



FRONT ELEVATION  
SCALE 1/4" = 1'-0"

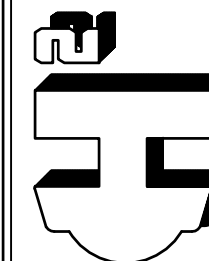
"THE DAKOTA II"  
(RIGHT HAND GARAGE)  
JRT MANG. PROP.

HEATED FOOTAGE:  
#1240

SQUARE FOOTAGE:  
FIRST FLOOR = 1240  
FRONT PORCH = 86  
PATIO/WOOD DECK = 144  
GARAGE = 572

HEATHER HALL  
165 HEATHERSTONE CT  
BENSON NC 27504  
(919) 207-1403

H SQUARED HOME  
DESIGN, INC.



ANY DEVIATION OF THE  
STANDARD DIMENSIONS  
OR DIMENSIONS VARIOUS  
H SQUARED HOME DESIGN,  
INC.'S LIABILITY.  
THIS PLAN HAS BEEN DRAWN  
IN ACCORDANCE WITH THE  
CAROLINA STATE BUILDING  
CODES 2018 EDITION.

DATE:  
02/25/2020

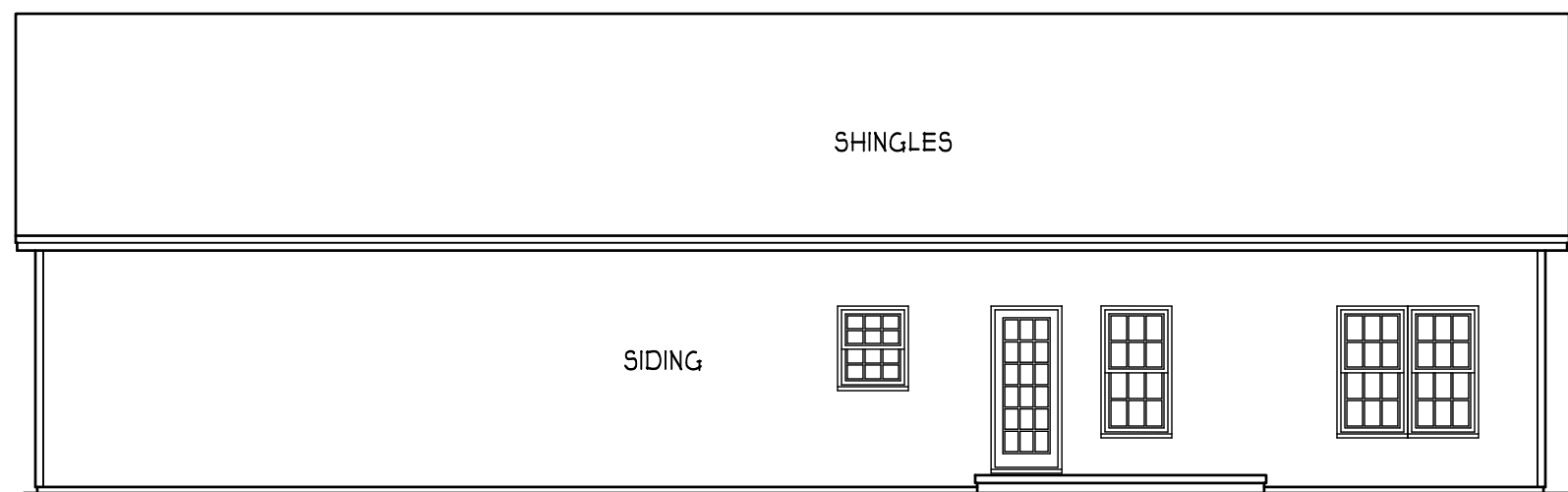
1 STORY

FILE:  
020320

ATTIC VENTILATION:

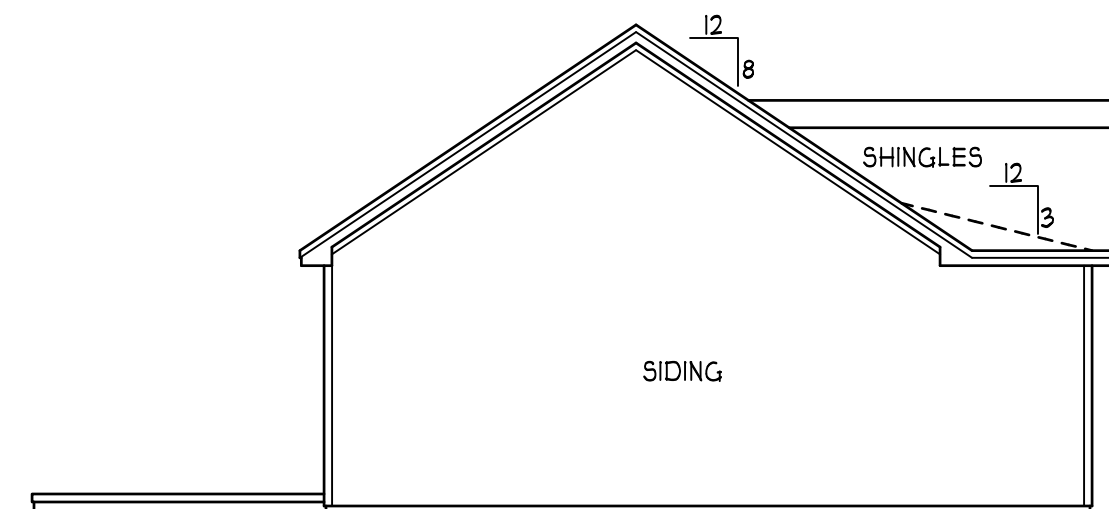
THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 TO 150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT THE AREA MAY BE 1 TO 300, PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION TO BE PROVIDED BY EAVE OR CORNICE VENTS.

GROSS ATTIC AREA TO BE VENTILATED 1899 SQ.FT.  
1899/150 = 12.66 SQ.FT. NET FREE AREA

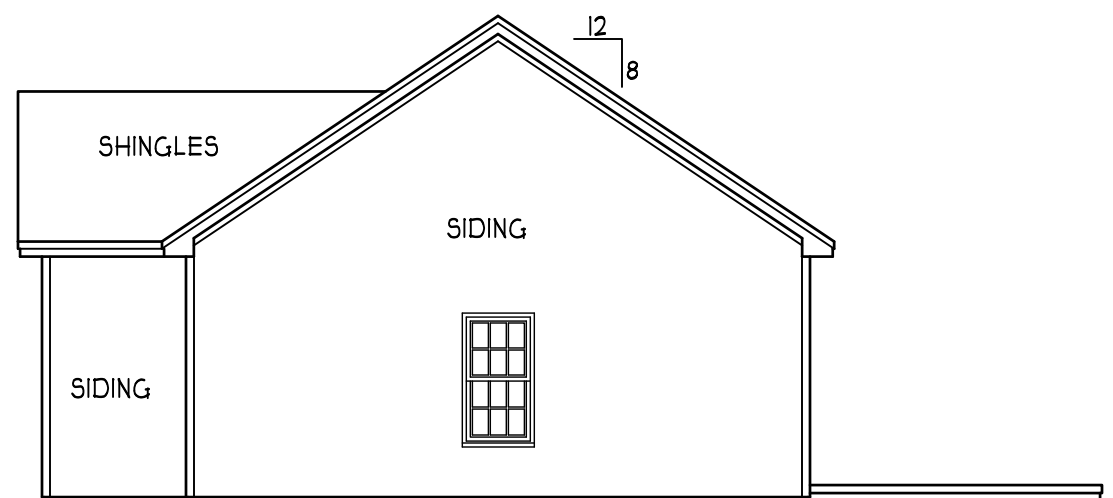


REAR ELEVATION  
SCALE 1/8" = 1'-0"

ENERGY COMPLIANCE  
ZONE 3 = MAX. GLAZING U-FACTOR .35  
R-VALUE = CEILING R38, WALLS R15,  
FLOORS R19 FOR JOHNSTON, WAYNE COUNTY  
ZONE 4 = MAX. GLAZING U-FACTOR .35  
R-VALUE = CEILING R38, WALLS R15,  
FLOORS R19 FOR WAKE, ORANGE COUNTY



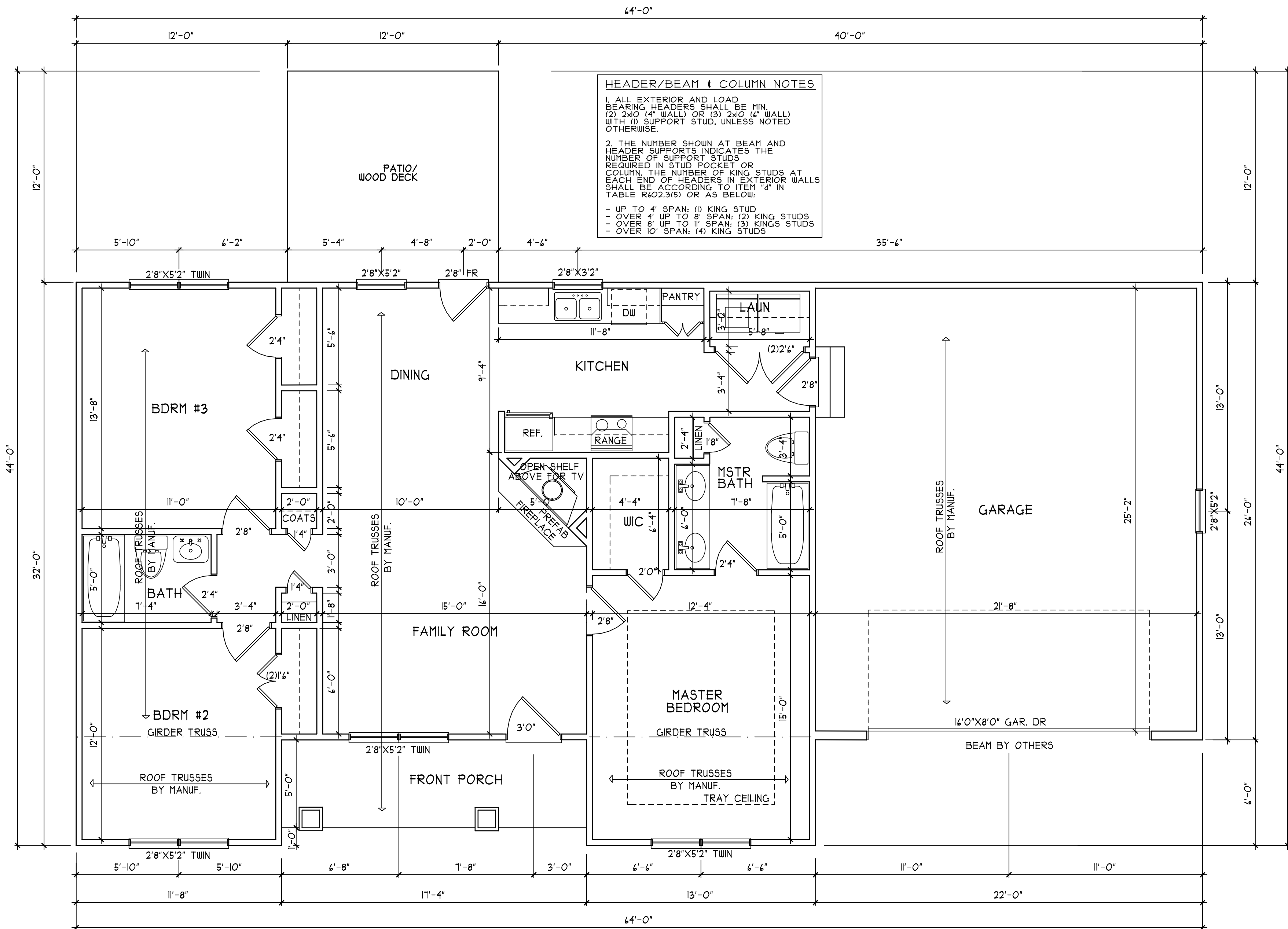
LEFT ELEVATION  
SCALE 1/8" = 1'-0"



RIGHT ELEVATION  
SCALE 1/8" = 1'-0"



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DESIGN, INC.



HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x10 (4" WALL) OR (3) 2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

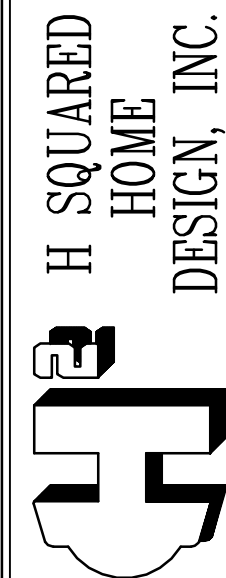
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW:

- UP TO 4' SPAN: (1) KING STUD
- OVER 4' UP TO 8' SPAN: (2) KING STUDS
- OVER 8' UP TO 11' SPAN: (3) KING STUDS
- OVER 10' SPAN: (4) KING STUDS

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS, BRACING DETAILS, AND STRUCTURAL NOTES

FIRST FLOOR PLAN

SCALE 1/4" = 1'-0"



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HEATHER HALL  
165 HEATHERSTONE CT  
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SQUARE FOOTAGE:  
FIRST FLOOR = 1240  
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HEATED FOOTAGE:  
#1240

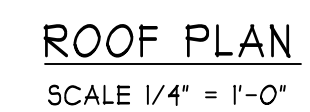
"THE DAKOTA II"  
(RIGHT HAND GARAGE)  
JRT MANG. PROP.

ANY DEVIATION OF THE  
STANDARD DETAILS OR  
OTHERS VOIDING THE  
H SQUARED HOME DESIGN,  
INC.'S LIABILITY.  
THIS PLAN HAS BEEN DRAWN  
IN ACCORDANCE WITH NORTH  
CAROLINA BUILDING CODES  
2018 EDITION.

DATE:  
02/25/2020

I STORY

FILE:  
020320



FILE:  
020320



STRUCTURAL NOTES

- 1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER OR DESIGNER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER OR DESIGNER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
- 2) DESIGN LOADS (R301.4)
- |                                 | LIVE LOAD (PSF) | DEAD LOAD (PSF) | DEFLECTION (LL) |
|---------------------------------|-----------------|-----------------|-----------------|
| ROOMS OTHER THAN SLEEPING ROOMS | 40              | 10              | L/360           |
| SLEEPING ROOMS                  | 30              | 10              | L/360           |
| ATTIC WITH PERMANENT STAIR      | 40              | 10              | L/360           |
| ATTIC WITH OUT PERMANENT STAIR  | 20              | 10              | L/360           |
| ATTIC WITH OUT STORAGE          | 10              | 10              | L/240           |
| STAIRS                          | 40              | ---             | L/360           |
| EXTERIOR BALCONIES              | 40              | 10              | L/360           |
| DECKS                           | 40              | 10              | L/360           |
| GUARDRAILS AND HANDRAILS        | 200             | ---             | ---             |
| PASSENGER VEHICLE GARAGES       | 50              | 10              | L/360           |
| FIRE ESCAPES                    | 40              | 10              | L/360           |
| SNOW                            | 20              | ---             | ---             |
- WIND LOAD (BASED ON 115/120 MPH WIND VELOCITY 1 EXPOSURE B)
- 3) WALL BRACING: BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO SECTION R602.10.3. THE AMOUNT AND LOCATION OF BRACING SHALL COMPLY WITH TABLE R602.10.1. THE LENGTH OF BRACED PANELS SHALL BE DETERMINED BY SECTION R602.10.4. LATERAL BRACING SHALL BE SATISFIED PER METHOD 3 BY CONTINUOUSLY SHEATHING WALLS WITH STRUCTURAL SHEATHING PER SECTION R602.10.3. NOTE THAT ANY SPECIFIC BRACED WALL DETAIL SHALL BE INSTALLED AS SPECIFIED.
- 4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINMENT PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.
- 5) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTUAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED 50 AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
- 6) ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP # 2 (Fb=915 PSI). PLATE MATERIAL MAY BE SPF # 3 OR SYP #3 (Fcl/perp) = 425 PSI - MIN).
- 7) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COLUMN FOR 4'-0" MAX. BEAM SPAN (UNO), (2) 2x4 STUDS FOR BEAM SPAN GREATER THAN 4'-0" (UNO).
- 8) L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2400 PSI, Fv=285 PSI, E=1.9x10<sup>6</sup> PSI. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2400 PSI, Fv=240 PSI, E=2.0x10<sup>6</sup> PSI. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55x10<sup>6</sup> PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.
- 9) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH ANY SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURE'S SPECIFICATIONS. ANY CHANGE IN TRUSSES OR I-JOIST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINEER.
- 10) ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. . ALL STEEL TUBING SHALL BE ASTM A500.
- 11) REBAR SHALL BE DEFORMED STEEL, ASTM#45, GRADE 40.
- 12) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 4" FROM EACH END.
- 13) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x4" STEEL ANGLE FOR UP TO 4'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 4" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).
- 14) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF.
- 15) THE POSITIVE AND NEGATIVE DESIGN PRESSURES REQUIRED FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION SHALL BE AS FOLLOWS:
- ROOF:
- 45.4 PSF - 2.25/12 PITCH OR LESS
- 34.8 PSF - 2.25/12 TO 1 1/2 PITCH
- 21 PSF - 1 1/2 TO 12/12 PITCH
- WALLS:
- 24.1 PSF - WALLS

HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x10 (4" WALL) OR (3) 2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW:
- UP TO 4' SPAN: (1) KING STUD
  - OVER 4' UP TO 8' SPAN: (2) KING STUDS
  - OVER 8' UP TO 11' SPAN: (3) KING STUDS
  - OVER 11' SPAN: (4) KING STUDS

FOUNDATION STRUCTURAL NOTES:

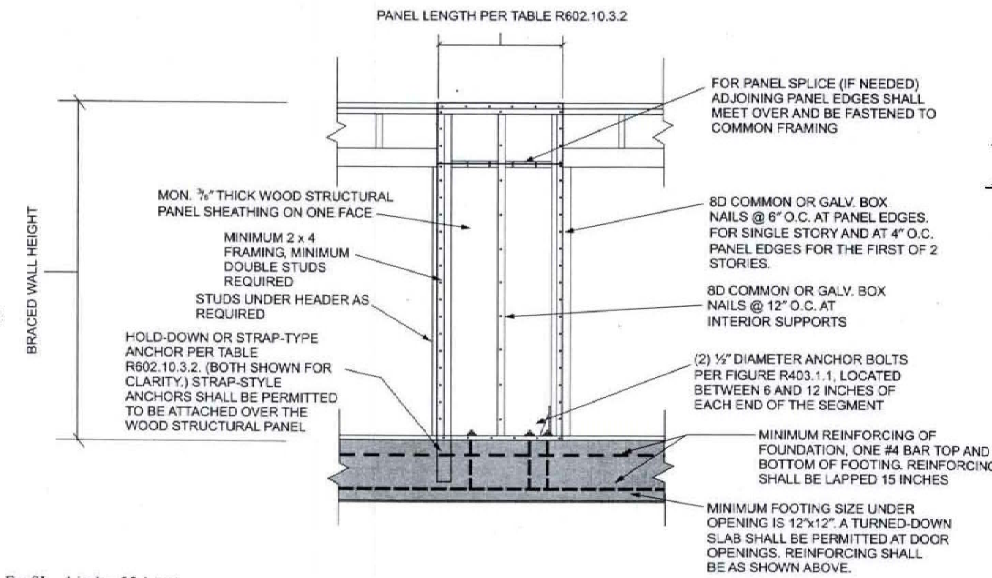
NC (2018 NCRC): Wind: 115-120 MPH

- ① (3) 2x10 SYP #2 OR SPF#2 GIRDER, TYPICAL UNO.
- ② CONCRETE BLOCK PIER SIZE SHALL BE:
- | SIZE    | HOLLOW MASONRY | SOLID MASONRY     |
|---------|----------------|-------------------|
| 8 x 16  | UP TO 32" HIGH | UP TO 5'-0" HIGH  |
| 12 x 16 | UP TO 48" HIGH | UP TO 9'-0" HIGH  |
| 16 x 16 | UP TO 64" HIGH | UP TO 12'-0" HIGH |
| 24 x 24 | UP TO 96" HIGH | ---               |
- WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.
- ③ WALL FOOTING AS FOLLOWS:
- DEPTH: 8" - UP TO 2-1/2 STORY  
10" - 3 STORY
- WIDTH: SIDING (OR EQUAL)  
- 16" - UP TO 2-1/2 STORY  
- 20" - 3 STORY
- BRICK VENEER  
- 16" - 1 STORY  
- 20" - 2 STORY  
- 24" - 3 STORY

FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO NORTH CAROLINA RESIDENTIAL CODE TABLE R404.1.I (1 THRU 4) NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

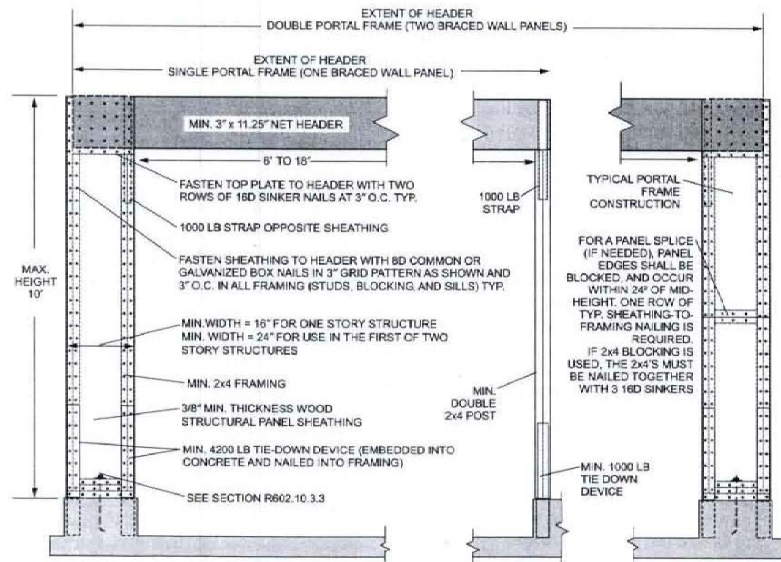
- ④ (4) 2x10 SYP#2 OR SPF#2 GIRDER.
- ⑤ (2) 1.75X9.25 LVL OR LSL GIRDER
- ⑥ (3) 1.75X9.25 LVL OR LSL GIRDER

1. "■" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO END, TYPICAL.
8. ABBREVIATIONS:  
"SJ" = SINGLE JOIST  
"DJ" = DOUBLE JOIST  
"TJ" = TRIPLE JOIST



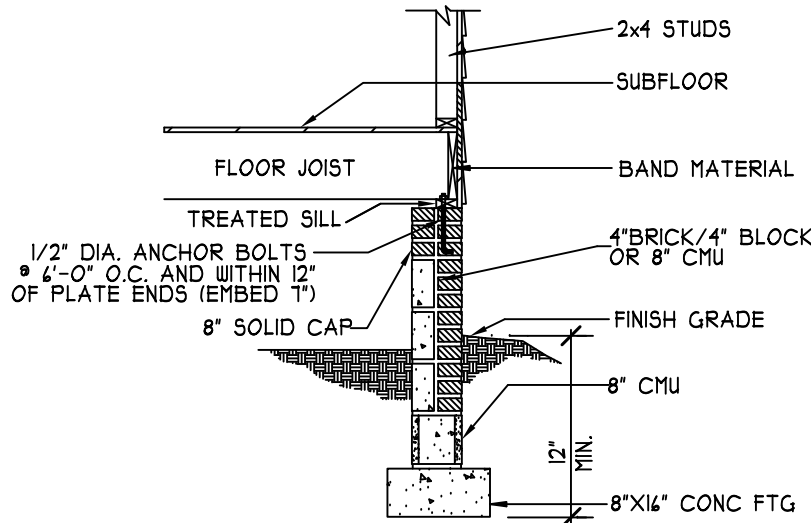
For ST: 1 inch = 25.4 mm.

FIGURE R602.10.3.2  
ALTERNATE BRACED WALL PANEL

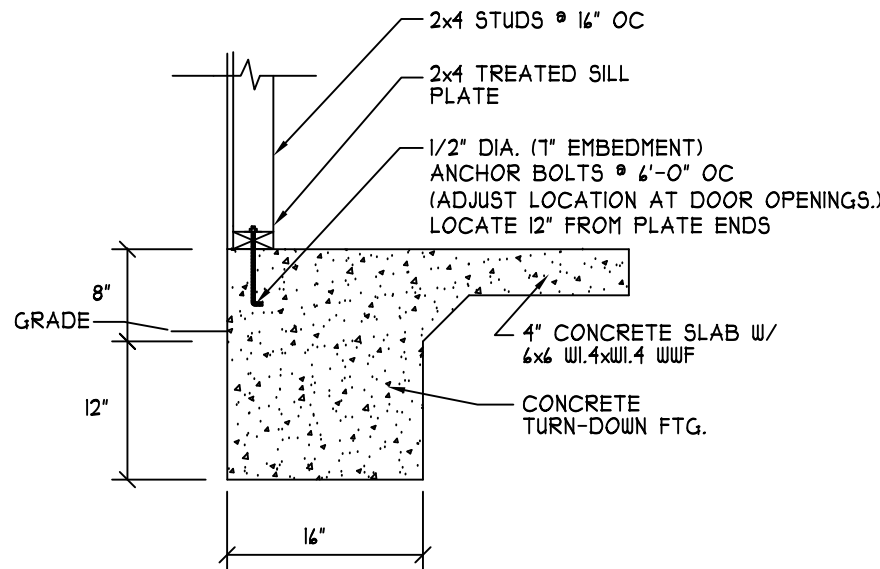


For ST: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound force = 4.448 N.

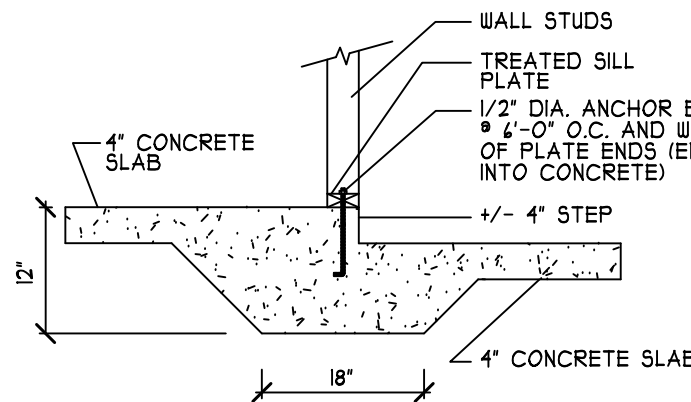
FIGURE R602.10.3.3  
METHOD PFF: PORTAL FRAME WITH HOLD-DOWNS



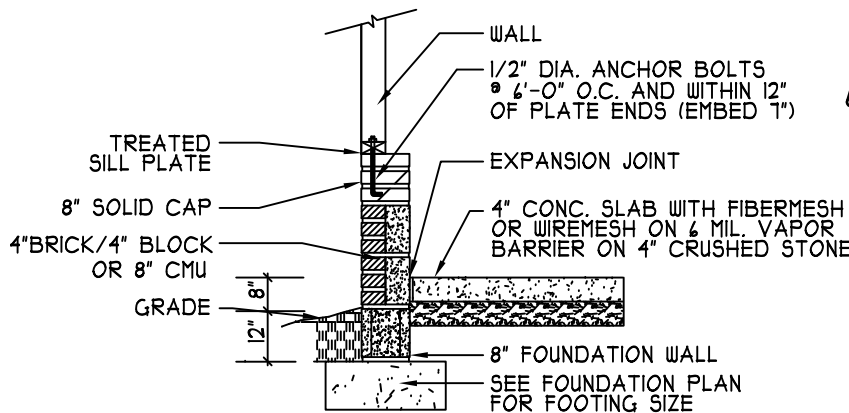
① CRAWL SECTION  
NTS



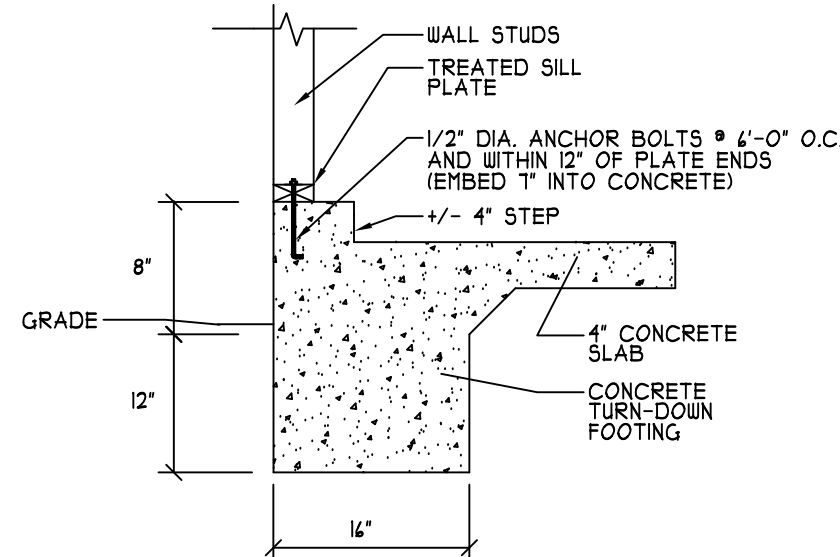
③ TURN DOWN SLAB FOOTING  
NTS



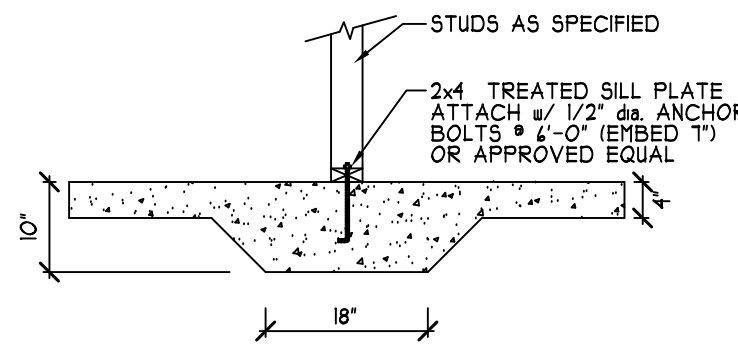
⑤ THICKENED SLAB @ GARAGE  
NTS



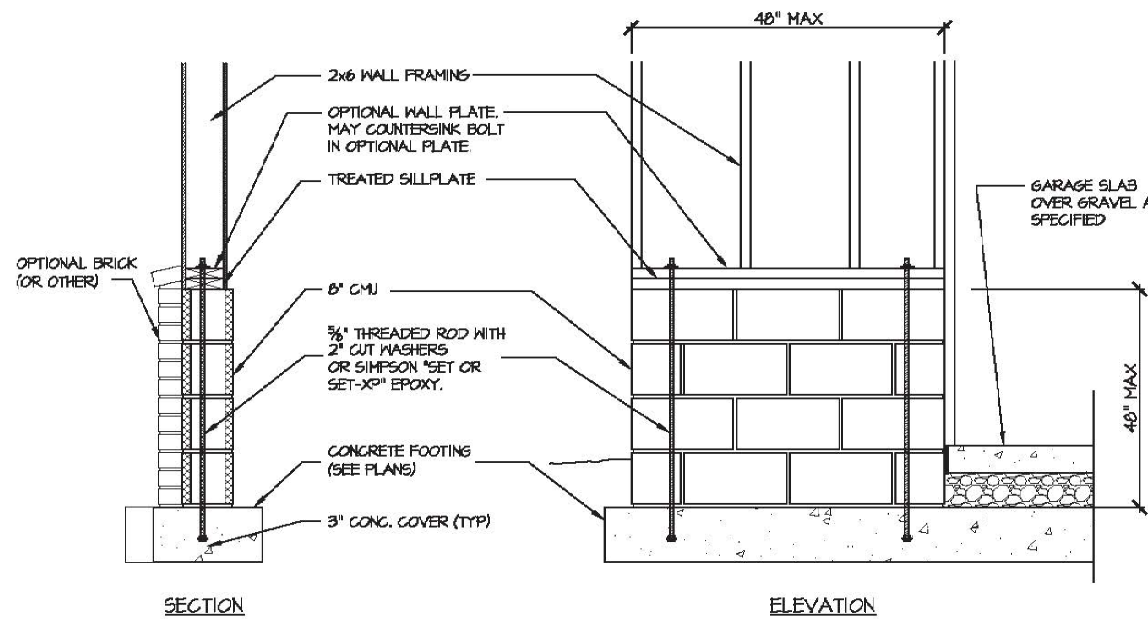
② GARAGE SLAB  
NTS



④ TURN DOWN SLAB @ GARAGE  
(SIDING)  
NTS



⑥ TYPICAL THICKENED SLAB  
NTS



GARAGE 'WING WALL' REINFORCING  
PER IRC FIGURE R602.10.4.3

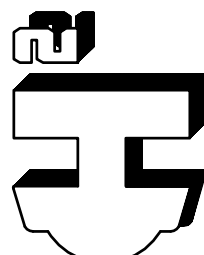
BASIC BUILDING

DETAIL SHEET

\*PLEASE NOTE THAT NOT ALL DETAILS APPLY TO EVERY PLAN.

HEATHER HALL  
165 HEATHERSTONE CT  
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THIS PLAN HAS BEEN DRAWN IN ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODES 2018 EDITION.

DATE:

FILE:





C&R Building Supply, Autryville NC

Timeline diagram showing the sequence of events for the 2008-2009 season. The timeline is a horizontal line with four vertical tick marks. Above the line, the dates are: -1-2-8, 5-10-0, 11-8-0, and 12-10-8. Below the line, the dates are: 1-2-8, 5-10-0, 5-10-0, and 1-2-8.

Scale:  $\frac{3}{8}"=1'$

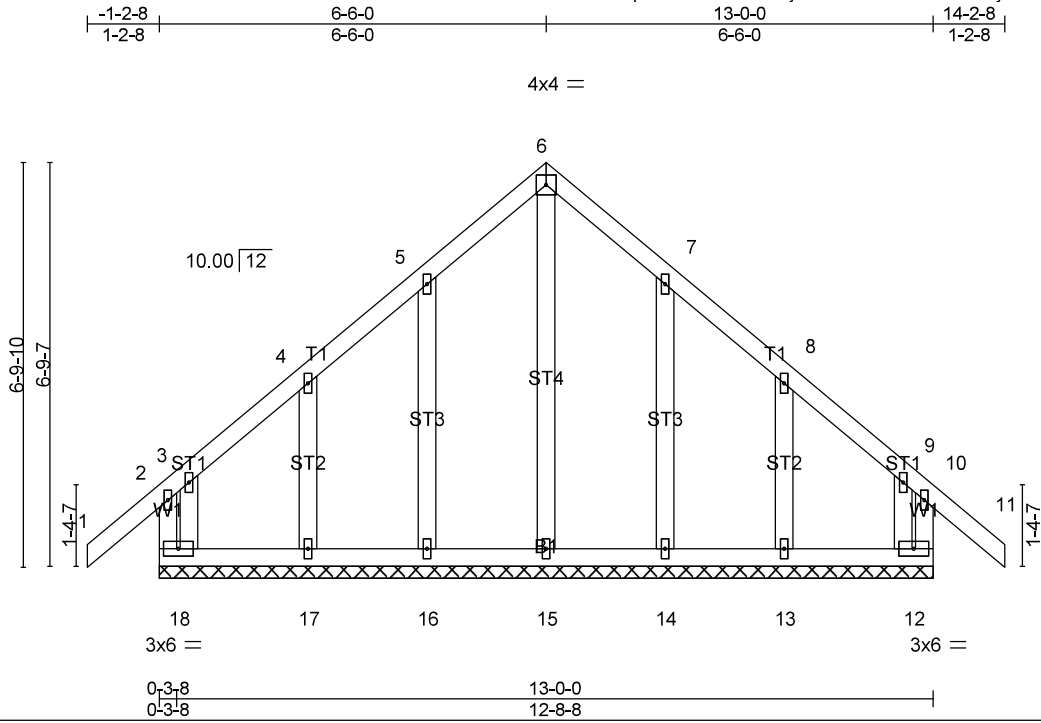




|       |       |                        |     |     |                           |
|-------|-------|------------------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type             | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | G2    | Common Supported Gable | 1   | 1   | Job Reference (optional)  |

C&R Building Supply, Autryville NC

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|                      |                       |             |                                  |               |             |
|----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| <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 20.0            | Plate Grip DOL 1.15   | TC 0.13     | Vert(LL) -0.01 11 n/r 120        | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.05     | Vert(CT) -0.01 11 n/r 120        |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.12     | Horz(CT) -0.00 12 n/a n/a        |               |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-R    |                                  | Weight: 88 lb | FT = 20%    |

**LUMBER-**

|           |     |         |
|-----------|-----|---------|
| TOP CHORD | 2x4 | SP No.2 |
| BOT CHORD | 2x4 | SP 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 6-0-0 oc bracing.                                   |

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

## REACTIONS.

All bearings 13-0-0.

(lb) - Max Horz 18=144(LC 7)

**Max Uplift** All uplift 100 lb or less at joint(s) 18, 12, 16, 17, 14, 13

Max Grav All reactions 250 lb or less at joint(s) 18, 12, 15, 16, 17, 14,  
13

**FORCES.**

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCdL=6.0psf; BCdL=6.0psf; h=20ft; B=64ft; L=26ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 1.5x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 12, 16, 17, 14, 13.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

|                          |             |                     |          |          |                           |
|--------------------------|-------------|---------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>G3 | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                     |          |          |                           |

C&R Building Supply, Autryville NC

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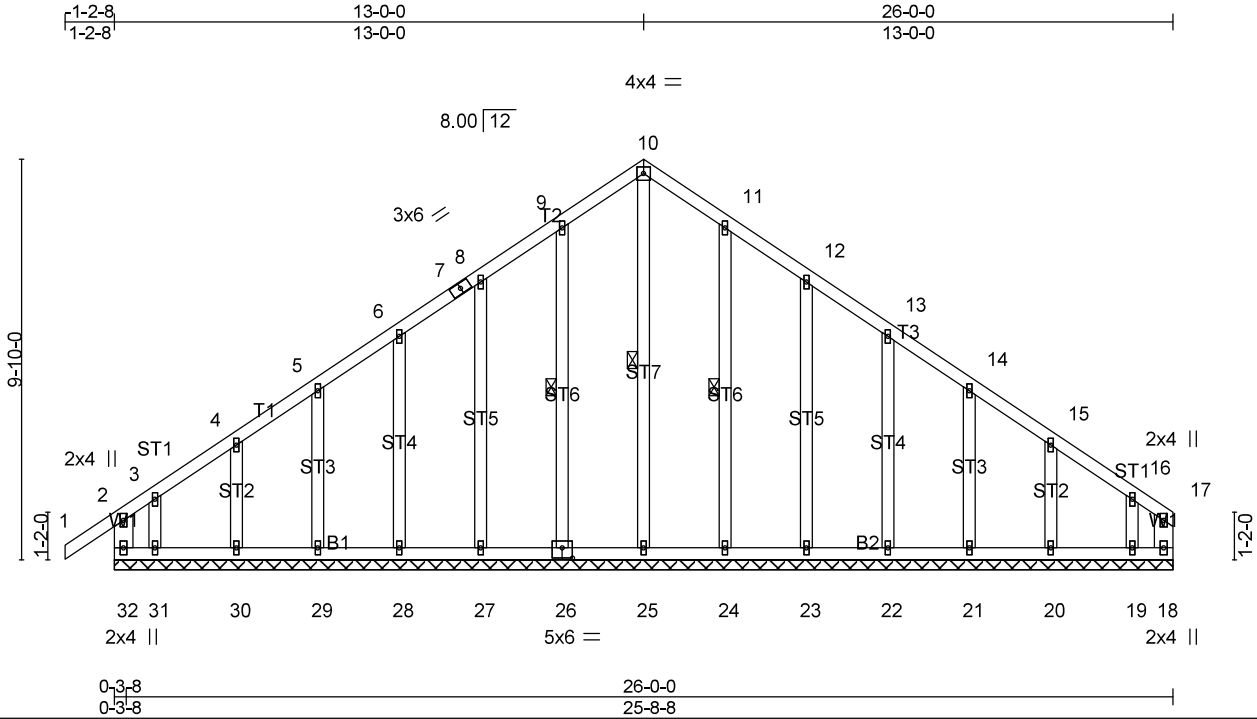


Plate Offsets (X,Y)-- [26:0-3-0,0-3-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.07  | Vert(LL) | -0.00    | 1      | n/r | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.04  | Vert(CT) | -0.00    | 1      | n/r |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.11  | Horz(CT) | -0.00    | 18     | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-R |          |          |        |     |                |          |
|               | Code IRC2018/TPI2014 |          |          |          |        |     | Weight: 188 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x6 SP No.1  
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 6-0-0 oc bracing.  
WEBS 1 Row at midpt 10-25, 9-26, 11-24

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

#### REACTIONS.

All bearings 26-0-0.  
(lb) - Max Horz 32=179(LC 7)  
Max Uplift All uplift 100 lb or less at joint(s) 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19 except 32=-120(LC 6), 18=-123(LC 7), 31=-117(LC 5)  
Max Grav All reactions 250 lb or less at joint(s) 18, 25, 26, 27, 28, 29, 30, 31, 24, 23, 22, 21, 20, 19 except 32=278(LC 14)

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

#### NOTES-

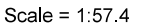
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26, 27, 28, 29, 30, 24, 23, 22, 21, 20, 19 except (jt=lb) 32=120, 18=123, 31=117.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

Continued on page 2

|       |       |            |     |     |                           |
|-------|-------|------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | G3    | GABLE      | 1   | 1   | Job Reference (optional)  |

LOAD CASE(S) Standard

8,430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:15 2025 Page 1  
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MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

Continued on page 2

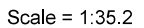
|       |       |            |     |     |                           |
|-------|-------|------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | G4    | GABLE      | 1   | 1   | Job Reference (optional)  |

**LOAD CASE(S)** Standard



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8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:16 2025 Page 1  
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|                |             |                 |   |
|----------------|-------------|-----------------|---|
| <b>LUMBER-</b> |             | <b>BRACING-</b> |   |
| TOP CHORD      | 2x4 SP No.2 | TOP CHORD       | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD      | 2x6 SP No.1 |                 |   |
| WEBS           | 2x4 SP No.3 | BOT CHORD       | Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 1-2=-2774/0, 2-3=-2207/0, 3-4=-2207/0, 4-5=-2794/0, 1-10=-2533/0,  
5-6=-2561/0  
**BOT CHORD** 9-12=0/2080, 8-12=0/2080, 8-13=0/2096, 7-13=0/2096  
**WEBS** 3-8=0/2585, 4-8=-700/0, 4-7=0/794, 2-8=-675/0, 2-9=0/762, 1-9=0/2019,  
5-7=0/2064

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 999 lb down at 1-7-4, 999 lb down at 3-7-4, 999 lb down at 5-7-4, and 999 lb down at 7-7-4, and 999 lb down at 9-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

|       |       |               |     |     |                           |
|-------|-------|---------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type    | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | GR1   | Common Girder | 1   | 2   | Job Reference (optional)  |

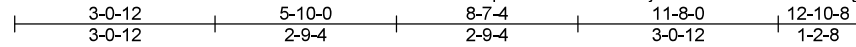
**LOAD CASE(S)** Standard  
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-60, 3-5=-60, 6-10=-20  
Concentrated Loads (lb)  
Vert: 8=-999(F) 11=-999(F) 12=-999(F) 13=-999(F) 14=-999(F)

|                          |             |                      |          |          |                           |
|--------------------------|-------------|----------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>T1 | Truss Type<br>Common | Qty<br>2 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                      |          |          |                           |

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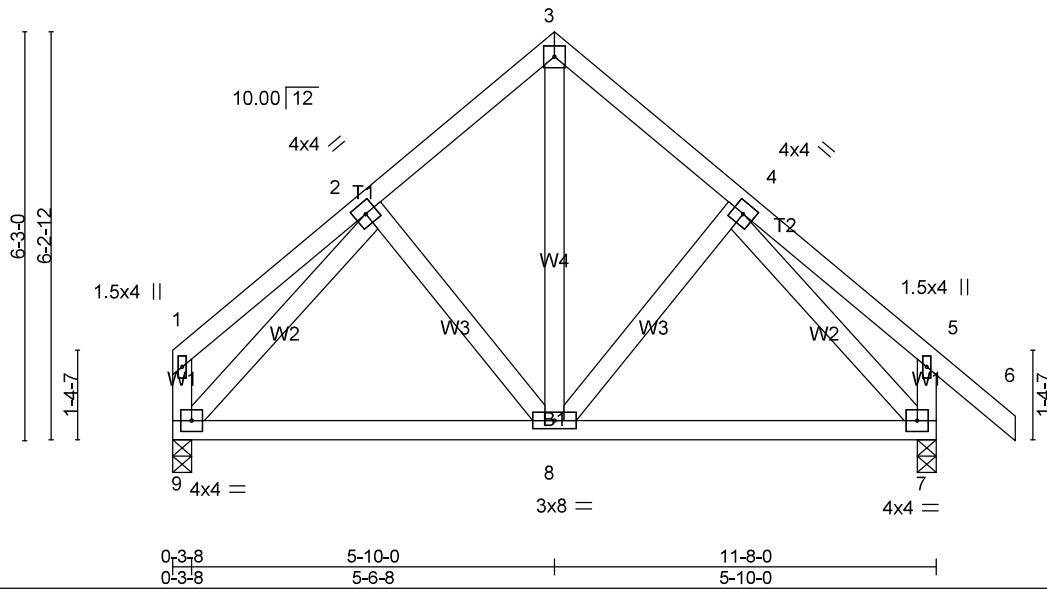
8.430 s Jan 20 2021 MiTek Industries, Inc. Tue Jul 8 09:42:17 2025 Page 1

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4x4 =

Scale = 1:35.2



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|-----------|----------|-------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.20   | Vert(LL) | -0.01 | 8-9   | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.13   | Vert(CT) | -0.03 | 7-8   | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.12   | Horz(CT) | 0.00  | 7     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-AS | Wind(LL) | 0.00  | 8     | >999   | 240 | Weight: 79 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 9=450/0-3-8 (min. 0-1-8), 7=541/0-3-8 (min. 0-1-8)  
Max Horz 9=128(LC 6)  
Max Uplift 7=19(LC 8)

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

TOP CHORD 2-3=-357/50, 3-4=-355/49  
BOT CHORD 8-9=0/310, 7-8=0/262  
WEBS 2-9=-342/0, 4-7=-361/0

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

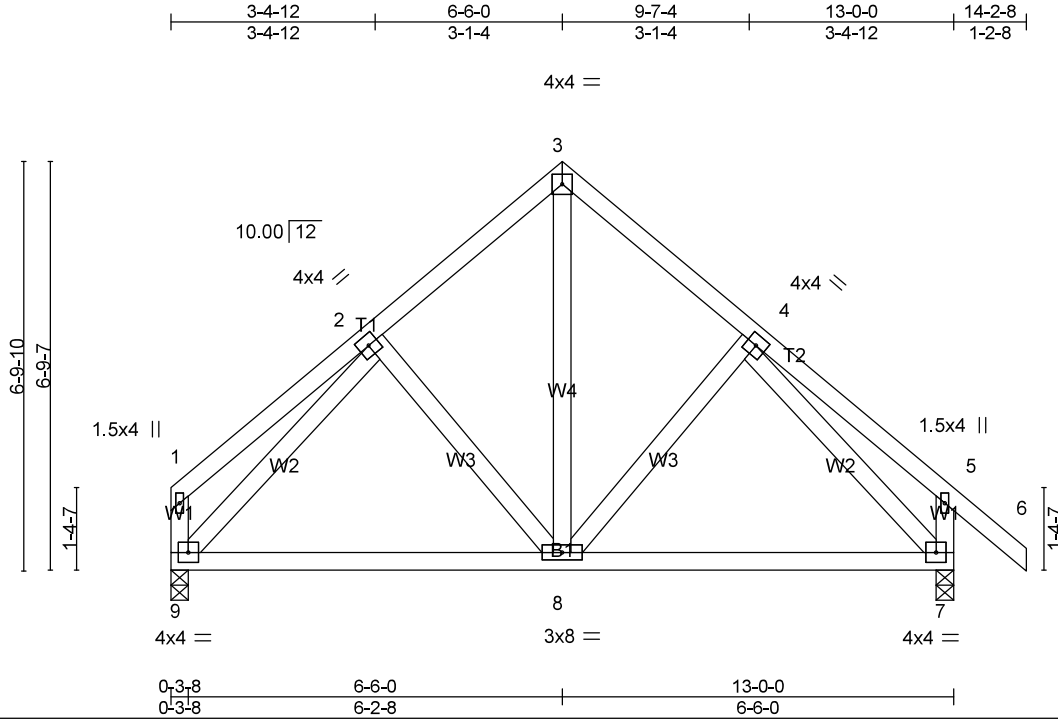
**LOAD CASE(S)** Standard

|       |       |            |     |     |                           |
|-------|-------|------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | T2    | Common     | 1   | 1   | Job Reference (optional)  |

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Scale = 1:38.3

|                      |                       |             |                       |                   |               |             |
|----------------------|-----------------------|-------------|-----------------------|-------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) | <b>I/defl</b> L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL 1.15   | TC 0.25     | Vert(LL) -0.02 8-9    | >999 360          | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.16     | Vert(CT) -0.05 7-8    | >999 240          |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.17     | Horz(CT) 0.00 7       | n/a n/a           |               |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) 0.00 8       | >999 240          | Weight: 87 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x4 SP No.3

## BRACING-

|           |  |
|-----------|--|
| TOP CHORD | Structural wood sheathing directly applied, except end<br>verticals. |
| BOT CHORD | Rigid ceiling directly applied.                                      |

|   |
|---|
| <p>MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.</p> |
|---|

**REACTIONS.** (lb/size) 9=504/0-3-8 (min. 0-1-8), 7=594/0-3-8 (min. 0-1-8)

Max Horz 9=-138(LC 6)

Max Uplift<sub>7</sub> = -18 (LC 8)

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

TOP CHORD  $2-3=-407/54$ ,  $3-4=-406/53$

BOT CHORD 8-9=0/355, 7-8=0/307

WEBS 3-8=-22/286, 2-9=-384/0, 4-7=-401/0

### NOTES-

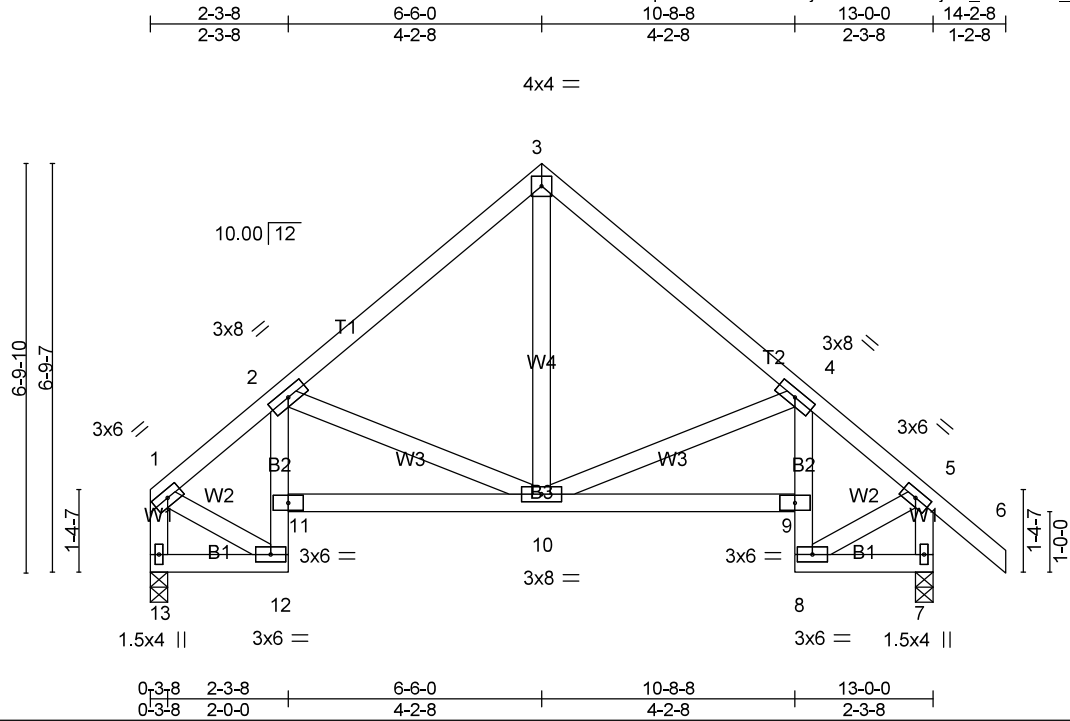
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.
- 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

|       |       |              |     |     |                           |
|-------|-------|--------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type   | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | T4    | Roof Special | 1   | 1   | Job Reference (optional)  |

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Scale = 1:38.3

|                      |                       |             |                                  |               |             |
|----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| <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 20.0            | Plate Grip DOL 1.15   | TC 0.08     | Vert(LL) -0.02 10-11 >999 360    | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.48     | Vert(CT) -0.04 10-11 >999 240    |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.09     | Horz(CT) 0.07 7 n/a n/a          |               |             |
| BCDL 10.0            | Code IRC2018/TPI2014  | Matrix-AS   | Wind(LL) -0.01 10-11 >999 240    | Weight: 84 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
B2: 2x4 SP No.2  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x4 SP No.3

## BRACING-

|           |   |
|-----------|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied.                                   |

**BOT CHORD**      Rigid ceiling directly applied.

**MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.**

**REACTIONS.** (lb/size) 13=504/0-3-8 (min. 0-1-8), 7=594/0-3-8 (min. 0-1-8)  
Max Horz 13=-138(LC 6)  
Max Uplift 7=-18(LC 8)

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

TOP CHORD 1-2=-485/7, 2-3=-497/24, 3-4=-496/24, 4-5=-474/14, 1-13=-544/0,  
5-7=-632/18

BOT CHORD    10-11=0/546, 9-10=0/456

WEBS 3-10=0/313, 1-12=0/370, 5-8=0/376

**NOTES-**

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

2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6'-0" between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7.

6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

LOAD CASE(S) Standard

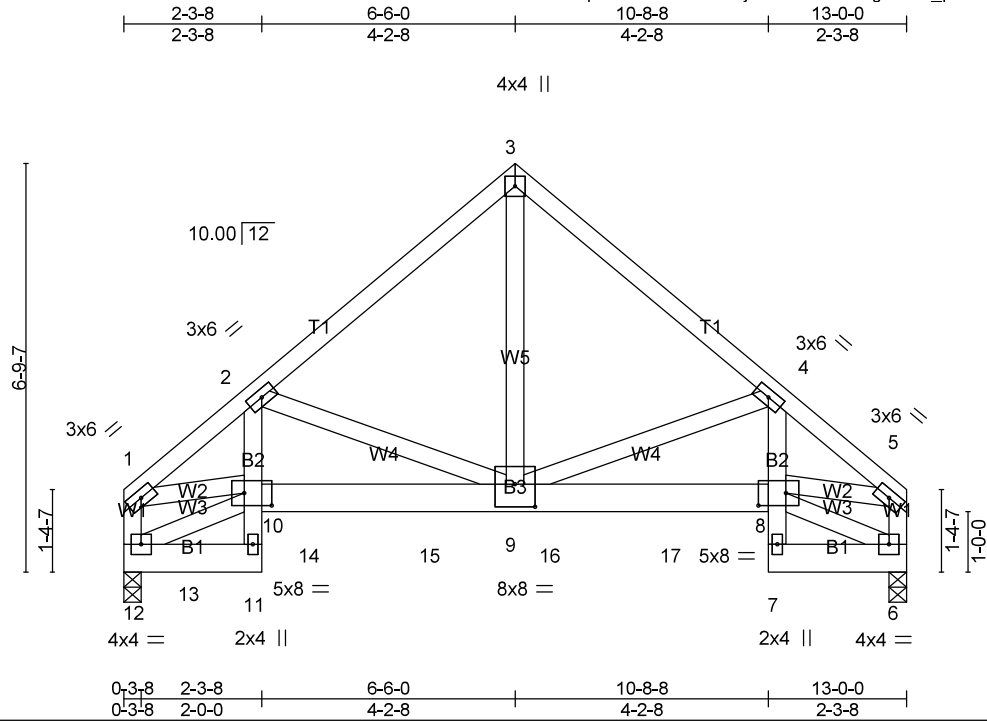


|                                    |             |                                   |          |          |                           |
|------------------------------------|-------------|-----------------------------------|----------|----------|---------------------------|
| Job<br>28780                       | Truss<br>T5 | Truss Type<br>Roof Special Girder | Qty<br>1 | Ply<br>2 | Vuncannon&Sons\Shane Cabe |
| C&R Building Supply, Autryville NC |             |                                   |          |          | Job Reference (optional)  |

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Scale = 1:38.3

Plate Offsets (X,Y)-- [8:0-5-8,0-2-8], [9:0-4-0,0-4-8], [10:0-5-8,0-2-8]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.32   | Vert(LL) | -0.04 | 9-10  | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.38   | Vert(CT) | -0.07 | 9-10  | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.46   | Horz(CT) | 0.05  | 6     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-MS | Wind(LL) | -0.01 | 9-10  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |       |       |        |     | Weight: 194 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
 B2: 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 W1: 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, Except: 6'-0-0 oc bracing: 7-8.

**REACTIONS.** (lb/size) 12=3744/0-3-8 (min. 0-1-9), 6=3296/0-3-8 (min. 0-1-8)  
 Max Horz 12=122(LC 6)

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

TOP CHORD 1-2=-4668/0, 2-3=-3217/0, 3-4=-3216/0, 4-5=-4782/0, 1-12=-3170/0, 5-6=-3245/0  
 BOT CHORD 10-11=0/455, 2-10=0/1307, 10-14=0/3677, 14-15=0/3677, 9-15=0/3677, 9-16=0/3744, 16-17=0/3744, 8-17=0/3744, 4-8=0/1405  
 WEBS 3-9=0/3752, 4-9=-1429/0, 2-9=-1358/0, 1-10=0/3402, 5-8=0/3542

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc, 2x4 - 1 row at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6'-0-0 between the bottom chord and any other members.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

|       |       |                     |     |     |                           |
|-------|-------|---------------------|-----|-----|---------------------------|
| Job   | Truss | Truss Type          | Qty | Ply | Vuncannon&Sons\Shane Cabe |
| 28780 | T5    | Roof Special Girder | 1   | 2   | Job Reference (optional)  |

**NOTES-**

8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1000 lb down at 1-0-12, 1006 lb down at 3-0-12, 1006 lb down at 5-0-12, 1006 lb down at 7-0-12, and 1006 lb down at 9-0-12, and 999 lb down at 10-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 11-12=-20, 8-10=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 8=-999(B) 13=-1000(B) 14=-1006(B) 15=-1006(B) 16=-1006(B) 17=-1006(B)

|                          |             |                      |          |          |                           |
|--------------------------|-------------|----------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>T6 | Truss Type<br>Common | Qty<br>7 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                      |          |          |                           |

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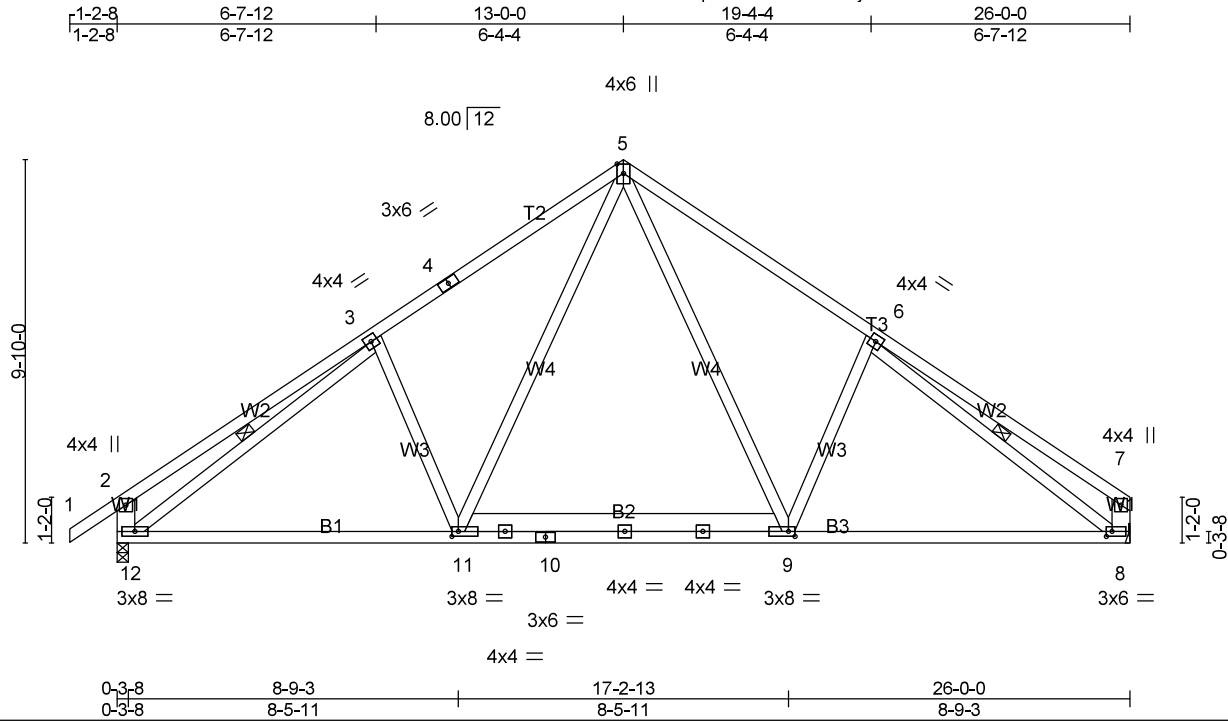


Plate Offsets (X,Y)-- [8:0-1-12,0-1-8], [9:0-2-0,0-1-8], [11:0-2-0,0-1-8]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------|-------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.20   | Vert(LL) | -0.07 | 9-11  | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.29   | Vert(CT) | -0.14 | 8-9   | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.30   | Horz(CT) | 0.03  | 8     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.02  | 9-11  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |       |       |        |     | Weight: 180 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
 B2: 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 3-12, 6-8

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 12=1110/0-3-8 (min. 0-1-8), 8=1019/Mechanical  
 Max Horz 12=179(LC 7)  
 Max Uplift 12=-8(LC 8)  
 Max Grav 12=1123(LC 13), 8=1042(LC 14)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-433/79, 3-4=-1230/47, 4-5=-1135/86, 5-6=-1235/87, 6-7=-425/68,  
 2-12=-457/93, 7-8=-361/54  
 BOT CHORD 11-12=0/1104, 10-11=0/775, 9-10=0/783, 8-9=0/1013  
 WEBS 5-9=-7/572, 6-9=-274/122, 5-11=-6/563, 3-11=-264/121, 3-12=-1000/0,  
 6-8=-1010/0

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 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) 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

|                          |             |                            |          |          |                           |
|--------------------------|-------------|----------------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>T7 | Truss Type<br>Roof Special | Qty<br>4 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                            |          |          |                           |

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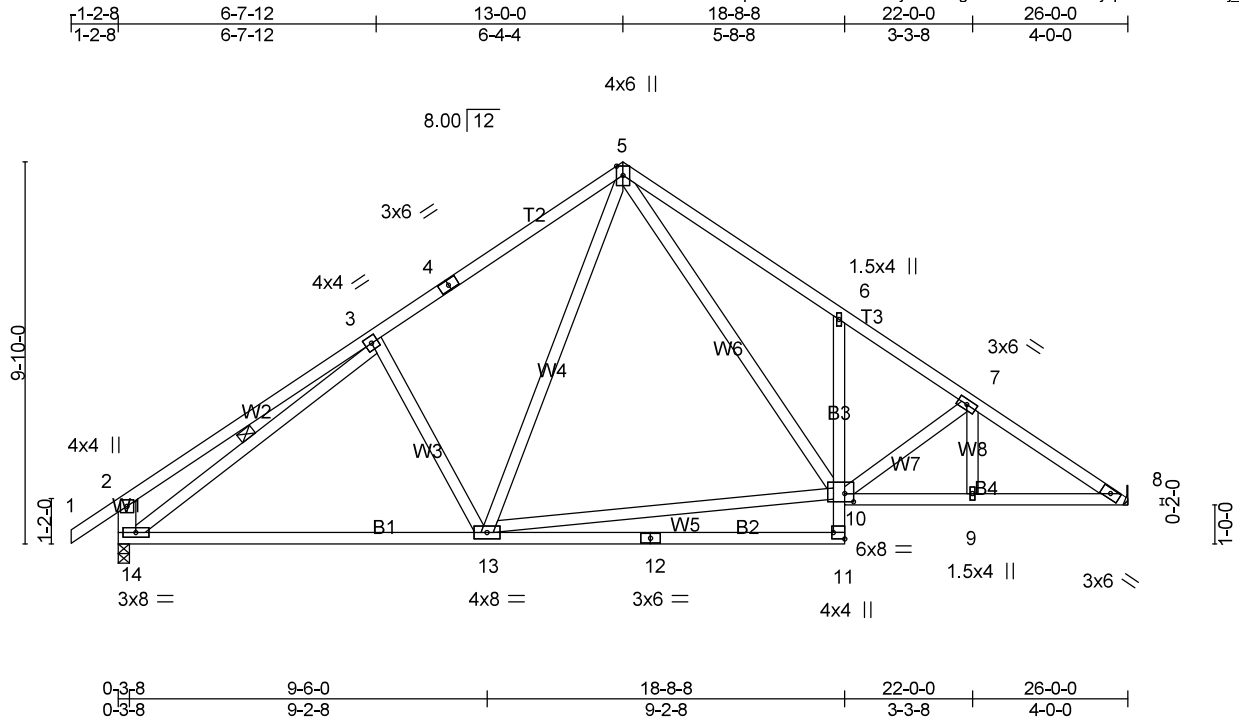


Plate Offsets (X,Y)-- [10:0-2-12,0-2-8], [11:Edge,0-3-8]

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.19   | Vert(LL) | -0.10 11-13 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.38   | Vert(CT) | -0.23 11-13 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.28   | Horz(CT) | 0.04 8      | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 | Matrix-AS | Wind(LL) | 0.02 10     | >999   | 240 | Weight: 169 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
 B3: 2x4 SP No.2  
 WEBS 2x4 SP No.2 \*Except\*  
 W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
 BOT CHORD Rigid ceiling directly applied.  
 WEBS 1 Row at midpt 3-14

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 8=1026/Mechanical, 14=1117/0-3-8 (min. 0-1-8)  
 Max Horz 14=-167(LC 6)  
 Max Uplift 14=-8(LC 8)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-438/72, 3-4=-1133/38, 4-5=-1021/77, 5-6=-1442/111, 6-7=-1414/19, 7-8=-1712/0, 2-14=-462/89  
 BOT CHORD 13-14=0/963, 6-10=-286/96, 9-10=0/1407, 8-9=0/1407  
 WEBS 3-13=-261/119, 5-13=0/430, 10-13=0/555, 5-10=-41/736, 7-10=-338/19, 3-14=-890/0

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

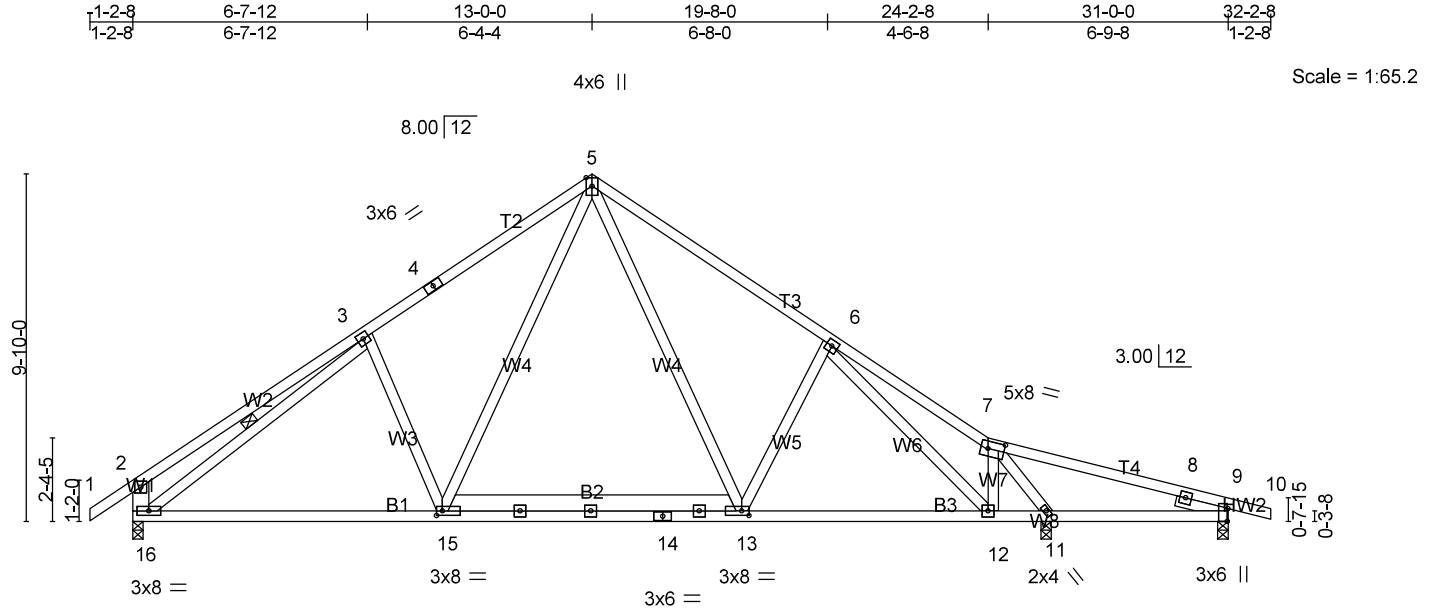
**LOAD CASE(S)** Standard

|                          |             |                            |          |          |                           |
|--------------------------|-------------|----------------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>T8 | Truss Type<br>Roof Special | Qty<br>2 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                            |          |          |                           |

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|   |        |         |         |         |        |
|---|--------|---------|---------|---------|--------|
| 0-3-8   | 8-9-3  | 17-2-13 | 24-2-8  | 25-10-4 | 31-0-0 |
| 0-3-8   | 8-5-11 | 8-5-10  | 6-11-11 | 1-7-12  | 5-1-12 |
| Plate Offsets (X,Y)-- [7:0-5-8,0-2-8], [9:0-4-6,Edge], [13:0-2-8,0-1-8], [15:0-2-0,0-1-8] |        |         |         |         |        |

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.21   | Vert(LL) | -0.07 15-16 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.30   | Vert(CT) | -0.14 15-16 | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.30   | Horz(CT) | 0.03 11     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.02 13-15  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 201 lb | FT = 20% |

|                                      |  |
|--------------------------------------|--|
| <b>LUMBER-</b>                       | <b>BRACING-</b>  |
| TOP CHORD 2x4 SP 2400F 2.0E          | TOP CHORD Structural wood sheathing directly applied, except end verticals.  |
| BOT CHORD 2x4 SP 2400F 2.0E *Except* | BOT CHORD Rigid ceiling directly applied.  |
| WEBS 2x4 SP No.2 *Except*            | WEBS 1 Row at midpt 3-16   |
| SLIDER Right 2x4 SP No.3 -D 1-6-0    |  |
|                                      | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS.** (lb/size) 11=1229/0-3-8 (min. 0-1-8), 9=274/0-3-8 (min. 0-1-8), 16=1117/0-3-8 (min. 0-1-8)  
 Max Horz 16=-176(LC 6)  
 Max Uplift 9=-38(LC 5), 16=-9(LC 8)  
 Max Grav 11=1245(LC 14), 9=288(LC 20), 16=1128(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-438/80, 3-4=-1235/47, 4-5=-1142/86, 5-6=-1232/86, 6-7=-1084/54, 2-16=-461/94  
 BOT CHORD 15-16=0/1110, 14-15=0/790, 13-14=0/781, 12-13=0/1022, 11-12=0/860  
 WEBS 3-15=-263/119, 5-15=-1/562, 5-13=-5/554, 6-13=-284/111, 6-12=-341/0, 7-12=0/252, 7-11=-1343/0, 3-16=-998/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=31ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 4x4 MT20 unless otherwise indicated.
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 16.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

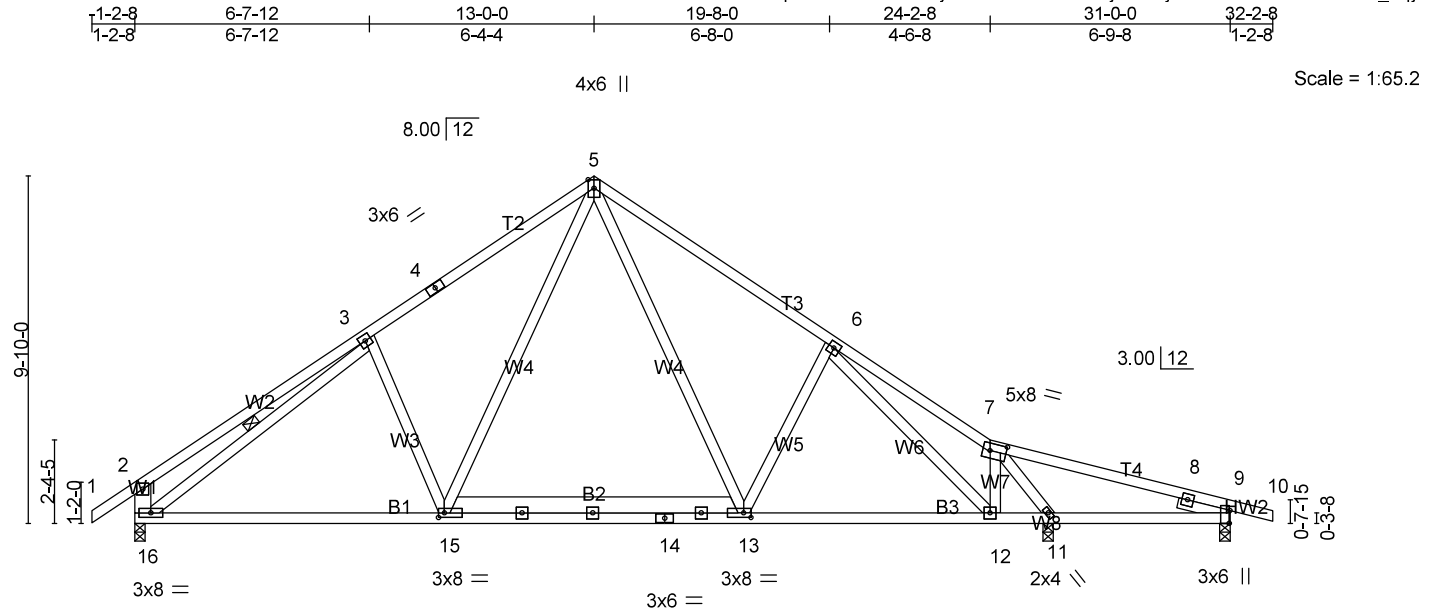


|                          |             |                            |          |          |                           |
|--------------------------|-------------|----------------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>T9 | Truss Type<br>Roof Special | Qty<br>7 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                            |          |          |                           |

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|   |        |         |         |         |        |
|---|--------|---------|---------|---------|--------|
| 0-3-8   | 8-9-3  | 17-2-13 | 24-2-8  | 25-10-4 | 31-0-0 |
| 0-3-8   | 8-5-11 | 8-5-10  | 6-11-11 | 1-7-12  | 5-1-12 |
| Plate Offsets (X,Y)-- [7:0-5-8,0-2-8], [9:0-4-6,Edge], [13:0-2-8,0-1-8], [15:0-2-0,0-1-8] |        |         |         |         |        |

| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.21   | Vert(LL) | -0.07 15-16 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.30   | Vert(CT) | -0.14 15-16 | >999   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.30   | Horz(CT) | 0.03 11     | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-AS | Wind(LL) | 0.02 13-15  | >999   | 240 |                |          |
|               | Code IRC2018/TPI2014 |           |          |             |        |     | Weight: 201 lb | FT = 20% |

|                                      |  |
|--------------------------------------|--|
| <b>LUMBER-</b>                       | <b>BRACING-</b>  |
| TOP CHORD 2x4 SP 2400F 2.0E          | TOP CHORD Structural wood sheathing directly applied, except end verticals.  |
| BOT CHORD 2x4 SP 2400F 2.0E *Except* | BOT CHORD Rigid ceiling directly applied.  |
| WEBS 2x4 SP No.2 *Except*            | WEBS 1 Row at midpt 3-16   |
| SLIDER Right 2x4 SP No.3 -D 1-6-0    |  |
|                                      | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS.** (lb/size) 11=1229/0-3-8 (min. 0-1-8), 9=274/0-3-8 (min. 0-1-8), 16=1117/0-3-8 (min. 0-1-8)  
 Max Horz 16=-176(LC 6)  
 Max Uplift 9=-38(LC 5), 16=-9(LC 8)  
 Max Grav 11=1245(LC 14), 9=288(LC 20), 16=1128(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-438/80, 3-4=-1235/47, 4-5=-1142/86, 5-6=-1232/86, 6-7=-1084/54, 2-16=-461/94  
 BOT CHORD 15-16=0/1110, 14-15=0/790, 13-14=0/781, 12-13=0/1022, 11-12=0/860  
 WEBS 3-15=-263/119, 5-15=-1/562, 5-13=-5/554, 6-13=-284/111, 6-12=-341/0, 7-12=0/252, 7-11=-1343/0, 3-16=-998/0

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=31ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 4x4 MT20 unless otherwise indicated.
  - 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 with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 16.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

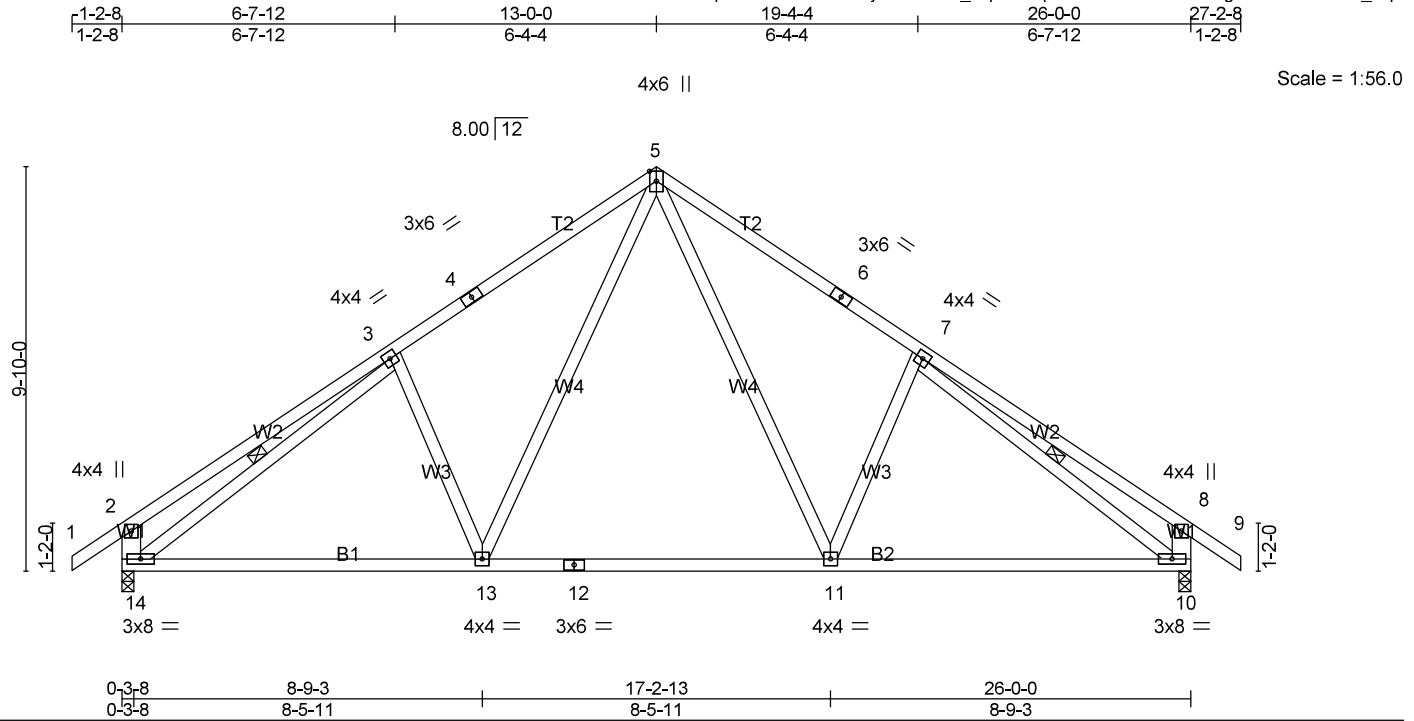
**LOAD CASE(S)** Standard

|                          |              |                      |           |          |                           |
|--------------------------|--------------|----------------------|-----------|----------|---------------------------|
| Job<br>28780             | Truss<br>T10 | Truss Type<br>Common | Qty<br>11 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |              |                      |           |          |                           |

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| LOADING (psf) | SPACING-             | CSI.      | DEFL.    | in (loc)    | I/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.19   | Vert(LL) | -0.23 11-13 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.36   | Vert(CT) | -0.30 11-13 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.31   | Horz(CT) | 0.03 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2018/TPI2014 | Matrix-AS | Wind(LL) | 0.02 11-13  | >999   | 240 |                |          |
|               |                      |           |          |             |        |     | Weight: 163 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
W1: 2x6 SP No.1

#### BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 3-14, 7-10

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 14=1108/0-3-8 (min. 0-1-8), 10=1108/0-3-8 (min. 0-1-8)

Max Horz 14=183(LC 7)  
Max Uplift 14=-8(LC 8), 10=-8(LC 8)  
Max Grav 14=1121(LC 13), 10=1121(LC 14)

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

TOP CHORD 2-3=-431/76, 3-4=-1241/48, 4-5=-1146/87, 5-6=-1146/87, 6-7=-1241/48,  
7-8=-431/76, 2-14=-458/92, 8-10=-458/92  
BOT CHORD 13-14=0/1120, 12-13=0/797, 11-12=0/797, 10-11=0/1023  
WEBS 5-11=-6/572, 7-11=-264/120, 5-13=-6/571, 3-13=-264/120, 3-14=-1041/0,  
7-10=-1041/0

#### NOTES-

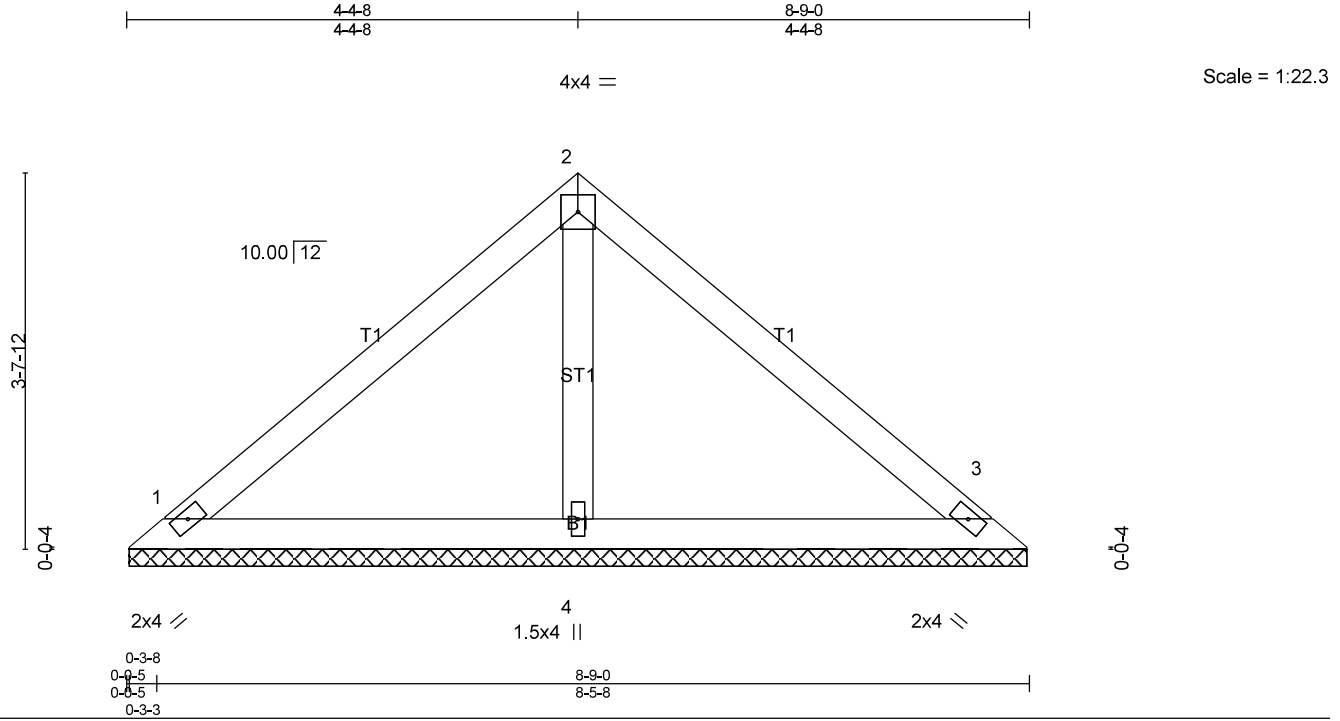
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6'-0" between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

**LOAD CASE(S)** Standard

|                          |             |                      |          |          |                           |
|--------------------------|-------------|----------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>V1 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                      |          |          |                           |

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| LOADING (psf) | SPACING-             |       | CSI.     | DEFL.    | in   | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 2-0-0 | TC 0.14  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.16  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.04  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |      |       |        |     | Weight: 33 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=188/8-8-6 (min. 0-1-8), 3=188/8-8-6 (min. 0-1-8), 4=259/8-8-6 (min. 0-1-8)  
Max Horz 1=59(LC 6)  
Max Uplift 1=17(LC 8), 3=17(LC 8)

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

#### NOTES-

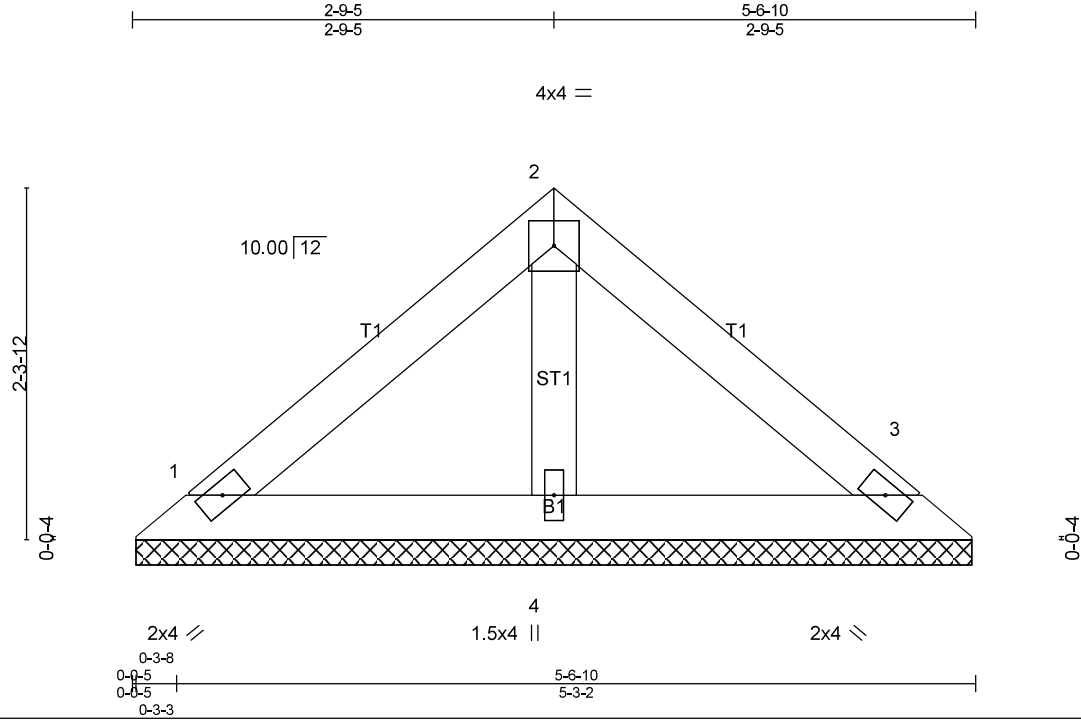
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

|                          |             |                      |          |          |                           |
|--------------------------|-------------|----------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>V2 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                      |          |          |                           |

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Scale = 1:15.2

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in   | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.05  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.06  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.02  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |          |      |       |        |     | Weight: 20 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING-

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=112/5-6-0 (min. 0-1-8), 3=112/5-6-0 (min. 0-1-8), 4=155/5-6-0 (min. 0-1-8)  
Max Horz 1=35(LC 7)  
Max Uplift1=-10(LC 8), 3=-10(LC 8)

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

#### NOTES-

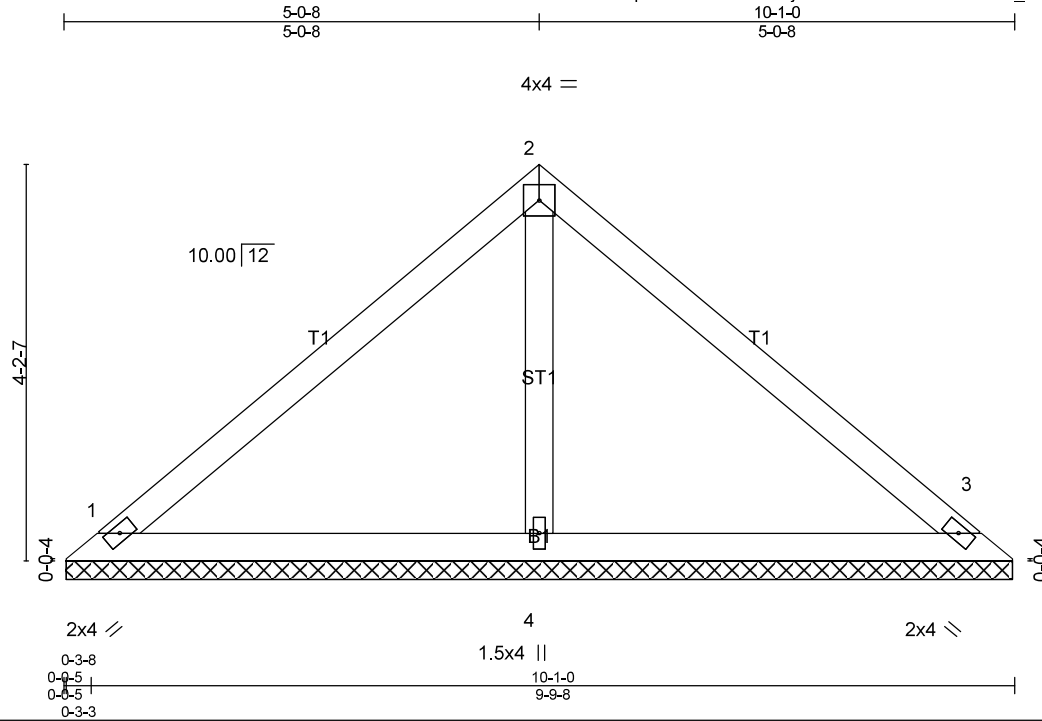
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

|                                    |             |                      |                          |          |                           |
|------------------------------------|-------------|----------------------|--------------------------|----------|---------------------------|
| Job<br>28780                       | Truss<br>V3 | Truss Type<br>Valley | Qty<br>1                 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| C&R Building Supply, Autryville NC |             |                      | Job Reference (optional) |          |                           |

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Scale = 1:24.4

| LOADING (psf) | SPACING-             |       | CSI.     | DEFL.    | in   | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 2-0-0 | TC 0.15  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.21  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.07  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-S |          |      |       |        |     | Weight: 38 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x4 SP 2400F 2.0E  
 BOT CHORD 2x4 SP No.2  
 OTHERS 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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=205/10-0-6 (min. 0-1-8), 3=205/10-0-6 (min. 0-1-8), 4=333/10-0-6 (min. 0-1-8)  
 Max Horz 1=-69(LC 6)  
 Max Uplift 1=-12(LC 8), 3=-12(LC 8)

**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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

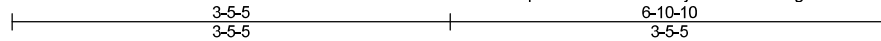
**LOAD CASE(S)** Standard



|                          |             |                      |          |          |                           |
|--------------------------|-------------|----------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>V4 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                      |          |          |                           |

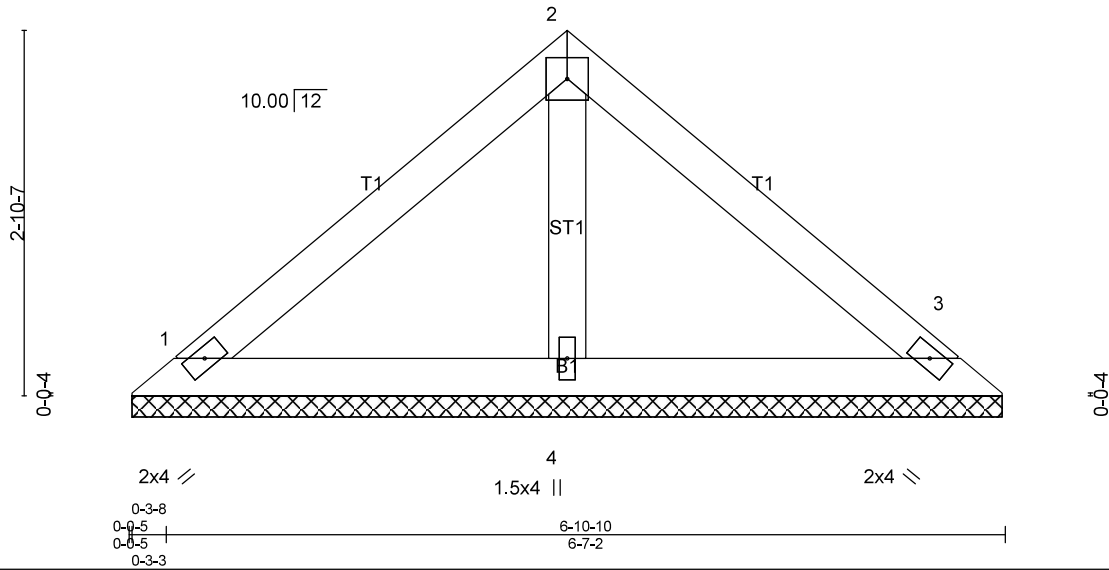
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4x4 =

Scale = 1:18.1



| LOADING (psf) | SPACING-             |       | CSI.     |  | DEFL.    | in   | (loc) | I/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|--|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 2-0-0 | TC 0.08  |  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.09  |  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.03  |  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2018/TPI2014 |       | Matrix-P |  |          |      |       |        |     | Weight: 25 lb | FT = 20% |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=144/6-10-0 (min. 0-1-8), 3=144/6-10-0 (min. 0-1-8), 4=198/6-10-0 (min. 0-1-8)  
Max Horz 1=45(LC 7)  
Max Uplift 1=13(LC 8), 3=13(LC 8)

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

#### NOTES-

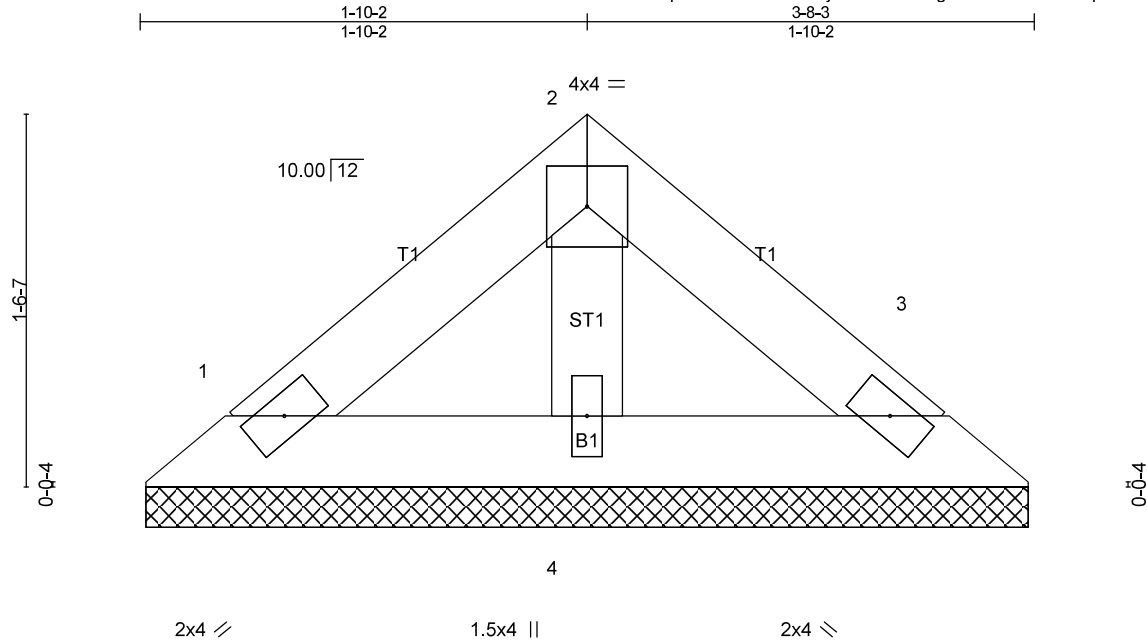
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard

|                          |             |                      |          |          |                           |
|--------------------------|-------------|----------------------|----------|----------|---------------------------|
| Job<br>28780             | Truss<br>V5 | Truss Type<br>Valley | Qty<br>1 | Ply<br>1 | Vuncannon&Sons\Shane Cabe |
| Job Reference (optional) |             |                      |          |          |                           |

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Scale = 1:9.5

|                          |                      |                 |                         |
|--------------------------|----------------------|-----------------|-------------------------|
| 0-0-50-3-8<br>0-0-50-3-3 |                      | 3-8-3<br>3-4-11 |                         |
| <b>LOADING</b> (psf)     | <b>SPACING-</b>      | <b>CSI.</b>     | <b>DEFL.</b>            |
| TCLL 20.0                | Plate Grip DOL 1.15  | TC 0.02         | in (loc) l/defl L/d     |
| TCDL 10.0                | Lumber DOL 1.15      | BC 0.02         | Vert(LL) n/a - n/a 999  |
| BCLL 0.0 *               | Rep Stress Incr YES  | WB 0.01         | Vert(CT) n/a - n/a 999  |
| BCDL 10.0                | Code IRC2018/TPI2014 | Matrix-P        | Horz(CT) 0.00 3 n/a n/a |
|                          |                      |                 | <b>PLATES</b> MT20      |
|                          |                      |                 | <b>GRIP</b> 244/190     |
|                          |                      |                 | Weight: 12 lb FT = 20%  |

#### LUMBER-

TOP CHORD 2x4 SP 2400F 2.0E  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-8-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 1=68/3-7-10 (min. 0-1-8), 3=68/3-7-10 (min. 0-1-8), 4=94/3-7-10 (min. 0-1-8)  
Max Horz 1=-21(LC 6)  
Max Uplift 1=-6(LC 8), 3=-6(LC 8)

**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 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=20ft; B=64ft; L=26ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

**LOAD CASE(S)** Standard