

# Mark Morris, P.E.

#126, 1317-M, Summerville, SC 29483

843 209-5784, Fax (866)-213-4614

The truss drawing(s) listed below have been prepared by **Atlantic Building Components** under my direct supervision based on the parameters provided by the truss designers.

AST #: 60324

JOB: 25-5333-R01

JOB NAME: LOT 156 PROVIDENCE CREEK

Wind Code: ASCE7-16

Wind Speed: Vult= 120mph

Exposure Category: B

Mean Roof Height (feet): 35

These truss designs comply with IRC 2015 as well as IRC 2018.

*20 Truss Design(s)*

Trusses:

P01, P02, R01, R02, R03, R05, R06, R07, R08, R09, R10, V01, V02, V03, V04, V05, V06, V07,



**6/17/2025**

**Mark Morris**

*My license renewal date for the state of North Carolina is 12/31/2025*

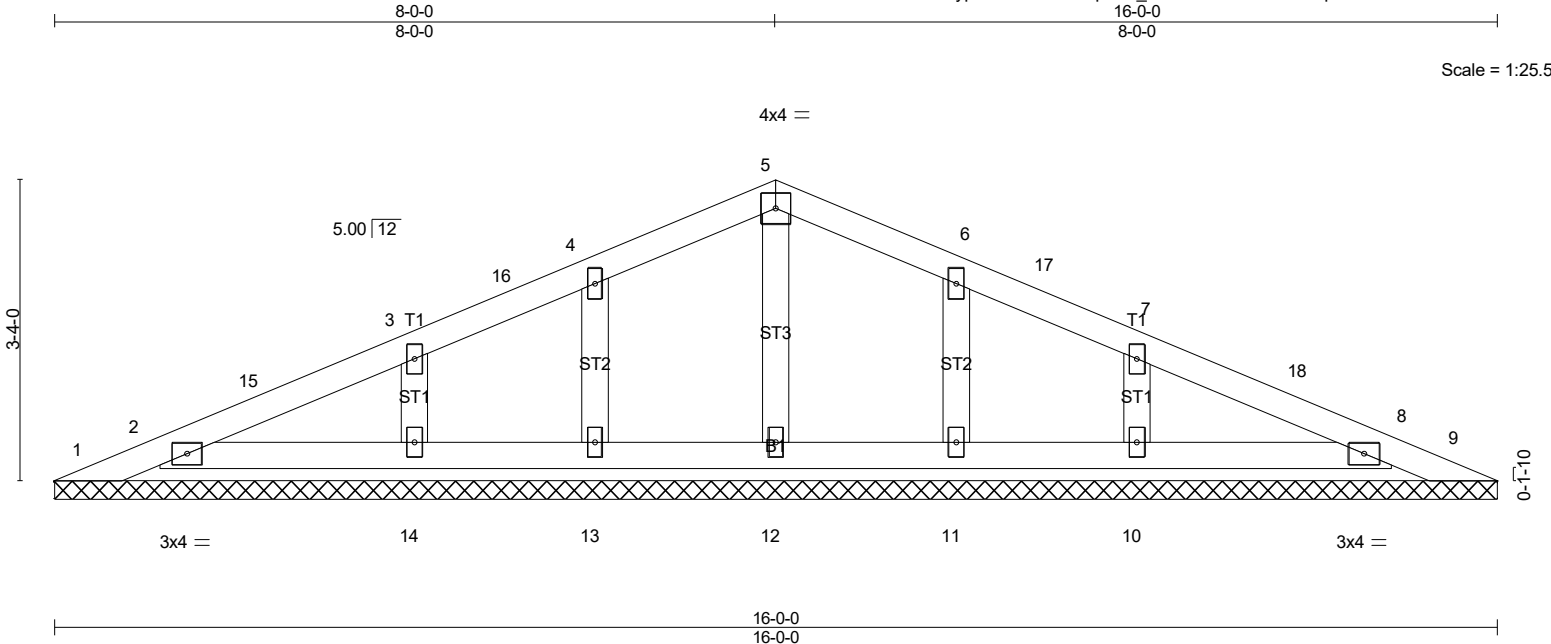
***Warning !—Verify design parameters and read notes before use.***

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|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | P01   | GABLE      | 2   | 1   |                                                                  |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:13 2025 Page 1  
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Job Reference (optional) # 60324



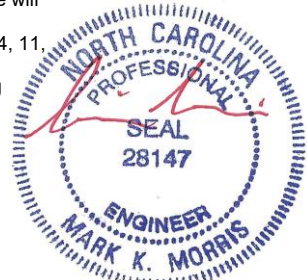
| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.10  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf) 20.0   | Plate Grip DOL 1.15  | BC 0.09  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.04  | Horz(CT) | 0.00 | 8     | n/a    | n/a |               |          |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-S |          |      |       |        |     |               |          |
| BCDL 10.0        | Code IRC2021/TPI2014 |          |          |      |       |        |     | Weight: 58 lb | FT = 20% |

|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <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.                                                                          |
| BOT CHORD 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                     |
| OTHERS 2x4 SP No.3    | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS.** All bearings 16-0-0.  
(lb) - Max Horz 1=47(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 1, 9, 2, 8, 12, 13, 11 except 14=277(LC 21), 10=277(LC 22)

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

- NOTES-** (13-16)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-9 to 5-2-2, Exterior(2R) 5-2-2 to 10-9-14, Exterior(2E) 10-9-14 to 15-7-7 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.0; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - All plates are 2x4 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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, 9, 2, 8, 13, 14, 11, 10.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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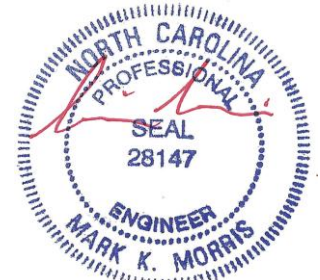
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|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | P01   | GABLE      | 2   | 1   | Job Reference (optional) # 60324                                 |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:13 2025 Page 2  
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- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



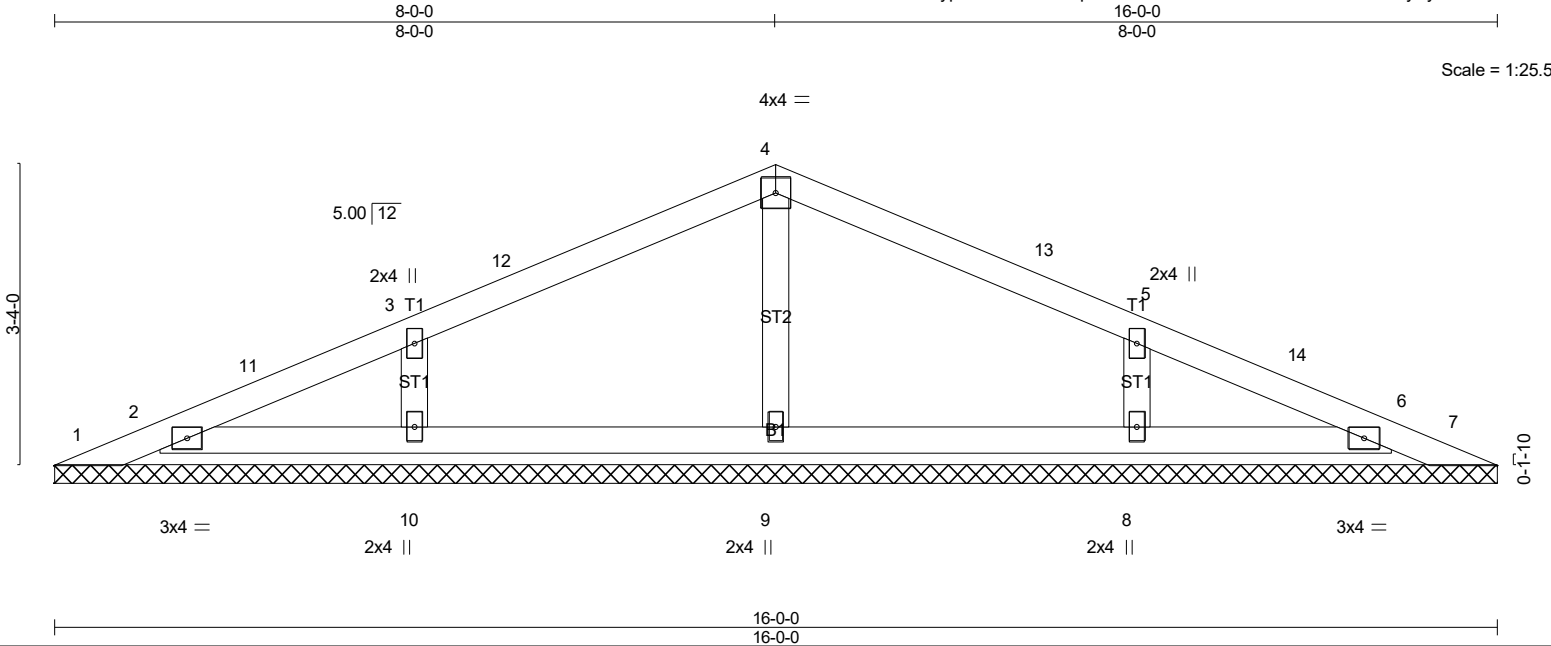
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|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | P02   | GABLE      | 19  | 1   |                                                                  |

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Job Reference (optional) # 60324



| LOADING (psf) |       | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES |  | GRIP    |  |
|---------------|-------|----------------------|------|----------|------|----------|------|--------|--|---------|--|
| TCLL (roof)   | 20.0  | Plate Grip DOL       | 1.15 | TC       | 0.26 | Vert(LL) | n/a  | MT20   |  | 244/190 |  |
| Snow (Pf)     | 20.0  | Lumber DOL           | 1.15 | BC       | 0.20 | Vert(CT) | n/a  |        |  |         |  |
| TCDL          | 10.0  | Rep Stress Incr      | YES  | WB       | 0.07 | Horz(CT) | 0.00 |        |  |         |  |
| BCLL          | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-S |      |          |      |        |  |         |  |
| BCDL          | 10.0  |                      |      |          |      |          |      |        |  |         |  |

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

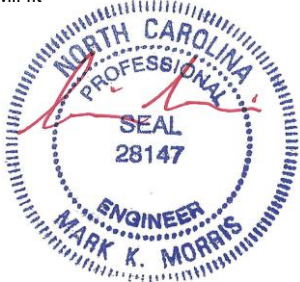
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6'-0'-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0'-0 oc bracing.

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

**REACTIONS.** All bearings 16'-0'-0.  
(lb) - Max Horz 1=47(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 2, 6, 10, 8  
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 2, 6 except 9=297(LC 22), 10=431(LC 21), 8=431(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-10=-357/153, 5-8=-357/153

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-9 to 5-2-2, Exterior(2R) 5-2-2 to 10-9-14, Exterior(2E) 10-9-14 to 15-7-7 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.
  - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 4'-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 30.0psf on the bottom chord in all areas where a rectangle 3'-6'-0 tall by 1'-0'-0 wide will fit 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, 2, 6, 10, 8.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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6/17/2025

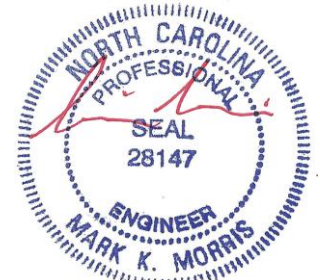
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| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| 25-5333-R01 | P02   | GABLE      | 19  | 1   | Job Reference (optional) # 60324                                 |

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- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
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**LOAD CASE(S)** Standard

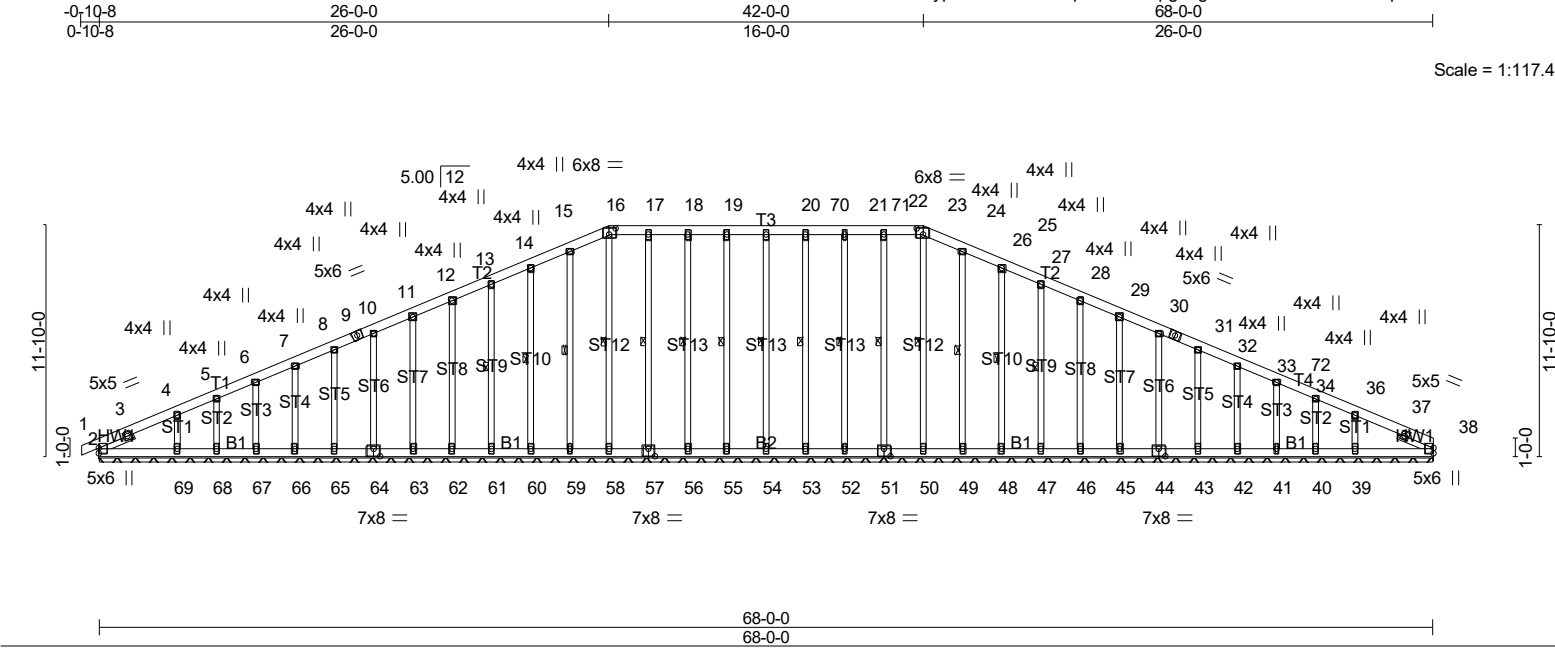


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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | R01   | GABLE      | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

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|                                                                                                                                    |       |                      |      |             |      |              |                 |                |          |
|------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------|------|-------------|------|--------------|-----------------|----------------|----------|
| Plate Offsets (X,Y)-- [16:0-4-0,0-3-13], [24:0-4-0,0-3-13], [44:0-4-0,0-4-8], [51:0-4-0,0-4-8], [57:0-4-0,0-4-8], [64:0-4-0,0-4-8] |       |                      |      |             |      |              |                 |                |          |
| <b>LOADING</b> (psf)                                                                                                               |       | <b>SPACING-</b>      |      | <b>CSI.</b> |      | <b>DEFL.</b> |                 | <b>PLATES</b>  |          |
| TCLL (roof)                                                                                                                        | 20.0  | Plate Grip DOL       | 1.15 | TC          | 0.07 | in (loc)     | l/defl          | MT20           | GRIP     |
| Snow (Pf)                                                                                                                          | 20.0  | Lumber DOL           | 1.15 | BC          | 0.06 | Vert(LL)     | -0.00 1 n/r     |                | 244/190  |
| TCDL                                                                                                                               | 10.0  | Rep Stress Incr      | YES  | WB          | 0.23 | Vert(CT)     | 0.00 1 n/r      |                |          |
| BCLL                                                                                                                               | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-SH   |      | Horz(CT)     | 0.01 38 n/a n/a |                |          |
| BCDL                                                                                                                               | 10.0  |                      |      |             |      |              |                 | Weight: 677 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

**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.  
WEBS 1 Row at midpt 20-54, 19-55, 18-56, 17-57, 16-58, 15-59, 14-60, 13-61, 21-53, 22-52, 23-51, 24-50, 25-49, 26-48, 27-47

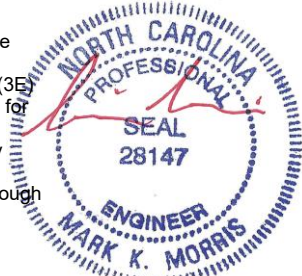
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 68-0-0.  
(lb) - Max Horz 2=-171(LC 15)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40 except 69=-127(LC 14), 39=-114(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 38, 66, 67, 68, 50, 42, 41, 40 except 54=286(LC 44), 55=287(LC 44), 56=289(LC 44), 57=288(LC 44), 58=251(LC 52), 59=289(LC 45), 60=290(LC 45), 61=286(LC 45), 62=286(LC 45), 63=287(LC 45), 64=288(LC 45), 65=258(LC 45), 69=301(LC 54), 53=287(LC 44), 52=289(LC 44), 51=288(LC 44), 49=289(LC 45), 48=290(LC 45), 47=286(LC 45), 46=286(LC 45), 45=287(LC 45), 44=288(LC 45), 43=258(LC 45), 39=312(LC 55)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 13-14=-114/274, 14-15=-130/310, 15-16=-143/339, 16-17=-136/329, 17-18=-136/330, 18-19=-136/330, 19-70=-136/330, 20-70=-136/330, 20-71=-136/330, 21-71=-136/330, 21-22=-136/330, 22-23=-136/330, 23-24=-136/329, 24-25=-143/339, 25-26=-130/310, 26-27=-114/274

- NOTES-** (15-18)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 6-0-0, Exterior(2N) 6-0-0 to 19-2-6, Corner(3R) 19-2-6 to 32-9-10, Exterior(2N) 32-9-10 to 35-2-6, Corner(3R) 35-2-6 to 48-9-10, Exterior(2N) 48-9-10 to 61-2-6, Corner(3E) 61-2-6 to 68-0-0 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
  - 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

Continued on page 2



6/17/2025

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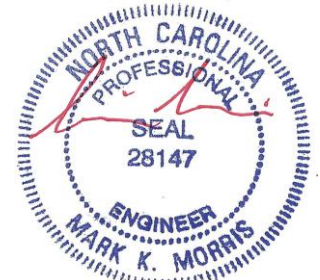
|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R01   | GABLE      | 1   | 1   | Job Reference (optional) # 60324                                 |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:19 2025 Page 2  
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#### NOTES- (15-18)

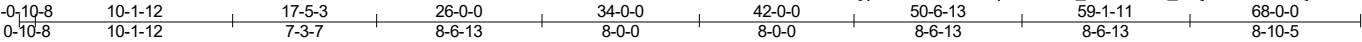
- 7) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 3x6 MT20 unless otherwise indicated.
- 10) Gable requires continuous bottom chord bearing.
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 54, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 53, 52, 51, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40 except (jt=lb) 69=127, 39=114.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

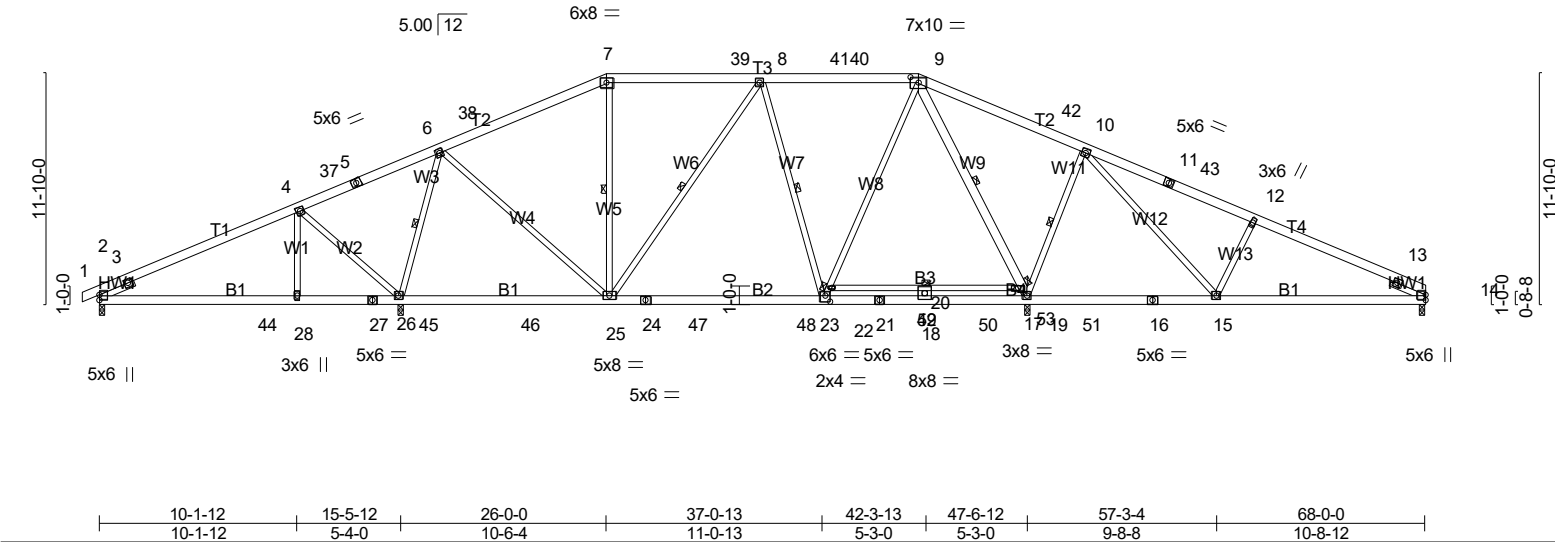


6/17/2025

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



Scale = 1:118.1



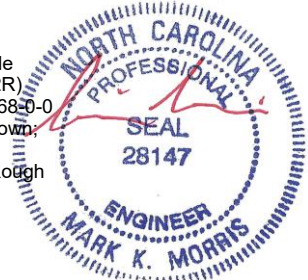
|                                                          |  |                                                              |  |                                                        |  |
|----------------------------------------------------------|--|--------------------------------------------------------------|--|--------------------------------------------------------|--|
| Plate Offsets (X,Y)-- [9:0-5-0,0-3-7], [23:0-3-0,0-3-12] |  | 10-1-12 15-5-12 26-0-0 37-0-13 42-3-13 47-6-12 57-3-4 68-0-0 |  | 10-1-12 5-4-0 10-6-4 11-0-13 5-3-0 5-3-0 9-8-8 10-8-12 |  |
| <b>LOADING</b> (psf)                                     |  | <b>SPACING-</b>                                              |  | <b>CSI.</b>                                            |  |
| TCLL (roof) 20.0                                         |  | 2-0-0                                                        |  | TC 0.70                                                |  |
| Snow (Pf) 20.0                                           |  | Plate Grip DOL 1.15                                          |  | BC 0.98                                                |  |
| TCDL 10.0                                                |  | Lumber DOL 1.15                                              |  | WB 0.99                                                |  |
| BCLL 0.0 *                                               |  | Rep Stress Incr YES                                          |  | Matrix-MSH                                             |  |
| BCDL 10.0                                                |  | Code IRC2021/TPI2014                                         |  |                                                        |  |
|                                                          |  |                                                              |  | <b>DEFL.</b>                                           |  |
|                                                          |  |                                                              |  | in (loc) l/defl L/d                                    |  |
|                                                          |  |                                                              |  | Vert(LL) -0.22 20-22 >999 240                          |  |
|                                                          |  |                                                              |  | Vert(CT) -0.33 20-22 >999 180                          |  |
|                                                          |  |                                                              |  | Horz(CT) 0.03 17 n/a n/a                               |  |
|                                                          |  |                                                              |  | <b>PLATES</b>                                          |  |
|                                                          |  |                                                              |  | MT20                                                   |  |
|                                                          |  |                                                              |  | <b>GRIP</b>                                            |  |
|                                                          |  |                                                              |  | 244/190                                                |  |
|                                                          |  |                                                              |  | Weight: 528 lb FT = 20%                                |  |

|                                                          |  |                                                                   |  |
|----------------------------------------------------------|--|-------------------------------------------------------------------|--|
| <b>LUMBER-</b>                                           |  | <b>BRACING-</b>                                                   |  |
| TOP CHORD 2x6 SP No.2                                    |  | TOP CHORD                                                         |  |
| BOT CHORD 2x6 SP No.2 *Except*                           |  | BOT CHORD                                                         |  |
| B3: 2x4 SP No.2, B4: 2x6 SP DSS                          |  |                                                                   |  |
| WEBS 2x4 SP No.3 *Except*                                |  | WEBS                                                              |  |
| W9: 2x6 SP No.2                                          |  |                                                                   |  |
| SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0 |  |                                                                   |  |
|                                                          |  | Structural wood sheathing directly applied or 6-0-0 oc purlins.   |  |
|                                                          |  | Rigid ceiling directly applied or 2-2-0 oc bracing. Except:       |  |
|                                                          |  | 6-0-0 oc bracing: 19-22                                           |  |
|                                                          |  | 1 Row at midpt 6-26, 7-25, 8-25, 8-23, 9-19, 10-17                |  |
|                                                          |  | MiTek recommends that Stabilizers and required cross bracing      |  |
|                                                          |  | be installed during truss erection, in accordance with Stabilizer |  |
|                                                          |  | Installation guide.                                               |  |

**REACTIONS.** All bearings 0-3-8.  
(lb) - Max Horz 2=172(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=-125(LC 14), 26=-195(LC 14),  
17=-162(LC 15), 14=-121(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) except 2=698(LC 41), 26=2299(LC 45),  
17=3346(LC 45), 14=703(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-457/0, 3-4=-774/154, 6-38=-1188/278, 7-38=-1140/308, 7-39=-1052/332,  
8-39=-1052/332, 8-40=-1123/281, 40-41=-1123/281, 9-41=-1123/281, 9-42=0/575,  
10-42=0/326, 10-11=-539/230, 11-43=-664/213, 12-43=-768/200, 12-13=-961/208,  
13-14=-470/0  
BOT CHORD 2-44=-211/638, 28-44=-211/638, 27-28=-211/638, 26-27=-211/638, 26-45=-79/458,  
45-46=-79/458, 25-46=-79/458, 24-25=-14/1295, 24-47=-14/1295, 47-48=-14/1295,  
23-48=-14/1295, 23-49=0/664, 21-49=0/664, 18-21=0/664, 18-50=0/664, 17-50=0/664,  
14-15=-112/829  
WEBS 4-28=0/307, 4-26=-781/223, 6-26=-1533/258, 6-25=-2/986, 8-25=-387/156, 8-23=-660/211,  
22-23=-74/1266, 9-22=-47/1338, 9-19=-1918/241, 17-19=-1969/212, 10-17=-1232/339,  
10-15=-169/875, 12-15=-521/237, 18-20=-370/0

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-11-2, Interior(1) 5-11-2 to 19-2-6, Exterior(2R) 19-2-6 to 32-9-10, Interior(1) 32-9-10 to 35-2-6, Exterior(2R) 35-2-6 to 48-9-10, Interior(1) 48-9-10 to 61-2-6, Exterior(2E) 61-2-6 to 68-0-0 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
  - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



Continued on page 2

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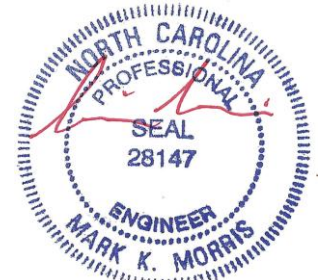
|             |       |                |     |     |                                                                  |
|-------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R02   | Piggyback Base | 8   | 1   | Job Reference (optional) # 60324                                 |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:20 2025 Page 2  
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#### NOTES- (12-15)

- 6) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 5x5 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 125 lb uplift at joint 2, 195 lb uplift at joint 26, 162 lb uplift at joint 17 and 121 lb uplift at joint 14.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

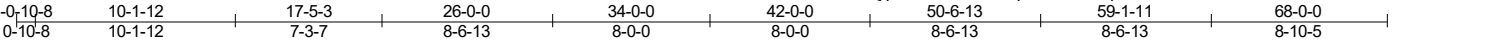


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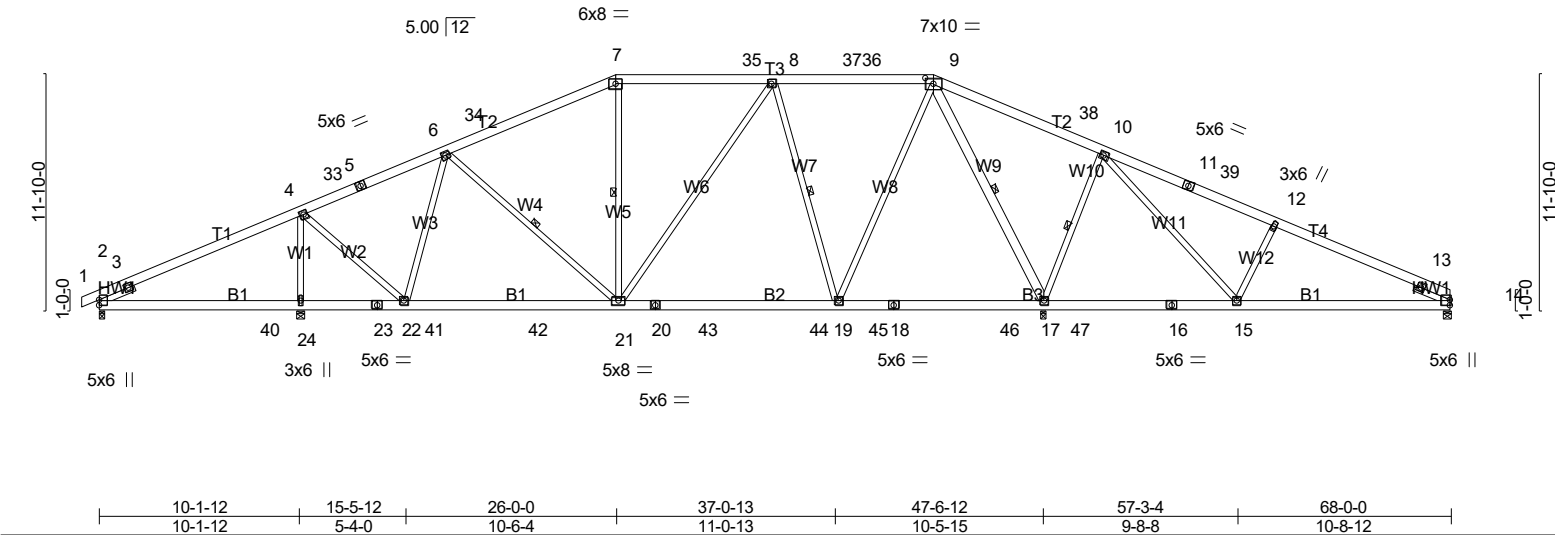
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|                          |       |                |     |     |                                                                  |
|--------------------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | R03   | Piggyback Base | 1   | 1   |                                                                  |
| Job Reference (optional) |       |                |     |     | # 60324                                                          |

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Scale = 1:116.0



| Plate Offsets (X,Y)-- [9:0-5-0,0-3-7] |       |                      |      |             |      |              |             |                         |         |
|---------------------------------------|-------|----------------------|------|-------------|------|--------------|-------------|-------------------------|---------|
| <b>LOADING</b> (psf)                  |       | <b>SPACING-</b>      |      | <b>CSI.</b> |      | <b>DEFL.</b> |             | <b>PLATES</b>           |         |
| TCLL (roof)                           | 20.0  | Plate Grip DOL       | 1.15 | TC          | 0.72 | in (loc)     | l/defl      | MT20                    | GRIP    |
| Snow (Pf)                             | 20.0  | Lumber DOL           | 1.15 | BC          | 0.75 | Vert(LL)     | 0.13 24-27  |                         | 244/190 |
| TCDL                                  | 10.0  | Rep Stress Incr      | YES  | WB          | 0.97 | Vert(CT)     | -0.28 19-21 |                         |         |
| BCLL                                  | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-MSH  |      | Horz(CT)     | 0.04 17     |                         |         |
| BCDL                                  | 10.0  |                      |      |             |      |              |             |                         |         |
|                                       |       |                      |      |             |      |              |             | Weight: 513 lb FT = 20% |         |

|                |                                                   |                 |                                                                                                                                                             |
|----------------|---------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LUMBER-</b> |                                                   | <b>BRACING-</b> |                                                                                                                                                             |
| TOP CHORD      | 2x6 SP No.2                                       | TOP CHORD       | Structural wood sheathing directly applied or 4-9-4 oc purlins.<br>Rigid ceiling directly applied or 10-0-0 oc bracing, Except:<br>6-0-0 oc bracing: 15-17. |
| BOT CHORD      | 2x6 SP No.2 *Except*<br>B3: 2x6 SP DSS            | BOT CHORD       |                                                                                                                                                             |
| WEBS           | 2x4 SP No.3 *Except*<br>W9: 2x6 SP No.2           | WEBS            | 1 Row at midpt                      6-21, 7-21, 8-19, 9-17, 10-17                                                                                           |
| SLIDER         | Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0 |                 | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.          |

(lb) - Max Horz 2=172(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=-185(LC 10), 24=-189(LC 14), 17=-267(LC 11), 14=-120(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) except 2=580(LC 54), 24=2044(LC 45), 17=3329(LC 45), 14=673(LC 43)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-375/414, 3-4=-517/445, 4-33=-1467/418, 5-33=-1429/423, 5-6=-1295/443, 6-34=-1613/428, 7-34=-1526/454, 7-35=-1410/468, 8-35=-1410/468, 8-36=-1123/369, 36-37=-1123/369, 9-37=-1123/369, 9-38=0/705, 10-38=0/473, 10-11=-474/225, 11-39=-600/207, 12-39=-702/195, 12-13=-893/202, 13-14=-555/0  
BOT CHORD 2-40=-342/406, 24-40=-342/406, 23-24=-342/406, 22-23=-342/406, 22-41=-257/1420, 41-42=-257/1420, 21-42=-257/1420, 20-21=-115/1381, 20-43=-115/1381, 43-44=-115/1381, 19-44=-115/1381, 19-45=0/627, 18-45=0/627, 18-46=0/627, 17-46=0/627, 14-15=-107/765  
WEBS 4-24=-1780/229, 4-22=0/1304, 6-22=-642/76, 6-21=-269/383, 7-21=-40/263, 8-21=-85/550, 8-19=-943/263, 9-19=-156/1470, 9-17=-2117/355, 10-17=-1242/335, 10-15=-161/903, 12-15=-525/238

- NOTES-** (12-15)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-10-8 to 5-11-2, Interior(1) 5-11-2 to 19-2-6, Exterior(2R) 19-2-6 to 32-9-10, Interior(1) 32-9-10 to 35-2-6, Exterior(2R) 35-2-6 to 48-9-10, Interior(1) 48-9-10 to 61-2-6, Exterior(2E) 61-2-6 to 68-0-0 zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; 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 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



Continued on page 2

6/17/2025

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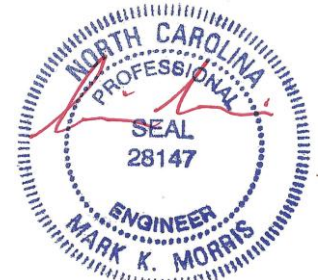
|             |       |                |     |     |                                                                  |
|-------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R03   | Piggyback Base | 1   | 1   | Job Reference (optional) # 60324                                 |

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**NOTES-** (12-15)

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- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 5x5 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 2, 189 lb uplift at joint 24, 267 lb uplift at joint 17 and 120 lb uplift at joint 14.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
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**LOAD CASE(S)** Standard



6/17/2025

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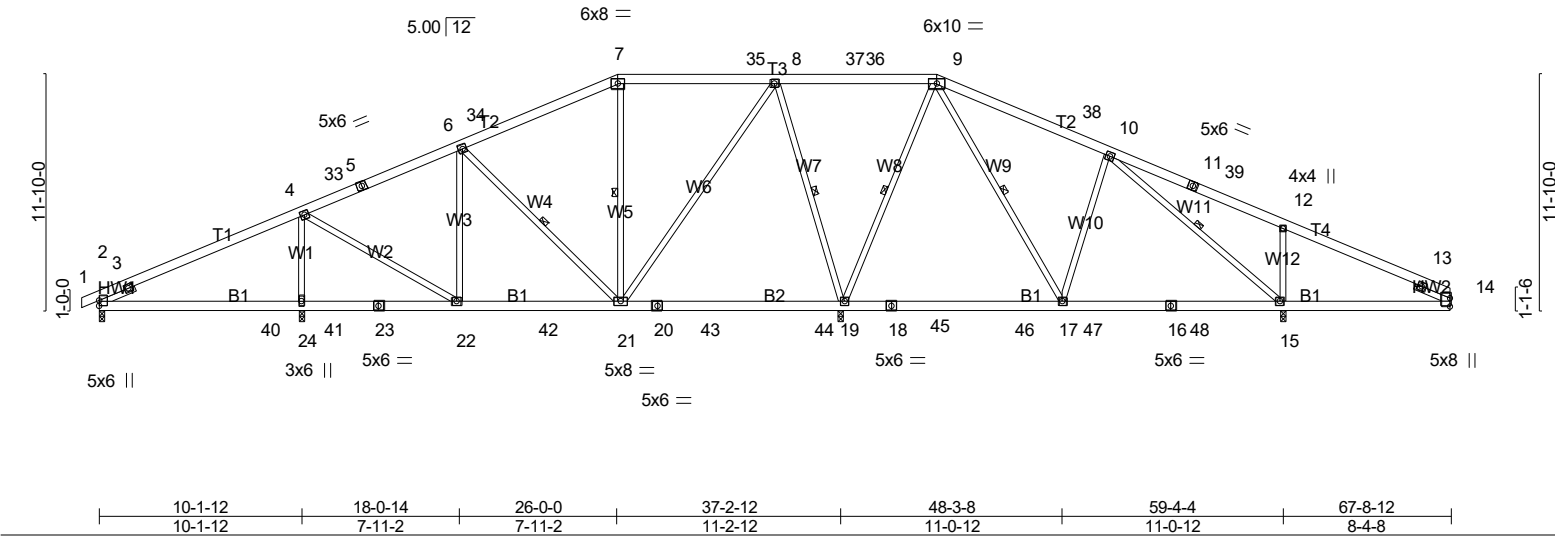
|             |       |                |     |     |                                                                  |
|-------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R05   | Piggyback Base | 3   | 1   |                                                                  |

Job Reference (optional) # 60324

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:22 2025 Page 1  
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|         |         |         |        |        |        |        |        |         |
|---------|---------|---------|--------|--------|--------|--------|--------|---------|
| -0-10-8 | 10-1-12 | 18-0-14 | 26-0-0 | 34-0-0 | 42-0-0 | 50-8-2 | 59-4-4 | 67-8-12 |
| 0-10-8  | 10-1-12 | 7-11-2  | 7-11-2 | 8-0-0  | 8-0-0  | 8-8-2  | 8-8-2  | 8-4-8   |

Scale = 1:115.5



| LOADING (psf) |       | SPACING-             |      | CSI.       |      | DEFL.    |             | PLATES |      | GRIP           |          |
|---------------|-------|----------------------|------|------------|------|----------|-------------|--------|------|----------------|----------|
| TCLL (roof)   | 20.0  | Plate Grip DOL       | 1.15 | TC         | 0.66 | Vert(LL) | 0.13 24-27  | L/defl | >903 | MT20           | 244/190  |
| Snow (PF)     | 20.0  | Lumber DOL           | 1.15 | BC         | 0.72 | Vert(CT) | -0.25 19-21 | L/d    | >999 |                |          |
| TCDL          | 10.0  | Rep Stress Incr      | YES  | WB         | 0.91 | Horz(CT) | 0.03 15     |        | n/a  |                |          |
| BCLL          | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-MSH |      |          |             |        |      |                |          |
| BCDL          | 10.0  |                      |      |            |      |          |             |        |      | Weight: 505 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
W7: 2x4 SP No.2  
SLIDER Left 2x4 SP No.3 1-11-0, Right 2x4 SP No.3 1-11-0

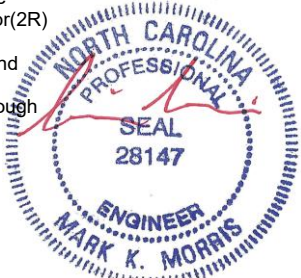
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 6-21, 7-21, 8-19, 9-19, 9-17, 10-15

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

**REACTIONS.** All bearings 0-3-8 except (jt=length) 14=Mechanical.  
(lb) - Max Horz 2=174(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=-197(LC 10), 24=-169(LC 14), 19=-225(LC 10), 15=-195(LC 15), 14=-128(LC 11)  
Max Grav All reactions 250 lb or less at joint(s) except 2=617(LC 54), 24=1531(LC 45), 19=2775(LC 45), 15=1329(LC 45), 14=398(LC 55)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-373/460, 3-4=-609/477, 4-33=-1254/392, 5-33=-1183/396, 5-6=-1034/419, 6-34=-885/367, 7-34=-735/394, 7-35=-677/409, 8-35=-677/409, 8-36=-13/372, 36-37=-13/372, 9-37=-13/372, 9-38=-747/370, 10-38=-888/340, 10-11=-220/410, 11-39=-301/393, 12-39=-403/380, 12-13=-301/297, 13-14=-168/327  
BOT CHORD 2-40=-377/488, 24-40=-377/488, 24-41=-377/488, 23-41=-377/488, 22-23=-377/488, 22-42=-214/1054, 21-42=-214/1054, 20-21=-23/294, 20-43=-23/294, 43-44=-23/294, 19-44=-23/294, 17-47=-141/805, 16-47=-141/805, 16-48=-141/805, 15-48=-141/805, 14-15=-221/278  
WEBS 4-24=-1229/237, 4-22=0/724, 6-21=-587/193, 8-21=-115/1065, 8-19=-1444/322, 9-19=-1145/202, 9-17=-148/1050, 10-17=-604/256, 10-15=-810/25, 12-15=-575/264

- NOTES-** (13-16)  
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=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-10-12, Interior(1) 5-10-12 to 19-2-12, Exterior(2R) 19-2-12 to 32-9-4, Interior(1) 32-9-4 to 35-2-12, Exterior(2R) 35-2-12 to 48-9-4, Interior(1) 48-9-4 to 60-11-8, Exterior(2E) 60-11-8 to 67-8-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); PF=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10  
4) Unbalanced snow loads have been considered for this design.  
5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



Continued on page 2

6/17/2025

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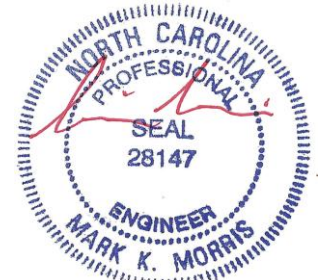
|             |       |                |     |     |                                                                  |
|-------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R05   | Piggyback Base | 3   | 1   | Job Reference (optional) # 60324                                 |

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#### NOTES- (13-16)

- 6) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 5x5 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 197 lb uplift at joint 2, 169 lb uplift at joint 24, 225 lb uplift at joint 19, 195 lb uplift at joint 15 and 128 lb uplift at joint 14.
- 13) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

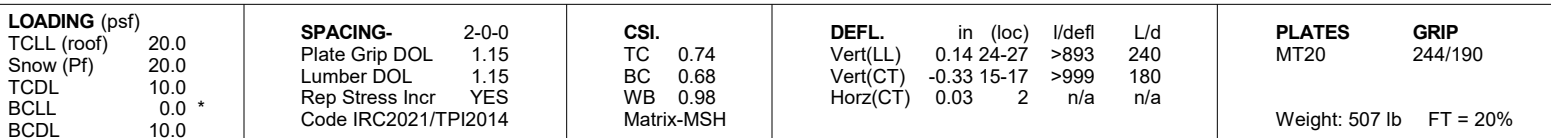
**LOAD CASE(S)** Standard



6/17/2025

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|                  |                                                                                                 |                                                    |
|------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <b>BRACING-</b>  |                                                                                                 |                                                    |
| <b>TOP CHORD</b> | Structural wood sheathing directly applied or 5-0-7 oc purlins.                                 |                                                    |
| <b>BOT CHORD</b> | Rigid ceiling directly applied or 10-0-0 oc bracing, Except:<br>6-0-0 oc bracing: 19-21, 17-19. |                                                    |
| <b>WEBS</b>      | 1 Row at midpt                                                                                  | 4-22, 6-21, 7-21, 8-21, 8-19, 9-19, 9-17,<br>10-17 |

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

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

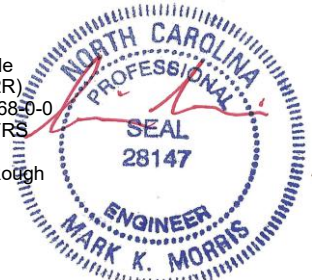
**TOP CHORD**  
2-3=-355/455, 3-4=-575/463, 4-33=-1051/325, 5-33=-981/330, 5-6=-832/353,  
6-34=-613/280, 7-34=-470/307, 7-35=-431/329, 8-35=-431/329, 8-36=0/1091, 36-37=0/1091,  
9-37=0/1091, 9-38=-540/282, 10-38=-683/252, 10-11=-1518/439, 11-39=-1650/421,  
12-39=-1756/419, 12-13=-1730/308, 13-14=-614/19

**BOT CHORD**  
2-40=-360/457, 24-40=-360/457, 24-41=-360/457, 23-41=-360/457, 22-23=-360/457,  
22-42=-158/868, 21-42=-158/868, 20-21=-669/273, 20-43=-669/273, 43-44=-669/273,  
19-44=-669/273, 19-45=-375/195, 18-45=-375/195, 18-46=-375/195, 17-46=-375/195,  
17-47=-52/788, 16-47=-52/788, 16-48=-52/788, 15-48=-52/788, 14-15=-205/1523

**WEBS**  
4-24=-1040/234, 4-22=-42/498, 6-21=-754/204, 7-21=-404/92, 8-21=-183/1446,  
8-19=-1633/382, 9-19=-1875/276, 9-17=-251/1736, 10-17=-1196/346, 10-15=-240/1018,  
12-15=-500/254

**NOTES-** (12-15)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDF=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-11-2, Interior(1) 5-11-2 to 19-2-6, Exterior(2R) 19-2-6 to 32-9-10, Interior(1) 32-9-10 to 35-2-6, Exterior(2R) 35-2-6 to 48-9-10, Interior(1) 48-9-10 to 61-2-6, Exterior(2E) 61-2-6 to 68-0-0; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



6/17/2025

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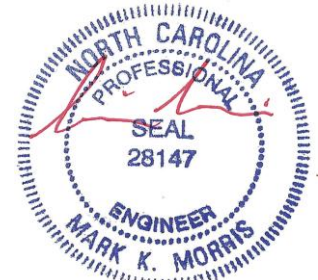
|             |       |                |     |     |                                                                  |
|-------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R06   | PIGGYBACK BASE | 1   | 1   | Job Reference (optional) # 60324                                 |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:23 2025 Page 2  
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**NOTES-** (12-15)

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- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 5x5 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 195 lb uplift at joint 2, 166 lb uplift at joint 24, 292 lb uplift at joint 19 and 176 lb uplift at joint 14.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

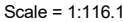
**LOAD CASE(S)** Standard



6/17/2025

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Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:24 2025 Page 1  
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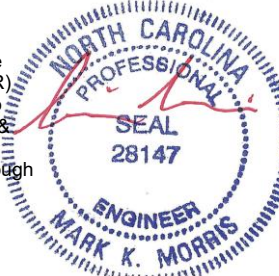
Weight: 509 lb      FT = 20%

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

(lb) - Max Horz 2=167(LC 14)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=-196(LC 10), 25=-165(LC 14),  
 20=-289(LC 11), 14=-194(LC 15)  
 Max Grav All reactions 250 lb or less at joint(s) except 2=603(LC 54), 25=1313(LC 35),  
 20=3780(LC 45), 14=1080(LC 43)

|           |                                                                                                                                                                                                                                                                                                                                     |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2-3=-355/458, 3-4=-574/470, 4-34=-1053/331, 5-34=-984/336, 5-6=-834/359,<br>6-35=-614/285, 7-35=-470/313, 7-36=-430/334, 36-37=-430/334, 8-37=-430/334,<br>8-38=0/1094, 38-39=0/1094, 9-39=0/1094, 9-40=-536/285, 10-40=-679/255,<br>10-11=-1509/441, 11-41=-1642/423, 12-41=-1747/421, 12-13=-1721/310, 13-14=-588/16              |
| BOT CHORD | 2-42=-349/456, 25-42=-349/456, 25-43=-349/456, 24-43=-349/456, 23-24=-349/456,<br>23-44=-155/870, 22-44=-155/870, 21-22=-672/280, 21-45=-672/280, 45-46=-672/280,<br>20-46=-672/280, 20-47=-377/202, 19-47=-377/202, 19-48=-377/202, 18-48=-377/202,<br>18-49=-39/784, 17-49=-39/784, 17-50=-39/784, 16-50=-39/784, 14-16=-196/1515 |
| WEBS      | 4-25=-1042/234, 4-23=-43/500, 6-22=-755/204, 7-22=-405/90, 8-22=-181/1448,<br>8-20=-1633/383, 9-20=-1876/273, 9-18=-251/1735, 10-18=-1195/346, 10-16=-239/1013,<br>12-16=-498/253                                                                                                                                                   |

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Hip Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 5-11-2, Interior(1) 5-11-2 to 19-2-6, Exterior(2R) 19-2-6 to 32-9-10, Interior(1) 32-9-10 to 35-2-6, Exterior(2R) 35-2-6 to 48-9-10, Interior(1) 48-9-10 to 62-0-14, Exterior(2E) 62-0-14 to 68-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.



6/17/2025

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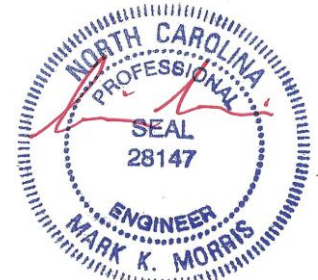
|             |       |                |     |     |                                                                  |
|-------------|-------|----------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type     | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R07   | Piggyback Base | 6   | 1   | Job Reference (optional) # 60324                                 |

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#### NOTES- (12-15)

- 6) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 7) Provide adequate drainage to prevent water ponding.
- 8) All plates are 5x5 MT20 unless otherwise indicated.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 196 lb uplift at joint 2, 165 lb uplift at joint 25, 289 lb uplift at joint 20 and 194 lb uplift at joint 14.
- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

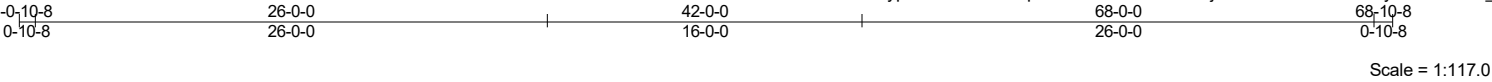


6/17/2025

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | R08   | GABLE      | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

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|                                                                                                                                    |       |                      |      |             |                         |              |        |               |         |
|------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------|------|-------------|-------------------------|--------------|--------|---------------|---------|
| Plate Offsets (X,Y)-- [16:0-4-0,0-3-13], [24:0-4-0,0-3-13], [45:0-4-0,0-4-8], [52:0-4-0,0-4-8], [58:0-4-0,0-4-8], [65:0-4-0,0-4-8] |       |                      |      |             |                         |              |        |               |         |
| <b>LOADING</b> (psf)                                                                                                               |       | <b>SPACING-</b>      |      | <b>CSI.</b> |                         | <b>DEFL.</b> |        | <b>PLATES</b> |         |
| TCLL (roof)                                                                                                                        | 20.0  | Plate Grip DOL       | 1.15 | TC          | 0.07                    | in (loc)     | l/defl | MT20          | GRIP    |
| Snow (Pf)                                                                                                                          | 20.0  | Lumber DOL           | 1.15 | BC          | 0.06                    | 0.00         | 38     | n/r           | 244/190 |
| TCDL                                                                                                                               | 10.0  | Rep Stress Incr      | YES  | WB          | 0.23                    | 0.00         | 39     | n/r           |         |
| BCLL                                                                                                                               | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-SH   |                         | 0.01         | 38     | n/a           |         |
| BCDL                                                                                                                               | 10.0  |                      |      |             |                         |              |        |               |         |
|                                                                                                                                    |       |                      |      |             | Weight: 680 lb FT = 20% |              |        |               |         |

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x6 SP No.2  
OTHERS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 2-1-4, Right 2x4 SP No.3 2-1-4

**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.  
WEBS 1 Row at midpt 20-55, 19-56, 18-57, 17-58, 16-59, 15-60, 14-61, 13-62, 21-54, 22-53, 23-52, 24-51, 25-50, 26-49, 27-48

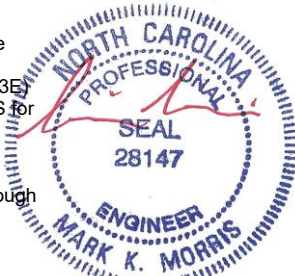
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 68-0-0.  
(lb) - Max Horz 2=167(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 54, 53, 52, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41 except 70=-126(LC 14), 40=-109(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 2, 38, 67, 68, 69, 51, 43, 42, 41 except 55=286(LC 44), 56=287(LC 44), 57=289(LC 44), 58=289(LC 44), 59=251(LC 52), 60=289(LC 45), 61=289(LC 45), 62=286(LC 45), 63=286(LC 45), 64=287(LC 45), 65=288(LC 45), 66=258(LC 45), 70=300(LC 54), 54=287(LC 44), 53=289(LC 44), 52=289(LC 44), 50=289(LC 45), 49=289(LC 45), 48=286(LC 45), 47=286(LC 45), 46=287(LC 45), 45=288(LC 45), 44=258(LC 45), 40=300(LC 55)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 13-14=-114/264, 14-15=-130/300, 15-16=-143/329, 16-17=-136/320, 17-18=-136/320, 18-19=-136/320, 19-71=-136/320, 20-71=-136/320, 20-72=-136/320, 21-72=-136/320, 21-22=-136/320, 22-23=-136/320, 23-24=-136/320, 24-25=-143/329, 25-26=-130/300, 26-27=-114/264

**NOTES-** (15-18)  
1) Unbalanced roof live loads have been considered for this design.  
2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-10-8 to 6-0-0, Exterior(2N) 6-0-0 to 19-2-6, Corner(3R) 19-2-6 to 32-9-10, Exterior(2N) 32-9-10 to 35-2-6, Corner(3R) 35-2-6 to 48-9-10, Exterior(2N) 48-9-10 to 62-0-0, Corner(3E) 62-0-0 to 68-10-8 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.  
4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10  
5) Unbalanced snow loads have been considered for this design.  
6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

Continued on page 2



6/17/2025

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

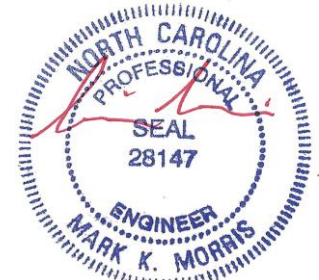
|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R08   | GABLE      | 1   | 1   | Job Reference (optional) # 60324                                 |

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#### NOTES- (15-18)

- 7) WARNING: This long span truss requires extreme care and experience for proper and safe handling and erection. For general handling and erection guidance, see Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses ("BCSI"), jointly produced by SBCA and TPI. The building owner or the owner's authorized agent shall contract with a qualified registered design professional for the design and inspection of the temporary installation restraint/bracing and the permanent individual truss member restraint/bracing. MiTek assumes no responsibility for truss manufacture, handling, erection, or bracing.
- 8) Provide adequate drainage to prevent water ponding.
- 9) All plates are 3x6 MT20 unless otherwise indicated.
- 10) Gable requires continuous bottom chord bearing.
- 11) Gable studs spaced at 2-0-0 oc.
- 12) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 13) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 14) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 54, 53, 52, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41 except (jt=lb) 70=126, 40=109.
- 15) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 16) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 17) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 18) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

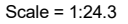
**LOAD CASE(S)** Standard



6/17/2025

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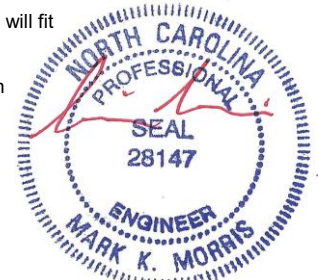
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Weight: 49 lb      FT = 20%

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

- 2) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) Gable studs spaced at 2'-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 30.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 1'-0" wide will fit 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) 8, 6.
- 11) 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.



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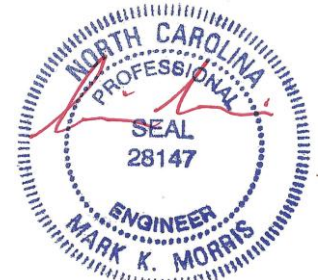
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| Job         | Truss | Truss Type              | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
|-------------|-------|-------------------------|-----|-----|------------------------------------------------------------------|
| 25-5333-R01 | R09   | Common Structural Gable | 1   | 1   | Job Reference (optional) # 60324                                 |

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- 12) Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- 13) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 14) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 15) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

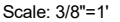
**LOAD CASE(S)** Standard



6/17/2025

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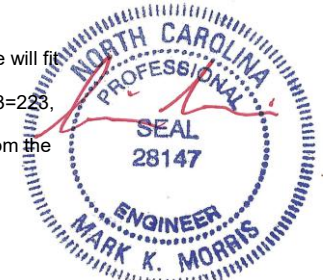
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| LUMBER-   |             | BRACING-  |                                                                                        |
|-----------|-------------|-----------|----------------------------------------------------------------------------------------|
| TOP CHORD | 2x4 SP No.2 | TOP CHORD | Structural wood sheathing directly applied or 5-11-0 oc purlins, except end verticals. |
| BOT CHORD | 2x6 SP No.2 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                   |
| WEBS      | 2x4 SP No.3 |           |                                                                                        |
| OTHERS    | 2x4 SP No.3 |           |                                                                                        |

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-268/78

- 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) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TC DL=5.0psf; BC DL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 4) 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.
- 5) T CLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 6) Unbalanced snow loads have been considered for this design.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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) except (jt=lb) 3=223, 4=163.
- 11) Use Simpson Strong-Tie HTU26 (10-16d Girder, 14-10dx1 1/2 Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-8-12 from the left end to 3-8-12 to connect truss(es) R05 (1 ply 2x6 SP) to back face of bottom chord.
- 12) Fill all nail holes where hanger is in contact with lumber.



6/17/2025

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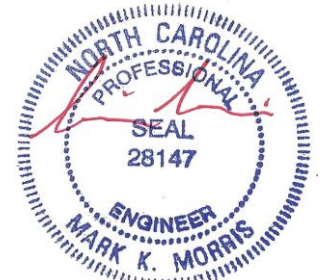
|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | R10   | GABLE      | 1   | 2   | Job Reference (optional) # 60324                                 |

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- 14) Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- 15) Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- 16) SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

#### LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
  - Uniform Loads (plf)
    - Vert: 1-2=-60, 3-4=-20
  - Concentrated Loads (lb)
    - Vert: 8=-376(B) 9=-376(B)

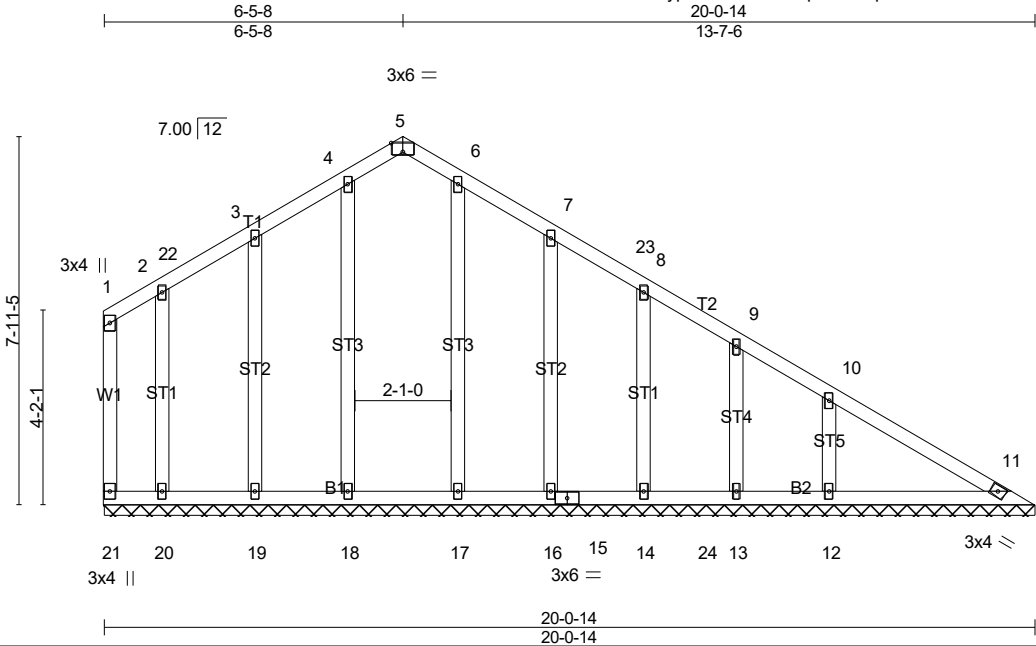


6/17/2025

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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V01   | GABLE      | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:29 2025 Page 1  
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Scale = 1:49.7

|                                      |       |                      |      |          |      |          |         |                |          |
|--------------------------------------|-------|----------------------|------|----------|------|----------|---------|----------------|----------|
| Plate Offsets (X,Y)-- [5:0-3-0,Edge] |       |                      |      |          |      |          |         |                |          |
| LOADING (psf)                        |       | SPACING-             |      | CSI.     |      | DEFL.    |         | PLATES         | GRIP     |
| TCLL (roof)                          | 20.0  | 2-0-0                |      | TC       | 0.19 | in (loc) | l/defl  | MT20           | 244/190  |
| Snow (Pf)                            | 20.0  | Plate Grip DOL       | 1.15 | BC       | 0.19 | Vert(LL) | n/a     |                |          |
| TCDL                                 | 10.0  | Lumber DOL           | 1.15 | WB       | 0.18 | Vert(CT) | n/a     |                |          |
| BCLL                                 | 0.0 * | Rep Stress Incr      | YES  | Matrix-S |      | Horz(CT) | 0.01 11 |                |          |
| BCDL                                 | 10.0  | Code IRC2021/TPI2014 |      |          |      |          |         |                |          |
|                                      |       |                      |      |          |      |          |         | Weight: 126 lb | FT = 20% |

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

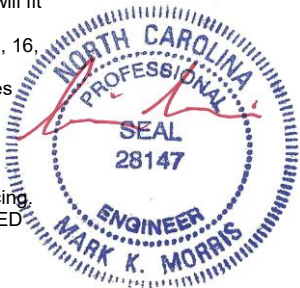
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 20-0-14.  
(lb) - Max Horz 21=-214(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 21, 11, 19, 20, 17, 16, 14, 13 except 12=-103(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 21, 11, 20, 13 except 18=303(LC 5), 19=287(LC 5), 17=309(LC 24), 16=275(LC 6), 14=276(LC 24), 12=324(LC 24)

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

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 4-11-6, Exterior(2R) 4-11-6 to 11-3-2, Interior(1) 11-3-2 to 14-8-13, Exterior(2E) 14-8-13 to 19-6-6 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
  - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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) 21, 11, 19, 20, 17, 16, 14, 13 except (jt=lb) 12=103.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2



6/17/2025

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|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | V01   | GABLE      | 1   | 1   | Job Reference (optional) # 60324                                 |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:29 2025 Page 2  
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LOAD CASE(S) Standard

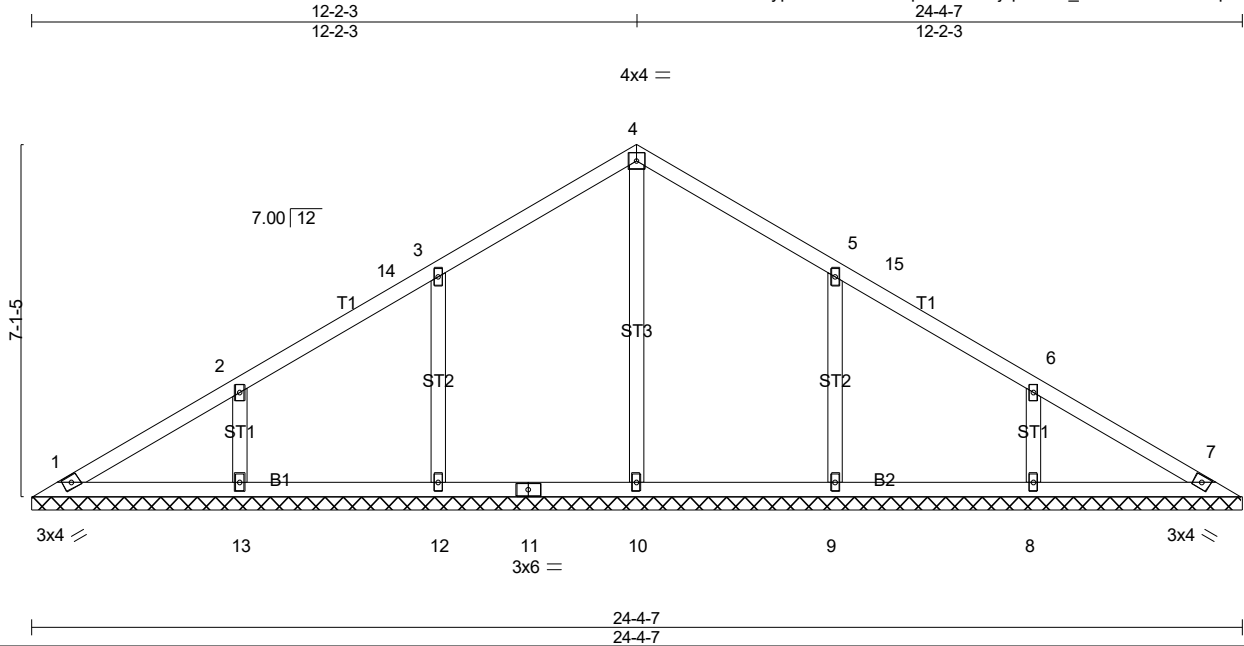


6/17/2025

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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V02   | Valley     | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:30 2025 Page 1  
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| LOADING (psf) |       | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES |  | GRIP           |          |
|---------------|-------|----------------------|------|----------|------|----------|------|--------|--|----------------|----------|
| TCLL (roof)   | 20.0  | Plate Grip DOL       | 1.15 | TC       | 0.28 | Vert(LL) | n/a  | MT20   |  | 244/190        |          |
| Snow (Pf)     | 20.0  | Lumber DOL           | 1.15 | BC       | 0.44 | Vert(CT) | n/a  |        |  |                |          |
| TCDL          | 10.0  | Rep Stress Incr      | YES  | WB       | 0.18 | Horz(CT) | 0.00 |        |  |                |          |
| BCLL          | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-S |      |          |      |        |  |                |          |
| BCDL          | 10.0  |                      |      |          |      |          |      |        |  |                |          |
|               |       |                      |      |          |      |          |      |        |  | Weight: 104 lb | FT = 20% |

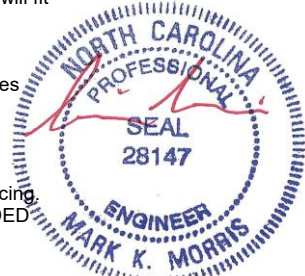
|                |             |                                                                                                                                                    |                                                                 |
|----------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <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. |
| BOT CHORD      | 2x4 SP No.3 | BOT CHORD                                                                                                                                          | Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS         | 2x4 SP No.3 |                                                                                                                                                    |                                                                 |
|                |             | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |                                                                 |

**REACTIONS.** All bearings 24-4-7.  
(lb) - Max Horz 1=150(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=114(LC 14), 13=109(LC 14), 9=113(LC 15), 8=109(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=464(LC 26), 12=462(LC 5), 13=339(LC 1), 9=462(LC 6), 8=339(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-12=-369/154, 2-13=-258/146, 5-9=-369/154, 6-8=-258/146

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 7-4-10, Exterior(2R) 7-4-10 to 16-11-13, Interior(1) 16-11-13 to 19-0-6, Exterior(2E) 19-0-6 to 23-9-15 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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) 1 except (jt=lb) 12=114, 13=109, 9=113, 8=109.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

Continued on page 2



6/17/2025

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|             |       |            |     |     |                                                                  |
|-------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job         | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01 | V02   | Valley     | 1   | 1   | Job Reference (optional) # 60324                                 |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:30 2025 Page 2  
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LOAD CASE(S) Standard

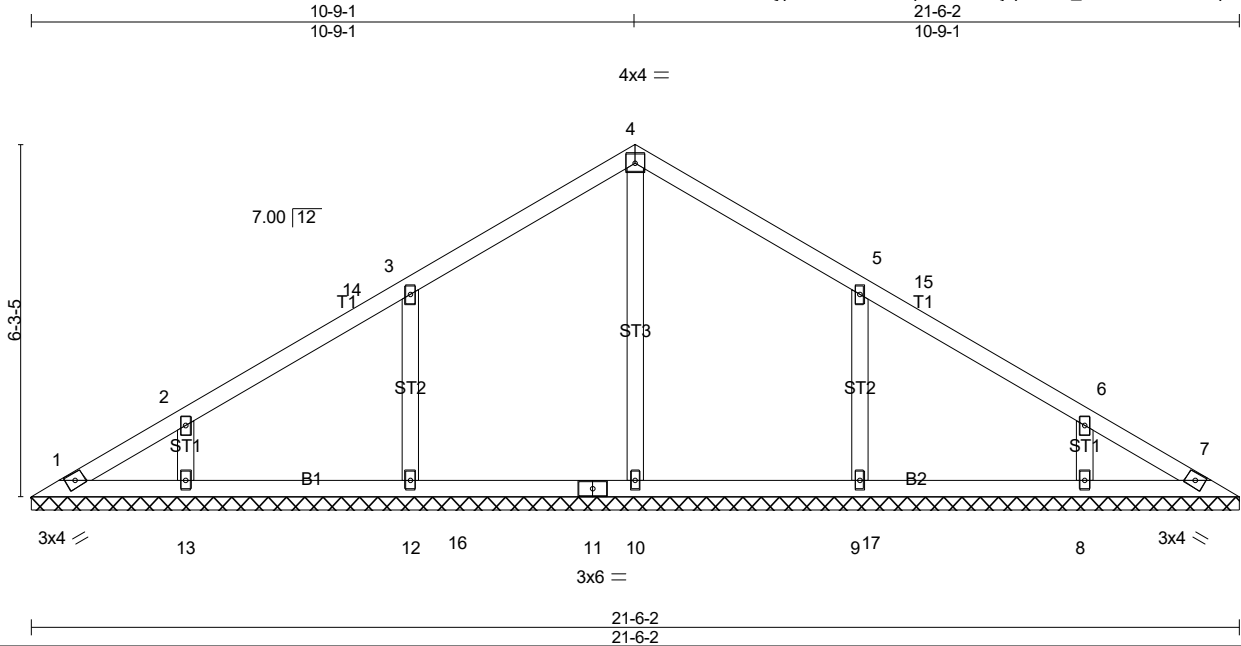


6/17/2025

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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V03   | Valley     | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:30 2025 Page 1  
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| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.29  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf) 20.0   | Plate Grip DOL 1.15  | BC 0.43  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.14  | Horz(CT) | 0.00 | 7     | n/a    | n/a |               |          |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-S |          |      |       |        |     |               |          |
| BCDL 10.0        | Code IRC2021/TPI2014 |          |          |      |       |        |     | Weight: 89 lb | FT = 20% |

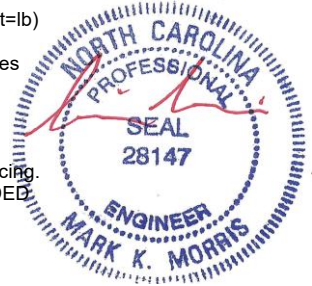
|                       |                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <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.                                                                          |
| BOT CHORD 2x4 SP No.3 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                     |
| OTHERS 2x4 SP No.3    | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS.** All bearings 21-6-2.  
(lb) - Max Horz 1=131(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 8 except 12=-119(LC 14), 9=-118(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=454(LC 23), 12=462(LC 5), 13=275(LC 1), 9=462(LC 6), 8=275(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 3-12=-380/160, 5-9=-380/160

- NOTES-** (10-13)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Interior(1) 5-4-1 to 5-11-8, Exterior(2R) 5-11-8 to 15-6-11, Interior(1) 15-6-11 to 16-2-1, Exterior(2E) 16-2-1 to 20-11-11 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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) 1, 13, 8 except (jt=lb) 12=119, 9=118.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
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**LOAD CASE(S)** Standard

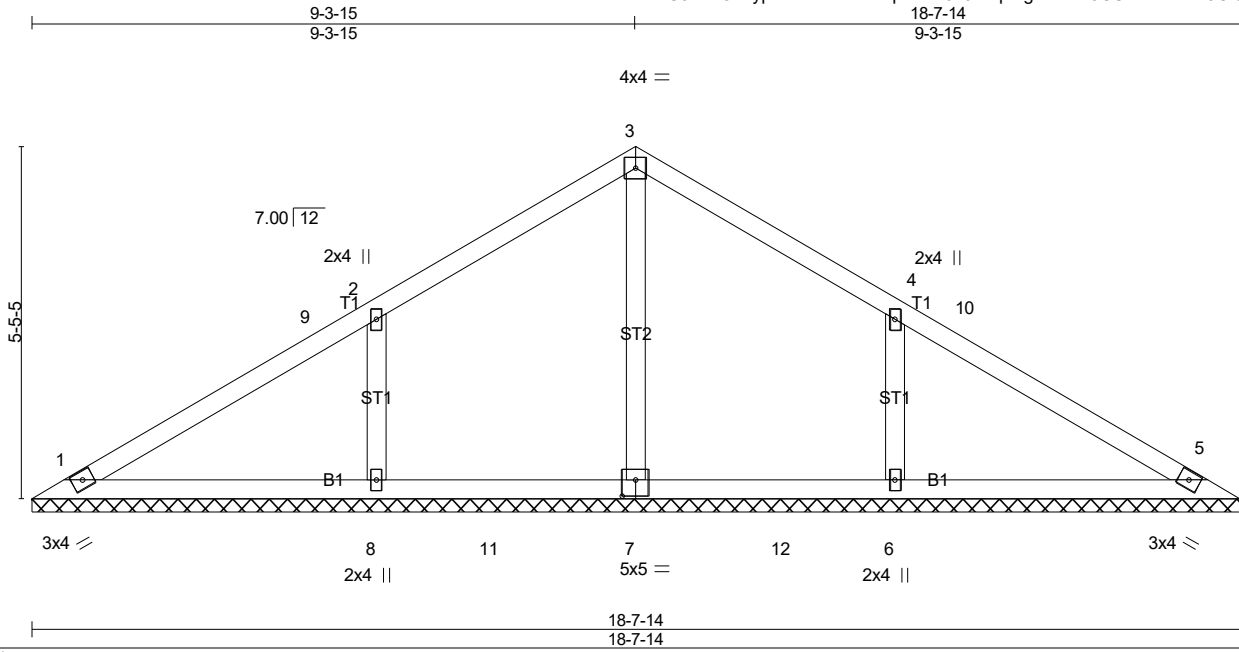


6/17/2025

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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V04   | Valley     | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

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Scale = 1:35.6

Plate Offsets (X,Y)-- [7:0-2-8,0-3-0]

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.37  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf) 20.0   | Plate Grip DOL 1.15  | BC 0.31  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.10  | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-S |          |      |       |        |     |               |          |
| BCDL 10.0        | Code IRC2021/TPI2014 |          |          |      |       |        |     | Weight: 73 lb | FT = 20% |

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

**BRACING-**  
TOP CHORD  
BOT CHORD

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

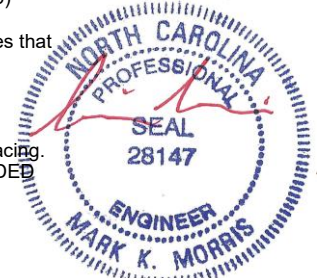
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 18-7-14.  
(lb) - Max Horz 1=113(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=143(LC 14), 6=143(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=383(LC 5), 8=537(LC 20), 6=537(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=425/186, 4-6=425/186

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-3-15, Exterior(2R) 5-3-15 to 13-3-15, Exterior(2E) 13-3-15 to 18-1-6 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.00; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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) 1, 5 except (jt=lb) 8=143, 6=143.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

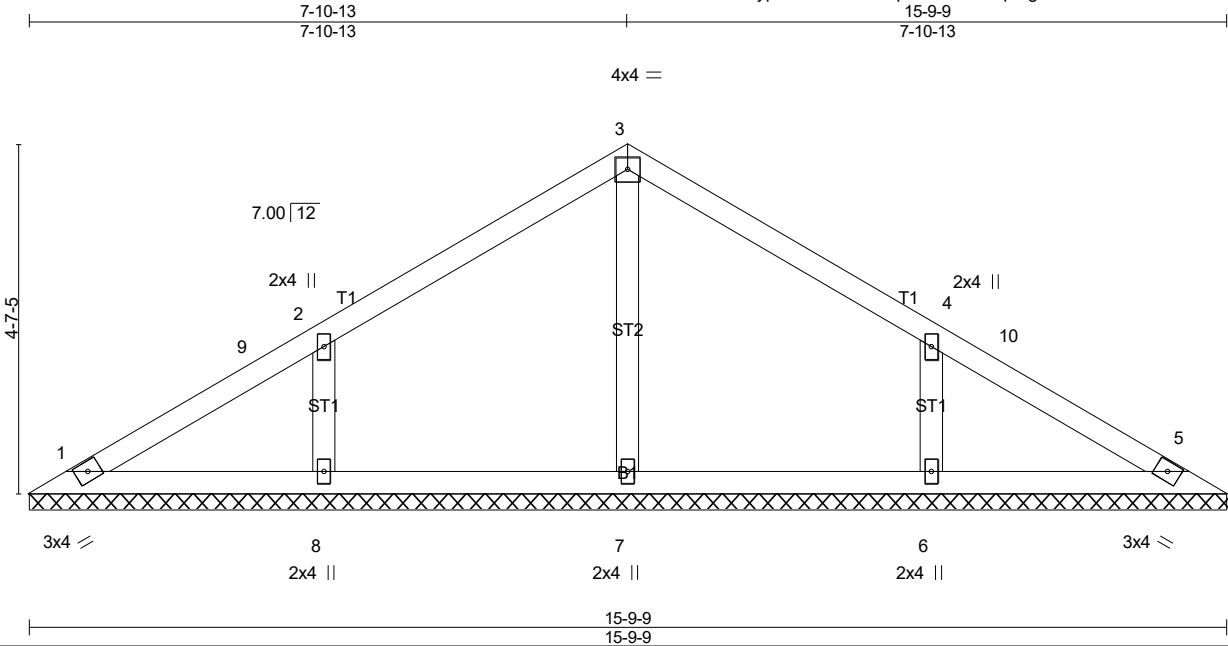


6/17/2025

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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V05   | Valley     | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:31 2025 Page 1  
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Scale = 1:30.3

| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.28  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf) 20.0   | Plate Grip DOL 1.15  | BC 0.18  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.08  | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-S |          |      |       |        |     |               |          |
| BCDL 10.0        | Code IRC2021/TPI2014 |          |          |      |       |        |     | Weight: 60 lb | FT = 20% |

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

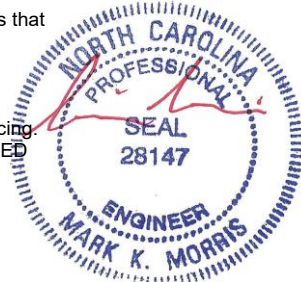
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 15-9-9.  
(lb) - Max Horz 1=95(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-119(LC 14), 6=-118(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=281(LC 20), 8=460(LC 20), 6=460(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-376/155, 4-6=-376/155

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCCL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 10-5-8, Exterior(2E) 10-5-8 to 15-3-2 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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 except (jt=lb) 8=119, 6=118.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

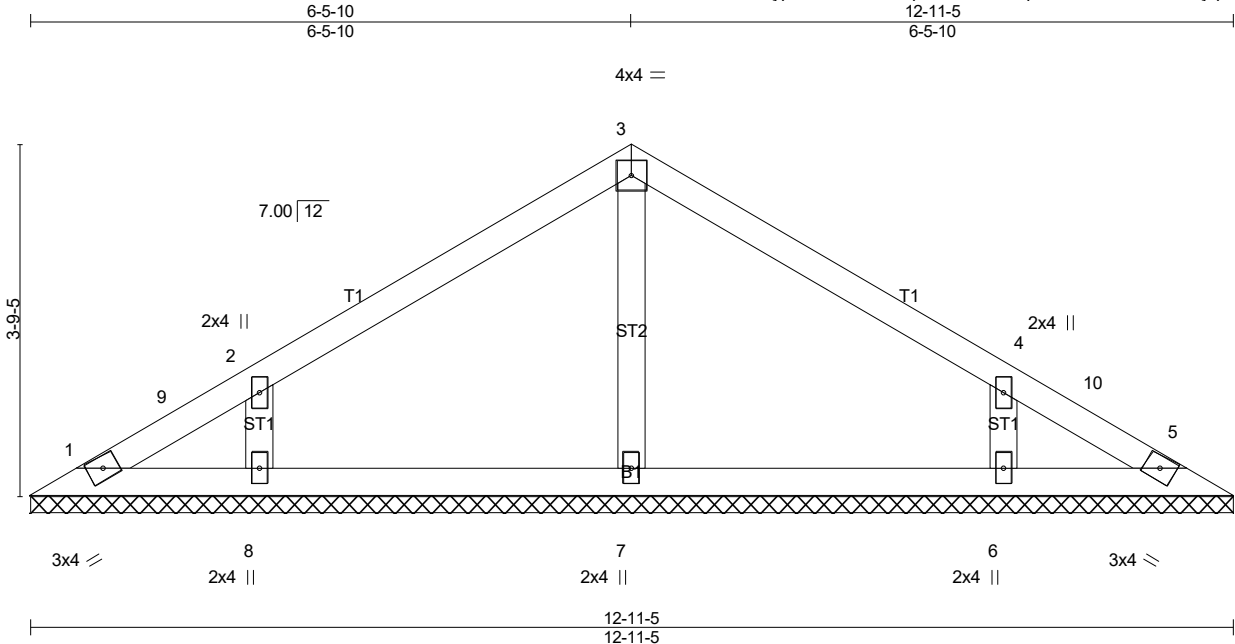


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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V06   | GABLE      | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

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| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.28  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf) 20.0   | Plate Grip DOL 1.15  | BC 0.21  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| 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-S |          |      |       |        |     |               |          |
| BCDL 10.0        | Code IRC2021/TPI2014 |          |          |      |       |        |     | Weight: 47 lb | FT = 20% |

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

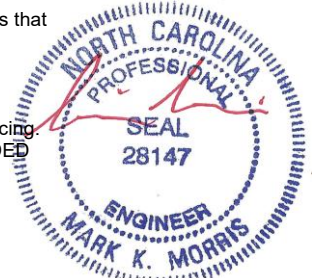
MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** All bearings 12-11-5.  
(lb) - Max Horz 1=-76(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-104(LC 14), 6=-104(LC 15)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=292(LC 20), 8=420(LC 20), 6=420(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-8=-359/139, 4-6=-359/139

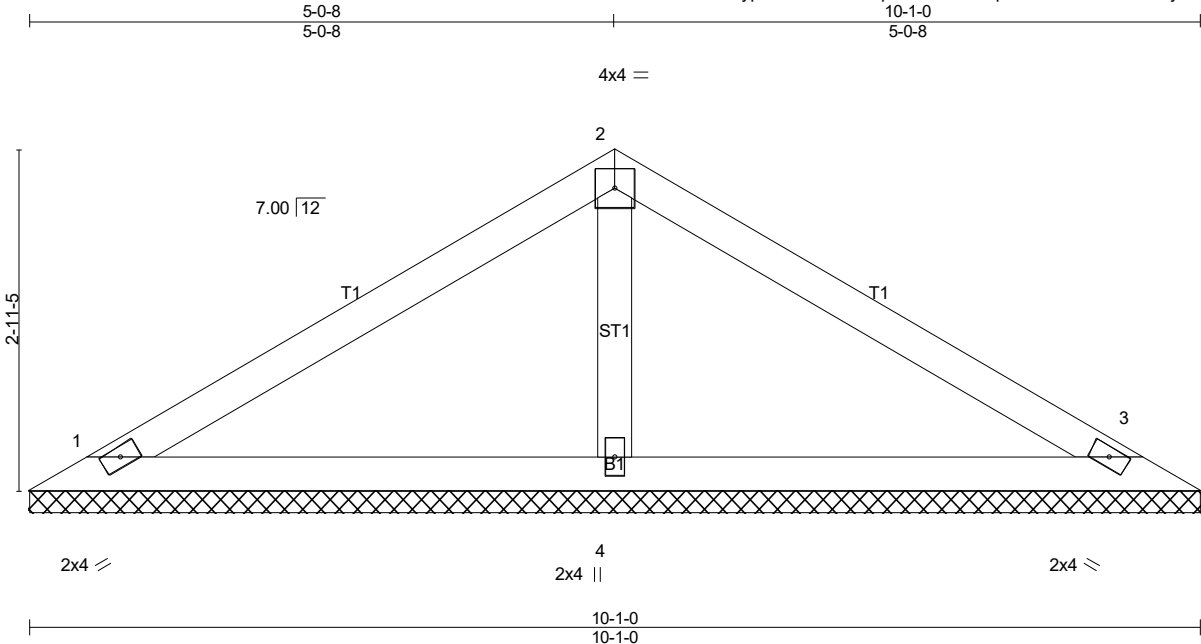
- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-6-8 to 5-4-1, Exterior(2R) 5-4-1 to 7-7-3, Exterior(2E) 7-7-3 to 12-4-13 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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, 5 except (jt=lb) 8=104, 6=104.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



6/17/2025

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.



| LOADING (psf) |       | SPACING-             |      | CSI.     |      | DEFL.    |      | PLATES        |  | GRIP     |  |
|---------------|-------|----------------------|------|----------|------|----------|------|---------------|--|----------|--|
| TCLL (roof)   | 20.0  | Plate Grip DOL       | 1.15 | TC       | 0.45 | Vert(LL) | n/a  | MT20          |  | 244/190  |  |
| Snow (Pf)     | 20.0  | Lumber DOL           | 1.15 | BC       | 0.34 | Vert(CT) | n/a  |               |  |          |  |
| TCDL          | 10.0  | Rep Stress Incr      | YES  | WB       | 0.06 | Horz(CT) | 0.00 |               |  |          |  |
| BCLL          | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-S |      |          |      |               |  |          |  |
| BCDL          | 10.0  |                      |      |          |      |          |      |               |  |          |  |
|               |       |                      |      |          |      |          |      | Weight: 34 lb |  | FT = 20% |  |

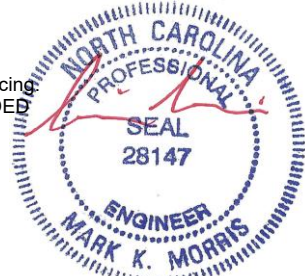
| LUMBER-   |             | BRACING-  |                                                                                                                                                    |
|-----------|-------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| TOP CHORD | 2x4 SP No.2 | TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins.                                                                                    |
| BOT CHORD | 2x4 SP No.3 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.                                                                                               |
| OTHERS    | 2x4 SP No.3 |           | MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide. |

**REACTIONS.** (lb/size) 1=170/10-1-0 (min. 0-1-8), 3=170/10-1-0 (min. 0-1-8), 4=380/10-1-0 (min. 0-1-8)  
Max Horz 1=-58(LC 10)  
Max Uplift 1=-32(LC 14), 3=-40(LC 15), 4=-20(LC 14)  
Max Grav 1=248(LC 20), 3=248(LC 21), 4=395(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-4=-262/102

- NOTES-** (9-12)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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
  - TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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, 4.
  - Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
  - Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
  - Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
  - SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

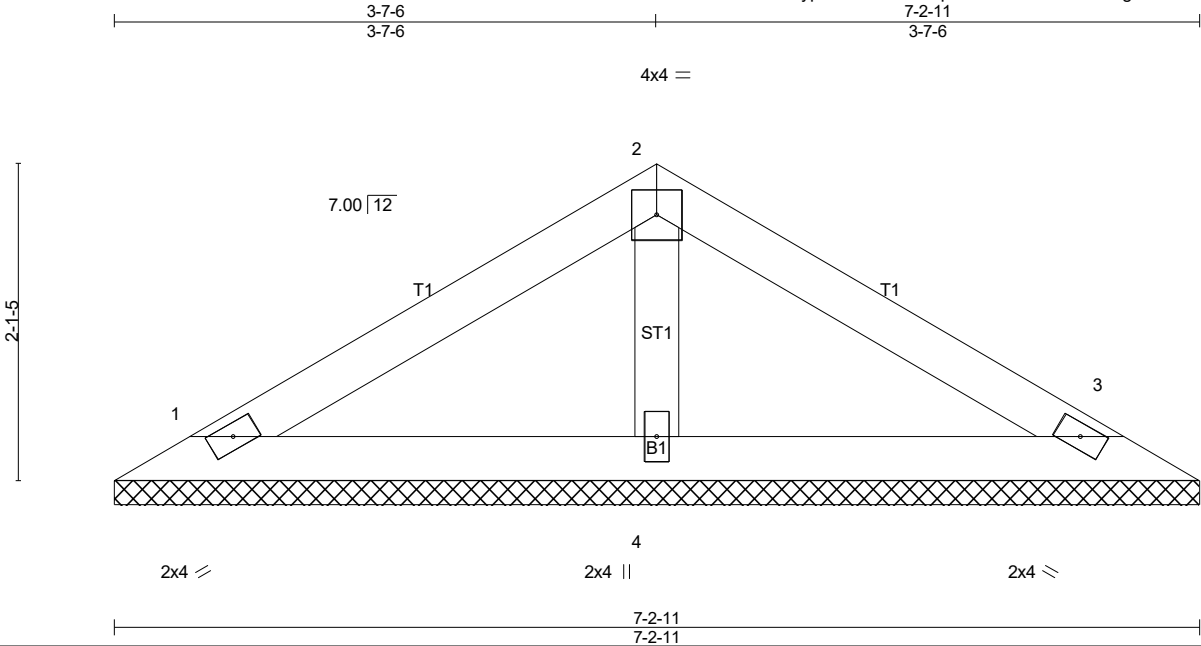


6/17/2025

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|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V08   | Valley     | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

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| LOADING (psf)    | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|------------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) 20.0 | 2-0-0                | TC 0.26  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| Snow (Pf) 20.0   | Plate Grip DOL 1.15  | BC 0.16  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| TCDL 10.0        | Lumber DOL 1.15      | WB 0.03  | Horz(CT) | 0.00 | 3     | n/a    | n/a |               |          |
| BCLL 0.0 *       | Rep Stress Incr YES  | Matrix-P |          |      |       |        |     |               |          |
| BCDL 10.0        | Code IRC2021/TPI2014 |          |          |      |       |        |     | Weight: 24 lb | FT = 20% |

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

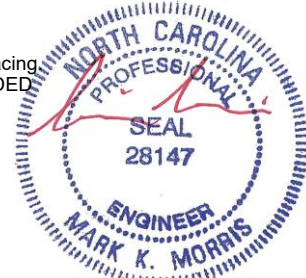
**REACTIONS.** (lb/size) 1=128/7-2-11 (min. 0-1-8), 3=128/7-2-11 (min. 0-1-8), 4=235/7-2-11 (min. 0-1-8)  
Max Horz 1=39(LC 11)  
Max Uplift 1=-28(LC 14), 3=-33(LC 15), 4=-2(LC 14)  
Max Grav 1=172(LC 20), 3=172(LC 21), 4=236(LC 20)

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

**NOTES-** (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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, 4.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
- Bearing symbols are only graphical representations of a possible bearing condition. Bearing symbols are not considered in the structural design of the truss to support the loads indicated.
- Web bracing shown is for lateral support of individual web members only. Refer to BCSI - Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses for additional bracing guidelines, including diagonal bracing.
- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard

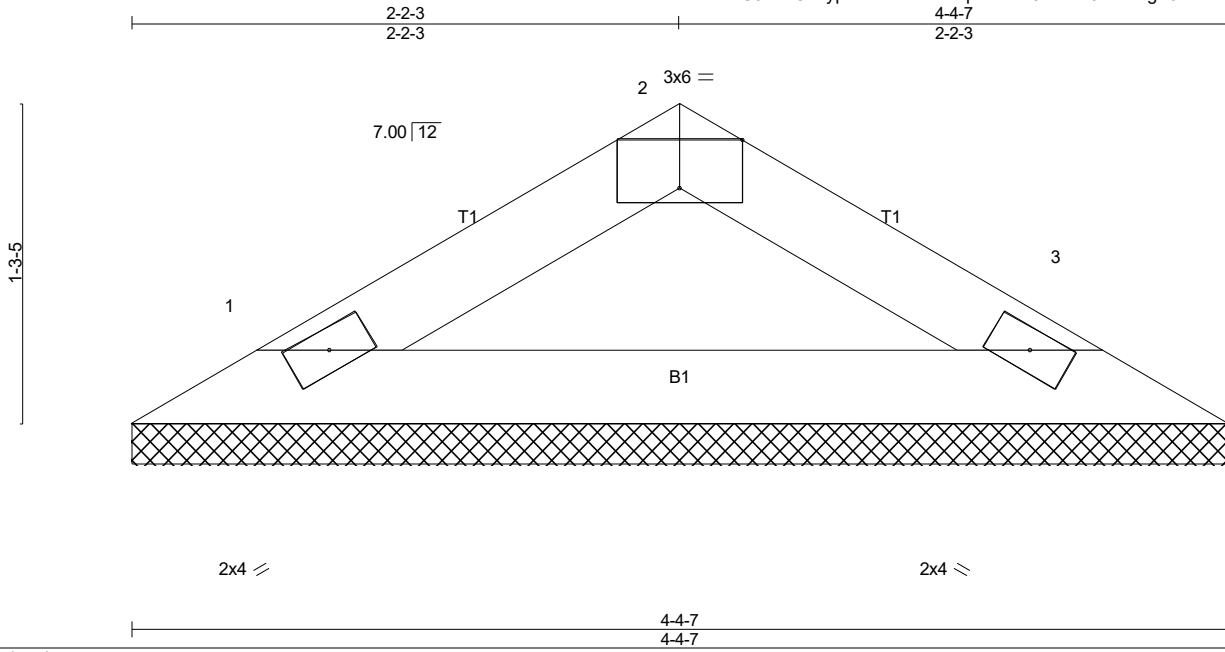


6/17/2025

**Warning !—Verify design parameters and read notes before use.** This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer – not truss designer or truss engineer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI/TPI 1 *National Design Standard for Metal Plate Connected Wood Truss Construction* and BCSI 1-03 *Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses* from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

|                          |       |            |     |     |                                                                  |
|--------------------------|-------|------------|-----|-----|------------------------------------------------------------------|
| Job                      | Truss | Truss Type | Qty | Ply | LOT 156 PROVIDENCE CREEK   504 PROVIDENCE CREEK DRIVE FUQUAY-VAR |
| 25-5333-R01              | V09   | Valley     | 1   | 1   |                                                                  |
| Job Reference (optional) |       |            |     |     | # 60324                                                          |

Run: 8.430 s Feb 12 2021 Print: 8.630 s Jul 12 2024 MiTek Industries, Inc. Tue Jun 17 21:43:33 2025 Page 1  
ID:zXU97ebO1cypNaLnLssBwZzqEeb-PY3vMxr15HfZ1egSJvfbesU3syveadVr5NeD8Jz5GKu



Scale = 1:9.2

| Plate Offsets (X,Y)-- [2:0-3-0,Edge] |       |                      |      |             |      |              |        |               |          |
|--------------------------------------|-------|----------------------|------|-------------|------|--------------|--------|---------------|----------|
| <b>LOADING</b> (psf)                 |       | <b>SPACING-</b>      |      | <b>CSI.</b> |      | <b>DEFL.</b> |        | <b>PLATES</b> |          |
| TCLL (roof)                          | 20.0  | Plate Grip DOL       | 1.15 | TC          | 0.06 | in (loc)     | l/defl | MT20          | GRIP     |
| Snow (Pf)                            | 20.0  | Lumber DOL           | 1.15 | BC          | 0.22 | n/a          | n/a    |               | 244/190  |
| TCDL                                 | 10.0  | Rep Stress Incr      | YES  | WB          | 0.00 | n/a          | n/a    |               |          |
| BCLL                                 | 0.0 * | Code IRC2021/TPI2014 |      | Matrix-P    |      | 0.00         | 3      |               |          |
| BCDL                                 | 10.0  |                      |      |             |      |              |        | Weight: 12 lb | FT = 20% |

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

**BRACING-**  
TOP CHORD  
BOT CHORD

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

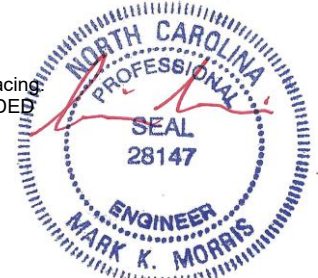
**REACTIONS.** (lb/size) 1=132/4-4-7 (min. 0-1-8), 3=132/4-4-7 (min. 0-1-8)  
Max Horz 1=21(LC 13)  
Max Uplift 1=16(LC 14), 3=16(LC 15)  
Max Grav 1=146(LC 20), 3=146(LC 21)

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

#### NOTES- (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCCL=5.0psf; BCDL=5.0psf; h=35ft; Cat. II; Exp B; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 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
- TCCL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
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- 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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit 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.
- Graphical bracing representation does not depict the size, type or the orientation of the brace on the member. Symbol only indicates that the member must be braced.
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- SEE BCSI-B3 SUMMARY SHEET- PERMANENT RESTRAINING/BRACING OF CHORDS & WEB MEMBERS FOR RECOMMENDED MINIMUM BRACING REQUIREMENTS OF TOP CHORD, BOTTOM CHORD, AND WEB PLANES. IN ADDITION TO THESE MINIMUM GUIDELINES, ALWAYS CONSULT THE PROJECT ARCHITECT OR ENGINEER FOR ADDITIONAL BRACING CONSIDERATIONS.

**LOAD CASE(S)** Standard



6/17/2025

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