



**ROOF & FLOOR TRUSSES & BEAMS**

Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry

**LOAD CHART FOR JACK STUDS**

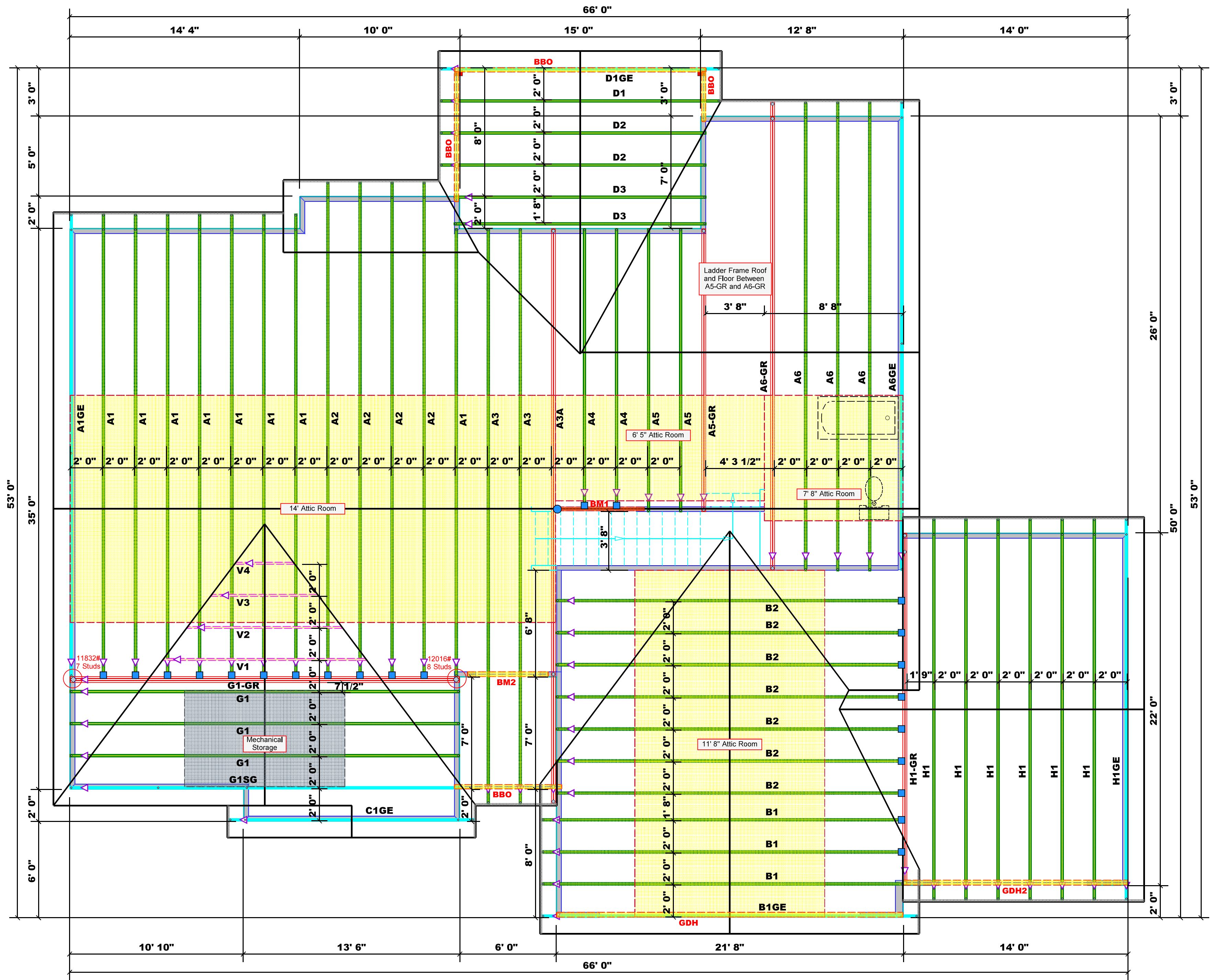
(BASED ON TABLES R522.5(1) & (2))  
NUMBERS OF JACK STUDS REQUIRED @ EACH END OF HEADERS/BEAMS

| FIN. REACTION (L.F.T.) | REQ. STUDS FOR 12" W/SPACER | FIN. REACTION (L.F.T.) | REQ. STUDS FOR 12" W/SPACER | FIN. REACTION (L.F.T.) | REQ. STUDS FOR 12" W/SPACER |
|------------------------|-----------------------------|------------------------|-----------------------------|------------------------|-----------------------------|
| 1700                   | 1                           | 2550                   | 1                           | 3400                   | 1                           |
| 3400                   | 2                           | 5100                   | 2                           | 6800                   | 2                           |
| 5100                   | 3                           | 7650                   | 3                           | 10200                  | 3                           |
| 6800                   | 4                           | 10200                  | 4                           | 13600                  | 4                           |
| 8500                   | 5                           | 12750                  | 5                           | 17000                  | 5                           |
| 10200                  | 6                           | 15300                  | 6                           |                        |                             |
| 11900                  | 7                           |                        |                             |                        |                             |
| 13600                  | 8                           |                        |                             |                        |                             |
| 15300                  | 9                           |                        |                             |                        |                             |

| COUNTY  | ADDRESS              | MODEL | DATE REV. | DRAWN BY     | SALESMAN     |
|---------|----------------------|-------|-----------|--------------|--------------|
| Harnett | Lot 3B Williams Farm | Roof  | 05/11/21  | David Landry | Lenny Norris |

| BUILDER            | JOB NAME             | PLAN                | SEAL DATE | QUOTE # | JOB #      |
|--------------------|----------------------|---------------------|-----------|---------|------------|
| Weaver Development | Lot 3B Williams Farm | Halifax / 3GRF, 4BR | Seal Date |         | J0521-2778 |

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.** These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BC34-61 and BC34-63 provided with the truss delivery package or online @ sbindustry.com



| Products |        |                             |       |         |
|----------|--------|-----------------------------|-------|---------|
| PlotID   | Length | Product                     | Plies | Net Qty |
| BM1      | 6' 0"  | 2x10 SPF No.2               | 2     | 2       |
| BM2      | 5' 0"  | 1-3/4"x 9-1/4" LVL Kerto-S  | 2     | 2       |
| GDH      | 22' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2     | 2       |
| GDH2     | 14' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2     | 2       |

All Walls Shown Are Considered Load Bearing

| Hatch Legend |             |
|--------------|-------------|
|              | Padded HVAC |
|              | Drop Beam   |

**1 Truss Placement Plan**  
Scale: 1/4"=1'

- Dimension Notes**
- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
  - All interior wall dimensions are to face of frame wall unless noted otherwise
  - All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Roof Area = 3572.15 sq.ft.  
Ridge Line = 136.54 ft.  
Hip Line = 0 ft.  
Horiz. OH = 117.43 ft.  
Raked OH = 255.04 ft.  
Decking = 123 sheets

| Connector Information |         |       |     |                  | Nail Information |            |
|-----------------------|---------|-------|-----|------------------|------------------|------------|
| Sym                   | Product | Manuf | Qty | Supported Member | Header           | Truss      |
|                       | HUS26   | USP   | 22  | NA               | 16d/3-1/2"       | 16d/3-1/2" |
|                       | HUS410  | USP   | 1   | Varies           | 16d/3-1/2"       | 16d/3-1/2" |



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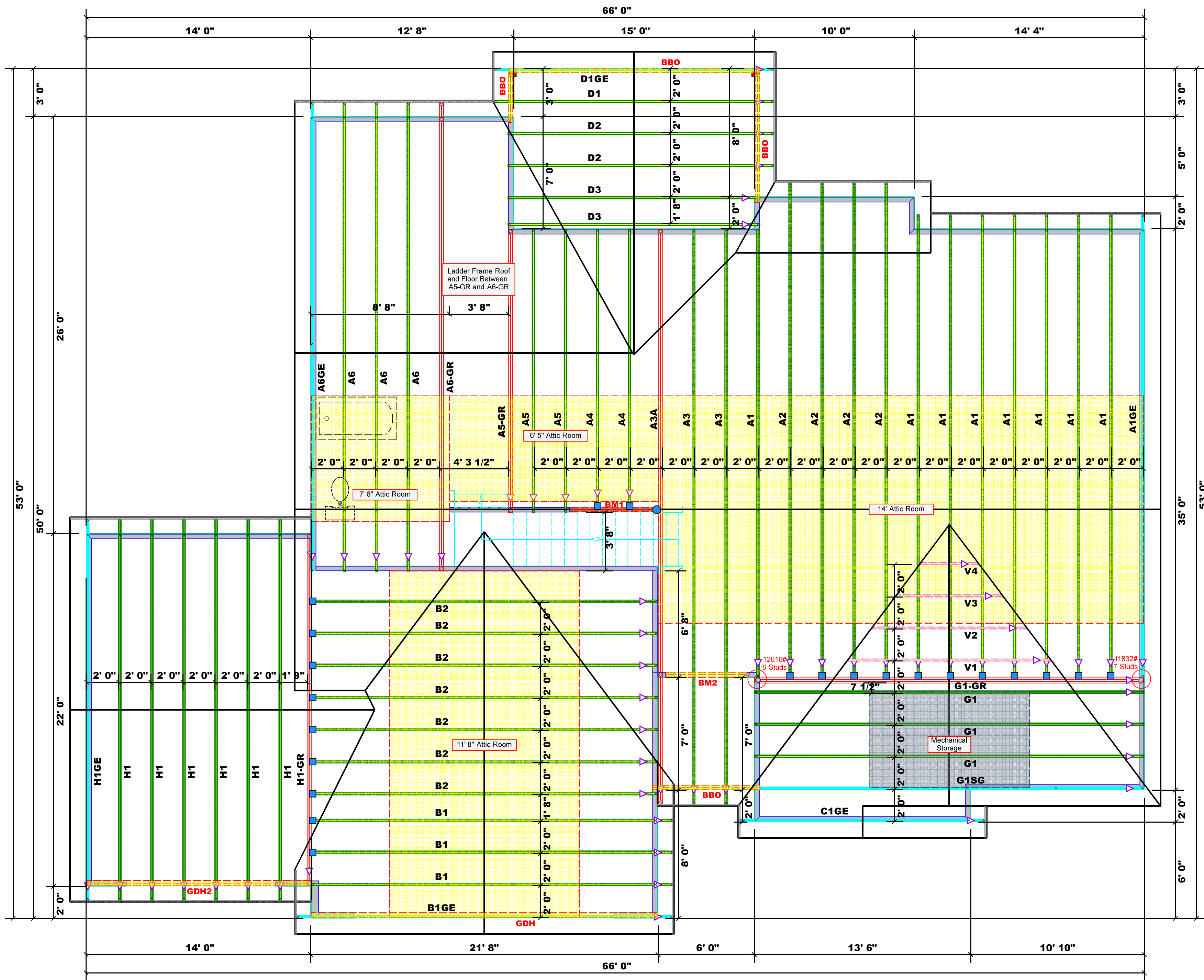
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature: **David Landry**

**LOAD CHART FOR JACK STUDS**

BASED ON TABLES R532.5(1) & (2)  
NUMBERS OF JACK STUDS REQUIRED @ EACH END OF HEADERS/BEAM

| FIN. REACTION (LBS/FT) | REQ. STUDS FOR EACH END | FIN. REACTION (LBS/FT) | REQ. STUDS FOR EACH END | FIN. REACTION (LBS/FT) | REQ. STUDS FOR EACH END |
|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| 1700                   | 1                       | 2550                   | 1                       | 3400                   | 1                       |
| 3400                   | 2                       | 5100                   | 2                       | 6800                   | 2                       |
| 5100                   | 3                       | 7650                   | 3                       | 10200                  | 3                       |
| 6800                   | 4                       | 10200                  | 4                       | 13600                  | 4                       |
| 8500                   | 5                       | 12750                  | 5                       | 17000                  | 5                       |
| 10200                  | 6                       | 15300                  | 6                       |                        |                         |
| 11900                  | 7                       |                        |                         |                        |                         |
| 13600                  | 8                       |                        |                         |                        |                         |
| 15300                  | 9                       |                        |                         |                        |                         |



| Products |        |                             |       |         |
|----------|--------|-----------------------------|-------|---------|
| PlotID   | Length | Product                     | Plies | Net Qty |
| BM1      | 6' 0"  | 2x10 SPF No.2               | 2     | 2       |
| BM2      | 5' 0"  | 1-3/4"x 9-1/4" LVL Kerto-S  | 2     | 2       |
| GDH      | 22' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2     | 2       |
| GDH2     | 14' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2     | 2       |

All Walls Shown Are Considered Load Bearing

| Hatch Legend |             |
|--------------|-------------|
| [Pattern]    | Padded HVAC |
| [Pattern]    | Drop Beam   |

1 Truss Placement Plan  
Scale: 1/4"=1'

- Dimension Notes**
- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
  - All interior wall dimensions are to face of frame wall unless noted otherwise
  - All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Roof Area = 3572.15 sq.ft.  
Ridge Line = 136.54 ft.  
Hip Line = 0 ft.  
Horiz. OH = 117.43 ft.  
Raked OH = 255.04 ft.  
Decking = 123 sheets

| Connector Information |         |       |     |                  | Nail Information |            |
|-----------------------|---------|-------|-----|------------------|------------------|------------|
| Sym                   | Product | Manuf | Qty | Supported Member | Header           | Truss      |
| [Blue Box]            | HUS26   | USP   | 22  | NA               | 16d/3-1/2"       | 16d/3-1/2" |
| [Blue Circle]         | HUS410  | USP   | 1   | Varies           | 16d/3-1/2"       | 16d/3-1/2" |

| BUILDER   | WEAVER DEVELOPMENT   | COUNTY    | HARNETT              |
|-----------|----------------------|-----------|----------------------|
| JOB NAME  | Lot 3B Williams Farm | ADDRESS   | Lot 3B Williams Farm |
| PLAN      | Halifax / 3GRF, 4BR  | MODEL     | Roof                 |
| SEAL DATE | Seal Date            | DATE REV. | 05/11/21             |
| QUOTE #   |                      | DRAWN BY  | David Landry         |
| JOB #     | J0521-2778           | SALESMAN  | Lenny Norris         |

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.** These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BC34-1 and BC34-3 provided with the truss delivery package or online at sbcindustry.com

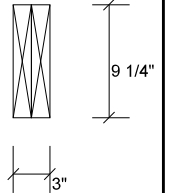
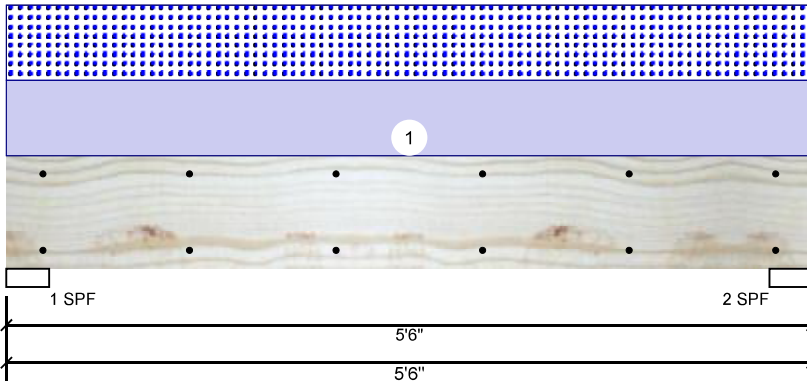


Client: Weaver Development  
 Project:  
 Address:

Date: 5/11/2021  
 Input by: David Landry  
 Job Name: Lot 3B Williams Farm  
 Project #: J0521-2778

**BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



**Member Information**

|                     |               |
|---------------------|---------------|
| Type:               | Girder        |
| Plies:              | 2             |
| Moisture Condition: | Dry           |
| Deflection LL:      | 480           |
| Deflection TL:      | 360           |
| Importance:         | Normal - II   |
| Temperature:        | Temp <= 100°F |

|                |              |
|----------------|--------------|
| Application:   | Floor        |
| Design Method: | ASD          |
| Building Code: | IBC/IRC 2015 |
| Load Sharing:  | No           |
| Deck:          | Not Checked  |

**Reactions UNPATTERNED lb (Uplift)**

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1   | Vertical  | 0    | 919  | 919  | 0    | 0     |
| 2   | Vertical  | 0    | 919  | 919  | 0    | 0     |

**Bearings**

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 3.500" | Vert | 41%  | 919 / 919    | 1837  | L        | D+S       |
| 2 - SPF | 3.500" | Vert | 41%  | 919 / 919    | 1837  | L        | D+S       |

**Analysis Results**

| Analysis     | Actual         | Location | Allowed       | Capacity    | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment       | 2122 ft-lb     | 2'9"     | 3946 ft-lb    | 0.538 (54%) | D+S   | L    |
| Unbraced     | 2122 ft-lb     | 2'9"     | 3654 ft-lb    | 0.581 (58%) | D+S   | L    |
| Shear        | 1127 lb        | 1' 3/4"  | 2872 lb       | 0.392 (39%) | D+S   | L    |
| LL Defl inch | 0.018 (L/3452) | 2'9"     | 0.126 (L/480) | 0.139 (14%) | S     | L    |
| TL Defl inch | 0.035 (L/1726) | 2'9"     | 0.168 (L/360) | 0.209 (21%) | D+S   | L    |

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-----------|----------|------------|------|----------|--------|-----------|----------|-------------|----------|
| 1  | Uniform   |          |            | Top  | 334 PLF  | 0 PLF  | 334 PLF   | 0 PLF    | 0 PLF       | A4       |

**Manufacturer Info**

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



This design is valid until 4/7/2024



Client: Weaver Development

Project:

Address:

Date: 5/11/2021

Input by: David Landry

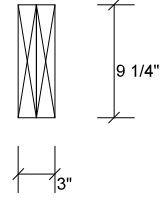
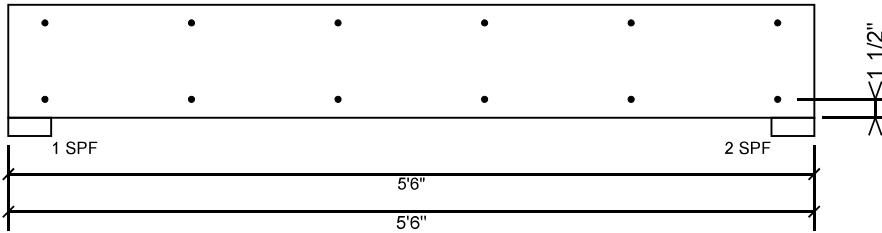
Job Name: Lot 3B Williams Farm

Project #: J0521-2778

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**BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

|                          |           |
|--------------------------|-----------|
| Capacity                 | 0.0 %     |
| Load                     | 0.0 PLF   |
| Yield Limit per Foot     | 157.4 PLF |
| Yield Limit per Fastener | 78.7 lb.  |
| Yield Mode               | IV        |
| Edge Distance            | 1 1/2"    |
| Min. End Distance        | 3"        |
| Load Combination         |           |
| Duration Factor          | 1.00      |

|                          |  |
|--------------------------|--|
| <b>Manufacturer Info</b> | Comtech, Inc.<br>1001 S. Reilly Road, Suite #639<br>Fayetteville, NC<br>USA<br>28314<br>910-864-TRUS |
|                          |  |

This design is valid until 4/7/2024



Client: Weaver Development

Project:

Address:

Date: 5/11/2021

Input by: David Landry

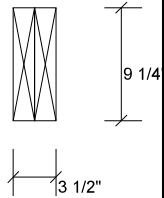
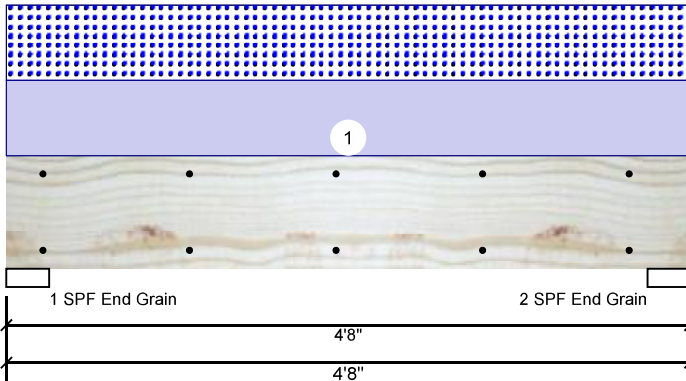
Job Name: Lot 3B Williams Farm

Project #: J0521-2778

Page 3 of 8

**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

|                     |               |
|---------------------|---------------|
| Type:               | Girder        |
| Plies:              | 2             |
| Moisture Condition: | Dry           |
| Deflection LL:      | 480           |
| Deflection TL:      | 360           |
| Importance:         | Normal - II   |
| Temperature:        | Temp <= 100°F |

|                |              |
|----------------|--------------|
| Application:   | Floor        |
| Design Method: | ASD          |
| Building Code: | IBC/IRC 2015 |
| Load Sharing:  | No           |
| Deck:          | Not Checked  |

**Reactions UNPATTERNED lb (Uplift)**

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1   | Vertical  | 0    | 1526 | 1510 | 0    | 0     |
| 2   | Vertical  | 0    | 1526 | 1510 | 0    | 0     |

**Bearings**

| Bearing           | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 3.500" | Vert | 28%  | 1526 / 1510  | 3036  | L        | D+S       |
| 2 - SPF End Grain | 3.500" | Vert | 28%  | 1526 / 1510  | 3036  | L        | D+S       |

**Analysis Results**

| Analysis     | Actual         | Location  | Allowed       | Capacity    | Comb. | Case |
|--------------|----------------|-----------|---------------|-------------|-------|------|
| Moment       | 2881 ft-lb     | 2'4"      | 14423 ft-lb   | 0.200 (20%) | D+S   | L    |
| Unbraced     | 2881 ft-lb     | 2'4"      | 12555 ft-lb   | 0.229 (23%) | D+S   | L    |
| Shear        | 1659 lb        | 3'7 1/4"  | 7943 lb       | 0.209 (21%) | D+S   | L    |
| LL Defl inch | 0.015 (L/3370) | 2'4 1/16" | 0.105 (L/480) | 0.142 (14%) | S     | L    |
| TL Defl inch | 0.030 (L/1676) | 2'4 1/16" | 0.140 (L/360) | 0.215 (21%) | D+S   | L    |

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type   | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-------------|----------|------------|------|----------|--------|-----------|----------|-------------|----------|
| 1  | Uniform     |          |            | Top  | 647 PLF  | 0 PLF  | 647 PLF   | 0 PLF    | 0 PLF       | A3       |
|    | Self Weight |          |            |      | 7 PLF    |        |           |          |             |          |

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

**Manufacturer Info**

Metsä Wood  
301 Merritt 7 Building, 2nd Floor  
Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us  
ICC-ES: ESR-3633

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS





Client: Weaver Development

Project:

Address:

Date: 5/11/2021

Input by: David Landry

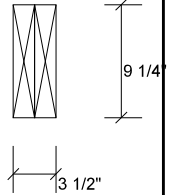
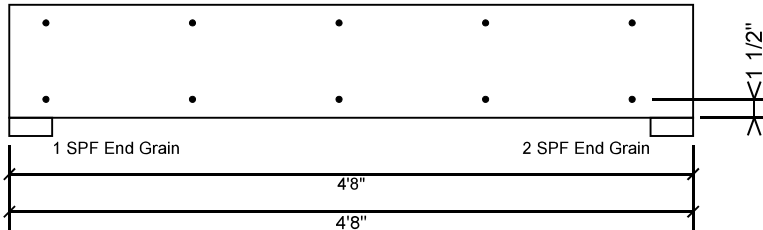
Job Name: Lot 3B Williams Farm

Project #: J0521-2778

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**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

|                          |           |
|--------------------------|-----------|
| Capacity                 | 0.0 %     |
| Load                     | 0.0 PLF   |
| Yield Limit per Foot     | 163.7 PLF |
| Yield Limit per Fastener | 81.9 lb.  |
| Yield Mode               | IV        |
| Edge Distance            | 1 1/2"    |
| Min. End Distance        | 3"        |
| Load Combination         |           |
| Duration Factor          | 1.00      |

### Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

### Manufacturer Info

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS





Client: Weaver Development

Date: 5/11/2021

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Project:

Input by: David Landry

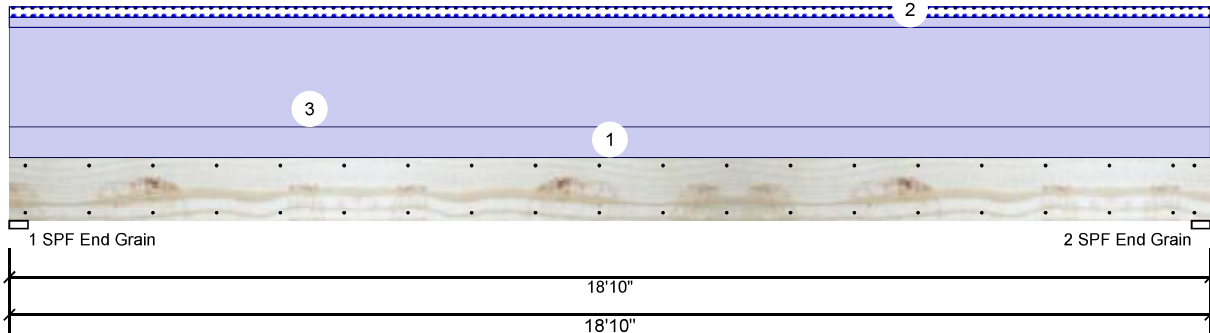
Address:

Job Name: Lot 3B Williams Farm

Project #: J0521-2778

**GDH Kerto-S LVL 1.750" X 11.875" 3-Ply - PASSED**

Level: Level



**Member Information**

|                     |               |
|---------------------|---------------|
| Type:               | Girder        |
| Plies:              | 3             |
| Moisture Condition: | Dry           |
| Deflection LL:      | 480           |
| Deflection TL:      | 360           |
| Importance:         | Normal - II   |
| Temperature:        | Temp <= 100°F |

|                |              |
|----------------|--------------|
| Application:   | Floor        |
| Design Method: | ASD          |
| Building Code: | IBC/IRC 2015 |
| Load Sharing:  | Yes          |
| Deck:          | Not Checked  |

**Reactions UNPATTERNED lb (Uplift)**

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1   | Vertical  | 0    | 2720 | 188  | 0    | 0     |
| 2   | Vertical  | 0    | 2720 | 188  | 0    | 0     |

**Bearings**

| Bearing           | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 3.500" | Vert | 18%  | 2720 / 188   | 2908  | L        | D+S       |
| 2 - SPF End Grain | 3.500" | Vert | 18%  | 2720 / 188   | 2908  | L        | D+S       |

**Analysis Results**

| Analysis     | Actual         | Location  | Allowed       | Capacity     | Comb. | Case    |
|--------------|----------------|-----------|---------------|--------------|-------|---------|
| Moment       | 12191 ft-lb    | 9'5"      | 27954 ft-lb   | 0.436 (44%)  | D     | Uniform |
| Unbraced     | 13035 ft-lb    | 9'5"      | 13043 ft-lb   | 0.999 (100%) | D+S   | L       |
| Shear        | 2364 lb        | 17'6 5/8" | 11970 lb      | 0.197 (20%)  | D     | Uniform |
| LL Defl inch | 0.037 (L/6029) | 9'5 1/16" | 0.459 (L/480) | 0.080 (8%)   | S     | L       |
| TL Defl inch | 0.565 (L/390)  | 9'5 1/16" | 0.612 (L/360) | 0.922 (92%)  | D+S   | L       |

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 10'11 13/16" o.c.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type   | Location         | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-------------|------------------|------------|------|----------|--------|-----------|----------|-------------|----------|
| 1  | Uniform     |                  |            | Top  | 60 PLF   | 0 PLF  | 0 PLF     | 0 PLF    | 0 PLF       | Wall     |
| 2  | Tie-In      | 0-0-0 to 18-10-0 | 1-0-0      | Top  | 20 PSF   | 0 PSF  | 20 PSF    | 0 PSF    | 0 PSF       | Roof     |
| 3  | Uniform     |                  |            | Top  | 195 PLF  | 0 PLF  | 0 PLF     | 0 PLF    | 0 PLF       | B1GE     |
|    | Self Weight |                  |            |      | 14 PLF   |        |           |          |             |          |

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

**Manufacturer Info**

Metsä Wood  
301 Merritt 7 Building, 2nd Floor  
Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us  
ICC-ES: ESR-3633

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS





Client: Weaver Development

Project:

Address:

Date: 5/11/2021

Input by: David Landry

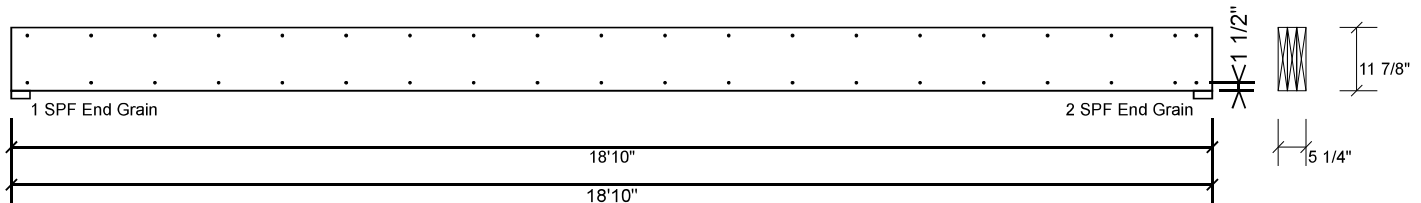
Job Name: Lot 3B Williams Farm

Project #: J0521-2778

Page 6 of 8

**GDH Kerto-S LVL 1.750" X 11.875" 3-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6".

|                          |           |
|--------------------------|-----------|
| Capacity                 | 0.0 %     |
| Load                     | 0.0 PLF   |
| Yield Limit per Foot     | 163.7 PLF |
| Yield Limit per Fastener | 81.9 lb.  |
| Yield Mode               | IV        |
| Edge Distance            | 1 1/2"    |
| Min. End Distance        | 3"        |
| Load Combination         |           |
| Duration Factor          | 1.00      |

### Notes

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

### Manufacturer Info

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS







Client: Weaver Development

Date: 5/11/2021

Page 7 of 8

Project:

Input by: David Landry

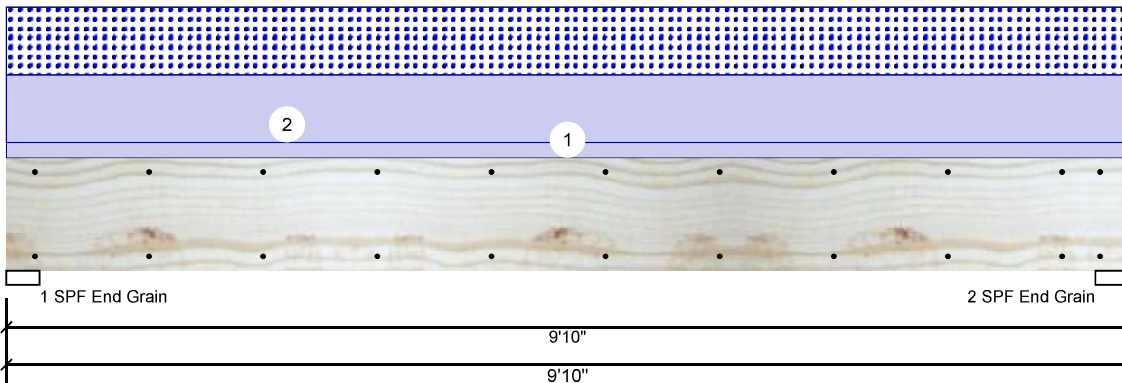
Address:

Job Name: Lot 3B Williams Farm

Project #: J0521-2778

**GDH2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



**Member Information**

|                     |               |
|---------------------|---------------|
| Type:               | Girder        |
| Plies:              | 2             |
| Moisture Condition: | Dry           |
| Deflection LL:      | 480           |
| Deflection TL:      | 360           |
| Importance:         | Normal - II   |
| Temperature:        | Temp <= 100°F |

|                |              |
|----------------|--------------|
| Application:   | Floor        |
| Design Method: | ASD          |
| Building Code: | IBC/IRC 2015 |
| Load Sharing:  | No           |
| Deck:          | Not Checked  |

**Reactions UNPATTERNED lb (Uplift)**

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1   | Vertical  | 0    | 1653 | 1313 | 0    | 0     |
| 2   | Vertical  | 0    | 1653 | 1313 | 0    | 0     |

**Bearings**

| Bearing           | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 3.500" | Vert | 28%  | 1653 / 1313  | 2966  | L        | D+S       |
| 2 - SPF End Grain | 3.500" | Vert | 28%  | 1653 / 1313  | 2966  | L        | D+S       |

**Analysis Results**

| Analysis     | Actual         | Location | Allowed       | Capacity    | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment       | 6627 ft-lb     | 4'11"    | 22897 ft-lb   | 0.289 (29%) | D+S   | L    |
| Unbraced     | 6627 ft-lb     | 4'11"    | 9857 ft-lb    | 0.672 (67%) | D+S   | L    |
| Shear        | 2202 lb        | 1'3 3/8" | 10197 lb      | 0.216 (22%) | D+S   | L    |
| LL Defl inch | 0.056 (L/2022) | 4'11"    | 0.234 (L/480) | 0.237 (24%) | S     | L    |
| TL Defl inch | 0.126 (L/895)  | 4'11"    | 0.312 (L/360) | 0.402 (40%) | D+S   | L    |

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type   | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments   |
|----|-------------|----------|------------|------|----------|--------|-----------|----------|-------------|------------|
| 1  | Uniform     |          |            | Top  | 60 PLF   | 0 PLF  | 0 PLF     | 0 PLF    | 0 PLF       | Wall Above |
| 2  | Uniform     |          |            | Top  | 267 PLF  | 0 PLF  | 267 PLF   | 0 PLF    | 0 PLF       | G1         |
|    | Self Weight |          |            |      | 9 PLF    |        |           |          |             |            |

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

**Manufacturer Info**

Metsä Wood  
301 Merritt 7 Building, 2nd Floor  
Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us  
ICC-ES: ESR-3633

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS





Client: Weaver Development

Project:

Address:

Date: 5/11/2021

Input by: David Landry

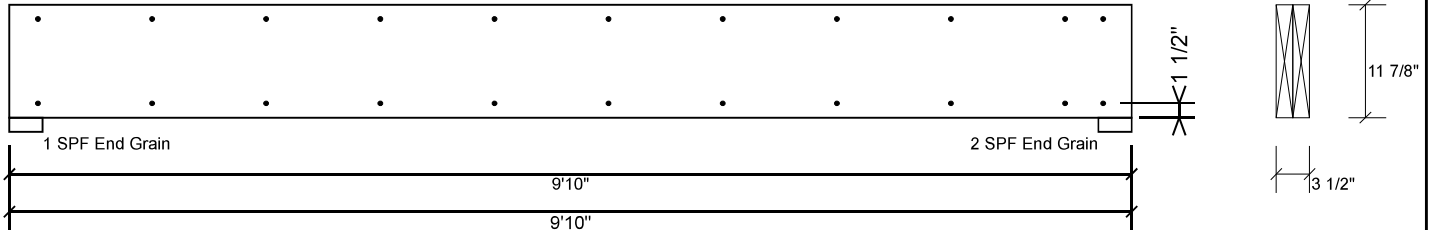
Job Name: Lot 3B Williams Farm

Project #: J0521-2778

Page 8 of 8

**GDH2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

|                          |           |
|--------------------------|-----------|
| Capacity                 | 0.0 %     |
| Load                     | 0.0 PLF   |
| Yield Limit per Foot     | 163.7 PLF |
| Yield Limit per Fastener | 81.9 lb.  |
| Yield Mode               | IV        |
| Edge Distance            | 1 1/2"    |
| Min. End Distance        | 3"        |
| Load Combination         |           |
| Duration Factor          | 1.00      |

### Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/7/2024

### Manufacturer Info

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 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS





Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: J0521-2778  
Lot 3B Williams Farm

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E15716276 thru E15716304

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

North Carolina COA: C-0844



May 11, 2021

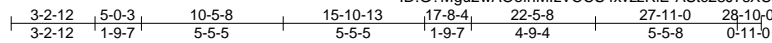
Strzyzewski, Marvin

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

|                   |             |                     |          |          |  |           |
|-------------------|-------------|---------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A1 | Truss Type<br>ATTIC | Qty<br>8 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716276 |
|-------------------|-------------|---------------------|----------|----------|--|-----------|

Comtech, Inc. Fayetteville, NC - 28314.

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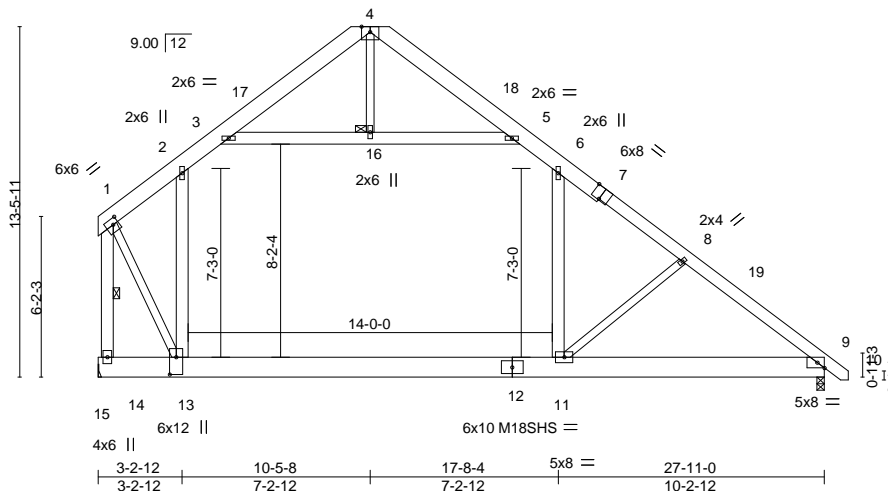


Plate Offsets (X,Y)-- [1:0-2-8,0-2-12], [7:0-4-0,Edge], [9:0-3-5,Edge], [13:0-8-0,0-3-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.59  | Vert(LL) -0.30 | 11-13    | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.69  | Vert(CT) -0.61 | 11-13    | >538   | 240 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.72  | Horz(CT) 0.02  | 9        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.21  | 9-11     | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 307 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
7-10: 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\*  
9-12: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
8-11,4-16,1-13: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-11-10 oc bracing.  
WEBS 1 Row at midpt 1-14  
JOINTS 1 Brace at Jt(s): 16

**REACTIONS.**

(size) 14=Mechanical, 9=0-3-8  
Max Horz 14=-317(LC 8)  
Max Grav 14=2033(LC 21), 9=1665(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1625/0, 2-3=-1477/112, 3-4=-556/107, 4-5=-411/104, 5-6=-1312/102, 6-8=-1903/0, 8-9=-2117/0, 1-14=-3612/0  
BOT CHORD 13-14=-267/321, 11-13=0/1397, 9-11=0/1642  
WEBS 2-13=-362/304, 6-11=0/784, 8-11=-523/203, 3-16=-1122/83, 5-16=-1122/83, 1-13=0/3077

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-6-6, Interior(1) 4-6-6 to 10-5-8, Exterior(2) 10-5-8 to 14-10-5, Interior(1) 14-10-5 to 28-8-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-16, 5-16; Wall dead load (5.0psf) on member(s).2-13, 6-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



May 11, 2021

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

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



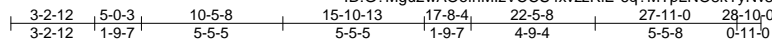
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716277 |
| J0521-2778 | A1GE  | GABLE      | 1   | 1   | Job Reference (optional) |           |

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:17 2021 Page 1

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6x8 =

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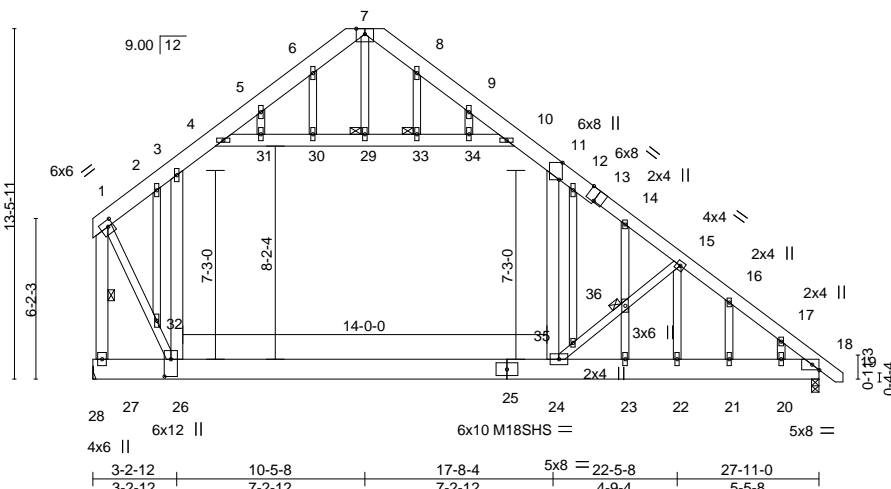


Plate Offsets (X,Y)-- [1:0-2-8,0-2-12], [11:0-7-14,Edge], [13:0-4-0,Edge], [18:0-3-5,Edge], [26:0-8-0,0-3-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.58  | Vert(LL) | -0.28    | 24-26  | >999 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.67  | Vert(CT) | -0.57    | 24-26  | >579 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.78  | Horz(CT) | 0.02     | 18     | n/a  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) | 0.26     | 24     | >999 |                |          |
|               | Code IRC2015/TPI2014 |          |          |          |        |      | Weight: 352 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
13-19: 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\*  
18-25: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
15-24,7-29,1-26,15-22: 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-2-6 oc bracing: 26-27  
6-6-8 oc bracing: 24-26.  
WEBS 1 Row at midpt 1-27  
JOINTS 1 Brace at Jt(s): 29, 33, 36

**REACTIONS.**

(size) 27=Mechanical, 18=0-3-8  
Max Horz 27=-432(LC 13)  
Max Uplift 18=-35(LC 13)  
Max Grav 27=2032(LC 21), 18=1669(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1613/0, 2-3=-1516/0, 3-4=-1471/166, 4-5=-656/111, 5-6=-453/132, 6-7=-432/188,  
7-8=-345/181, 8-9=-399/132, 9-10=-401/114, 10-11=-1295/156, 11-12=-1925/44,  
12-14=-1885/8, 14-15=-1743/0, 15-16=-2232/131, 16-17=-2287/79, 17-18=-2454/0,  
1-27=-3565/0  
BOT CHORD 26-27=-326/435, 24-26=0/1410, 23-24=0/1780, 22-23=0/1780, 21-22=0/1751,  
20-21=0/1751, 18-20=0/1751  
WEBS 3-26=407/223, 11-24=0/1075, 24-35=-994/479, 35-36=-812/423, 15-36=-811/415,  
4-31=-1087/103, 30-31=-1077/104, 29-30=-1078/104, 29-33=-1078/104, 33-34=-1078/104,  
10-34=-1073/102, 1-32=-10/3046, 26-32=-19/3104, 5-31=-9/358, 12-35=-261/81,  
14-36=-400/35, 23-36=-399/25, 15-22=-247/660

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 2x6 MT20 unless otherwise indicated.
- 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 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 10-11, 4-31, 30-31, 29-30, 29-33, 33-34, 10-34; Wall dead load (5.0psf) on member(s). 3-26, 11-24

Continued on page 2 (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 24-26



May 11, 2021

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



818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716277 |
| J0521-2778 | A1GE  | GABLE      | 1   | 1   | Job Reference (optional) |           |

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:17 2021 Page 2  
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**NOTES-**

- 11) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 35 lb uplift at joint 18.
- 13) Attic room checked for L/360 deflection.

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



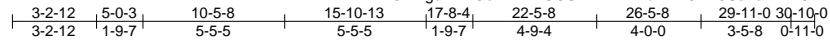
818 Soundside Road  
 Edenton, NC 27932

|                   |             |                     |          |          |  |           |
|-------------------|-------------|---------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A2 | Truss Type<br>ATTIC | Qty<br>4 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716278 |
|-------------------|-------------|---------------------|----------|----------|--|-----------|

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6x8 =

Scale = 1:83.3

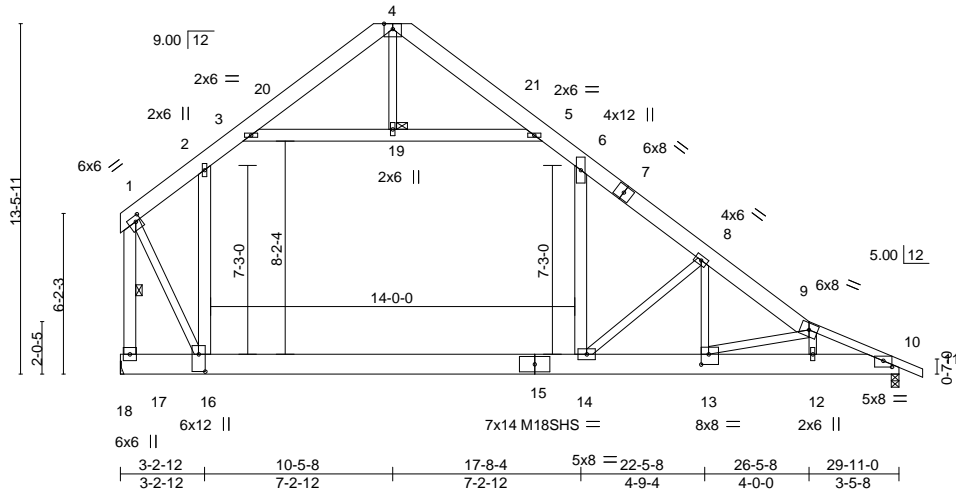


Plate Offsets (X,Y)-- [1:0-2-8,0-2-8], [10:0-4-0,0-2-14], [13:0-3-8,0-4-12], [16:0-8-0,0-3-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.42  | Vert(LL) | -0.36    | 14-16  | >978 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.74  | Vert(CT) | -0.74    | 14-16  | >479 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.99  | Horz(CT) | 0.02     | 10     | n/a  |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) | 0.22     | 14     | >999 |                |          |
|               | Code IRC2015/TPI2014 |          |          |          |        |      | Weight: 334 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP 2400F 2.0E \*Except\*  
9-11: 2x4 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
2-16,6-14,3-5,1-17: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-6-5 oc bracing.  
WEBS 1 Row at midpt 1-17  
JOINTS 1 Brace at Jt(s): 19

**REACTIONS.**

(size) 17=Mechanical, 10=0-3-8  
Max Horz 17=-320(LC 8)  
Max Grav 17=2144(LC 21), 10=1640(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1710/0, 2-3=-1583/108, 3-4=-573/106, 4-5=-392/105, 5-6=-1377/102, 6-8=-2121/0, 8-9=-3066/14, 9-10=-2967/3, 1-17=-3817/0  
BOT CHORD 16-17=-219/323, 14-16=0/1512, 13-14=0/2530, 12-13=0/2793, 10-12=0/2680  
WEBS 2-16=-372/266, 6-14=0/1019, 8-14=-1601/216, 9-12=-533/69, 3-19=-1220/78, 5-19=-1220/78, 1-16=0/3299, 8-13=-80/1003, 9-13=-314/97

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-6-6, Interior(1) 4-6-6 to 10-5-8, Exterior(2) 10-5-8 to 14-10-5, Interior(1) 14-10-5 to 30-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-19, 5-19; Wall dead load (5.0psf) on member(s). 2-16, 6-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



May 11, 2021

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



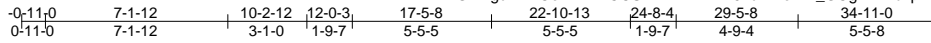
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716279 |
| J0521-2778 | A3    | ATTIC      | 2   | 1   | Job Reference (optional) |           |

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6x8 =

Scale = 1:84.9

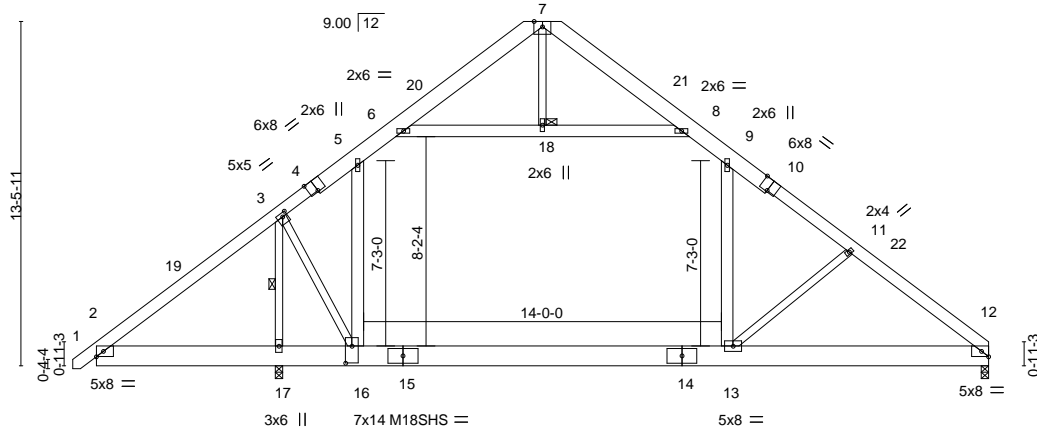


Plate Offsets (X,Y)-- [3:0-2-4,0-1-12], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [16:0-8-0,0-3-0]

|                      |                      |             |                |          |        |     |                |             |
|----------------------|----------------------|-------------|----------------|----------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>   | in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.60     | Vert(LL) -0.32 | 13-16    | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.71     | Vert(CT) -0.67 | 13-16    | >495   | 240 | M18SHS         | 244/190     |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.72     | Horz(CT) 0.01  | 12       | n/a    | n/a |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Wind(LL) 0.21  | 13       | >999   | 240 |                |             |
|                      | Code IRC2015/TPI2014 |             |                |          |        |     | Weight: 349 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
1-4,10-12: 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
5-16,9-13,6-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-7-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 5-7-4 oc bracing.  
WEBS 1 Row at midpt 3-17  
JOINTS 1 Brace at Jt(s): 18

**REACTIONS.**

(size) 17=0-3-8, 12=0-3-8  
Max Horz 17=323(LC 9)  
Max Grav 17=2585(LC 2), 12=1558(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-359/523, 3-5=-1443/0, 5-6=-1383/35, 6-7=-583/127, 7-8=-419/108, 8-9=-1216/43,  
9-11=-1770/0, 11-12=-1987/0  
BOT CHORD 2-17=-366/407, 16-17=-456/389, 13-16=0/1282, 12-13=0/1537  
WEBS 3-17=-3830/192, 3-16=0/3169, 5-16=-533/223, 9-13=0/749, 11-13=-530/237,  
6-18=-1007/0, 8-18=-1007/0

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 17-5-8, Exterior(2) 17-5-8 to 21-10-5, Interior(1) 21-10-5 to 34-9-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-18, 8-18; Wall dead load (5.0psf) on member(s).5-16, 9-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Attic room checked for L/360 deflection.



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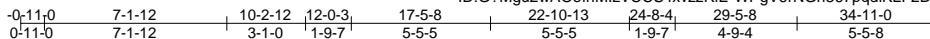


|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716280 |
| J0521-2778 | A3A   | ATTIC      | 1   | 2   | Job Reference (optional) |           |

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6x8 =

Scale = 1:84.9

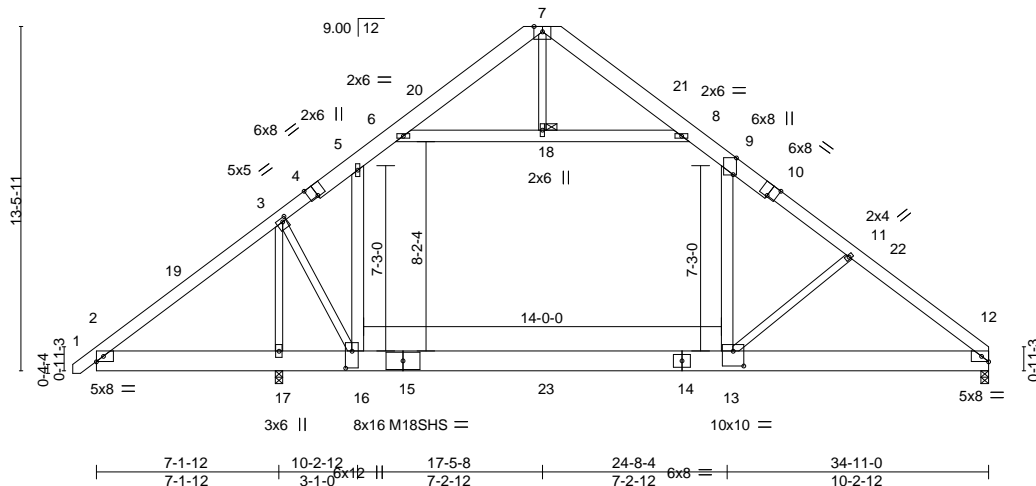


Plate Offsets (X,Y)-- [3:0-2-0,0-1-12], [4:0-4-0,Edge], [9:0-7-14,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [13:0-5-0,0-7-0], [16:0-8-0,0-3-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.43  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.96  | Vert(LL) -0.44 13-16 >747 360 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.86  | Vert(CT) -0.71 13-16 >468 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.01 12 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.20 13-16 >999 240  |                |          |
|               |                      |          |                               | Weight: 699 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP 2400F 2.0E \*Except\*  
 1-4,10-12: 2x6 SP 2400F 2.0E  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x4 SP No.2 \*Except\*  
 5-16,9-13,6-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 18

**REACTIONS.**

(size) 17=0-3-8, 12=0-3-8  
 Max Horz 17=323(LC 11)  
 Max Grav 17=4603(LC 21), 12=2767(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-359/514, 3-5=-3511/152, 5-6=-2754/232, 6-7=-542/115, 7-8=-302/99,  
 8-9=-2471/221, 9-11=-4020/206, 11-12=-4280/227  
 BOT CHORD 2-17=-357/405, 16-17=-440/387, 13-16=0/2920, 12-13=-78/3320  
 WEBS 3-17=-8046/801, 3-16=-480/6540, 5-16=-88/1207, 9-13=-84/2257, 11-13=-732/263,  
 6-18=-2795/253, 8-18=-2795/253

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 17-5-8, Exterior(2) 17-5-8 to 21-10-5, Interior(1) 21-10-5 to 34-9-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-18, 8-18; Wall dead load (5.0psf) on member(s).5-16, 9-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3237 lb down and 464 lb up at 17-5-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Attic room checked for L/360 deflection.



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Continued on page 2

**LOAD CASE(S), Standard**

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



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|                   |              |                     |          |                 |  |           |
|-------------------|--------------|---------------------|----------|-----------------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A3A | Truss Type<br>ATTIC | Qty<br>1 | Ply<br><b>2</b> | Lot 3B Williams Farm<br>Job Reference (optional) | E15716280 |
|-------------------|--------------|---------------------|----------|-----------------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:20 2021 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-80, 6-7=-60, 7-8=-60, 8-9=-80, 9-12=-60, 2-16=-20, 13-16=-40, 12-13=-20, 6-8=-20

Drag: 5-16=-10, 9-13=-10

Concentrated Loads (lb)

Vert: 23=-1837(F)

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

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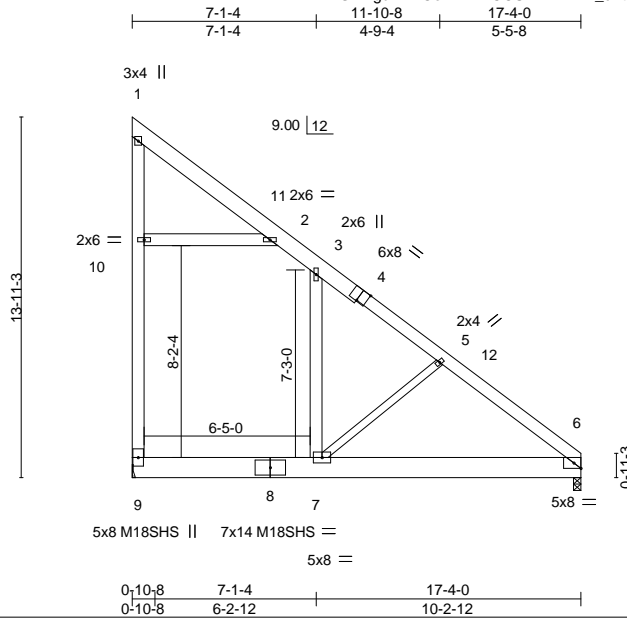


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|                   |             |                          |          |          |  |           |
|-------------------|-------------|--------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A4 | Truss Type<br>ROOF TRUSS | Qty<br>2 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716281 |
|-------------------|-------------|--------------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:21 2021 Page 1  
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Scale = 1:83.8

Plate Offsets (X,Y)-- [4:0-4-0,Edge], [6:0-3-5,Edge]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.64  | Vert(LL) -0.21 | 6-7      | >960   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.37  | Vert(CT) -0.48 | 6-7      | >426   | 240 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.37  | Horz(CT) 0.00  | 6        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.20  | 6-7      | >996   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 195 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
1-4: 2x8 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x6 SP No.1 \*Except\*  
5-7: 2x4 SP No.2

**BRACING-**

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

**REACTIONS.**

(size) 9=Mechanical, 6=0-3-8  
Max Horz 9=424(LC 13)  
Max Uplift 9=57(LC 13)  
Max Grav 9=1336(LC 21), 6=803(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 9-10=530/90, 1-10=473/123, 1-2=114/423, 3-5=473/83, 5-6=699/91  
BOT CHORD 7-9=75/413, 6-7=0/545  
WEBS 5-7=565/221, 2-10=539/271

**NOTES-**

- Wind: ASCE 7-10: Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 17-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 2-10; Wall dead load (5.0psf) on member(s).3-7
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 7-9
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 57 lb uplift at joint 9.
- Attic room checked for L/360 deflection.



May 11, 2021

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

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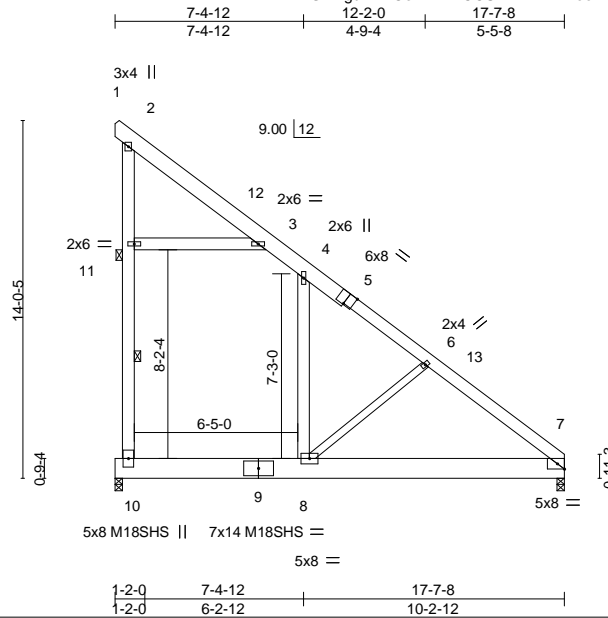
818 Soundside Road  
Edenton, NC 27932

|                   |             |                          |          |          |  |           |
|-------------------|-------------|--------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A5 | Truss Type<br>ROOF TRUSS | Qty<br>2 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716282 |
|-------------------|-------------|--------------------------|----------|----------|--|-----------|

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ID:G?Mgu2wAOefhMlzVCCS4xvzzRIE-ToofXXPWDhMr38n5RmIWIZE5VYMS\_yndRoG28CzHb5h



Scale = 1:85.1

Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-3-5,Edge]

| LOADING (psf) | SPACING-                     | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|------------------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0<br>Plate Grip DOL 1.15 | TC 0.76  | Vert(LL) -0.21 | 7-8      | >960   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15              | BC 0.37  | Vert(CT) -0.48 | 7-8      | >426   | 240 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Rep Stress Incr YES          | WB 0.37  | Horz(CT) 0.00  | 7        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014         | Matrix-S | Wind(LL) 0.20  | 7-8      | >997   | 240 |                |          |
|               |                              |          |                |          |        |     | Weight: 196 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x6 SP No.1 \*Except\*  
1-5: 2x8 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x6 SP No.1 \*Except\*  
6-8: 2x4 SP No.2

**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.  
WEBS 1 Row at midpt 10-11  
JOINTS 1 Brace at Jt(s): 11

**REACTIONS.** (size) 10=0-3-8, 7=0-3-8  
Max Horz 10=-432(LC 13)  
Max Uplift 10=-70(LC 13)  
Max Grav 10=1362(LC 21), 7=801(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-11=-557/103, 2-11=-500/136, 2-3=-123/425, 4-6=-481/55, 6-7=-706/63  
BOT CHORD 8-10=-78/421, 7-8=0/551  
WEBS 3-11=-537/268, 6-8=-565/223

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 17-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Ceiling dead load (10.0 psf) on member(s). 3-4, 3-11; Wall dead load (5.0psf) on member(s).4-8
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 70 lb uplift at joint 10.
  - 8) Attic room checked for L/360 deflection.



May 11, 2021

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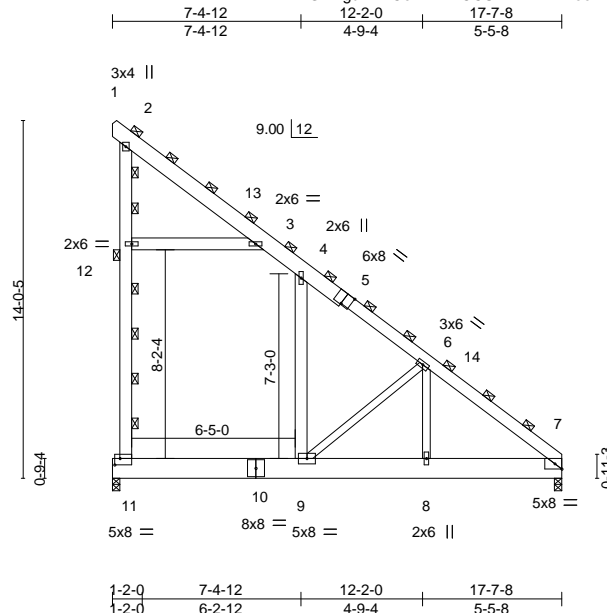
818 Soundside Road  
Edenton, NC 27932

|                   |                |                          |          |          |  |           |
|-------------------|----------------|--------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A5-GR | Truss Type<br>ROOF TRUSS | Qty<br>1 | Ply<br>2 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716283 |
|-------------------|----------------|--------------------------|----------|----------|--|-----------|

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Scale = 1:85.1

Plate Offsets (X,Y)-- [5:0-4.0,Edge], [7:0-3.5,Edge], [11:0-2.8,0-3-0]

|                      |                      |             |                |          |        |     |                |             |
|----------------------|----------------------|-------------|----------------|----------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>   | in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 3-0-0                | TC 0.46     | Vert(LL) -0.13 | 9        | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.33     | Vert(CT) -0.29 | 9        | >708   | 240 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.25     | Horz(CT) 0.00  | 7        | n/a    | n/a |                |             |
| BCDL 10.0            | Rep Stress Incr NO   | Matrix-S    | Wind(LL) 0.12  | 9        | >999   | 240 | Weight: 404 lb | FT = 20%    |
|                      | Code IRC2015/TPI2014 |             |                |          |        |     |                |             |

**LUMBER-**  
TOP CHORD 2x6 SP No.1 \*Except\*  
1-5: 2x8 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x6 SP No.1 \*Except\*  
6-9,6-8: 2x4 SP No.2

**BRACING-**  
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheeted: Spacing > 2-8-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 2, 12

**REACTIONS.** (size) 11=0-3-8, 7=0-3-8  
Max Horz 11=-648(LC 13)  
Max Uplift 11=-105(LC 13)  
Max Grav 11=2043(LC 21), 7=1202(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 11-12=-756/151, 2-12=-672/201, 2-3=-182/549, 3-4=-356/158, 4-6=-640/90,  
6-7=-1826/37  
BOT CHORD 9-11=-149/634, 8-9=0/1320, 7-8=0/1320  
WEBS 3-12=-730/408, 6-9=-1729/329, 6-8=-49/1323

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10: Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 17-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 3-4, 3-12; Wall dead load (5.0psf) on member(s).4-9
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 11.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Attic room checked for L/360 deflection.



May 11, 2021

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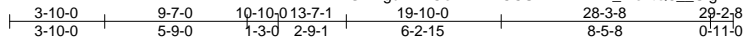
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716284 |
| J0521-2778 | A6    | ROOF TRUSS | 3   | 1   | Job Reference (optional) |           |

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6x10 M18SHS =

Scale = 1:87.6

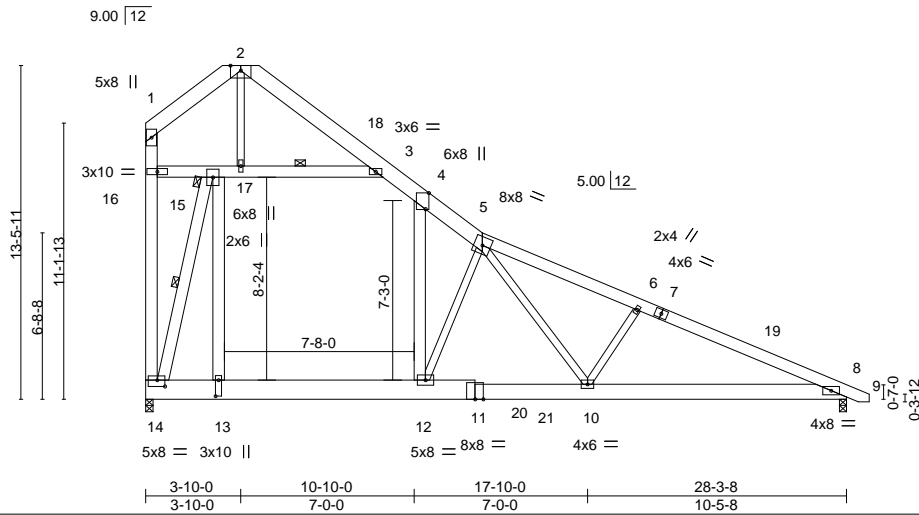


Plate Offsets (X,Y)-- [4:0-7-14,Edge], [13:0-7-12,0-1-8], [14:0-3-12,0-3-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.67  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.90  | Vert(LL) -0.22 10-12 >999 360 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.94  | Vert(CT) -0.46 10-12 >736 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.03 8 n/a n/a       |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.15 10-12 >999 240  |                |          |
|               |                      |          |                               | Weight: 322 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
5-7,7-9: 2x6 SP No. 1  
BOT CHORD 2x8 SP No.1 \*Except\*  
11-14: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
2-17,5-12,5-10,6-10: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-11-2 oc bracing.  
WEBS 1 Row at midpt 3-15, 14-15  
JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

(size) 14=0-3-8, 8=0-3-8  
Max Horz 14=-386(LC 13)  
Max Grav 14=1899(LC 21), 8=1327(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-46/909, 2-3=-81/883, 3-4=-845/0, 4-5=-1740/0, 5-6=-2479/0, 6-8=-2689/6,  
14-16=-69/1026, 1-16=-13/598  
BOT CHORD 13-14=0/1154, 12-13=0/1196, 10-12=0/1729, 8-10=0/2401  
WEBS 13-15=0/1674, 4-12=0/1284, 15-16=-703/80, 15-17=-2008/133, 3-17=-1755/94,  
14-15=-3791/83, 2-17=-1396/254, 5-12=-1480/147, 5-10=-173/947, 6-10=-420/248

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 8-2-13, Interior(1) 8-2-13 to 28-11-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 15-16, 15-17, 3-17; Wall dead load (5.0psf) on member(s).13-15, 4-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
- Attic room checked for L/360 deflection.



May 11, 2021

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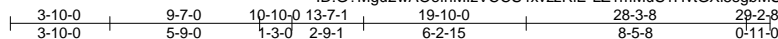
818 Soundside Road  
Edenton, NC 27932

|                   |                |                          |          |          |  |           |
|-------------------|----------------|--------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>A6-GR | Truss Type<br>ROOF TRUSS | Qty<br>1 | Ply<br>2 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716285 |
|-------------------|----------------|--------------------------|----------|----------|--|-----------|

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Scale = 1:83.4

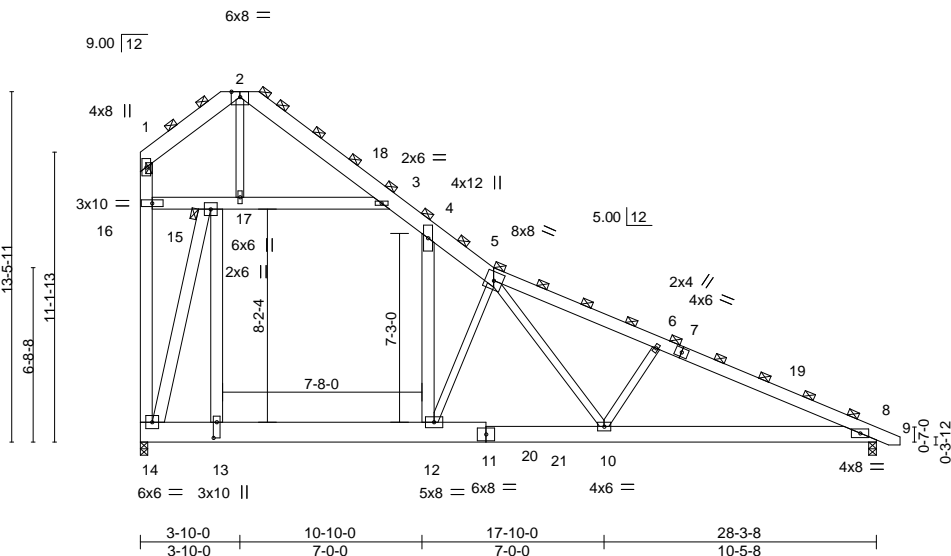


Plate Offsets (X,Y)-- [13:0-7-4,0-1-8]

|                      |                      |       |             |              |             |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|-------------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 3-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc)    | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.50     | Vert(LL)     | -0.16 10-12 | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.74     | Vert(CT)     | -0.34 10-12 | >981   | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | NO    | WB 0.90     | Horz(CT)     | 0.02 8      | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.11 10-12  | >999   | 240 | Weight: 644 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
5-7,7-9: 2x6 SP No.1  
BOT CHORD 2x8 SP No.1 \*Except\*  
11-14: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
2-17,5-12,5-10,6-10: 2x4 SP No.2

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheeted: Spacing > 2-8-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 1, 2, 5, 15

**REACTIONS.**

(size) 14=0-3-8, 8=0-3-8  
Max Horz 14=-579(LC 13)  
Max Grav 14=2848(LC 21), 8=1990(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-69/1364, 2-3=-122/1324, 3-4=-1268/0, 4-5=-2610/0, 5-6=-3719/0, 6-8=-4034/9,  
14-16=-103/1539, 1-16=-19/897  
BOT CHORD 13-14=0/1730, 12-13=0/1794, 10-12=0/2594, 8-10=0/3601  
WEBS 13-15=0/2510, 4-12=0/1926, 15-16=-1055/120, 15-17=-3012/199, 3-17=-2632/140,  
14-15=-5686/124, 2-17=-2094/382, 5-12=-2220/220, 5-10=-260/1421, 6-10=-630/372

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 8-2-13, Interior(1) 8-2-13 to 28-11-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 15-16, 15-17, 3-17; Wall dead load (5.0psf) on member(s).13-15, 4-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



May 11, 2021

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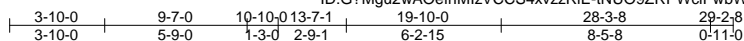


818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716286 |
| J0521-2778 | A6GE  | GABLE      | 1   | 1   | Job Reference (optional) |           |

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6x10 M18SHS =

Scale = 1:87.6

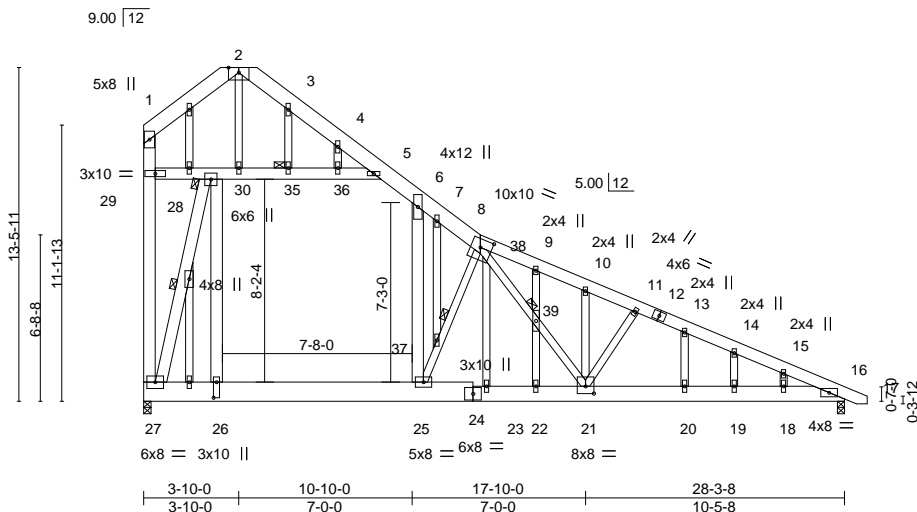


Plate Offsets (X,Y)-- [8:0-5-8,0-4-0], [21:0-4-0,0-3-8], [26:0-7-8,0-1-8], [38:0-2-8,0-1-7]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.56  | Vert(LL) -0.17 | 25       | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.83  | Vert(CT) -0.37 | 23-25    | >898   | 240 | M18SHS         | 244/190  |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.68  | Horz(CT) 0.03  | 16       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.18  | 23-25    | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 372 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x8 SP No.1 *Except*<br>8-12,12-17: 2x6 SP No.1      | TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins, except end verticals.                                |
| BOT CHORD 2x8 SP No.1 *Except*<br>24-27: 2x10 SP No.1          | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:<br>8-9-11 oc bracing: 26-27<br>6-11-2 oc bracing: 25-26. |
| WEBS 2x6 SP No.1 *Except*<br>2-30,8-25,8-21,11-21: 2x4 SP No.2 | WEBS 1 Row at midpt 27-28, 8-25   |
| OTHERS 2x4 SP No.2   | JOINTS 1 Brace at Jt(s): 28, 35, 39   |

**REACTIONS.** (size) 27=0-3-8, 16=0-3-8  
 Max Horz 27=-563(LC 13)  
 Max Uplift 27=-62(LC 13), 16=-134(LC 13)  
 Max Grav 27=1798(LC 21), 16=1288(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-128/768, 2-3=-152/797, 3-4=-176/666, 4-5=-229/603, 5-6=-810/21, 6-7=-1473/0,  
 7-8=-1553/0, 8-9=-2182/301, 9-10=-2203/254, 10-11=-2244/236, 11-13=-2332/264,  
 13-14=-2405/262, 14-15=-2401/211, 15-16=-2447/172, 27-29=-204/868, 1-29=-80/527  
 BOT CHORD 26-27=0/1083, 25-26=0/1123, 23-25=0/1668, 22-23=0/1668, 21-22=0/1668,  
 20-21=-104/2197, 19-20=-104/2197, 18-19=-104/2197, 16-18=-104/2197  
 WEBS 26-28=-65/1610, 6-25=-26/999, 28-29=-589/141, 28-30=-1741/298, 30-35=-1523/241,  
 35-36=-1524/241, 5-36=-1525/239, 27-28=-3429/396, 2-30=-1299/326, 25-37=-1571/470,  
 8-37=-1650/498, 8-38=-491/1192, 38-39=-311/673, 21-39=-325/714, 11-21=-413/251,  
 23-38=-204/583

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x6 MT20 unless otherwise indicated.
  - 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 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 5-6, 28-29, 28-30, 30-35, 35-36, 5-36; Wall dead load (5.0psf) on member(s).26-28, 6-25
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 25-26



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Continued on page 2

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



818 Soundside Road  
 Edenton, NC 27932



|            |       |            |     |     |                          |           |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Lot 3B Williams Farm     | E15716286 |
| J0521-2778 | A6GE  | GABLE      | 1   | 1   | Job Reference (optional) |           |

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**NOTES-**

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 27 and 134 lb uplift at joint 16.
- 12) Attic room checked for L/360 deflection.

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

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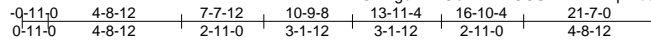
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|                   |             |                     |          |          |  |           |
|-------------------|-------------|---------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>B1 | Truss Type<br>ATTIC | Qty<br>3 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716287 |
|-------------------|-------------|---------------------|----------|----------|--|-----------|

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Scale = 1:76.9

Plate Offsets (X,Y)-- [2:0-0-8,0-2-0], [9:0-1-8,0-2-0], [11:0-4-0,0-4-12], [13:0-4-0,0-4-12]

|   |   |  |   |   |                                    |
|---|---|--|---|---|------------------------------------|
| <b>LOADING</b> (psf)<br>TCLL 20.0<br>TCDL 10.0<br>BCLL 0.0 *<br>BCDL 10.0 | <b>SPACING-</b><br>2-0-0<br>Plate Grip DOL 1.15<br>Lumber DOL 1.15<br>Rep Stress Incr YES<br>Code IRC2015/TPI2014 | <b>CSI.</b><br>TC 0.79<br>BC 0.75<br>WB 0.20<br>Matrix-S | <b>DEFL.</b><br>in (loc) l/defl L/d<br>Vert(LL) -0.23 11-13 >999 360<br>Vert(CT) -0.38 11-13 >659 240<br>Horz(CT) 0.01 10 n/a n/a<br>Wind(LL) 0.06 11-13 >999 240 | <b>PLATES</b><br>MT20<br>Weight: 226 lb | <b>GRIP</b><br>244/190<br>FT = 20% |
|---|---|--|---|---|------------------------------------|

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
6-15,2-13,9-11: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-7-6 oc bracing.  
JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

(size) 14=0-3-8, 10=Mechanical  
Max Horz 14=329(LC 9)  
Max Grav 14=1486(LC 21), 10=1445(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1617/0, 3-4=-981/145, 7-8=-984/149, 8-9=-1597/0, 2-14=-1643/8, 9-10=-1598/0  
BOT CHORD 13-14=-312/478, 11-13=0/995  
WEBS 8-11=-8/675, 3-13=-2/708, 4-15=-1030/189, 7-15=-1030/189, 2-13=0/854, 9-11=0/917

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-4-4 zone; 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
- 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 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 7-8, 4-15, 7-15; Wall dead load (5.0psf) on member(s).8-11, 3-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



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|                   |               |                     |          |          |  |           |
|-------------------|---------------|---------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>B1GE | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716288 |
|-------------------|---------------|---------------------|----------|----------|--|-----------|

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ID:G?Mgu2wAOefhMlzVCCS4xvzzRIE-Hy9WnaTHpX7\_n3EFo0PwYqU8tyJROaqVpkjNMszhB5b  
 -0-11-0 4-8-12 7-7-12 10-9-8 13-11-4 16-10-4 21-7-0 22-6-0  
 0-11-0 4-8-12 2-11-0 3-1-12 3-1-12 2-11-0 4-8-12 0-11-0

Scale = 1:82.1

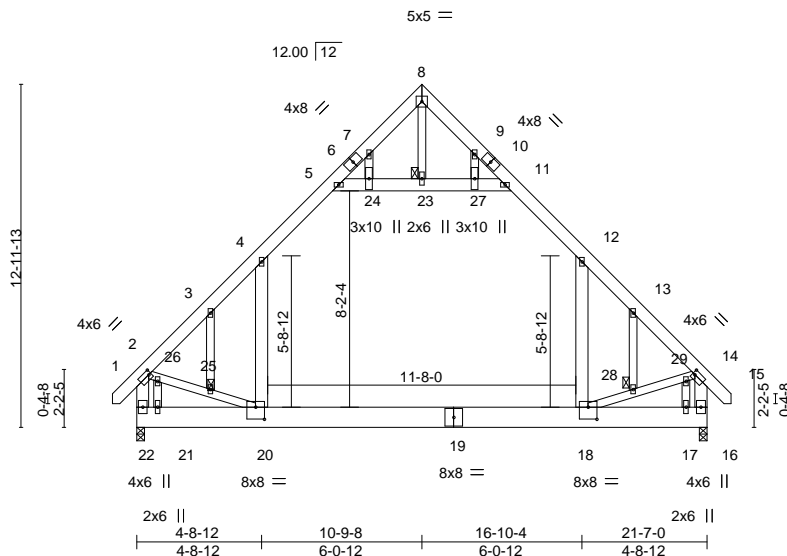


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [14:0-1-0,0-2-0], [18:0-4-0,0-5-8], [20:0-4-0,0-5-8]

|                      |                      |       |             |              |             |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|-------------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc)    | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.70     | Vert(LL)     | -0.21 18-20 | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.72     | Vert(CT)     | -0.35 18-20 | >726   | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.72     | Horz(CT)     | 0.01 16     | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.08 18-20  | >999   | 240 | Weight: 244 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 8-23,2-20,14-18: 2x4 SP No.2  
 OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 23, 25, 28

**REACTIONS.**

(size) 22=0-3-8, 16=0-3-8  
 Max Horz 22=422(LC 11)  
 Max Grav 22=1480(LC 21), 16=1480(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1601/0, 3-4=-1592/42, 4-5=-995/179, 7-8=-26/326, 8-9=-26/326, 11-12=-995/179,  
 12-13=-1591/42, 13-14=-1600/0, 2-22=-1231/0, 14-16=-1232/0  
 BOT CHORD 21-22=-379/571, 20-21=-379/571, 18-20=0/1047, 17-18=-83/286, 16-17=-83/286  
 WEBS 12-18=0/790, 4-20=0/790, 5-24=-1075/235, 23-24=-1070/236, 23-27=-1070/236,  
 11-27=-1075/235, 8-23=-438/0, 2-26=-22/762, 25-26=-3/913, 20-25=-19/874,  
 18-28=-26/879, 28-29=-10/918, 14-29=-29/767, 7-24=-10/475, 21-26=-476/69,  
 9-27=-10/474, 17-29=-477/69

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 4-5, 11-12, 5-24, 23-24, 23-27, 11-27; Wall dead load (5.0psf) on member(s).12-18, 4-20
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
- Attic room checked for L/360 deflection.



May 11, 2021

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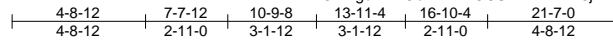
818 Soundside Road  
 Edenton, NC 27932

|                   |             |                     |          |          |  |           |
|-------------------|-------------|---------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>B2 | Truss Type<br>ATTIC | Qty<br>7 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716289 |
|-------------------|-------------|---------------------|----------|----------|--|-----------|

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5x5 =

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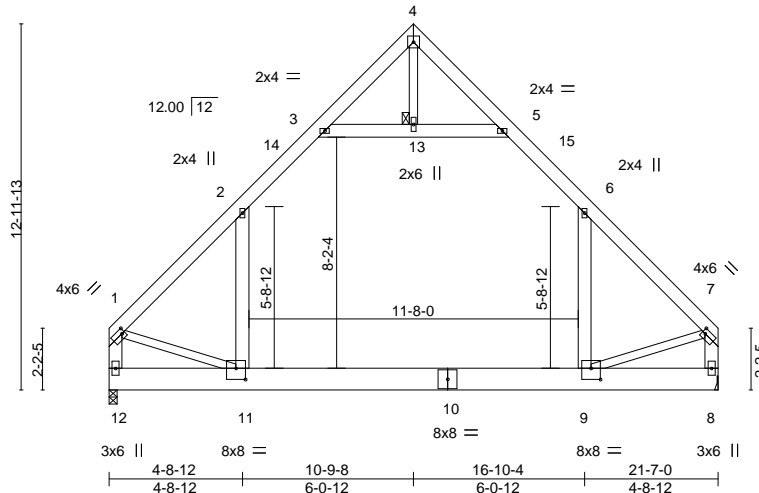


Plate Offsets (X,Y)-- [1:0-1-4,0-2-0], [7:0-1-4,0-2-0], [9:0-4-0,0-4-12], [11:0-4-0,0-4-12]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.78  | Vert(LL) -0.23 | 9-11     | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.75  | Vert(CT) -0.39 | 9-11     | >653   | 240 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.20  | Horz(CT) 0.01  | 8        | n/a    | n/a |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) 0.07  | 9-11     | >999   | 240 | Weight: 223 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |                |          |        |     |                |          |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 4-13,1-11,7-9: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.  
 JOINTS 1 Brace at Jt(s): 13

**REACTIONS.**

(size) 12=0-3-8, 8=Mechanical  
 Max Horz 12=313(LC 11)  
 Max Grav 12=1446(LC 21), 8=1446(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1600/0, 2-3=-984/147, 5-6=-984/147, 6-7=-1600/0, 1-12=-1600/0, 7-8=-1601/0  
 BOT CHORD 11-12=-303/406, 9-11=0/997  
 WEBS 6-9=-6/678, 2-11=-7/678, 3-13=-1036/187, 5-13=-1036/187, 1-11=0/915, 7-9=0/919

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-8-12, Interior(1) 4-8-12 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-4-4 zone; 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
- 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 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s).6-9, 2-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



May 11, 2021

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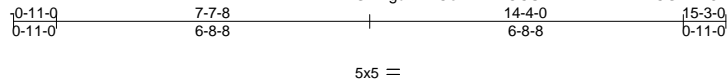


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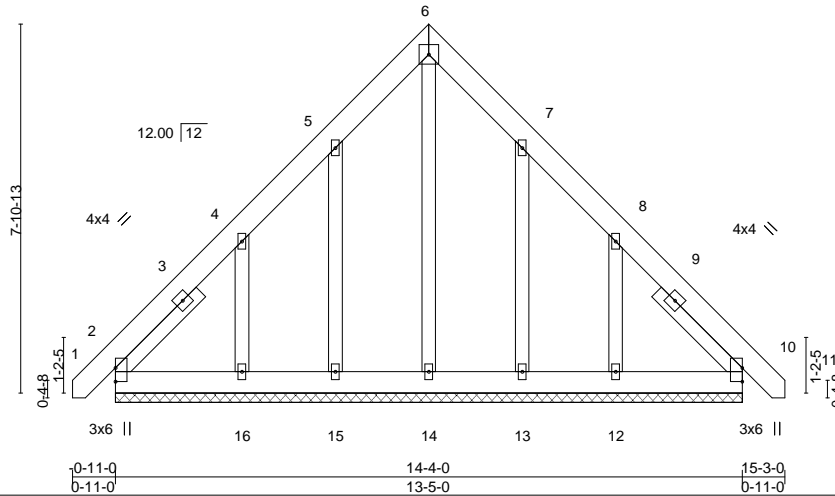
|                   |               |                                    |          |          |  |           |
|-------------------|---------------|------------------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>C1GE | Truss Type<br>COMMON SUPPORTED GAB | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716290 |
|-------------------|---------------|------------------------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:30 2021 Page 1  
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Scale = 1:46.4



|                      |                      |             |                          |                |             |
|----------------------|----------------------|-------------|--------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>             | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.04     | in (loc) l/defl L/d      | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.04     | Vert(LL) 0.00 10 n/r 120 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.13     | Vert(CT) 0.00 10 n/r 120 |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.00 10 n/a n/a |                |             |
|                      | Code IRC2015/TPI2014 |             |                          | Weight: 124 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 - 2-6-0, Right 2x4 SP No.2 -H 2-6-0

**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.

**REACTIONS.**

All bearings 13-5-0.  
(lb) - Max Horz 2=224(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 13 except 16=256(LC 12), 12=251(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 13 except 16=270(LC 19), 12=265(LC 20)

**FORCES.**

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

WEBS 4-16=-280/263, 8-12=-280/260

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;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.
- 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 2-0-0 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) 2, 10, 15, 13 except (jt=lb) 16=256, 12=251.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 11, 2021

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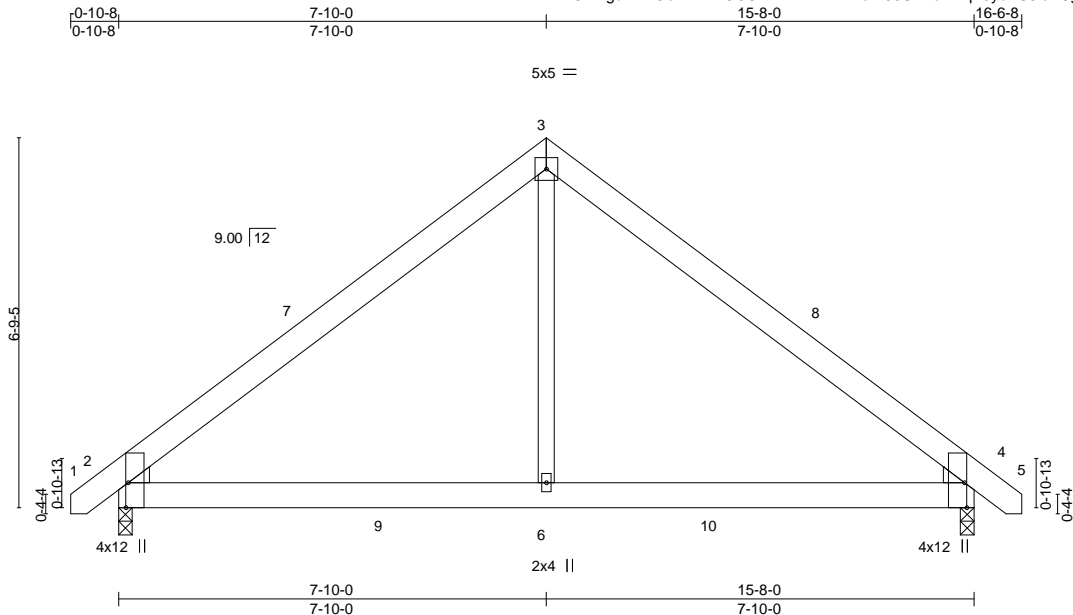


818 Soundside Road  
Edenton, NC 27932

|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>D1 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716291 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:31 2021 Page 1  
ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-iXrFpCw95SVZeWzqT9ydAS6loASgb2zxVhy1yBzHb5Y



Scale = 1:39.7

Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [4:0-0-13,0-1-1], [4:0-1-9,0-5-4], [4:0-5-8,Edge]

|                      |                      |             |                |     |       |        |     |               |             |
|----------------------|----------------------|-------------|----------------|-----|-------|--------|-----|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>   | in  | (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.28     | Vert(LL) -0.03 | 4-6 | >999  | 360    |     | MT20          | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.30     | Vert(CT) -0.05 | 4-6 | >999  | 240    |     |               |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.31     | Horz(CT) 0.01  | 4   | n/a   | n/a    |     |               |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Wind(LL) 0.06  | 4-6 | >999  | 240    |     | Weight: 98 lb | FT = 20%    |
|                      | Code IRC2015/TPI2014 |             |                |     |       |        |     |               |             |

**LUMBER-**

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

**WEDGE**

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

**REACTIONS.**

(size) 2=0-3-0, 4=0-3-0  
Max Horz 2=154(LC 10)  
Max Uplift 2=90(LC 9), 4=90(LC 8)  
Max Grav 2=717(LC 2), 4=717(LC 2)

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

TOP CHORD 2-3=810/620, 3-4=810/618  
BOT CHORD 2-6=323/544, 4-6=323/544  
WEBS 3-6=488/523

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 16-4-12 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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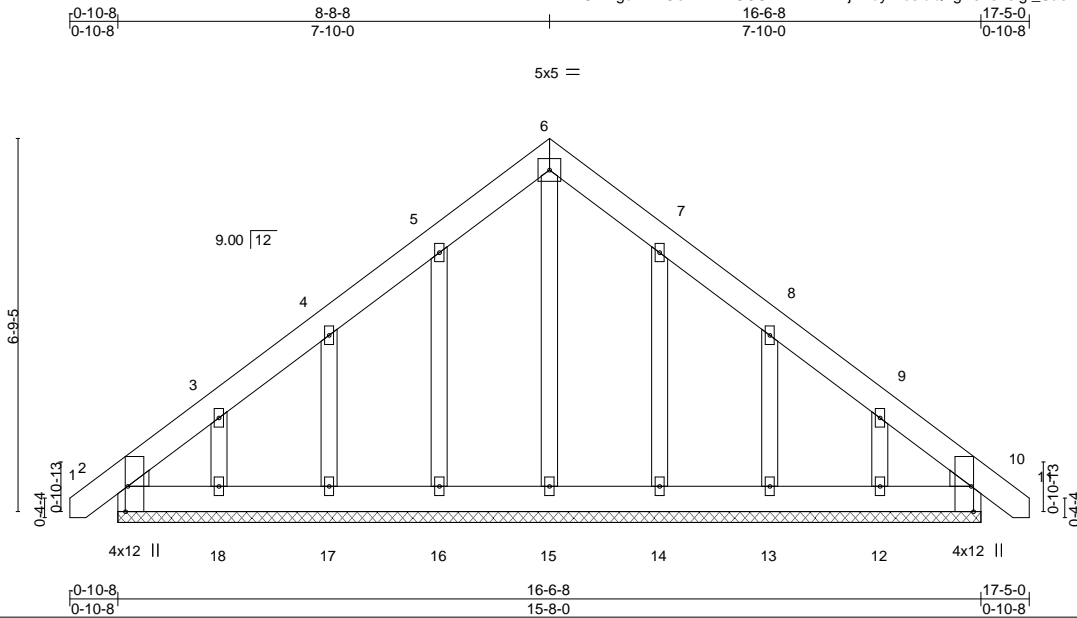


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|                   |               |                                    |          |          |  |           |
|-------------------|---------------|------------------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>D1GE | Truss Type<br>COMMON SUPPORTED GAB | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716292 |
|-------------------|---------------|------------------------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:32 2021 Page 1  
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Scale = 1:39.4

Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [10:0-0-13,0-1-1], [10:0-1-9,0-5-4], [10:0-5-8,Edge]

|                      |                      |             |                          |                |             |
|----------------------|----------------------|-------------|--------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>             | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.03     | in (loc) l/defl L/d      | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.02     | Vert(LL) 0.00 10 n/r 120 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.07     | Vert(CT) 0.00 10 n/r 120 |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.00 10 n/a n/a |                |             |
|                      | Code IRC2015/TPI2014 |             |                          | Weight: 124 lb | FT = 20%    |

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

**REACTIONS.** All bearings 15-8-0.  
(lb) - Max Horz 2=-192(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 14 except 17=-104(LC 12), 18=-135(LC 12), 13=-106(LC 13), 12=-129(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch 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.
  - 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 2-0-0 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) 2, 10, 16, 14 except (jt=lb) 17=104, 18=135, 13=106, 12=129.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

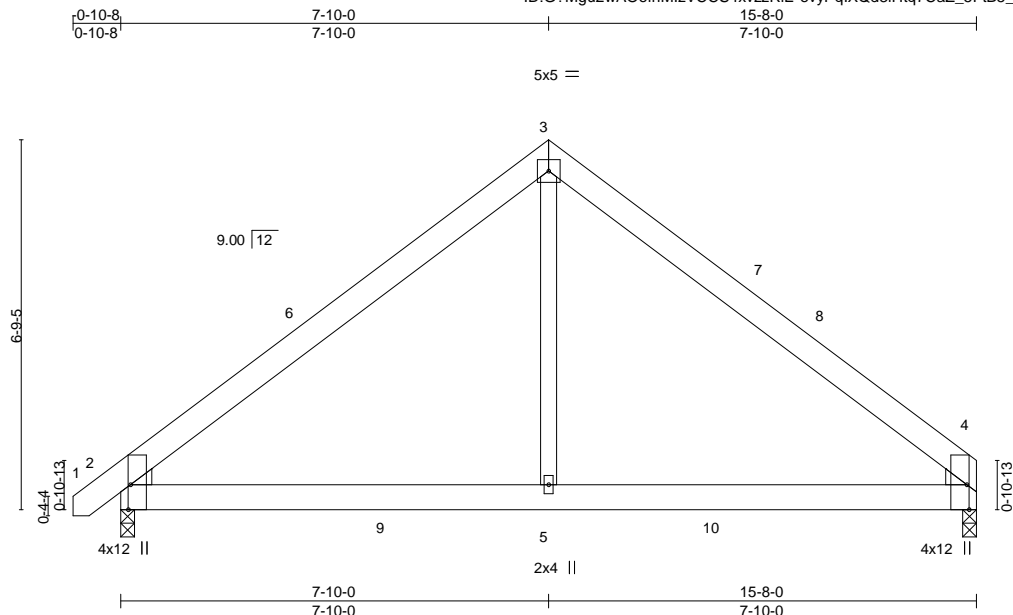


May 11, 2021

|                   |             |                      |          |          |                                   |
|-------------------|-------------|----------------------|----------|----------|-----------------------------------|
| Job<br>J0521-2778 | Truss<br>D2 | Truss Type<br>COMMON | Qty<br>2 | Ply<br>1 | Lot 3B Williams Farm<br>E15716293 |
|-------------------|-------------|----------------------|----------|----------|-----------------------------------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:33 2021 Page 1  
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Scale = 1:39.7

Plate Offsets (X,Y)-- [2:0-10-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [4:0-0-13,0-1-1], [4:0-1-9,0-5-4], [4:0-5-8,Edge]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.30  | Vert(LL) -0.03 | 2-5      | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.30  | Vert(CT) -0.05 | 2-5      | >999   | 240 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.31  | Horz(CT) 0.01  | 4        | n/a    | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) 0.06  | 2-5      | >999   | 240 |               |          |
|               | Code IRC2015/TPI2014 |          |                |          |        |     | Weight: 96 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

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

**REACTIONS.** (size) 2=0-3-0, 4=0-3-0  
Max Horz 2=153(LC 11)  
Max Uplift 2=-90(LC 9), 4=-86(LC 8)  
Max Grav 2=718(LC 2), 4=673(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-811/620, 3-4=-809/620  
BOT CHORD 2-5=-333/542, 4-5=-333/542  
WEBS 3-5=-486/524

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 15-6-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



May 11, 2021

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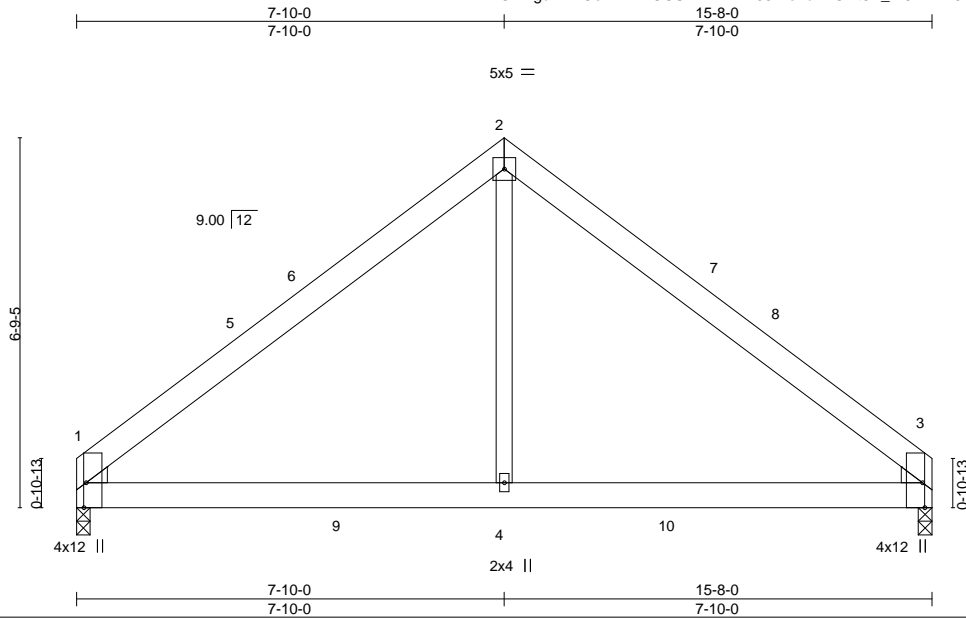


|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>D3 | Truss Type<br>COMMON | Qty<br>2 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716294 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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Scale = 1:39.7

Plate Offsets (X,Y)-- [1:0-0-13,0-1-1], [1:0-1-9,0-5-4], [1:0-5-8,Edge], [3:0-0-13,0-1-1], [3:0-1-9,0-5-4], [3:0-5-8,Edge]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.30  | Vert(LL) -0.02 | 3-4      | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.29  | Vert(CT) -0.05 | 3-4      | >999   | 240 |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.31  | Horz(CT) 0.01  | 3        | n/a    | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Wind(LL) 0.06  | 1-4      | >999   | 240 | Weight: 94 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |                |          |        |     |               |          |

**LUMBER-**

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

**WEDGE**

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

**REACTIONS.**

(size) 1=0-3-0, 3=0-3-0  
Max Horz 1=150(LC 10)  
Max Uplift 1=86(LC 9), 3=86(LC 8)  
Max Grav 1=674(LC 2), 3=674(LC 2)

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

TOP CHORD 1-2=-810/622, 2-3=-810/622  
BOT CHORD 1-4=-335/543, 3-4=-335/543  
WEBS 2-4=-483/524

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-8 to 4-6-5, Interior(1) 4-6-5 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 15-6-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 11, 2021

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|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>G1 | Truss Type<br>Common | Qty<br>3 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716295 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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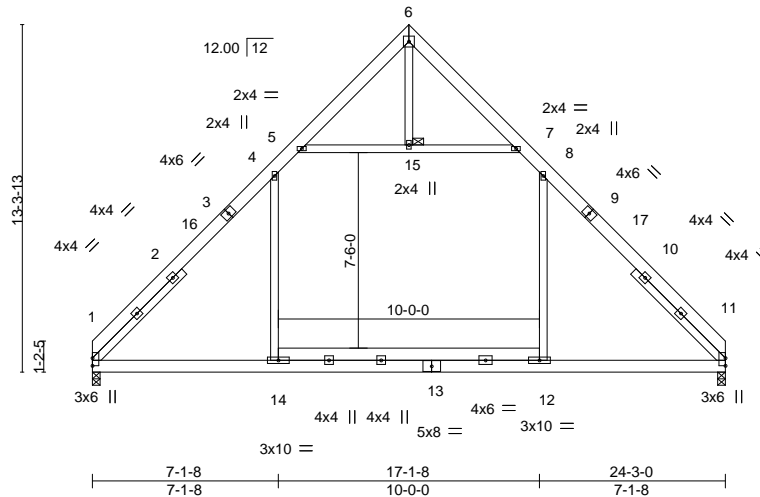
8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:35 2021 Page 1

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5x5 =

Scale = 1:83.1



|                      |                      |       |             |              |             |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|-------------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc)    | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.26     | Vert(LL)     | -0.14 11-12 | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.51     | Vert(CT)     | -0.16 11-12 | >999   | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.13     | Horz(CT)     | 0.02 11     | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.19 1-14   | >999   | 240 |                |             |
|                      |                      |       |             |              |             |        |     | Weight: 217 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -H 4-10-11, Right 2x4 SP No.2 -H 4-10-11

**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.  
 JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

(size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=-306(LC 8)  
 Max Uplift 1=-35(LC 13), 11=-35(LC 12)  
 Max Grav 1=1110(LC 20), 11=1110(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-4=-1451/251, 4-5=-805/321, 7-8=-805/320, 8-11=-1453/251  
 BOT CHORD 1-14=-7/913, 12-14=-12/914, 11-12=-7/912  
 WEBS 4-14=-25/552, 8-12=-26/554, 5-15=-863/391, 7-15=-863/391

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-1-8, Exterior(2) 12-1-8 to 16-6-7, Interior(1) 16-6-7 to 24-3-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11.



May 11, 2021

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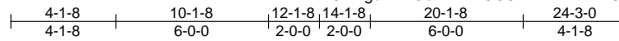
818 Soundside Road  
 Edenton, NC 27932

|                   |                |                             |          |          |  |           |
|-------------------|----------------|-----------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>G1-GR | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br>3 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716296 |
|-------------------|----------------|-----------------------------|----------|----------|--|-----------|

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4x6 =

Scale = 1:85.2

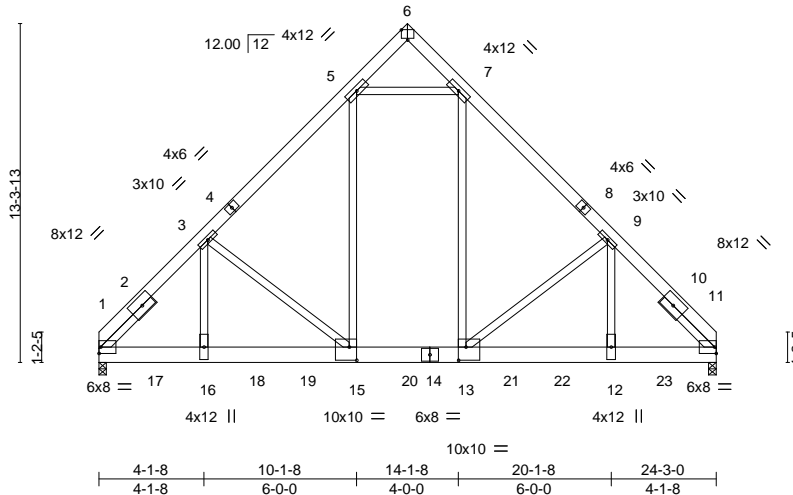


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [13:0-3-8,0-6-4], [15:0-3-8,0-6-4]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.97  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.40  | Vert(LL) -0.09 12-13 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.56  | Vert(CT) -0.18 12-13 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.04 11 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) -0.02 15-16 >999 240 | Weight: 703 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP 2400F 2.0E  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -H 2-9-4, Right 2x4 SP No.2 -H 2-9-4

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=304(LC 4)  
 Max Grav 1=11831(LC 2), 11=12016(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-13875/0, 3-5=-10297/0, 7-9=-10310/0, 9-11=-14178/0  
 BOT CHORD 1-16=0/9026, 15-16=0/9042, 13-15=0/7348, 12-13=0/9245, 11-12=0/9228  
 WEBS 7-13=0/6894, 9-13=-2492/0, 9-12=0/4965, 5-15=0/6826, 3-15=-2232/0, 3-16=0/4595,  
 5-7=-7517/0

**NOTES-**

- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1958 lb down at 2-0-12, 1958 lb down at 4-0-12, 1958 lb down at 6-0-12, 1958 lb down at 8-0-12, 1958 lb down at 10-0-12, 1958 lb down at 12-0-12, 1958 lb down at 14-0-12, 2068 lb down at 16-0-12, 2068 lb down at 18-0-12, and 2068 lb down at 20-0-12, and 2068 lb down at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-60, 6-11=-60, 1-11=-20



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Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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|                   |                |                             |          |                 |   |
|-------------------|----------------|-----------------------------|----------|-----------------|---|
| Job<br>J0521-2778 | Truss<br>G1-GR | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br><b>3</b> | Lot 3B Williams Farm<br>E15716296<br>Job Reference (optional) |
|-------------------|----------------|-----------------------------|----------|-----------------|---|

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 13--1547(B) 12--1645(B) 15--1547(B) 16--1547(B) 17--1547(B) 18--1547(B) 19--1547(B) 20--1547(B) 21--1645(B) 22--1645(B) 23--1645(B)

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

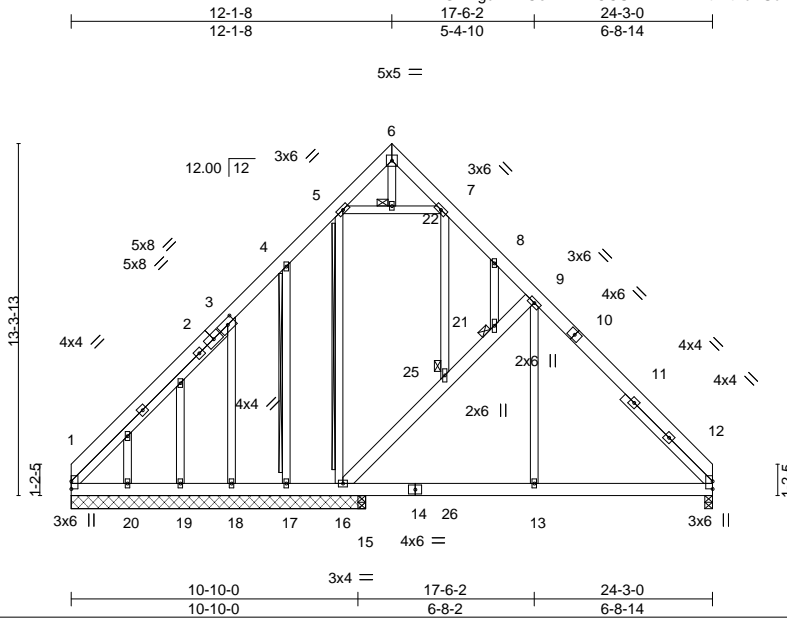


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|                   |               |                     |          |          |  |           |
|-------------------|---------------|---------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>G1SG | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716297 |
|-------------------|---------------|---------------------|----------|----------|--|-----------|

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Scale = 1:82.0

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

| LOADING (psf) | SPACING-                                | CSI.     | DEFL.          | in (loc) | I/defl | L/d | PLATES         | GRIP     |
|---------------|---|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 2-0-0<br>Lumber DOL 1.15 | TC 0.20  | Vert(LL) -0.02 | 13-15    | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Rep Stress Incr YES                     | BC 0.14  | Vert(CT) -0.03 | 12-13    | >999   | 240 |                |          |
| BCLL 0.0 *    | Code IRC2015/TPI2014                    | WB 0.37  | Horz(CT) 0.01  | 12       | n/a    | n/a |                |          |
| BCDL 10.0     |   | Matrix-S | Wind(LL) 0.01  | 12-13    | >999   | 240 | Weight: 259 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 9-16: 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -H 8-5-2, Right 2x4 SP No.2 -H 4-8-11

**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 T-Brace: 2x4 SPF No.2 - 5-16, 4-17  
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.  
 1 Brace at Jt(s): 21, 22, 25

**REACTIONS.**

All bearings 11-1-8 except (jt=length) 12=0-3-8, 15=0-3-8.  
 (lb) - Max Horz 1=382(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 17, 20 except 16=205(LC 13),  
 18=-446(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 19, 20 except 1=385(LC 21),  
 12=663(LC 20), 16=287(LC 1), 18=434(LC 19), 15=352(LC 18)

**JOINTS**

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-503/279, 3-4=-349/173, 4-5=-269/210, 8-9=-311/176, 9-12=-683/95  
 BOT CHORD 1-20=-204/371, 19-20=-204/371, 18-19=-204/371, 17-18=-205/372, 16-17=-205/372,  
 15-16=0/417, 13-15=0/417, 12-13=0/417  
 WEBS 16-25=-528/327, 21-25=-506/310, 9-21=-552/358, 9-13=0/298, 3-18=-507/461

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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 2-0-0 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, 12, 17, 20 except (jt=length) 16=205, 18=446.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 11, 2021

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|                   |             |                      |          |          |                                   |
|-------------------|-------------|----------------------|----------|----------|-----------------------------------|
| Job<br>J0521-2778 | Truss<br>H1 | Truss Type<br>COMMON | Qty<br>6 | Ply<br>1 | Lot 3B Williams Farm<br>E15716298 |
|-------------------|-------------|----------------------|----------|----------|-----------------------------------|

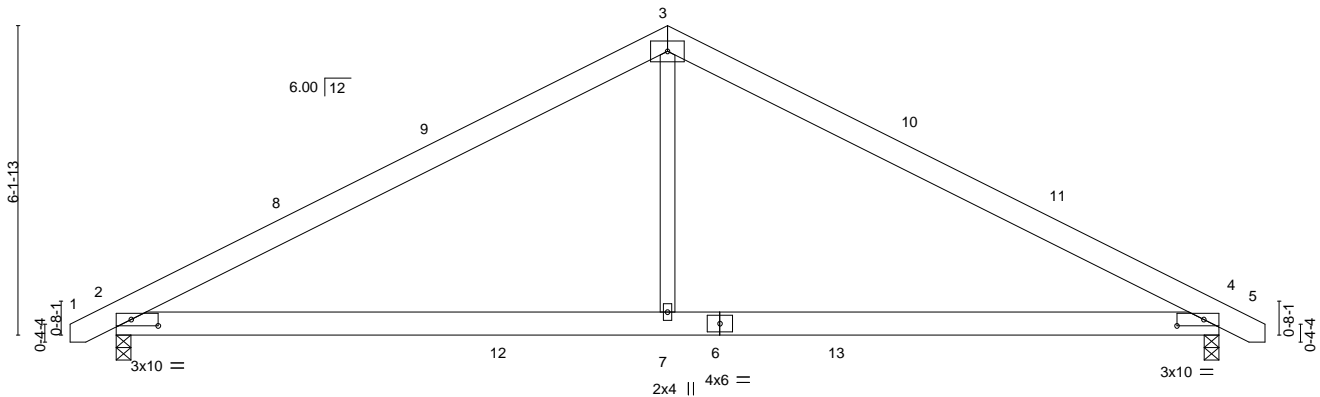
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0-11-0 10-11-8 21-11-0 22-10-0  
0-11-0 10-11-8 10-11-8 0-11-0

5x8 =

Scale = 1:43.1



10-11-8 21-11-0  
10-11-8 10-11-8

Plate Offsets (X,Y)-- [2:0-6-7,0-1-8], [4:0-6-7,0-1-8]

|                      |                      |             |                |          |        |     |                |             |
|----------------------|----------------------|-------------|----------------|----------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>   | in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.63     | Vert(LL) -0.08 | 4-7      | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.50     | Vert(CT) -0.18 | 4-7      | >999   | 240 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.15     | Horz(CT) 0.02  | 4        | n/a    | n/a |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Wind(LL) 0.06  | 2-7      | >999   | 240 | Weight: 122 lb | FT = 20%    |
|                      | Code IRC2015/TPI2014 |             |                |          |        |     |                |             |

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=76(LC 11)  
Max Uplift 2=-64(LC 12), 4=-64(LC 13)  
Max Grav 2=953(LC 2), 4=953(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1379/292, 3-4=-1379/292  
BOT CHORD 2-7=-93/1123, 4-7=-93/1123  
WEBS 3-7=0/655

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-2 zone; 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
- 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 2-0-0 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) 2, 4.



May 11, 2021

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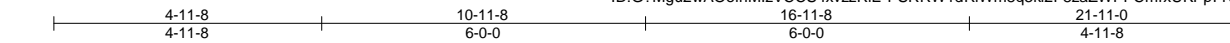
818 Soundside Road  
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|                   |                |                             |          |          |  |           |
|-------------------|----------------|-----------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>H1-GR | Truss Type<br>COMMON GIRDER | Qty<br>1 | Ply<br>2 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716299 |
|-------------------|----------------|-----------------------------|----------|----------|--|-----------|

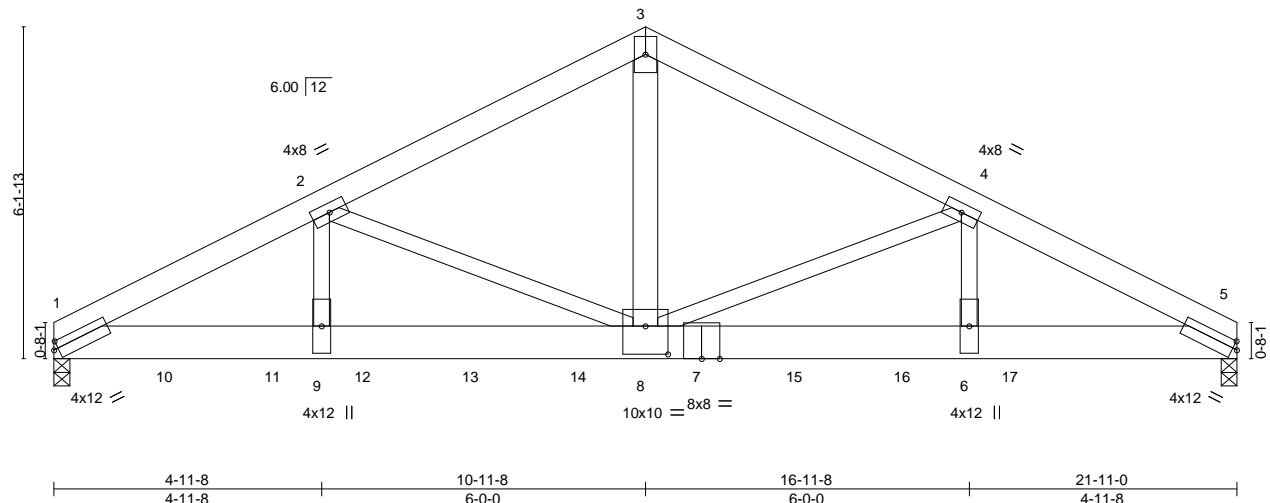
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Scale = 1:40.2



|                       |   |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [1:0-1-0,0-1-12], [5:0-1-0,0-1-12], [8:0-5-0,0-6-4] |
|-----------------------|---|

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                       | PLATES         | GRIP     |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.46  | in (loc) l/defl L/d         | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.69  | Vert(LL) -0.12 6-8 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.64  | Vert(CT) -0.25 6-8 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.07 5 n/a n/a     |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) -0.01 8-9 >999 240 |                |          |
|               |                      |          |                             | Weight: 323 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x8 SP 2400F 2.0E  
 WEBS 2x4 SP No.2 \*Except\*  
 3-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=-73(LC 6)  
 Max Grav 1=7649(LC 2), 5=6352(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-13723/0, 2-3=-9326/0, 3-4=-9326/0, 4-5=-12722/0  
 BOT CHORD 1-9=0/12036, 8-9=0/12036, 6-8=0/11140, 5-6=0/11140  
 WEBS 3-8=0/7882, 4-8=-3094/0, 4-6=0/2919, 2-8=-4070/0, 2-9=0/3753

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1387 lb down at 2-0-12, 1387 lb down at 4-0-12, 1388 lb down at 5-8-12, 1388 lb down at 7-8-12, 1388 lb down at 9-8-12, 1388 lb down at 11-8-12, 1388 lb down at 13-8-12, and 1388 lb down at 15-8-12, and 1388 lb down at 17-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=60, 3-5=60, 1-5=20  
 Concentrated Loads (lb)  
 Vert: 7=1130(B) 10=1128(B) 11=1128(B) 12=1130(B) 13=1130(B) 14=1130(B) 15=1130(B) 16=1130(B) 17=1130(B)



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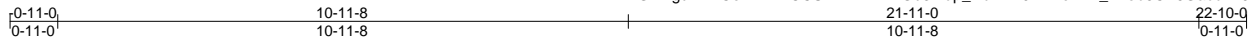
818 Soundside Road  
 Edenton, NC 27932

|                   |               |                                    |          |          |  |           |
|-------------------|---------------|------------------------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>H1GE | Truss Type<br>COMMON SUPPORTED GAB | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716300 |
|-------------------|---------------|------------------------------------|----------|----------|--|-----------|

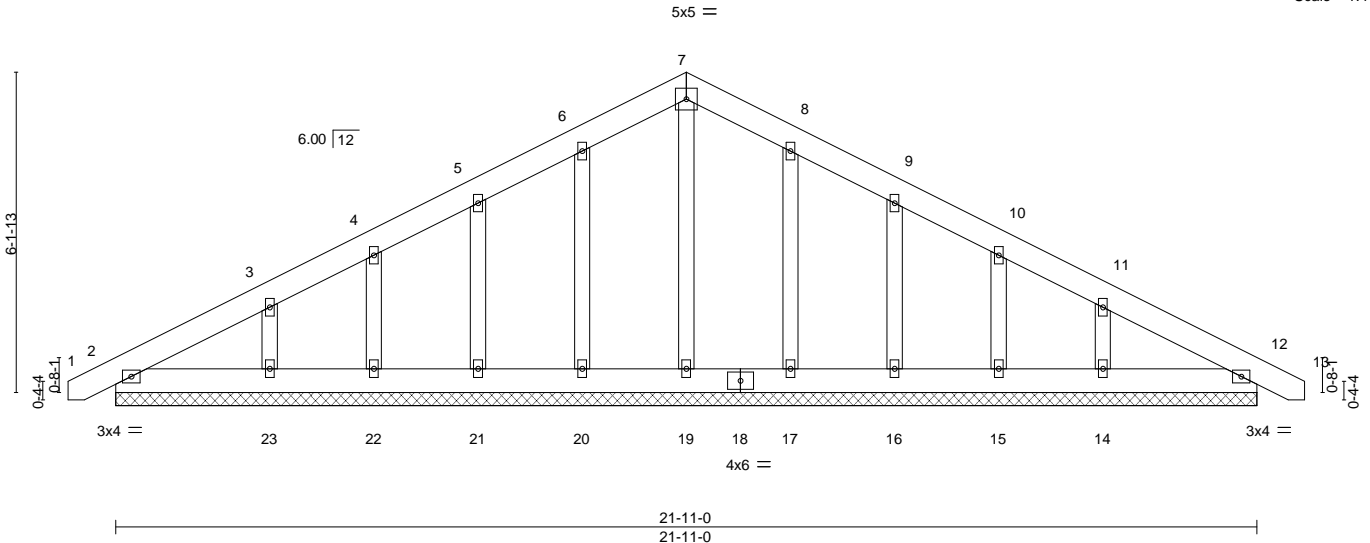
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:40 2021 Page 1

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Scale = 1:41.6



|                      |                      |             |                          |                |             |
|----------------------|----------------------|-------------|--------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>             | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.03     | in (loc) l/defl L/d      | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.02     | Vert(LL) 0.00 12 n/r 120 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.06     | Vert(CT) 0.00 12 n/r 120 |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Horz(CT) 0.00 12 n/a n/a |                |             |
|                      | Code IRC2015/TPI2014 |             |                          | Weight: 154 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 21-11-0.  
(lb) - Max Horz 2=119(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except 23=109(LC 12),  
14=-106(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 17, 16, 15, 14, 12

**FORCES.**

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; 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.
- 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 2-0-0 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) 2, 20, 21, 22, 17, 16, 15, 12 except (jt=lb) 23=109, 14=106.



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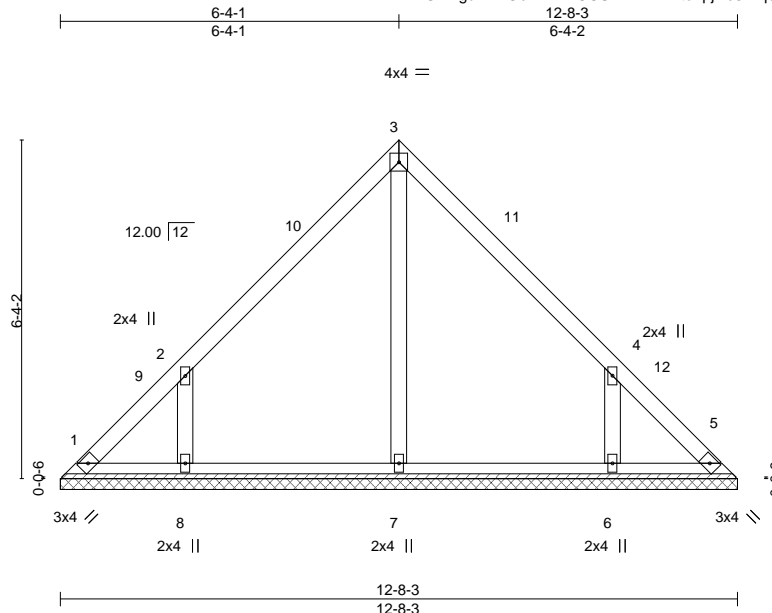
818 Soundside Road  
Edenton, NC 27932



|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>V1 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716301 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:42 2021 Page 1  
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Scale = 1:40.6

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

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.14  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.09  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.09  | Horz(CT) | 0.00     | 5      | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S |          |          |        |     | Weight: 58 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x4 SP No.1  
BOT CHORD 2x4 SP No.1  
OTHERS 2x4 SP No.2

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

**REACTIONS.** All bearings 12-8-3.  
(lb) - Max Horz 1=144(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=161(LC 12), 6=161(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=342(LC 19), 6=342(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-8=-356/291, 4-6=-355/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-4-1, Exterior(2) 6-4-1 to 10-8-14, Interior(1) 10-8-14 to 12-3-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 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=161, 6=161.



May 11, 2021

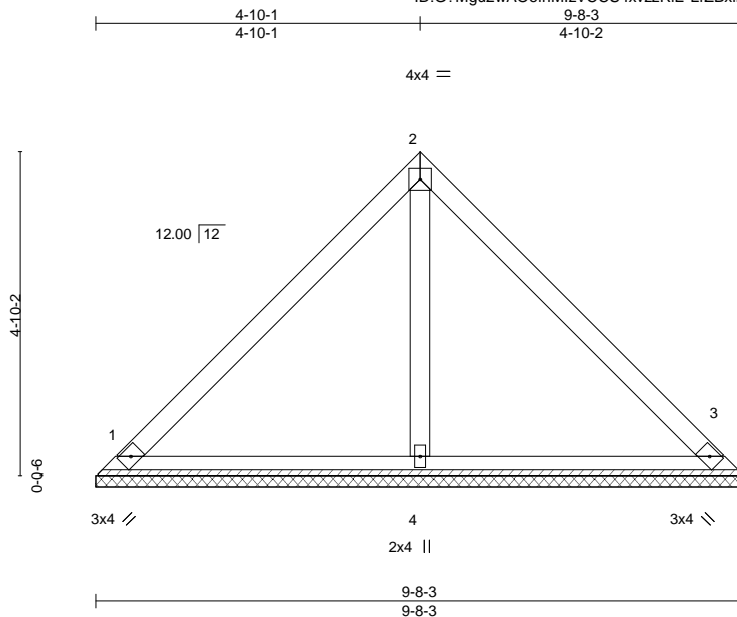
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**TRENCO**  
818 Soundside Road  
Edenton, NC 27932

|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>V2 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716302 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:43 2021 Page 1  
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Scale = 1:32.4

|                      |                      |       |             |              |          |        |     |               |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.22     | Vert(LL)     | n/a      | -      | n/a | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.15     | Vert(CT)     | n/a      | -      | n/a |               |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.06     | Horz(CT)     | 0.00     | 3      | n/a |               |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    |              |          |        |     | Weight: 39 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=9-8-3, 3=9-8-3, 4=9-8-3  
Max Horz 1=108(LC 8)  
Max Uplift 1=27(LC 13), 3=27(LC 13)  
Max Grav 1=204(LC 1), 3=204(LC 1), 4=311(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



May 11, 2021

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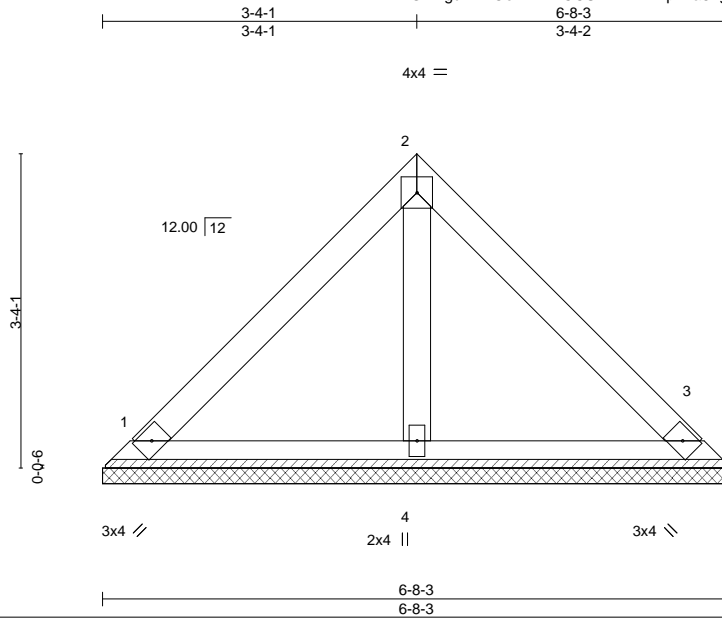


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|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>V3 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716303 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

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8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:44 2021 Page 1  
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Scale = 1:23.0

|                      |                      |             |                         |               |             |
|----------------------|----------------------|-------------|-------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>            | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.15     | in (loc) l/defl L/d     | MT20          | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.07     | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.02     | Vert(CT) n/a - n/a 999  |               |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-P    | Horz(CT) 0.00 3 n/a n/a |               |             |
|                      | Code IRC2015/TPI2014 |             |                         | Weight: 26 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=6-8-3, 3=6-8-3, 4=6-8-3  
Max Horz 1=72(LC 8)  
Max Uplift 1=26(LC 13), 3=26(LC 13)  
Max Grav 1=146(LC 1), 3=146(LC 1), 4=187(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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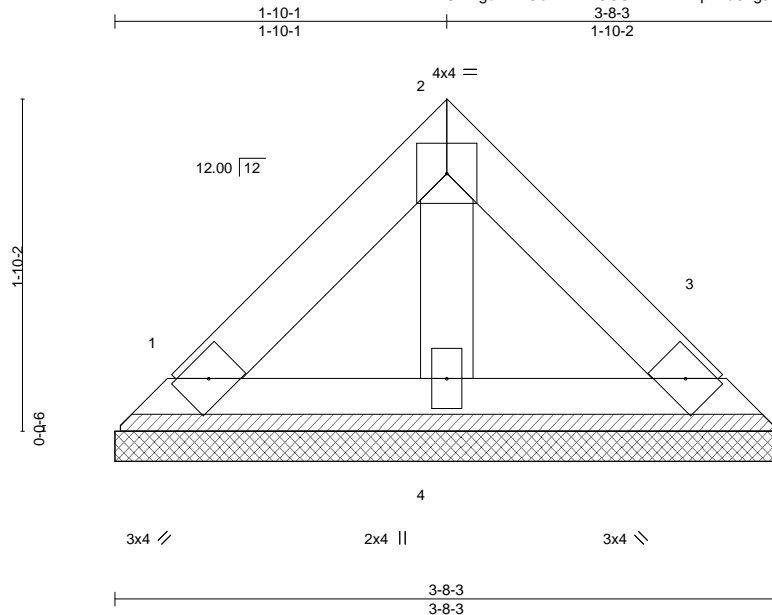
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Edenton, NC 27932

|                   |             |                      |          |          |  |           |
|-------------------|-------------|----------------------|----------|----------|--|-----------|
| Job<br>J0521-2778 | Truss<br>V4 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Lot 3B Williams Farm<br>Job Reference (optional) | E15716304 |
|-------------------|-------------|----------------------|----------|----------|--|-----------|

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Tue May 11 11:17:44 2021 Page 1

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Scale: 1"=1'

|                      |                      |       |             |              |          |        |     |               |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.03     | Vert(LL)     | n/a      | -      | n/a | MT20          | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.02     | Vert(CT)     | n/a      | -      | n/a |               |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.01     | Horz(CT)     | 0.00     | 3      | n/a |               |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-P    |              |          |        |     | Weight: 13 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=3-8-3, 3=3-8-3, 4=3-8-3  
Max Horz 1=36(LC 8)  
Max Uplift 1=13(LC 13), 3=13(LC 13)  
Max Grav 1=72(LC 1), 3=73(LC 1), 4=93(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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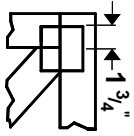
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



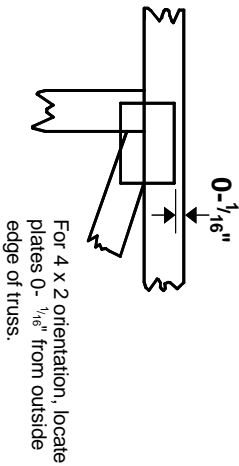
818 Soundside Road  
Edenton, NC 27932

# Symbols

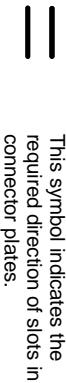
## PLATE LOCATION AND ORIENTATION



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



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



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

## PLATE SIZE

4 X 4

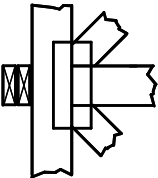
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



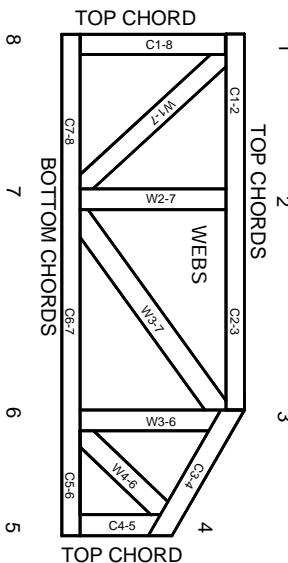
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

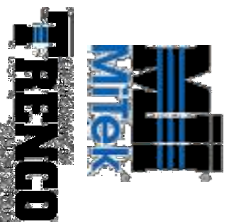
ICC-ES Reports:

ESR-1311, ESR-1352, ESR 1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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

# General Safety Notes

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

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and lead vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.