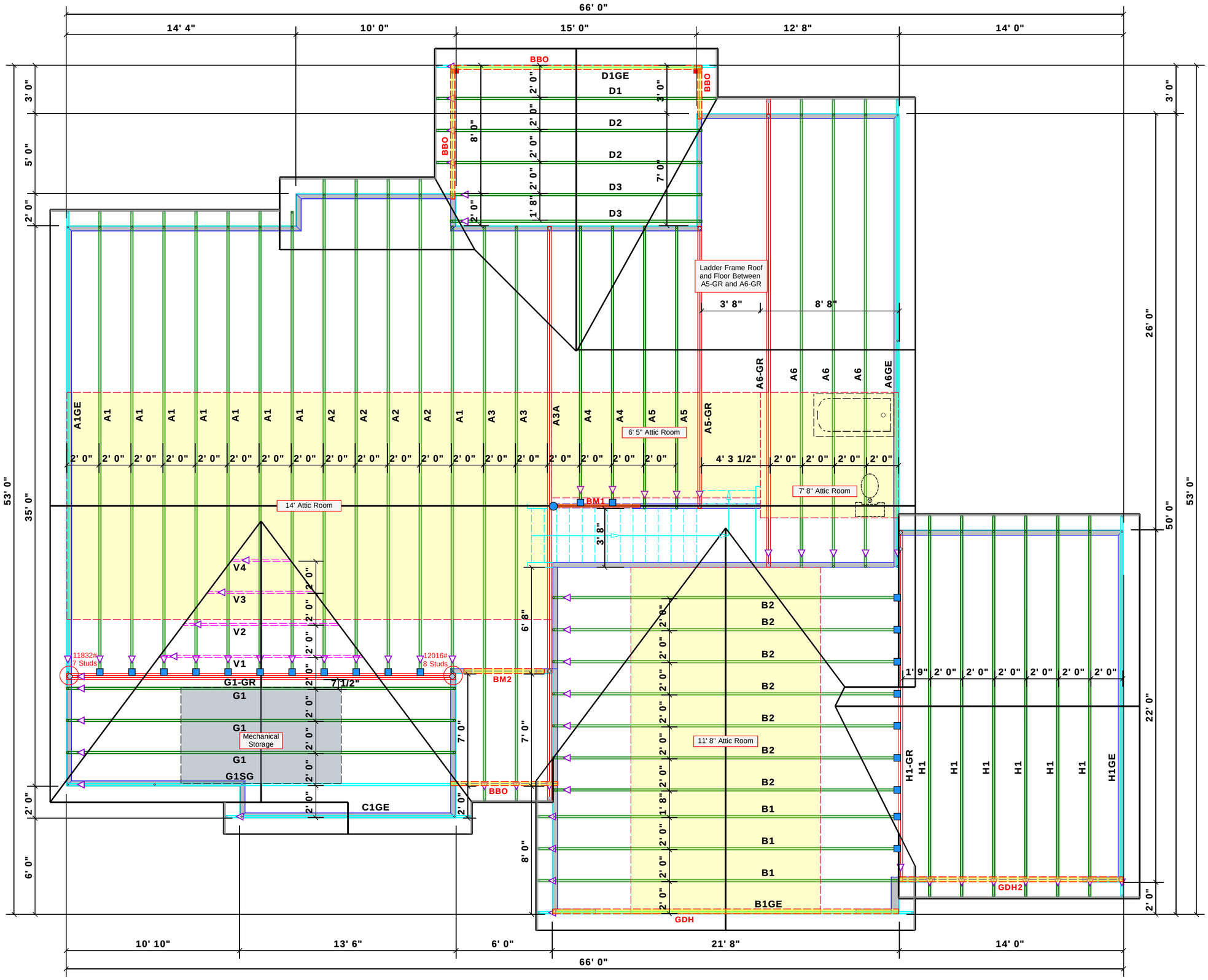



| Products | | | | |
|---|---|---|---|---|
| PlotID | Length | Product | Plies | Net Qty |
| BM1 | 6' 0" | 2x10 SPF No.2 | 2 | 2 |
| BM2 | 5' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 |
| GDH | 22' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 |
| GDH2 | 14' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 |

All Walls Shown Are Considered Load Bearing

Hatch Legend
- Padded HVAC
- Drop Beam

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

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. 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" |


COMTECH
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

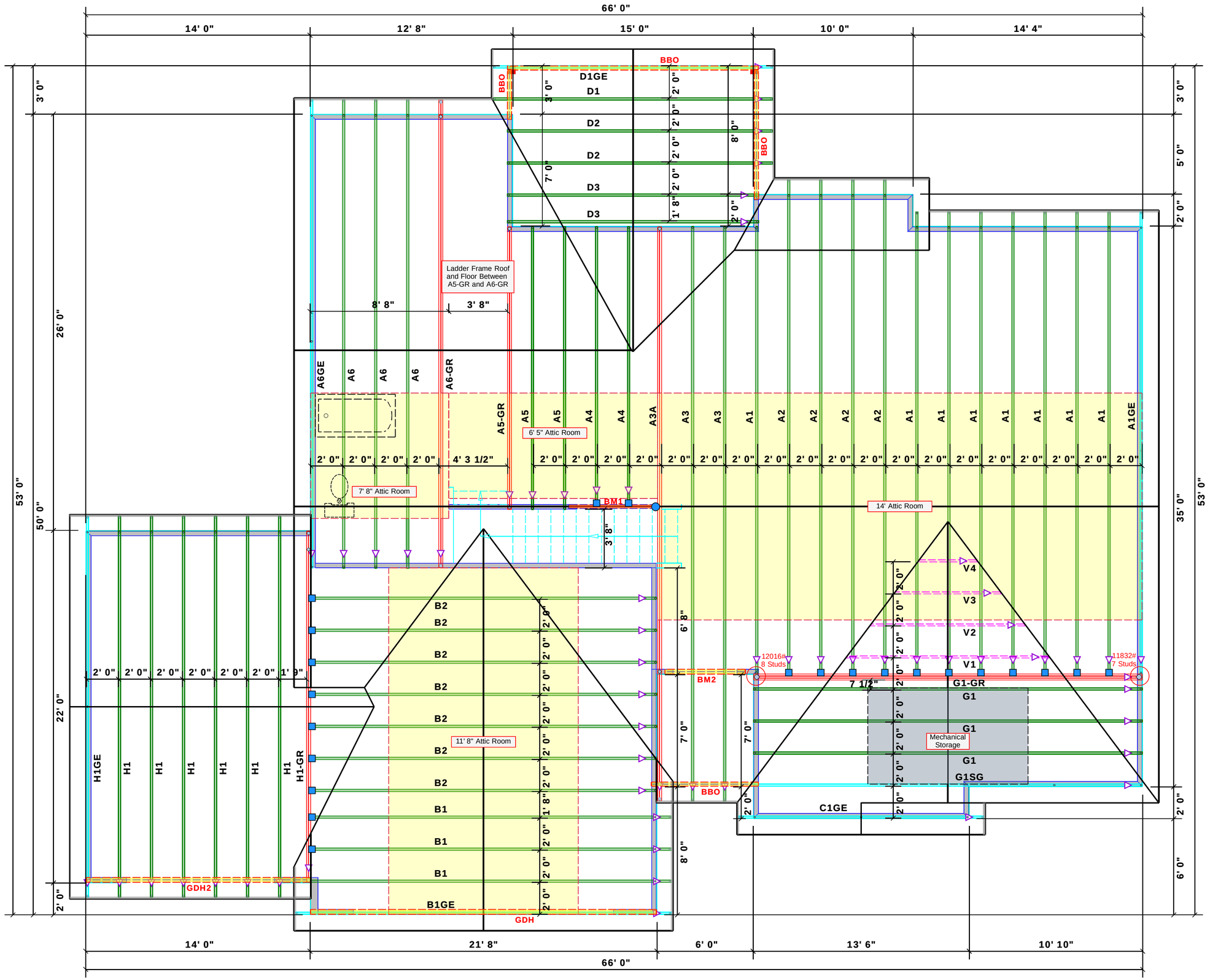
(BASED ON TABLES R502.5(1) & (2))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

| END REACTION (LB) | BEDDED STUDS FOR (2) PLY HEADER | END REACTION (LB) | BEDDED STUDS FOR (3) PLY HEADER | END REACTION (LB) | BEDDED STUDS FOR (4) PLY HEADER |
|---|---|---|---|---|---|
| 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 | | | | |
| 13500 | 8 | | | | |
| 15300 | 9 | | | | |

| | |
|---|---|
| BUILDER | Weaver Development |
| JOB NAME | Lot 3 Atkins Farm |
| PLAN | Halifax / 3GRF, 4BR |
| SEAL DATE | Seal Date |
| QUOTE # | Quote # |
| JOB # | J0221-1018 |
| COUNTY | Harnett |
| ADDRESS | Lot 3 Atkins Farm |
| MODEL | Roof |
| DATE REV. | 02/22/21 |
| DRAWN BY | David Landry |
| 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 BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.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 |
|---|
| 1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise<br>2. All interior wall dimensions are to face of frame wall unless noted otherwise<br>3. 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 R502.5(1) & (2))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

| END REACTION (LBS) | BEDDED STUDS FOR (2) PLY HEADER | END REACTION (LBS) | BEDDED STUDS FOR (3) PLY HEADER | END REACTION (LBS) | BEDDED STUDS FOR (4) PLY HEADER |
|---|---|---|---|---|---|
| 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 | | | | |
| 13500 | 8 | | | | |
| 15300 | 9 | | | | |

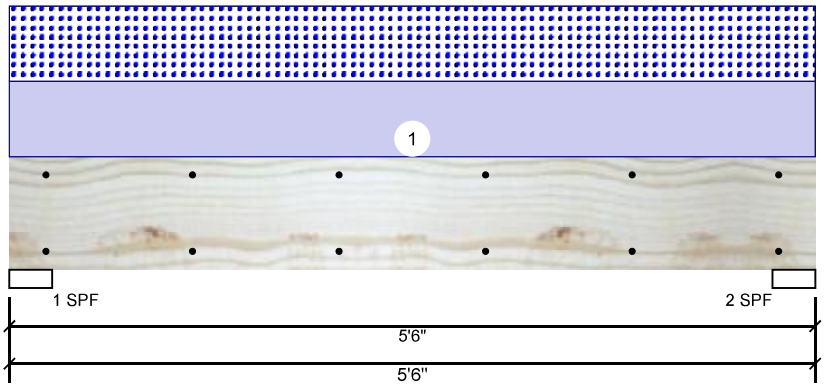
| | |
|---|---|
| BUILDER | Weaver Development |
| JOB NAME | Lot 3 Atkins Farm |
| PLAN | Halifax / 3GRF, 4BR |
| SEAL DATE | Seal Date |
| QUOTE # | |
| JOB # | J0221-1018 |
| COUNTY | Harnett |
| ADDRESS | Lot 3 Atkins Farm |
| MODEL | Roof |
| DATE REV. | 02/22/21 |
| DRAWN BY | David Landry |
| SALESMAN | Lenny Norris |

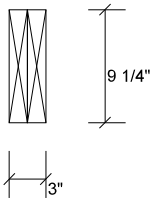
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer 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 BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

| | | | |
|---|---|---|---|
| Client: | Weaver Development | Date: | 2/22/2021 |
| Project: | | Input by: | David Landry |
| Address: | | Job Name: | Lot 3 Atkins Farm |
| | | Project #: | J0221-1018 |

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

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal | | |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

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

## Bearings

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|
| 1 - SPF | 3.500" | 41% | 919 / 919 | 1837 | L | D+S |
| 2 - SPF | 3.500" | 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 | 1169 lb | 1' | 2872 lb | 0.407 (41%) | D+S | L |
| LL Defl inch | 0.018 (L/3452) | 2'9" | 0.126 (L/480) | 0.140 (14%) | S | L |
| TL Defl inch | 0.035 (L/1726) | 2'9" | 0.168 (L/360) | 0.210 (21%) | D+S | L |

## Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 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 |

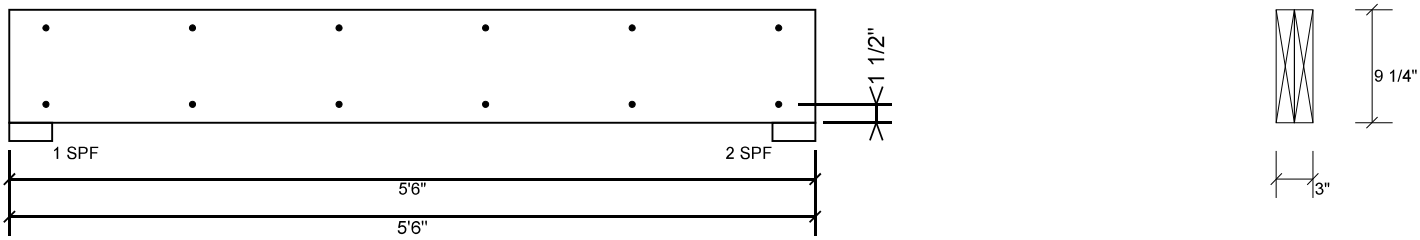
This design is valid until 2/26/2023

Manufacturer Info

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

# 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 |

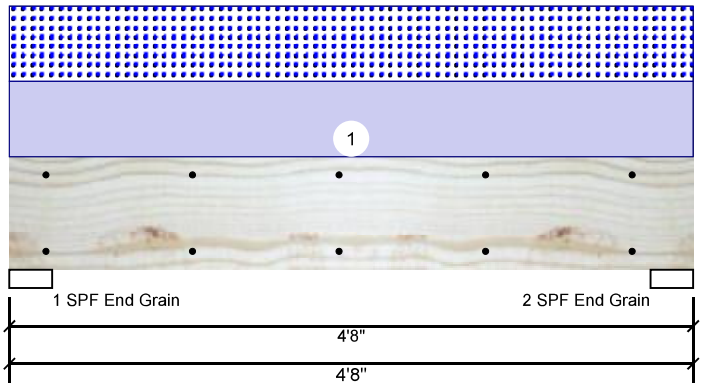
This design is valid until 2/26/2023

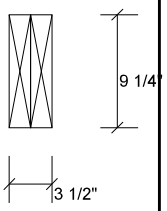
Manufacturer Info

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

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

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal | | |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

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

## Bearings

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | 28% | 1526 / 1510 | 3036 | L | D+S |
| 2 - SPF End Grain | 3.500" | 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 | 1735 lb | 1' | 7943 lb | 0.218 (22%) | D+S | L |
| LL Defl inch | 0.015 (L/3370) | 2'4 1/16" | 0.105 (L/480) | 0.140 (14%) | S | L |
| TL Defl inch | 0.030 (L/1676) | 2'4 1/16" | 0.140 (L/360) | 0.210 (21%) | D+S | L |

## Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 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 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 2/26/2023

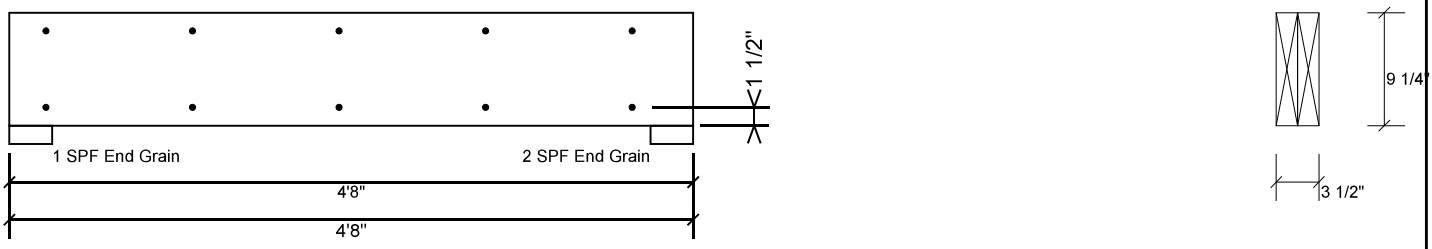
**Manufacturer Info**

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

# 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 2/26/2023

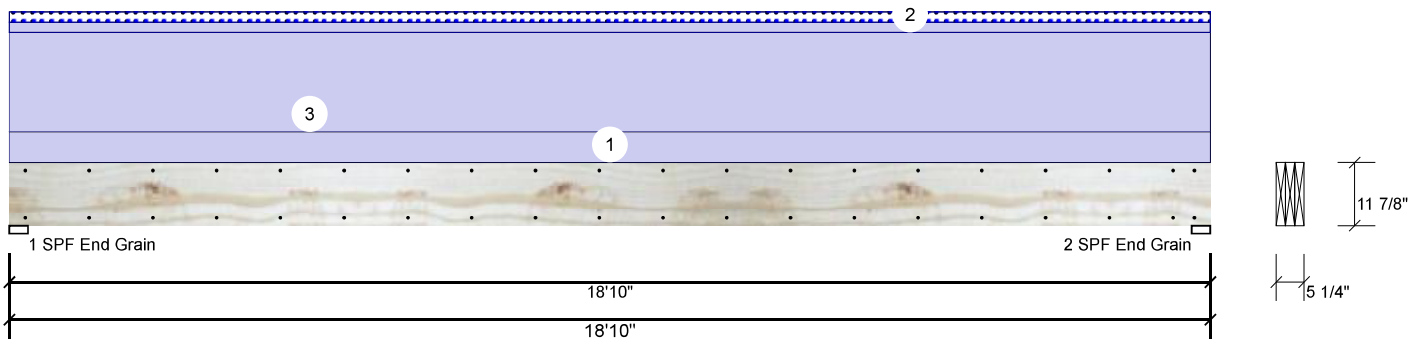
**Manufacturer Info**

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

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

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 3 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | Yes |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal | | |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

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

## Bearings

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | 18% | 2720 / 188 | 2908 | L | D+S |
| 2 - SPF End Grain | 3.500" | 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" | 13056 ft-lb | 0.998 (100%) | D+S | L |
| Shear | 2368 lb | 1'2 5/8" | 11970 lb | 0.198 (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) | 0.920 (92%) | D+S | L |

## Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 10'11 5/8" o.c.
6 Bottom braced at bearings.
7 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 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 2/26/2023

**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
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USA
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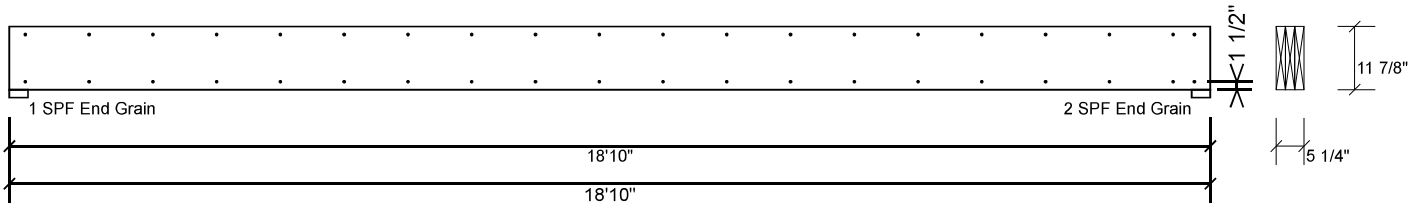
910-864-TRUS

# 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 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 2/26/2023

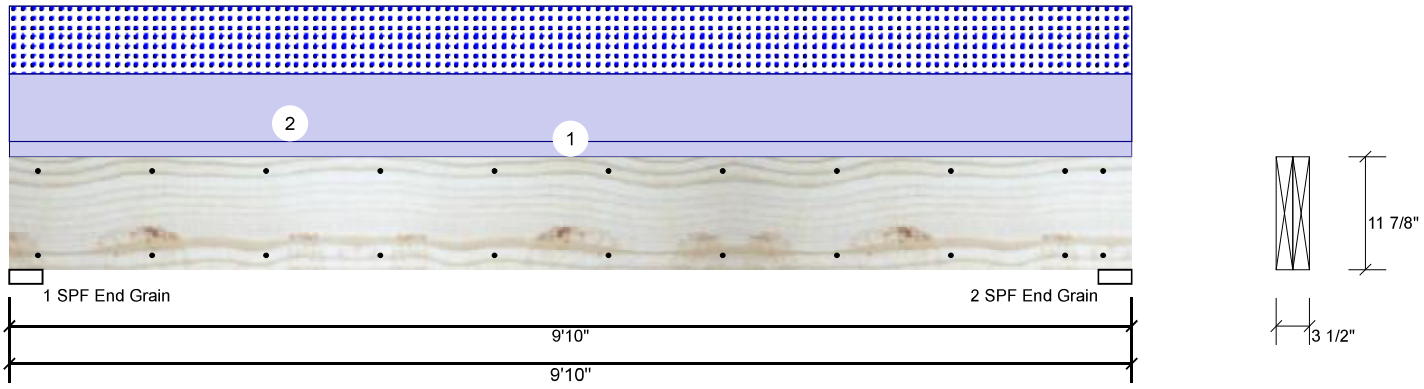
### Manufacturer Info

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

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

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal | | |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

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

## Bearings

| Bearing | Length | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | 28% | 1653 / 1313 | 2966 | L | D+S |
| 2 - SPF End Grain | 3.500" | 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 | 2231 lb | 8'7 3/8" | 10197 lb | 0.219 (22%) | D+S | L |
| LL Defl inch | 0.056 (L/2022) | 4'11" | 0.234 (L/480) | 0.240 (24%) | S | L |
| TL Defl inch | 0.126 (L/895) | 4'11" | 0.312 (L/360) | 0.400 (40%) | D+S | L |

## Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top braced at bearings.
6 Bottom braced at bearings.
7 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 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 2/26/2023

### Manufacturer Info

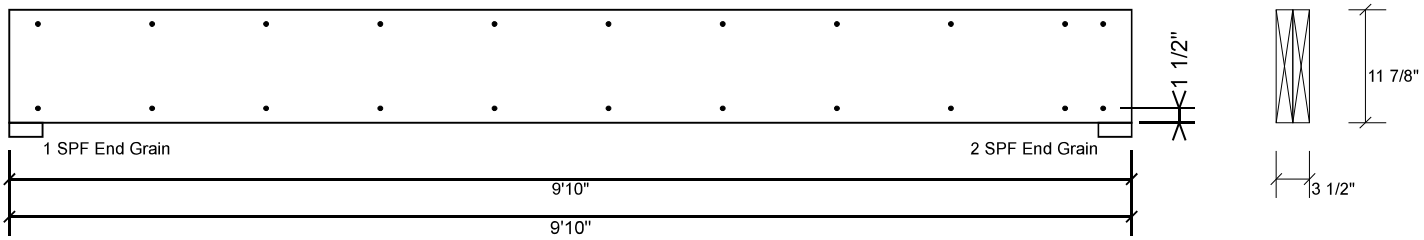
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

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

| | | | |
|---|---|---|---|
| Client: | Weaver Development | Date: | 2/22/2021 |
| Project: | | Input by: | David Landry |
| Address: | | Job Name: | Lot 3 Atkins Farm |
| | | Project #: | J0221-1018 |

# 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 2/26/2023

**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

RE: J0221-1018
Lot 3 Atkins Farm

**Trenco**
818 Soundside Rd
Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0221-1018
Lot/Block: Model:
Address: Subdivision:
City: State:

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 29 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|---|---|---|---|---|---|---|---|
| 1 | E15058952 | A1 | 2/22/2021 | 21 | E15058972 | G1-GR | 2/22/2021 |
| 2 | E15058953 | A1GE | 2/22/2021 | 22 | E15058973 | G1SG | 2/22/2021 |
| 3 | E15058954 | A2 | 2/22/2021 | 23 | E15058974 | H1 | 2/22/2021 |
| 4 | E15058955 | A3 | 2/22/2021 | 24 | E15058975 | H1-GR | 2/22/2021 |
| 5 | E15058956 | A3A | 2/22/2021 | 25 | E15058976 | H1GE | 2/22/2021 |
| 6 | E15058957 | A4 | 2/22/2021 | 26 | E15058977 | V1 | 2/22/2021 |
| 7 | E15058958 | A5 | 2/22/2021 | 27 | E15058978 | V2 | 2/22/2021 |
| 8 | E15058959 | A5-GR | 2/22/2021 | 28 | E15058979 | V3 | 2/22/2021 |
| 9 | E15058960 | A6 | 2/22/2021 | 29 | E15058980 | V4 | 2/22/2021 |
| 10 | E15058961 | A6-GR | 2/22/2021 | | | | |
| 11 | E15058962 | A6GE | 2/22/2021 | | | | |
| 12 | E15058963 | B1 | 2/22/2021 | | | | |
| 13 | E15058964 | B1GE | 2/22/2021 | | | | |
| 14 | E15058965 | B2 | 2/22/2021 | | | | |
| 15 | E15058966 | C1GE | 2/22/2021 | | | | |
| 16 | E15058967 | D1 | 2/22/2021 | | | | |
| 17 | E15058968 | D1GE | 2/22/2021 | | | | |
| 18 | E15058969 | D2 | 2/22/2021 | | | | |
| 19 | E15058970 | D3 | 2/22/2021 | | | | |
| 20 | E15058971 | G1 | 2/22/2021 | | | | |

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

Truss Design Engineer's Name: Gilbert, Eric
My license renewal date for the state of North Carolina is December 31, 2021.
North Carolina COA: C-0844


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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

February 22, 2021



Gilbert, Eric

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058952 |
|---|---|---|---|---|---|
| J0221-1018 | A1 | ATTIC | 8 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:22 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-I_lqciWeagmC4sVH8zXdCDhUGTPAAWSEC4BsMbyMX1?

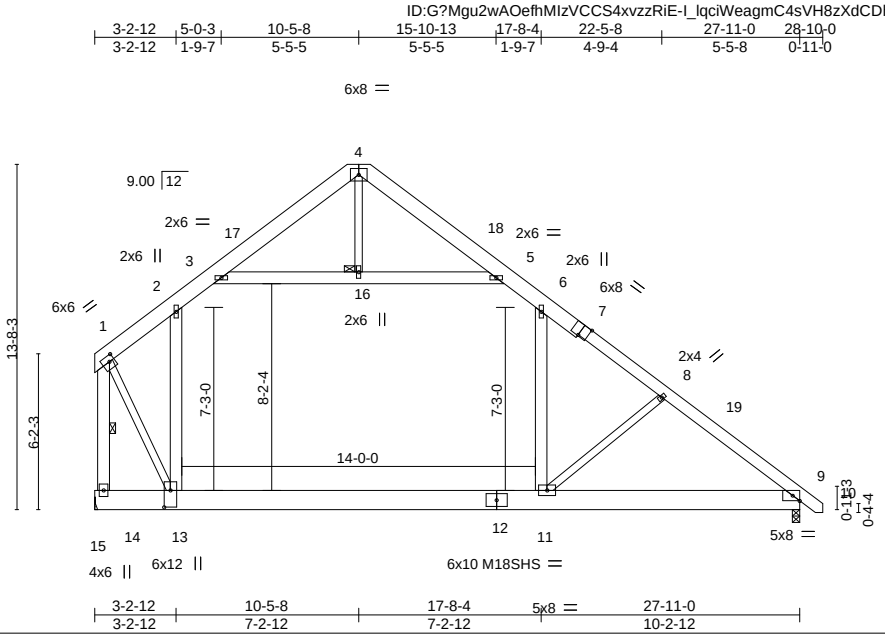



Plate Offsets (X,Y)-- [1:0-2-8,0-2-12], [7:0-4-0,Edge], [9:0-3-5,Edge], [13:0-8-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | 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 | >537 | 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: 308 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 4-5-2 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=-1626/0, 2-3=-1477/112, 3-4=-555/107, 4-5=-410/104, 5-6=-1313/102, 6-8=-1903/0, 8-9=-2117/0, 1-14=-3613/0
BOT CHORD 13-14=-267/321, 11-13=0/1398, 9-11=0/1642
WEBS 2-13=-361/304, 6-11=0/783, 8-11=-522/203, 3-16=-1124/82, 5-16=-1124/82, 1-13=0/3078

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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.
6) 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
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
8) Refer to girder(s) for truss to truss connections.
9) Attic room checked for L/360 deflection.

November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058953 |
|---|---|---|---|---|---|
| J0221-1018 | A1GE | GABLE | 1 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:24 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-ENta1OYu6H0vJ9ffGOa5HenqyG40eP1XgOgzQUyMX0z

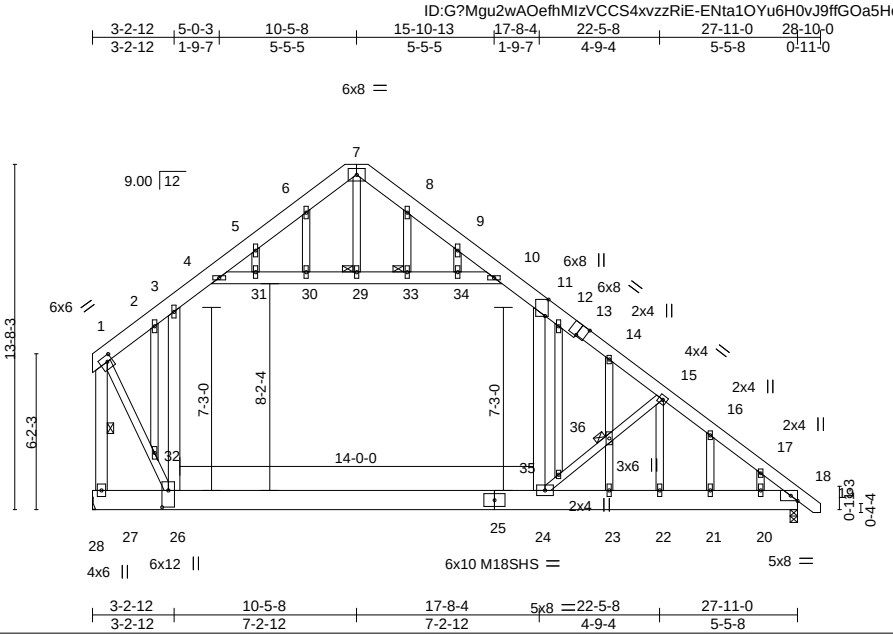



Plate Offsets (X,Y)-- [1:0-2-8,0-2-12], [11:0-7-14,Edge], [13:0-4-0,Edge], [18:0-3-5,Edge], [26:0-8-0,0-3-0]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.58 | Vert(LL) | -0.28 | 24-26 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.67 | Vert(CT) | -0.57 | 24-26 | >578 | 240 | M18SHS | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.78 | Horz(CT) | 0.02 | 18 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.26 | 24 | >999 | 240 | Weight: 353 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=-655/111, 5-6=-453/132, 6-7=-432/188, 7-8=-344/181, 8-9=-398/132, 9-10=-400/114, 10-11=-1295/156, 11-12=-1927/44, 12-14=-1885/9, 14-15=-1742/0, 15-16=-2233/131, 16-17=-2288/79, 17-18=-2455/0, 1-27=-3566/0 |
| BOT CHORD | 26-27=-326/435, 24-26=0/1410, 23-24=0/1781, 22-23=0/1781, 21-22=0/1752, 20-21=0/1752, 18-20=0/1752 |
| WEBS | 3-26=-407/223, 11-24=0/1078, 24-35=-997/480, 35-36=-811/423, 15-36=-811/415, 4-31=-1088/103, 30-31=-1078/104, 29-30=-1079/104, 29-33=-1079/104, 33-34=-1079/104, 10-34=-1074/102, 1-32=-11/3047, 26-32=-19/3105, 5-31=-9/358, 12-35=-265/82, 14-36=-405/35, 23-36=-405/25, 15-22=-248/666 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are MT20 plates unless otherwise indicated.
5) All plates are 2x6 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) 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
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 24-26


November 4,2020

Continued on page 2



TRENCO
818 Soundside Road
Edenton, NC 27932

**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 100 lb uplift at joint(s) 18.
13) Attic room checked for L/360 deflection.




818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058954 |
|---|---|---|---|---|---|
| J0221-1018 | A2 | ATTIC | 4 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:26 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-Am?LS3Z9euGdYTp2NpcZM3sD34lO6GDq7i94UMyMX0x

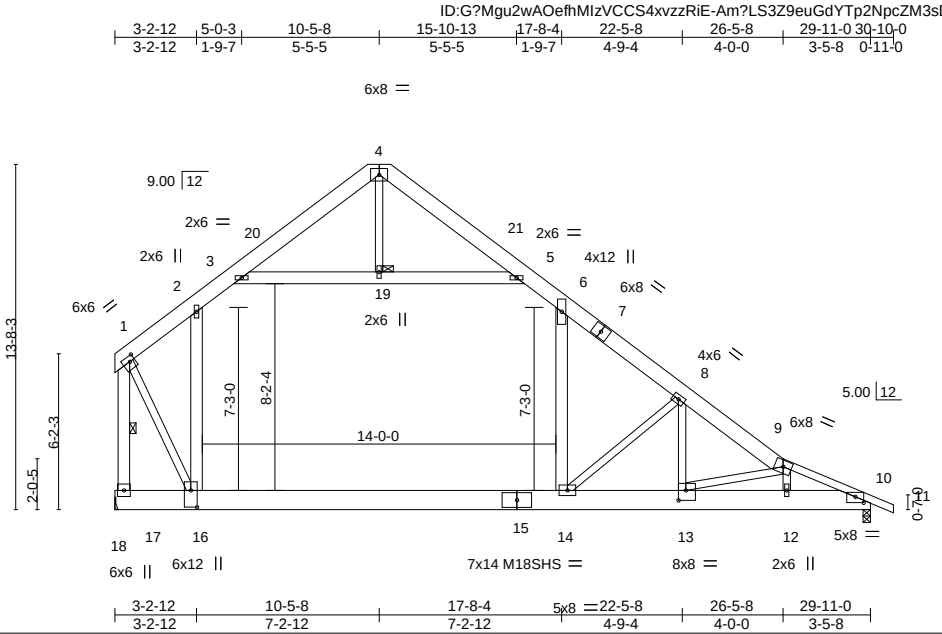



Plate Offsets (X,Y)-- [1:0-2-8,0-2-8], [10:0-4-0,0-2-14], [13:0-3-8,0-4-12], [16:0-8-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.42 | Vert(LL) | -0.36 | 14-16 | >978 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.74 | Vert(CT) | -0.74 | 14-16 | >479 | 240 | M18SHS | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.99 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.22 | 14 | >999 | 240 | Weight: 335 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-**

1) Unbalanced roof live loads have been considered for this design.
2) 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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.
6) 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
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
8) Refer to girder(s) for truss to truss connections.
9) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058955 |
|---|---|---|---|---|---|
| J0221-1018 | A3 | ATTIC | 2 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:27 2020 Page 1
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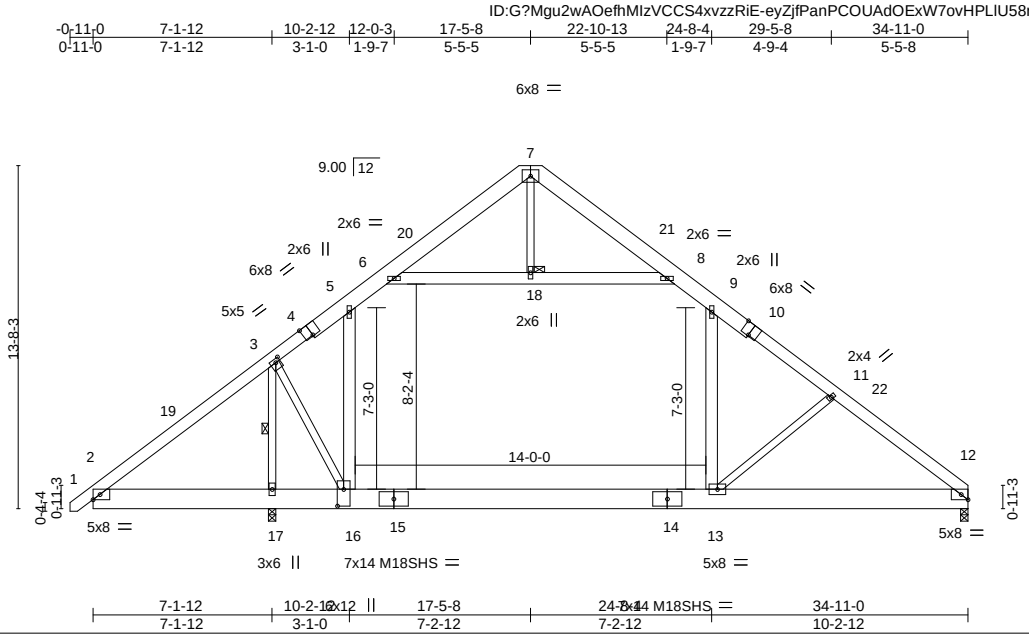


Plate Offsets (X,Y)-- [3:0-2-4,0-1-12], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [16:0-8-0,0-3-0]

| 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 | 0.61 | Vert(LL) | -0.33 | 13-16 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.67 | 13-16 | >494 | 240 | M18SHS | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.73 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.21 | 13 | >999 | 240 | Weight: 350 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 4-6-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-7-0 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=-360/523, 3-5=-1443/0, 5-6=-1383/35, 6-7=-582/127, 7-8=-419/108, 8-9=-1217/43, 9-11=-1770/0, 11-12=-1986/0
BOT CHORD 2-17=-367/407, 16-17=-457/389, 13-16=0/1282, 12-13=0/1537
WEBS 3-17=-3832/192, 3-16=0/3171, 5-16=-532/223, 9-13=0/747, 11-13=-529/237, 6-18=-1008/0, 8-18=-1008/0

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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.
6) 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
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
9) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | A3A | ATTIC | 1 | 2 | E15058956 |

Job Reference (optional)

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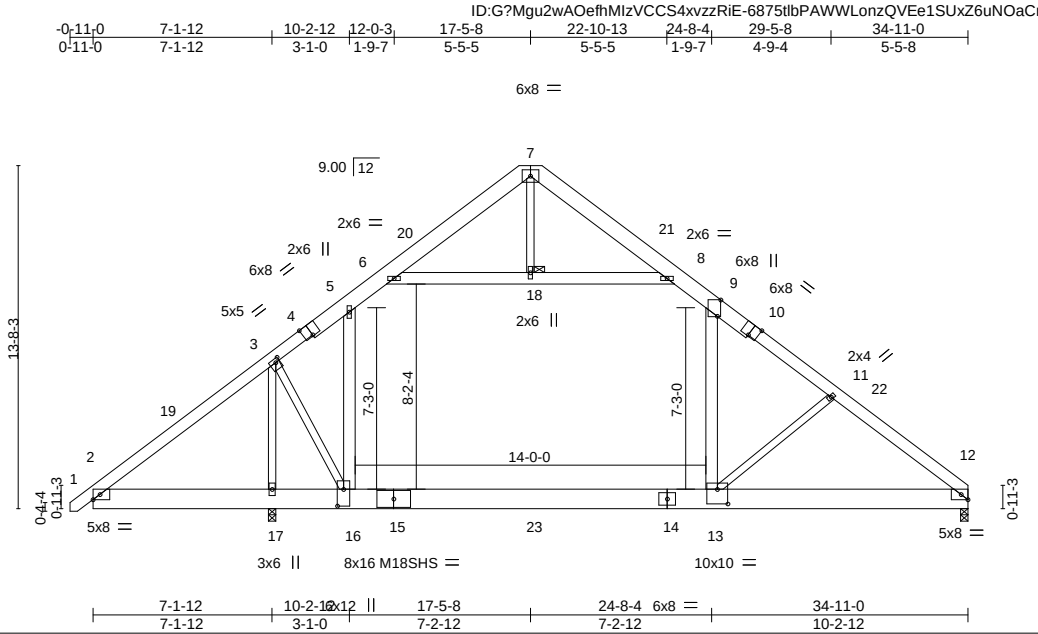


Plate Offsets (X,Y)-- [3:0-2-0,0-1-12], [4:0-4-0,Edge], [9:0-7-14,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [13:0-5-0,0-7-0], [16:0-8-0,0-3-0]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.44 | Vert(LL) | -0.44 | 13-16 | >746 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.71 | 13-16 | >468 | 240 | M18SHS | 244/190 |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.86 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.20 | 13-16 | >999 | 240 | Weight: 700 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 9)
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=-360/515, 3-5=-3512/152, 5-6=-2754/232, 6-7=-541/115, 7-8=-302/100, 8-9=-2472/221, 9-11=-4020/206, 11-12=-4279/227
BOT CHORD 2-17=-358/405, 16-17=-441/387, 13-16=0/2921, 12-13=-78/3320
WEBS 3-17=-8050/802, 3-16=-481/6544, 5-16=-88/1209, 9-13=-84/2254, 11-13=-731/263, 6-18=-2798/253, 8-18=-2799/253

**NOTES-**

1) 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=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
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 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.
8) 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
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) 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.
12) Attic room checked for L/360 deflection.


November 4,2020

Continued on page 2

**LOAD CASE(S)** Standard



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818 Soundside Road
Edenton, NC 27932

**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)




818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | A4 | ROOF TRUSS | 2 | 1 | E15058957 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:30 2020 Page 1
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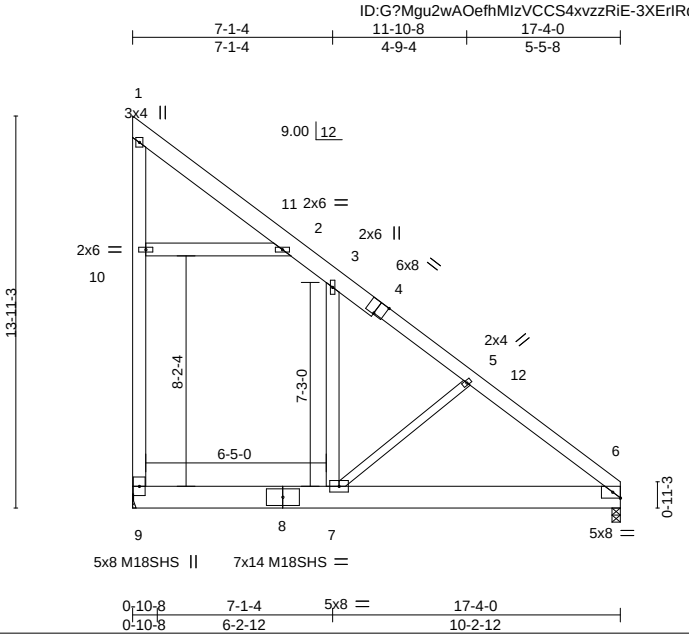


Plate Offsets (X,Y)-- [4:0-4-0,Edge], [6:0-3-5,Edge]

| 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 | 0.64 | Vert(LL) | -0.21 | 6-7 | >957 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.37 | Vert(CT) | -0.48 | 6-7 | >425 | 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 | >994 | 240 | Weight: 194 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=-529/90, 1-10=-472/123, 1-2=-114/422, 3-5=-473/83, 5-6=-698/91
BOT CHORD 7-9=-75/413, 6-7=0/545
WEBS 5-7=-564/221, 2-10=-539/271

**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) 0-2-12 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
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). 2-3, 2-10; Wall dead load (5.0psf) on member(s).3-7
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 7-9
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
9) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058958 |
|---|---|---|---|---|---|
| J0221-1018 | A5 | ROOF TRUSS | 2 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:32 2020 Page 1
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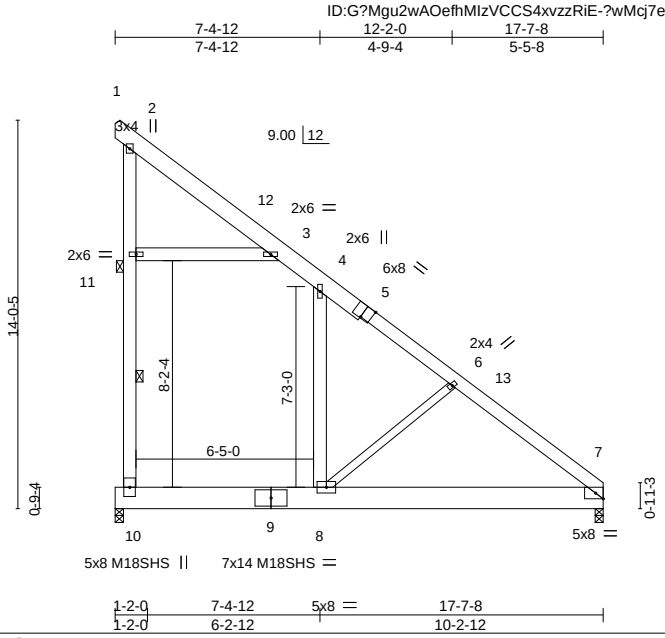


Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-3-5,Edge]

| 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 | 0.76 | Vert(LL) | -0.21 | 7-8 | >958 | 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 | >995 | 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=-555/102, 2-11=-499/136, 2-3=-123/425, 4-6=-481/55, 6-7=-706/63
BOT CHORD 8-10=-78/421, 7-8=0/550
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 100 lb uplift at joint(s) 10.
8) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | A5-GR | ROOF TRUSS | 1 | 2 | E15058959 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:33 2020 Page 1
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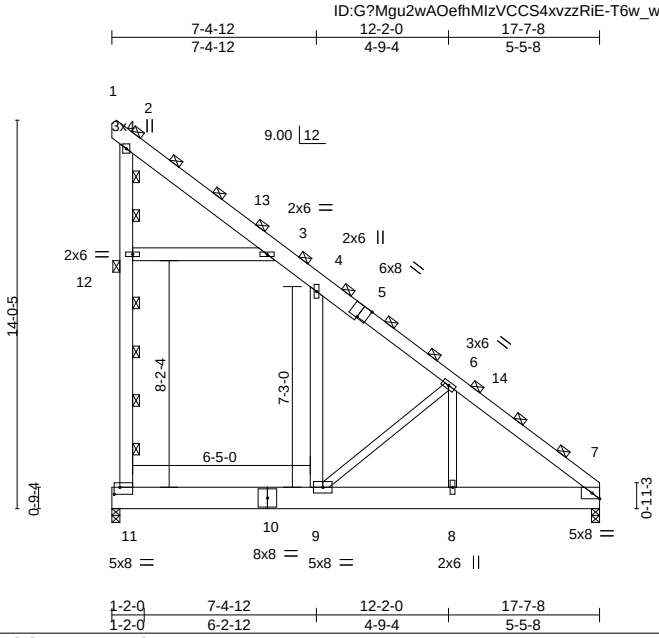


Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-3-5,Edge], [11:0-2-8,0-3-0]

| LOADING (psf) | | SPACING- | 3-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.46 | Vert(LL) | -0.13 | 9 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.33 | Vert(CT) | -0.29 | 9 | >707 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.25 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.12 | 9 | >999 | 240 | Weight: 403 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*
6-9,6-8: 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=-755/151, 2-12=-670/201, 2-3=-182/548, 3-4=-356/158, 4-6=-640/91, 6-7=-1827/37
BOT CHORD 9-11=-149/634, 8-9=0/1321, 7-8=0/1321
WEBS 3-12=-730/408, 6-9=-1730/329, 6-8=-49/1325

**NOTES-**
1) 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; 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
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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.
6) Ceiling dead load (10.0 psf) on member(s). 3-4, 3-12; Wall dead load (5.0psf) on member(s).4-9
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=105.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058960 |
|---|---|---|---|---|---|
| J0221-1018 | A6 | ROOF TRUSS | 3 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:33 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-T6w_wTfY?29euYrOInEC9YeLIv46FRWskIMxESyMX0q

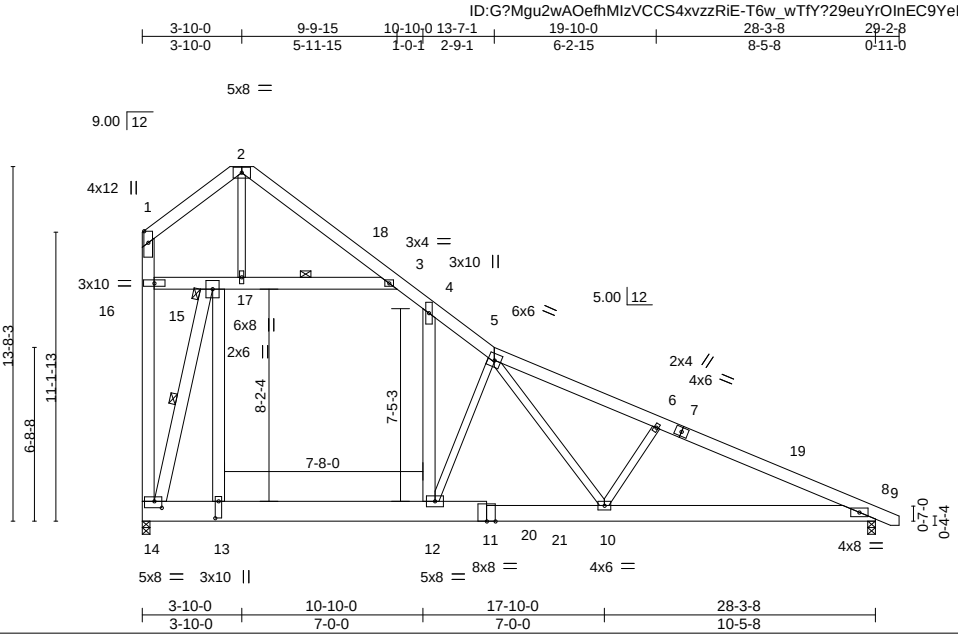


Plate Offsets (X,Y)-- [13:0-7-12,0-1-8], [14:0-3-8,0-3-0]

| 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 | 0.73 | Vert(LL) | -0.24 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.99 | Vert(CT) | -0.51 | 10-12 | >662 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.96 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.16 | 10-12 | >999 | 240 | Weight: 311 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
8-11: 2x8 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 4-4-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 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=-389(LC 13)
Max Grav 14=1900(LC 21), 8=1330(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-46/833, 2-3=-87/813, 3-4=-882/0, 4-5=-1713/0, 5-6=-2490/0, 6-8=-2699/0, 14-16=-68/923, 1-16=-16/518
BOT CHORD 13-14=0/1158, 12-13=0/1204, 10-12=0/1715, 8-10=0/2409
WEBS 13-15=0/1811, 4-12=0/1152, 15-16=-675/86, 15-17=-1955/138, 3-17=-1727/100, 14-15=-3772/86, 2-17=-1253/250, 5-12=-1433/132, 5-10=-176/986, 6-10=-417/250

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) 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 29-0-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) 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
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
7) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | A6-GR | ROOF TRUSS | 1 | 2 | E15058961 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:36 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-thc7YUhQHzXCl?azzvnvmAGtT69XSpFIQGabrnyMX0n

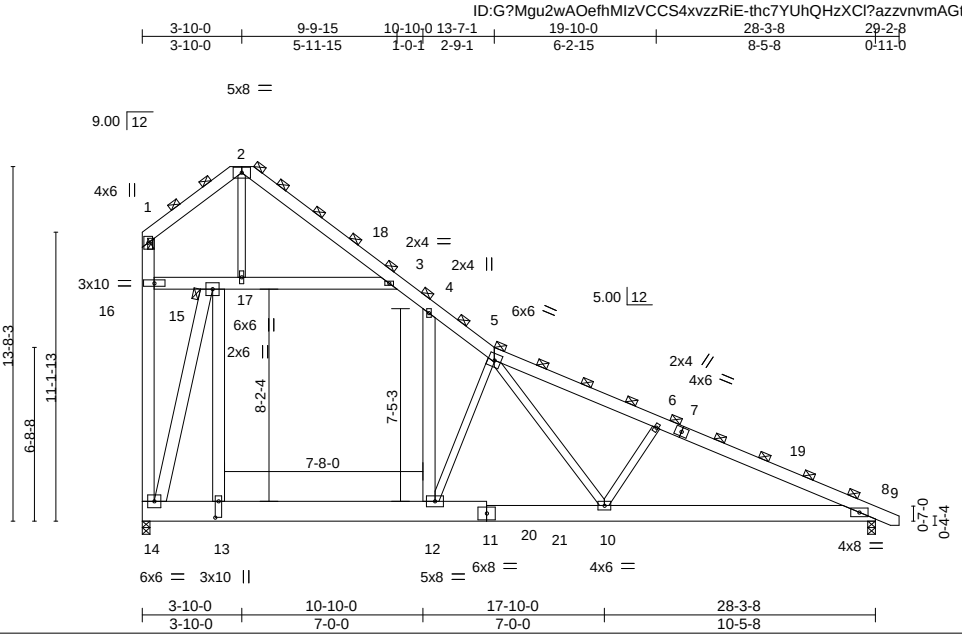


Plate Offsets (X,Y)-- [13:0-7-8,0-1-8]

| LOADING (psf) | | SPACING- | 3-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.61 | Vert(LL) | -0.18 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.82 | Vert(CT) | -0.38 | 10-12 | >882 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.89 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.12 | 10-12 | >999 | 240 | Weight: 622 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
8-11: 2x8 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=-584(LC 13)
Max Grav 14=2851(LC 21), 8=1996(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-70/1249, 2-3=-131/1220, 3-4=-1323/0, 4-5=-2570/0, 5-6=-3735/0, 6-8=-4049/0, 14-16=-102/1385, 1-16=-24/777
BOT CHORD 13-14=0/1737, 12-13=0/1805, 10-12=0/2573, 8-10=0/3614
WEBS 13-15=0/2716, 4-12=0/1727, 15-16=-1012/128, 15-17=-2933/207, 3-17=-2591/150, 14-15=-5658/128, 2-17=-1879/375, 5-12=-2149/199, 5-10=-263/1479, 6-10=-625/375

**NOTES-**
1) 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: 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=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 29-0-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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.
7) 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
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058962 |
|---|---|---|---|---|---|
| J0221-1018 | A6GE | GABLE | 1 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:35 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-PV2kL8goWfPM7s?nPCGgEzkiuinujPU9Ccr2JLyMX0o

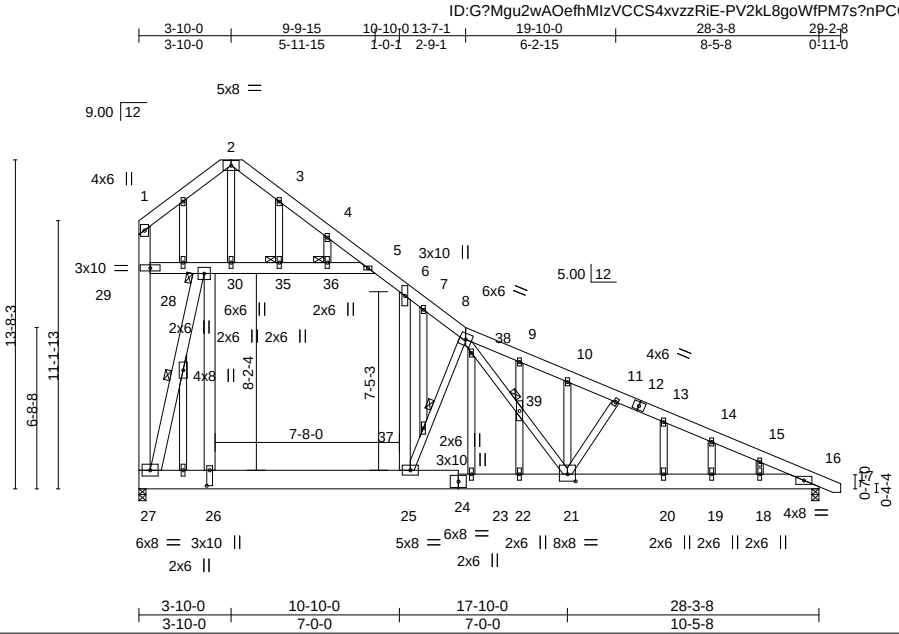


Plate Offsets (X,Y)-- [21:0-4-0,0-3-8], [26:0-7-12,0-1-8]

| 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 | 0.60 | Vert(LL) | -0.19 | 25 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.91 | Vert(CT) | -0.41 | 23-25 | >823 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.67 | Horz(CT) | 0.03 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.20 | 23-25 | >999 | 240 | Weight: 362 lb | FT = 20% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.1 |
| BOT CHORD | 2x10 SP No.1 *Except* 16-24: 2x8 SP No.1 |
| WEBS | 2x6 SP No.1 *Except* 2-30,8-25,8-21,11-21: 2x4 SP No.2 |
| OTHERS | 2x4 SP No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-11-2 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 7-6-8 oc bracing: 26-27 5-6-9 oc bracing: 25-26. |
| WEBS | 1 Row at midpt 27-28, 8-25 |
| JOINTS | 1 Brace at Jt(s): 28, 35, 36, 39 |

**REACTIONS.** (size) 27=0-3-8, 16=0-3-8
Max Horz 27=-568(LC 13)
Max Uplift 27=-64(LC 13), 16=-133(LC 13)
Max Grav 27=1799(LC 21), 16=1291(LC 1)

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

| | |
|---|---|
| TOP CHORD | 1-2=-104/679, 2-3=-119/689, 3-4=-162/618, 4-5=-231/544, 5-6=-836/27, 6-7=-1459/0, 7-8=-1525/0, 8-9=-2182/299, 9-10=-2217/254, 10-11=-2248/233, 11-13=-2334/261, 13-14=-2405/257, 14-15=-2402/206, 15-16=-2448/168, 27-29=-186/761, 1-29=-57/438 |
| BOT CHORD | 26-27=0/1080, 25-26=0/1123, 23-25=0/1661, 22-23=0/1661, 21-22=0/1661, 20-21=-99/2197, 19-20=-99/2197, 18-19=-99/2197, 16-18=-99/2197 |
| WEBS | 26-28=-90/1727, 6-25=-7/928, 28-29=-551/132, 28-30=-1674/279, 30-35=-1478/229, 35-36=-1478/229, 5-36=-1478/229, 27-28=-3394/386, 2-30=-1089/257, 25-37=-1602/470, 8-37=-1636/489, 8-38=-505/1236, 38-39=-317/683, 21-39=-337/745, 11-21=-400/246, 23-38=-214/625 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 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.
8) 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
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 25-26
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 16=133.
11) Attic room checked for L/360 deflection.


November 4,2020




TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058963 |
|---|---|---|---|---|---|
| J0221-1018 | B1 | ATTIC | 3 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:37 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-Lt9Vmqi22Hf3N999XdI8JOp?QWVqBQKSfwK9NEyMX0m

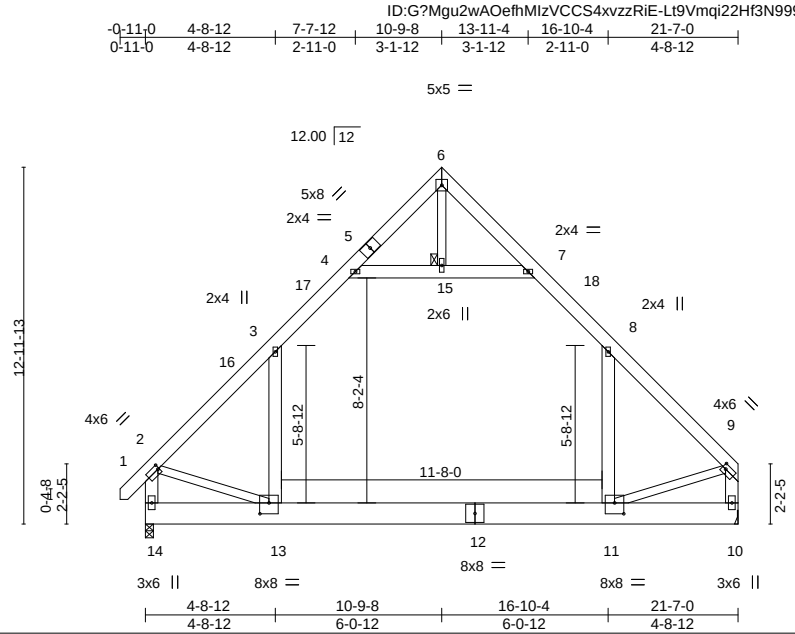


Plate Offsets (X,Y)-- [2:0-0-8,0-2-0], [9:0-1-8,0-2-0], [11:0-4-0,0-4-12], [13:0-4-0,0-4-12]

| 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 | 0.79 | Vert(LL) | -0.23 | 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.38 | 11-13 | >659 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.20 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 11-13 | >999 | 240 | Weight: 226 lb | 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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, 7-8, 4-15, 7-15; Wall dead load (5.0psf) on member(s).8-11, 3-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
7) Refer to girder(s) for truss to truss connections.
8) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058964 |
|---|---|---|---|---|---|
| J0221-1018 | B1GE | GABLE | 1 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:38 2020 Page 1
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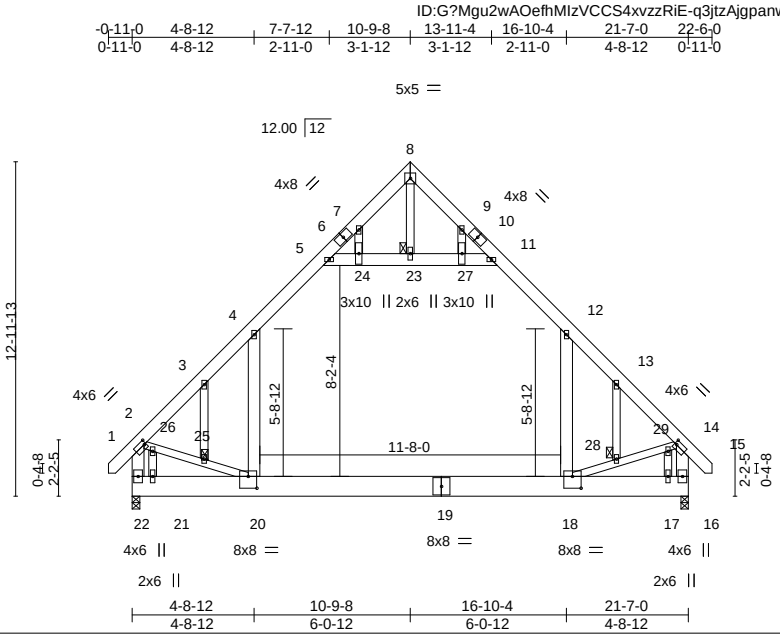



Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [14:0-1-0,0-2-0], [18:0-4-0,0-5-8], [20:0-4-0,0-5-8]

| 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 | 0.70 | 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-**

1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 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.
8) 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
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
10) Attic room checked for L/360 deflection.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058965 |
|---|---|---|---|---|---|
| J0221-1018 | B2 | ATTIC | 7 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:39 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-IGHFBWkJauvncTJYe1LcOpuL9JBFfKqI7EpGS6yMX0k

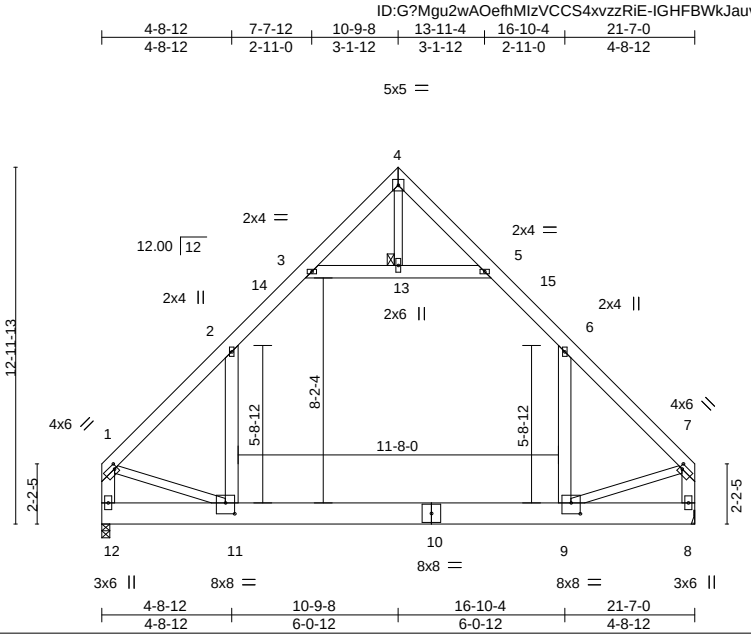



Plate Offsets (X,Y)-- [1:0-1-4,0-2-0], [7:0-1-4,0-2-0], [9:0-4-0,0-4-12], [11:0-4-0,0-4-12]

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

**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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s).6-9, 2-11
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
7) Refer to girder(s) for truss to truss connections.
8) Attic room checked for L/360 deflection.

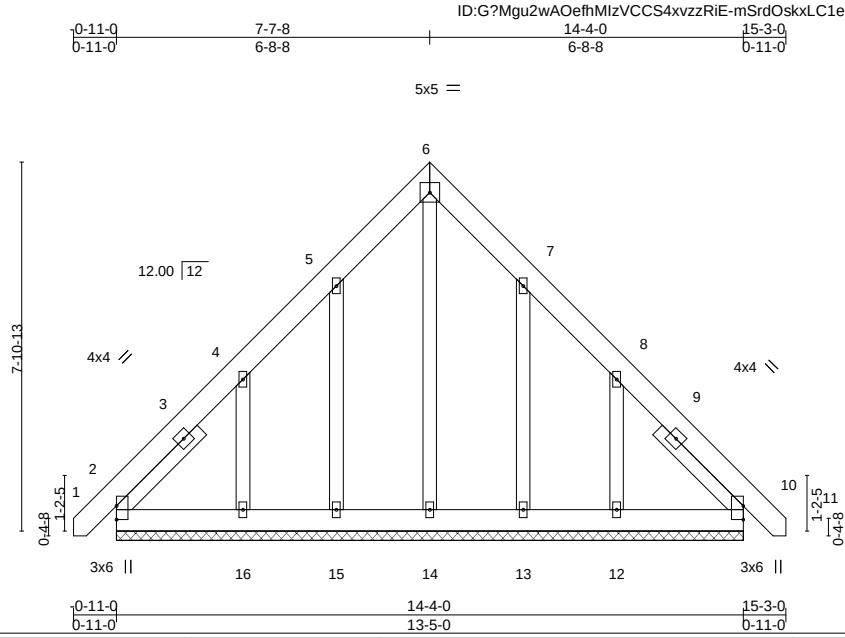

November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | C1GE | COMMON SUPPORTED GAB | 1 | 1 | E15058966 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:40 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-mSrdOskxLC1eEdukClsrx0RiLjigOo7uLuYp_YyMX0j




| 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 | 0.04 | Vert(LL) | 0.00 | 10 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 10 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.13 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | 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 -x 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) 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.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058967 |
|---|---|---|---|---|---|
| J0221-1018 | D1 | COMMON | 1 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:41 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-EeP0bClZ6V9VsnSwmSN4TE_pR7_o7De1aYIMW?yMX0i

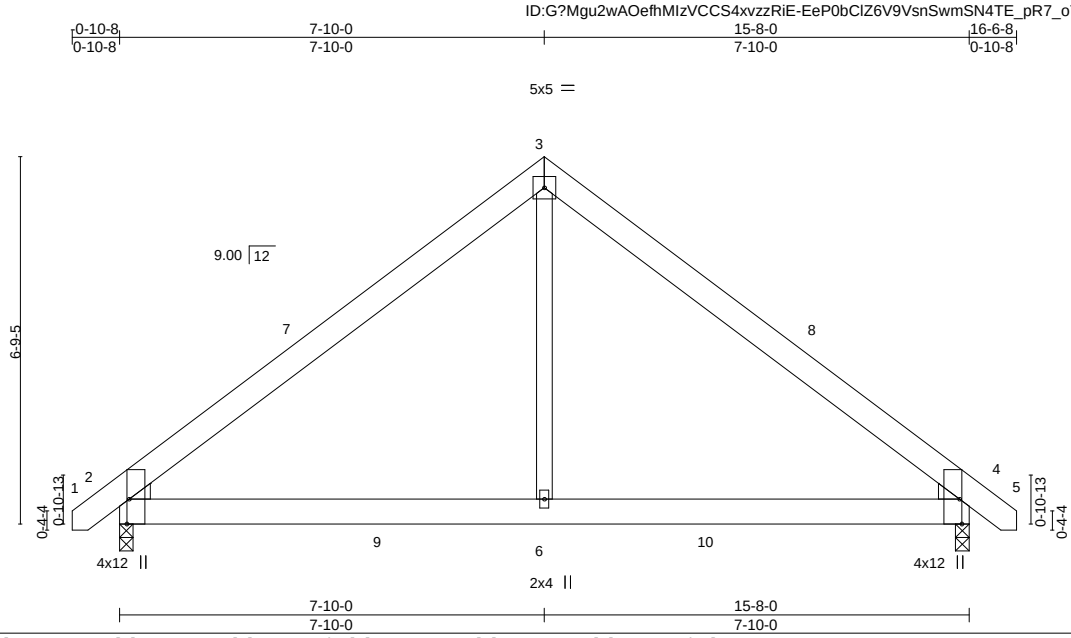



Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [4:0-0-13,0-1-1], [4:0-1-9,0-5-4], [4:0-5-8,Edge]

| 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 | 0.28 | Vert(LL) | -0.03 | 4-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.05 | 4-6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.31 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 4-6 | >999 | 240 | Weight: 98 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=-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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | D1GE | COMMON SUPPORTED GAB | 1 | 1 | E15058968 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:42 2020 Page 1
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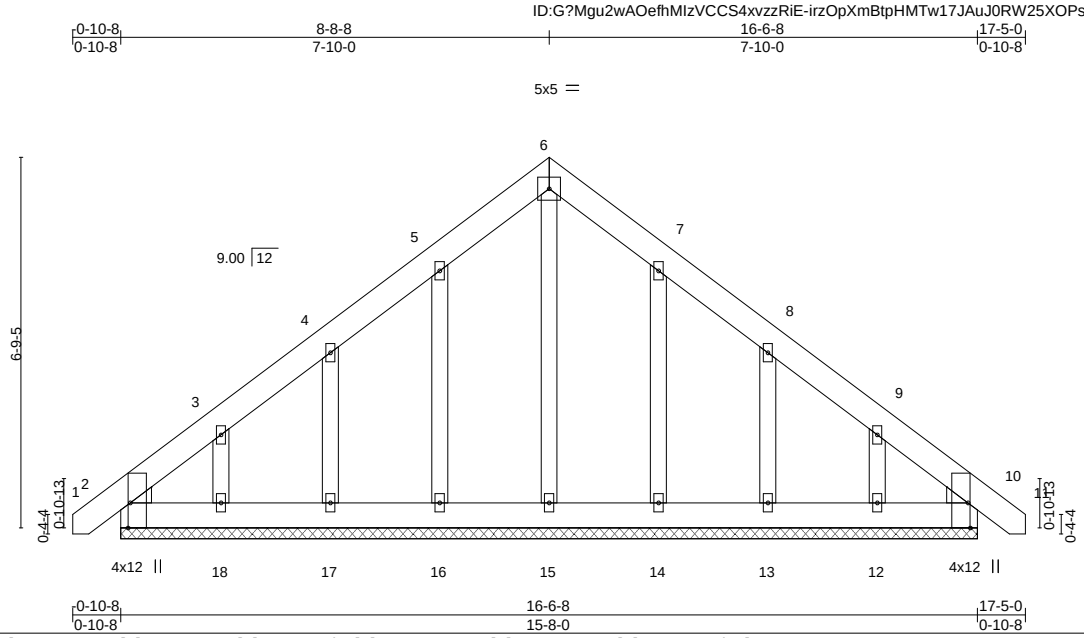


Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [10:0-0-13,0-1-1], [10:0-1-9,0-5-4], [10:0-5-8,Edge]

| 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 | 0.03 | Vert(LL) | 0.00 | 10 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 10 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) 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.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058969 |
|---|---|---|---|---|---|
| J0221-1018 | D2 | COMMON | 2 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:44 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-eD58EDnRPQX4jEBVRbwn5scKOK?VKaOUGVW17KyMX0f

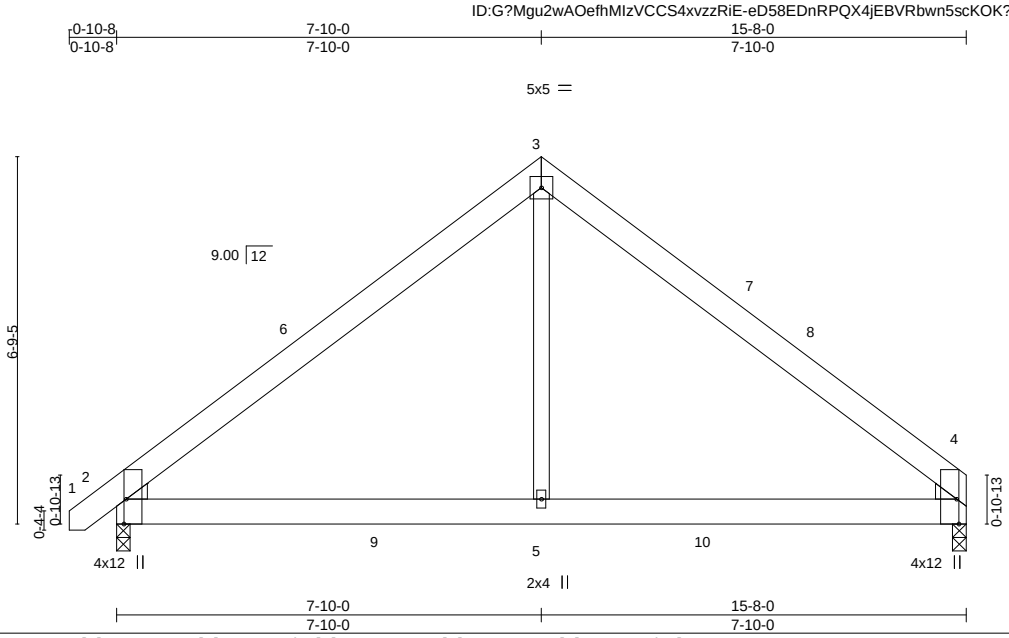


Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [4:0-0-13,0-1-1], [4:0-1-9,0-5-4], [4:0-5-8,Edge]

| 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 | 0.30 | Vert(LL) | -0.03 | 2-5 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.05 | 2-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.31 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 2-5 | >999 | 240 | 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058970 |
|---|---|---|---|---|---|
| J0221-1018 | D3 | COMMON | 2 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:45 2020 Page 1
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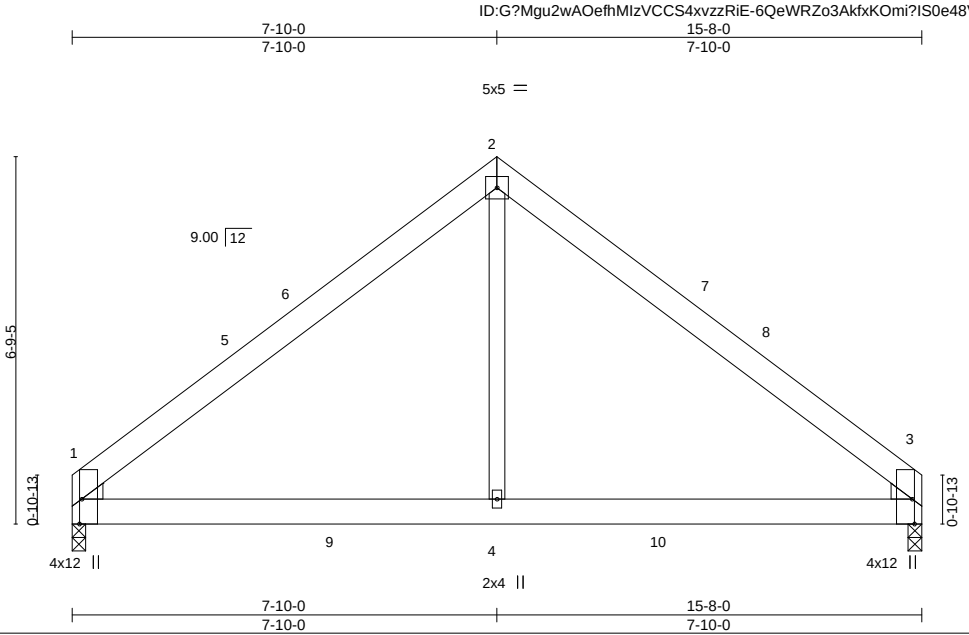


Plate Offsets (X,Y)-- [1:0-0-13,0-1-1], [1:0-1-9,0-5-4], [1:0-5-8,Edge], [3:0-0-13,0-1-1], [3:0-1-9,0-5-4], [3:0-5-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.30 | Vert(LL) | -0.02 | 3-4 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | -0.05 | 3-4 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.31 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 1-4 | >999 | 240 | Weight: 94 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) 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058971 |
|---|---|---|---|---|---|
| J0221-1018 | G1 | Common | 3 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:46 2020 Page 1
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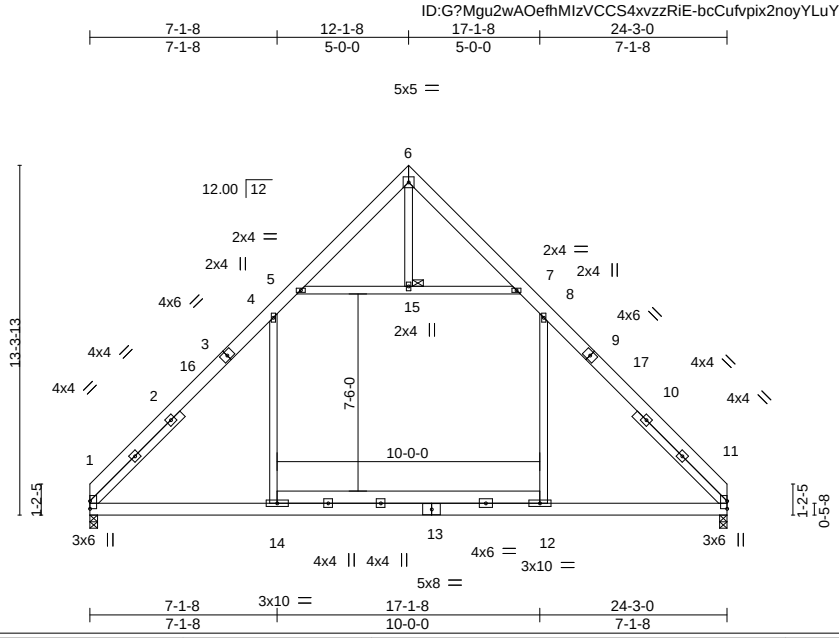


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.26 | Vert(LL) | -0.14 | 11-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 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 -x 4-10-11, Right 2x4 SP No.2 -x 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-**

1) Unbalanced roof live loads have been considered for this design.
2) 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
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11.


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | G1-GR | COMMON GIRDER | 1 | 3 | E15058972 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:47 2020 Page 1
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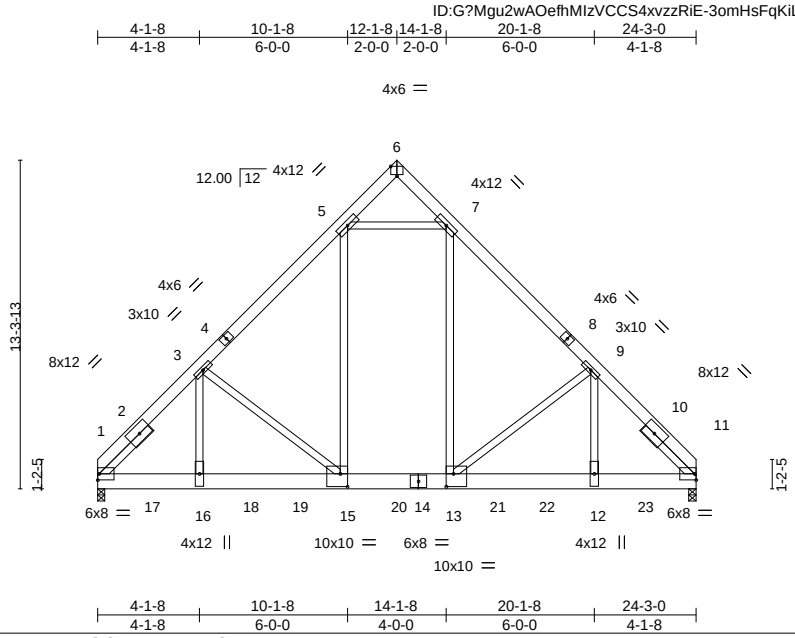


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [13:0-3-8,0-6-4], [15:0-3-8,0-6-4]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.97 | Vert(LL) | -0.09 | 12-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.40 | Vert(CT) | -0.18 | 12-13 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.56 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | 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 -x 2-9-4, Right 2x4 SP No.2 -x 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-**
1) 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=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
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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.
7) 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
1) 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



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818 Soundside Road
Edenton, NC 27932

**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)

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | G1SG | GABLE | 1 | 1 | E15058973 |
| | | | | | Job Reference (optional) |

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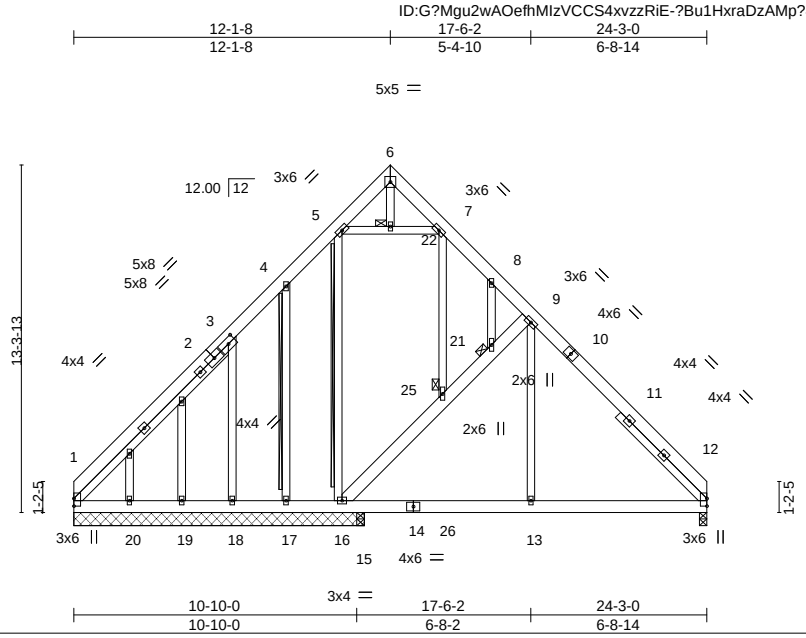


Plate Offsets (X,Y)-- [3:0-3-8,0-2-8]

| 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 | 0.20 | Vert(LL) | -0.02 | 13-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | -0.03 | 12-13 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.37 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | 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 -x 8-5-2, Right 2x4 SP No.2 -x 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<br>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.<br>Brace must cover 90% of web length. |
| JOINTS | 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)

**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-**

1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 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.
8) 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=lb) 16=205, 18=446.
9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.


November 4,2020




TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058974 |
|---|---|---|---|---|---|
| J0221-1018 | H1 | COMMON | 6 | 1 | Job Reference (optional) |

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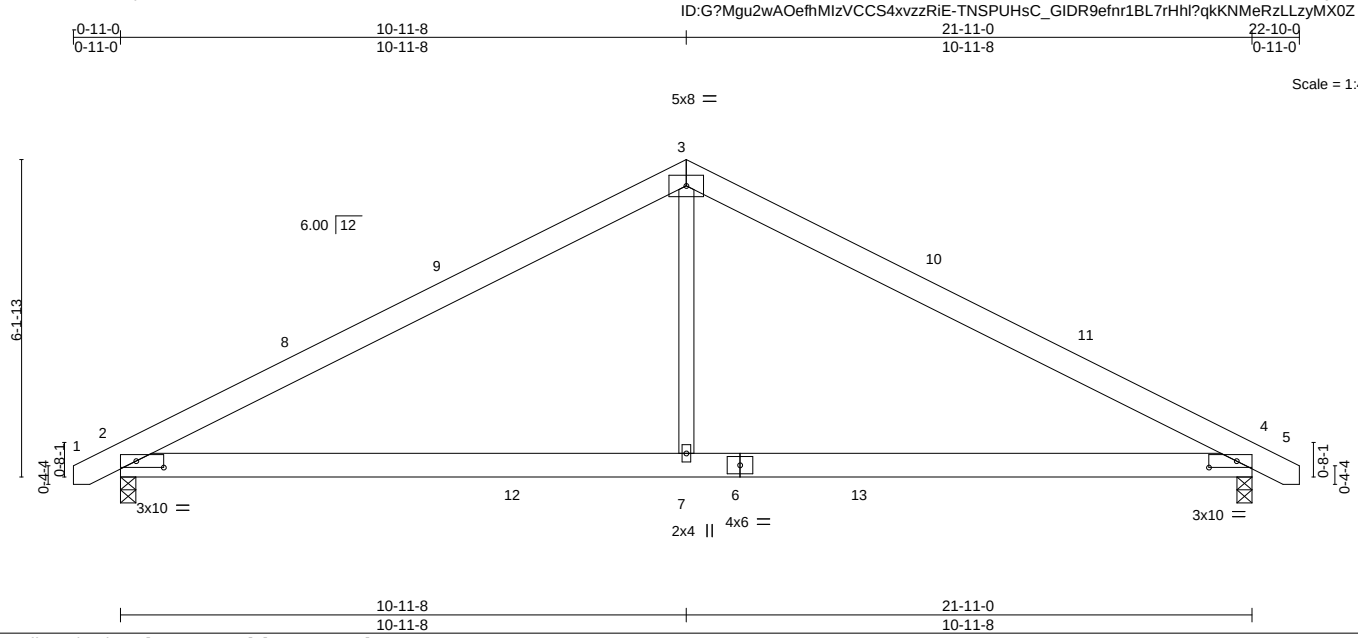


Plate Offsets (X,Y)-- [2:0-6-7,0-1-8], [4:0-6-7,0-1-8]

| 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 | 0.63 | Vert(LL) | -0.08 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.50 | Vert(CT) | -0.18 | 4-7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.02 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 2-7 | >999 | 240 | Weight: 122 lb | FT = 20% |

**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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.


November 4,2020




TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | H1-GR | COMMON GIRDER | 1 | 2 | E15058975 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:54 2020 Page 1
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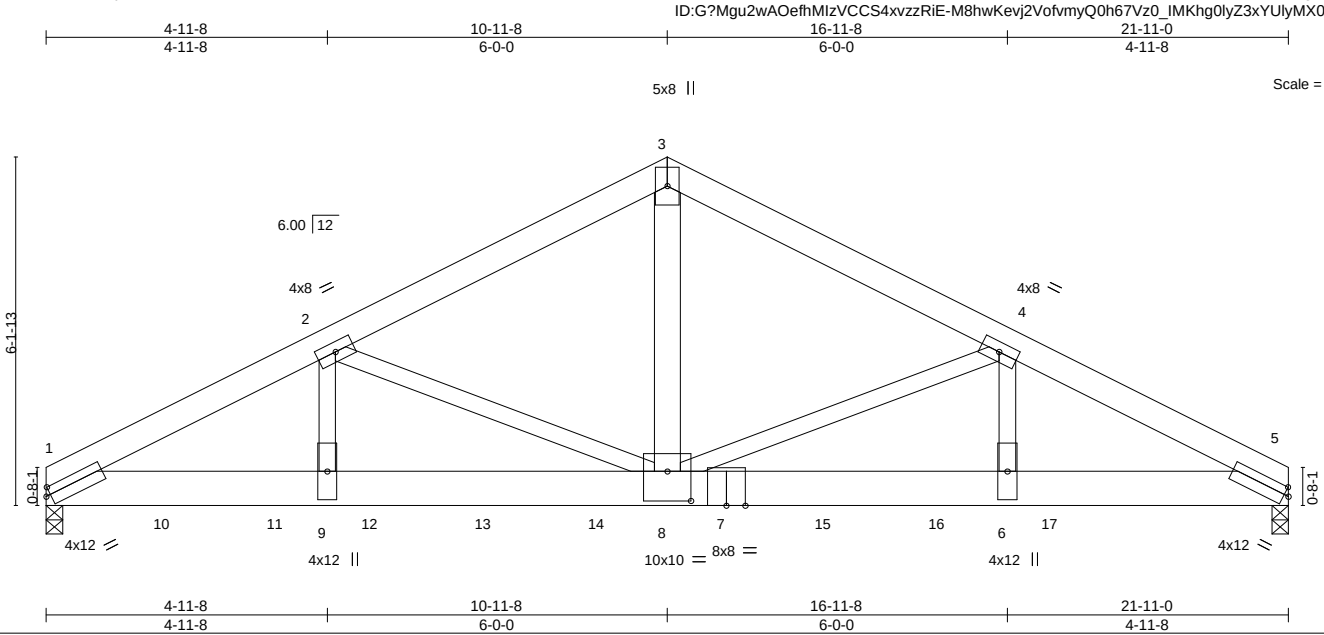


Plate Offsets (X,Y)-- [1:0-1-0,0-1-12], [5:0-1-0,0-1-12], [8:0-5-0,0-6-4]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.46 | Vert(LL) | -0.12 | 6-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.69 | Vert(CT) | -0.25 | 6-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.64 | Horz(CT) | 0.07 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | 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-**
1) 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.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=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
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 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.
7) 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
1) 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)


November 4,2020



TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058976 |
|---|---|---|---|---|---|
| J0221-1018 | H1GE | COMMON SUPPORTED GAB | 1 | 1 | Job Reference (optional) |

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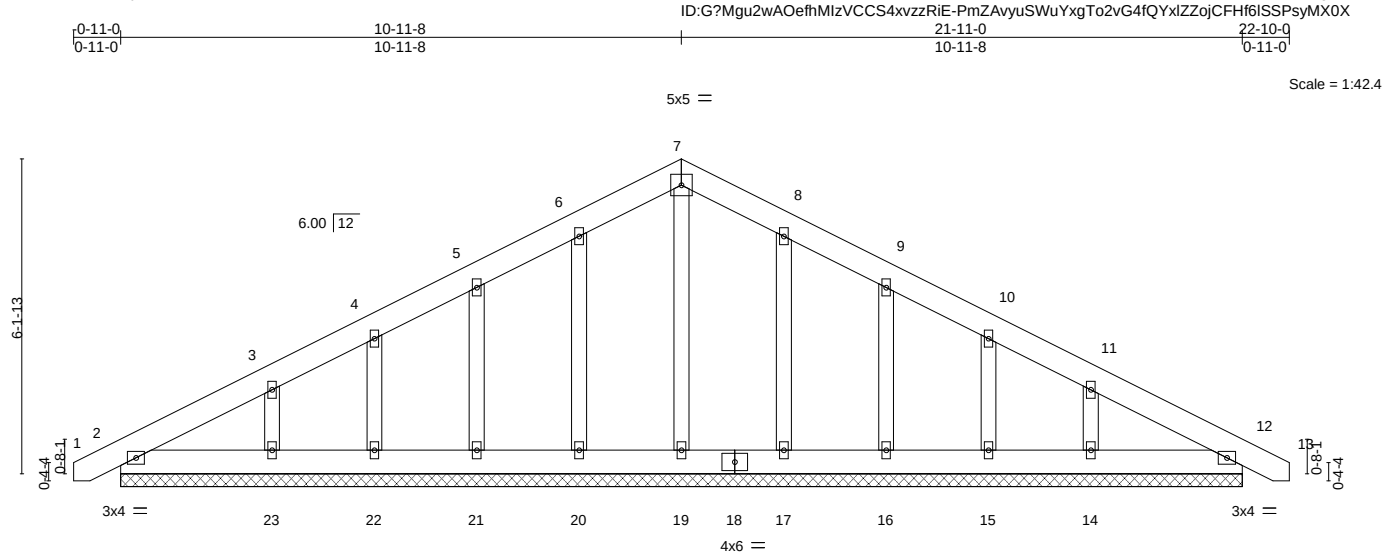


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.03 | Vert(LL) | 0.00 | 12 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 12 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) 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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TRENCO
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | V1 | VALLEY | 1 | 1 | E15058977 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:59 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-i6VpNMzrt1Qy0YqOpEiIC1jw4NAHLPahjLfJ9yyMX0Q

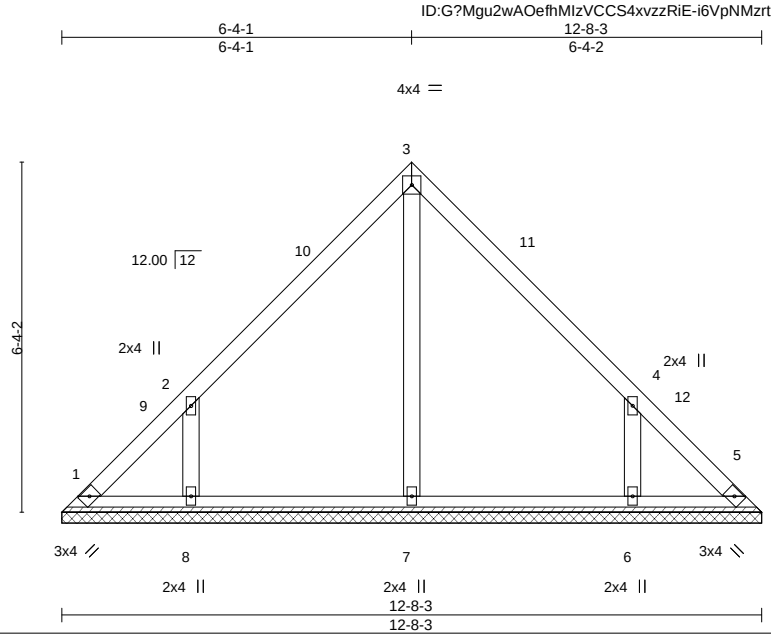


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| 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 | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.09 | Horz(CT) | 0.00 | 5 | n/a | 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 8)
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=-355/291, 4-6=-355/291

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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) 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.
6) Non Standard bearing condition. Review required.


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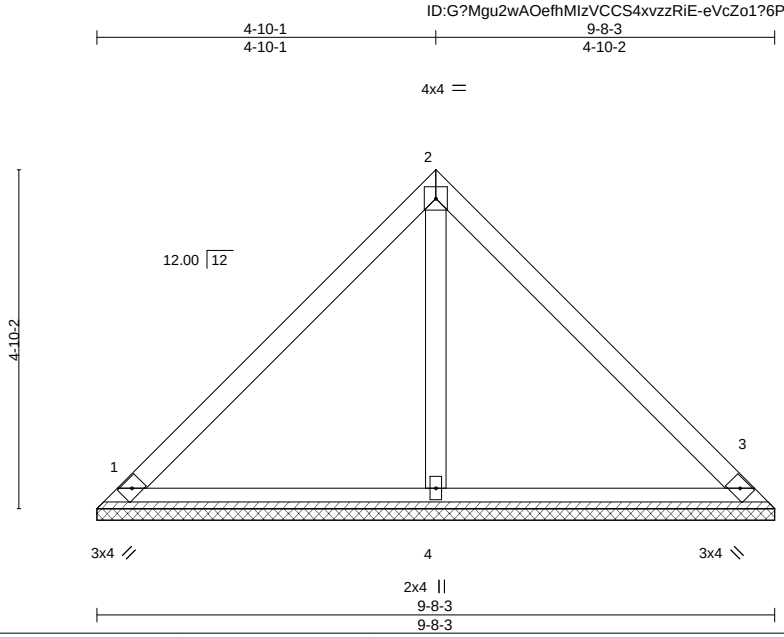
| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm |
|---|---|---|---|---|---|
| J0221-1018 | V2 | VALLEY | 1 | 1 | E15058978 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:11:01 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-eVcZo1?6PfgfFr_mxfkmHSpFGBropKS_Af8QEryMX0O




| 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 | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 40 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.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818 Soundside Road
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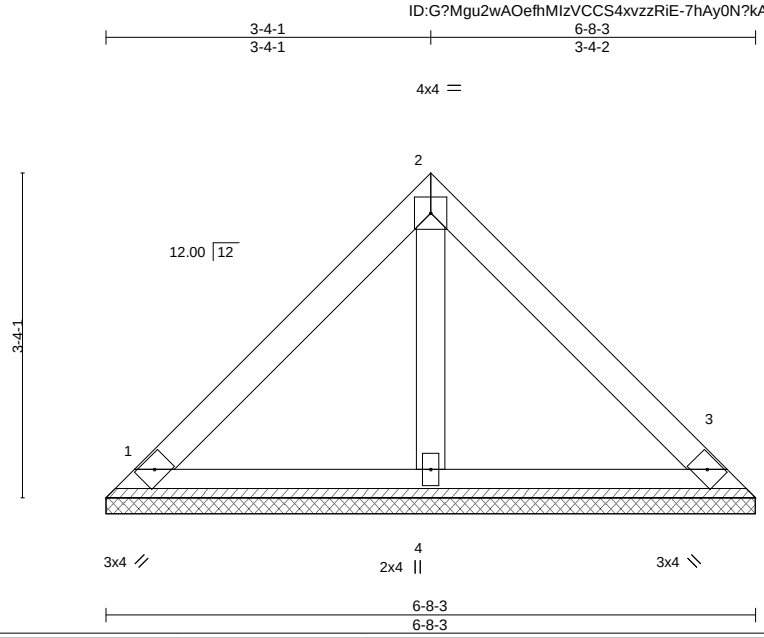
| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058979 |
|---|---|---|---|---|---|
| J0221-1018 | V3 | VALLEY | 1 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:11:02 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-7hAy0N?kAyoWt?ZzUNF?qfLR9bCLYnL7PJt_mHyMX0N




| 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 | 0.15 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 27 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.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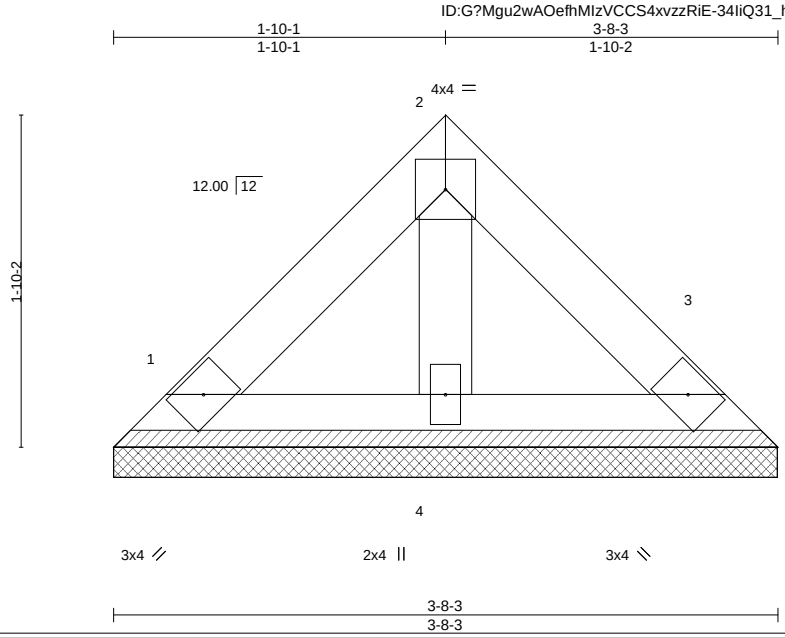
| Job | Truss | Truss Type | Qty | Ply | Lot 3 Atkins Farm E15058980 |
|---|---|---|---|---|---|
| J0221-1018 | V4 | VALLEY | 1 | 1 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:11:04 2020 Page 1
ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-34IiQ31_ha2E6JjLcnHTv4RpROub0h2QtdM4q9yMX0L




| 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 | 0.03 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 14 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-**
1) Unbalanced roof live loads have been considered for this design.
2) 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
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.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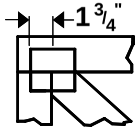
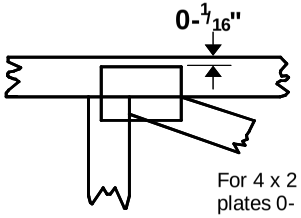
# Symbols

### PLATE LOCATION AND ORIENTATION




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




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

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

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

### PLATE SIZE

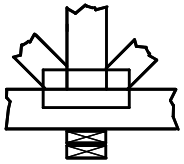
4 x 4

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

### LATERAL BRACING LOCATION

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

### BEARING

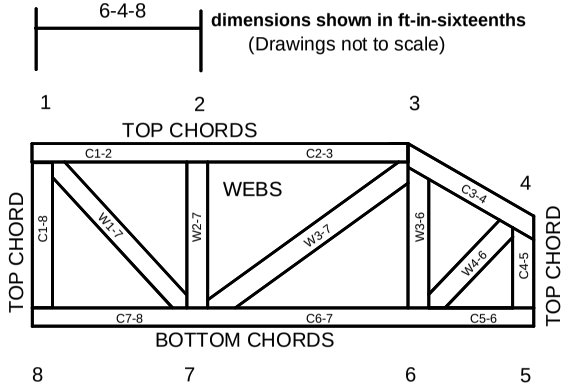


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: 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




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

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

### PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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





# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

21. The design does not take into account any dynamic or other loads other than those expressly stated.