

| Products | | | | | |
|----------|--------|-----------------------------|-------|---------|----------|
| PlotID | Length | Product | Plies | Net Qty | Fab Type |
| BM1 | 17' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 | FF |
| BM2 | 20' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 | FF |
| BM3 | 12' 0" | 2x10 SP No.2 | 2 | 4 | FF |
| BM4 | 7' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 | FF |
| BM5 | 9' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 | FF |
| GDH | 20' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 | FF |
| GDH2 | 14' 0" | 2x12 SPF No.2 | 2 | 2 | FF |

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

Dimension Notes

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

| Connector Information | | | | Nail Information | | |
|-----------------------|---------|-------|-----|------------------|------------|------------|
| Sym | Product | Manuf | Qty | Supported Member | Header | Truss |
| ■ | HUS26 | USP | 9 | NA | 16d/3-1/2" | 16d/3-1/2" |

Hatch Legend

- Box Storage
- Drop Beam
- 2nd Floor Walls

Roof Area = 3371.07 sq.ft.
Ridge Line = 96.21 ft.
Hip Line = 0 ft.
Horiz. OH = 183.58 ft.
Raked OH = 213.39 ft.
Decking = 116 sheets

▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

LOAD CHART FOR JACK STUDS
(BASED ON TABLES R502.5(1) & (2))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEAD/GUARD

| END REACTION (UP TO) @ END OF HEAD/GUARD | END REACTION (UP TO) @ END OF HEAD/GUARD | END REACTION (UP TO) @ END OF HEAD/GUARD | END REACTION (UP TO) @ END OF HEAD/GUARD |
|--|--|--|--|
| 1700 | 2550 | 3400 | |
| 3400 | 5100 | 6800 | |
| 5100 | 7650 | 10200 | |
| 6800 | 10200 | 13600 | |
| 8500 | 12750 | 17000 | |
| 10200 | 15300 | | |
| 11900 | | | |
| 13600 | | | |
| 15300 | | | |

| | | | |
|------------------|--|------------------|-----------------------|
| BUILDER | Precision Custom Homes and Renovations | COUNTY | Cameron / Harnett |
| JOB NAME | Lot 38 Liberty Meadow | ADDRESS | Lot 38 Liberty Meadow |
| PLAN | Liberty 2.0 w/ CP | MODEL | Roof |
| SEAL DATE | N/A | DATE REV. | 03/01/23 |
| QUOTE # | | DRAWN BY | David Landry |
| JOB # | J0922-4865 | SALESMAN | Neil Baggett |

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 BCSH-B1 and BCSH-B3 provided with the truss delivery package or online @ sbcindustry.com

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

comtech

ROOF & FLOOR TRUSSES & BEAMS

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

Reaction Summary of Order



| | | | |
|-----------------|-----------------|-----------------|--------------|
| REQ. QUOTE DATE | / / | ORDER # | J0922-4865 |
| ORDER DATE | 09/23/22 | QUOTE # | |
| DELIVERY DATE | / / | CUSTOMER ACCT # | 0000007216 |
| DATE OF INVOICE | / / | CUSTOMER PO # | |
| ORDERED BY | Shaun Garderner | INVOICE # | |
| COUNTY | Harnett | TERMS | |
| SUPERINTENDANT | Shaun Garderner | SALES REP | Neil Baggett |
| JOBSITE PHONE # | (910) 988-8172 | SALES AREA | David Landry |

| | | | |
|----------|--|--|---|
| SHEET NO | Precision Custom Homes 256 Briar Hill Rd. Raeford, NC 28376 (910) 988-8172 | JOB NAME: Lot 38 Liberty Meadow MODEL: Roof TAG: Liberty 2.0 w/ CP DELIVERY INSTRUCTIONS: 52 miles round trip | LOT # 38 SUBDIV: Liberty Meadow JOB CATEGORY: _ |
| | Precision Custom Homes and Lot 38 Liberty Meadow Cameron, NC 28356 | SPECIAL INSTRUCTIONS: <div style="text-align: right;">PLAN SEAL DATE:</div> | |

| | | | | | | | | |
|-----------------------------------|---------------|-------------|-----------|--------------|------------------|-----------|---------|----------|
| BUILDING DEPARTMENT Roof Order | OVERHANG INFO | HEEL HEIGHT | 00-06-08 | REQ. LAYOUTS | REQ. ENGINEERING | QUOTE | DTL | 03/01/23 |
| | END CUT | RETURN | | | | LAYOUT | DTL | 03/01/23 |
| | GABLE STUDS | | 24 IN. OC | | JOBSITE 1 | JOBSITE 1 | CUTTING | DTL |

| | | | | |
|---------------------|---------------------|---------------------|--------------|--|
| ROOF TRUSSES | LOADING INFORMATION | TCLL-TCDL-BCLL-BCDL | STRESS INCR. | ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.) |
| | | 20.0,10.0,0.0,10.0 | 1.15 | |

| PROFILE | QTY | PITCH | | TYPE ID | BASE O/A | LUMBER | | OVERHANG | | REACTIONS | | | | |
|---------|------------|-------|------|--------------|----------------------|--------|-------|----------|----------|---------------------------------------|--|--|--------------------------------------|--------------------------------------|
| | | TOP | BOT | | | TOP | BOT | LEFT | RIGHT | | | | | |
| | 6 | 7.00 | 0.00 | COMMON A1 | 33-00-00 33-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 1525.2 lbs. -90.9 lbs. | Joint 8 1525.2 lbs. -90.9 lbs. | | | |
| | 1 | 7.00 | 0.00 | GABLE A1GE | 33-00-00 33-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 198.3 lbs. -61.9 lbs. | Joint 20 172.7 lbs. -4.6 lbs. | Joint 22 209.1 lbs. -93.2 lbs. | Joint 23 164.5 lbs. -75.0 lbs. | Joint 24 175.8 lbs. -77.8 lbs. |
| | 4 | 7.00 | 0.00 | COMMON A2 | 33-00-00 33-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 1315.9 lbs. -17.7 lbs. | Joint 3 150.9 lbs. -112.7 lbs. | Joint 4 87.0 lbs. 26.1 lbs. | Joint 8 1525.2 lbs. -90.9 lbs. | |
| | 9 | 7.00 | 0.00 | COMMON A3 | 33-00-00 33-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | | Joint 2 1529.4 lbs. -91.0 lbs. | Joint 8 1461.3 lbs. -74.7 lbs. | | | |
| | 1 | 7.00 | 0.00 | GABLE A3GE | 33-00-00 33-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | | Joint 2 197.6 lbs. -59.9 lbs. | Joint 20 117.2 lbs. -2.3 lbs. | Joint 21 230.5 lbs. -107.2 lbs. | Joint 22 158.3 lbs. -71.1 lbs. | Joint 23 177.0 lbs. -78.5 lbs. |
| | 1 | 6.00 | 0.00 | GABLE B1GE | 12-00-00 12-00-00 | 2 X 4 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 550.0 lbs. -142.9 lbs. | Joint 8 550.0 lbs. -142.9 lbs. | | | |
| | 4 | 6.00 | 0.00 | COMMON B2 | 12-00-00 12-00-00 | 2 X 4 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 550.0 lbs. -108.9 lbs. | Joint 4 550.0 lbs. -108.9 lbs. | | | |
| | 5 | 10.00 | 0.00 | COMMON C1 | 20-00-00 20-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 1043.7 lbs. -48.5 lbs. | Joint 4 1043.7 lbs. -48.5 lbs. | | | |
| | 1 2 Ply | 10.00 | 0.00 | COMMON C1-GR | 20-00-00 20-00-00 | 2 X 6 | 2 X 8 | 01-02-08 | | Joint 2 6838.3 lbs. -436.9 lbs. | Joint 6 6844.2 lbs. -424.1 lbs. | | | |
| | 1 | 10.00 | 0.00 | GABLE C1GE | 20-00-00 20-00-00 | 2 X 6 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 859.7 lbs. -169.5 lbs. | Joint 12 859.7 lbs. -169.5 lbs. | | | |
| | 6 | 6.00 | 0.00 | COMMON G1 | 46-00-00 46-00-00 | 2 X 6 | 2 X 8 | 01-02-08 | 01-02-08 | Joint 2 1250.3 lbs. -65.6 lbs. | Joint 12 1365.2 lbs. -168.3 lbs. | Joint 18 1447.0 lbs. -119.5 lbs. | | |

Reaction Summary of Order



| | | | |
|-----------------|-----------------|-----------------|--------------|
| REQ. QUOTE DATE | / / | ORDER # | J0922-4865 |
| ORDER DATE | 09/23/22 | QUOTE # | |
| DELIVERY DATE | / / | CUSTOMER ACCT # | 0000007216 |
| DATE OF INVOICE | / / | CUSTOMER PO # | |
| ORDERED BY | Shaun Garderner | INVOICE # | |
| COUNTY | Harnett | TERMS | |
| SUPERINTENDANT | Shaun Garderner | SALES REP | Neil Baggett |
| JOBSITE PHONE # | (910) 988-8172 | SALES AREA | David Landry |

| | | | |
|---------|--|--|---|
| SOLD TO | Precision Custom Homes 256 Briar Hill Rd. Raeford, NC 28376 (910) 988-8172 | JOB NAME: Lot 38 Liberty Meadow MODEL: Roof TAG: Liberty 2.0 w/ CP DELIVERY INSTRUCTIONS: 52 miles round trip | LOT # 38 SUBDIV: Liberty Meadow JOB CATEGORY: _ |
| | Precision Custom Homes and Lot 38 Liberty Meadow Cameron, NC 28356 | SPECIAL INSTRUCTIONS: | PLAN SEAL DATE: |

| | | | | | | | | | | |
|-----------------------------------|---------------|-------------|-------------|--------------|------------------|--------|---------|----------|---------|-----|
| BUILDING DEPARTMENT Roof Order | OVERHANG INFO | HEEL HEIGHT | 00-06-08 | REQ. LAYOUTS | REQ. ENGINEERING | QUOTE | DTL | 03/01/23 | | |
| | END CUT | RETURN | | | | LAYOUT | DTL | 03/01/23 | | |
| | | | GABLE STUDS | 24 IN. OC | JOBSITE | 1 | JOBSITE | 1 | CUTTING | DTL |

| | | | | |
|---------------------|---------------------|---------------------|--------------|--|
| ROOF TRUSSES | LOADING INFORMATION | TCLL-TCDL-BCLL-BCDL | STRESS INCR. | ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.) |
| | | 20.0,10.0,0.0,10.0 | 1.15 | |

| PROFILE | QTY | PITCH | | TYPE ID | BASE O/A | LUMBER | | OVERHANG | | REACTIONS | | | | | |
|---------|-----|-------|------|----------------|----------------------|--------|-------|----------|-----------|--------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| | | TOP | BOT | | | TOP | BOT | LEFT | RIGHT | | | | | | |
| | 1 | 6.00 | 0.00 | COMMON G1GE | 46-00-00 46-00-00 | 2 X 4 | 2 X 6 | 01-02-08 | 01-02-08 | Joint 2 196.2 lbs. -27.2 lbs. | Joint 26 196.2 lbs. -3.2 lbs. | Joint 28 219.1 lbs. -94.9 lbs. | Joint 29 139.7 lbs. -62.0 lbs. | Joint 30 165.1 lbs. -70.6 lbs. | |
| | 4 | 4.00 | 0.00 | MONO TRUSS J1 | 06-00-00 06-00-00 | 2 X 4 | 2 X 6 | 01-02-08 | -00-01-08 | Joint 2 316.0 lbs. -132.3 lbs. | Joint 4 215.2 lbs. -90.3 lbs. | | | | |
| | 6 | 4.00 | 0.00 | MONOPITCH J2 | 05-00-00 05-00-00 | 2 X 4 | 2 X 6 | 01-02-08 | -00-01-08 | Joint 2 277.3 lbs. -119.5 lbs. | Joint 4 174.4 lbs. -72.2 lbs. | | | | |
| | 1 | 4.00 | 0.00 | MONOPITCH J2GE | 05-00-00 05-00-00 | 2 X 4 | 2 X 6 | 01-02-08 | | Joint 2 189.3 lbs. -89.3 lbs. | Joint 5 3.5 lbs. -3.4 lbs. | Joint 6 52.4 lbs. -34.0 lbs. | Joint 7 222.4 lbs. -70.5 lbs. | | |
| | 9 | 4.00 | 0.00 | MONOPITCH J3 | 03-04-08 03-04-08 | 2 X 4 | 2 X 6 | 01-02-08 | | Joint 2 223.8 lbs. -68.8 lbs. | Joint 4 107.4 lbs. -14.2 lbs. | | | | |
| | 2 | 4.00 | 0.00 | MONOPITCH J3GE | 03-06-00 03-06-00 | 2 X 4 | 2 X 4 | 01-02-08 | | Joint 2 164.5 lbs. -91.1 lbs. | Joint 7 52.0 lbs. -26.0 lbs. | Joint 8 125.2 lbs. -37.7 lbs. | | | |
| | 1 | 10.00 | 0.00 | VALLEY V1 | 18-05-05 18-05-05 | 2 X 4 | 2 X 4 | | | Joint 1 193.5 lbs. -7.5 lbs. | Joint 5 182.2 lbs. 22.4 lbs. | Joint 6 560.1 lbs. -171.8 lbs. | Joint 8 410.9 lbs. 55.3 lbs. | Joint 9 560.3 lbs. -171.9 lbs. | |
| | 1 | 10.00 | 0.00 | VALLEY V2 | 15-07-11 15-07-11 | 2 X 4 | 2 X 4 | | | Joint 1 150.3 lbs. -16.8 lbs. | Joint 5 134.9 lbs. 10.7 lbs. | Joint 6 428.5 lbs. -142.4 lbs. | Joint 7 410.8 lbs. 56.2 lbs. | Joint 8 428.9 lbs. -142.5 lbs. | |
| | 1 | 10.00 | 0.00 | VALLEY V3 | 12-10-02 12-10-02 | 2 X 4 | 2 X 4 | | | Joint 1 101.5 lbs. -31.1 lbs. | Joint 5 84.7 lbs. -8.6 lbs. | Joint 6 329.9 lbs. -123.9 lbs. | Joint 7 242.2 lbs. 54.2 lbs. | Joint 8 330.1 lbs. -124.1 lbs. | |
| | 1 | 10.00 | 0.00 | VALLEY V4 | 10-00-08 10-00-08 | 2 X 4 | 2 X 4 | | | Joint 1 198.9 lbs. -21.8 lbs. | Joint 3 198.9 lbs. -30.4 lbs. | Joint 4 346.9 lbs. 10.9 lbs. | | | |
| | 1 | 10.00 | 0.00 | VALLEY V5 | 07-02-15 07-02-15 | 2 X 4 | 2 X 4 | | | Joint 1 150.6 lbs. -22.7 lbs. | Joint 3 150.7 lbs. -28.7 lbs. | Joint 4 219.7 lbs. 22.5 lbs. | | | |

Reaction Summary of Order



| | | | |
|-----------------|-----------------|-----------------|--------------|
| REQ. QUOTE DATE | / / | ORDER # | J0922-4865 |
| ORDER DATE | 09/23/22 | QUOTE # | |
| DELIVERY DATE | / / | CUSTOMER ACCT # | 0000007216 |
| DATE OF INVOICE | / / | CUSTOMER PO # | |
| ORDERED BY | Shaun Garderner | INVOICE # | |
| COUNTY | Harnett | TERMS | |
| SUPERINTENDANT | Shaun Garderner | SALES REP | Neil Baggett |
| JOBSITE PHONE # | (910) 988-8172 | SALES AREA | David Landry |

| | | | |
|-------|--|--|---|
| SHEET | Precision Custom Homes 256 Briar Hill Rd. Raeford, NC 28376 (910) 988-8172 | JOB NAME: Lot 38 Liberty Meadow MODEL: Roof TAG: Liberty 2.0 w/ CP DELIVERY INSTRUCTIONS: 52 miles round trip | LOT # 38 SUBDIV: Liberty Meadow JOB CATEGORY: _ |
| | Precision Custom Homes and Lot 38 Liberty Meadow Cameron, NC 28356 | SPECIAL INSTRUCTIONS: <p style="text-align: right;">PLAN SEAL DATE:</p> | <p style="text-align: right;">BY DATE</p> |

| | | | | | | | | | | |
|-----------------------------------|---------------|-------------|-----------|--------------|------------------|--------|---------|----------|---------|-----|
| BUILDING DEPARTMENT Roof Order | OVERHANG INFO | HEEL HEIGHT | 00-06-08 | REQ. LAYOUTS | REQ. ENGINEERING | QUOTE | DTL | 03/01/23 | | |
| | END CUT | RETURN | | | | LAYOUT | DTL | 03/01/23 | | |
| | GABLE STUDS | | 24 IN. OC | | JOBSITE | 1 | JOBSITE | 1 | CUTTING | DTL |

| ROOF TRUSSES | | LOADING INFORMATION | | TCLL-TCDL-BCLL-BCDL | STRESS INCR. | ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.) | | | | | | | | |
|---------------------|-----|----------------------------|------|---------------------|----------------------|---|-------|----------|-------|------------|------------|------------|------------|------------|
| | | | | 20.0,10.0,0.0,10.0 | 1.15 | | | | | | | | | |
| PROFILE | QTY | PITCH | | TYPE ID | BASE O/A | LUMBER | | OVERHANG | | REACTIONS | | | | |
| | PLY | TOP | BOT | | | TOP | BOT | LEFT | RIGHT | | | | | |
| | 1 | 10.00 | 0.00 | VALLEY V6 | 04-05-05 04-05-05 | 2 X 4 | 2 X 4 | | | Joint 1 | Joint 3 | Joint 4 | Joint 17 | Joint 18 |
| | | | | | | | | | | 85.8 lbs. | 85.8 lbs. | 125.2 lbs. | 304.2 lbs. | 337.3 lbs. |
| | | | | | | | | | | -12.9 lbs. | -16.3 lbs. | 12.8 lbs. | -31.6 lbs. | -27.3 lbs. |

| ITEMS | | | | | | | | | |
|--------------|--------------|--------|----------|-------------|-----------------|--|--|--|--|
| QTY | ITEM TYPE | SIZE | LENGTH | PART NUMBER | NOTES | | | | |
| | | | FT-IN-16 | | | | | | |
| 9 | Hangers, USP | HUS 26 | | | SIMPSON (HUS26) | | | | |

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0922-4865
Lot 38 Liberty Meadow

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

Pages or sheets covered by this seal: I56917876 thru I56917898

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



March 1, 2023

Gilbert, Eric

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

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss A1 | Truss Type COMMON | Qty 6 | Ply 1 | Lot 38 Liberty Meadow I56917876 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

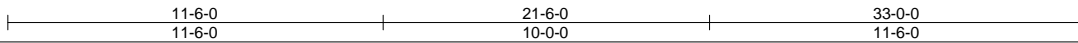
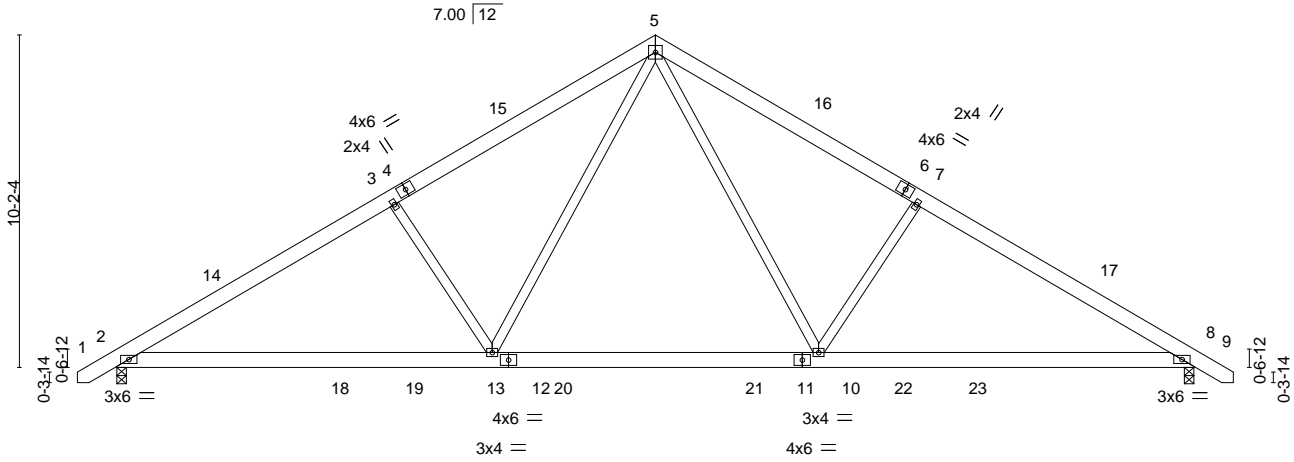
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:40 2023 Page 1



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5x5 =

Scale = 1:70.6



| 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) | -0.15 10-13 | >999 | 360 | MT20 | 244/190 |
| BCDL 10.0 | Lumber DOL | 1.15 | BC 0.53 | Vert(CT) | -0.26 8-10 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.31 | Horz(CT) | 0.05 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.05 2-13 | >999 | 240 | | |
| | | | | | | | | Weight: 221 lb | FT = 20% |

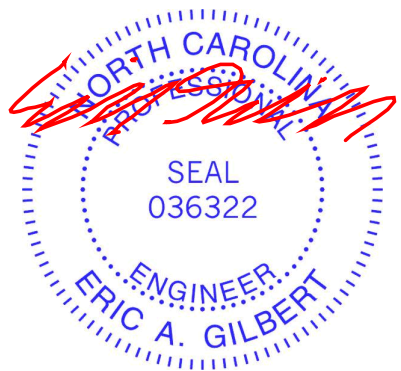
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=245(LC 11)
 Max Uplift 2=91(LC 12), 8=91(LC 13)
 Max Grav 2=1525(LC 19), 8=1525(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2295/423, 3-5=-2090/464, 5-7=-2091/464, 7-8=-2296/423
 BOT CHORD 2-13=-222/2070, 10-13=-9/1347, 8-10=-233/1886
 WEBS 3-13=-544/300, 5-13=-140/991, 5-10=-139/991, 7-10=-544/300

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 34-0-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 2 and 91 lb uplift at joint 8.



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

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



| | | | | | |
|-------------------|---------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss A1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917877 |
|-------------------|---------------|---------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

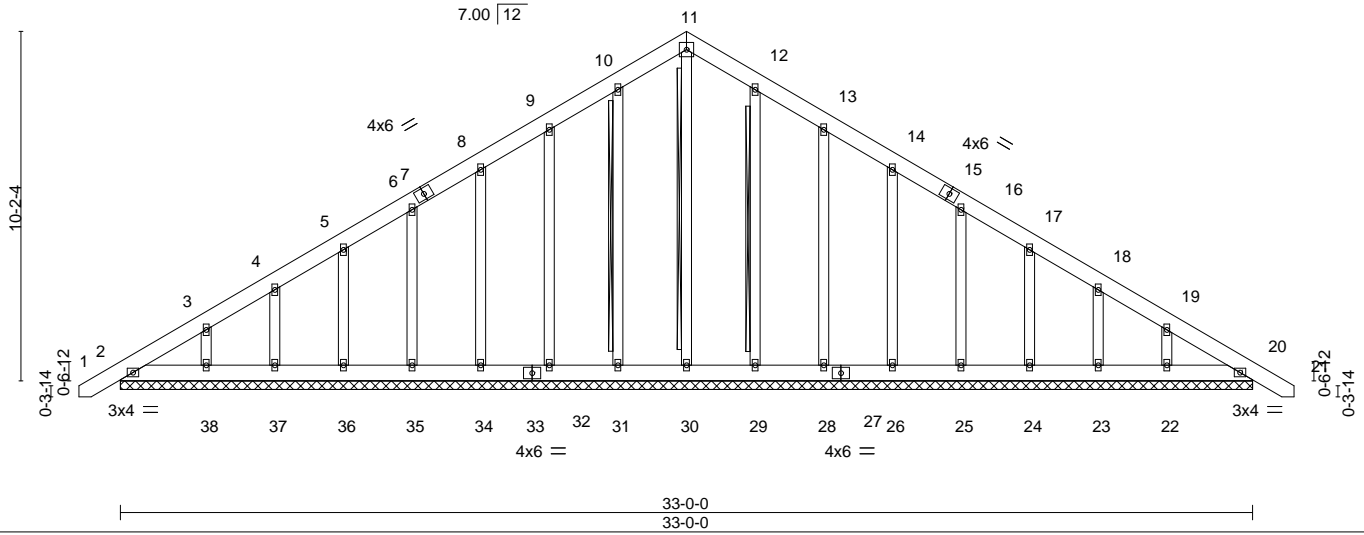
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:43 2023 Page 1

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5x5 =

Scale = 1:67.2



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| 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 | 20 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | 0.00 | 20 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.13 | Horz(CT) | 0.01 | 20 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 283 lb | FT = 20% |

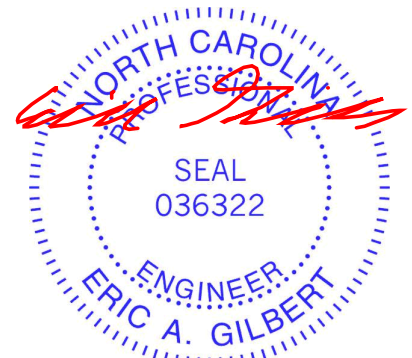
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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.
WEBS T-Brace: 2x4 SPF No.2 - 11-30, 10-31, 12-29
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS. All bearings 33-0-0.
(lb) - Max Horz 2=306(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22
Max Grav All reactions 250 lb or less at joint(s) 2, 20, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-277/226, 10-11=-242/277, 11-12=-242/277

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 1, 2023

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

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

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



818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss A2 | Truss Type COMMON | Qty 4 | Ply 1 | Lot 38 Liberty Meadow I56917878 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

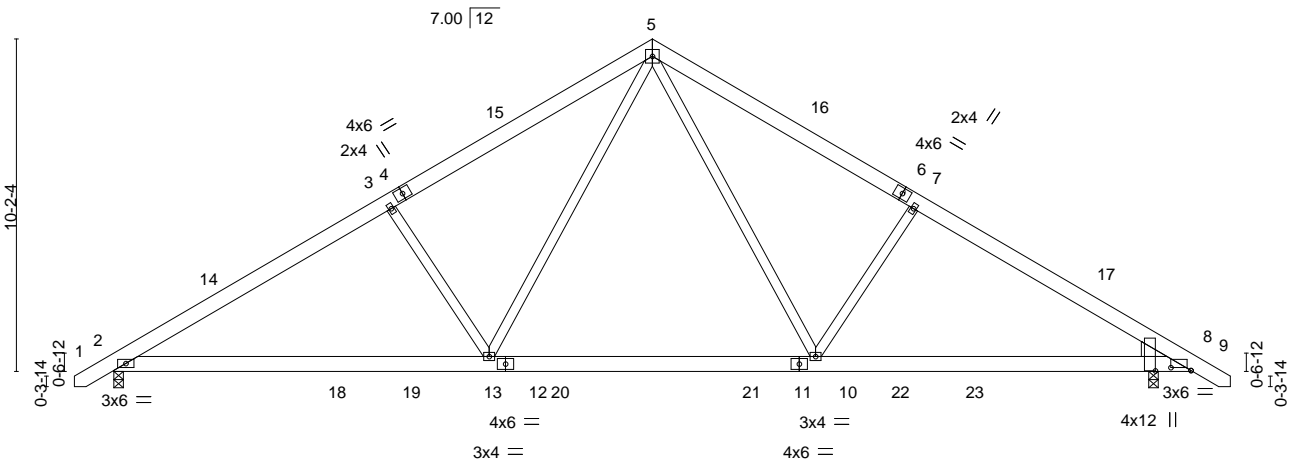
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:45 2023 Page 1

ID:aTXuLo?nW09qtpROz2WQ0wydkZW-M8af6Lcx16nn73t3bR3BqkLF2yb73YePMPAMzfKAU



5x5 =

Scale = 1:70.6



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

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.65 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.60 | Vert(LL) -0.15 10-13 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.31 | Vert(CT) -0.26 8-10 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.05 8 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.05 2-13 >999 240 | Weight: 223 lb | FT = 20% |

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=245(LC 11)
Max Uplift 2=-91(LC 12), 8=-91(LC 13)
Max Grav 2=1525(LC 19), 8=1525(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2295/423, 3-5=-2090/464, 5-7=-2091/464, 7-8=-2296/423
BOT CHORD 2-13=-222/2070, 10-13=-9/1347, 8-10=-233/1886
WEBS 3-13=-544/300, 5-13=-140/991, 5-10=-139/991, 7-10=-544/300

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 34-0-6 zone; cantilever 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, 8.



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

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

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss A3 | Truss Type COMMON | Qty 9 | Ply 1 | Lot 38 Liberty Meadow 156917879 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:46 2023 Page 1

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5x5 =

Scale = 1:69.1

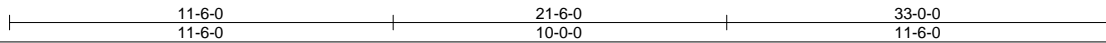
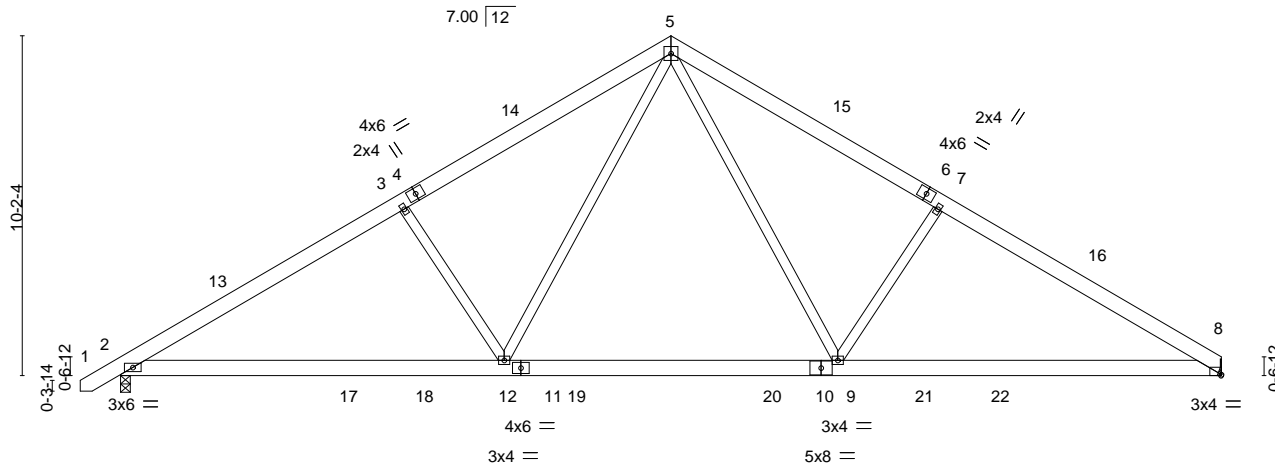


Plate Offsets (X,Y)-- [8:0-0-2,Edge]

| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-------------|
| 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 0.32 | Vert(LL) | -0.15 | 9-12 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.54 | Vert(CT) | -0.27 | 8-9 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.32 | Horz(CT) | 0.05 | 8 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.05 | 2-12 | >999 | | |
| | | | | | | | | Weight: 218 lb | FT = 20% |

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

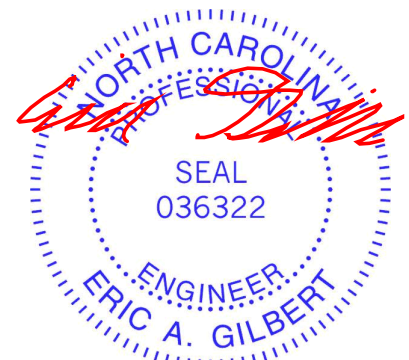
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=Mechanical
Max Horz 2=241(LC 11)
Max Uplift 2=-91(LC 12), 8=-75(LC 13)
Max Grav 2=1529(LC 19), 8=1461(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2303/425, 3-5=-2098/466, 5-7=-2112/480, 7-8=-2319/440
BOT CHORD 2-12=-255/2070, 9-12=-30/1348, 8-9=-260/1916
WEBS 3-12=-545/300, 5-12=-141/990, 5-9=-144/1011, 7-9=-555/308

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-11-4 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



March 1, 2023

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| | | | | | |
|-------------------|---------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss A3GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917880 |
|-------------------|---------------|---------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

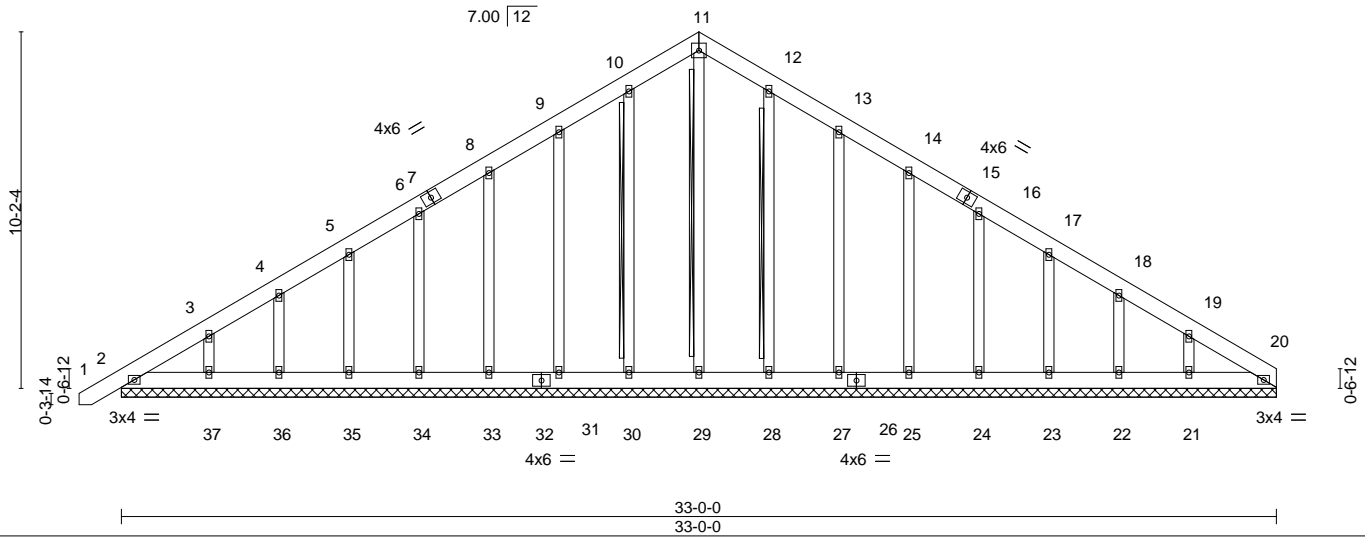
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:48 2023 Page 1

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5x5 =

Scale = 1:65.8



| 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 0.04 | Vert(LL) | -0.00 | 1 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | 0.00 | 1 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.13 | Horz(CT) | 0.01 | 20 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | Weight: 280 lb | FT = 20% |

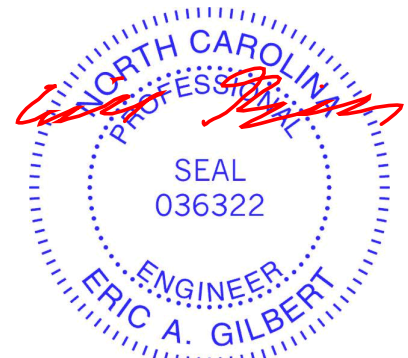
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

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.
 WEBS T-Brace: 2x4 SPF No.2 - 11-29, 10-30, 12-28
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
 Brace must cover 90% of web length.

REACTIONS. All bearings 33-0-0.
 (lb) - Max Horz 2=301(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22 except 21=107(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 20, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-280/222, 10-11=-236/265, 11-12=-236/265

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph 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, 20, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22 except (jt=lb) 21=107.
 - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



March 1, 2023

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

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

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 Edenton, NC 27932

| | | | | | |
|---|---------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss B1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917881 |
| Comtech, Inc. Fayetteville, NC - 28314, | | | | | Job Reference (optional) |

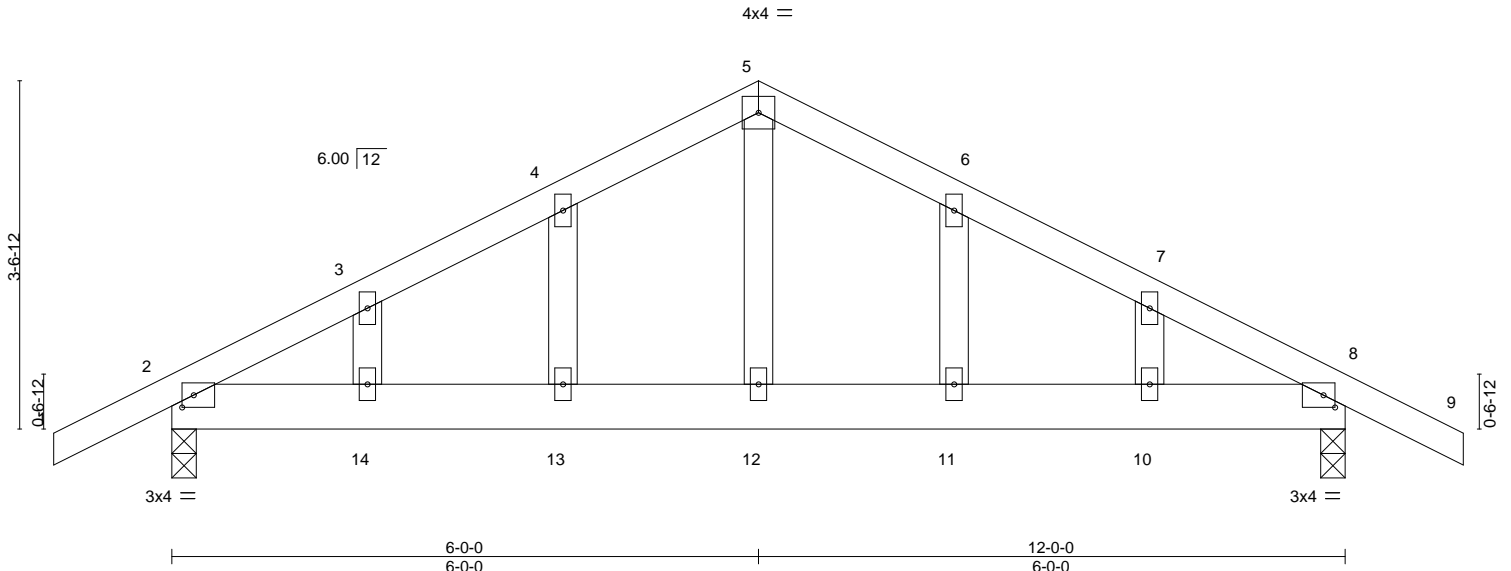
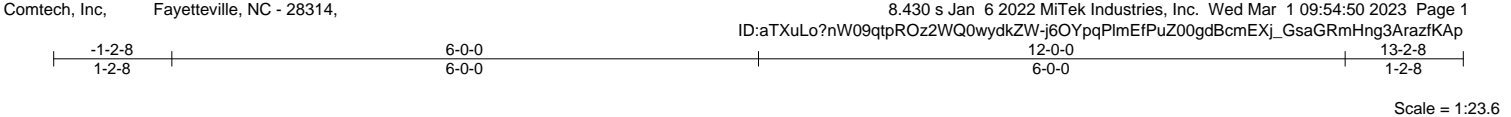


Plate Offsets (X,Y)-- [2:0-1-7,0-1-8], [8:0-1-7,0-1-8]

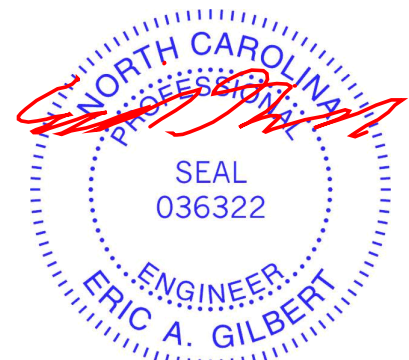
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.14 | Vert(LL) | -0.02 | 10-11 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.19 | Vert(CT) | -0.03 | 10-11 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.09 | Horz(CT) | 0.01 | 8 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.03 | 10-11 | >999 | | |
| | | | | | | | | Weight: 65 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | |
| OTHERS 2x4 SP No.2 | |

REACTIONS. (size) 2=0-3-0, 8=0-3-0
 Max Horz 2=-73(LC 17)
 Max Uplift 2=-143(LC 9), 8=-143(LC 8)
 Max Grav 2=550(LC 1), 8=550(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-617/666, 3-4=-570/687, 4-5=-561/740, 5-6=-561/740, 6-7=-570/688, 7-8=-617/666
 BOT CHORD 2-14=-494/491, 13-14=-494/491, 12-13=-494/491, 11-12=-494/491, 10-11=-494/491,
 8-10=-494/491
 WEBS 5-12=-513/328

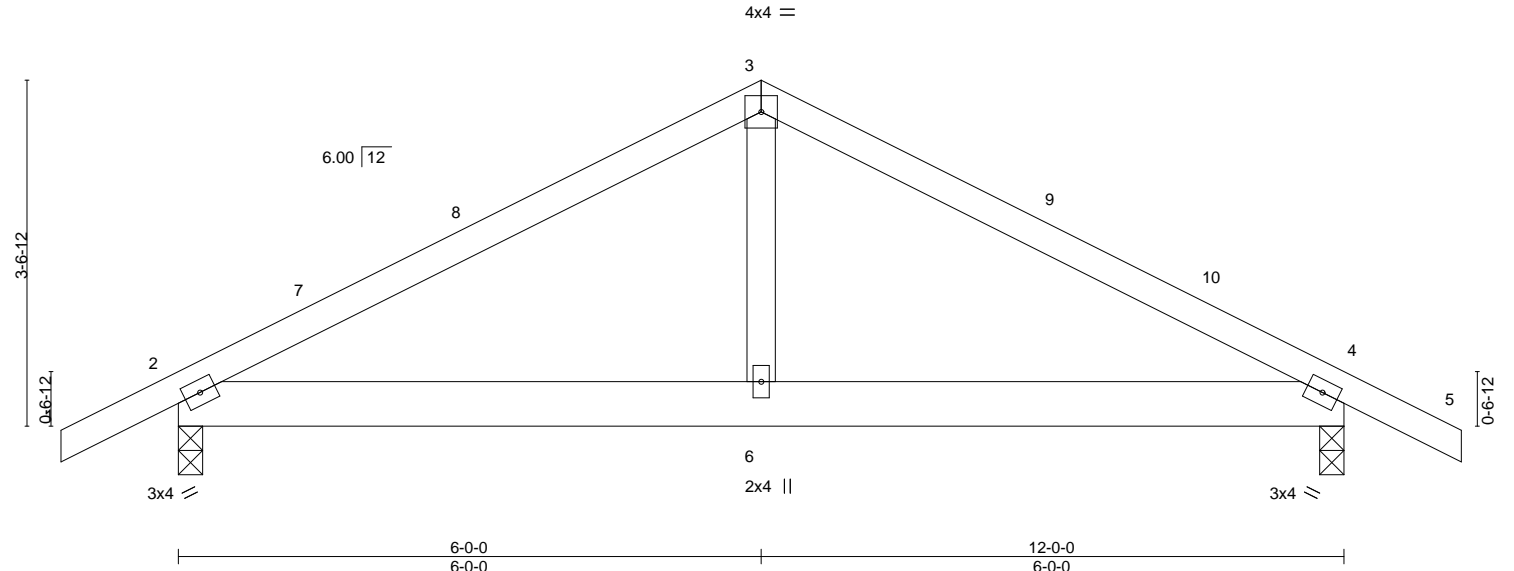
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & 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 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=143, 8=143.



March 1, 2023

| | | | | | | |
|---|-------|------------|-----|-----|-----------------------|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 38 Liberty Meadow | 156917882 |
| J0922-4865 | B2 | COMMON | 4 | 1 | | |
| Comtech, Inc. Fayetteville, NC - 28314, | | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:51 2023 Page 1
 ID:aTXuLo?nW09qtpROz2WQ0wydkZW-Blxw09QNXYnGVibDEKirJS4rMgCN?uKR0KpiNozfKAO
 Scale = 1:23.7



| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.29 | Vert(LL) | -0.01 | 4-6 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.15 | Vert(CT) | -0.02 | 4-6 | >999 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.07 | Horz(CT) | 0.01 | 4 | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Wind(LL) | 0.03 | 4-6 | >999 | | |
| | Code IRC2015/TPI2014 | | | | | | Weight: 57 lb | FT = 20% |

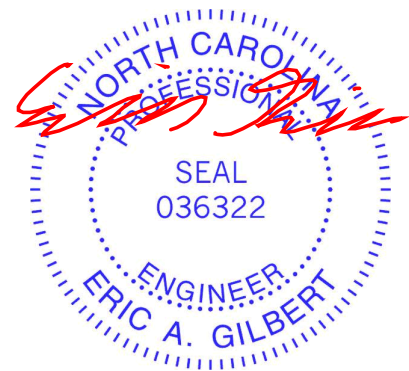
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

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=-47(LC 10)
 Max Uplift 2=-109(LC 9), 4=-109(LC 8)
 Max Grav 2=550(LC 1), 4=550(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-640/667, 3-4=-640/667
 BOT CHORD 2-6=-457/485, 4-6=-457/485
 WEBS 3-6=-394/296

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 13-2-8 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.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 4=109.



March 1, 2023

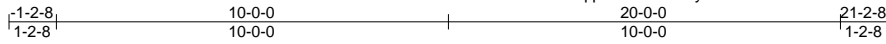
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|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss C1 | Truss Type COMMON | Qty 5 | Ply 1 | Lot 38 Liberty Meadow 156917883 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

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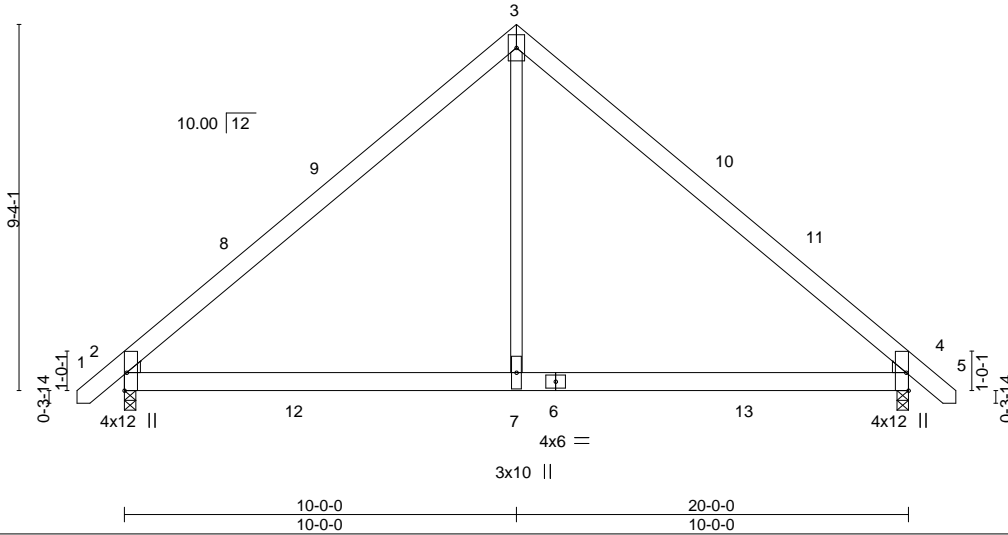
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Job Reference (optional)



5x8 ||

Scale = 1:58.8



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

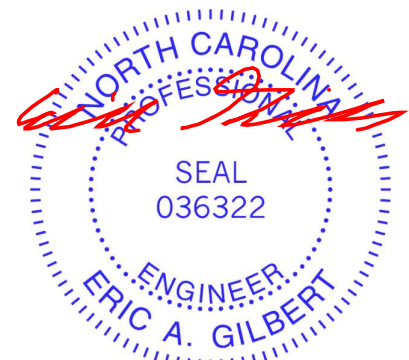
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.49 | Vert(LL) | -0.10 | 4-7 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.54 | Vert(CT) | -0.17 | 4-7 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.19 | Horz(CT) | 0.01 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.06 | 2-7 | >999 | Weight: 129 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | |
| WEDGE | |
| Left: 2x4 SP No.3 , Right: 2x4 SP No.3 | |

REACTIONS. (size) 4=0-3-8, 2=0-3-8
 Max Horz 2=-221(LC 10)
 Max Uplift 4=-48(LC 13), 2=-48(LC 12)
 Max Grav 4=1044(LC 20), 2=1044(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1118/210, 3-4=-1118/210
 BOT CHORD 2-7=0/784, 4-7=0/784
 WEBS 3-7=0/822

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-8 to 3-4-4, Interior(1) 3-4-4 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 21-0-8 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) 4, 2.



March 1, 2023

| | |
|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

| | | | | | |
|-------------------|----------------|-----------------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss C1-GR | Truss Type COMMON GIRDER | Qty 1 | Ply 2 | Lot 38 Liberty Meadow I56917884 |
|-------------------|----------------|-----------------------------|----------|----------|------------------------------------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 1

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5x8 ||

Scale = 1:58.8

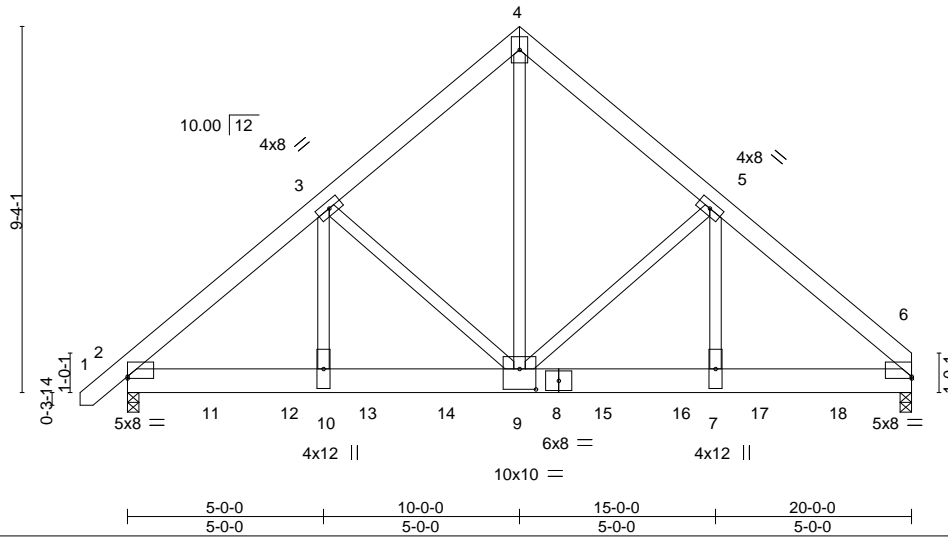


Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [6:Edge,0-0-9], [9:0-5-0,0-6-4]

| 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 0.61 | Vert(LL) | -0.07 | 9-10 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.45 | Vert(CT) | -0.13 | 9-10 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.85 | Horz(CT) | 0.03 | 6 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.05 | 9-10 | >999 | Weight: 341 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x8 SP 2400F 2.0E
 WEBS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

(size) 6=0-3-8, 2=0-3-8
 Max Horz 2=217(LC 26)
 Max Uplift 6=-424(LC 9), 2=-437(LC 8)
 Max Grav 6=6844(LC 2), 2=6838(LC 2)

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

TOP CHORD 2-3=-8399/550, 3-4=-5693/462, 4-5=-5691/461, 5-6=-8413/547
 BOT CHORD 2-10=-410/6080, 9-10=-410/6081, 7-9=-340/6084, 6-7=-340/6083
 WEBS 4-9=-485/6901, 5-9=-2367/286, 5-7=-162/3485, 3-9=-2363/282, 3-10=-164/3461

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=424, 2=437.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1360 lb down and 95 lb up at 2-0-12, 1360 lb down and 95 lb up at 4-0-12, 1360 lb down and 95 lb up at 6-0-12, 1360 lb down and 95 lb up at 8-0-12, 1360 lb down and 95 lb up at 10-0-12, 1360 lb down and 95 lb up at 12-0-12, 1360 lb down and 95 lb up at 14-0-12, and 1360 lb down and 95 lb up at 16-0-12, and 1360 lb down and 95 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-4=-60, 4-6=-60, 2-6=-20



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Continued on page 2

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIT/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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| | | | | | |
|-------------------|----------------|-----------------------------|----------|-----------------|------------------------------------|
| Job J0922-4865 | Truss C1-GR | Truss Type COMMON GIRDER | Qty 1 | Ply 2 | Lot 38 Liberty Meadow I56917884 |
|-------------------|----------------|-----------------------------|----------|-----------------|------------------------------------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 2
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Job Reference (optional)

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-1290(F) 11=-1290(F) 12=-1290(F) 13=-1290(F) 14=-1290(F) 15=-1290(F) 16=-1290(F) 17=-1290(F) 18=-1290(F)

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

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



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| | | | | | |
|-------------------|---------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss C1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917885 |
|-------------------|---------------|---------------------|----------|----------|------------------------------------|

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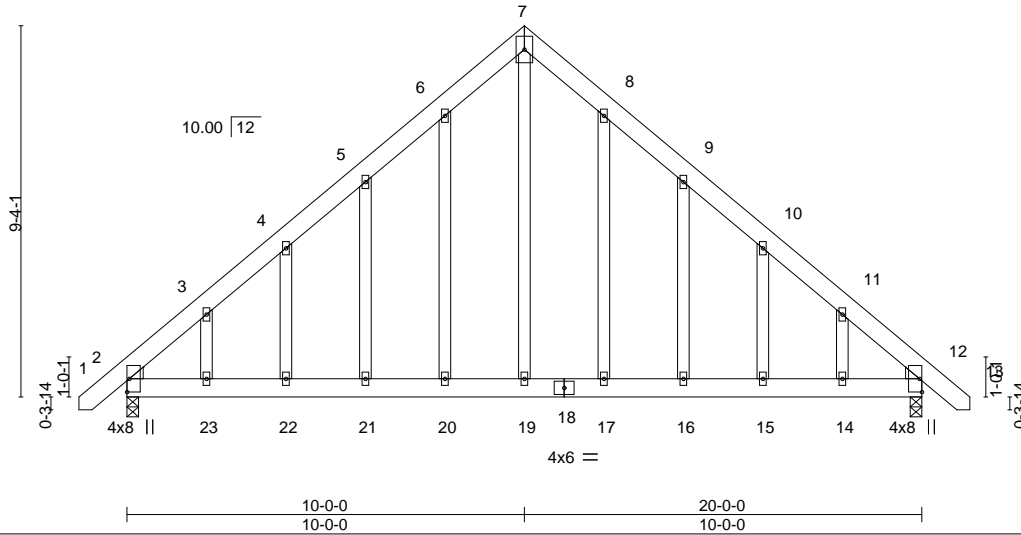
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:54 2023 Page 1

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5x8 ||

Scale = 1:58.0



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|-------------|--------|-----|----------------|-------------|
| 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 0.20 | Vert(LL) | -0.09 15-16 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.40 | Vert(CT) | -0.14 15-16 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.40 | Horz(CT) | 0.01 12 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.15 21-22 | >999 | 240 | | |
| | | | | | | | | Weight: 180 lb | FT = 20% |

LUMBER-

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

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

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

REACTIONS.

(size) 12=0-3-8, 2=0-3-8
 Max Horz 2=-276(LC 10)
 Max Uplift 12=-169(LC 13), 2=-169(LC 12)
 Max Grav 12=860(LC 1), 2=860(LC 1)

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

TOP CHORD 2-3=-870/130, 3-4=-749/172, 4-5=-705/231, 5-6=-739/304, 6-7=-776/383, 7-8=-776/383,
 8-9=-739/304, 9-10=-705/231, 10-11=-749/172, 11-12=-870/129
 BOT CHORD 2-23=-39/567, 22-23=-39/567, 21-22=-39/567, 20-21=-39/567, 19-20=-39/567,
 17-19=-39/567, 16-17=-39/567, 15-16=-39/567, 14-15=-39/567, 12-14=-39/567
 WEBS 7-19=-309/660

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=169, 2=169.



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

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



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| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss G1 | Truss Type COMMON | Qty 6 | Ply 1 | Lot 38 Liberty Meadow 156917886 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

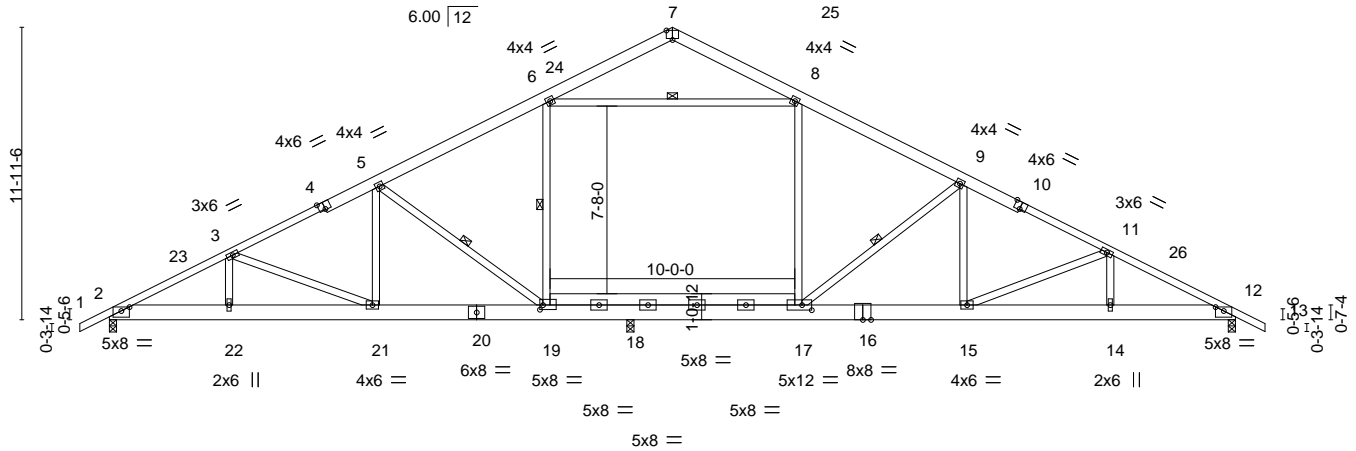
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ID:aTXuLo?nW09qtpROz2WQ0wydkZW-?SJBHDV86OXPe2MabpFYjJiO5BGPXLJOGG2bgzfKAI
 -1-2-8 4-10-10 8-8-12 10-10-10 17-10-10 23-0-0 27-10-10 34-10-10 40-10-10 46-0-0 47-2-8
 1-2-8 4-10-10 3-10-2 2-1-14 7-0-0 5-1-6 4-10-10 7-0-0 6-0-0 5-1-6 1-2-8

4x6 =

Scale = 1:94.1



4-10-10 10-10-10 17-10-10 21-1-10 28-1-5 34-10-10 40-10-10 46-0-0
 4-10-10 6-0-0 7-0-0 3-3-0 6-11-11 6-9-5 6-0-0 5-1-6

| | |
|------------------------|---|
| Plate Offsets (X, Y)-- | [2:0-4-0,0-1-15], [4:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [12:0-4-0,0-1-15], [17:0-4-12,0-2-8], [19:0-1-8,0-2-4] |
|------------------------|---|

| 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 0.26 | Vert(LL) | -0.24 | 15-17 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.44 | Vert(CT) | -0.40 | 15-17 | >739 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.42 | Horz(CT) | 0.03 | 12 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.16 | 15-17 | >999 | 240 | Weight: 376 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|--|
| TOP CHORD 2x6 SP No.1 *Except* 1-4,10-13: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 3-11-0 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: |
| BOT CHORD 2x8 SP 2400F 2 OE *Except* 17-19: 2x6 SP No.1 | 8-5-9 oc bracing: 18-19 7-9-4 oc bracing: 17-18. |
| WEBS 2x4 SP No.2 | WEBS 1 Row at midpt 9-17, 6-19, 5-19, 6-8 |

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 18=0-3-8
 Max Horz 2=156(LC 11)
 Max Uplift 2=-66(LC 12), 12=-168(LC 13), 18=-120(LC 12)
 Max Grav 2=1250(LC 1), 12=1365(LC 24), 18=1447(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2175/456, 3-5=-1759/445, 5-6=-1250/413, 6-7=-378/186, 7-8=-350/181,
 8-9=-1235/382, 9-11=-2082/468, 11-12=-2367/451
 BOT CHORD 2-22=-304/1880, 21-22=-304/1880, 19-21=-194/1515, 18-19=-52/1043, 17-18=-48/1031,
 15-17=-245/1812, 14-15=-325/2045, 12-14=-325/2045
 WEBS 9-17=-1058/260, 9-15=-26/593, 5-19=-875/234, 5-21=-23/446, 3-21=-393/120,
 11-15=-281/104, 6-8=-846/319

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-7 to 3-2-5, Interior(1) 3-2-5 to 23-0-0, Exterior(2) 23-0-0 to 27-4-13, Interior(1) 27-4-13 to 47-2-7 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=168, 18=120.



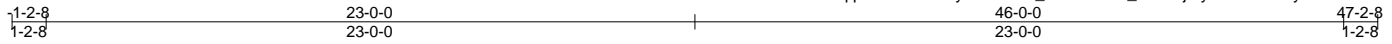
| | | | | | |
|-------------------|---------------|------------------------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss G1GE | Truss Type COMMON SUPPORTED GAB | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917887 |
|-------------------|---------------|------------------------------------|----------|----------|------------------------------------|

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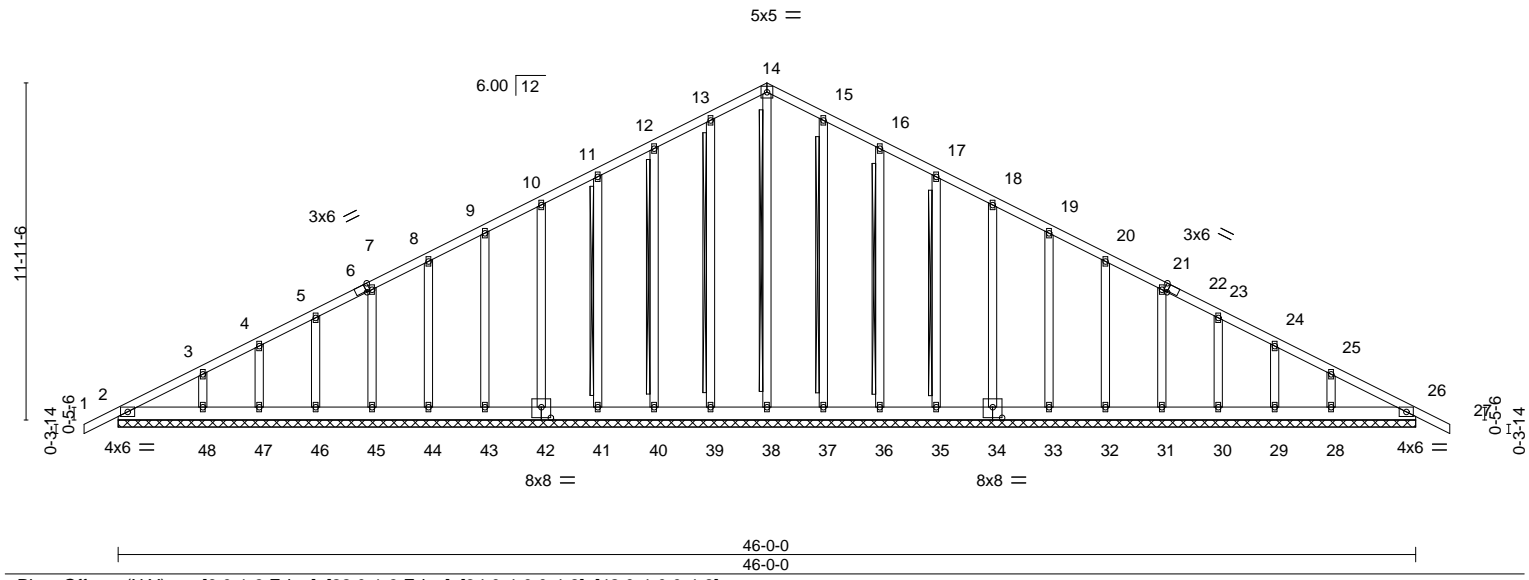
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:00 2023 Page 1

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Job Reference (optional)



Scale = 1:81.7



| 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 0.07 | Vert(LL) | -0.00 | 27 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.03 | Vert(CT) | -0.00 | 27 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.18 | Horz(CT) | 0.01 | 26 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |

Weight: 376 lb FT = 20%

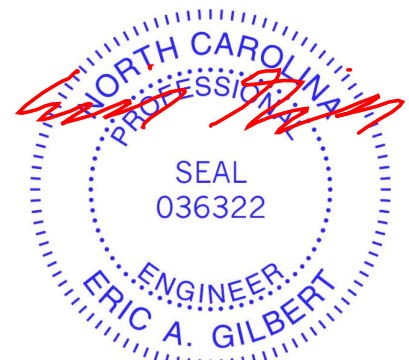
| LUMBER- | BRACING- |
|-----------------------|--|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | WEBS T-Brace: 2x4 SPF No.2 - 14-38, 13-39, 12-40, 11-41, 15-37, 16-36, 17-35 |

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 46-0-0.
 (lb) - Max Horz 2=245(LC 16)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26
 Max Grav All reactions 250 lb or less at joint(s) 2, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-322/96, 11-12=-106/275, 12-13=-127/337, 13-14=-146/387, 14-15=-146/387, 15-16=-127/337, 16-17=-106/275
 BOT CHORD 2-48=-82/271, 47-48=-82/271, 46-47=-82/271, 45-46=-82/271, 44-45=-82/271, 43-44=-82/271, 42-43=-82/271, 41-42=-82/271, 40-41=-82/271, 39-40=-82/271, 38-39=-82/271, 37-38=-82/271, 36-37=-82/271, 35-36=-82/271, 34-35=-82/271, 33-34=-82/271, 32-33=-82/271, 31-32=-82/271, 30-31=-82/271, 29-30=-82/271, 28-29=-82/271, 26-28=-82/271

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

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

| | | | | | |
|-------------------|-------------|--------------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss J1 | Truss Type MONO TRUSS | Qty 4 | Ply 1 | Lot 38 Liberty Meadow I56917888 |
|-------------------|-------------|--------------------------|----------|----------|------------------------------------|

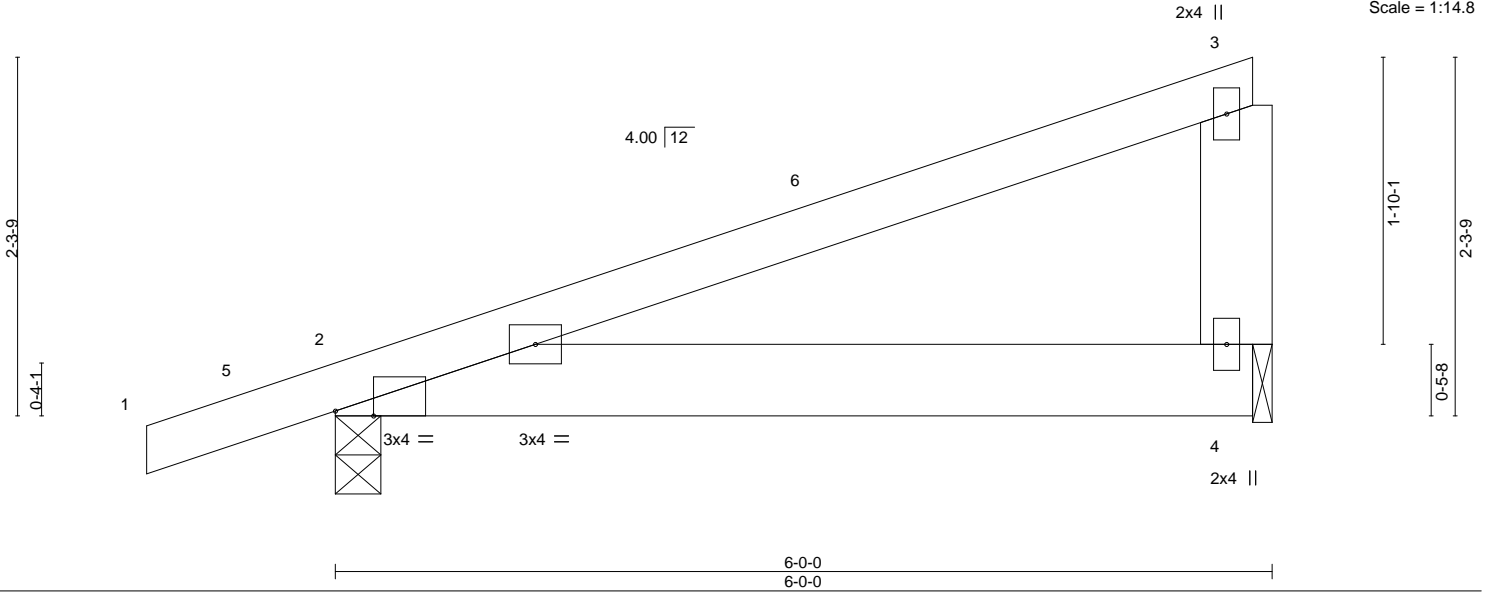
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:02 2023 Page 1

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Scale = 1:14.8



| Plate Offsets (X,Y)-- [2:0-2-15,Edge] | | LOADING (psf) | | SPACING- | | CSI. | | DEFL. | | | | PLATES | | GRIP | |
|---------------------------------------|-------|-----------------|-----------------|----------|------|----------|-------|-------|------|-----|---------------|----------|--|------|--|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.41 | Vert(LL) | -0.01 | 2-4 | >999 | 360 | MT20 | 244/190 | | | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | -0.03 | 2-4 | >999 | 240 | | | | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | n/a | n/a | | | | | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | Wind(LL) | 0.03 | 2-4 | >999 | 240 | Weight: 29 lb | FT = 20% | | | |

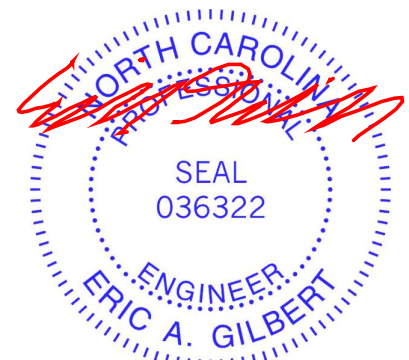
| LUMBER- | | BRACING- | |
|-----------|-------------|-----------|---|
| TOP CHORD | 2x4 SP No.1 | TOP CHORD | Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD | 2x6 SP No.1 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 2x6 SP No.1 | | |

REACTIONS. (size) 2=0-3-8, 4=0-1-8
 Max Horz 2=83(LC 8)
 Max Uplift 2=-132(LC 8), 4=-90(LC 8)
 Max Grav 2=316(LC 1), 4=215(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * 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.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=132.



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| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 38 Liberty Meadow | I56917889 |
| J0922-4865 | J2 | MONOPIITCH | 6 | 1 | | |

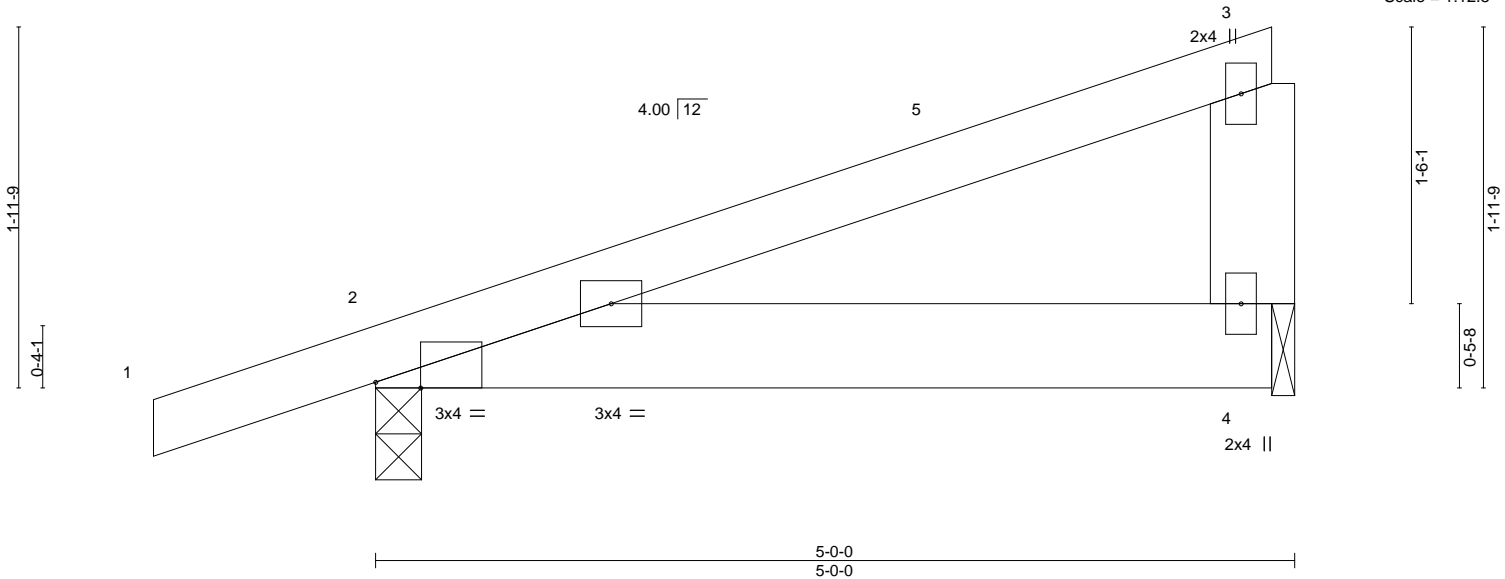
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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:03 2023 Page 1

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Scale = 1:12.5



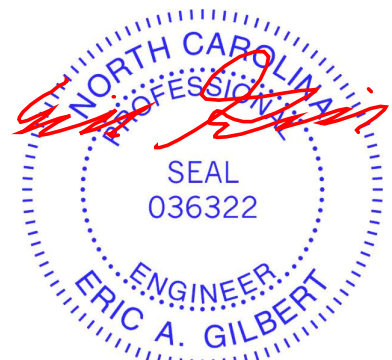
| Plate Offsets (X,Y)-- | [2:0-2-15,Edge] | | | | | | | PLATES | GRIP |
|-----------------------|-----------------------|-------------|-----------------------|--------|------|-----|---------------|----------------|------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) | l/defl | L/d | | MT20 | 244/190 | |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.26 | Vert(LL) -0.01 | 2-4 | >999 | 360 | | | |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.08 | Vert(CT) -0.01 | 2-4 | >999 | 240 | | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 | | n/a | n/a | | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-P | Wind(LL) 0.01 | 2-4 | >999 | 240 | Weight: 24 lb | FT = 20% | |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x6 SP No.1 | |

REACTIONS. (size) 2=0-3-0, 4=0-1-8
 Max Horz 2=72(LC 8)
 Max Uplift 2=-119(LC 8), 4=-72(LC 8)
 Max Grav 2=277(LC 1), 4=174(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * 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.
 - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=-119.



March 1, 2023

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| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

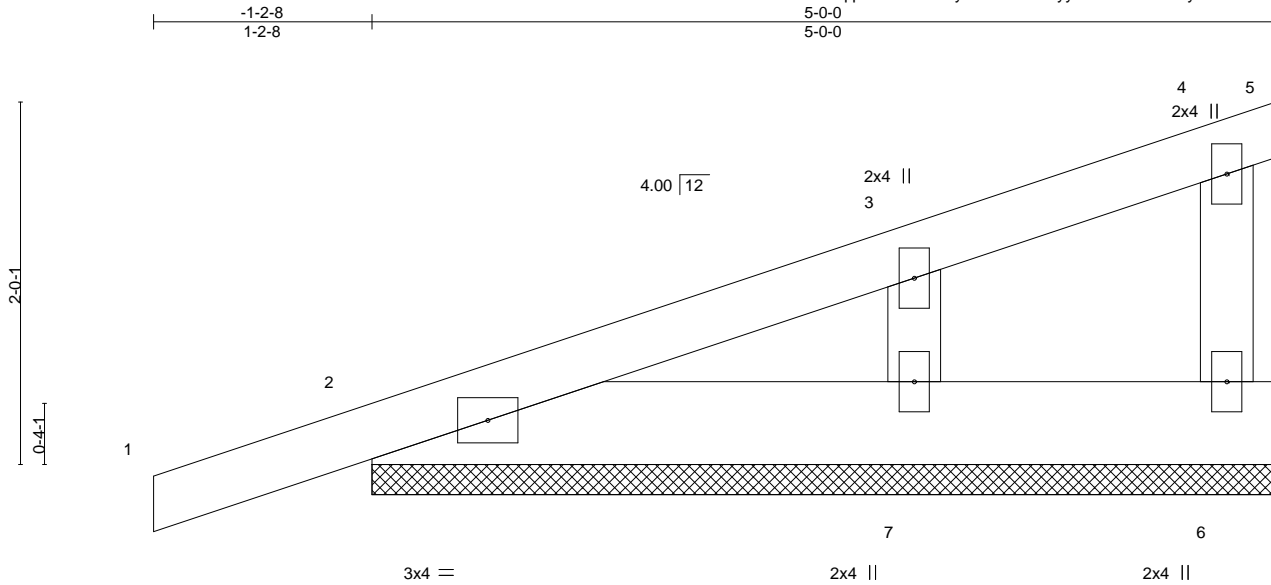
| | | | | | |
|-------------------|---------------|-----------------------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss J2GE | Truss Type MONOPITCH SUPPORTED | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917890 |
|-------------------|---------------|-----------------------------------|----------|----------|------------------------------------|

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Job Reference (optional)



Scale = 1:12.7

| 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 0.07 | Vert(LL) | 0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | 0.00 | 1 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.03 | Horz(CT) | -0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | |
| | | | | | | | | Weight: 24 lb | FT = 20% | |

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

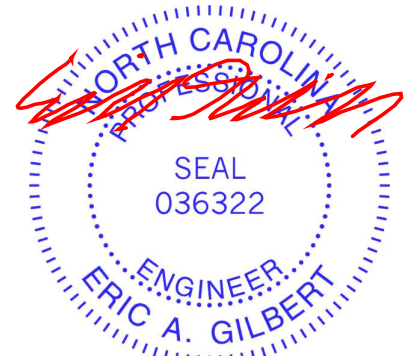
BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-0-0.
(lb) - Max Horz 2=104(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 2, 7
Max Grav All reactions 250 lb or less at joint(s) 5, 6, 2, 7

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 6, 2, 7.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



March 1, 2023

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

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



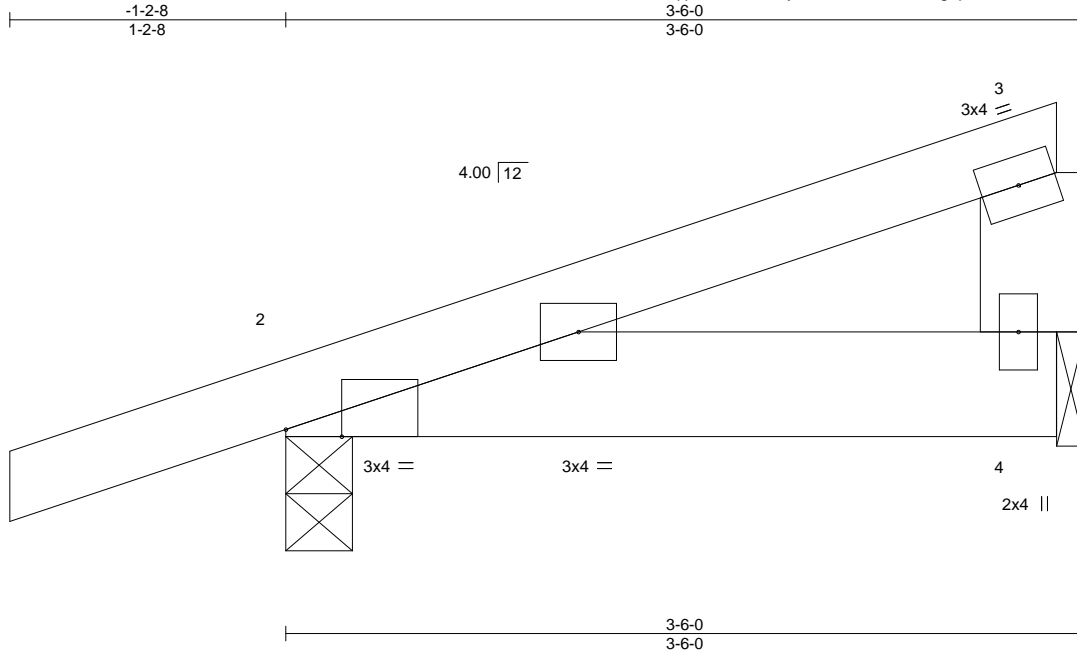
818 Soundside Road
Edenton, NC 27932

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|-------------------|-------------|------------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss J3 | Truss Type MONOPICH | Qty 9 | Ply 1 | Lot 38 Liberty Meadow 156917891 |
|-------------------|-------------|------------------------|----------|----------|------------------------------------|

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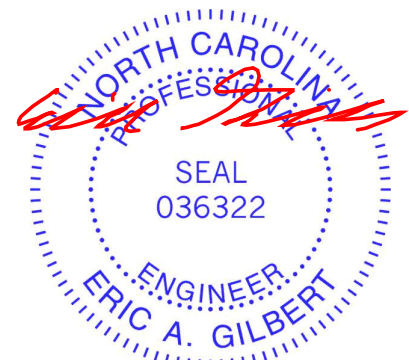
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-----------------------------|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.09 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.03 | Vert(LL) -0.00 2-4 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.01 | Vert(CT) -0.00 2-4 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-P | Horz(CT) 0.00 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.00 2 **** 240 | Weight: 17 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x6 SP No.1 | |

REACTIONS. (size) 2=0-3-8, 4=0-1-8
 Max Horz 2=56(LC 8)
 Max Uplift 2=69(LC 8), 4=14(LC 12)
 Max Grav 2=224(LC 1), 4=107(LC 1)

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * 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.
 - 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



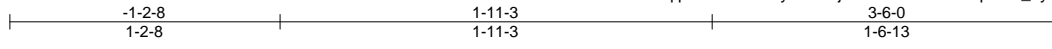
March 1, 2023

| | | | | | |
|-------------------|---------------|-----------------------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss J3GE | Truss Type MONOPITCH SUPPORTED | Qty 2 | Ply 1 | Lot 38 Liberty Meadow I56917892 |
|-------------------|---------------|-----------------------------------|----------|----------|------------------------------------|

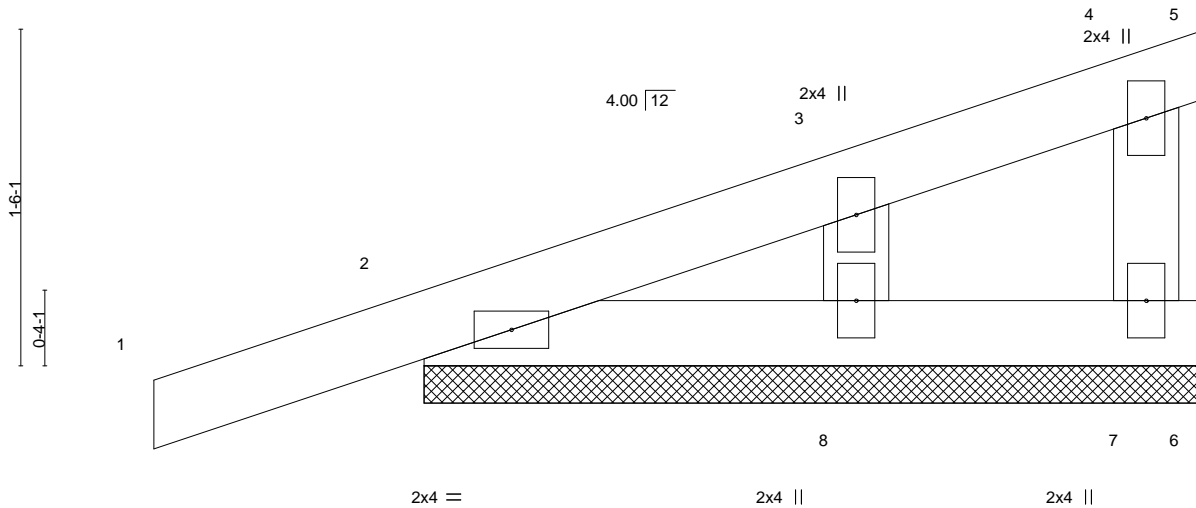
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Scale = 1:10.3



| 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 0.07 | Vert(LL) | 0.00 | 4 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | 0.00 | 4 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.02 | Horz(CT) | 0.00 | | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | Weight: 15 lb | FT = 20% |

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

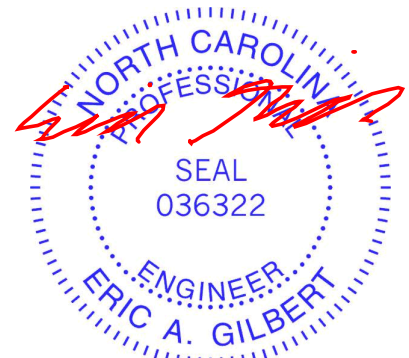
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=3-6-0, 2=3-6-0, 8=3-6-0
 Max Horz 2=79(LC 8)
 Max Uplift 7=26(LC 8), 2=91(LC 8), 8=38(LC 12)
 Max Grav 7=52(LC 1), 2=164(LC 1), 8=125(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 8.



March 1, 2023

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

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



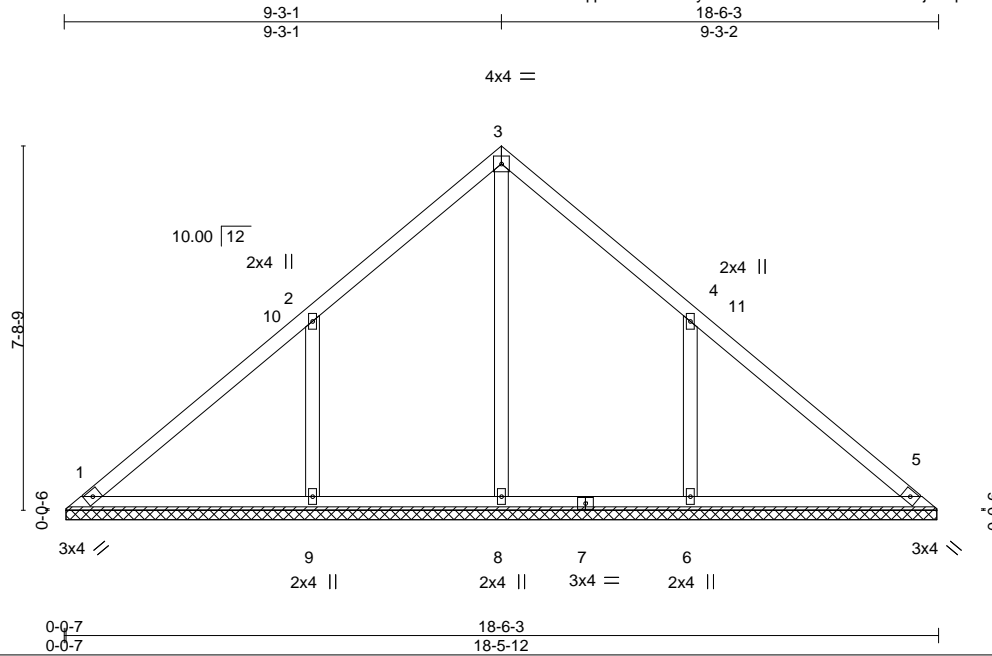
818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss V1 | Truss Type VALLEY | Qty 1 | Ply 1 | Lot 38 Liberty Meadow 156917893 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

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ID:aTXuLo?nW09qtpROz2WQ0wydkZW-BaTMazd1Xmwr2KOUjPVqV1Hm3X0zUZWxwUQ7UXzfKAX



Scale = 1:48.8

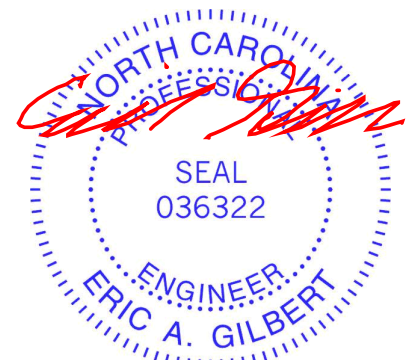
| | | | | | |
|-----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X,Y)-- | [4:0-0-0,0-0-0] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.23 | Vert(LL) n/a - n/a 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.18 | Vert(CT) n/a - n/a 999 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.13 | Horz(CT) 0.00 5 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 84 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | |

REACTIONS. All bearings 18-5-5.
 (lb) - Max Horz 1=177(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-172(LC 12), 6=-172(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=411(LC 22), 9=560(LC 19), 6=560(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=-428/293, 4-6=-428/292

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 9-3-1, Exterior(2) 9-3-1 to 13-7-14, Interior(1) 13-7-14 to 18-1-6 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 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, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=172, 6=172.



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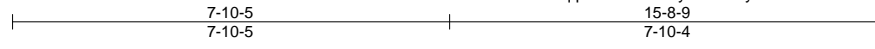
| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss V2 | Truss Type VALLEY | Qty 1 | Ply 1 | Lot 38 Liberty Meadow 156917894 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

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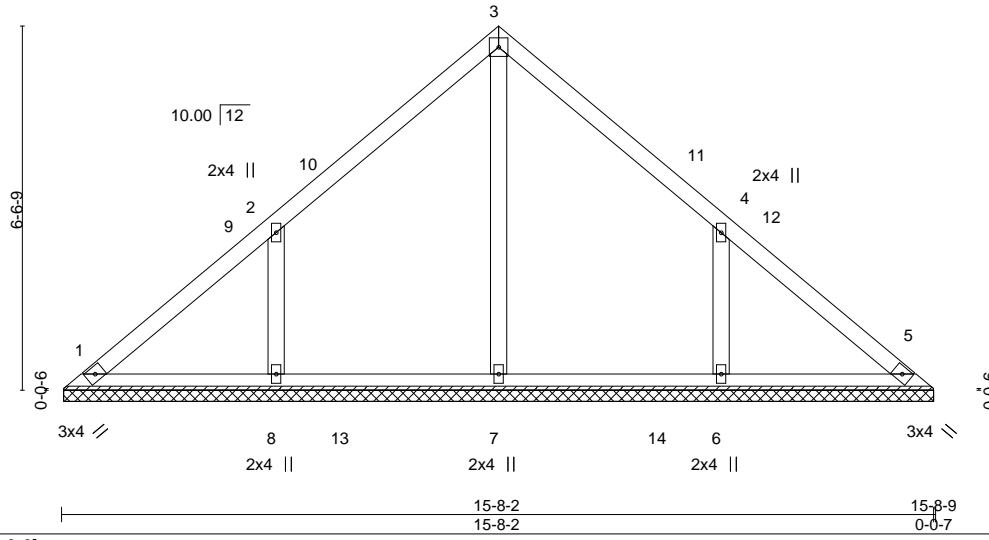
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Job Reference (optional)



4x4 =

Scale = 1:41.4



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

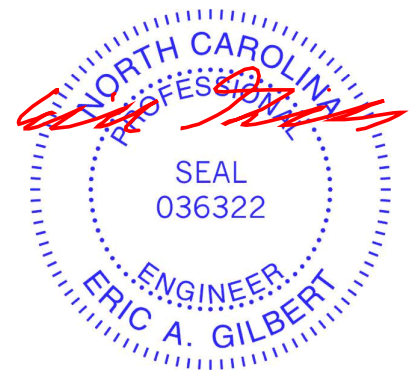
| | | | | | |
|----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.15 | Vert(LL) n/a - n/a 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.17 | Vert(CT) n/a - n/a 999 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.10 | Horz(CT) 0.00 5 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 69 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | |

REACTIONS. All bearings 15-7-11.
 (lb) - Max Horz 1=149(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=143(LC 12), 6=142(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=411(LC 19), 8=429(LC 19), 6=429(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-356/254, 4-6=-356/254

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-10-5, Exterior(2) 7-10-5 to 12-3-1, Interior(1) 12-3-1 to 15-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 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, with BCDL = 10.0psf.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=143, 6=142.



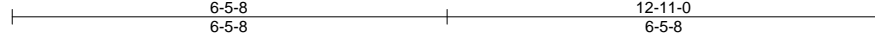
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| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY TRENCO <small>A MiTek Affiliate</small></p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|--|

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss V3 | Truss Type VALLEY | Qty 1 | Ply 1 | Lot 38 Liberty Meadow 156917895 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:11 2023 Page 1

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4x4 =

Scale = 1:34.2

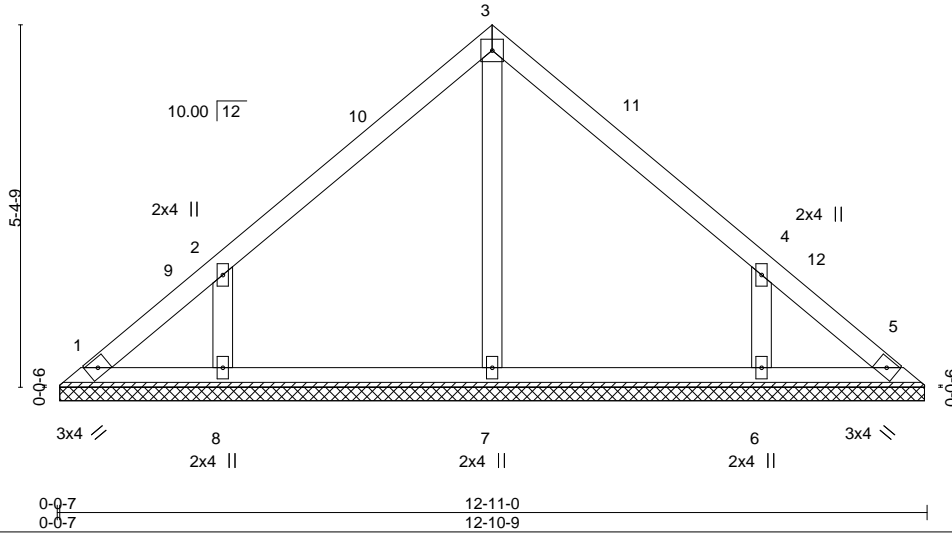


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-------------|
| 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 0.13 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.09 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.07 | Horz(CT) | 0.00 | 5 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | Weight: 54 lb | FT = 20% |

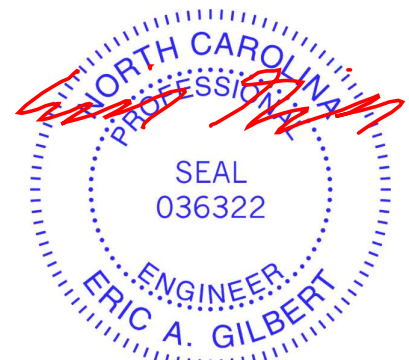
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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 12-10-1.
 (lb) - Max Horz 1=-121(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-124(LC 12), 6=-124(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=330(LC 19), 6=330(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=-314/239, 4-6=-314/239

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-5-8, Exterior(2) 6-5-8 to 10-10-5, Interior(1) 10-10-5 to 12-6-3 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=124, 6=124.
 - 6) Non Standard bearing condition. Review required.



March 1, 2023

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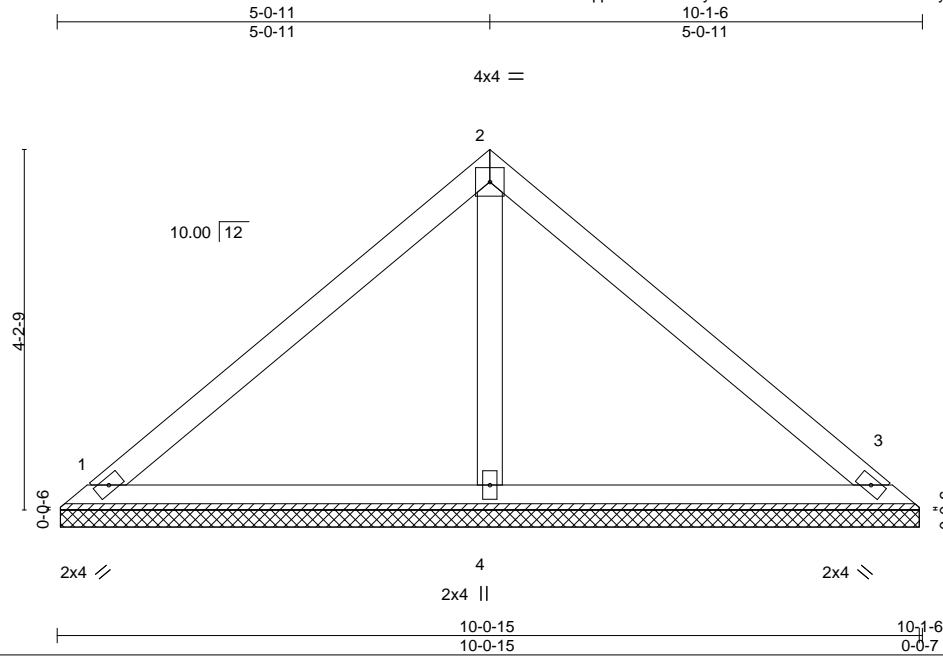


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|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss V4 | Truss Type VALLEY | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917896 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:13 2023 Page 1

ID:aTXuLo?nW09qtpROz2WQ0wydkZW-XXHFehhALiY885GRWY5?C5_dqYjP9szg4m8u9kzfkAS



Scale = 1:26.9

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.23 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.16 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.06 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | | | | | Weight: 38 lb | FT = 20% |
| | Code IRC2015/TPI2014 | | | | | | | |

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

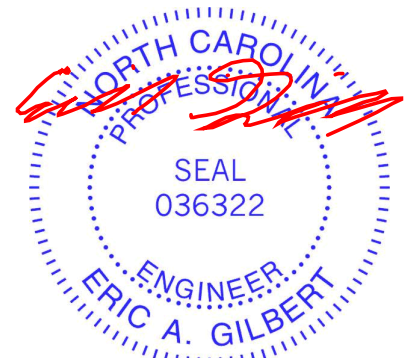
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=10-0-8, 3=10-0-8, 4=10-0-8
 Max Horz 1=93(LC 11)
 Max Uplift 1=22(LC 13), 3=30(LC 13)
 Max Grav 1=199(LC 1), 3=199(LC 1), 4=347(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 Vasd=103mph; TC DL=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) Gable requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 1, 2023

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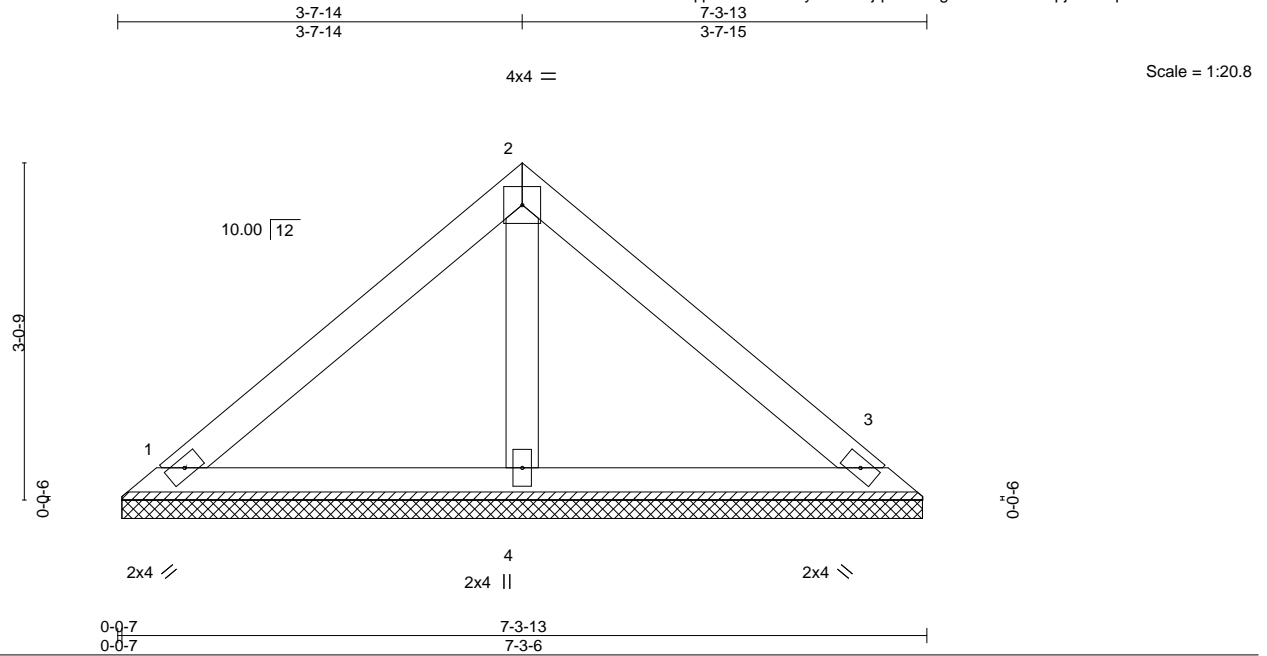


818 Soundside Road
 Edenton, NC 27932

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|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss V5 | Truss Type VALLEY | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917897 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:14 2023 Page 1
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| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.15 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.08 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.02 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-P | | | | | Weight: 27 lb | FT = 20% |
| | Code IRC2015/TPI2014 | | | | | | | |

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=7-2-14, 3=7-2-14, 4=7-2-14
 Max Horz 1=65(LC 8)
 Max Uplift 1=23(LC 13), 3=29(LC 13)
 Max Grav 1=151(LC 1), 3=151(LC 1), 4=220(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 Vasd=103mph; TC DL=6.0psf; BC DL=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.



March 1, 2023

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



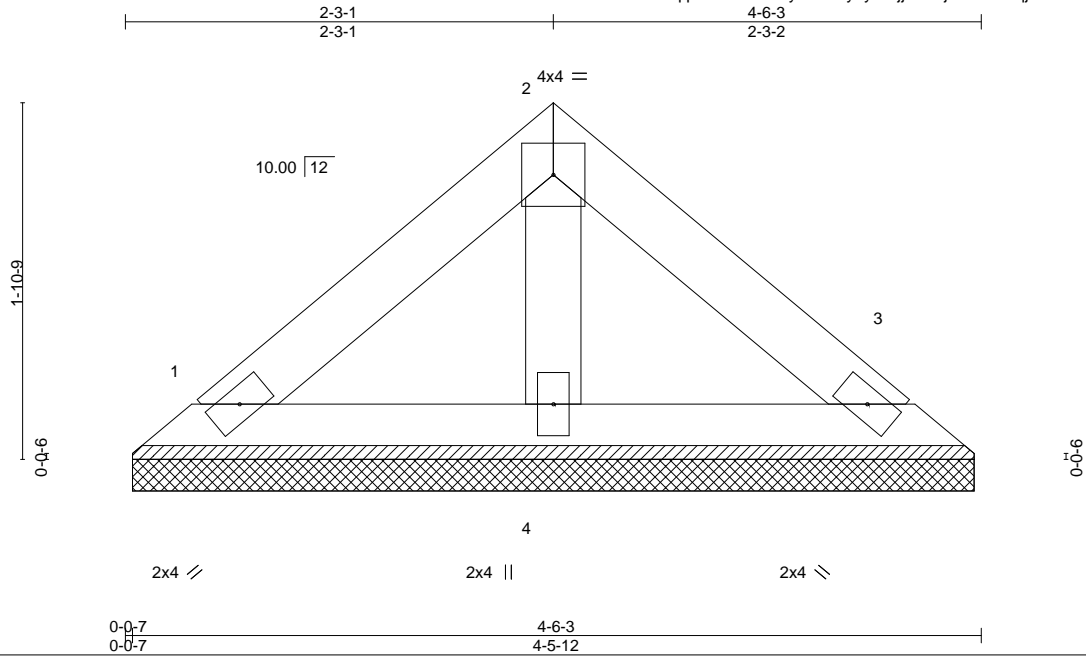
818 Soundside Road
 Edenton, NC 27932

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|-------------------|-------------|----------------------|----------|----------|------------------------------------|
| Job J0922-4865 | Truss V6 | Truss Type VALLEY | Qty 1 | Ply 1 | Lot 38 Liberty Meadow 156917898 |
|-------------------|-------------|----------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:16 2023 Page 1

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Scale = 1:12.2

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.05 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.03 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.01 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-P | | | | | Weight: 16 lb | FT = 20% |
| | Code IRC2015/TPI2014 | | | | | | | |

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

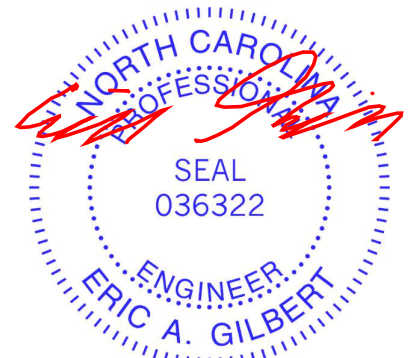
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-6-3 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-5-5, 3=4-5-5, 4=4-5-5
 Max Horz 1=37(LC 8)
 Max Uplift 1=13(LC 13), 3=16(LC 13)
 Max Grav 1=86(LC 1), 3=86(LC 1), 4=125(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 Vasd=103mph; TC DL=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) Gable requires continuous bottom chord bearing.
- 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



March 1, 2023

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

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

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

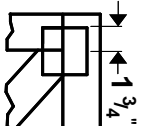
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



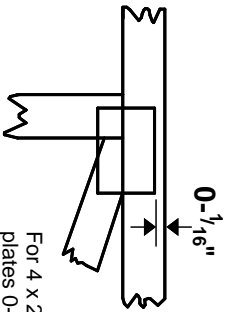
818 Soundside Road
 Edenton, NC 27932

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

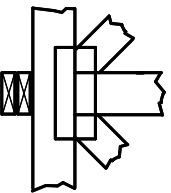
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



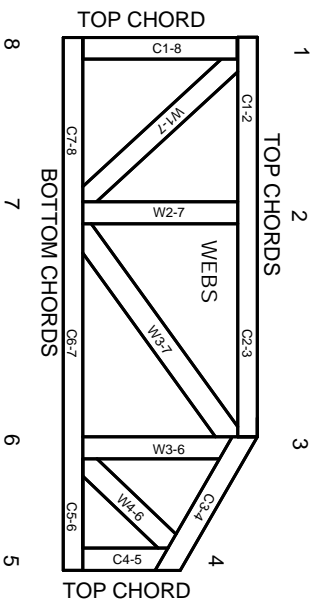
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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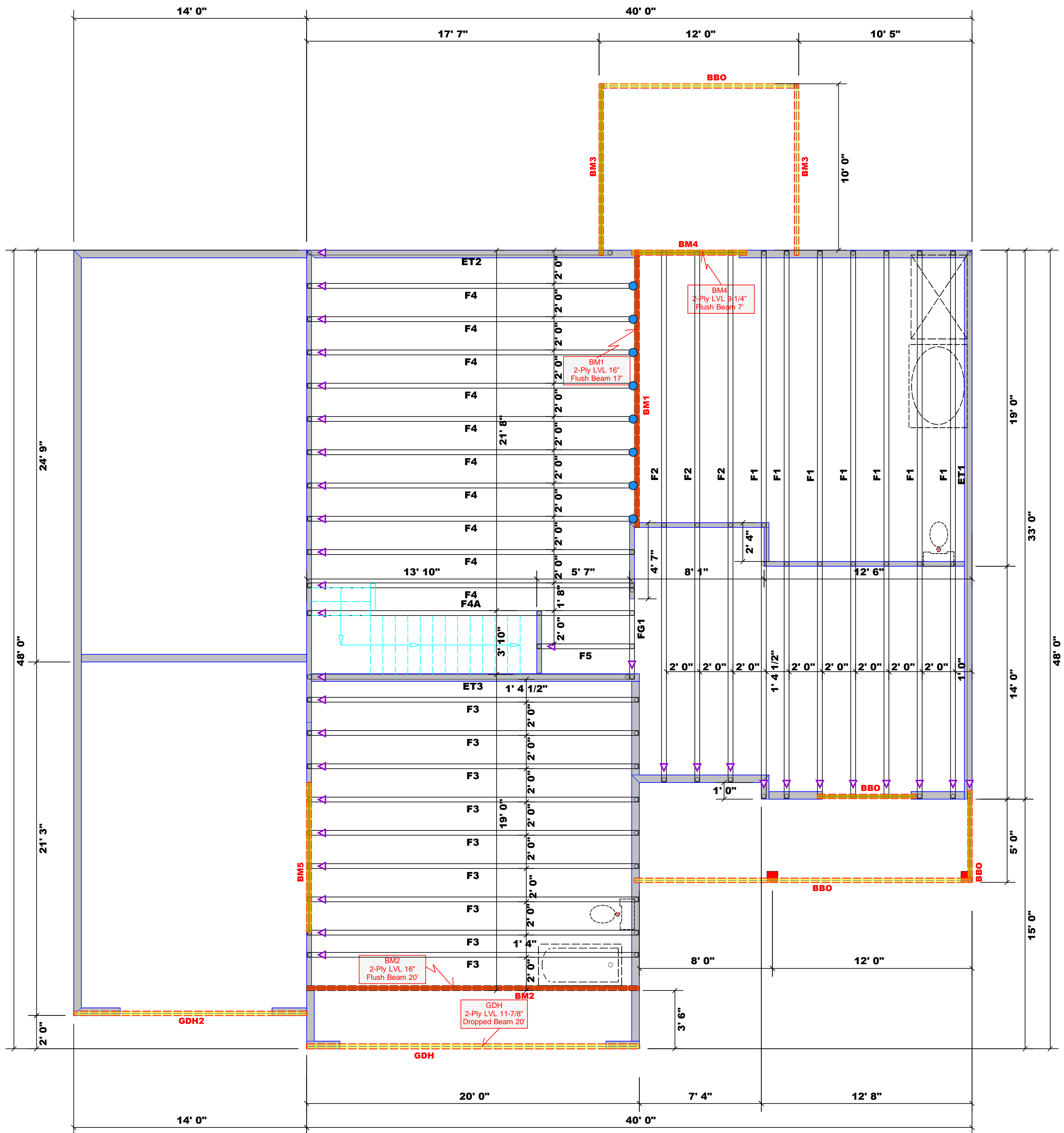
MITek Engineering Reference Sheet: MII-7473 rev. 5/19/2020



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



| Products | | | | | |
|----------|--------|-----------------------------|-------|---------|----------|
| PlotID | Length | Product | Plies | Net Qty | Fab Type |
| BM1 | 17' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 | FF |
| BM2 | 20' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 | FF |
| BM3 | 12' 0" | 2x10 SP No.2 | 2 | 4 | FF |
| BM4 | 7' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 | FF |
| BM5 | 9' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 | FF |
| GDH | 20' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 | FF |
| GDH2 | 14' 0" | 2x12 SPF No.2 | 2 | 2 | FF |

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

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

| Connector Information | | | | Nail Information | |
|-----------------------|---------|-------|-----|------------------|-------------------------|
| Sym | Product | Manuf | Qty | Supported Member | Header / Truss |
| ● | HUS410 | USP | 8 | Varies | 16d/3-1/2" / 16d/3-1/2" |

- Plumbing Drop Notes**
- Plumbing drop locations shown are NOT exact.
 - Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
 - Adjust spacing as needed not to exceed 24"oc.

▲ = Indicates Left End of Truss (Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

LOAD CHART FOR JACK STUDS
(BASED ON TABLES R502.5(1) & (2))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADERS

| END REACTION (UP TO) 2x12 HEADERS | END REACTION (UP TO) 2x10 HEADERS | END REACTION (UP TO) 2x8 HEADERS | END REACTION (UP TO) 2x6 HEADERS |
|-----------------------------------|-----------------------------------|----------------------------------|----------------------------------|
| 1700 | 2550 | 3400 | 4250 |
| 3400 | 5100 | 6800 | 8500 |
| 5100 | 7650 | 10200 | 12900 |
| 6800 | 10200 | 13600 | 17100 |
| 8500 | 12750 | 17000 | 21300 |
| 10200 | 15300 | | |
| 11900 | | | |
| 13600 | | | |
| 15300 | | | |

| | | | |
|------------------|--|------------------|-----------------------|
| BUILDER | Precision Custom Homes and Renovations | COUNTY | Cameron / Harnett |
| JOB NAME | Lot 38 Liberty Meadow | ADDRESS | Lot 38 Liberty Meadow |
| PLAN | Liberty 2.0 w/ CP | MODEL | Floor |
| SEAL DATE | N/A | DATE REV. | 03/01/23 |
| QUOTE # | | DRAWN BY | David Landry |
| JOB # | J0922-4866 | SALESMAN | Neil Baggett |

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 BCSB-1 and BCSB-3 provided with the truss delivery package or online @ sbcindustry.com

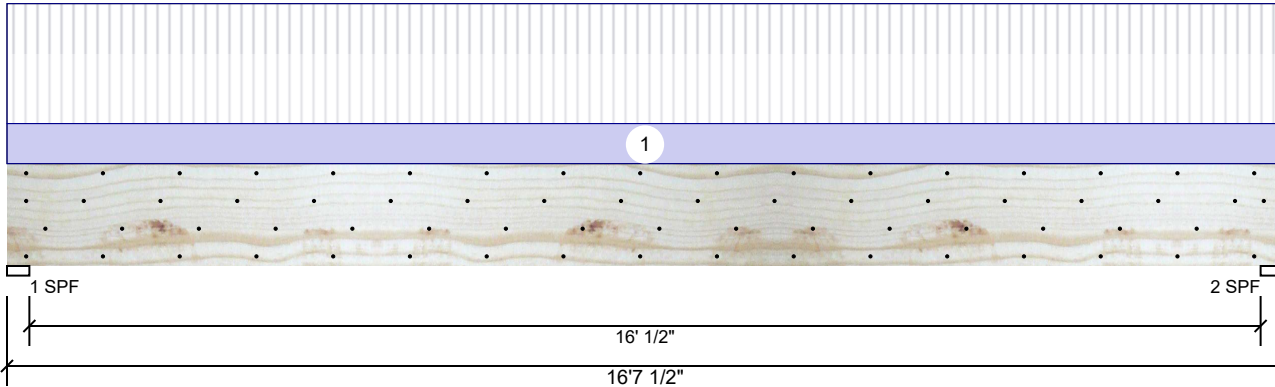
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions 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

comTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

| | |
|---------------------|---------------|
| Type: | Girder |
| Plies: | 2 |
| Moisture Condition: | Dry |
| Deflection LL: | 480 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| Temperature: | Temp <= 100°F |

| | |
|----------------|-------------|
| Application: | Floor |
| Design Method: | ASD |
| Building Code: | IBC 2012 |
| Load Sharing: | No |
| Deck: | Not Checked |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 3333 | 1217 | 0 | 0 | 0 |
| 2 | Vertical | 3333 | 1217 | 0 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 3.500" | Vert | 87% | 1217 / 3333 | 4551 | L | D+L |
| 2 - SPF | 3.500" | Vert | 87% | 1217 / 3333 | 4551 | L | D+L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|---------------|------------|---------------|--------------|-------|------|
| Moment | 17931 ft-lb | 8'3 3/4" | 34565 ft-lb | 0.519 (52%) | D+L | L |
| Unbraced | 17931 ft-lb | 8'3 3/4" | 17951 ft-lb | 0.999 (100%) | D+L | L |
| Shear | 4391 lb | 15' | 11947 lb | 0.368 (37%) | D+L | L |
| LL Defl inch | 0.286 (L/678) | 8'3 13/16" | 0.405 (L/480) | 0.707 (71%) | L | L |
| TL Defl inch | 0.391 (L/497) | 8'3 13/16" | 0.809 (L/240) | 0.483 (48%) | D+L | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top must be laterally braced at a maximum of 6'5 3/4" o.c.
- 6 Bottom must be laterally braced at end 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 | | | Near Face | 134 PLF | 401 PLF | 0 PLF | 0 PLF | 0 PLF | F4 |
| | Self Weight | | | | 12 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 11/3/2024

Manufacturer Info

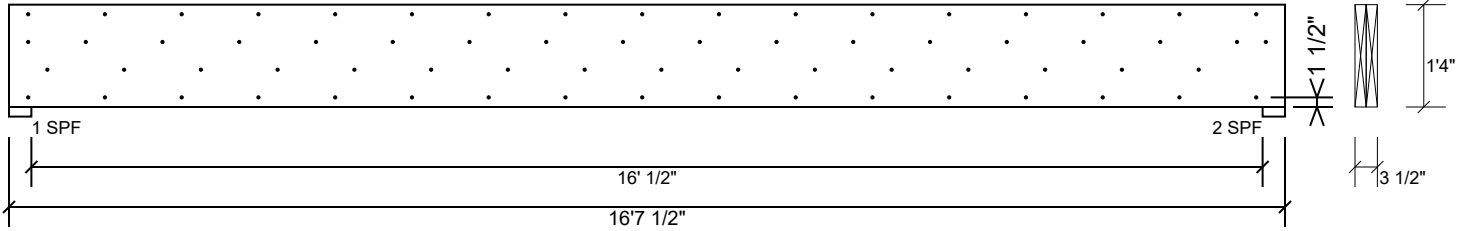
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
www.metsawood.com/us

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



BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

| | |
|--------------------------|-----------|
| Capacity | 81.7 % |
| Load | 267.5 PLF |
| Yield Limit per Foot | 327.4 PLF |
| Yield Limit per Fastener | 81.9 lb. |
| Yield Mode | IV |
| Edge Distance | 1 1/2" |
| Min. End Distance | 3" |
| Load Combination | D+L |
| 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 11/3/2024

Manufacturer Info

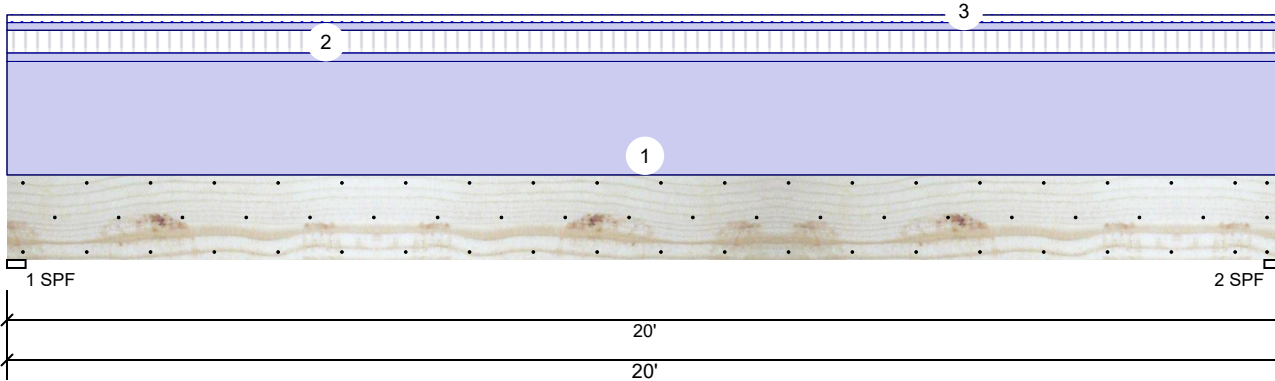
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
www.metsawood.com/us

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 1001 S. Reilly Road, Suite #639
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 USA
 28314
 910-864-TRUS



BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

| | |
|---------------------|---------------|
| Type: | Girder |
| Plies: | 2 |
| Moisture Condition: | Dry |
| Deflection LL: | 480 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| Temperature: | Temp <= 100°F |

| | |
|----------------|-------------|
| Application: | Floor |
| Design Method: | ASD |
| Building Code: | IBC 2012 |
| Load Sharing: | No |
| Deck: | Not Checked |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 400 | 2409 | 135 | 0 | 0 |
| 2 | Vertical | 400 | 2409 | 135 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-------------|
| 1 - SPF | 3.500" | Vert | 54% | 2409 / 401 | 2811 | L | D+0.75(L+S) |
| 2 - SPF | 3.500" | Vert | 54% | 2409 / 401 | 2811 | L | D+0.75(L+S) |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|--------------|-------------|------|
| Moment | 13439 ft-lb | 10' | 34565 ft-lb | 0.389 (39%) | D+L | L |
| Unbraced | 13439 ft-lb | 10' | 13492 ft-lb | 0.996 (100%) | D+L | L |
| Shear | 2461 lb | 18'4 1/2" | 11947 lb | 0.206 (21%) | D+L | L |
| LL Defl inch | 0.059 (L/3960) | 10' 1/16" | 0.489 (L/480) | 0.121 (12%) | 0.75(L+S) | L |
| TL Defl inch | 0.415 (L/565) | 10' 1/16" | 0.978 (L/240) | 0.425 (42%) | D+0.75(L+S) | L |

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at a maximum of 8'9 7/16" o.c.
- Bottom must be laterally braced at end bearings.
- 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 | 200 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above, C1GE |
| 2 | Tie-In | 0-0-0 to 20-0-0 | 1-0-0 | Far Face | 15 PSF | 40 PSF | 0 PSF | 0 PSF | 0 PSF | Floor Load |
| 3 | Tie-In | 0-0-0 to 20-0-0 | 0-6-0 | Near Face | 27 PSF | 0 PSF | 27 PSF | 0 PSF | 0 PSF | J3 |
| | Self Weight | | | | 12 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

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

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- 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 11/3/2024

Manufacturer Info

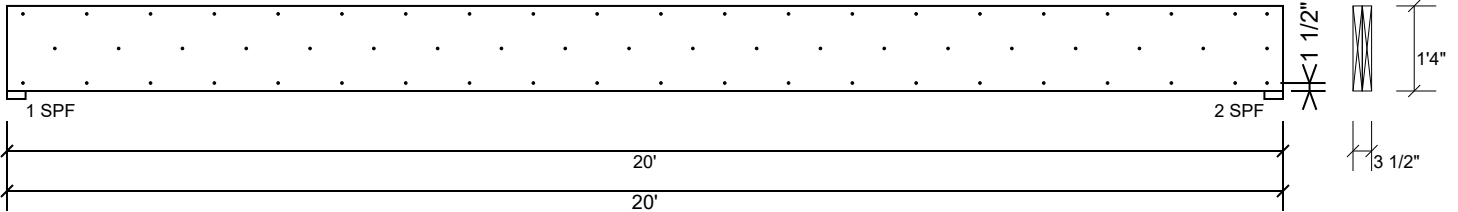
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BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

| | |
|--------------------------|-----------|
| Capacity | 11.2 % |
| Load | 27.5 PLF |
| Yield Limit per Foot | 245.6 PLF |
| Yield Limit per Fastener | 81.9 lb. |
| Yield Mode | IV |
| Edge Distance | 1 1/2" |
| Min. End Distance | 3" |
| Load Combination | D+L |
| 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 11/3/2024

Manufacturer Info

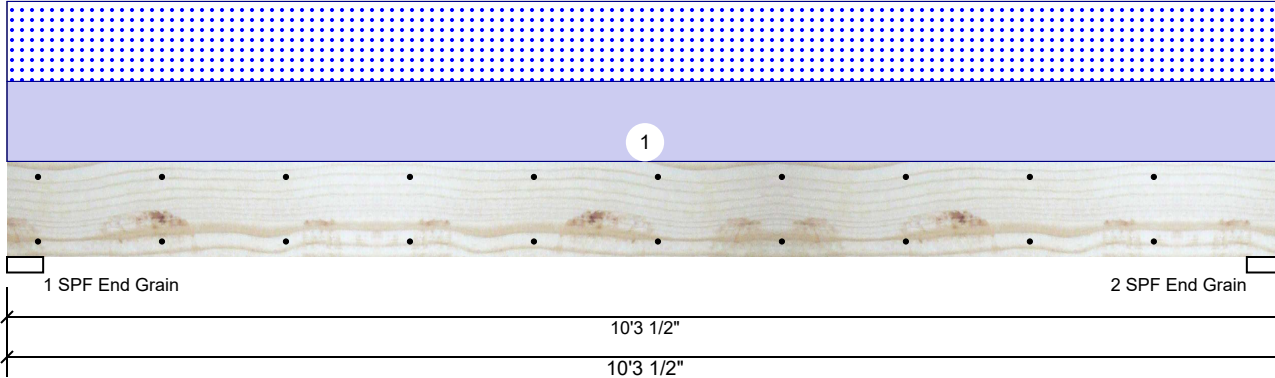
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BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Member Information

| | | | |
|---------------------|---------------|----------------|-------------|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC 2012 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | Ceiling: | Gypsum 1/2" |
| Temperature: | Temp <= 100°F | | |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 0 | 607 | 607 | 0 | 0 |
| 2 | Vertical | 0 | 607 | 607 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 3.500" | Vert | 27% | 607 / 607 | 1214 | L | D+S |
| 2 - SPF End Grain | 3.500" | Vert | 27% | 607 / 607 | 1214 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment | 2852 ft-lb | 5'1 3/4" | 3946 ft-lb | 0.723 (72%) | D+S | L |
| Unbraced | 2852 ft-lb | 5'1 3/4" | 2937 ft-lb | 0.971 (97%) | D+S | L |
| Shear | 964 lb | 1' 3/4" | 2872 lb | 0.336 (34%) | D+S | L |
| LL Defl inch | 0.090 (L/1317) | 5'1 3/4" | 0.246 (L/480) | 0.365 (36%) | S | L |
| TL Defl inch | 0.179 (L/658) | 5'1 3/4" | 0.328 (L/360) | 0.547 (55%) | D+S | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 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 | 118 PLF | 0 PLF | 118 PLF | 0 PLF | 0 PLF | B2 |

Manufacturer Info

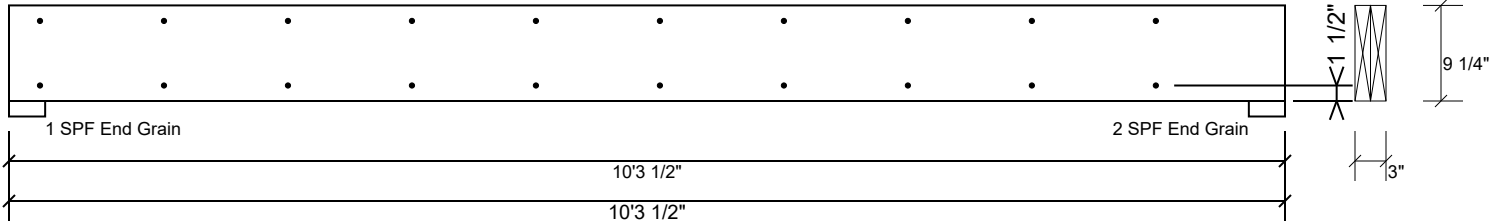
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 USA
 28314
 910-864-TRUS



This design is valid until 11/3/2024

BM3 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 |

Manufacturer Info

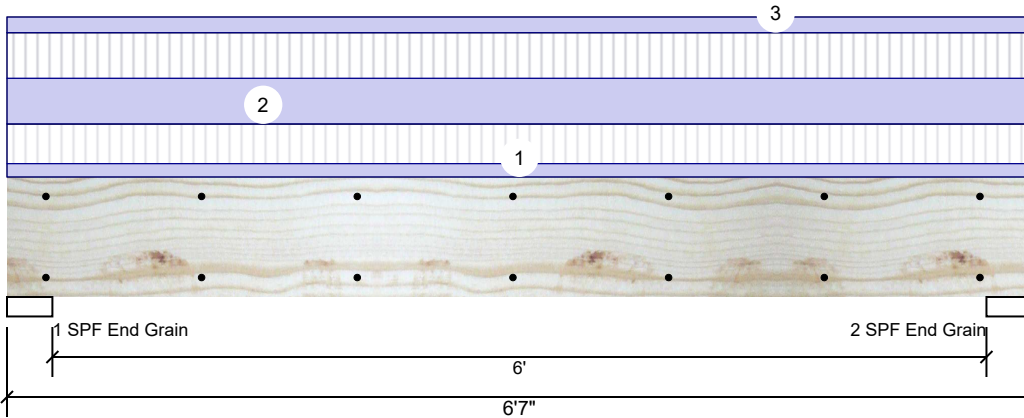
Comtech, Inc.
 1001 S. Reilly Road, Suite #639
 Fayetteville, NC
 USA
 28314
 910-864-TRUS



This design is valid until 11/3/2024

BM4 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 2012 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | | |
| Temperature: | Temp <= 100°F | | |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 2149 | 1903 | 0 | 0 | 0 |
| 2 | Vertical | 2149 | 1903 | 0 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 3.500" | Vert | 39% | 1903 / 2149 | 4053 | L | D+L |
| 2 - SPF End Grain | 3.500" | Vert | 39% | 1903 / 2149 | 4053 | L | D+L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment | 5774 ft-lb | 3'3 1/2" | 12542 ft-lb | 0.460 (46%) | D+L | L |
| Unbraced | 5774 ft-lb | 3'3 1/2" | 9934 ft-lb | 0.581 (58%) | D+L | L |
| Shear | 2750 lb | 1'3/4" | 6907 lb | 0.398 (40%) | D+L | L |
| LL Defl inch | 0.056 (L/1320) | 3'3 1/2" | 0.153 (L/480) | 0.364 (36%) | L | L |
| TL Defl inch | 0.105 (L/700) | 3'3 1/2" | 0.204 (L/360) | 0.514 (51%) | D+L | L |

Design Notes

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

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-------------|----------|------------|------|----------|---------|-----------|----------|-------------|------------|
| 1 | Uniform | | | Top | 102 PLF | 304 PLF | 0 PLF | 0 PLF | 0 PLF | F2 |
| 2 | Uniform | | | Top | 349 PLF | 349 PLF | 0 PLF | 0 PLF | 0 PLF | A1 |
| 3 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above |
| | 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 11/3/2024

Manufacturer Info

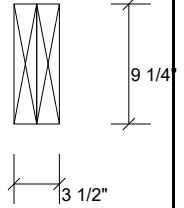
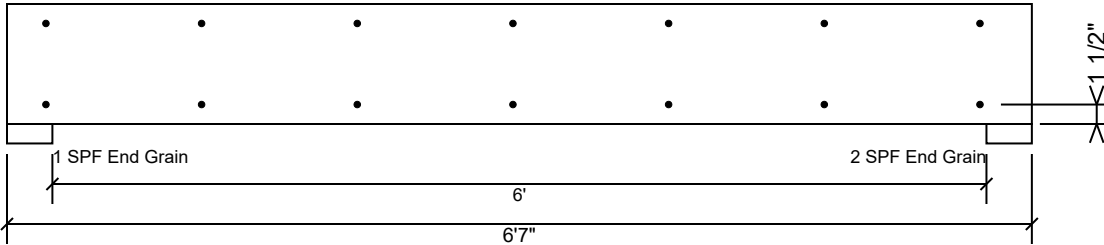
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 Norwalk, CT 06851
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 910-864-TRUS



BM4 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 11/3/2024

Manufacturer Info

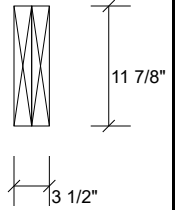
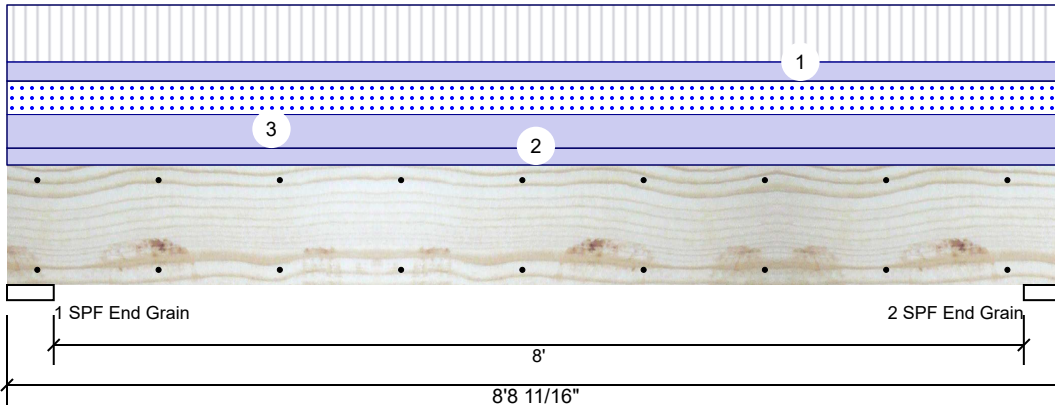
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BM5 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

| | | | |
|---------------------|---------------|----------------|-------------|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC 2012 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal - II | | |
| Temperature: | Temp <= 100°F | | |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 1772 | 2203 | 1044 | 0 | 0 |
| 2 | Vertical | 1753 | 2179 | 1033 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-------------|
| 1 - SPF End Grain | 4.625" | Vert | 32% | 2203 / 2112 | 4314 | L | D+0.75(L+S) |
| 2 - SPF End Grain | 4.063" | Vert | 36% | 2179 / 2089 | 4268 | L | D+0.75(L+S) |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|-------------|-------------|------|
| Moment | 7478 ft-lb | 4' 5/8" | 19911 ft-lb | 0.376 (38%) | D+L | L |
| Unbraced | 8118 ft-lb | 4' 5/8" | 11006 ft-lb | 0.738 (74%) | D+0.75(L+S) | L |
| Shear | 2737 lb | 1' 1/2" | 8867 lb | 0.309 (31%) | D+L | L |
| LL Defl inch | 0.059 (L/1643) | 4' 11/16" | 0.203 (L/480) | 0.292 (29%) | 0.75(L+S) | L |
| TL Defl inch | 0.121 (L/804) | 4' 11/16" | 0.406 (L/240) | 0.298 (30%) | D+0.75(L+S) | L |

Design Notes

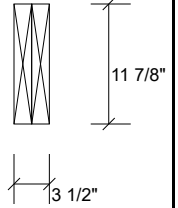
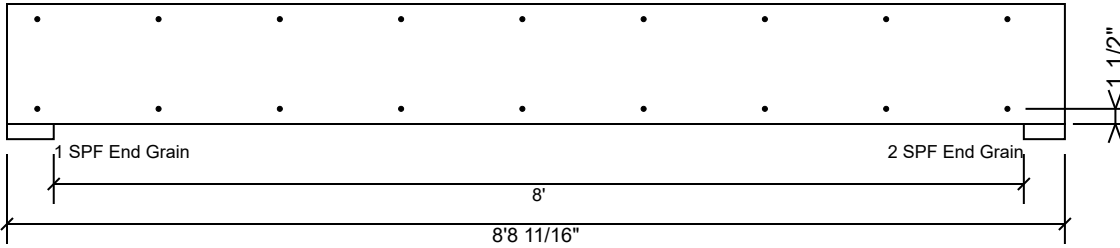
- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at end bearings.
- Bottom must be laterally braced at end bearings.
- 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 | Part. Uniform | 0-0-0 to 8-8-11 | | Top | 135 PLF | 404 PLF | 0 PLF | 0 PLF | 0 PLF | F3 |
| 2 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above |
| 3 | Uniform | | | Top | 238 PLF | 0 PLF | 238 PLF | 0 PLF | 0 PLF | C1 |
| | 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 | Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us | Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS |
| | | | This design is valid until 11/3/2024 | |

BM5 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 11/3/2024

Manufacturer Info

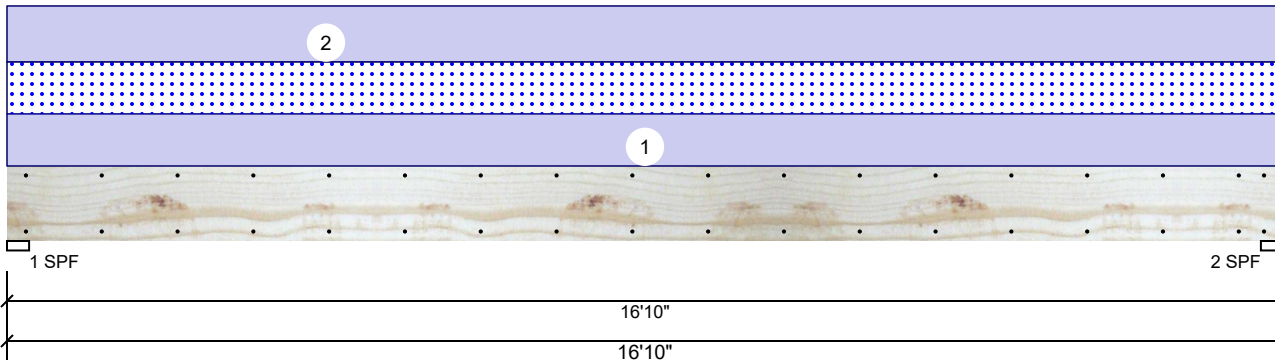
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GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

| | | | |
|---------------------|---------------|----------------|-------------|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC 2012 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 240 | Deck: | Not Checked |
| Importance: | Normal - II | | |
| Temperature: | Temp <= 100°F | | |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 0 | 1054 | 471 | 0 | 0 |
| 2 | Vertical | 0 | 1054 | 471 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 3.500" | Vert | 29% | 1054 / 471 | 1525 | L | D+S |
| 2 - SPF | 3.500" | Vert | 29% | 1054 / 471 | 1525 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|--------------|-------|------|
| Moment | 6075 ft-lb | 8'5" | 22897 ft-lb | 0.265 (27%) | D+S | L |
| Unbraced | 6075 ft-lb | 8'5" | 6086 ft-lb | 0.998 (100%) | D+S | L |
| Shear | 1413 lb | 1'3 3/8" | 10197 lb | 0.139 (14%) | D+S | L |
| LL Defl inch | 0.098 (L/2006) | 8'5 1/16" | 0.409 (L/480) | 0.239 (24%) | S | L |
| TL Defl inch | 0.317 (L/620) | 8'5 1/16" | 0.819 (L/240) | 0.387 (39%) | D+S | L |

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at end bearings.
- Bottom must be laterally braced at end bearings.
- 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 | | | Near Face | 56 PLF | 0 PLF | 56 PLF | 0 PLF | 0 PLF | J3 |
| 2 | Uniform | | | Top | 60 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above |
| | Self Weight | | | | 9 PLF | | | | | |

Notes

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

Lumber

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

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- 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 11/3/2024

Manufacturer Info

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

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GDH 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 | 29.7 % |
| Load | 56.0 PLF |
| Yield Limit per Foot | 188.3 PLF |
| Yield Limit per Fastener | 94.1 lb. |
| Yield Mode | IV |
| Edge Distance | 1 1/2" |
| Min. End Distance | 3" |
| Load Combination | D+S |
| Duration Factor | 1.15 |

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 11/3/2024

Manufacturer Info

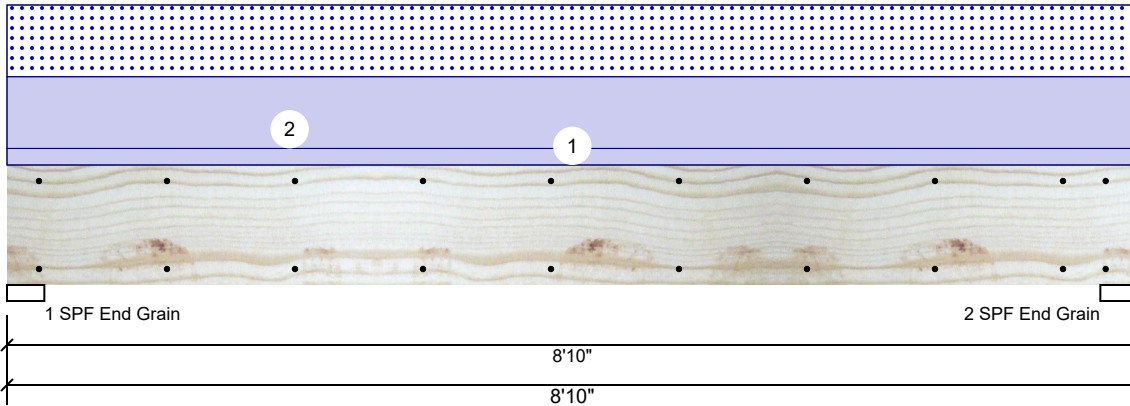
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 28314
 910-864-TRUS



GDH2 S-P-F #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Member Information

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

| | |
|----------------|-------------|
| Application: | Floor |
| Design Method: | ASD |
| Building Code: | IBC 2012 |
| Load Sharing: | No |
| Deck: | Not Checked |

Reactions UNPATTERNED Ib (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 0 | 1413 | 1148 | 0 | 0 |
| 2 | Vertical | 0 | 1413 | 1148 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L Ib | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 3.500" | Vert | 57% | 1413 / 1148 | 2562 | L | D+S |
| 2 - SPF End Grain | 3.500" | Vert | 57% | 1413 / 1148 | 2562 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|--------------|-------|------|
| Moment | 5085 ft-lb | 4'5" | 5306 ft-lb | 0.958 (96%) | D+S | L |
| Unbraced | 5085 ft-lb | 4'5" | 5088 ft-lb | 0.999 (100%) | D+S | L |
| Shear | 1849 lb | 7'7 1/4" | 3493 lb | 0.529 (53%) | D+S | L |
| LL Defl inch | 0.058 (L/1740) | 4'5 1/16" | 0.209 (L/480) | 0.276 (28%) | S | L |
| TL Defl inch | 0.129 (L/780) | 4'5 1/16" | 0.279 (L/360) | 0.461 (46%) | D+S | L |

Design Notes

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

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-----------|----------|------------|------|----------|--------|-----------|----------|-------------|------------|
| 1 | Uniform | | | Top | 60 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above |
| 2 | Uniform | | | Top | 260 PLF | 0 PLF | 260 PLF | 0 PLF | 0 PLF | G1 |

Manufacturer Info

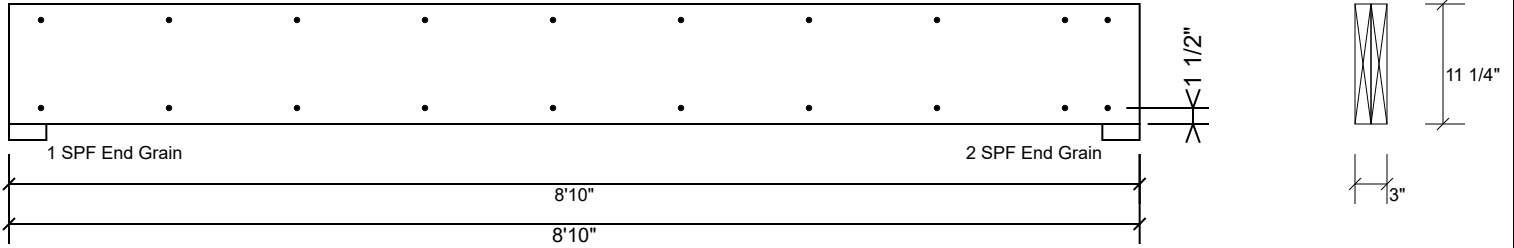
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 28314
 910-864-TRUS



This design is valid until 11/3/2024

GDH2 S-P-F #2 2.000" X 12.000" 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 |

Manufacturer Info

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This design is valid until 11/3/2024

Reaction Summary of Order



| | | | |
|-----------------|-----------------|-----------------|--------------|
| REQ. QUOTE DATE | / / | ORDER # | J0922-4866 |
| ORDER DATE | 09/23/22 | QUOTE # | |
| DELIVERY DATE | / / | CUSTOMER ACCT # | 0000007216 |
| DATE OF INVOICE | / / | CUSTOMER PO # | |
| ORDERED BY | Shaun Garderner | INVOICE # | |
| COUNTY | Harnett | TERMS | |
| SUPERINTENDANT | Shaun Garderner | SALES REP | Neil Baggett |
| JOBSITE PHONE # | (910) 988-8172 | SALES AREA | David Landry |

| | | | |
|-------|--|---|---|
| SHEET | Precision Custom Homes 256 Briar Hill Rd. Raeford, NC 28376 (910) 988-8172 | JOB NAME: Lot 38 Liberty Meadow MODEL: Floor TAG: Liberty 2.0 w/ CP DELIVERY INSTRUCTIONS: 52 miles round trip | LOT # 38 SUBDIV: Liberty Meadow JOB CATEGORY: _ |
| | Precision Custom Homes and Lot 38 Liberty Meadow Cameron, NC 28356 | SPECIAL INSTRUCTIONS: <div style="text-align: right;">PLAN SEAL DATE:</div> | |

| | | | | | | | | |
|------------------------------------|---------------|-------------|-----------|--------------|------------------|-----------|---------|----------|
| BUILDING DEPARTMENT Floor Order | OVERHANG INFO | HEEL HEIGHT | 00-06-08 | REQ. LAYOUTS | REQ. ENGINEERING | QUOTE | DTL | 03/01/23 |
| | END CUT | RETURN | | | | LAYOUT | DTL | 03/01/23 |
| | GABLE STUDS | | 24 IN. OC | | JOBSITE 1 | JOBSITE 1 | CUTTING | DTL |

| | | | | |
|----------------------|---------------------|---------------------|--------------|---|
| FLOOR TRUSSES | LOADING INFORMATION | TCLL-TCDL-BCLL-BCDL | STRESS INCR. | FLOOR TRUSS SPACING: 24.0 IN. O.C. (TYP.) |
| | | 40.0,10.0,0.0,5.0 | 1.00 | |

| FLOOR PROFILE | QTY PLY | DEPTH ID | BASE SPAN | O/A SPAN | END TYPE | | INT BEARING | | REACTIONS |
|---------------|---------|----------|-----------|----------|----------|-------|-------------|----------|-----------|
| | | | | | LEFT | RIGHT | SIZE | LOCATION | |

| | | | | | | | | | | | | | |
|--|---|-----------------|----------|----------|--|--|--|--|-----------------------|------------------------|------------------------|------------------------|------------------------|
| | 1 | 01-04-00 ET1 | 32-11-00 | 32-11-00 | | | | | Joint 29 23.4 lbs. | Joint 30 127.1 lbs. | Joint 31 151.2 lbs. | Joint 32 145.5 lbs. | Joint 33 147.0 lbs. |
|--|---|-----------------|----------|----------|--|--|--|--|-----------------------|------------------------|------------------------|------------------------|------------------------|

| | | | | | | | | | | | | | |
|--|---|-----------------|----------|----------|--|--|--|--|-----------------------|------------------------|------------------------|------------------------|------------------------|
| | 1 | 01-04-00 ET2 | 18-04-00 | 18-04-00 | | | | | Joint 17 32.7 lbs. | Joint 18 134.3 lbs. | Joint 19 150.0 lbs. | Joint 20 145.8 lbs. | Joint 21 146.9 lbs. |
|--|---|-----------------|----------|----------|--|--|--|--|-----------------------|------------------------|------------------------|------------------------|------------------------|

| | | | | | | | | | | | | | |
|--|---|-----------------|----------|----------|--|--|--|--|-----------------------|------------------------|------------------------|------------------------|------------------------|
| | 1 | 01-04-00 ET3 | 19-04-08 | 19-04-08 | | | | | Joint 18 35.3 lbs. | Joint 19 136.7 lbs. | Joint 20 149.5 lbs. | Joint 21 145.9 lbs. | Joint 22 146.9 lbs. |
|--|---|-----------------|----------|----------|--|--|--|--|-----------------------|------------------------|------------------------|------------------------|------------------------|

| | | | | | | | | | | | | | |
|--|---|----------------|----------|----------|--|--|--|--|--------------------------------------|--|-------------------------------------|--|--|
| | 7 | 01-04-00 F1 | 32-11-00 | 32-11-00 | | | | | Joint 24 882.3 lbs. 204.1 lbs. | Joint 33 2190.2 lbs. 1224.3 lbs. | Joint 40 662.4 lbs. 22.2 lbs. | | |
|--|---|----------------|----------|----------|--|--|--|--|--------------------------------------|--|-------------------------------------|--|--|

| | | | | | | | | | | | | | |
|--|---|----------------|----------|----------|--|--|--|--|--------------------------------------|--|--------------------------------------|--|--|
| | 3 | 01-04-00 F2 | 31-11-00 | 31-11-00 | | | | | Joint 22 794.9 lbs. 131.6 lbs. | Joint 30 2078.8 lbs. 1319.8 lbs. | Joint 36 719.4 lbs. 127.0 lbs. | | |
|--|---|----------------|----------|----------|--|--|--|--|--------------------------------------|--|--------------------------------------|--|--|

| | | | | | | | | | | | | | |
|--|---|----------------|----------|----------|--|--|--|--|---------------------------------------|---------------------------------------|--|--|--|
| | 9 | 01-04-00 F3 | 19-11-00 | 19-11-00 | | | | | Joint 14 1075.4 lbs. 522.5 lbs. | Joint 24 1075.4 lbs. 522.5 lbs. | | | |
|--|---|----------------|----------|----------|--|--|--|--|---------------------------------------|---------------------------------------|--|--|--|

| | | | | | | | | | | | | | |
|--|----|----------------|----------|----------|--|--|--|--|---------------------------------------|---------------------------------------|--|--|--|
| | 10 | 01-04-00 F4 | 19-08-00 | 19-08-00 | | | | | Joint 16 1067.9 lbs. 512.1 lbs. | Joint 25 1061.7 lbs. 567.4 lbs. | | | |
|--|----|----------------|----------|----------|--|--|--|--|---------------------------------------|---------------------------------------|--|--|--|

| | | | | | | | | | | | | | |
|--|---|-----------------|----------|----------|--|--|--|--|------------------------------------|---------------------------------------|--------------------------------------|--|--|
| | 1 | 01-04-00 F4A | 19-08-00 | 19-08-00 | | | | | Joint 16 275.1 lbs. 3.8 lbs. | Joint 20 1157.1 lbs. 526.1 lbs. | Joint 31 730.4 lbs. 198.6 lbs. | | |
|--|---|-----------------|----------|----------|--|--|--|--|------------------------------------|---------------------------------------|--------------------------------------|--|--|

| | | | | | | | | | | | | | |
|--|---|----------------|----------|----------|--|--|--|--|-------------------------------------|-------------------------------------|--|--|--|
| | 1 | 01-04-00 F5 | 05-10-08 | 05-10-08 | | | | | Joint 4 294.4 lbs. 198.6 lbs. | Joint 8 288.3 lbs. 193.7 lbs. | | | |
|--|---|----------------|----------|----------|--|--|--|--|-------------------------------------|-------------------------------------|--|--|--|

Reaction Summary of Order



ROOF & FLOOR TRUSSES & BEAMS
 Reilly Road Industrial Park P.O. Box 40408
 Fayetteville, N.C. 28309 (910) 864-TRUS

| | | | |
|-----------------|-----------------|-----------------|--------------|
| REQ. QUOTE DATE | / / | ORDER # | J0922-4866 |
| ORDER DATE | 09/23/22 | QUOTE # | |
| DELIVERY DATE | / / | CUSTOMER ACCT # | 0000007216 |
| DATE OF INVOICE | / / | CUSTOMER PO # | |
| ORDERED BY | Shaun Garderner | INVOICE # | |
| COUNTY | Harnett | TERMS | |
| SUPERINTENDANT | Shaun Garderner | SALES REP | Neil Baggett |
| JOBSITE PHONE # | (910) 988-8172 | SALES AREA | David Landry |

| | | | |
|-------|--|---|---|
| PHOTO | Precision Custom Homes 256 Briar Hill Rd. Raeford, NC 28376 (910) 988-8172 | JOB NAME: Lot 38 Liberty Meadow MODEL: Floor TAG: Liberty 2.0 w/ CP DELIVERY INSTRUCTIONS: 52 miles round trip | LOT # 38 SUBDIV: Liberty Meadow JOB CATEGORY: _ |
| | Precision Custom Homes and Lot 38 Liberty Meadow Cameron, NC 28356 | SPECIAL INSTRUCTIONS: <p style="text-align: right;">PLAN SEAL DATE:</p> | <p style="text-align: right;">BY DATE</p> |

| | | | | | | | | |
|----------------------------|----------------------|--------------------|----------|---------------------|-------------------------|--------------|-----|--------------------------------|
| BUILDING DEPARTMENT | OVERHANG INFO | HEEL HEIGHT | 00-06-08 | REQ. LAYOUTS | REQ. ENGINEERING | QUOTE | DTL | 03/01/23 |
| Floor Order | END CUT RETURN | | | | | | DTL | 03/01/23 |
| | GABLE STUDS | 24 IN. OC | | JOBSITE | 1 | JOBSITE | 1 | CUTTING DTL 03/01/23 |

| | | | | |
|----------------------|----------------------------|---------------------|--------------|--|
| FLOOR TRUSSES | LOADING INFORMATION | TCLL-TCDL-BCLL-BCDL | STRESS INCR. | FLOOR TRUSS SPACING: 24.0 IN. O.C. (TYP.) |
| | | 40.0,10.0,0.0,5.0 | 1.00 | |

| FLOOR PROFILE | QTY PLY | DEPTH ID | BASE SPAN | O/A SPAN | END TYPE | | INT BEARING | | REACTIONS |
|---------------|---------|----------|-----------|----------|----------|-------|-------------|----------|-----------|
| | | | | | LEFT | RIGHT | SIZE | LOCATION | |

| | | | | | | | | | | |
|---|---|-----------------|----------|----------|---|--|--|--|-------------------------------------|-------------------------------------|
|  | 1 | 01-01-00 FG1 | 05-06-00 | 05-06-00 |  | | | | Joint 5 475.8 lbs. 411.8 lbs. | Joint 8 455.3 lbs. 376.1 lbs. |
|---|---|-----------------|----------|----------|---|--|--|--|-------------------------------------|-------------------------------------|

ITEMS

| QTY | ITEM TYPE | SIZE | LENGTH FT-IN-16 | PART NUMBER | NOTES |
|-----|-------------------|---------------------------|--------------------|-------------|------------------|
| 8 | Hangers, USP | HUS 410 | | | SIMPSON (HUS410) |
| 2 | LVL Beams (Sized) | LVL, 1-3/4" x 9-1/4" (S) | 07-00-00 | | BM4 |
| 2 | LVL Beams (Sized) | LVL, 1-3/4" x 11-7/8" (S) | 09-00-00 | | BM5 |
| 2 | LVL Beams (Sized) | LVL, 1-3/4" x 11-7/8" (S) | 20-00-00 | | GDH |
| 2 | LVL Beams (Sized) | LVL, 1-3/4" x 16" (S) | 17-00-00 | | BM1 |
| 2 | LVL Beams (Sized) | LVL, 1-3/4" x 16" (S) | 20-00-00 | | BM2 |

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0922-4866
Lot 38 Liberty Meadow

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

Pages or sheets covered by this seal: I56917899 thru I56917908

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



March 1, 2023

Gilbert, Eric

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

| | | | | | |
|-------------------|--------------|---------------------|----------|----------|--|
| Job J0922-4866 | Truss ET1 | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917899 Job Reference (optional) |
|-------------------|--------------|---------------------|----------|----------|--|

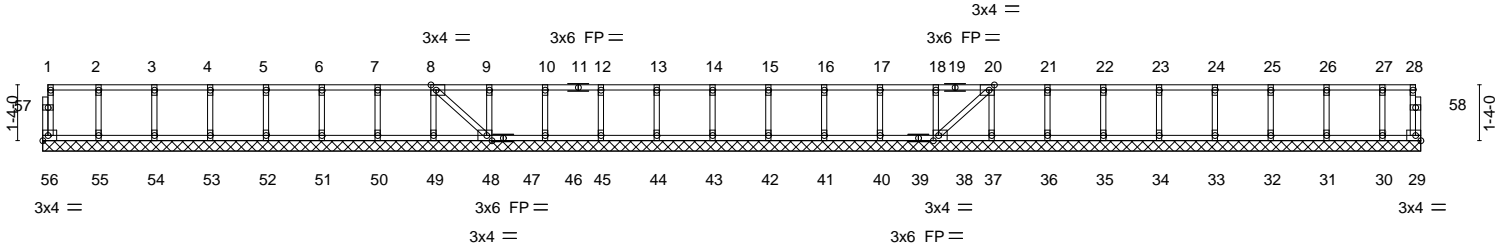
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:46 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-vFAMz0lokDfoj_POPHmBiuM3HfXVKefis35yipzfKAt

0-1/8

0-1/8

Scale = 1:55.0



| | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 14-8-0 | 16-0-0 | 17-4-0 | 18-8-0 | 20-0-0 | 21-4-0 | 22-8-0 | 24-0-0 | 25-4-0 | 26-8-0 | 28-0-0 | 29-4-0 | 30-8-0 | 32-0-0 | 32-11-0 |
| 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 0-11-0 |

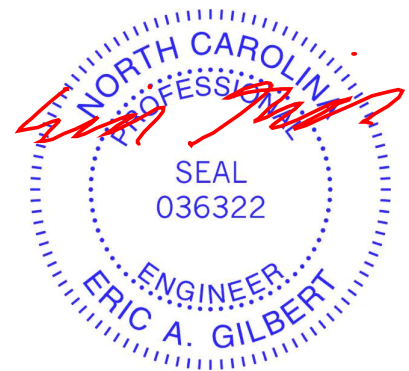
| | | | | | | | |
|-----------------------|----------------------|---|-------------|----------------|---------------------|----------------|-----------------|
| Plate Offsets (X,Y)-- | | [8:0-1-8,Edge], [20:0-1-8,Edge], [38:0-1-8,Edge], [48:0-1-8,Edge] | | | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL | 1.00 | TC 0.06 | Vert(LL) n/a | - n/a 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.01 | Vert(CT) n/a | - n/a 999 | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB 0.03 | Horz(CT) -0.00 | 38 n/a n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | |
| | | | | | | Weight: 147 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |
| OTHERS 2x4 SP No.3(flat) | |

REACTIONS. All bearings 32-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 56, 29, 55, 54, 53, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 2) Plates checked for a plus or minus 1 degree rotation about its center.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 5) Gable studs spaced at 1-4-0 oc.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



March 1, 2023

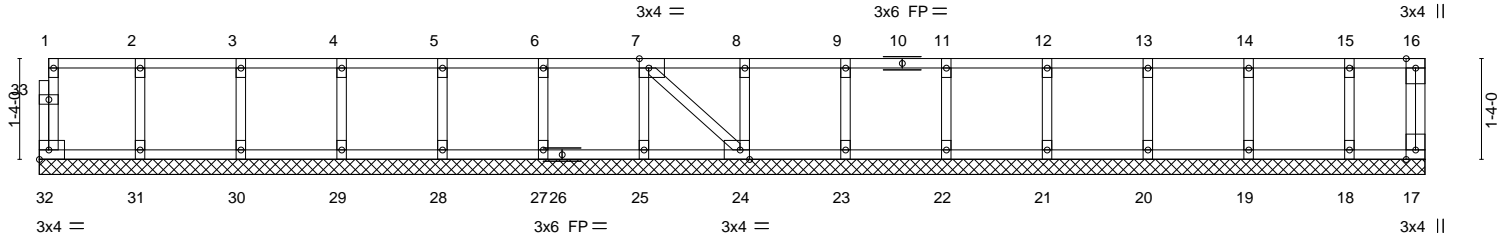
| | | | | | |
|-------------------|--------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4866 | Truss ET2 | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917900 |
| | | | | | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:47 2023 Page 1
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0-1-8

Scale = 1:30.5



| | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 14-8-0 | 16-0-0 | 17-4-0 | 18-4-0 |
| 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-0-0 |

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [24:0-1-8,Edge]

| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-----------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL | 1.00 | TC 0.07 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.01 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 | Rep Stress Incr | NO | WB 0.03 | Horz(CT) | 0.00 | 17 | n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 84 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |
| OTHERS 2x4 SP No.3(flat) | |

REACTIONS. All bearings 18-4-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 1-4-0 oc.
 - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - CAUTION, Do not erect truss backwards.



March 1, 2023

| | |
|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

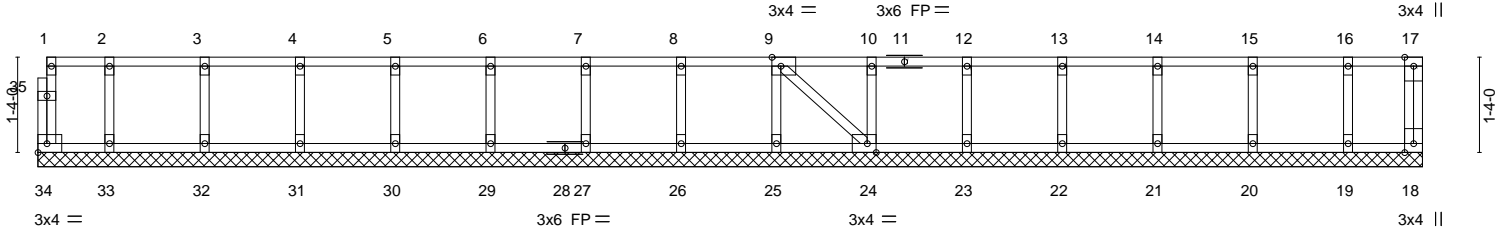
| | | | | | |
|-------------------|--------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4866 | Truss ET3 | Truss Type GABLE | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917901 |
|-------------------|--------------|---------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:48 2023 Page 1
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0-1-8

Scale: 3/8"=1'



| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1-0-0 | 2-4-0 | 3-8-0 | 5-0-0 | 6-4-0 | 7-8-0 | 9-0-0 | 10-4-0 | 11-8-0 | 13-0-0 | 14-4-0 | 15-8-0 | 17-0-0 | 18-4-0 | 19-4-8 |
| 1-0-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-0-8 |

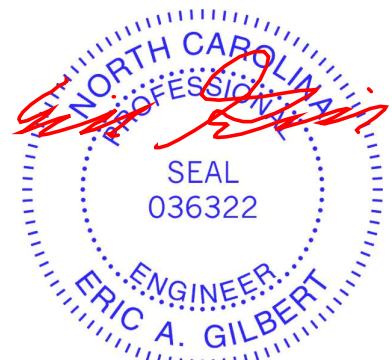
| | | | | | | | | | |
|---|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-----------------|
| Plate Offsets (X,Y)-- [9:0-1-8,Edge], [24:0-1-8,Edge] | | | | | | PLATES | | GRIP | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | MT20 | 244/190 |
| TCLL 40.0 | Plate Grip DOL | 1.00 | TC 0.06 | Vert(LL) | n/a | - | n/a | | |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.01 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB 0.03 | Horz(CT) | 0.00 | 18 | n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 89 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |
| OTHERS 2x4 SP No.3(flat) | |

REACTIONS. All bearings 19-4-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 20, 19

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 2) Plates checked for a plus or minus 1 degree rotation about its center.
 - 3) Gable requires continuous bottom chord bearing.
 - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 5) Gable studs spaced at 1-4-0 oc.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.



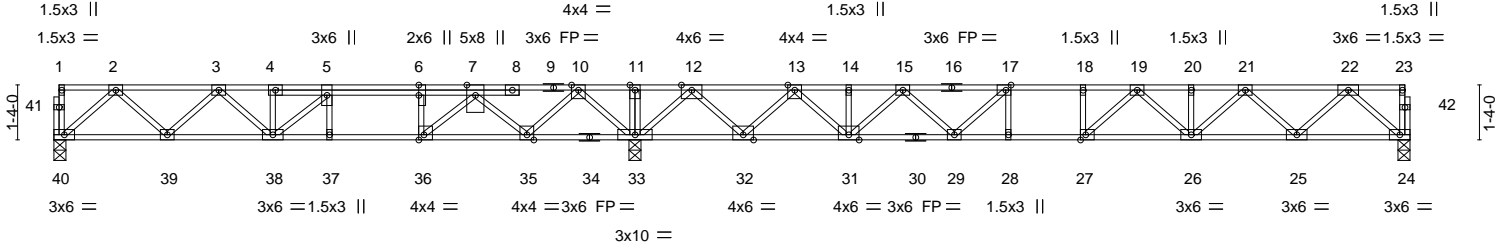
March 1, 2023

| | |
|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

| | | | | | |
|-------------------|-------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4866 | Truss F1 | Truss Type Floor | Qty 7 | Ply 1 | Lot 38 Liberty Meadow I56917902 |
|-------------------|-------------|---------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:50 2023 Page 1
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| | |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [6:0-3-0,0-0-0], [17:0-1-8,Edge], [27:0-1-8,Edge], [36:0-1-8,Edge] |
|-----------------------|--|

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|--------|---------|
| TCLL 40.0 | Plate Grip DOL | 1.00 | TC 0.63 | Vert(LL) | -0.20 | 27 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.82 | Vert(CT) | -0.27 | 26-27 | >820 | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB 0.63 | Horz(CT) | 0.04 | 24 | n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |

Weight: 180 lb FT = 20%F, 11%E

| LUMBER- | BRACING- |
|-----------------------------|---|
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 40=0-3-8, 24=0-3-8, 33=0-3-8
Max Grav 40=662(LC 3), 24=882(LC 4), 33=2190(LC 1)

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

TOP CHORD 2-3=-1110/36, 3-4=-1659/212, 4-5=-1659/219, 5-6=-1602/621, 6-7=-1602/621, 7-10=-392/1404, 10-11=0/2571, 11-12=0/2571, 12-13=-40/475, 13-14=-1631/0, 14-15=-1631/0, 15-17=-2564/0, 17-18=-2931/0, 18-19=-2931/0, 19-20=-2592/0, 20-21=-2592/0, 21-22=-1586/0

BOT CHORD 39-40=0/704, 38-39=-106/1489, 37-38=-621/1602, 36-37=-621/1602, 35-36=-1086/1024, 33-35=-1709/0, 32-33=-1291/0, 31-32=-200/935, 29-31=0/2220, 28-29=0/2931, 27-28=0/2931, 26-27=0/2856, 25-26=0/2193, 24-25=0/952

WEBS 2-40=935/0, 2-39=-59/564, 3-39=-528/98, 4-38=-325/0, 5-38=0/648, 22-24=-1266/0, 22-25=0/881, 21-25=-845/0, 21-26=0/542, 19-26=-358/0, 19-27=-253/331, 12-33=-1704/0, 12-32=0/1314, 10-33=-1399/0, 10-35=0/993, 7-35=-1033/0, 7-36=0/1214, 6-36=-690/0, 13-32=-1288/0, 13-31=0/991, 15-31=-835/0, 15-29=0/579, 17-29=-718/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x4 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.

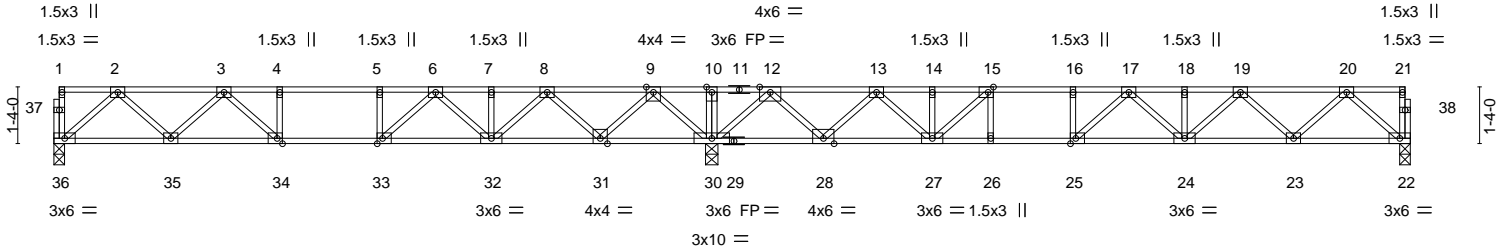


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|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

| | | | | | |
|-------------------|-------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4866 | Truss F2 | Truss Type Floor | Qty 3 | Ply 1 | Lot 38 Liberty Meadow I56917903 |
|-------------------|-------------|---------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:52 2023 Page 1
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| | |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [15:0-1-8,Edge], [25:0-1-8,Edge], [33:0-1-8,Edge], [34:0-1-8,Edge] |
|-----------------------|--|

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|----------------|-----------------|
| TCLL 40.0 | 2-0-0 | TC 0.85 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.00 | BC 0.91 | Vert(LL) -0.18 24-25 >999 480 | | |
| BCLL 0.0 | Lumber DOL 1.00 | WB 0.54 | Vert(CT) -0.25 24-25 >776 360 | | |
| BCDL 5.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.04 22 n/a n/a | | |
| | Code IRC2015/TPI2014 | | | Weight: 167 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 36=0-3-0, 30=0-3-8, 22=0-3-0
Max Grav 36=719(LC 3), 30=2079(LC 1), 22=795(LC 4)

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

TOP CHORD 2-3=-1229/0, 3-4=-1941/0, 4-5=-1941/0, 5-6=-1941/0, 6-7=-1408/202, 7-8=-1408/202, 8-9=-241/659, 9-10=0/2218, 10-12=0/2218, 12-13=-523/817, 13-14=-1712/332, 14-15=-1712/332, 15-16=-2291/0, 16-17=-2291/0, 17-18=-2225/0, 18-19=-2225/0, 19-20=-1395/0

BOT CHORD 35-36=0/769, 34-35=0/1668, 33-34=0/1941, 32-33=-35/1748, 31-32=-414/927, 30-31=-1214/0, 28-30=-1129/0, 27-28=-547/1232, 26-27=0/2291, 25-26=0/2291, 24-25=0/2385, 23-24=0/1918, 22-23=0/852

WEBS 2-36=-1022/0, 2-35=0/640, 3-35=-610/0, 3-34=-83/372, 9-30=-1439/0, 9-31=0/1062, 20-22=-1132/0, 20-23=0/755, 19-23=-728/0, 19-24=-1/417, 17-25=-477/33, 12-30=-1508/0, 8-31=-1027/0, 8-32=0/734, 6-32=-547/0, 6-33=0/628, 5-33=-320/0, 12-28=0/1134, 13-28=-1085/0, 13-27=0/740, 15-27=-1088/0, 15-26=0/273

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x4 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) CAUTION, Do not erect truss backwards.



March 1, 2023

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|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

| | | | | | |
|-------------------|-------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4866 | Truss F3 | Truss Type Floor | Qty 9 | Ply 1 | Lot 38 Liberty Meadow I56917904 |
|-------------------|-------------|---------------------|----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

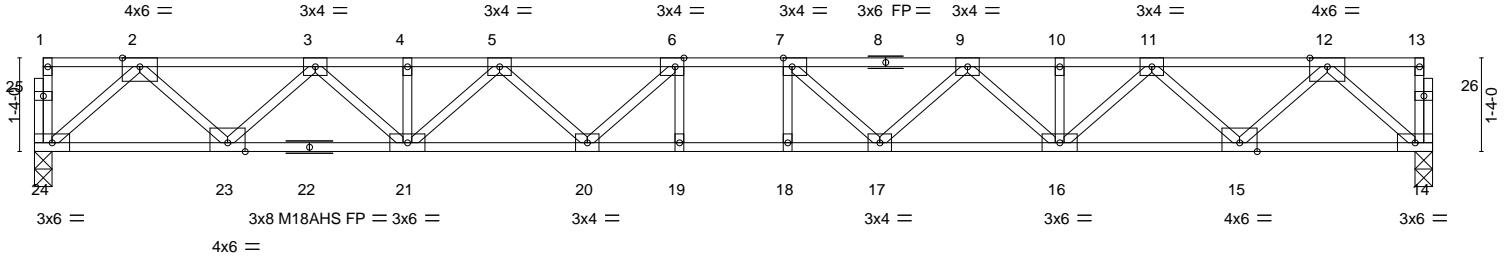
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:53 2023 Page 1

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0-1-8



0-1-8
Scale = 1:32.8



19-11-0
19-11-0

| | | |
|-----------------------|--------------------------------|----------------------------------|
| Plate Offsets (X,Y)-- | [6:0-1-8,Edge], [7:0-1-8,Edge] | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. |
| TCLL 40.0 | Plate Grip DOL 1.00 | TC 0.56 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.95 |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.55 |
| BCDL 5.0 | Code IRC2015/TP12014 | Matrix-S |
| | | DEFL. in (loc) l/defl L/d |
| | | Vert(LL) -0.33 18-19 >724 480 |
| | | Vert(CT) -0.45 18-19 >526 360 |
| | | Horz(CT) 0.08 14 n/a n/a |
| | | PLATES GRIP |
| | | MT20 244/190 |
| | | M18AHS 186/179 |
| | | Weight: 106 lb FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 5-9-6 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 24=0-3-0, 14=0-3-0
Max Grav 24=1075(LC 1), 14=1075(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2005/0, 3-4=-3408/0, 4-5=-3408/0, 5-6=-4160/0, 6-7=-4391/0, 7-9=-4160/0, 9-10=-3408/0, 10-11=-3408/0, 11-12=-2005/0
BOT CHORD 23-24=0/1172, 21-23=0/2810, 20-21=0/3918, 19-20=0/4391, 18-19=0/4391, 17-18=0/4391, 16-17=0/3918, 15-16=0/2810, 14-15=0/1172
WEBS 2-24=-1557/0, 2-23=0/1160, 3-23=-1119/0, 3-21=0/814, 5-21=-693/0, 5-20=0/469, 6-20=-575/87, 12-14=-1557/0, 12-15=0/1160, 11-15=-1119/0, 11-16=0/814, 9-16=-693/0, 9-17=0/469, 7-17=-575/87

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



March 1, 2023

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

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

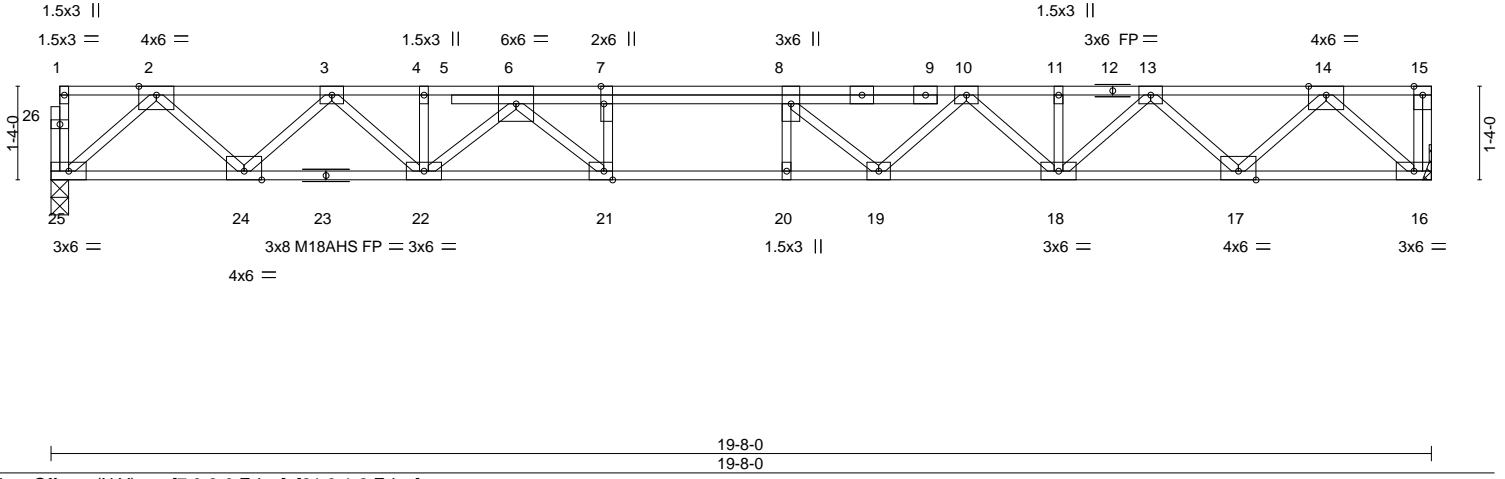


818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-------------|---------------------|-----------|----------|------------------------------------|
| Job J0922-4866 | Truss F4 | Truss Type Floor | Qty 10 | Ply 1 | Lot 38 Liberty Meadow I56917905 |
|-------------------|-------------|---------------------|-----------|----------|------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:54 2023 Page 1
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| | | | | | |
|------------------------|---------------------------------|-------------|----------------------------------|----------------|-----------------|
| Plate Offsets (X, Y)-- | [7:0-3-0,Edge], [21:0-1-8,Edge] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL 1.00 | TC 0.39 | Vert(LL) -0.29 20 >806 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.88 | Vert(CT) -0.40 20 >587 360 | M18AHS | 186/179 |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.54 | Horz(CT) 0.08 16 n/a n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | | |
| | | | | Weight: 112 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 25=0-3-0, 16=Mechanical
Max Grav 25=1062(LC 1), 16=1068(LC 1)

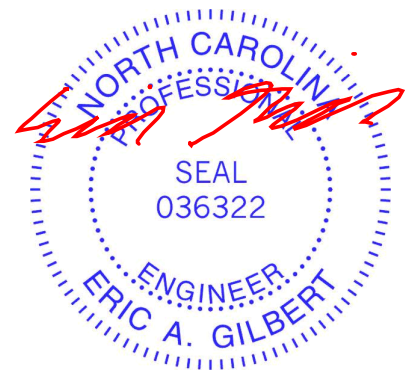
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1976/0, 3-4=-3346/0, 4-6=-3350/0, 6-7=-4437/0, 7-8=-4437/0, 8-10=-4140/0, 10-11=-3354/0, 11-13=-3354/0, 13-14=-1976/0

BOT CHORD 24-25=0/1156, 22-24=0/2765, 21-22=0/3951, 20-21=0/4437, 19-20=0/4437, 18-19=0/3823, 17-18=0/2764, 16-17=0/1157

WEBS 2-25=-1537/0, 2-24=0/1140, 3-24=-1097/0, 3-22=0/790, 6-22=-803/0, 6-21=0/970, 7-21=-557/0, 14-16=-1541/0, 14-17=0/1139, 13-17=-1096/0, 13-18=0/802, 10-18=-637/0, 10-19=0/581, 8-19=-621/0

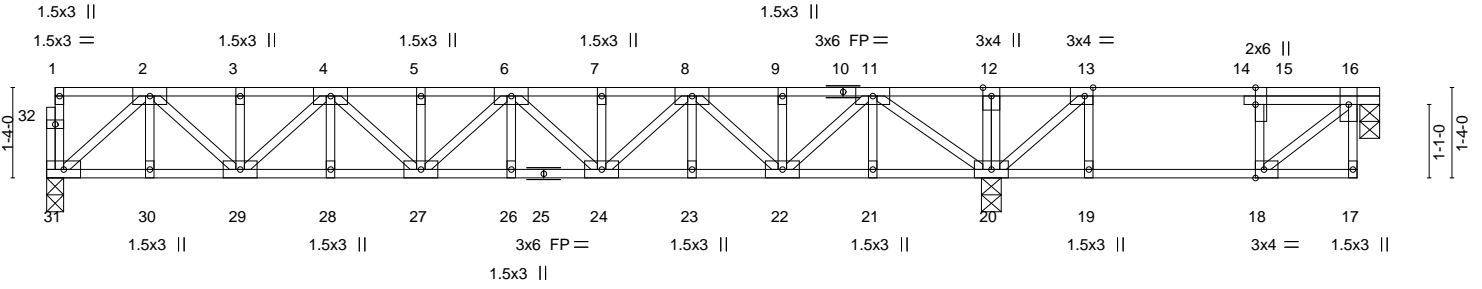
- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 3x4 MT20 unless otherwise indicated.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 7) CAUTION, Do not erect truss backwards.



| | | | | | | |
|-------------------|--------------|---------------------|----------|----------|---|-----------|
| Job J0922-4866 | Truss F4A | Truss Type Floor | Qty 1 | Ply 1 | Lot 38 Liberty Meadow Job Reference (optional) | I56917906 |
|-------------------|--------------|---------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 1
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| | | | | | | |
|-----------------------|--|--------|---------|---------|--------|--------|
| | 13-11-4 | 15-5-4 | 16-7-10 | 17-10-0 | 19-4-0 | 19-8-0 |
| | 13-11-4 | 1-6-0 | 1-2-6 | 1-2-6 | 1-6-0 | 0-4-0 |
| Plate Offsets (X,Y)-- | [13:0-1-8,Edge], [15:0-3-0,0-0-0], [18:0-1-8,Edge] | | | | | |

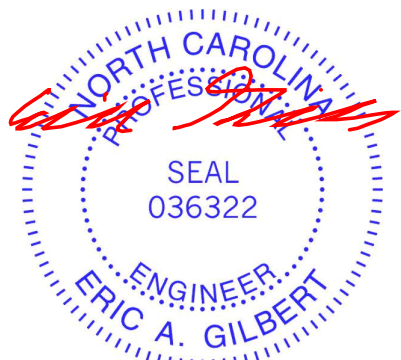
| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|----------------|-----------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL | 1.00 | TC 0.40 | Vert(LL) | -0.08 | 26 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.38 | Vert(CT) | -0.11 | 26 | >999 | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB 0.37 | Horz(CT) | 0.03 | 20 | n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 115 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 19-20,18-19. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 31=0-3-0, 16=0-3-8, 20=0-3-8
Max Grav 31=730(LC 8), 16=275(LC 4), 20=1157(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1331/0, 3-4=-1331/0, 4-5=-1969/0, 5-6=-1969/0, 6-7=-1961/0, 7-8=-1961/0, 8-9=-1306/0, 9-11=-1306/0, 11-12=0/365, 12-13=0/364, 13-15=-276/99, 15-16=-253/96
BOT CHORD 30-31=0/775, 29-30=0/775, 28-29=0/1732, 27-28=0/1732, 26-27=0/2047, 24-26=0/2047, 23-24=0/1717, 22-23=0/1717, 21-22=0/750, 20-21=0/750, 19-20=-96/253, 18-19=-96/253
WEBS 16-18=-125/330, 2-31=-1021/0, 2-29=0/751, 4-29=-541/0, 4-27=0/319, 8-24=0/345, 8-22=-569/0, 11-22=0/769, 11-20=-1229/0, 13-20=-575/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x6 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
 - 6) CAUTION, Do not erect truss backwards.



March 1, 2023

| | |
|--|---|
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|--|---|

| | | | | | |
|---|-------------|---------------------|----------|----------|------------------------------------|
| Job J0922-4866 | Truss F5 | Truss Type FLOOR | Qty 1 | Ply 1 | Lot 38 Liberty Meadow I56917907 |
| Comtech, Inc. Fayetteville, NC - 28314, | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:57 2023 Page 1
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| | |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [2:0-1-8,Edge], [6:0-1-8,Edge], [9:0-1-8,0-1-8] |
|-----------------------|---|

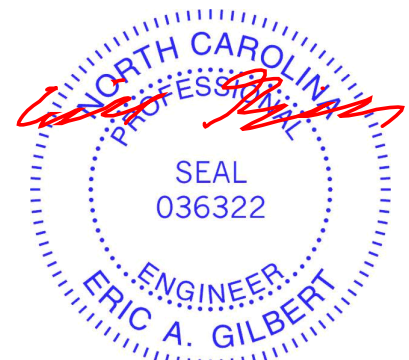
| | | | | | |
|----------------------|-----------------------|-------------|----------------------------------|---------------|-----------------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL 1.00 | TC 0.23 | Vert(LL) -0.01 6 >999 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.11 | Vert(CT) -0.01 6 >999 360 | | |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.18 | Horz(CT) -0.01 4 n/a n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 32 lb | FT = 20%F, 11%E |

| | |
|-----------------------------|--|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 5-10-8 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 8=0-3-8, 4=0-3-8
 Max Grav 8=288(LC 1), 4=294(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-294/0, 3-4=-296/0
 BOT CHORD 7-8=0/294, 6-7=0/294
 WEBS 2-8=-382/0, 4-6=0/383

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) Plates checked for a plus or minus 1 degree rotation about its center.
 - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
 - 4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
 - 5) CAUTION, Do not erect truss backwards.



March 1, 2023

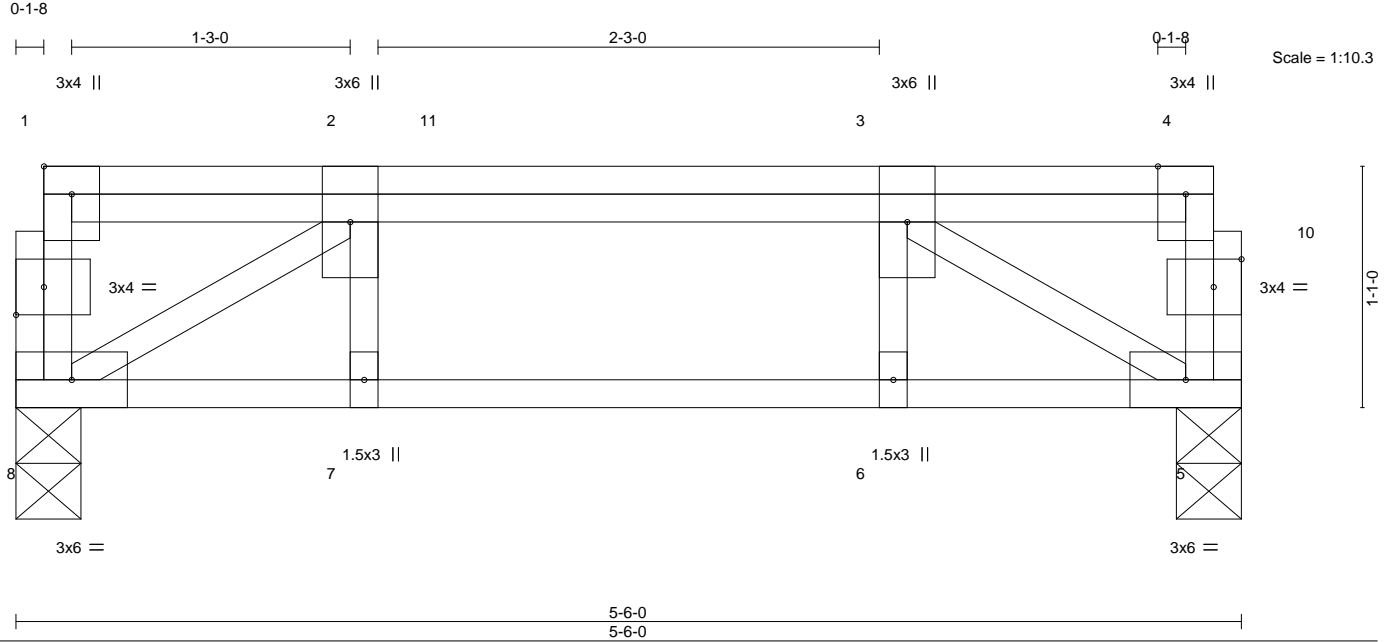
| | |
|--|--|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|--|

| | | | | | | |
|-------------------|--------------|---------------------|----------|----------|---|-----------|
| Job J0922-4866 | Truss FG1 | Truss Type FLOOR | Qty 1 | Ply 1 | Lot 38 Liberty Meadow Job Reference (optional) | I56917908 |
|-------------------|--------------|---------------------|----------|----------|---|-----------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:58 2023 Page 1

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| | | | | | |
|-----------------------|---|-------------|----------------------------------|---------------|-----------------|
| Plate Offsets (X,Y)-- | [1:Edge,0-1-8], [9:0-1-8,0-1-8], [10:0-1-8,0-1-8] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL 1.00 | TC 0.12 | Vert(LL) -0.01 6 >999 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.17 | Vert(CT) -0.01 6-7 >999 360 | | |
| BCLL 0.0 | Rep Stress Incr NO | WB 0.19 | Horz(CT) 0.01 5 n/a n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 34 lb | FT = 20%F, 11%E |

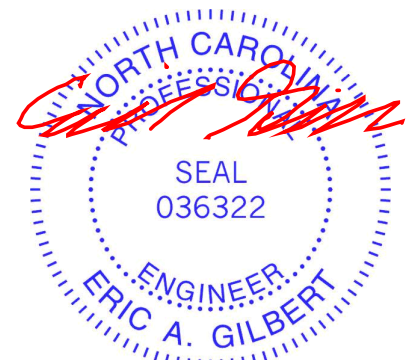
| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 8=0-3-8, 5=0-3-8
Max Grav 8=455(LC 1), 5=476(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-683/0
BOT CHORD 7-8=0/683, 6-7=0/683, 5-6=0/683
WEBS 2-8=-802/0, 3-5=-801/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

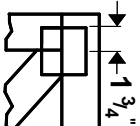
LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 3=-172 11=-194



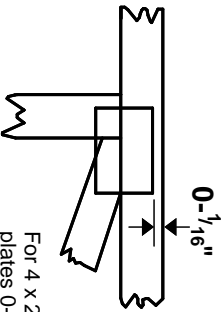
March 1, 2023

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

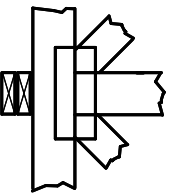
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



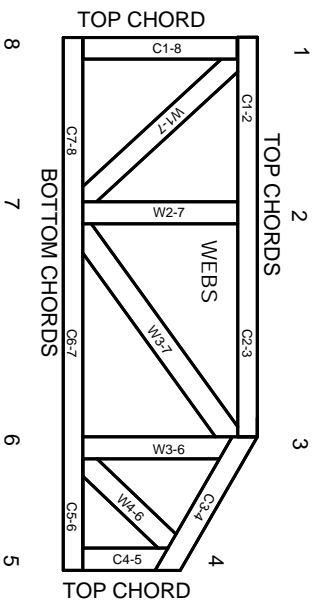
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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