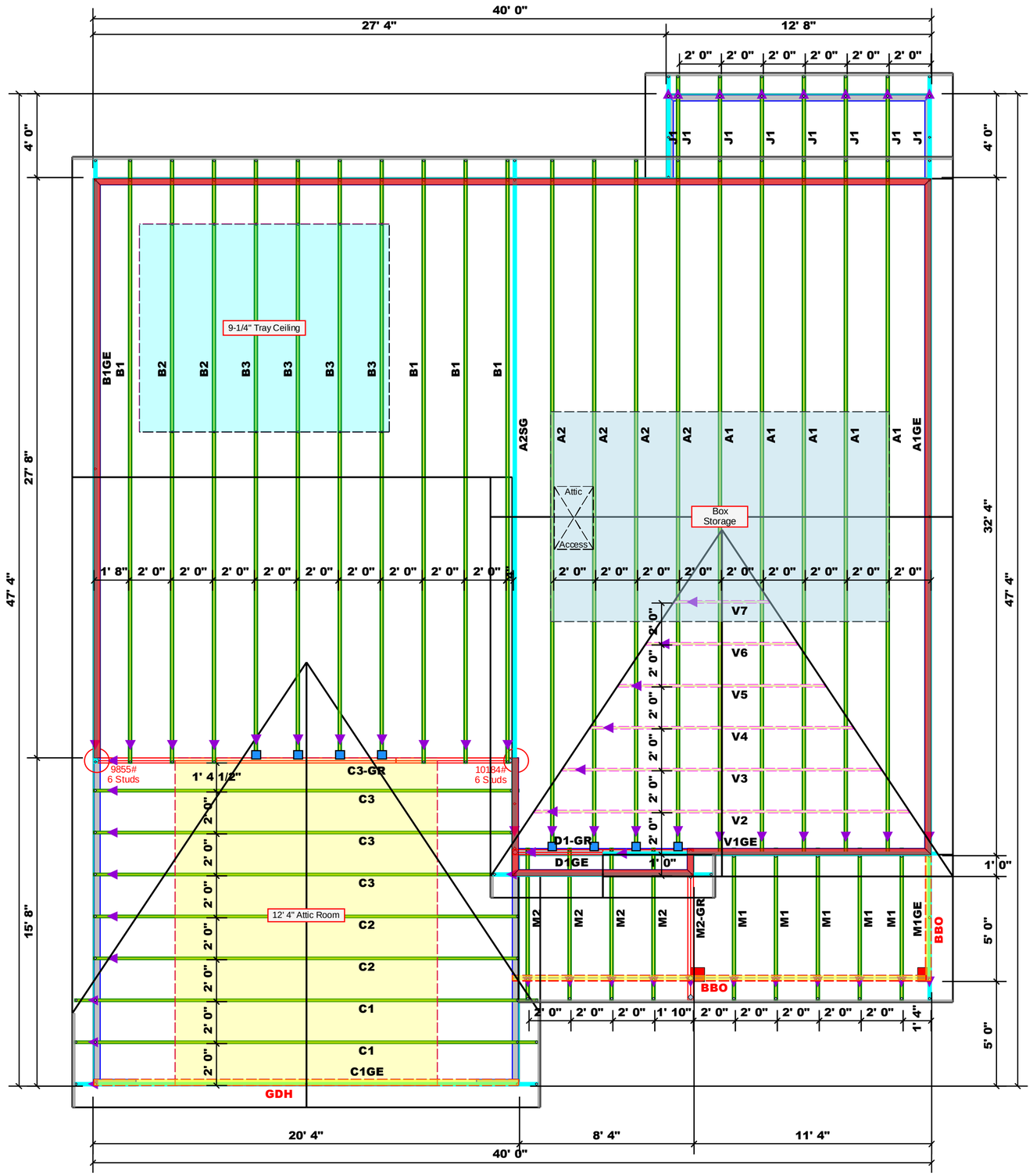



All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.

◯ -- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

All Headers Are Considered 2X10 Beams Unless Otherwise Noted

All Walls Shown Are Considered Load Bearing

| | |
|---|---|
| Roof Area | = 2396.08 sq.ft. |
| Ridge Line | = 81.8 ft. |
| Hip Line | = 0 ft. |
| Horiz. OH | = 151.03 ft. |
| Raked OH | = 241.11 ft. |
| Decking | = 82 sheets |

**Dimension Notes**

1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of stud unless noted otherwise
3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

**Hatch Legend**

- Second Floor Walls
- Box Storage
- Tray Ceiling
- Drop Beam
- Flush Beam

| Connector Information | | | | | Nail Information | |
|---|---|---|---|---|---|---|
| Sym | Product | Manuf | Qty | Supported Member | Header | Truss |
| ■ | HUS26 | USP | 8 | NA | 16d/3-1/2" | 16d/3-1/2" |

**Products**

| PlotID | Length | Product | Plies | Net Qty |
|---|---|---|---|---|
| BM1 | 8' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 |
| BM2 | 5' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 |
| BM3 | 13' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 |
| BM4 | 8' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 |
| BM5 | 11' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 |
| GDH | 21' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 |

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

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


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


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

Signature Jonathan Landry

Jonathan Landry

**LOAD CHART FOR JACK STUDS**

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

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

| END REACTION (UP TO) | REQ'D STUDS FOR (2) PLY HEADER | END REACTION (UP TO) | REQ'D STUDS FOR (3) PLY HEADER | END REACTION (UP TO) | REQ'D STUDS FOR (4) PLY HEADER |
|---|---|---|---|---|---|
| 1700 | 1 | 2550 | 1 | 3400 | 1 |
| 3400 | 2 | 5100 | 2 | 6800 | 2 |
| 5100 | 3 | 7650 | 3 | 10200 | 3 |
| 6800 | 4 | 10200 | 4 | 13600 | 4 |
| 8500 | 5 | 12750 | 5 | 17000 | 5 |
| 10200 | 6 | 15300 | 6 | | |
| 11900 | 7 | | | | |
| 13600 | 8 | | | | |
| 15300 | 9 | | | | |

| | |
|---|---|
| CITY / CO. | Harnett Co. / Harnett |
| ADDRESS | - |
| MODEL | Roof |
| DATE REV. | 07/01/24 |
| DRAWN BY | Jonathan Landry |
| SALES REP. | Lenny Norris |
| BUILDER | Gammon Construction |
| JOB NAME | Delude Residence |
| PLAN | The Armstrong |
| SEAL DATE | N/A |
| QUOTE # | |
| JOB # | J0424-2426 |

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**

These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0424-2426
Delude Residence

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: I66592130 thru I66592156

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844


July 2,2024

Gilbert, Eric

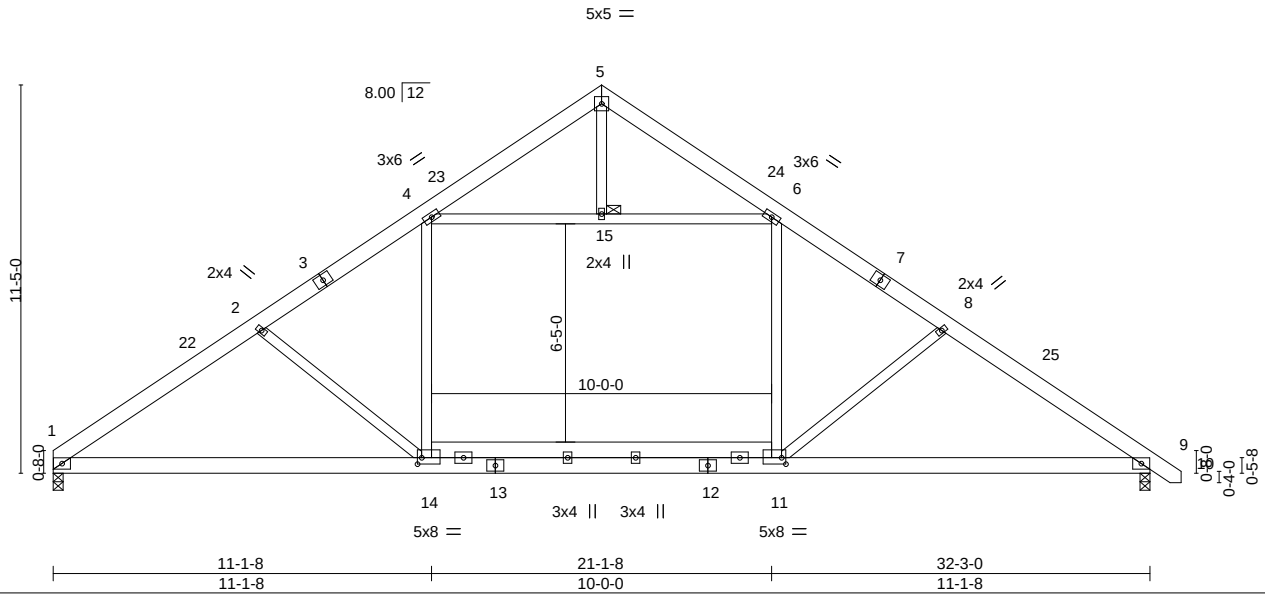
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | A1 | COMMON | 5 | 1 | I66592130 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:38:57 2024 Page 1
ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

| 6-1-8 | 11-1-8 | 16-1-8 | 21-1-8 | 26-1-8 | 32-3-0 | 33-2-0 |
|---|---|---|---|---|---|---|
| 6-1-8 | 5-0-0 | 5-0-0 | 5-0-0 | 5-0-0 | 6-1-8 | 0-11-0 |

Scale = 1:67.7




| 11-1-8 | 21-1-8 | 32-3-0 |
|---|---|---|
| 11-1-8 | 10-0-0 | 11-1-8 |

Plate Offsets (X,Y)-- [11:0-1-8,0-2-4], [14:0-1-8,0-2-4]

| 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 | 0.21 | Vert(LL) | -0.24 | 14-18 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.29 | 14-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.49 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-AS | | Wind(LL) | 0.27 | 14-18 | >999 | 240 | Weight: 252 lb | FT = 25% |

**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.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 15

**REACTIONS.** (size) 1=0-3-8, 9=0-3-8
Max Horz 1=-354(LC 8)
Max Uplift 1=-219(LC 12), 9=-236(LC 13)
Max Grav 1=1455(LC 19), 9=1499(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2143/726, 2-4=-1937/676, 4-5=-471/260, 5-6=-471/260, 6-8=-1940/669, 8-9=-2140/714
BOT CHORD 1-14=-443/1986, 11-14=-230/1662, 9-11=-427/1714
WEBS 8-11=-445/292, 2-14=-444/292, 4-14=-65/648, 6-11=-56/646, 4-15=-1355/515, 6-15=-1355/515

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-1-8, Exterior(2) 16-1-8 to 20-6-5, Interior(1) 20-6-5 to 33-0-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x6 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 219 lb uplift at joint 1 and 236 lb uplift at joint 9.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


July 2,2024

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | A1GE | GABLE | 1 | 1 | I66592131 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:38:58 2024 Page 1

ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

16-1-8 | 32-3-0 | 33-2-0

16-1-8 | 16-1-8 | 0-11-0

Scale = 1:71.3

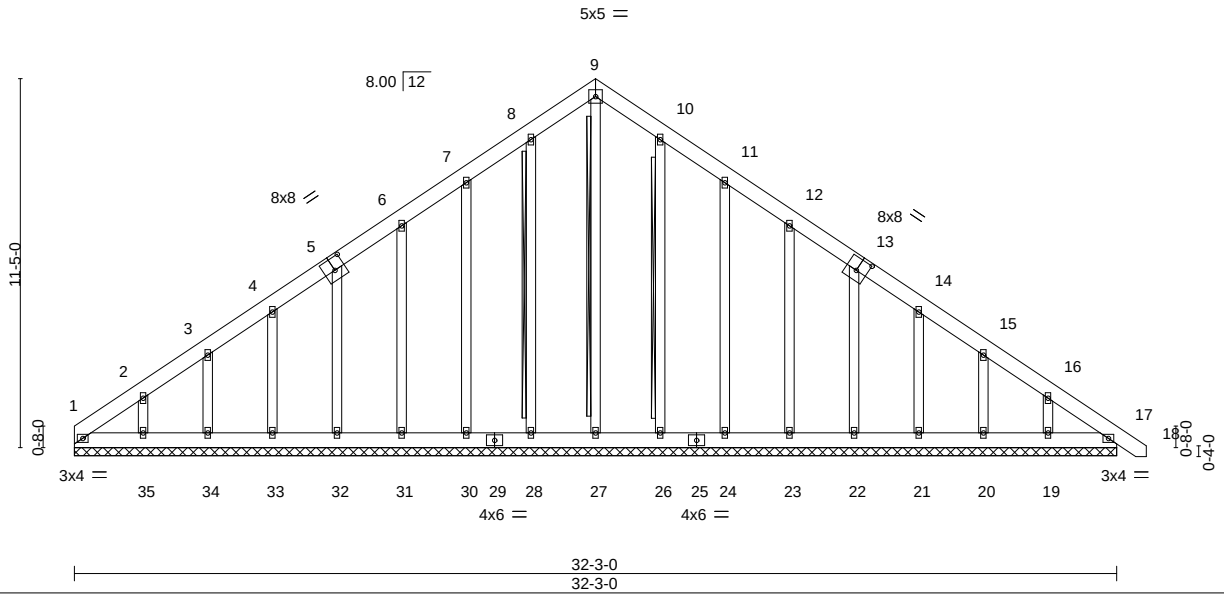


Plate Offsets (X,Y)-- [5:0-4-0,0-4-8], [13:0-4-0,0-4-8]

| 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 | 0.06 | Vert(LL) | 0.00 | 17 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 17 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.01 | 17 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 293 lb | FT = 25% |

**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 - 9-27, 8-28, 10-26 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 32-3-0.

(lb) - Max Horz 1=-444(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 17, 27, 28, 26 except 1=-144(LC 10), 30=-148(LC 12), 31=-140(LC 12), 32=-133(LC 12), 33=-119(LC 12), 34=-129(LC 12), 35=-186(LC 12), 24=-152(LC 13), 23=-140(LC 13), 22=-133(LC 13), 21=-119(LC 13), 20=-132(LC 13), 19=-169(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 17, 28, 30, 31, 32, 33, 34, 35, 26, 24, 23, 22, 21, 20, 19 except 27=285(LC 13)

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

| | |
|---|---|
| TOP CHORD | 1-2=-464/343, 2-3=-333/286, 3-4=-275/251, 6-7=-196/281, 7-8=-284/346, 8-9=-331/381, 9-10=-331/381, 10-11=-284/321, 16-17=-356/243 |
| BOT CHORD | 1-35=-224/350, 34-35=-224/350, 33-34=-224/350, 32-33=-224/350, 31-32=-230/353, 30-31=-230/353, 28-30=-230/353, 27-28=-230/353, 26-27=-230/353, 24-26=-230/353, 23-24=-230/353, 22-23=-230/353, 21-22=-224/347, 20-21=-224/347, 19-20=-224/347, 17-19=-224/347 |
| WEBS | 9-27=-261/171 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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) 17, 27, 28, 26 except (jt=lb) 1=144, 30=148, 31=140, 32=133, 33=119, 34=129, 35=186, 24=152, 23=140, 22=133, 21=119, 20=132, 19=169.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.


July 2,2024




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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | A2 | COMMON | 4 | 1 | I66592132 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:38:59 2024 Page 1

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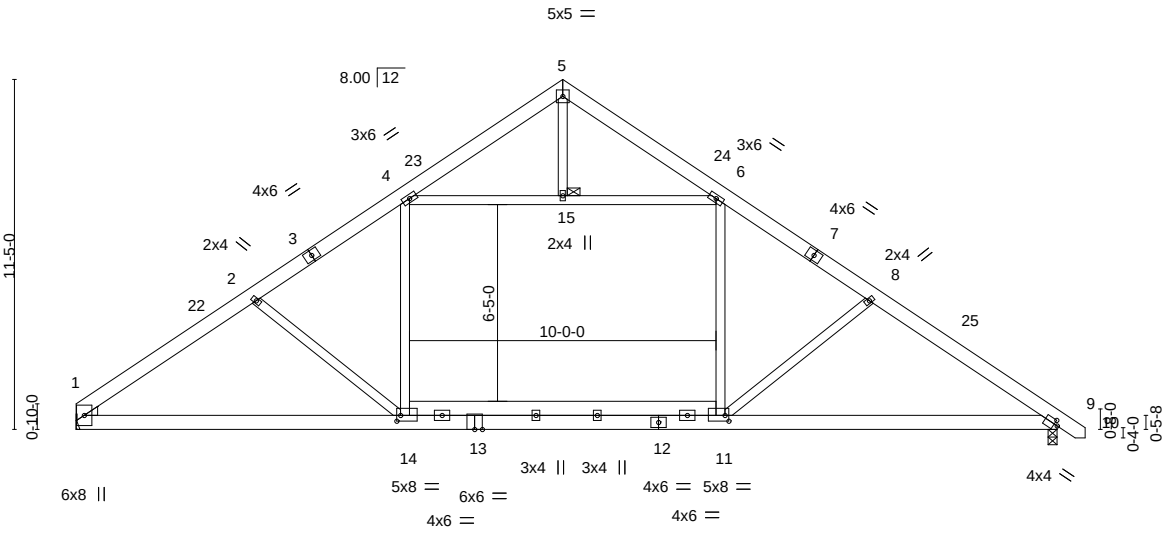
| 5-10-8 | 10-10-8 | 15-10-8 | 20-10-8 | 25-10-8 | 32-0-0 | 32-11-0 |
|---|---|---|---|---|---|---|
| 5-10-8 | 5-0-0 | 5-0-0 | 5-0-0 | 5-0-0 | 6-1-8 | 0-11-0 |

Scale = 1:75.2




| 10-10-8 | 20-10-8 | 32-0-0 |
|---|---|---|
| 10-10-8 | 10-0-0 | 11-1-8 |

Plate Offsets (X,Y)-- [9:0-1-5,0-1-12], [11:0-1-8,0-2-4], [14:0-1-8,0-2-4]

| 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 | 0.23 | Vert(LL) | -0.24 | 11-21 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.53 | Vert(CT) | -0.30 | 11-21 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.48 | Horz(CT) | 0.05 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.27 | 11-21 | >999 | 240 | Weight: 251 lb | FT = 25% |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 15

**REACTIONS.** (size) 1=Mechanical, 9=0-3-8
Max Horz 1=-354(LC 8)
Max Uplift 1=-216(LC 12), 9=-235(LC 13)
Max Grav 1=1445(LC 19), 9=1488(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2080/706, 2-4=-1908/664, 4-5=-471/260, 5-6=-462/258, 6-8=-1911/662, 8-9=-2120/708
BOT CHORD 1-14=-417/1907, 11-14=-223/1635, 9-11=-423/1699
WEBS 8-11=-458/292, 2-14=-375/280, 4-14=-50/596, 6-11=-56/647, 4-15=-1334/510, 6-15=-1334/510

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 15-10-8, Exterior(2) 15-10-8 to 20-3-5, Interior(1) 20-3-5 to 32-9-1 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) except (jt=lb) 1=216, 9=235.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


July 2,2024



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Delude Residence | |
|---|---|---|---|---|---|---|
| J0424-2426 | A2SG | GABLE | 1 | 1 | Job Reference (optional) | I66592133 |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:38:59 2024 Page 1
ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

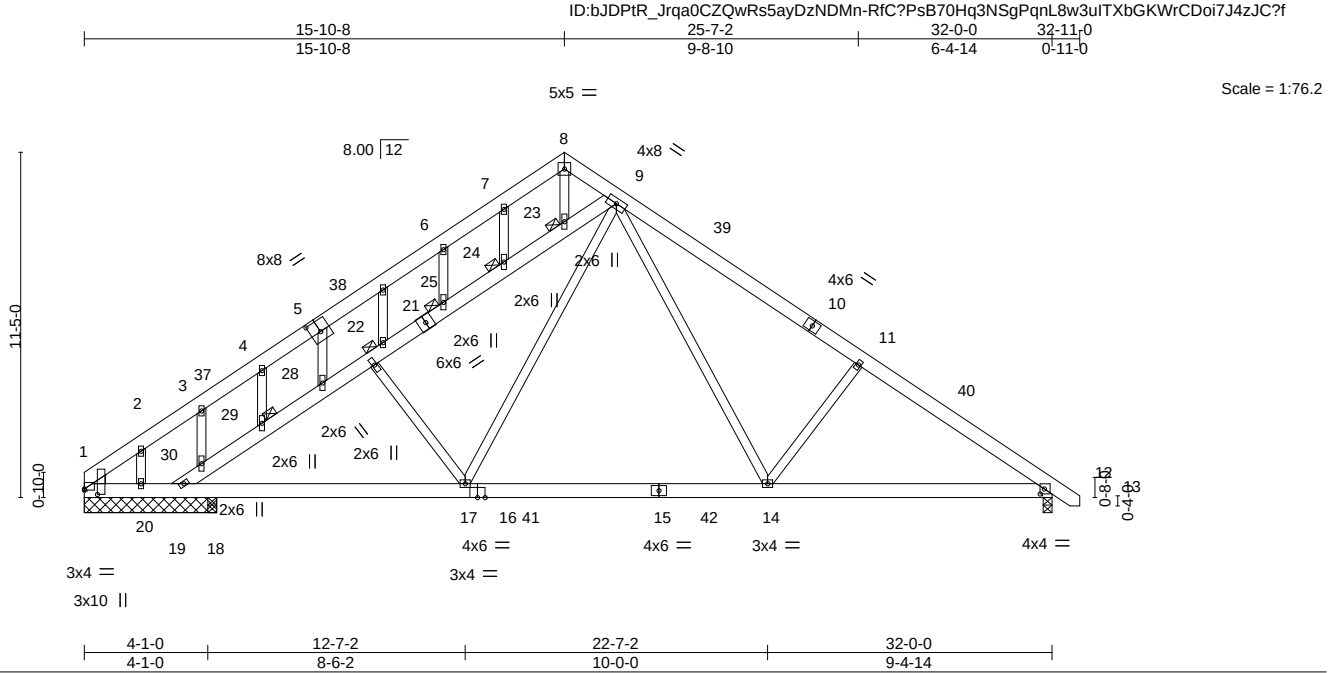


Plate Offsets (X,Y)-- [1:0-0-0,0-0-7], [1:0-2-2,0-5-3], [5:0-4-0,0-4-8], [12:0-1-11,0-2-0]

| 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) | -0.18 | 14-17 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(CT) | -0.25 | 14-17 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.45 | Horz(CT) | 0.03 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.04 | 14-17 | >999 | 240 | Weight: 277 lb | FT = 25% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
19-21,9-21: 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 22, 23, 24, 25, 29

**REACTIONS.** All bearings 4-4-8 except (jt=length) 12=0-3-8, 18=0-3-8.
(lb) - Max Horz 1=-354(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 12=-208(LC 13), 19=-366(LC 12), 20=-216(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 1 except 12=1297(LC 20), 19=918(LC 19), 20=289(LC 19), 18=409(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-429/283, 2-3=-352/65, 3-4=-379/0, 4-5=-264/40, 5-6=-337/27, 6-7=-331/163, 7-8=-288/197, 8-9=-388/280, 9-11=-1741/653, 11-12=-1874/614
BOT CHORD 1-20=-228/430, 19-20=-228/430, 18-19=-302/1590, 17-18=-302/1590, 14-17=-36/1040, 12-14=-350/1470
WEBS 19-30=-1877/878, 29-30=-1735/781, 28-29=-1810/831, 22-28=-1611/696, 22-25=-1593/684, 24-25=-1420/569, 23-24=-1398/556, 9-23=-1512/631, 9-14=-219/802, 9-17=-176/723, 17-22=-472/342, 11-14=-588/380, 6-25=-312/223, 5-28=-416/289, 3-30=-255/173, 2-20=-433/314

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 15-10-8, Exterior(2) 15-10-8 to 20-3-5, Interior(1) 20-3-5 to 32-9-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 208 lb uplift at joint 12, 366 lb uplift at joint 19 and 216 lb uplift at joint 20.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | B1 | COMMON | 4 | 1 | I66592134 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:00 2024 Page 1

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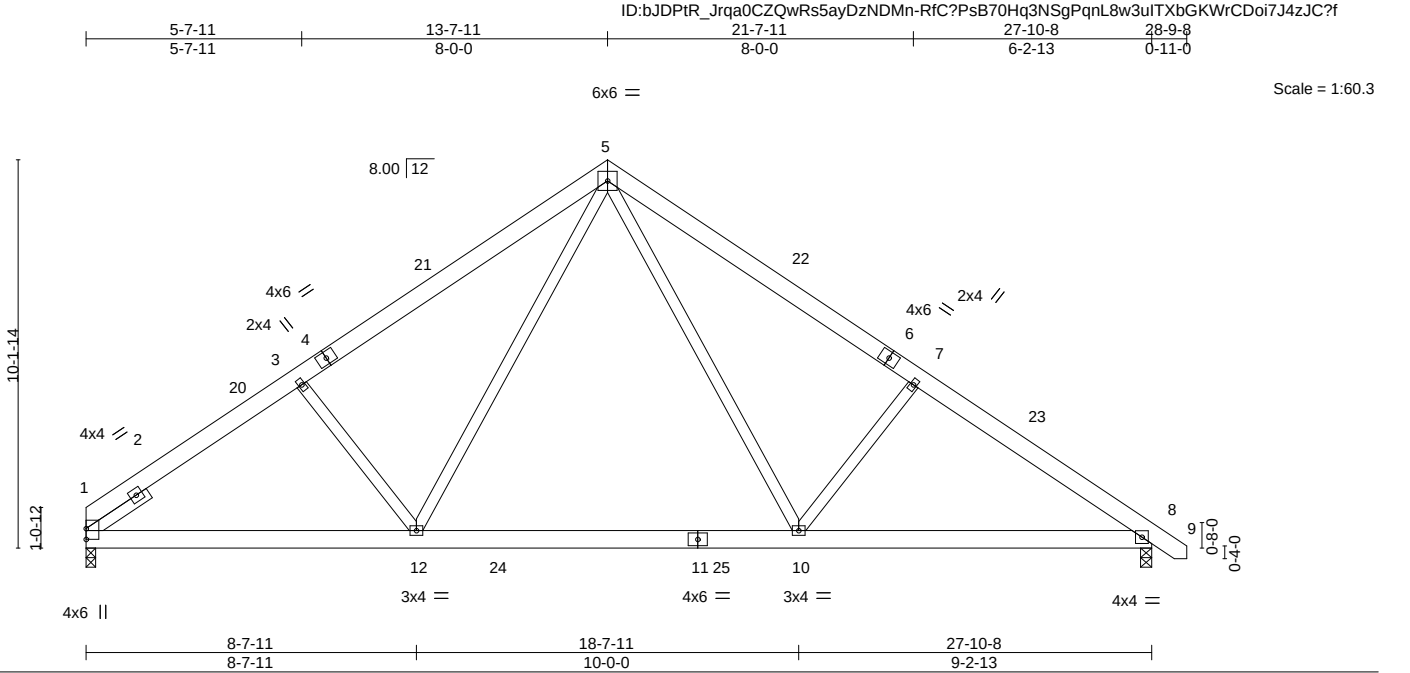


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.24 | Vert(LL) | -0.18 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.46 | Vert(CT) | -0.26 | 10-12 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.43 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.04 | 10-12 | >999 | 240 | Weight: 195 lb | FT = 25% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.1 |
| BOT CHORD | 2x6 SP No.1 |
| WEBS | 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.2 1-11-0 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied. |
| BOT CHORD | Rigid ceiling directly applied. |

**REACTIONS.** (size) 1=0-3-0, 8=0-3-8
Max Horz 1=-313(LC 8)
Max Uplift 1=-186(LC 12), 8=-207(LC 13)
Max Grav 1=1186(LC 19), 8=1232(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1685/609, 3-5=-1613/645, 5-7=-1696/658, 7-8=-1783/623
BOT CHORD 1-12=-343/1515, 10-12=-54/995, 8-10=-379/1404
WEBS 3-12=-478/350, 5-12=-179/680, 5-10=-213/805, 7-10=-571/381

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 13-7-11, Exterior(2) 13-7-11 to 18-0-8, Interior(1) 18-0-8 to 28-7-9 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 186 lb uplift at joint 1 and 207 lb uplift at joint 8.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | B1GE | GABLE | 1 | 1 | I66592135 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:02 2024 Page 1

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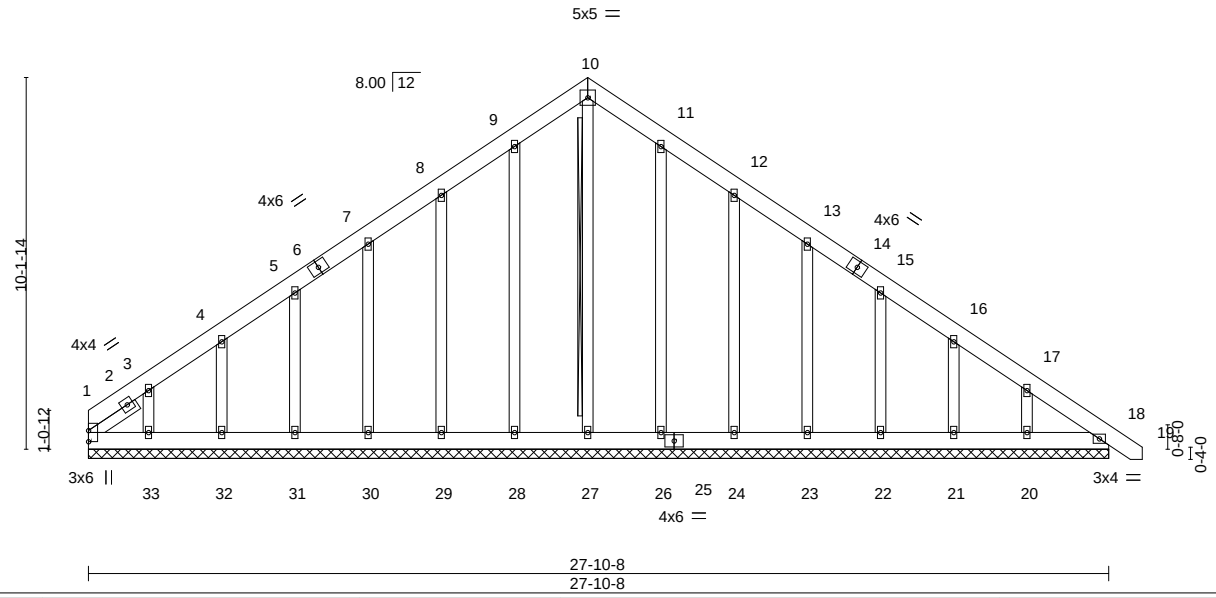
13-7-11 27-10-8 28-9-8

13-7-11 14-2-13 0-11-0

Scale = 1:62.9




27-10-8

27-10-8

| 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 | 0.06 | Vert(LL) | 0.00 | 18 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | 0.00 | 18 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.18 | Horz(CT) | 0.01 | 18 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 245 lb | FT = 25% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 SP No.1 |
| BOT CHORD | 2x6 SP No.1 |
| OTHERS | 2x4 SP No.2 |
| SLIDER | Left 2x4 SP No.2 1-6-10 |

**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 - 10-27 |
| | 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 27-10-8.

(lb) - Max Horz 1=-394(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 18, 28, 26 except 1=-199(LC 10), 29=-147(LC 12), 30=-132(LC 12), 31=-133(LC 12), 32=-125(LC 12), 33=-265(LC 12), 24=-151(LC 13), 23=-132(LC 13), 22=-132(LC 13), 21=-128(LC 13), 20=-171(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 18, 28, 29, 30, 31, 32, 26, 24, 23, 22, 21, 20 except 1=305(LC 12), 27=251(LC 13), 33=252(LC 19)

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

| | |
|---|---|
| TOP CHORD | 1-3=-450/331, 3-4=-280/245, 8-9=-246/299, 9-10=-298/340, 10-11=-298/340, 11-12=-246/274, 17-18=-309/210 |
| BOT CHORD | 1-33=-199/312, 32-33=-199/312, 31-32=-199/312, 30-31=-199/312, 29-30=-199/312, 28-29=-199/312, 27-28=-199/312, 26-27=-199/312, 24-26=-199/312, 23-24=-199/312, 22-23=-199/312, 21-22=-199/312, 20-21=-199/312, 18-20=-199/312 |
| WEBS | 3-33=-235/267 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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) 18, 28, 26 except (jt=lb) 1=199, 29=147, 30=132, 31=133, 32=125, 33=265, 24=151, 23=132, 22=132, 21=128, 20=171.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | B2 | ROOF SPECIAL | 2 | 1 | I66592136 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:02 2024 Page 1

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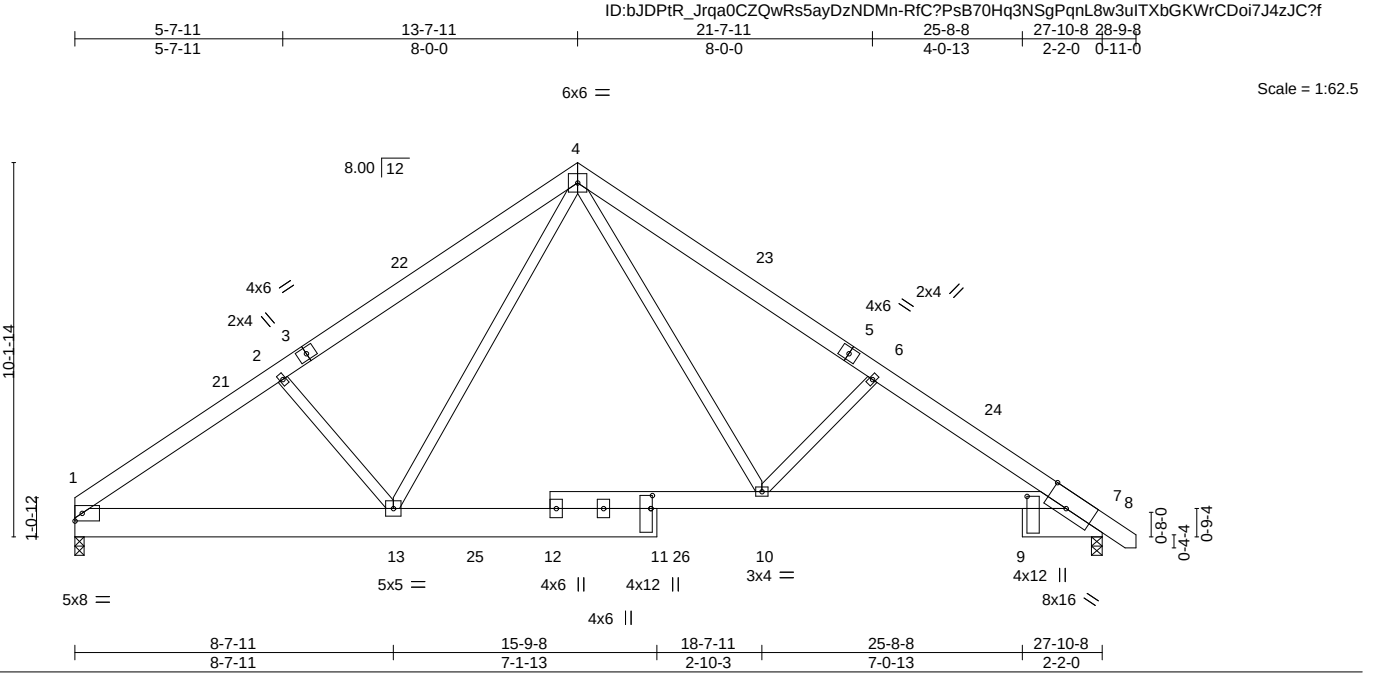


Plate Offsets (X,Y)-- [7:0-7-0,Edge], [11:0-3-15,10-2-8], [11:0-4-4,0-0-8]

| 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 | 0.36 | Vert(LL) | -0.08 | 10-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.16 | 10-20 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.45 | Horz(CT) | 0.05 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.07 | 10-20 | >999 | 240 | Weight: 228 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
7-12: 2x6 SP No.1
WEBS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 1=0-3-0, 7=0-3-8
Max Horz 1=-312(LC 8)
Max Uplift 1=-186(LC 12), 7=-210(LC 13)
Max Grav 1=1176(LC 19), 7=1231(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1708/612, 2-4=-1613/640, 4-6=-1886/681, 6-7=-2042/686
BOT CHORD 1-13=-356/1556, 10-13=-55/1039, 7-10=-452/1692
WEBS 4-10=-252/1001, 6-10=-692/406, 4-13=-166/607, 2-13=-534/373

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 13-7-11, Exterior(2) 13-7-11 to 18-0-8, Interior(1) 18-0-8 to 28-7-12 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) except (jt=lb) 1=186, 7=210.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence | |
|---|---|---|---|---|---|---|
| J0424-2426 | B3 | ROOF SPECIAL | 4 | 1 | Job Reference (optional) | I66592137 |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:03 2024 Page 1
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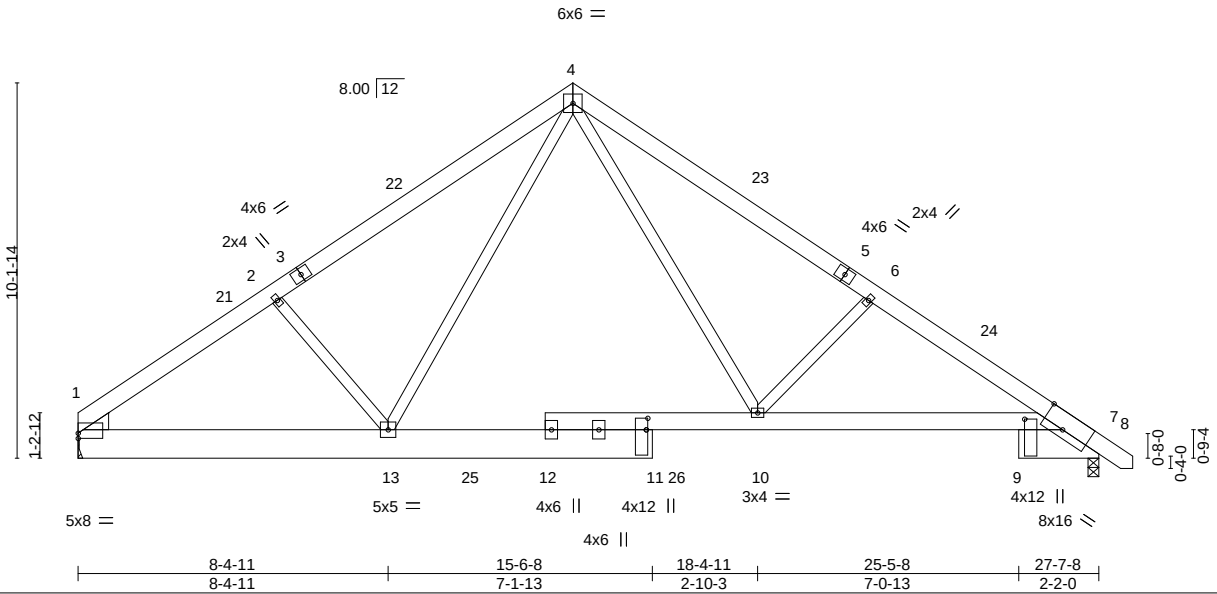
| 5-4-11 | 13-4-11 | 21-4-11 | 25-5-8 | 27-7-8 | 28-6-8 |
|---|---|---|---|---|---|
| 5-4-11 | 8-0-0 | 8-0-0 | 4-0-13 | 2-2-0 | 0-11-0 |

Scale = 1:62.4




| 8-4-11 | 15-6-8 | 18-4-11 | 25-5-8 | 27-7-8 |
|---|---|---|---|---|
| 8-4-11 | 7-1-13 | 2-10-3 | 7-0-13 | 2-2-0 |

Plate Offsets (X,Y)-- [1:0-0-0,0-1-11], [7:0-7-0,Edge], [11:0-3-7,10-2-14], [11:0-3-12,0-0-8]

| 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 | 0.36 | Vert(LL) | -0.08 | 10-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.48 | Vert(CT) | -0.15 | 10-20 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.47 | Horz(CT) | -0.06 | 1 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-AS | | Wind(LL) | 0.08 | 10-20 | >999 | 240 | Weight: 228 lb | FT = 25% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
7-12: 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x6 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 1=Mechanical, 7=0-3-8
Max Horz 7=-312(LC 8)
Max Uplift 1=-183(LC 12), 7=-209(LC 13)
Max Grav 1=1166(LC 19), 7=1220(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1650/595, 2-4=-1557/623, 4-6=-1863/687, 6-7=-2019/693
BOT CHORD 1-13=-387/1276, 10-13=-99/1010, 7-10=-503/1894
WEBS 4-10=-263/1050, 6-10=-689/409, 4-13=-145/578, 2-13=-512/367

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 13-4-11, Exterior(2) 13-4-11 to 17-9-8, Interior(1) 17-9-8 to 28-4-9 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) except (jt=lb) 1=183, 7=209.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | C1 | ATTIC | 2 | 1 | I66592138 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:04 2024 Page 1

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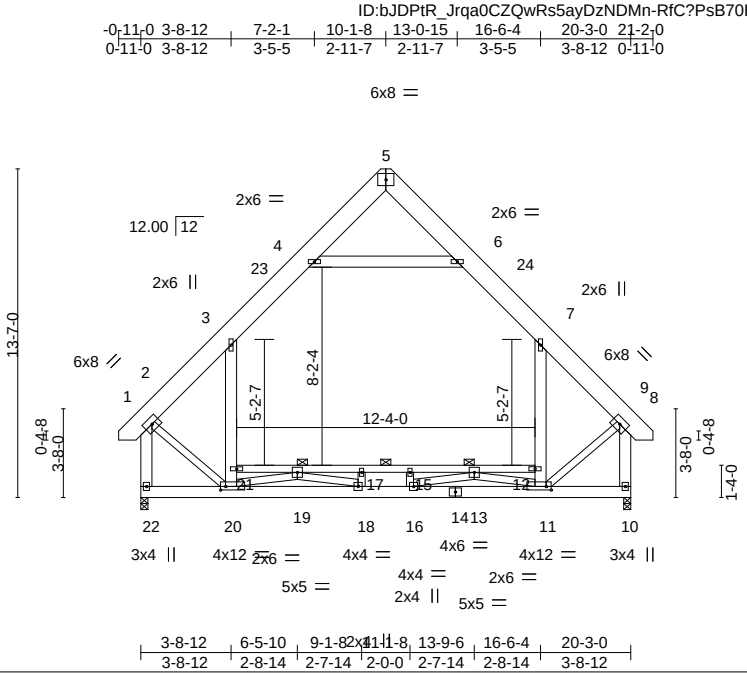


Plate Offsets (X,Y)-- [11:0-2-8,0-1-12], [20:0-2-8,0-1-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | -0.11 | 16-18 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.20 | 16-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.03 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.06 | 18-20 | >999 | 240 | Weight: 273 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x10 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
12-21: 2x4 SP No.1
WEBS 2x4 SP No.2 *Except*
7-11,3-20,4-6,2-22,8-10: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
4-0-0 oc bracing: 13-19
10-0-0 oc bracing: 19-21, 12-13
JOINTS 1 Brace at Jt(s): 19, 13

**REACTIONS.** (size) 22=0-3-8, 10=0-3-8
Max Horz 22=338(LC 11)
Max Grav 22=1608(LC 21), 10=1608(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1210/80, 3-4=-918/271, 6-7=-919/271, 7-8=-1210/80, 2-22=-1666/68, 8-10=-1669/68
BOT CHORD 20-22=-332/376, 18-20=0/2262, 16-18=0/2894, 11-16=0/2193, 19-21=-152/397, 17-19=-2265/0, 15-17=-2265/0, 13-15=-2265/0, 12-13=-168/410
WEBS 11-12=-67/365, 7-12=-28/535, 20-21=-67/365, 3-21=-28/535, 4-6=-960/290, 2-20=0/1027, 8-11=0/1030, 15-16=-261/0, 17-18=-261/0, 19-20=-1933/0, 18-19=0/766, 13-16=0/764, 11-13=-1933/0

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-6-11 to 3-8-4, Interior(1) 3-8-4 to 10-1-8, Exterior(2) 10-1-8 to 14-6-5, Interior(1) 14-6-5 to 20-9-11 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-12, 3-21
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21, 17-19, 15-17, 13-15, 12-13
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Attic room checked for L/360 deflection.


July 2,2024



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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | C1GE | GABLE | 1 | 1 | I66592139 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:05 2024 Page 1

ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

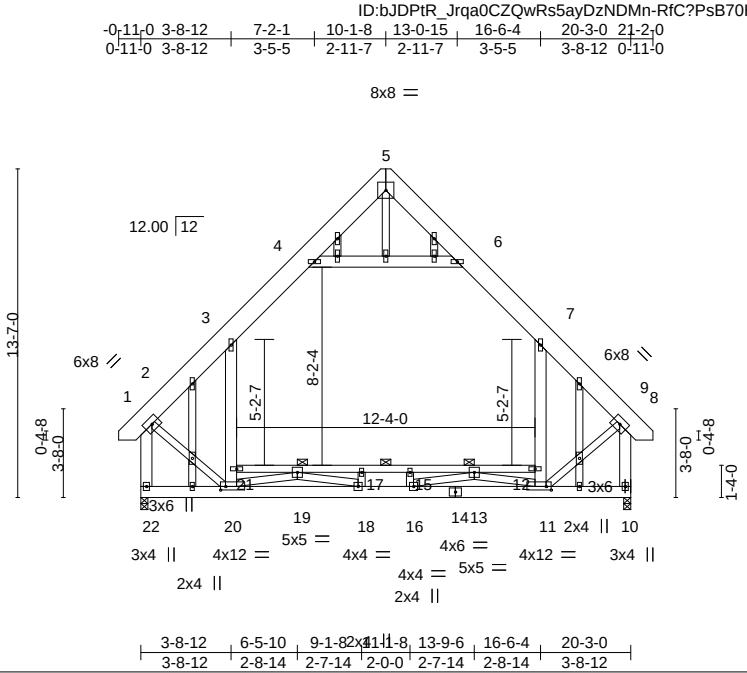


Plate Offsets (X,Y)-- [11:0-2-8,0-1-12], [20:0-2-8,0-1-12]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | -0.11 | 16-18 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.20 | 16-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.03 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.06 | 18-20 | >999 | 240 | Weight: 293 lb | FT = 25% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x10 SP No.1 |
| BOT CHORD | 2x6 SP No.1 *Except* 12-21: 2x4 SP No.1 |
| WEBS | 2x4 SP No.2 *Except* 7-11,3-20,4-6,2-22,8-10: 2x6 SP No.1 |
| OTHERS | 2x4 SP No.2 |

**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied. Except: 4-0-0 oc bracing: 13-19 10-0-0 oc bracing: 19-21, 12-13 |
| JOINTS | 1 Brace at Jt(s): 19, 13 |

**REACTIONS.** (size) 22=0-3-8, 10=0-3-8
Max Horz 22=338(LC 11)
Max Grav 22=1608(LC 21), 10=1608(LC 20)

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

| | |
|---|---|
| TOP CHORD | 2-3=-1210/106, 3-4=-918/311, 6-7=-919/311, 7-8=-1210/106, 2-22=-1666/102, 8-10=-1669/102 |
| BOT CHORD | 20-22=-332/376, 18-20=0/2262, 16-18=0/2894, 11-16=0/2193, 19-21=-152/397, 17-19=-2265/0, 15-17=-2265/0, 13-15=-2265/0, 12-13=-168/410 |
| WEBS | 11-12=-67/365, 7-12=-28/535, 20-21=-67/365, 3-21=-28/535, 4-6=-960/363, 2-20=0/1027, 8-11=0/1030, 15-16=-261/0, 17-18=-261/0, 19-20=-1933/0, 18-19=0/766, 13-16=0/764, 11-13=-1933/0 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-6-11 to 3-8-4, Exterior(2) 3-8-4 to 10-1-8, Corner(3) 10-1-8 to 14-6-5, Exterior(2) 14-6-5 to 20-9-11 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 2x6 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-12, 3-21
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21, 17-19, 15-17, 13-15, 12-13
10) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
11) Attic room checked for L/360 deflection.


July 2,2024



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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | C2 | ATTIC | 2 | 1 | I66592140 |

Job Reference (optional)

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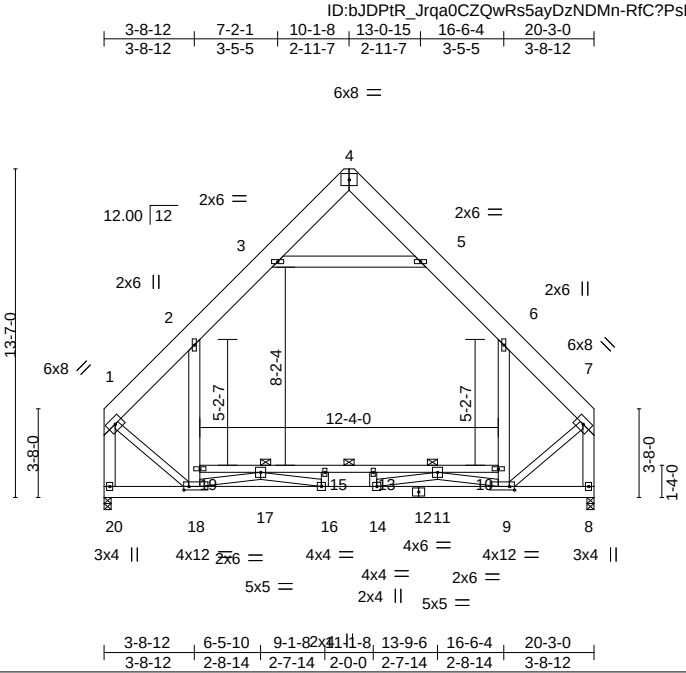


Plate Offsets (X,Y)-- [9:0-2-8,0-1-12], [18:0-2-8,0-1-12]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.27 | Vert(LL) | -0.11 | 14-16 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.20 | 14-16 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.07 | 16-18 | >999 | 240 | Weight: 267 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x10 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-19: 2x4 SP No.1
WEBS 2x4 SP No.2 *Except*
6-9,2-18,3-5,1-20,7-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
4-0-0 oc bracing: 11-17
10-0-0 oc bracing: 17-19, 10-11
JOINTS 1 Brace at Jt(s): 17, 11

**REACTIONS.** (size) 20=0-3-8, 8=0-3-8
Max Horz 20=-391(LC 8)
Max Grav 20=1580(LC 21), 8=1580(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1221/64, 2-3=-932/298, 5-6=-933/298, 6-7=-1222/64, 1-20=-1647/46, 7-8=-1650/46
BOT CHORD 18-20=-406/432, 16-18=0/2302, 14-16=0/2895, 9-14=0/2194, 17-19=-208/436, 15-17=-2265/0, 13-15=-2265/0, 11-13=-2265/0, 10-11=-228/451
WEBS 9-10=-70/363, 6-10=-31/533, 18-19=-70/363, 2-19=-31/533, 3-5=-961/340, 1-18=-19/1049, 7-9=-21/1052, 13-14=-266/13, 15-16=-265/10, 17-18=-1933/0, 16-17=0/791, 11-14=0/789, 9-11=-1933/0

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-10, 2-19
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-19, 15-17, 13-15, 11-13, 10-11
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Attic room checked for L/360 deflection.


July 2,2024



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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | C3 | ATTIC | 3 | 1 | I66592141 |

Job Reference (optional)

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Scale: 1/8"=1'

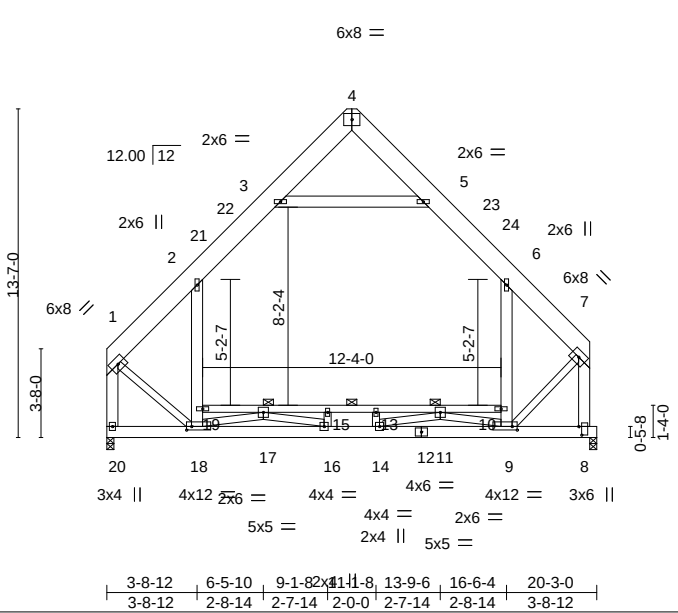


Plate Offsets (X,Y)-- [8:0-4-4,0-1-8], [9:0-2-8,0-1-12], [18:0-2-8,0-1-12]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.28 | Vert(LL) | -0.11 | 14-16 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.76 | Vert(CT) | -0.19 | 14-16 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.35 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | Wind(LL) | 0.06 | 16-18 | >999 | 240 | Weight: 266 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x10 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-19: 2x4 SP No.1
WEBS 2x4 SP No.2 *Except*
6-9,2-18,3-5,1-20,7-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied. Except:
4-0-0 oc bracing: 11-17
6-0-0 oc bracing: 17-19
10-0-0 oc bracing: 10-11
JOINTS 1 Brace at Jt(s): 17, 11

**REACTIONS.** (size) 20=0-3-8, 8=0-3-8
Max Horz 20=312(LC 9)
Max Grav 20=1556(LC 21), 8=1584(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1193/39, 2-3=-891/262, 5-6=-909/264, 6-7=-1139/44, 1-20=-1605/12, 7-8=-1667/6
BOT CHORD 18-20=-322/348, 16-18=0/2245, 14-16=0/2865, 9-14=0/2143, 17-19=-161/349, 15-17=-2258/0, 13-15=-2258/0, 11-13=-2258/0, 10-11=-157/444
WEBS 9-10=-121/311, 6-10=-84/480, 18-19=-71/361, 2-19=-29/534, 3-5=-919/272, 1-18=0/985, 7-9=0/1068, 13-14=-270/0, 15-16=-252/0, 17-18=-1914/0, 16-17=0/732, 11-14=0/786, 9-11=-1941/0

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 10-1-8, Exterior(2) 10-1-8 to 14-6-5, Interior(1) 14-6-5 to 19-8-12 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) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-5; Wall dead load (5.0psf) on member(s).6-10, 2-19
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-19, 15-17, 13-15, 11-13, 10-11
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Attic room checked for L/360 deflection.


July 2,2024



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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | C3-GR | Attic Girder | 1 | 2 | I66592142 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:07 2024 Page 1

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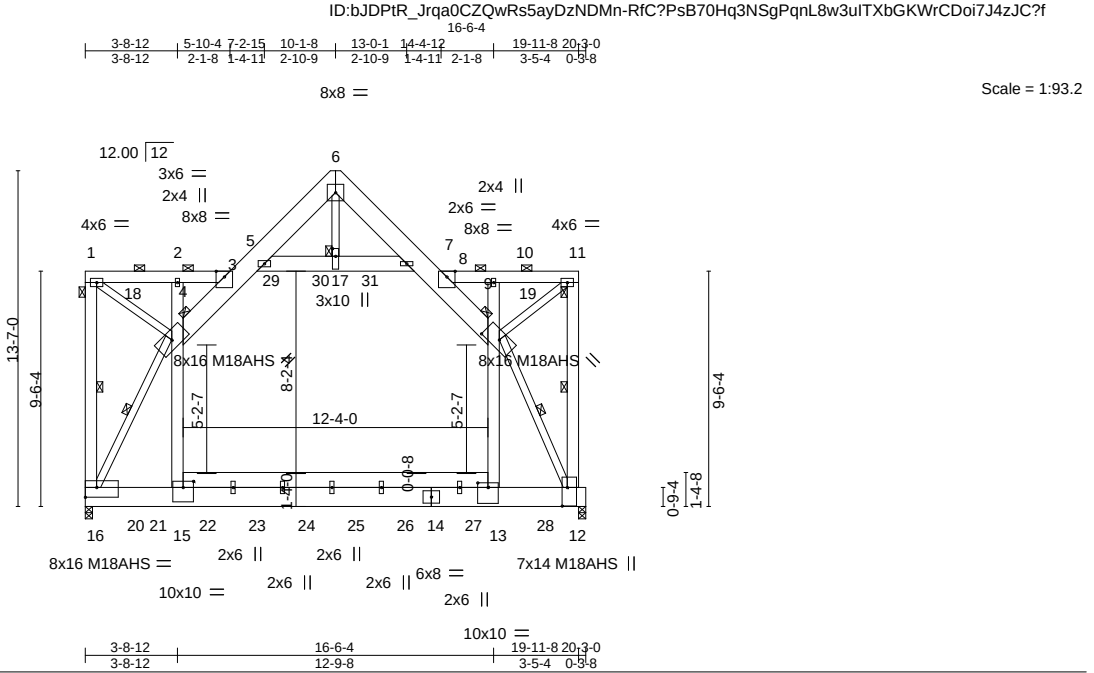



Plate Offsets (X,Y)-- [9:0-8-4,0-4-0], [12:0-9-0,0-2-8], [13:0-5-0,0-2-4], [15:0-5-0,0-3-0], [16:Edge,0-4-12], [17:0-3-12,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.38 | Vert(LL) | -0.19 | 13-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.43 | Vert(CT) | -0.26 | 13-15 | >891 | 240 | M18AHS | 186/179 |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.98 | Horz(CT) | 0.02 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MS | | Wind(LL) | 0.04 | 13-15 | >999 | 240 | Weight: 699 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x6 SP No.1 *Except* 4-6,6-9: 2x10 SP No.1

BOT CHORD 2x10 SP 2400F 2.0E *Except* 13-15: 2x8 SP 2400F 2.0E

WEBS 2x4 SP No.2 *Except* 1-16,11-12,2-15,10-13: 2x6 SP No.1, 5-7: 2x8 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-3, 3-4, 8-9, 8-11.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 1-16, 11-12, 4-16, 9-12

JOINTS 1 Brace at Jt(s): 1, 4, 9, 11, 17

**REACTIONS.** (size) 16=0-3-8 (req. 0-4-1), 12=0-3-8 (req. 0-4-3)
Max Horz 16=125(LC 35)
Max Uplift 16=-1108(LC 9), 12=-1045(LC 8)
Max Grav 16=9855(LC 2), 12=10184(LC 2)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

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

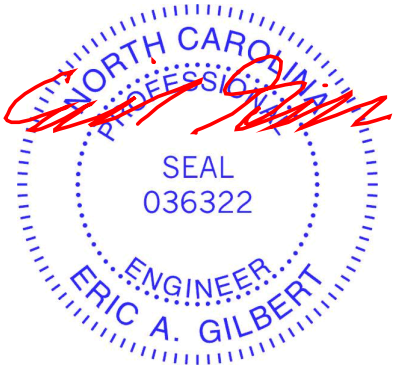
TOP CHORD 1-16=-1388/632, 1-2=-1313/795, 2-3=-1103/909, 3-4=-6529/985, 3-5=-5887/748, 5-6=-3615/644, 6-7=-3567/523, 7-8=-6488/833, 8-9=-6783/984, 8-10=-699/1127, 10-11=-800/995, 11-12=-1790/720

BOT CHORD 15-16=-456/4676, 13-15=-471/4614, 12-13=-458/4673

WEBS 1-4=-941/1487, 4-15=0/3402, 2-4=-2074/408, 5-17=-2301/165, 7-17=-2301/165, 9-13=0/3359, 9-10=-2181/423, 9-11=-1205/942, 4-16=-9523/938, 9-12=-10152/994, 6-17=-498/4171

**NOTES-**

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-5-0 oc.
   Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 3 rows staggered at 0-2-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) All plates are MT20 plates unless otherwise indicated.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Ceiling dead load (10.0 psf) on member(s). 2-3, 3-5, 7-8, 8-10, 5-17, 7-17; Wall dead load (5.0psf) on member(s).4-15, 2-4, 9-13, 9-10
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
11) WARNING: Required bearing size at joint(s) 16, 12 greater than input bearing size.

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Continued on page 2



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**NOTES-**

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=1108, 12=1045.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 329 lb down and 226 lb up at 0-2-12, 1074 lb down and 216 lb up at 1-8-12, 1068 lb down and 216 lb up at 3-8-12, 1068 lb down and 223 lb up at 6-1-8, 1074 lb down and 216 lb up at 15-8-12, and 1074 lb down and 216 lb up at 17-8-12, and 1092 lb down and 203 lb up at 19-8-12 on top chord, and 633 lb down at 0-9-4, 629 lb down at 2-9-4, 629 lb down at 4-9-4, 336 lb down and 109 lb up at 6-9-4, 336 lb down and 109 lb up at 8-9-4, 336 lb down and 109 lb up at 10-9-4, 336 lb down and 109 lb up at 12-9-4, 336 lb down and 109 lb up at 14-5-4, and 336 lb down and 109 lb up at 16-5-4, and 336 lb down and 109 lb up at 18-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) Attic room checked for L/360 deflection.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-80, 3-5=-80, 5-6=-60, 6-7=-60, 7-8=-80, 8-10=-80, 10-11=-60, 15-16=-20, 13-15=-40, 12-13=-20, 5-7=-20
   Drag: 2-15=-10, 10-13=-10
   Concentrated Loads (lb)
   Vert: 1=-42 3=-1028(F) 2=-1028(F) 13=-38(B) 7=-1166(F) 10=-1034(F) 11=-1072(F) 18=-1034(F) 19=-1034(F) 20=-146(B) 21=-141(B) 22=-141(B) 23=-38(B) 24=-38(B) 25=-38(B) 26=-38(B) 27=-38(B) 28=-38(B) 29=-1166(F) 30=-1166(F) 31=-1166(F)

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | D1-GR | Common Girder | 1 | 2 | I66592143 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:09 2024 Page 1

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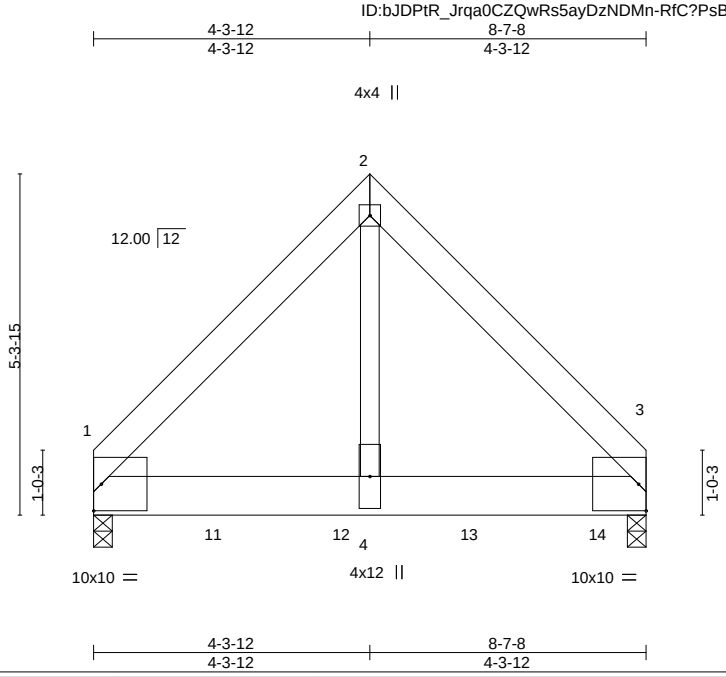


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.07 | Vert(LL) | -0.01 | 4-10 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.33 | Vert(CT) | -0.03 | 4-10 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.38 | Horz(CT) | 0.00 | 1 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-MP | | Wind(LL) | 0.01 | 4-10 | >999 | 240 | Weight: 127 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 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) 1=0-3-8, 3=0-3-8
Max Horz 1=-138(LC 4)
Max Uplift 1=-446(LC 9), 3=-568(LC 8)
Max Grav 1=2607(LC 2), 3=3331(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2399/465, 2-3=-2390/463
BOT CHORD 1-4=-278/1654, 3-4=-278/1654
WEBS 2-4=-524/3098

**NOTES-**

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=446, 3=568.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1333 lb down and 236 lb up at 1-10-12, 1333 lb down and 236 lb up at 3-10-12, and 1333 lb down and 236 lb up at 5-10-12, and 1336 lb down and 233 lb up at 7-10-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-3=-60, 5-8=-20
   Concentrated Loads (lb)
   Vert: 11=-1259(B) 12=-1259(B) 13=-1259(B) 14=-1262(B)


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | D1GE | COMMON SUPPORTED GAB | 1 | 1 | I66592144 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:08 2024 Page 1

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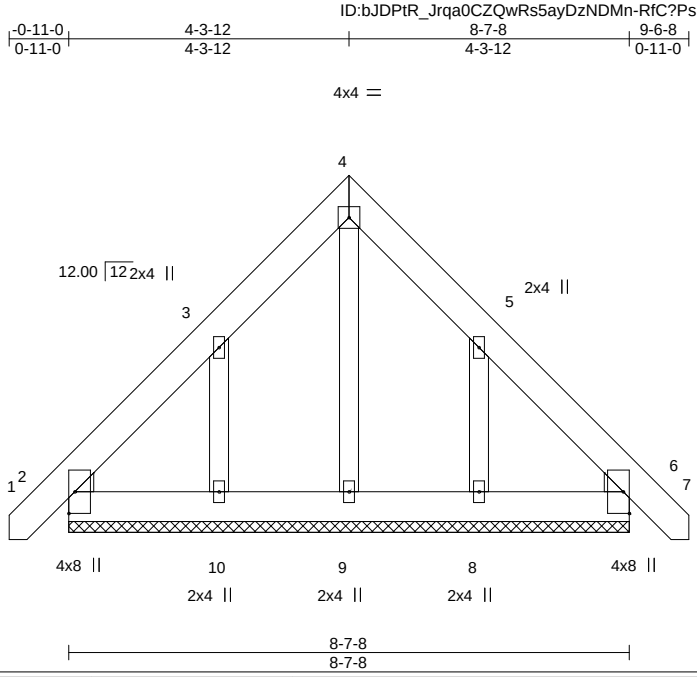


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | 0.00 | 6 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 6 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 6 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 70 lb | FT = 25% |

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

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

**REACTIONS.** All bearings 8-7-8.
(lb) - Max Horz 2=-203(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-290(LC 12), 8=-286(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 10=271(LC 19), 8=266(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-350/325, 5-8=-351/326

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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) Gable requires continuous bottom chord bearing.
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) 2, 6 except (jt=lb) 10=290, 8=286.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | J1 | Monopitch | 8 | 1 | I66592145 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:09 2024 Page 1

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0-11-0 4-0-0

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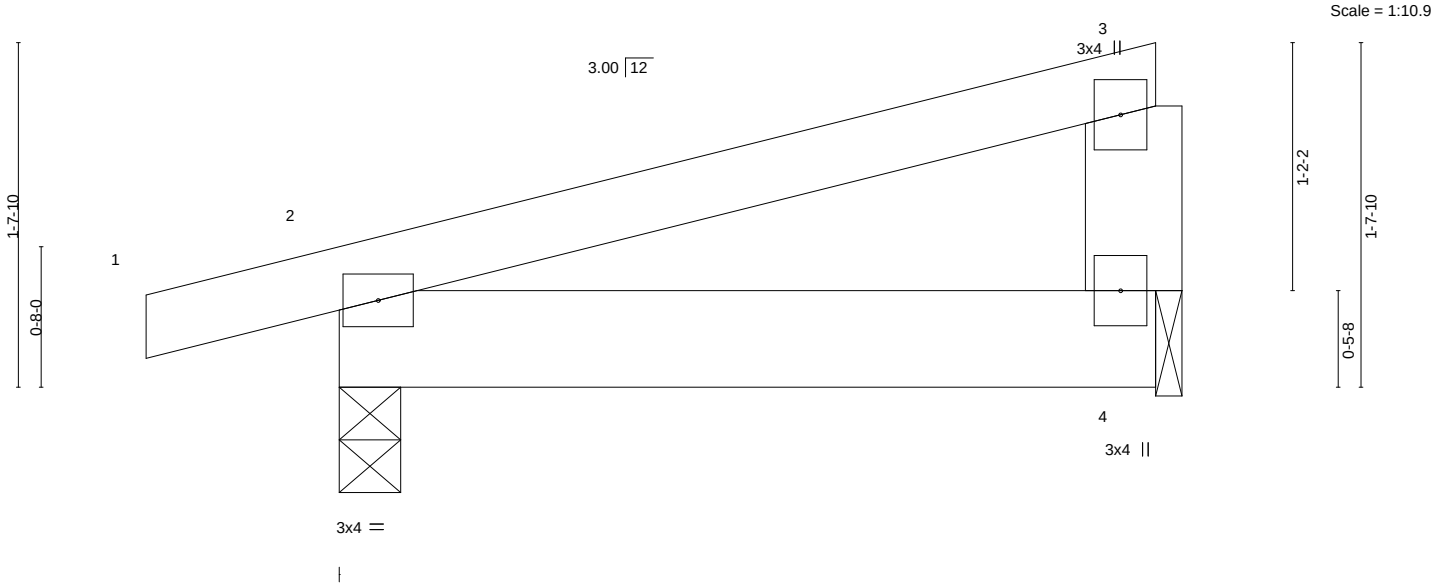


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.11 | Vert(LL) | 0.01 | 4-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.07 | Vert(CT) | -0.01 | 4-7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-AS | | | | | | | Weight: 19 lb | FT = 25% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 2=0-3-8, 4=0-1-8
Max Horz 2=78(LC 8)
Max Uplift 2=-133(LC 8), 4=-80(LC 12)
Max Grav 2=213(LC 1), 4=144(LC 1)

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

**NOTES-**

1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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
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=133.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | M1 | MONOPITCH | 5 | 1 | I66592146 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:10 2024 Page 1

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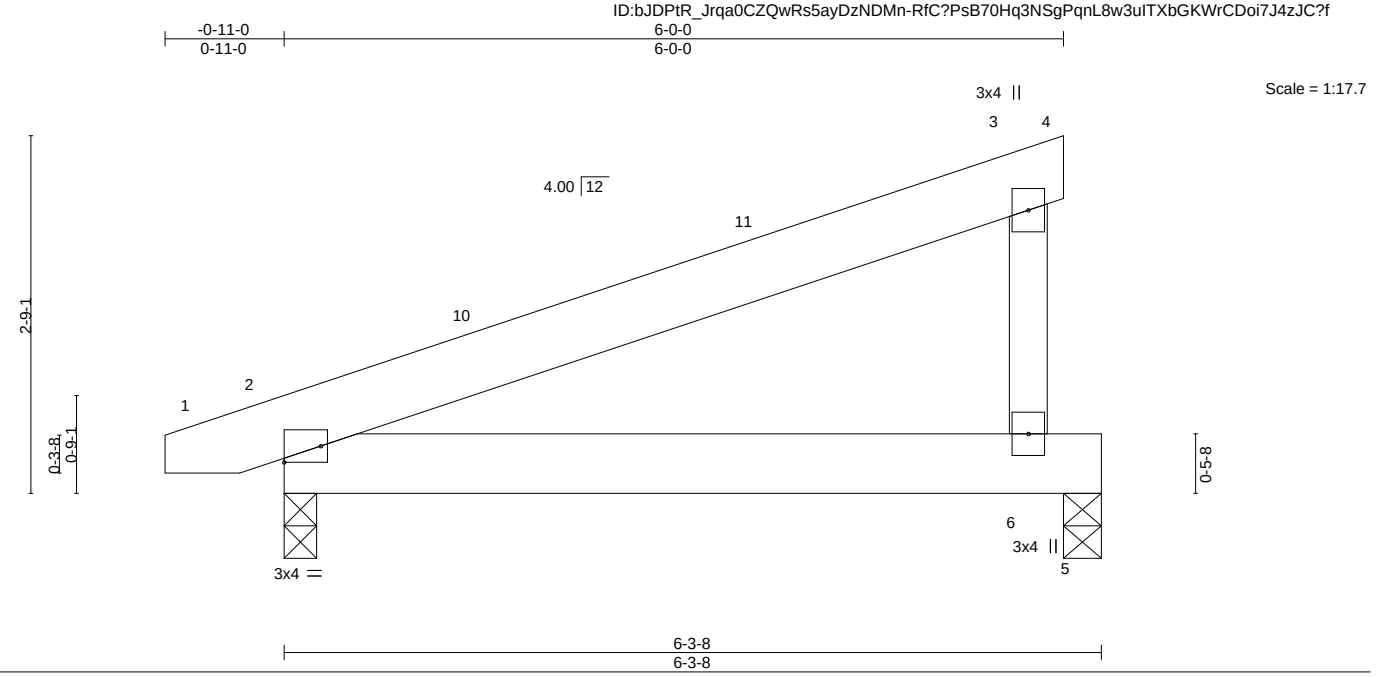


Plate Offsets (X,Y)-- [2:Edge,0-1-8]

| 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 | 0.20 | Vert(LL) | 0.07 | 6-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.23 | Vert(CT) | -0.03 | 6-9 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-AS | | | | | | | Weight: 35 lb | FT = 25% |

**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, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied. |

**REACTIONS.** (size) 2=0-3-0, 5=0-3-8
Max Horz 2=99(LC 8)
Max Uplift 2=-167(LC 8), 5=-160(LC 8)
Max Grav 2=285(LC 1), 5=225(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-165/283

**NOTES-**

1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 6-0-0 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=167, 5=160.
5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | M1GE | GABLE | 1 | 1 | I66592147 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:11 2024 Page 1

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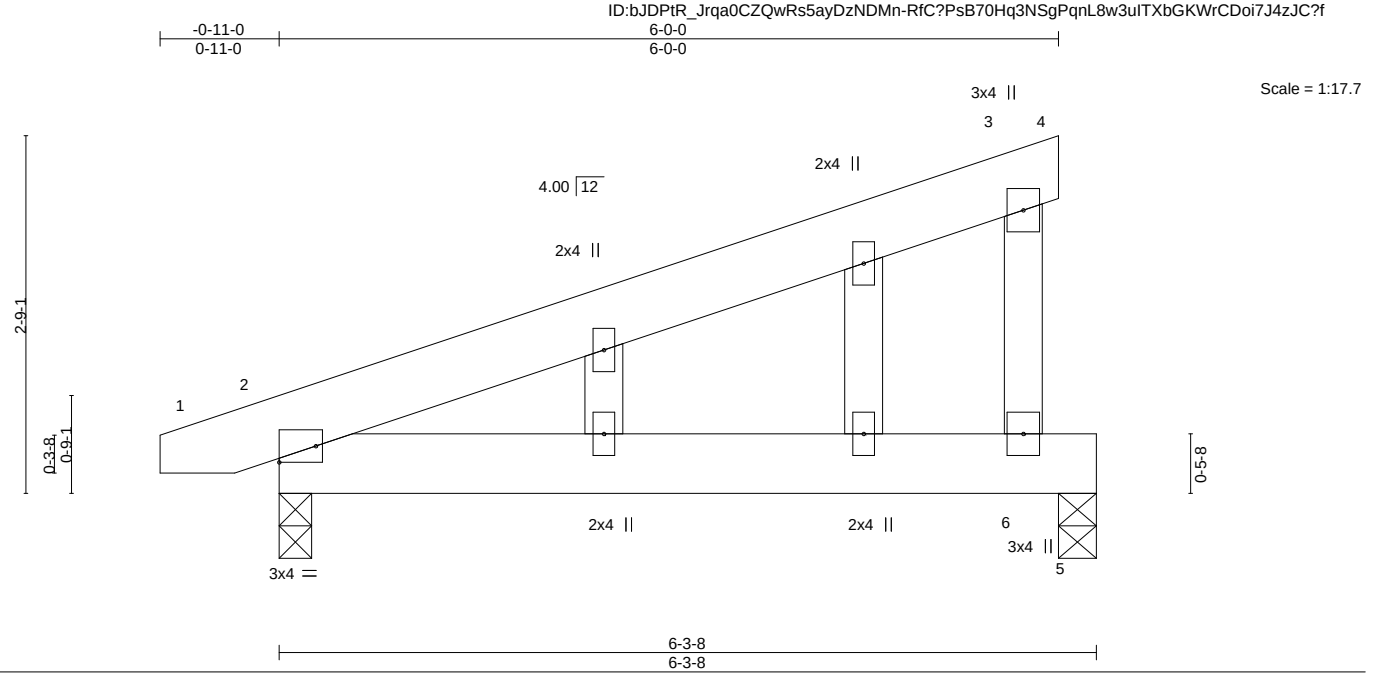


Plate Offsets (X,Y)-- [2:Edge,0-1-8]

| 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 | 0.21 | Vert(LL) | 0.07 | 6-13 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.24 | Vert(CT) | -0.03 | 6-13 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | -0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-AS | | | | | | | Weight: 38 lb | FT = 25% |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x6 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, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied. |

**REACTIONS.** (size) 2=0-3-0, 5=0-3-8
Max Horz 2=141(LC 8)
Max Uplift 2=-230(LC 8), 5=-223(LC 8)
Max Grav 2=285(LC 1), 5=225(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-165/288

**NOTES-**

1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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 exposed;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 studs spaced at 2-0-0 oc.
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) except (jt=lb) 2=230, 5=223.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | M2 | HALF HIP | 4 | 1 | I66592148 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:11 2024 Page 1

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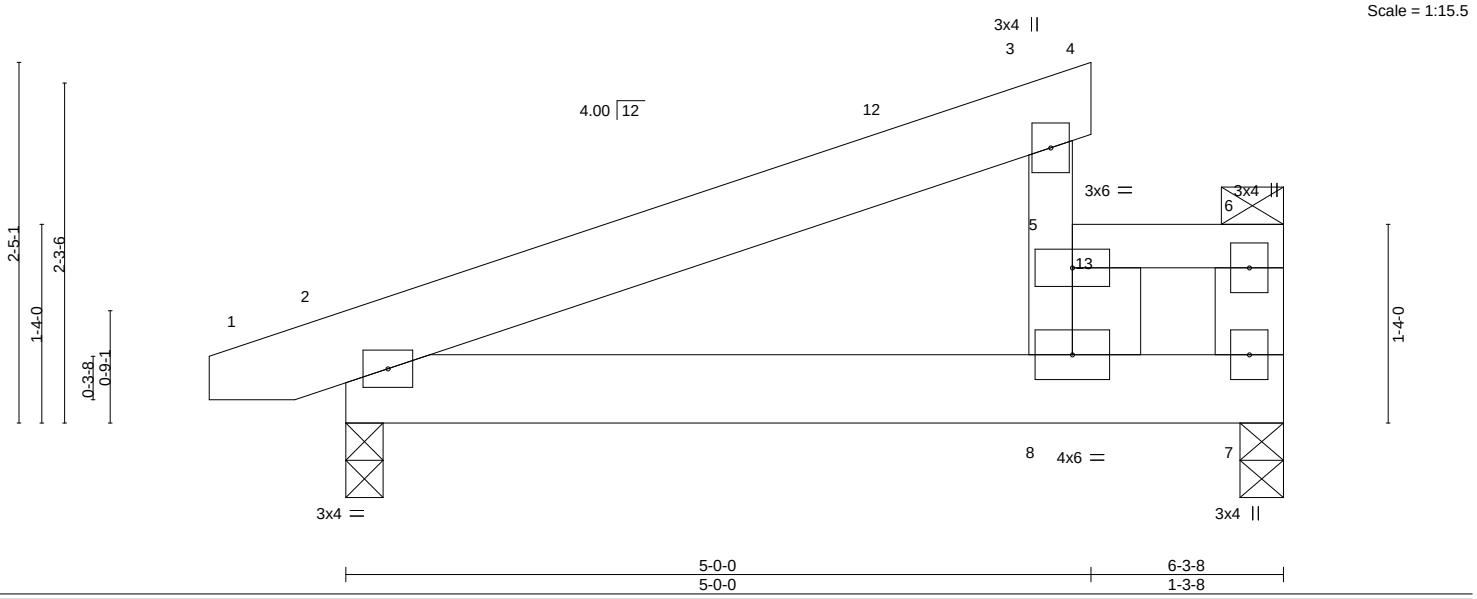


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.32 | Vert(LL) | -0.00 | 8-11 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.15 | Vert(CT) | -0.01 | 8-11 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | -0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MR | | Wind(LL) | 0.01 | 8-11 | >999 | 240 | Weight: 36 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x6 SP No.1 *Except* 5-6: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except* 3-8: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-8, 5-6. Except: 6-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 7=0-3-8, 2=0-3-0
Max Horz 2=126(LC 12)
Max Uplift 7=-111(LC 12), 2=-89(LC 8)
Max Grav 7=420(LC 1), 2=318(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-321/182, 5-6=-260/237
BOT CHORD 2-8=-307/322, 7-8=-237/260

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 6-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 2 except (jt=lb) 7=111.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-20, 5-6=-60, 7-9=-20
Concentrated Loads (lb)
Vert: 13=-210(F)


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | M2-GR | HALF HIP | 1 | 2 | I66592149 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:12 2024 Page 1

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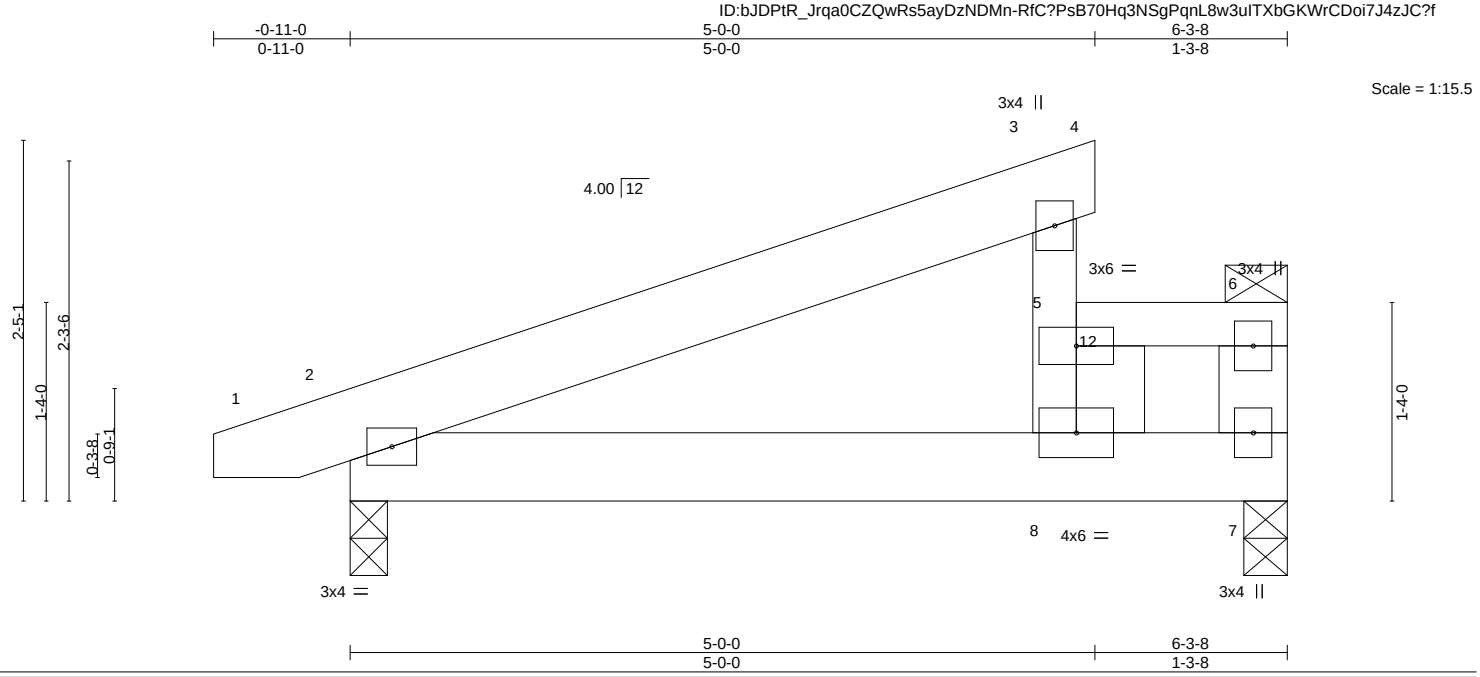


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.16 | Vert(LL) | -0.00 | 8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | -0.01 | 8-11 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.00 | Horz(CT) | 0.00 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MR | | Wind(LL) | 0.00 | 8 | >999 | 240 | Weight: 73 lb | FT = 25% |

**LUMBER-**

TOP CHORD 2x6 SP No.1 *Except*
5-6: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-8: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-8, 5-6.
Except:
6-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 7=0-3-8, 2=0-3-0
Max Horz 2=126(LC 8)
Max Uplift 7=-111(LC 8), 2=-89(LC 4)
Max Grav 7=420(LC 1), 2=318(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-320/59
BOT CHORD 2-8=-100/281

**NOTES-**

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) 2 except (jt=lb) 7=111.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-20, 5-6=-60, 7-9=-20


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Continued on page 2



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**LOAD CASE(S)** Standard
Concentrated Loads (lb)
Vert: 12=-210(F)

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V1GE | GABLE | 1 | 1 | I66592150 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:12 2024 Page 1

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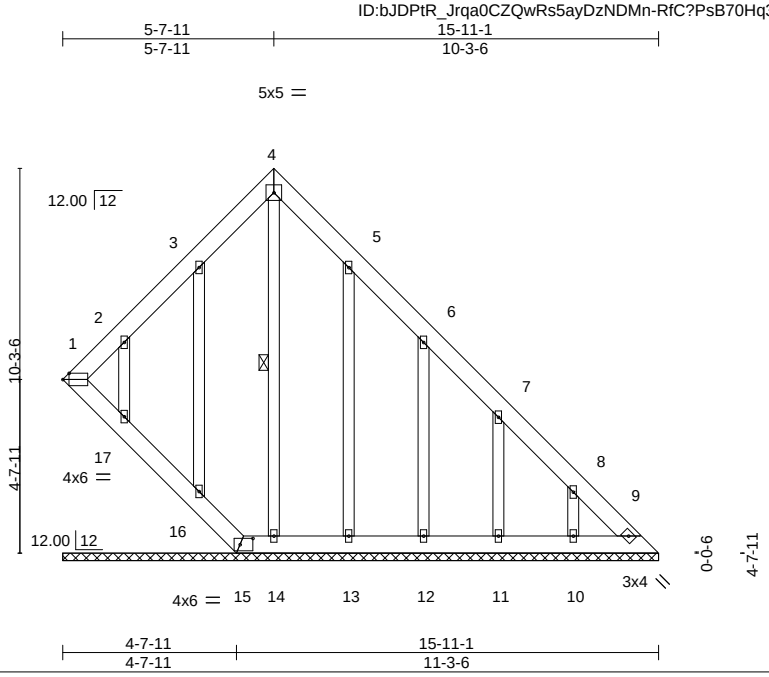


Plate Offsets (X,Y)-- [1:0-2-0,Edge], [15:0-4-2,0-2-0]

| 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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.19 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 145 lb | FT = 25% |

**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 | 1 Row at midpt 4-14 |

**REACTIONS.** All bearings 15-11-1.

(lb) - Max Horz 1=-418(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) 9, 14 except 15=-348(LC 13), 16=-175(LC 12), 17=-206(LC 12), 13=-151(LC 13), 12=-223(LC 13), 11=-197(LC 13), 10=-206(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 15, 14, 16, 17, 13, 12, 11, 10 except 1=303(LC 13), 9=299(LC 13)

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

| | |
|---|---|
| TOP CHORD | 3-4=-234/268, 4-5=-238/253, 7-8=-289/188, 8-9=-456/321 |
| BOT CHORD | 1-17=-381/524, 16-17=-379/531, 15-16=-365/524, 14-15=-258/369, 13-14=-258/369, 12-13=-258/369, 11-12=-257/368, 10-11=-256/367, 9-10=-254/365 |
| WEBS | 6-12=-254/246 |

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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) Bearing at joint(s) 1, 16, 17 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 14 except (jt=lb) 15=348, 16=175, 17=206, 13=151, 12=223, 11=197, 10=206.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1, 16, 17.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V2 | VALLEY | 1 | 1 | I66592151 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:13 2024 Page 1

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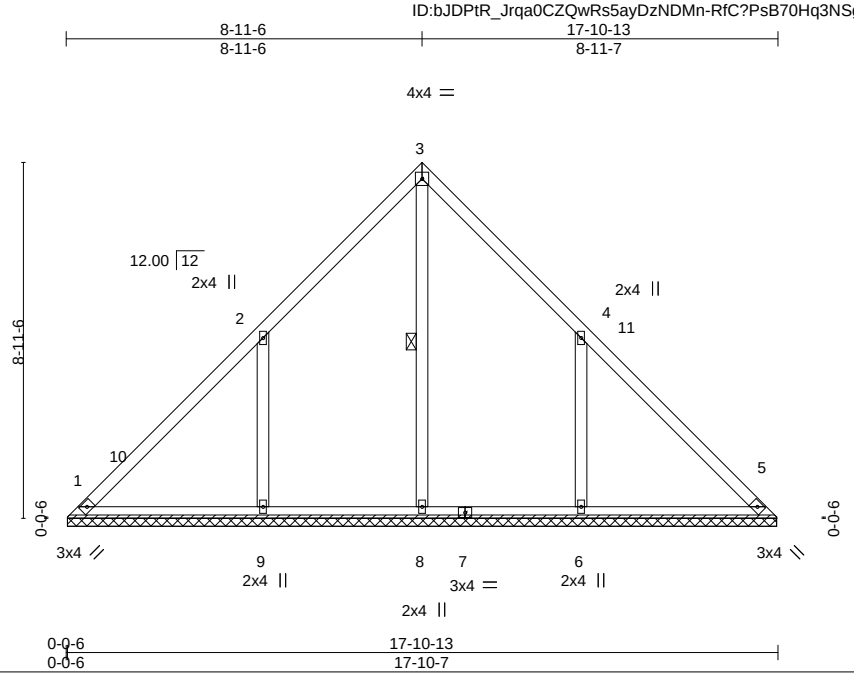


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| 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 | 0.29 | 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 | 0.21 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 88 lb | FT = 25% |

**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. |
| WEBS | 1 Row at midpt 3-8 |

**REACTIONS.** All bearings 17-10-1.

(lb) - Max Horz 1=-274(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-331(LC 12), 6=-331(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=426(LC 22), 9=600(LC 19), 6=599(LC 20)

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

TOP CHORD 2-3=-257/246, 3-4=-257/246

WEBS 2-9=-589/479, 4-6=-589/479

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-11-6, Interior(1) 4-11-6 to 8-11-6, Exterior(2) 8-11-6 to 13-4-3, Interior(1) 13-4-3 to 17-6-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 9=331, 6=331.
6) Non Standard bearing condition. Review required.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V3 | VALLEY | 1 | 1 | I66592152 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:13 2024 Page 1

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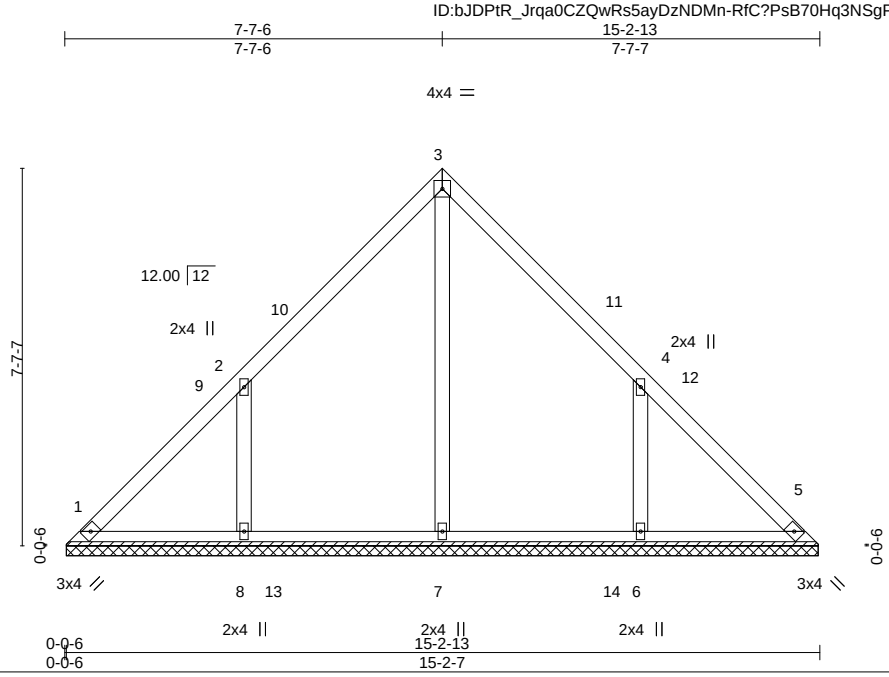


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| 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 | 0.20 | 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: 73 lb | FT = 25% |

**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 15-2-1.

(lb) - Max Horz 1=232(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-276(LC 12), 6=-275(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=421(LC 22), 8=488(LC 19), 6=488(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-497/423, 4-6=-497/423

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-7-6, Exterior(2) 7-7-6 to 12-0-3, Interior(1) 12-0-3 to 14-10-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=276, 6=275.
6) Non Standard bearing condition. Review required.


July 2,2024



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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V4 | VALLEY | 1 | 1 | I66592153 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:14 2024 Page 1

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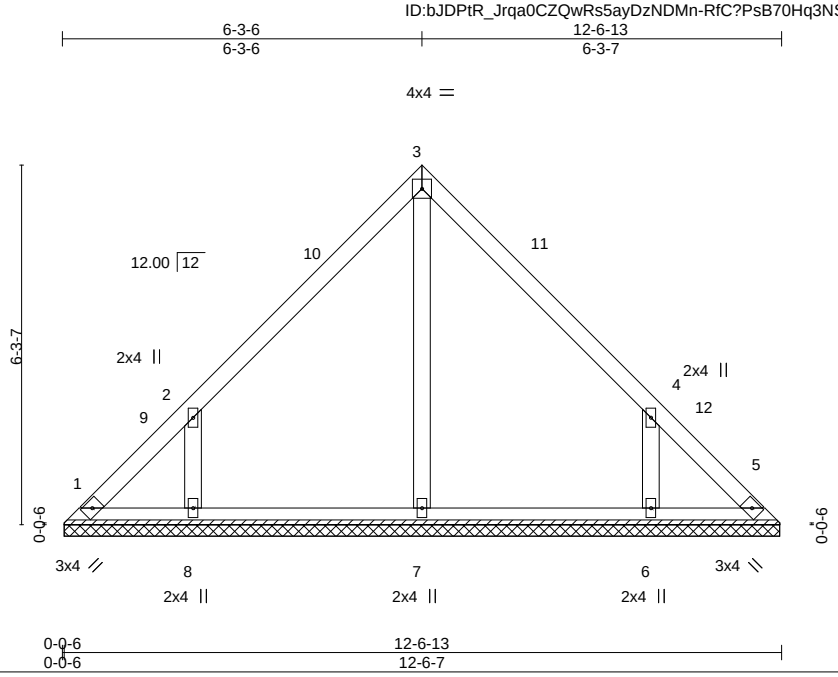


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| 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 | 0.17 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.08 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 57 lb | FT = 25% |

**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 12-6-1.

(lb) - Max Horz 1=189(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-242(LC 12), 6=-242(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=370(LC 19), 6=370(LC 20)

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

WEBS 2-8=-448/403, 4-6=-448/403

**NOTES-**

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-3-6, Exterior(2) 6-3-6 to 10-8-3, Interior(1) 10-8-3 to 12-2-9 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=242, 6=242.
6) Non Standard bearing condition. Review required.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V5 | VALLEY | 1 | 1 | I66592154 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:14 2024 Page 1

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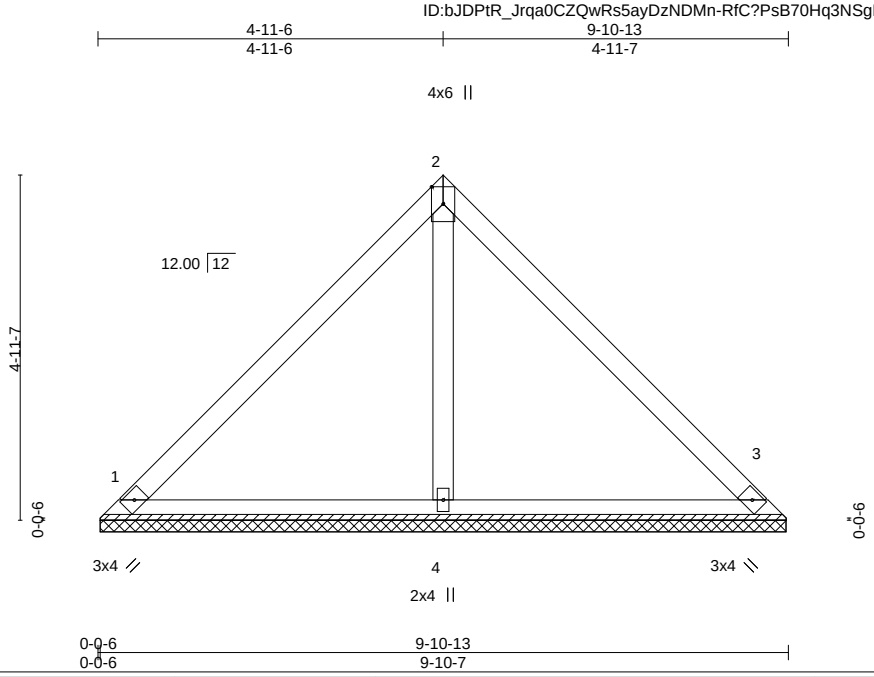


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.29 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.16 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 40 lb | FT = 25% |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.** (size) 1=9-10-1, 3=9-10-1, 4=9-10-1
Max Horz 1=-147(LC 8)
Max Uplift 1=-55(LC 13), 3=-55(LC 13), 4=-19(LC 12)
Max Grav 1=209(LC 1), 3=209(LC 1), 4=319(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=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
6) Non Standard bearing condition. Review required.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V6 | VALLEY | 1 | 1 | I66592155 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:15 2024 Page 1

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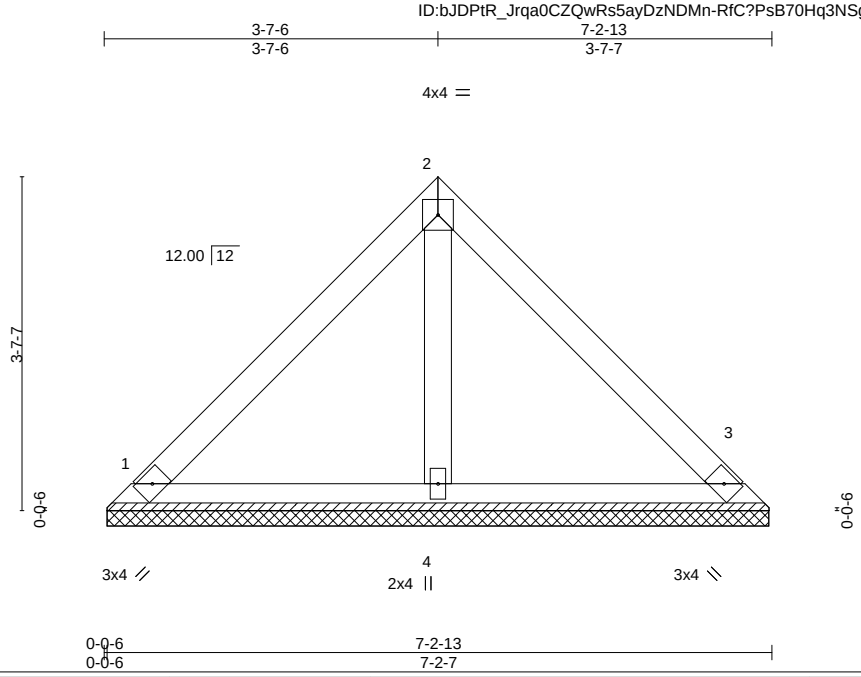


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.23 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 29 lb | FT = 25% |

**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=7-2-1, 3=7-2-1, 4=7-2-1
Max Horz 1=-104(LC 8)
Max Uplift 1=-52(LC 13), 3=-52(LC 13)
Max Grav 1=159(LC 1), 3=159(LC 1), 4=204(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=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.


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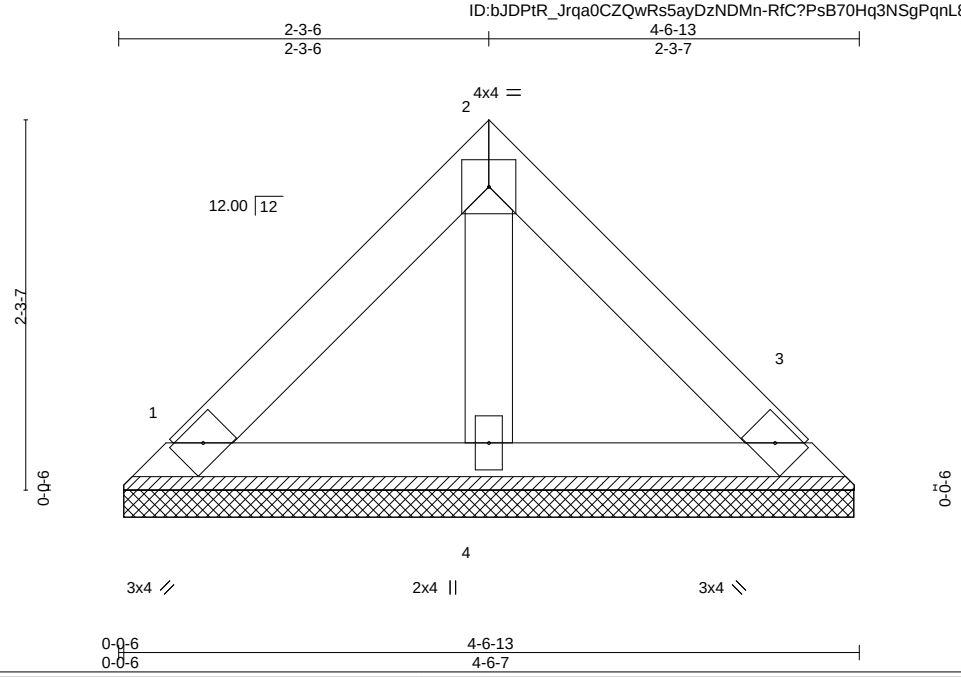
| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2426 | V7 | VALLEY | 1 | 1 | I66592156 |

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 09:39:15 2024 Page 1

ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f




| 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 | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.03 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 17 lb | FT = 25% |

**LUMBER-**

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

**BRACING-**

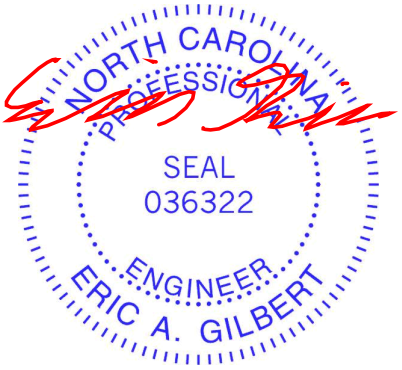
| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 4-6-13 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

**REACTIONS.** (size) 1=4-6-1, 3=4-6-1, 4=4-6-1
Max Horz 1=-62(LC 8)
Max Uplift 1=-31(LC 13), 3=-30(LC 13)
Max Grav 1=94(LC 1), 3=94(LC 1), 4=121(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=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.



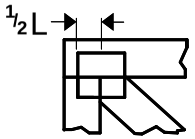

July 2,2024



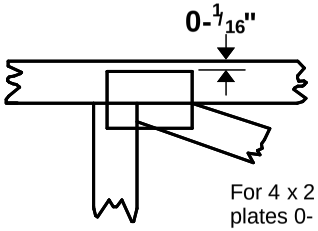
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

# 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.

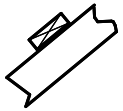
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

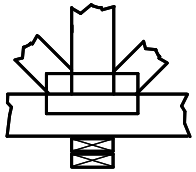
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

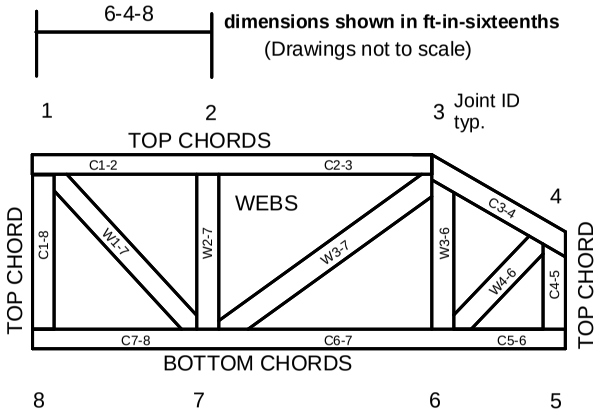


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




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

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

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

# Design General Notes

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

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



MiTek®

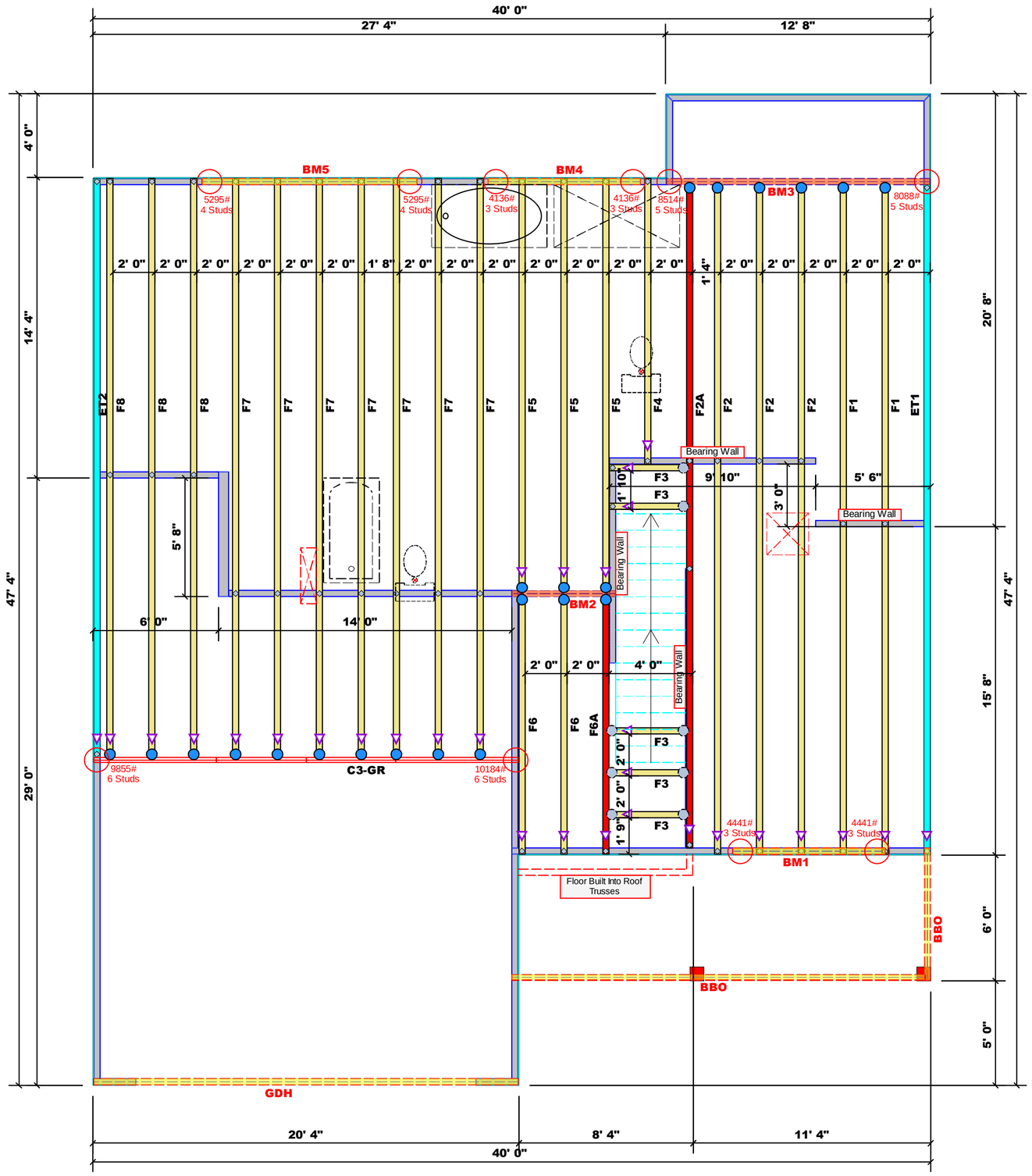
ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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




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

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

*All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.*

*-- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs*

All Headers Are Considered 2X10 Beams Unless Otherwise Noted

All Walls Shown Are Considered Load Bearing

**Plumbing Drop Notes**

1. Plumbing drop locations shown are NOT exact.
2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
3. Adjust spacing as needed not to exceed 24"oc.

**Dimension Notes**

1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of stud unless noted otherwise
3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

**Hatch Legend**

- Second Floor Walls
- Box Storage
- Tray Ceiling
- Drop Beam
- Flush Beam

| Connector Information | | | | | Nail Information | |
|---|---|---|---|---|---|---|
| Sym | Product | Manuf | Qty | Supported Member | Header | Truss |
| | HUS410 | USP | 22 | NA | 16d/3-1/2" | 16d/3-1/2" |
| | MSH422 | USP | 8 | Varies | 10d/3" | 10d/3" |

**Products**

| PlotID | Length | Product | Plies | Net Qty |
|---|---|---|---|---|
| BM1 | 8' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 |
| BM2 | 5' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 |
| BM3 | 13' 0" | 1-3/4"x 16" LVL Kerto-S | 2 | 2 |
| BM4 | 8' 0" | 1-3/4"x 9-1/4" LVL Kerto-S | 2 | 2 |
| BM5 | 11' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 |
| GDH | 21' 0" | 1-3/4"x 11-7/8" LVL Kerto-S | 2 | 2 |


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


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

Signature Jonathan Landry

Jonathan Landry

**LOAD CHART FOR JACK STUDS**

(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

| END REACTION (UP TO) | REQ'D STUDS FOR (2) 1.5" HEADER | END REACTION (UP TO) | REQ'D STUDS FOR (3) 1.5" HEADER | END REACTION (UP TO) | REQ'D STUDS FOR (4) 1.5" HEADER |
|---|---|---|---|---|---|
| 1700 | 1 | 2550 | 1 | 3400 | 1 |
| 3400 | 2 | 5100 | 2 | 6800 | 2 |
| 5100 | 3 | 7650 | 3 | 10200 | 3 |
| 6800 | 4 | 10200 | 4 | 13600 | 4 |
| 8500 | 5 | 12750 | 5 | 17000 | 5 |
| 10200 | 6 | 15300 | 6 | | |
| 11900 | 7 | | | | |
| 13600 | 8 | | | | |
| 15300 | 9 | | | | |

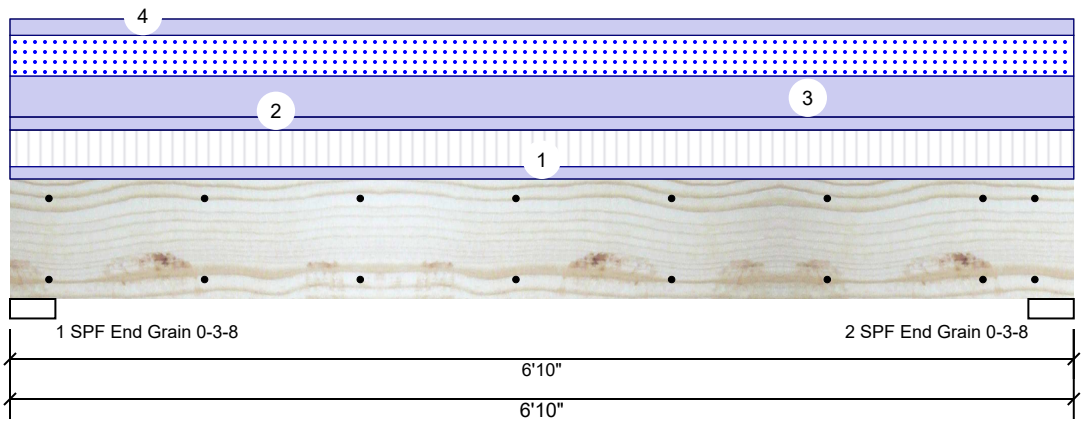
| | |
|---|---|
| BUILDER | Gammon Construction |
| JOB NAME | Delude Residence |
| PLAN | The Armstrong |
| SEAL DATE | N/A |
| QUOTE # | |
| JOB # | J0424-2427 |
| CITY / CO. | Harnett Co. / Harnett |
| ADDRESS | - |
| MODEL | Floor |
| DATE REV. | 07/01/24 |
| DRAWN BY | Jonathan Landry |
| SALES REP. | Lenny Norris |

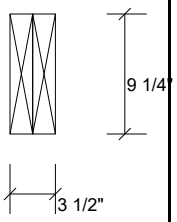
**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# BM1 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | Ceiling: | Gypsum 1/2" |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|---|---|---|---|---|---|---|
| 1 | Vertical | 1155 | 2614 | 1281 | 0 | 0 |
| 2 | Vertical | 1155 | 2614 | 1281 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | Vert | 43% | 2614 / 1827 | 4441 | L | D+0.75(L+S) |
| 2 - SPF End Grain | 3.500" | Vert | 43% | 2614 / 1827 | 4441 | L | D+0.75(L+S) |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 6604 ft-lb | 3'5" | 14423 ft-lb | 0.458 (46%) | D+0.75(L+S) | L |
| Unbraced | 6604 ft-lb | 3'5" | 10210 ft-lb | 0.647 (65%) | D+0.75(L+S) | L |
| Shear | 3066 lb | 1' 3/4" | 7943 lb | 0.386 (39%) | D+0.75(L+S) | L |
| LL Defl inch | 0.053 (L/1451) | 3'5" | 0.159 (L/480) | 0.331 (33%) | 0.75(L+S) | L |
| TL Defl inch | 0.128 (L/597) | 3'5" | 0.212 (L/360) | 0.603 (60%) | D+0.75(L+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 | 113 PLF | 338 PLF | 0 PLF | 0 PLF | 0 PLF | F2 |
| 2 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall |
| 3 | Uniform | | | Top | 375 PLF | 0 PLF | 375 PLF | 0 PLF | 0 PLF | A1 |
| 4 | Uniform | | | Top | 150 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | V1GE |
| | 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 6/28/2026

**Manufacturer Info**

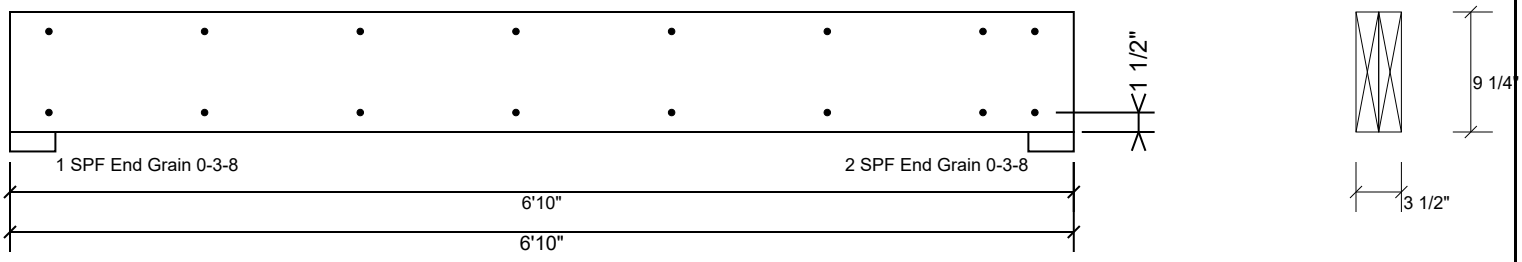
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Road
Fayetteville
Cumberland
28314

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# BM1 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. |
| $C_M$ | 1 |
| 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 6/28/2026

**Manufacturer Info**

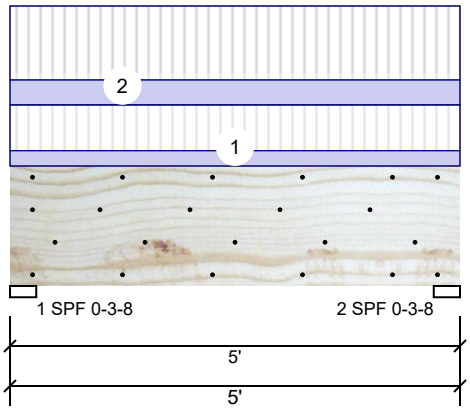
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

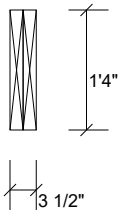
Comtech, Inc.
1001 S Reilly Road
Fayetteville
Cumberland
28314

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

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

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | Ceiling: | Gypsum 1/2" |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|---|---|---|---|---|---|---|
| 1 | Vertical | 1625 | 576 | 0 | 0 | 0 |
| 2 | Vertical | 1625 | 576 | 0 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF | 3.500" | Vert | 42% | 576 / 1625 | 2201 | L | D+L |
| 2 - SPF | 3.500" | Vert | 42% | 576 / 1625 | 2201 | L | D+L |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 2291 ft-lb | 2'6" | 34565 ft-lb | 0.066 (7%) | D+L | L |
| Unbraced | 2291 ft-lb | 2'6" | 24270 ft-lb | 0.094 (9%) | D+L | L |
| Shear | 1944 lb | 1'7 1/2" | 11947 lb | 0.163 (16%) | D+L | L |
| LL Defl inch | 0.006 (L/8929) | 2'6" | 0.114 (L/480) | 0.054 (5%) | L | L |
| TL Defl inch | 0.008 (L/6592) | 2'6" | 0.152 (L/360) | 0.055 (5%) | 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 end bearings.
6 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 | 83 PLF | 249 PLF | 0 PLF | 0 PLF | 0 PLF | F6 |
| 2 | Uniform | | | Far Face | 135 PLF | 401 PLF | 0 PLF | 0 PLF | 0 PLF | F5 |
| | 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 6/28/2026

**Manufacturer Info**

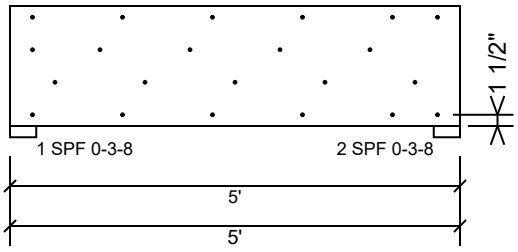
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

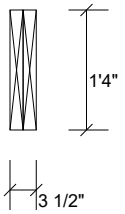
Comtech, Inc.
1001 S Reilly Road
Fayetteville
Cumberland
28314

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# BM2 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 | 81.9 % |
| Load | 268.0 PLF |
| Yield Limit per Foot | 327.4 PLF |
| Yield Limit per Fastener | 81.9 lb. |
| $C_M$ | 1 |
| 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 6/28/2026

**Manufacturer Info**

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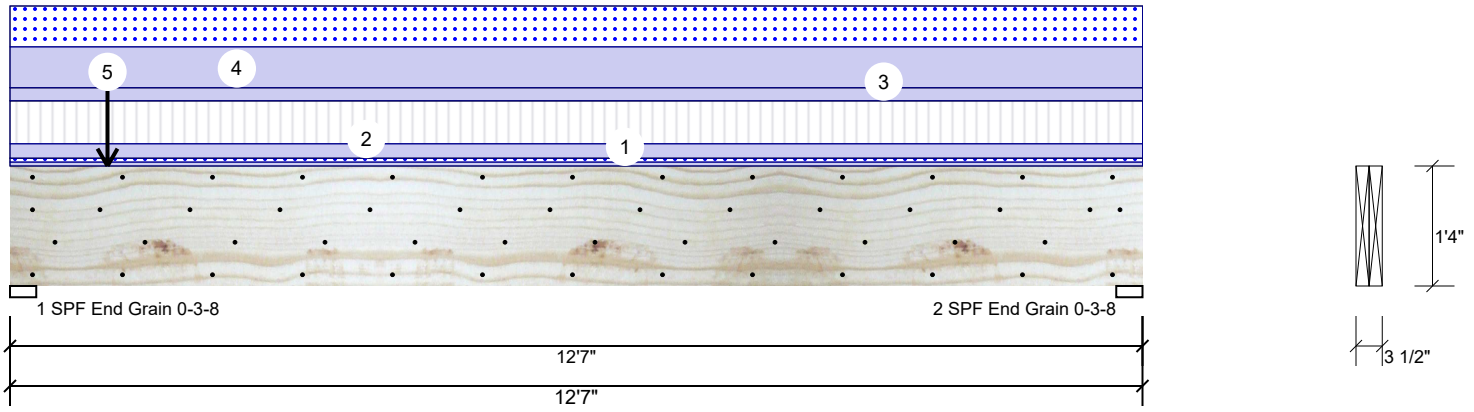
| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# BM3 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | Ceiling: | Gypsum 1/2" |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|---|---|---|---|---|---|---|
| 1 | Vertical | 2911 | 4392 | 2586 | 0 | 0 |
| 2 | Vertical | 2518 | 4261 | 2586 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | Vert | 83% | 4392 / 4122 | 8514 | L | D+0.75(L+S) |
| 2 - SPF End Grain | 3.500" | Vert | 79% | 4261 / 3828 | 8088 | L | D+0.75(L+S) |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 23817 ft-lb | 6'3 3/16" | 39750 ft-lb | 0.599 (60%) | D+0.75(L+S) | L |
| Unbraced | 23817 ft-lb | 6'3 3/16" | 23866 ft-lb | 0.998 (100%) | D+0.75(L+S) | L |
| Shear | 6330 lb | 1'7 1/2" | 11947 lb | 0.530 (53%) | D+L | L |
| LL Defl inch | 0.149 (L/978) | 6'3 5/16" | 0.304 (L/480) | 0.491 (49%) | 0.75(L+S) | L |
| TL Defl inch | 0.314 (L/464) | 6'3 3/8" | 0.405 (L/360) | 0.776 (78%) | D+0.75(L+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 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 loads must be supported equally by all plies.
6. Top must be laterally braced at a maximum of 4'9 1/2" o.c.
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 | | | Far Face | 36 PLF | 0 PLF | 36 PLF | 0 PLF | 0 PLF | J1 |
| 2 | Uniform | | | Near Face | 132 PLF | 395 PLF | 0 PLF | 0 PLF | 0 PLF | F1 |
| 3 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall |
| 4 | Uniform | | | Top | 375 PLF | 0 PLF | 375 PLF | 0 PLF | 0 PLF | A1 |
| 5 | Point | 1-1-0 | | Near Face | 153 lb | 458 lb | 0 lb | 0 lb | 0 lb | F2A |
| | 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 6/28/2026

**Manufacturer Info**

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www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Road
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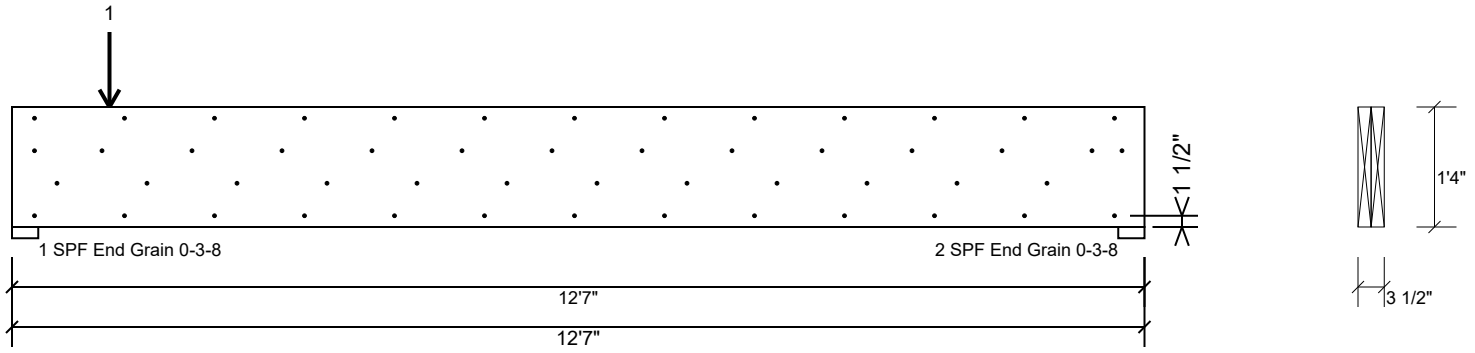
28314

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# BM3 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 | 80.5 % |
| Load | 263.5 PLF |
| Yield Limit per Foot | 327.4 PLF |
| Yield Limit per Fastener | 81.9 lb. |
| $C_M$ | 1 |
| 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 6/28/2026

**Manufacturer Info**

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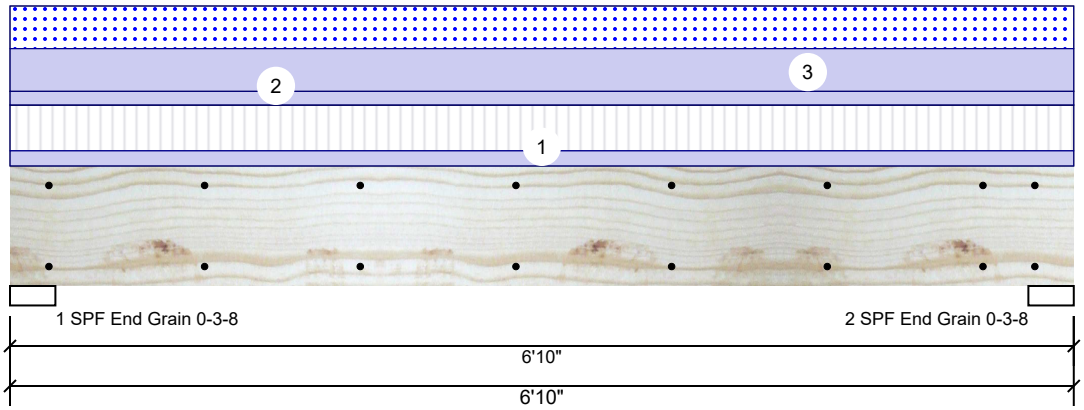
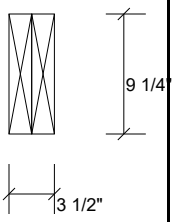
| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# 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/IRC 2015 |
| 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 | 1363 | 2160 | 1271 | 0 | 0 |
| 2 | Vertical | 1363 | 2160 | 1271 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | Vert | 40% | 2160 / 1976 | 4136 | L | D+0.75(L+S) |
| 2 - SPF End Grain | 3.500" | Vert | 40% | 2160 / 1976 | 4136 | L | D+0.75(L+S) |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 6149 ft-lb | 3'5" | 14423 ft-lb | 0.426 (43%) | D+0.75(L+S) | L |
| Unbraced | 6149 ft-lb | 3'5" | 10210 ft-lb | 0.602 (60%) | D+0.75(L+S) | L |
| Shear | 2855 lb | 5'9 1/4" | 7943 lb | 0.359 (36%) | D+0.75(L+S) | L |
| LL Defl inch | 0.057 (L/1342) | 3'5" | 0.159 (L/480) | 0.358 (36%) | 0.75(L+S) | L |
| TL Defl inch | 0.119 (L/641) | 3'5" | 0.212 (L/360) | 0.561 (56%) | D+0.75(L+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 | 133 PLF | 399 PLF | 0 PLF | 0 PLF | 0 PLF | F5 |
| 2 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall |
| 3 | Uniform | | | Top | 372 PLF | 0 PLF | 372 PLF | 0 PLF | 0 PLF | A2 |
| | 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 6/28/2026

**Manufacturer Info**

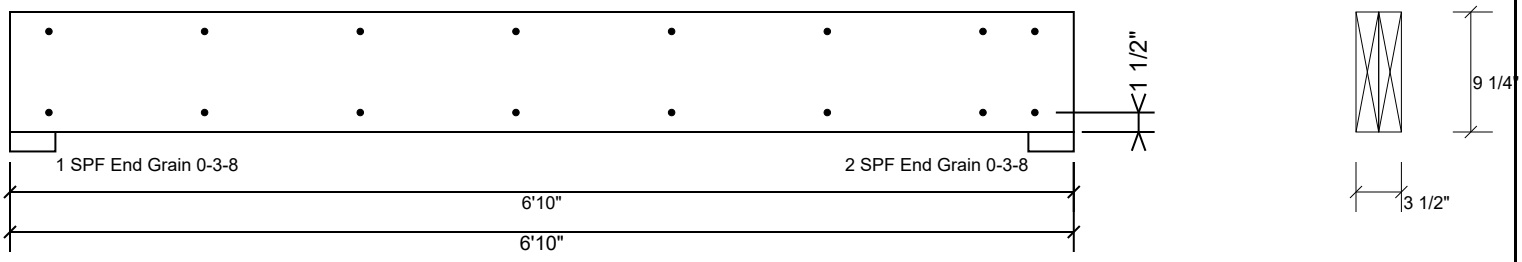
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Road
Fayetteville
Cumberland
28314

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# 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. |
| $C_M$ | 1 |
| 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 6/28/2026

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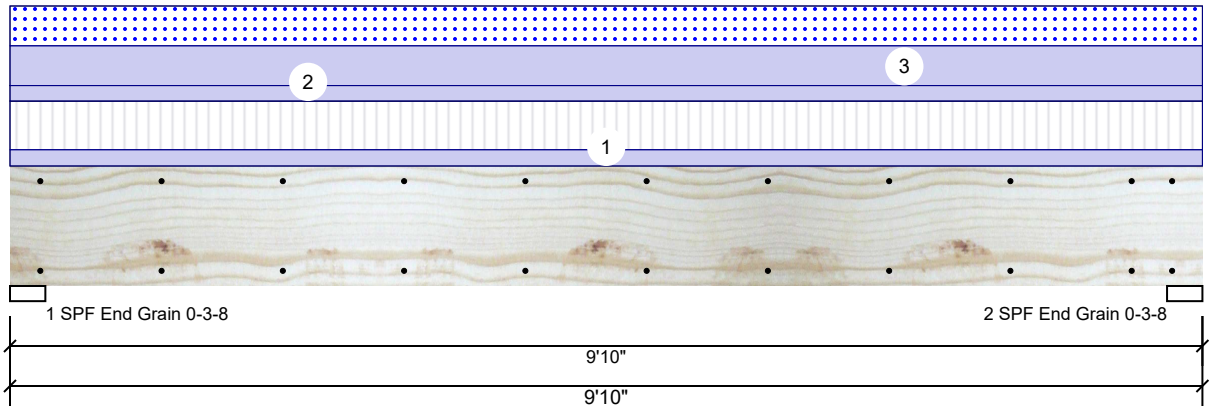
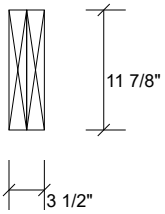
| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# 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/IRC 2015 |
| 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 | 1854 | 2769 | 1514 | 0 | 0 |
| 2 | Vertical | 1854 | 2769 | 1514 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | Vert | 51% | 2769 / 2526 | 5295 | L | D+0.75(L+S) |
| 2 - SPF End Grain | 3.500" | Vert | 51% | 2769 / 2526 | 5295 | L | D+0.75(L+S) |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 10330 ft-lb | 4'11" | 19911 ft-lb | 0.519 (52%) | D+L | L |
| Unbraced | 11832 ft-lb | 4'11" | 11839 ft-lb | 0.999 (100%) | D+0.75(L+S) | L |
| Shear | 3427 lb | 1'3 3/8" | 8867 lb | 0.387 (39%) | D+L | L |
| LL Defl inch | 0.107 (L/1051) | 4'11" | 0.234 (L/480) | 0.457 (46%) | 0.75(L+S) | L |
| TL Defl inch | 0.224 (L/501) | 4'11" | 0.312 (L/360) | 0.718 (72%) | D+0.75(L+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 7'4 5/16" o.c.
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 | 126 PLF | 377 PLF | 0 PLF | 0 PLF | 0 PLF | F7 |
| 2 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall |
| 3 | Uniform | | | Top | 308 PLF | 0 PLF | 308 PLF | 0 PLF | 0 PLF | B2 |
| | Self Weight | | | | 9 PLF | | | | | |

**Notes**

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

**Lumber**

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

**Handling & Installation**

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

This design is valid until 6/28/2026

**Manufacturer Info**

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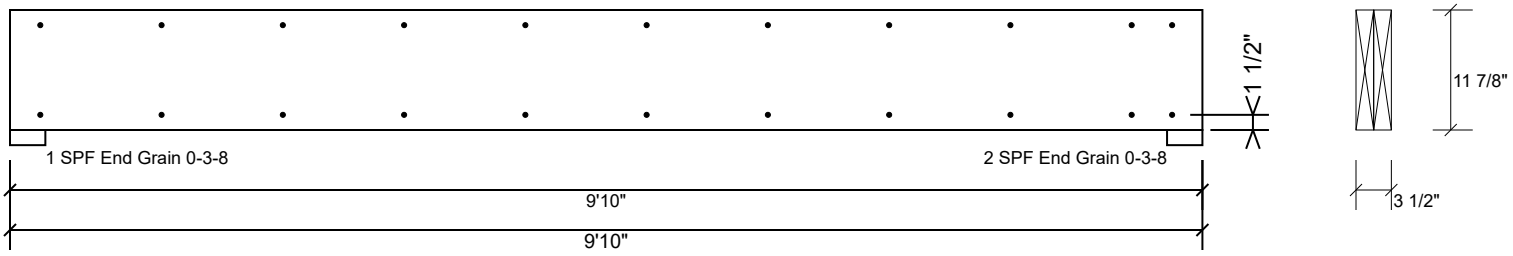
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# 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. |
| $C_M$ | 1 |
| 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

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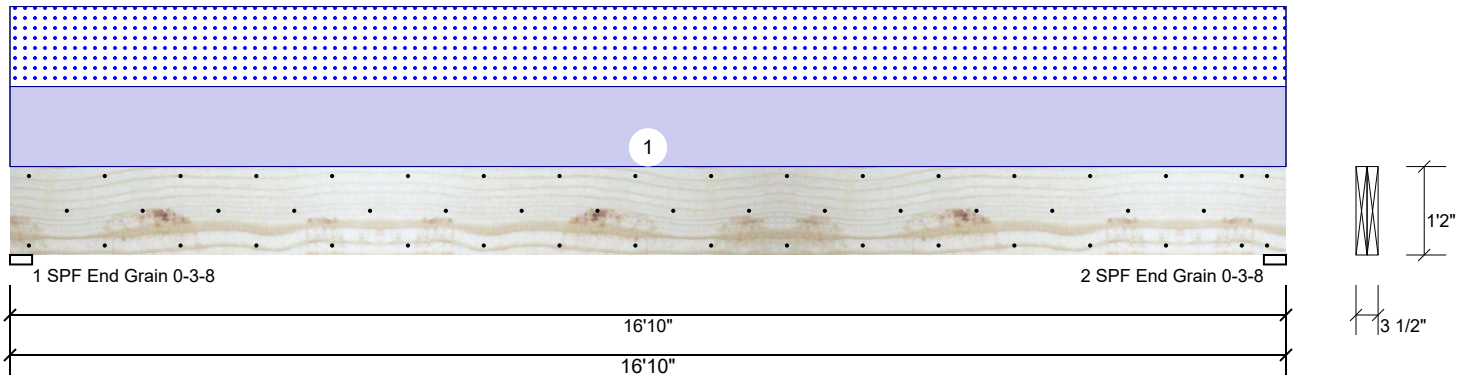
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level




## Member Information

| | | | |
|---|---|---|---|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | Ceiling: | Gypsum 1/2" |
| Temperature: | Temp <= 100°F | | |

## Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|---|---|---|---|---|---|---|
| 1 | Vertical | 0 | 1859 | 1768 | 0 | 0 |
| 2 | Vertical | 0 | 1859 | 1768 | 0 | 0 |

## Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---|---|---|---|---|---|---|---|
| 1 - SPF End Grain | 3.500" | Vert | 35% | 1859 / 1768 | 3627 | L | D+S |
| 2 - SPF End Grain | 3.500" | Vert | 35% | 1859 / 1768 | 3627 | L | D+S |

## Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|---|---|---|---|---|---|---|
| Moment | 14442 ft-lb | 8'5" | 31049 ft-lb | 0.465 (47%) | D+S | L |
| Unbraced | 14442 ft-lb | 8'5" | 14446 ft-lb | 1.000 (100%) | D+S | L |
| Shear | 3011 lb | 1'5 1/2" | 12021 lb | 0.250 (25%) | D+S | L |
| LL Defl inch | 0.229 (L/859) | 8'5 1/16" | 0.409 (L/480) | 0.559 (56%) | S | L |
| TL Defl inch | 0.469 (L/419) | 8'5 1/16" | 0.546 (L/360) | 0.860 (86%) | 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 3 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 7'1 3/16" o.c.
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 | 210 PLF | 0 PLF | 210 PLF | 0 PLF | 0 PLF | C1GE |
| | Self Weight | | | | 11 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 6/28/2026

**Manufacturer Info**

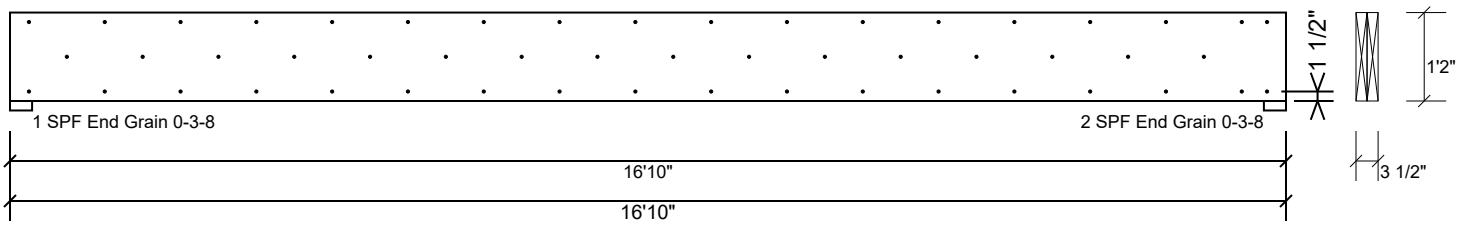
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Road
Fayetteville
Cumberland
28314

| | | | |
|---|---|---|---|
| Client: | Gammon Construction | Date: | 7/1/2024 |
| Project: | The Armstrong | Input by: | Jonathan Landry |
| Address: | | Job Name: | Delude Residence |
| | | Project #: | J0424-2427 |

# GDH Kerto-S LVL 1.750" X 14.000" 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 | 0.0 % |
| Load | 0.0 PLF |
| Yield Limit per Foot | 245.6 PLF |
| Yield Limit per Fastener | 81.9 lb. |
| $C_M$ | 1 |
| 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 6/28/2026

**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
Fayetteville
Cumberland
28314

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0424-2427
Delude Residence

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: I66593256 thru I66593267

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844


July 2,2024

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 | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | ET1 | GABLE | 1 | 1 | I66593256 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 10:02:12 2024 Page 1
ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8 0-1-8

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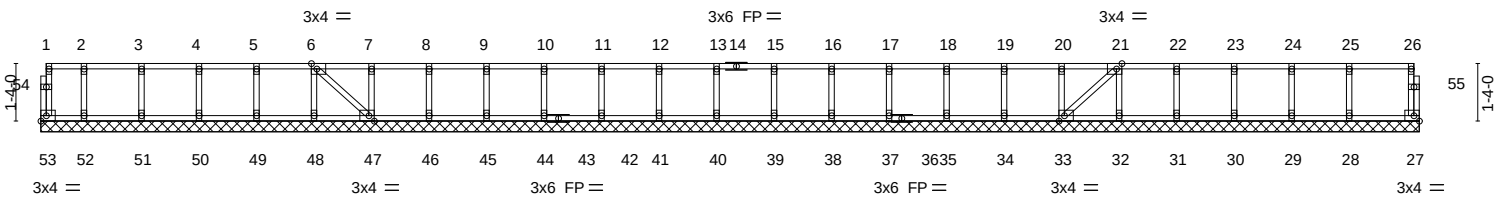


| 1-0-0 | 2-4-0 | 3-8-0 | 5-0-0 | 6-4-0 | 7-8-0 | 9-0-0 | 10-4-0 | 11-8-0 | 13-0-0 | 14-4-0 | 15-8-0 | 17-0-0 | 18-4-0 | 19-8-0 | 21-0-0 | 22-4-0 | 23-8-0 | 25-0-0 | 26-4-0 | 27-8-0 | 29-0-0 | 30-4-0 | 31-11-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-7-8 |

Plate Offsets (X,Y)-- [6:0-1-8,Edge], [21:0-1-8,Edge], [33:0-1-8,Edge], [47:0-1-8,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 | 0.08 | 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 | 0.04 | Horz(CT) | -0.00 | 33 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 142 lb | FT = 20%F, 11%E |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.1(flat) |
| BOT CHORD | 2x4 SP No.1(flat) |
| WEBS | 2x4 SP No.3(flat) |
| OTHERS | 2x4 SP No.3(flat) |

**BRACING-**

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

**REACTIONS.** All bearings 31-11-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 53, 27, 52, 51, 50, 49, 48, 47, 46, 45, 44, 42, 41, 40, 39, 38, 37, 35, 34, 33, 32, 31, 30, 29, 28

**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.


July 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | ET2 | GABLE | 1 | 1 | I66593257 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 10:02:12 2024 Page 1
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0-1-8

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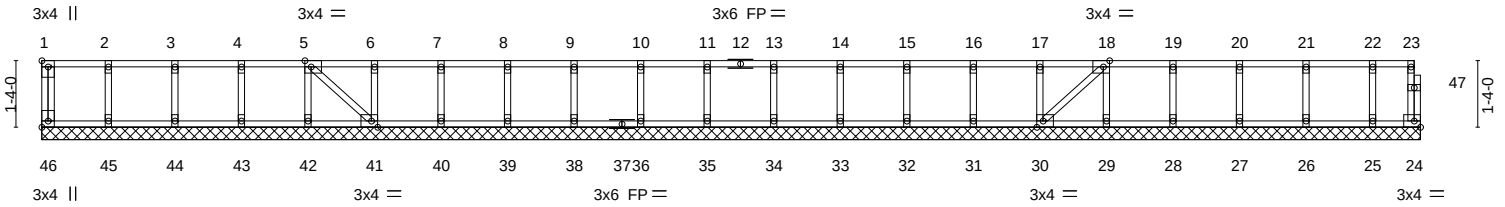


| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 14-8-0 | 16-0-0 | 17-4-0 | 18-8-0 | 20-0-0 | 21-4-0 | 22-8-0 | 24-0-0 | 25-4-0 | 26-8-0 | 27-7-8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 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 | 0-11-8 |

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [18:0-1-8,Edge], [30:0-1-8,Edge], [41:0-1-8,Edge], [46:Edge,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 | 0.06 | 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 | 30 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 125 lb | FT = 20%F, 11%E |

**LUMBER-**

| | |
|---|---|
| TOP CHORD | 2x4 SP No.1(flat) |
| BOT CHORD | 2x4 SP No.1(flat) |
| WEBS | 2x4 SP No.3(flat) |
| OTHERS | 2x4 SP No.3(flat) |

**BRACING-**

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

**REACTIONS.** All bearings 27-7-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 46, 24, 45, 44, 43, 42, 41, 40, 39, 38, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25

**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.


July 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F1 | Floor | 2 | 1 | I66593258 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 10:02:13 2024 Page 1
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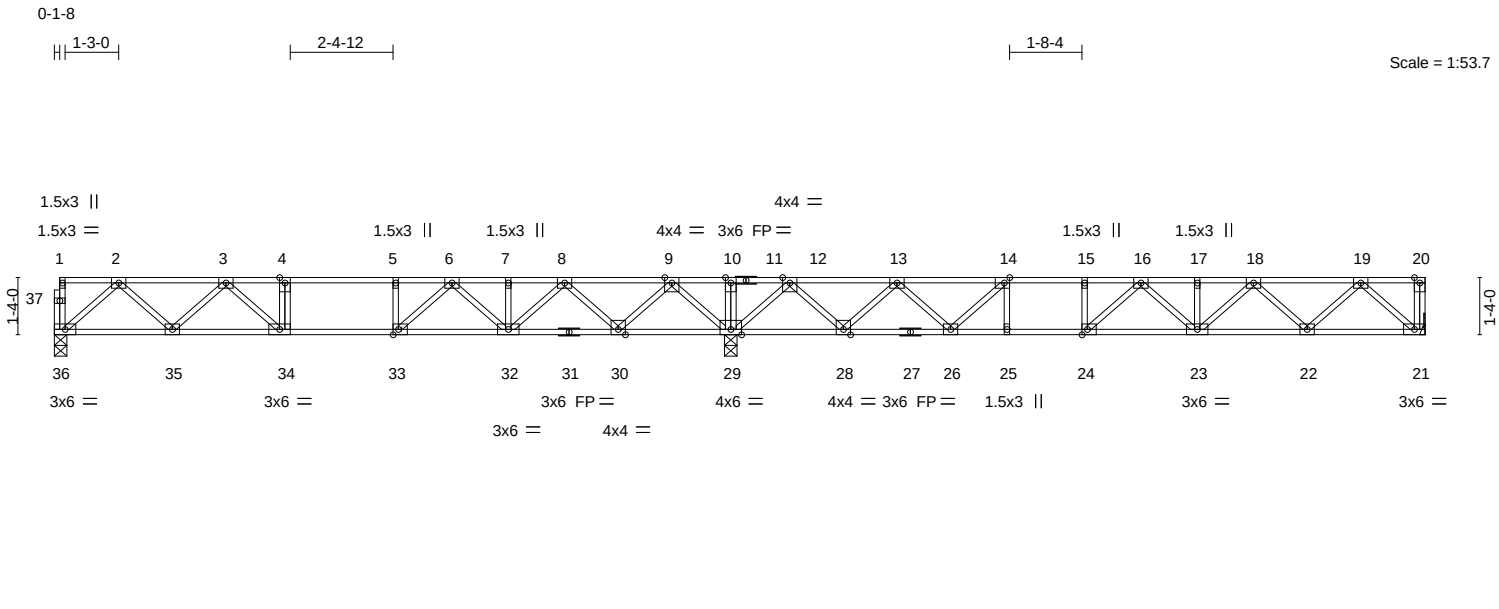


Plate Offsets (X,Y)-- [14:0-1-8,Edge], [24:0-1-8,Edge], [33:0-1-8,Edge]

| 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 | 0.69 | Vert(LL) | -0.18 | 23-24 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.94 | Vert(CT) | -0.24 | 23-24 | >790 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.53 | Horz(CT) | 0.04 | 21 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 167 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 36=0-3-8, 29=0-3-8, 21=Mechanical
Max Grav 36=734(LC 3), 29=2081(LC 1), 21=790(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1260/0, 3-4=-2013/0, 4-5=-2013/0, 5-6=-2013/0, 6-7=-1431/158, 7-8=-1431/158, 8-9=-227/612, 9-10=0/2258, 10-12=0/2258, 12-13=-537/871, 13-14=-1681/364, 14-15=-2218/57, 15-16=-2218/57, 16-17=-2175/0, 17-18=-2175/0, 18-19=-1370/0
BOT CHORD 35-36=0/786, 34-35=0/1711, 33-34=0/2013, 32-33=0/1789, 30-32=-369/930, 29-30=-1236/0, 28-29=-1166/0, 26-28=-607/1226, 25-26=-57/2218, 24-25=-57/2218, 23-24=0/2324, 22-23=0/1881, 21-22=0/840
WEBS 2-36=-1044/0, 2-35=0/659, 3-35=-627/0, 3-34=-67/403, 9-29=-1460/0, 9-30=0/1081, 8-30=-1046/0, 8-32=0/753, 6-32=-565/0, 6-33=0/656, 5-33=-339/0, 12-29=-1503/0, 12-28=0/1110, 13-28=-1061/0, 13-26=0/762, 19-21=-1118/0, 19-22=0/738, 18-22=-710/0, 18-23=-15/400, 16-24=-504/8, 14-26=-957/0, 14-25=0/309

**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) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.


July 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F2 | Floor | 3 | 1 | I66593259 |
| | | | | | Job Reference (optional) |

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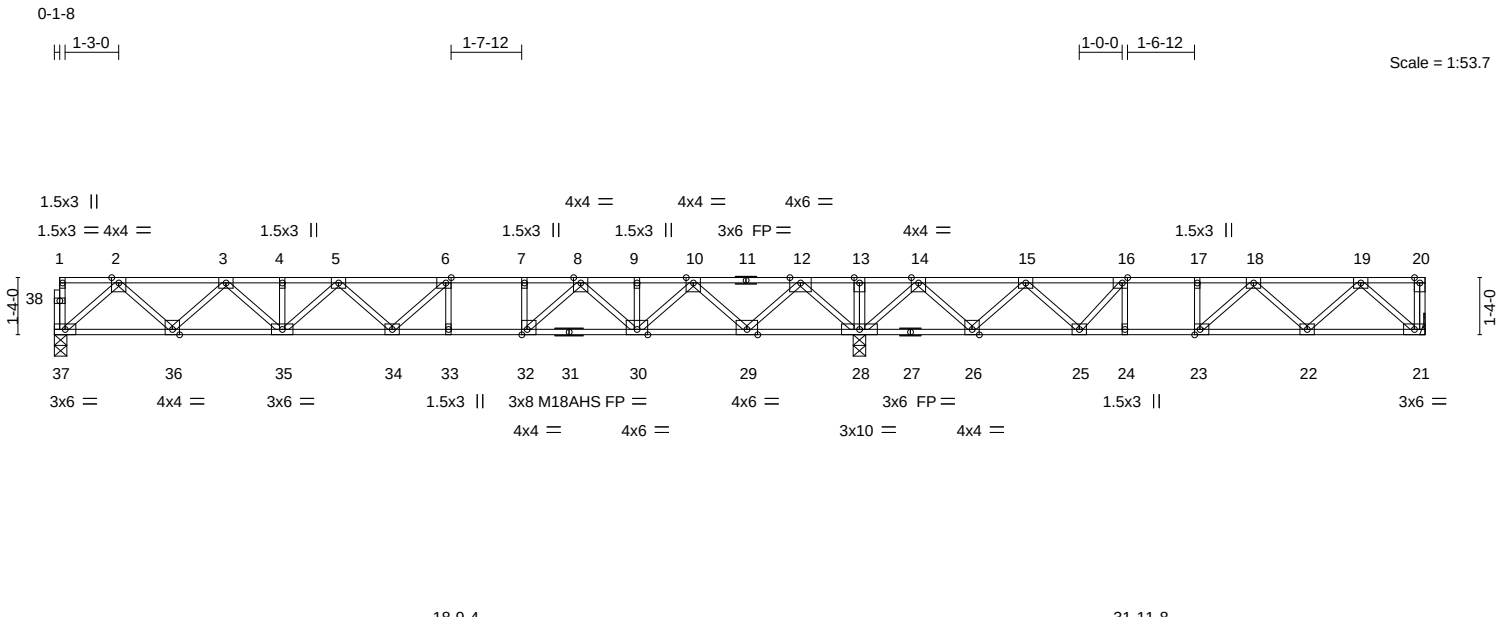


Plate Offsets (X,Y)-- [6:0-1-8,Edge], [16:0-1-8,Edge], [23:0-1-8,Edge], [32:0-1-8,Edge]

| 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 | 0.72 | Vert(LL) | -0.23 | 33-34 | >952 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.71 | Vert(CT) | -0.32 | 33-34 | >705 | 360 | M18AHS | 186/179 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.04 | 28 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 168 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 37=0-3-8, 21=Mechanical, 28=0-3-8
Max Grav 37=900(LC 3), 21=611(LC 4), 28=2115(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1627/0, 3-4=-2648/0, 4-5=-2648/0, 5-6=-3038/0, 6-7=-2935/0, 7-8=-2935/0, 8-9=-1837/0, 9-10=-1837/0, 10-12=-310/473, 12-13=0/2326, 13-14=0/2326, 14-15=-296/1130, 15-16=-1129/604, 16-17=-1379/321, 17-18=-1379/321, 18-19=-991/14
BOT CHORD 36-37=0/973, 35-36=0/2249, 34-35=0/3002, 33-34=0/2935, 32-33=0/2935, 30-32=0/2404, 29-30=-205/1168, 28-29=-1062/0, 26-28=-1434/0, 25-26=-858/839, 24-25=-321/1379, 23-24=-321/1379, 22-23=-108/1302, 21-22=0/641
WEBS 2-37=-1293/0, 2-36=0/910, 3-36=-865/0, 3-35=0/543, 12-28=-1682/0, 12-29=0/1294, 10-29=-1241/0, 10-30=0/957, 8-30=-825/0, 8-32=0/942, 5-35=-481/0, 6-34=-134/433, 6-33=-325/0, 7-32=-370/0, 19-21=-853/0, 19-22=-37/487, 18-22=-433/131, 18-23=-335/104, 14-28=-1316/0, 14-26=0/944, 15-26=-902/0, 15-25=0/599, 16-25=-728/0, 16-24=0/285

**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.


July 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F2A | Floor Girder | 1 | 1 | I66593260 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 10:02:15 2024 Page 1
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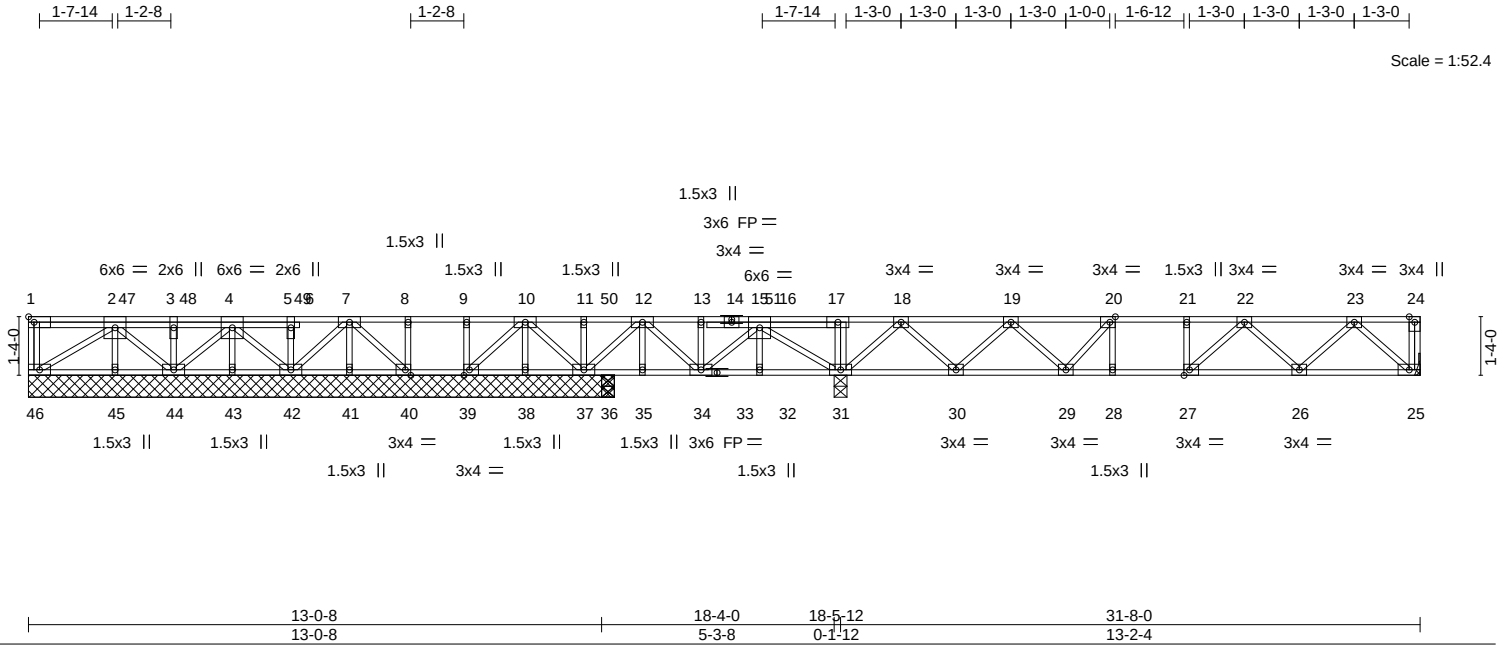


Plate Offsets (X,Y)-- [20:0-1-8,Edge], [27:0-1-8,Edge], [39:0-1-8,Edge], [40:0-1-8,Edge]

| 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) | -0.06 | 26-27 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.48 | Vert(CT) | -0.09 | 26-27 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.38 | Horz(CT) | 0.01 | 25 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 190 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** All bearings 13-4-0 except (jt=length) 31=0-3-8, 25=Mechanical, 36=0-3-8.
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 37, 38, 39, 36
Max Grav All reactions 250 lb or less at joint(s) 46, 45, 38, 39, 40, 41, 43, 36 except 31=1522(LC 5), 25=610(LC 7), 37=416(LC 16), 42=266(LC 3), 44=266(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 12-13=-189/291, 13-16=-189/294, 16-17=0/1223, 17-18=0/1246, 18-19=-288/0, 19-20=-1125/0, 20-21=-1374/0, 21-22=-1374/0, 22-23=-989/0
BOT CHORD 32-34=-567/123, 31-32=-567/123, 30-31=-399/0, 29-30=0/833, 28-29=0/1374, 27-28=0/1374, 26-27=0/1300, 25-26=0/639
WEBS 18-31=-1234/0, 18-30=0/797, 19-30=-762/0, 19-29=0/411, 23-25=-851/0, 23-26=0/486, 22-26=-432/0, 22-27=-40/251, 20-29=-418/0, 16-31=-913/0, 16-34=0/396, 12-37=-339/146

**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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 38, 39, 36.
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.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 170 lb down at 1-7-4, 170 lb down at 3-7-4, 170 lb down at 5-7-4, and 170 lb down at 16-3-12, and 170 lb down at 18-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 25-46=-10, 1-24=-100
Concentrated Loads (lb)
Vert: 17=-90(B) 47=-90(B) 48=-90(B) 49=-90(B) 51=-90(B)


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F3 | Floor | 5 | 1 | I66593261 |
| | | | | | Job Reference (optional) |

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ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

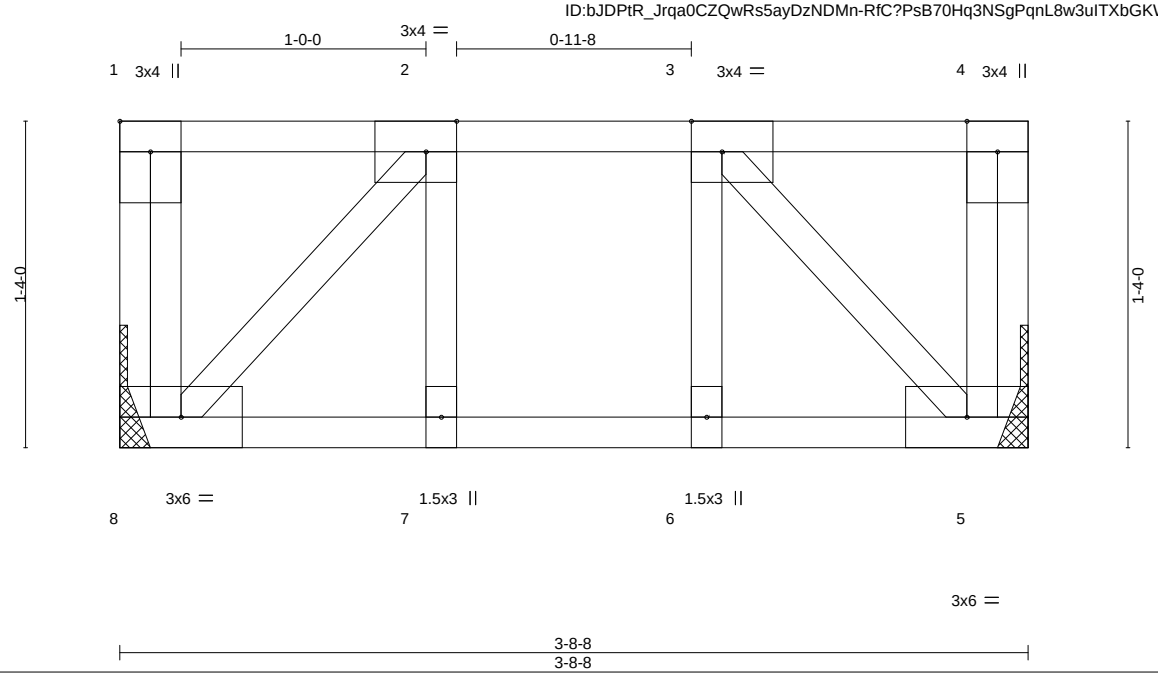


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge]

| 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) | -0.00 | 7 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.05 | Vert(CT) | -0.00 | 7 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 25 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=Mechanical, 5=Mechanical
Max Grav 8=190(LC 1), 5=190(LC 1)

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

**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) Refer to girder(s) for truss to truss connections.
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.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F4 | Floor | 1 | 1 | I66593262 |
| | | | | | Job Reference (optional) |

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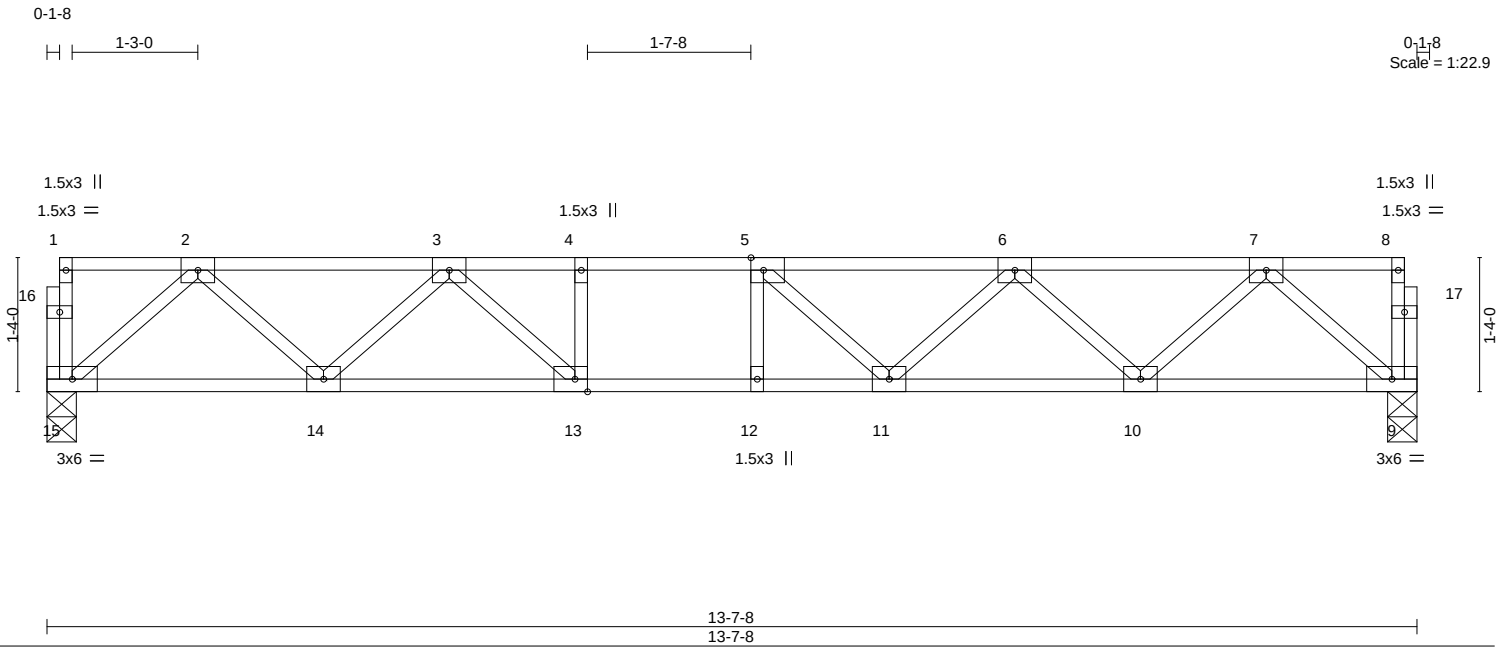


Plate Offsets (X,Y)-- [5:0-1-8,Edge], [13:0-1-8,Edge]

| 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) | -0.11 | 11-12 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.66 | Vert(CT) | -0.14 | 11-12 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.32 | Horz(CT) | 0.03 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 71 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 15=0-3-8, 9=0-3-8
Max Grav 15=729(LC 1), 9=729(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1247/0, 3-4=-1999/0, 4-5=-1999/0, 5-6=-1892/0, 6-7=-1261/0
BOT CHORD 14-15=0/779, 13-14=0/1705, 12-13=0/1999, 11-12=0/1999, 10-11=0/1725, 9-10=0/772
WEBS 7-9=-1025/0, 2-15=-1034/0, 7-10=0/680, 2-14=0/651, 6-10=-645/0, 3-14=-637/0, 6-11=0/306, 3-13=0/554, 5-11=-324/47

**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.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F5 | Floor | 3 | 1 | I66593263 |
| | | | | | Job Reference (optional) |

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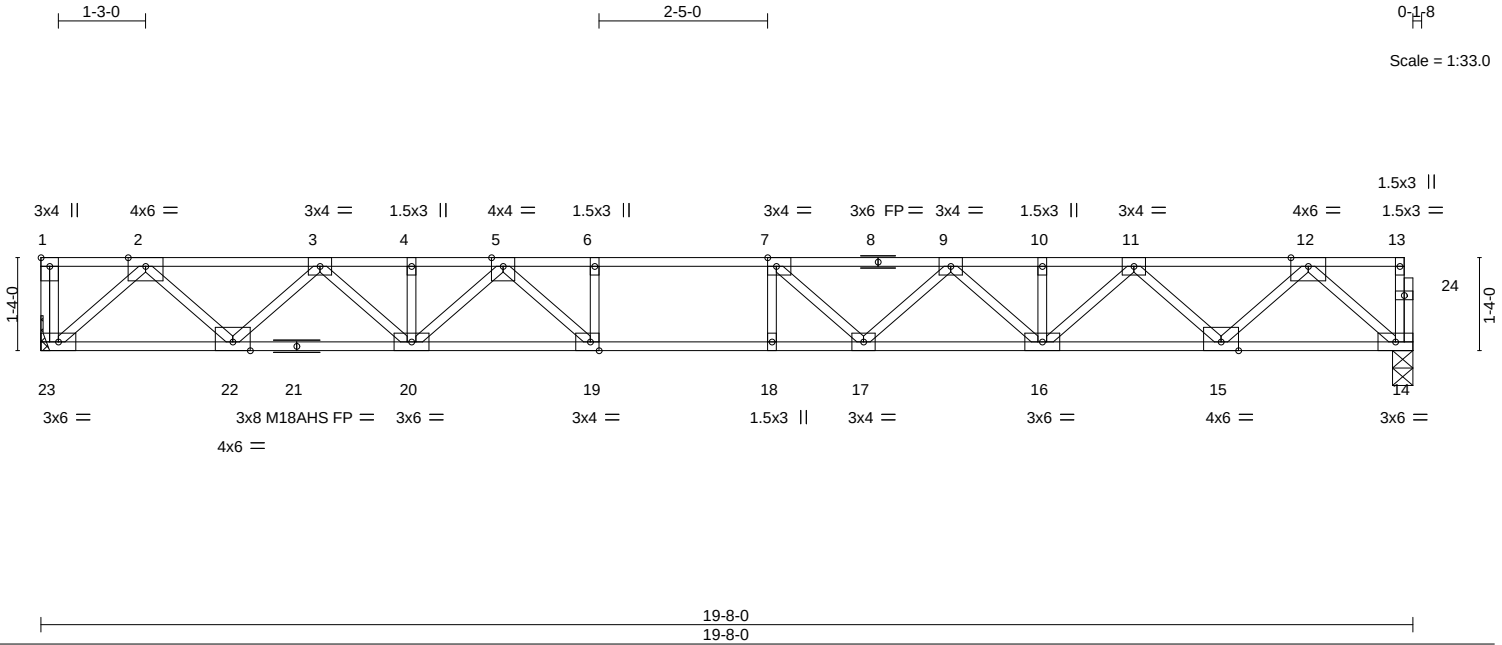


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [19:0-1-8,Edge]

| 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 | 0.53 | Vert(LL) | -0.29 | 17-18 | >804 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.73 | Vert(CT) | -0.40 | 17-18 | >588 | 360 | M18AHS | 186/179 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.06 | 14 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 103 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 23=Mechanical, 14=0-3-8
Max Grav 23=1068(LC 1), 14=1062(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1977/0, 3-4=-3351/0, 4-5=-3351/0, 5-6=-4227/0, 6-7=-4227/0, 7-9=-4074/0, 9-10=-3346/0, 10-11=-3346/0, 11-12=-1976/0
BOT CHORD 22-23=0/1158, 20-22=0/2760, 19-20=0/3815, 18-19=0/4227, 17-18=0/4227, 16-17=0/3853, 15-16=0/2765, 14-15=0/1156
WEBS 2-23=-1542/0, 2-22=0/1139, 3-22=-1089/0, 3-20=0/803, 12-14=-1536/0, 12-15=0/1141, 11-15=-1098/0, 11-16=0/790, 5-20=-632/0, 5-19=0/857, 9-16=-690/0, 9-17=0/475, 7-17=-563/148, 6-19=-398/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F6 | Floor | 2 | 1 | I66593264 |
| | | | | | Job Reference (optional) |

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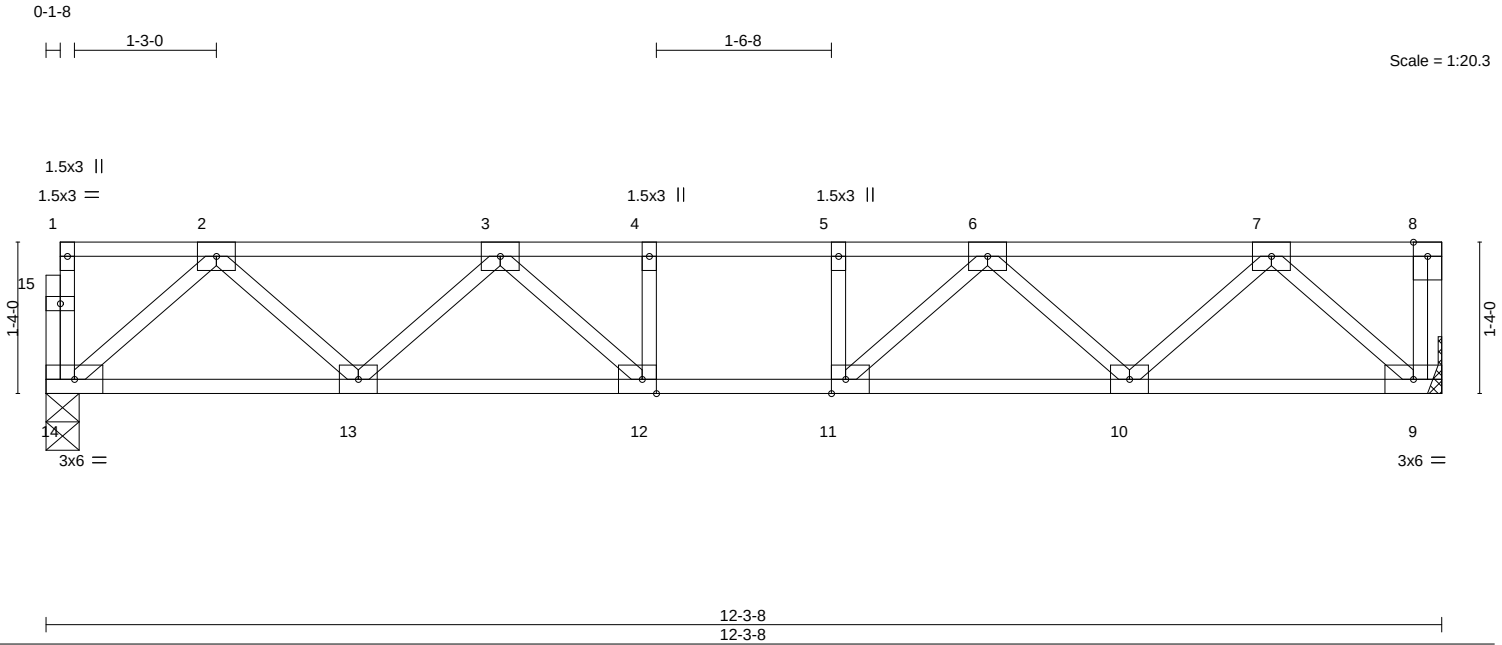


Plate Offsets (X,Y)-- [11:0-1-8,Edge], [12:0-1-8,Edge]

| 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 | 0.26 | Vert(LL) | -0.06 | 10-11 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.35 | Vert(CT) | -0.08 | 10-11 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.26 | Horz(CT) | 0.02 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 65 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 14=0-3-8, 9=Mechanical
Max Grav 14=656(LC 1), 9=662(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1097/0, 3-4=-1627/0, 4-5=-1627/0, 5-6=-1627/0, 6-7=-1097/0
BOT CHORD 13-14=0/697, 12-13=0/1466, 11-12=0/1627, 10-11=0/1466, 9-10=0/698
WEBS 2-14=-926/0, 2-13=0/556, 3-13=-513/0, 7-9=-929/0, 7-10=0/556, 6-10=-513/0, 6-11=0/392, 3-12=0/392

**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) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F6A | Floor | 1 | 1 | I66593265 |
| | | | | | Job Reference (optional) |

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ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

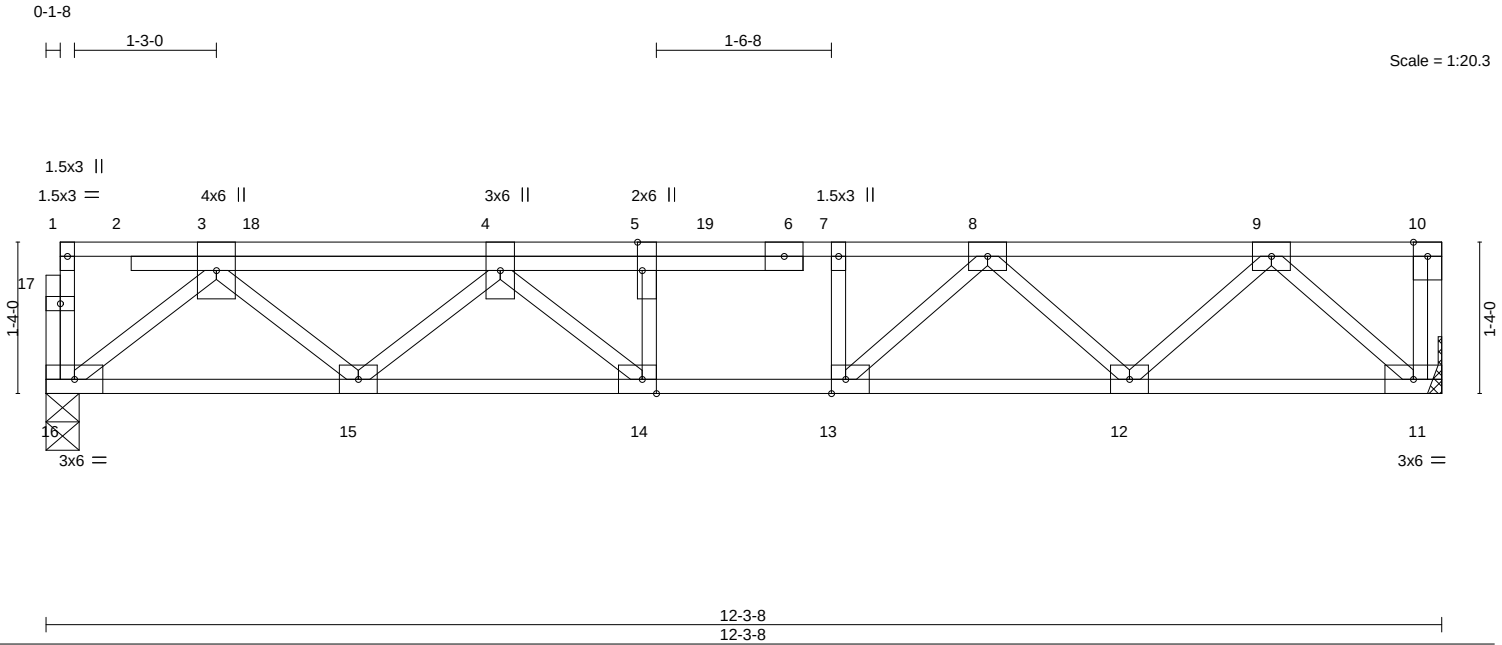


Plate Offsets (X,Y)-- [5:0-3-0,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]

| 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) | -0.07 | 14-15 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.52 | Vert(CT) | -0.10 | 14-15 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.35 | Horz(CT) | 0.03 | 11 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 74 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 16=0-3-8, 11=Mechanical
Max Grav 16=841(LC 1), 11=748(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-1505/0, 4-5=-2040/0, 5-7=-2042/0, 7-8=-2040/0, 8-9=-1276/0
BOT CHORD 15-16=0/959, 14-15=0/2005, 13-14=0/2040, 12-13=0/1741, 11-12=0/794
WEBS 3-16=-1246/0, 3-15=0/741, 4-15=-678/0, 9-11=-1057/0, 9-12=0/670, 8-12=-647/0, 8-13=0/543, 7-13=-289/0

**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) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 170 lb down at 1-10-12, and 170 lb down at 3-10-12, and 107 lb down at 5-10-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 11-16=-10, 1-10=-100
Concentrated Loads (lb)
Vert: 4=-90(F) 18=-90(F) 19=-90(F)


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| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F7 | Floor | 7 | 1 | I66593266 |
| | | | | | Job Reference (optional) |

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ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

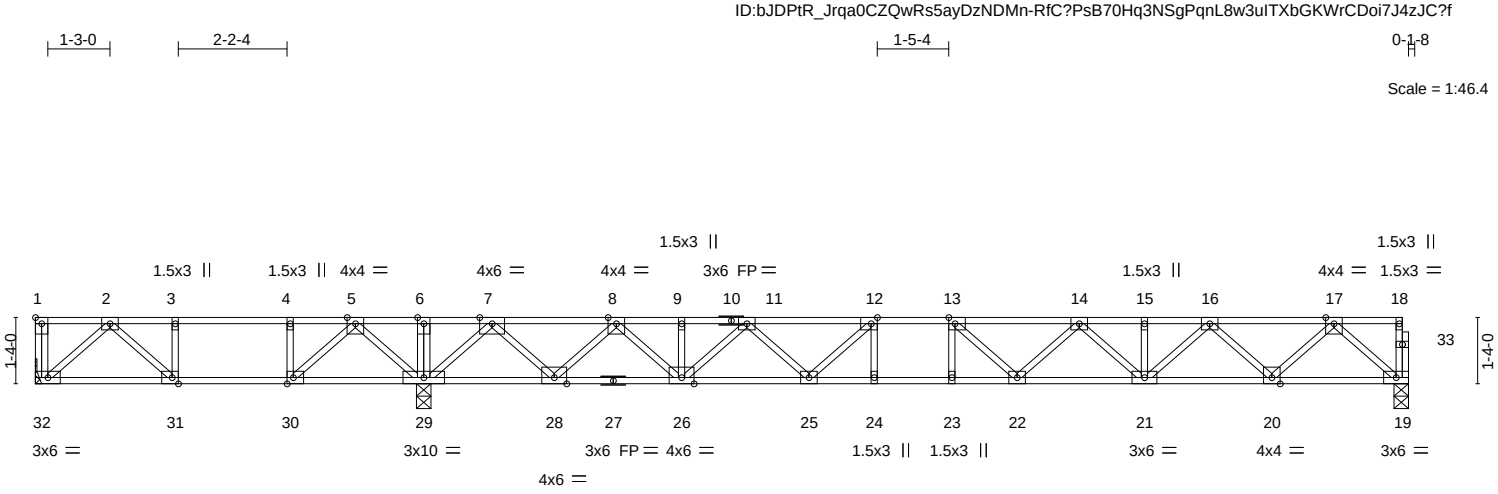


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [12:0-1-8,Edge], [13:0-1-8,Edge], [30:0-1-8,Edge], [31:0-1-8,Edge]

| 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 | 0.93 | Vert(LL) | -0.29 | 23 | >810 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.99 | Vert(CT) | -0.40 | 23 | >592 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.07 | 19 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 145 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 32=Mechanical, 29=0-3-8, 19=0-3-8
Max Uplift 32=-89(LC 4)
Max Grav 32=356(LC 3), 29=1802(LC 1), 19=1003(LC 7)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-433/468, 3-4=-433/468, 4-5=-433/468, 5-6=0/1456, 6-7=0/1456, 7-8=-974/0, 8-9=-2535/0, 9-11=-2535/0, 11-12=-3444/0, 12-13=-3802/0, 13-14=-3696/0, 14-15=-3095/0, 15-16=-3095/0, 16-17=-1849/0
BOT CHORD 31-32=-136/322, 30-31=-468/433, 29-30=-957/53, 26-28=0/1856, 25-26=0/3115, 24-25=0/3802, 23-24=0/3802, 22-23=0/3802, 21-22=0/3538, 20-21=0/2578, 19-20=0/1090
WEBS 2-32=-428/181, 2-31=-451/151, 5-29=-833/0, 5-30=0/924, 4-30=-477/0, 17-19=-1448/0, 17-20=0/1056, 16-20=-1014/0, 16-21=0/704, 7-29=-1668/0, 7-28=0/1303, 8-28=-1253/0, 8-26=0/949, 11-26=-810/0, 11-25=0/549, 14-21=-601/0, 14-22=-8/362, 13-22=-421/200, 12-25=-691/0, 12-24=-112/250

**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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 32.
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.


July 2,2024



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

| Job | Truss | Truss Type | Qty | Ply | Delude Residence |
|---|---|---|---|---|---|
| J0424-2427 | F8 | Floor | 3 | 1 | I66593267 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Jul 1 10:02:19 2024 Page 1
ID:bJDPtR_Jrqa0CZQwRs5ayDzNDMn-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

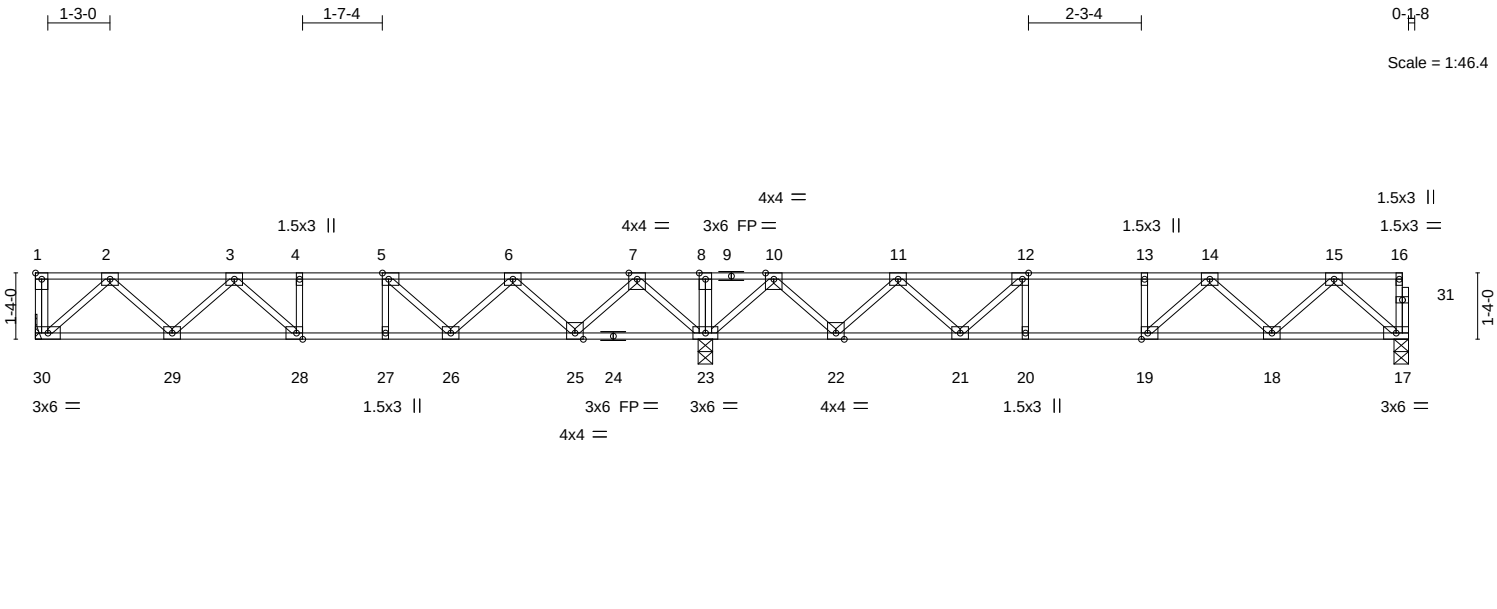


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [12:0-1-8,Edge], [19:0-1-8,Edge], [28:0-1-8,Edge]

| 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 | 0.50 | Vert(LL) | -0.11 | 18-19 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.63 | Vert(CT) | -0.14 | 18-19 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.43 | Horz(CT) | 0.03 | 17 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 142 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 30=Mechanical, 23=0-3-8, 17=0-3-8
Max Grav 30=649(LC 3), 23=1791(LC 1), 17=670(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1068/0, 3-4=-1564/0, 4-5=-1564/0, 5-6=-1307/150, 6-7=-495/531, 7-8=0/1689, 8-10=0/1689, 10-11=-447/402, 11-12=-1357/34, 12-13=-1686/0, 13-14=-1686/0, 14-15=-1130/0
BOT CHORD 29-30=0/682, 28-29=0/1424, 27-28=0/1564, 26-27=0/1564, 25-26=-322/1040, 23-25=-769/0, 22-23=-811/0, 21-22=-202/1034, 20-21=0/1686, 19-20=0/1686, 18-19=0/1510, 17-18=0/715
WEBS 2-30=-908/0, 2-29=0/536, 3-29=-495/4, 7-23=-1243/0, 7-25=0/885, 6-25=-848/0, 6-26=0/486, 5-26=-576/0, 10-23=-1277/0, 10-22=0/911, 11-22=-872/0, 11-21=0/527, 15-17=-949/0, 15-18=0/577, 14-18=-529/0, 14-19=-83/265, 12-21=-625/0

**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) Refer to girder(s) for truss to truss connections.
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.
6) CAUTION, Do not erect truss backwards.


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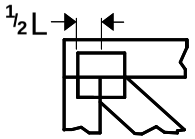
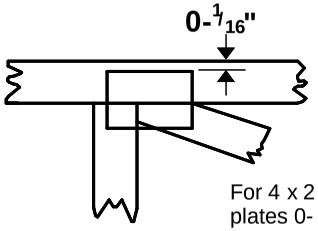
# Symbols

## PLATE LOCATION AND ORIENTATION




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




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

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

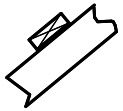
* Plate location details available in MiTek software or upon request.

## PLATE SIZE

4 x 4

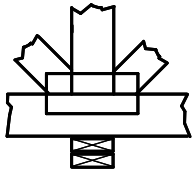
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

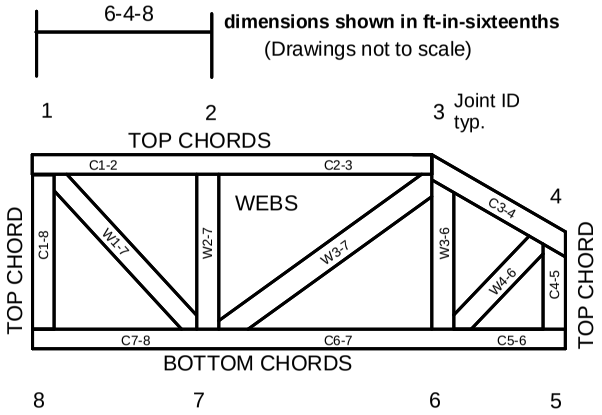


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System




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

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

# Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

# Design General Notes

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

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



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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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