

RE: J0322-1318  
 Precision/Lot 31 Liberty Meadows/Harnett

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0322-1318  
 Lot/Block: Model:  
 Address: Subdivision:  
 City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4  
 Wind Code: ASCE 7-10 Wind Speed: 130 mph  
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 42 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal#     | Truss Name | Date      | No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1   | I51978232 | A1-GE      | 5/17/2022 | 21  | I51978252 | G1-GE      | 5/17/2022 |
| 2   | I51978233 | A2         | 5/17/2022 | 22  | I51978253 | G2         | 5/17/2022 |
| 3   | I51978234 | A3         | 5/17/2022 | 23  | I51978254 | G3         | 5/17/2022 |
| 4   | I51978235 | A4         | 5/17/2022 | 24  | I51978255 | G5         | 5/17/2022 |
| 5   | I51978236 | A4-A       | 5/17/2022 | 25  | I51978256 | G6         | 5/17/2022 |
| 6   | I51978237 | A5         | 5/17/2022 | 26  | I51978257 | G7-GE      | 5/17/2022 |
| 7   | I51978238 | A6         | 5/17/2022 | 27  | I51978258 | H1         | 5/17/2022 |
| 8   | I51978239 | A7         | 5/17/2022 | 28  | I51978259 | K1         | 5/17/2022 |
| 9   | I51978240 | A8         | 5/17/2022 | 29  | I51978260 | M1         | 5/17/2022 |
| 10  | I51978241 | A9         | 5/17/2022 | 30  | I51978261 | M2         | 5/17/2022 |
| 11  | I51978242 | B1-GE      | 5/17/2022 | 31  | I51978262 | M3         | 5/17/2022 |
| 12  | I51978243 | B2         | 5/17/2022 | 32  | I51978263 | P1         | 5/17/2022 |
| 13  | I51978244 | B3         | 5/17/2022 | 33  | I51978264 | VA1        | 5/17/2022 |
| 14  | I51978245 | B4         | 5/17/2022 | 34  | I51978265 | VA2        | 5/17/2022 |
| 15  | I51978246 | C1-GE      | 5/17/2022 | 35  | I51978266 | VA3        | 5/17/2022 |
| 16  | I51978247 | C2         | 5/17/2022 | 36  | I51978267 | VA4        | 5/17/2022 |
| 17  | I51978248 | C3         | 5/17/2022 | 37  | I51978268 | VB1        | 5/17/2022 |
| 18  | I51978249 | D1-GE      | 5/17/2022 | 38  | I51978269 | VC1        | 5/17/2022 |
| 19  | I51978250 | D2         | 5/17/2022 | 39  | I51978270 | XH1        | 5/17/2022 |
| 20  | I51978251 | D3         | 5/17/2022 | 40  | I51978271 | YH1        | 5/17/2022 |

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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



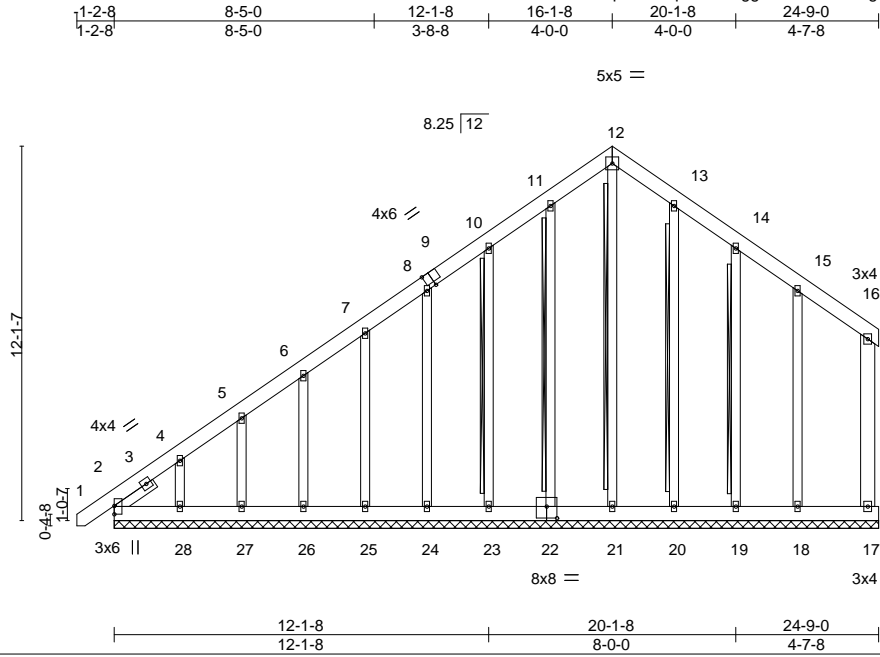


|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978232 |
| J0322-1318 | A1-GE | GABLE      | 1   | 1   | Job Reference (optional)                 |           |

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Scale = 1:74.6

Plate Offsets (X,Y)-- [9:0-2-14,Edge], [22:0-4-0,0-4-8]

| LOADING (psf) | SPACING-             | 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 | 1        | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.02  | Vert(CT) -0.00 | 1        | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.16  | Horz(CT) 0.00  | 17       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S |                |          |        |     | Weight: 262 lb | FT = 20% |

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x6 SP No.1  
OTHERS 2x4 SP No.2  
SLIDER Left 2x4 SP No.2 1-6-4

**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.  
WEBS T-Brace: 2x4 SPF No.2 - 12-21, 11-22, 10-23, 13-20, 14-19  
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 24-9-0.  
(lb) - Max Horz 2=401(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 17, 21, 22, 24, 25, 26, 27, 20 except 2=-158(LC 8), 23=-102(LC 12), 28=-218(LC 12), 19=-105(LC 13), 18=-110(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 17, 21, 22, 23, 24, 25, 26, 27, 28, 20, 19, 18 except 2=283(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-471/349, 4-5=-325/278, 5-6=-274/255, 10-11=-180/268, 11-12=-219/286, 12-13=-220/270

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17, 21, 22, 24, 25, 26, 27, 20 except (jt=lb) 2=158, 23=102, 28=218, 19=105, 18=110.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

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



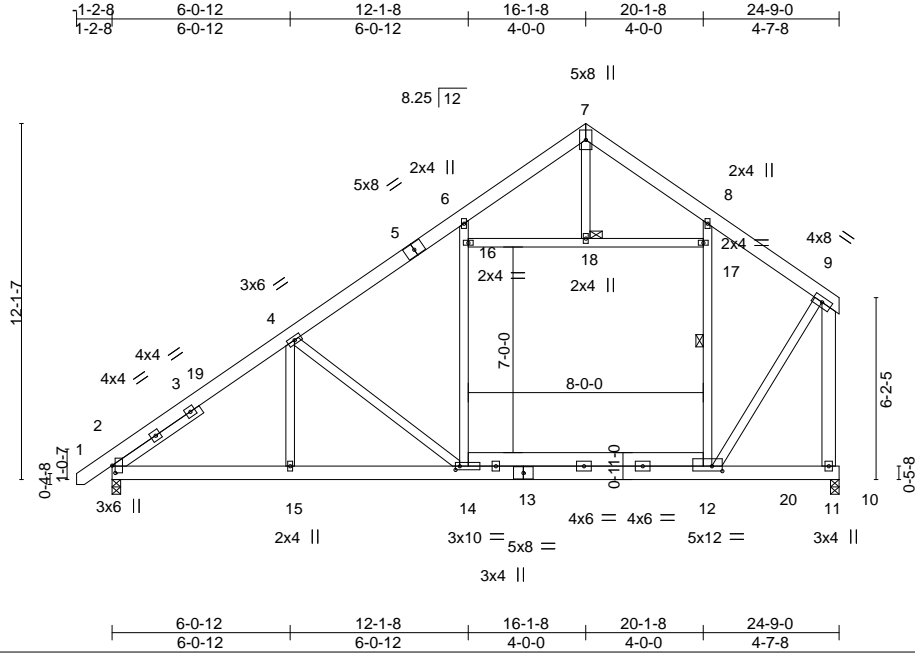
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978233 |
| J0322-1318 | A2    | COMMON     | 6   | 1   | Job Reference (optional)                 |           |

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Scale = 1:78.4

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

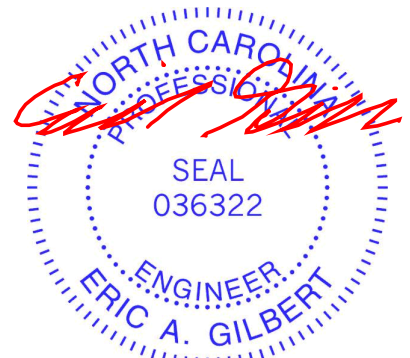
| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.53  | Vert(LL) -0.26 | 14-15    | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.80  | Vert(CT) -0.50 | 14-15    | >590   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.76  | Horz(CT) 0.01  | 11       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.26  | 14-15    | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 238 lb | FT = 20% |

| LUMBER-                                     | BRACING-  |
|---|---|
| TOP CHORD 2x6 SP No.1                       | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1                       | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:                          |
| WEBS 2x4 SP No.2 *Except* 9-11: 2x6 SP No.1 | WEBS 1 Row at midpt 8-12  |
| SLIDER Left 2x4 SP No.2 3-7-4               | JOINTS 1 Brace at Jt(s): 18   |

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
 Max Horz 2=275(LC 9)  
 Max Uplift 2=-55(LC 12), 11=-66(LC 12)  
 Max Grav 2=1119(LC 19), 11=1266(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1523/250, 4-6=-977/214, 6-7=-470/198, 7-8=-585/227, 8-9=-869/205, 9-11=-1502/300  
 BOT CHORD 2-15=-308/1309, 14-15=-308/1309, 12-14=-117/745  
 WEBS 14-16=0/360, 6-16=0/333, 9-12=-162/1229, 4-14=-801/272, 4-15=0/390, 16-18=-252/92, 17-18=-252/92

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 16-1-8, Exterior(2) 16-1-8 to 20-3-4, Interior(1) 20-3-4 to 24-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 11.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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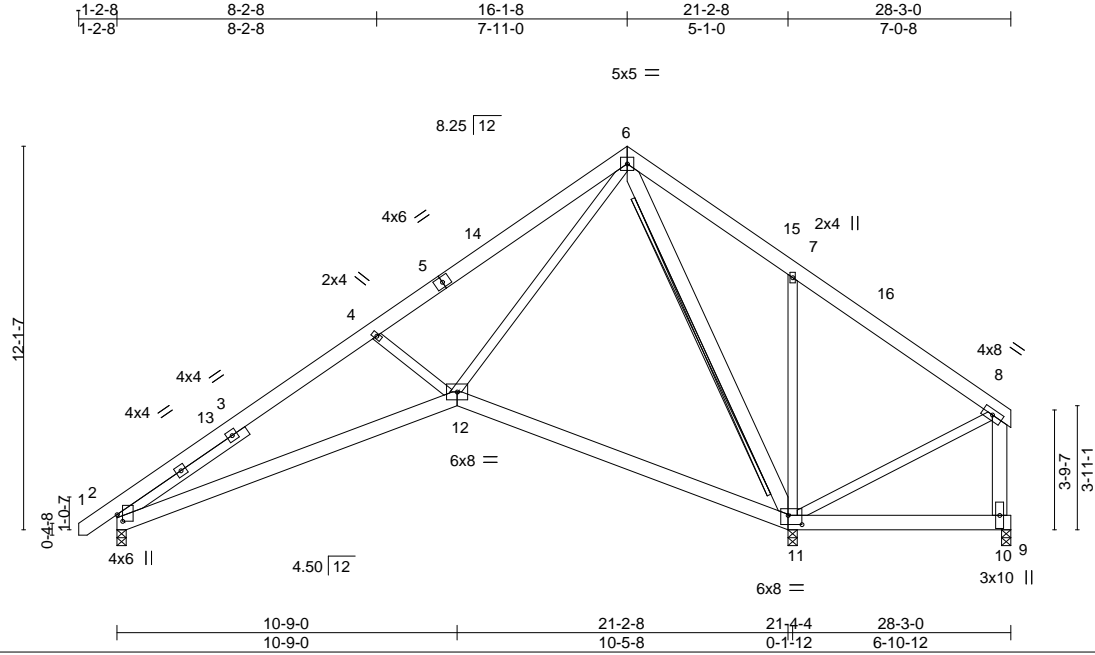
818 Soundside Road  
 Edenton, NC 27932

|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | I51978234 |
| J0322-1318 | A3    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)                 |           |

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Scale = 1:72.8

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.25  | Vert(LL) -0.10 | 11-12    | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.35  | Vert(CT) -0.22 | 11-12    | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.81  | Horz(CT) 0.06  | 10       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.03  | 2-12     | >999   | 240 | Weight: 238 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-11,8-10: 2x6 SP No.1  
 SLIDER Left 2x4 SP No.2 4-11-8

**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, Except: 6-0-0 oc bracing: 11-12.  
 WEBS T-Brace: 2x4 SPF No.2 - 6-11  
 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.**

(size) 2=0-3-8, 11=0-3-8, 10=0-3-8  
 Max Horz 2=278(LC 9)  
 Max Uplift 2=-28(LC 12), 11=-189(LC 12), 10=-502(LC 23)  
 Max Grav 2=713(LC 1), 11=2003(LC 1), 10=107(LC 12)

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

TOP CHORD 2-4=-1184/296, 4-6=-831/253, 6-7=-48/761, 7-8=-114/757, 8-10=-69/560  
 BOT CHORD 2-12=-288/1116  
 WEBS 4-12=-539/332, 6-12=-141/1080, 6-11=-1338/121, 7-11=-488/297, 8-11=-677/209

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 16-1-8, Exterior(2) 16-1-8 to 20-6-5, Interior(1) 20-6-5 to 27-10-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 11=189, 10=502.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 17, 2022

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|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978235 |
| J0322-1318 | A4    | SCISSORS   | 3   | 1   | Job Reference (optional)                 |           |

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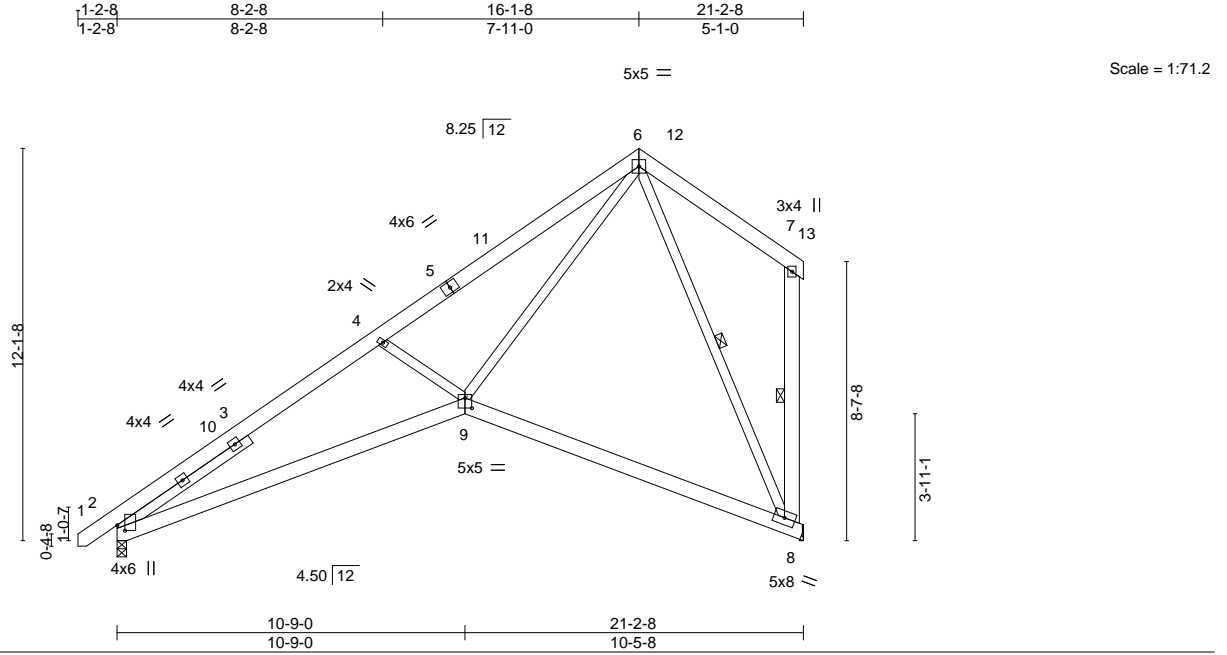


Plate Offsets (X,Y)-- [2:0-2-0,0-2-14], [9:0-2-8,0-3-12]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.31  | Vert(LL) -0.10 | 2-9      | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.39  | Vert(CT) -0.22 | 2-9      | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.56  | Horz(CT) 0.10  | 8        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.05  | 9        | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 180 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 7-8: 2x6 SP No.1  
 SLIDER Left 2x4 SP No.2 4-11-8

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-9-15 oc bracing.  
 WEBS 1 Row at midpt 7-8, 6-8

**REACTIONS.**

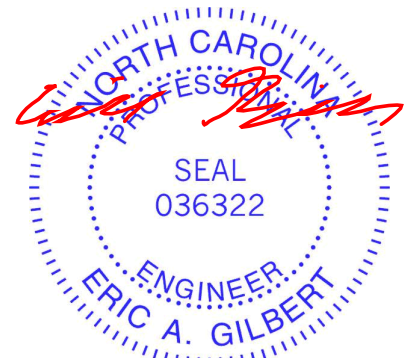
(size) 2=0-3-8, 8=Mechanical  
 Max Horz 2=317(LC 12)  
 Max Uplift 2=-26(LC 12), 8=-113(LC 12)  
 Max Grav 2=904(LC 1), 8=826(LC 1)

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

TOP CHORD 2-4=-1763/481, 4-6=-1471/438  
 BOT CHORD 2-9=-617/1676, 8-9=-121/382  
 WEBS 4-9=-485/312, 6-9=-372/1459, 6-8=-814/255

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 16-1-8, Exterior(2) 16-1-8 to 20-6-5, Interior(1) 20-6-5 to 20-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 8=113.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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

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



818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978236 |
| J0322-1318 | A4-A  | SCISSORS   | 1   | 1   | Job Reference (optional)                 |           |

Comtech, Inc. Fayetteville, NC - 28314,

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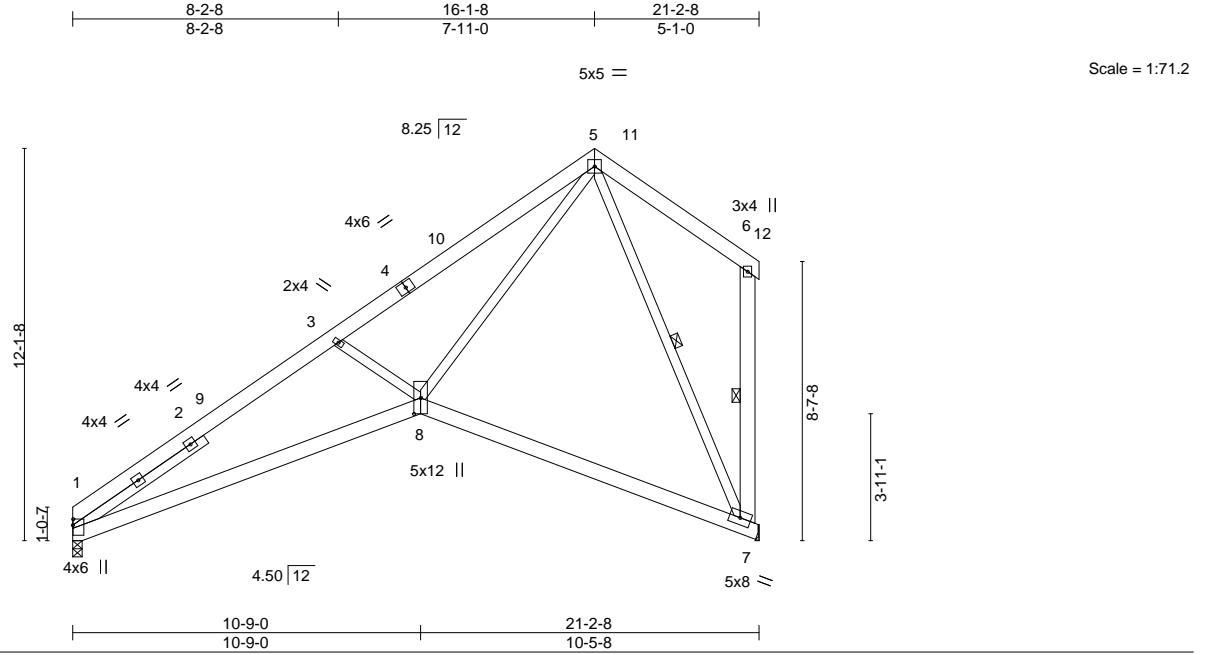


Plate Offsets (X,Y)-- [1:0-2-4,0-0-2], [8:0-5-14,0-2-8]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.31  | Vert(LL) -0.11 | 1-8      | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.40  | Vert(CT) -0.23 | 1-8      | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.57  | Horz(CT) 0.10  | 7        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.05  | 8        | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 177 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-7: 2x6 SP No.1  
 SLIDER Left 2x4 SP No.2 4-11-8

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-9-4 oc bracing.  
 WEBS 1 Row at midpt 6-7, 5-7

**REACTIONS.**

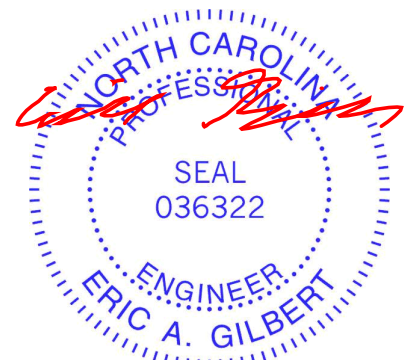
(size) 1=0-3-8, 7=Mechanical  
 Max Horz 1=313(LC 12)  
 Max Uplift 1=-8(LC 12), 7=-113(LC 12)  
 Max Grav 1=828(LC 1), 7=828(LC 1)

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

TOP CHORD 1-3=-1772/484, 3-5=-1469/441  
 BOT CHORD 1-8=-622/1673, 7-8=-121/383  
 WEBS 3-8=-482/318, 5-8=-375/1457, 5-7=-817/255

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-15 to 4-6-12, Interior(1) 4-6-12 to 16-1-8, Exterior(2) 16-1-8 to 20-6-5, Interior(1) 20-6-5 to 20-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 7=113.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



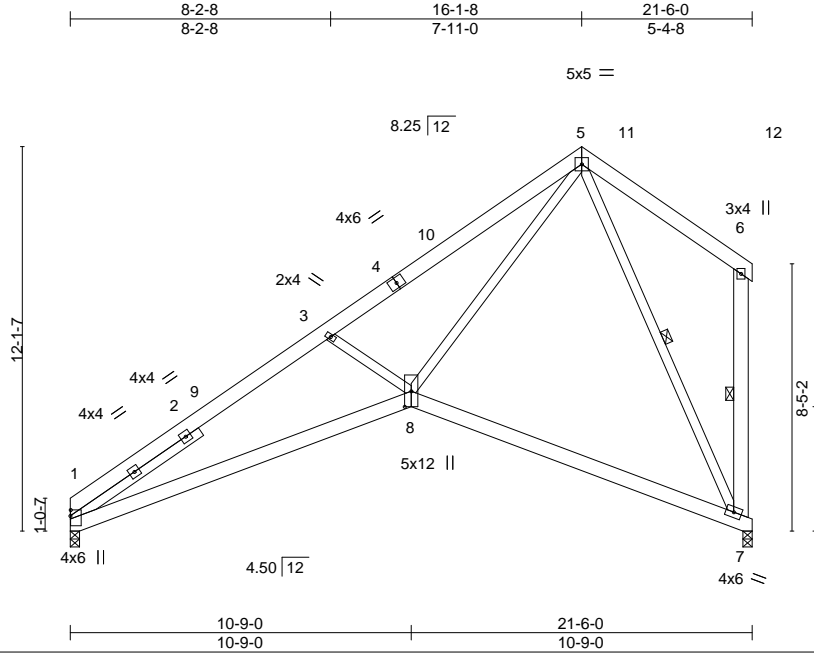
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978237 |
| J0322-1318 | A5    | SCISSORS   | 2   | 1   | Job Reference (optional)                 |           |

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Scale = 1:72.6

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.32  | Vert(LL) -0.11 | 7-8      | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.40  | Vert(CT) -0.23 | 7-8      | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.57  | Horz(CT) 0.10  | 7        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.05  | 8        | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 178 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-7: 2x6 SP No.1  
 SLIDER Left 2x4 SP No.2 4-11-8

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-11-2 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-9-7 oc bracing.  
 WEBS 1 Row at midpt 6-7, 5-7

**REACTIONS.**

(size) 1=0-3-8, 7=0-3-8  
 Max Horz 1=308(LC 12)  
 Max Uplift 1=-11(LC 12), 7=-109(LC 12)  
 Max Grav 1=839(LC 1), 7=839(LC 1)

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

TOP CHORD 1-3=-1808/492, 3-5=-1508/450  
 BOT CHORD 1-8=-621/1697, 7-8=-124/404  
 WEBS 3-8=-478/317, 5-8=-372/1475, 5-7=-826/247

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-15 to 4-6-12, Interior(1) 4-6-12 to 16-1-8, Exterior(2) 16-1-8 to 20-6-5, Interior(1) 20-6-5 to 21-1-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 7=109.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



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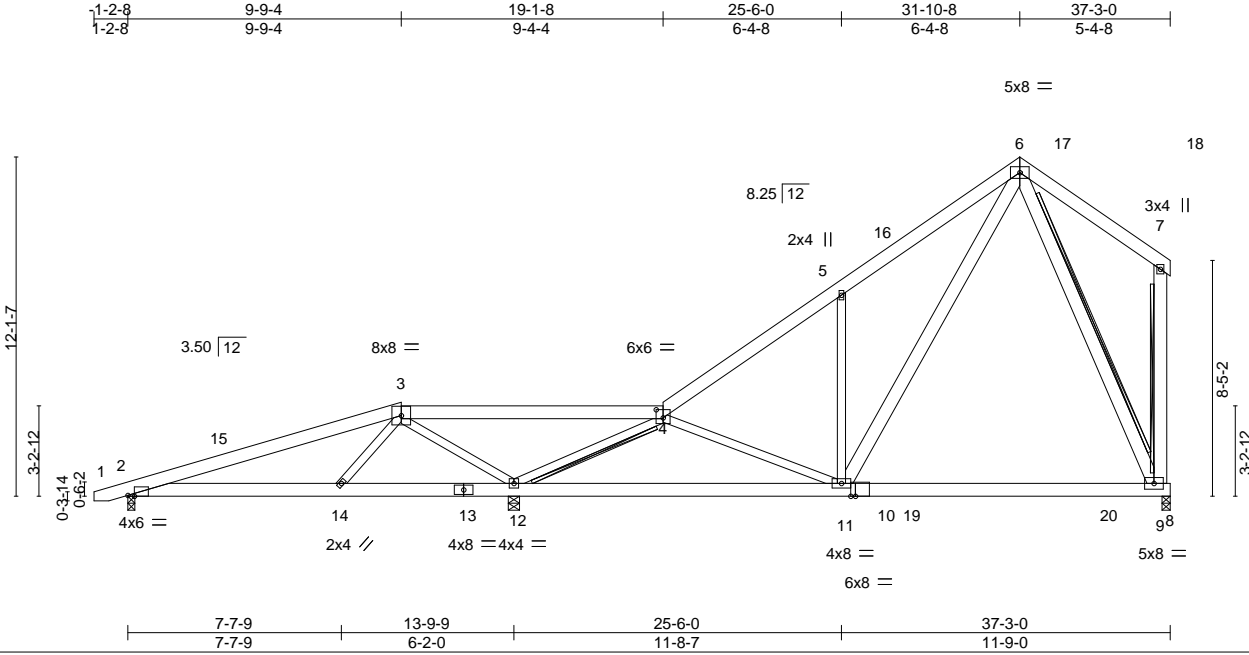




|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978239 |
| J0322-1318 | A7    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:16 2022 Page 1  
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Scale = 1:82.3

Plate Offsets (X,Y)-- [2:0-2-13,Edge], [4:0-3-0,0-3-8], [10:0-2-0,0-0-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.46  | Vert(LL) -0.31 | 9-11     | >894   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.61  | Vert(CT) -0.40 | 9-11     | >687   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.52  | Horz(CT) 0.01  | 9        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.05  | 2-14     | >999   | 240 | Weight: 306 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-11,7-9,6-9: 2x6 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 (10-0-0 max.): 3-4.  
 Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-14.  
 BOT CHORD  
 WEBS T-Brace: 2x4 SPF No.2 - 4-12, 7-9, 6-9  
 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.**

(size) 2=0-3-0, 12=0-4-13, 9=0-3-8  
 Max Horz 2=313(LC 12)  
 Max Uplift 2=251(LC 8), 12=157(LC 12), 9=80(LC 12)  
 Max Grav 2=443(LC 23), 12=1744(LC 1), 9=1034(LC 19)

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

TOP CHORD 2-3=-321/368, 3-4=-509/906, 4-5=-991/35, 5-6=-1045/250  
 BOT CHORD 2-14=-553/233, 12-14=-327/97, 11-12=-161/863, 9-11=-56/323  
 WEBS 3-14=-359/341, 3-12=-1212/788, 4-12=-1841/466, 5-11=-515/308, 6-11=-150/1041,  
 6-9=-693/146

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-5 to 3-5-8, Interior(1) 3-5-8 to 31-10-8, Exterior(2) 31-10-8 to 36-3-5, Interior(1) 36-3-5 to 36-10-12 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=251, 12=157.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 17, 2022

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 Edenton, NC 27932

|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978240 |
| J0322-1318 | A8    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)                 |           |

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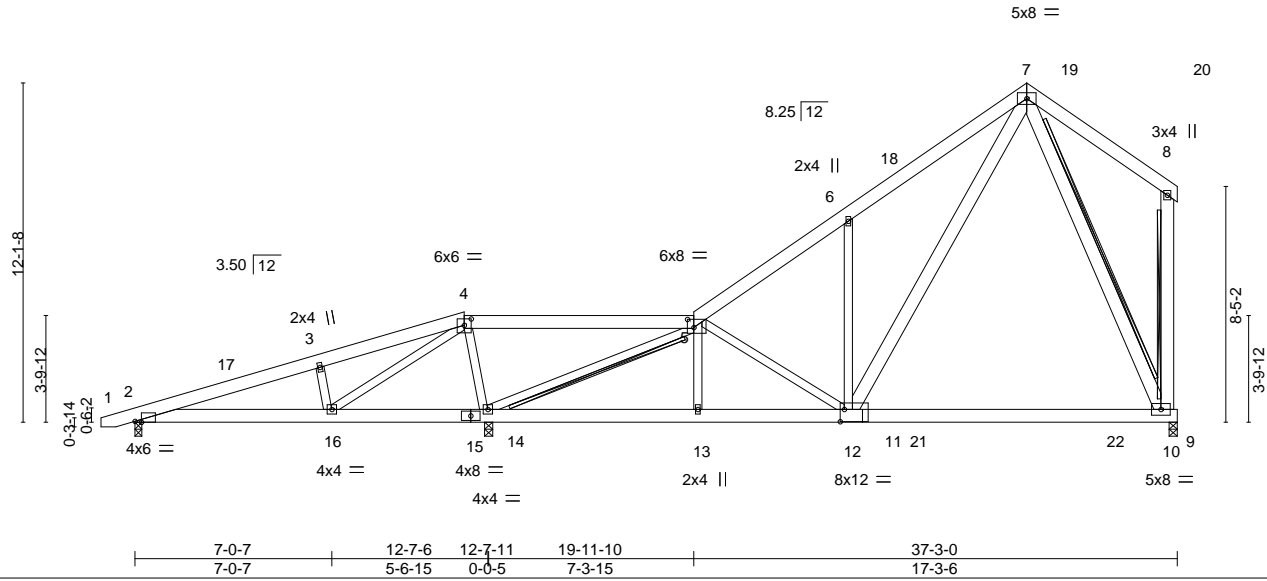


Plate Offsets (X,Y)-- [2:0-2-12,Edge], [4:0-3-0,0-2-12], [5:0-2-12,0-3-8], [12:0-1-12,0-5-4]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.38  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.59  | Vert(LL) -0.27 10-12 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.74  | Vert(CT) -0.39 10-12 >751 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.01 10 n/a n/a      |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.04 2-16 >999 240   | Weight: 315 lb | FT = 20% |

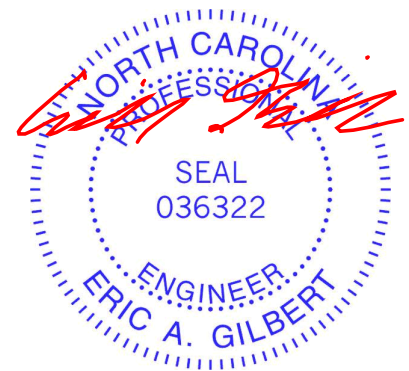
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 7-12,8-10,7-10: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-5. Rigid ceiling directly applied or 6-0-0 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 5-14, 8-10, 7-10  
 WEBS 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.** (size) 2=0-2-15, 14=0-3-8, 10=0-3-8  
 Max Horz 2=314(LC 12)  
 Max Uplift 2=-214(LC 8), 14=-183(LC 12), 10=-76(LC 12)  
 Max Grav 2=342(LC 23), 14=1806(LC 1), 10=1069(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-200/312, 3-4=-122/339, 4-5=-408/764, 5-6=-1057/53, 6-7=-1111/259  
 BOT CHORD 2-16=-449/142, 14-16=-577/137, 13-14=-118/1039, 12-13=-116/1039, 10-12=-59/340  
 WEBS 3-16=-343/167, 4-16=-676/786, 4-14=-863/515, 5-14=-1882/360, 5-12=-306/10, 6-12=-483/290, 7-12=-163/1124, 7-10=-738/158

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-6 to 3-5-7, Interior(1) 3-5-7 to 31-10-7, Exterior(2) 31-10-7 to 36-3-4, Interior(1) 36-3-4 to 36-10-12 zone; porch left exposed; 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, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 2=214, 14=183.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 17, 2022

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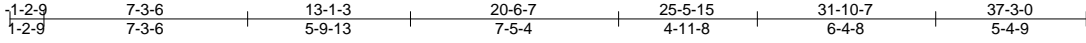
818 Soundside Road  
 Edenton, NC 27932

|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | I51978241 |
| J0322-1318 | A9    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)                 |           |

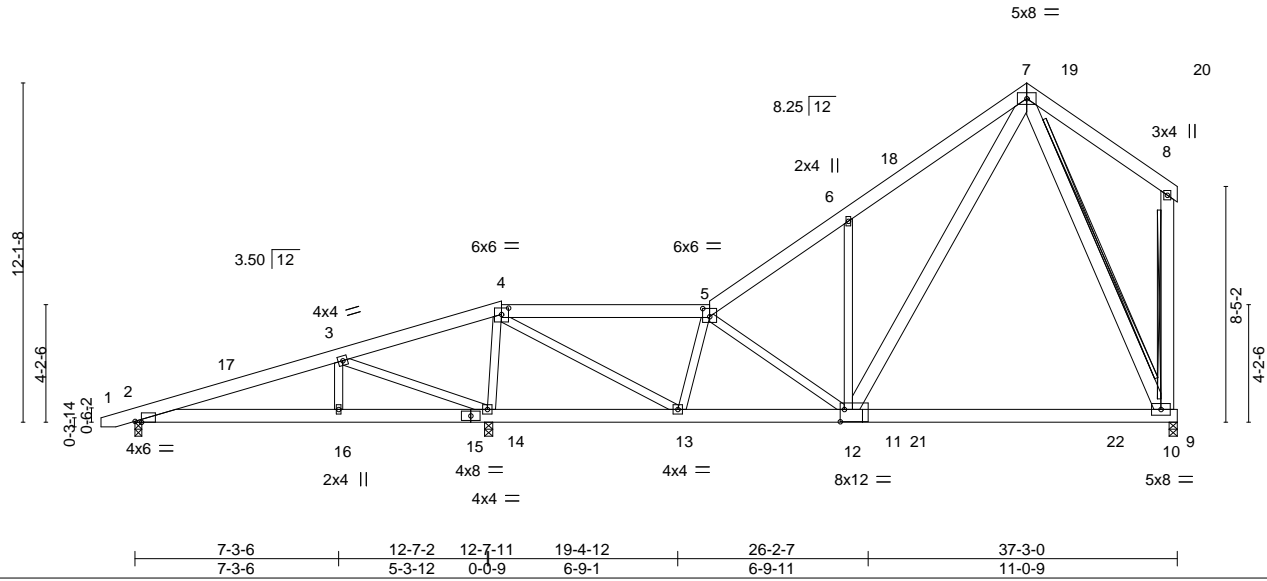
Comtech, Inc., Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:18 2022 Page 1

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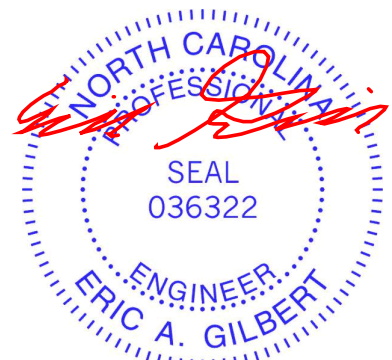
| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.39  | Vert(LL) -0.28 | 10-12    | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.59  | Vert(CT) -0.39 | 10-12    | >746   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.51  | Horz(CT) 0.01  | 10       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.04  | 2-16     | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 315 lb | FT = 20% |

| LUMBER-  | BRACING-   |
|--|--|
| TOP CHORD 2x6 SP No.1                                    | 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.): 4-5.  |
| BOT CHORD 2x6 SP No.1                                    | Rigid ceiling directly applied or 6-0-0 oc bracing.  |
| WEBS 2x4 SP No.2 *Except*<br>7-12,8-10,7-10: 2x6 SP No.1 | T-Brace: 2x4 SPF No.2 - 8-10, 7-10<br>Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.<br>Brace must cover 90% of web length. |

**REACTIONS.** (size) 2=0-2-15, 14=0-3-8, 10=0-3-8  
 Max Horz 2=313(LC 12)  
 Max Uplift 2=-208(LC 8), 14=-190(LC 12), 10=-74(LC 12)  
 Max Grav 2=335(LC 23), 14=1816(LC 1), 10=1062(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-142/305, 3-4=-449/803, 4-5=-807/0, 5-6=-1043/48, 6-7=-1090/248  
 BOT CHORD 2-16=-384/81, 14-16=-384/81, 13-14=-527/186, 12-13=-115/1010, 10-12=-57/336  
 WEBS 3-14=-871/686, 4-14=-1340/417, 4-13=-246/1453, 5-13=-743/203, 5-12=-286/16,  
 6-12=-457/280, 7-12=-150/1097, 7-10=-728/154

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-6 to 3-5-7, Interior(1) 3-5-7 to 31-10-7, Exterior(2) 31-10-7 to 36-3-4, Interior(1) 36-3-4 to 36-10-12 zone; porch left exposed;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, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 2=208, 14=190.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



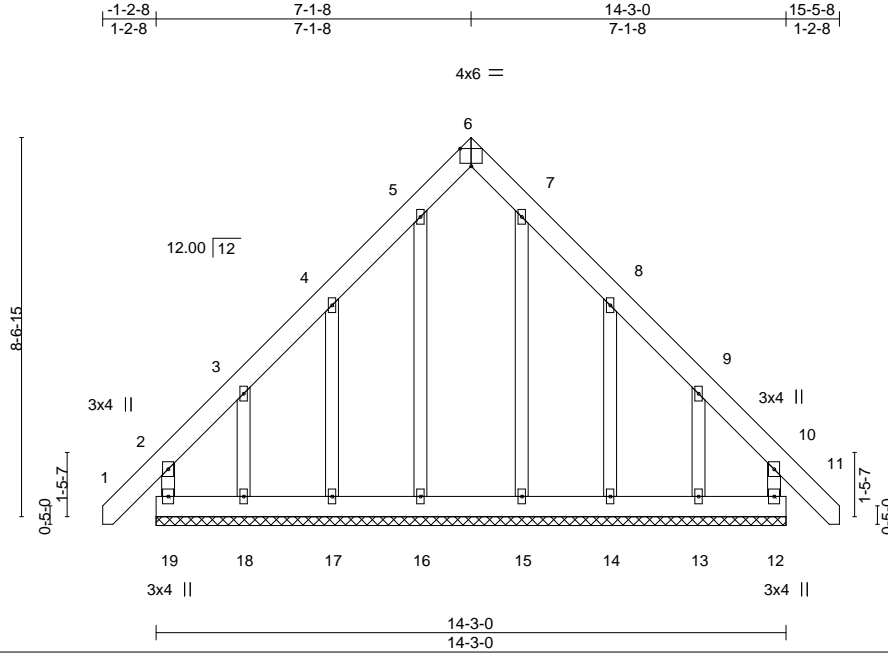
May 17, 2022

|            |       |            |     |     |  |
|------------|-------|------------|-----|-----|--|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett |
| J0322-1318 | B1-GE | GABLE      | 1   | 1   | 151978242                                |

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Scale = 1:52.1

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

| LOADING (psf) | SPACING-             | CSL      | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.15  | Vert(LL) -0.00 | 11       | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.06  | Vert(CT) -0.00 | 11       | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.13  | Horz(CT) 0.00  | 12       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-R |                |          |        |     |                |          |
|               |                      |          |                |          |        |     | Weight: 132 lb | FT = 20% |

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

**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.** All bearings 14-3-0.  
(lb) - Max Horz 19=-297(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) except 19=-159(LC 8), 12=-142(LC 9), 17=-166(LC 12), 18=-244(LC 12), 14=-167(LC 13), 13=-240(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 17, 14, 13 except 19=266(LC 20), 12=252(LC 19), 16=280(LC 22), 18=255(LC 10), 15=276(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 4-5=-211/286, 7-8=-212/286

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 159 lb uplift at joint 19, 142 lb uplift at joint 12, 166 lb uplift at joint 17, 244 lb uplift at joint 18, 167 lb uplift at joint 14 and 240 lb uplift at joint 13.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

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

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



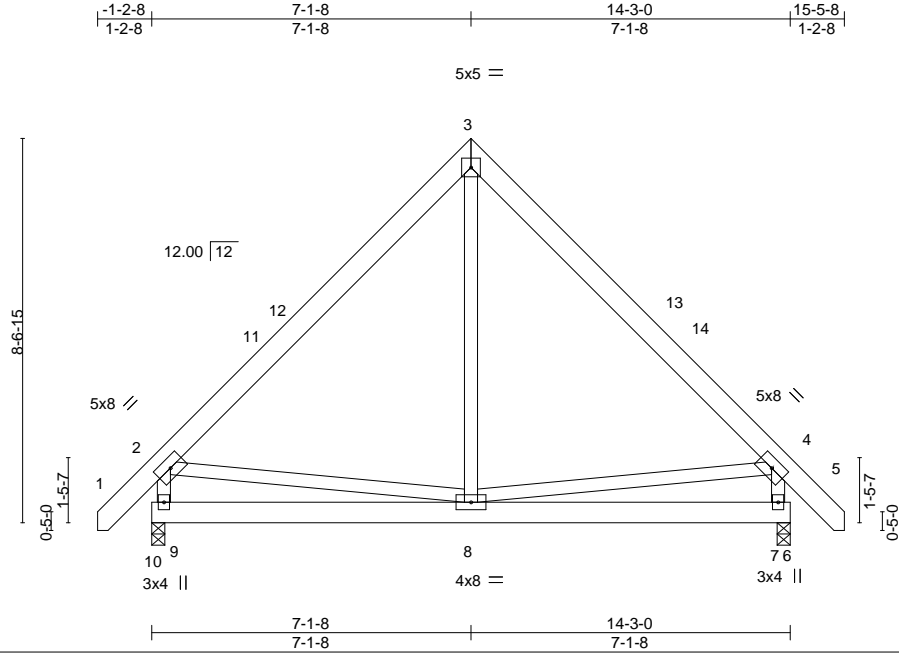
818 Soundside Road  
Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | I51978243 |
| J0322-1318 | B2    | COMMON     | 1   | 1   | Job Reference (optional)                 |           |

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Scale = 1:51.4

|                      |                      |             |                |     |       |        |     |                |             |
|----------------------|----------------------|-------------|----------------|-----|-------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>   | in  | (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.39     | Vert(LL) -0.01 | 8-9 | >999  | 360    |     | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.13     | Vert(CT) -0.02 | 8-9 | >999  | 240    |     |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.09     | Horz(CT) 0.00  | 7   | n/a   | n/a    |     |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Wind(LL) 0.00  | 8-9 | >999  | 240    |     |                |             |
|                      | Code IRC2015/TPI2014 |             |                |     |       |        |     | Weight: 123 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

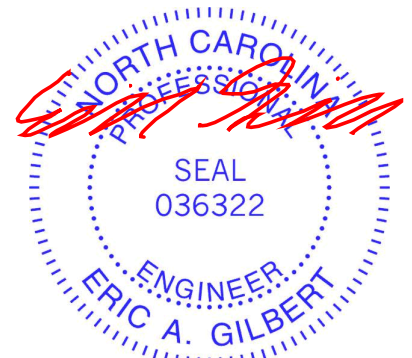
(size) 9=0-3-8, 7=0-3-8  
 Max Horz 9=-237(LC 10)  
 Max Uplift 9=-28(LC 12), 7=-28(LC 13)  
 Max Grav 9=636(LC 1), 7=636(LC 1)

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

TOP CHORD 2-3=-511/170, 3-4=-511/170, 2-9=-563/249, 4-7=-563/250  
 BOT CHORD 8-9=-243/348, 7-8=-95/280  
 WEBS 3-8=0/273

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 7-1-8, Exterior(2) 7-1-8 to 11-6-5, Interior(1) 11-6-5 to 15-4-2 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 9 and 28 lb uplift at joint 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



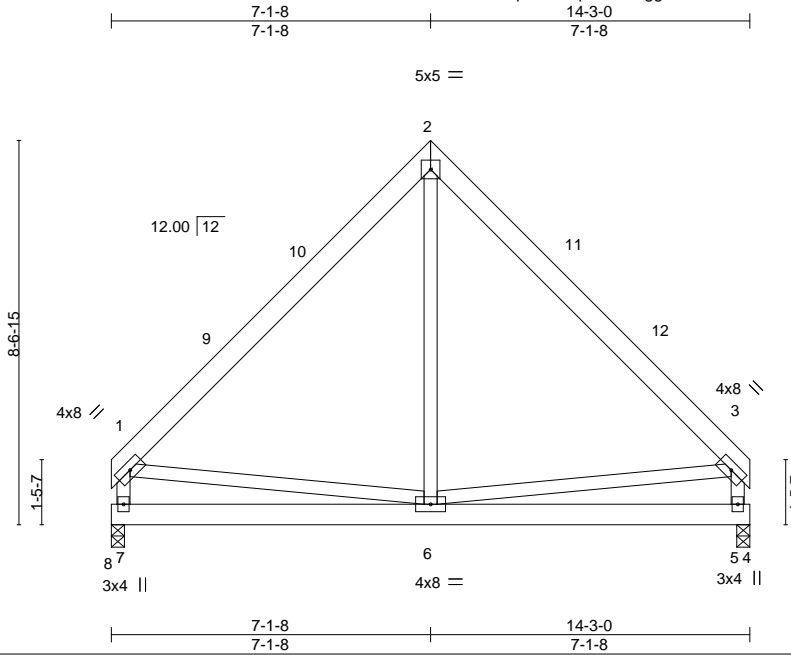
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978244 |
| J0322-1318 | B3    | COMMON     | 3   | 1   | Job Reference (optional)                 |           |

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|                      |                      |       |             |              |       |       |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|-------|-------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in    | (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.25     | Vert(LL)     | -0.01 | 6-7   | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.13     | Vert(CT)     | -0.02 | 6-7   | >999   | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.06     | Horz(CT)     | 0.00  | 5     | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.00  | 6     | >999   | 240 | Weight: 116 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 7=0-3-8, 5=0-3-8  
 Max Horz 7=205(LC 9)  
 Max Uplift 7=-20(LC 13), 5=-20(LC 12)  
 Max Grav 7=555(LC 1), 5=555(LC 1)

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

TOP CHORD 1-2=-515/163, 2-3=-515/163, 1-7=-483/174, 3-5=-483/175  
 BOT CHORD 6-7=-228/298  
 WEBS 2-6=0/270

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-1 to 4-7-14, Interior(1) 4-7-14 to 7-1-8, Exterior(2) 7-1-8 to 11-6-5, Interior(1) 11-6-5 to 13-11-15 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 7 and 20 lb uplift at joint 5.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

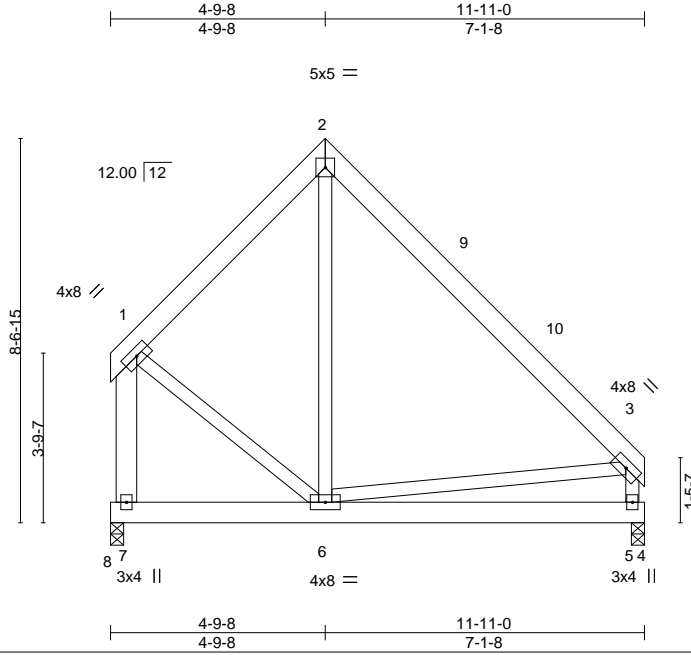


818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978245 |
| J0322-1318 | B4    | COMMON     | 1   | 1   | Job Reference (optional)                 |           |

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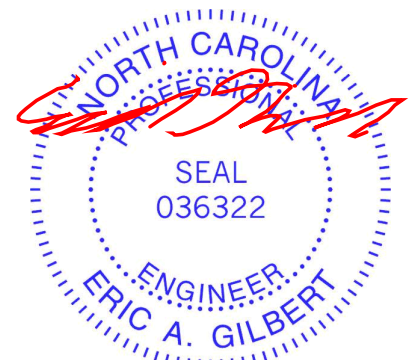
|                      |                      |             |              |       |       |        |     |                |             |
|----------------------|----------------------|-------------|--------------|-------|-------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b> | in    | (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.27     | Vert(LL)     | -0.01 | 5-6   | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.11     | Vert(CT)     | -0.03 | 5-6   | >999   | 240 |                |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.13     | Horz(CT)     | 0.00  | 5     | n/a    | n/a |                |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-S    | Wind(LL)     | 0.00  | 6     | >999   | 240 |                |             |
|                      | Code IRC2015/TPI2014 |             |              |       |       |        |     | Weight: 107 lb | FT = 20%    |

|                           |   |
|---------------------------|---|
| <b>LUMBER-</b>            | <b>BRACING-</b>   |
| TOP CHORD 2x6 SP No.1     | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1     | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS 2x4 SP No.2 *Except* |   |
| 1-7: 2x6 SP No.1          |   |

**REACTIONS.** (size) 7=0-3-8, 5=0-3-8  
 Max Horz 7=-186(LC 8)  
 Max Uplift 7=-45(LC 13), 5=-4(LC 12)  
 Max Grav 7=459(LC 1), 5=458(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-333/161, 2-3=-392/115, 1-7=-427/162, 3-5=-383/141

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 9-2-5, Interior(1) 9-2-5 to 11-7-15 zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 7 and 4 lb uplift at joint 5.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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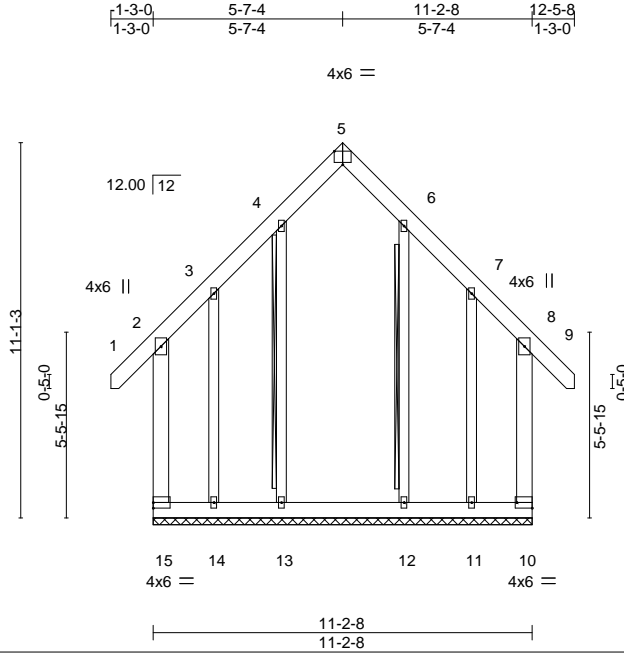


|            |       |            |     |     |  |
|------------|-------|------------|-----|-----|--|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett |
| J0322-1318 | C1-GE | GABLE      | 1   | 1   | I51978246                                |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:22 2022 Page 1

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Scale = 1:68.1



Plate Offsets (X,Y)-- [5:0-3-0,Edge], [10:Edge,0-2-0]

| LOADING (psf) | SPACING-             | CSL      | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.31  | Vert(LL) 0.00  | 8        | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.24  | Vert(CT) 0.00  | 8        | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.31  | Horz(CT) -0.00 | 10       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-R |                |          |        |     |                |          |
|               |                      |          |                |          |        |     | Weight: 139 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.  
 WEBS T-Brace: 2x4 SPF No.2 - 4-13, 6-12  
 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 11-2-8.  
 (lb) - Max Horz 15=429(LC 11)  
 Max Uplift All uplift 100 lb or less at joint(s) except 15=617(LC 8), 10=613(LC 9), 14=722(LC 9), 11=718(LC 8)  
 Max Grav All reactions 250 lb or less at joint(s) except 15=703(LC 11), 10=698(LC 10), 13=385(LC 22), 14=801(LC 10), 12=385(LC 21), 11=798(LC 11)

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

TOP CHORD 2-3=-325/317, 3-4=-201/364, 6-7=-202/365, 7-8=-322/315, 2-15=-363/345, 8-10=-361/343  
 WEBS 3-14=-419/363, 7-11=-418/362

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 617 lb uplift at joint 15, 613 lb uplift at joint 10, 722 lb uplift at joint 14 and 718 lb uplift at joint 11.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

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

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

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

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



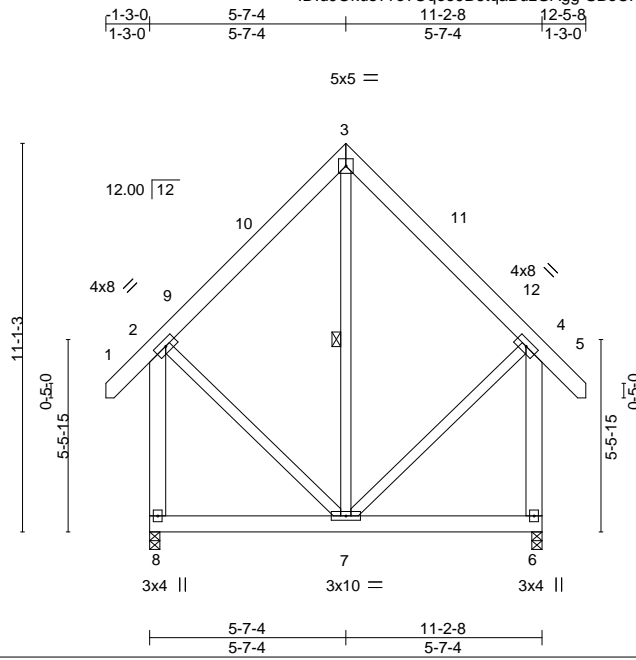
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978247 |
| J0322-1318 | C2    | COMMON     | 2   | 1   | Job Reference (optional)                 |           |

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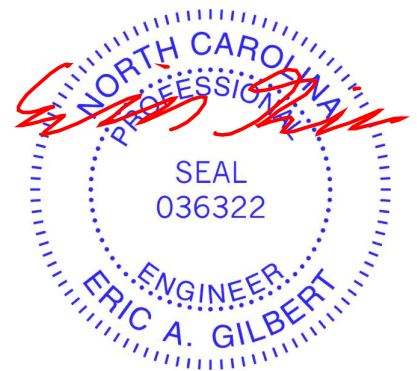
|                      |                      |       |             |                       |          |     |                |             |
|----------------------|----------------------|-------|-------------|-----------------------|----------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> in (loc) | l/defl   | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.14     | Vert(LL) -0.00        | 7-8 >999 | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.08     | Vert(CT) -0.01        | 7-8 >999 | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.12     | Horz(CT) -0.00        | 6 n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL) 0.00         | 7-8 >999 | 240 |                |             |
|                      |                      |       |             |                       |          |     | Weight: 131 lb | FT = 20%    |

|   |   |
|---|---|
| <b>LUMBER-</b>                                    | <b>BRACING-</b>   |
| TOP CHORD 2x6 SP No.1                             | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1                             | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS 2x4 SP No.2 *Except*<br>2-8,4-6: 2x6 SP No.1 | WEBS 1 Row at midpt 3-7   |

**REACTIONS.** (size) 8=0-3-8, 6=0-3-8  
 Max Horz 8=-342(LC 10)  
 Max Uplift 8=-39(LC 8), 6=-39(LC 9)  
 Max Grav 8=526(LC 20), 6=526(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-300/221, 3-4=-300/221, 2-8=-478/293, 4-6=-478/293  
 BOT CHORD 7-8=-335/369  
 WEBS 4-7=-126/250

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-2 to 3-3-11, Interior(1) 3-3-11 to 5-7-12, Exterior(2) 5-7-12 to 10-0-9, Interior(1) 10-0-9 to 12-4-10 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 8 and 39 lb uplift at joint 6.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



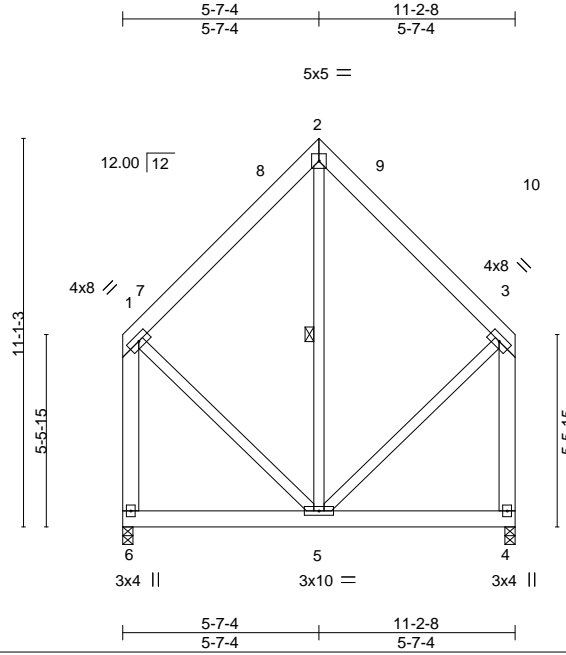
May 17, 2022

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978248 |
| J0322-1318 | C3    | COMMON     | 4   | 1   | Job Reference (optional)                 |           |

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Scale = 1:65.8

|                      |                      |       |             |              |       |       |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|-------|-------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in    | (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.13     | Vert(LL)     | -0.00 | 5-6   | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.08     | Vert(CT)     | -0.01 | 5-6   | >999   | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.05     | Horz(CT)     | 0.00  | 4     | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.00  | 5     | >999   | 240 |                |             |
|                      |                      |       |             |              |       |       |        |     | Weight: 124 lb | FT = 20%    |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 1-6,3-4: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 2-5

**REACTIONS.**

(size) 6=0-3-8, 4=0-3-8  
 Max Horz 6=129(LC 9)  
 Max Uplift 6=-45(LC 13), 4=-45(LC 12)  
 Max Grav 6=433(LC 20), 4=433(LC 19)

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

TOP CHORD 1-2=-284/158, 2-3=-284/158, 1-6=-386/145, 3-4=-386/145

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-8-1, Interior(1) 4-8-1 to 5-7-12, Exterior(2) 5-7-12 to 10-0-9, Interior(1) 10-0-9 to 11-0-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 6 and 45 lb uplift at joint 4.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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

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



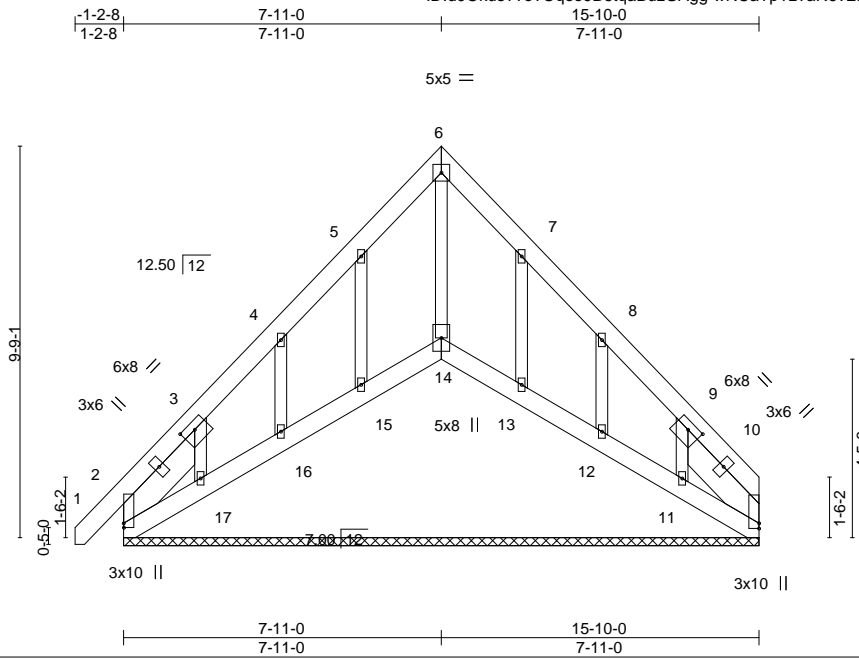
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978249 |
| J0322-1318 | D1-GE | GABLE      | 1   | 1   | Job Reference (optional)                 |           |

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Scale = 1:57.4

Plate Offsets (X,Y)-- [2:0-1-5,0-0-1], [3:0-4-0,0-2-4], [9:0-4-0,0-2-4], [10:Edge,0-0-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.04  | Vert(LL) -0.00 | 1        | n/r    | 120 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.03  | Vert(CT) -0.00 | 1        | n/r    | 120 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.09  | Horz(CT) 0.01  | 10       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S |                |          |        |     | Weight: 149 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x8 SP No.1 2-10-15, Right 2x8 SP No.1 2-10-14

**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 15-10-0.  
 (lb) - Max Horz 2=283(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 10 except 2=269(LC 8), 14=138(LC 11), 15=129(LC 12), 16=164(LC 12), 17=293(LC 12), 13=122(LC 13), 12=164(LC 13), 11=281(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 10, 15, 16, 17, 13, 12, 11 except 2=364(LC 20), 14=543(LC 13)

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

TOP CHORD 2-3=-399/292, 5-6=-232/254, 6-7=-232/254, 9-10=-330/210  
 BOT CHORD 2-17=-175/271, 16-17=-188/275, 15-16=-188/276, 14-15=-190/273, 13-14=-190/273, 12-13=-188/275, 11-12=-188/275, 10-11=-174/263  
 WEBS 6-14=-268/185, 3-17=-274/299, 9-11=-270/287

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 2=269, 14=138, 15=129, 16=164, 17=293, 13=122, 12=164, 11=281.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14, 15, 16, 17, 13, 12, 11.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978250 |
| J0322-1318 | D2    | SCISSORS   | 7   | 1   | Job Reference (optional)                 |           |

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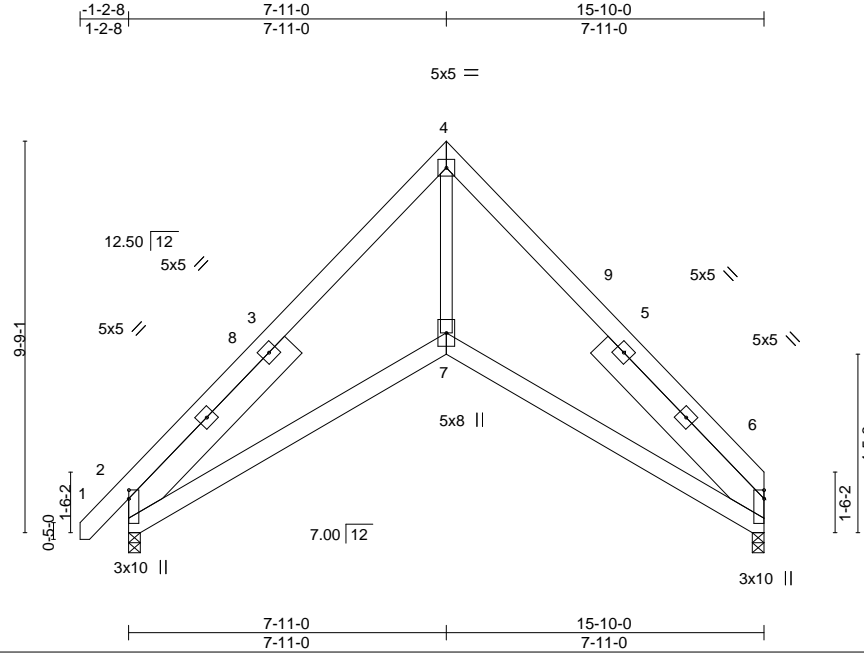


Plate Offsets (X,Y)-- [2:0-2-10,0-0-1], [6:Edge,0-0-0]

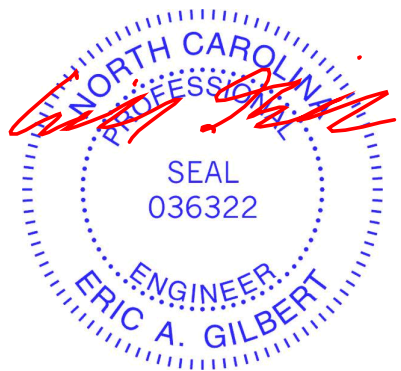
| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.32  | Vert(LL) -0.03 | 6-7      | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.19  | Vert(CT) -0.07 | 6-7      | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.19  | Horz(CT) 0.07  | 6        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) -0.04 | 7        | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 146 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x6 SP No.1                                    | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1                                    | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS 2x4 SP No.2   |   |
| SLIDER Left 2x8 SP No.1 5-11-9, Right 2x8 SP No.1 5-11-9 |   |

**REACTIONS.** (size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=226(LC 9)  
 Max Uplift 6=-29(LC 12), 2=-32(LC 13)  
 Max Grav 6=611(LC 1), 2=698(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-968/53, 4-6=-1048/73  
 BOT CHORD 2-7=-76/759, 6-7=-63/753  
 WEBS 4-7=0/881

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-11, Interior(1) 3-3-11 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 15-7-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

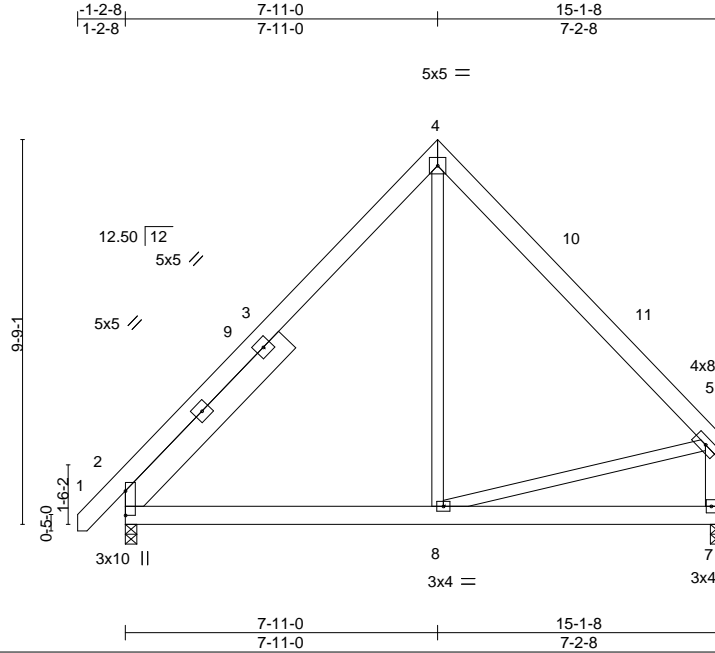


|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978251 |
| J0322-1318 | D3    | COMMON     | 4   | 1   | Job Reference (optional)                 |           |

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Scale = 1:58.4

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

| 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 0.35  | Vert(LL) | -0.02 | 2-8   | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.18  | Vert(CT) | -0.04 | 2-8   | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.07  | Horz(CT) | 0.00  | 7     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.02  | 2-8   | >999   | 240 |                |          |
|               |                      |       |          |          |       |       |        |     | Weight: 136 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x8 SP No.1 5-10-11

**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.**

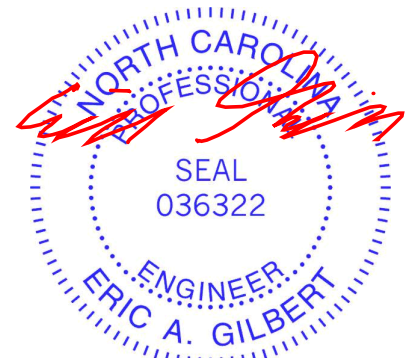
(size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=223(LC 9)  
 Max Uplift 2=-26(LC 13), 7=-33(LC 12)  
 Max Grav 2=662(LC 1), 7=598(LC 1)

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

TOP CHORD 2-4=-591/181, 4-5=-533/206, 5-7=-537/211  
 BOT CHORD 2-8=-21/309  
 WEBS 4-8=0/296, 5-8=-54/287

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-11, Interior(1) 3-3-11 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 14-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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

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

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



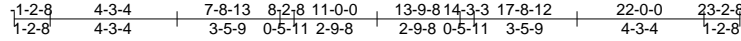
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978252 |
| J0322-1318 | G1-GE | ATTIC      | 1   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:27 2022 Page 1

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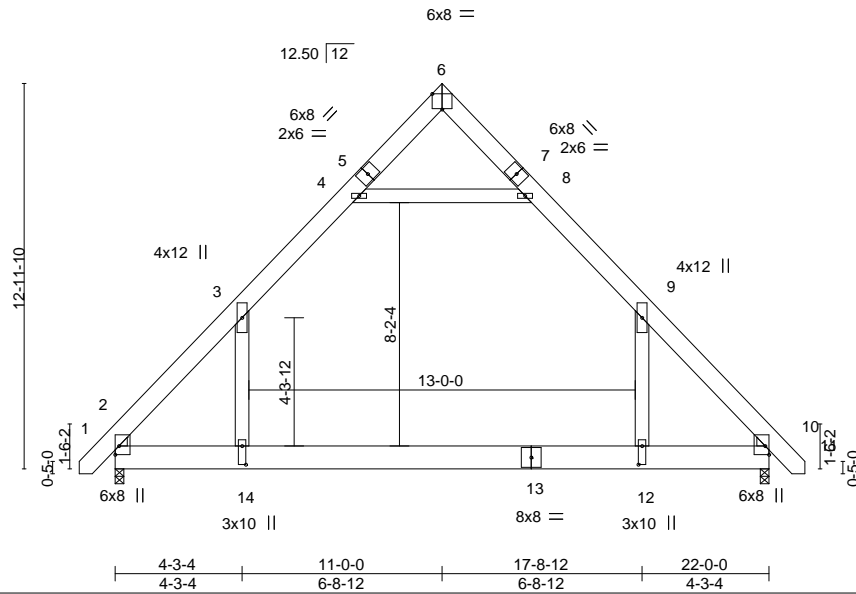


Plate Offsets (X,Y)-- [2:Edge,0-1-8], [6:Edge,0-6-5], [10:Edge,0-1-8], [12:0-7-8,0-1-8], [14:0-7-8,0-1-8]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.81  | Vert(LL) -0.29 | 12-14    | >898   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.86  | Vert(CT) -0.48 | 12-14    | >547   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.32  | Horz(CT) 0.01  | 10       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.09  | 12-14    | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 233 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1  
 WEDGE  
 Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 7-6-15 oc bracing.

**REACTIONS.**

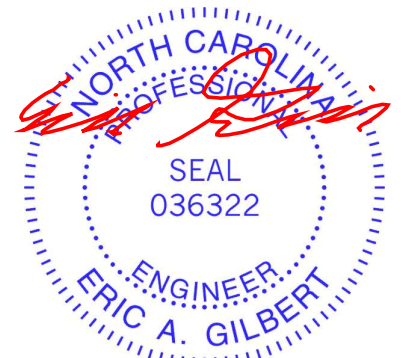
(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-379(LC 10)  
 Max Grav 2=1556(LC 21), 10=1556(LC 20)

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

TOP CHORD 2-3=-2181/0, 3-4=-1099/170, 4-6=-40/294, 6-8=-40/294, 8-9=-1099/170, 9-10=-2180/0  
 BOT CHORD 2-14=0/1134, 12-14=0/1134, 10-12=0/1134  
 WEBS 9-12=0/1238, 3-14=0/1238, 4-8=-1349/228

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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, 8-9, 4-8; Wall dead load (5.0psf) on member(s).9-12, 3-14
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Attic room checked for L/360 deflection.



May 17, 2022

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

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



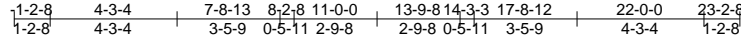
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978253 |
| J0322-1318 | G2    | ATTIC      | 6   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:28 2022 Page 1

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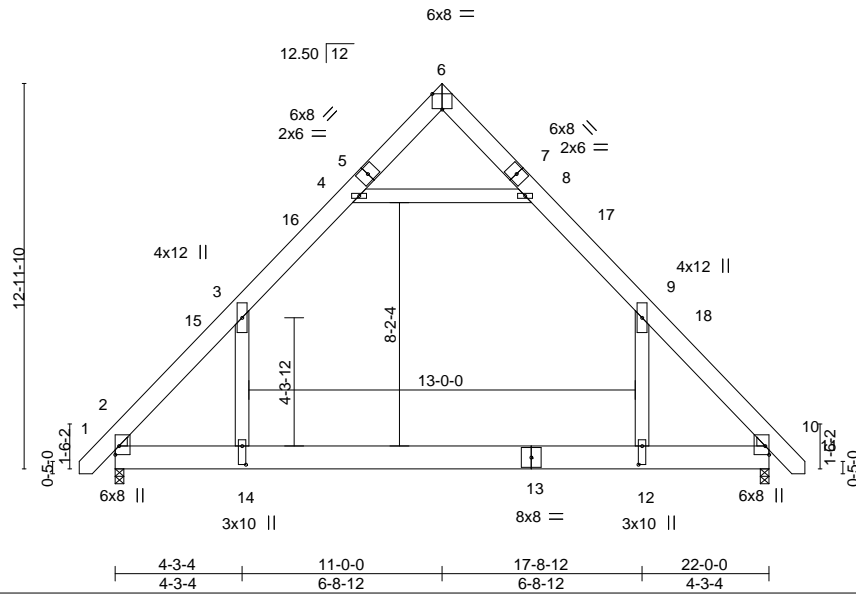


Plate Offsets (X,Y)-- [2:Edge,0-1-8], [6:Edge,0-6-5], [10:Edge,0-1-8], [12:0-7-8,0-1-8], [14:0-7-8,0-1-8]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.81  | Vert(LL) | -0.29 12-14 | >898   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.86  | Vert(CT) | -0.48 12-14 | >547   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.32  | Horz(CT) | 0.01 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) | 0.06 12-14  | >999   | 240 |                |          |
|               |                      |          |          |             |        |     | Weight: 233 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1  
 WEDGE  
 Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-1-9 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 7-6-15 oc bracing.

**REACTIONS.**

(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=-303(LC 10)  
 Max Grav 2=1562(LC 21), 10=1562(LC 20)

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

TOP CHORD 2-3=-2153/0, 3-4=-1093/155, 4-6=-40/286, 6-8=-40/286, 8-9=-1092/155, 9-10=-2152/0  
 BOT CHORD 2-14=0/1107, 12-14=0/1107, 10-12=0/1107  
 WEBS 9-12=0/1238, 3-14=0/1238, 4-8=-1357/193

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-14 to 3-4-15, Interior(1) 3-4-15 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-11-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 8-9, 4-8; Wall dead load (5.0psf) on member(s).9-12, 3-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.



May 17, 2022

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



818 Soundside Road  
 Edenton, NC 27932

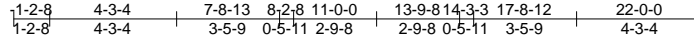


|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978254 |
| J0322-1318 | G3    | ATTIC      | 6   | 1   | Job Reference (optional)                 |           |

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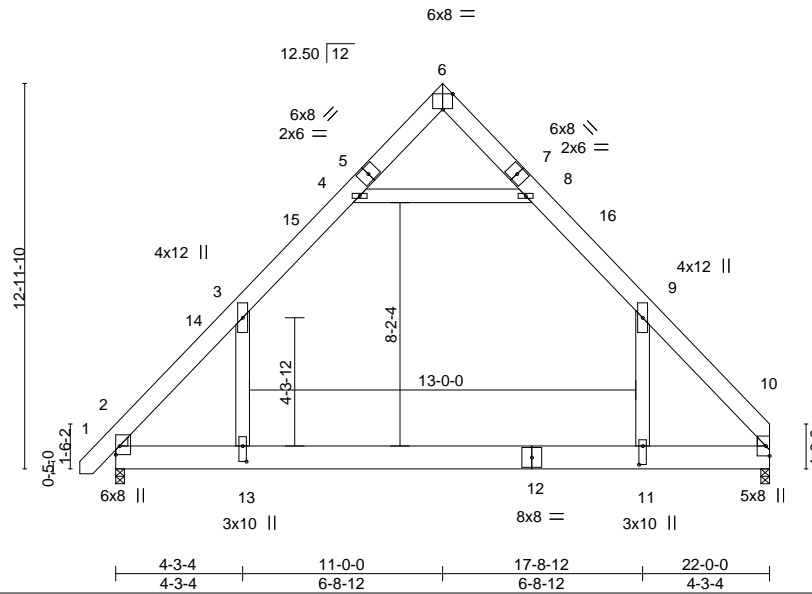


Plate Offsets (X,Y)-- [2:Edge,0-1-8], [6:Edge,0-6-5], [11:0-7-8,0-1-8], [13:0-6-4,0-1-8]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.82  | Vert(LL) | -0.29 11-13 | >888   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.86  | Vert(CT) | -0.48 11-13 | >541   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.32  | Horz(CT) | 0.01 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) | 0.07 11-13  | >999   | 240 |                |          |
|               |                      |          |          |             |        |     | Weight: 229 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x8 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1  
 WEDGE  
 Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-12 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 7-5-9 oc bracing.

**REACTIONS.**

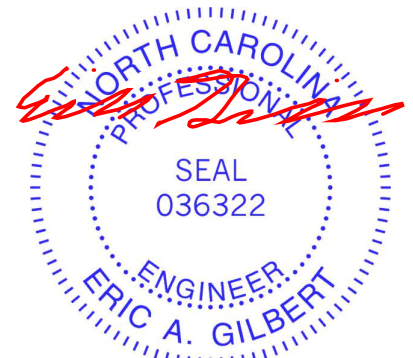
(size) 2=0-3-8, 10=0-3-8  
 Max Horz 2=300(LC 11)  
 Max Grav 2=1564(LC 21), 10=1518(LC 20)

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

TOP CHORD 2-3=-2159/0, 3-4=-1092/156, 4-6=-36/291, 6-8=-38/287, 8-9=-1095/158, 9-10=-2114/0  
 BOT CHORD 2-13=0/1104, 11-13=0/1104, 10-11=0/1104  
 WEBS 9-11=0/1183, 3-13=0/1244, 4-8=-1363/201

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-14 to 3-4-15, Interior(1) 3-4-15 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 8-9, 4-8; Wall dead load (5.0psf) on member(s).9-11, 3-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Attic room checked for L/360 deflection.



May 17, 2022

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



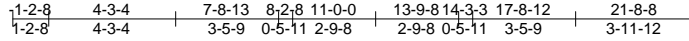
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978255 |
| J0322-1318 | G5    | ATTIC      | 1   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:29 2022 Page 1

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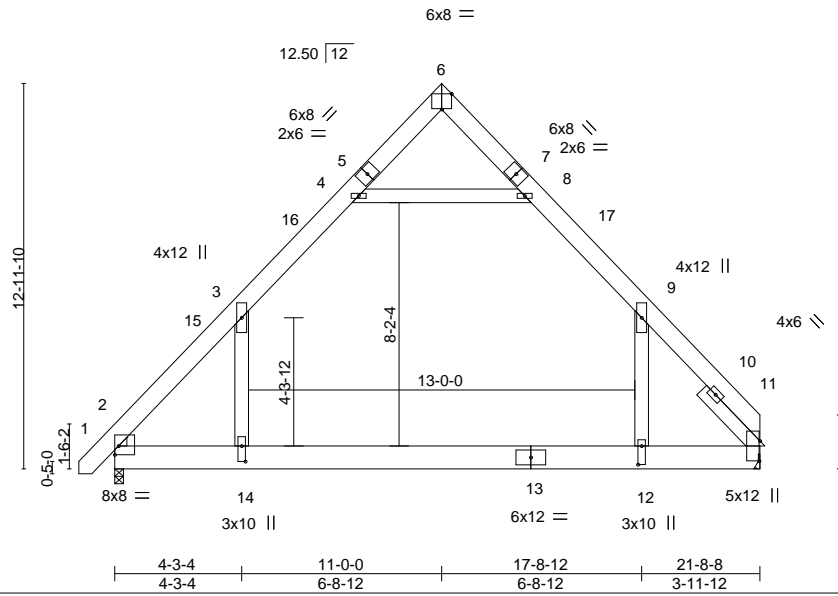


Plate Offsets (X,Y)-- [2:Edge,0-3-9], [6:Edge,0-6-5], [11:0-8-1,0-0-5], [12:0-7-8,0-1-8], [14:0-6-4,0-1-8]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.85  | Vert(LL) -0.28 | 12-14    | >925   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.85  | Vert(CT) -0.46 | 12-14    | >566   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.32  | Horz(CT) 0.01  | 11       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.06  | 12-14    | >999   | 240 | Weight: 232 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x8 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1  
 WEDGE  
 Left: 2x4 SP No.2  
 SLIDER Right 2x6 SP No.1 2-9-15

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 7-9-4 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 11=Mechanical  
 Max Horz 2=300(LC 9)  
 Max Grav 2=1565(LC 21), 11=1518(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2155/0, 3-4=-1101/157, 4-6=-46/276, 6-8=-39/286, 8-9=-1089/160, 9-11=-2143/0  
 BOT CHORD 2-14=0/1105, 12-14=0/1105, 11-12=0/1105  
 WEBS 9-12=0/1213, 3-14=0/1228, 4-8=-1354/203

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-14 to 3-4-15, Interior(1) 3-4-15 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Ceiling dead load (10.0 psf) on member(s). 3-4, 8-9, 4-8; Wall dead load (5.0psf) on member(s).9-12, 3-14
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Attic room checked for L/360 deflection.



May 17, 2022

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818 Soundside Road  
 Edenton, NC 27932

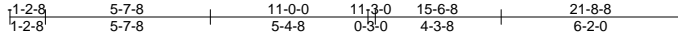
|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978256 |
| J0322-1318 | G6    | ROOF SPECIAL | 6   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:30 2022 Page 1

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MEMBERS SHOWN DOTTED SHALL BE REMOVED AFTER TRUSS IS ERECTED AND BRACED.



4x6 =

Scale = 1:78.6

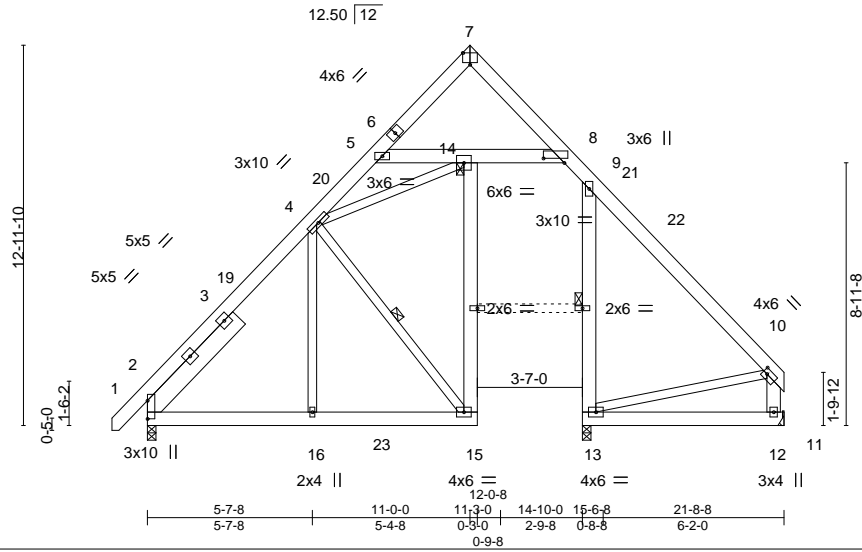


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [7:Edge,0-4-13], [8:0-8-8,0-1-14], [10:0-1-12,0-2-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.36  | Vert(LL) -0.09 | 5-14     | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.68  | Vert(CT) -0.20 | 5-14     | >894   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.22  | Horz(CT) 0.22  | 12       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.11  | 5-14     | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 235 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 10-12: 2x6 SP No.1  
 SLIDER Left 2x8 SP No.1 4-5-13

**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. Except:  
 6-0-0 oc bracing: 9-13  
 8-11-0 oc bracing: 8-14  
 WEBS 1 Row at midpt 4-15  
 JOINTS 1 Brace at Jt(s): 14

**REACTIONS.**

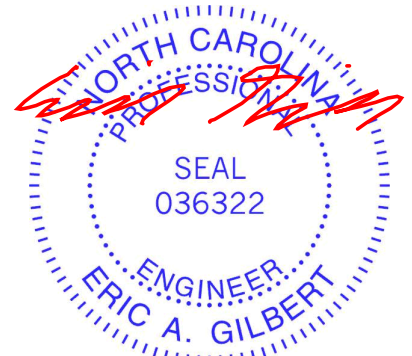
(size) 2=0-3-8, 13=0-3-8, 12=Mechanical  
 Max Horz 2=302(LC 9)  
 Max Uplift 2=93(LC 13), 12=144(LC 13)  
 Max Grav 2=663(LC 20), 13=1034(LC 19), 12=234(LC 20)

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

TOP CHORD 2-4=-678/235, 4-5=-741/76, 5-7=-282/38, 7-8=-332/64, 8-9=-541/273, 9-10=-182/251  
 BOT CHORD 2-16=-113/444, 15-16=-113/444, 14-15=-112/598, 8-14=-172/377, 9-13=-970/31  
 WEBS 4-15=-671/177, 4-14=-112/547

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-11, Interior(1) 3-3-11 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=144.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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



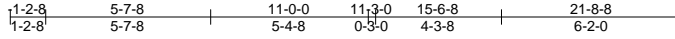
818 Soundside Road  
 Edenton, NC 27932

|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978257 |
| J0322-1318 | G7-GE | ROOF SPECIAL | 1   | 1   | Job Reference (optional)                 |           |

Comtech, Inc. Fayetteville, NC - 28314,

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MEMBERS SHOWN DOTTED SHALL BE REMOVED AFTER TRUSS IS ERECTED AND BRACED.

4x6 =

Scale = 1:78.6

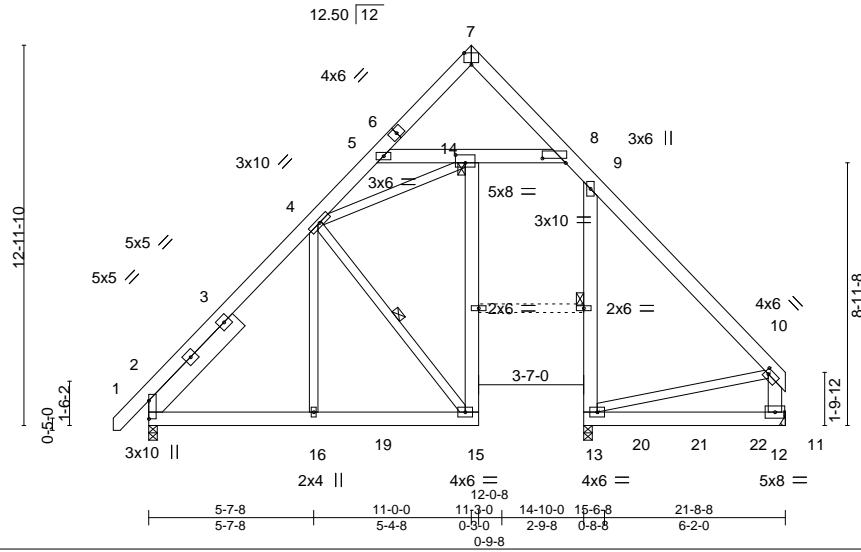


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [7:Edge,0-4-13], [8:0-9-8,0-1-14], [10:0-1-8,0-2-0], [14:0-4-0,0-3-4]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.40  | Vert(LL) 0.14  | 5-14     | >999   | 240 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.73  | Vert(CT) -0.24 | 5-14     | >759   | 180 |                |          |
| BCLL 0.0 *    | Rep Stress Incr NO   | WB 0.24  | Horz(CT) 0.25  | 12       | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S |                |          |        |     |                |          |
|               |                      |          |                |          |        |     | Weight: 235 lb | FT = 20% |

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 10-12: 2x6 SP No.1  
 SLIDER Left 2x8 SP No.1 4-4-13

**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. Except:  
 6-0-0 oc bracing: 9-13  
 8-3-0 oc bracing: 8-14  
 WEBS 1 Row at midpt 4-15  
 JOINTS 1 Brace at Jt(s): 14

**REACTIONS.**

(size) 2=0-3-8, 13=0-3-8, 12=Mechanical  
 Max Horz 2=374(LC 24)  
 Max Uplift 2=-209(LC 9), 13=-168(LC 8), 12=-311(LC 9)  
 Max Grav 2=669(LC 34), 13=1350(LC 33), 12=659(LC 20)

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

TOP CHORD 2-4=-718/290, 4-5=-768/163, 5-7=-285/51, 7-8=-346/114, 8-9=-455/262, 9-10=-163/309,  
 10-12=-174/305  
 BOT CHORD 2-16=-177/474, 15-16=-177/474, 14-15=-191/635, 8-14=-172/515, 9-13=-1002/166,  
 12-13=-121/347  
 WEBS 10-13=-343/102, 4-15=-717/279, 4-14=-172/598

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=209, 13=168, 12=311.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 312 lb down and 38 lb up at 16-8-0, and 289 lb down and 34 lb up at 18-8-0, and 248 lb down and 67 lb up at 20-8-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 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

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



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Continued on page 2

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

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

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



818 Soundside Road  
 Edenton, NC 27932

|            |       |              |     |     |  |
|------------|-------|--------------|-----|-----|--|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett |
| J0322-1318 | G7-GE | ROOF SPECIAL | 1   | 1   | I51978257                                |

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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-7=-60, 7-10=-60, 2-15=-20, 8-14=-20, 11-13=-20

Concentrated Loads (lb)

Vert: 20=-283(B) 21=-289(B) 22=-248(B)

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



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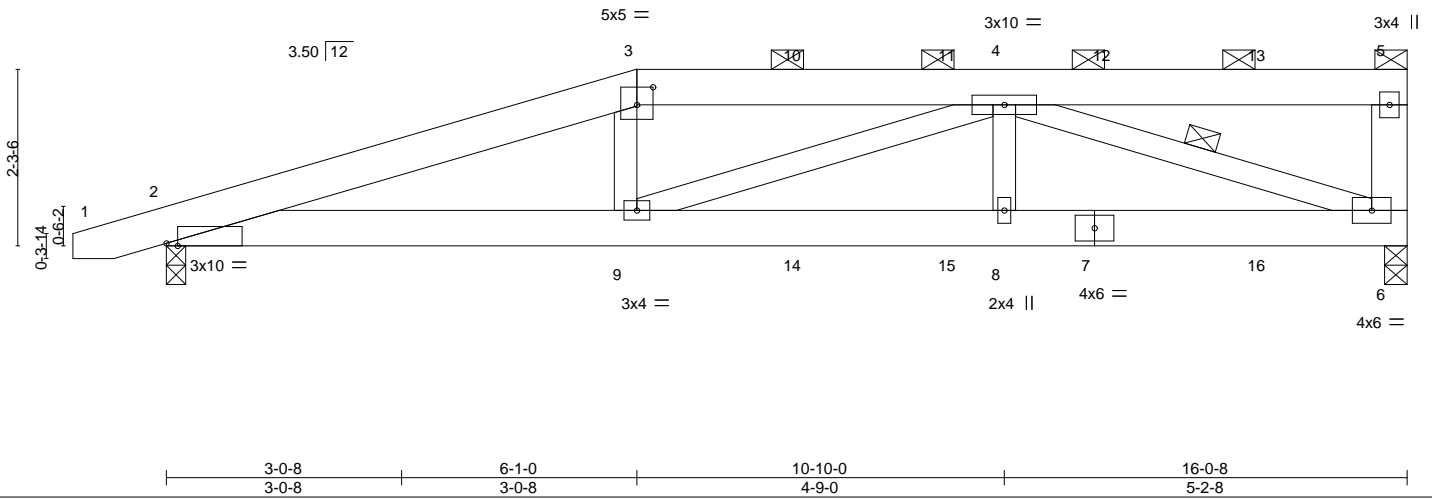
|            |       |                 |     |     |  |           |
|------------|-------|-----------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type      | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978258 |
| J0322-1318 | H1    | HALF HIP GIRDER | 1   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:32 2022 Page 1  
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Scale = 1:29.8



|                       |                                   |
|-----------------------|-----------------------------------|
| Plate Offsets (X,Y)-- | [2:0-1-12,Edge], [3:0-2-8,0-2-12] |
|-----------------------|-----------------------------------|

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                       | PLATES         | GRIP     |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.29  | in (loc) l/defl L/d         | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.45  | Vert(LL) 0.11 8-9 >999 240  |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.39  | Vert(CT) -0.16 8-9 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.04 6 n/a n/a     |                |          |
|               | Code IRC2015/TPI2014 |          |                             | Weight: 100 lb | FT = 20% |

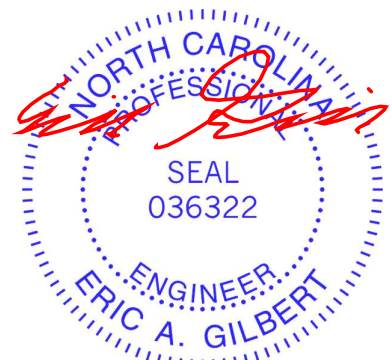
| LUMBER-                                       | BRACING-  |
|---|---|
| TOP CHORD 2x6 SP No.1                         | TOP CHORD Structural wood sheathing directly applied or 4-3-6 oc purlins, except end verticals, and 2-0-0 oc purlins (4-5-0 max.): 3-5. |
| BOT CHORD 2x6 SP No.1                         | BOT CHORD Rigid ceiling directly applied or 7-2-4 oc bracing.   |
| WEBS 2x4 SP No.2 *Except*<br>5-6: 2x6 SP No.1 | WEBS 1 Row at midpt 4-6   |

**REACTIONS.** (size) 6=0-3-8, 2=0-3-0  
 Max Horz 2=71(LC 19)  
 Max Uplift 6=-512(LC 4), 2=-490(LC 4)  
 Max Grav 6=1219(LC 1), 2=1175(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3039/1239, 3-4=-2825/1190, 5-6=-258/100  
 BOT CHORD 2-9=-1204/2856, 8-9=-1042/2473, 6-8=-1042/2473  
 WEBS 3-9=-185/484, 4-6=-2449/1032, 4-8=-86/382, 4-9=-158/375

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=512, 2=490.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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) 108 lb down and 81 lb up at 6-1-0, 108 lb down and 81 lb up at 8-1-12, 108 lb down and 81 lb up at 10-1-12, and 108 lb down and 81 lb up at 12-1-12, and 108 lb down and 81 lb up at 14-1-12 on top chord, and 380 lb down and 234 lb up at 6-1-0, 78 lb down and 50 lb up at 8-1-12, 78 lb down and 50 lb up at 10-1-12, and 78 lb down and 50 lb up at 12-1-12, and 78 lb down and 50 lb up at 14-1-12 on bottom 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-3=-60, 3-5=-60, 2-6=-20



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Continued on page 2

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

|            |       |                 |     |     |  |           |
|------------|-------|-----------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type      | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | I51978258 |
| J0322-1318 | H1    | HALF HIP GIRDER | 1   | 1   | Job Reference (optional)                 |           |

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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 3=-108(B) 7=-39(B) 9=-380(B) 10=-108(B) 11=-108(B) 12=-108(B) 13=-108(B) 14=-39(B) 15=-39(B) 16=-39(B)

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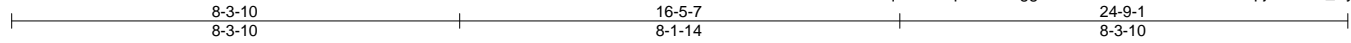
818 Soundside Road  
 Edenton, NC 27932

|            |       |             |     |     |  |           |
|------------|-------|-------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type  | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978259 |
| J0322-1318 | K1    | Flat Girder | 1   | 2   | Job Reference (optional)                 |           |

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Scale = 1:42.7

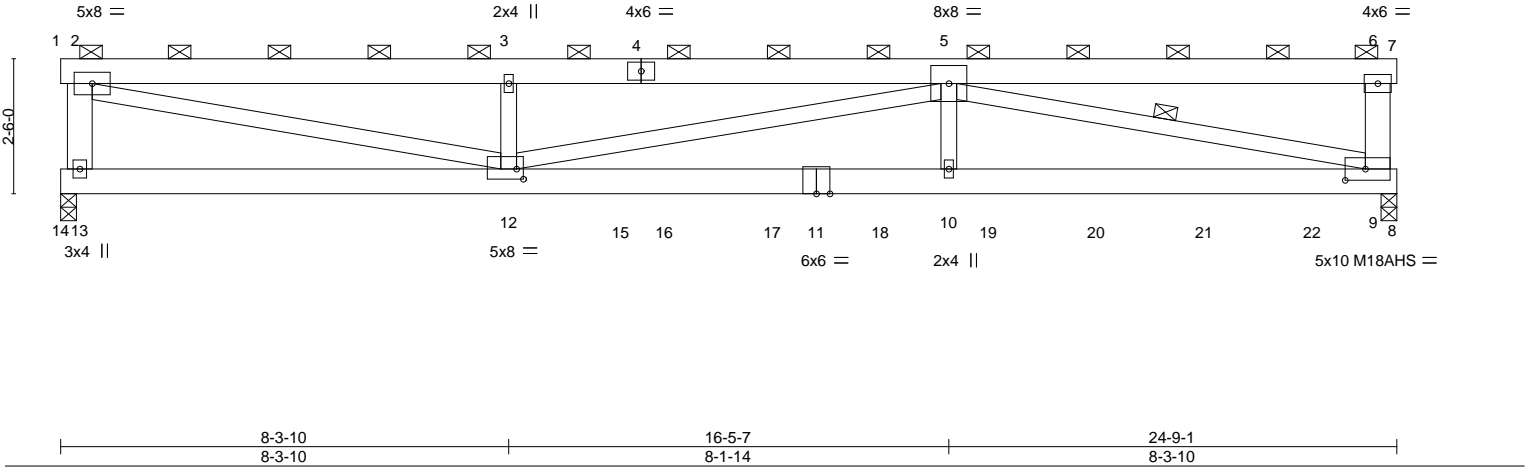


Plate Offsets (X,Y)-- [9:0-4-8,0-2-8], [12:0-1-8,0-2-4]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                         | PLATES         | GRIP     |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.53  | in (loc) l/defl L/d           | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.93  | Vert(LL) -0.26 10-12 >999 360 | M18AHS         | 186/179  |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.70  | Vert(CT) -0.49 10-12 >595 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.05 9 n/a n/a       |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.36 10-12 >799 240  | Weight: 325 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x6 SP No.1                              | TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-7, except end verticals. |
| BOT CHORD 2x6 SP No.1                              | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.      |
| WEBS 2x4 SP No.2 *Except*<br>2-13,6-9: 2x6 SP No.1 | WEBS 1 Row at midpt 5-9   |

**REACTIONS.** (size) 13=0-3-8, 9=0-3-8  
 Max Uplift 13=-597(LC 4), 9=-426(LC 5)  
 Max Grav 13=1784(LC 1), 9=3064(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-13=-1723/684, 2-3=-5834/2279, 3-5=-5834/2279, 5-6=-923/79, 6-9=-337/122  
 BOT CHORD 12-13=-62/343, 10-12=-2528/6374, 9-10=-2528/6374  
 WEBS 2-12=-2289/5669, 3-12=-441/184, 5-12=-761/284, 5-10=-558/1241, 5-9=-5652/2528

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=597, 9=426.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 639 lb down and 331 lb up at 10-4-9, 200 lb down and 164 lb up at 11-2-4, 200 lb down and 164 lb up at 13-2-4, 200 lb down and 164 lb up at 15-2-4, 200 lb down and 164 lb up at 17-2-4, 200 lb down and 164 lb up at 19-2-4, and 200 lb down and 164 lb up at 21-2-4, and 1463 lb down at 23-2-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



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LOAD CASE(S) Standard

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
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**ENGINEERING BY**  
**TRENCO**  
 A MiTek Affiliate  
 818 Soundside Road  
 Edenton, NC 27932



|            |       |             |     |          |  |           |
|------------|-------|-------------|-----|----------|--|-----------|
| Job        | Truss | Truss Type  | Qty | Ply      | Precision/Lot 31 Liberty Meadows/Harnett | I51978259 |
| J0322-1318 | K1    | Flat Girder | 1   | <b>2</b> | Job Reference (optional)                 |           |

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:33 2022 Page 2  
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**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-2=-60, 2-6=-60, 6-7=-60, 8-14=-20

Concentrated Loads (lb)

Vert: 15=-639(F) 16=-177(F) 17=-177(F) 18=-177(F) 19=-177(F) 20=-177(F) 21=-177(F) 22=-1168(F)

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|            |       |              |     |     |  |           |
|------------|-------|--------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type   | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978260 |
| J0322-1318 | M1    | ROOF SPECIAL | 1   | 1   | Job Reference (optional)                 |           |

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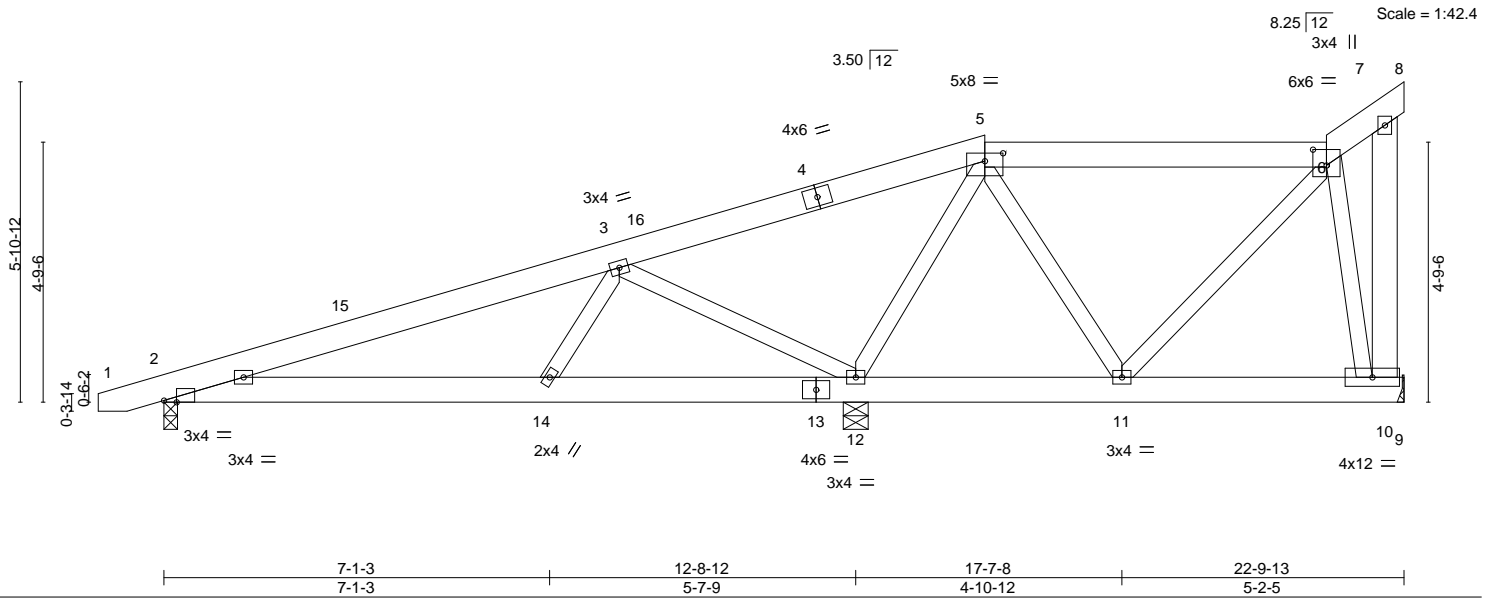


Plate Offsets (X,Y)-- [2:0-2-13,Edge], [5:0-4-0,0-1-12], [6:0-3-0,0-3-8]

| 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 0.28  | Vert(LL) | 0.04  | 2-14  | >999   | 240 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.17  | Vert(CT) | -0.04 | 2-14  | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.39  | Horz(CT) | 0.00  | 12    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S |          |       |       |        |     | Weight: 163 lb | FT = 20% |

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 7-10: 2x6 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.): 5-6.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

**REACTIONS.** (size) 10=Mechanical, 2=0-3-0, 12=0-5-8  
 Max Horz 2=180(LC 12)  
 Max Uplift 10=-47(LC 12), 2=-172(LC 8), 12=-347(LC 8)  
 Max Grav 10=268(LC 1), 2=455(LC 1), 12=1156(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-511/339, 3-5=-425/463  
 BOT CHORD 2-14=-502/429, 12-14=-328/340  
 WEBS 3-14=-357/324, 3-12=-856/738, 5-12=-705/403, 6-10=-255/81

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-5 to 3-5-8, Interior(1) 3-5-8 to 15-1-4, Exterior(2) 15-1-4 to 21-4-11, Interior(1) 21-4-11 to 22-9-13 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) Provide adequate drainage to prevent water ponding.
  - 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) 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) 10 except (jt=lb) 2=172, 12=347.
  - 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | I51978261 |
| J0322-1318 | M2    | HALF HIP   | 1   | 1   | Job Reference (optional)                 |           |

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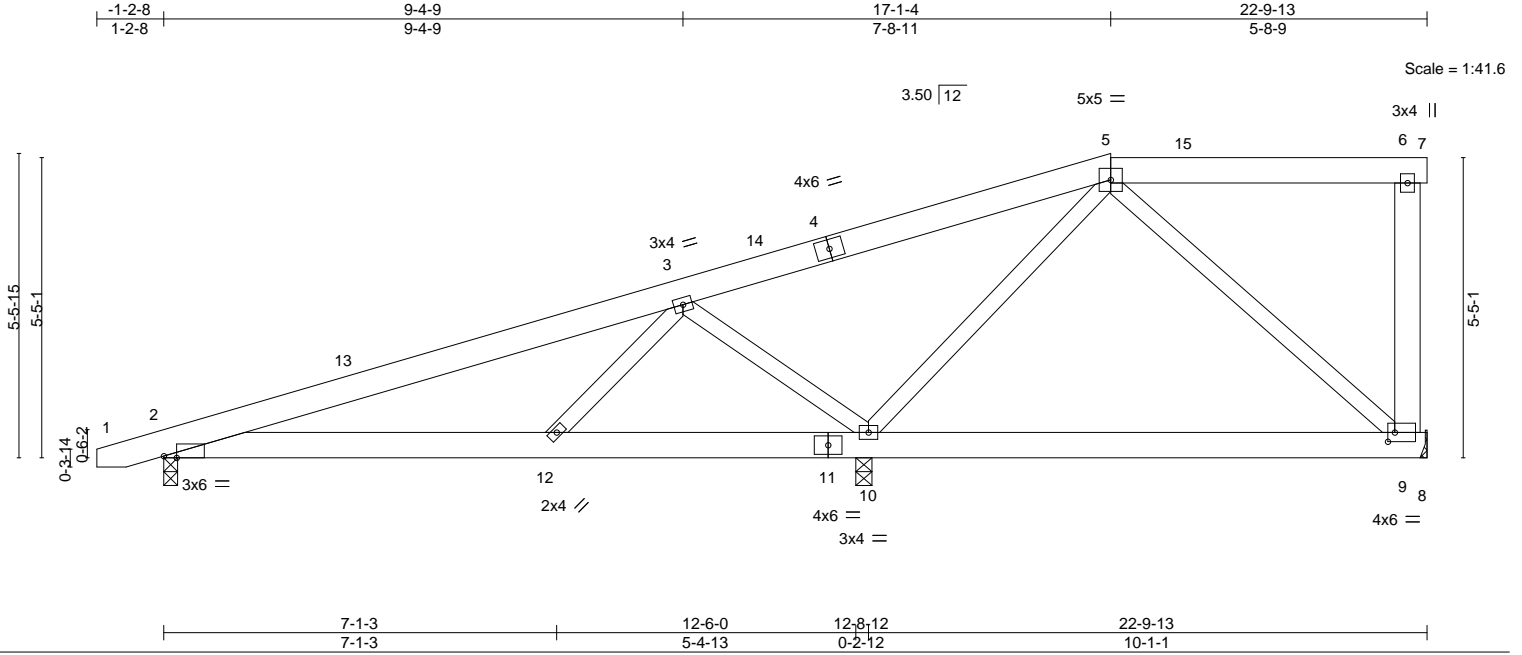


Plate Offsets (X,Y)-- [2:0-2-13,Edge], [9:0-1-8,0-2-0]

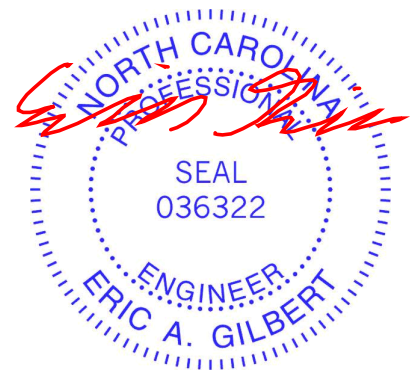
| LOADING (psf) | SPACING-             | CSL.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.35  | Vert(LL) -0.05 | 9-10     | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.21  | Vert(CT) -0.10 | 9-10     | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.44  | Horz(CT) 0.00  | 9        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.04  | 2-12     | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 153 lb | FT = 20% |

| LUMBER-                                       | BRACING-  |
|---|---|
| TOP CHORD 2x6 SP No.1                         | 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.): 5-7. |
| BOT CHORD 2x6 SP No.1                         | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 9-10.  |
| WEBS 2x4 SP No.2 *Except*<br>6-9: 2x6 SP No.1 |   |

**REACTIONS.** (size) 9=Mechanical, 2=0-3-0, 10=0-3-8  
 Max Horz 2=173(LC 8)  
 Max Uplift 9=-14(LC 9), 2=-174(LC 8), 10=-333(LC 8)  
 Max Grav 9=309(LC 24), 2=471(LC 23), 10=1120(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-510/370, 3-5=-378/395  
 BOT CHORD 2-12=-503/421, 10-12=-206/290  
 WEBS 3-12=-453/319, 3-10=-805/661, 5-10=-576/442

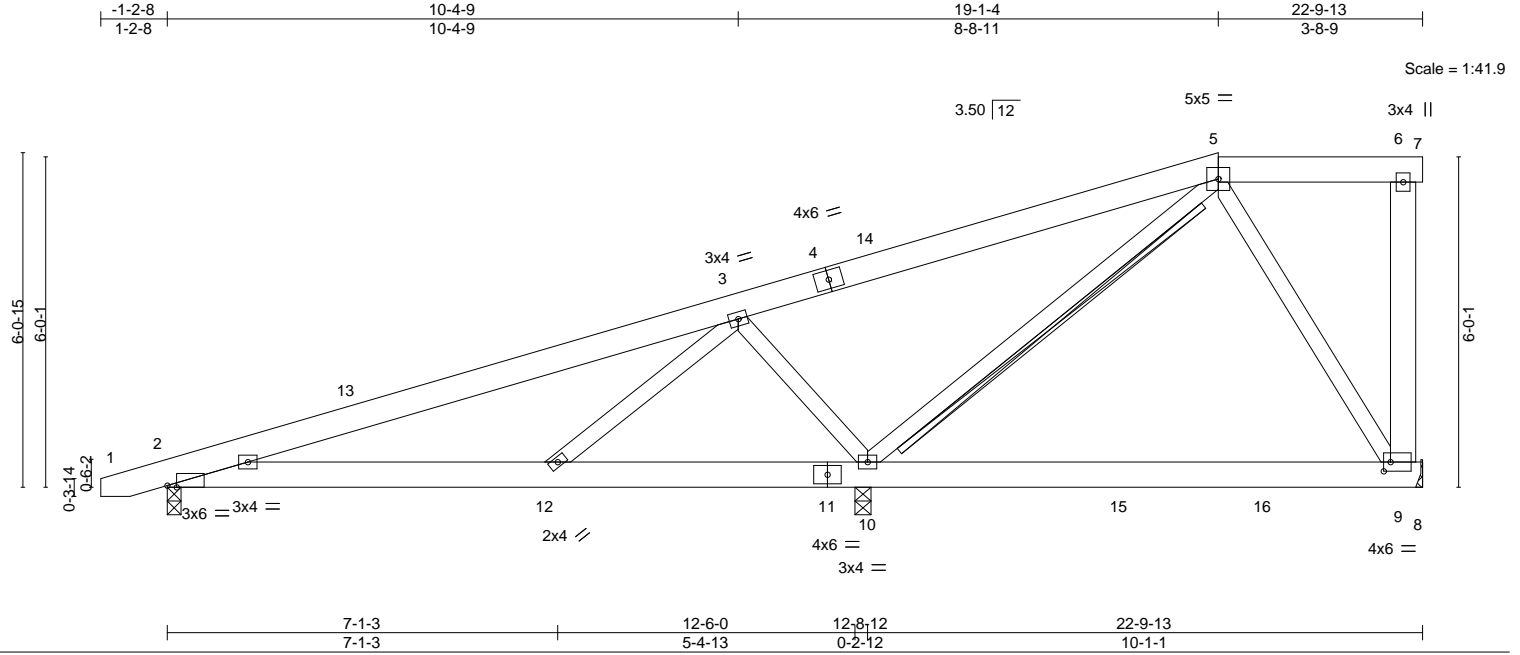
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-5 to 3-5-8, Interior(1) 3-5-8 to 17-1-4, Exterior(2) 17-1-4 to 22-9-13 zone; porch left exposed;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) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=174, 10=333.
  - 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978262 |
| J0322-1318 | M3    | HALF HIP   | 1   | 1   | Job Reference (optional)                 |           |

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.43  | Vert(LL) -0.07 | 9-10     | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.28  | Vert(CT) -0.12 | 9-10     | >972   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.21  | Horz(CT) 0.00  | 9        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.05  | 2-12     | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 156 lb | FT = 20% |

| LUMBER-                                       | BRACING-   |
|---|--|
| TOP CHORD 2x6 SP No.1                         | 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.): 5-7.   |
| BOT CHORD 2x6 SP No.1                         | Rigid ceiling directly applied or 10'-0-0 oc bracing.  |
| WEBS 2x4 SP No.2 *Except*<br>6-9: 2x6 SP No.1 | T-Brace: 2x4 SPF No.2 - 5-10<br>Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.<br>Brace must cover 90% of web length. |

**REACTIONS.** (size) 9=Mechanical, 2=0-3-0, 10=0-3-8  
 Max Horz 2=192(LC 8)  
 Max Uplift 9=18(LC 12), 2=175(LC 8), 10=321(LC 8)  
 Max Grav 9=332(LC 2), 2=482(LC 23), 10=1094(LC 23)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=502/368, 3-5=315/322  
 BOT CHORD 2-12=511/407  
 WEBS 3-12=521/366, 3-10=786/593, 5-10=453/360

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-5 to 3-5-8, Interior(1) 3-5-8 to 19-1-4, Exterior(2) 19-1-4 to 22-9-13 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=175, 10=321.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



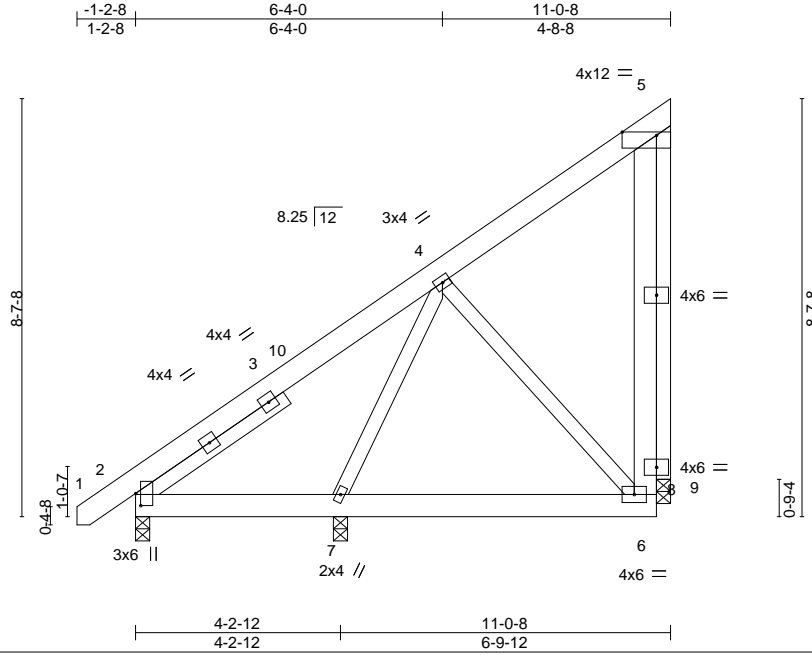
May 17, 2022

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978263 |
| J0322-1318 | P1    | MONOPITCH  | 4   | 1   | Job Reference (optional)                 |           |

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Scale: 1/4"=1'

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.13  | Vert(LL) -0.01 | 6-7      | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.10  | Vert(CT) -0.02 | 6-7      | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.24  | Horz(CT) -0.00 | 9        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.01  | 2-7      | >999   | 240 |                |          |
|               |                      |          |                |          |        |     | Weight: 110 lb | FT = 20% |

**LUMBER-**

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

**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) 2=0-3-8, 7=0-3-8, 9=0-3-8  
 Max Horz 7=258(LC 12)  
 Max Uplift 2=-42(LC 9), 9=-167(LC 12)  
 Max Grav 2=327(LC 1), 7=335(LC 3), 9=337(LC 19)

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

TOP CHORD 6-8=-178/332, 5-8=-178/332  
 BOT CHORD 6-7=-200/265  
 WEBS 4-6=-367/294, 5-9=-421/229

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 10-6-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 9 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 capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=167.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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

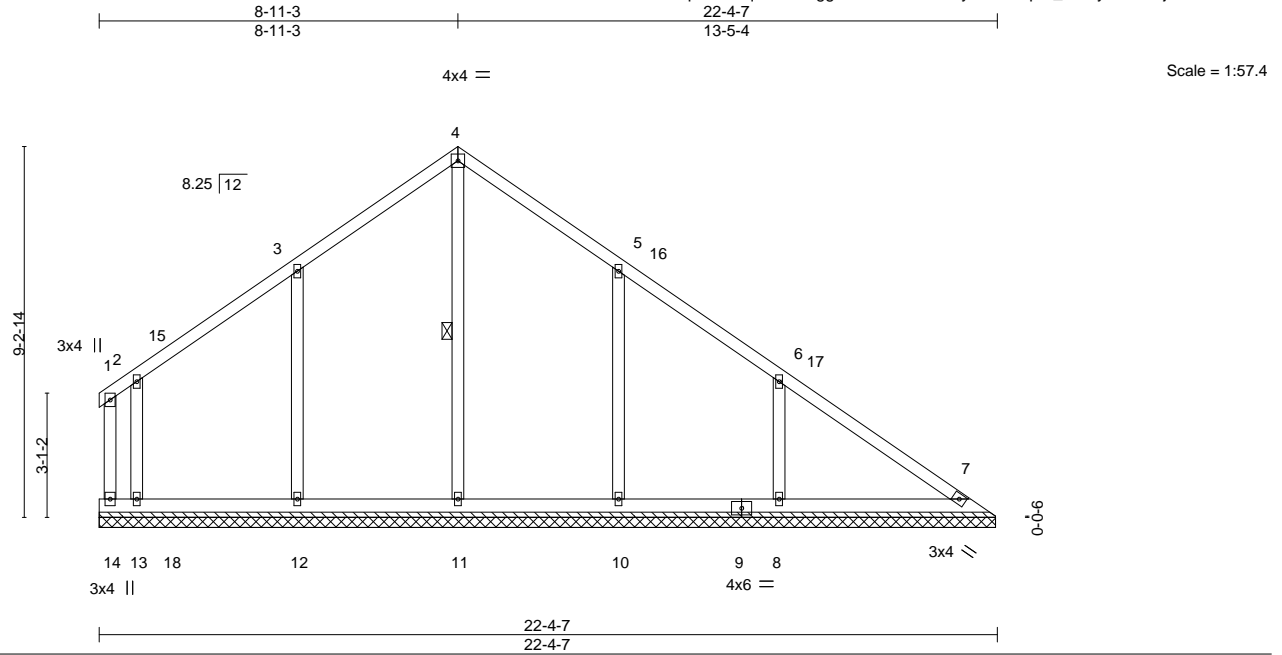


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|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978264 |
| J0322-1318 | VA1   | VALLEY     | 1   | 1   | Job Reference (optional)                 |           |

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|                      |                      |       |             |              |          |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b> | in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0            | Plate Grip DOL       | 1.15  | TC 0.19     | Vert(LL)     | n/a      | -      | n/a | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.07     | Vert(CT)     | n/a      | -      | n/a |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.20     | Horz(CT)     | 0.00     | 7      | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    |              |          |        |     | Weight: 134 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 4-11

**REACTIONS.**

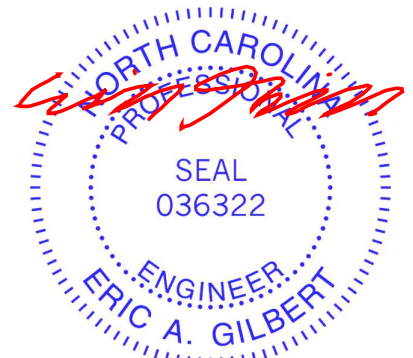
All bearings 22-3-14.  
(lb) - Max Horz 14=-208(LC 8)  
Max Uplift All uplift 100 lb or less at joint(s) 7, 10 except 14=-172(LC 19), 12=-109(LC 12), 13=-108(LC 12), 8=-123(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 14, 7 except 11=500(LC 20), 12=555(LC 19), 13=439(LC 19), 10=525(LC 20), 8=481(LC 20)

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

WEBS 3-12=-321/212, 2-13=-271/210, 5-10=-295/198, 6-8=-352/228

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-4 to 4-11-3, Interior(1) 4-11-3 to 8-11-3, Exterior(2) 8-11-3 to 13-4-0, Interior(1) 13-4-0 to 21-7-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 10 except (jt=lb) 14=172, 12=109, 13=108, 8=123.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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



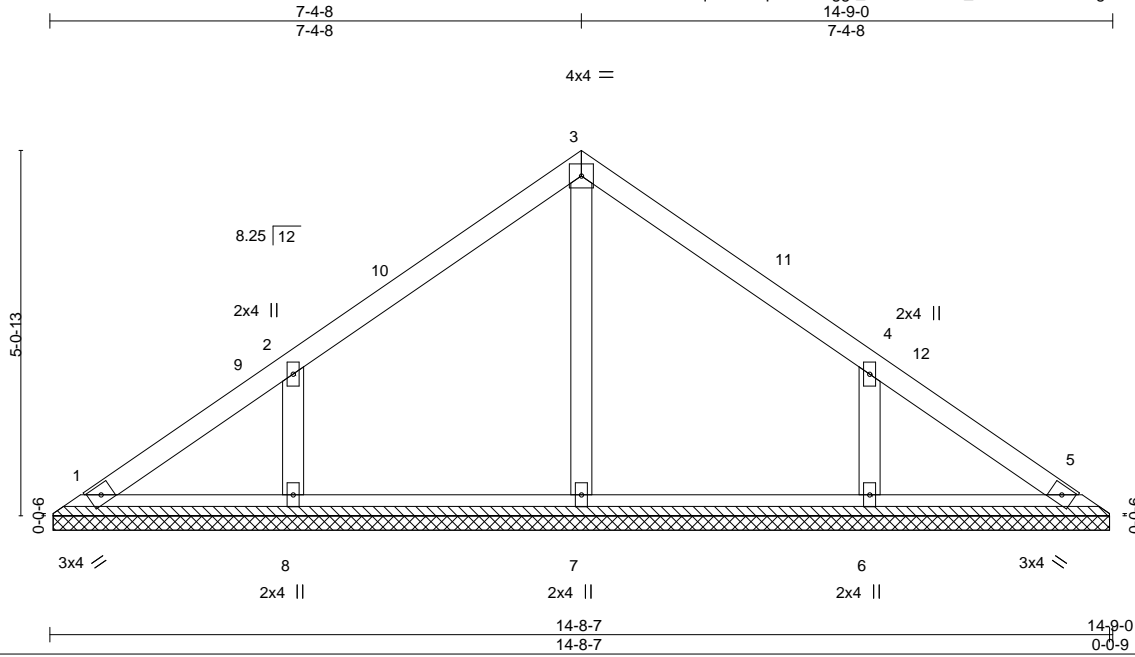
818 Soundside Road  
Edenton, NC 27932



|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978266 |
| J0322-1318 | VA3   | VALLEY     | 1   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:39 2022 Page 1  
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Scale: 3/8"=1'

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in   | (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.14  | Vert(LL) | n/a  | -     | n/a    | 999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.08  | Vert(CT) | n/a  | -     | n/a    | 999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.07  | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S |          |      |       |        |     | Weight: 59 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 14-7-15.  
 (lb) - Max Horz 1=-114(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-104(LC 12), 6=-104(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=254(LC 1), 8=350(LC 19), 6=350(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-301/207, 4-6=-301/207

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-12 to 4-10-9, Interior(1) 4-10-9 to 7-4-8, Exterior(2) 7-4-8 to 11-9-5, Interior(1) 11-9-5 to 14-3-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=104, 6=104.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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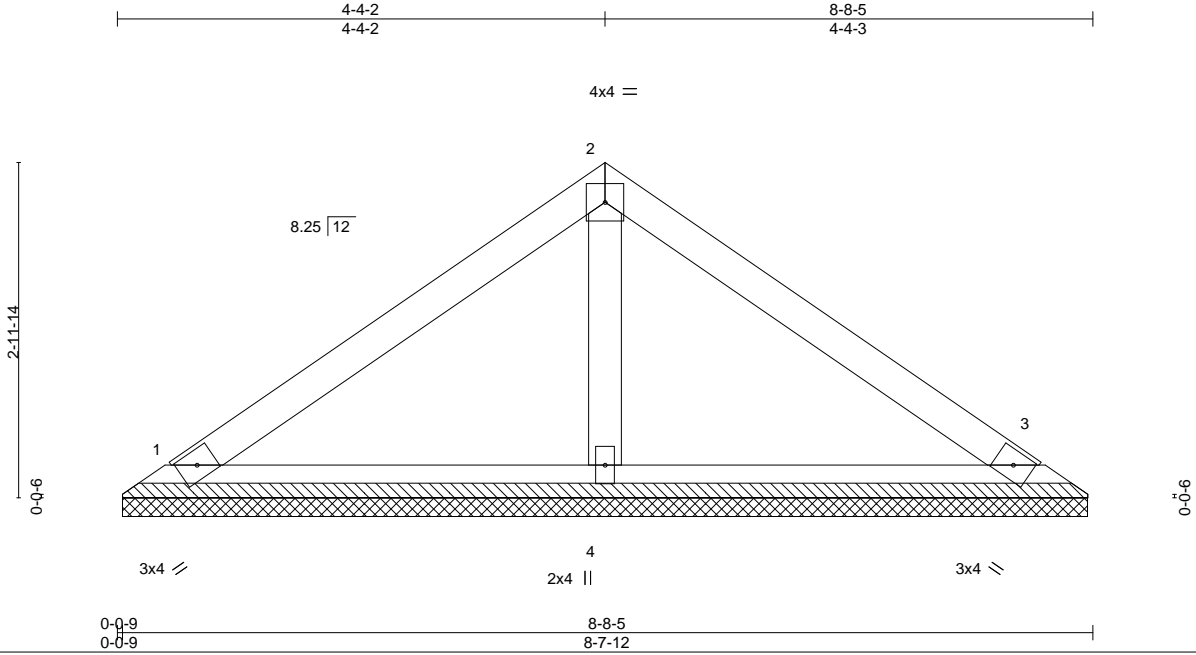


|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978267 |
| J0322-1318 | VA4   | VALLEY     | 1   | 1   | Job Reference (optional)                 |           |

Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:20.5

|                      |                      |             |                         |               |             |
|----------------------|----------------------|-------------|-------------------------|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>            | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 2-0-0                | TC 0.21     | in (loc) l/defl L/d     | MT20          | 244/190     |
| TCDL 10.0            | Plate Grip DOL 1.15  | BC 0.11     | Vert(LL) n/a - n/a 999  |               |             |
| BCLL 0.0 *           | Lumber DOL 1.15      | WB 0.03     | Vert(CT) n/a - n/a 999  |               |             |
| BCDL 10.0            | Rep Stress Incr YES  | Matrix-P    | Horz(CT) 0.00 3 n/a n/a | Weight: 30 lb | FT = 20%    |
|                      | Code IRC2015/TPI2014 |             |                         |               |             |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=8-7-3, 3=8-7-3, 4=8-7-3  
 Max Horz 1=-64(LC 8)  
 Max Uplift 1=-27(LC 12), 3=-33(LC 13)  
 Max Grav 1=169(LC 1), 3=170(LC 1), 4=280(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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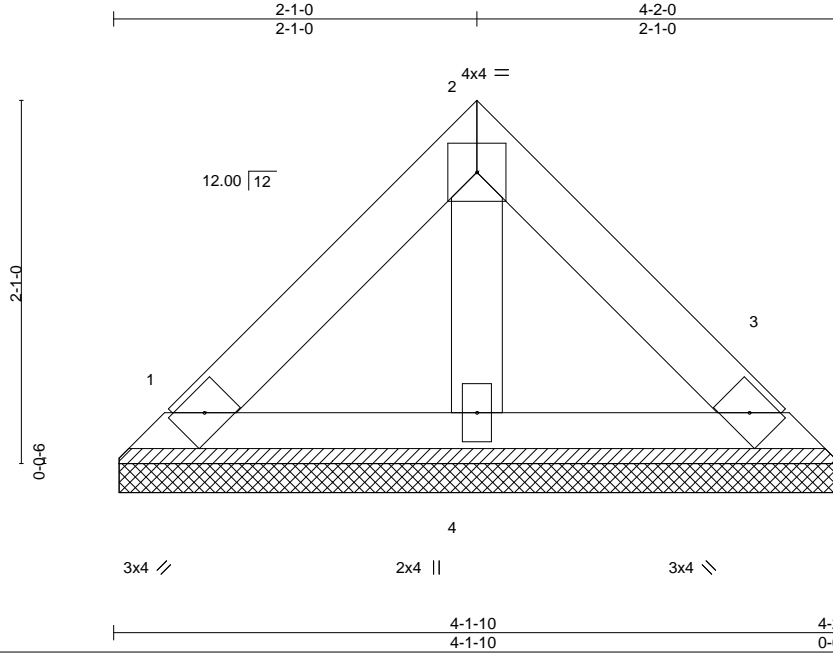
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978268 |
| J0322-1318 | VB1   | VALLEY     | 1   | 1   | Job Reference (optional)                 |           |

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|                      |                      |             |               |          |        |     |               |             |
|----------------------|----------------------|-------------|---------------|----------|--------|-----|---------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b>      | <b>CSI.</b> | <b>DEFL.</b>  | in (loc) | l/defl | L/d | <b>PLATES</b> | <b>GRIP</b> |
| TCLL 20.0            | 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 0.02     | Vert(CT) n/a  | -        | n/a    | 999 |               |             |
| BCLL 0.0 *           | Rep Stress Incr YES  | WB 0.01     | Horz(CT) 0.00 | 3        | n/a    | n/a |               |             |
| BCDL 10.0            | Code IRC2015/TPI2014 | Matrix-P    |               |          |        |     | Weight: 16 lb | FT = 20%    |

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

(size) 1=4-1-4, 3=4-1-4, 4=4-1-4  
 Max Horz 1=-42(LC 8)  
 Max Uplift 1=-15(LC 13), 3=-15(LC 13)  
 Max Grav 1=84(LC 1), 3=84(LC 1), 4=108(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978270 |
| J0322-1318 | XH1   | JACK-OPEN  | 5   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:42 2022 Page 1  
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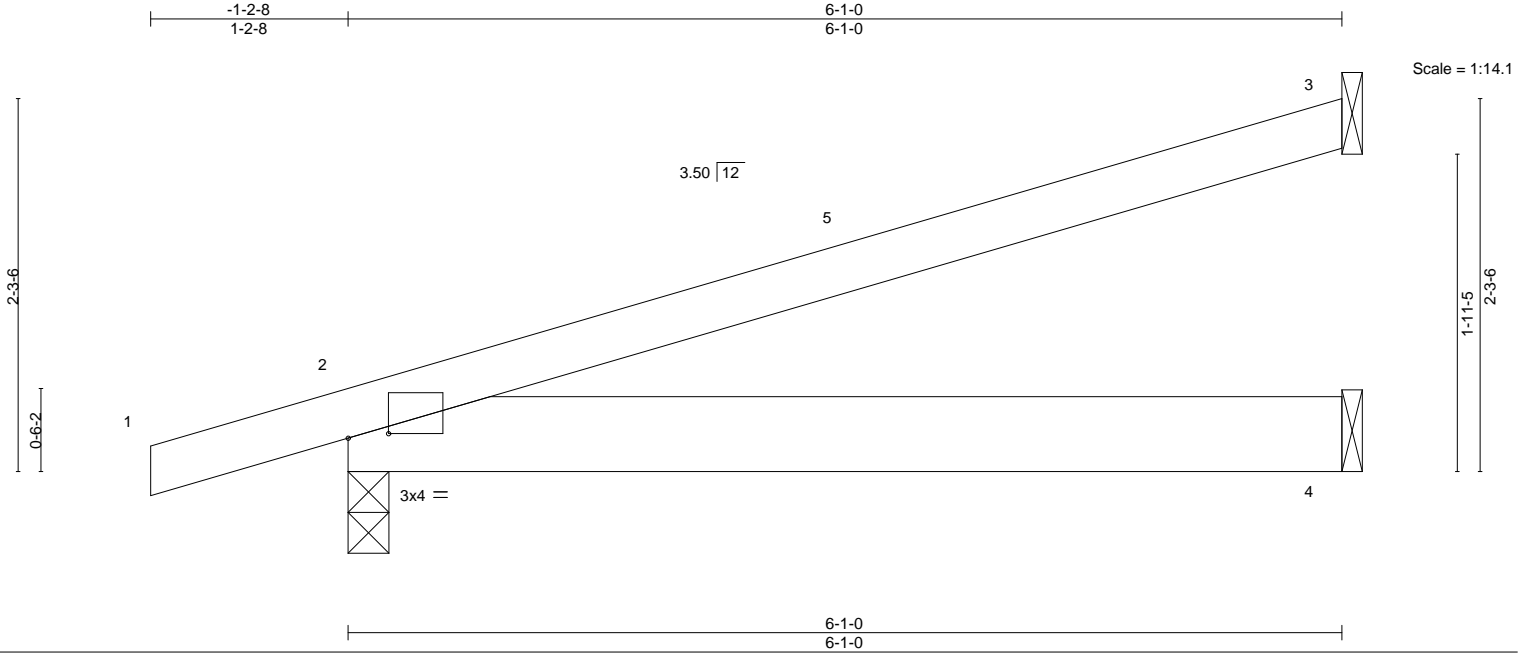


Plate Offsets (X,Y)-- [2:0-2-15,0-0-5]

| LOADING (psf) | SPACING-        | 2-0-0           | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES        | GRIP     |
|---------------|-----------------|-----------------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0     | Plate Grip DOL  | 1.15            | TC 0.46  | Vert(LL) | -0.02    | 2-4    | >999 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL      | 1.15            | BC 0.14  | Vert(CT) | -0.03    | 2-4    | >999 |               |          |
| BCLL 0.0 *    | Rep Stress Incr | YES             | WB 0.00  | Horz(CT) | -0.00    | 3      | n/a  |               |          |
| BCDL 10.0     | Code            | IRC2015/TPI2014 | Matrix-P | Wind(LL) | 0.04     | 2-4    | >999 | Weight: 26 lb | FT = 20% |

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

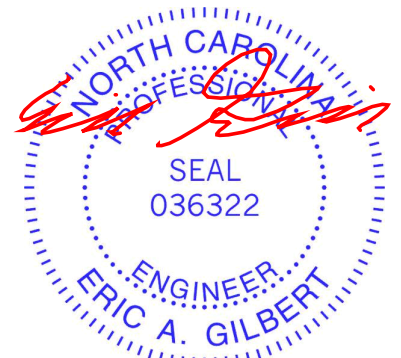
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=72(LC 8)  
 Max Uplift 3=68(LC 12), 2=-135(LC 8), 4=-30(LC 8)  
 Max Grav 3=168(LC 1), 2=325(LC 1), 4=118(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-0-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 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) 3, 4 except (jt=6) 2=135.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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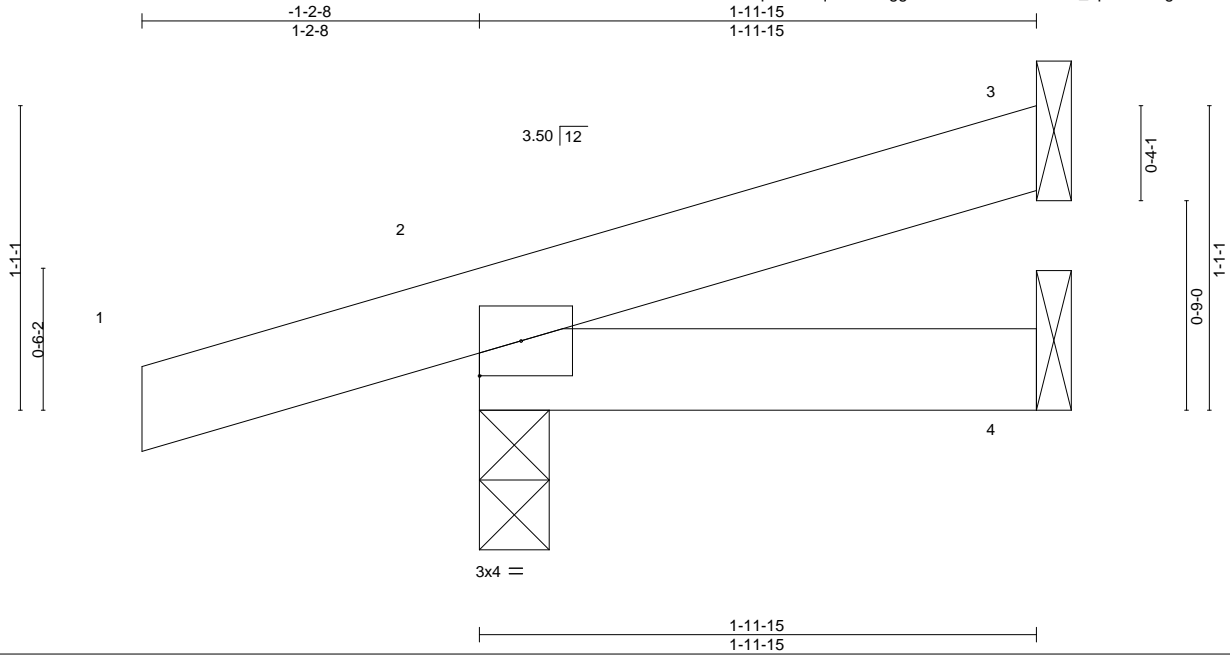


818 Soundside Road  
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|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978271 |
| J0322-1318 | YH1   | JACK-OPEN  | 2   | 1   | Job Reference (optional)                 |           |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon May 16 14:38:42 2022 Page 1  
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Scale = 1:8.3

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in    | (loc) | l/defl | L/d | PLATES       | GRIP     |
|---------------|----------------------|-------|----------|----------|-------|-------|--------|-----|--------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.07  | Vert(LL) | -0.00 | 2     | >999   | 360 | MT20         | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.03  | Vert(CT) | -0.00 | 2-4   | >999   | 240 |              |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00 | 3     | n/a    | n/a |              |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | 0.00  | 2-4   | >999   | 240 | Weight: 8 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-11-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=33(LC 8)  
 Max Uplift 3=-20(LC 12), 2=-84(LC 8), 4=-10(LC 8)  
 Max Grav 3=35(LC 1), 2=176(LC 1), 4=39(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left and right 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) 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) 3, 2, 4.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 17, 2022

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

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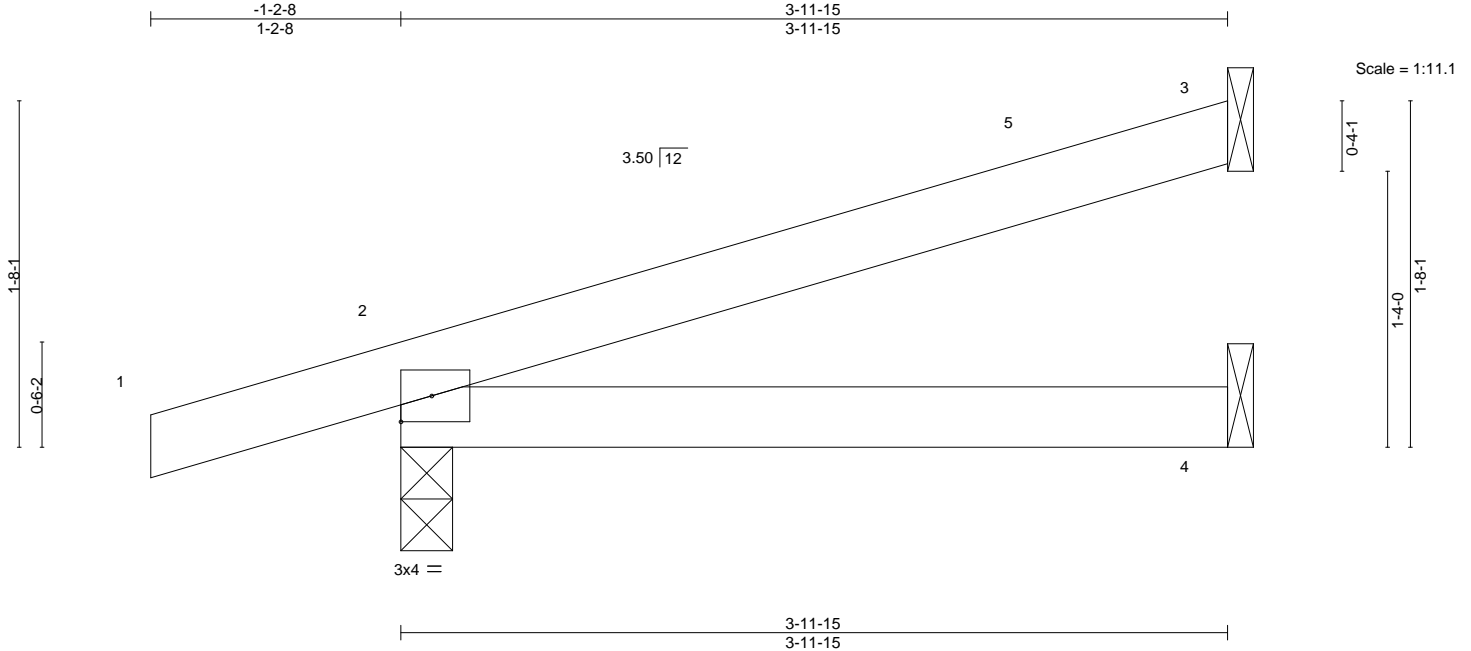


818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |  |           |
|------------|-------|------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978272 |
| J0322-1318 | YH2   | JACK-OPEN  | 2   | 1   | Job Reference (optional)                 |           |

Comtech, Inc, Fayetteville, NC - 28314,

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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 0.15  | Vert(LL) | -0.01 | 2-4   | >999   | 360 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.13  | Vert(CT) | -0.02 | 2-4   | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.00  | Horz(CT) | -0.00 | 3     | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-P | Wind(LL) | 0.02  | 2-4   | >999   | 240 | Weight: 14 lb | FT = 20% |

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

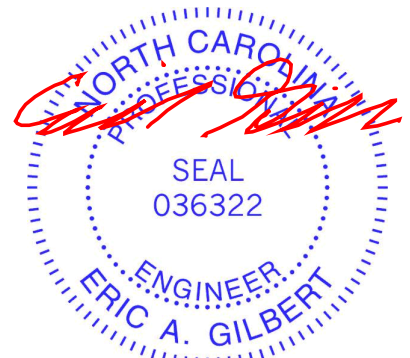
**REACTIONS.**

(size) 3=Mechanical, 2=0-3-0, 4=Mechanical  
 Max Horz 2=51(LC 8)  
 Max Uplift 3=-44(LC 12), 2=-108(LC 8), 4=-20(LC 8)  
 Max Grav 3=100(LC 1), 2=246(LC 1), 4=76(LC 3)

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

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 3-11-3 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 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) 3, 4 except (jt=lb) 2=108.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



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

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

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

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



818 Soundside Road  
 Edenton, NC 27932

|            |       |                     |     |     |  |           |
|------------|-------|---------------------|-----|-----|--|-----------|
| Job        | Truss | Truss Type          | Qty | Ply | Precision/Lot 31 Liberty Meadows/Harnett | 151978273 |
| J0322-1318 | ZH1   | DIAGONAL HIP GIRDER | 1   | 1   | Job Reference (optional)                 |           |

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Scale = 1:18.8

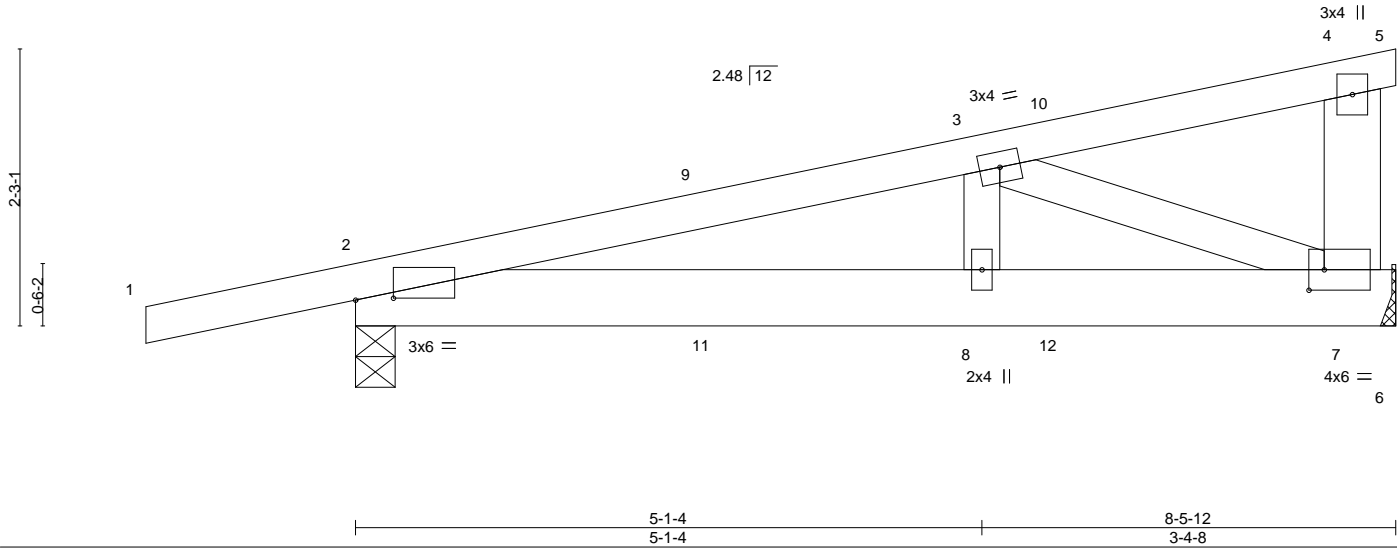


Plate Offsets (X,Y)-- [2:0-3-11,0-0-3], [7:0-1-8,0-2-0]

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.20  | Vert(LL) 0.02  | 2-8      | >999   | 240 | MT20          | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.14  | Vert(CT) -0.02 | 2-8      | >999   | 240 |               |          |
| BCLL 0.0 *    | Rep Stress Incr NO   | WB 0.12  | Horz(CT) 0.00  | 7        | n/a    | n/a |               |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-P |                |          |        |     | Weight: 44 lb | FT = 20% |

| LUMBER-                                       | BRACING-  |
|---|---|
| TOP CHORD 2x4 SP No.1                         | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1                         | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.                                  |
| WEBS 2x4 SP No.2 *Except*<br>4-7: 2x6 SP No.1 |   |

**REACTIONS.** (size) 7=Mechanical, 2=0-3-14  
Max Horz 2=71(LC 19)  
Max Uplift 7=-150(LC 4), 2=-203(LC 4)  
Max Grav 7=370(LC 1), 2=458(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-639/228  
BOT CHORD 2-8=-255/587, 7-8=-255/587  
WEBS 3-7=-631/274

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left and right exposed; 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) 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) except (jt=lb) 7=150, 2=203.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 17 lb down and 17 lb up at 2-10-15, 17 lb down and 17 lb up at 2-10-15, and 40 lb down and 54 lb up at 5-8-14, and 40 lb down and 54 lb up at 5-8-14 on top chord, and 3 lb down and 22 lb up at 2-10-15, 3 lb down and 22 lb up at 2-10-15, and 21 lb down and 42 lb up at 5-8-14, and 21 lb down and 42 lb up at 5-8-14 on bottom 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 + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-4=-60, 4-5=-60, 2-6=-20  
Concentrated Loads (lb)  
Vert: 10=-31(F=-15, B=-15) 12=-20(F=-10, B=-10)



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# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

**4 X 4**

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

## LATERAL BRACING LOCATION



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

## BEARING



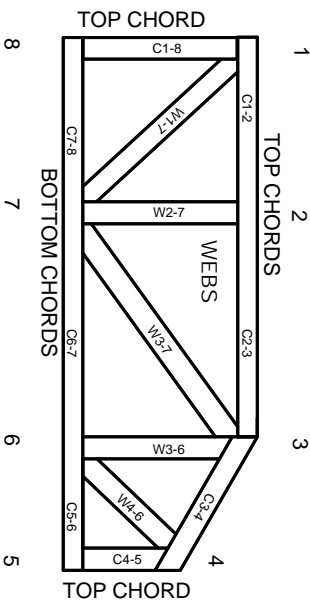
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

### Industry Standards:

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

# Numbering System

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



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



# General Safety Notes

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

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