

RE: J0624-3320  
 Weaver/Lot 41 West Preserve/Harnett

Trenco  
 818 Soundside Rd  
 Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0624-3320  
 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 27 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal#     | Truss Name | Date      | No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1   | I63260747 | A1         | 1/26/2024 | 21  | I63260767 | VB2        | 1/26/2024 |
| 2   | I63260748 | A1GE       | 1/26/2024 | 22  | I63260768 | VC1        | 1/26/2024 |
| 3   | I63260749 | A2         | 1/26/2024 | 23  | I63260769 | VC2        | 1/26/2024 |
| 4   | I63260750 | A3         | 1/26/2024 | 24  | I63260770 | VC3        | 1/26/2024 |
| 5   | I63260751 | A4         | 1/26/2024 | 25  | I63260771 | VC4        | 1/26/2024 |
| 6   | I63260752 | A5         | 1/26/2024 | 26  | I63260772 | VC5        | 1/26/2024 |
| 7   | I63260753 | A5GE       | 1/26/2024 | 27  | I63260773 | VC6        | 1/26/2024 |
| 8   | I63260754 | B1         | 1/26/2024 |     |           |            |           |
| 9   | I63260755 | B1GE       | 1/26/2024 |     |           |            |           |
| 10  | I63260756 | B2         | 1/26/2024 |     |           |            |           |
| 11  | I63260757 | B3         | 1/26/2024 |     |           |            |           |
| 12  | I63260758 | B4         | 1/26/2024 |     |           |            |           |
| 13  | I63260759 | C1         | 1/26/2024 |     |           |            |           |
| 14  | I63260760 | C1GE       | 1/26/2024 |     |           |            |           |
| 15  | I63260761 | C2         | 1/26/2024 |     |           |            |           |
| 16  | I63260762 | C2GR       | 1/26/2024 |     |           |            |           |
| 17  | I63260763 | G1         | 1/26/2024 |     |           |            |           |
| 18  | I63260764 | G1GE       | 1/26/2024 |     |           |            |           |
| 19  | I63260765 | G2GR       | 1/26/2024 |     |           |            |           |
| 20  | I63260766 | VB1        | 1/26/2024 |     |           |            |           |

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, 2024.  
 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.



January 26, 2024

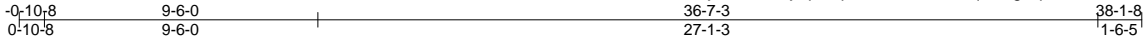


|                   |               |                     |          |          |   |           |
|-------------------|---------------|---------------------|----------|----------|---|-----------|
| Job<br>J0624-3320 | Truss<br>A1GE | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260748 |
|-------------------|---------------|---------------------|----------|----------|---|-----------|

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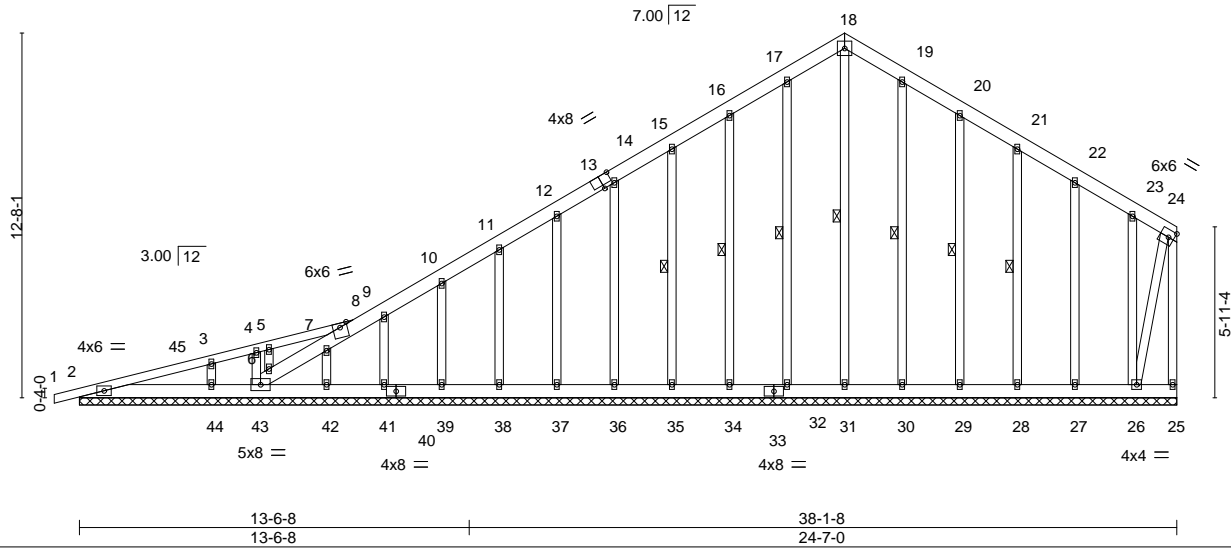
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:01 2024 Page 1

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6x6 =

Scale = 1:80.0



|                       |                      |       |             |              |       |       |        |     |                |             |
|-----------------------|----------------------|-------|-------------|--------------|-------|-------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- | [13:0-4-0,Edge]      |       |             |              |       |       |        |     |                |             |
| <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 0.15     | Vert(LL)     | -0.00 | 1     | n/r    | 120 | MT20           | 244/190     |
| TCDL 10.0             | Lumber DOL           | 1.15  | BC 0.06     | Vert(CT)     | 0.00  | 1     | n/r    | 120 |                |             |
| BCLL 0.0 *            | Rep Stress Incr      | YES   | WB 0.14     | Horz(CT)     | -0.00 | 25    | n/a    | n/a |                |             |
| BCDL 10.0             | Code IRC2015/TPI2014 |       | Matrix-S    |              |       |       |        |     | Weight: 370 lb | FT = 20%    |

|  |   |
|--|---|
| <b>LUMBER-</b>                                     | <b>BRACING-</b>   |
| TOP CHORD 2x6 SP No.1 *Except*<br>1-8: 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, Except:                          |
| WEBS 2x4 SP No.2                                   | 6-0-0 oc bracing: 2-44,43-44.   |
| OTHERS 2x4 SP No.2                                 | WEBS 1 Row at midpt 18-31, 17-32, 16-34, 15-35, 19-30, 20-29, 21-28                             |

**REACTIONS.** All bearings 38-1-8.  
 (lb) - Max Horz 2=404(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 25, 43, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 30, 29, 28, 27 except 2=101(LC 6), 44=120(LC 6), 26=181(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 25, 43, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 30, 29, 28, 27, 26 except 44=367(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 8-9=-328/262, 9-10=-286/262, 16-17=-206/282, 17-18=-236/296, 18-19=-236/283

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 22-2-3, Corner(3) 22-2-3 to 30-11-13, Exterior(2) 30-11-13 to 33-6-15, Corner(3) 33-6-15 to 37-11-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - 4) All plates are 2x4 MT20 unless otherwise indicated.
  - 5) Gable requires continuous bottom chord bearing.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 43, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 30, 29, 28, 27 except (jt=lb) 2=101, 44=120, 26=181.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



|                   |             |                            |          |          |  |
|-------------------|-------------|----------------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>A2 | Truss Type<br>ROOF SPECIAL | Qty<br>3 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260749 |
|-------------------|-------------|----------------------------|----------|----------|--|

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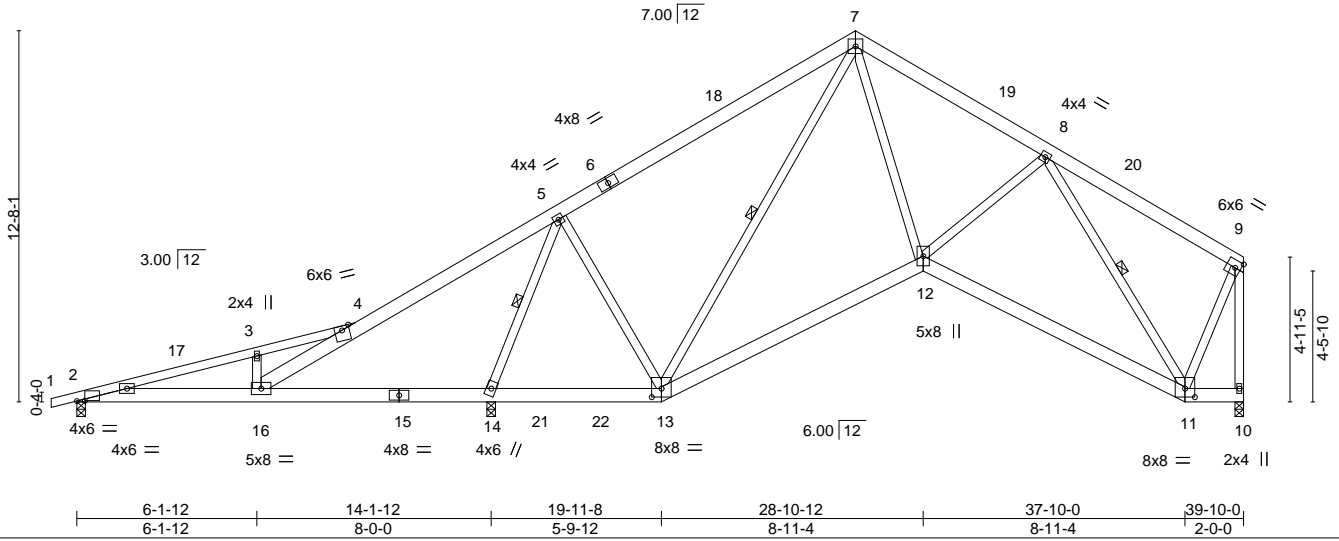
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:03 2024 Page 1

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6x6 =

Scale = 1:78.7



|                        |   |
|------------------------|---|
| Plate Offsets (X, Y)-- | [2:0-3-4,0-0-3], [11:0-4-0,0-3-8], [13:0-4-0,0-3-8] |
|------------------------|---|

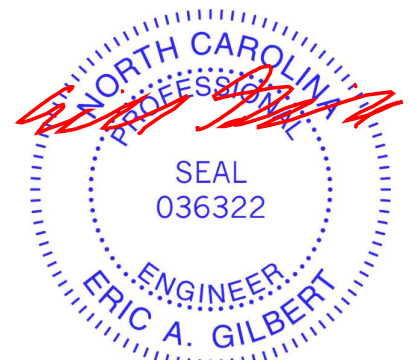
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.61  | Vert(LL) | -0.06 12-13 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.26  | Vert(CT) | -0.14 12-13 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.76  | Horz(CT) | 0.04 10     | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.07 14-16  | >999   | 240 | Weight: 294 lb | FT = 20% |

| LUMBER-  | BRACING-  |
|--|---|
| TOP CHORD 2x6 SP No.1 *Except*<br>1-4: 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 6-0-0 oc bracing.                                   |
| WEBS 2x4 SP No.2                                   | WEBS 1 Row at midpt 5-14, 8-11, 7-13  |

**REACTIONS.** (size) 10=0-3-8, 14=0-3-8, 2=0-3-8  
 Max Horz 2=292(LC 7)  
 Max Uplift 10=66(LC 11), 14=290(LC 10), 2=130(LC 6)  
 Max Grav 10=809(LC 18), 14=2251(LC 1), 2=190(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-267/453, 3-4=-220/413, 4-16=-817/980, 4-5=-995/1545, 5-7=-367/254, 7-8=-919/122, 8-9=-344/89, 9-10=-818/71  
 BOT CHORD 2-16=-374/133, 14-16=-1194/820, 13-14=-448/454, 12-13=0/676, 11-12=-50/740  
 WEBS 3-16=-348/179, 5-14=-2196/1028, 5-13=-271/797, 7-12=0/718, 8-12=-52/277, 8-11=-807/70, 9-11=0/572, 7-13=-889/292

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 22-2-3, Exterior(2) 22-2-3 to 30-11-13, Interior(1) 30-11-13 to 35-3-7, Exterior(2) 35-3-7 to 39-8-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 14=290, 2=130.
  - 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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**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)

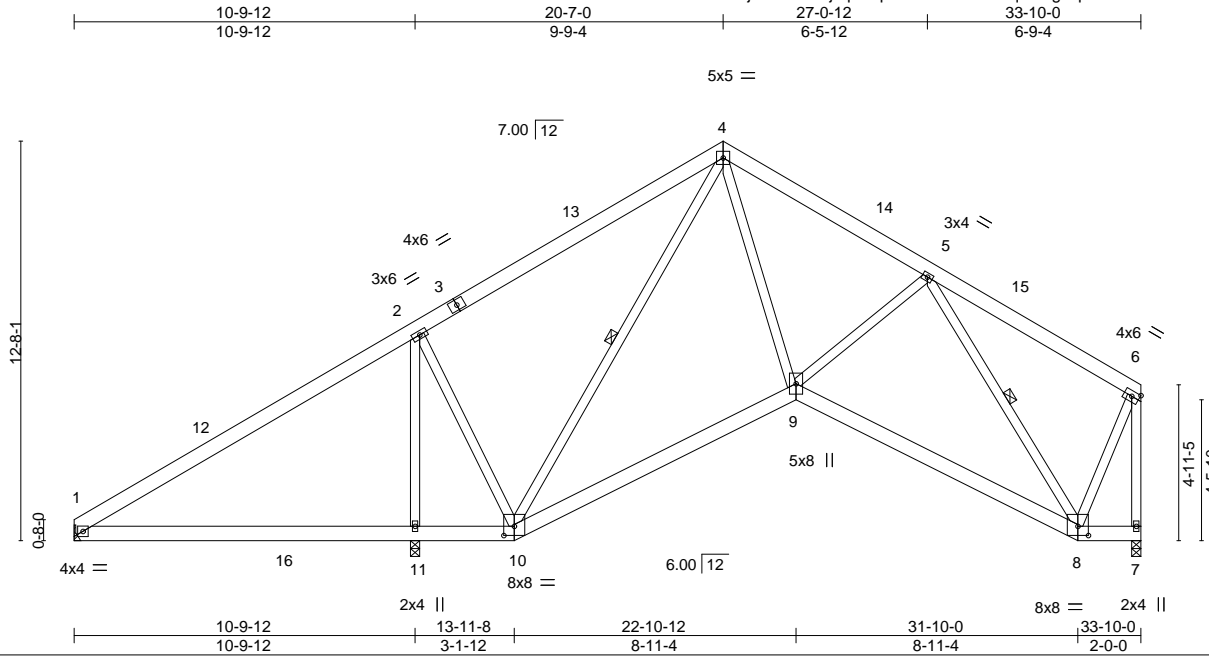
**ENGINEERING BY**  
**TRENCO**  
 A MITEK Affiliate

818 Soundside Road  
 Edenton, NC 27932

|                   |             |                            |          |          |   |           |
|-------------------|-------------|----------------------------|----------|----------|---|-----------|
| Job<br>J0624-3320 | Truss<br>A3 | Truss Type<br>ROOF SPECIAL | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260750 |
|-------------------|-------------|----------------------------|----------|----------|---|-----------|

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Scale = 1:73.1

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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.          | in (loc) | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.54  | Vert(LL) -0.08 | 1-11     | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.37  | Vert(CT) -0.18 | 1-11     | >730   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.83  | Horz(CT) 0.06  | 7        | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.03  | 1-11     | >999   | 240 | Weight: 263 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 6-0-0 oc bracing.                                   |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-8, 4-10   |

**REACTIONS.** (size) 1=Mechanical, 7=0-3-8, 11=0-3-8  
 Max Horz 1=287(LC 7)  
 Max Uplift 7=68(LC 11), 11=193(LC 10)  
 Max Grav 1=380(LC 21), 7=879(LC 1), 11=1600(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-446/253, 4-5=-975/322, 5-6=-353/136, 6-7=-887/191  
 BOT CHORD 9-10=-14/641, 8-9=-173/815  
 WEBS 4-9=-87/773, 5-8=-901/224, 6-8=-51/620, 4-10=-680/37, 2-10=0/407, 2-11=-1207/443

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-3-7, Exterior(2) 29-3-7 to 33-8-4 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) 7 except (jt=lb) 11=193.



January 26, 2024

|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

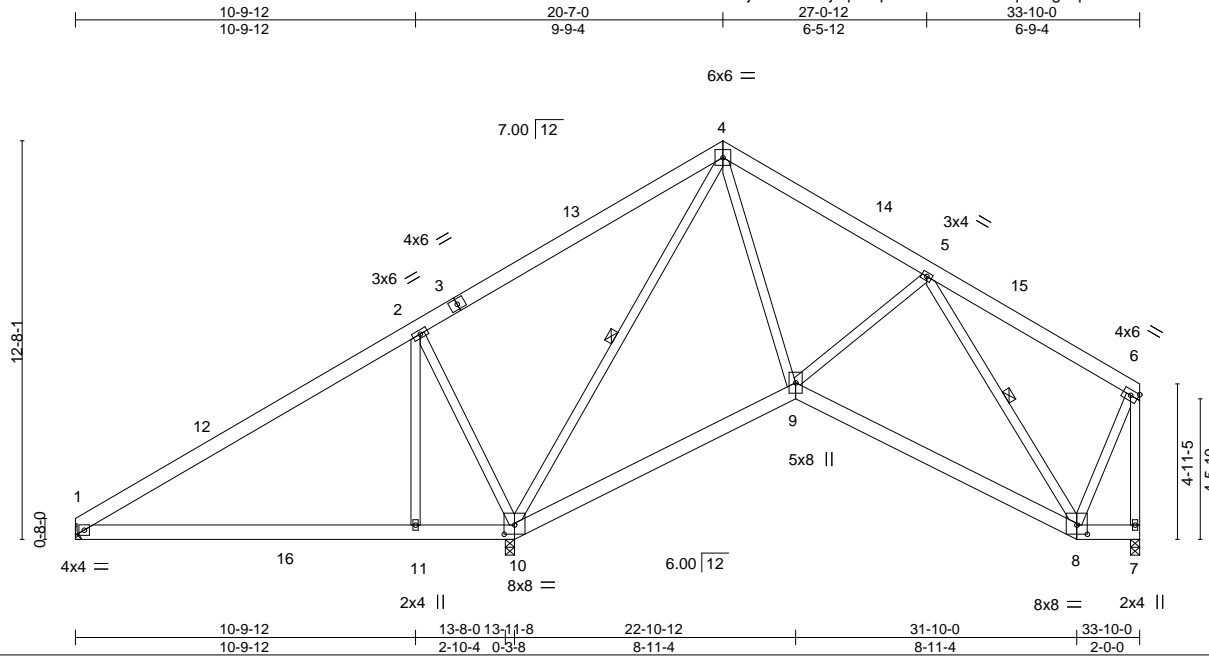


|                   |             |                            |          |          |  |
|-------------------|-------------|----------------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>A4 | Truss Type<br>ROOF SPECIAL | Qty<br>3 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260751 |
|-------------------|-------------|----------------------------|----------|----------|--|

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Scale = 1:73.2

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

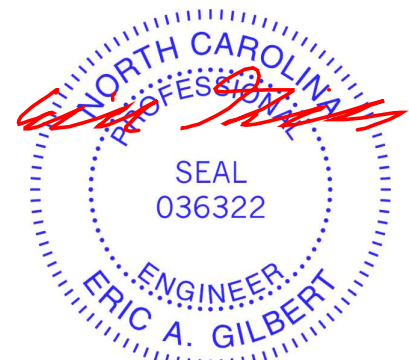
|                      |                       |             |                                  |                |             |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| <b>LOADING</b> (psf) | <b>SPACING-</b> 2-0-0 | <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 0.52     | Vert(LL) -0.09 1-11 >999 360     | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL 1.15       | BC 0.34     | Vert(CT) -0.19 1-11 >860 240     |                |             |
| BCLL 0.0 *           | Rep Stress Incr YES   | WB 0.94     | Horz(CT) 0.05 7 n/a n/a          |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014  | Matrix-S    | Wind(LL) 0.04 1-11 >999 240      | Weight: 263 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 6-0-0 oc bracing.                                   |
| WEBS 2x4 SP No.2      | WEBS 1 Row at midpt 5-8, 4-10   |

**REACTIONS.** (size) 1=Mechanical, 10=0-3-8, 7=0-3-8  
 Max Horz 1=287(LC 7)  
 Max Uplift 10=-209(LC 10), 7=-55(LC 11)  
 Max Grav 1=444(LC 21), 10=1692(LC 17), 7=683(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-319/92, 2-4=-15/431, 4-5=-590/215, 5-6=-277/115, 6-7=-694/136  
 BOT CHORD 1-11=-132/263, 10-11=-132/263, 9-10=-23/318, 8-9=-107/576  
 WEBS 4-9=-45/621, 5-8=-598/139, 6-8=-4/454, 4-10=-1040/138, 2-10=-1080/345, 2-11=0/509

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 4-6-1, Interior(1) 4-6-1 to 16-2-3, Exterior(2) 16-2-3 to 24-11-13, Interior(1) 24-11-13 to 29-3-7, Exterior(2) 29-3-7 to 33-8-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 10=209.



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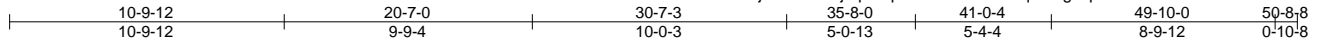
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|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MITEK Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |             |                            |          |          |                                     |           |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|-----------|
| Job<br>J0624-3320 | Truss<br>A5 | Truss Type<br>ROOF SPECIAL | Qty<br>7 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett | 163260752 |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|-----------|

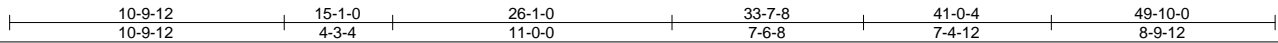
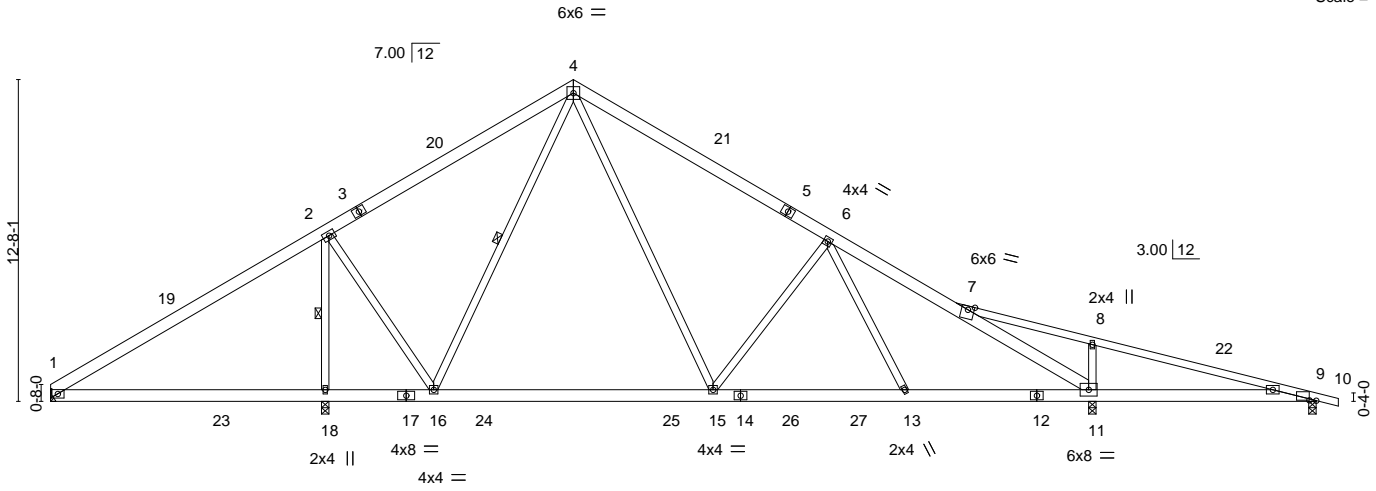
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:06 2024 Page 1

ID:2KOcXZExhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:90.7



|                       |                       |             |                                  |                |             |
|-----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [9:0-3-4,0-0-3]       |             |                                  |                |             |
| <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 0.74     | Vert(LL) -0.22 15-16 >999 360    | MT20           | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15       | BC 0.53     | Vert(CT) -0.33 15-16 >999 240    |                |             |
| BCLL 0.0 *            | Rep Stress Incr YES   | WB 0.65     | Horz(CT) 0.03 11 n/a n/a         |                |             |
| BCDL 10.0             | Code IRC2015/TP12014  | Matrix-S    | Wind(LL) 0.08 9-11 >999 240      | Weight: 333 lb | FT = 20%    |

|   |  |
|---|--|
| <b>LUMBER-</b>                                      | <b>BRACING-</b>  |
| TOP CHORD 2x6 SP No.1 *Except*<br>7-10: 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins. |
| BOT CHORD 2x6 SP No.1                               | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.              |
| WEBS 2x4 SP No.2                                    | WEBS 1 Row at midpt 2-18, 4-16   |

**REACTIONS.** All bearings 0-3-8 except (jt=length) 1=Mechanical.  
 (lb) - Max Horz 1=297(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 18=163(LC 10), 11=235(LC 11), 9=130(LC 7)  
 Max Grav All reactions 250 lb or less at joint(s) except 1=389(LC 21), 18=2071(LC 17), 11=1687(LC 1), 9=293(LC 22)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=756/332, 4-6=1451/415, 6-7=1743/284, 7-11=1921/296, 8-9=186/259  
 BOT CHORD 15-16=0/755, 13-15=102/1477, 11-13=51/1543  
 WEBS 2-18=1714/413, 2-16=0/930, 4-16=510/54, 4-15=140/1068, 6-15=630/271, 6-13=0/253, 8-11=496/244

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-4 to 5-1-1, Interior(1) 5-1-1 to 15-7-3, Exterior(2) 15-7-3 to 25-6-13, Interior(1) 25-6-13 to 45-8-11, Exterior(2) 45-8-11 to 50-8-8 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are 4x6 MT20 unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 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) 1 except (jt=lb) 18=163, 11=235, 9=130.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 26, 2024

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**TRENCO**  
 A MITEK AFFILIATE

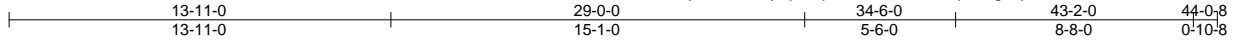
818 Soundside Road  
 Edenton, NC 27932

|            |       |            |     |     |                                     |           |
|------------|-------|------------|-----|-----|-------------------------------------|-----------|
| Job        | Truss | Truss Type | Qty | Ply | Weaver/Lot 41 West Preserve/Harnett | 163260753 |
| J0624-3320 | A5GE  | GABLE      | 1   | 1   |                                     |           |

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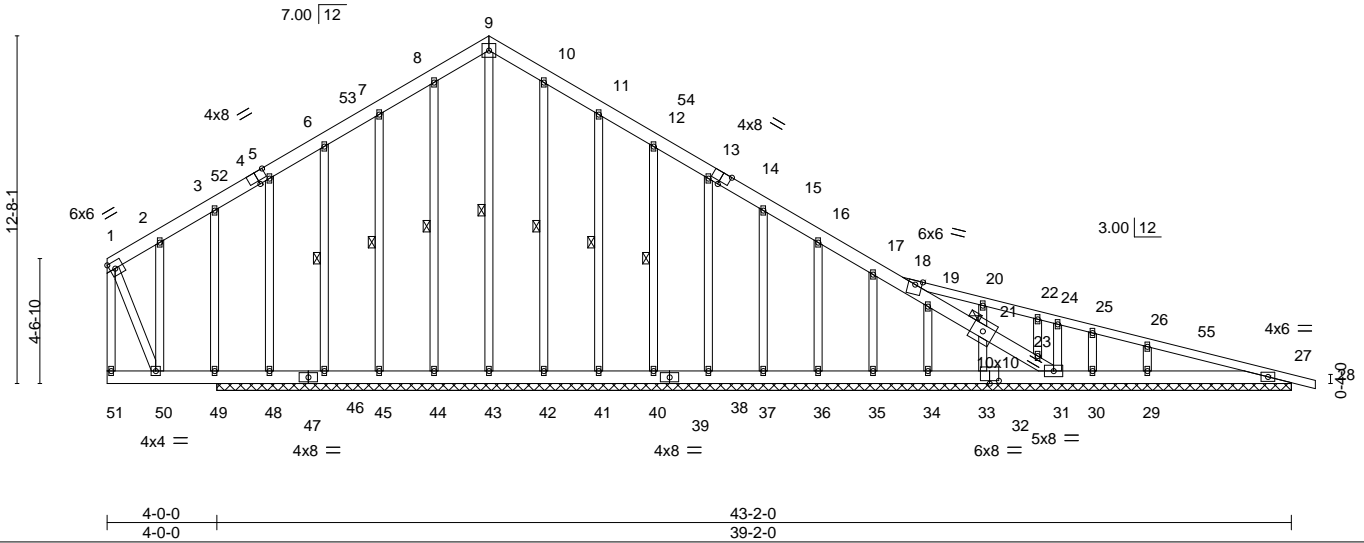
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:09 2024 Page 1

ID:2KOcXZEXhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f



6x6 =

Scale = 1:84.0



|                       |   |
|-----------------------|---|
| Plate Offsets (X,Y)-- | [4:0-4-0,Edge], [14:0-4-0,Edge], [32:0-4-0,0-1-4] |
|-----------------------|---|

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES | GRIP    |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|---------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.20  | Vert(LL) | 0.01     | 28     | n/r | MT20   | 244/190 |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.09  | Vert(CT) | 0.01     | 28     | n/r |        |         |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.17  | Horz(CT) | 0.01     | 27     | n/a |        |         |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S |          |          |        |     |        |         |

Weight: 405 lb FT = 20%

| LUMBER-  | BRACING-   |
|--|--|
| TOP CHORD 2x6 SP No.1 *Except*<br>18-28: 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 6-0-0 oc bracing, Except:<br>10-0-0 oc bracing: 50-51,30-31,29-30,27-29. |
| WEBS 2x4 SP No.2                                     | WEBS 1 Row at midpt 9-43, 8-44, 7-45, 6-46, 10-42, 11-41, 12-40  |
| OTHERS 2x4 SP No.2                                   | JOINTS 1 Brace at Jt(s): 21  |

| REACTIONS.  |
|---|
| All bearings 39-2-0.  |
| (lb) - Max Horz 49=370(LC 6)  |
| Max Uplift All uplift 100 lb or less at joint(s) 44, 45, 46, 48, 42, 41, 40, 38, 37, 36, 35, 34 except 27=106(LC 7), 49=211(LC 10), 33=125(LC 7), 30=102(LC 7), 29=163(LC 11) |
| Max Grav All reactions 250 lb or less at joint(s) 27, 44, 45, 46, 48, 42, 41, 40, 38, 37, 36, 35, 34, 30 except 43=293(LC 19), 49=484(LC 17), 33=300(LC 22), 29=408(LC 1)     |

| FORCES.  |
|--|
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.   |
| TOP CHORD 7-8=-209/315, 8-9=-238/351, 9-10=-238/363, 10-11=-209/355, 11-12=-154/313, 12-13=-172/276, 13-15=-189/257, 15-16=-208/270, 16-17=-243/296, 17-18=-274/296, 19-21=-269/166  |
| BOT CHORD 48-49=-149/375, 46-48=-149/375, 45-46=-149/375, 44-45=-149/375, 43-44=-149/375, 42-43=-149/375, 41-42=-149/375, 40-41=-149/375, 38-40=-149/375, 37-38=-149/375, 36-37=-149/375, 35-36=-149/375, 34-35=-149/375, 33-34=-149/375, 31-33=-142/368 |
| WEBS 9-43=-253/83, 3-49=-257/148, 26-29=-282/177   |

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-6-3, Exterior(2) 9-6-3 to 18-3-13, Interior(1) 18-3-13 to 39-7-11, Exterior(2) 39-7-11 to 44-0-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 27 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) 44, 45, 46, 48, 42, 41, 40, 38, 37, 36, 35, 34 except (jt=lb) 27=106, 49=211, 33=125, 30=102, 29=163.
  - Non Standard bearing condition. Review required.
  - 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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A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932



|                   |             |                      |          |          |   |           |
|-------------------|-------------|----------------------|----------|----------|---|-----------|
| Job<br>J0624-3320 | Truss<br>B1 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260754 |
|-------------------|-------------|----------------------|----------|----------|---|-----------|

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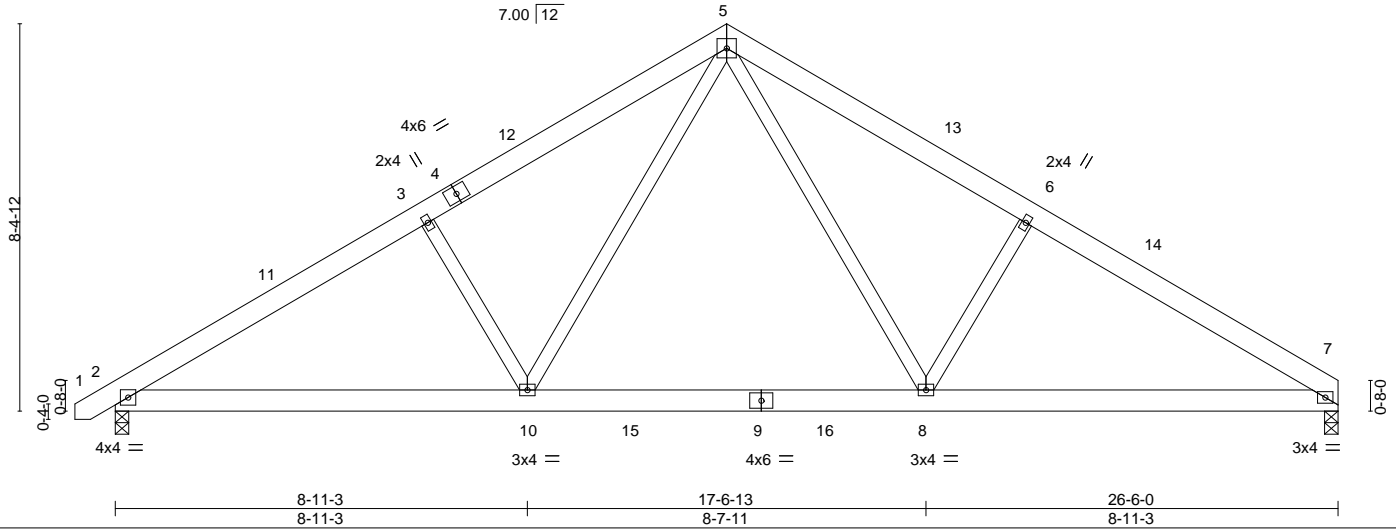
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:10 2024 Page 1

ID:2KOcXZEhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



5x5 =

Scale = 1:49.9



|                      |                      |       |             |              |            |        |     |                |             |
|----------------------|----------------------|-------|-------------|--------------|------------|--------|-----|----------------|-------------|
| <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)     | -0.10 8-10 | >999   | 360 | MT20           | 244/190     |
| TCDL 10.0            | Lumber DOL           | 1.15  | BC 0.32     | Vert(CT)     | -0.14 8-10 | >999   | 240 |                |             |
| BCLL 0.0 *           | Rep Stress Incr      | YES   | WB 0.22     | Horz(CT)     | 0.03 7     | n/a    | n/a |                |             |
| BCDL 10.0            | Code IRC2015/TPI2014 |       | Matrix-S    | Wind(LL)     | 0.03 10    | >999   | 240 |                |             |
|                      |                      |       |             |              |            |        |     | Weight: 175 lb | FT = 20%    |

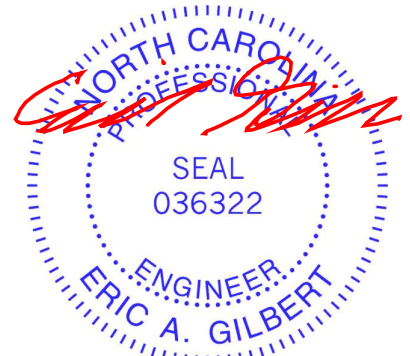
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-3 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 7=0-3-8, 2=0-3-8  
 Max Horz 2=193(LC 7)  
 Max Uplift 7=-85(LC 11), 2=-97(LC 10)  
 Max Grav 7=1075(LC 18), 2=1124(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1686/416, 3-5=-1525/463, 5-6=-1529/470, 6-7=-1672/422  
 BOT CHORD 2-10=-252/1492, 8-10=-60/971, 7-8=-262/1355  
 WEBS 5-8=-156/714, 6-8=-409/259, 5-10=-147/710, 3-10=-408/247

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-8 to 3-8-5, Interior(1) 3-8-5 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2.



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|                   |               |                     |          |          |  |
|-------------------|---------------|---------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>B1GE | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260755 |
|                   |               |                     |          |          | Job Reference (optional)                         |

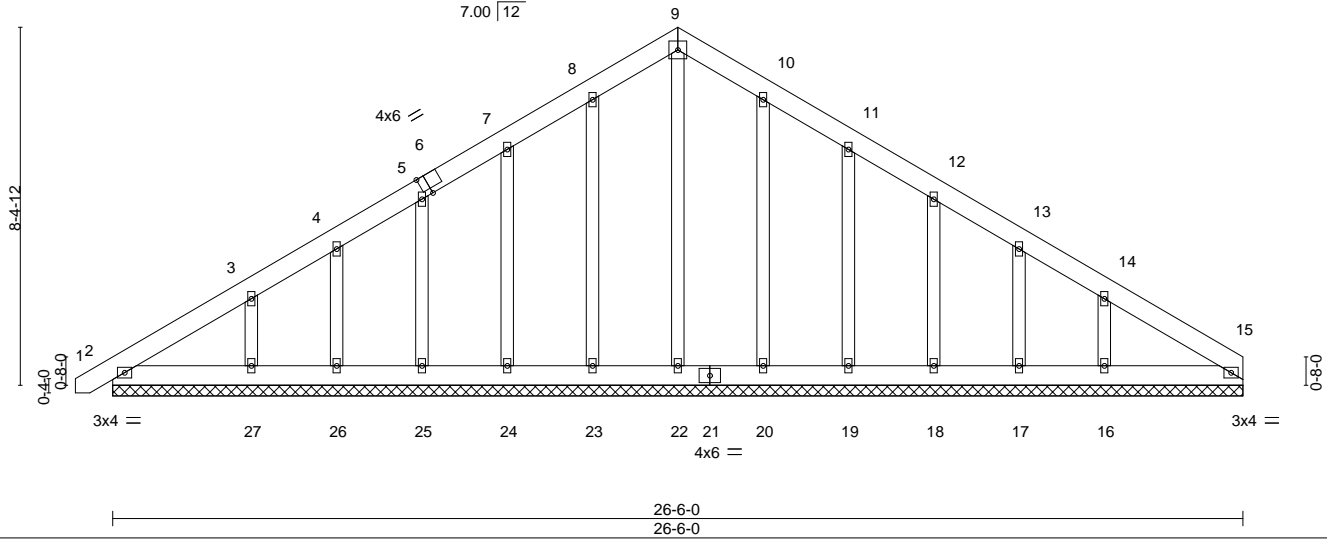
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:11 2024 Page 1

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Scale = 1:54.0



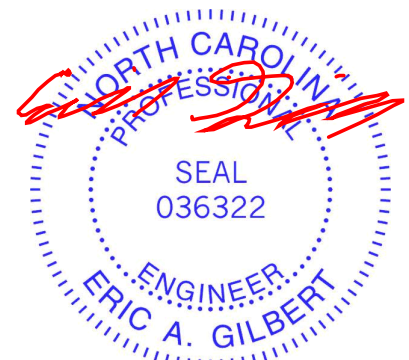
|                       |                      |          |                |          |        |        |                |          |
|-----------------------|----------------------|----------|----------------|----------|--------|--------|----------------|----------|
| Plate Offsets (X,Y)-- | [6:0-2-3,Edge]       |          |                |          |        | PLATES | GRIP           |          |
| LOADING (psf)         | SPACING- 2-0-0       | CSI.     | DEFL.          | in (loc) | l/defl | L/d    |                |          |
| TCLL 20.0             | Plate Grip DOL 1.15  | TC 0.04  | Vert(LL) -0.00 | 1        | n/r    | 120    | PLATES MT20    |          |
| TCDL 10.0             | Lumber DOL 1.15      | BC 0.03  | Vert(CT) 0.00  | 1        | n/r    | 120    | GRIP 244/190   |          |
| BCLL 0.0 *            | Rep Stress Incr YES  | WB 0.14  | Horz(CT) 0.00  | 15       | n/a    | n/a    |                |          |
| BCDL 10.0             | Code IRC2015/TPI2014 | Matrix-S |                |          |        |        | Weight: 207 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. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| OTHERS 2x4 SP No.2    |   |

**REACTIONS.** All bearings 26-6-0.  
 (lb) - Max Horz 2=242(LC 7)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 23, 24, 25, 26, 20, 19, 18, 17 except 27=141(LC 10), 16=143(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 15, 2, 22, 23, 24, 25, 26, 20, 19, 18, 17 except 27=282(LC 17), 16=288(LC 18)

**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; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-8 to 3-8-5, Exterior(2) 3-8-5 to 8-10-3, Corner(3) 8-10-3 to 17-7-13, Exterior(2) 17-7-13 to 22-1-3, Corner(3) 22-1-3 to 26-6-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 23, 24, 25, 26, 20, 19, 18, 17 except (jt=lb) 27=141, 16=143.



January 26, 2024

|   |   |
|---|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|---|---|

|                   |             |                      |          |          |  |
|-------------------|-------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>B2 | Truss Type<br>COMMON | Qty<br>3 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260756 |
|-------------------|-------------|----------------------|----------|----------|--|

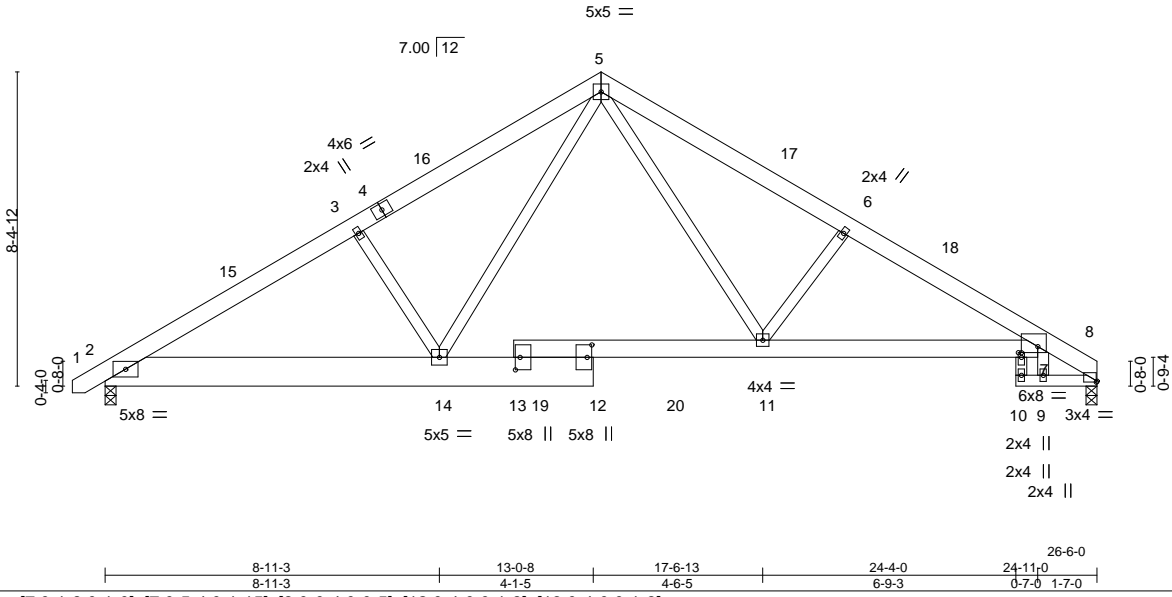
Comtech, Inc. Fayetteville, NC - 28314,

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ID:2KOcXZExhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8W3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:61.6



|                        |  |
|------------------------|--|
| Plate Offsets (X, Y)-- | [7:0-1-8,0-1-0], [7:0-5-4,0-1-15], [8:0-0-4,0-0-5], [12:0-4-0,0-1-8], [13:0-4-0,0-1-8] |
|------------------------|--|

| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.90  | Vert(LL) | -0.13    | 10     | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.56  | Vert(CT) | -0.27    | 10     | >999 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.23  | Horz(CT) | 0.18     | 8      | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TP12014 |       | Matrix-S | Wind(LL) | 0.10     | 10     | >999 | Weight: 199 lb | FT = 20% |

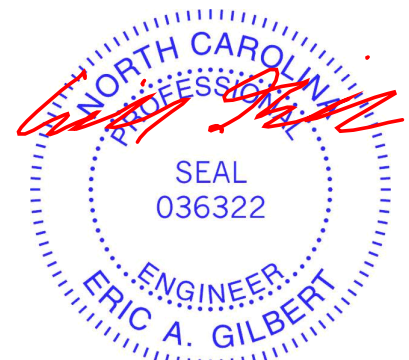
|                                       |   |
|---------------------------------------|---|
| <b>LUMBER-</b>                        | <b>BRACING-</b>   |
| TOP CHORD 2x6 SP No.1                 | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 *Except*        | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| 2-12: 2x10 SP No.1, 8-10: 2x4 SP No.1 |   |
| WEBS 2x4 SP No.2                      |   |

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
 Max Horz 2=196(LC 9)  
 Max Uplift 8=-79(LC 11), 2=-97(LC 10)  
 Max Grav 8=1076(LC 18), 2=1111(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1726/417, 3-5=-1560/458, 5-6=-1785/502, 6-7=-1966/485, 7-8=-736/185  
 BOT CHORD 2-14=-247/1535, 11-14=-67/1027, 7-11=-322/1721  
 WEBS 5-11=-191/977, 6-11=-600/281, 5-14=-129/647, 3-14=-411/245

**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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-8 to 3-8-5, Interior(1) 3-8-5 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.



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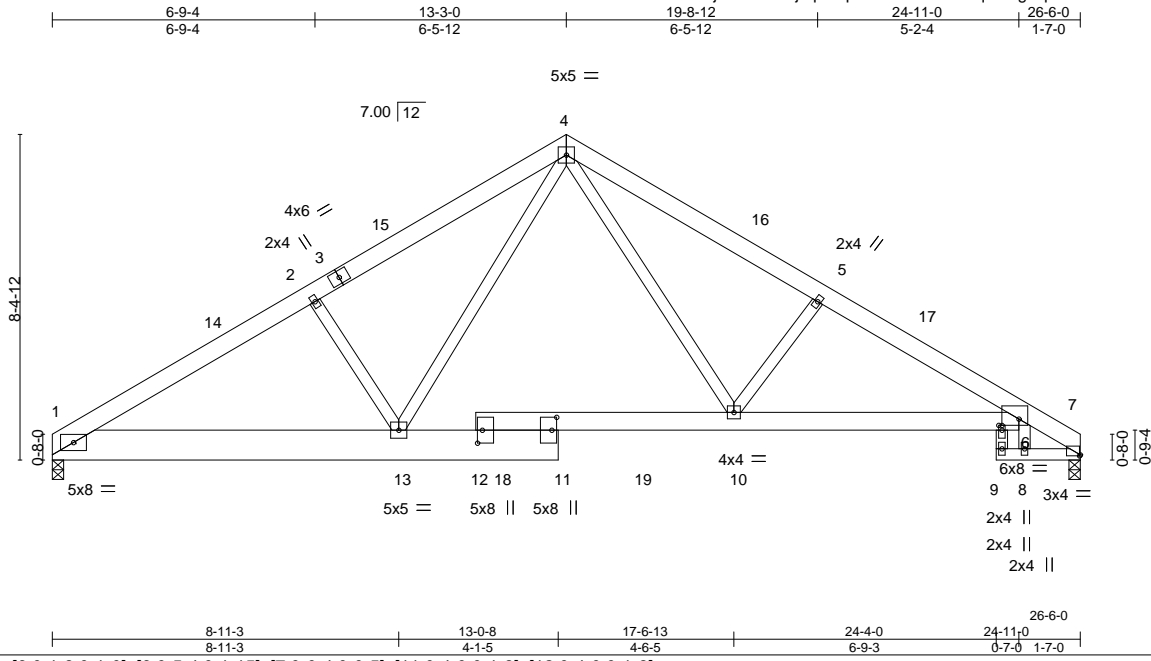
|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TP1 Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |             |                      |          |          |  |
|-------------------|-------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>B3 | Truss Type<br>COMMON | Qty<br>3 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260757 |
|-------------------|-------------|----------------------|----------|----------|--|

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Scale = 1:59.4

|                       |  |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [6:0-1-8,0-1-0], [6:0-5-4,0-1-15], [7:0-0-4,0-0-5], [11:0-4-0,0-1-8], [12:0-4-0,0-1-8] |
|-----------------------|--|

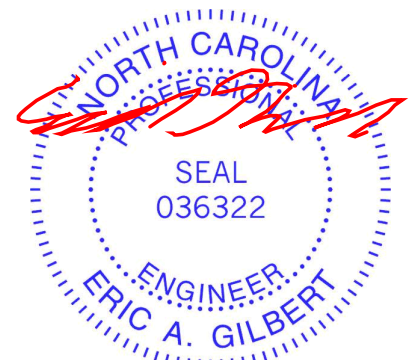
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES | GRIP           |          |
|---------------|----------------------|-------|----------|----------|----------|--------|------|--------|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.90  | Vert(LL) | -0.13    | 9      | >999 | 360    | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.56  | Vert(CT) | -0.27    | 9      | >999 | 240    |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.23  | Horz(CT) | 0.18     | 7      | n/a  | n/a    |                |          |
| BCDL 10.0     | Code IRC2015/TP12014 |       | Matrix-S | Wind(LL) | 0.10     | 9      | >999 | 240    |                |          |
|               |                      |       |          |          |          |        |      |        | Weight: 197 lb | FT = 20% |

|                                      |   |
|--------------------------------------|---|
| <b>LUMBER-</b>                       | <b>BRACING-</b>   |
| TOP CHORD 2x6 SP No.1                | TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 *Except*       | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| 1-11: 2x10 SP No.1, 7-9: 2x4 SP No.1 |   |
| WEBS 2x4 SP No.2                     |   |

|                   |                                       |
|-------------------|---------------------------------------|
| <b>REACTIONS.</b> | (size) 7=0-3-8, 1=0-3-8               |
|                   | Max Horz 1=191(LC 6)                  |
|                   | Max Uplift 7=79(LC 11), 1=85(LC 10)   |
|                   | Max Grav 7=1077(LC 18), 1=1063(LC 17) |

|                |  |
|----------------|--|
| <b>FORCES.</b> | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD      | 1-2=-1730/429, 2-4=-1564/469, 4-5=-1787/507, 5-6=-1968/491, 6-7=-736/186     |
| BOT CHORD      | 1-13=-263/1544, 10-13=-71/1028, 6-10=-327/1722                               |
| WEBS           | 4-10=-194/979, 5-10=-600/282, 4-13=-139/651, 2-13=-422/261                   |

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 1.



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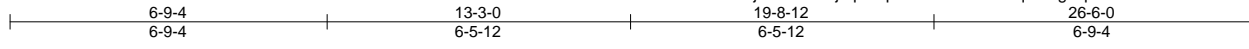
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| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (<a href="http://www.tpinst.org">www.tpinst.org</a>) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (<a href="http://www.sbcacomponents.com">www.sbcacomponents.com</a>)</p> | <p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |             |                      |          |          |   |           |
|-------------------|-------------|----------------------|----------|----------|---|-----------|
| Job<br>J0624-3320 | Truss<br>B4 | Truss Type<br>COMMON | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260758 |
|-------------------|-------------|----------------------|----------|----------|---|-----------|

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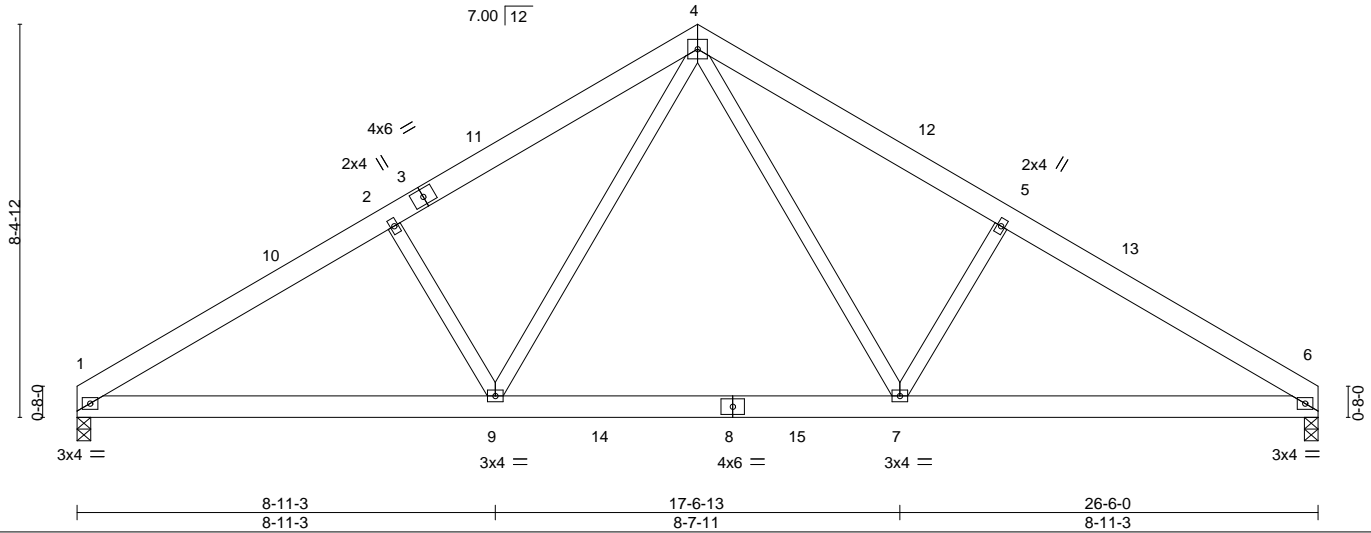
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:15 2024 Page 1

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5x5 =

Scale = 1:49.2



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc)  | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.19  | Vert(LL) | -0.10 7-9 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.32  | Vert(CT) | -0.14 7-9 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.22  | Horz(CT) | 0.03 6    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.03 9    | >999   | 240 |                |          |
|               |                      |       |          |          |           |        |     | Weight: 173 lb | FT = 20% |

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-11-4 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-8, 1=0-3-8  
 Max Horz 1=189(LC 7)  
 Max Uplift 6=-85(LC 11), 1=-85(LC 10)  
 Max Grav 6=1075(LC 18), 1=1075(LC 17)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1673/426, 2-4=-1529/474, 4-5=-1530/474, 5-6=-1673/426  
 BOT CHORD 1-9=-265/1498, 7-9=-64/972, 6-7=-265/1356  
 WEBS 4-7=-157/714, 5-7=-409/259, 4-9=-157/714, 2-9=-409/259

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 8-10-3, Exterior(2) 8-10-3 to 17-7-13, Interior(1) 17-7-13 to 21-11-7, Exterior(2) 21-11-7 to 26-4-4 zone:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 1.



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|                   |             |                         |          |          |  |
|-------------------|-------------|-------------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>C1 | Truss Type<br>QUEENPOST | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260759 |
|-------------------|-------------|-------------------------|----------|----------|--|

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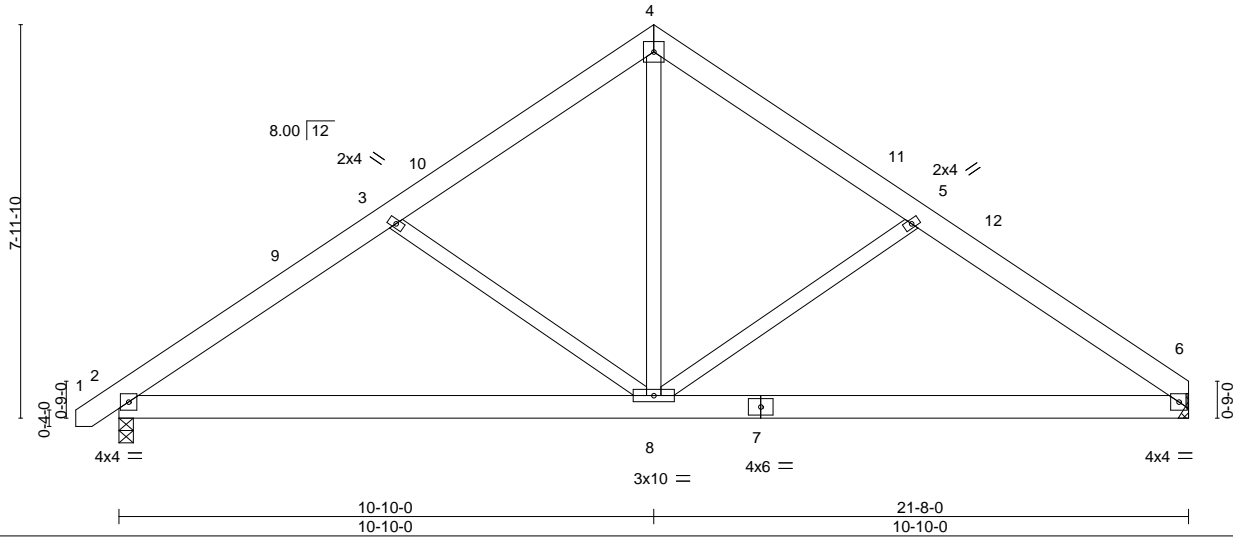
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:16 2024 Page 1

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5x5 =

Scale = 1:46.7



| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc)  | l/defl | L/d | PLATES         | GRIP     |
|---------------|----------------------|-------|----------|----------|-----------|--------|-----|----------------|----------|
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.13  | Vert(LL) | -0.07 6-8 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.39  | Vert(CT) | -0.15 6-8 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.27  | Horz(CT) | 0.02 6    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.02 2-8  | >999   | 240 |                |          |
|               |                      |       |          |          |           |        |     | Weight: 144 lb | FT = 20% |

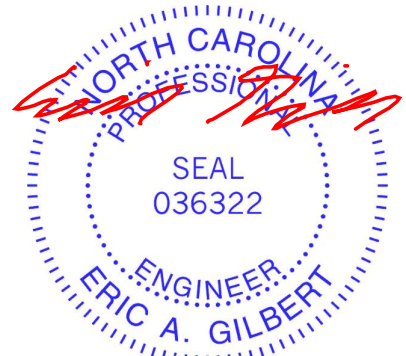
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 6=Mechanical, 2=0-3-8  
 Max Horz 2=183(LC 7)  
 Max Uplift 6=66(LC 11), 2=78(LC 10)  
 Max Grav 6=856(LC 1), 2=909(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1152/344, 3-4=-893/301, 4-5=-893/302, 5-6=-1156/350  
 BOT CHORD 2-8=-179/918, 6-8=-192/893  
 WEBS 3-8=-363/232, 4-8=-160/681, 5-8=-367/248

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-4, Interior(1) 3-8-4 to 6-5-3, Exterior(2) 6-5-3 to 15-2-13, Interior(1) 15-2-13 to 17-1-15, Exterior(2) 17-1-15 to 21-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) 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) 6, 2.



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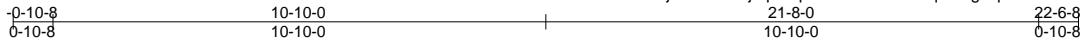
818 Soundside Road  
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|                   |               |                     |          |          |  |
|-------------------|---------------|---------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>C1GE | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260760 |
|-------------------|---------------|---------------------|----------|----------|--|

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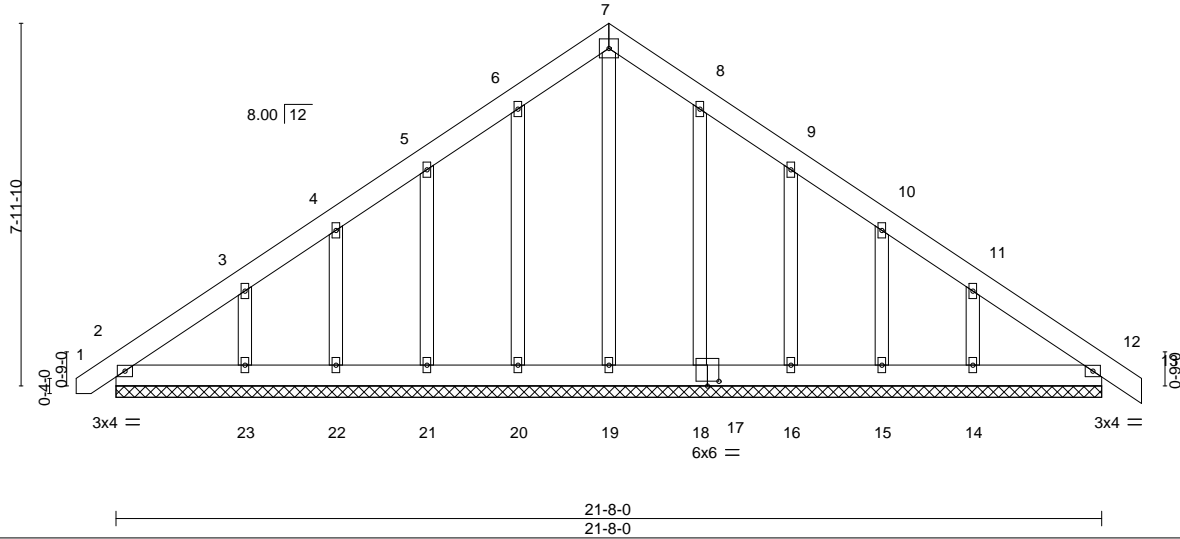
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:18 2024 Page 1

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5x5 =

Scale = 1:50.6



|                       |                      |       |             |               |          |        |     |                |             |
|-----------------------|----------------------|-------|-------------|---------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X,Y)-- | [17:0-3-0,0-1-4]     |       |             |               |          |        |     |                |             |
| <b>LOADING</b> (psf)  | <b>SPACING-</b>      | 2-0-0 | <b>CSI.</b> | <b>DEFL.</b>  | in (loc) | l/defl | L/d | <b>PLATES</b>  | <b>GRIP</b> |
| TCLL 20.0             | Plate Grip DOL 1.15  |       | TC 0.03     | Vert(LL) 0.00 | 12       | n/r    | 120 | MT20           | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15      |       | BC 0.02     | Vert(CT) 0.00 | 12       | n/r    | 120 |                |             |
| BCLL 0.0 *            | Rep Stress Incr YES  |       | WB 0.12     | Horz(CT) 0.00 | 12       | n/a    | n/a |                |             |
| BCDL 10.0             | Code IRC2015/TPI2014 |       | Matrix-S    |               |          |        |     |                |             |
|                       |                      |       |             |               |          |        |     | Weight: 172 lb | FT = 20%    |

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

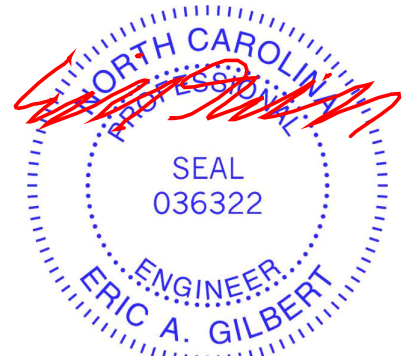
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 21-8-0.  
 (lb) - Max Horz 2=233(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 20, 22, 18, 15 except 21=101(LC 10), 23=146(LC 10),  
 16=103(LC 11), 14=140(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 18, 16, 15, 14 except 23=255(LC 17)

**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; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-9 to 3-8-4, Exterior(2) 3-8-4 to 6-5-3, Corner(3) 6-5-3 to 15-2-13, Exterior(2) 15-2-13 to 18-1-11, Corner(3) 18-1-11 to 22-6-8 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) 12, 2, 20, 22, 18, 15 except (jt=lb) 21=101, 23=146, 16=103, 14=140.



January 26, 2024

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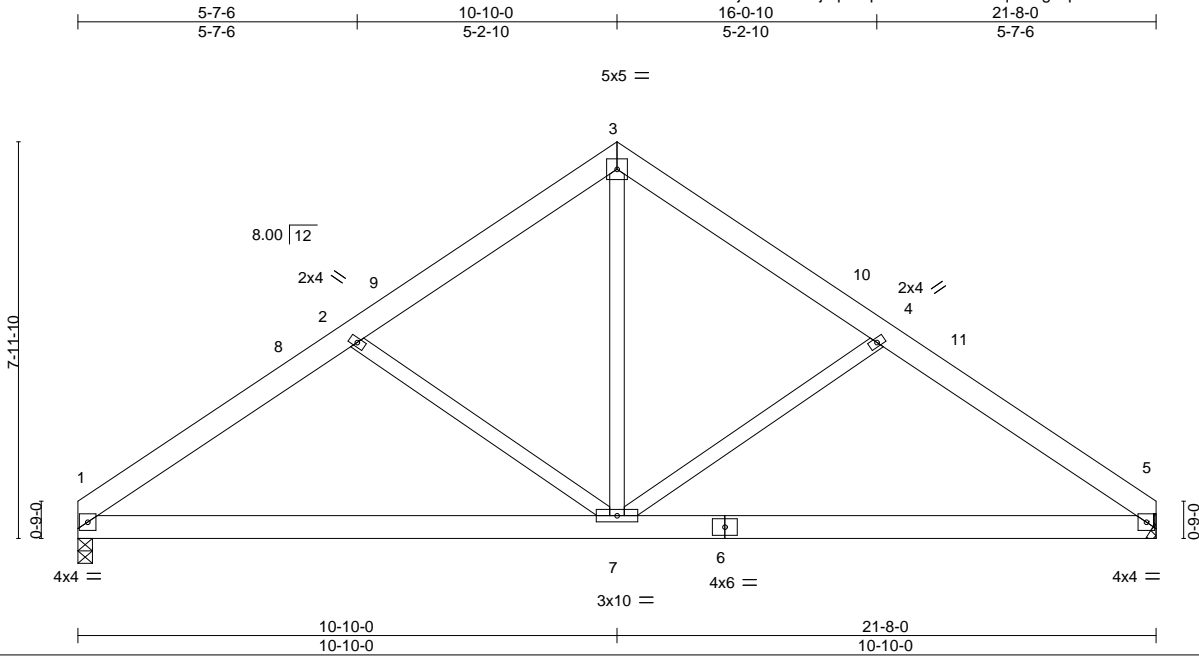
818 Soundside Road  
 Edenton, NC 27932

|                   |             |                         |          |          |  |
|-------------------|-------------|-------------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>C2 | Truss Type<br>QUEENPOST | Qty<br>3 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260761 |
|-------------------|-------------|-------------------------|----------|----------|--|

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ID:2KOcXZExhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:46.3

| 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 0.13  | Vert(LL) | -0.07 5-7 | >999   | 360 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.39  | Vert(CT) | -0.15 5-7 | >999   | 240 |                |          |
| BCLL 0.0 *    | Rep Stress Incr      | YES   | WB 0.27  | Horz(CT) | 0.02 5    | n/a    | n/a |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.02 7    | >999   | 240 |                |          |
|               |                      |       |          |          |           |        |     | Weight: 142 lb | FT = 20% |

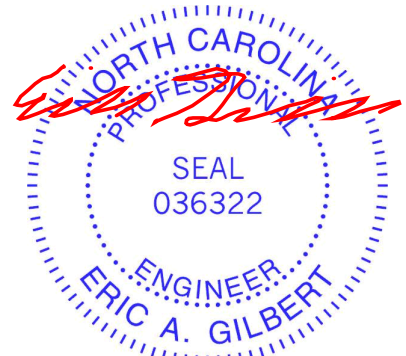
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

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

**REACTIONS.** (size) 5=Mechanical, 1=0-3-8  
 Max Horz 1=-179(LC 6)  
 Max Uplift 5=-66(LC 11), 1=-66(LC 10)  
 Max Grav 5=857(LC 1), 1=857(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1155/354, 2-3=-893/307, 3-4=-893/307, 4-5=-1158/355  
 BOT CHORD 1-7=-194/922, 5-7=-195/895  
 WEBS 2-7=-361/247, 3-7=-167/680, 4-7=-367/248

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCCL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 6-5-3, Exterior(2) 6-5-3 to 15-2-13, Interior(1) 15-2-13 to 17-1-15, Exterior(2) 17-1-15 to 21-6-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) 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) 5, 1.



January 26, 2024

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPH Quality Criteria and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacomponents.com)



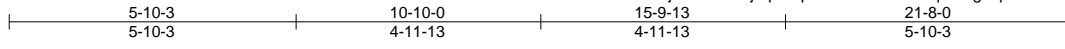
818 Soundside Road  
 Edenton, NC 27932

|                   |               |                    |          |          |  |
|-------------------|---------------|--------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>C2GR | Truss Type<br>FINK | Qty<br>1 | Ply<br>2 | Weaver/Lot 41 West Preserve/Harnett<br>163260762 |
|-------------------|---------------|--------------------|----------|----------|--|

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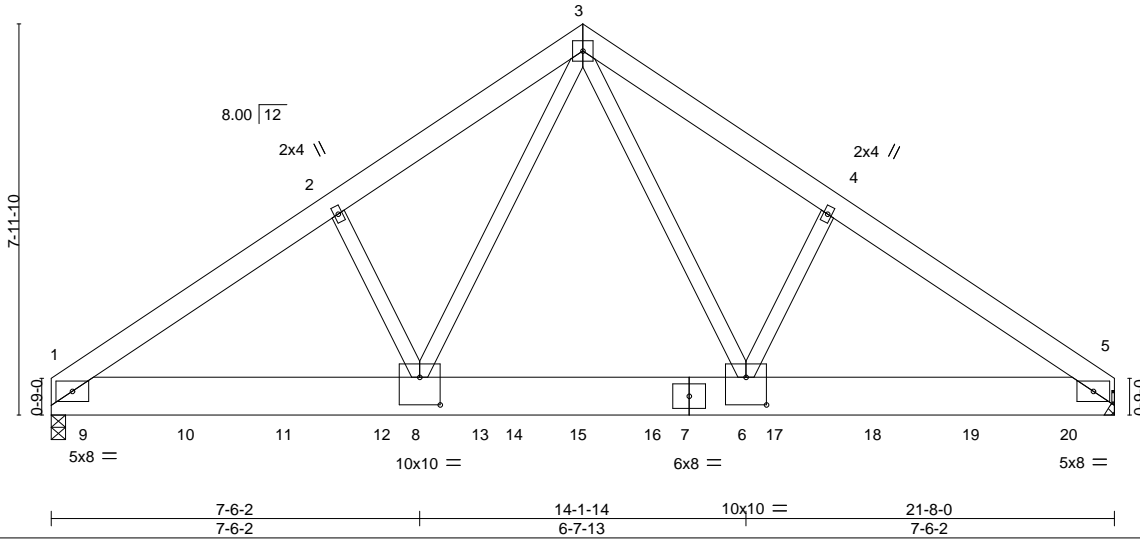
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:21 2024 Page 1

ID:2K0cXZExhjzrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



5x5 =

Scale = 1:47.0



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

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                       | PLATES         | GRIP     |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.12  | in (loc) l/defl L/d         | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.37  | Vert(LL) -0.04 1-8 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.25  | Vert(CT) -0.07 1-8 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr NO   | Matrix-S | Horz(CT) 0.02 5 n/a n/a     |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.02 6-8 >999 240  | Weight: 361 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 2x10 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS 2x4 SP No.2       |   |

**REACTIONS.** (size) 1=0-3-8, 5=Mechanical  
 Max Horz 1=-175(LC 25)  
 Max Uplift 5=-146(LC 9)  
 Max Grav 1=3031(LC 1), 5=2904(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-3741/0, 2-3=-3604/42, 3-4=-3556/233, 4-5=-3691/168  
 BOT CHORD 1-8=0/3014, 6-8=0/2096, 5-6=-75/2979  
 WEBS 2-8=-303/209, 3-8=0/2016, 3-6=-269/1918, 4-6=-308/206

- 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: 2x10 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 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) 5=146.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 364 lb down at 0-8-12, 424 lb down at 2-8-12, 424 lb down at 4-8-12, 424 lb down at 6-8-12, 369 lb down and 41 lb up at 8-8-12, 369 lb down and 41 lb up at 10-8-12, 369 lb down and 41 lb up at 12-8-12, 369 lb down and 41 lb up at 14-8-12, 369 lb down and 41 lb up at 16-8-12, and 369 lb down and 41 lb up at 18-8-12, and 371 lb down and 39 lb up at 20-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15



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Continued on page 2

|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |               |                    |          |                 |  |
|-------------------|---------------|--------------------|----------|-----------------|--|
| Job<br>J0624-3320 | Truss<br>C2GR | Truss Type<br>FINK | Qty<br>1 | Ply<br><b>2</b> | Weaver/Lot 41 West Preserve/Harnett<br>I63260762<br>Job Reference (optional) |
|-------------------|---------------|--------------------|----------|-----------------|--|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:21 2024 Page 2  
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**LOAD CASE(S)** Standard

Uniform Loads (plf)

Vert: 1-5=-20, 1-3=-60, 3-5=-60

Concentrated Loads (lb)

Vert: 7=-369(B) 9=-364(B) 10=-424(B) 11=-424(B) 12=-424(B) 13=-369(B) 15=-369(B) 17=-369(B) 18=-369(B) 19=-369(B) 20=-371(B)

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.**

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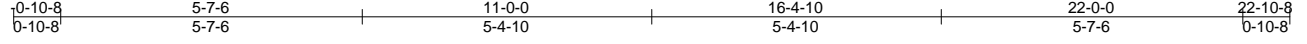


|                   |             |                         |          |          |  |
|-------------------|-------------|-------------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>G1 | Truss Type<br>QUEENPOST | Qty<br>6 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260763 |
|-------------------|-------------|-------------------------|----------|----------|--|

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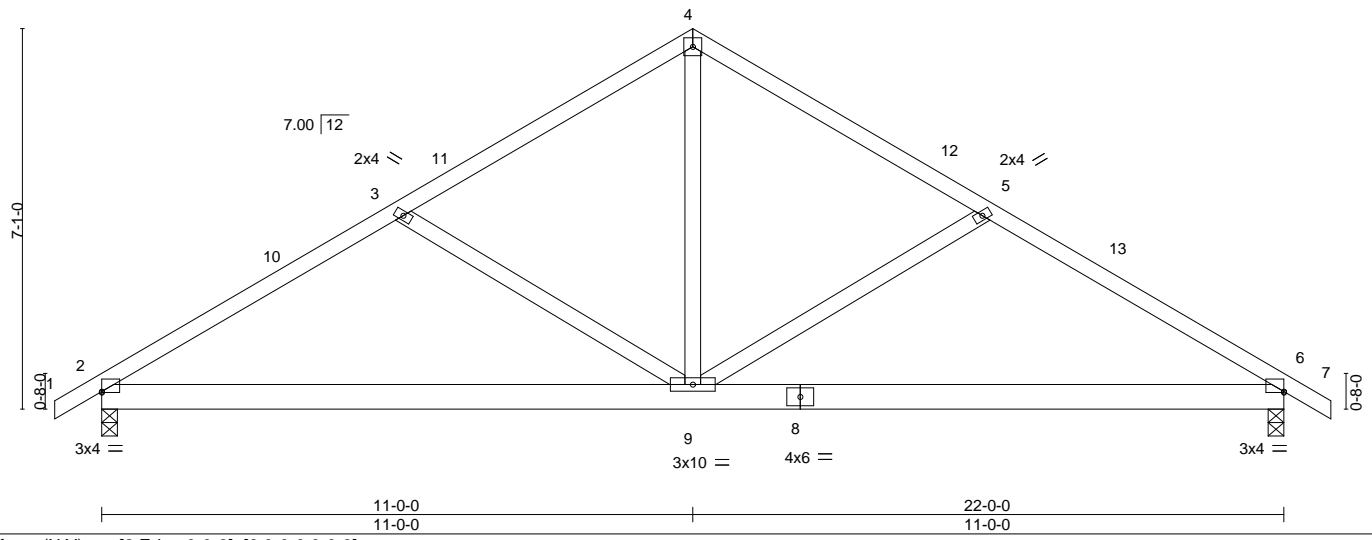
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:22 2024 Page 1

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4x4 =

Scale = 1:42.9



|                        |                                 |
|------------------------|---------------------------------|
| Plate Offsets (X, Y)-- | [2:Edge,0-0-3], [6:0-0-0,0-0-3] |
|------------------------|---------------------------------|

| LOADING (psf) | SPACING-             | CSI.     | DEFL.                       | PLATES         | GRIP     |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.31  | in (loc) l/defl L/d         | MT20           | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.42  | Vert(LL) -0.08 6-9 >999 360 |                |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.26  | Vert(CT) -0.17 6-9 >999 240 |                |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S | Horz(CT) 0.02 6 n/a n/a     |                |          |
|               | Code IRC2015/TPI2014 |          | Wind(LL) 0.02 2-9 >999 240  | Weight: 121 lb | FT = 20% |

| LUMBER-               | BRACING-   |
|-----------------------|--|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-3-13 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      |  |

**REACTIONS.** (size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=-166(LC 8)  
 Max Uplift 6=-85(LC 11), 2=-85(LC 10)  
 Max Grav 6=930(LC 1), 2=930(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1270/363, 3-4=-965/295, 4-5=-965/295, 5-6=-1270/363  
 BOT CHORD 2-9=-201/1022, 6-9=-201/1003  
 WEBS 3-9=-360/226, 4-9=-121/663, 5-9=-360/226

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 6-7-3, Exterior(2) 6-7-3 to 15-4-13, Interior(1) 15-4-13 to 18-5-11, Exterior(2) 18-5-11 to 22-10-8 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) 6, 2.



January 26, 2024

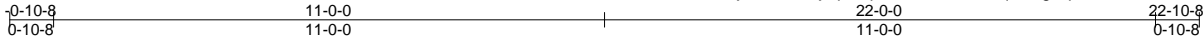
|  |   |
|--|---|
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|--|---|

|                   |               |                     |          |          |   |           |
|-------------------|---------------|---------------------|----------|----------|---|-----------|
| Job<br>J0624-3320 | Truss<br>G1GE | Truss Type<br>GABLE | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260764 |
|-------------------|---------------|---------------------|----------|----------|---|-----------|

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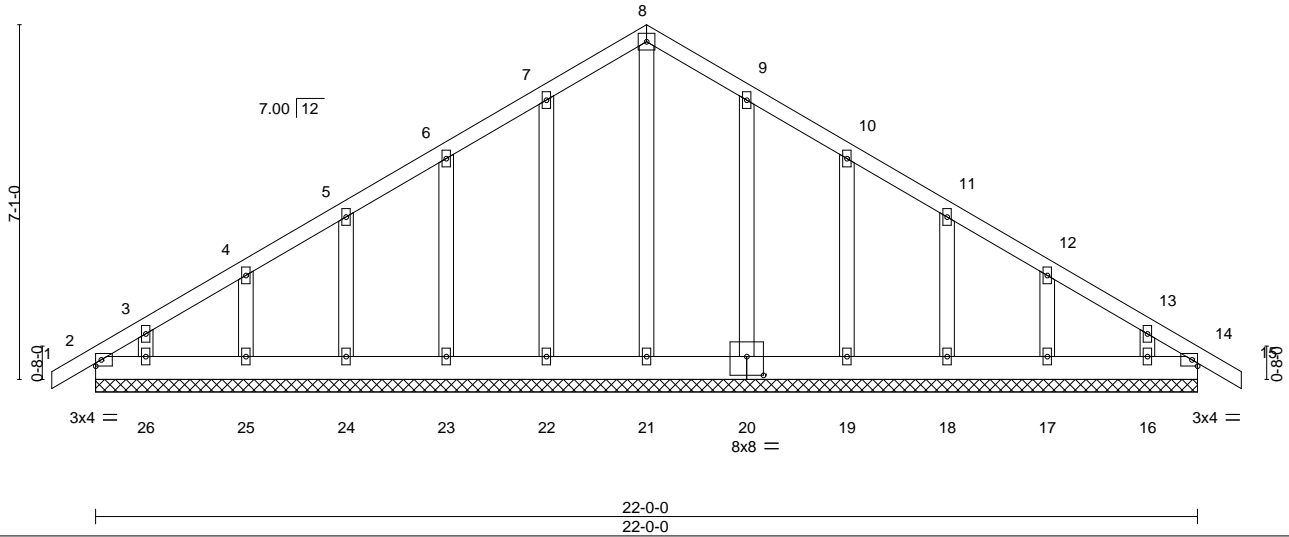
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:24 2024 Page 1

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4x4 =

Scale = 1:46.0



|                       |                       |             |                                  |                |             |
|-----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [20:0-4-0,0-4-8]      |             |                                  |                |             |
| <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 0.04     | Vert(LL) -0.00 14 n/r 120        | MT20           | 244/190     |
| TCDL 10.0             | Lumber DOL 1.15       | BC 0.02     | Vert(CT) -0.00 15 n/r 120        |                |             |
| BCLL 0.0 *            | Rep Stress Incr YES   | WB 0.09     | Horz(CT) 0.00 14 n/a n/a         |                |             |
| BCDL 10.0             | Code IRC2015/TPI2014  | Matrix-S    |                                  |                |             |
|                       |                       |             |                                  | Weight: 145 lb | FT = 20%    |

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

**REACTIONS.** All bearings 22-0-0.  
 (lb) - Max Horz 2=208(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 22, 23, 24, 25, 20, 19, 18, 17, 16 except 26=101(LC 10)  
 Max Grav All reactions 250 lb or less at joint(s) 14, 2, 21, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16

**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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 6-7-3, Corner(3) 6-7-3 to 15-4-13, Exterior(2) 15-4-13 to 18-5-11, Corner(3) 18-5-11 to 22-10-8 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) 14, 2, 22, 23, 24, 25, 20, 19, 18, 17, 16 except (jt=lb) 26=101.

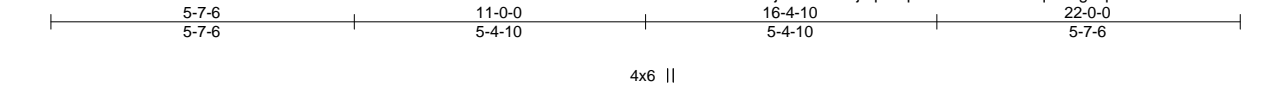


|                   |               |                             |          |          |   |           |
|-------------------|---------------|-----------------------------|----------|----------|---|-----------|
| Job<br>J0624-3320 | Truss<br>G2GR | Truss Type<br>Common Girder | Qty<br>1 | Ply<br>2 | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260765 |
|-------------------|---------------|-----------------------------|----------|----------|---|-----------|

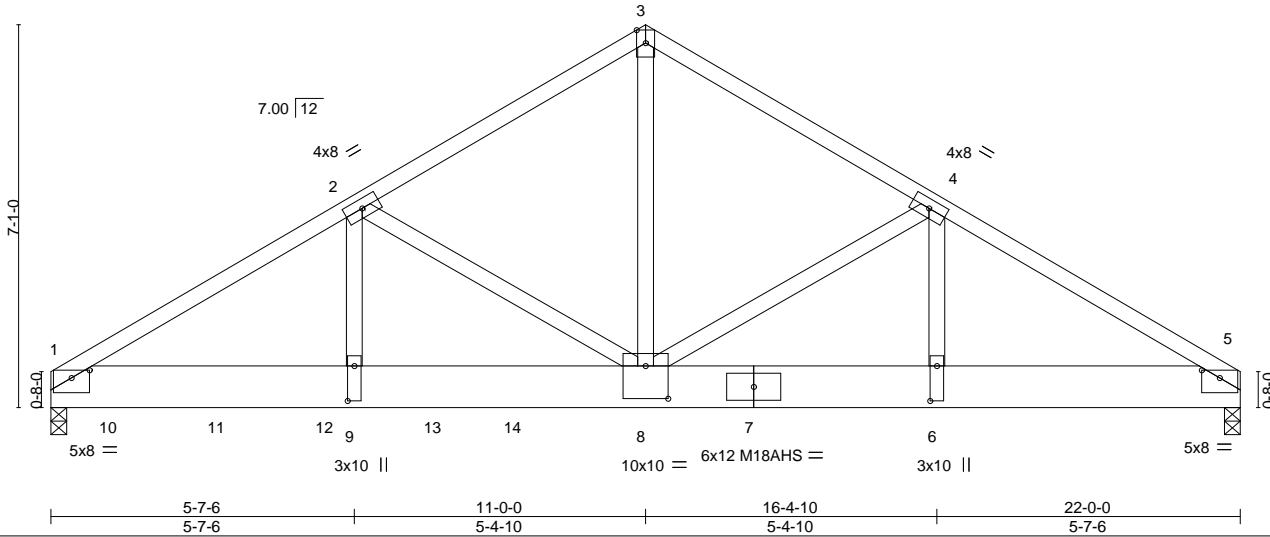
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:25 2024 Page 1

ID:2K0cXZExhjzrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:42.6



|               |                      |       |          |          |          |        |      |                |          |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| LOADING (psf) | SPACING-             | 2-0-0 | CSI.     | DEFL.    | in (loc) | l/defl | L/d  | PLATES         | GRIP     |
| TCLL 20.0     | Plate Grip DOL       | 1.15  | TC 0.54  | Vert(LL) | -0.10    | 8-9    | >999 | MT20           | 244/190  |
| TCDL 10.0     | Lumber DOL           | 1.15  | BC 0.93  | Vert(CT) | -0.18    | 8-9    | >999 | M18AHS         | 186/179  |
| BCLL 0.0 *    | Rep Stress Incr      | NO    | WB 0.52  | Horz(CT) | 0.03     | 5      | n/a  |                |          |
| BCDL 10.0     | Code IRC2015/TPI2014 |       | Matrix-S | Wind(LL) | 0.06     | 8-9    | >999 | Weight: 320 lb | FT = 20% |

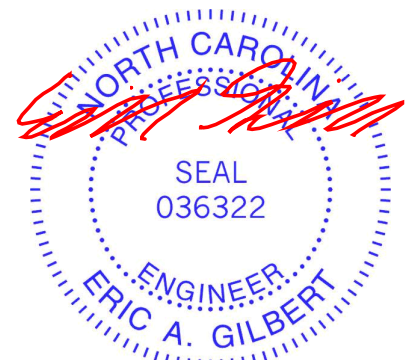
|                        |   |
|------------------------|---|
| <b>LUMBER-</b>         | <b>BRACING-</b>   |
| TOP CHORD 2x4 SP No.1  | TOP CHORD Structural wood sheathing directly applied or 4-3-9 oc purlins. |
| BOT CHORD 2x10 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.            |
| WEBS 2x4 SP No.2       |   |

|                   |                                       |
|-------------------|---------------------------------------|
| <b>REACTIONS.</b> | (size) 1=0-3-8, 5=0-3-8               |
|                   | Max Horz 1=157(LC 24)                 |
|                   | Max Uplift 1=-414(LC 8), 5=-186(LC 9) |
|                   | Max Grav 1=5379(LC 1), 5=2588(LC 1)   |

|                |  |
|----------------|--|
| <b>FORCES.</b> | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD      | 1-2=-8009/587, 2-3=-4509/365, 3-4=-4511/366, 4-5=-4372/316                   |
| BOT CHORD      | 1-9=-512/6743, 8-9=-512/6743, 6-8=-204/3650, 5-6=-204/3650                   |
| WEBS           | 3-8=-277/4152, 4-8=-417/431, 4-6=-428/130, 2-8=-3471/370, 2-9=-211/3449      |

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=414, 5=186.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 836 lb down and 85 lb up at 1-0-12, 837 lb down and 86 lb up at 3-0-12, 837 lb down and 86 lb up at 5-0-12, and 837 lb down and 86 lb up at 7-0-12, and 2884 lb down and 166 lb up at 8-6-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

|                                 |   |
|---------------------------------|---|
| <b>LOAD CASE(S)</b>             | Standard                                  |
| 1) Dead + Roof Live (balanced): | Lumber Increase=1.15, Plate Increase=1.15 |
| Uniform Loads (plf)             |   |
| Vert:                           | 1-3=-60, 3-5=-60, 1-5=-20                 |



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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. 1/2/2023 BEFORE USE.**

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

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Edenton, NC 27932

|                   |               |                             |          |                 |   |           |
|-------------------|---------------|-----------------------------|----------|-----------------|---|-----------|
| Job<br>J0624-3320 | Truss<br>G2GR | Truss Type<br>Common Girder | Qty<br>1 | Ply<br><b>2</b> | Weaver/Lot 41 West Preserve/Harnett<br>Job Reference (optional) | 163260765 |
|-------------------|---------------|-----------------------------|----------|-----------------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:25 2024 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 10=-836(B) 11=-837(B) 12=-837(B) 13=-837(B) 14=-2884(B)

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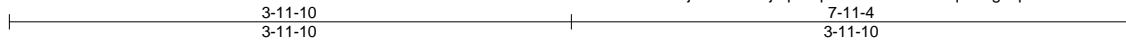
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Edenton, NC 27932

|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VB1 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260766 |
|-------------------|--------------|----------------------|----------|----------|--|

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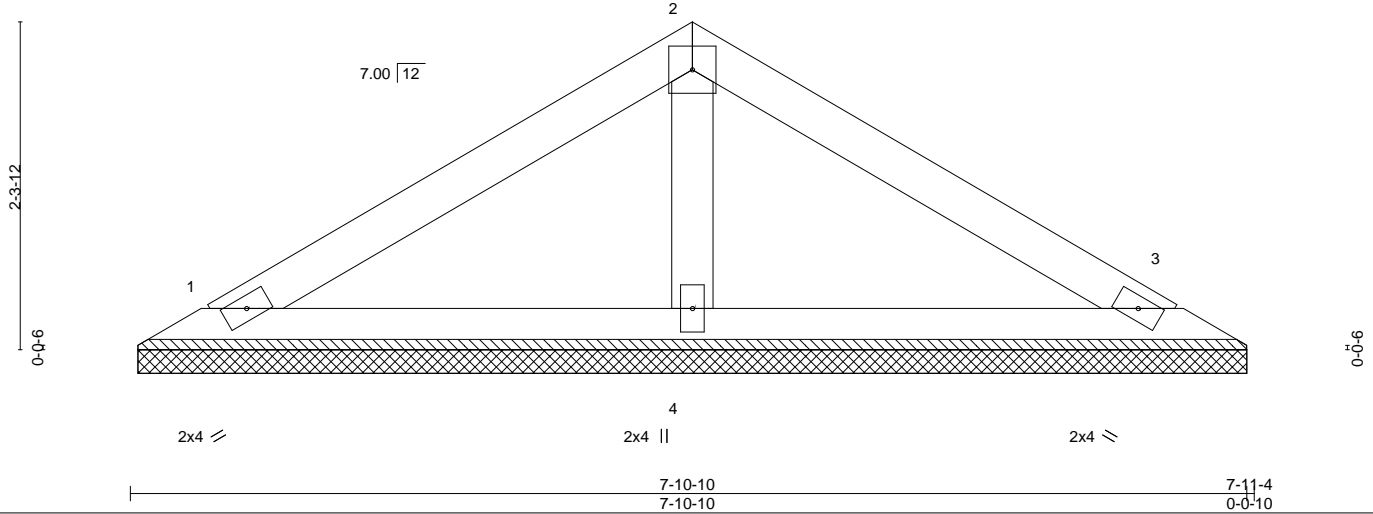
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:26 2024 Page 1

ID:2KOcXZExhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:16.3



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.16  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.09  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.02  | Horz(CT) | 0.00     | 3      | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-P |          |          |        |     | Weight: 26 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |          |          |        |     |               |          |

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

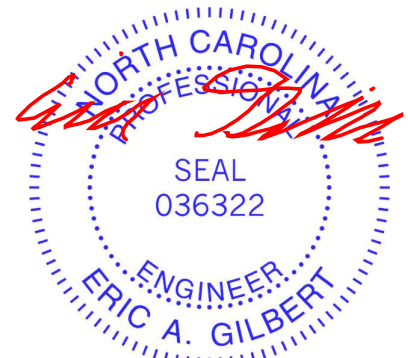
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=7-10-0, 3=7-10-0, 4=7-10-0  
 Max Horz 1=48(LC 9)  
 Max Uplift 1=25(LC 10), 3=30(LC 11)  
 Max Grav 1=143(LC 1), 3=143(LC 1), 4=258(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VB2 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260767 |
|-------------------|--------------|----------------------|----------|----------|--|

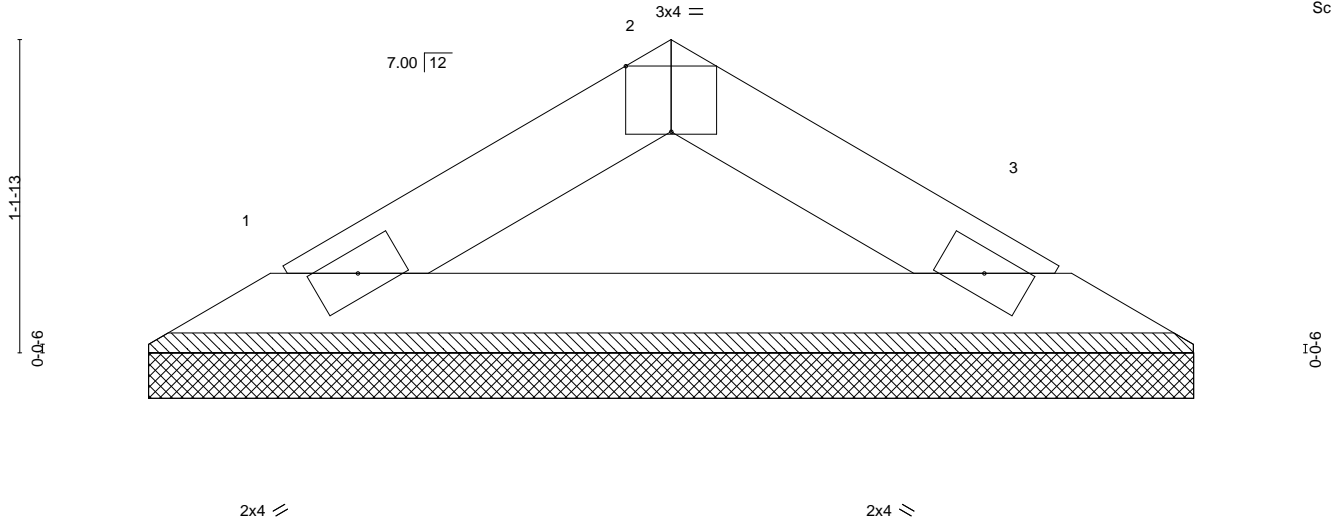
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:27 2024 Page 1

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Scale = 1:8.4



| Plate Offsets (X,Y)-- | [2:0-2-0,Edge]        |             |                                  |               |             |               |          |
|-----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|---------------|----------|
| <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 0.02     | Vert(LL) n/a - n/a 999           | MT20          | 244/190     |               |          |
| TCDL 10.0             | Lumber DOL 1.15       | BC 0.07     | Vert(CT) n/a - n/a 999           |               |             |               |          |
| BCLL 0.0 *            | Rep Stress Incr YES   | WB 0.00     | Horz(CT) 0.00 3 n/a n/a          |               |             |               |          |
| BCDL 10.0             | Code IRC2015/TPI2014  | Matrix-P    |                                  |               |             |               |          |
|                       |                       |             |                                  |               |             | Weight: 11 lb | FT = 20% |

| LUMBER-   |             | BRACING-  |  |
|-----------|-------------|-----------|--|
| TOP CHORD | 2x4 SP No.1 | TOP CHORD | Structural wood sheathing directly applied or 3-11-4 oc purlins. |
| BOT CHORD | 2x4 SP No.1 | BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing.             |

**REACTIONS.** (size) 1=3-10-0, 3=3-10-0  
 Max Horz 1=20(LC 7)  
 Max Uplift 1=9(LC 10), 3=9(LC 11)  
 Max Grav 1=113(LC 1), 3=113(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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|  |   |
|--|---|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>ENGINEERING BY</p> <p><b>TRENCO</b></p> <p>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|---|

|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VC1 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260768 |
|-------------------|--------------|----------------------|----------|----------|--|

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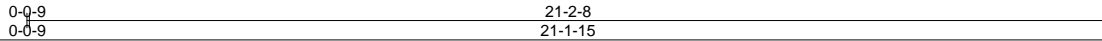
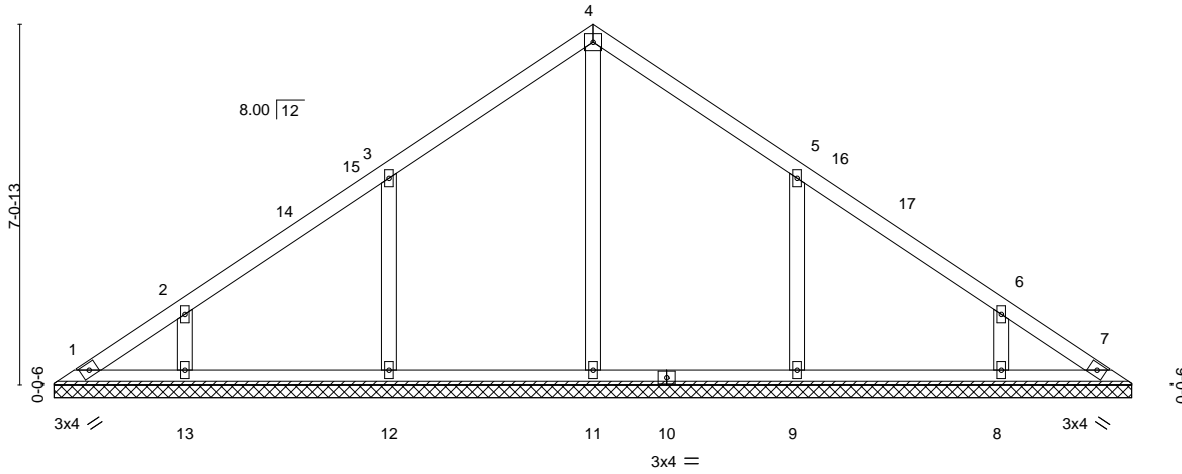
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:29 2024 Page 1

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4x4 =

Scale = 1:45.2



|                        |                                  |             |                                  |               |             |
|------------------------|----------------------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X, Y)-- | [5:0-0-0,0-0-0], [6:0-0-0,0-0-0] |             |                                  |               |             |
| <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 0.16     | Vert(LL) n/a - n/a 999           | MT20          | 244/190     |
| TCDL 10.0              | Lumber DOL 1.15                  | BC 0.19     | Vert(CT) n/a - n/a 999           |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES              | WB 0.14     | Horz(CT) 0.00 7 n/a n/a          |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014             | Matrix-S    |                                  | Weight: 92 lb | FT = 20%    |

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

**REACTIONS.** All bearings 21-1-6.  
 (lb) - Max Horz 1=162(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=113(LC 10), 9=113(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=446(LC 17), 12=461(LC 17), 13=277(LC 17), 9=461(LC 18), 8=277(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 3-12=-318/213, 5-9=-318/213

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 6-2-7, Exterior(2) 6-2-7 to 15-0-1, Interior(1) 15-0-1 to 16-3-12, Exterior(2) 16-3-12 to 20-8-9 zone:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) All plates are 2x4 MT20 unless otherwise indicated.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 13, 8 except (jt=lb) 12=113, 9=113.
  - 7) Non Standard bearing condition. Review required.



January 26, 2024

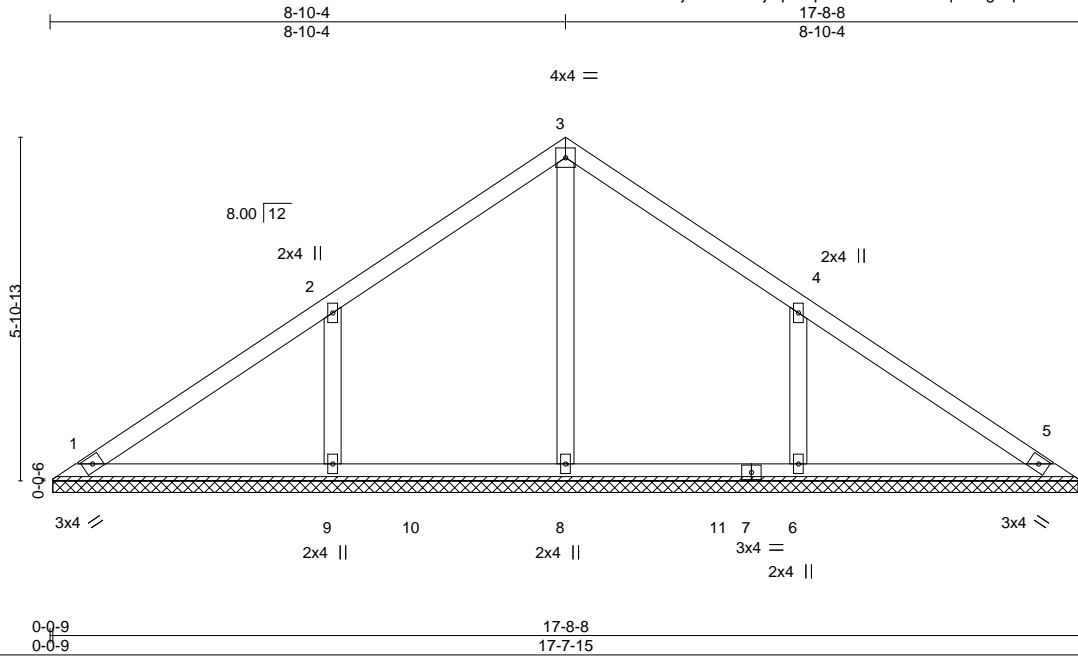
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|--|---|
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|--|---|

|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VC2 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260769 |
|-------------------|--------------|----------------------|----------|----------|--|

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Scale = 1:39.6

|                       |                 |                 |             |              |          |        |     |               |             |
|-----------------------|-----------------|-----------------|-------------|--------------|----------|--------|-----|---------------|-------------|
| Plate Offsets (X,Y)-- | [4:0-0-0,0-0-0] |                 |             |              |          |        |     |               |             |
| <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 0.18     | Vert(LL)     | n/a      | -      | n/a | MT20          | 244/190     |
| TCDL 10.0             | Lumber DOL      | 1.15            | BC 0.15     | Vert(CT)     | n/a      | -      | n/a |               |             |
| BCLL 0.0 *            | Rep Stress Incr | YES             | WB 0.09     | Horz(CT)     | 0.00     | 5      | n/a |               |             |
| BCDL 10.0             | Code            | IRC2015/TPI2014 | Matrix-S    |              |          |        |     | Weight: 72 lb | FT = 20%    |

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


**REACTIONS.** All bearings 17-7-6.  
 (lb) - Max Horz 1=134(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-130(LC 10), 6=-129(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=402(LC 17), 9=461(LC 17), 6=461(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-9=-356/249, 4-6=-357/249

- 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=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=130, 6=129.
  - 6) Non Standard bearing condition. Review required.



January 26, 2024

|  |  |
|--|--|
| <p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.</b></p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPH Quality Criteria and DSB-22</b> available from Truss Plate Institute (www.tpinst.org) and <b>BCSI Building Component Safety Information</b> available from the Structural Building Component Association (www.sbcacomponents.com)</p> | <p>ENGINEERING BY</p>  <p>A MiTek Affiliate</p> <p>818 Soundside Road<br/>Edenton, NC 27932</p> |
|--|--|

|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VC3 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260770 |
|-------------------|--------------|----------------------|----------|----------|--|

Comtech, Inc. Fayetteville, NC - 28314,

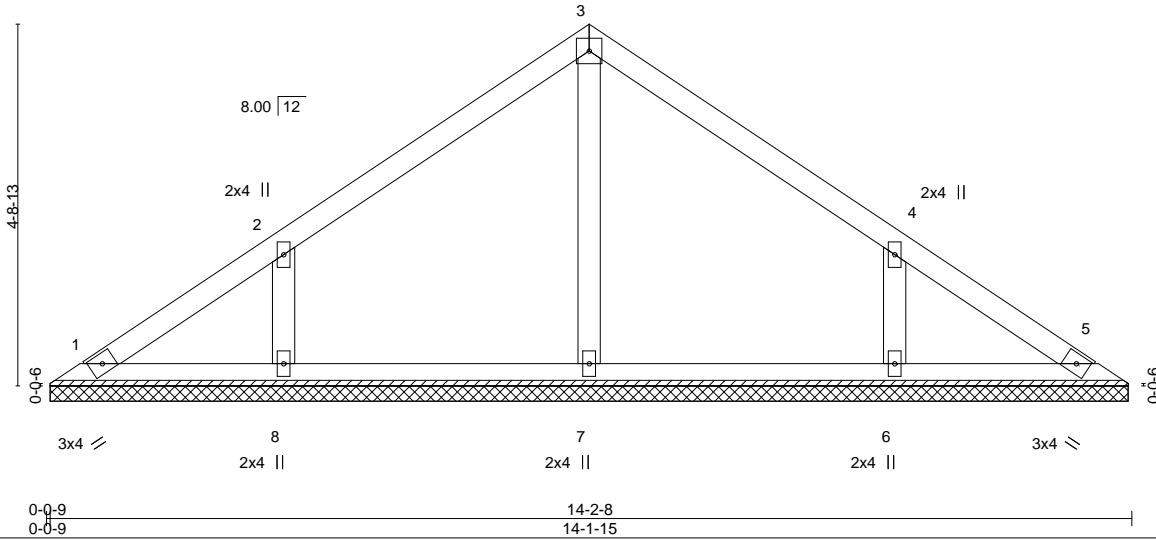
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:31 2024 Page 1

ID:2KOcXZExhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:30.2



|                        |                       |             |                                  |               |             |
|------------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X, Y)-- | [4:0-0-0,0-0-0]       |             |                                  |               |             |
| <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) n/a - n/a 999           | MT20          | 244/190     |
| TCDL 10.0              | Lumber DOL 1.15       | BC 0.09     | Vert(CT) n/a - n/a 999           |               |             |
| BCLL 0.0 *             | Rep Stress Incr YES   | WB 0.06     | Horz(CT) 0.00 5 n/a n/a          |               |             |
| BCDL 10.0              | Code IRC2015/TPI2014  | Matrix-S    |                                  | Weight: 55 lb | FT = 20%    |

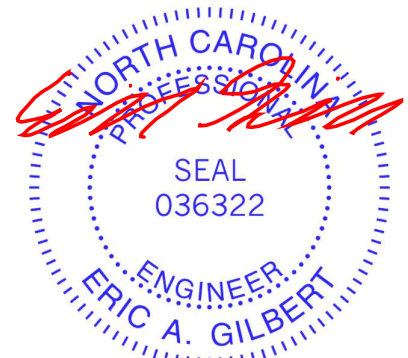
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

**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 14-1-6.  
 (lb) - Max Horz 1=106(LC 9)  
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-105(LC 10), 6=-104(LC 11)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=260(LC 1), 8=337(LC 17), 6=337(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-289/209, 4-6=-289/209

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; 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 except (jt=lb) 8=105, 6=104.
  - Non Standard bearing condition. Review required.



January 26, 2024

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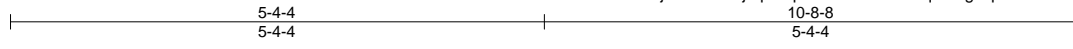
818 Soundside Road  
 Edenton, NC 27932

|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VC4 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260771 |
|-------------------|--------------|----------------------|----------|----------|--|

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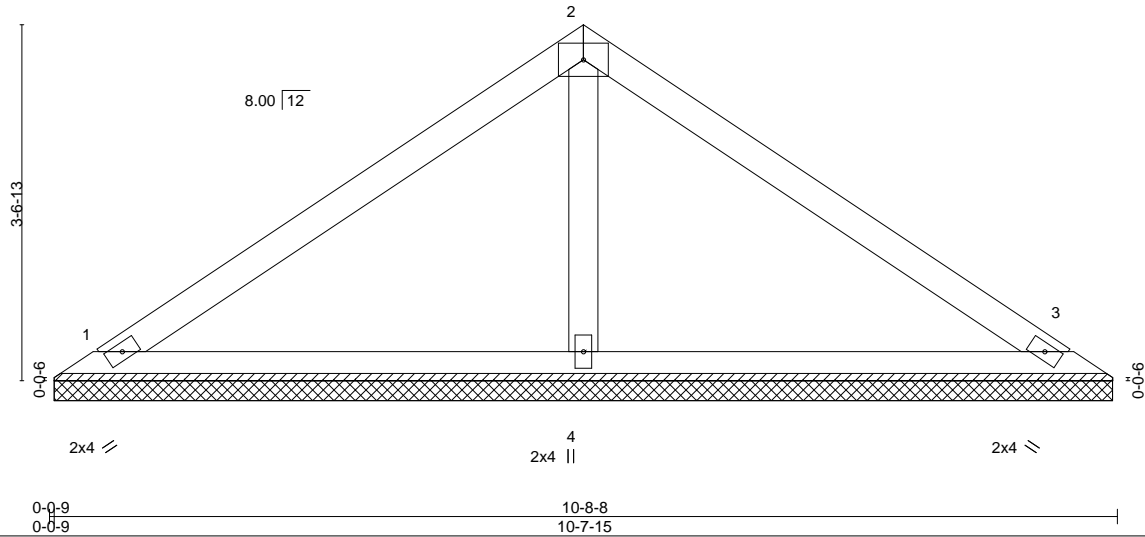
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:32 2024 Page 1

ID:2KOcXZExhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x6 =

Scale = 1:23.1



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.25  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.17  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.05  | Horz(CT) | 0.00     | 3      | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-S |          |          |        |     | Weight: 38 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |          |          |        |     |               |          |

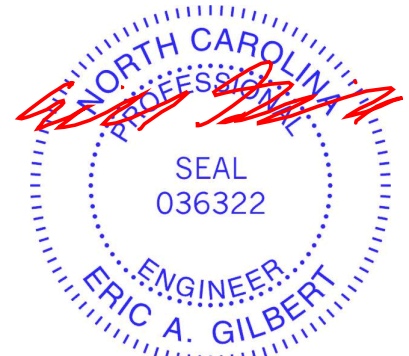
**LUMBER-**  
 TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP No.1  
 OTHERS 2x4 SP No.2

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

**REACTIONS.** (size) 1=10-7-6, 3=10-7-6, 4=10-7-6  
 Max Horz 1=78(LC 7)  
 Max Uplift 1=28(LC 10), 3=35(LC 11), 4=5(LC 10)  
 Max Grav 1=193(LC 1), 3=193(LC 1), 4=392(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
  - 6) Non Standard bearing condition. Review required.



January 26, 2024

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|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VC5 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260772 |
|-------------------|--------------|----------------------|----------|----------|--|

Comtech, Inc. Fayetteville, NC - 28314,

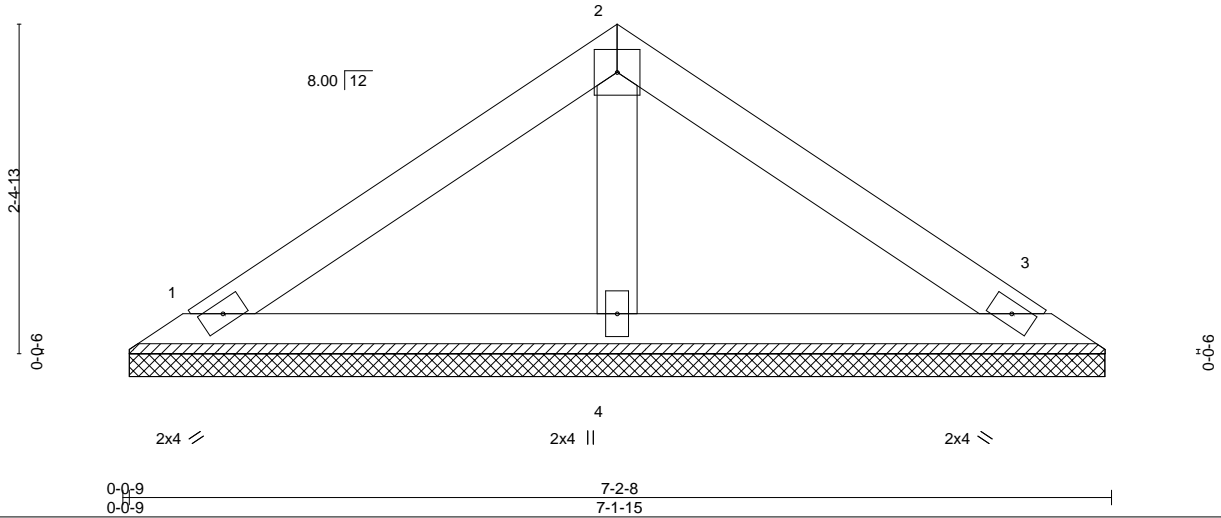
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:33 2024 Page 1

ID:2KOcXZExhjrAW8Zk1jzq7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:16.8



| LOADING (psf) | SPACING-             | CSI.     | DEFL.    | in (loc) | l/defl | L/d | PLATES        | GRIP     |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.13  | Vert(LL) | n/a      | -      | n/a | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.07  | Vert(CT) | n/a      | -      | n/a |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.02  | Horz(CT) | 0.00     | 3      | n/a |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-P |          |          |        |     | Weight: 24 lb | FT = 20% |
|               | Code IRC2015/TPI2014 |          |          |          |        |     |               |          |

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

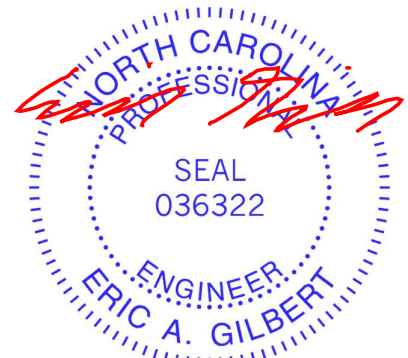
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=7-1-6, 3=7-1-6, 4=7-1-6  
 Max Horz 1=50(LC 9)  
 Max Uplift 1=24(LC 10), 3=29(LC 11)  
 Max Grav 1=135(LC 1), 3=135(LC 1), 4=227(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



January 26, 2024

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|                   |              |                      |          |          |  |
|-------------------|--------------|----------------------|----------|----------|--|
| Job<br>J0624-3320 | Truss<br>VC6 | Truss Type<br>VALLEY | Qty<br>1 | Ply<br>1 | Weaver/Lot 41 West Preserve/Harnett<br>163260773 |
|-------------------|--------------|----------------------|----------|----------|--|

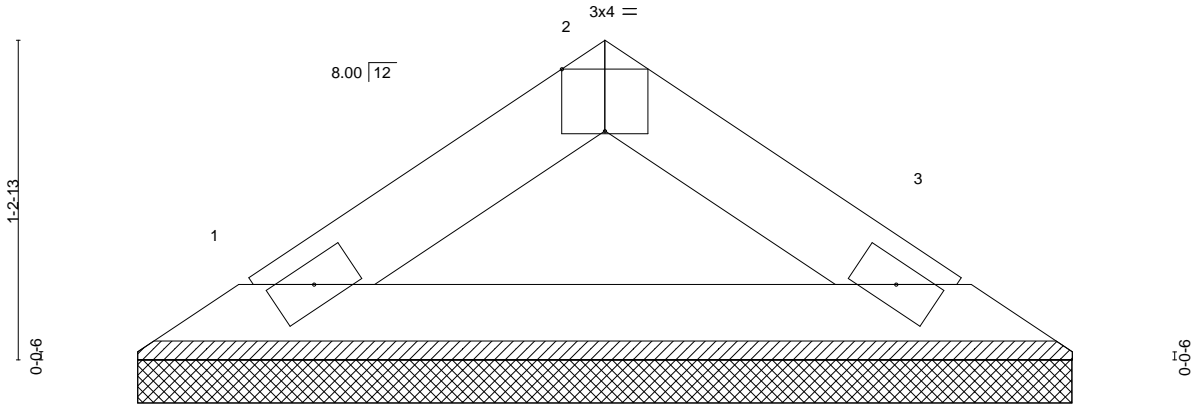
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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jan 25 15:39:34 2024 Page 1

ID:2KOcXZEhjrAW8Zk1jqz7zrqGJ-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:8.9



| LOADING (psf) | SPACING-             | CSI.     | DEFL.                   | PLATES        | GRIP     |
|---------------|----------------------|----------|-------------------------|---------------|----------|
| TCLL 20.0     | 2-0-0                | TC 0.02  | in (loc) l/defl L/d     | MT20          | 244/190  |
| TCDL 10.0     | Plate Grip DOL 1.15  | BC 0.06  | Vert(LL) n/a - n/a 999  |               |          |
| BCLL 0.0 *    | Lumber DOL 1.15      | WB 0.00  | Vert(CT) n/a - n/a 999  |               |          |
| BCDL 10.0     | Rep Stress Incr YES  | Matrix-P | Horz(CT) 0.00 3 n/a n/a |               |          |
|               | Code IRC2015/TPI2014 |          |                         | Weight: 10 lb | FT = 20% |

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

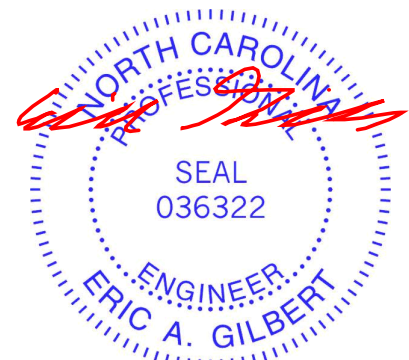
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-7-6, 3=3-7-6  
 Max Horz 1=22(LC 6)  
 Max Uplift 1=8(LC 10), 3=8(LC 11)  
 Max Grav 1=109(LC 1), 3=109(LC 1)

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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



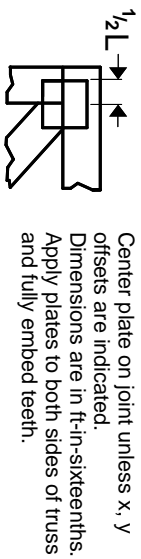
January 26, 2024

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

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

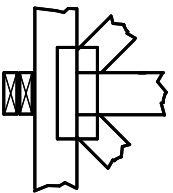
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

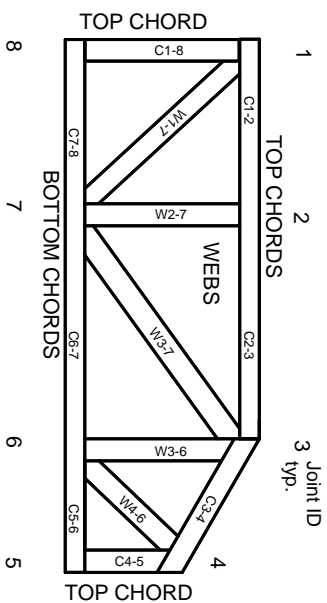


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



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

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

# Product Code Approvals

ICC-ES Reports:

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

# Design General Notes

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

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

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**MITek**

ENGINEERING BY  
**TRENGO**  
A MITek Affiliate

MITek Engineering Reference Sheet: MIL-7473 rev. 1/2/2023

# General Safety Notes

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

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