

RE: J0823-4525
 Lot 5 Turlington Acres

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Customer: Project Name: J0823-4525
 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 5 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|
| 1 | I59485622 | A1 | 7/12/2023 |
| 2 | I59485623 | A2 | 7/12/2023 |
| 3 | I59485624 | A3 | 7/12/2023 |
| 4 | I59485625 | A4 | 7/12/2023 |
| 5 | I59485626 | A6 | 7/12/2023 |

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.
 Truss Design Engineer's Name: Gilbert, Eric
 My license renewal date for the state of North Carolina is December 31, 2023.
 North Carolina COA: C-0844

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



July 12, 2023

| | | | | | |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|
| Job J0823-4525 | Truss A1 | Truss Type GABLE | Qty 2 | Ply 1 | Lot 5 Turlington Acres 159485622 |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|

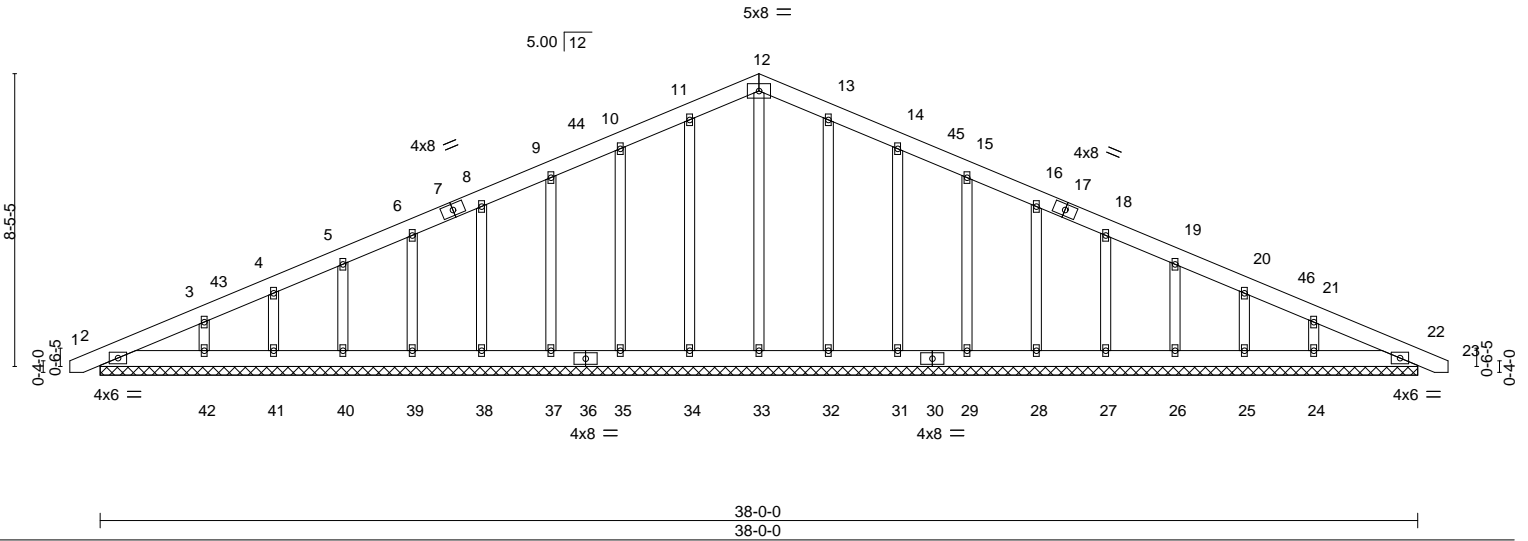
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jul 12 10:30:59 2023 Page 1

ID:6MOOCypZjwne7O2?rGKQJynMlx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

| | | | |
|---------|--------|--------|---------|
| -0-10-8 | 19-0-0 | 38-0-0 | 38-10-8 |
| 0-10-8 | 19-0-0 | 19-0-0 | 0-10-8 |

Scale = 1:66.5



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.05 | Vert(LL) | 0.00 | 22 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | 0.00 | 22 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.14 | Horz(CT) | 0.01 | 22 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | Weight: 292 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 38-0-0.
 (lb) - Max Horz 2=166(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24
 Max Grav All reactions 250 lb or less at joint(s) 2, 22, 33, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 10-11=-98/290, 11-12=-111/326, 12-13=-111/328, 13-14=-98/292

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-2 to 3-8-10, Exterior(2) 3-8-10 to 19-0-0, Corner(3) 19-0-0 to 23-4-13, Exterior(2) 23-4-13 to 38-8-2 zone:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 34, 35, 37, 38, 39, 40, 41, 42, 32, 31, 29, 28, 27, 26, 25, 24.



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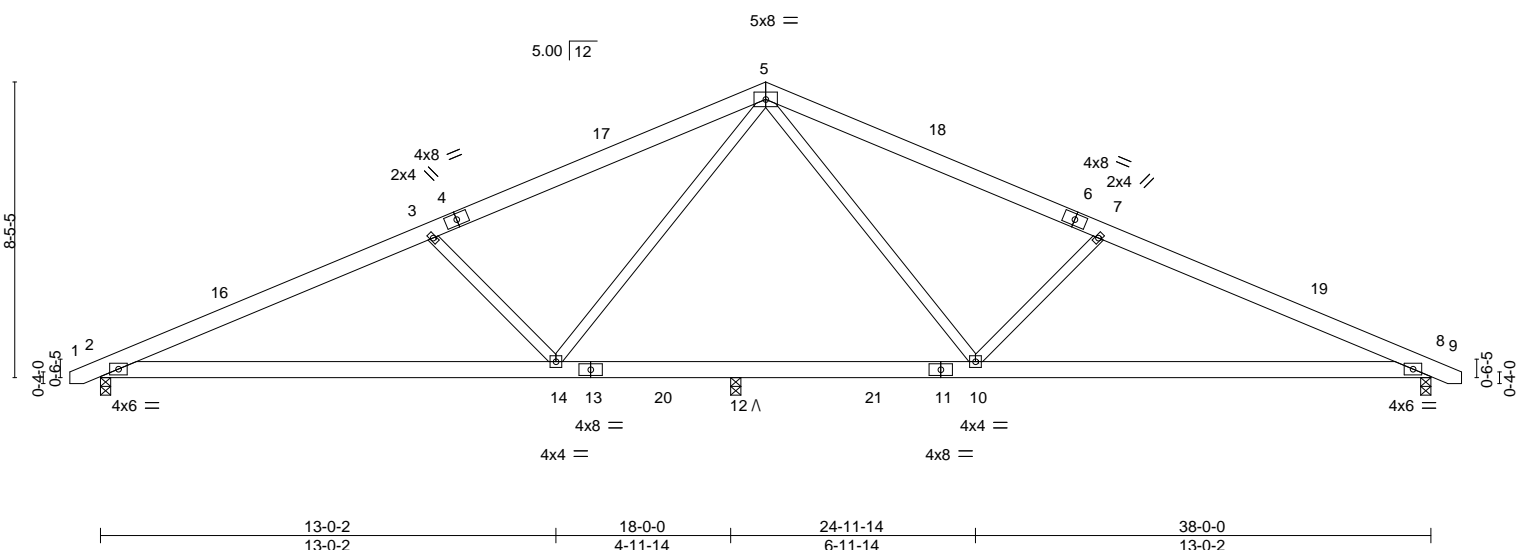
| | | | | | | |
|------------|-------|------------|-----|-----|------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 5 Turlington Acres | 159485623 |
| J0823-4525 | A2 | COMMON | 3 | 1 | | |

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| | | | | | |
|--------|-------|--------|--------|--------|---------|
| 0-10-8 | 9-6-0 | 19-0-0 | 28-6-0 | 38-0-0 | 38-10-8 |
| 0-10-8 | 9-6-0 | 9-6-0 | 9-6-0 | 9-6-0 | 0-10-8 |

Scale = 1:65.8



| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.42 | Vert(LL) | -0.21 | 2-14 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.65 | Vert(CT) | -0.50 | 2-14 | >433 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.31 | Horz(CT) | 0.07 | 8 | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Wind(LL) | 0.11 | 2-14 | >999 | | |
| | Code IRC2015/TPI2014 | | | | | | Weight: 233 lb | FT = 20% |

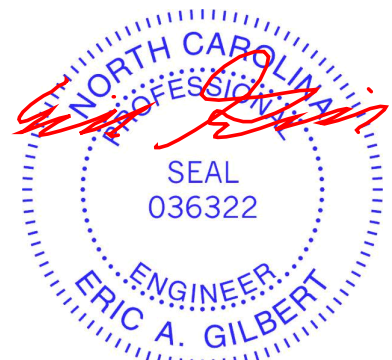
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-2-7 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 12=0-3-8
 Max Horz 2=98(LC 12)
 Max Uplift 2=-107(LC 12), 8=-109(LC 13), 12=REL
 Max Grav 2=1436(LC 1), 8=1447(LC 1), 12=447(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2719/667, 3-5=-2309/601, 5-7=-2342/601, 7-8=-2751/667
 BOT CHORD 2-14=-503/2442, 12-14=-214/1589, 10-12=-214/1589, 8-10=-511/2471
 WEBS 5-10=-113/813, 7-10=-638/334, 5-14=-113/773, 3-14=-640/334

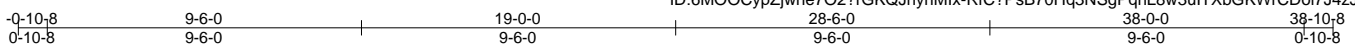
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 19-0-0, Exterior(2) 19-0-0 to 23-4-13, Interior(1) 23-4-13 to 38-8-2 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) except (jt=lb) 2=107, 8=109.
 - 6) "Λ" indicates Released bearing: allow for upward movement at joint(s) 12.



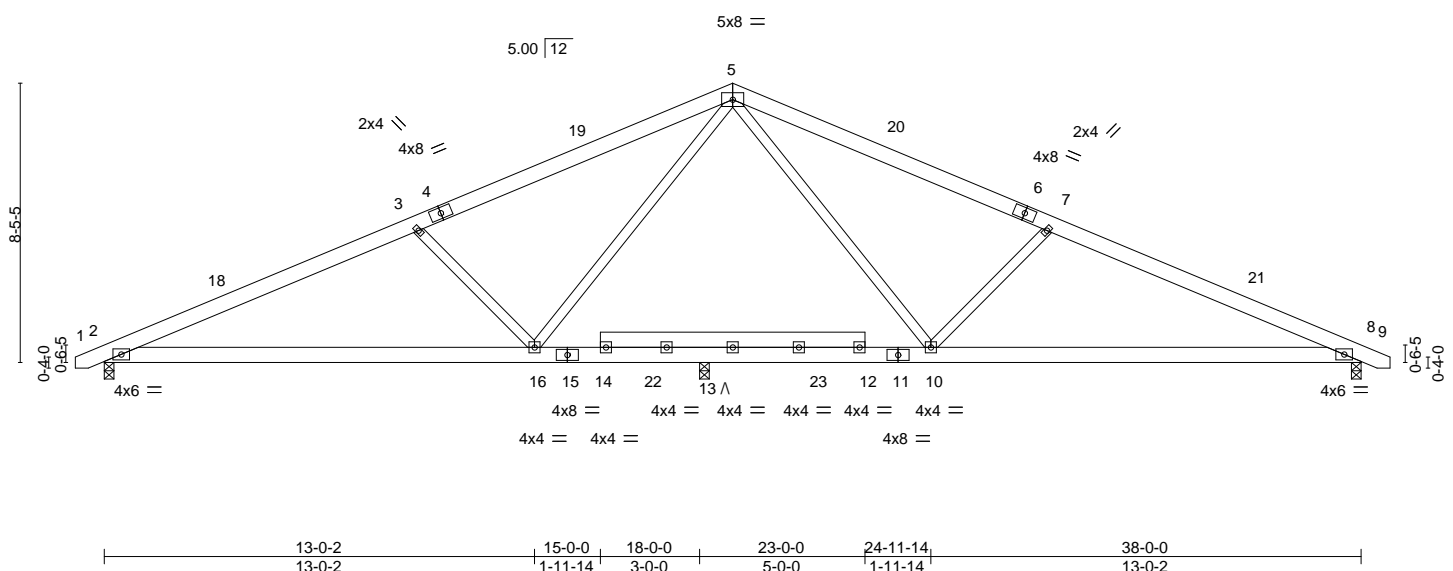
July 12, 2023

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|-------------------|-------------|----------------------|----------|----------|-------------------------------------|
| Job J0823-4525 | Truss A3 | Truss Type COMMON | Qty 7 | Ply 1 | Lot 5 Turlington Acres 159485624 |
|-------------------|-------------|----------------------|----------|----------|-------------------------------------|

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Scale = 1:69.7



| 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 0.42 | Vert(LL) | -0.21 2-16 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.62 | Vert(CT) | -0.48 2-16 | >451 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.32 | Horz(CT) | 0.05 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.10 2-16 | >999 | 240 | | |
| | | | | | | | | Weight: 252 lb | FT = 20% |

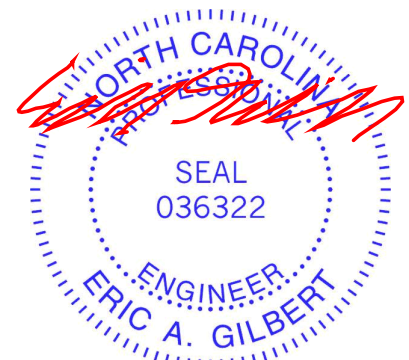
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
12-14: 2x6 SP No.1

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 13=0-3-8
Max Horz 2=98(LC 12)
Max Uplift 2=-81(LC 12), 8=-81(LC 13), 13=REL
Max Grav 2=1276(LC 1), 8=1309(LC 1), 13=872(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2316/488, 3-5=-1904/421, 5-7=-1996/414, 7-8=-2407/481
BOT CHORD 2-16=-339/2072, 13-16=-103/1376, 10-13=-102/1364, 8-10=-340/2155
WEBS 5-10=-19/725, 7-10=-642/339, 5-16=-34/608, 3-16=-644/338

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 19-0-0, Exterior(2) 19-0-0 to 23-4-13, Interior(1) 23-4-13 to 38-8-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 200.0lb AC unit load placed on the bottom chord, 19-0-0 from left end, supported at two points, 5-0-0 apart.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
 - "^" indicates Released bearing: allow for upward movement at joint(s) 13.



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

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|-------------------|-------------|----------------------|-----------|----------|-------------------------------------|
| Job J0823-4525 | Truss A4 | Truss Type COMMON | Qty 11 | Ply 1 | Lot 5 Turlington Acres 159485625 |
|-------------------|-------------|----------------------|-----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

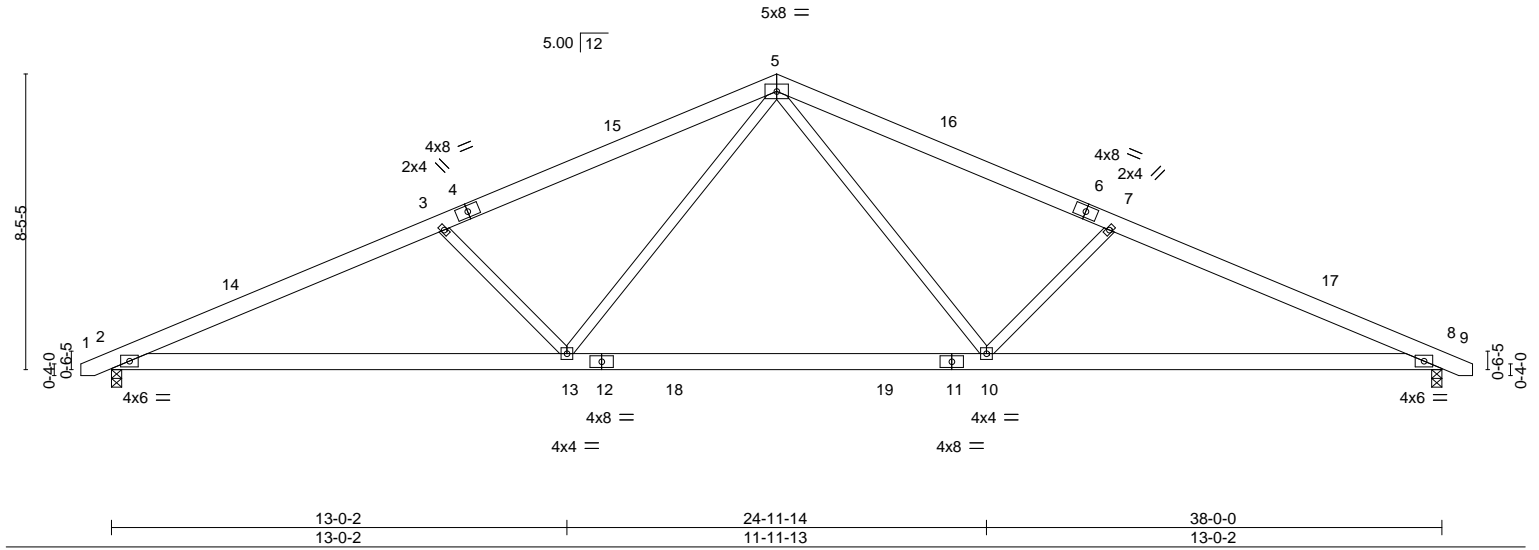
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jul 12 10:31:03 2023 Page 1

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Job Reference (optional)

| | | | | | |
|------------------|----------------|-----------------|-----------------|-----------------|-------------------|
| 0-10-8 0-10-8 | 9-6-0 9-6-0 | 19-0-0 9-6-0 | 28-6-0 9-6-0 | 38-0-0 9-6-0 | 38-10-8 0-10-8 |
|------------------|----------------|-----------------|-----------------|-----------------|-------------------|

Scale = 1:65.8



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.41 | Vert(LL) | -0.37 10-13 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.66 | Vert(CT) | -0.51 10-13 | >896 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.31 | Horz(CT) | 0.08 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.09 2-13 | >999 | 240 | | |
| | | | | | | | | Weight: 233 lb | FT = 20% |

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

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

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=-98(LC 17)
 Max Uplift 2=-107(LC 12), 8=-107(LC 13)
 Max Grav 2=1558(LC 1), 8=1558(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3064/667, 3-5=-2716/601, 5-7=-2716/601, 7-8=-3064/667
 BOT CHORD 2-13=-503/2757, 10-13=-214/1822, 8-10=-511/2757
 WEBS 5-10=-113/998, 7-10=-629/334, 5-13=-113/998, 3-13=-629/334

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 19-0-0, Exterior(2) 19-0-0 to 23-4-13, Interior(1) 23-4-13 to 38-8-2 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) except (jt=lb) 2=107, 8=107.



July 12, 2023

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)



818 Soundside Road
 Edenton, NC 27932

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|------------|-------|------------|-----|-----|------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 5 Turlington Acres | 159485626 |
| J0823-4525 | A6 | COMMON | 3 | 1 | | |

Comtech, Inc. Fayetteville, NC - 28314,

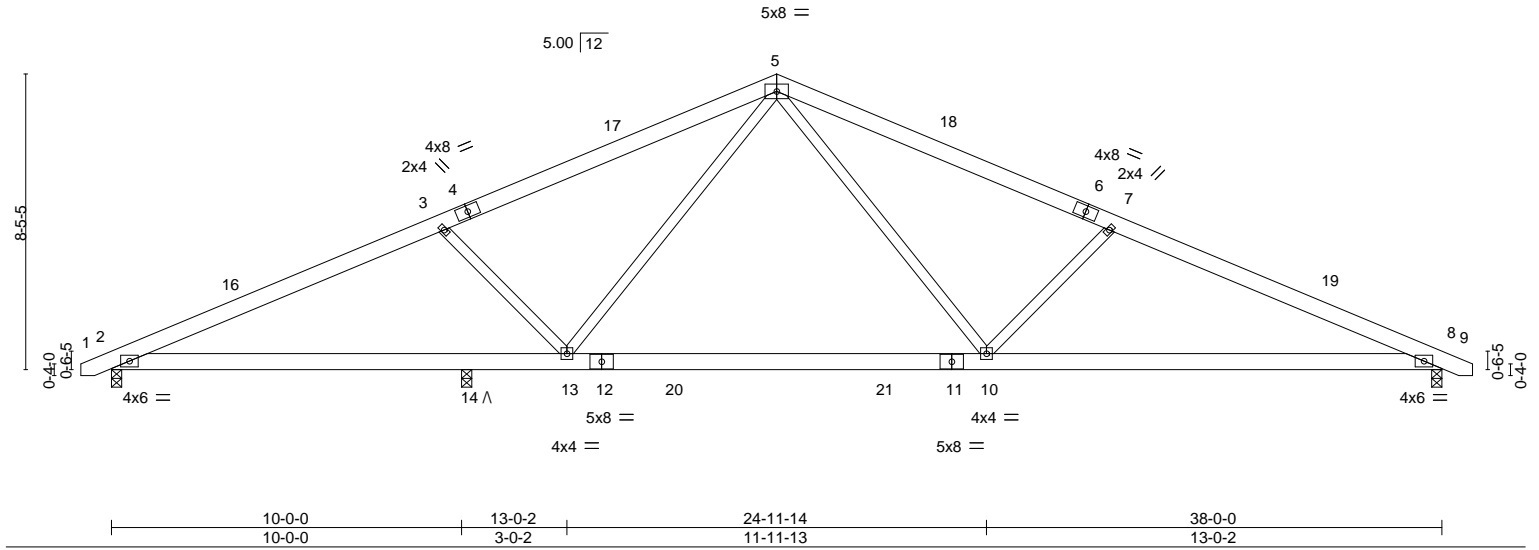
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Jul 12 10:31:04 2023 Page 1

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Job Reference (optional)

| | | | | | |
|--------|-------|--------|--------|--------|---------|
| 0-10-8 | 9-6-0 | 19-0-0 | 28-6-0 | 38-0-0 | 38-10-8 |
| 0-10-8 | 9-6-0 | 9-6-0 | 9-6-0 | 9-6-0 | 0-10-8 |

Scale = 1:65.8



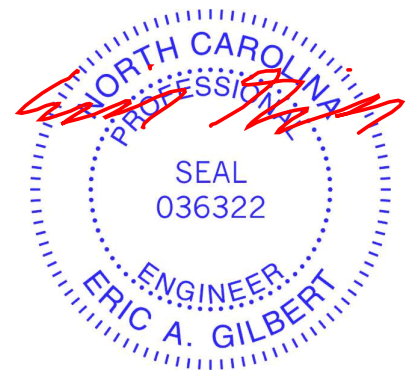
| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.40 | Vert(LL) | -0.38 10-13 | >884 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.74 | Vert(CT) | -0.58 10-13 | >570 | 240 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.31 | Horz(CT) | 0.07 8 | n/a | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Wind(LL) | 0.12 10-13 | >999 | 240 | | |
| | Code IRC2015/TPI2014 | | | | | | Weight: 233 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-3-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | |

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 14=0-3-8
 Max Horz 2=98(LC 16)
 Max Uplift 2=-135(LC 12), 8=-123(LC 13), 14=REL
 Max Grav 2=1251(LC 2), 8=1435(LC 1), 14=482(LC 3)

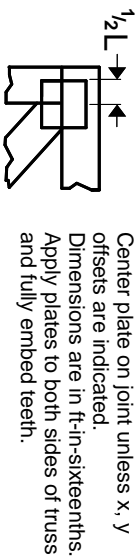
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2562/667, 3-5=-2215/602, 5-7=-2507/601, 7-8=-2840/667
 BOT CHORD 2-14=-502/2281, 13-14=-502/2281, 10-13=-215/1599, 8-10=-511/2558
 WEBS 5-10=-113/1036, 7-10=-629/334, 5-13=-113/659, 3-13=-615/333

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-2 to 3-8-10, Interior(1) 3-8-10 to 19-0-0, Exterior(2) 19-0-0 to 23-4-13, Interior(1) 23-4-13 to 38-8-2 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) except (jt=lb) 2=135, 8=123.
 - 6) "Λ" indicates Released bearing: allow for upward movement at joint(s) 14.

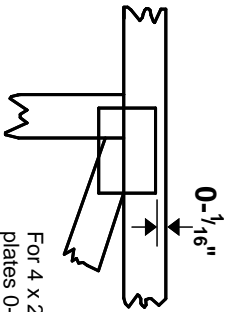


Symbols

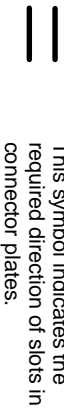
PLATE LOCATION AND ORIENTATION



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

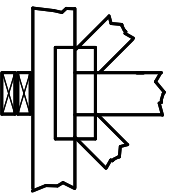
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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.

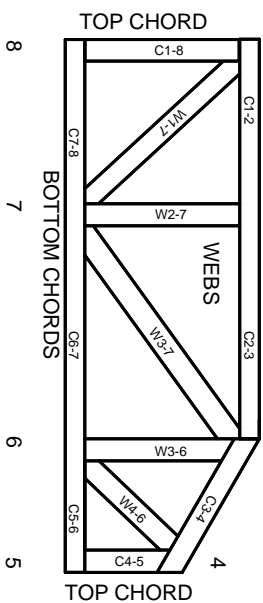
Industry Standards:

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



1 TOP CHORDS
2 Joint ID
3 typ.



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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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.

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