

RE: J0624-3359
 Lot 37 Cottlestone Estates

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Customer: Project Name: J0624-3359
 Lot/Block: Model:
 Address: Subdivision:
 City: State:

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

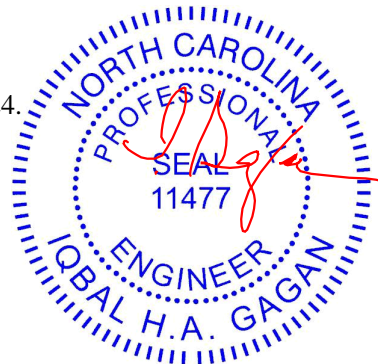
Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
 Wind Code: ASCE 7-16 Wind Speed: 130 mph
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 30 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date | No. | Seal# | Truss Name | Date |
|-----|-----------|------------|----------|-----|-----------|------------|----------|
| 1 | I66077577 | A1 | 6/6/2024 | 21 | I66077597 | VB5 | 6/6/2024 |
| 2 | I66077578 | A1GE | 6/6/2024 | 22 | I66077598 | VB6 | 6/6/2024 |
| 3 | I66077579 | A1GRD | 6/6/2024 | 23 | I66077599 | VB7 | 6/6/2024 |
| 4 | I66077580 | A2 | 6/6/2024 | 24 | I66077600 | VB8 | 6/6/2024 |
| 5 | I66077581 | A2GRD | 6/6/2024 | 25 | I66077601 | VB9 | 6/6/2024 |
| 6 | I66077582 | A3 | 6/6/2024 | 26 | I66077602 | VC1GE | 6/6/2024 |
| 7 | I66077583 | B1 | 6/6/2024 | 27 | I66077603 | VC2 | 6/6/2024 |
| 8 | I66077584 | B1GE | 6/6/2024 | 28 | I66077604 | VC3 | 6/6/2024 |
| 9 | I66077585 | VA1GE | 6/6/2024 | 29 | I66077605 | VC4 | 6/6/2024 |
| 10 | I66077586 | VA2 | 6/6/2024 | 30 | I66077606 | VC5 | 6/6/2024 |
| 11 | I66077587 | VA3 | 6/6/2024 | | | | |
| 12 | I66077588 | VA4 | 6/6/2024 | | | | |
| 13 | I66077589 | VA5 | 6/6/2024 | | | | |
| 14 | I66077590 | VA6 | 6/6/2024 | | | | |
| 15 | I66077591 | VA7 | 6/6/2024 | | | | |
| 16 | I66077592 | VA8 | 6/6/2024 | | | | |
| 17 | I66077593 | VB1 | 6/6/2024 | | | | |
| 18 | I66077594 | VB2 | 6/6/2024 | | | | |
| 19 | I66077595 | VB3 | 6/6/2024 | | | | |
| 20 | I66077596 | VB4 | 6/6/2024 | | | | |

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: Gagan, Iqbal
 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.

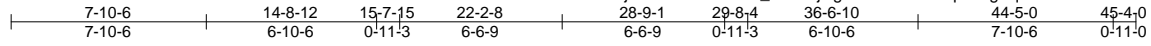


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|-------------------|-------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss A1 | Truss Type ATTIC | Qty 9 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077577 |
|-------------------|-------------|---------------------|----------|----------|---|-----------|

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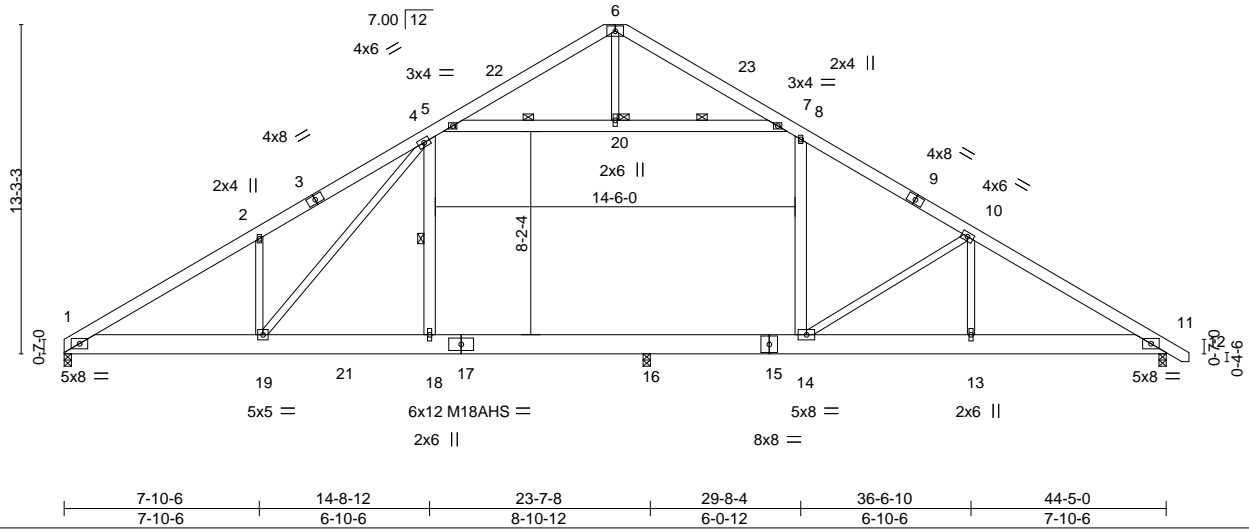
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:21 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



5x8 =

Scale = 1:92.9



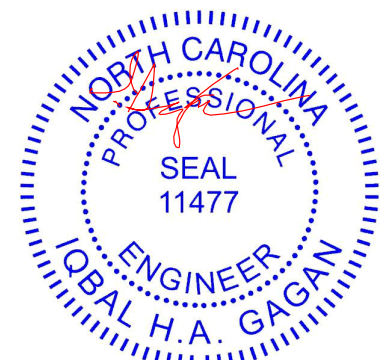
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|-------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.39 | Vert(LL) | -0.40 18-19 | >693 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.77 | Vert(CT) | -0.58 18-19 | >484 | 240 | M18AHS | 186/179 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.96 | Horz(CT) | 0.06 11 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | Wind(LL) | 0.23 18-19 | >999 | 240 | | |
| | | | | | | | | Weight: 411 lb | FT = 20% |

| LUMBER- | BRACING- |
|----------------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 3-8-9 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 *Except* | WEBS 1 Row at midpt 5-20, 7-20, 4-18 |
| 5-7,4-18,8-14: 2x6 SP No.1 | JOINTS 1 Brace at Jt(s): 20 |

REACTIONS. (size) 1=0-3-8, 11=0-3-8, 16=0-3-8
 Max Horz 1=317(LC 8)
 Max Grav 1=2210(LC 20), 11=2056(LC 21), 16=1385(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3848/168, 2-4=-3944/353, 4-5=-2355/244, 5-6=-640/109, 6-7=-650/107,
 7-8=-2426/251, 8-10=-2987/194, 10-11=-3420/212
 BOT CHORD 1-19=-33/3462, 18-19=0/2560, 16-18=0/2560, 14-16=0/2560, 13-14=-51/2846,
 11-13=-51/2846
 WEBS 5-20=-2076/234, 7-20=-2076/234, 4-18=-211/366, 8-14=-64/694, 2-19=-577/285,
 10-13=-118/433, 4-19=-263/1439, 10-14=-875/273

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are MT20 plates 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) Ceiling dead load (10.0 psf) on member(s) 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s) 4-18, 8-14
 - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18, 14-16
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Attic room checked for L/360 deflection.



June 6, 2024

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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TRENCO
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 Edenton, NC 27932

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|-------------------|---------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss A1GE | Truss Type GABLE | Qty 2 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077578 |
|-------------------|---------------|---------------------|----------|----------|---|-----------|

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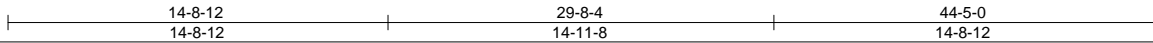
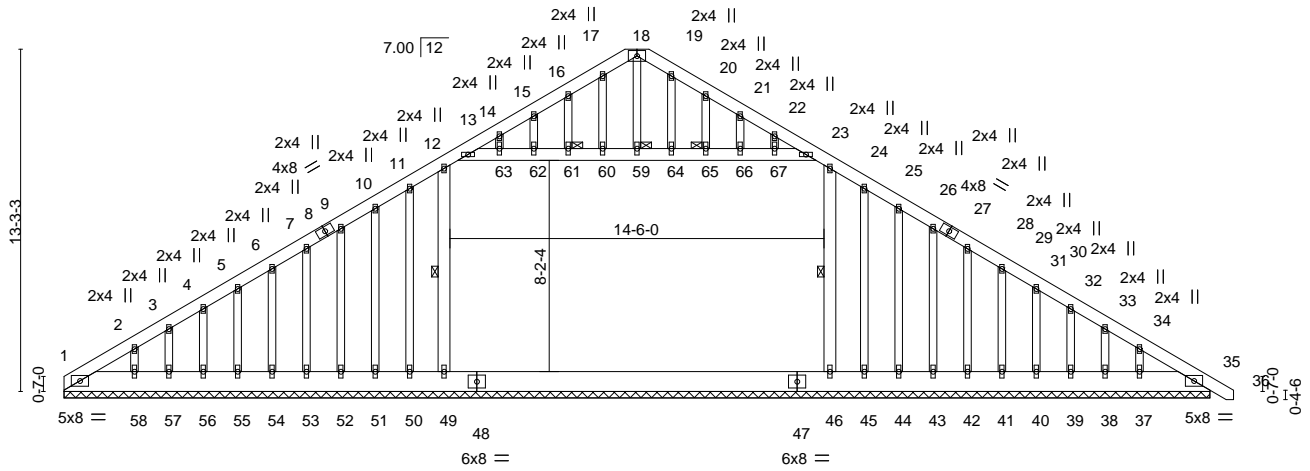
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:22 2024 Page 1

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5x8 =

Scale = 1:89.3



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|----------------|-------------|
| 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 0.18 | Vert(LL) | 0.00 | 35 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.43 | Vert(CT) | 0.00 | 35 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.22 | Horz(CT) | 0.01 | 35 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 502 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x10 SP No.1
 WEBS 2x6 SP No.1 *Except*
 18-59: 2x4 SP No.2
 OTHERS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 12-49, 24-46
 JOINTS 1 Brace at Jt(s): 59, 61, 65

REACTIONS.

All bearings 44-5-0.
 (lb) - Max Horz 1=397(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 35, 52, 53, 54, 55, 56, 57, 58, 43, 42, 41, 40, 39, 38, 37 except 50=1680(LC 18), 45=1680(LC 18)
 Max Grav All reactions 250 lb or less at joint(s) 52, 53, 54, 55, 56, 57, 43, 42, 41, 40, 39, 38 except 1=315(LC 21), 49=2390(LC 20), 46=2364(LC 18), 35=302(LC 20), 51=513(LC 18), 58=277(LC 20), 44=513(LC 18), 37=266(LC 21)

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

TOP CHORD 1-2=-502/177, 2-3=-485/167, 3-4=-471/167, 4-5=-462/164, 5-6=-453/187, 6-7=-444/211, 7-9=-436/234, 9-10=-428/259, 10-11=-404/286, 11-12=-354/308, 12-13=-540/300, 13-14=-729/125, 14-15=-680/142, 15-16=-657/173, 16-17=-642/205, 17-18=-610/234, 18-19=-610/234, 19-20=-642/205, 20-21=-657/173, 21-22=-680/142, 22-23=-729/125, 23-24=-534/300, 24-25=-308/252, 25-26=-336/236, 26-27=-337/198, 27-29=-345/157, 29-30=-352/128, 30-31=-361/104, 31-32=-370/80, 32-33=-379/56, 33-34=-392/49, 34-35=-413/59
BOT CHORD 1-58=-41/347, 57-58=-41/347, 56-57=-41/347, 55-56=-41/347, 54-55=-41/347, 53-54=-41/347, 52-53=-41/347, 51-52=-41/347, 50-51=-41/347, 49-50=-41/347, 46-49=-41/347, 45-46=-41/347, 44-45=-41/347, 43-44=-41/347, 42-43=-41/347, 41-42=-41/347, 40-41=-41/347, 39-40=-41/347, 38-39=-41/347, 37-38=-41/347, 35-37=-41/347
WEBS 13-63=0/335, 62-63=0/335, 61-62=0/335, 60-61=0/335, 59-60=0/335, 59-64=0/335, 64-65=0/335, 65-66=0/335, 66-67=0/335, 23-67=0/335, 12-49=-789/78, 24-46=-737/31, 18-59=-114/336

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-0-0 to 4-4-13, Exterior(2N) 4-4-13 to 22-2-8, Corner(3R) 22-2-8 to 26-7-5, Exterior(2N) 26-7-5 to 45-2-5 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 2x6 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 1-4-0 oc.



June 6, 2024

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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 Edenton, NC 27932

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|------------|-------|------------|-----|-----|----------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 37 Cottlestone Estates | I66077578 |
| J0624-3359 | A1GE | GABLE | 2 | 1 | Job Reference (optional) | |

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:22 2024 Page 2
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NOTES-

- 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, with BCDL = 10.0psf.
- 9) Ceiling dead load (10.0 psf) on member(s). 12-13, 23-24, 13-63, 62-63, 61-62, 60-61, 59-60, 59-64, 64-65, 65-66, 66-67, 23-67; Wall dead load (5.0psf) on member(s).12-49, 24-46
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 35, 52, 53, 54, 55, 56, 57, 58, 43, 42, 41, 40, 39, 38, 37 except (jt=lb) 50=1680, 45=1680.
- 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 12) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 13) Attic room checked for L/360 deflection.



June 6, 2024

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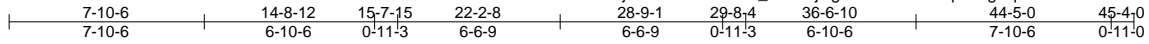
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|-------------------|----------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss A1GRD | Truss Type ATTIC | Qty 1 | Ply 2 | Lot 37 Cottleston Estates Job Reference (optional) | 166077579 |
|-------------------|----------------|---------------------|----------|----------|---|-----------|

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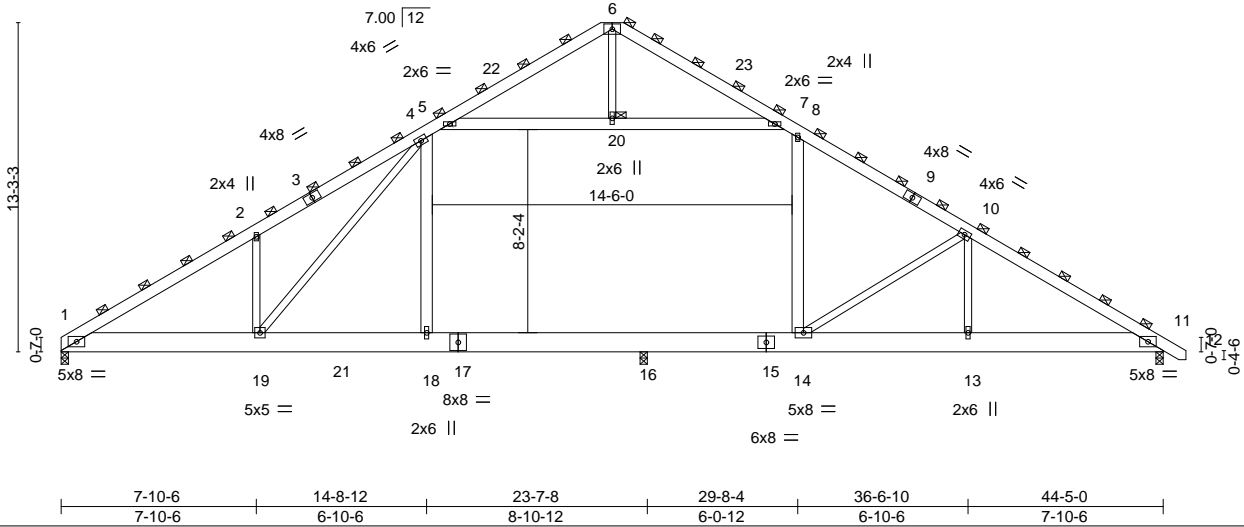
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:23 2024 Page 1

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5x8 =

Scale = 1:92.9



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|-------------|--------|-----|----------------|-------------|
| LOADING (psf) | SPACING- | 3-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.33 | Vert(LL) | -0.30 18-19 | >924 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.64 | Vert(CT) | -0.43 18-19 | >646 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.31 | Horz(CT) | 0.05 11 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | Wind(LL) | 0.18 18 | >999 | 240 | Weight: 822 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x10 SP No.1
 WEBS 2x4 SP No.2 *Except*
 5-7,4-18,8-14: 2x6 SP No.1

BRACING-

TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
 (Switched from sheeted: Spacing > 2-8-0).
 Rigid ceiling directly applied or 10-0-0 oc bracing.
 BOT CHORD
 JOINTS 1 Brace at Jt(s): 6, 20

REACTIONS.

(size) 1=0-3-8, 11=0-3-8, 16=0-3-8
 Max Horz 1=-476(LC 10)
 Max Grav 1=3315(LC 20), 11=3084(LC 21), 16=2077(LC 21)

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

TOP CHORD 1-2=-5772/252, 2-4=-5915/529, 4-5=-3533/366, 5-6=-960/163, 6-7=-974/160,
 7-8=-3639/376, 8-10=-4481/291, 10-11=-5129/319
 BOT CHORD 1-19=-49/5193, 18-19=0/3840, 16-18=0/3840, 14-16=0/3840, 13-14=-77/4269,
 11-13=-77/4269
 WEBS 5-20=-3115/352, 7-20=-3115/352, 4-18=-316/549, 8-14=-97/1041, 2-19=-865/427,
 10-13=-176/650, 4-19=-394/2158, 10-14=-1312/410, 6-20=0/270

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: 2x6 - 2 rows staggered at 0-9-0 oc, 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 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.
- Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s). 4-18, 8-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18, 14-16
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



June 6, 2024

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|-------------------|-------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss A2 | Truss Type ATTIC | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077580 |
|-------------------|-------------|---------------------|----------|----------|---|-----------|

Comtech, Inc. Fayetteville, NC - 28314,

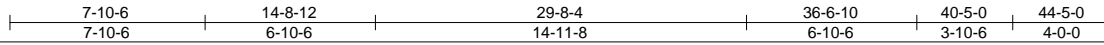
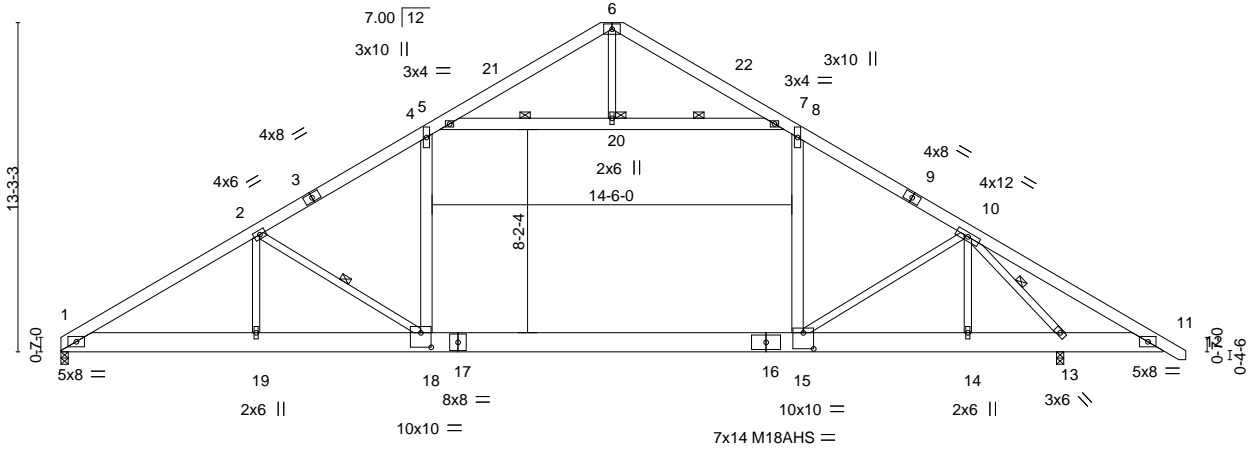
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:23 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



5x8 =

Scale = 1:92.9



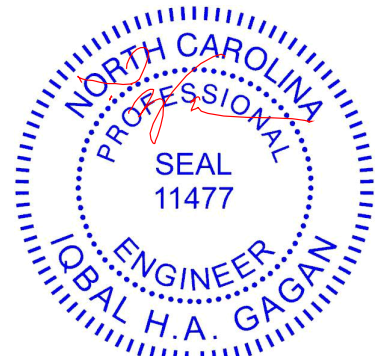
| | | | | | |
|-----------------------|-------------------------------------|-------------|----------------------------------|---------------|-------------------------|
| Plate Offsets (X,Y)-- | [15:0-5-0,0-7-12], [18:0-5-0,0-7-0] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.27 | Vert(LL) -0.33 15-18 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.57 | Vert(CT) -0.59 15-18 >823 240 | M18AHS | 186/179 |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.40 | Horz(CT) 0.05 13 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | Wind(LL) 0.23 18 >999 240 | | Weight: 415 lb FT = 20% |

| | |
|------------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied or 5-1-8 oc purlins. |
| BOT CHORD 2x10 SP 2400F 2.0E | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* | WEBS 1 Row at midpt 5-20, 7-20, 2-18, 10-13 |
| 5-7,4-18,8-15: 2x6 SP No.1 | JOINTS 1 Brace at Jt(s): 20 |

| | |
|-------------------|--|
| REACTIONS. | (size) 1=0-3-8, 13=0-3-8 |
| | Max Horz 1=-317(LC 10) |
| | Max Grav 1=2260(LC 20), 13=2712(LC 21) |

| | |
|----------------|---|
| FORCES. | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD | 1-2=-4030/13, 2-4=-3429/0, 4-5=-2694/60, 5-6=-629/113, 6-7=-661/117, 7-8=-2752/56, 8-10=-3414/0, 10-11=-314/206 |
| BOT CHORD | 1-19=0/3625, 18-19=0/3625, 15-18=0/2929, 14-15=0/1643, 13-14=0/1643, 11-13=-80/367 |
| WEBS | 5-20=-2448/6, 7-20=-2448/6, 4-18=0/1067, 8-15=0/943, 2-19=-77/403, 10-14=-1113/96, 2-18=-929/287, 10-15=0/1611, 10-13=-2446/157 |

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 zone; cantilever right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are MT20 plates 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.
 - 6) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s).4-18, 8-15
 - 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 15-18
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - 9) Attic room checked for L/360 deflection.



June 6, 2024

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 J0624-3359 | Truss A2GRD | Truss Type ATTIC | Qty 1 | Ply 2 | Lot 37 Cottleston Estates Job Reference (optional) | 166077581 |
|-------------------|----------------|---------------------|----------|----------|---|-----------|

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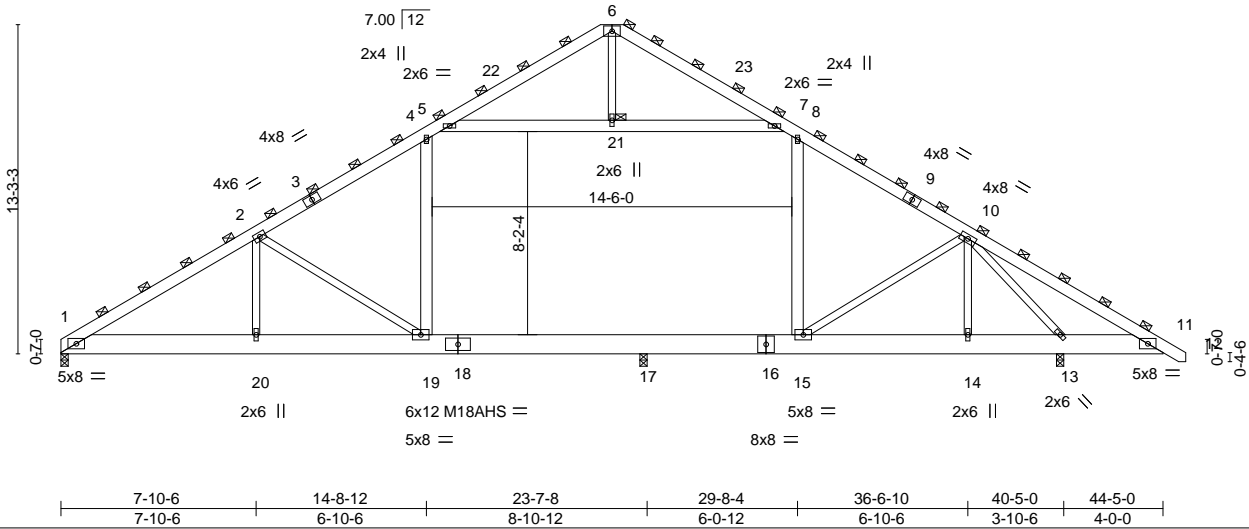
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:24 2024 Page 1

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5x8 =

Scale = 1:92.9



| LOADING (psf) | SPACING- | 3-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.36 | Vert(LL) | -0.28 | 19 | >983 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.77 | Vert(CT) | -0.51 | 19-20 | >546 | M18AHS | 186/179 |
| BCLL 0.0 * | Rep Stress Incr | NO | WB 0.40 | Horz(CT) | 0.03 | 13 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | Wind(LL) | 0.21 | 19 | >999 | | |
| | | | | | | | | Weight: 830 lb | FT = 20% |

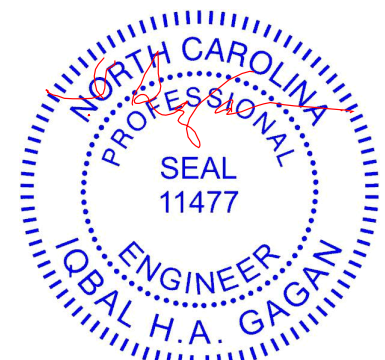
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x10 SP No.1
 WEBS 2x4 SP No.2 *Except*
 5-7,4-19,8-15: 2x6 SP No.1

BRACING-
 TOP CHORD 2-0-0 oc purlins (6-0-0 max.)
 (Switched from sheeted: Spacing > 2-8-0).
 Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 6-0-0 oc bracing: 11-13.
 JOINTS 1 Brace at Jt(s): 6, 21

REACTIONS. (size) 1=0-3-8, 13=0-3-8, 17=0-3-8
 Max Horz 1=-476(LC 10)
 Max Grav 1=2697(LC 20), 13=3116(LC 1), 17=1835(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-4825/243, 2-4=-3386/212, 4-5=-2756/316, 5-6=-959/164, 6-7=-1011/167,
 7-8=-2890/315, 8-10=-3431/202, 10-11=-446/466
 BOT CHORD 1-20=-32/4382, 19-20=-32/4382, 17-19=0/2957, 15-17=0/2957, 14-15=0/1759,
 13-14=0/1759, 11-13=-258/529
 WEBS 5-21=-2192/278, 7-21=-2192/278, 4-19=0/644, 8-15=-149/507, 2-20=0/862,
 10-14=-937/269, 2-19=-1706/349, 10-15=-126/1511, 6-21=0/266, 10-13=-2933/397

- 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: 2x6 - 2 rows staggered at 0-9-0 oc, 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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; 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.
 - Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-21, 7-21; Wall dead load (5.0psf) on member(s).4-19, 8-15
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 17-19, 15-17
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.



June 6, 2024

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/TPI 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)

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| | | | | | | |
|-------------------|-------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss A3 | Truss Type ATTIC | Qty 7 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077582 |
|-------------------|-------------|---------------------|----------|----------|---|-----------|

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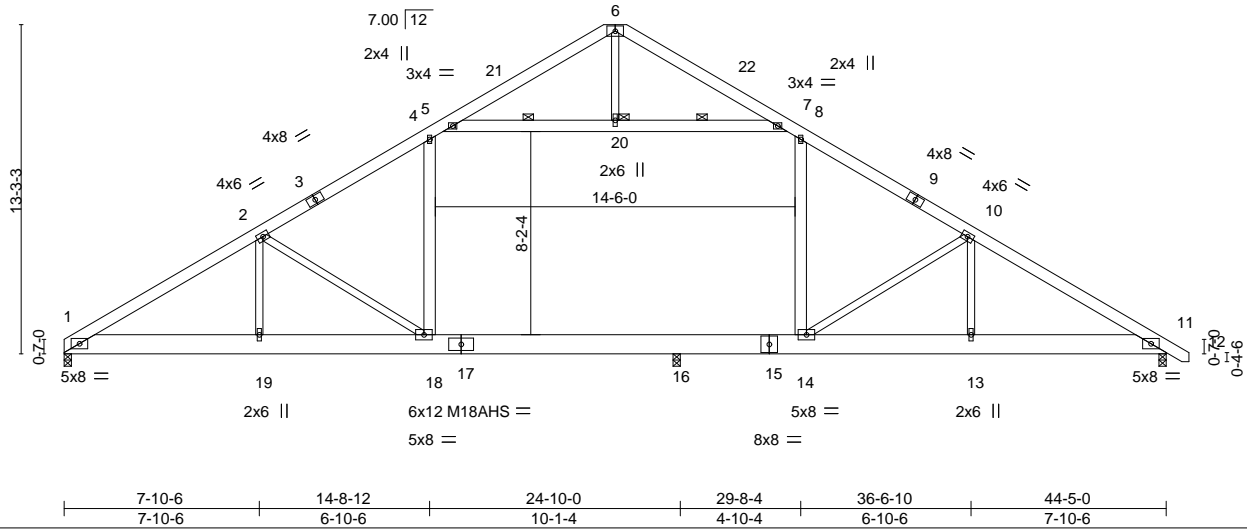
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:25 2024 Page 1

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5x8 =

Scale = 1:92.9



| 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 0.40 | Vert(LL) | -0.35 16-18 | >852 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.76 | Vert(CT) | -0.56 18 | >523 | 240 | M18AHS | 186/179 |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 1.00 | Horz(CT) | 0.06 11 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | Wind(LL) | 0.21 18 | >999 | 240 | | |
| | | | | | | | | Weight: 407 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x10 SP No.1
 WEBS 2x4 SP No.2 *Except*
 5-7,4-18,8-14: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 5-20, 7-20
 JOINTS 1 Brace at Jt(s): 20

REACTIONS.

(size) 1=0-3-8, 11=0-3-8, 16=0-3-8
 Max Horz 1=317(LC 10)
 Max Grav 1=2043(LC 20), 11=1836(LC 20), 16=1312(LC 21)

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

TOP CHORD 1-2=-3634/145, 2-4=-2856/136, 4-5=-2317/212, 5-6=-637/111, 6-7=-654/108,
 7-8=-2391/224, 8-10=-2937/160, 10-11=-3117/199
 BOT CHORD 1-19=-14/3281, 18-19=-14/3281, 16-18=0/2517, 14-16=0/2517, 13-14=-38/2629,
 11-13=-38/2629
 WEBS 5-20=-2027/203, 7-20=-2027/203, 4-18=0/641, 8-14=-113/675, 2-19=0/421,
 10-13=-196/373, 2-18=-914/201, 10-14=-800/297

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 22-2-8, Exterior(2R) 22-2-8 to 26-7-5, Interior(1) 26-7-5 to 45-2-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates 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.
- 6) Ceiling dead load (10.0 psf) on member(s) 4-5, 7-8, 5-20, 7-20; Wall dead load (5.0psf) on member(s) 4-18, 8-14
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 16-18, 14-16
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Attic room checked for L/360 deflection.



June 6, 2024

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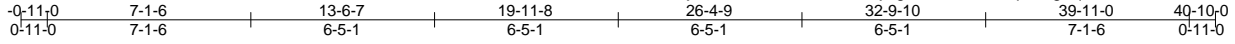
818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|--|
| Job J0624-3359 | Truss B1 | Truss Type COMMON | Qty 6 | Ply 1 | Lot 37 Cottleston Estates 166077583 |
|-------------------|-------------|----------------------|----------|----------|--|

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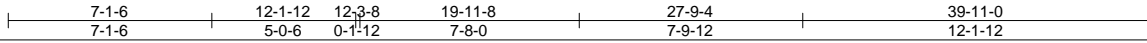
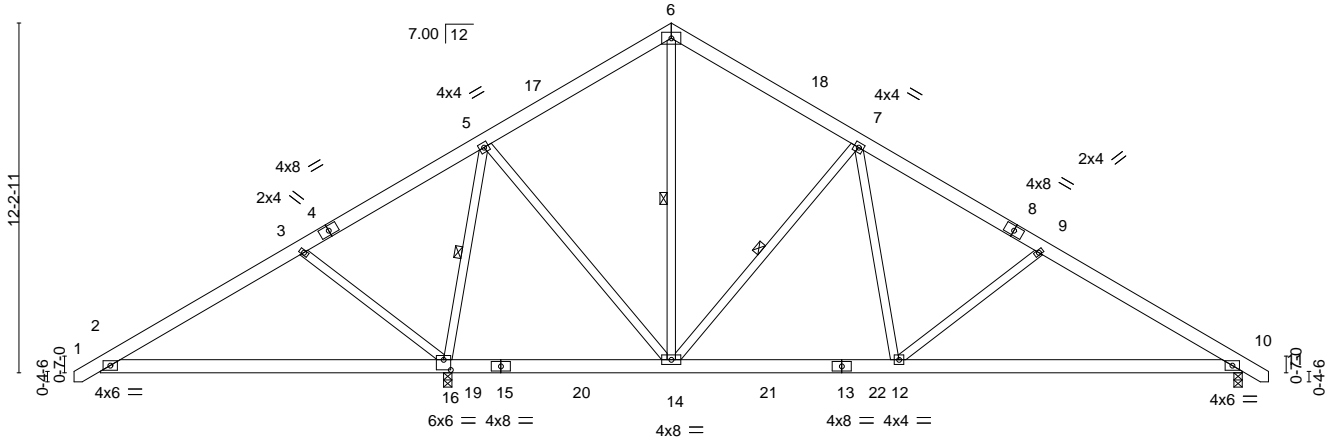
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:25 2024 Page 1

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5x8 =

Scale = 1:80.5



| | | | | | | | | | |
|------------------------|----------------------|-------|-------------|----------------|----------|--------|-----|----------------|-------------|
| Plate Offsets (X, Y)-- | [16:0-3-0,0-4-4] | | | | | | | | |
| 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 0.31 | Vert(LL) -0.13 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | | BC 0.49 | Vert(CT) -0.27 | 10-12 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | | WB 0.75 | Horz(CT) 0.02 | 10 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | Wind(LL) -0.07 | 14-16 | >999 | 240 | Weight: 294 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-11-11 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 5-16, 6-14, 7-14 |

REACTIONS. (size) 16=0-3-8, 10=0-3-8
 Max Horz 16=-290(LC 10)
 Max Uplift 16=-146(LC 12), 10=-97(LC 13)
 Max Grav 16=2649(LC 2), 10=1160(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-685/770, 3-5=-762/1079, 5-6=-448/196, 6-7=-469/175, 7-9=-1226/154, 9-10=-1534/183
 BOT CHORD 2-16=-560/641, 14-16=-653/774, 12-14=0/865, 10-12=-63/1249
 WEBS 3-16=-460/321, 5-16=-1927/792, 5-14=-420/1286, 6-14=-294/307, 7-14=-978/270, 7-12=-38/765, 9-12=-424/231

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-5 to 3-7-8, Interior(1) 3-7-8 to 19-11-8, Exterior(2R) 19-11-8 to 24-4-5, Interior(1) 24-4-5 to 40-8-5 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10 except (jt=lb) 16=146.
 - 6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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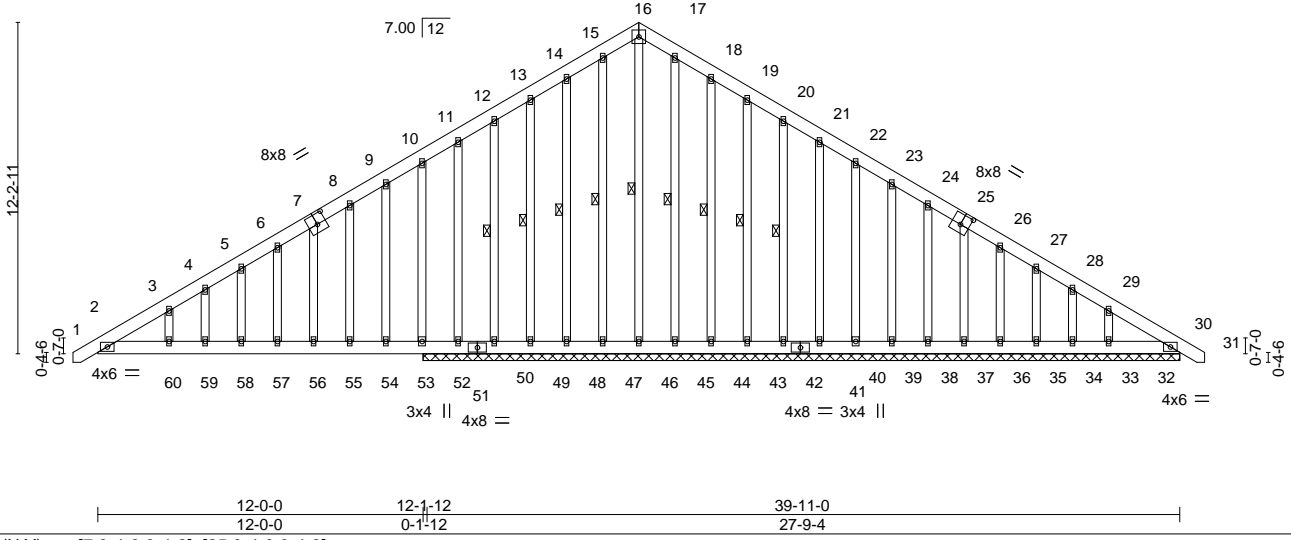
| | | | | | |
|---|---------------|---------------------|----------|----------|--|
| Job J0624-3359 | Truss B1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 37 Cottleston Estates I66077584 |
| Comtech, Inc. Fayetteville, NC - 28314, | | | | | Job Reference (optional) |

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:26 2024 Page 1
 ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f

-0-11-0 19-11-8 39-11-0 40-10-0
 0-11-0 19-11-8 19-11-8 0-11-0

6x6 =

Scale = 1:85.0



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|-------------------------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.47 | Vert(LL) | 0.00 | 30 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.64 | Vert(CT) | 0.00 | 30 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.44 | Horz(CT) | 0.02 | 30 | n/a | | |
| BCDL 10.0 | Code IRC2018/TP12014 | | Matrix-S | | | | | | |
| | | | | | | | | | Weight: 451 lb FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 7-4-12 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | WEBS 1 Row at midpt 16-46, 15-47, 14-48, 13-49, 12-50, 17-45, 18-44, 19-43, 20-42 |

REACTIONS. All bearings 27-11-0.
 (lb) - Max Horz 53=362(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 48, 49, 45, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33 except 30=367(LC 25), 50=150(LC 12), 52=1234(LC 1), 53=849(LC 12), 32=101(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 30, 48, 49, 44, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33, 32 except 46=612(LC 1), 47=285(LC 1), 50=316(LC 1), 52=563(LC 12), 53=1825(LC 1), 45=289(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-899/788, 3-4=-880/800, 4-5=-872/823, 5-6=-871/853, 6-7=-839/860, 7-8=-869/917, 8-9=-856/939, 9-10=-742/880, 10-11=-417/651, 11-12=-556/796, 12-13=-561/829, 13-14=-521/839, 14-15=-480/840, 15-16=-393/748, 16-17=-393/748, 17-18=-480/839, 18-19=-517/835, 19-20=-552/825, 20-21=-591/824, 21-22=-631/824, 22-23=-671/824, 23-24=-711/824, 24-25=-751/825, 25-26=-790/825, 26-27=-831/826, 27-28=-870/837, 28-29=-906/842, 29-30=-988/896
 BOT CHORD 2-60=-695/895, 59-60=-695/895, 58-59=-695/895, 57-58=-695/895, 56-57=-695/895, 55-56=-695/896, 54-55=-695/896, 53-54=-695/896, 52-53=-746/885, 50-52=-746/885, 49-50=-746/885, 48-49=-746/885, 47-48=-746/885, 46-47=-746/885, 45-46=-746/885, 44-45=-746/885, 43-44=-746/885, 42-43=-746/885, 40-42=-746/885, 39-40=-746/885, 38-39=-746/885, 37-38=-746/885, 36-37=-746/885, 35-36=-747/885, 34-35=-747/885, 33-34=-747/885, 32-33=-747/885, 30-32=-747/885
 WEBS 16-46=-584/318, 15-47=-263/157, 11-52=-292/201, 10-53=-527/631, 17-45=-262/156

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-5 to 3-7-8, Exterior(2N) 3-7-8 to 19-11-8, Corner(3R) 19-11-8 to 24-4-5, Exterior(2N) 24-4-5 to 40-8-5 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable studs spaced at 1-4-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 48, 49, 45, 44, 43, 30=367, 50=150, 52=1234, 53=849, 32=101.



June 6, 2024

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/TPI1 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.sbccomponents.com)

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| | | | | | | |
|-------------------|---------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss B1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077584 |
|-------------------|---------------|---------------------|----------|----------|---|-----------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:26 2024 Page 2
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NOTES-

- 9) Non Standard bearing condition. Review required.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.



June 6, 2024

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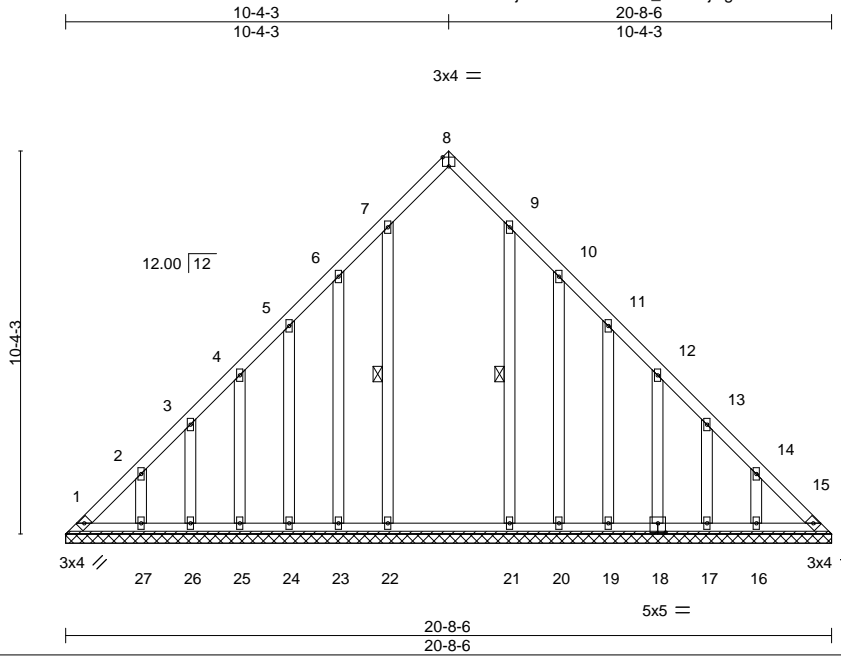
818 Soundside Road
Edenton, NC 27932

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|-------------------|----------------|---------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VA1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077585 |
|-------------------|----------------|---------------------|----------|----------|---|-----------|

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Scale = 1:62.3

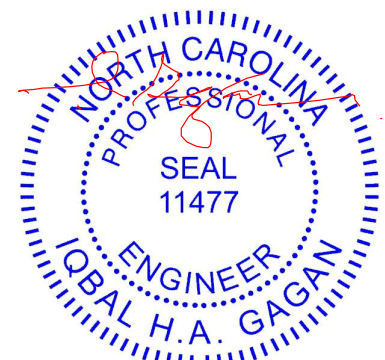
| | | | | | |
|-----------------------|----------------------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [8:0-2-0,Edge], [18:0-2-8,0-3-0] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.05 | Vert(LL) n/a - n/a 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.09 | Vert(CT) n/a - n/a 999 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.09 | Horz(CT) 0.01 15 n/a n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | Matrix-S | | | |
| | | | | Weight: 159 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | WEBS 1 Row at midpt 7-22, 9-21 |

REACTIONS. All bearings 20-8-6.
 (lb) - Max Horz 1=300(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 15, 22, 24, 25, 26, 21, 19, 18, 17 except 1=105(LC 10), 23=118(LC 12), 27=123(LC 12), 20=124(LC 13), 16=123(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 27, 20, 19, 18, 17, 16 except 1=344(LC 12), 15=336(LC 13), 22=301(LC 19), 21=286(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=510/239, 2-3=401/173, 3-4=317/142, 12-13=306/130, 13-14=389/173, 14-15=499/239
 BOT CHORD 1-27=179/384, 26-27=179/384, 25-26=179/384, 24-25=179/384, 23-24=179/384, 22-23=179/384, 21-22=179/384, 20-21=179/384, 19-20=179/384, 18-19=179/384, 17-18=179/384, 16-17=179/384, 15-16=179/384

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-4 to 4-8-7, Interior(1) 4-8-7 to 10-4-3, Exterior(2R) 10-4-3 to 14-7-15, Interior(1) 14-7-15 to 20-4-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 22, 24, 25, 26, 21, 19, 18, 17 except (jt=lb) 1=105, 23=118, 27=123, 20=124, 16=123.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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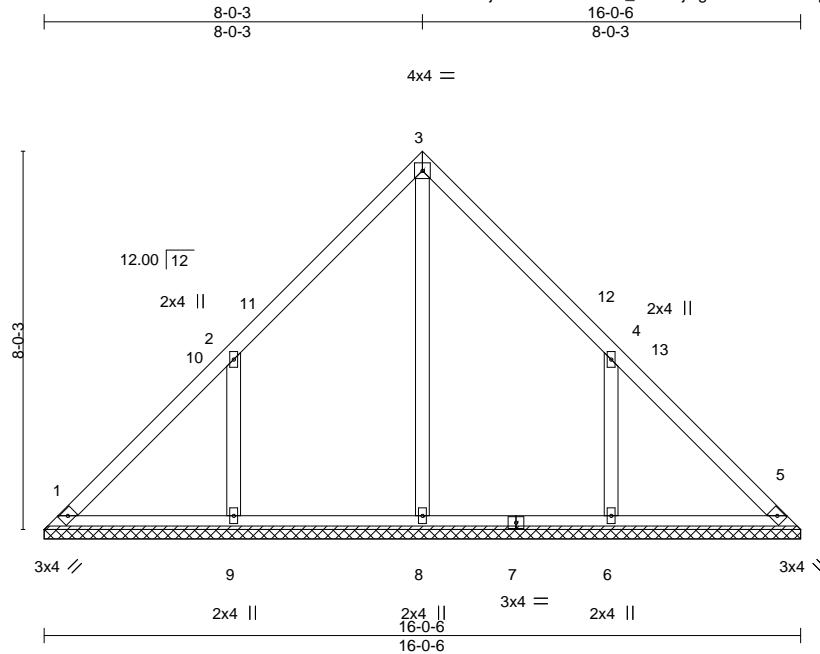
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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VA3 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077587 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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Scale = 1:48.8

| 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 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.14 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | Weight: 77 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 16-0-6.
 (lb) - Max Horz 1=184(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=192(LC 12), 6=192(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=407(LC 22), 9=539(LC 19), 6=538(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-324/344, 4-6=-324/344

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 8-0-3, Exterior(2R) 8-0-3 to 12-5-0, Interior(1) 12-5-0 to 15-8-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=192, 6=192.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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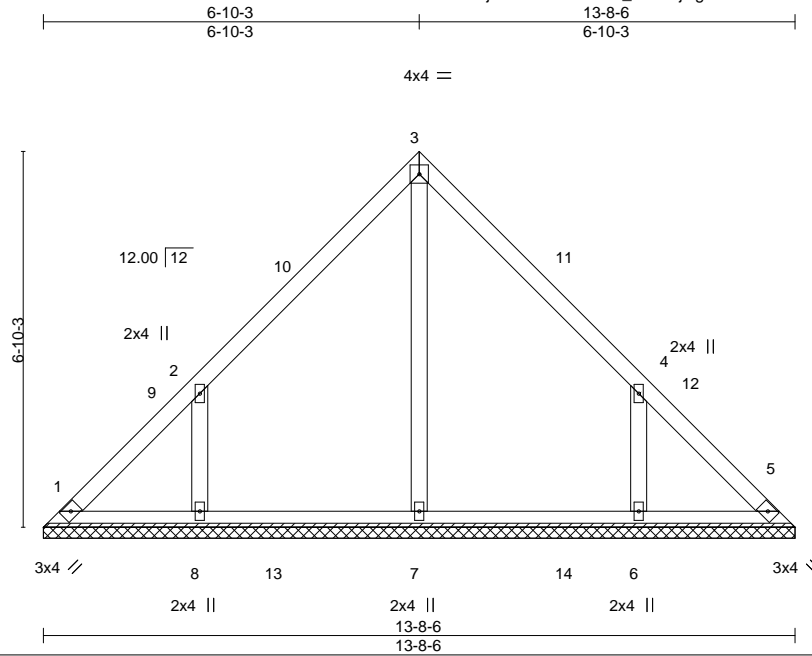
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VA4 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077588 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:29 2024 Page 1

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Scale = 1:42.0

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.15 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.10 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | Weight: 64 lb | FT = 20% |

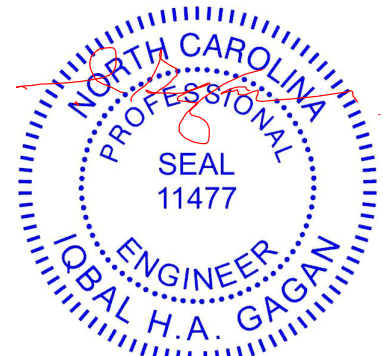
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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 13-8-6.
(lb) - Max Horz 1=156(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=167(LC 12), 6=167(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=399(LC 19), 8=436(LC 19), 6=436(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-297/355, 4-6=-297/355

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-10-3, Exterior(2R) 6-10-3 to 11-3-0, Interior(1) 11-3-0 to 13-4-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=167, 6=167.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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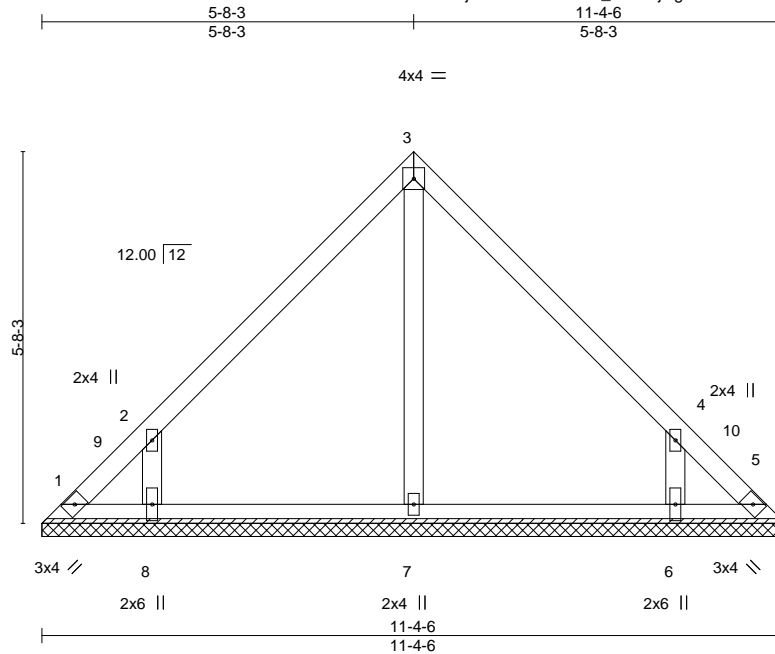
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Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VA5 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077589 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:29 2024 Page 1

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Scale = 1:35.2

| 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 0.18 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.09 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.08 | Horz(CT) | 0.00 | 5 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | Weight: 50 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 11-4-6.
 (lb) - Max Horz 1=128(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=163(LC 12), 6=163(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=342(LC 19), 6=342(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-311/427, 4-6=-311/426

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-8-3, Exterior(2R) 5-8-3 to 10-1-0, Interior(1) 10-1-0 to 11-0-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=163, 6=163.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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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818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|-------------------|--------------|----------------------|----------|----------|---|
| Job J0624-3359 | Truss VA6 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottlestone Estates I66077590 |
|-------------------|--------------|----------------------|----------|----------|---|

Comtech, Inc. Fayetteville, NC - 28314,

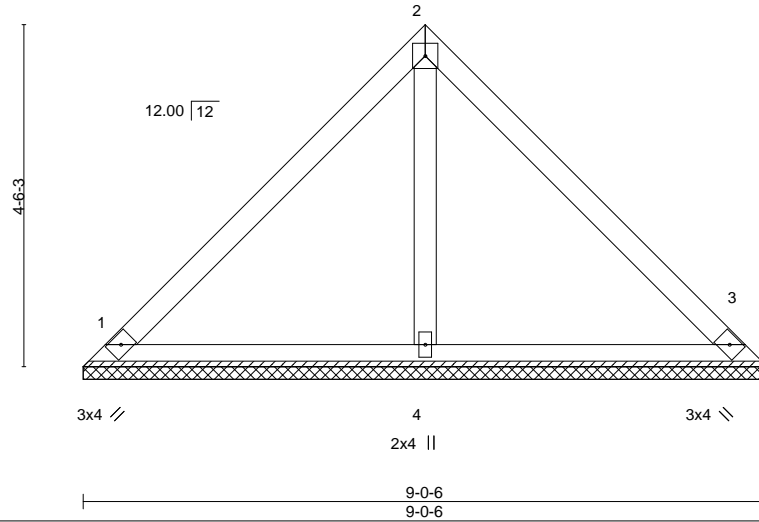
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:30 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:30.4



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.26 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.13 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.05 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | Weight: 37 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. (size) 1=9-0-6, 3=9-0-6, 4=9-0-6
 Max Horz 1=-100(LC 8)
 Max Uplift 1=-25(LC 13), 3=-25(LC 13)
 Max Grav 1=189(LC 1), 3=189(LC 1), 4=289(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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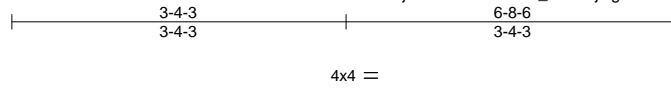
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|--|-----------|
| Job J0624-3359 | Truss VA7 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottlestone Estates Job Reference (optional) | 166077591 |
|-------------------|--------------|----------------------|----------|----------|--|-----------|

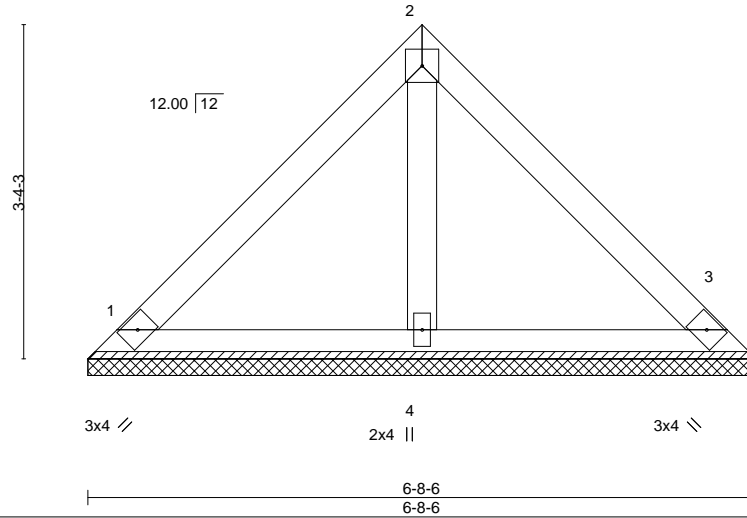
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:30 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:23.1



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.24 | 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 0.02 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 27 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. (size) 1=6-8-6, 3=6-8-6, 4=6-8-6
 Max Horz 1=-72(LC 8)
 Max Uplift 1=-26(LC 13), 3=-26(LC 13)
 Max Grav 1=146(LC 1), 3=146(LC 1), 4=188(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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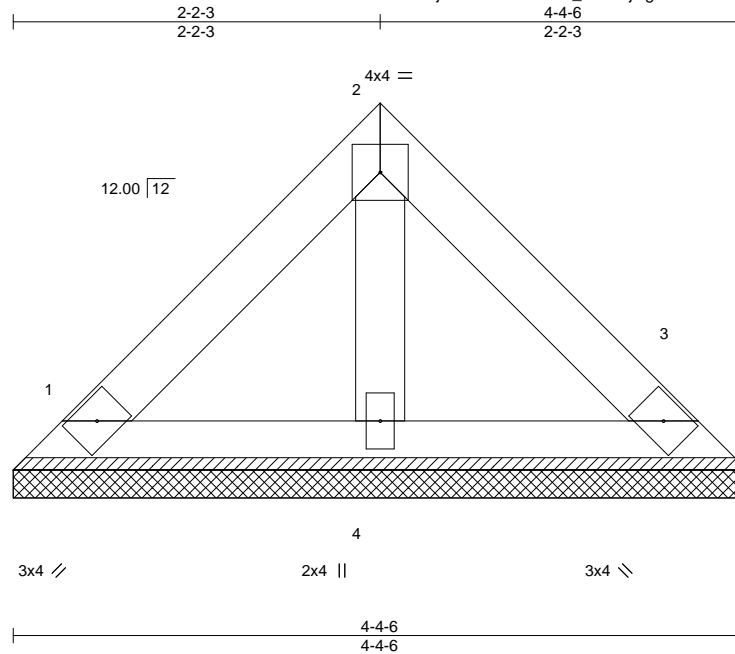
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VA8 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077592 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:30 2024 Page 1

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Scale = 1:13.7

| 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 0.06 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.03 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.01 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | Weight: 17 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 1=4-4-6, 3=4-4-6, 4=4-4-6
 Max Horz 1=-44(LC 8)
 Max Uplift 1=-16(LC 13), 3=-16(LC 13)
 Max Grav 1=89(LC 1), 3=89(LC 1), 4=115(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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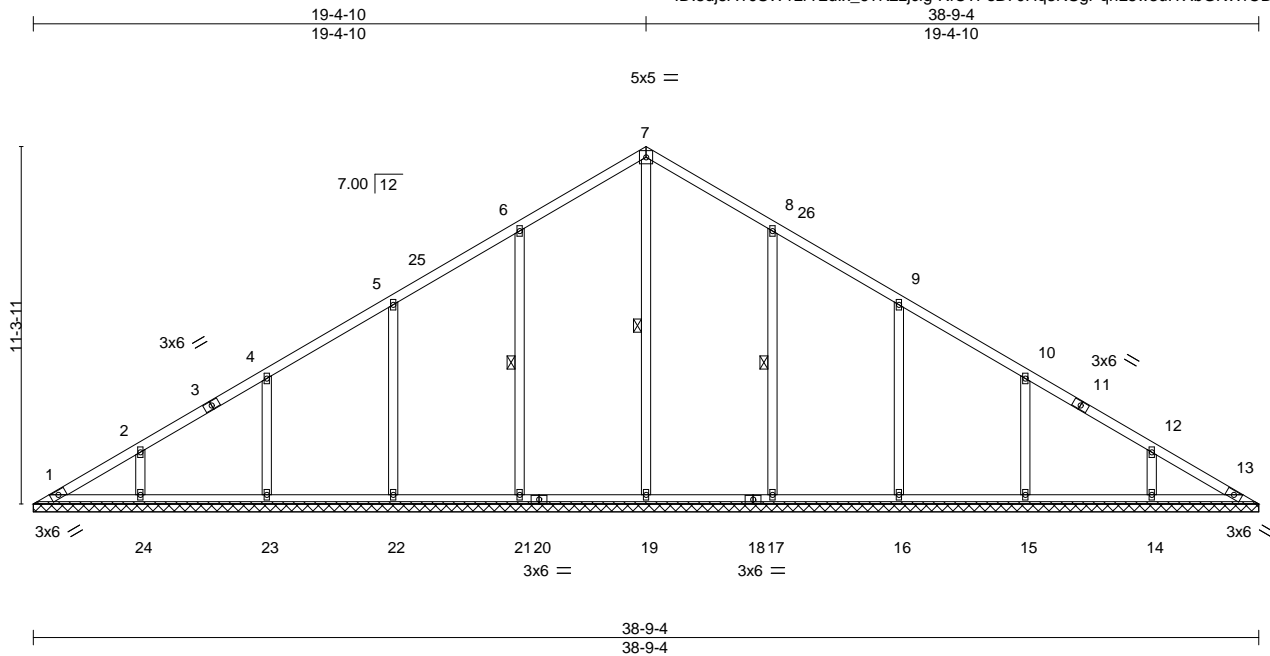
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|--|-----------|
| Job J0624-3359 | Truss VB1 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottlestone Estates Job Reference (optional) | 166077593 |
|-------------------|--------------|----------------------|----------|----------|--|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:31 2024 Page 1

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| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.15 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.17 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.17 | Horz(CT) | 0.01 | 13 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | Weight: 197 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.
WEBS 1 Row at midpt 7-19, 6-21, 8-17

REACTIONS. All bearings 38-9-4.
(lb) - Max Horz 1=264(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 21, 22, 23, 24, 17, 16, 15, 14
Max Grav All reactions 250 lb or less at joint(s) 1, 13 except 19=467(LC 22), 21=536(LC 19), 22=520(LC 19), 23=466(LC 19), 24=369(LC 19), 17=535(LC 20), 16=521(LC 20), 15=466(LC 20), 14=369(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-7=-212/277, 7-8=-212/270
WEBS 6-21=-278/183, 5-22=-253/148, 4-23=-264/153, 8-17=-277/183, 9-16=-253/147, 10-15=-264/153

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 19-4-10, Exterior(2R) 19-4-10 to 23-9-7, Interior(1) 23-9-7 to 38-2-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 21, 22, 23, 24, 17, 16, 15, 14.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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818 Soundside Road
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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VB2 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077594 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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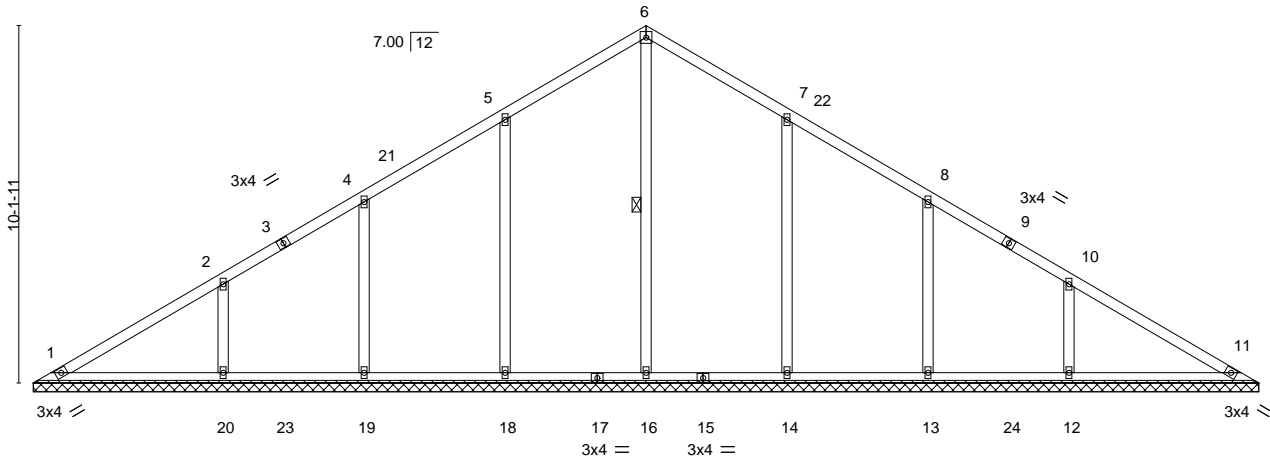
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:32 2024 Page 1

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4x4 =

Scale = 1:65.4



34-9-4
34-9-4

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.21 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.16 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.28 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | |
| | | | | | | | | | Weight: 168 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.
 WEBS 1 Row at midpt 6-16

REACTIONS.

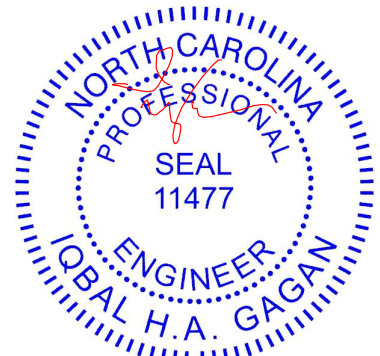
All bearings 34-9-4.
 (lb) - Max Horz 1=236(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 18, 19, 14, 13 except 20=102(LC 12), 12=102(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 11 except 16=452(LC 22), 18=548(LC 19), 19=474(LC 19), 20=531(LC 19), 14=548(LC 20), 13=474(LC 20), 12=531(LC 20)

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

WEBS 5-18=283/186, 2-20=328/183, 7-14=283/186, 10-12=328/183

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 17-4-10, Exterior(2R) 17-4-10 to 21-9-7, Interior(1) 21-9-7 to 34-2-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 18, 19, 14, 13 except (jt=lb) 20=102, 12=102.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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| | | | | | |
|------------|-------|------------|-----|-----|----------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 37 Cottlestone Estates |
| J0624-3359 | VB3 | Valley | 1 | 1 | I66077595 |
| | | | | | Job Reference (optional) |

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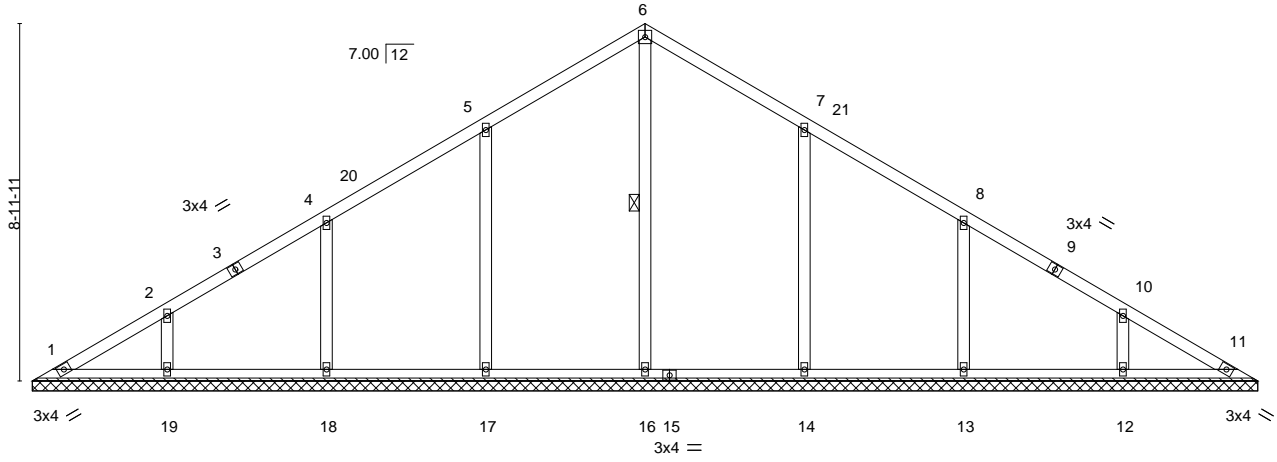
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:32 2024 Page 1

ID:8dj5ATJSW1LrT2dix_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



4x4 =

Scale = 1:57.9



30-9-4
30-9-4

| 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 0.15 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.17 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.19 | Horz(CT) | 0.00 | 11 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | Weight: 143 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.
WEBS 1 Row at midpt 6-16

REACTIONS. All bearings 30-9-4.
(lb) - Max Horz 1=-208(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 17, 18, 19, 14, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 1, 11 except 16=442(LC 22), 17=545(LC 19), 18=460(LC 19), 19=371(LC 19), 14=544(LC 20), 13=460(LC 20), 12=371(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-17=-277/184, 4-18=-258/150, 7-14=-276/184, 8-13=-258/150

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 15-4-10, Exterior(2R) 15-4-10 to 19-9-7, Interior(1) 19-9-7 to 30-2-13 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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 17, 18, 19, 14, 13, 12.
- 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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/TPI1 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)



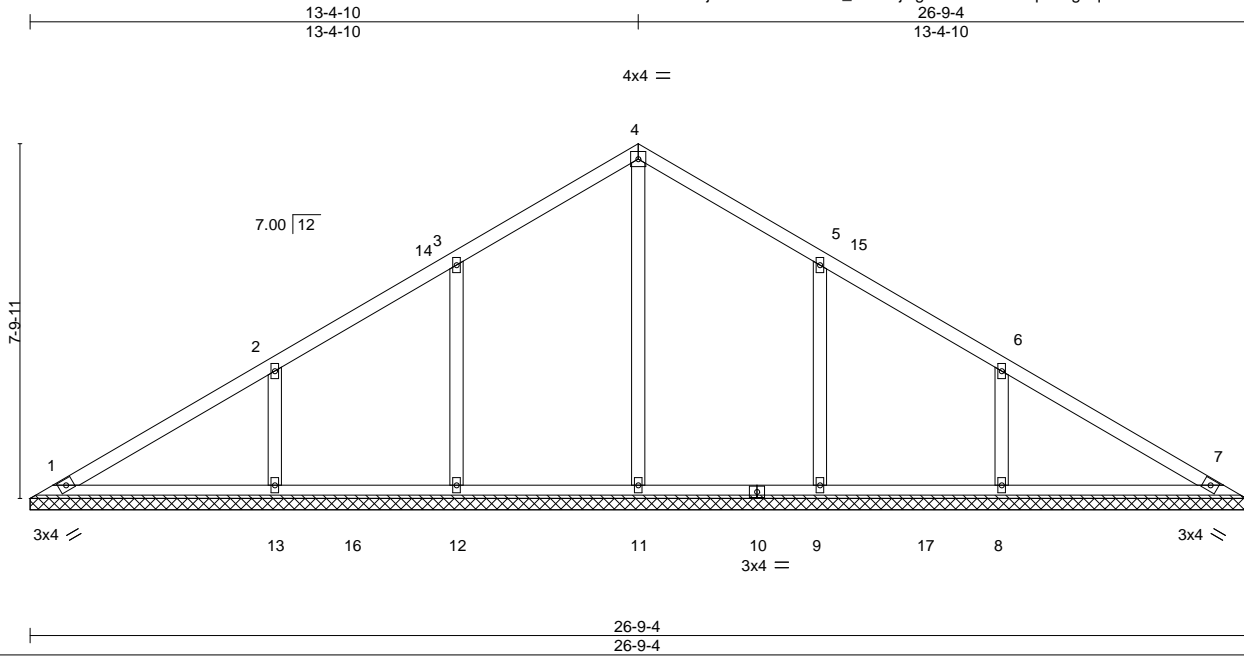
818 Soundside Road
Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VB4 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | 166077596 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:33 2024 Page 1

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| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.21 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.17 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.19 | Horz(CT) | 0.00 | 7 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | |
| | | | | | | | | Weight: 117 lb | FT = 20% |

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

REACTIONS. All bearings 26-9-4.
 (lb) - Max Horz 1=-180(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 13, 9 except 8=-100(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=452(LC 19), 12=497(LC 19), 13=526(LC 19), 9=496(LC 20), 8=526(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 3-12=-257/174, 2-13=-323/181, 5-9=-256/174, 6-8=-323/181

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 13-4-10, Exterior(2R) 13-4-10 to 17-9-7, Interior(1) 17-9-7 to 26-2-13 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) Gable requires continuous bottom chord bearing.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 13, 9 except (jt=lb) 8=100.
 - 8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



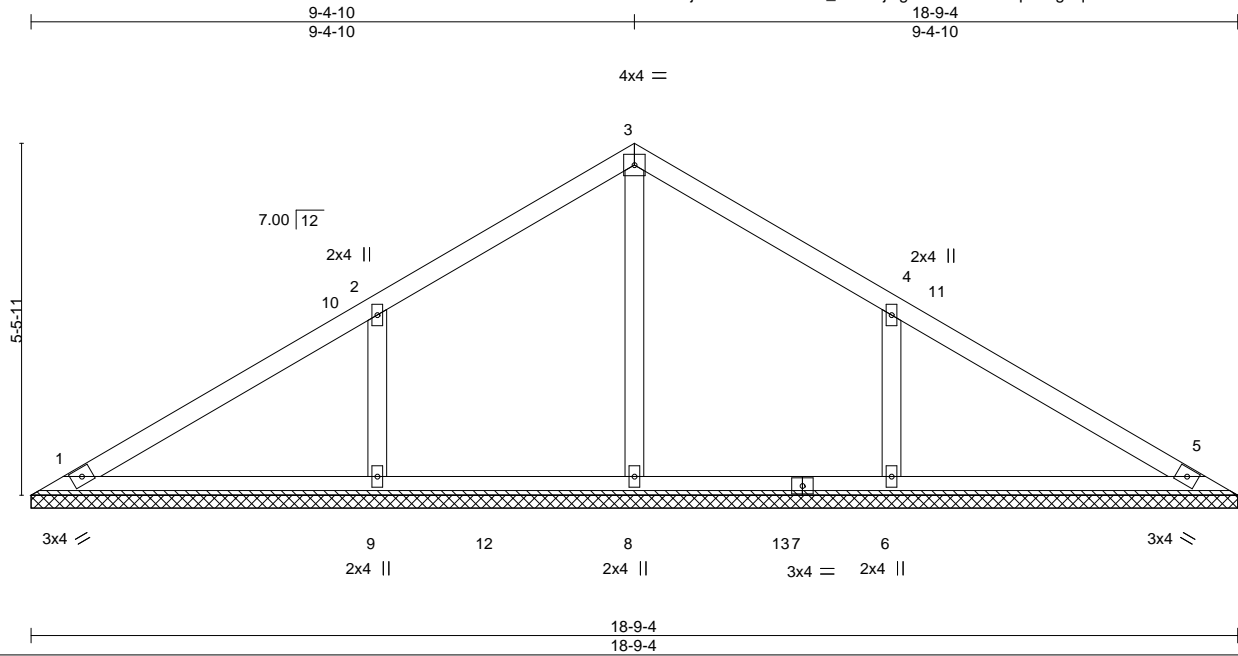
June 6, 2024

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VB6 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077598 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:34 2024 Page 1

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Scale = 1:35.8

| 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 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.15 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.07 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | Weight: 73 lb | FT = 20% |

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

REACTIONS. All bearings 18-9-4.
 (lb) - Max Horz 1=124(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-109(LC 12), 6=-109(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=373(LC 19), 9=550(LC 19), 6=550(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-344/218, 4-6=-344/217

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 9-4-10, Exterior(2R) 9-4-10 to 13-9-7, Interior(1) 13-9-7 to 18-2-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=109, 6=109.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 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/TPI 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)

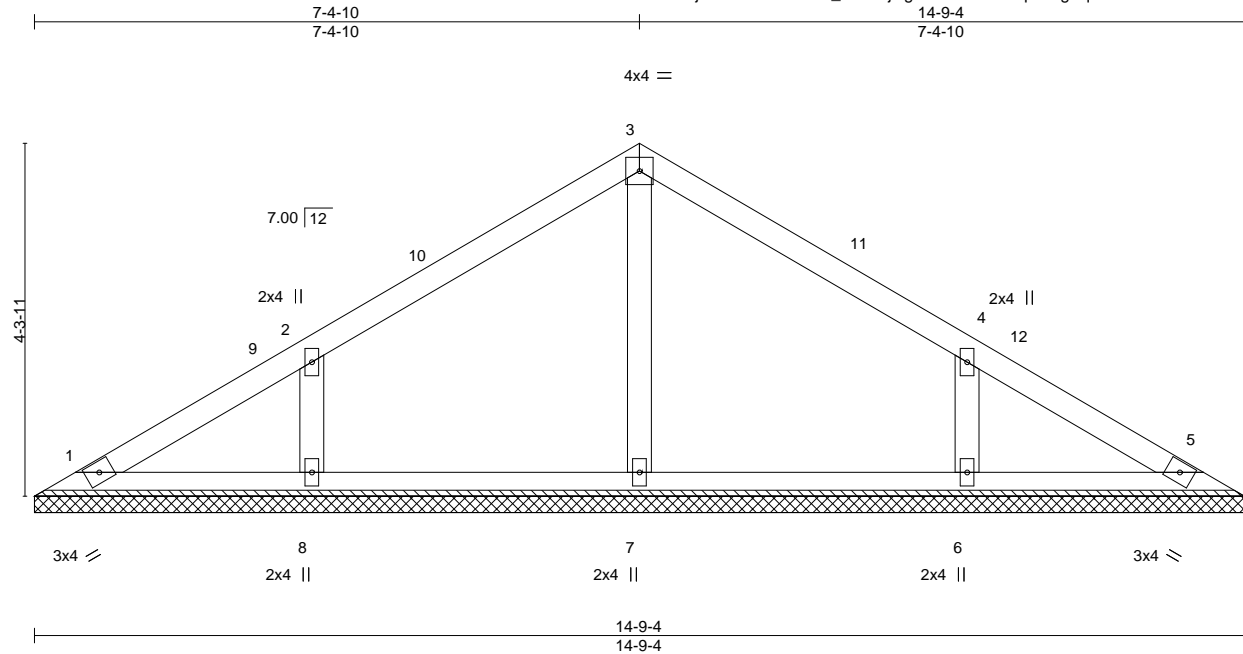
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VB7 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077599 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:34 2024 Page 1

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| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.08 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.05 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/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 14-9-4.
 (lb) - Max Horz 1=-96(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=269(LC 1), 8=342(LC 19), 6=342(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-264/193, 4-6=-264/193

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 7-4-10, Exterior(2R) 7-4-10 to 11-9-7, Interior(1) 11-9-7 to 14-2-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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|-------------------|--------------|----------------------|----------|----------|--|
| Job J0624-3359 | Truss VB8 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates I66077600 |
|-------------------|--------------|----------------------|----------|----------|--|

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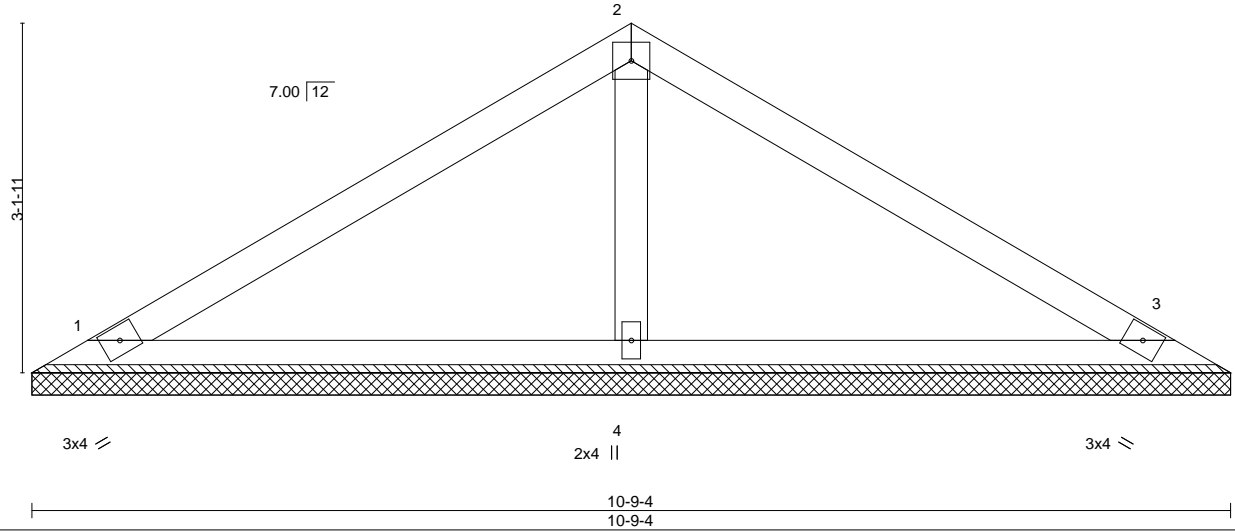
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:35 2024 Page 1

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4x4 =

Scale = 1:20.7



| 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 0.04 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | | | | | | |
| | Code IRC2018/TPI2014 | | | | | | Weight: 37 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. (size) 1=10-9-4, 3=10-9-4, 4=10-9-4
 Max Horz 1=68(LC 10)
 Max Uplift 1=24(LC 12), 3=31(LC 13)
 Max Grav 1=185(LC 1), 3=185(LC 1), 4=406(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-263/147

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-6-8 to 4-11-4, Interior(1) 4-11-4 to 5-4-10, Exterior(2R) 5-4-10 to 9-9-7, Interior(1) 9-9-7 to 10-2-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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|-------------------|--------------|----------------------|----------|----------|--|
| Job J0624-3359 | Truss VB9 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates 166077601 |
|-------------------|--------------|----------------------|----------|----------|--|

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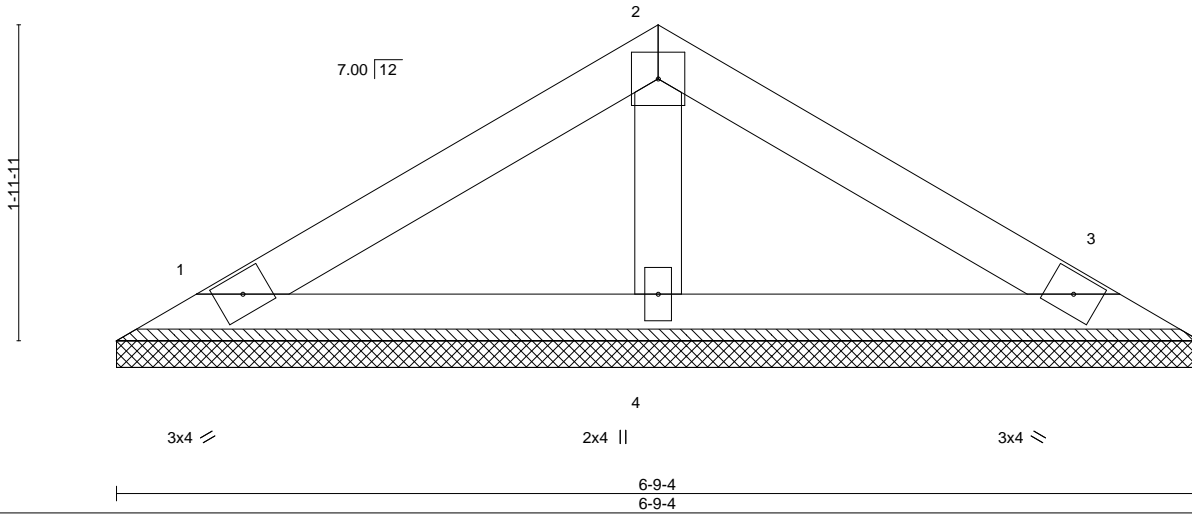
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:35 2024 Page 1

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4x4 =

Scale = 1:14.4



| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.11 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.06 | 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 | | | | | | |
| | Code IRC2018/TPI2014 | | | | | | Weight: 22 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. (size) 1=6-9-4, 3=6-9-4, 4=6-9-4
Max Horz 1=-40(LC 10)
Max Uplift 1=-19(LC 12), 3=-23(LC 13)
Max Grav 1=120(LC 1), 3=120(LC 1), 4=216(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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Edenton, NC 27932

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|-------------------|----------------|---------------------|----------|----------|--|
| Job J0624-3359 | Truss VC1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 37 Cottleston Estates I66077602 |
|-------------------|----------------|---------------------|----------|----------|--|

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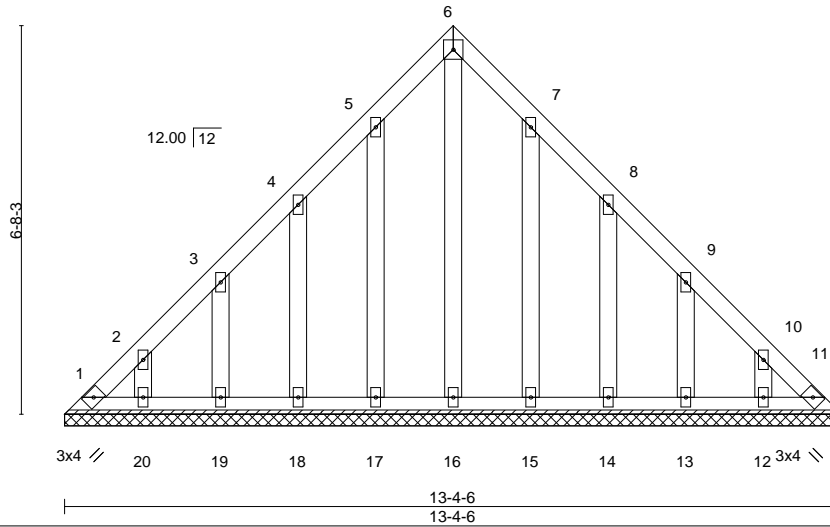
8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:36 2024 Page 1

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4x4 =

Scale = 1:39.6



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-------------|
| 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 0.04 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.10 | Horz(CT) | 0.00 | 11 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | Weight: 89 lb | FT = 20% |

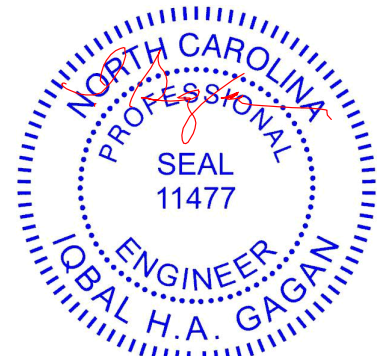
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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 13-4-6.
 (lb) - Max Horz 1=190(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 17, 18, 19, 20, 15, 13, 12 except 14=101(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 11, 16, 17, 18, 19, 20, 15, 14, 13, 12

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-254/157

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; Gable Roof; Common Truss; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-8-3, Exterior(2R) 6-8-3 to 11-1-0, Interior(1) 11-1-0 to 13-0-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11, 17, 18, 19, 20, 15, 13, 12 except (jt=lb) 14=101.
 - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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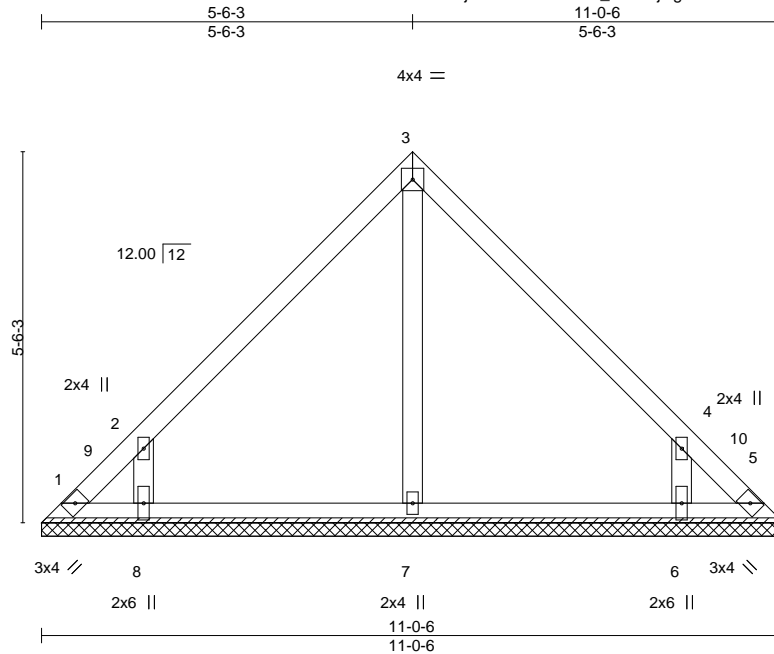
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VC2 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077603 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:36 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:34.3

| 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 0.18 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.08 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | Weight: 48 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 11-0-6.
 (lb) - Max Horz 1=124(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=167(LC 12), 6=167(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=349(LC 19), 6=349(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-323/451, 4-6=-323/451

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-6-3, Exterior(2R) 5-6-3 to 9-11-0, Interior(1) 9-11-0 to 10-8-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=167, 6=167.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 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/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)



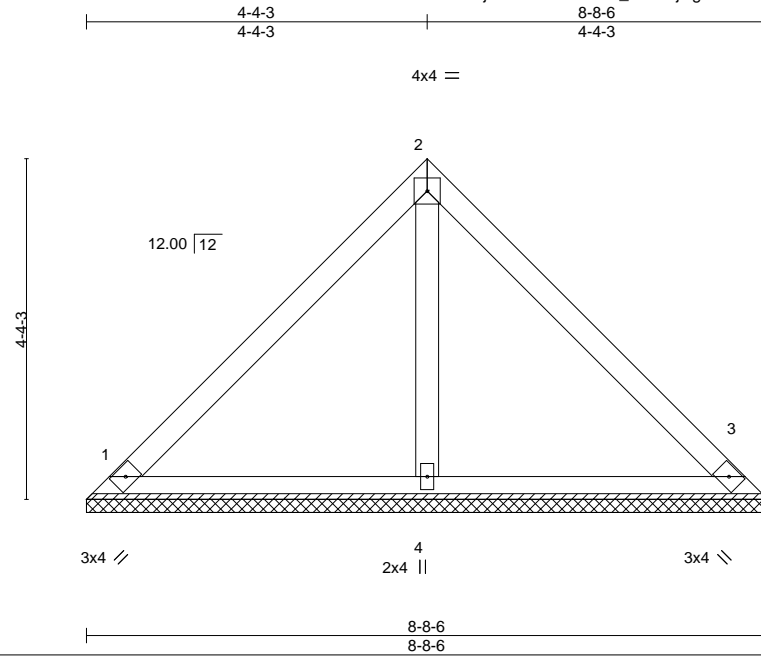
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|--|-----------|
| Job J0624-3359 | Truss VC3 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottlestone Estates Job Reference (optional) | I66077604 |
|-------------------|--------------|----------------------|----------|----------|--|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:37 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:29.4

| 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 0.38 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.04 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | | Weight: 35 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. (size) 1=8-8-6, 3=8-8-6, 4=8-8-6
 Max Horz 1=96(LC 9)
 Max Uplift 1=35(LC 13), 3=35(LC 13)
 Max Grav 1=195(LC 1), 3=195(LC 1), 4=250(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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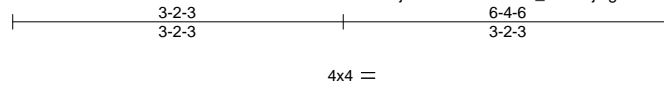
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|--|-----------|
| Job J0624-3359 | Truss VC4 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottlestone Estates Job Reference (optional) | 166077605 |
|-------------------|--------------|----------------------|----------|----------|--|-----------|

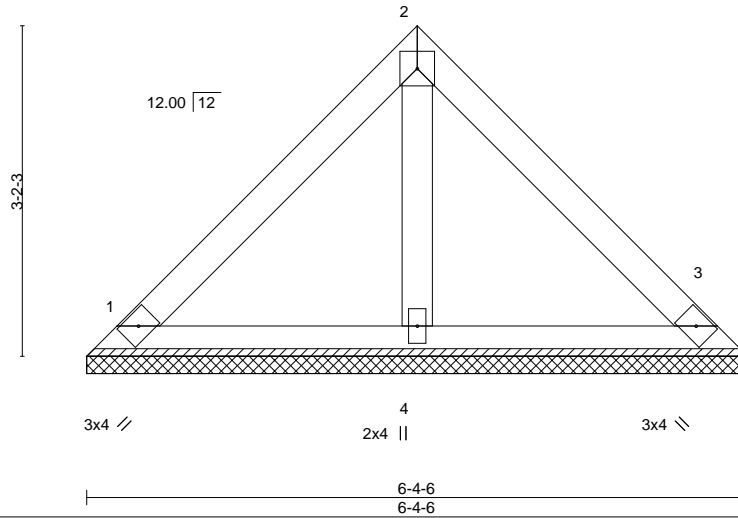
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:37 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RIC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:22.2



| 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 0.22 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.06 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.02 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | Weight: 25 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. (size) 1=6-4-6, 3=6-4-6, 4=6-4-6
 Max Horz 1=-68(LC 8)
 Max Uplift 1=-25(LC 13), 3=-25(LC 13)
 Max Grav 1=138(LC 1), 3=138(LC 1), 4=177(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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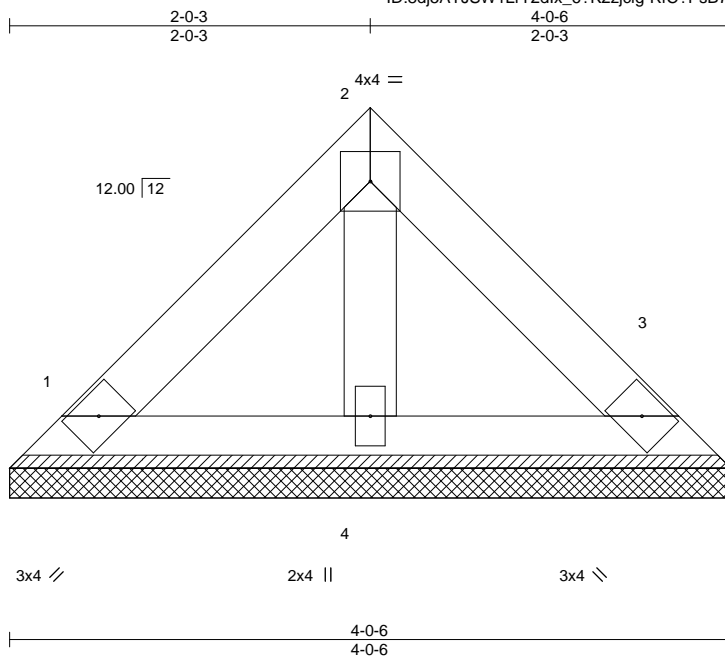
818 Soundside Road
 Edenton, NC 27932

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|-------------------|--------------|----------------------|----------|----------|---|-----------|
| Job J0624-3359 | Truss VC5 | Truss Type Valley | Qty 1 | Ply 1 | Lot 37 Cottleston Estates Job Reference (optional) | I66077606 |
|-------------------|--------------|----------------------|----------|----------|---|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Thu Jun 6 12:26:38 2024 Page 1

ID:8dj5ATJSW1LrT2dlx_6?K2zjclg-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:12.9

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.08 | Vert(LL) | n/a | - | n/a | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | n/a | - | n/a | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.01 | Horz(CT) | 0.00 | 3 | n/a | | |
| BCDL 10.0 | Code IRC2018/TPI2014 | | Matrix-P | | | | | Weight: 15 lb | FT = 20% |

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

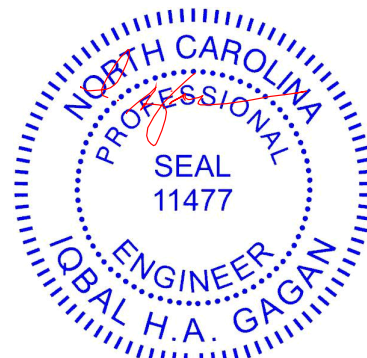
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-0-6 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-0-6, 3=4-0-6, 4=4-0-6
 Max Horz 1=-40(LC 8)
 Max Uplift 1=-14(LC 13), 3=-14(LC 13)
 Max Grav 1=81(LC 1), 3=81(LC 1), 4=104(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 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 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.
- 7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



June 6, 2024

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

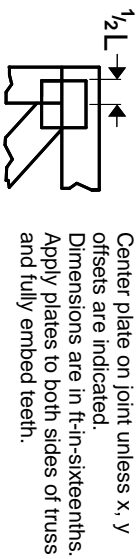
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TPI1 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)



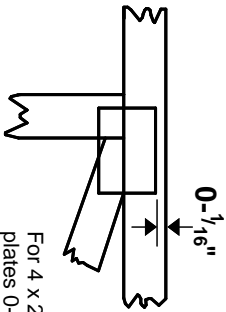
818 Soundside Road
 Edenton, NC 27932

Symbols

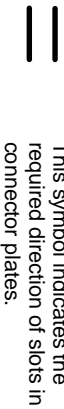
PLATE LOCATION AND ORIENTATION



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

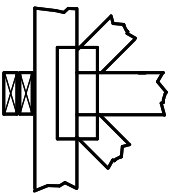
4 X 4
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

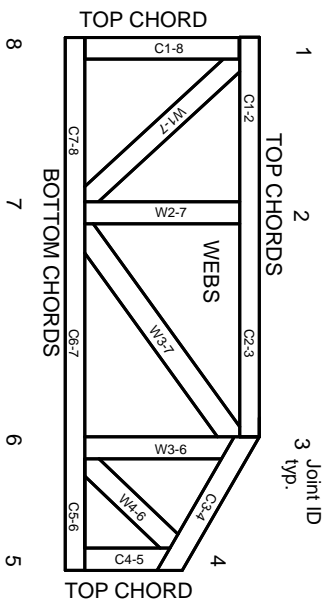


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

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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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.

MITek

ENGINEERING BY
TRENGO
A MITek Affiliate

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