

RE: J0121-0603
 Lot 52 Sierra Village

Trenco
 818 Soundside Rd
 Edenton, NC 27932

Site Information:

Customer: Project Name: J0121-0603
 Lot/Block: Model:
 Address: Subdivision:
 City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3
 Wind Code: ASCE 7-10 Wind Speed: 130 mph
 Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 18 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|----------|
| 1 | E15377763 | A01 | 2/9/2021 |
| 2 | E15377764 | A02 | 2/9/2021 |
| 3 | E15377765 | A03 | 2/9/2021 |
| 4 | E15377766 | A04 | 2/9/2021 |
| 5 | E15377767 | A05 | 2/9/2021 |
| 6 | E15377768 | A06 | 2/9/2021 |
| 7 | E15377769 | B01 | 2/9/2021 |
| 8 | E15377770 | B02 | 2/9/2021 |
| 9 | E15377771 | B03 | 2/9/2021 |
| 10 | E15377772 | B04 | 2/9/2021 |
| 11 | E15377773 | G01 | 2/9/2021 |
| 12 | E15377774 | G02 | 2/9/2021 |
| 13 | E15377775 | M01 | 2/9/2021 |
| 14 | E15377776 | M02 | 2/9/2021 |
| 15 | E15377777 | M03 | 2/9/2021 |
| 16 | E15377778 | PS-8 | 2/9/2021 |
| 17 | E15377779 | PS-8G | 2/9/2021 |
| 18 | E15377780 | V01 | 2/9/2021 |

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.
 Truss Design Engineer's Name: Gilbert, Eric
 My license renewal date for the state of North Carolina is December 31, 2021.
 North Carolina COA: C-0844

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



| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377763 |
| J0121-0603 | A01 | GABLE | 1 | 1 | | |

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ID:WeU20_wZYqtA5MeuIVrNlzoaVc-LtVZD91wPqfswy9_0dDFzTsmvq?PDLrFNCYoUMzopXN

0-10-8 15-3-0 30-6-0 31-4-8
 0-10-8 15-3-0 15-3-0 0-10-8

Scale = 1:59.8

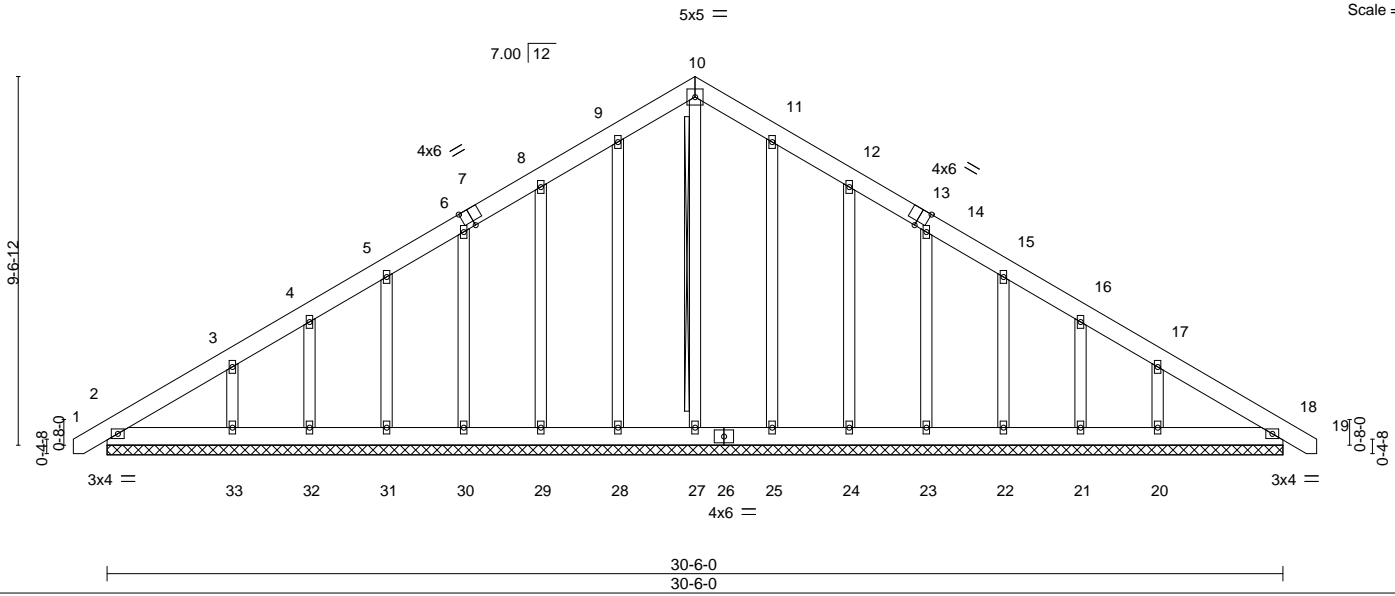


Plate Offsets (X,Y)-- [7:0-2-15,Edge], [13:0-2-15,Edge]

| 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) | 0.00 | 18 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.03 | Vert(CT) | 0.00 | 19 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.15 | Horz(CT) | 0.01 | 18 | n/a | | |
| BCDL 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | |
| | | | | | | | | Weight: 254 lb | FT = 20% |

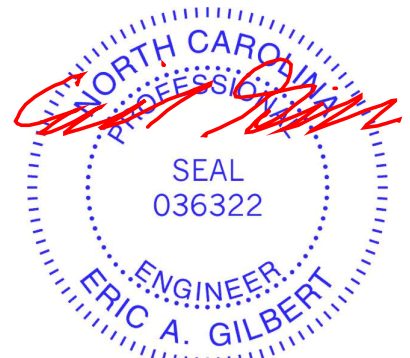
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 OTHERS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS T-Brace: 2x4 SPF No.2 - 10-27
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
 Brace must cover 90% of web length.

REACTIONS. All bearings 30-6-0.
 (lb) - Max Horz 2=-311(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 28, 30, 31, 32, 25, 23, 22, 21, 2 except 29=-106(LC 10), 33=-166(LC 10), 24=-109(LC 11), 20=-163(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 18, 27, 28, 29, 30, 31, 32, 25, 24, 23, 22, 21, 2 except 33=289(LC 17), 20=286(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-278/235, 8-9=-204/253, 9-10=-242/282, 10-11=-242/282

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-8-14 to 3-7-14, Exterior(2) 3-7-14 to 10-10-3, Corner(3) 10-10-3 to 19-7-13, Exterior(2) 19-7-13 to 26-10-2, Corner(3) 26-10-2 to 31-2-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 40.0psf 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) 28, 30, 31, 32, 25, 23, 22, 21, 2 except (jt=lb) 29=106, 33=166, 24=109, 20=163.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

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



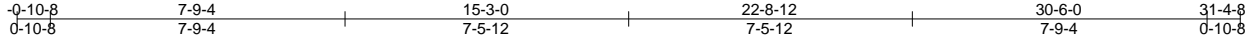
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377764 |
| J0121-0603 | A02 | COMMON | 5 | 1 | | |

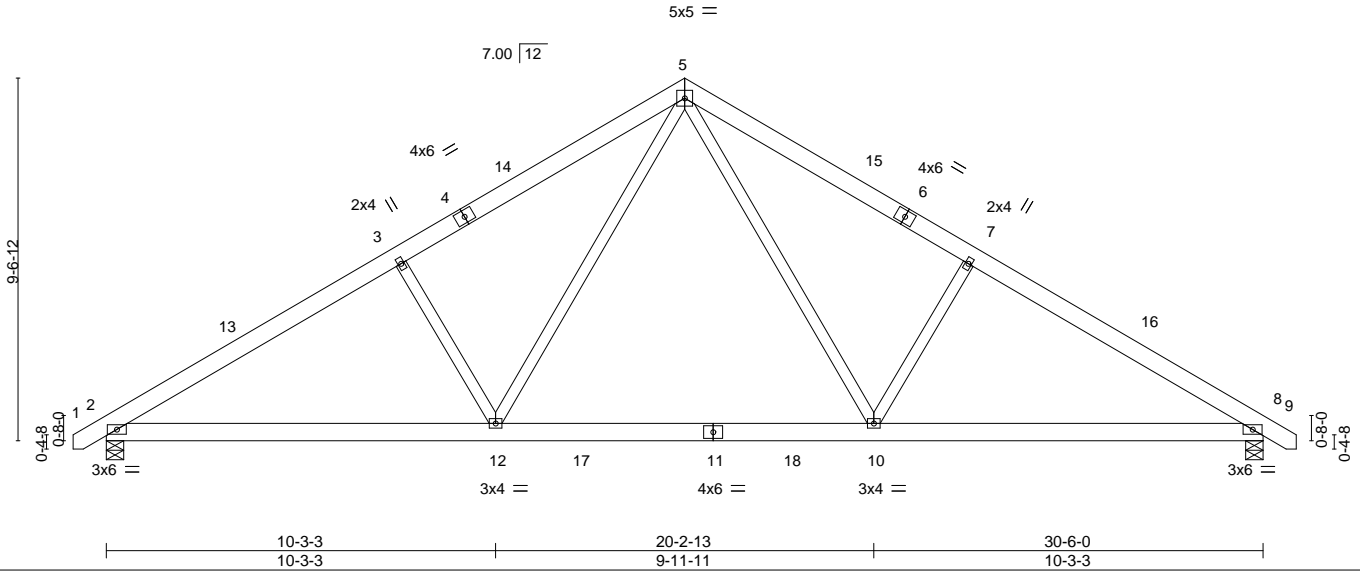
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Scale = 1:60.7



| | | | | | |
|----------------------|----------------------|-------------|-------------------------------|----------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL 20.0 | 2-0-0 | TC 0.25 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.37 | Vert(LL) -0.12 10-12 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.37 | Vert(CT) -0.18 10-12 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.04 8 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.04 2-12 >999 240 | Weight: 203 lb | FT = 20% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-6-2 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS.

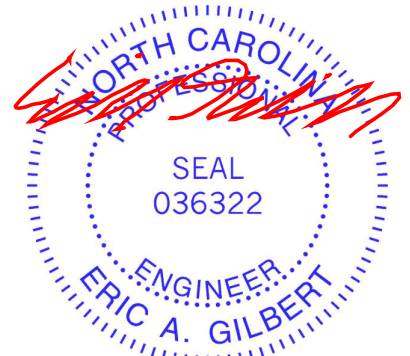
(size) 8=0-5-8, 2=0-5-8
 Max Horz 2=-249(LC 8)
 Max Uplift 8=-163(LC 11), 2=-163(LC 10)
 Max Grav 8=1271(LC 18), 2=1271(LC 17)

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

TOP CHORD 2-3=-1889/561, 3-5=-1771/616, 5-7=-1771/616, 7-8=-1889/561
 BOT CHORD 2-12=-336/1694, 10-12=-84/1093, 8-10=-336/1508
 WEBS 5-10=-201/800, 7-10=-508/317, 5-12=-201/800, 3-12=-508/317

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 10-10-3, Exterior(2) 10-10-3 to 19-7-13, Interior(1) 19-7-13 to 26-10-2, Exterior(2) 26-10-2 to 31-2-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf 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) except (jt=lb) 8=163, 2=163.



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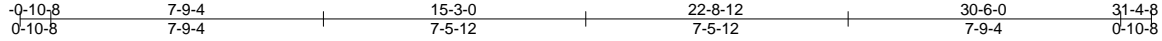
818 Soundside Road
 Edenton, NC 27932

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|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377765 |
| J0121-0603 | A03 | COMMON | 3 | 1 | | |

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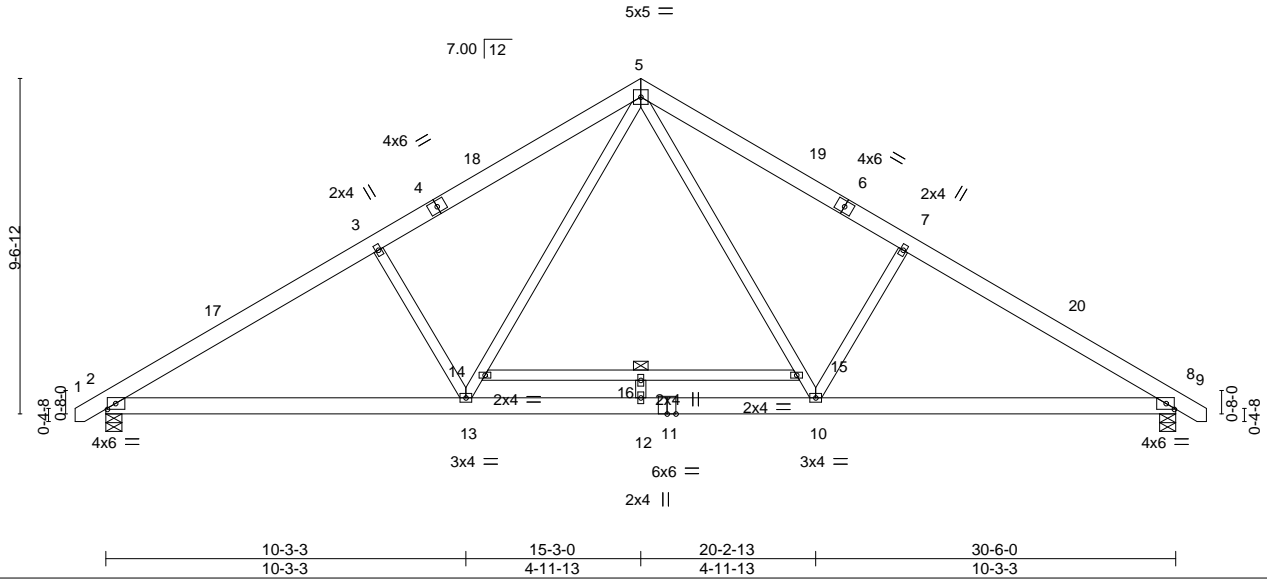


Plate Offsets (X,Y)-- [2:0-2-13,0-2-0], [8:0-2-13,0-2-0]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.28 | Vert(LL) -0.15 | 12 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.71 | Vert(CT) -0.31 | 12 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.42 | Horz(CT) 0.05 | 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.16 | 12 | >999 | 240 | | |
| | | | | | | | Weight: 218 lb | FT = 20% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 14-15

REACTIONS.

(size) 2=0-5-8, 8=0-5-8
 Max Horz 2=-249(LC 8)
 Max Uplift 2=-212(LC 10), 8=-212(LC 11)
 Max Grav 2=1537(LC 1), 8=1537(LC 1)

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

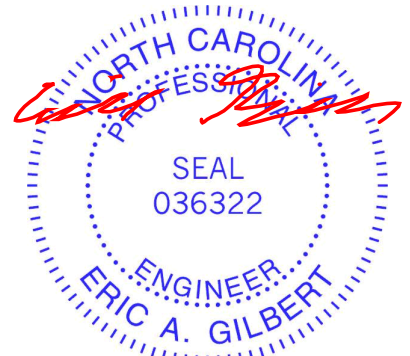
TOP CHORD 2-3=-2427/750, 3-5=-2336/805, 5-7=-2336/805, 7-8=-2427/750
 BOT CHORD 2-13=-496/2028, 12-13=-245/1476, 10-12=-245/1476, 8-10=-496/1972
 WEBS 5-15=-310/1086, 10-15=-250/895, 7-10=-478/306, 13-14=-250/895, 5-14=-310/1086,
 3-13=-478/306, 12-16=-304/104

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-10-3, Exterior(2) 10-10-3 to 19-7-13, Interior(1) 19-7-13 to 26-11-11, Exterior(2) 26-11-11 to 31-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=212, 8=212.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-60, 5-9=-60, 2-8=-20, 14-15=-60



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

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



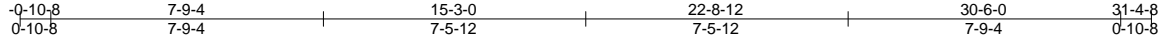
818 Soundside Road
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|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377766 |
| J0121-0603 | A04 | COMMON | 2 | 1 | | |

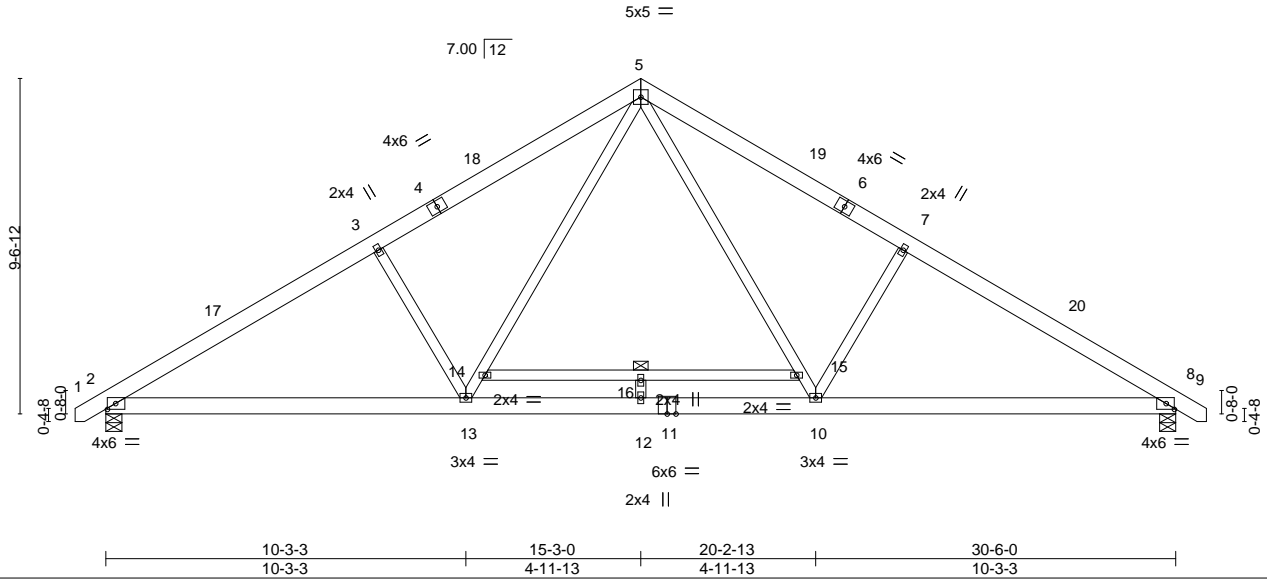
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Scale = 1:65.7



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

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.29 | Vert(LL) -0.15 | 12 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.72 | Vert(CT) -0.32 | 12 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.43 | Horz(CT) 0.05 | 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.16 | 12 | >999 | 240 | | |
| | | | | | | | Weight: 218 lb | FT = 20% |

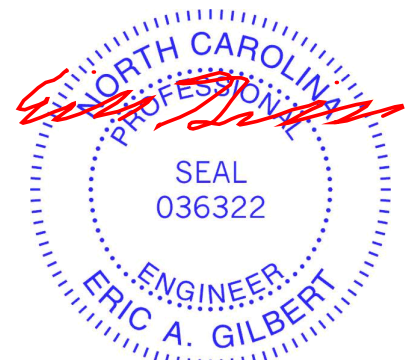
| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-8-1 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 | WEBS 1 Row at midpt 14-15 |

REACTIONS. (size) 8=0-5-8, 2=0-5-8
 Max Horz 2=-265(LC 8)
 Max Uplift 8=-222(LC 11), 2=-222(LC 10)
 Max Grav 8=1615(LC 1), 2=1615(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2544/785, 3-5=-2446/844, 5-7=-2446/844, 7-8=-2544/785
 BOT CHORD 2-13=-517/2125, 12-13=-251/1543, 10-12=-251/1543, 8-10=-517/2066
 WEBS 5-15=-323/1134, 10-15=-262/940, 7-10=-510/326, 13-14=-262/940, 5-14=-323/1134,
 3-13=-510/326, 12-16=-304/104

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-10-3, Exterior(2) 10-10-3 to 19-7-13, Interior(1) 19-7-13 to 26-11-11, Exterior(2) 26-11-11 to 31-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=222, 2=222.

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-5=-64, 5-9=-64, 2-8=-21, 14-15=-60

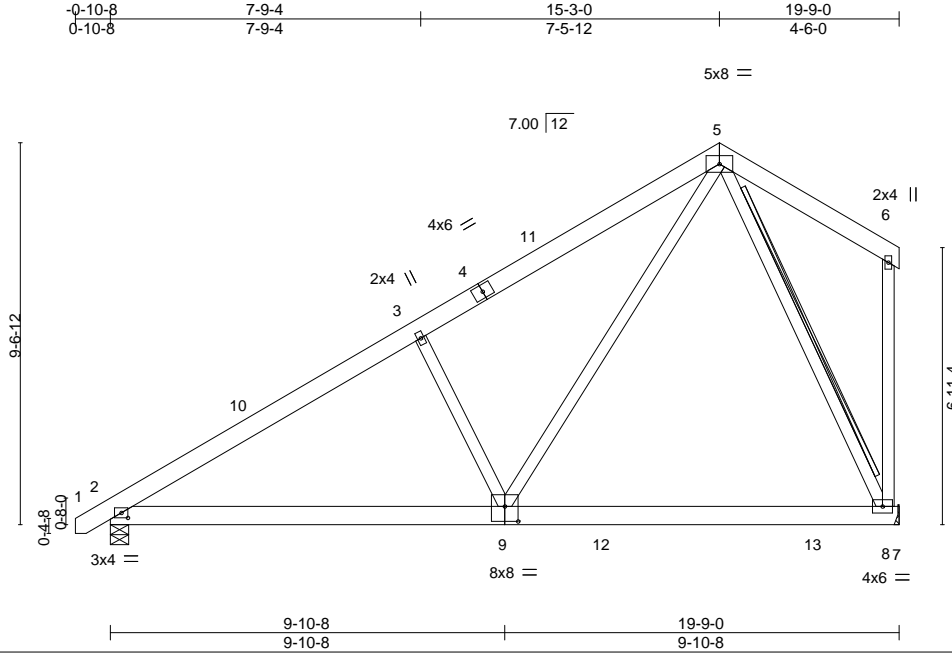


February 3, 2021

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|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377767 |
| J0121-0603 | A05 | COMMON | 10 | 1 | | |

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:52:59 2021 Page 1
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Scale = 1:57.7

Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [9:0-4-0,0-4-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.25 | Vert(LL) -0.12 | 8-9 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.35 | Vert(CT) -0.17 | 8-9 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.43 | Horz(CT) 0.01 | 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.03 | 2-9 | >999 | 240 | | |
| | | | | | | | Weight: 148 lb | FT = 20% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS T-Brace: 2x4 SPF No.2 - 5-8
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
 Brace must cover 90% of web length.

REACTIONS.

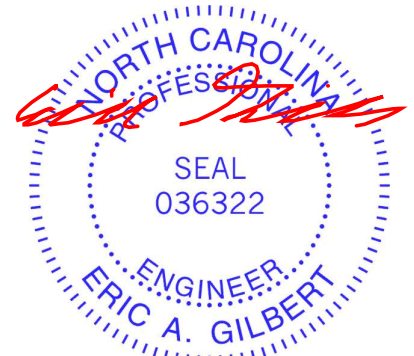
(size) 8=Mechanical, 2=0-5-8
 Max Horz 2=280(LC 10)
 Max Uplift 8=139(LC 10), 2=94(LC 10)
 Max Grav 8=875(LC 17), 2=842(LC 17)

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

TOP CHORD 2-3=-1097/233, 3-5=-947/312
 BOT CHORD 2-9=-367/967, 8-9=-109/316
 WEBS 3-9=-544/334, 5-9=-226/883, 5-8=-718/259

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 10-10-3, Exterior(2) 10-10-3 to 19-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 8=139.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 3, 2021

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

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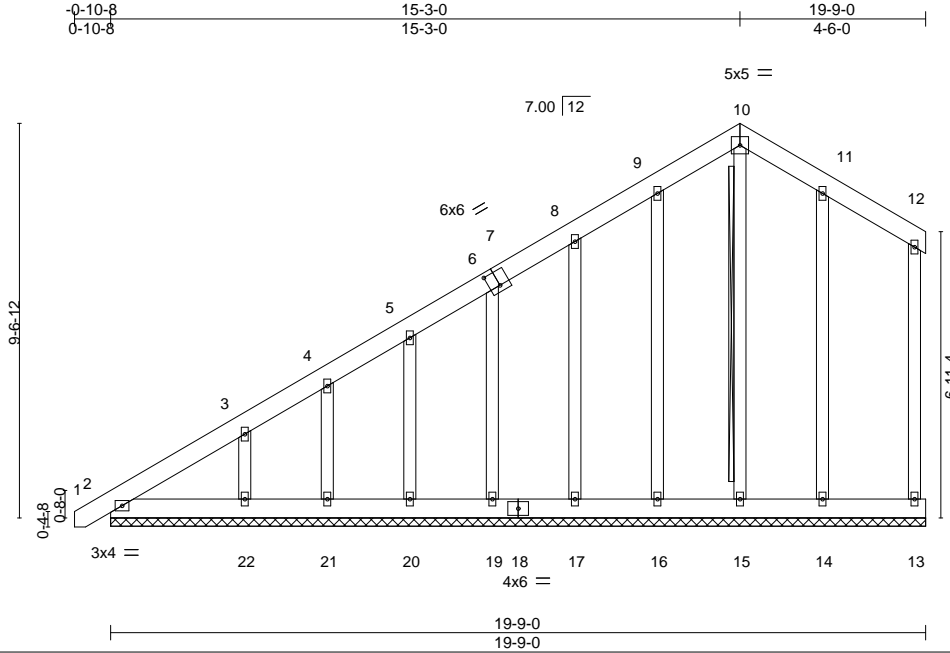


818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377768 |
| J0121-0603 | A06 | GABLE | 1 | 1 | Job Reference (optional) | |

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:53:00 2021 Page 1
ID:WeU20_wZYqtTA5MeulVrNizoaVc-A1sqUC6h?gP?etc8MuKgDk6oDF2vd318I8?6i0zopXH



Scale = 1:55.8

Plate Offsets (X,Y)-- [6:0-2-0,0-0-0], [7:0-3-0,0-4-4], [7:0-0-0,0-2-12]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.06 | Vert(LL) -0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.02 | Vert(CT) 0.00 | 1 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.17 | Horz(CT) 0.00 | 13 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | | | | | |
| | | | | | | | Weight: 177 lb | FT = 20% |

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 10-15
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
Brace must cover 90% of web length.

REACTIONS.

All bearings 19-9-0.
(lb) - Max Horz 2=411(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 13, 2, 16, 19, 20, 21, 14 except 17=-101(LC 10), 22=-172(LC 10)
Max Grav All reactions 250 lb or less at joint(s) 13, 2, 15, 16, 17, 19, 20, 21, 14 except 22=290(LC 17)

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

TOP CHORD 2-3=-421/293, 3-4=-301/185

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-8-14 to 3-7-14, Exterior(2) 3-7-14 to 10-10-3, Corner(3) 10-10-3 to 19-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 40.0psf 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) 13, 2, 16, 19, 20, 21, 14 except (jt=lb) 17=101, 22=172.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



February 3, 2021

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



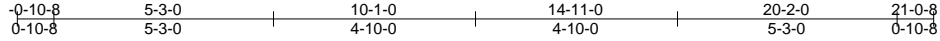
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E1537769 |
| J0121-0603 | B01 | GABLE | 1 | 1 | Job Reference (optional) | |

Comtech, Inc., Fayetteville, NC - 28314,

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ID:WeU20_wZYqtTA5MeulVrNlzoaVc-eDQChY6Jm_XsG0BKwbrlyfyQFLiMX2H_okfETzopXG



5x5 =

Scale = 1:55.1

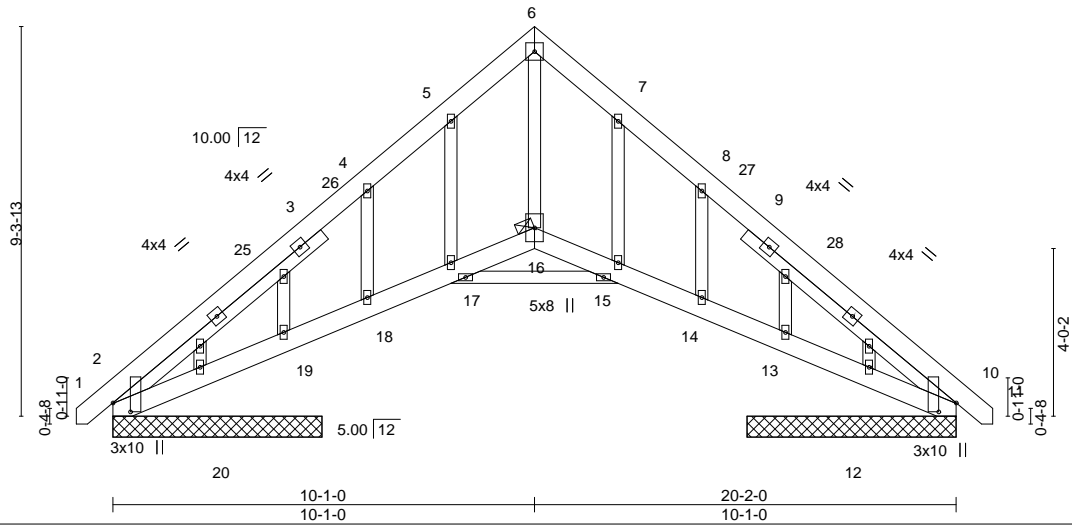


Plate Offsets (X,Y)-- [2:0-2-9,0-5-0], [10:0-2-9,0-5-0]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.09 | Vert(LL) -0.02 | 17 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.24 | Vert(CT) -0.04 | 17 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.12 | Horz(CT) 0.04 | 10 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.03 | 17-18 | >999 | 240 | | |
| | | | | | | | Weight: 176 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 OTHERS 2x4 SP No.2
 SLIDER Left 2x4 SP No.3 -x 6-5-12, Right 2x4 SP No.3 -x 6-5-12

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.

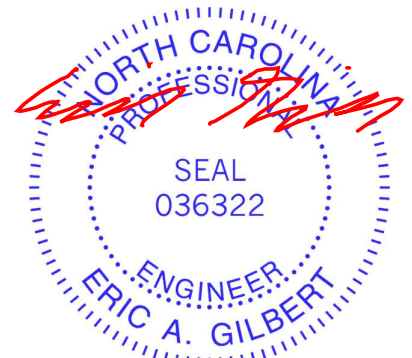
All bearings 5-0-0.
 (lb) - Max Horz 2=-301(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 10, 12 except 2=-109(LC 11), 19=-328(LC 10), 20=-102(LC 17), 13=-267(LC 11)
 Max Grav All reactions 250 lb or less at joint(s) 20, 12 except 2=466(LC 1), 10=466(LC 1), 19=550(LC 17), 13=483(LC 18)

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

TOP CHORD 2-4=-765/0, 4-5=-695/218, 5-6=-590/266, 6-7=-613/298, 7-8=-712/253, 8-10=-839/145
 BOT CHORD 2-20=-129/643, 19-20=-145/699, 18-19=-52/525, 17-18=-131/657, 16-17=-352/674, 15-16=-340/674, 14-15=-103/636, 13-14=-153/578, 12-13=-91/659, 10-12=-105/626
 WEBS 6-16=-247/516, 15-17=-472/531, 4-18=-404/381, 8-14=-404/365

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 5-8-3, Exterior(2) 5-8-3 to 14-5-13, Interior(1) 14-5-13 to 16-6-2, Exterior(2) 16-6-2 to 20-10-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2, 10, 19, 20, 13, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 12 except (jt=lb) 2=109, 19=328, 20=102, 13=267.



February 3, 2021

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818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377770 |
| J0121-0603 | B02 | SCISSORS | 1 | 1 | | |

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ID:WeU20_wZYqtTA5MeulVrNlzoaVc-6P_bvu7xXHfjuAmWUIN8I9B6S3eh5x?RCSUDmvzopXF

0-10-8 5-2-4 10-1-0 14-11-12 20-2-0 21-0-8
 0-10-8 5-2-4 4-10-12 4-10-12 5-2-4 0-10-8

5x5 =

Scale = 1:55.0

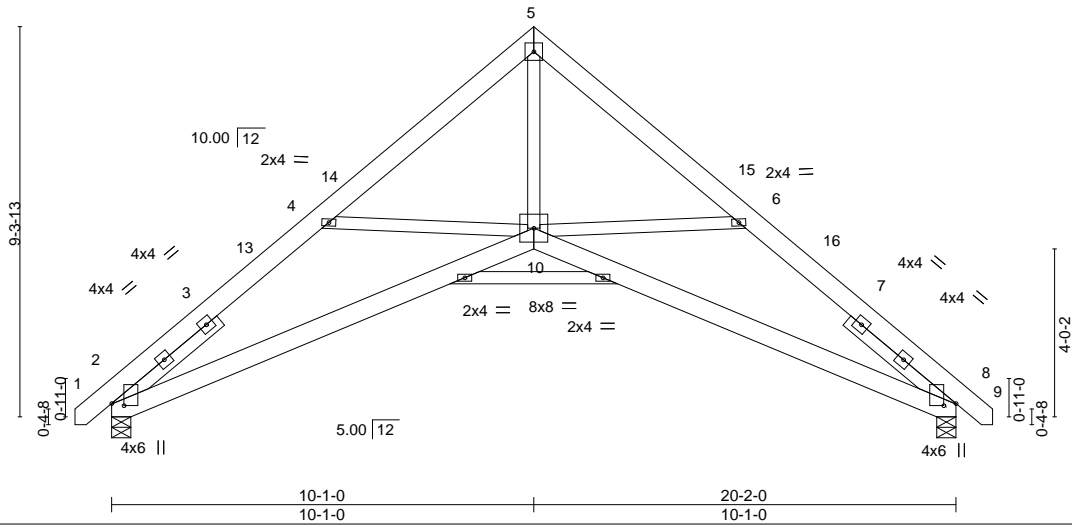


Plate Offsets (X,Y)-- [2:0-0-10,0-3-8], [8:0-0-10,0-3-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.14 | Vert(LL) -0.08 | 2-10 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.32 | Vert(CT) -0.17 | 2-10 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.27 | Horz(CT) 0.09 | 8 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.03 | 10 | >999 | 240 | | |
| | | | | | | | Weight: 156 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.3 -x 3-3-5, Right 2x4 SP No.3 -x 3-3-5

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.

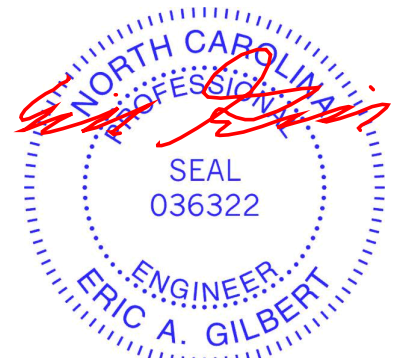
(size) 2=0-5-8, 8=0-5-8
 Max Horz 2=-241(LC 8)
 Max Uplift 2=-98(LC 10), 8=-98(LC 11)
 Max Grav 2=848(LC 1), 8=848(LC 1)

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

TOP CHORD 2-4=-1524/464, 4-5=-1187/260, 5-6=-1188/260, 6-8=-1524/464
 BOT CHORD 2-10=-246/1317, 8-10=-232/1156
 WEBS 5-10=-120/1111, 6-10=-384/343, 4-10=-384/343

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-14 to 3-7-14, Interior(1) 3-7-14 to 5-8-3, Exterior(2) 5-8-3 to 14-5-13, Interior(1) 14-5-13 to 16-6-2, Exterior(2) 16-6-2 to 20-10-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



February 3, 2021

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818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377771 |
| J0121-0603 | B03 | SCISSORS | 6 | 1 | | |

Comtech, Inc, Fayetteville, NC - 28314,

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5x5 =

Scale = 1:55.2

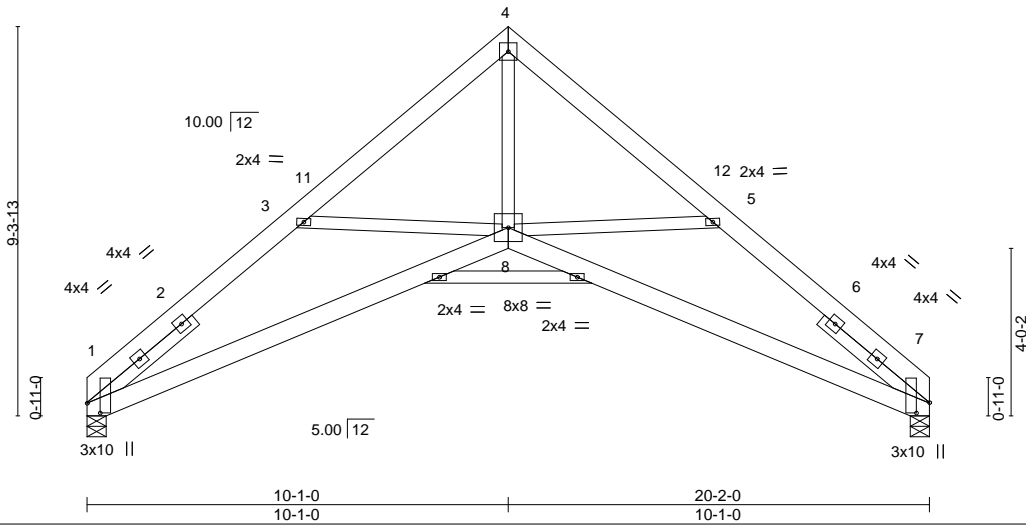


Plate Offsets (X,Y)-- [1:0-2-13,0-3-12], [7:0-3-0,0-3-12]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|-----|-------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.13 | Vert(LL) -0.08 | 1-8 | >999 | 360 | | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.33 | Vert(CT) -0.17 | 1-8 | >999 | 240 | | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.27 | Horz(CT) 0.09 | 7 | n/a | n/a | | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.03 | 8 | >999 | 240 | | | |
| | | | | | | | | Weight: 151 lb | FT = 20% |

LUMBER-

TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.3 -x 3-3-5, Right 2x4 SP No.3 -x 3-3-5

BRACING-

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

REACTIONS.

(size) 1=0-5-8, 7=0-5-8
 Max Horz 1=-237(LC 6)
 Max Uplift 1=-82(LC 10), 7=-82(LC 11)
 Max Grav 1=793(LC 1), 7=793(LC 1)

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

TOP CHORD 1-3=-1533/509, 3-4=-1195/289, 4-5=-1195/289, 5-7=-1533/509
 BOT CHORD 1-8=-279/1322, 7-8=-279/1166
 WEBS 4-8=-159/1117, 5-8=-381/363, 3-8=-381/363

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-2 to 4-10-8, Interior(1) 4-10-8 to 5-8-3, Exterior(2) 5-8-3 to 14-5-13, Interior(1) 14-5-13 to 15-3-8, Exterior(2) 15-3-8 to 19-11-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



February 3, 2021

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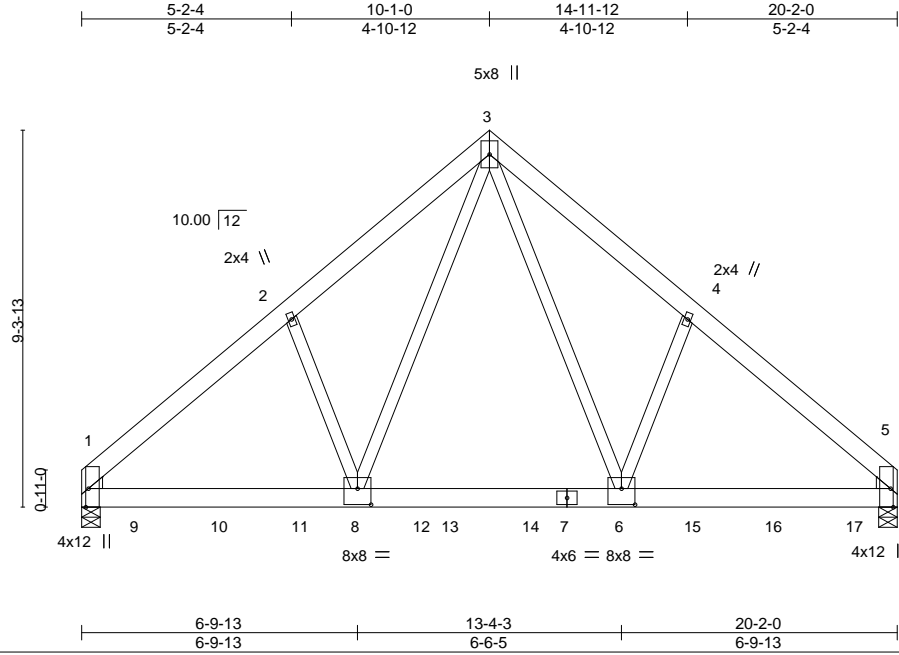
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|---------------|-----|-----|--------------------------|----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E1537772 |
| J0121-0603 | B04 | Common Girder | 1 | 2 | Job Reference (optional) | |

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:53:04 2021 Page 1

ID:WeU20_wZYqtTA5MeuVrNlzoaVc-2o5LKa9B3vvR7UwvbjPcNaHLPsB4ZpZKgmzKrnzopXD



Scale = 1:57.0

Plate Offsets (X,Y)-- [1:0-0-13,0-1-0], [1:0-1-11,0-4-13], [1:0-5-8,Edge], [5:0-5-8,Edge], [5:0-1-11,0-4-13], [5:0-0-13,0-1-0], [6:0-4-0,0-4-12], [8:0-4-0,0-4-12]

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-----------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.62 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.91 | Vert(LL) -0.09 1-8 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.39 | Vert(CT) -0.17 1-8 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr NO | Matrix-S | Horz(CT) 0.03 5 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.08 1-8 >999 240 | Weight: 302 lb | FT = 20% |

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 WEDGE
 Left: 2x4 SP No.3 , Right: 2x4 SP No.3

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

REACTIONS. (size) 1=0-5-8, 5=0-5-8
 Max Horz 1=235(LC 26)
 Max Uplift 1=-819(LC 8), 5=-829(LC 9)
 Max Grav 1=4614(LC 2), 5=4673(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-5031/915, 2-3=-4853/1004, 3-4=-4804/994, 4-5=-4980/905
 BOT CHORD 1-8=-686/3704, 6-8=-418/2588, 5-6=-599/3606
 WEBS 3-6=-666/3067, 4-6=-276/372, 3-8=-689/3174, 2-8=-276/375

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 40.0psf 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) except (jt=lb) 1=819, 5=829.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 779 lb down and 159 lb up at 1-4-4, 779 lb down and 159 lb up at 3-4-4, 779 lb down and 159 lb up at 5-4-4, 779 lb down and 159 lb up at 7-0-12, 754 lb down and 159 lb up at 9-0-12, 754 lb down and 159 lb up at 11-0-12, 779 lb down and 159 lb up at 13-0-12, 779 lb down and 159 lb up at 15-0-12, and 779 lb down and 159 lb up at 17-0-12, and 780 lb down and 157 lb up at 19-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



February 3, 2021

Continued on page 2

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818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|---------------|-----|----------|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377772 |
| J0121-0603 | B04 | Common Girder | 1 | 2 | Job Reference (optional) | |

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:53:04 2021 Page 2
 ID:WeU20_wZYqtTA5MeulVrNlzoaVc-2o5LKa9B3vvR7UwvbjPcNaHLPsB4ZpZkgmzKrnzopXD

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 6=-754(B) 8=-754(B) 9=-754(B) 10=-754(B) 11=-754(B) 13=-754(B) 14=-754(B) 15=-754(B) 16=-754(B) 17=-755(B)

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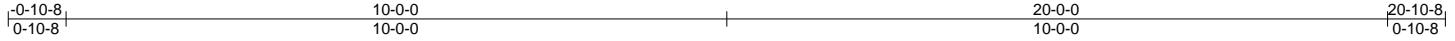
| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377773 |
| J0121-0603 | G01 | GABLE | 1 | 1 | | |

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:53:06 2021 Page 1

ID:WeU20_wZYqtTA5MeulVrNlzoaVc-?BD5IFASbWA9Mo4j8R4S?Mp9g5X1pg074SQvgzopXB

Job Reference (optional)



Scale = 1:34.9

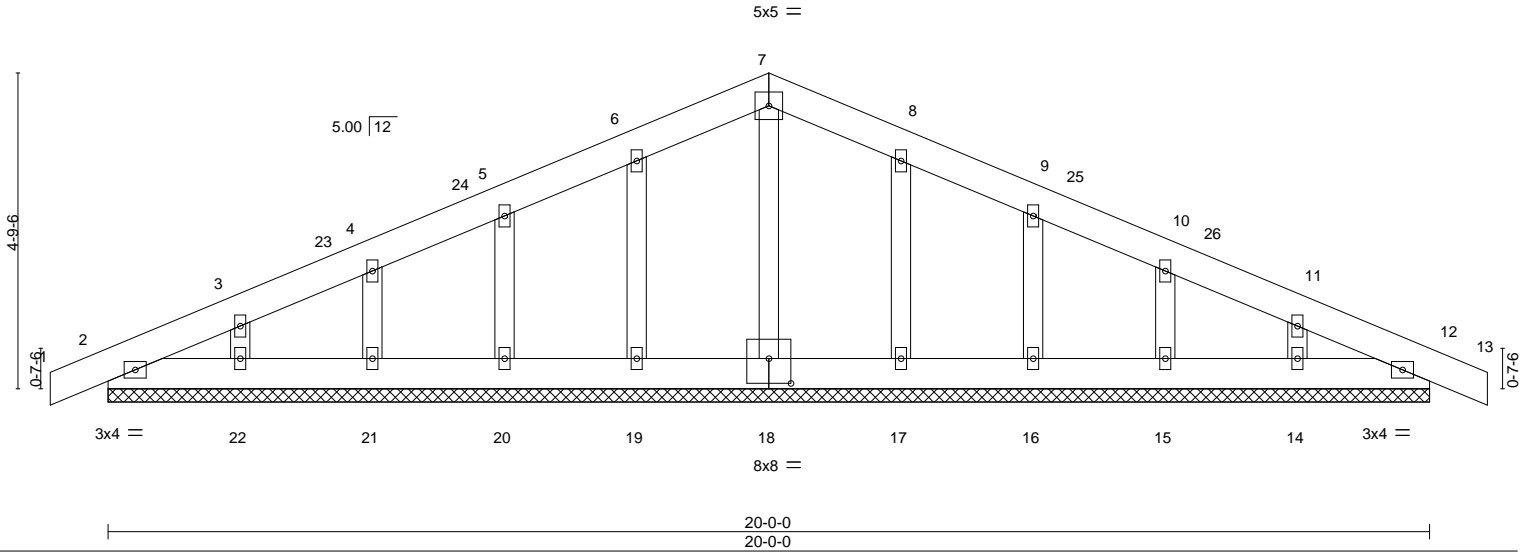


Plate Offsets (X,Y)-- [18:0-4-0,0-4-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.03 | Vert(LL) -0.00 | 12 | n/r | 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.01 | Vert(CT) -0.00 | 12 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.03 | Horz(CT) 0.00 | 12 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | | | | | |
| | | | | | | | Weight: 130 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS.

All bearings 20'-0".
 (lb) - Max Horz 2=54(LC 12)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14
 Max Grav All reactions 250 lb or less at joint(s) 2, 12, 18, 19, 20, 21, 22, 17, 16, 15, 14

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

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 10-0-0, Corner(3) 10-0-0 to 14-4-13, Exterior(2) 14-4-13 to 20-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0" oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6" tall by 2'-0" wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 19, 20, 21, 22, 17, 16, 15, 14.



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

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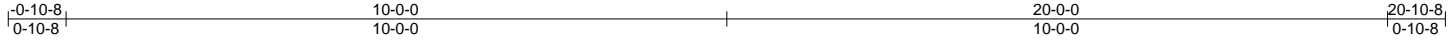
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377774 |
| J0121-0603 | G02 | Common | 5 | 1 | | |

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:53:06 2021 Page 1
ID:WeU20_wZYqtTA5MeulVrNIzoaVc-?BD5IFASbWA9Mo4lj8R4S?Mixg0y1oT074SQvgzopXB

Job Reference (optional)



Scale = 1:34.9

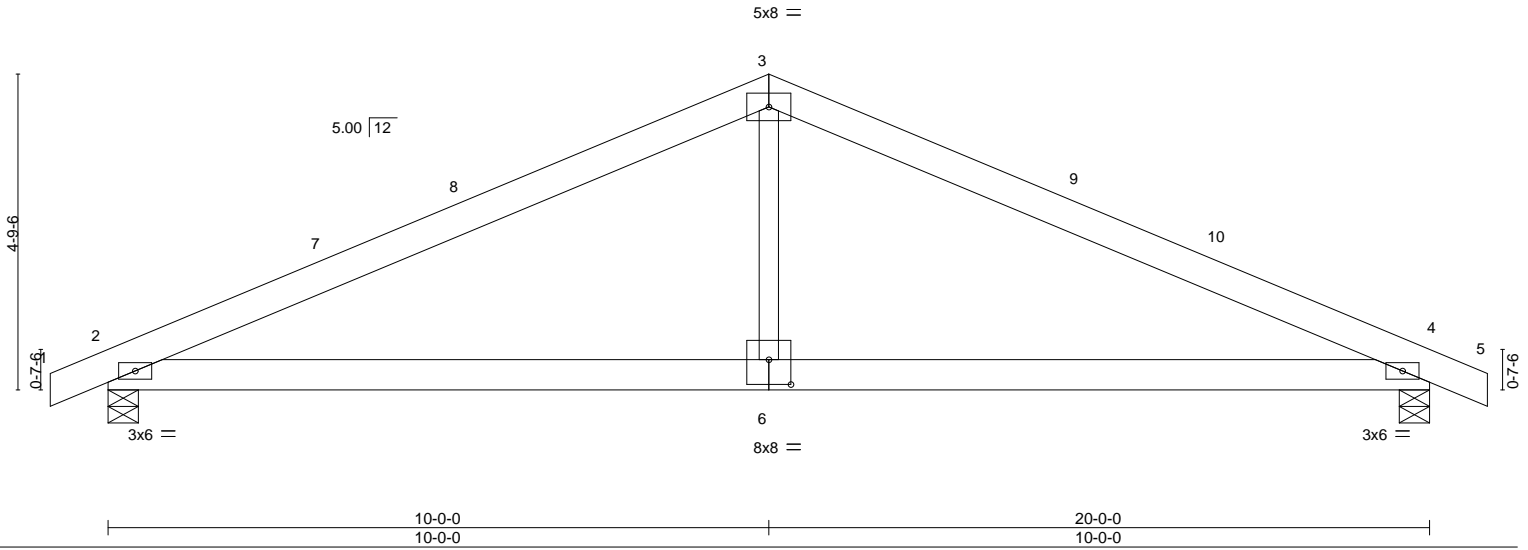


Plate Offsets (X,Y)-- [6:0-4-0-0-4-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.49 | Vert(LL) -0.05 | 2-6 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.37 | Vert(CT) -0.12 | 2-6 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.11 | Horz(CT) 0.02 | 4 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.04 | 2-6 | >999 | 240 | | |
| | | | | | | | Weight: 108 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 2=0-5-8, 4=0-5-8
Max Horz 2=-54(LC 13)
Max Uplift 2=-65(LC 12), 4=-65(LC 13)
Max Grav 2=848(LC 1), 4=848(LC 1)

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

TOP CHORD 2-3=-1232/289, 3-4=-1232/289
BOT CHORD 2-6=-132/1025, 4-6=-132/1025
WEBS 3-6=0/474

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 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(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 20-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



February 3, 2021

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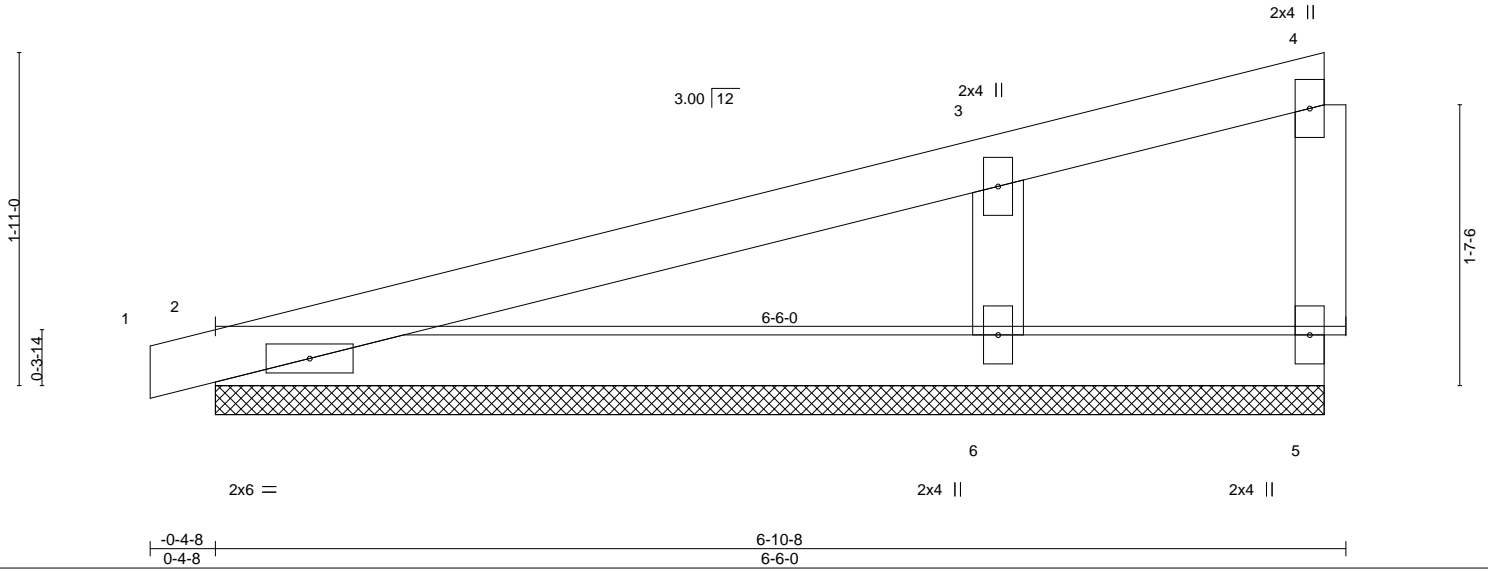
| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377775 |
| J0121-0603 | M01 | GABLE | 1 | 1 | | |

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ID:WeU20_wZYqtTA5MeulVrNizoaVc-TNnUybB4LqI0_xeUGsyJ?Dvxt4LTmGXAMkK_S6zopXA
6-10-8
6-6-0

Scale = 1:13.2



| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.22 | Vert(LL) -0.00 | 1 | n/r | 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.41 | Vert(CT) 0.00 | 1 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.06 | Horz(CT) -0.00 | 5 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-P | | | | | Weight: 23 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 5=6-4-8, 2=6-4-8, 6=6-4-8
Max Horz 2=89(LC 6)
Max Uplift 5=-18(LC 1), 2=-128(LC 6), 6=-320(LC 10)
Max Grav 5=7(LC 10), 2=343(LC 1), 6=809(LC 1)

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

WEBS 3-6=-276/313

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=128, 6=320.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 2-5=-115(F=-95)



February 3, 2021

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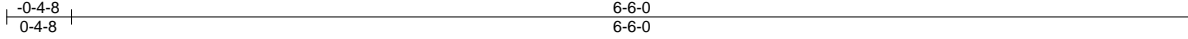
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377776 |
| J0121-0603 | M02 | MONOPITCH | 10 | 1 | | |

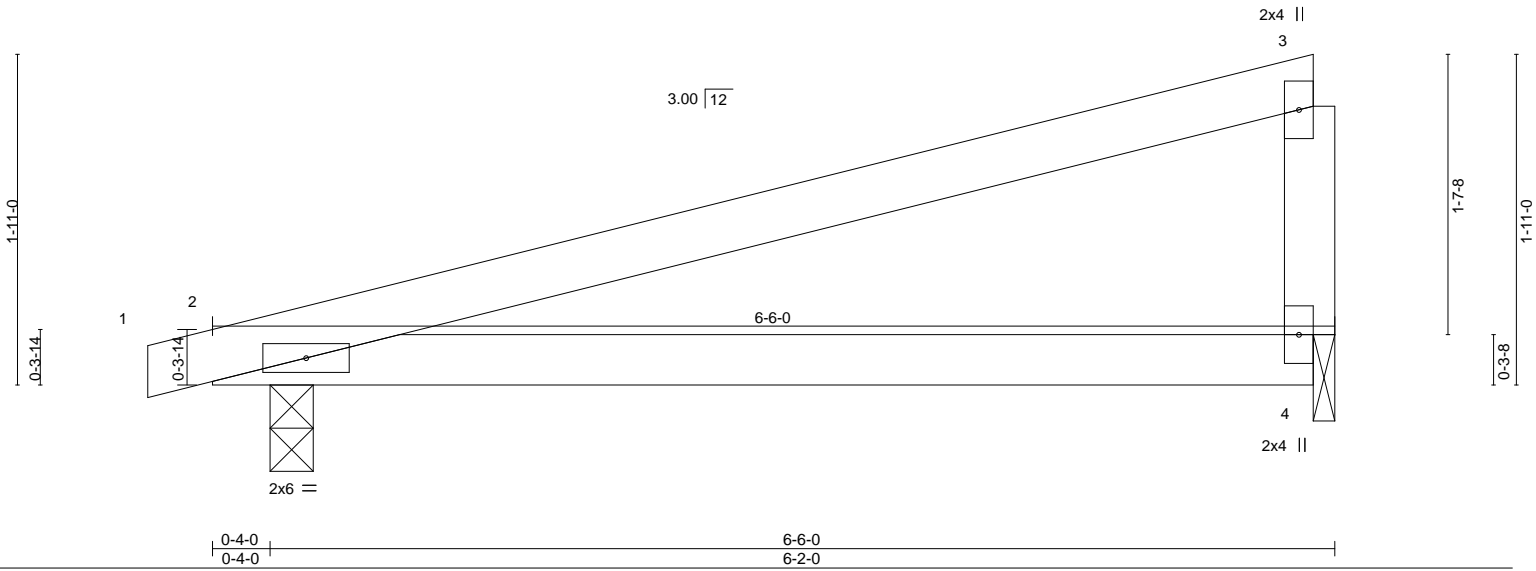
Comtech, Inc., Fayetteville, NC - 28314,

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Scale = 1:13.3



| 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 0.64 | Vert(LL) | -0.08 | 2-4 | >946 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.82 | Vert(CT) | -0.16 | 2-4 | >473 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-P | Wind(LL) | 0.19 | 2-4 | >385 | 240 | Weight: 22 lb | FT = 20% |

LUMBER-

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

BRACING-

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

REACTIONS.

(size) 4=0-1-8, 2=0-3-0
 Max Horz 2=62(LC 6)
 Max Uplift 4=128(LC 6), 2=-136(LC 6)
 Max Grav 4=247(LC 1), 2=280(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=128, 2=136.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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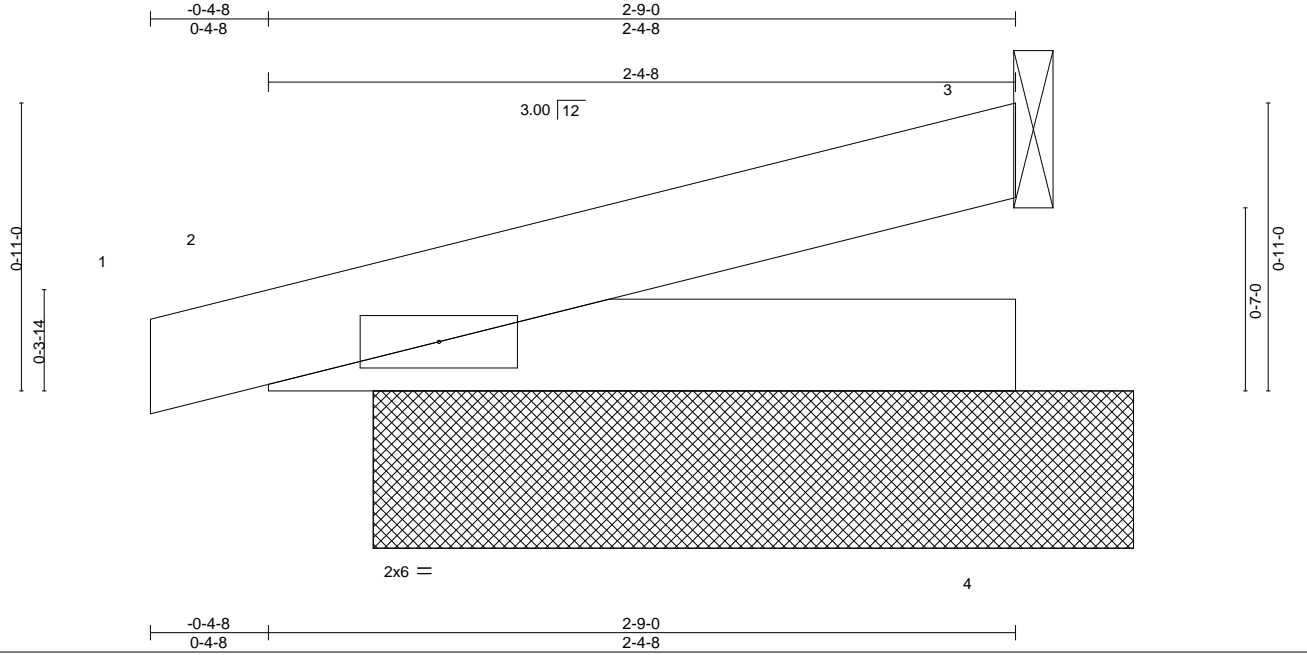
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|---------------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377777 |
| J0121-0603 | M03 | MONOPITCH SUPPORTED | 1 | 1 | | |

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Scale = 1:7.3

| | | | | | |
|----------------------|----------------------|-------------|-----------------------------|---------------|-------------|
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
| TCLL 20.0 | 2-0-0 | TC 0.22 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.05 | Vert(LL) -0.00 2-4 >999 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.00 | Vert(CT) -0.00 2-4 >999 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-P | Horz(CT) -0.00 3 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.00 2 **** 240 | Weight: 8 lb | FT = 20% |

| | |
|-----------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 2-4-8 oc purlins. |
| BOT CHORD 2x4 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |

REACTIONS. All bearings 2-5-0.
 (lb) - Max Horz 2=36(LC 6)
 Max Uplift All uplift 100 lb or less at joint(s) 3, 2
 Max Grav All reactions 250 lb or less at joint(s) 3, 3, 2, 4

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

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable studs spaced at 2-0-0 oc.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 40.0psf 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) 3, 2.
 - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377778 |
| J0121-0603 | PS-8 | Common | 3 | 1 | | |

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Job Reference (optional)



Scale = 1:20.4

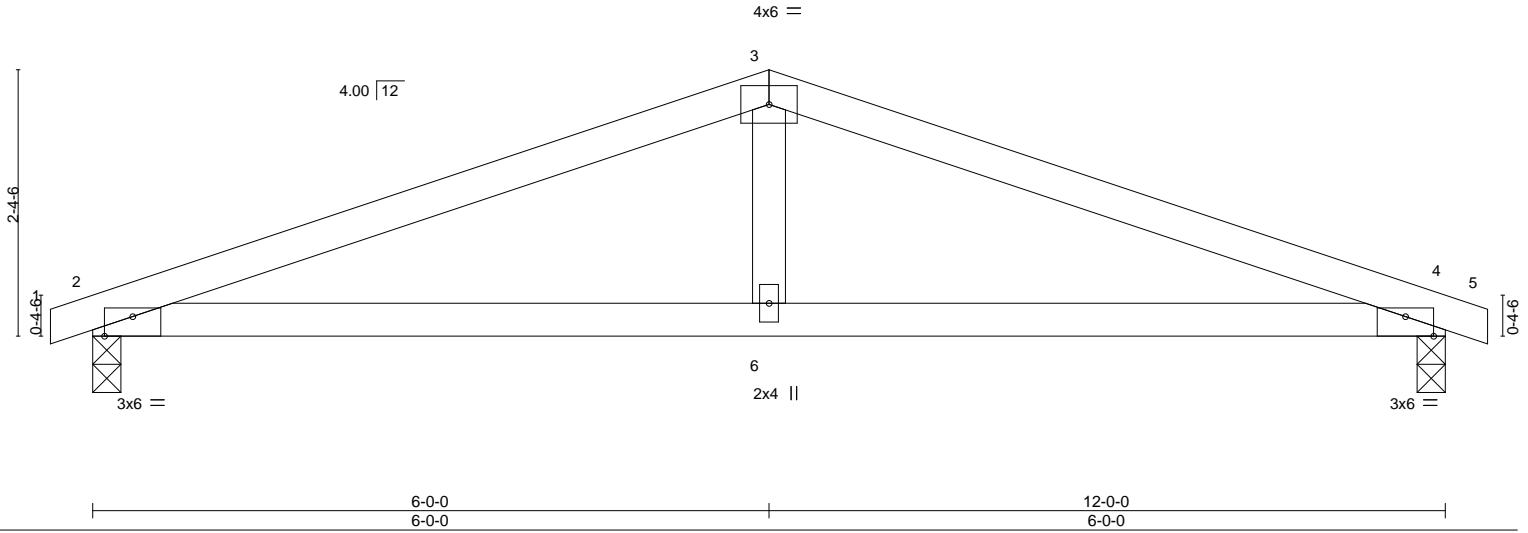


Plate Offsets (X,Y)-- [2:0-3-0,Edge], [4:0-3-0,Edge]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.39 | Vert(LL) 0.10 | 2-6 | >999 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.31 | Vert(CT) -0.07 | 2-6 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.06 | Horz(CT) -0.01 | 4 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | | | | | |
| | | | | | | | Weight: 41 lb | FT = 20% |

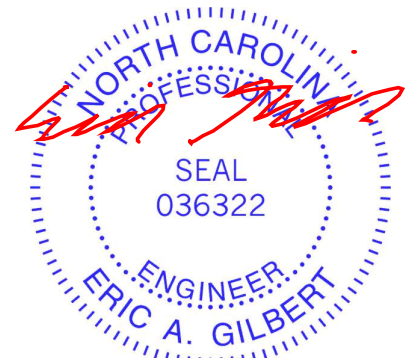
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-10-12 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 5-10-11 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-3-0
 Max Horz 2=28(LC 10)
 Max Uplift 2=-236(LC 6), 4=-236(LC 7)
 Max Grav 2=500(LC 1), 4=500(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-873/1166, 3-4=-873/1166
 BOT CHORD 2-6=-1022/771, 4-6=-1022/771
 WEBS 3-6=-430/283

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=236, 4=236.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



February 3, 2021

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

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

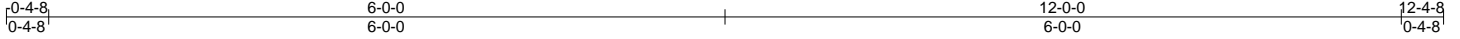


818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|----------------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377779 |
| J0121-0603 | PS-8G | COMMON SUPPORTED GAB | 1 | 1 | | |

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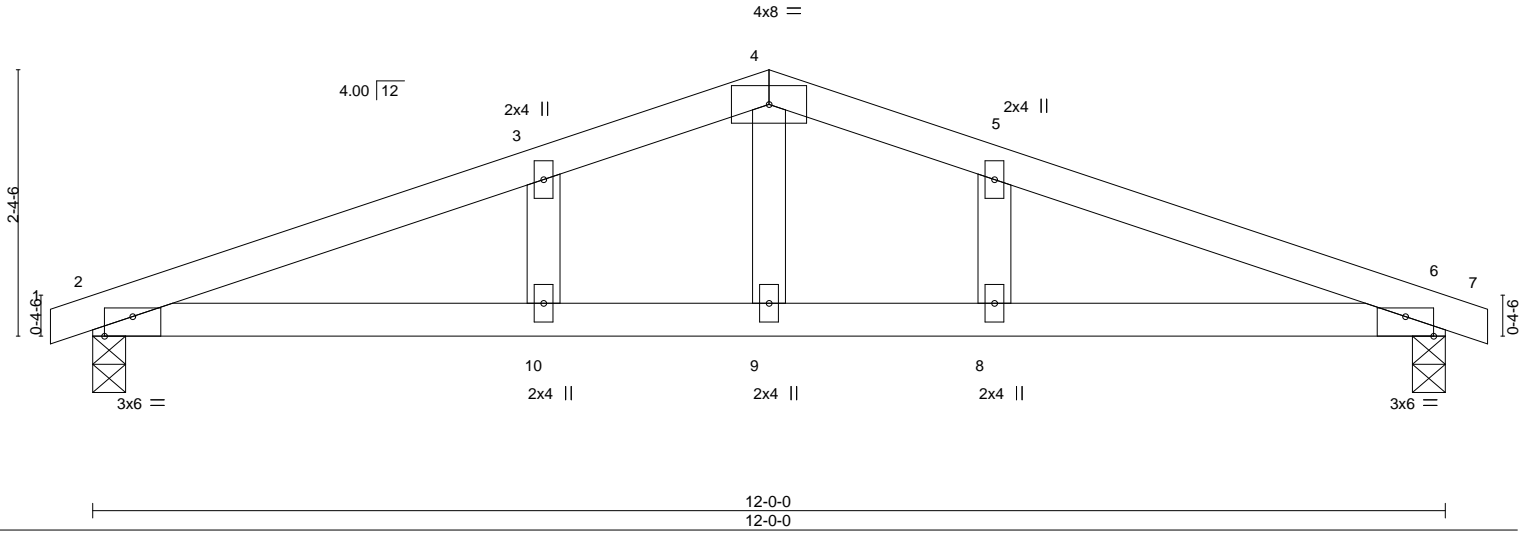


Plate Offsets (X,Y)-- [2:0-3-0,Edge], [6:0-3-0,Edge]

| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.42 | Vert(LL) 0.11 | 2-10 | >999 | 240 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.41 | Vert(CT) -0.09 | 2-10 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.07 | Horz(CT) -0.02 | 6 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | | | | Weight: 44 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 5-0-8 oc bracing.

REACTIONS.

(size) 2=0-3-8, 6=0-3-8
Max Horz 2=48(LC 14)
Max Uplift 2=-325(LC 6), 6=-325(LC 7)
Max Grav 2=500(LC 1), 6=500(LC 1)

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

TOP CHORD 2-3=-880/1434, 3-4=-829/1483, 4-5=-829/1483, 5-6=-880/1434
BOT CHORD 2-10=-1259/786, 9-10=-1259/786, 8-9=-1259/786, 6-8=-1259/786
WEBS 4-9=-559/291

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 40.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=325, 6=325.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

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



818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|-----------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 52 Sierra Village | E15377780 |
| J0121-0603 | V01 | GABLE | 1 | 1 | | |

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Feb 3 14:53:11 2021 Page 1
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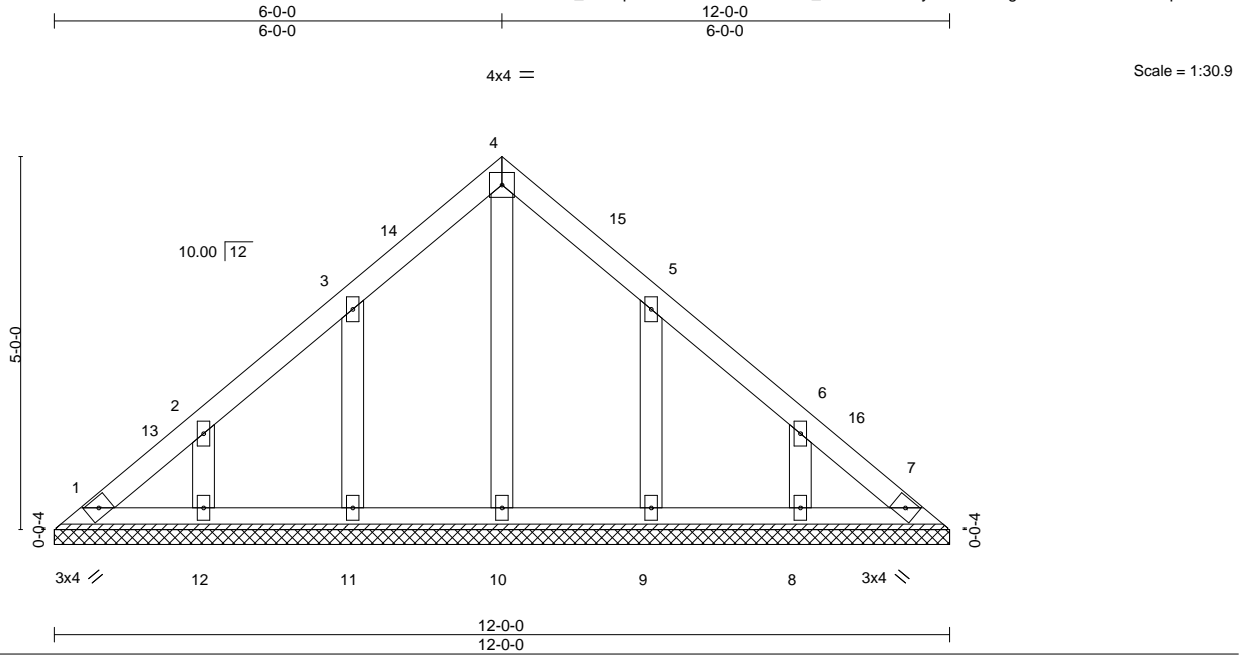


Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|-----------------|-----------------|----------|----------|------|-------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.04 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.03 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | Weight: 58 lb | FT = 20% |

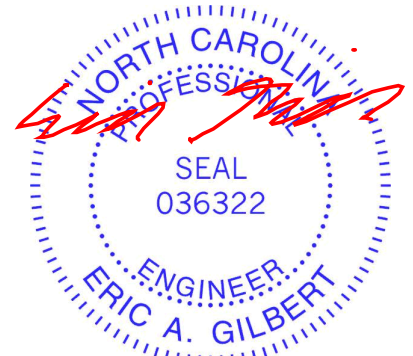
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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 12-0-0.
 (lb) - Max Horz 1=112(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 11, 12, 9, 8
 Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 11, 12, 9, 8

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 11-7-3 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, 12, 9, 8.



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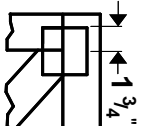
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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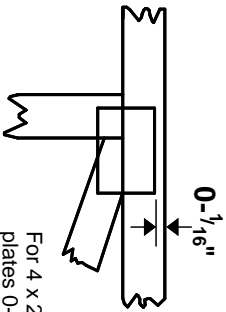
818 Soundside Road
 Edenton, NC 27932

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 20/20 software** or upon request.

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

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

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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