ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0423-1755
Wellons / Lot 3 The Cape Harnett

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

Pages or sheets covered by this seal: I57851099 thru I57851131

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

North Carolina COA: C-0844

April 19,2023

Gilbert, Eric

**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 MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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 | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A01 | COMMON | 6 | 1 | I57851099 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:41:39 2023 Page 1
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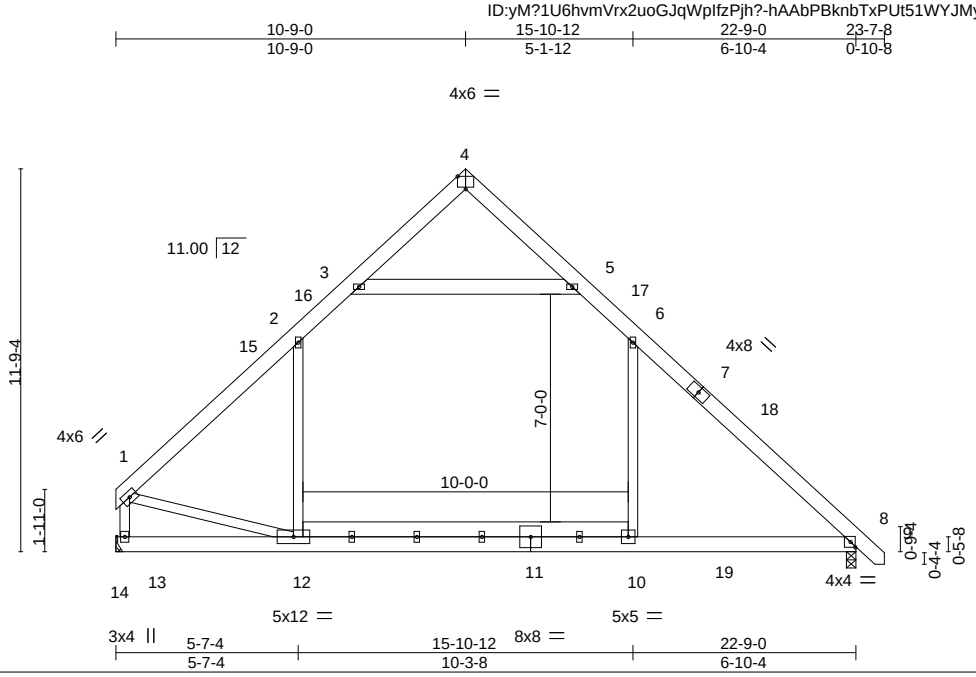


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [8:0-1-12,0-2-0]

| 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 | 0.56 | Vert(LL) | -0.28 | 10-12 | >973 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.71 | Vert(CT) | -0.38 | 10-12 | >704 | 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) | 0.20 | 8-10 | >999 | 240 | Weight: 197 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
3-5: 2x6 SP No.1

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13.

**REACTIONS.** (size) 13=Mechanical, 8=0-3-8
Max Horz 13=-274(LC 8)
Max Uplift 13=-31(LC 13), 8=-44(LC 13)
Max Grav 13=1090(LC 20), 8=1169(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1302/219, 2-3=-859/294, 5-6=-804/287, 6-8=-1417/199, 1-13=-1221/217
BOT CHORD 12-13=-296/327, 10-12=0/920, 8-10=0/919
WEBS 2-12=0/459, 6-10=0/623, 1-12=-54/996, 3-5=-943/364

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 10-9-0, Exterior(2) 10-9-0 to 15-1-13, Interior(1) 15-1-13 to 23-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 13 and 44 lb uplift at joint 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.
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

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A01GE | GABLE | 1 | 1 | I57851100 |
| | | | | | Job Reference (optional) |

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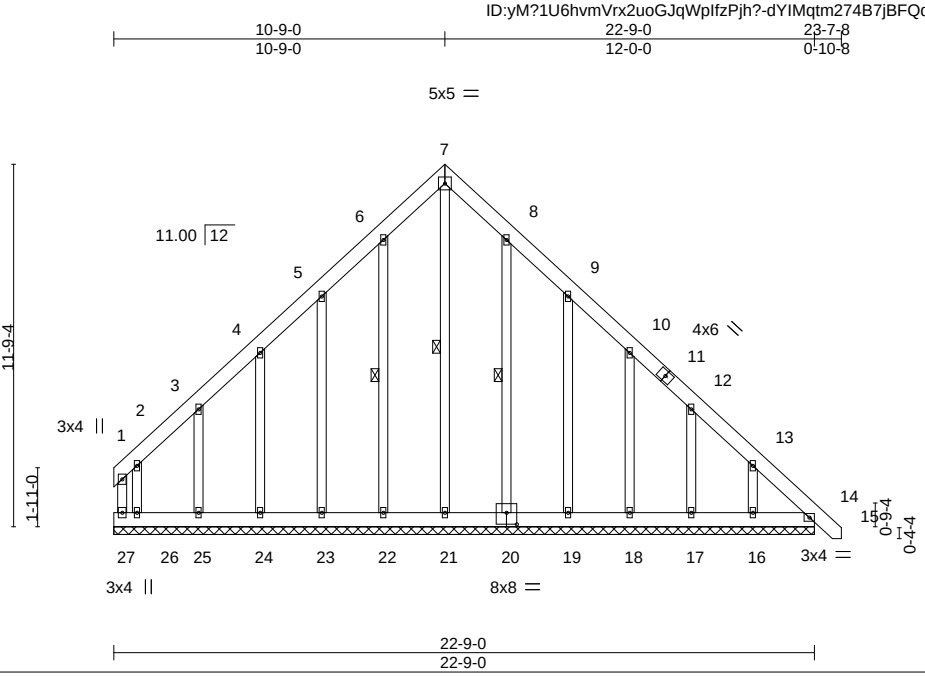


Plate Offsets (X,Y)-- [20:0-4-0,0-4-8]

| 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 | 0.13 | Vert(LL) | 0.00 | 14 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | Vert(CT) | 0.00 | 14 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.23 | Horz(CT) | 0.01 | 14 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 226 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 | 1 Row at midpt 7-21, 6-22, 8-20 |

**REACTIONS.** All bearings 22-9-0.
(lb) - Max Horz 27=-340(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 21, 22, 20 except 27=-235(LC 10), 14=-199(LC 9), 23=-153(LC 12), 24=-122(LC 12), 25=-143(LC 12), 26=-360(LC 12), 19=-144(LC 13), 18=-124(LC 13), 17=-122(LC 13), 16=-163(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 22, 23, 24, 25, 20, 19, 18, 17, 16 except 27=371(LC 12), 14=271(LC 19), 21=451(LC 12), 26=276(LC 10)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-303/347, 6-7=-346/402, 7-8=-346/417, 8-9=-303/406, 9-10=-237/324, 10-12=-269/279, 12-13=-300/293, 13-14=-386/356
BOT CHORD 26-27=-261/303, 25-26=-261/303, 24-25=-261/304, 23-24=-261/304, 22-23=-261/304, 21-22=-261/304, 20-21=-261/304, 19-20=-261/304, 18-19=-260/304, 17-18=-260/303, 16-17=-260/303, 14-16=-259/302
WEBS 7-21=-426/290

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-3-2 to 4-8-14, Exterior(2) 4-8-14 to 10-9-0, Corner(3) 10-9-0 to 15-1-13, Exterior(2) 15-1-13 to 23-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 21, 22, 20 except (jt=lb) 27=235, 14=199, 23=153, 24=122, 25=143, 26=360, 19=144, 18=124, 17=122, 16=163.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A02 | FINK | 1 | 1 | I57851101 |
| | | | | | Job Reference (optional) |

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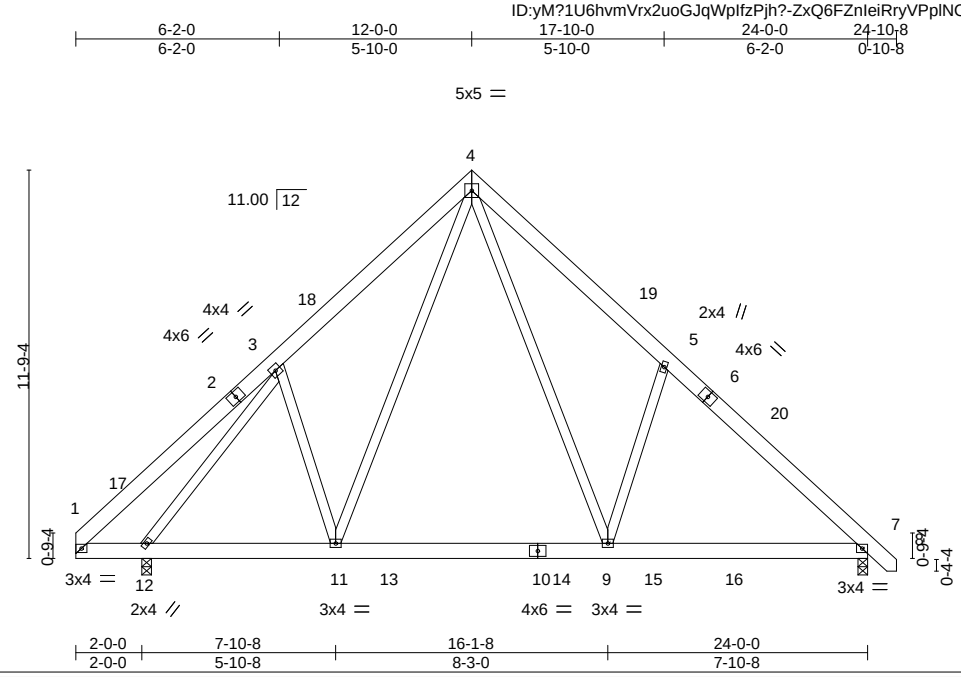


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.17 | Vert(LL) | -0.08 | 9-11 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | -0.11 | 9-11 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.02 | 7-9 | >999 | 240 | Weight: 197 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, Except:
6-0-0 oc bracing: 1-12.

**REACTIONS.** (size) 12=0-3-8, 7=0-3-8
Max Horz 12=-276(LC 10)
Max Uplift 12=-39(LC 12), 7=-45(LC 13)
Max Grav 12=1096(LC 19), 7=1029(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-936/406, 4-5=-1116/425, 5-7=-1192/246
BOT CHORD 11-12=-106/752, 9-11=-2/578, 7-9=-28/825
WEBS 3-11=-262/284, 4-11=-184/399, 4-9=-226/791, 5-9=-449/320, 3-12=-1139/234

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 24-8-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 7.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A02TR | FINK | 6 | 1 | I57851102 |
| | | | | | Job Reference (optional) |

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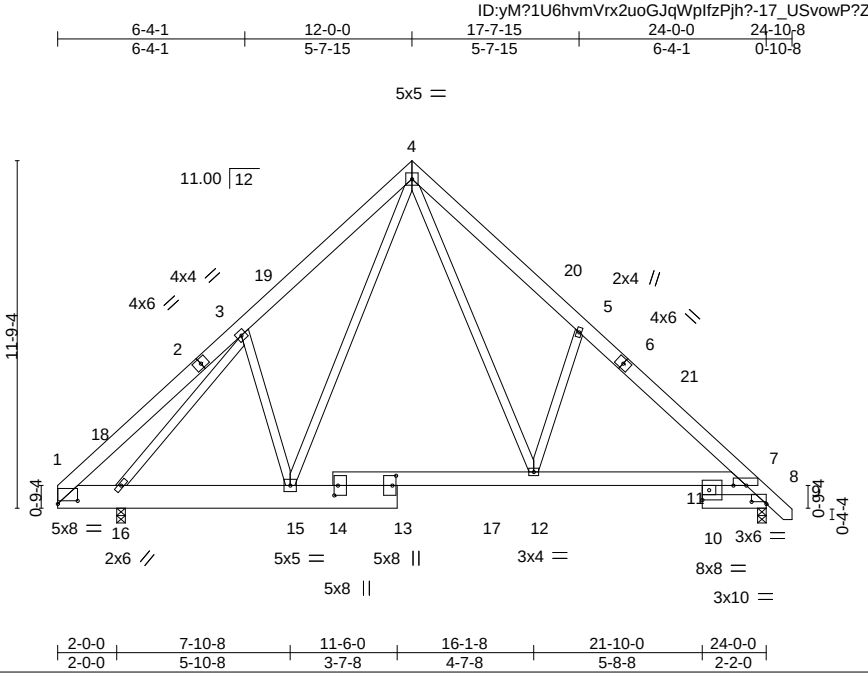


Plate Offsets (X,Y)-- [1:0-8-1,0-1-4], [7:0-5-4,0-0-0], [8:0-6-0,0-0-14], [13:0-4-0,0-1-8], [14:0-4-0,0-1-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | -0.07 | 12-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.35 | Vert(CT) | -0.11 | 12-15 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.76 | Horz(CT) | 0.05 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.03 | 11-12 | >999 | 240 | Weight: 222 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
1-13: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
10-11: 2x6 SP No.1

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

**REACTIONS.** (size) 16=0-3-8, 8=0-3-8
Max Horz 16=-276(LC 8)
Max Uplift 16=-39(LC 12), 8=-46(LC 13)
Max Grav 16=1071(LC 19), 8=945(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-955/395, 4-5=-1163/418, 5-7=-1203/247, 7-8=-799/202
BOT CHORD 15-16=-94/779, 12-15=-1/583, 11-12=-21/881, 7-11=-21/881
WEBS 3-15=-315/302, 4-15=-180/427, 4-12=-228/811, 5-12=-486/309, 3-16=-974/160

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 24-8-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 8.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A03 | FINK | 1 | 1 | I57851103 |
| | | | | | Job Reference (optional) |

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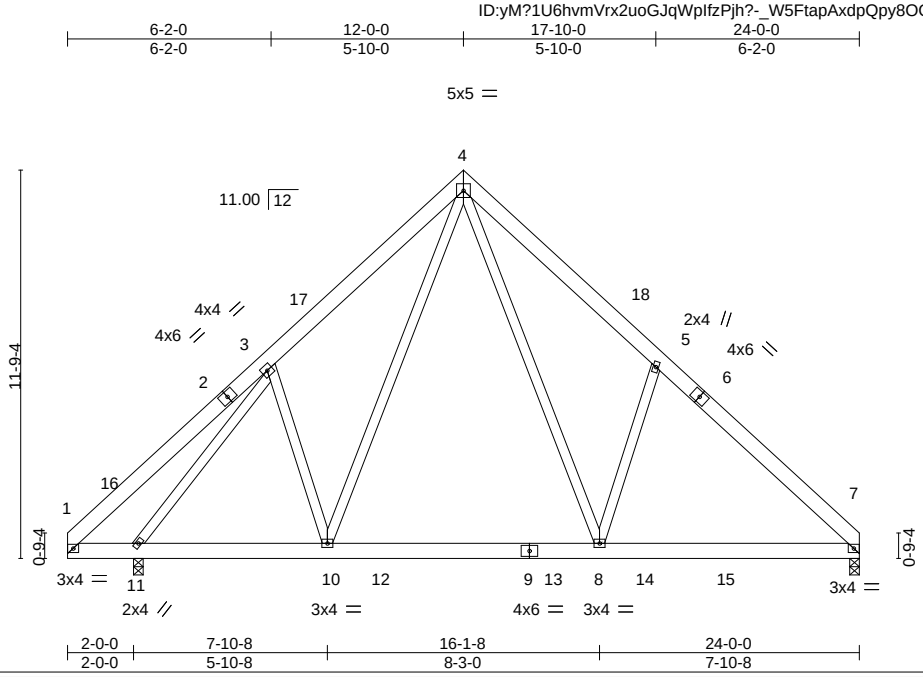


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.17 | Vert(LL) | -0.08 | 8-10 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | -0.11 | 8-10 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.90 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.02 | 7-8 | >999 | 240 | Weight: 195 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, Except:
6-0-0 oc bracing: 1-11.

**REACTIONS.** (size) 11=0-3-8, 7=0-3-8
Max Horz 11=-269(LC 8)
Max Uplift 11=-39(LC 12), 7=-32(LC 13)
Max Grav 11=1097(LC 19), 7=979(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-4=-936/407, 4-5=-1120/441, 5-7=-1193/254
BOT CHORD 10-11=-113/747, 8-10=-9/574, 7-8=-44/822
WEBS 3-10=-262/284, 4-10=-184/398, 4-8=-231/795, 5-8=-452/325, 3-11=-1140/235

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 23-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 7.

April 19,2023

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

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

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A04 | COMMON | 5 | 1 | I57851104 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:41:47 2023 Page 1
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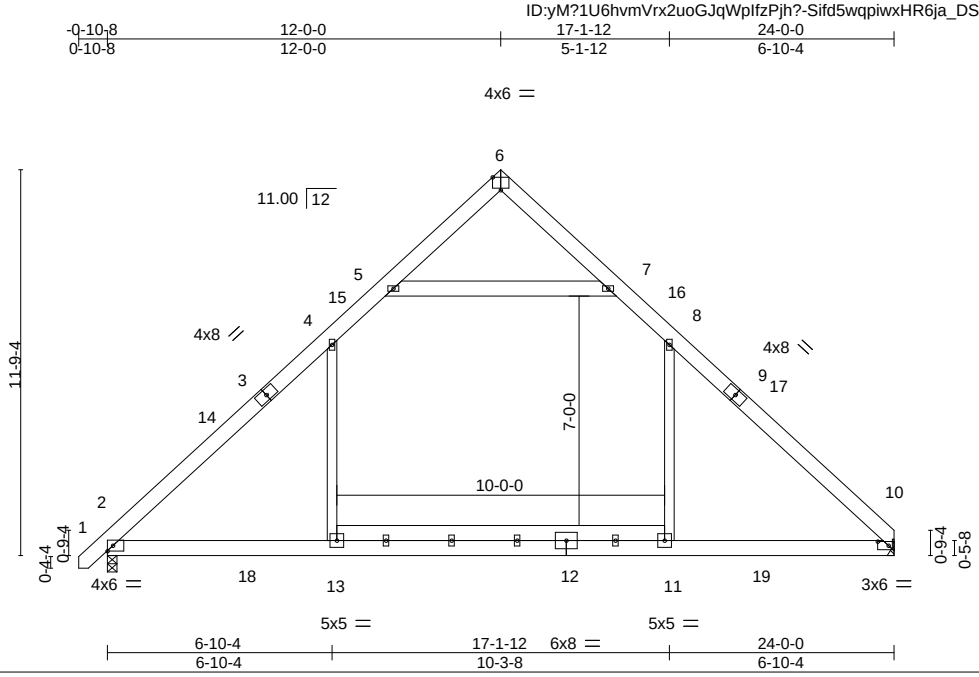


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [10:0-4-0,0-1-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.54 | Vert(LL) | -0.25 | 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.56 | Vert(CT) | -0.35 | 11-13 | >824 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.52 | Horz(CT) | 0.02 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.20 | 10-11 | >999 | 240 | Weight: 194 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
5-7: 2x6 SP No.1

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=Mechanical
Max Horz 2=276(LC 9)
Max Uplift 2=-47(LC 12), 10=-35(LC 13)
Max Grav 2=1263(LC 19), 10=1212(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1635/236, 4-5=-951/305, 7-8=-951/310, 8-10=-1624/232
BOT CHORD 2-13=0/1077, 11-13=0/1078, 10-11=0/1077
WEBS 4-13=0/713, 8-11=0/699, 5-7=-1144/405

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 12-0-0, Exterior(2) 12-0-0 to 16-4-13, Interior(1) 16-4-13 to 23-10-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A05 | COMMON | 2 | 1 | I57851105 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:41:48 2023 Page 1
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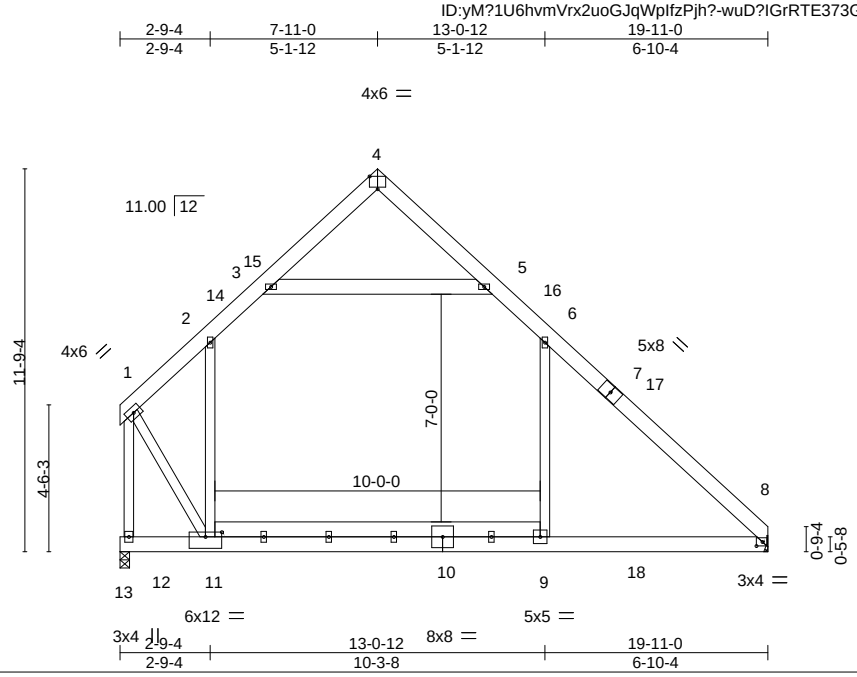


Plate Offsets (X,Y)-- [4:0-3-0,Edge], [8:0-2-4,0-1-8], [11:0-6-0,0-1-12]

| 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 | 0.52 | Vert(LL) | -0.32 | 9-11 | >727 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.60 | Vert(CT) | -0.50 | 9-11 | >468 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.32 | Horz(CT) | 0.01 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.25 | 8-9 | >954 | 240 | Weight: 182 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-13: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
3-5: 2x6 SP No.1

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 11-12.

**REACTIONS.** (size) 12=0-3-8, 8=Mechanical
Max Horz 12=-265(LC 8)
Max Uplift 12=-55(LC 13), 8=-18(LC 13)
Max Grav 12=1059(LC 20), 8=980(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-853/161, 2-3=-738/261, 5-6=-616/245, 6-8=-1110/122, 1-12=-1697/259
BOT CHORD 11-12=-239/268, 9-11=0/698, 8-9=0/698
WEBS 6-9=0/484, 1-11=-165/1385, 3-5=-701/292

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 19-10-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 8.

April 19,2023

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A06 | COMMON | 6 | 1 | I57851106 |
| | | | | | Job Reference (optional) |

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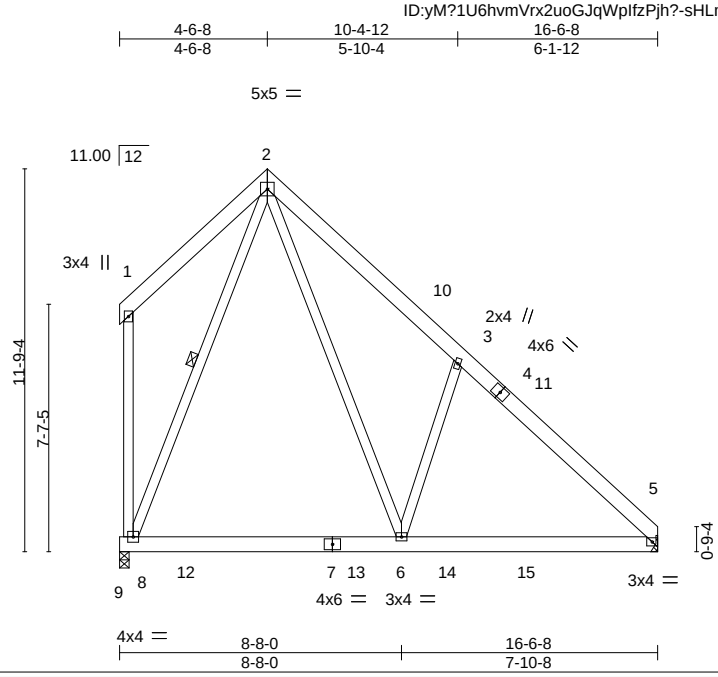


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.17 | Vert(LL) | -0.10 | 6-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.34 | Vert(CT) | -0.13 | 6-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.55 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.02 | 5-6 | >999 | 240 | Weight: 146 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 1 Row at midpt 2-8

**REACTIONS.** (size) 8=0-3-8, 5=Mechanical
Max Horz 8=-285(LC 13)
Max Uplift 8=-103(LC 13)
Max Grav 8=861(LC 20), 5=722(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-771/296, 3-5=-833/106
BOT CHORD 6-8=-95/301, 5-6=0/567
WEBS 2-6=-225/849, 3-6=-476/334, 2-8=-663/135

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 8-11-5, Interior(1) 8-11-5 to 16-5-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=103.

April 19,2023

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A07 | COMMON | 2 | 1 | I57851107 |
| | | | | | Job Reference (optional) |

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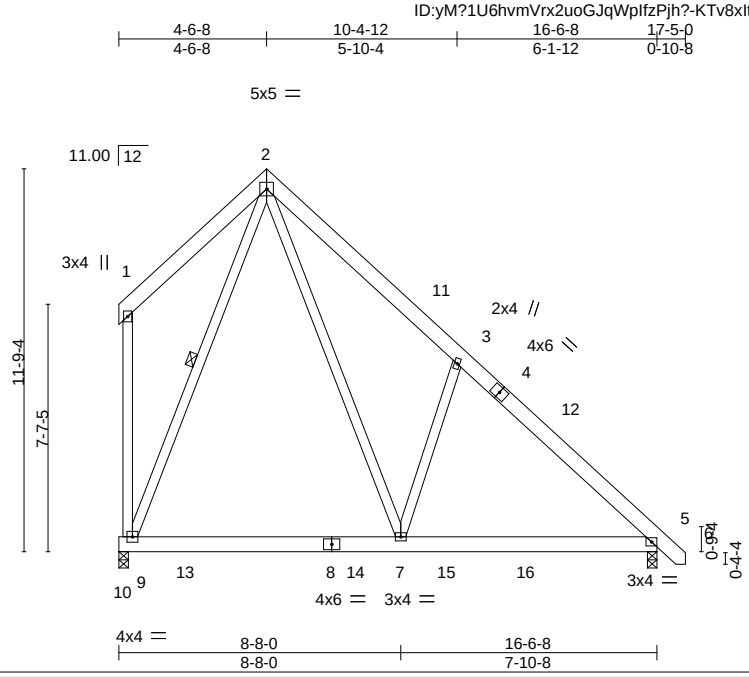


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.17 | Vert(LL) | -0.10 | 7-9 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.34 | Vert(CT) | -0.13 | 7-9 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.02 | 5-7 | >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 1 Row at midpt 2-9

**REACTIONS.** (size) 9=0-3-8, 5=0-3-8
Max Horz 9=-296(LC 13)
Max Uplift 9=-102(LC 13)
Max Grav 9=858(LC 20), 5=770(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-764/285, 3-5=-830/102
BOT CHORD 7-9=-109/308, 5-7=0/567
WEBS 2-7=-218/839, 3-7=-470/328, 2-9=-660/135

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 8-11-5, Interior(1) 8-11-5 to 17-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=102.

April 19,2023

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | A07GE | GABLE | 1 | 1 | I57851108 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:41:52 2023 Page 1
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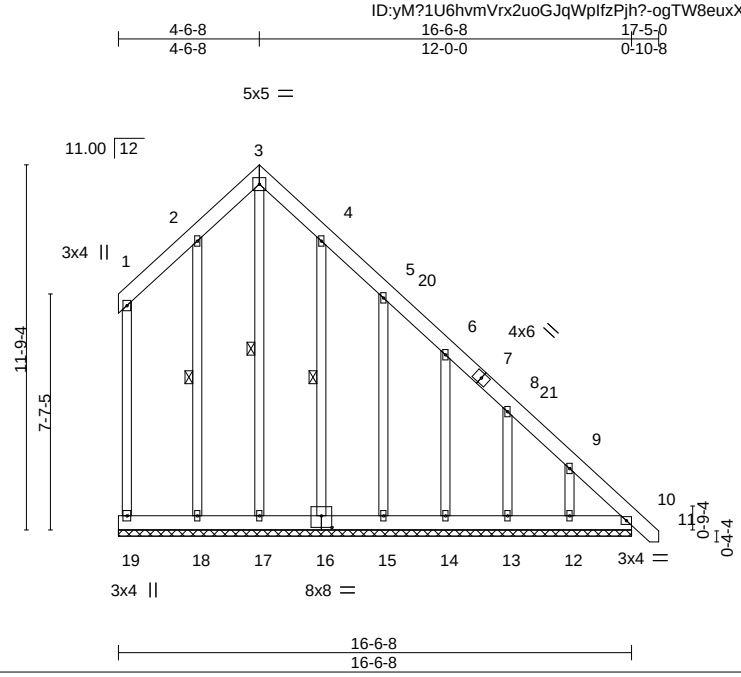


Scale = 1:74.3

Plate Offsets (X,Y)-- [16:0-4-0,0-4-8]

| 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 | 0.04 | Vert(LL) | 0.00 | 10 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 10 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.17 | Horz(CT) | 0.01 | 10 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 175 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 | 1 Row at midpt 3-17, 2-18, 4-16 |

**REACTIONS.** All bearings 16-6-8.
(lb) - Max Horz 19=-439(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 19, 17 except 10=-159(LC 11), 18=-106(LC 12), 16=-103(LC 13), 15=-134(LC 13), 14=-124(LC 13), 13=-123(LC 13), 12=-178(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 19, 17, 18, 16, 15, 14, 13, 12 except 10=346(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 6-8=-273/229, 8-9=-390/271, 9-10=-540/349
BOT CHORD 18-19=-282/439, 17-18=-282/439, 16-17=-282/439, 15-16=-282/438, 14-15=-282/438, 13-14=-281/438, 12-13=-281/438, 10-12=-280/437

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-3-2 to 8-11-5, Interior(1) 8-11-5 to 17-3-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 19, 17 except (jt=lb) 10=159, 18=106, 16=103, 15=134, 14=124, 13=123, 12=178.

April 19,2023

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

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | B1 | GABLE | 1 | 1 | I57851109 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:41:54 2023 Page 1
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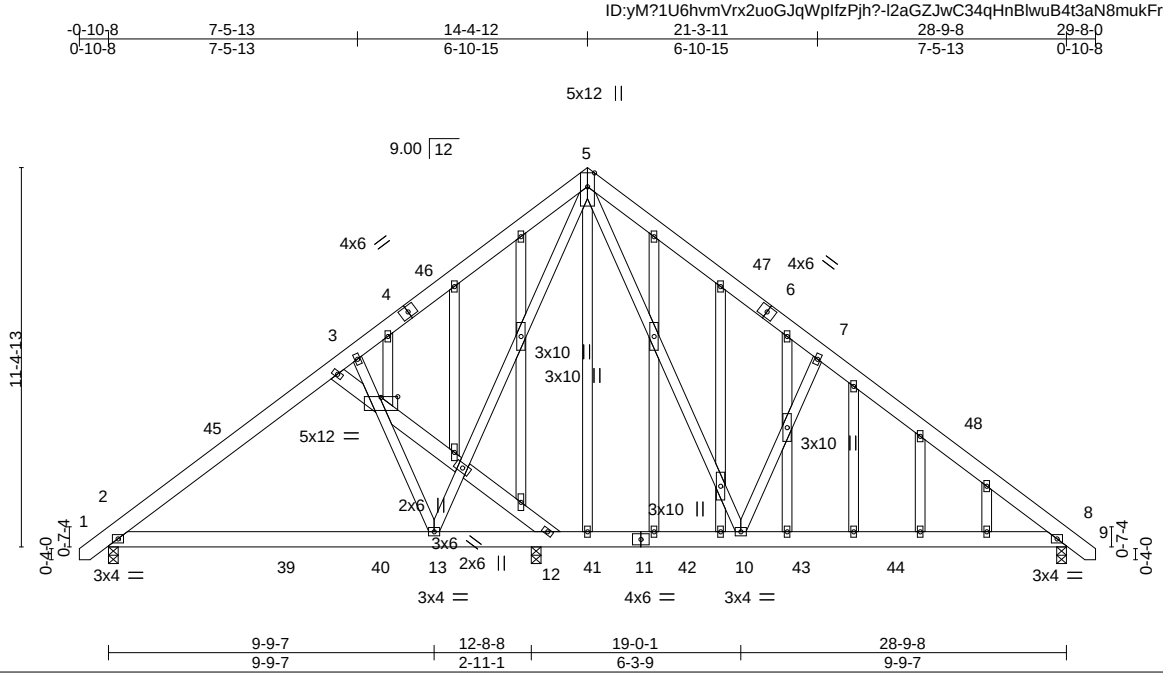


Plate Offsets (X,Y)-- [15:0-6-0,0-0-4]

| 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 | 0.23 | Vert(LL) | -0.09 | 2-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.42 | Vert(CT) | -0.18 | 2-13 | >886 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.69 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.06 | 2-13 | >999 | 240 | Weight: 312 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
12-14,14-15,15-16: 2x6 SP No.1
OTHERS 2x4 SP No.2

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

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8, 12=0-3-8
Max Horz 2=-340(LC 10)
Max Uplift 2=-226(LC 12), 8=-233(LC 13), 12=-18(LC 12)
Max Grav 2=1190(LC 19), 8=1226(LC 20), 12=215(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1439/317, 3-5=-1348/441, 5-7=-1417/444, 7-8=-1503/319
BOT CHORD 2-13=-288/1304, 12-13=-22/851, 10-12=-22/851, 8-10=-113/1152
WEBS 3-13=-509/407, 5-13=-274/696, 5-10=-285/822, 7-10=-507/406

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-8-9 to 3-8-3, Interior(1) 3-8-3 to 14-4-12, Exterior(2) 14-4-12 to 18-9-9, Interior(1) 18-9-9 to 29-6-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=226, 8=233.

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | B2 | FINK | 1 | 1 | I57851110 |
| | | | | | Job Reference (optional) |

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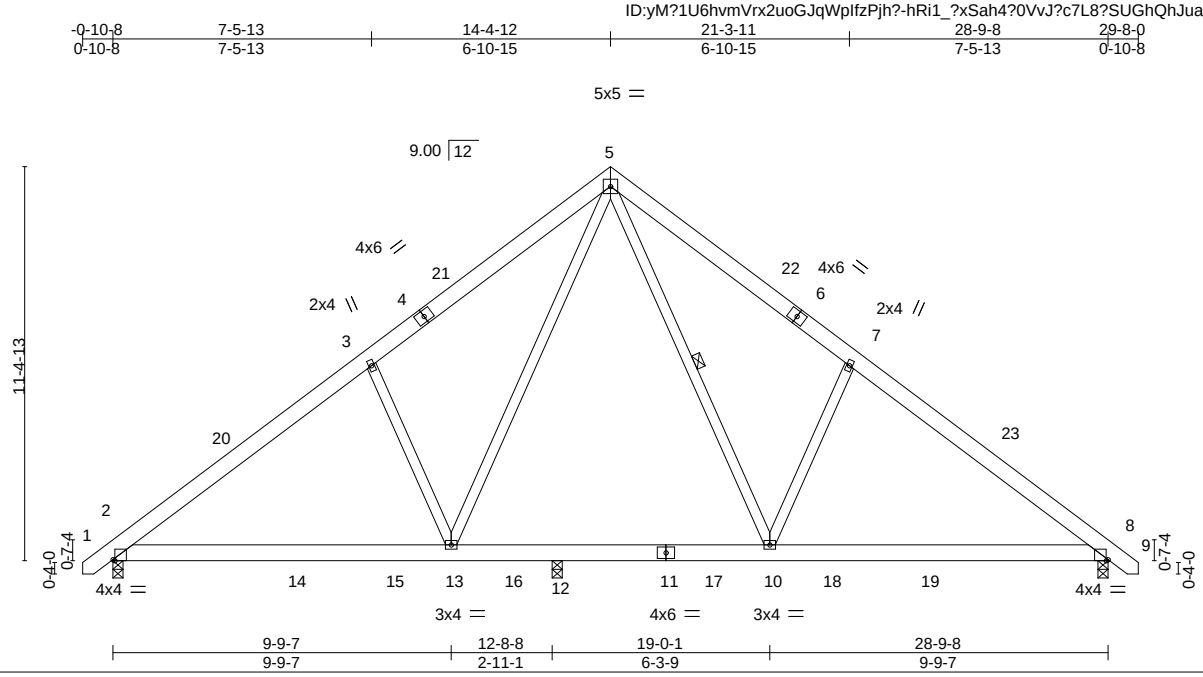


Plate Offsets (X,Y)-- [2:0-0-11,Edge], [8:0-0-11,Edge]

| 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 | 0.23 | Vert(LL) | -0.09 | 2-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.42 | Vert(CT) | -0.18 | 2-13 | >859 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.42 | Horz(CT) | 0.03 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.13 | 8-10 | >999 | 240 | Weight: 208 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.
WEBS 1 Row at midpt 5-10

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8, 12=0-3-8
Max Horz 2=-272(LC 10)
Max Uplift 2=-67(LC 12), 8=-95(LC 8), 12=-41(LC 9)
Max Grav 2=1141(LC 19), 8=1164(LC 2), 12=302(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1407/519, 3-5=-1287/643, 5-7=-1350/914, 7-8=-1471/786
BOT CHORD 2-13=-260/1204, 12-13=-99/762, 10-12=-99/762, 8-10=-490/1111
WEBS 3-13=-510/309, 5-13=-135/684, 5-10=-675/703, 7-10=-505/326

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-9 to 3-8-3, Interior(1) 3-8-3 to 14-4-12, Exterior(2) 14-4-12 to 18-9-9, Interior(1) 18-9-9 to 29-6-1 zone; porch right 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) 2, 8, 12.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | B3 | FINK | 1 | 1 | I57851111 |
| | | | | | Job Reference (optional) |

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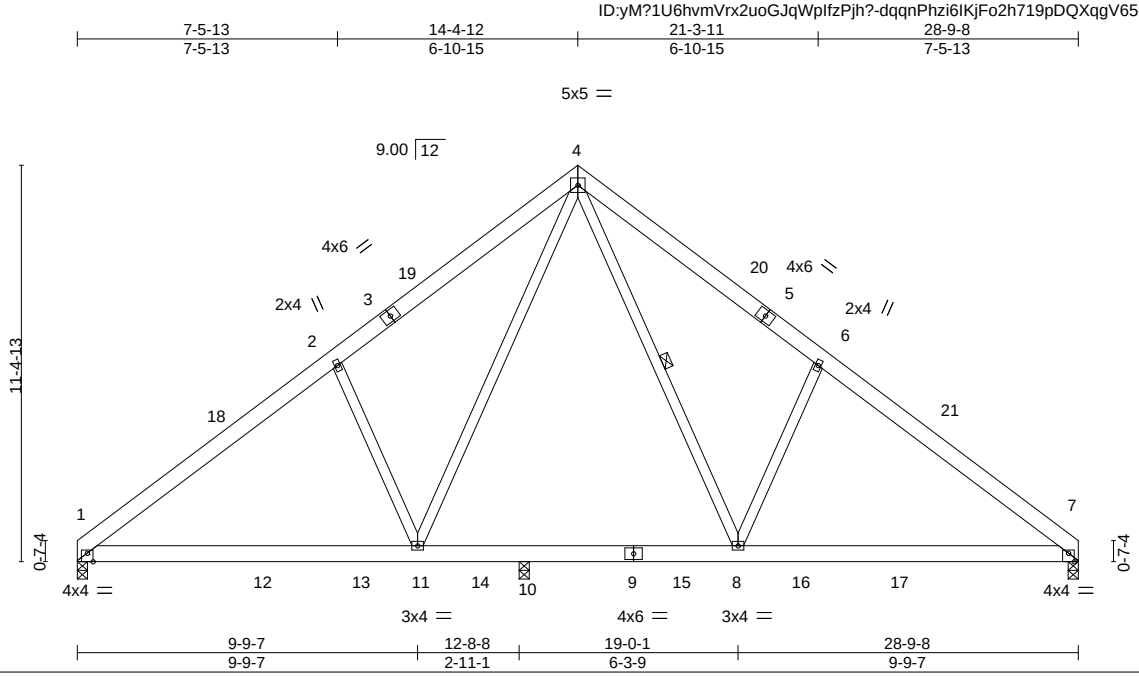


Plate Offsets (X,Y)-- [1:0-2-0,Edge], [7:0-2-0,Edge]

| 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 | 0.24 | Vert(LL) | -0.09 | 1-11 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.42 | Vert(CT) | -0.18 | 1-11 | >843 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.42 | Horz(CT) | 0.03 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.14 | 7-8 | >999 | 240 | Weight: 204 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 9-11-1 oc bracing.
WEBS 1 Row at midpt 4-8

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8, 10=0-3-8
Max Horz 1=-261(LC 10)
Max Uplift 1=-52(LC 12), 7=-91(LC 8), 10=-43(LC 9)
Max Grav 1=1093(LC 19), 7=1122(LC 2), 10=299(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1414/525, 2-4=-1294/652, 4-6=-1357/923, 6-7=-1477/793
BOT CHORD 1-11=-285/1203, 10-11=-115/759, 8-10=-115/759, 7-8=-506/1116
WEBS 2-11=-511/314, 4-11=-134/689, 4-8=-678/706, 6-8=-507/325

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 14-4-12, Exterior(2) 14-4-12 to 18-9-9, Interior(1) 18-9-9 to 28-7-12 zone; porch right 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) 1, 7, 10.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | B4GR | Monopitch Girder | 1 | 2 | I57851112 |
| | | | | | Job Reference (optional) |

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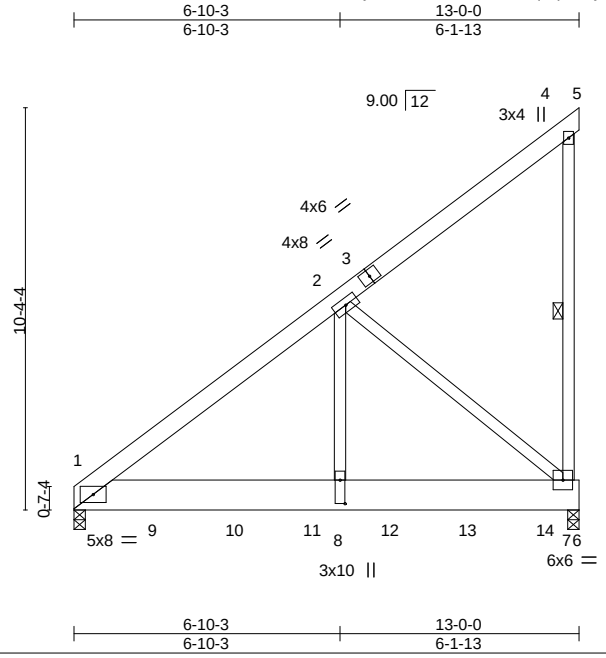


Plate Offsets (X,Y)-- [8:0-7-4,0-1-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.15 | Vert(LL) | -0.04 | 1-8 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.50 | Vert(CT) | -0.07 | 1-8 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.77 | Horz(CT) | 0.01 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 1-8 | >999 | 240 | Weight: 241 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 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 1 Row at midpt 4-7

**REACTIONS.** (size) 7=0-3-8, 1=0-3-8
Max Horz 1=314(LC 8)
Max Uplift 7=-317(LC 8), 1=-51(LC 8)
Max Grav 7=3888(LC 2), 1=3255(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3458/14
BOT CHORD 1-8=-230/2715, 7-8=-230/2715
WEBS 2-8=-79/3993, 2-7=-3575/302

**NOTES-**
1) 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, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
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 except (jt=lb) 7=317.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1042 lb down and 51 lb up at 2-0-12, 1042 lb down and 51 lb up at 4-0-12, 1042 lb down and 51 lb up at 6-0-12, 1042 lb down and 51 lb up at 8-0-12, and 1042 lb down and 51 lb up at 10-0-12, and 1042 lb down and 51 lb up at 12-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-5=-20, 1-6=-20
Concentrated Loads (lb)
Vert: 9=-878(B) 10=-878(B) 11=-878(B) 12=-878(B) 13=-878(B) 14=-879(B)

April 19,2023

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | C1 | Common | 2 | 1 | I57851113 |
| | | | | | Job Reference (optional) |

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-0-10-8 6-4-15 12-9-0 19-1-1 25-6-0 26-4-8
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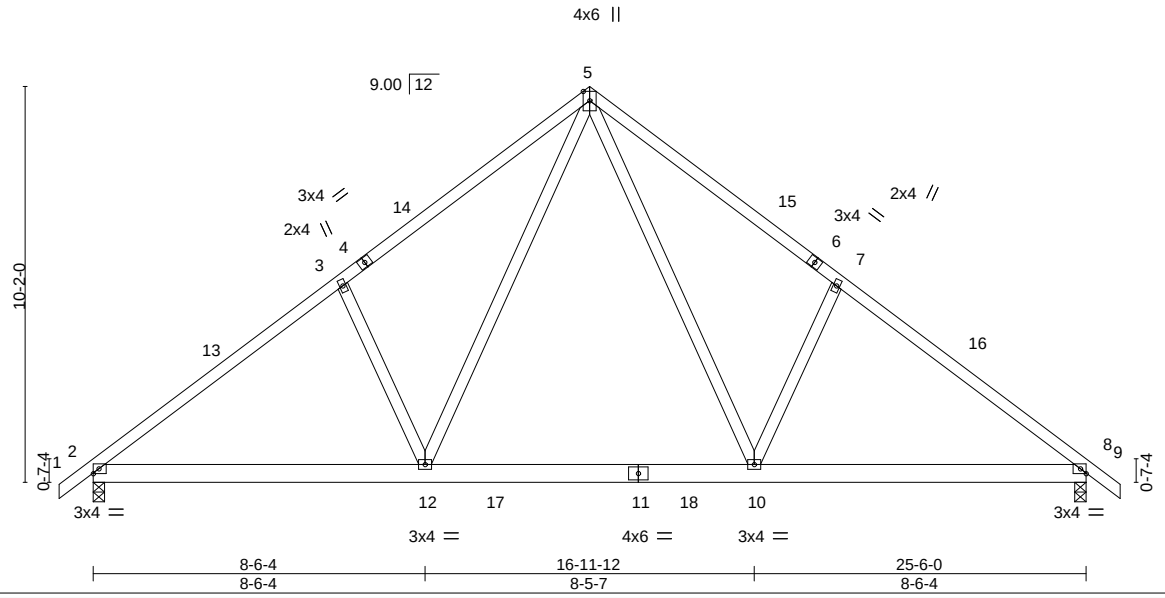


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.40 | Vert(LL) | -0.10 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.32 | Vert(CT) | -0.14 | 10-12 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.32 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 2-12 | >999 | 240 | Weight: 156 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-0-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-245(LC 10)
Max Uplift 2=-62(LC 12), 8=-62(LC 13)
Max Grav 2=1099(LC 19), 8=1099(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1421/295, 3-5=-1311/403, 5-7=-1311/403, 7-8=-1421/295
BOT CHORD 2-12=-91/1199, 10-12=0/782, 8-10=-102/1058
WEBS 5-10=-163/700, 7-10=-411/271, 5-12=-163/699, 3-12=-411/271

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

April 19,2023

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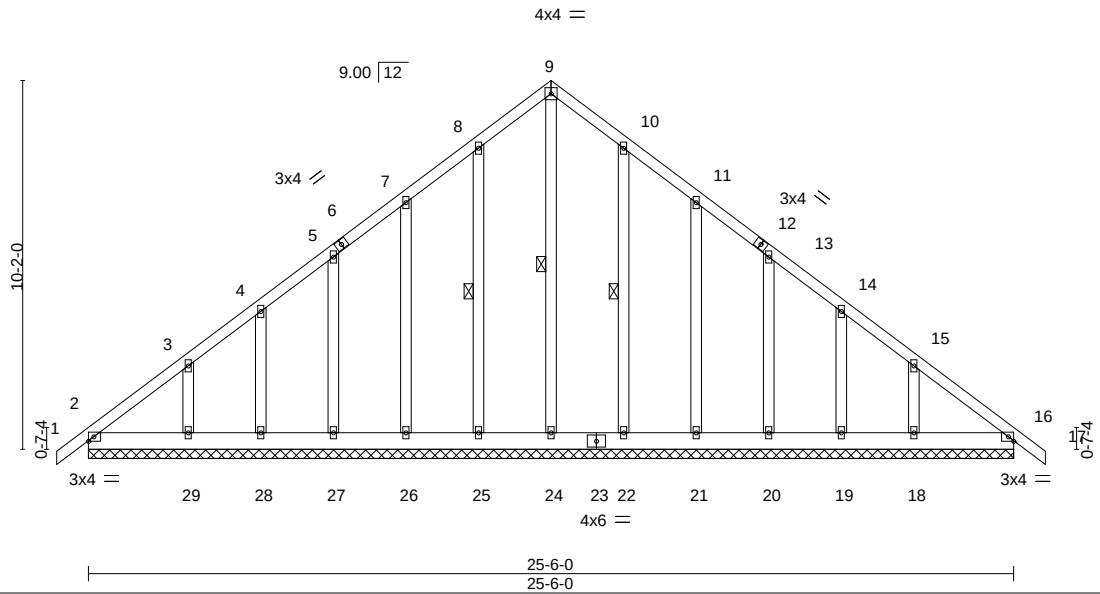
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | C1GE | GABLE | 1 | 1 | I57851114 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:03 2023 Page 1
ID:yM?1U6hvmVrx2uoGJqWpIfzPjh?-_ndgSO1rxry?MZxfwal_wTEj3WvHS7wOhmL9kDzPRTY

-0-10-8 12-9-0 25-6-0 26-4-8
0-10-8 12-9-0 12-9-0 0-10-8

Scale: 3/16"=1'




25-6-0
25-6-0

| 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 | 0.07 | Vert(LL) | 0.00 | 16 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | 0.00 | 16 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.12 | Horz(CT) | 0.01 | 16 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 198 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 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 1 Row at midpt 9-24, 8-25, 10-22

**REACTIONS.** All bearings 25-6-0.
(lb) - Max Horz 2=-306(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 25, 28, 22, 19 except 26=-102(LC 12), 27=-100(LC 12), 29=-153(LC 12), 21=-103(LC 13), 20=-100(LC 13), 18=-151(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18 except 29=251(LC 19)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-318/220, 15-16=-270/184
BOT CHORD 2-29=-178/274, 28-29=-178/274, 27-28=-178/274, 26-27=-178/274, 25-26=-178/274, 24-25=-178/274, 22-24=-178/274, 21-22=-178/274, 20-21=-178/274, 19-20=-178/274, 18-19=-178/274, 16-18=-178/274

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 12-9-0, Corner(3) 12-9-0 to 17-1-13, Exterior(2) 17-1-13 to 26-4-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 25, 28, 22, 19 except (jt=lb) 26=102, 27=100, 29=153, 21=103, 20=100, 18=151.

April 19,2023

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

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | C2GR | Common Girder | 1 | 2 | I57851115 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:05 2023 Page 1
ID:yM?1U6hvmVrx2uoGJqWpIfzPjh?-wAlQt425TSCjbt511?nT?uK_bJVkwskg84qGp6zPRTW

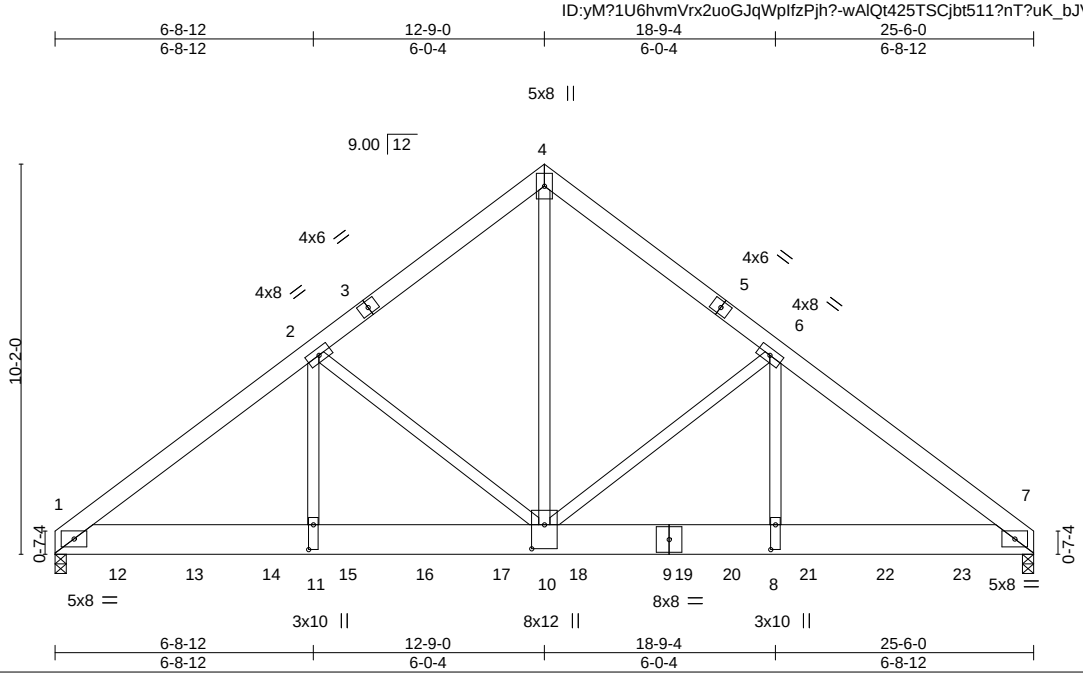


Plate Offsets (X,Y)-- [8:0-7-12,0-1-8], [10:0-7-8,0-4-0], [11:0-7-12,0-1-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.32 | Vert(LL) | -0.10 | 10-11 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.36 | Vert(CT) | -0.17 | 10-11 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.81 | Horz(CT) | 0.04 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.04 | 10-11 | >999 | 240 | Weight: 448 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-3-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8
Max Horz 1=228(LC 26)
Max Uplift 1=-54(LC 8)
Max Grav 1=7178(LC 2), 7=5677(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9167/2, 2-4=-5832/0, 4-6=-5833/0, 6-7=-7830/0
BOT CHORD 1-11=-23/7258, 10-11=-23/7258, 8-10=0/6187, 7-8=0/6187
WEBS 4-10=0/6564, 6-10=-2064/0, 6-8=0/2234, 2-10=-3454/326, 2-11=-114/3921

**NOTES-**
1) 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 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1163 lb down and 55 lb up at 1-6-12, 1163 lb down and 55 lb up at 3-6-12, 1163 lb down and 55 lb up at 5-6-12, 1163 lb down and 55 lb up at 7-6-12, 1163 lb down and 55 lb up at 9-6-12, 934 lb down and 38 lb up at 11-6-12, 934 lb down and 38 lb up at 13-6-12, 682 lb down at 15-6-12, 682 lb down at 17-6-12, 682 lb down at 19-6-12, and 682 lb down at 21-6-12, and 682 lb down at 23-6-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-7=-60, 1-7=-20

April 19,2023

Continued on page 2

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

Concentrated Loads (lb)

Vert: 12=-929(F) 13=-929(F) 14=-929(F) 15=-929(F) 16=-929(F) 17=-763(F) 18=-763(F) 19=-627(F) 20=-627(F) 21=-627(F) 22=-627(F) 23=-627(F)


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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | D1 | ATTIC | 1 | 1 | I57851116 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:07 2023 Page 1
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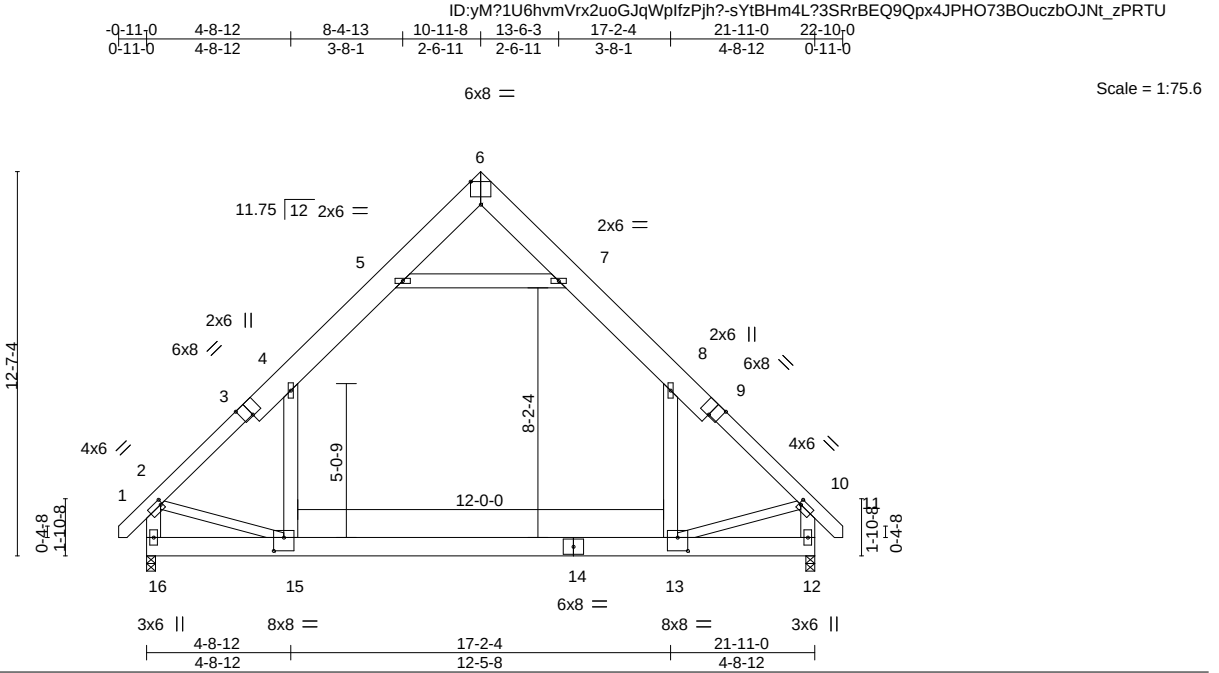


Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-0-12,0-2-0], [13:0-4-0,0-5-4], [15:0-4-0,0-5-4]

| 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 | 0.56 | Vert(LL) | -0.28 | 13-15 | >929 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.87 | Vert(CT) | -0.44 | 13-15 | >591 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.27 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.08 | 13-15 | >999 | 240 | Weight: 235 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-8-5 oc bracing.

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8
Max Horz 16=403(LC 11)
Max Grav 16=1495(LC 21), 12=1495(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1750/0, 4-5=-1109/185, 5-6=-41/343, 6-7=-41/343, 7-8=-1109/185, 8-10=-1749/0, 2-16=-1730/33, 10-12=-1731/34
BOT CHORD 15-16=-432/567, 13-15=0/1156
WEBS 5-7=-1415/263, 4-15=0/865, 8-13=0/865, 2-15=-20/1094, 10-13=-29/1102

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-9-6 to 3-7-7, Exterior(2) 3-7-7 to 10-11-8, Corner(3) 10-11-8 to 15-4-5, Exterior(2) 15-4-5 to 22-8-6 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | D2 | ATTIC | 8 | 1 | I57851117 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:08 2023 Page 1
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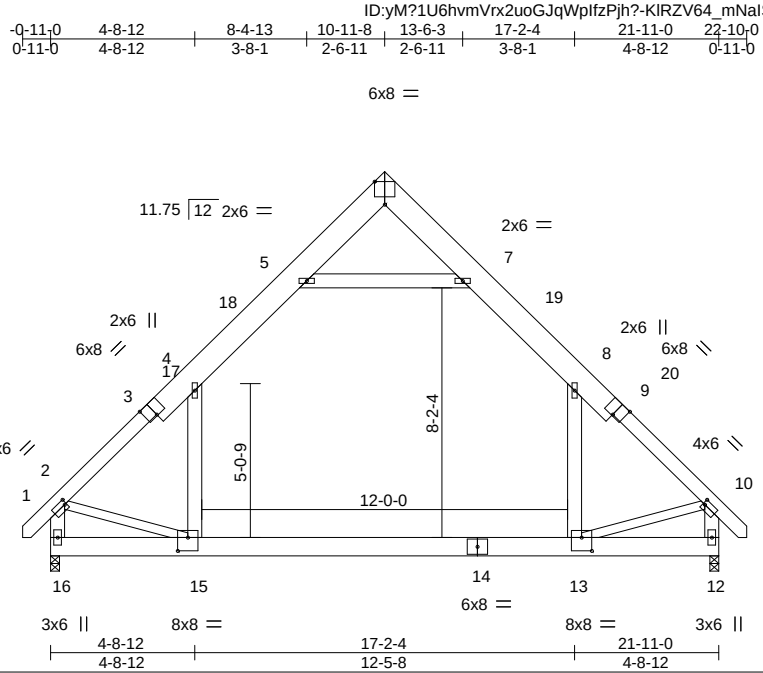


Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-0-12,0-2-0], [13:0-4-0,0-5-4], [15:0-4-0,0-5-4]

| 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 | 0.56 | Vert(LL) | -0.28 | 13-15 | >929 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.87 | Vert(CT) | -0.44 | 13-15 | >591 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.27 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 13-15 | >999 | 240 | Weight: 235 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x6 SP No.1 *Except* 2-15,10-13: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-11-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-8-5 oc bracing.

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8
Max Horz 16=322(LC 11)
Max Grav 16=1501(LC 21), 12=1501(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1739/0, 4-5=-1101/150, 5-6=-23/332, 6-7=-23/332, 7-8=-1101/150, 8-10=-1738/0, 2-16=-1724/3, 10-12=-1725/3
BOT CHORD 15-16=-334/474, 13-15=0/1128
WEBS 5-7=-1423/180, 4-15=0/865, 8-13=0/865, 2-15=0/1051, 10-13=0/1057

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-6 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
7) Attic room checked for L/360 deflection.

April 19,2023

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | D3 | ATTIC | 1 | 2 | I57851118 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:10 2023 Page 1
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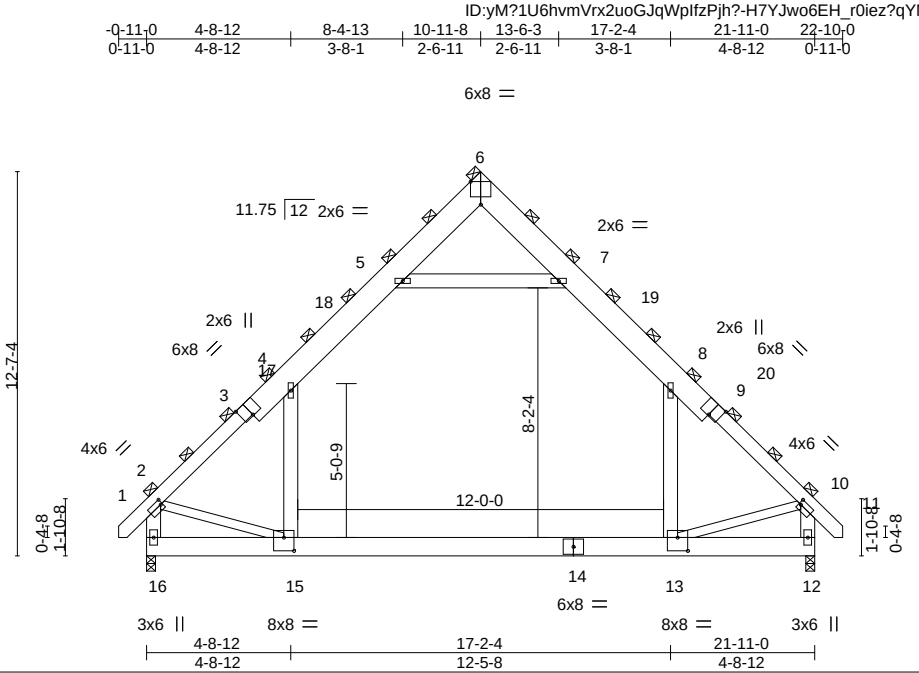


Plate Offsets (X,Y)-- [2:0-0-12,0-2-0], [3:0-4-0,Edge], [6:0-4-0,Edge], [9:0-4-0,Edge], [10:0-0-12,0-2-0], [13:0-4-0,0-5-4], [15:0-4-0,0-5-4]

| LOADING (psf) | | SPACING- 4-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.28 | 13-15 | >929 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.96 | Vert(CT) | -0.44 | 13-15 | >591 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.23 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.06 | 13-15 | >999 | 240 | Weight: 471 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except*
1-3,9-11: 2x6 SP No.1
BOT CHORD 2x8 SP No.1
WEBS 2x6 SP No.1 *Except*
2-15,10-13: 2x4 SP No.2

**BRACING-**
TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals
(Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8
Max Horz 16=623(LC 11)
Max Grav 16=3001(LC 21), 12=3000(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3479/0, 4-5=-2203/301, 5-6=-43/663, 6-7=-46/663, 7-8=-2200/294, 8-10=-3472/0,
2-16=-3448/3, 10-12=-3447/0
BOT CHORD 15-16=-637/906, 13-15=0/2253, 12-13=-129/485
WEBS 5-7=-2847/365, 4-15=0/1730, 8-13=0/1730, 2-15=0/2095, 10-13=0/2110

**NOTES-**
1) 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, 2x10 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 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.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-6 zone; end vertical right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.
7) Ceiling dead load (10.0 psf) on member(s). 4-5, 7-8, 5-7; Wall dead load (5.0psf) on member(s).4-15, 8-13
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-15
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Attic room checked for L/360 deflection.

April 19,2023


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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | G1 | COMMON | 1 | 1 | I57851119 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:12 2023 Page 1
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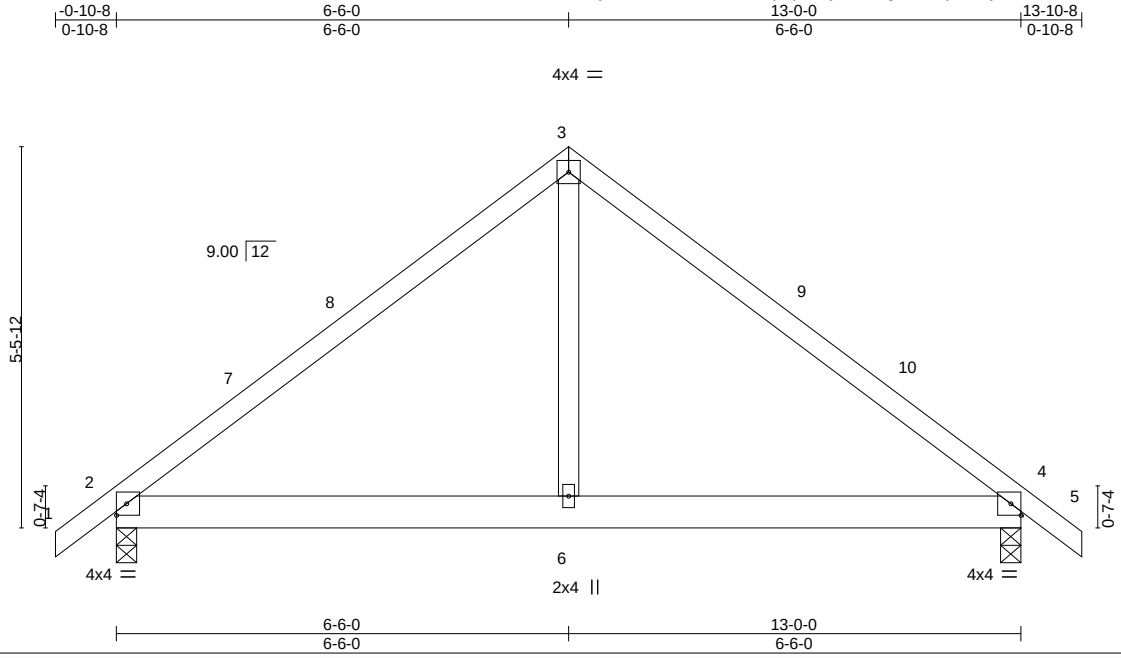


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | -0.01 | 2-6 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.18 | Vert(CT) | -0.03 | 2-6 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.07 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 2-6 | >999 | 240 | Weight: 65 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x4 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=0-3-8, 4=0-3-8
Max Horz 2=133(LC 11)
Max Uplift 2=-38(LC 12), 4=-38(LC 13)
Max Grav 2=570(LC 1), 4=570(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-595/164, 3-4=-595/164
BOT CHORD 2-6=0/379, 4-6=0/379
WEBS 3-6=0/329

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

April 19,2023

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | G1GE | GABLE | 1 | 1 | I57851120 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:13 2023 Page 1
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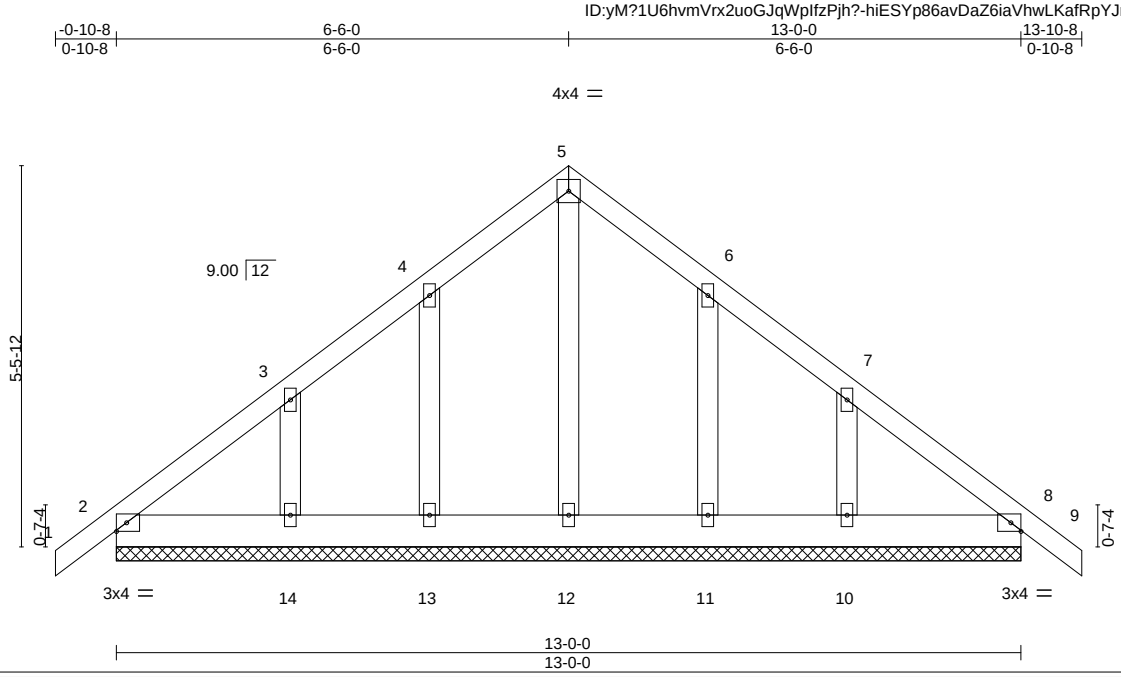


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.05 | Vert(LL) | -0.00 | 8 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 8 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 8 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 80 lb | FT = 20% |

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

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

**REACTIONS.** All bearings 13-0-0.
(lb) - Max Horz 2=166(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 13, 11 except 14=-133(LC 12), 10=-132(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 6-6-0, Corner(3) 6-6-0 to 10-10-13, Exterior(2) 10-10-13 to 13-10-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 13, 11 except (jt=lb) 14=133, 10=132.

April 19,2023

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VB1 | VALLEY | 1 | 1 | I57851121 |
| | | | | | Job Reference (optional) |

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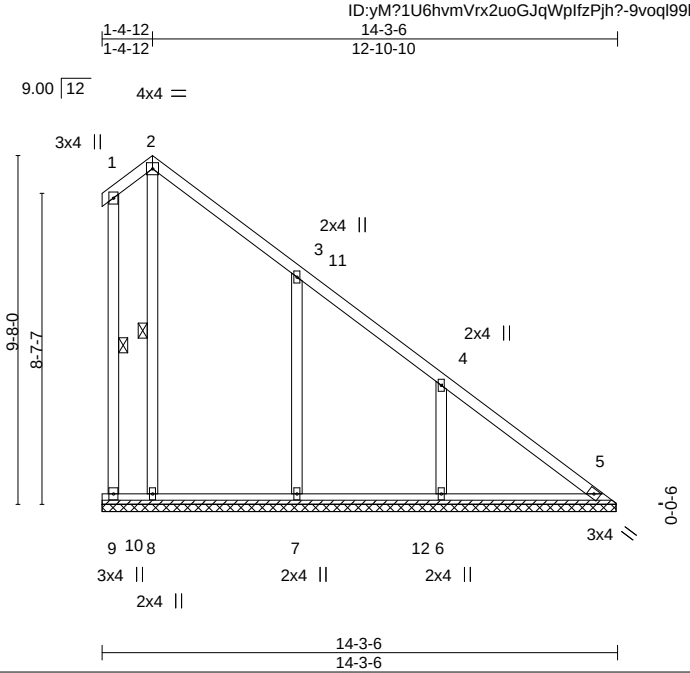


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 87 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 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 1-9, 2-8 |

**REACTIONS.** All bearings 14-2-14.
(lb) - Max Horz 10=-288(LC 13)
Max Uplift All uplift 100 lb or less at joint(s) 8 except 9=-184(LC 18), 7=-112(LC 13), 6=-129(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 9, 5, 10 except 8=401(LC 20), 7=546(LC 20), 6=474(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-371/361
BOT CHORD 9-10=-318/343, 8-9=-318/342, 7-8=-318/342, 6-7=-318/342, 5-6=-318/342
WEBS 3-7=-322/227, 4-6=-363/248

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-12 to 5-9-9, Interior(1) 5-9-9 to 13-10-1 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 9=184, 7=112, 6=129.

April 19,2023

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VB2 | VALLEY | 1 | 1 | I57851122 |
| | | | | | Job Reference (optional) |

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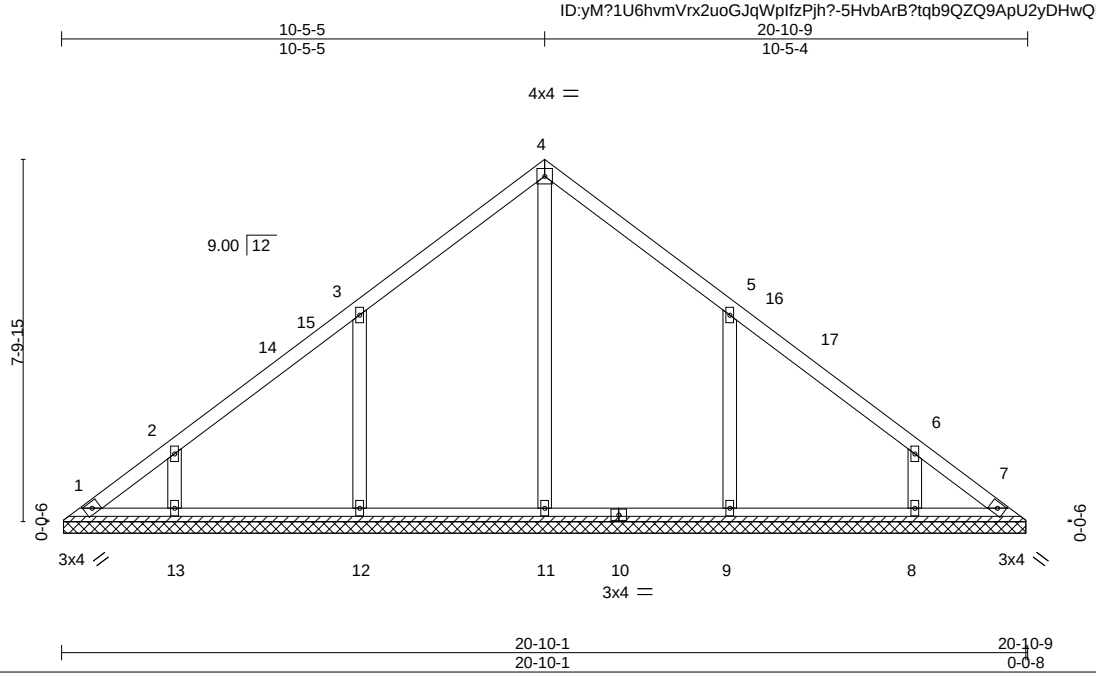


Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

| 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 | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.16 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 95 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 20-9-9.
(lb) - Max Horz 1=-180(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=-122(LC 12), 9=-122(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=443(LC 22), 12=467(LC 19), 13=277(LC 19), 9=467(LC 20), 8=277(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-337/230, 2-13=-259/191, 5-9=-337/230, 6-8=-258/191

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 10-5-5, Exterior(2) 10-5-5 to 14-10-1, Interior(1) 14-10-1 to 20-5-4 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, 7, 13, 8 except (jt=lb) 12=122, 9=122.

April 19,2023

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VB3 | VALLEY | 1 | 1 | I57851123 |
| | | | | | Job Reference (optional) |

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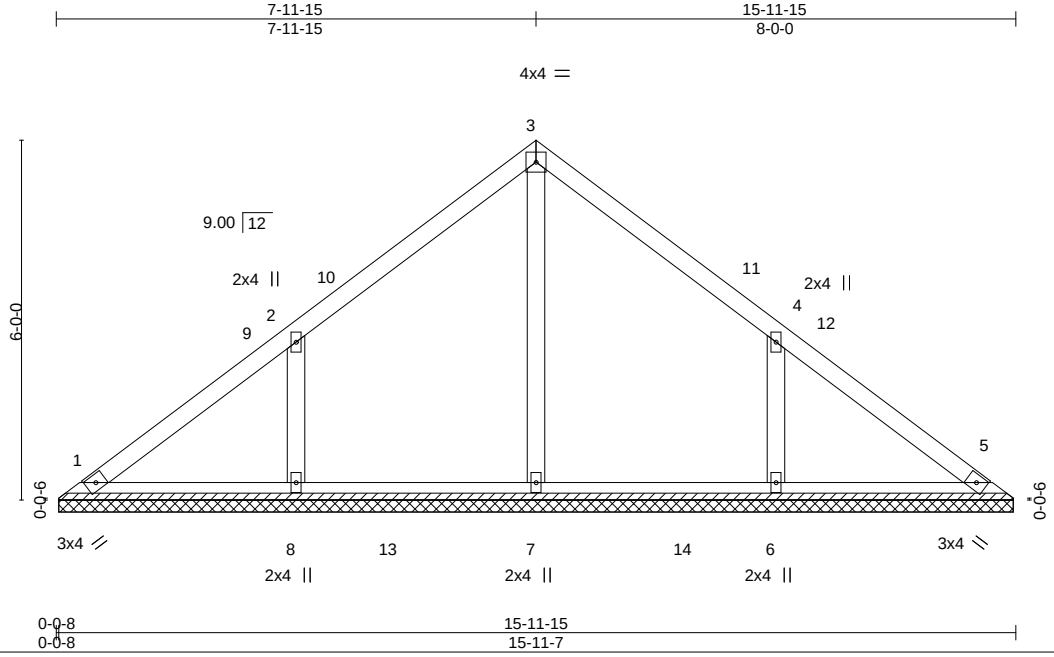


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| 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 | 0.16 | 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 | 0.09 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 67 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 15-10-15.
(lb) - Max Horz 1=-136(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-125(LC 12), 6=-125(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=404(LC 19), 8=415(LC 19), 6=415(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-339/232, 4-6=-339/232

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 7-11-15, Exterior(2) 7-11-15 to 12-4-12, Interior(1) 12-4-12 to 15-6-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=125, 6=125.

April 19,2023

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VB4 | VALLEY | 1 | 1 | I57851124 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:18 2023 Page 1
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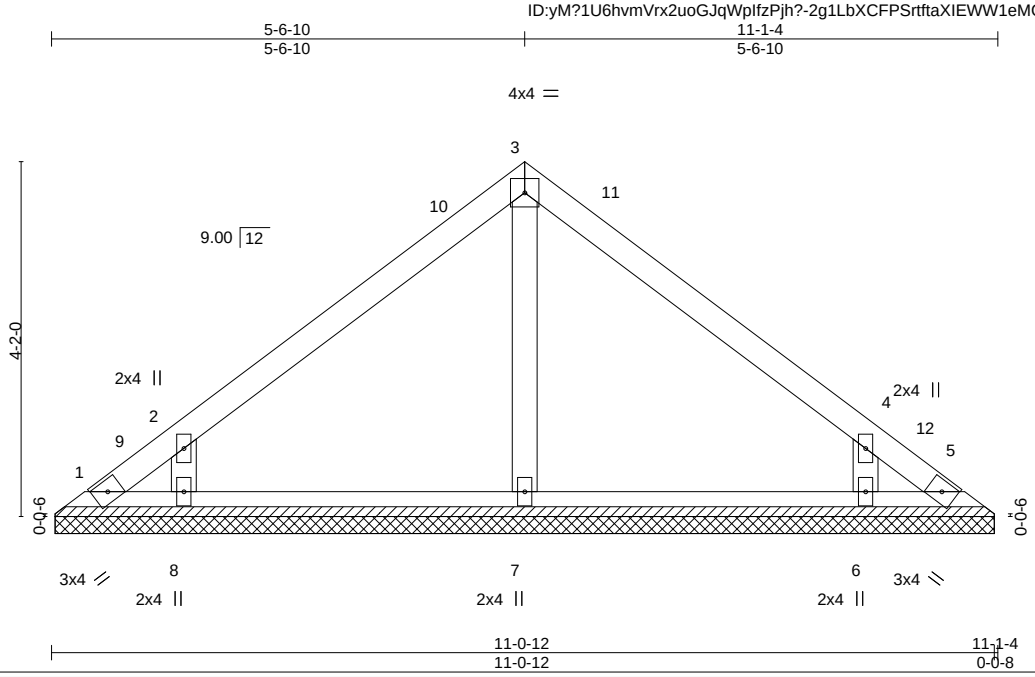


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.13 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.09 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.04 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 43 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 11-0-4.
(lb) - Max Horz 1=-92(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-114(LC 12), 6=-114(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=250(LC 1), 8=332(LC 19), 6=332(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-315/244, 4-6=-315/244

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 5-6-10, Exterior(2) 5-6-10 to 9-11-7, Interior(1) 9-11-7 to 10-7-15 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, 5 except (jt=lb) 8=114, 6=114.

April 19,2023

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VB5 | VALLEY | 1 | 1 | I57851125 |
| | | | | | Job Reference (optional) |

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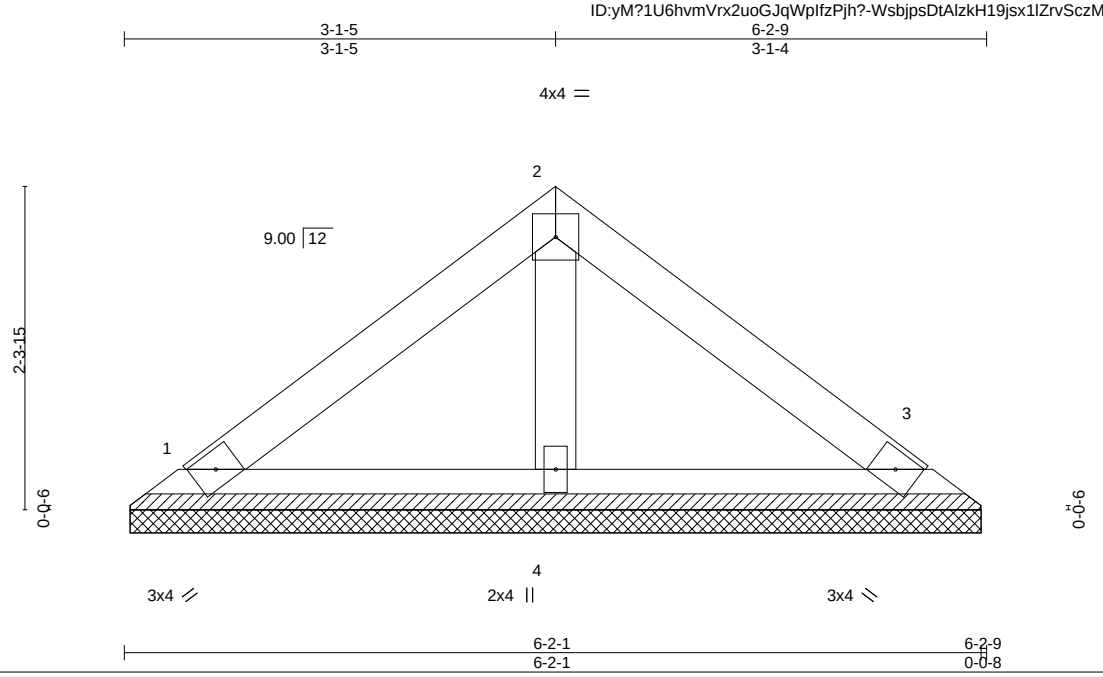


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.09 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.05 | 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 | IRC2015/TPI2014 | Matrix-P | | | | | | | 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=6-1-9, 3=6-1-9, 4=6-1-9
Max Horz 1=-48(LC 10)
Max Uplift 1=-19(LC 12), 3=-23(LC 13)
Max Grav 1=120(LC 1), 3=120(LC 1), 4=187(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VC1 | VALLEY | 1 | 1 | I57851126 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:21 2023 Page 1
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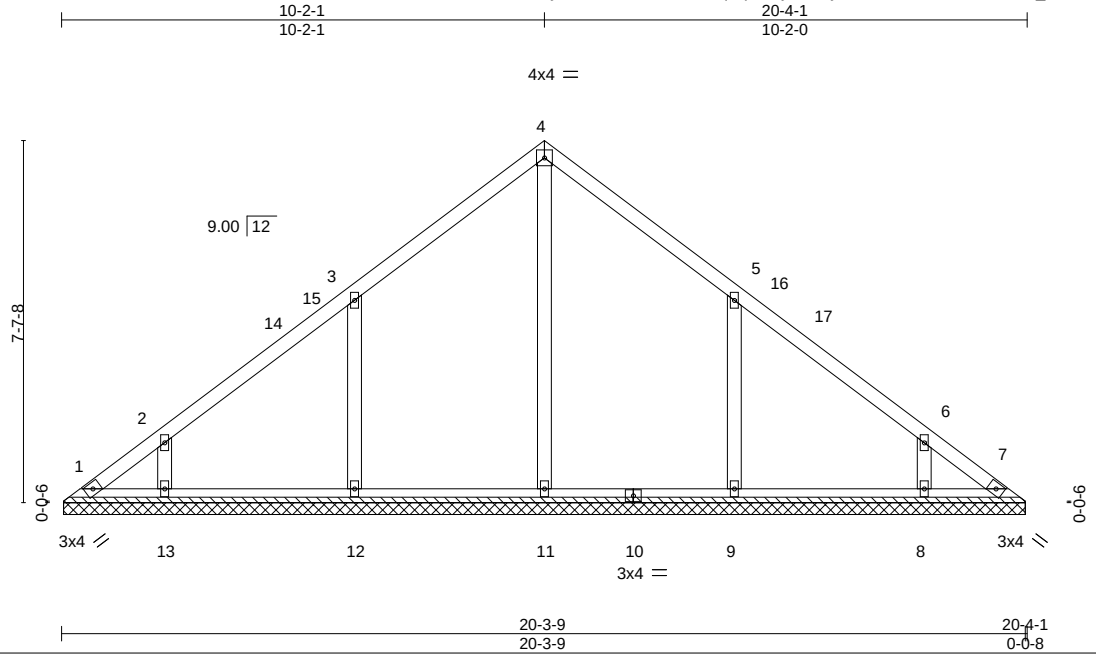


Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

| 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 | 0.16 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.00 | 7 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | Weight: 92 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 20-3-1.
(lb) - Max Horz 1=175(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=-122(LC 12), 9=-122(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=441(LC 22), 12=468(LC 19), 13=270(LC 19), 9=468(LC 20), 8=270(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-337/231, 2-13=-254/191, 5-9=-337/231, 6-8=-254/191

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 10-2-1, Exterior(2) 10-2-1 to 14-6-13, Interior(1) 14-6-13 to 19-10-12 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, 7, 13, 8 except (jt=lb) 12=122, 9=122.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VC2 | VALLEY | 1 | 1 | I57851127 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:22 2023 Page 1
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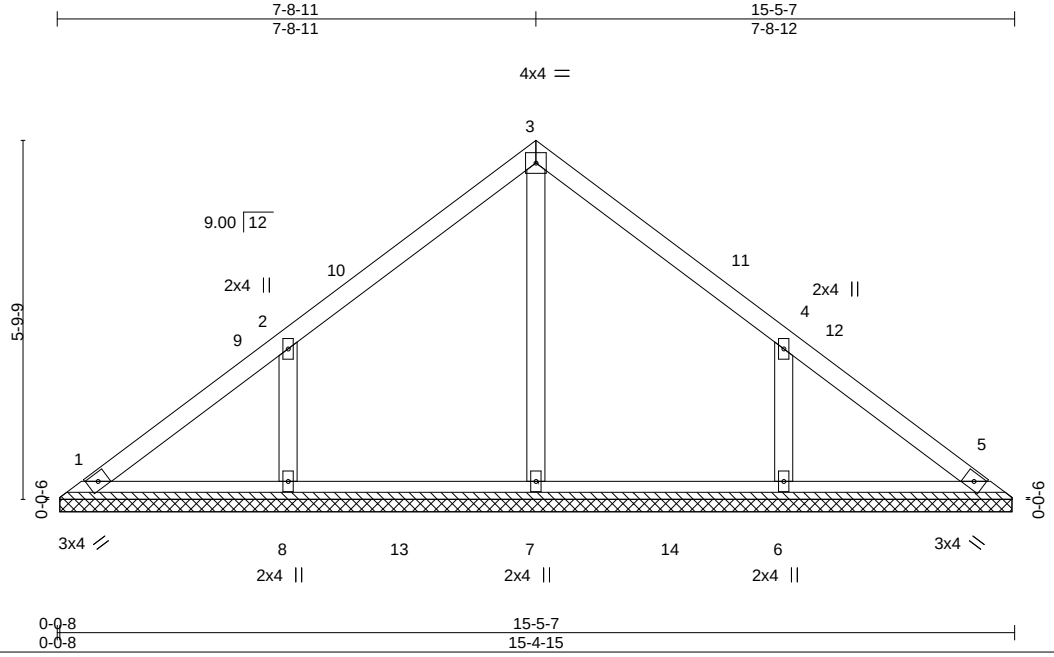


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

| 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 | 0.15 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.14 | 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 | IRC2015/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 15-4-7.
(lb) - Max Horz 1=131(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-121(LC 12), 6=-121(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=396(LC 19), 8=394(LC 19), 6=394(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-329/228, 4-6=-329/228

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 7-8-11, Exterior(2) 7-8-11 to 12-1-8, Interior(1) 12-1-8 to 15-0-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=121, 6=121.

April 19,2023

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VC3 | VALLEY | 1 | 1 | I57851128 |
| | | | | | Job Reference (optional) |

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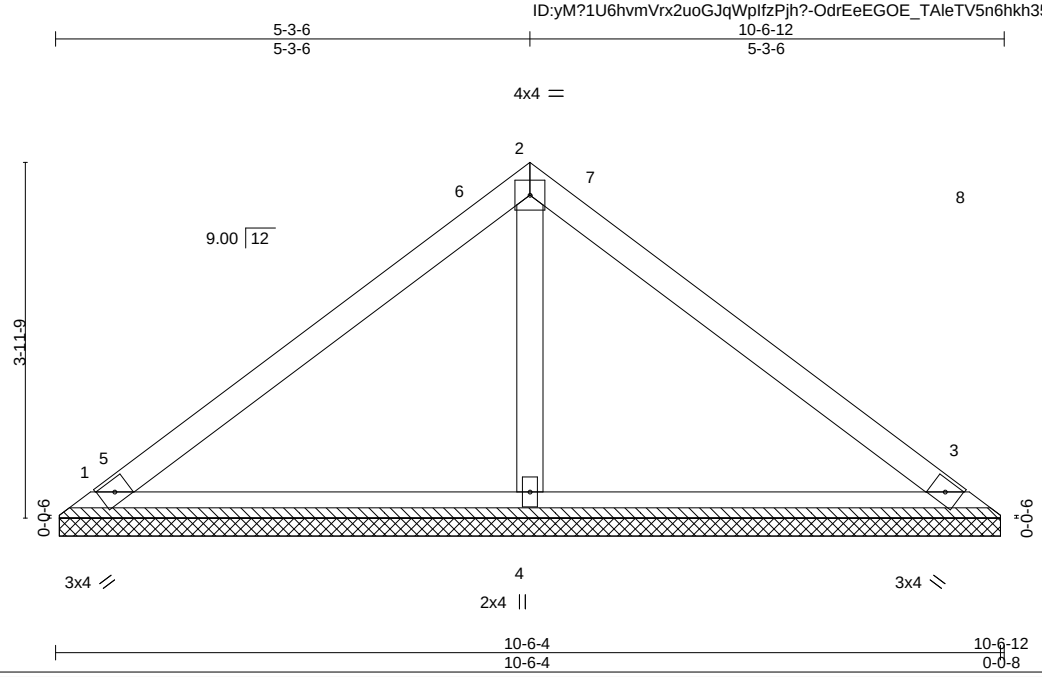


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.25 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.17 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 39 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=10-5-12, 3=10-5-12, 4=10-5-12
Max Horz 1=87(LC 9)
Max Uplift 1=-24(LC 12), 3=-32(LC 13)
Max Grav 1=200(LC 1), 3=200(LC 1), 4=375(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-5 to 4-10-1, Interior(1) 4-10-1 to 5-3-6, Exterior(2) 5-3-6 to 9-8-3, Interior(1) 9-8-3 to 10-1-7 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.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VC4 | VALLEY | 1 | 1 | I57851129 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:24 2023 Page 1
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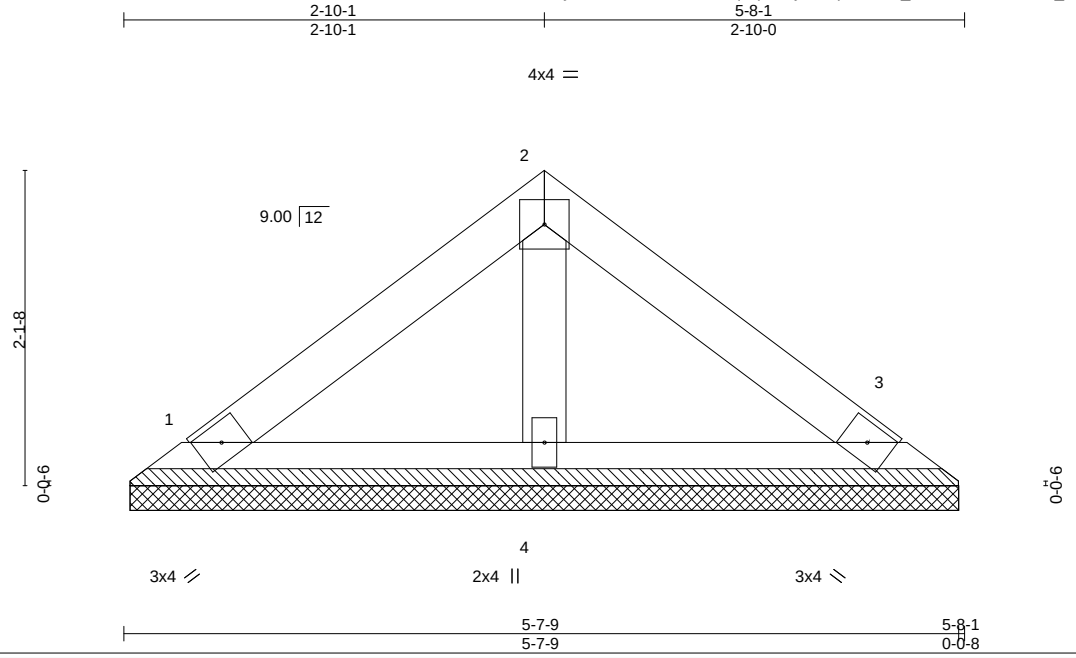


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.04 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.01 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 19 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 5-8-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-7-1, 3=5-7-1, 4=5-7-1
Max Horz 1=-43(LC 10)
Max Uplift 1=-17(LC 12), 3=-21(LC 13)
Max Grav 1=108(LC 1), 3=108(LC 1), 4=168(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

April 19,2023

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

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

| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VD1 | VALLEY | 1 | 1 | I57851130 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:26 2023 Page 1
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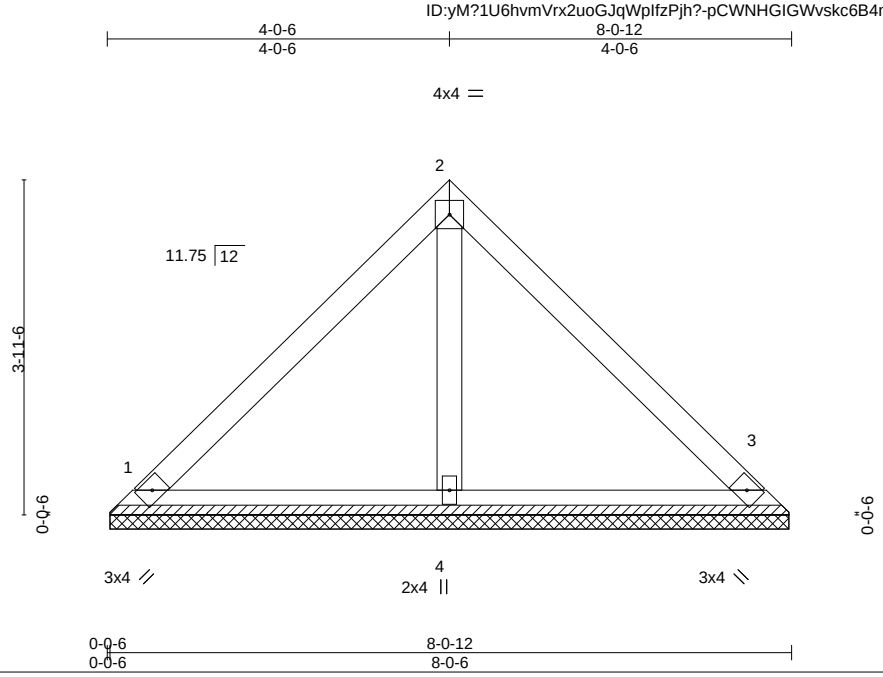


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 32 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=8-0-0, 3=8-0-0, 4=8-0-0
Max Horz 1=86(LC 9)
Max Uplift 1=-31(LC 13), 3=-32(LC 13)
Max Grav 1=178(LC 1), 3=178(LC 1), 4=232(LC 1)

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

**NOTES-**
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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.

April 19,2023

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| Job | Truss | Truss Type | Qty | Ply | Wellons / Lot 3 The Cape Harnett |
|---|---|---|---|---|---|
| J0423-1755 | VD2 | VALLEY | 1 | 1 | I57851131 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Apr 18 15:42:27 2023 Page 1
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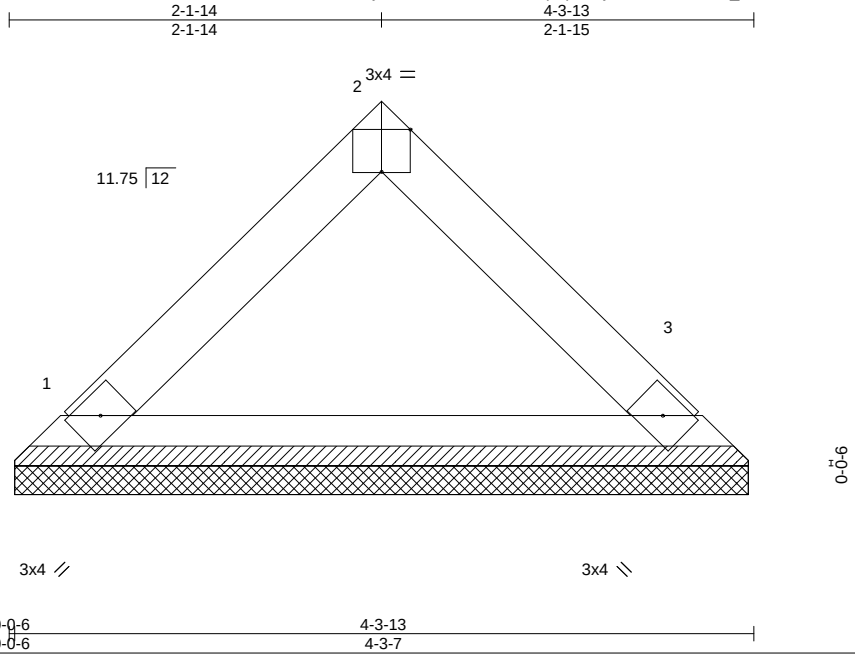


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

| 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 | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.11 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 14 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-3-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-3-1, 3=4-3-1
Max Horz 1=42(LC 9)
Max Uplift 1=-5(LC 12), 3=-5(LC 13)
Max Grav 1=144(LC 1), 3=144(LC 1)

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

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

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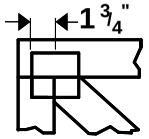
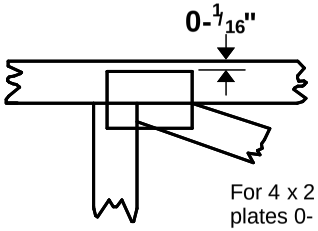
# Symbols

## 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.

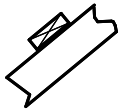
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

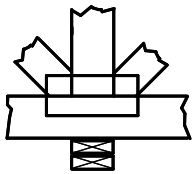
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

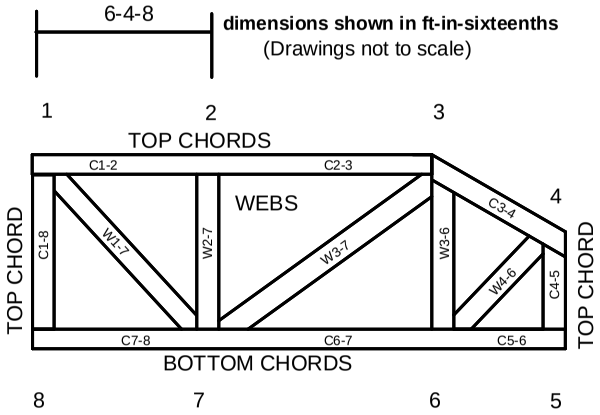


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: 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




**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/TPI 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.