ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J0822-4435
Wellco/Lot 149 Hidden Lakes/Harnett

Trenco
818 Soundside Rd
Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0822-4435
Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 16 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|---|---|---|---|
| 1 | I53146737 | A1 | 7/18/2022 |
| 2 | I53146738 | B1 | 7/18/2022 |
| 3 | I53146739 | B1GE | 7/18/2022 |
| 4 | I53146740 | C1 | 7/18/2022 |
| 5 | I53146741 | C1GE | 7/18/2022 |
| 6 | I53146742 | C2 | 7/18/2022 |
| 7 | I53146743 | C3 | 7/18/2022 |
| 8 | I53146744 | C4 | 7/18/2022 |
| 9 | I53146745 | D1 | 7/18/2022 |
| 10 | I53146746 | D1GE | 7/18/2022 |
| 11 | I53146747 | D2 | 7/18/2022 |
| 12 | I53146748 | D3 | 7/18/2022 |
| 13 | I53146749 | M1GE | 7/18/2022 |
| 14 | I53146750 | PB1 | 7/18/2022 |
| 15 | I53146751 | PB1GE | 7/18/2022 |
| 16 | I53146752 | PB2 | 7/18/2022 |

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844


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

July 18, 2022



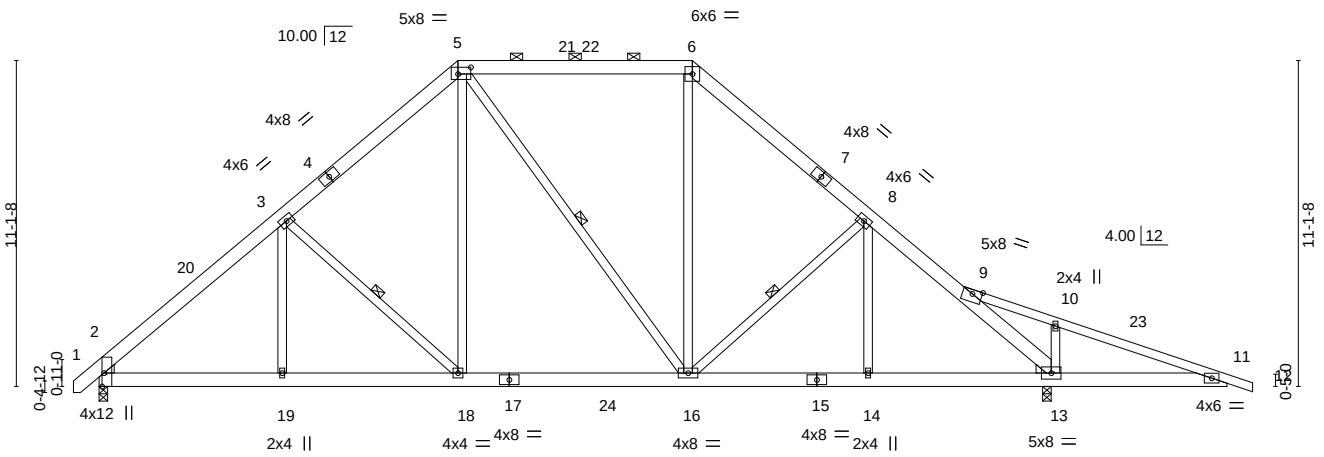
Gilbert, Eric

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | A1 | PIGGYBACK BASE | 11 | 1 | I53146737 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:56:58 2022 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-nGI3b6hUWrdc0U0KITWzJSZ9HbQrBqMGWIW?TPywvRp

-0-10-8 6-3-0 12-3-0 20-3-0 26-3-0 29-6-0 32-4-4 38-6-0 39-4-8
0-10-8 6-3-0 6-0-0 8-0-0 6-0-0 3-3-0 2-10-4 6-1-12 0-10-8

Scale = 1:78.6




6-3-0 12-3-0 20-3-0 26-3-0 32-4-4 38-6-0
6-3-0 6-0-0 8-0-0 6-0-0 6-1-4 6-1-12

Plate Offsets (X,Y)-- [2:0-5-8,Edge], [5:0-5-4,0-2-12]

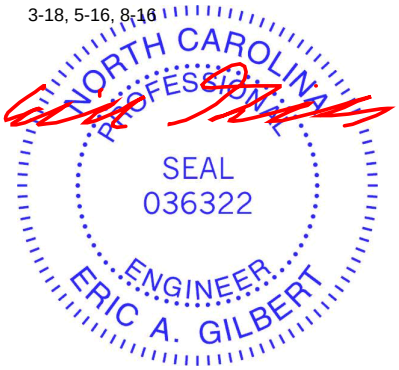
| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.52 | Vert(LL) | -0.06 | 16-18 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.43 | Vert(CT) | -0.11 | 16-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.03 | 13 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.03 | 14-16 | >999 | 240 | Weight: 294 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1 *Except* 9-12: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-11-9 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-6, 9-13.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 11-13.
WEBS 1 Row at midpt 3-18, 5-16, 8-16

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8
Max Horz 2=-266(LC 10)
Max Uplift 2=-56(LC 12), 13=-157(LC 9)
Max Grav 2=1302(LC 1), 13=1872(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1651/338, 3-5=-1303/398, 5-6=-951/363, 6-8=-1206/345, 8-9=-1369/229, 9-13=-2043/695, 9-10=-602/708, 10-11=-681/750
BOT CHORD 2-19=-107/1274, 18-19=-107/1274, 16-18=0/1001, 14-16=0/1021, 13-14=0/1021, 11-13=-656/704
WEBS 3-19=0/253, 3-18=-499/229, 5-18=-62/567, 6-16=-15/399, 8-16=-332/152, 10-13=-326/181




**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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 16-7-13, Interior(1) 16-7-13 to 20-3-0, Exterior(2) 20-3-0 to 24-7-13, Interior(1) 24-7-13 to 39-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 56 lb uplift at joint 2 and 157 lb uplift at joint 13.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

July 18,2022

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| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | B1 | PIGGYBACK BASE | 4 | 1 | I53146738 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:56:59 2022 Page 1
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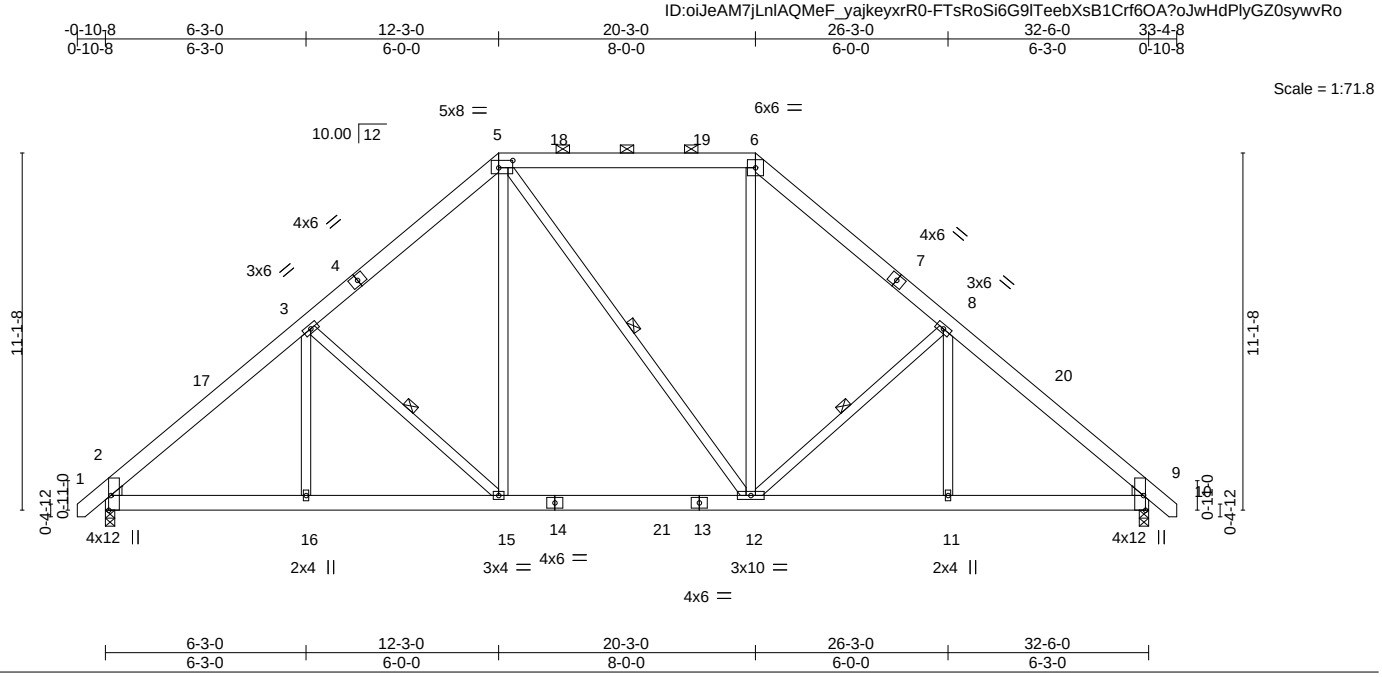


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [5:0-5-4,0-2-12], [9:0-5-8,Edge]

| 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 | 0.32 | Vert(LL) | -0.07 | 12-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.29 | Vert(CT) | -0.11 | 12-15 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.03 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 15 | >999 | 240 | Weight: 265 lb | FT = 20% |

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

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-10-6 oc purlins, except
2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-15, 5-12, 8-12

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-261(LC 10)
Max Uplift 2=-55(LC 12), 9=-55(LC 13)
Max Grav 2=1342(LC 1), 9=1342(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1709/396, 3-5=-1354/458, 5-6=-992/431, 6-8=-1337/458, 8-9=-1708/396
BOT CHORD 2-16=-175/1300, 15-16=-175/1300, 12-15=-51/1030, 11-12=-170/1178, 9-11=-170/1178
WEBS 3-16=0/252, 3-15=-495/236, 5-15=-72/569, 6-12=-75/477, 8-12=-492/236

**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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 18-5-11, Interior(1) 18-5-11 to 20-3-0, Exterior(2) 20-3-0 to 26-3-0, Interior(1) 26-3-0 to 33-3-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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 55 lb uplift at joint 2 and 55 lb uplift at joint 9.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


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| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | B1GE | GABLE | 1 | 1 | I53146739 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:01 2022 Page 1
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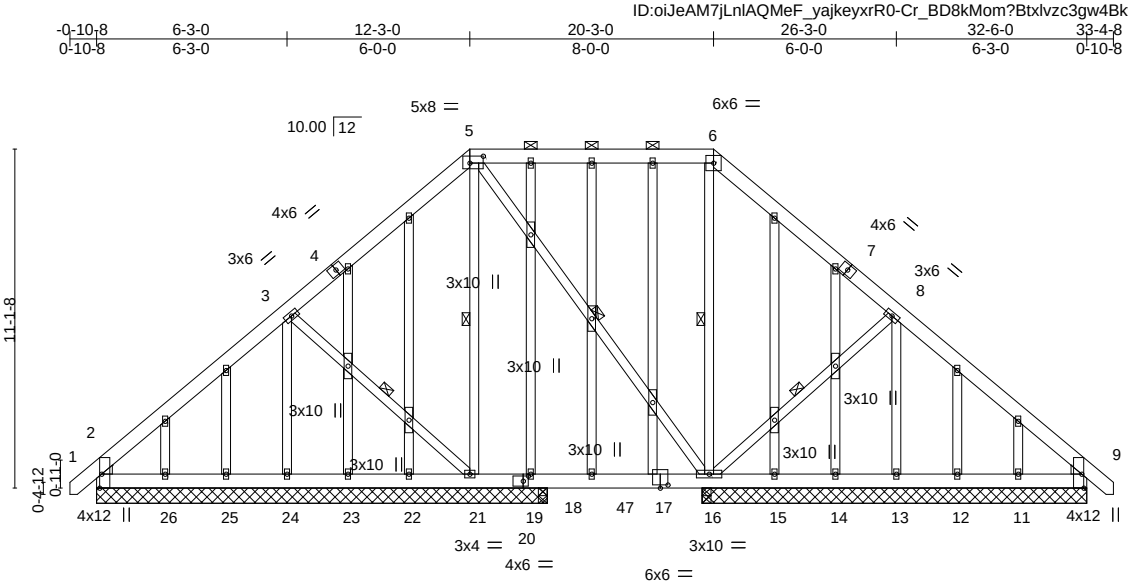


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [5:0-5-4,0-2-12], [9:0-5-8,Edge], [17:0-3-0,0-1-4], [20:0-2-0,0-2-0]

| 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 | 0.30 | Vert(LL) | -0.00 | 16-18 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.10 | Vert(CT) | -0.01 | 16-18 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.19 | Horz(CT) | 0.00 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.00 | 2-26 | >999 | 240 | Weight: 371 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
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-21, 5-21, 5-16, 6-16, 8-16

**REACTIONS.** All bearings 14-9-8 except (jt=length) 16=12-7-8, 16=12-7-8, 13=12-7-8, 9=12-7-8, 15=12-7-8, 14=12-7-8, 12=12-7-8, 11=12-7-8, 18=0-3-8.
(lb) - Max Horz 2=-261(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 21, 16, 13, 9, 26, 15, 11 except 24=-108(LC 12), 19=-265(LC 18)
Max Grav All reactions 250 lb or less at joint(s) 22, 23, 25, 26, 15, 14, 12, 11 except 2=307(LC 23), 24=359(LC 19), 21=376(LC 19), 16=612(LC 1), 16=612(LC 1), 13=317(LC 24), 9=278(LC 24), 18=551(LC 18)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-331/151, 3-5=-256/234, 8-9=-278/60
WEBS 3-24=-310/187, 6-16=-375/119, 8-13=-271/172

**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 Corner(3) -0-9-1 to 3-7-12, Exterior(2) 3-7-12 to 12-3-0, Corner(3) 12-3-0 to 16-7-13, Exterior(2) 16-7-13 to 20-3-0, Corner(3) 20-3-0 to 24-7-13, Exterior(2) 24-7-13 to 33-3-1 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 21, 16, 13, 9, 26, 15, 11 except (jt=lb) 24=108, 19=265.
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


July 18,2022



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | C1 | ROOF TRUSS | 4 | 1 | I53146740 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:02 2022 Page 1
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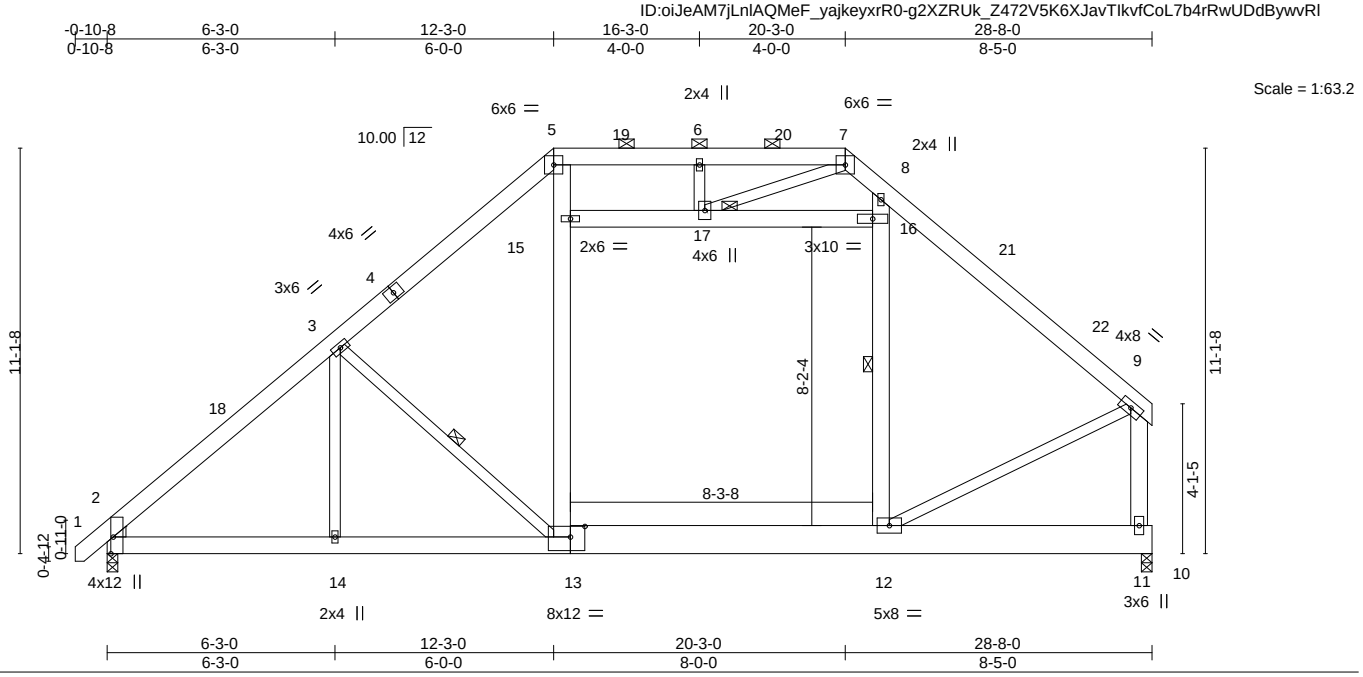


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [13:0-4-12,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.30 | Vert(LL) | -0.09 | 13-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.40 | Vert(CT) | -0.16 | 13-14 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.36 | Horz(CT) | 0.02 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.09 | 13-14 | >999 | 240 | Weight: 289 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-13: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
5-13,8-12,9-11,15-16: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 12-16
JOINTS 1 Brace at Jt(s): 17

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8
Max Horz 2=254(LC 9)
Max Grav 2=1467(LC 20), 11=1608(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1905/105, 3-5=-1571/162, 5-6=-1270/191, 6-7=-1270/191, 7-8=-820/155, 8-9=-1526/76, 9-11=-1633/72
BOT CHORD 2-14=-121/1472, 13-14=-122/1473, 12-13=0/1150
WEBS 3-13=-524/257, 13-15=-32/713, 5-15=0/726, 12-16=-116/388, 8-16=0/412, 9-12=0/1224, 16-17=-479/114, 3-14=0/289, 7-17=-112/706

**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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 18-5-11, Interior(1) 18-5-11 to 20-3-0, Exterior(2) 20-3-0 to 26-5-11, Interior(1) 26-5-11 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Ceiling dead load (10.0 psf) on member(s). 15-17, 16-17; Wall dead load (5.0psf) on member(s).13-15, 12-16
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
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.


July 18,2022



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | C1GE | GABLE | 1 | 1 | I53146741 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:04 2022 Page 1
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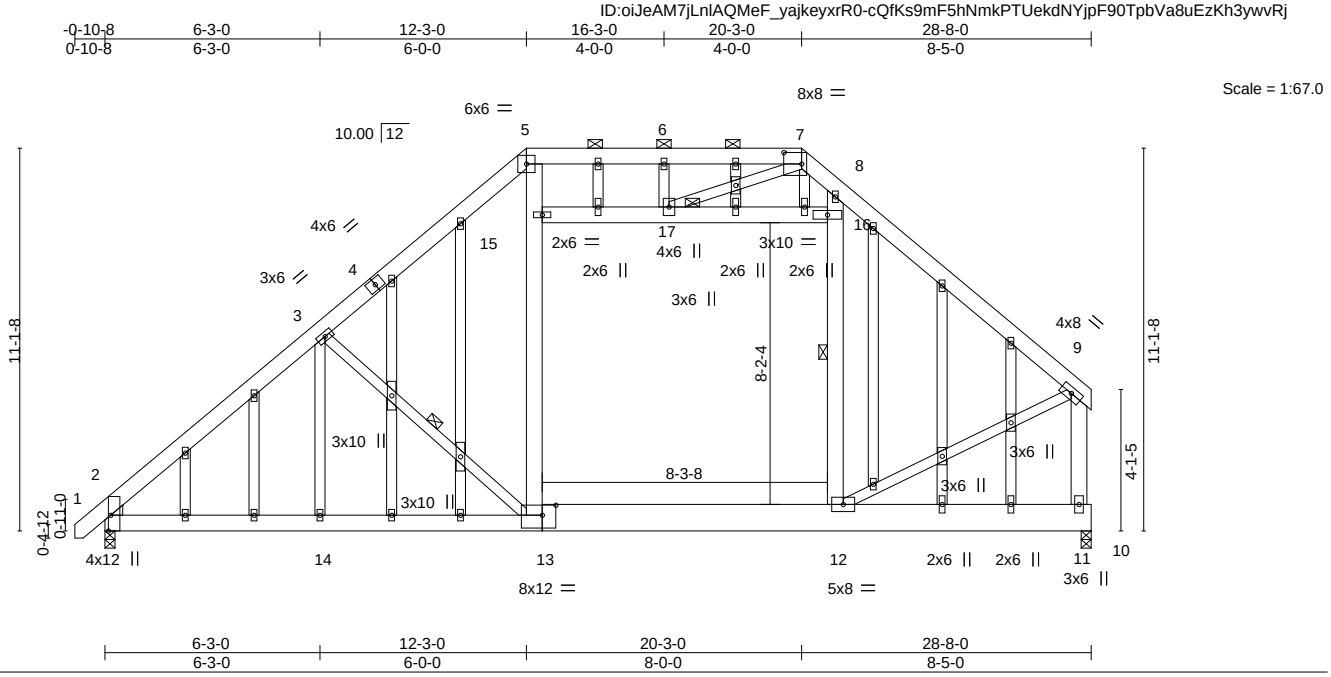


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [7:0-6-4,0-4-0], [13:0-4-12,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.30 | Vert(LL) | -0.09 | 13-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.40 | Vert(CT) | -0.16 | 13-14 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.36 | Horz(CT) | 0.02 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.11 | 13-14 | >999 | 240 | Weight: 352 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-13: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
5-13,8-12,9-11,15-16: 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-7-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-13, 12-16
JOINTS 1 Brace at Jt(s): 17

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8
Max Horz 2=328(LC 12)
Max Uplift 2=-51(LC 12)
Max Grav 2=1449(LC 2), 11=1608(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1905/162, 3-5=-1571/208, 5-6=-1268/228, 6-7=-1269/228, 7-8=-820/180, 8-9=-1526/100, 9-11=-1633/97
BOT CHORD 2-14=-190/1468, 13-14=-190/1469, 12-13=0/1127
WEBS 3-13=-524/359, 13-15=-54/717, 5-15=0/720, 12-16=-116/388, 8-16=0/412, 9-12=0/1202, 16-17=-475/124, 3-14=0/289, 7-17=-143/701


**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) -0-9-1 to 3-7-12, Exterior(2) 3-7-12 to 12-3-0, Corner(3) 12-3-0 to 16-7-13, Exterior(2) 16-7-13 to 20-3-0, Corner(3) 20-3-0 to 24-7-13, Exterior(2) 24-7-13 to 28-3-12 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (10.0 psf) on member(s). 15-17, 16-17; Wall dead load (5.0psf) on member(s).13-15, 12-16
10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2.
12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | C1GE | GABLE | 1 | 1 | I53146741<br>Job Reference (optional) |



**NOTES-**

14) Attic room checked for L/360 deflection.

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | C2 | ROOF TRUSS | 1 | 2 | I53146742 |
| | | | | | Job Reference (optional) |

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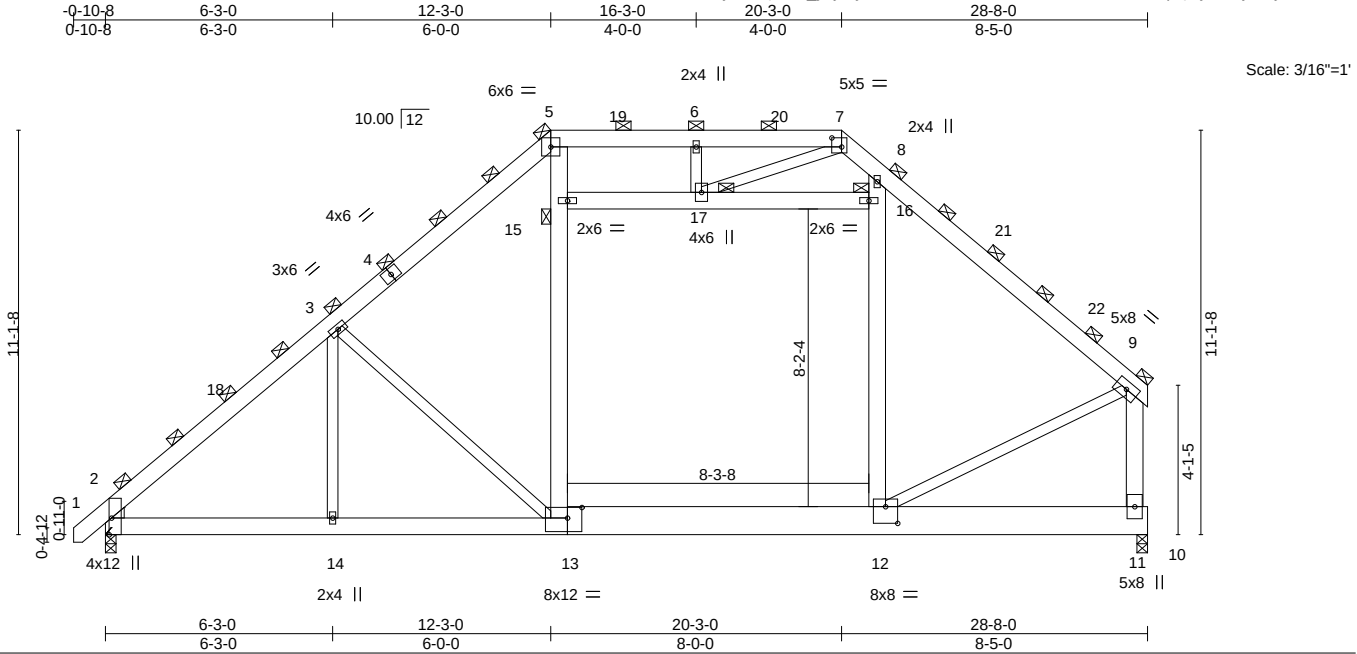


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [7:0-3-4,0-3-0], [12:0-4-0,0-5-8], [13:0-4-12,0-3-8]

| 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 | 0.37 | Vert(LL) | -0.08 | 12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.44 | Vert(CT) | -0.11 | 13-14 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.32 | Horz(CT) | 0.02 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.08 | 13-14 | >999 | 240 | Weight: 578 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1 *Except*
10-13: 2x10 SP No.1
WEBS 2x4 SP No.2 *Except*
5-13,8-12,9-11,15-16: 2x6 SP No.1
WEDGE
Left: 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.
JOINTS 1 Brace at Jt(s): 5, 7, 9, 15, 16, 17

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8
Max Horz 2=509(LC 9)
Max Grav 2=3122(LC 20), 11=4444(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4039/252, 3-5=-3448/380, 5-6=-2679/406, 6-7=-2681/406, 7-8=-1950/365, 8-9=-3502/231, 9-11=-3684/218
BOT CHORD 2-14=-272/3123, 13-14=-273/3125, 12-13=0/2599
WEBS 3-13=-983/494, 13-15=-83/1541, 5-15=0/1557, 12-16=0/1130, 8-16=0/1184, 9-12=0/2677, 15-17=-51/282, 16-17=-762/193, 6-17=-259/208, 3-14=0/535, 7-17=-156/1079


**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: 2x6 - 2 rows staggered at 0-9-0 oc, 2x10 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 18-5-11, Interior(1) 18-5-11 to 20-3-0, Exterior(2) 20-3-0 to 26-5-11, Interior(1) 26-5-11 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Ceiling dead load (10.0 psf) on member(s). 15-17, 16-17; Wall dead load (5.0psf) on member(s).13-15, 12-16
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

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ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-5=-120, 5-7=-120, 7-9=-120, 2-13=-40, 12-13=-80, 11-12=-160(F=-120), 10-11=-40, 15-16=-40
   Drag: 13-15=-20, 12-16=-20

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | C3 | PIGGYBACK BASE | 2 | 2 | I53146743 |
| | | | | | Job Reference (optional) |

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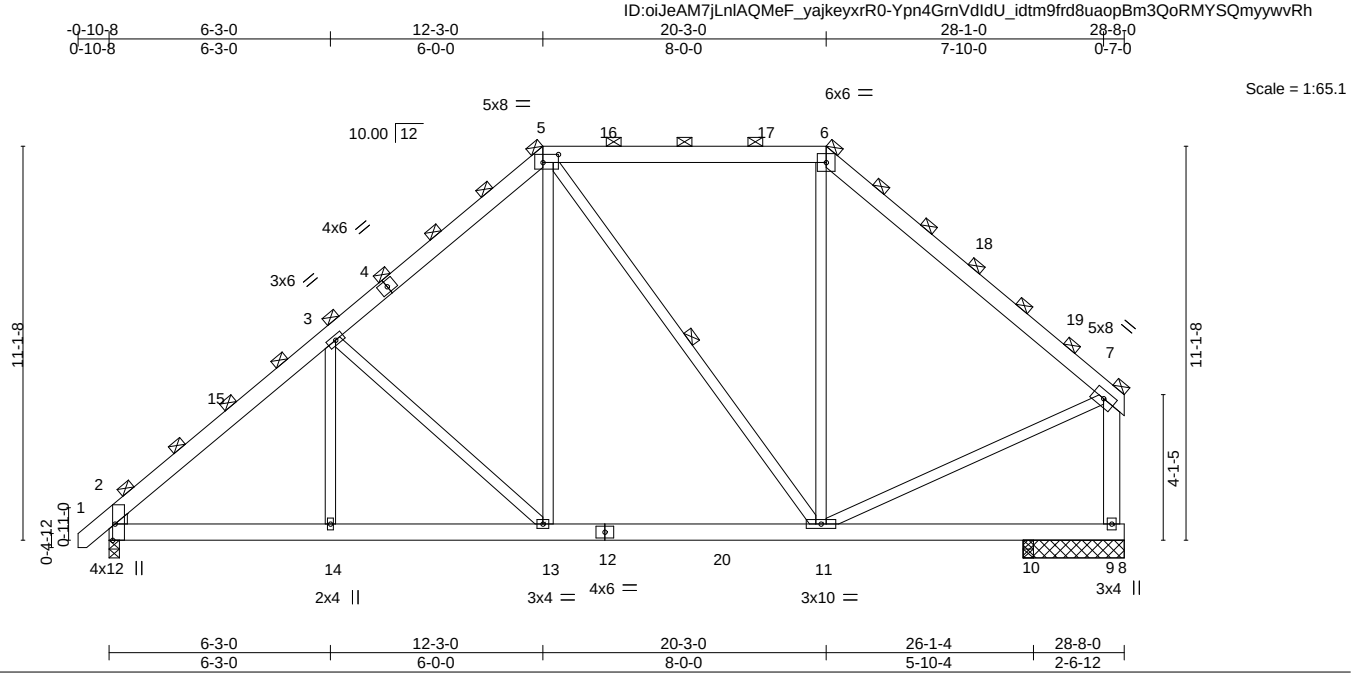


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [5:0-5-4,0-2-12]

| 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 | 0.36 | Vert(LL) | -0.06 | 11-13 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.30 | Vert(CT) | -0.09 | 11-13 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.25 | Horz(CT) | 0.02 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.02 | 14 | >999 | 240 | Weight: 485 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-9: 2x6 SP No.1
WEDGE
Left: 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.
WEBS 1 Row at midpt 5-11

**REACTIONS.** (size) 2=0-3-8, 9=2-10-4, 10=0-3-8
Max Horz 2=509(LC 9)
Max Uplift 2=-108(LC 12), 9=-148(LC 13)
Max Grav 2=2347(LC 1), 9=2096(LC 2), 10=378(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2920/682, 3-5=-2232/803, 5-6=-1404/731, 6-7=-1934/667, 7-9=-2058/670
BOT CHORD 2-14=-588/2214, 13-14=-588/2214, 11-13=-235/1656
WEBS 3-14=0/505, 3-13=-1018/480, 5-13=-151/1158, 5-11=-630/204, 6-11=-92/423, 7-11=-86/1340

**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: 2x6 - 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) 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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 18-5-11, Interior(1) 18-5-11 to 20-3-0, Exterior(2) 20-3-0 to 26-5-11, Interior(1) 26-5-11 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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) except (jt=lb) 2=108, 9=148.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | C4 | PIGGYBACK BASE | 3 | 1 | I53146744 |
| | | | | | Job Reference (optional) |

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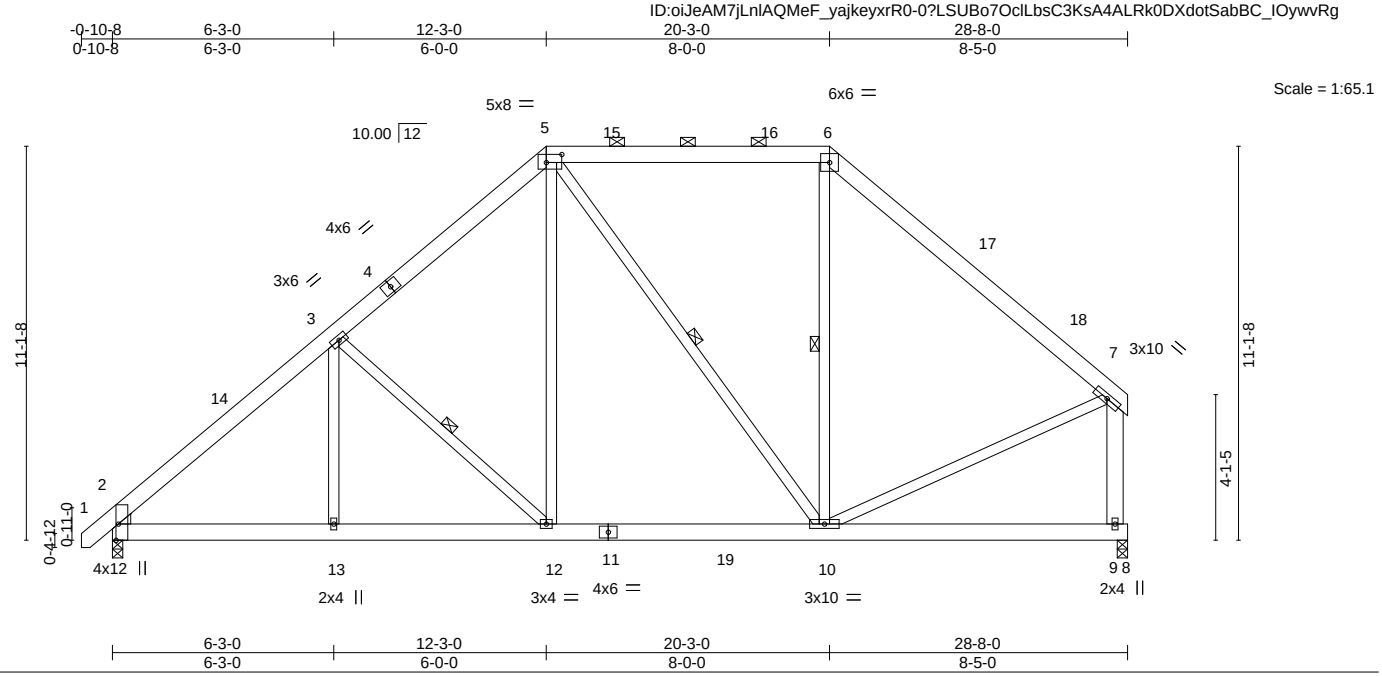


Plate Offsets (X,Y)-- [2:0-5-8,Edge], [5:0-5-4,0-2-12]

| 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 | 0.39 | Vert(LL) | -0.06 | 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.26 | Vert(CT) | -0.09 | 10-12 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.02 | 9 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.02 | 13 | >999 | 240 | Weight: 243 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-9: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 5-6.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-12, 5-10, 6-10

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8
Max Horz 2=254(LC 9)
Max Uplift 2=-49(LC 12), 9=-15(LC 13)
Max Grav 2=1182(LC 1), 9=1133(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1473/333, 3-5=-1123/395, 5-6=-725/356, 6-7=-950/306
BOT CHORD 2-13=-288/1114, 12-13=-288/1114, 10-12=-112/833
WEBS 3-13=0/261, 3-12=-513/239, 5-12=-81/571, 5-10=-296/115, 7-9=-1060/323, 7-10=-88/732

**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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 12-3-0, Exterior(2) 12-3-0 to 18-5-11, Interior(1) 18-5-11 to 20-3-0, Exterior(2) 20-3-0 to 26-5-11, Interior(1) 26-5-11 to 28-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
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) 2, 9.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


July 18,2022



ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | D1 | ATTIC | 5 | 1 | I53146745 |
| | | | | | Job Reference (optional) |

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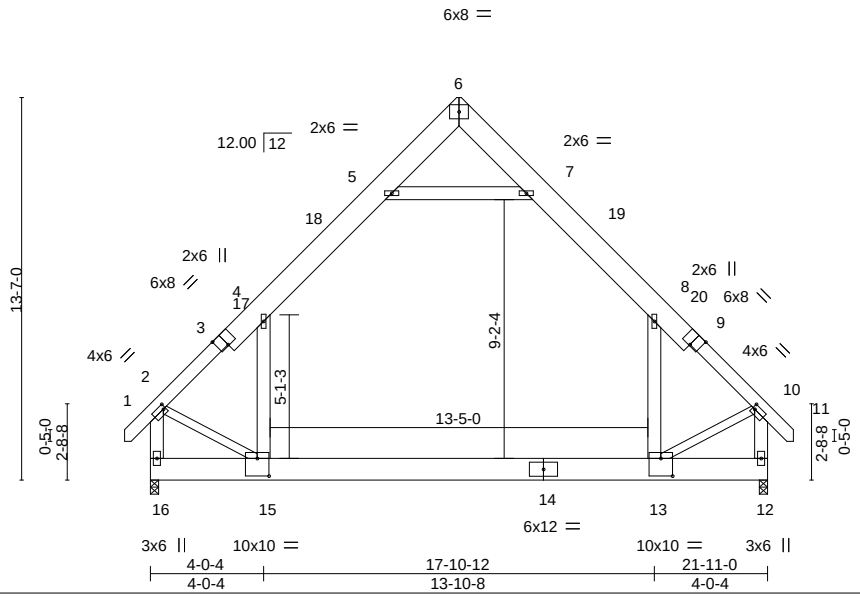


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [3:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-0,0-2-0], [13:0-5-0,0-7-8], [15:0-5-0,0-7-8]

| LOADING (psf) | | SPACING- 2-0-0 | | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.61 | Vert(LL) | -0.24 | 13-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.80 | Vert(CT) | -0.37 | 13-15 | >693 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.23 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.05 | 13-15 | >999 | 240 | Weight: 259 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x10 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 4-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-6-15 oc bracing.

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8
Max Horz 16=353(LC 11)
Max Grav 16=1585(LC 21), 12=1585(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1649/0, 4-5=-1052/166, 5-6=-20/368, 6-7=-20/368, 7-8=-1052/166, 8-10=-1649/0, 2-16=-1914/0, 10-12=-1914/0
BOT CHORD 15-16=-318/414, 13-15=0/1022
WEBS 5-7=-1342/207, 4-15=0/869, 8-13=0/869, 2-15=0/1057, 10-13=0/1059

**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) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-9-2 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Attic room checked for L/360 deflection.


July 18,2022



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

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | D1GE | ATTIC | 1 | 1 | I53146746 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:09 2022 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-zOSDvtqOwD?2rAMSRHCYFmW1A15hGnut2Vh4MHywvRe

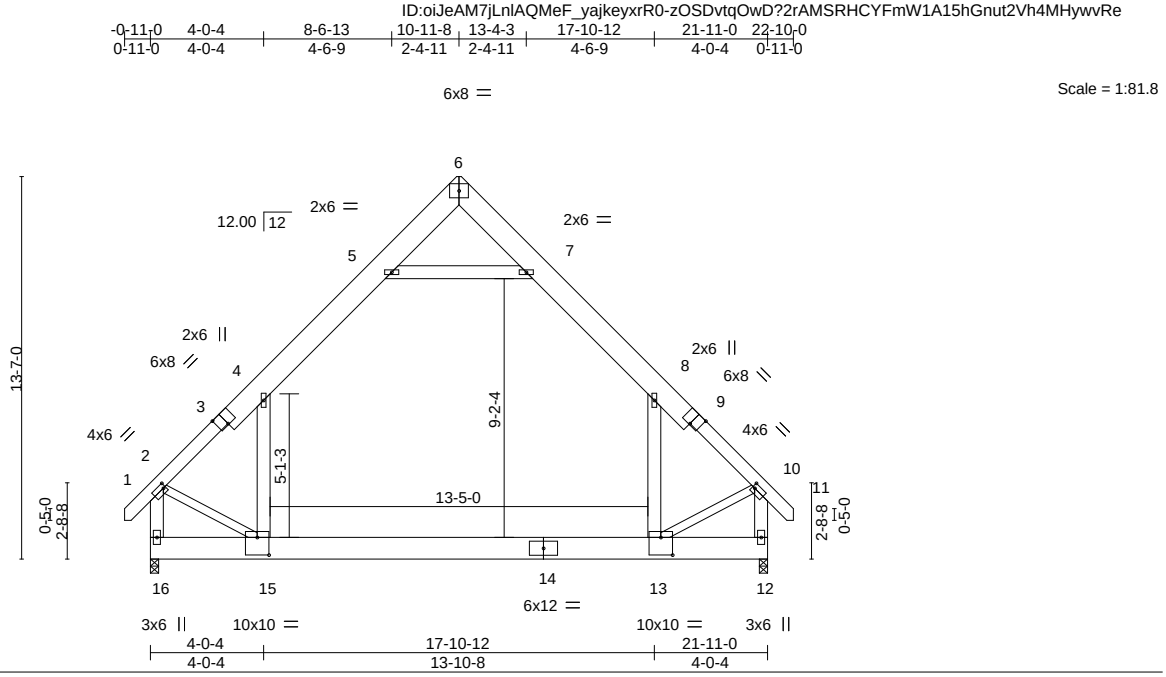


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [3:0-4-0,Edge], [9:0-4-0,Edge], [10:0-1-0,0-2-0], [13:0-5-0,0-7-8], [15:0-5-0,0-7-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.61 | Vert(LL) | -0.24 | 13-15 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.80 | Vert(CT) | -0.37 | 13-15 | >693 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | 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: 259 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except* 1-3,9-11: 2x6 SP No.1
BOT CHORD 2x10 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 4-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-6-15 oc bracing.

**REACTIONS.** (size) 16=0-3-8, 12=0-3-8
Max Horz 16=442(LC 11)
Max Grav 16=1581(LC 21), 12=1581(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1664/0, 4-5=-1060/199, 5-6=-38/368, 6-7=-39/368, 7-8=-1060/199, 8-10=-1664/0, 2-16=-1931/0, 10-12=-1931/0
BOT CHORD 15-16=-410/503, 13-15=0/1053
WEBS 5-7=-1342/289, 4-15=0/869, 8-13=0/869, 2-15=0/1096, 10-13=0/1099

**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) -0-9-2 to 3-7-11, Exterior(2) 3-7-11 to 11-0-0, Corner(3) 11-0-0 to 15-4-13, Exterior(2) 15-4-13 to 22-9-2 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Attic room checked for L/360 deflection.


July 18,2022



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| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | D2 | ATTIC | 2 | 1 | I53146747 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:10 2022 Page 1
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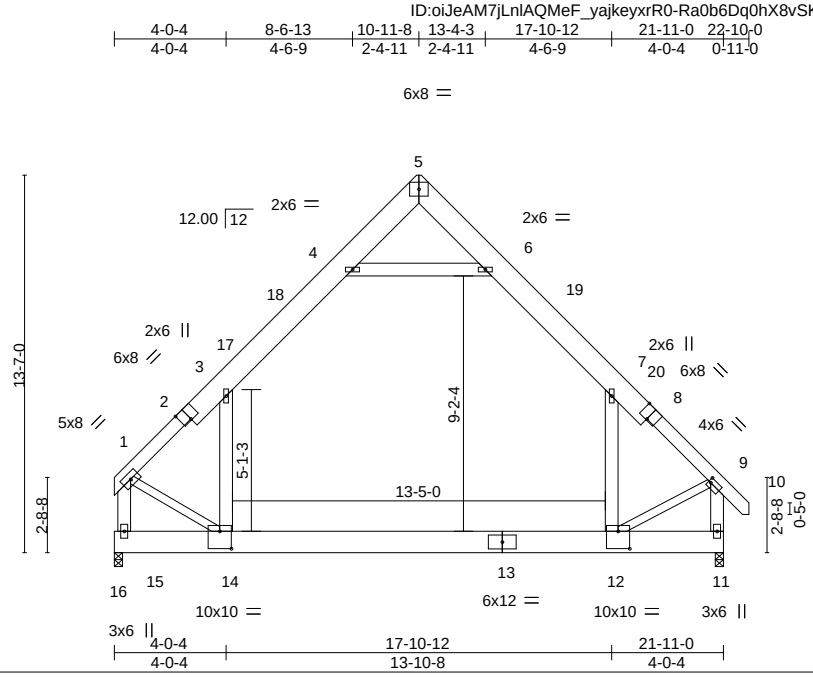


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [8:0-4-0,Edge], [9:0-1-0,0-2-0], [12:0-5-0,0-7-8], [14:0-5-0,0-7-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.61 | Vert(LL) | -0.23 | 12-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.80 | Vert(CT) | -0.37 | 12-14 | >696 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.25 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.05 | 12-14 | >999 | 240 | Weight: 257 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except* 1-2,8-10: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 1-14,9-12: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-7-7 oc bracing: 12-14.

**REACTIONS.** (size) 11=0-3-8, 15=0-3-8
Max Horz 15=320(LC 11)
Max Grav 11=1574(LC 20), 15=1551(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1619/0, 3-4=-1049/168, 4-5=-18/362, 5-6=-21/366, 6-7=-1040/158, 7-9=-1631/0, 1-15=-1900/0, 9-11=-1894/0
BOT CHORD 14-15=-305/349, 12-14=0/1009
WEBS 4-6=-1329/213, 3-14=0/833, 7-12=0/863, 1-14=0/1102, 9-12=0/1042

**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) 0-4-12 to 4-9-9, Interior(1) 4-9-9 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 22-9-2 zone; end vertical 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). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Attic room checked for L/360 deflection.


July 18,2022



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| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | D3 | ATTIC | 3 | 1 | I53146748 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:11 2022 Page 1
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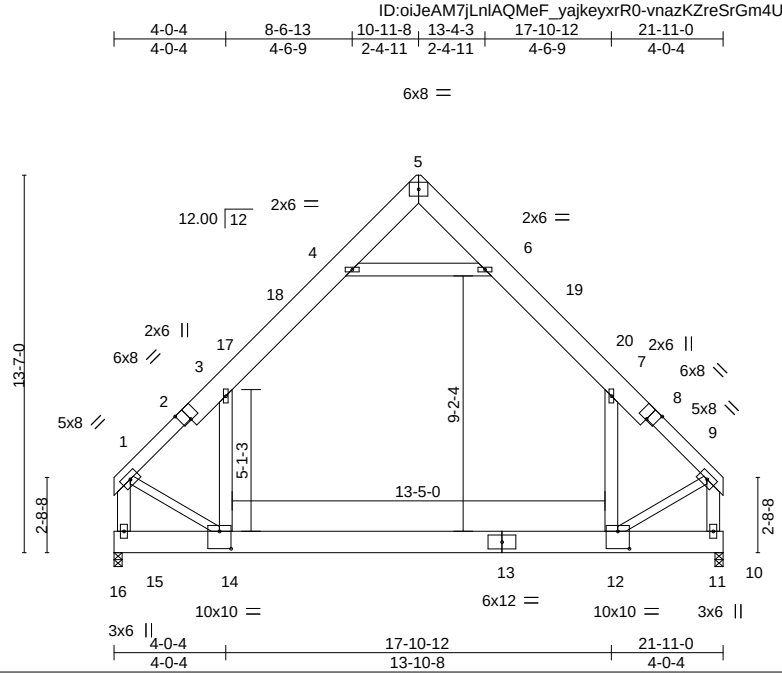


Plate Offsets (X,Y)-- [2:0-4-0,Edge], [8:0-4-0,Edge], [12:0-5-0,0-7-8], [14:0-5-0,0-7-8]

| 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 | 0.60 | Vert(LL) | -0.23 | 12-14 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.79 | Vert(CT) | -0.36 | 12-14 | >700 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.25 | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | Wind(LL) | 0.05 | 12-14 | >999 | 240 | Weight: 254 lb | FT = 20% |

**LUMBER-**
TOP CHORD 2x10 SP No.1 *Except* 1-2,8-9: 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x6 SP No.1 *Except* 1-14,9-12: 2x4 SP No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 4-10-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-8-5 oc bracing: 12-14.

**REACTIONS.** (size) 15=0-3-8, 11=0-3-8
Max Horz 15=-330(LC 8)
Max Grav 15=1544(LC 21), 11=1544(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1604/0, 3-4=-1039/164, 4-5=-21/359, 5-6=-21/359, 6-7=-1039/164, 7-9=-1603/0, 1-15=-1885/0, 9-11=-1886/0
BOT CHORD 14-15=-317/359, 12-14=0/991
WEBS 4-6=-1312/202, 3-14=0/827, 7-12=0/827, 1-14=0/1096, 9-12=0/1097

**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) 0-4-12 to 4-9-9, Interior(1) 4-9-9 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-7-4 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). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-14, 7-12
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-14
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Attic room checked for L/360 deflection.


July 18,2022




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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | M1GE | MONOPITCH STRUCTURAL | 1 | 1 | I53146749 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:12 2022 Page 1
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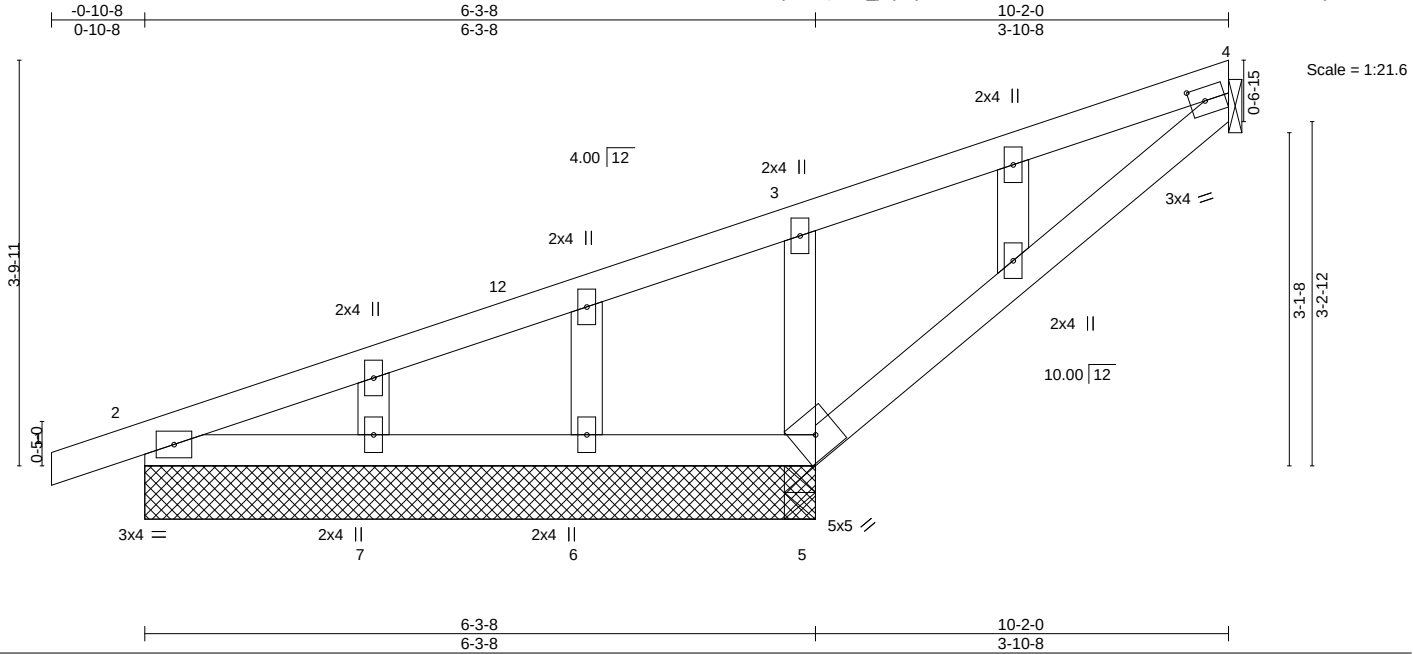


Plate Offsets (X,Y)-- [4:0-1-11,0-1-8]

| 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 | 0.29 | Vert(LL) | -0.01 | 4-5 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.02 | 4-5 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.05 | Horz(CT) | -0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-S | | Wind(LL) | 0.00 | 2-7 | >999 | 240 | Weight: 42 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.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 4-5.

**REACTIONS.** All bearings 6-3-8 except (jt=length) 4=Mechanical.
(lb) - Max Horz 2=177(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 4, 2, 7 except 5=-174(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 4, 2, 6, 7 except 5=440(LC 1), 5=440(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-5=-353/236

**NOTES-**
1) 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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-3-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 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) 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) 4, 2, 7 except (jt=lb) 5=174.
8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.


July 18,2022



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | PB1 | PIGGYBACK | 22 | 1 | I53146750 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:13 2022 Page 1
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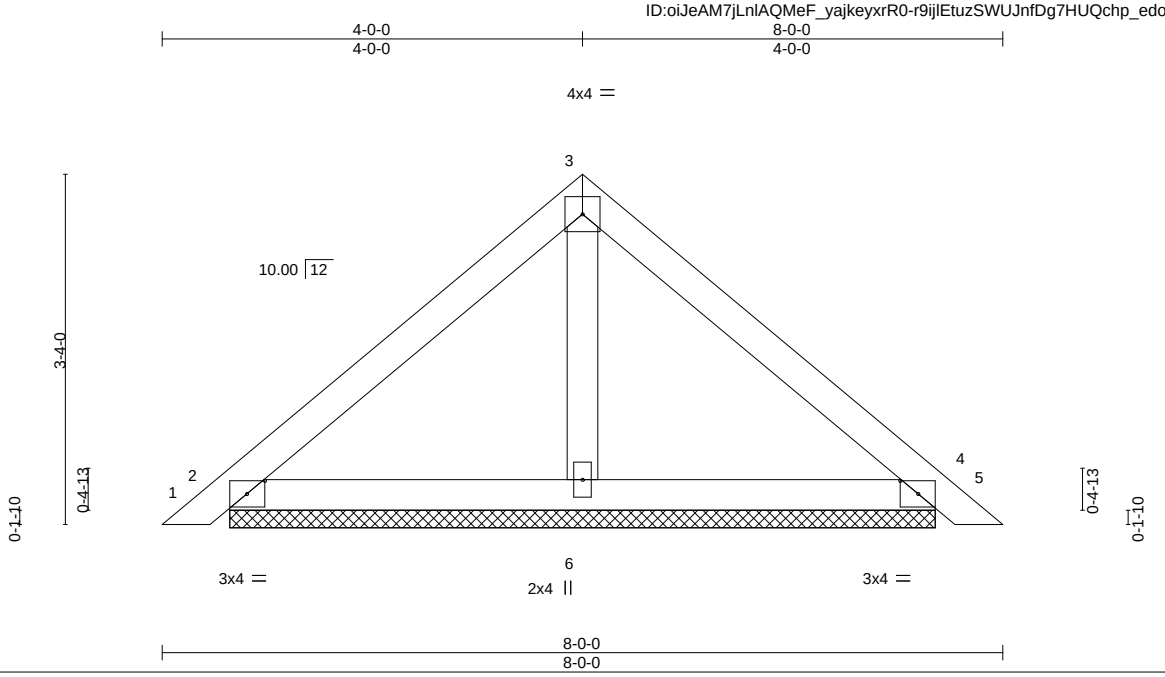


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [4:0-2-1,0-1-8]

| 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 | 0.17 | Vert(LL) | 0.00 | 5 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | 0.01 | 5 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.02 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 29 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) 2=6-8-9, 4=6-8-9, 6=6-8-9
Max Horz 2=-75(LC 10)
Max Uplift 2=-30(LC 12), 4=-37(LC 13)
Max Grav 2=182(LC 1), 4=182(LC 1), 6=223(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) 2, 4.
7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


July 18,2022



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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | PB1GE | GABLE | 2 | 1 | I53146751 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:14 2022 Page 1
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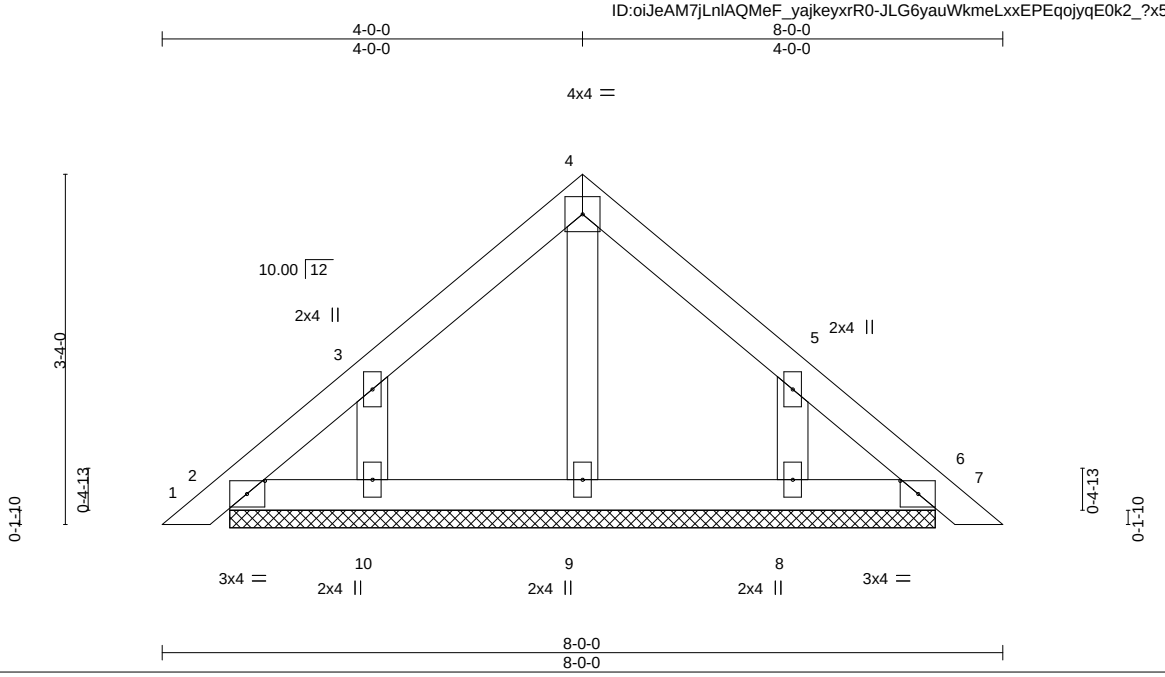


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [6:0-2-1,0-1-8]

| 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 | 0.04 | Vert(LL) | -0.00 | 6 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.02 | Vert(CT) | 0.00 | 6 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 6 | 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.** All bearings 6-8-9.
(lb) - Max Horz 2=94(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-121(LC 12), 8=-120(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

**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 Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=121, 8=120.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.


July 18,2022



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

| Job | Truss | Truss Type | Qty | Ply | Wellco/Lot 149 Hidden Lakes/Harnett |
|---|---|---|---|---|---|
| J0822-4435 | PB2 | PIGGYBACK | 3 | 2 | I53146752 |
| | | | | | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Jul 18 06:57:14 2022 Page 1
ID:oiJeAM7jLnlAQMeF_yajkeyxrR0-JLG6yauWkmeLxxEPEqojyqE?H2z5x5UcCnOr2UywvRZ

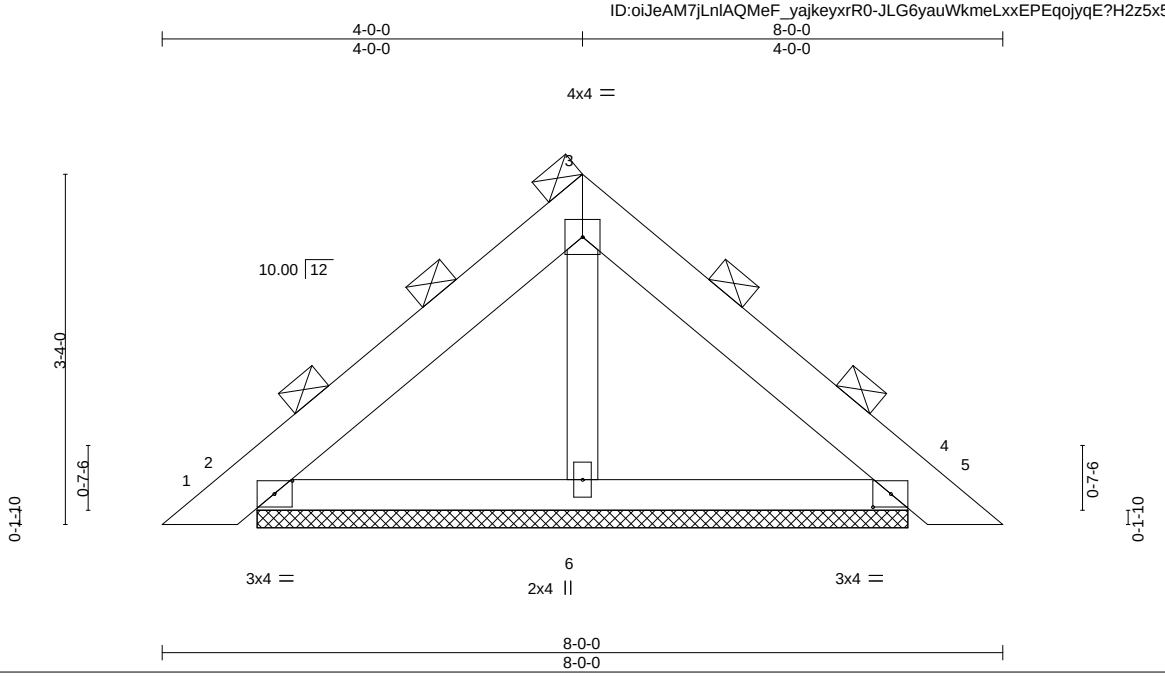


Plate Offsets (X,Y)-- [2:0-2-1,0-1-8], [4:0-2-1,0-1-8]

| 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 | 0.07 | Vert(LL) | 0.00 | 5 | n/r | 120 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.08 | Vert(CT) | 0.00 | 5 | n/r | 120 | | |
| BCLL | 0.0 * | Rep Stress Incr | NO | WB | 0.01 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | | | Weight: 74 lb | FT = 20% |

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

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

**REACTIONS.** (size) 2=6-2-5, 4=6-2-5, 6=6-2-5
Max Horz 2=-146(LC 10)
Max Uplift 2=-66(LC 12), 4=-81(LC 13)
Max Grav 2=373(LC 1), 4=373(LC 1), 6=384(LC 3)

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

**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: 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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.


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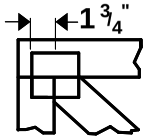
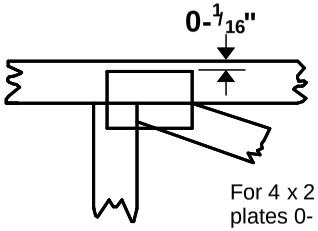
# Symbols

## 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.

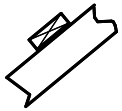
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

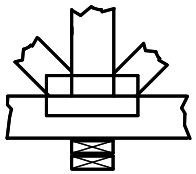
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

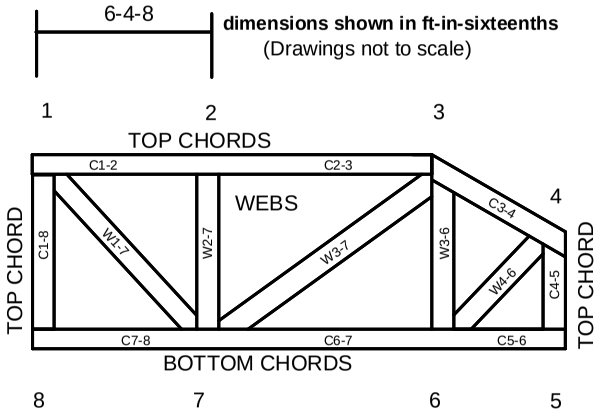


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**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.



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.