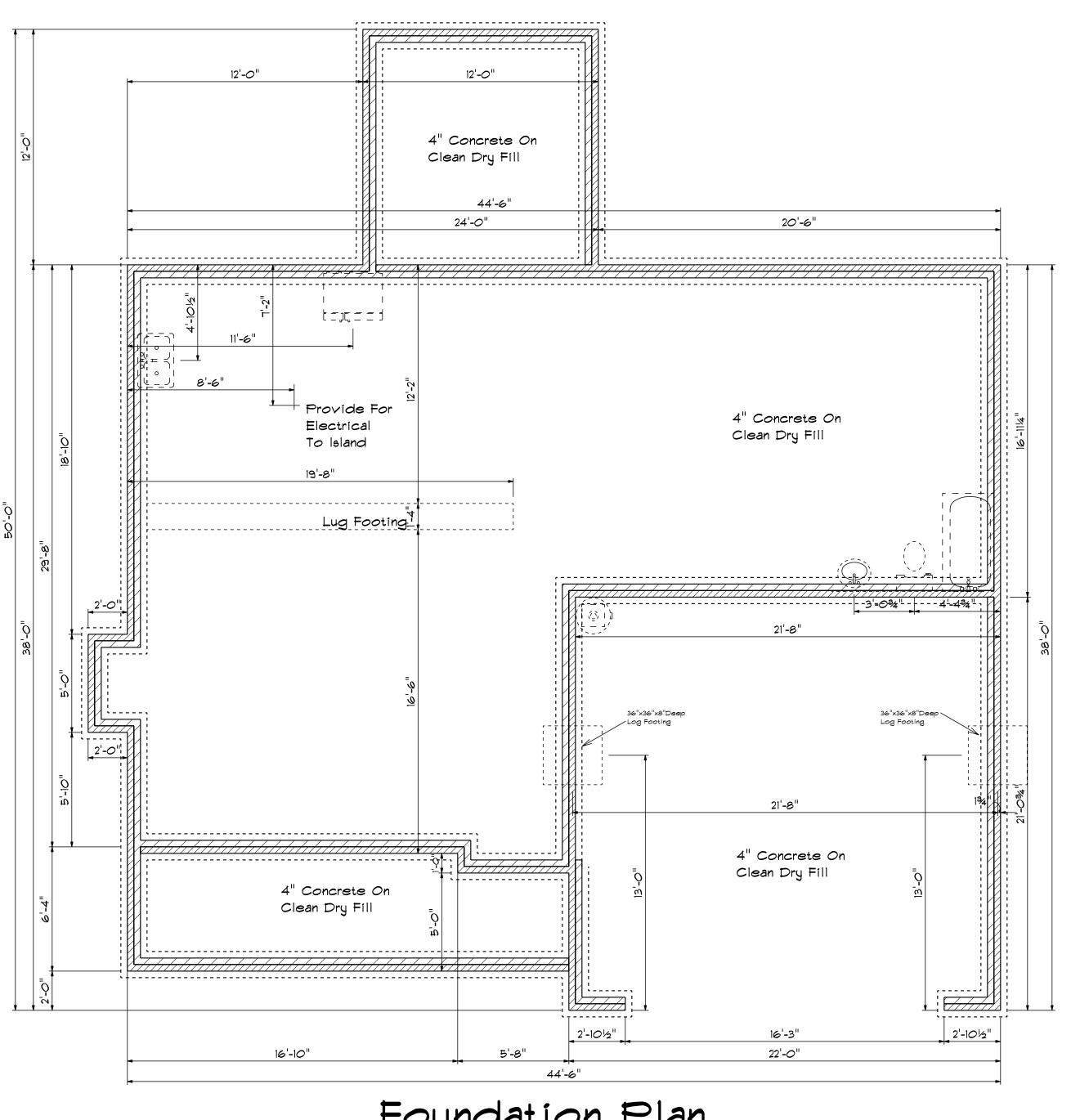


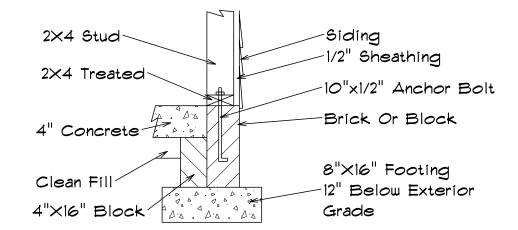
| SECOND FLOOR OPENING SCHEDULE |               |       |       |  |  |  |
|-------------------------------|---------------|-------|-------|--|--|--|
| PRODUCT CODE                  | SIZE          | HINGE | COUNT |  |  |  |
| 1-6 Door Unit                 | 1'-4"         | R     | 1     |  |  |  |
| 2-0 Door Unit                 | 2'-0"         | R     | 1     |  |  |  |
| 2-4 Door Unit                 | 2'-4"         | R     | 1     |  |  |  |
| 2-4 Door Unit                 | 2'-4"         | L     | 2     |  |  |  |
| 2-6 Door Unit                 | 2'-6"         | R     | 2     |  |  |  |
| 2-6 Door Unit                 | 2'-6"         | L     | 1     |  |  |  |
| 2-8 Door Unit                 | 2'-8"         | R     | 2     |  |  |  |
| 3-0 Doublehung Door Unit      | 3'-0"         | LR    | 2     |  |  |  |
| 20x32 single                  | 2'-0" x 3'-2" | N     | 2     |  |  |  |
| 28x52 single                  | 2'-8" x 5'-2" | N     | 5     |  |  |  |
| 28x52 triple                  | 8'-0" x 5'-2" | NA    | 1     |  |  |  |

Second Floor Plan

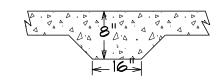
Scale: 1/4"= 1'-0"

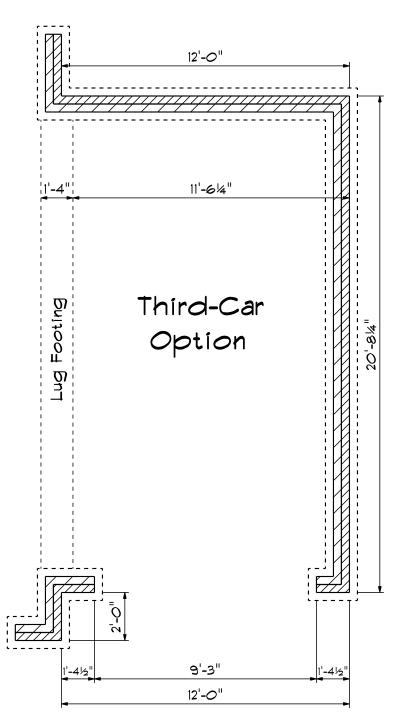


## Foundation Detail Siding

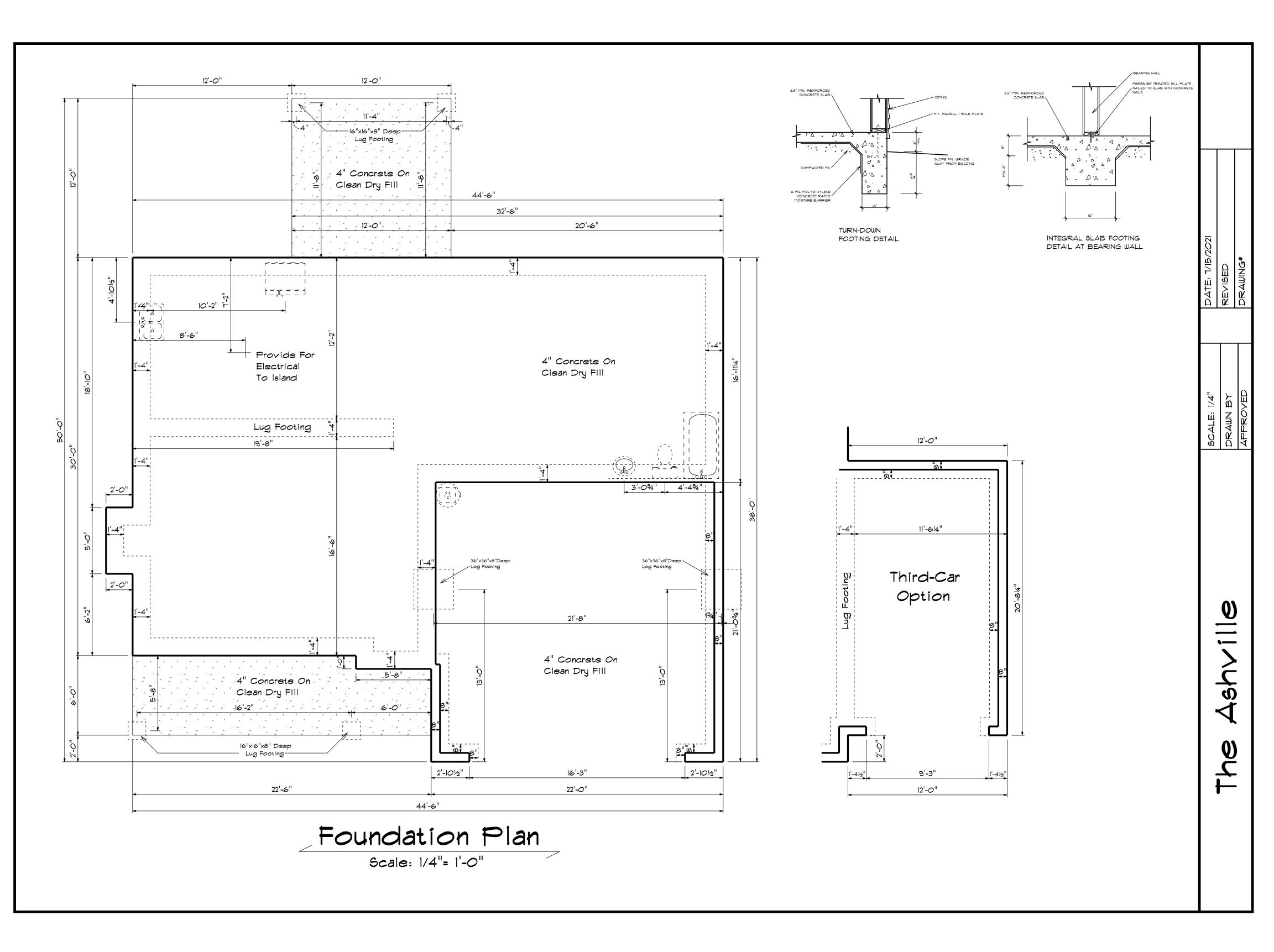


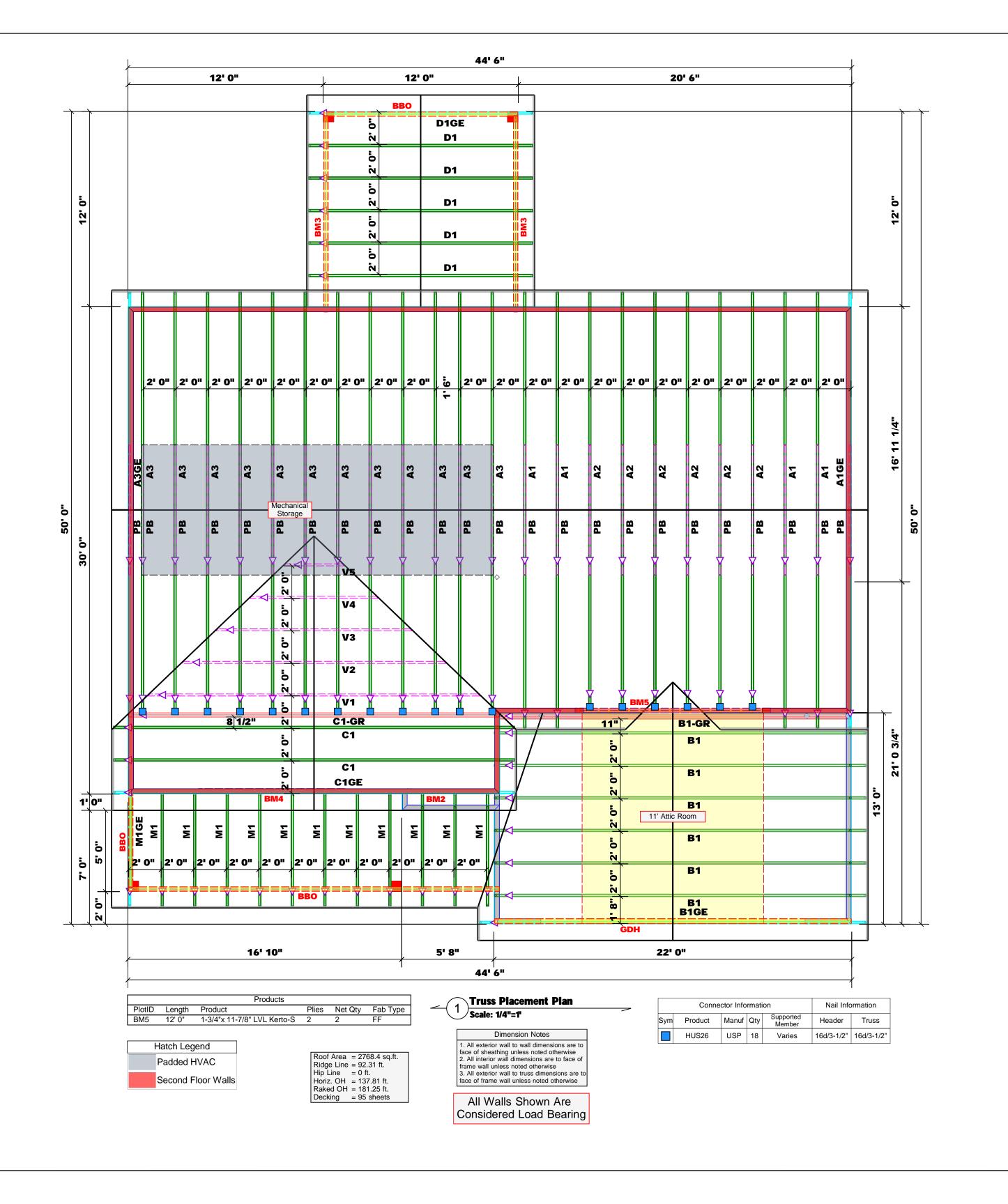
## Lug Footing Detail





## Foundation Plan Scale: 1/4"= 1'-0"







Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature

## **David Landry**

| LO                      | AD (                              | CHAR   | ₹T FO                   | R JA                              | ACK STUD                | s               |
|-------------------------|-----------------------------------|--------|-------------------------|-----------------------------------|-------------------------|-----------------|
|                         | (8                                | ASED C | N TABLE:                | 3 R502.9                          | 5(t) & (b))             |                 |
| NU                      | MBER C                            |        | STUBS R<br>READER/      |                                   | ED 8 EA END OF          |                 |
| END REACTION<br>(UP 10) | REQ'D STUDG FOR<br>(2) PLY HEADER |        | BND REACTION<br>(of 10) | REQ16 STUDS FOR<br>(3) ALY HEADER | END REACTION<br>(JP TO) | REQ15 STUDS FOR |
| 1700                    | 1                                 |        | 2550                    | 1                                 | 3400                    | 1               |
| 3400                    | 2                                 |        | 5100                    | 2                                 | 6800                    | 2               |
| FIGO                    | -                                 |        | 7450                    | -                                 | 10200                   | -               |

| TI II 0 :- | BUILDER       | Benjamin Stout Real Estate  | COUNTY             | Fayetteville / Cumberland |
|------------|---------------|-----------------------------|--------------------|---------------------------|
|            | JOB NAME      | JOB NAME Lot 5 Cypress Road | ADDRESS            | Cypress Road              |
|            | PLAN          | The Ashville                | MODEL              | Roof                      |
|            | SEAL DATE N/A | N/A                         | DATE REV. 03/10/22 | 03/10/22                  |
|            | QUOTE #       |                             | DRAWN BY           | DRAWN BY David Landry     |
|            | 10B #         | J0322-1269                  | SALESMAN           | SALESMAN Marshall Naylor  |

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



RE: J0322-1269 Lot 5 Cypress Road **Trenco** 818 Soundside Rd Edenton, NC 27932

**Site Information:** 

Customer: Benjamin Stout Real Estate Project Name: J0322-1269 Lot/Block: 5 Model: Williams

Address: Cypress Road Subdivision: Cypress Road

City: Fayetteville State: NC

## 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 21 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal#     | Truss Name | Date      | No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|-----|-----------|------------|-----------|
| 1   | E16391025 | A1         | 11/9/2021 | 21  | E16391045 | V5         | 11/9/2021 |
| 2   | E16391026 | A1GE       | 11/9/2021 |     |           |            |           |
| 3   | E16391027 | A2         | 11/9/2021 |     |           |            |           |
| 4   | E16391028 | A3         | 11/9/2021 |     |           |            |           |
| 5   | E16391029 | A3GE       | 11/9/2021 |     |           |            |           |
| 6   | E16391030 | B1         | 11/9/2021 |     |           |            |           |
| 7   | E16391031 | B1-GR      | 11/9/2021 |     |           |            |           |
| 8   | E16391032 | B1GE       | 11/9/2021 |     |           |            |           |
| 9   | E16391033 | C1         | 11/9/2021 |     |           |            |           |
| 10  | E16391034 | C1-GR      | 11/9/2021 |     |           |            |           |
| 11  | E16391035 | C1GE       | 11/9/2021 |     |           |            |           |
| 12  | E16391036 | D1         | 11/9/2021 |     |           |            |           |
| 13  | E16391037 | D1GE       | 11/9/2021 |     |           |            |           |
| 14  | E16391038 | M1         | 11/9/2021 |     |           |            |           |
| 15  | E16391039 | M1GE       | 11/9/2021 |     |           |            |           |
| 16  | E16391040 | PB         | 11/9/2021 |     |           |            |           |
| 17  | E16391041 | V1         | 11/9/2021 |     |           |            |           |
| 18  | E16391042 | V2         | 11/9/2021 |     |           |            |           |
| 19  | E16391043 | V3         | 11/9/2021 |     |           |            |           |
| 20  | E16391044 | V4         | 11/9/2021 |     |           |            |           |
|     |           |            |           |     |           |            |           |

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

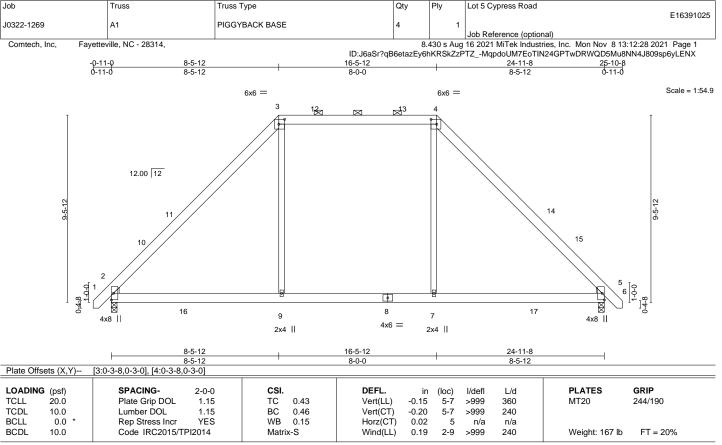
My license renewal date for the state of North Carolina is December 31, 2022

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.



November 09, 2021



**BRACING-**

TOP CHORD

BOT CHORD

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

**REACTIONS.** (size) 2=0-3-8, 5=0-3-8

Max Horz 2=223(LC 11)

Max Uplift 2=-35(LC 12), 5=-35(LC 13) Max Grav 2=1309(LC 2), 5=1309(LC 2)

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

TOP CHORD 2-3=-1465/308, 3-4=-908/350, 4-5=-1465/308 BOT CHORD 2-9=-36/930, 7-9=-33/938, 5-7=-33/928

WEBS 3-9=0/653, 4-7=0/653

## 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 8-5-12, Exterior(2) 8-5-12 to 14-8-7, Interior(1) 14-8-7 to 16-5-12, Exterior(2) 16-5-12 to 22-8-7, Interior(1) 22-8-7 to 25-8-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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, 5.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 6-0-0 oc purlins, except

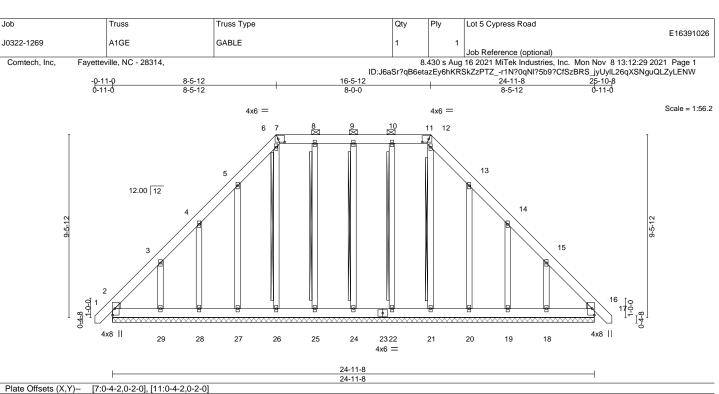
2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing

November 9,2021







LOADING (psf) SPACING-CSI. DEFL **PLATES** GRIP 2-0-0 I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) 0.00 16 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.03 Vert(CT) 0.00 16 120 n/r **BCLL** 0.0 Rep Stress Incr YES WB 0.13 Horz(CT) 0.01 16 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 245 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 2x6 SP No.1 **BOT CHORD** 

OTHERS 2x4 SP No 2 WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

**BRACING-**TOP CHORD

BOT CHORD

WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-11.

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace:

2x4 SPF No.2 - 9-24, 8-25, 6-26, 10-22,

12-21

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 24-11-8.

(lb) - Max Horz 2=280(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 24, 25, 26, 22, 16 except 2=-114(LC 8), 27=-130(LC 12), 28=-135(LC 12), 29=-221(LC 12), 20=-125(LC 13),

19=-136(LC 13), 18=-214(LC 13)

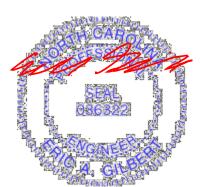
All reactions 250 lb or less at joint(s) 2, 24, 25, 26, 27, 28, 22, 21, 20, Max Grav 19, 18, 16 except 29=254(LC 19)

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

TOP CHORD 2-3=-311/246

## 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
- 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 requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 25, 26, 22, 16 except (jt=lb) 2=114, 27=130, 28=135, 29=221, 20=125, 19=136, 18=214.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 16.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



November 9,2021

neters 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 designs. 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 experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*



Job Truss Truss Type Qty Ply Lot 5 Cypress Road F16391027 J0322-1269 A2 PIGGYBACK BASE Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:30 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-JDxNDAONmPj0cMEfXuyhWxVZW9ZXrlvbcKezu?yLENV 8-2-4 8-2-4 8-0-0 8-5-12 Scale = 1:53.9 6x6 =5x5 = 12  $\bowtie$  3 12.00 12 4x4 // 4x4 // 14 15 1-3-8 6 0 8 16 9 7 3x10 4x8 || 4x6 = 2x4 || 2x4 || 16-2-4 24-8-0 Plate Offsets (X,Y)--[1:Edge,0-0-0], [3:0-3-8,0-3-0], [4:0-2-12,0-2-12] LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.44 Vert(LL) -0.29 5-7 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.53 Vert(CT) -0.34 5-7 >861 240 0.13 **BCLL** 0.0 Rep Stress Incr YES WB Horz(CT) 0.02 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.19 5-7 >999 240 Weight: 176 lb FT = 20% **BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

Right: 2x4 SP No.2

SLIDER Left 2x6 SP No.1 5-11-1

REACTIONS.

(size) 1=Mechanical, 5=0-3-8 Max Horz 1=-221(LC 8)

Max Uplift 1=-20(LC 12), 5=-35(LC 13) Max Grav 1=1087(LC 2), 5=1249(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 1-3=-1337/307, 3-4=-815/353, 4-5=-1306/303 TOP CHORD

**BOT CHORD** 1-9=-36/838, 7-9=-32/844, 5-7=-33/836

WEBS 3-9=0/518, 4-7=0/562

## 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 8-2-4, Exterior(2) 8-2-4 to 14-4-15, Interior(1) 14-4-15 to 16-2-4, Exterior(2) 16-2-4 to 22-4-15, Interior(1) 22-4-15 to 25-5-6 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) 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) 1, 5.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 6-0-0 oc purlins, except

2-0-0 oc purlins (6-0-0 max.): 3-4.

Rigid ceiling directly applied or 10-0-0 oc bracing.

November 9,2021





Job Truss Truss Type Qty Ply Lot 5 Cypress Road F16391028 J0322-1269 PIGGYBACK BASE 12 АЗ Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:31 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-nPVIQWP?XjrtEVpr5cTw381jxZujaknlq\_NXQRyLENU 24-11-8 8-0-0 8-5-12 Scale = 1:57.7 6x6 =6x6 =2 12.00 12 13 1-0-0 T 15 16 6 4x8 || 4x8 II 3x4 || 3x4 || 3x10 =4x8 = 4x6 = 4x4 = 16-5-12 [2:0-3-8,0-3-0], [3:0-3-8,0-3-0] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 I/defl L/d **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.46 Vert(LL) -0.14 1-8 >999 360 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.15 ВС 0.53 -0.19 1-8 >999 240 **BCLL** 0.0 Rep Stress Incr YES WB 0.15 Horz(CT) 0.02 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.17 1-8 >999 240 Weight: 181 lb FT = 20% LUMBER-**BRACING-**TOP CHORD

BOT CHORD

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

WFBS 2x4 SP No 2

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=Mechanical, 4=0-3-8

Max Horz 1=-221(LC 8)

Max Uplift 1=-22(LC 12), 4=-35(LC 13) Max Grav 1=1263(LC 2), 4=1314(LC 2)

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

TOP CHORD  $1\hbox{-}2\hbox{--}1449/307,\ 2\hbox{-}3\hbox{--}925/359,\ 3\hbox{-}4\hbox{--}1489/315}$ 

1-8=-35/947, 6-8=-37/955, 4-6=-32/944 BOT CHORD

2-8=0/660, 3-6=0/667 **WEBS** 

## 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; DCDL=6.0psf; and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 8-5-12, Exterior(2) 8-5-12 to 14-8-7, Interior(1) 14-8-7 to 16-5-12, Exterior(2) 16-5-12 to 22-8-7, Interior(1) 22-8-7 to 25-8-14 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) 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) 1, 4.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



November 9,2021

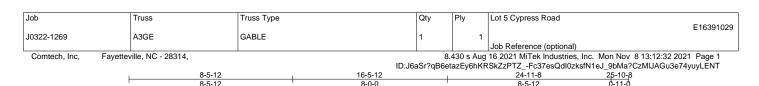


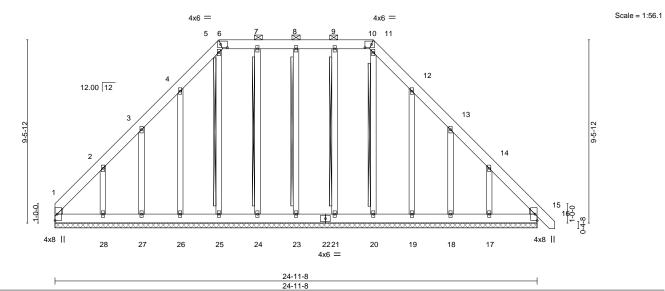
Structural wood sheathing directly applied or 5-11-9 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

2-0-0 oc purlins (6-0-0 max.): 2-3.







| Plate Offs | sets (X,Y) | [6:0-4-2,0-2-0], [10:0-4-2 | ,0-2-0] |       |      |          |      |       |        |     |                |          |  |
|------------|------------|----------------------------|---------|-------|------|----------|------|-------|--------|-----|----------------|----------|--|
| LOADING    | (1 - )     | SPACING-                   | 2-0-0   | CSI.  | 0.04 | DEFL.    | in   | (loc) | l/defl | L/d | PLATES         | GRIP     |  |
| TCLL       | 20.0       | Plate Grip DOL             | 1.15    | TC    | 0.04 | Vert(LL) | 0.00 | 15    | n/r    | 120 | MT20           | 244/190  |  |
| TCDL       | 10.0       | Lumber DOL                 | 1.15    | BC    | 0.03 | Vert(CT) | 0.00 | 15    | n/r    | 120 |                |          |  |
| BCLL       | 0.0 *      | Rep Stress Incr            | YES     | WB    | 0.13 | Horz(CT) | 0.01 | 15    | n/a    | n/a |                |          |  |
| BCDL       | 10.0       | Code IRC2015/TF            | PI2014  | Matri | x-S  |          |      |       |        |     | Weight: 242 lb | FT = 20% |  |

LUMBER-

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

OTHERS 2x4 SP No 2 WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

BRACING-TOP CHORD

BOT CHORD

WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-10.

Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace:

2x4 SPF No.2 - 8-23, 7-24, 5-25, 9-21,

11-20

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 24-11-8.

(lb) - Max Horz 1=-277(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 23, 24, 25, 21, 15 except

 $26 = -129(LC\ 12),\ 27 = -134(LC\ 12),\ 28 = -228(LC\ 12),\ 19 = -125(LC\ 13),\ 18 = -136(LC\ 12)$ 

13), 17=-214(LC 13), 1=-120(LC 10)

Max Grav All reactions 250 lb or less at joint(s) 23, 24, 25, 26, 27, 21, 20, 19,

18, 17, 1, 15 except 28=266(LC 19)

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

TOP CHORD 1-2=-317/250 WEBS 2-28=-252/242

## 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) Provide adequate drainage to prevent water ponding.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 23, 24, 25, 21, 15 except (jt=lb) 26=129, 27=134, 28=228, 19=125, 18=136, 17=214, 1=120.
- 11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 15.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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meters 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 designs. 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 experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*



| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| 10000 4000 | D4    | ATTIO      |     |     | E16391030                |
| J0322-1269 | B1    | ATTIC      | ь   | 1   | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:33 2021 Page 1

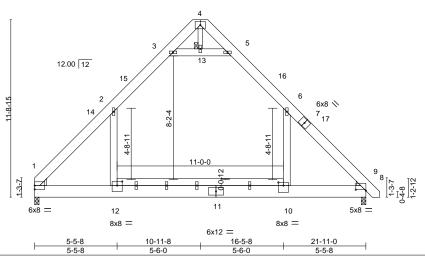
Structural wood sheathing directly applied or 5-1-3 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 13

|       |        | ID:J6a          | Sr?qB6etazEy | 6hKRSkZzPTZjod | IWrCQF3K6bTpyDC1VC   | 8Z7?ANYi2dV2llsdVKyLENS |
|-------|--------|-----------------|--------------|----------------|----------------------|-------------------------|
| 5-5-8 | 9-1-13 | 10-11-8, 12-9-3 | 16-5-8       | 21-11-0        | 22-10 <sub>1</sub> 0 |                         |
| 5-5-8 | 3-8-5  | 1-9-11 1-9-11   | 3-8-5        | 5-5-8          | 0-11-b               |                         |

Scale = 1:71.8 6x8 =



| Plate Offsets (X,Y) | [8:0-8-0,0-0-13], | [10:0-4-0,0-2-8], | [12:0-4-0,0-3-4] |
|---------------------|-------------------|-------------------|------------------|
|                     |                   |                   |                  |

| LOADING (psf) | SPACING- 2-0-0       | CSI.     | <b>DEFL.</b> in (loc) I/defl L/d | PLATES GRIP             |
|---------------|----------------------|----------|----------------------------------|-------------------------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.73  | Vert(LL) -0.21 10-12 >999 360    | MT20 244/190            |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.69  | Vert(CT) -0.36 10-12 >720 240    | W1120 244/130           |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.14  | Horz(CT) 0.01 8 n/a n/a          | Weight: 248 lb FT = 20% |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.08 10-12 >999 240     |                         |

**BRACING-**

TOP CHORD

**BOT CHORD** 

JOINTS

LUMBER-

TOP CHORD 2x8 SP No.1

2x10 SP No.1 \*Except\* 10-12: 2x6 SP No.1 BOT CHORD

2x6 SP No.1 \*Except\* WEBS

4-13: 2x4 SP No.2

WEDGE

Left: 2x6 SP No.2, Right: 2x4 SP No.3

REACTIONS. (size) 1=0-3-8, 8=0-3-8

Max Horz 1=-277(LC 8) Max Grav 1=1413(LC 21), 8=1459(LC 21)

**BOT CHORD** 1-12=0/1085, 10-12=0/1085, 8-10=0/1085

WEBS 6-10=0/975, 2-12=0/889, 3-13=-1621/246, 5-13=-1621/246

## 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 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-7-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are 2x6 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.
- 6) Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s).6-10, 2-12
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
- 8) Attic room checked for L/360 deflection.



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| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1269 | B1-GR | ATTIC      | 1   | _   | E16391031                |
|            |       |            |     | 3   | Job Reference (optional) |

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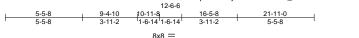
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:36 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-7NIeUDT8LFUAKHhot 935mCIWcaZIFxRU\_G5I5 fyLENPART AND STANDART STAND$ 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 11

Scale = 1:77.0



5x8 = 5x8 = VERIFY LOADING, BY OTHERS 12.00 12 11 2x6 || 4x12 || 4x12 || 11-0-0 × 18 8 10 14 13 15 16 19 20 2x6 || 2x6 || 2x6 || 10x10 = 6x12 = 10x10 = 2x6 ||

5-6-0

| Plate Offsets (X,Y) | [2:0-9-12,0-1-4], [6:0-9-12,0-1-4], [7:Ed | ge,0-3-0], [8:0-5-0,0-2-0], | [10:0-5-0,0-2-0]             |                         |
|---------------------|---|-----------------------------|------------------------------|-------------------------|
| LOADING (psf)       | SPACING- 2-0-0                            | CSI.                        | DEFL. in (loc) I/defl L/d    | PLATES GRIP             |
| TCLL 20.0           | Plate Grip DOL 1.15                       | TC 0.72                     | Vert(LL) -0.29 8-10 >905 360 | MT20 244/190            |
| TCDL 10.0           | Lumber DOL 1.15                           | BC 0.76                     | Vert(CT) -0.39 8-10 >666 240 |                         |
| BCLL 0.0 *          | Rep Stress Incr NO                        | WB 0.38                     | Horz(CT) 0.02 7 n/a n/a      | M                       |
| BCDL 10.0           | Code IRC2015/TPI2014                      | Matrix-S                    | Wind(LL) 0.01 10 >999 240    | Weight: 801 lb FT = 20% |

BRACING-

JOINTS

TOP CHORD

**BOT CHORD** 

5-6-0

LUMBER-

TOP CHORD 2x10 SP 2400F 2.0E BOT CHORD 2x10 SP No.1 \*Except\* 8-10: 2x6 SP No.1

**WEBS** 2x6 SP No.1 \*Except\* 4-11: 2x4 SP No.2

REACTIONS. (size) 1=0-4-0, 7=0-4-0

Max Horz 1=271(LC 5)

Max Grav 1=9588(LC 14), 7=9573(LC 14)

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

TOP CHORD 1-2=-10113/0, 2-3=-4213/35, 3-4=-19/3638, 4-5=-20/3649, 5-6=-4203/35, 6-7=-10124/0

**BOT CHORD** 1-10=0/5656, 8-10=0/5720, 7-8=0/5656

**WEBS** 6-8=0/8207, 2-10=0/8177, 3-11=-11296/4, 5-11=-11296/4, 4-11=0/835

## NOTES-

- 1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
  - Top chords connected as follows: 2x10 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 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); Lumber DOL=1.60 plate grip DOL=1.60
- 5) Concentrated loads from layout are not present in Load Case(s): #3 Dead + Uninhabitable Attic Without Storage; #4 Dead + 0.6 MWFRS Wind (Pos. Internal) Left; #5 Dead + 0.6 MWFRS Wind (Pos. Internal) Right; #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #8 Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel; #9 Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #11 Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #20 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #21 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #22 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #23 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #23 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); Int) 2nd Parallel).

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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-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 properly damage. For general guidance regarding the fabrication, storage, delivery, crection and bracing of trusses and truss systems, see ANS/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1269 | B1-GR | ATTIC      | 1   |     | E16391031                |
| 00022 1200 | 2. 3. |            |     | 3   | Job Reference (optional) |

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8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:36 2021 Page 2 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_7NIeUDT8LFUAKHhot935mClWcaZlFxRU\_G5l5fyLENP

## NOTES-

- 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). 2-3, 5-6, 3-11, 5-11; Wall dead load (5.0psf) on member(s).6-8, 2-10
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1726 lb down at 1-11-12, 1726 lb down at 3-11-12, 3826 lb down at 5-2-12, 376 lb down and 34 lb up at 5-11-12, 376 lb down and 34 lb up at 7-11-12, 376 lb down and 34 lb up at 13-11-12, 376 lb down and 34 lb up at 13-11-12, 376 lb down and 34 lb up at 13-11-12, 376 lb down and 34 lb up at 13-11-12, 376 lb down at 19-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) Attic room checked for L/360 deflection.

## LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-60, 2-3=-80, 3-4=-60, 4-5=-60, 5-6=-80, 6-7=-60, 1-10=-20, 8-10=-40, 7-8=-20, 3-5=-20

Drag: 6-8=-10, 2-10=-10

Concentrated Loads (lb)

Vert: 9=-62(B) 8=-1029(B) 10=-1029(B) 12=-430(B) 13=-430(B) 14=-62(B) 15=-62(B) 16=-62(B) 17=-62(B) 18=-62(B) 19=-430(B) 20=-430(B) 10=-1029(B) 10=-10



| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1269 | B1GE  | GABLE      | 1   | ,   | E16391032                |
| 30322-1269 | DIGE  | GABLE      | '   | '   | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:34 2021 Page 1 vcB1mvLENR

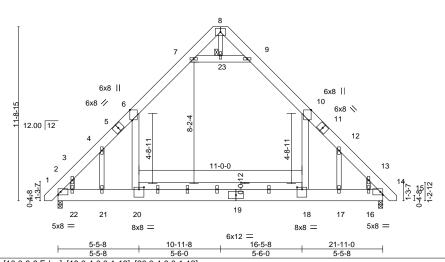
|                      |       |        | ID:36891.4dE    | soetaz Eyonkki | SKZZP1ZB_BU3X | RideE927V            | mkuanniaamvznanbvvyc |
|----------------------|-------|--------|-----------------|----------------|---------------|----------------------|----------------------|
| -Q-11 <sub>1</sub> 0 | 5-5-8 | 9-1-13 | 10-11-8, 12-9-3 | 16-5-8         | 21-11-0       | 22-10 <sub>T</sub> 0 |                      |
| 0-11-b               | 5-5-8 | 3-8-5  | 1-9-11 1-9-11   | 3-8-5          | 5-5-8         | 0-11-0               |                      |

Scale = 1:73.2 6x8 =

Structural wood sheathing directly applied or 5-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 23



| Plate Offs | sets (X,Y) | [6:0-8-6,Edge], [10:0-8-6 | i,Edge], [18:0- | ·4-0,0-1-12], [2 | 20:0-4-0,0-1 | -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               | 0.72         | Vert(LL) | -0.17 18-20 | >999   | 360 | MT20           | 244/190  |  |
| TCDL       | 10.0       | Lumber DOL                | 1.15            | BC               | 0.63         | Vert(CT) | -0.30 18-20 | >855   | 240 |                |          |  |
| BCLL       | 0.0 *      | Rep Stress Incr           | YES             | WB               | 0.17         | Horz(CT) | 0.01 14     | n/a    | n/a |                |          |  |
| BCDI       | 10.0       | Code IRC2015/T            | PI2014          | Matri            | x-S          | Wind(LL) | 0.08.18-20  | >999   | 240 | Weight: 261 lb | FT = 20% |  |

**BRACING-**

TOP CHORD

**BOT CHORD** 

JOINTS

LUMBER-

TOP CHORD 2x8 SP No.1

2x10 SP No.1 \*Except\* **BOT CHORD** 18-20: 2x6 SP No.1

2x6 SP No.1 \*Except\* WEBS

8-23: 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 14=0-3-8

Max Horz 2=349(LC 11)

Max Grav 2=1443(LC 20), 14=1443(LC 21)

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

2-3=-1821/0, 3-4=-1558/0, 4-6=-1957/23, 6-7=-1028/184, 7-8=-60/389, 8-9=-61/390, 9-10=-1028/184, 10-12=-1956/22, 12-13=-1557/0, 13-14=-1821/0 TOP CHORD

**BOT CHORD** 2-22=0/1098, 21-22=0/1110, 20-21=0/1095, 18-20=0/1095, 17-18=0/1095, 16-17=0/1109,

14-16=0/1092

**WEBS** 10-18=0/1192, 6-20=0/1192, 7-23=-1506/324, 9-23=-1506/324, 4-21=-717/135,

3-22=0/341, 12-17=-717/135, 13-16=0/341

## 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
- 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 2x6 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.
- 8) Ceiling dead load (10.0 psf) on member(s). 6-7, 9-10, 7-23, 9-23; Wall dead load (5.0psf) on member(s).10-18, 6-20
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
- 10) Attic room checked for L/360 deflection.



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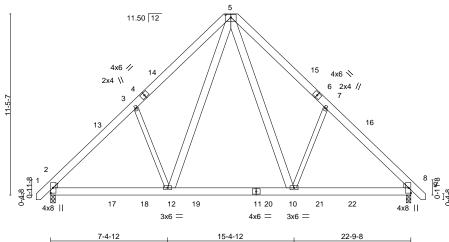
| ss Road  | Ply      | Qty  | Truss Type | Truss              | Job                    |
|--|----------|------|------------|--------------------|------------------------|
| E16391033  |          |      |            |                    |                        |
|  | 1        | 2    | COMMON     | C1                 | J0322-1269             |
| ice (optional)                                     |          |      |            |                    |                        |
| ek Industries, Inc. Mon Nov 8 13:12:37 2021 Page 1 | 30 s Aug | 8.   |            | ville, NC - 28314, | Comtech, Inc, Fayettev |
| ice (optional)                                     |          | 2 8. | COMMON     |                    |                        |

 $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-cZs0hZTm6Zc1yQG?RsaKIPHqn\_?J\_PKdDwqre5yLENO\\$ 11-4-12 17-4-12 0-11-0 6-0-0 6-0-0

> Scale = 1:68.6 5x8 =

> > Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



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

| LOADING (psf) | SPACING- 2-0-0       | <b>CSI.</b> | <b>DEFL.</b> in (loc) I/defl L/d                               | PLATES GRIP             |
|---------------|----------------------|-------------|--|-------------------------|
| TCLL 20.0     | Plate Grip DOL 1.15  | TC 0.18     | Vert(LL) -0.05 10-12 >999 360                                  | MT20 244/190            |
| TCDL 10.0     | Lumber DOL 1.15      | BC 0.26     | Vert(CT) -0.07 10-12 >999 360<br>Vert(CT) -0.07 10-12 >999 240 | W120 244/190            |
| BCLL 0.0 *    | Rep Stress Incr YES  | WB 0.27     | Horz(CT) 0.01 8 n/a n/a  | Weight: 204 lb FT = 20% |
| BCDL 10.0     | Code IRC2015/TPI2014 | Matrix-S    | Wind(LL) 0.01 2-12 >999 240                                    |                         |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x6 SP No.1 \*Except\* WEBS 7-10,3-12: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 8=0-3-8

Max Horz 2=-280(LC 10)

Max Uplift 2=-42(LC 12), 8=-42(LC 13) Max Grav 2=1057(LC 19), 8=1057(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1210/251, 3-5=-1109/415, 5-7=-1110/415, 7-8=-1210/251

**BOT CHORD** 2-12=-91/943, 10-12=0/619, 8-10=-42/811

WEBS 5-10=-201/658, 7-10=-406/304, 5-12=-201/657, 3-12=-406/304

## 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 11-4-12, Exterior(2) 11-4-12 to 15-9-9, Interior(1) 15-9-9 to 23-6-14 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.



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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.

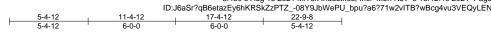
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

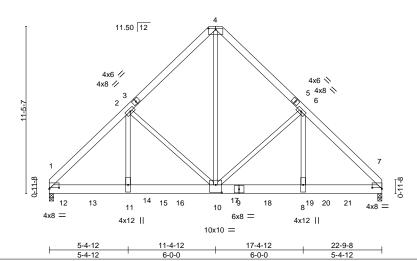
available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



| Job                    | Truss             | Truss Type    | Qty      | Ply       | Lot 5 Cypress Road  |
|------------------------|-------------------|---------------|----------|-----------|---|
|                        |                   |               |          |           | E16391034   |
| J0322-1269             | C1-GR             | COMMON GIRDER | 1        | 2         |   |
|                        |                   |               |          |           | Job Reference (optional)                                      |
| Comtech, Inc, Fayettev | ille, NC - 28314, |               | 8.       | 430 s Aug | 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:40 2021 Page 1 |
|                        |                   | ID: IsoCr     | 2aB6ataz | LIGHKDOL  | 7-PT7 09V0 IbWoDLL bou236271w2vITP2wPcg4vu2VEOvLENI           |



Scale = 1:74.3 5x12 =



[1:0-8-0,0-0-15], [4:0-6-0,0-1-0], [7:0-8-0,0-0-15], [10:0-5-0,0-6-4] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI DEFL **PLATES** GRIP 2-0-0 in L/d (loc) I/defl **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.28 Vert(LL) -0.10 8-10 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.40 Vert(CT) -0.17 8-10 >999 240

**BCLL** 0.0 Rep Stress Incr WB 0.94 Horz(CT) 0.04 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Wind(LL) 0.05 8-10 >999 240 Weight: 396 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x8 SP 2400F 2.0E 2x4 SP No 2 WFBS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-5-14 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=-270(LC 23) Max Uplift 1=-225(LC 9), 7=-237(LC 8) Max Grav 1=7977(LC 2), 7=8527(LC 2)

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

TOP CHORD 1-2=-8698/296, 2-4=-5745/316, 4-6=-5744/316, 6-7=-8803/299 **BOT CHORD** 1-11=-233/5962, 10-11=-233/5971, 8-10=-139/6041, 7-8=-139/6032

4-10=-299/7498, 6-10=-2640/260, 6-8=-42/3902, 2-10=-2545/257, 2-11=-37/3758 **WEBS** 

## 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: 2x8 - 2 rows staggered at 0-6-0 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) except (jt=lb) 1=225, 7=237.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1246 lb down and 39 lb up at 0-10-4, 1243 lb down and 42 lb up at 2-10-4, 1243 lb down and 42 lb up at 4-10-4, 1243 lb down and 42 lb up at 6-10-4, 1243 lb down and 42 lb up at 8-10-4, 1243 lb down and 42 lb up at 10-10-4, 1243 lb down and 42 lb up at 12-10-4, 1243 lb down and 42 lb up at 14-10-4, 1243 lb down and 42 lb up at 16-10-4, 1243 lb down and 42 lb up at 18-10-4, and 1243 lb down and 42 lb up at 20-4-4, and 1250 lb down and 35 lb up at 22-7-12 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



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eters 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 designs. 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 experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*



| Job        | Truss | Truss Type    | Qty | Ply | Lot 5 Cypress Road       | ٦ |
|------------|-------|---------------|-----|-----|--------------------------|---|
| J0322-1269 | C1-GR | COMMON GIRDER | 1   | _   | E16391034                | 1 |
| 30322-1209 | C1-GK | COMMON GINDER | '   | 2   | Job Reference (optional) |   |

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:40 2021 Page 2 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-08Y9JbWePU\_bpu?a6?71w2vITB?wBcg4vu3VEQyLENL

## LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 1-7=-20

Concentrated Loads (lb)

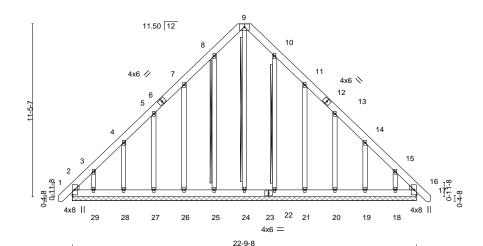
Vert: 9=-969(B) 7=-976(B) 12=-972(B) 13=-969(B) 14=-969(B) 15=-969(B) 16=-969(B) 17=-969(B) 18=-969(B) 19=-969(B) 20=-969(B) 21=-969(B)



| Job           | Truss                     | Truss Type           | Qty              | Ply        | Lot 5 Cypress Road                             |                  |
|---------------|---------------------------|----------------------|------------------|------------|--|------------------|
|               |                           |                      |                  |            |  | E16391035        |
| J0322-1269    | C1GE                      | COMMON SUPPORTED GAB | 1                | 1          |  |                  |
|               |                           |                      |                  |            | Job Reference (optional)                       |                  |
| Comtech, Inc, | Fayetteville, NC - 28314, |                      | 8                | .430 s Aug | 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12 | 2:38 2021 Page 1 |
|               |                           |                      | ID: I6aSr2aB6ata | ZEVERKDS   | k7zDT7 4mODuyl IOtoktoorB2o57rda1oOD7iu1       | POOLAYVI ENNI    |

-0-11-0 11-4-12 22-9-8 23-8-8 0-11-0 11-4-12 11-4-12 0-11-0

5x8 = Scale = 1:71.8



22-9-8 LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl L/d Plate Grip DOL Vert(LL) 244/190 **TCLL** 20.0 1.15 TC 0.05 -0.00 120 MT20 16 n/r TCDL 10.0 Lumber DOL 1.15 вс 0.03 Vert(CT) -0.00 16 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.18 Horz(CT) 0.01 16 n/a n/a Weight: 227 lb BCDL Code IRC2015/TPI2014 FT = 20%

LUMBER-

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

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-

TOP CHORD BOT CHORD WEBS Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 9-24, 8-25, 10-22 Exercise (2x) T and Use on the purple of the purity 10d.

Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 22-9-8.

(lb) - Max Horz 2=-350(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 25, 22 except 2=-170(LC 10), 26=-147(LC 12), 27=-130(LC 12),

28=-137(LC 12), 29=-210(LC 12), 21=-150(LC 13), 20=-130(LC 13), 19=-136(LC 13), 18=-200(LC 13),

16=-103(LC 11)

Max Grav All reactions 250 lb or less at joint(s) 24, 25, 26, 27, 28, 29, 22, 21, 20, 19, 18 except 2=362(LC 12), 16=317(LC 13)

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

TOP CHORD 2-3=-506/298, 3-4=-336/228, 14-15=-285/175, 15-16=-449/302

 $24 - 25 = -221/337, \ 22 - 24 = -221/337, \ 21 - 22 = -221/337, \ 20 - 21 = -221/337, \ 19 - 20 = -220/337, \ 20 - 21 = -221/337, \ 20 - 21/337, \ 20 - 21/337, \ 20 - 21/337, \ 20 - 21/337, \ 20 -$ 

18-19=-220/336, 16-18=-218/335

## 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) 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) 25, 22 except (jt=lb) 2=170, 26=147, 27=130, 28=137, 29=210, 21=150, 20=130, 19=136, 18=200, 16=103.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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\*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road

| D1   COMMON   5   1   Job Reference (optional)   |
|--|
| Job Reference (optional)   S.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:41 2021 Page 1   ID:J6aSr?qB6etazEy6hKRSkZzPTZUL6XXxXGAn6SR2ZmgifGTFSV8bPHwHcD8Yo2nsyLENK  |
| Comtech, Inc, Fayetteville, NC - 28314,  8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:41 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZUL6XXxXGAn6SR2ZmgilGTFSV8bPHwHcD8Yc2nsyLENK 11-11-0 5-11-8 5-11-8 5-11-8 5-11-8 5-11-8 5-11-8 5-11-8 5-11-8  |
| ID:J6aSr?qB6etazEy6hKRSkZzPTZUL6XXxXGAn6SR2ZmgifGTFSV8bPHwHcD8Yo2nsyLENK    -0-11-0  |
| -0-11-0 5-11-8 11-11-0 12-10-0 5-11-8 5-11-8 Scale: 1/2  |
| 5x5 = Scale: 1/2   |
| 5x5 =  |
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| 3x4 = 2x4    3x4 =   |
|  |
| 5-11-8   |
| 5-11-8 5-11-8  |
| Plate Offsets (X,Y) [2:0-2-0,0-1-12], [4:0-2-0,0-1-12]   |
| LOADING A STATE OF THE STATE OF |
| LOADING (psf) SPACING- 2-0-0 CSI. DEFL. in (loc) 1/defl L/d PLATES GRIP  |
| TCLL 20.0   Plate Grip DOL 1.15   TC 0.16   Vert(LL) 0.02 2-6 >999 240   MT20 244/190  |
| TCDL 10.0 Lumber DOL 1.15 BC 0.13 Vert(CT) -0.02 2-6 >999 240  |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

**BCDL** 

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

10.0

2x4 SP No 2 WFBS

REACTIONS. (size) 2=0-3-0, 4=0-3-0

Max Horz 2=43(LC 11) Max Uplift 2=-106(LC 9), 4=-106(LC 8) Max Grav 2=517(LC 1), 4=517(LC 1)

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-626/654, 3-4=-626/654 BOT CHORD 2-6=-466/475, 4-6=-466/475

WEBS 3-6=-364/279

## 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) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 5-11-8, Exterior(2) 5-11-8 to 10-4-5, Interior(1) 10-4-5 to 12-7-10 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-S

- 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) except (jt=lb) 2=106, 4=106.



Weight: 69 lb

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

FT = 20%

November 9,2021

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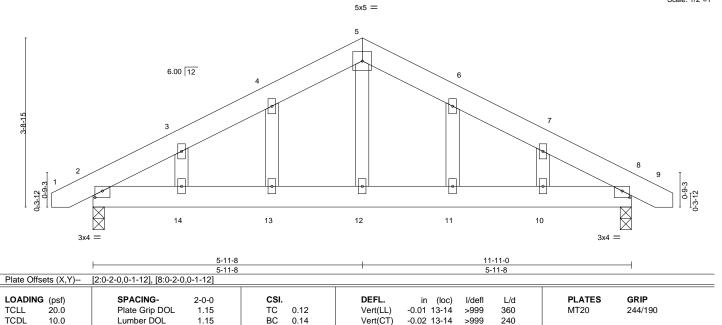
\*\*ANS/TPIT Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\*

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



| Job Truss              |                    | Truss Type   | Qty Ply Lot 5 Cypress Road  |   |                          |         |  |  |
|------------------------|--------------------|--|---|---|--------------------------|---------|--|--|
|                        |                    |  |   |   | E16391037                |         |  |  |
| J0322-1269             | D1GE               | GABLE  | 1   | 1 |                          |         |  |  |
|                        |                    |  |   |   | Job Reference (optional) |         |  |  |
| Comtech, Inc, Fayettev | ville, NC - 28314, |  | 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:42 2021 Page 1 |   |                          |         |  |  |
|                        | ID                 | ID:J6aSr?qB6etazEy6hKRSkZzPTZyXfvkGXvx5EJ3C8yEQAV?T?hV?IPfksMMCYcJJyLENJ |   |   |                          |         |  |  |
| 0-11-0                 |                    | 5-11-8   |   |   | 11-11-0                  | 12-10-0 |  |  |
| 0-11-0                 |                    | 5-11-8   |   |   | 5-11-8                   | 0-11-0  |  |  |

Scale: 1/2"=1



Vert(CT)

Horz(CT)

Wind(LL)

**BRACING-**

TOP CHORD

BOT CHORD

-0.02 13-14

0.02 10-11

0.01

>999

>999

n/a

240

n/a

240

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 77 lb

FT = 20%

LUMBER-

BCLL

BCDL

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

10.0

10.0

0.0

2x4 SP No.2 WFBS 2x4 SP No.2 **OTHERS** 

REACTIONS.

(size) 2=0-3-0. 8=0-3-0 Max Horz 2=68(LC 12)

Max Uplift 2=-137(LC 9), 8=-137(LC 8)

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

Max Grav 2=517(LC 1), 8=517(LC 1)

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

TOP CHORD  $2\text{-}3\text{--}623/674,\ 3\text{-}4\text{--}555/669,\ 4\text{-}5\text{--}530/694,\ 5\text{-}6\text{--}530/694,\ 6\text{-}7\text{--}555/669,\ 7\text{-}8\text{--}623/674}$ BOT CHORD 2-14=-490/476, 13-14=-490/476, 12-13=-490/476, 11-12=-490/476, 10-11=-490/476,

1.15

YES

8-10=-490/476 **WEBS** 5-12=-372/227

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; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

ВС

WB 0.06

0.14

- 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=137, 8=137.



November 9,2021





| Job        | Truss | Truss Type   | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|--------------|-----|-----|--------------------------|
| J0322-1269 | M1    | MONOPITCH    | 11  | 1   | E16391038                |
| 00022 1200 |       | Interversion |     |     | Job Reference (optional) |

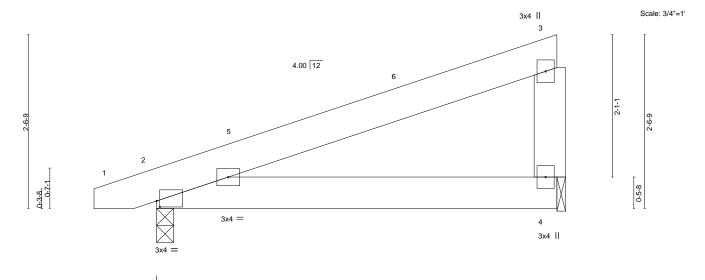
Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:42 2021 Page 1 

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



| Plate Off | fsets (X,Y) | [2:0-0-9,0-1-1] |        |       |      |          |       |       |        |     |               |          |
|-----------|-------------|-----------------|--------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADIN    | G (psf)     | SPACING-        | 2-0-0  | CSI.  |      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES        | GRIP     |
| TCLL      | 20.Ó        | Plate Grip DOL  | 1.15   | TC    | 0.19 | Vert(LL) | -0.01 | 2-4   | >999   | 360 | MT20          | 244/190  |
| TCDL      | 10.0        | Lumber DOL      | 1.15   | BC    | 0.12 | Vert(CT) | -0.03 | 2-4   | >999   | 240 |               |          |
| BCLL      | 0.0 *       | Rep Stress Incr | YES    | WB    | 0.00 | Horz(CT) | 0.00  |       | n/a    | n/a |               |          |
| BCDL      | 10.0        | Code IRC2015/TF | PI2014 | Matri | x-P  | Wind(LL) | 0.03  | 2-4   | >999   | 240 | Weight: 34 lb | FT = 20% |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x6 SP No.1 WFBS

REACTIONS. (size) 2=0-3-0, 4=0-1-8

Max Horz 2=71(LC 8) Max Uplift 2=-104(LC 8), 4=-97(LC 8)

Max Grav 2=274(LC 1), 4=223(LC 1)

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

## NOTES-

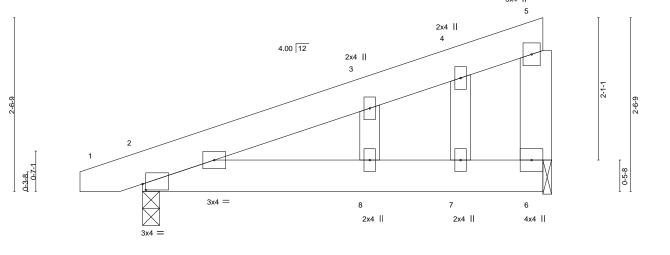
- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-7-9 to 3-9-4, Interior(1) 3-9-4 to 5-9-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 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.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=104.



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| Qty Ply Lot 5 Cypress Road  |
|---|
| E16391039   |
|   |
| Job Reference (optional)  |
| 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:43 2021 Page 1 |
| ID:J6aSr?qB6etazEy6hKRSkZzPTZQjDIycYXiPMAgLj8o7hkYgXsbP5KOBuWbrH9rlyLENI  |
| 6-0-0   |
| 6-0-0   |
|   |
| 3x4    Scale: 3/4"=1'   |
| 5   |
| 2x4   |
| _   |



| Plate Offs | Plate Offsets (X,Y) [2:0-0-9,0-1-1] |                 |        |       |      |          |       |       |        |     |               |          |
|------------|-------------------------------------|-----------------|--------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADING    | G (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) | 0.02  | 2-8   | >999   | 240 | MT20          | 244/190  |
| TCDL       | 10.0                                | Lumber DOL      | 1.15   | BC    | 0.10 | Vert(CT) | -0.02 | 8     | >999   | 240 |               |          |
| BCLL       | 0.0 *                               | Rep Stress Incr | YES    | WB    | 0.01 | Horz(CT) | -0.00 | 6     | n/a    | n/a |               |          |
| BCDL       | 10.0                                | Code IRC2015/TI | PI2014 | Matri | x-S  |          |       |       |        |     | Weight: 37 lb | FT = 20% |

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x6 SP No.1 WFBS

2x4 SP No.2 **OTHERS** 

REACTIONS. (size) 2=0-3-0. 6=0-1-8

Max Horz 2=101(LC 8)

Max Uplift 2=-151(LC 8), 6=-142(LC 8) Max Grav 2=274(LC 1), 6=223(LC 1)

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

- 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 acone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 1-4-0 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) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
  8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=151, 6=142.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

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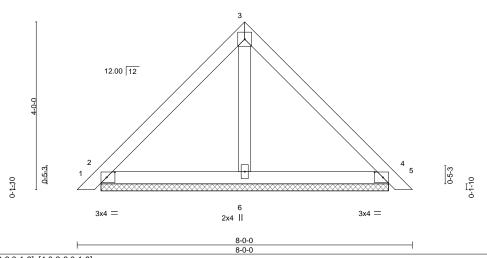
| Job         | Truss                   | Truss Type | Qty | Ply       | Lot 5 Cypress Road          | _                                 |
|-------------|-------------------------|------------|-----|-----------|-----------------------------|-----------------------------------|
| J0322-1269  | РВ                      | Piggyback  | 24  | 1         |                             | E16391040                         |
|             |                         | 33,744     |     |           | Job Reference (optional)    |                                   |
| Comtech Inc | Favetteville NC - 28314 | •          |     | 430 s Aug | 16 2021 MiTek Industries In | nc Mon Nov 8 13:12:44 2021 Page 1 |

 $ID: J6aSr? qB6etazEy6 \hbox{\r{$h$}} KRSkZzPTZ\_-uvng9yZ9TiU1IVILLrCz5u4? doRi7evfqV1jNByLENH$ 4-0-0 4-0-0

> Scale = 1:25.9 4x4 =

> > Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



| Plate Offsets (X,Y) | [2:0-2-6,0-1-8], [4:0-2-6,0-1-8] |          |                                       |  |
|---------------------|----------------------------------|----------|---------------------------------------|--|
| LOADING (psf)       | SPACING- 2-0-0                   | CSI.     | DEFL. in (loc) I/defl L/d PLATES GRIP |  |
| TCLL 20.0           | Plate Grip DOL 1.15              | TC 0.20  | Vert(LL) 0.01 5 n/r 120 MT20 244/190  |  |
| TCDL 10.0           | Lumber DOL 1.15                  | BC 0.09  | Vert(CT) 0.01 5 n/r 120               |  |
| BCLL 0.0 *          | Rep Stress Incr YES              | WB 0.03  | Horz(CT) 0.00 4 n/a n/a               |  |
| BCDL 10.0           | Code IRC2015/TPI2014             | Matrix-P | Weight: 32 lb FT = 20%                |  |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 OTHERS

REACTIONS. (size) 2=6-10-6, 4=6-10-6, 6=6-10-6

Max Horz 2=-114(LC 10)

Max Uplift 2=-65(LC 13), 4=-71(LC 13)

Max Grav 2=190(LC 1), 4=190(LC 1), 6=214(LC 3)

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

## NOTES-

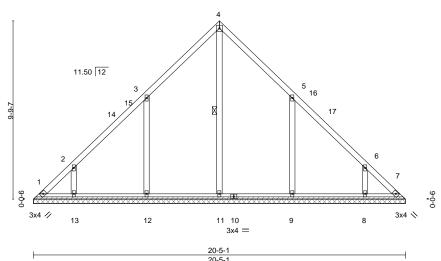
- Unbalanced roof live loads have been considered for this design.
   Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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| Job           |          | Truss              | Т       | Frugo Typo |          | Otv      | Ply       | Lot 5 Cypress Road  |
|---------------|----------|--------------------|---------|------------|----------|----------|-----------|---|
| 300           |          | TTUSS              | '       | russ Type  |          | Qty      | Fly       | E16391041   |
| J0322-1269    |          | V1                 | \<br> \ | /ALLEY     |          | 1        | 1         | 210001041   |
|               |          |                    |         |            |          |          |           | Job Reference (optional)                                      |
| Comtech, Inc, | Fayettev | rille, NC - 28314, |         |            |          | 8.       | 430 s Aug | 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:45 2021 Page 1 |
|               |          |                    |         |            | ID:J6aSı | ?qB6etaz | Ey6hKRSk  | kZzPTZN6L2MlanE0cuwftXvYjCd5dB6CmNs2Jp29mGwdyLENG             |
|               |          |                    |         | 10-2-8     |          |          | 20-5-     | 1   |
|               |          | '                  | ı       | 10-2-8     | '        |          | 10-2-9    | 9   |
|               |          |                    |         |            | 4x4 =    |          |           | Scale = 1:59.   |



|          | 20-0-1   |                 |        |       |      |          |      |       |        |     |                |          |
|----------|--|-----------------|--------|-------|------|----------|------|-------|--------|-----|----------------|----------|
| Plate Of | Plate Offsets (X,Y) [5:0-0-0,0-0-0], [6:0-0-0,0-0-0] |                 |        |       |      |          |      |       |        |     |                |          |
| LOADIN   | G (pef)  | SPACING-        | 2-0-0  | CSI.  |      | DEFL.    | in   | (loc) | l/defl | L/d | PLATES         | GRIP     |
|          | (1 - /   |                 |        |       |      |          |      | (IUC) |        |     |                |          |
| 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    | 0.21 | Horz(CT) | 0.00 | 7     | n/a    | n/a |                |          |
| BCDL     | 10.0   | Code IRC2015/TF | PI2014 | Matri | x-S  | ` ′      |      |       |        |     | Weight: 105 lb | FT = 20% |

LUMBER-

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

BOT CHORD 2x4 SP No.1 OTHERS 2x4 SP No.2 BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midot 4-11

**REACTIONS.** All bearings 20-5-1.

(lb) - Max Horz 1=226(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-173(LC 12), 13=-126(LC 12), 9=-173(LC 13),

8=-126(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=440(LC 22), 12=486(LC 19), 13=285(LC 19),

9=485(LC 20), 8=285(LC 20)

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

WEBS 3-12=-393/294, 2-13=-299/243, 5-9=-393/294, 6-8=-299/243

## 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) 0-4-6 to 4-9-2, Interior(1) 4-9-2 to 10-2-8, Exterior(2) 10-2-8 to 14-7-5, Interior(1) 14-7-5 to 20-0-11 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 except (jt=lb) 12=173, 13=126, 9=173, 8=126.



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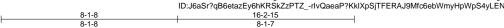


| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       | ٦ |
|------------|-------|------------|-----|-----|--------------------------|---|
| J0322-1269 | V2    | VALLEY     | 1   | 1   | E16391042                |   |
| JU322-1269 | VZ    | VALLEY     | '   | '   | Job Reference (optional) |   |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:46 2021 Page 1  $ID: J6aSr? qB6etazEy6hKR \r{S}kZzPTZ\_-rIvQaeaP?KklXpSjTFERAJ9Mfc6ebWmyHpWpS4yLENFALAMART AND STANDARD AND ST$ 

Scale = 1:49.9



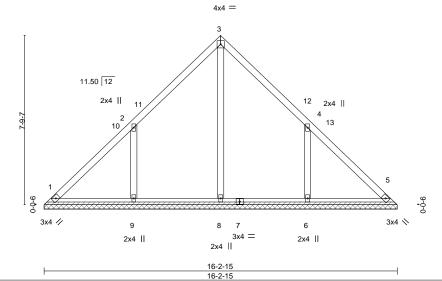


Plate Offsets (X,Y)--[4:0-0-0,0-0-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** 2-0-0 I/defI L/d 244/190 **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.17 Vert(LL) n/a n/a 999 MT20 TCDL Lumber DOL 10.0 1.15 ВС 0.19 Vert(CT) n/a n/a 999 0.13 BCLL 0.0 Rep Stress Incr YES WB Horz(CT) 0.00 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 77 lb FT = 20%

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

**BRACING-**TOP CHORD **BOT CHORD** 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 16-2-15.

2x4 SP No.2

(lb) - Max Horz 1=-178(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-182(LC 12), 6=-182(LC 13)

All reactions 250 lb or less at joint(s) 1, 5 except 8=418(LC 22), 9=503(LC 19), 6=503(LC 20)

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

**WEBS** 2-9=-406/302, 4-6=-406/302

## NOTES-

OTHERS

- 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) 0-4-6 to 4-9-2, Interior(1) 4-9-2 to 8-1-8, Exterior(2) 8-1-8 to 12-6-4, Interior(1) 12-6-4 to 15-10-9 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) 1 except (jt=lb) 9=182, 6=182,



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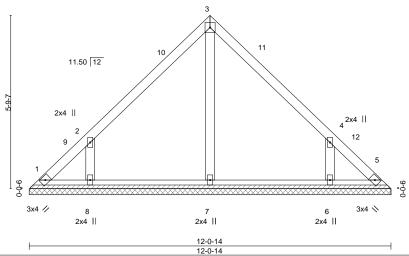
| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1269 | V3    | VALLEY     | 1   | 1   | E16391043                |
| 30322-1203 | V 3   | VALLE      | '   |     | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:47 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRS\check{k}ZzPTZ\_-JUTon\_b1mdsc9z1w1zlgiWiXz0TMK\_y6WTFN\_WyLENE$ 

6-0-7 12-0-14 6-0-7

> Scale = 1:36.2 4x4 =



| Plate Off | sets (X,Y) | [4:0-0-0,0-0-0] |        |       |      |          |      |       |        |     |               |          |
|-----------|------------|-----------------|--------|-------|------|----------|------|-------|--------|-----|---------------|----------|
| LOADIN    | G (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    | 0.07 | Horz(CT) | 0.00 | 5     | n/a    | n/a |               |          |
| BCDL      | 10.0       | Code IRC2015/TF | PI2014 | Matri | x-S  |          |      |       |        |     | Weight: 53 lb | FT = 20% |

LUMBER-

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

BOT CHORD 2x4 SP No.2 OTHERS

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

**BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-0-14.

(lb) - Max Horz 1=-130(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-150(LC 12), 6=-150(LC 13) All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=334(LC 19), 6=334(LC 20)

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

**WEBS** 2-8=-344/282, 4-6=-344/282

## 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) 0-4-6 to 4-9-2, Interior(1) 4-9-2 to 6-0-7, Exterior(2) 6-0-7 to 10-5-4, Interior(1) 10-5-4 to 11-8-8 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=150, 6=150,



November 9,2021





| Job                        |          | Truss              | Truss Type       |   |   | Qty        | Ply               | Lot 5 Cypress Road    |                        |                      |
|----------------------------|----------|--------------------|------------------|---|---|------------|-------------------|-----------------------|------------------------|----------------------|
| J0322-1269                 |          | V4                 | VALLEY           |   |   | 1          | 1                 |                       |                        | E16391044            |
| 30322-1209                 |          | V4                 | VALLET           |   |   | 1          | '                 | Job Reference (option | nal)                   |                      |
| Comtech, Inc,              | Fayettev | ville, NC - 28314, |                  |   |   |            |                   | 16 2021 MiTek Indust  | ries, Inc. Mon Nov 8 1 |                      |
|                            |          |                    |                  |   | ID:J6aSr                                | ?qB6etazl  |                   |                       | _Tn7c6agHvFkFhXQpW     | /3SsFI7?wWyyLEND     |
|                            |          |                    |                  | 3-11-6<br>3-11-6                        | +                                       |            | 7-10-1:<br>3-11-6 | 2                     |                        |                      |
|                            |          |                    |                  | 0110                                    |   |            | 0110              |                       |                        |                      |
|                            |          |                    |                  |   | 4x4 =                                   |            |                   |                       |                        | Scale = 1:25.3       |
|                            |          |                    |                  |   |   |            |                   |                       |                        |                      |
|                            |          |                    |                  |   |   |            |                   |                       |                        |                      |
|                            |          | _                  |                  |   | 2                                       |            |                   |                       |                        |                      |
|                            |          |                    |                  |   |   |            |                   |                       |                        |                      |
|                            |          |                    |                  |   | $/W\setminus$                           |            |                   |                       |                        |                      |
|                            |          |                    |                  | _ /                                     |   |            |                   |                       |                        |                      |
|                            |          |                    | 11.50 1:         | 2                                       | /     `                                 |            |                   |                       |                        |                      |
|                            |          |                    |                  |   | ´                                       |            |                   |                       |                        |                      |
|                            |          |                    |                  |   |   |            |                   |                       |                        |                      |
|                            |          | 3-9-6              |                  |   |   | \          |                   |                       |                        |                      |
|                            |          | ĕ                  |                  |   |   |            |                   |                       |                        |                      |
|                            |          |                    | /                | / /                                     |   |            |                   |                       |                        |                      |
|                            |          |                    |                  |   |   |            | `                 |                       |                        |                      |
|                            |          |                    | //               | ,                                       |   |            |                   | 3                     |                        |                      |
|                            |          |                    | . / /            |   |   |            |                   | \ \ \ "               |                        |                      |
|                            |          |                    | 1/2/             |   |   |            |                   |                       |                        |                      |
|                            |          | 9-0-0              | <del>adama</del> |   |   | //////     | //////            |                       | 9-0-0                  |                      |
|                            |          | 3                  | ····             | *************************************** | *************************************** | ×××××      | ×××××             |                       | -0                     |                      |
|                            |          |                    |                  |   | 4                                       |            |                   |                       |                        |                      |
|                            |          |                    | ix4 //           |   | 2x4                                     |            |                   | 3x4 📏                 |                        |                      |
|                            |          |                    |                  |   |   |            |                   |                       |                        |                      |
|                            |          |                    |                  |   | 7-10-12                                 |            |                   |                       |                        |                      |
|                            |          |                    |                  |   | 7-10-12                                 |            |                   |                       |                        |                      |
| LOADING / C                |          | 004000             |                  | 001                                     | DEE:                                    |            | (1)               | 1/1-0                 | DI 4750                | ODID                 |
| LOADING (psf)<br>TCLL 20.0 |          |                    | 0-0              | <b>CSI.</b> TC 0.21                     | DEFL.                                   | in         |                   | I/defl L/d<br>n/a 999 | PLATES<br>MT20         | <b>GRIP</b> 244/190  |
| TCDL 20.0                  |          |                    | .15<br>.15       | BC 0.10                                 | Vert(LL)<br>Vert(CT)                    | n/a<br>n/a |                   | n/a 999<br>n/a 999    | IVI I ZU               | 2 <del>44</del> /190 |
| BCLL 0.0                   | *        |                    | ES               | WB 0.03                                 | Horz(CT                                 |            |                   | n/a 999<br>n/a n/a    |                        |                      |
| BCDL 10.0                  |          | Code IRC2015/TPI20 |                  | Matrix-P                                | 1.0.2(01                                | , 0.00     | 3                 | ., 11/4               | Weight: 31 lb          | FT = 20%             |
|                            |          |                    |                  |   |   |            |                   |                       |                        |                      |

LUMBER-

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

**BRACING-**

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-10-12, 3=7-10-12, 4=7-10-12

Max Horz 1=-82(LC 8)

Max Uplift 1=-30(LC 13), 3=-31(LC 13)

Max Grav 1=173(LC 1), 3=173(LC 1), 4=228(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.



November 9,2021





Job Truss Truss Type Qty Ply Lot 5 Cypress Road F16391045 J0322-1269 V5 VALLEY Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:12:48 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-nh1B?KcfXx\_Tn7c6agHvFkFkIQqk3SEFI7?wWyyLEND\\$ 1-10-5 1-10-5 Scale = 1:11.7 4x4 = 2 11.50 12 3 9-0-0 9-0-0 3x4 // 2x4 || 3x4 📏 3-8-11 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES GRIP** in (loc) I/defl L/d 20.0 Plate Grip DOL TC Vert(LL) 244/190 TCLL 1.15 0.03 n/a 999 MT20 n/a ВС **TCDL** 10.0 Lumber DOL 1.15 0.02 Vert(CT) n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.01 Horz(CT) 0.00 3 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 13 lb FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-8-11 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-8-11, 3=3-8-11, 4=3-8-11

Max Horz 1=34(LC 9)

Max Uplift 1=-12(LC 13), 3=-13(LC 13)

Max Grav 1=72(LC 1), 3=72(LC 1), 4=95(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.



November 9,2021





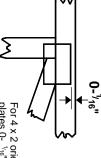
818 Soundside Road

## Symbols

# PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Apply plates to both sides of truss Dimensions are in ft-in-sixteenths.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss

ω

O

S

required direction of slots in This symbol indicates the

connector plates

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

## PLATE SIZE



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

## LATERAL BRACING LOCATION



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

## BEARING



number where bearings occur.

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

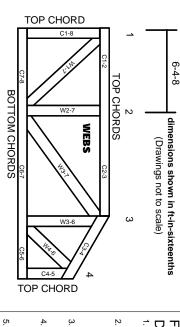
## Industry Standards:

ANSI/TPI1: National Design Specification for Metal

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Plate Connected Wood Truss Construction. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing

## **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

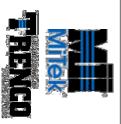
ICC-ES Reports:

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

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

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

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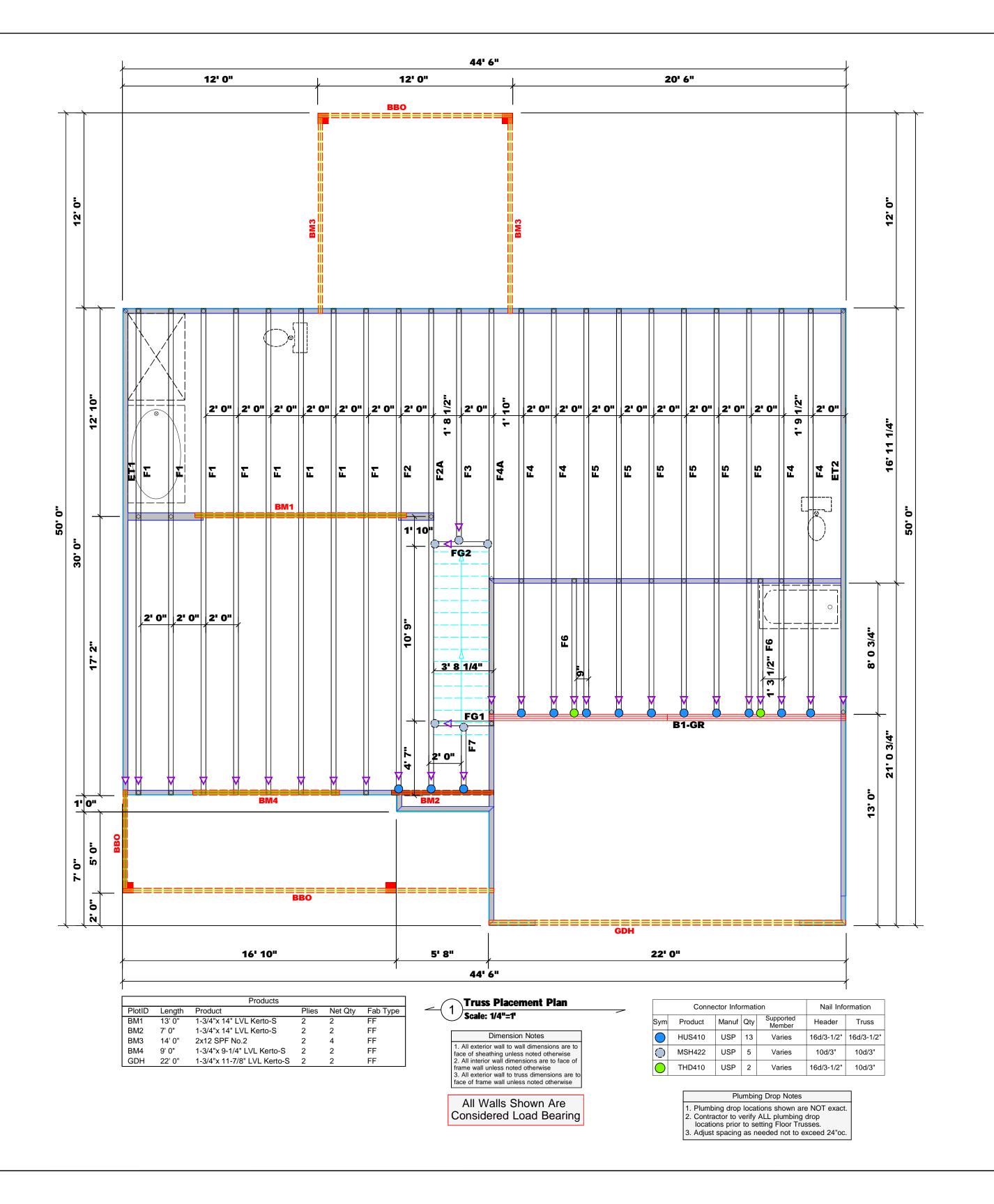


MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# **General Safety Notes**

## Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.





Reilly Road Industrial Park Fayetteville, N.C. 28309 Phone: (910) 864-8787 Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds

## **David Landry**

| LO                      | AD (                              | HAR    | (I FO                   | K J A                            | ICK STUD                | 5                                 |
|-------------------------|-----------------------------------|--------|-------------------------|----------------------------------|-------------------------|-----------------------------------|
|                         | (à                                | ASED C | N TABLE:                | 5 R502.5                         | (t) & (b))              |                                   |
| NU                      | WBER C                            |        | STUBS R<br>READER/      |                                  | ED & EA END OF          |                                   |
| END REACTION<br>(UP 10) | REQ'O STUDO FOR<br>(2) PLY HEADER |        | BND REACTION<br>(of 10) | REQ16 STURS FOR<br>(3) MY HEADER | END REACTION<br>(UP TO) | REQYD STUDS FOR<br>(4) PLY MRADER |
| 1700                    | 1                                 |        | 2550                    | 1                                | 3400                    | 1                                 |
| 3400                    | 2                                 |        | 5100                    | 2                                | 6800                    | 2                                 |
| 0100                    | -                                 |        | 3100                    |                                  | 0000                    |                                   |

10200 4

12750 5

15300 6

13600 4

17000 5

5100 3 6800 4

03/10/22 Cypress Floor DATE REV.
DRAWN BY
SALESMAN ADDRESS MODEL COUNTY Rea The Ashville Lot 5 Cypr NAME **SEAL DATE** BUILDER QUOTE:

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

truss delivery package or online @ sbcindustry.co



Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

3/10/2022 Date:

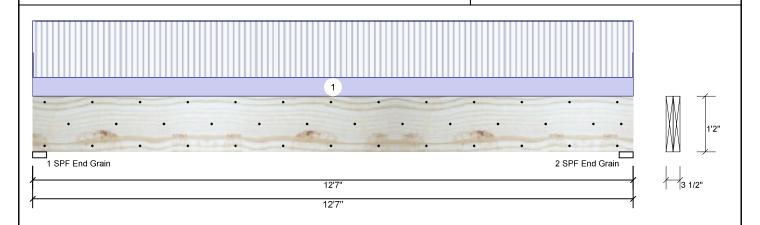
Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270 Project #:

Page 1 of 12

1.750" X 14.000" **Kerto-S LVL** 2-Ply - PASSED BM<sub>1</sub>

Level: Level

**Reactions UNPATTERNED lb (Uplift)** 



| Type:              | Girder        | Application:   | Floor        | Brg      | Live   | Dead       | Snow   | Wind           | Const     |
|--------------------|---------------|----------------|--------------|----------|--------|------------|--------|----------------|-----------|
| Plies:             | 2             | Design Method: | ASD          | 1        | 4568   | 1591       | 0      | 0              | 0         |
| Moisture Condition | ı: Dry        | Building Code: | IBC/IRC 2015 | 2        | 4568   | 1591       | 0      | 0              | 0         |
| Deflection LL:     | 480           | Load Sharing:  | No           |          |        |            |        |                |           |
| Deflection TL:     | 360           | Deck:          | Not Checked  |          |        |            |        |                |           |
| Importance:        | Normal        |                |              |          |        |            |        |                |           |
| Temperature:       | Temp <= 100°F |                |              |          |        |            |        |                |           |
|                    |               |                |              | Bearings | s      |            |        |                |           |
|                    |               |                |              | Bearing  | Length | Cap. React | D/L lb | Total Ld. Case | Ld. Comb. |
|                    |               |                |              | 1 - SPF  | 3.500" | 58% 1591   | / 4568 | 6159 L         | D+L       |

## **Analysis Results**

**Member Information** 

| Analysis     | Actual        | Location  | Allowed       | Capacity        | Comb. | Case |
|--------------|---------------|-----------|---------------|-----------------|-------|------|
| Moment       | 17989 ft-lb   | 6'3 1/2"  | 26999 ft-lb   | 0.666 (67%)     | D+L   | L    |
| Unbraced     | 17989 ft-lb   | 6'3 1/2"  | 18055 ft-lb   | 0.996<br>(100%) | D+L   | L    |
| Shear        | 4792 lb       | 11'2 1/4" | 10453 lb      | 0.458 (46%)     | D+L   | L    |
| LL Defl inch | 0.252 (L/578) | 6'3 1/2"  | 0.303 (L/480) | 0.830 (83%)     | L     | L    |
| TL Defl inch | 0.340 (L/428) | 6'3 1/2"  | 0.404 (L/360) | 0.840 (84%)     | D+L   | L    |

## **Design Notes**

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 5'4 1/2" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

| Grain                   |        |     |             |        |     |
|-------------------------|--------|-----|-------------|--------|-----|
| 2 - SPF<br>End<br>Grain | 3.500" | 58% | 1591 / 4568 | 6159 L | D+L |
|                         |        |     |             |        |     |

| ID | Load Type   | Location | Trib Width | Side | Dead 0.9 | Live 1  | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-------------|----------|------------|------|----------|---------|-----------|----------|-------------|----------|
| 1  | Uniform     |          |            | Тор  | 242 PLF  | 726 PLF | 0 PLF     | 0 PLF    | 0 PLF       | F1       |
|    | Self Weight |          |            |      | 11 PLF   |         |           |          |             |          |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

## Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

## chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 4/24/2023

6. For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS



isDesign

Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

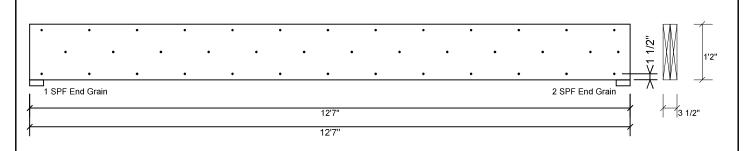
3/10/2022 Date:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270 Project #:

Page 2 of 12

**Kerto-S LVL** 1.750" X 14.000" 2-Ply - PASSED BM1

Level: Level



## **Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity 0.0 % 0.0 PLF Load Yield Limit per Foot 245.6 PLF Yield Limit per Fastener 81.9 lb. IV Yield Mode Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

## Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

chemicals

## Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Metsä Wood

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS





Client: Benjamin Stout Real Estate

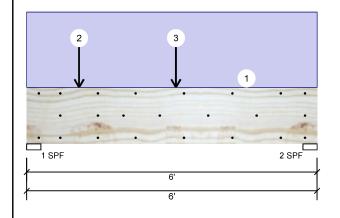
Project: Address:

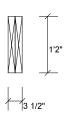
Cypress Road Fayetteville, NC 28304

3/10/2022 Date:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270 Project #:

1.750" X 14.000" **BM2 Kerto-S LVL** 2-Ply - PASSED Level: Level





D+I

Page 3 of 12

## **Member Information** Reactions UNPATTERNED lb (Uplift) Girder Floor Wind Application: Brg Live Dead Snow Type: Const Plies: Design Method: ASD 678 709 Ω 0 0 1 Moisture Condition: Dry **Building Code:** IBC/IRC 2015 546 0 0 0 2 189 Deflection LL: 480 Load Sharing: Deflection TL: 360 Deck: Not Checked Importance: Normal Temp <= 100°F Temperature: **Bearings** Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.500" 27% 709 / 678 1387 L D+L

2 - SPF 3.500"

14%

546 / 189

734 I

## **Analysis Results**

| Analysis     | Actual             | Location   | Allowed       | Capacity    | Comb. | Case |
|--------------|--------------------|------------|---------------|-------------|-------|------|
| Moment       | 1305 ft-lb         | 2'8 7/16"  | 26999 ft-lb   | 0.048 (5%)  | D+L   | L    |
| Unbraced     | 1305 ft-lb         | 2'8 7/16"  | 17623 ft-lb   | 0.074 (7%)  | D+L   | L    |
| Shear        | 1162 lb            | 1'4 3/4"   | 10453 lb      | 0.111 (11%) | D+L   | L    |
| LL Defl inch | 0.003<br>(L/21799) | 2'7 3/8"   | 0.139 (L/480) | 0.020 (2%)  | L     | L    |
| TL Defl inch | 0.008 (L/8727)     | 2'10 1/16" | 0.185 (L/360) | 0.040 (4%)  | D+L   | L    |

## **Design Notes**

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top braced at bearings.
- 7 Bottom braced at bearings.
- 8 Lateral slenderness ratio based on single ply width

| ID | Load Type   | Location | Trib Width | Side     | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments   |
|----|-------------|----------|------------|----------|----------|--------|-----------|----------|-------------|------------|
| 1  | Uniform     |          |            | Тор      | 150 PLF  | 0 PLF  | 0 PLF     | 0 PLF    | 0 PLF       | Wall Above |
| 2  | Point       | 1-1-0    |            | Far Face | 238 lb   | 714 lb | 0 lb      | 0 lb     | 0 lb        | F2A        |
| 3  | Point       | 3-1-0    |            | Far Face | 51 lb    | 153 lb | 0 lb      | 0 lb     | 0 lb        | F7         |
|    | Self Weight |          |            |          | 11 PLF   |        |           |          |             |            |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

## Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

## Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Manufacturer Info Metsä Wood

301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA





isDesign

Client: Benjamin Stout Real Estate

Cypress Road Fayetteville, NC 28304

3/10/2022 Date: Input by: David Landry

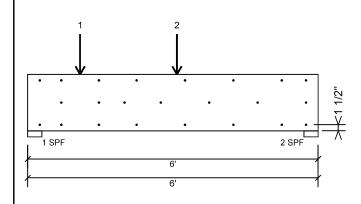
Job Name: Lot 5 Cypress Road J0322-1270 Project #:

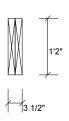
**Kerto-S LVL** 1.750" X 14.000" 2-Ply - PASSED BM<sub>2</sub>

Project:

Address:

Level: Level





Page 4 of 12

### **Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Maximum end distance not to exceed 6"

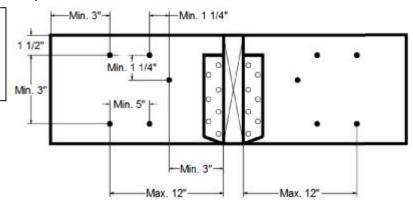
| Capacity                 | 0.0 %     |  |
|--------------------------|-----------|--|
| Load                     | 0.0 PLF   |  |
| Yield Limit per Foot     | 245.6 PLF |  |
| Yield Limit per Fastener | 81.9 lb.  |  |
| Yield Mode               | IV        |  |
| Edge Distance            | 1 1/2"    |  |
| Min. End Distance        | 3"        |  |
| Load Combination         |           |  |
| Duration Factor          | 1.00      |  |

### **Concentrated Load**

Fasten at concentrated side load at 1-1-0 with a minimum of (6) - 10d Box nails (.128x3") in the pattern shown

| pattern snown.           |           |  |
|--------------------------|-----------|--|
| Capacity                 | 96.9 %    |  |
| Load                     | 476.0lb.  |  |
| Total Yield Limit        | 491.0 lb. |  |
| Cg                       | 0.9998    |  |
| Yield Limit per Fastener | 81.9 lb.  |  |
| Yield Mode               | IV        |  |
| Load Combination         | D+L       |  |
| Duration Factor          | 1.00      |  |

### Min/Max fastener distances for Concentrated Side Loads



Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

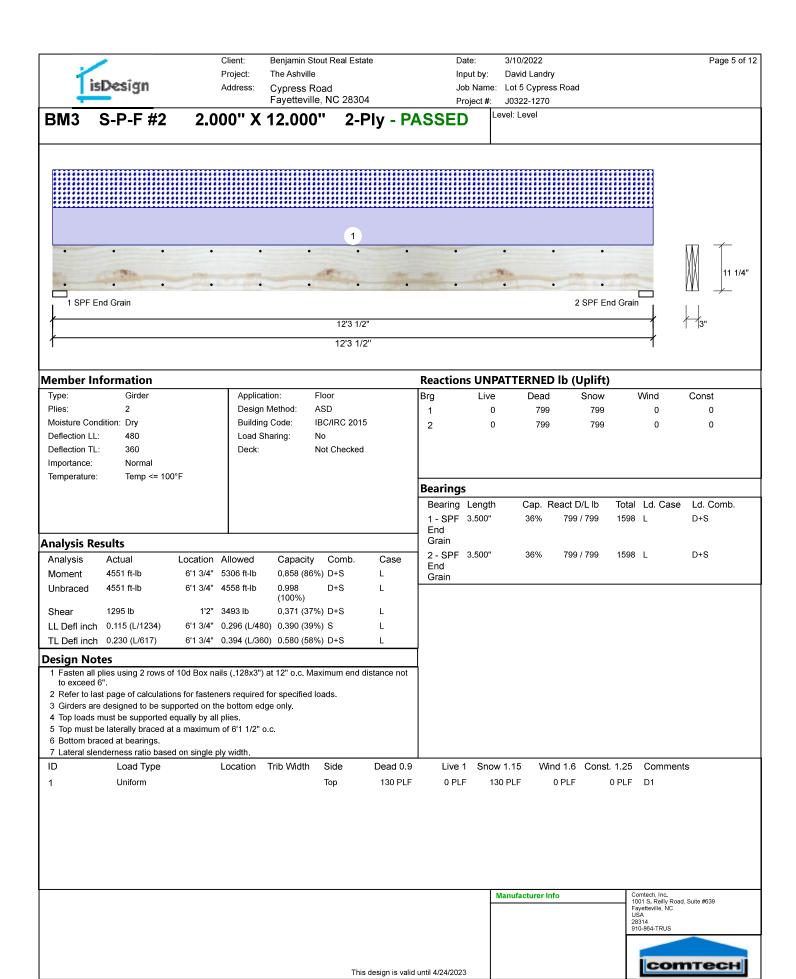
This design is valid until 4/24/2023

### Manufacturer Info 6. For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633









Client: Benjamin Stout Real Estate Project:

Address:

Cypress Road Fayetteville, NC 28304 Date: 3/10/2022

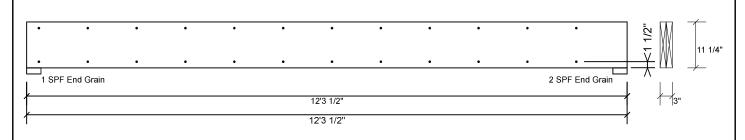
Input by: David Landry Job Name: Lot 5 Cypress Road Project #: J0322-1270

Page 6 of 12

S-P-F #2 2.000" X 12.000" **BM3** 

2-Ply - PASSED

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

0.0 % Capacity 0.0 PLF Load Yield Limit per Foot 157.4 PLF Yield Limit per Fastener 78.7 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

> Manufacturer Info Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS соттесн

This design is valid until 4/24/2023





Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

3/10/2022 Date:

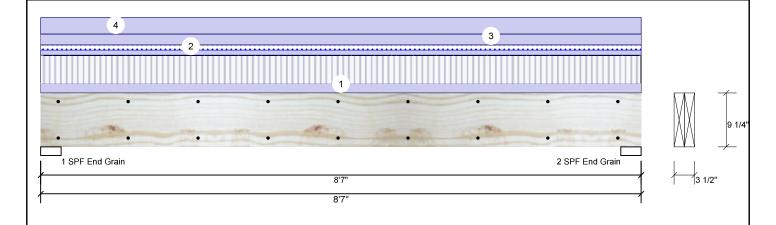
Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270 Project #:

Page 7 of 12

2-Ply - PASSED **Kerto-S LVL** 1.750" X 9.250" **BM4** 

Level: Level

**Reactions UNPATTERNED lb (Uplift)** 



| Type:              | Girder             | Application:         | Floor        |      | Brg          | Live   | Dead    | Snow       | V     | Vind     | Const     |
|--------------------|--------------------|----------------------|--------------|------|--------------|--------|---------|------------|-------|----------|-----------|
| Plies:             | 2                  | Design Method:       | ASD          |      | 1            | 1330   | 2005    | 240        |       | 0        | 0         |
| Moisture Condition | on: Dry            | Building Code:       | IBC/IRC 2015 |      | 2            | 1330   | 2005    | 240        |       | 0        | 0         |
| Deflection LL:     | 480                | Load Sharing:        | No           |      |              |        |         |            |       |          |           |
| Deflection TL:     | 360                | Deck:                | Not Checked  |      |              |        |         |            |       |          |           |
| Importance:        | Normal             |                      |              |      |              |        |         |            |       |          |           |
| Temperature:       | Temp <= 100°F      |                      |              |      |              |        |         |            |       |          |           |
|                    |                    |                      |              |      | Bearings     | S      |         |            |       |          |           |
|                    |                    |                      |              |      | Bearing      | Length | Cap. Re | act D/L lb | Total | Ld. Case | Ld. Comb. |
|                    |                    |                      |              |      | 1 - SPF      | 3.500" | 31% 2   | 005 / 1330 | 3335  | L        | D+L       |
| Analysis Resu      | lts                |                      |              |      | End<br>Grain |        |         |            |       |          |           |
|                    | ctual Location     | Allowed Capaci       | ty Comb.     | Case | 2 - SPF      | 3.500" | 31% 2   | 005 / 1330 | 3335  | L        | D+L       |
| Moment 6           | 413 ft-lb 4'3 1/2" | 12542 ft-lb 0.511 (5 | 1%) D+L      | L    | End<br>Grain |        |         |            |       |          |           |

L

L

L

### **Design Notes**

Unbraced

Shear

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".

4'3 1/2" 8468 ft-lb

1' 6907 lb

4'3 9/16" 0.203 (L/480) 0.370 (37%) L

4'3 9/16" 0.271 (L/360) 0.690 (69%) D+L

0.757 (76%) D+L

0.370 (37%) D+L

- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.

6413 ft-lb

2558 lb

LL Defl inch 0.075 (L/1301)

TL Defl inch 0.188 (L/519)

5 Top braced at bearings.

**Member Information** 

- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

| ID | Load Type   | Location | Trib Width | Side | Dead 0.9 | Live 1  | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments   |
|----|-------------|----------|------------|------|----------|---------|-----------|----------|-------------|------------|
| 1  | Uniform     |          |            | Тор  | 104 PLF  | 310 PLF | 0 PLF     | 0 PLF    | 0 PLF       | F1         |
| 2  | Uniform     |          |            | Тор  | 56 PLF   | 0 PLF   | 56 PLF    | 0 PLF    | 0 PLF       | M1         |
| 3  | Uniform     |          |            | Тор  | 120 PLF  | 0 PLF   | 0 PLF     | 0 PLF    | 0 PLF       | Wall Above |
| 4  | Uniform     |          |            | Тор  | 180 PLF  | 0 PLF   | 0 PLF     | 0 PLF    | 0 PLF       | C1GE       |
|    | Self Weight |          |            |      | 7 PLF    |         |           |          |             |            |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

### chemicals Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850

Manufacturer Info

www.metsawood.com/us ICC-ES: ESR-3633





isDesign

Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

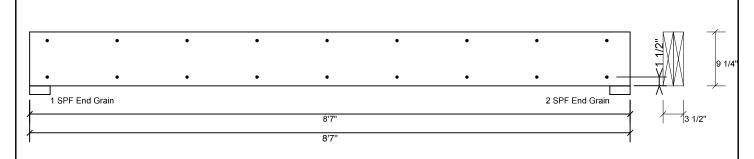
3/10/2022 Date:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270

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**Kerto-S LVL** 2-Ply - PASSED 1.750" X 9.250" BM4

Project #: Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity 0.0 % 0.0 PLF Load Yield Limit per Foot 163.7 PLF Yield Limit per Fastener 81.9 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 4/24/2023

6. For flat roofs provide proper drainage to prevent ponding

301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

Metsä Wood







Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

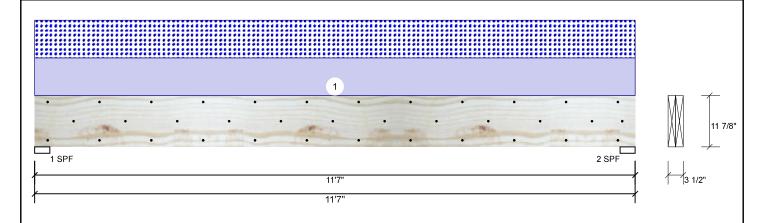
3/10/2022 Date:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270

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**Kerto-S LVL** 2-Ply - PASSED 1.750" X 11.875" BM<sub>5</sub>

Project #: Level: Level



| Member Infor      | mation        |                |              | Reactio | ons UNPAI | LEKNED I | (Uplift)  |          |         |           |     |
|-------------------|---------------|----------------|--------------|---------|-----------|----------|-----------|----------|---------|-----------|-----|
| Туре:             | Girder        | Application:   | Floor        | Brg     | Live      | Dead     | Snow      | Wi       | nd      | Const     |     |
| Plies:            | 2             | Design Method: | ASD          | 1       | 0         | 1559     | 1506      |          | 0       | 0         |     |
| Moisture Conditio | n: Dry        | Building Code: | IBC/IRC 2015 | 2       | 0         | 1559     | 1506      |          | 0       | 0         |     |
| Deflection LL:    | 480           | Load Sharing:  | No           |         |           |          |           |          |         |           |     |
| Deflection TL:    | 360           | Deck:          | Not Checked  |         |           |          |           |          |         |           |     |
| Importance:       | Normal        |                |              |         |           |          |           |          |         |           |     |
| Temperature:      | Temp <= 100°F |                |              |         |           |          |           |          |         |           |     |
|                   |               |                |              | Bearing | gs        |          |           |          |         |           |     |
|                   |               |                |              | Bearing | g Length  | Cap. Rea | ct D/L lb | Total Lo | d. Case | Ld. Comb. |     |
|                   |               |                |              | 1 - SPF | 3.500"    | 59% 155  | 59 / 1506 | 3065 L   |         | D+S       |     |
|                   |               |                |              | 2 - SPF | 3.500"    | 59% 155  | 59 / 1506 | 3065 L   |         | D+S       | - 1 |

### **Analysis Results**

| Analysis     | Actual         | Location | Allowed       | Capacity    | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment       | 8188 ft-lb     | 5'9 1/2" | 22897 ft-lb   | 0.358 (36%) | D+S   | L    |
| Unbraced     | 8188 ft-lb     | 5'9 1/2" | 8589 ft-lb    | 0.953 (95%) | D+S   | L    |
| Shear        | 2935 lb        | 1'2 5/8" | 10197 lb      | 0.288 (29%) | D+S   | L    |
| LL Defl inch | 0.103 (L/1298) | 5'9 1/2" | 0.278 (L/480) | 0.370 (37%) | S     | L    |
| TL Defl inch | 0.209 (L/637)  | 5'9 1/2" | 0.371 (L/360) | 0.560 (56%) | D+S   | L    |

### **Design Notes**

- 1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.
- 6 Lateral slenderness ratio based on single ply width.

| ID | Load Type   | Location | Trib Width | Side     | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-------------|----------|------------|----------|----------|--------|-----------|----------|-------------|----------|
| 1  | Uniform     |          |            | Far Face | 260 PLF  | 0 PLF  | 260 PLF   | 0 PLF    | 0 PLF       | A2       |
|    | Self Weight |          |            |          | 9 PLF    |        |           |          |             |          |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

### chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851

Manufacturer Info

(800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633





isDesign

BM<sub>5</sub>

Client: Benjamin Stout Real Estate

Project: Address: Cypress Road

Fayetteville, NC 28304

3/10/2022 Date:

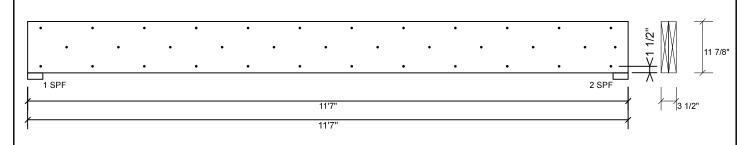
Project #:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270

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**Kerto-S LVL** 2-Ply - PASSED 1.750" X 11.875"

Level: Level



### **Multi-Ply Analysis**

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity 92.1 % 260.0 PLF Load Yield Limit per Foot 282.4 PLF Yield Limit per Fastener 94.1 lb. IV Yield Mode Edge Distance 1 1/2" 3" Min. End Distance D+S Load Combination Duration Factor 1.15

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

5. Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 4/24/2023

### Manufacturer Info 6. For flat roofs provide proper drainage to prevent ponding

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633







Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

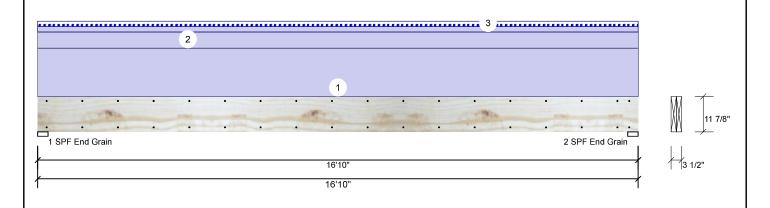
3/10/2022 Date:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270 Project #:

Page 11 of 12

1.750" X 11.875" **Kerto-S LVL** 2-Ply - PASSED **GDH** 

Level: Level



| Member Inf     | ormation       |           |               |                 |            |         | Reaction     | ns UNPAT | TERNE | D lb (Uplift) |       |          |           |
|----------------|----------------|-----------|---------------|-----------------|------------|---------|--------------|----------|-------|---------------|-------|----------|-----------|
| Type:          | Girder         |           | Application   | n: Fl           | oor        |         | Brg          | Live     | Dead  | d Snow        | ,     | Wind     | Const     |
| Plies:         | 2              |           | Design M      | ethod: AS       | SD         |         | 1            | 0        | 2266  | 3 168         |       | 0        | 0         |
| Moisture Cond  | ition: Dry     |           | Building (    | Code: IB        | C/IRC 2015 |         | 2            | 0        | 2266  | 168           |       | 0        | 0         |
| Deflection LL: | 480            |           | Load Sha      | ring: No        | )          |         |              |          |       |               |       |          |           |
| Deflection TL: | 360            |           | Deck:         | No              | ot Checked |         |              |          |       |               |       |          |           |
| Importance:    | Normal         |           |               |                 |            |         |              |          |       |               |       |          |           |
| Temperature:   | Temp <= 10     | 00°F      |               |                 |            |         |              |          |       |               |       |          |           |
|                |                |           |               |                 |            |         | Bearing:     | S        |       |               |       |          |           |
|                |                |           |               |                 |            |         | Bearing      | Length   | Cap.  | React D/L lb  | Total | Ld. Case | Ld. Comb. |
|                |                |           |               |                 |            |         | 1 - SPF      | 3.500"   | 23%   | 2266 / 168    | 2434  | L        | D+S       |
|                |                |           |               |                 |            |         | End          |          |       |               |       |          |           |
| Analysis Res   | sults          |           |               |                 |            |         | Grain        |          |       |               |       |          |           |
| Analysis       | Actual         | Location  | Allowed       | Capacity        | Comb.      | Case    | 2 - SPF      | 3.500"   | 23%   | 2266 / 168    | 2434  | L        | D+S       |
| Moment         | 9024 ft-lb     | 8'5"      | 17919 ft-lb   | 0.504 (50%)     | D          | Uniform | End<br>Grain |          |       |               |       |          |           |
| Unbraced       | 9694 ft-lb     | 8'5"      | 9704 ft-lb    | 0.999<br>(100%) | D+S        | L       |              |          |       |               |       |          |           |
| Shear          | 1938 lb        | 15'7 3/8" | 7980 lb       | 0.243 (24%)     | D          | Uniform |              |          |       |               |       |          |           |
| LL Defl inch   | 0.035 (L/5617) | 8'5 1/16" | 0.409 (L/480) | 0.090 (9%)      | S          | L       |              |          |       |               |       |          |           |

### **Design Notes**

1 Fasten all plies using 2 rows of 10d Box nails ( 128x3") at 12" o.c. Maximum end distance not

8'5 1/16" 0.546 (L/360) 0.930 (93%) D+S

- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 9'6 3/4" o.c.
- 6 Bottom braced at bearings.

TL Defl inch 0.506 (L/388)

7 Lateral slenderness ratio based on single ply width.

| ID | Load Type   | Location         | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments   |  |
|----|-------------|------------------|------------|------|----------|--------|-----------|----------|-------------|------------|--|
| 1  | Uniform     |                  |            | Тор  | 180 PLF  | 0 PLF  | 0 PLF     | 0 PLF    | 0 PLF       | B1GE       |  |
| 2  | Uniform     |                  |            | Тор  | 60 PLF   | 0 PLF  | 0 PLF     | 0 PLF    | 0 PLF       | Wall Above |  |
| 3  | Tie-In      | 0-0-0 to 16-10-0 | 1-0-0      | Тор  | 20 PSF   | 0 PSF  | 20 PSF    | 0 PSF    | 0 PSF       | Roof Load  |  |
|    | Self Weight |                  |            |      | 9 PLF    |        |           |          |             |            |  |

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

### chemicals Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals

  3. Damaged Beams must not be used

  4. Design assumes top edge is laterally restrained

  5. Provide lateral support at bearing points to avoid lateral displacement and rotation

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info





isDesign

Client: Benjamin Stout Real Estate

Project: Address:

Cypress Road Fayetteville, NC 28304

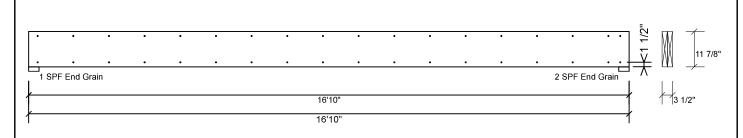
3/10/2022 Date:

Input by: David Landry Job Name: Lot 5 Cypress Road J0322-1270 Project #:

Page 12 of 12

**Kerto-S LVL** 1.750" X 11.875" 2-Ply - PASSED **GDH** 

Level: Level



### **Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity 0.0 % 0.0 PLF Load Yield Limit per Foot 163.7 PLF Yield Limit per Fastener 81.9 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown, It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

chemicals

### Handling & Installation

Handling & Installation

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5. Provide lateral support at bearing points to avoid lateral displacement and rotation

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This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info







RE: J0322-1270 Lot 5 Cypress Road **Trenco** 818 Soundside Rd Edenton, NC 27932

**Site Information:** 

Customer: Benjamin Stout Real Estate Project Name: J0322-1270 Lot/Block: 5 Model: Williams

Address: Cypress Road Subdivision: Cypress Road

City: Fayetteville State: NC

### 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: N/A Wind Speed: N/A mph Roof Load: N/A psf Floor Load: 55.0 psf

This package includes 13 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal#     | Truss Name | Date      |
|-----|-----------|------------|-----------|
| 1   | E16391095 | ET1        | 11/9/2021 |
| 2   | E16391096 | ET2        | 11/9/2021 |
| 3   | E16391097 | F1         | 11/9/2021 |
| 4   | E16391098 | F2         | 11/9/2021 |
| 5   | E16391099 | F2A        | 11/9/2021 |
| 6   | E16391100 | F3         | 11/9/2021 |
| 7   | E16391101 | F4         | 11/9/2021 |
| 8   | E16391102 | F4A        | 11/9/2021 |
| 9   | E16391103 | F5         | 11/9/2021 |
| 10  | E16391104 | F6         | 11/9/2021 |
| 11  | E16391105 | F7         | 11/9/2021 |
| 12  | E16391106 | FG1        | 11/9/2021 |
| 13  | E16391107 | FG2        | 11/9/2021 |

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Gilbert, Eric

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



November 09, 2021

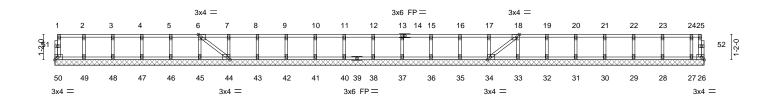
| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| 10000 4070 |       | 0.5.5      |     |     | E16391095                |
| J0322-1270 | EI1   | GABLE      | 1   | 1   | Job Reference (optional) |

0-<u>1</u>-8

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:25 2021 Page 1  $ID: J6aSr?qB6etazEy6hKRS \check{k}ZzPTZ\_-ComAmz3tpJfDjpxDFyRbFXH3ZKSZEB?hFOTOJJyLEMe$ 

0-<u>1</u>-8

Scale = 1:50.0



| Plate Offs | ate Offsets (X,Y) [6:0-1-8,Edge], [18:0-1-8,Edge], [34:0-1-8,Edge], [44:0-1-8,Edge] |                 |        |       |      |          |       |       |        |     |                |                 |
|------------|---|-----------------|--------|-------|------|----------|-------|-------|--------|-----|----------------|-----------------|
| LOADING    | G (psf)   | SPACING-        | 2-0-0  | CSI.  |      | DEFL.    | in    | (loc) | I/defl | L/d | PLATES         | GRIP            |
| TCLL       | 40.0  | Plate Grip DOL  | 1.00   | TC    | 0.06 | Vert(LL) | n/a   | ` -   | n/a    | 999 | MT20           | 244/190         |
| TCDL       | 10.0  | Lumber DOL      | 1.00   | BC    | 0.01 | Vert(CT) | n/a   | -     | n/a    | 999 |                |                 |
| BCLL       | 0.0   | Rep Stress Incr | YES    | WB    | 0.03 | Horz(CT) | -0.00 | 26    | n/a    | n/a |                |                 |
| BCDL       | 5.0   | Code IRC2015/TF | PI2014 | Matri | x-S  |          |       |       |        |     | Weight: 128 lb | FT = 20%F, 11%E |

LUMBER-TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat) 2x4 SP No.3(flat) WFBS

2x4 SP No.3(flat) OTHERS

BRACING-TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 49-50,48-49,47-48,46-47,45-46,44-45.

REACTIONS. All bearings 29-11-0.

Max Uplift All uplift 100 lb or less at joint(s) 26 (lb) -

Max Grav All reactions 250 lb or less at joint(s) 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35,

34, 33, 32, 31, 30, 29, 28, 27

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

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 26.
- 7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



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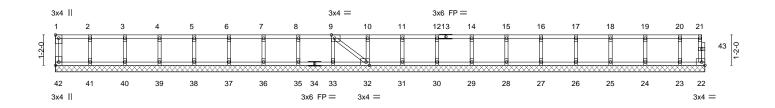


| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       | ٦ |
|------------|-------|------------|-----|-----|--------------------------|---|
| J0322-1270 | ET2   | GABLE      | 1   | 1   | E16391096                | ; |
| 30322-1270 | EIZ   | GABLE      | '   | '   | Joh Reference (ontional) |   |

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:26 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-g?KYzJ3Vacn4KyWPpfyqnlpEHkoozeErU2CxrlyLEMd

0-1-8

Scale = 1:41.7



|            | 1-4-0 2-8-0 | 0   4-0-0   5-4-0   6     | 6-8-0 <sub> </sub> 8-0-0 <sub> </sub> | 9-4-0 10-8-0 1       | 12-0-0 13-4-0 | 14-8-0  | 16-0-0  | 17-4-0   | 18-8-0 | 20-0-0 | 21-4-0 22-8-0  | 24-0-0 24-11-8  |
|------------|-------------|---------------------------|---------------------------------------|----------------------|---------------|---------|---------|----------|--------|--------|----------------|-----------------|
|            | 1-4-0 1-4-0 | 0                         | 1-4-0                                 | 1-4-0 1-4-0          | 1-4-0 1-4-0   | 1-4-0   | 1-4-0   | 1-4-0    | 1-4-0  | 1-4-0  | 1-4-0 1-4-0    | 1-4-0 '0-11-8'  |
| Plate Offs | sets (X,Y)  | [1:Edge,0-1-8], [9:0-1-8, | ,Edge], [32:0-1-8                     | 3,Edge], [42:Edge,0- | 1-8]          |         |         |          |        |        |                |                 |
|            |             |                           |                                       |                      |               |         |         |          |        |        |                |                 |
| LOADING    | G (psf)     | SPACING-                  | 2-0-0                                 | CSI.                 | DI            | EFL.    | in (loc | ) I/defl | L/d    |        | PLATES         | GRIP            |
| TCLL       | 40.0        | Plate Grip DOL            | 1.00                                  | TC 0.06              | Ve            | ert(LL) | n/a `   | - n/a    | 999    |        | MT20           | 244/190         |
| TCDL       | 10.0        | Lumber DOL                | 1.00                                  | BC 0.01              | Ve            | ert(CT) | n/a     | - n/a    | 999    |        |                |                 |
| BCLL       | 0.0         | Rep Stress Incr           | YES                                   | WB 0.03              | Ho            | orz(CT) | 0.00 2  | 2 n/a    | n/a    |        |                |                 |
| BCDL       | 5.0         | Code IRC2015/T            | TPI2014                               | Matrix-S             |               |         |         |          |        |        | Weight: 106 lb | FT = 20%F, 11%E |
|            |             | 1                         |                                       |                      | 1             |         |         |          |        |        |                |                 |

 LUMBER 

 TOP CHORD
 2x4 SP No.1(flat)
 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

 BOT CHORD
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

 OTHERS
 2x4 SP No.3(flat)
 BOT CHORD
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 24-11-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 42, 22, 41, 40, 39, 38, 37, 36, 35, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23

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

### NOTES-

- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Gable requires continuous bottom chord bearing.
- 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 5) Gable studs spaced at 1-4-0 oc.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.



November 9,2021





818 Soundside Road

| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1270 | E4    | Floor      |     | ,   | E16391097                |
| J0322-1270 | FI    | Floor      | 8   | '   | Job Reference (optional) |

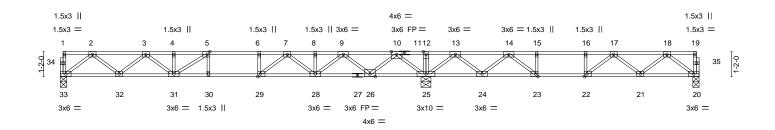
8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:28 2021 Page 1  $ID: J6aSr?qB6etazEy6hKRSkZzPTZ\_-cNRIO?5l6E1naGfow4\_ltAvMLYG4RO68xMh2weyLEMb$ 

0-1-8

HI 1-3-0 1-6-0 2-3-0

2-2-0

0-1-8 Scale = 1:50.8



|                         |   |  | 17-1-8                |                  |              |                         | 1                    |                   |                        | 29-               | 11-0           |                     |
|-------------------------|---|--|-----------------------|------------------|--------------|-------------------------|----------------------|-------------------|------------------------|-------------------|----------------|---------------------|
|                         | 17-1-8  |  |                       |                  |              |                         |                      |                   |                        | 12                | -9-8           | 1                   |
| Plate Offs              | Plate Offsets (X,Y) [5:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge], [29:0-1-8,Edge] |  |                       |                  |              |                         |                      |                   |                        |                   |                |                     |
| LOADING<br>TCLL<br>TCDL | G (psf)<br>40.0<br>10.0   | SPACING-<br>Plate Grip DOL<br>Lumber DOL | 2-0-0<br>1.00<br>1.00 | CSI.<br>TC<br>BC | 0.86<br>0.85 | DEFL. Vert(LL) Vert(CT) | in<br>-0.20<br>-0.28 | (loc)<br>30<br>30 | I/defI<br>>999<br>>735 | L/d<br>480<br>360 | PLATES<br>MT20 | <b>GRIP</b> 244/190 |
| BCLL<br>BCDL            | 0.0<br>5.0  | Rep Stress Incr<br>Code IRC2015/TF       | YES                   | WB<br>Matri      | 0.58         | Horz(CT)                | 0.05                 | 20                | n/a                    | n/a               | Weight: 149 lb | FT = 20%F, 11%E     |

LUMBER-

BOT CHORD

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD WFBS

2x4 SP No.1(flat) 2x4 SP No.3(flat) **BRACING-**TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 33=0-3-8, 25=0-5-8, 20=0-3-8

Max Grav 33=826(LC 3), 25=1934(LC 1), 20=608(LC 4)

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

2-3=-1695/0, 3-4=-2732/0, 4-5=-2732/0, 5-6=-2963/0, 6-7=-2963/0, 7-8=-2067/0,  $8-9 = -2067/0, \ 9-10 = -539/303, \ 10-12 = 0/2152, \ 12-13 = 0/2152, \ 13-14 = -551/972,$ 

14-15=-1575/269, 15-16=-1575/269, 16-17=-1575/269, 17-18=-1162/0

32-33=0/1030, 31-32=0/2330, 30-31=0/2963, 29-30=0/2963, 28-29=0/2561,  $26 - 28 = -37/1417, \ 25 - 26 = -833/0, \ 24 - 25 = -1263/0, \ 23 - 24 = -662/1135, \ 22 - 23 = -269/1575,$ 

21-22=-24/1515, 20-21=0/747

**WEBS** 2-33=-1290/0, 2-32=0/866, 3-32=-826/0, 3-31=0/514, 10-25=-1655/0, 10-26=0/1228,

9-26=-1188/0, 9-28=0/878, 7-28=-685/0, 7-29=0/807, 6-29=-359/0, 5-31=-475/153, 13-25=-1321/0, 13-24=0/882, 14-24=-926/0, 14-23=0/942, 18-20=-935/0, 18-21=0/540,

17-21=-460/99, 17-22=-345/76, 15-23=-417/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means. 5) CAUTION, Do not erect truss backwards.



November 9,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1270 | Eo    | Floor      | 1   | ,   | E16391098                |
| 30322-1270 | F2    |            | '   | '   | Job Reference (optional) |

1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:29 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-4a?hcL6NtX9eBQE\_UnWXPNRXuxcHAsbHA?RbS4yLEMa$ 

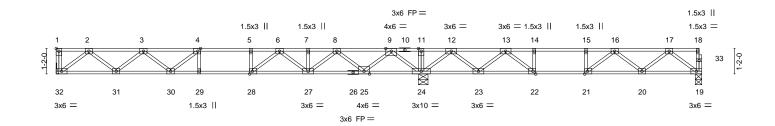
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

2-3-0

Scale = 1:49.8



| <u> </u>                |                       |  | 16-7-8<br>16-7-8      |                  |              | 16 <sub>7</sub> 9-0<br>0-1-8  |  |                        | 29-7-8<br>12-10-  |                | <del></del>         |
|-------------------------|-----------------------|--|-----------------------|------------------|--------------|-------------------------------|--|------------------------|-------------------|----------------|---------------------|
| Plate Offse             | ets (X,Y)             | [1:Edge,0-1-8], [4:0-1-8,Edg             | je], [21:0-1          | -8,Edge], [22:   | 0-1-8,Edge   | ], [28:0-1-8,Edge]            |  |                        |                   |                |                     |
| LOADING<br>TCLL<br>TCDL | (psf)<br>40.0<br>10.0 | SPACING-<br>Plate Grip DOL<br>Lumber DOL | 2-0-0<br>1.00<br>1.00 | CSI.<br>TC<br>BC | 0.87<br>0.85 | DEFL.<br>Vert(LL)<br>Vert(CT) | in (loc)<br>-0.18 28-29<br>-0.25 28-29 | I/defl<br>>999<br>>810 | L/d<br>480<br>360 | PLATES<br>MT20 | <b>GRIP</b> 244/190 |
| BCLL<br>BCDL            | 0.0<br>5.0            | Rep Stress Incr<br>Code IRC2015/TPI2     | YES<br>014            | WB<br>Matri      | 0.57<br>x-S  | Horz(CT)                      | 0.05 19                                | n/a                    | n/a               | Weight: 146 lb | FT = 20%F, 11%E     |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

REACTIONS.

(size) 32=Mechanical, 19=0-3-8, 24=0-5-4 Max Grav 32=814(LC 3), 19=615(LC 4), 24=1907(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1658/0, 3-4=-2582/0, 4-5=-2848/0, 5-6=-2848/0, 6-7=-2034/0, 7-8=-2034/0,

 $8-9 = -563/296, \ 9-11 = 0/2082, \ 11-12 = 0/2082, \ 12-13 = -578/905, \ 13-14 = -1611/221,$ 

2-3-0

14-15=-1611/221, 15-16=-1611/221, 16-17=-1179/0

BOT CHORD 31-32=0/1002, 30-31=0/2282, 29-30=0/2848, 28-29=0/2848, 27-28=0/2500,

 $25 - 27 = -36/1414,\ 24 - 25 = -810/0,\ 23 - 24 = -1188/0,\ 22 - 23 = -602/1165,\ 21 - 22 = -221/1611,$ 20-21=0/1540, 19-20=0/756

**WEBS** 2-32=-1257/0, 2-31=0/854, 3-31=-813/0, 3-30=0/392, 4-30=-431/27, 9-24=-1619/0,

9-25=0/1194, 8-25=-1155/0, 8-27=0/843, 6-27=-652/0, 6-28=0/750, 5-28=-323/0, 17-19=-946/0, 17-20=0/550, 16-20=-470/84, 16-21=-317/90, 12-24=-1316/0,

12-23=0/876, 13-23=-920/0, 13-22=0/936, 14-22=-417/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



November 9,2021





| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
|            |       | _          |     |     | E16391099                |
| J0322-1270 | F2A   | Floor      | 1   | 1   | Job Reference (optional) |

1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:31 2021 Page 1

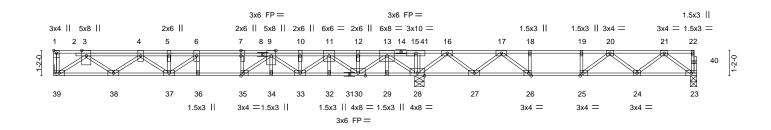
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

 $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-0y7R017eP9PMRkONcCY? UoWwalOYekCadJwiXzyLEMY\\$ 1-2-8 1-1-10 1-2-8 1-2-8 1-2-8 1-2-8 1-2-8 1-2-8 2-3-0

Scale = 1:50.0



|            |            |                            | 16-7-8         |                  |           | 16 <sub>1</sub> 9-0 | )           |        | 29-7-8  |                |                 |
|------------|------------|----------------------------|----------------|------------------|-----------|---------------------|-------------|--------|---------|----------------|-----------------|
|            |            |                            | 16-7-8         |                  |           | 0-1-8               | 1           |        | 12-10-8 | 3              | 1               |
| Plate Offs | sets (X,Y) | [1:Edge,0-1-8], [7:0-3-0,E | dge], [25:0-1- | -8,Edge], [26:0- | 1-8,Edge] | , [35:0-1-8,Edge]   |             |        |         |                |                 |
| LOADING    | (psf)      | SPACING-                   | 2-0-0          | CSI.             |           | DEFL.               | in (loc     | l/defl | L/d     | PLATES         | GRIP            |
| TCLL       | 40.0       | Plate Grip DOL             | 1.00           | TC               | 0.66      | Vert(LL)            | -0.15 3     | >999   | 480     | MT20           | 244/190         |
| TCDL       | 10.0       | Lumber DOL                 | 1.00           | BC               | 0.48      | Vert(CT)            | -0.20 35-36 | >993   | 360     |                |                 |
| BCLL       | 0.0        | Rep Stress Incr            | NO             | WB (             | 0.69      | Horz(CT)            | 0.04 23     | 3 n/a  | n/a     |                |                 |
| BCDL       | 5.0        | Code IRC2015/TF            | PI2014         | Matrix-          | S         |                     |             |        |         | Weight: 173 lb | FT = 20%F, 11%E |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-TOP CHORD 2x4 SP 2400F 2.0E(flat)

BOT CHORD 2x4 SP 2400F 2.0E(flat)

2x4 SP No 3(flat) WFBS

(size) 39=Mechanical, 28=0-5-4, 23=0-3-8

Max Grav 39=951(LC 3), 28=2436(LC 1), 23=579(LC 4)

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

3-4=-2099/0, 4-5=-3320/0, 5-6=-3320/0, 6-7=-3521/0, 7-9=-3521/0, 9-10=-2750/0,

10-11=-2750/0, 11-12=-1201/0, 12-13=-1201/0, 13-15=0/2484, 15-16=0/2500,

 $16\text{-}17\text{=-}224/1085,\ 17\text{-}18\text{=-}1394/330,\ 18\text{-}19\text{=-}1394/330,\ 19\text{-}20\text{=-}1394/330,\ 20\text{-}21\text{=-}1095/0$ 

BOT CHORD  $38 - 39 = 0/1255,\ 37 - 38 = 0/2907,\ 36 - 37 = 0/3521,\ 35 - 36 = 0/3521,\ 34 - 35 = 0/3180,\ 33 - 34 = 0/3180,$ 

32-33=0/2041, 30-32=0/2041, 29-30=-501/77, 28-29=-501/77, 27-28=-1403/0,

 $26\hbox{-}27\hbox{-}-753/865,\ 25\hbox{-}26\hbox{-}-330/1394,\ 24\hbox{-}25\hbox{-}-59/1406,\ 23\hbox{-}24\hbox{-}0/710$ 3-39=-1541/0, 3-38=0/1072, 4-38=-1027/0, 4-37=0/515, 5-37=-259/12, 13-28=-2425/0,

13-30=0/1449, 11-30=-1115/0, 11-33=0/936, 9-33=-593/0, 9-35=0/799, 7-35=-397/0, 16-28=-1479/0, 6-37=-372/209, 16-27=0/905, 17-27=-970/0, 17-26=0/989, 18-26=-436/0,

21-23=-888/0, 21-24=-6/501, 20-24=-405/117, 20-25=-370/0

### NOTES-

WEBS

REACTIONS.

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 222 lb down at 4-1-4, and 576 lb down at 15-1-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 23-39=-10, 1-22=-100

Concentrated Loads (lb)

Vert: 4=-142(F) 13=-496(F)



November 9,2021

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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/ITP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



| Job                      | Truss         | Truss Type | Qty | Ply     | Lot 5 Cypress Road  |
|--------------------------|---------------|------------|-----|---------|---|
| J0322-1270               | Eo            | Floor      | 1   | 1       | E16391100   |
| 100322-1270              | r3            | Floor      | '   | '       | Job Reference (optional)  |
| Cameta ala Ina Faccattas | illa NC 20244 |            |     | 120 - 1 | 4C 2024 MiTaly Industrian Inc. Mar. Nov. 9 42:42:22 2024 Page 4 |

Fayetteville, NC - 28314,

1-3-0

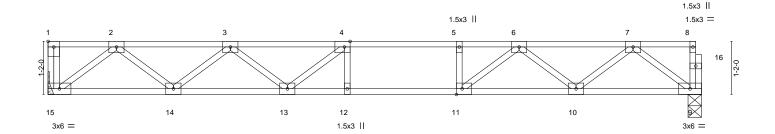
ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-U8hpEN8G9SXD2tzZ9w3E1036M9egNGIjszfF3PyLEMX 2-4-0 <sup>0</sup>11<sup>8</sup>

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

Scale: 1/2"=1'



14-4-0 [1:Edge,0-1-8], [4:0-1-8,Edge], [11:0-1-8,Edge] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** 2-0-0 (loc) I/defl L/d 1.00 0.60 244/190 **TCLL** 40.0 Plate Grip DOL TC Vert(LL) -0.19 12-13 >906 480 MT20 TCDL -0.25 12-13 10.0 Lumber DOL 1.00 ВС 0.87 Vert(CT) >687 360 BCLL 0.0 Rep Stress Incr YES WB 0.38 Horz(CT) 0.04 n/a n/a BCDL Code IRC2015/TPI2014 Matrix-S Weight: 71 lb FT = 20%F, 11%E

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 15=Mechanical, 9=0-3-8

Max Grav 15=775(LC 1), 9=768(LC 1)

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

TOP CHORD 2-3=-1559/0, 3-4=-2384/0, 4-5=-2550/0, 5-6=-2550/0, 6-7=-1538/0

**BOT CHORD**  $14 - 15 = 0/947,\ 13 - 14 = 0/2143,\ 12 - 13 = 0/2550,\ 11 - 12 = 0/2550,\ 10 - 11 = 0/2118,\ 9 - 10 = 0/954$ **WEBS** 

2-15=-1188/0, 2-14=0/797, 3-14=-761/0, 3-13=0/398, 7-9=-1194/0, 7-10=0/760,

 $6-10=-755/0,\ 6-11=0/740,\ 5-11=-317/0,\ 4-13=-437/18$ 

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



November 9,2021





| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| J0322-1270 | F4    | Floor      | 4   | 1   | E16391101                |
|            |       | 1          |     |     | Job Reference (optional) |

2-5-4

1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:33 2021 Page 1  $ID: J6aSr? qB6etazEy6hKRSkZzPTZ\_-zLFBRj9uwmf4g1YljdaTaDcD9Z\_A6g4t5dPpbryLEMW\\$ 

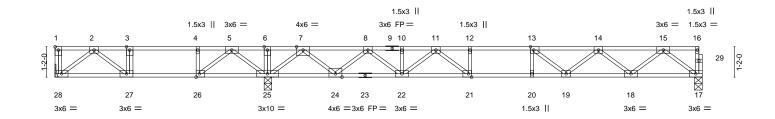
2-3-4

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

Scale = 1:41.8



| Plate Offsets (X,Y)                        | 8-2-4   | 3-2-8<br>)-0-4                        | 24-11-8<br>16-9-0  |                                 |
|--|---|---------------------------------------|--|---------------------------------|
| Plate Offsets (A, f)                       | [1:Edge,0-1-8], [13:0-1-8,Edge], [21:0                                | -1-6,Eugej, [26.0-1-6,Euge]           |  | T                               |
| LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO | CSI.<br>TC 0.85<br>BC 0.86<br>WB 0.54 | DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.21 21-22         >964         480           Vert(CT)         -0.28 21-22         >719         360           Horz(CT)         0.05         17         n/a         n/a | <b>PLATES GRIP</b> MT20 244/190 |
| BCDL 5.0                                   | Code IRC2015/TPI2014  | Matrix-S                              | ` ,  | Weight: 125 lb FT = 20%F, 11%E  |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 28=Mechanical, 25=0-3-8, 17=0-3-8

Max Grav 28=1746(LC 3), 25=1571(LC 1), 17=851(LC 7)

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

TOP CHORD  $1-28-1403/0,\ 2-3-629/297,\ 3-4-629/297,\ 4-5-629/297,\ 5-6-0/1219,\ 6-7-0/1219,\$ 

7-8=-1123/0, 8-10=-2493/0, 10-11=-2493/0, 11-12=-3157/0, 12-13=-3157/0,

13-14=-2793/0, 14-15=-1763/0

**BOT CHORD** 27-28=-55/424, 26-27=-297/629, 25-26=-730/183, 24-25=-35/277, 22-24=0/1926,

15-18=0/917, 14-18=-871/0, 14-19=0/501, 7-25=-1524/0, 7-24=0/1128, 8-24=-1076/0,

8-22=0/753, 11-22=-559/0, 11-21=0/624, 12-21=-277/0, 13-19=-602/0

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 17-28=-10, 1-16=-100

Concentrated Loads (lb)

Vert: 1=-1350



November 9,2021

ameters 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 designs. 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 experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*



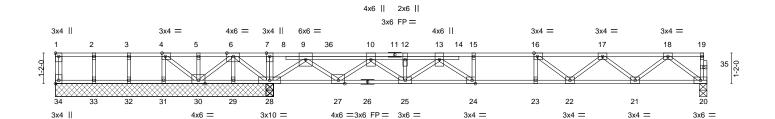
| Job        | Truss | Truss Type   | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|--------------|-----|-----|--------------------------|
| J0322-1270 | F4A   | Floor Girder | 1   | 1   | E16391102                |
| 30322-1270 | r4A   | Floor Gilder | '   | '   | Job Reference (optional) |

1-2-8 1-2-8 1-2-8 1-2-8 1-3-0

8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:34 2021 Page 1  $ID: J6aSr? qB6etazEy6hK\ddot{R}SkZzPTZ\_-RXpaf2AWh4nxIB7yHL5i6R8QtyJ?r5R0JH8M7IyLEMV\\$ 

2-3-0

Scale = 1:41.5



|            |            | 8-2-8                      | 1              | 3- <sub>4-</sub> 4    |                      | 24-11-8      |     |                |                 |
|------------|------------|----------------------------|----------------|-----------------------|----------------------|--------------|-----|----------------|-----------------|
|            |            | 8-2-8                      | C              | ı-1- <sup>1</sup> 12  |                      | 16-7-4       |     |                | <u> </u>        |
| Plate Offs | sets (X,Y) | [1:Edge,0-1-8], [4:0-1-8,E | dge], [16:0-1- | 8,Edge], [24:0-1-8,Ed | ge], [34:Edge,0-1-8] |              |     |                |                 |
| LOADING    | G (psf)    | SPACING-                   | 2-0-0          | CSI.                  | DEFL. in             | (loc) I/defl | L/d | PLATES         | GRIP            |
| TCLL       | 40.0       | Plate Grip DOL             | 1.00           | TC 0.72               | Vert(LL) -0.18 2     | 2-23 >999    | 480 | MT20           | 244/190         |
| TCDL       | 10.0       | Lumber DOL                 | 1.00           | BC 0.88               | Vert(CT) -0.24 2     | 2-23 >825    | 360 |                |                 |
| BCLL       | 0.0        | Rep Stress Incr            | NO             | WB 0.66               | Horz(CT) 0.03        | 20 n/a       | n/a |                |                 |
| BCDL       | 5.0        | Code IRC2015/TF            | PI2014         | Matrix-S              |                      |              |     | Weight: 134 lb | FT = 20%F, 11%E |

LUMBER-TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

**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: 29-30,28-29,27-28.

REACTIONS. All bearings 8-4-4 except (jt=length) 20=0-3-8.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 29=-516(LC 4), 30=-346(LC 4), 31=-239(LC 4) Max Grav All reactions 250 lb or less at joint(s) 34, 30, 31, 32, 33 except 28=2681(LC 1), 28=2681(LC 1), 20=773(LC 4)

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

TOP CHORD 4-5=0/372, 5-6=0/372, 6-7=0/2805, 7-9=0/2806, 9-10=-255/233, 10-12=-1747/0,

12-13=-1747/0, 13-15=-2589/0, 15-16=-2589/0, 16-17=-2406/0, 17-18=-1570/0

BOT CHORD 29-30=-1225/0, 28-29=-1225/0, 27-28=-1194/0, 25-27=0/1076, 24-25=0/2211,

23-24=0/2589, 22-23=0/2589, 21-22=0/2158, 20-21=0/952

**WEBS** 6-28=-1983/0, 6-29=0/505, 6-30=0/1101, 4-30=-472/0, 4-31=0/251, 9-28=-2137/0,

9-27=0/1383, 10-27=-1347/0, 10-25=0/837, 18-20=-1191/0, 18-21=0/804, 17-21=-766/0,

17-22=0/375, 16-22=-401/0, 13-25=-579/0, 13-24=0/628, 15-24=-253/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 516 lb uplift at joint 29, 346 lb uplift at joint 30 and 239 lb uplift at joint 31.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 407 lb down at 10-5-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 20-34=-10, 1-19=-100

Concentrated Loads (lb) Vert: 36=-327(B)



November 9,2021

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

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



| Job        | Truss | Truss Type | Qty | Ply | Lot 5 Cypress Road       |
|------------|-------|------------|-----|-----|--------------------------|
| 10222 4270 | T.C.  |            |     |     | E16391103                |
| J0322-1270 | F5    | Floor      | Ь   | 1   | Job Reference (optional) |

2-5-4

1-3-0

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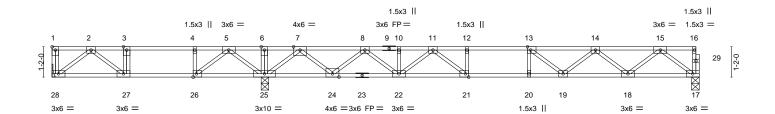
2-3-4 0-11-8

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

Scale = 1:41.8



| Plate Offsets | - (V V)   | 8-2-4<br>8-2-4<br>[1:Edge,0-1-8], [13:0-1-8, | 0-             | 2-8<br>0-4                |          | 24-1<br>16- |        |     |                |                 |
|---------------|-----------|--|----------------|---------------------------|----------|-------------|--------|-----|----------------|-----------------|
| Flate Offsets | 5 (A, I ) | [1.⊑uge,0-1-6], [13.0-1-6,                   | Eugej, [21.0-1 | -o,Eugej, [20.0-1-6,Eugej |          |             |        |     |                |                 |
| LOADING (p    | /         | SPACING-                                     | 2-0-0          | CSI.                      | DEFL.    | in (loc)    | l/defl | L/d | PLATES         | GRIP            |
|               | 10.0      | Plate Grip DOL                               | 1.00           | TC 0.74                   | Vert(LL) | -0.21 21-22 | >964   | 480 | MT20           | 244/190         |
|               | 10.0      | Lumber DOL                                   | 1.00           | BC 0.78                   | Vert(CT) | -0.28 21-22 | >719   | 360 |                |                 |
|               | 0.0       | Rep Stress Incr                              | YES            | WB 0.54                   | Horz(CT) | 0.05 17     | n/a    | n/a |                |                 |
| BCDL          | 5.0       | Code IRC2015/TP                              | 12014          | Matrix-S                  |          |             |        |     | Weight: 125 lb | FT = 20%F, 11%E |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

**REACTIONS.** (size) 28=Mechanical, 25=0-3-8, 17=0-3-8

Max Uplift 28=-14(LC 4)

Max Grav 28=396(LC 3), 25=1571(LC 1), 17=851(LC 7)

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

TOP CHORD 2-3=-629/297, 3-4=-629/297, 4-5=-629/297, 5-6=0/1219, 6-7=0/1219, 7-8=-1123/0,

 $8-10 = -2493/0,\ 10-11 = -2493/0,\ 11-12 = -3157/0,\ 12-13 = -3157/0,\ 13-14 = -2793/0,$ 

14-15=-1763/0

BOT CHORD 27-28=-56/423, 26-27=-297/629, 25-26=-730/184, 24-25=-34/277, 22-24=0/1927, 21-22=0/2904, 20-21=0/3157, 19-20=0/3157, 18-19=0/2432, 17-18=0/1059

2-28=-531/70, 2-27=-302/259, 5-25=-823/0, 5-26=0/878, 4-26=-429/0, 15-17=-1326/0,

15-18=0/917, 14-18=-871/0, 14-19=0/501, 7-25=-1524/0, 7-24=0/1128, 8-24=-1076/0,

 $8\hbox{-}22\hbox{=}0/753,\ 11\hbox{-}22\hbox{=}-559/0,\ 11\hbox{-}21\hbox{=}0/624,\ 12\hbox{-}21\hbox{=}-277/0,\ 13\hbox{-}19\hbox{=}-603/0$ 

### NOTES-

**WEBS** 

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 28.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.



November 9,2021

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

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\*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road

| Job              | Truss                   | Truss Type | Qty | Ply | Lot 5 Cypress Road  |
|------------------|-------------------------|------------|-----|-----|---|
|                  |                         |            |     |     | E16391104   |
| J0322-1270       | F6                      | Floor      | 2   | 1   |   |
|                  |                         |            |     |     | Job Reference (optional)                                      |
| Comtech, Inc, Fa | vetteville, NC - 28314, |            |     |     | 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:36 2021 Page 1 |

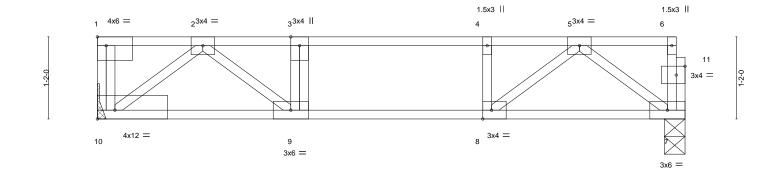
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Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

Scale = 1:15.4



[1:Edge,0-1-8], [8:0-1-8,Edge], [10:Edge,0-1-8], [11:0-1-8,0-1-8] Plate Offsets (X,Y)--LOADING (psf) SPACING-CSI. DEFL. **PLATES GRIP** 2-0-0 I/defl L/d (loc) TCLL 40.0 Plate Grip DOL 1.00 TC 0.39 Vert(LL) -0.04 9-10 >999 480 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.00 ВС 0.27 -0.05 9-10 >999 360 BCLL 0.0 Rep Stress Incr NO WB 0.22 Horz(CT) 0.01 n/a n/a BCDL Code IRC2015/TPI2014 Matrix-S Weight: 43 lb FT = 20%F, 11%E

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD BOT CHORD 2x4 SP No.1(flat) 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 10=Mechanical, 7=0-3-8

Max Grav 10=3846(LC 1), 7=440(LC 1)

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

1-3-0

TOP CHORD 1-10=-3459/0, 2-3=-821/0, 3-4=-821/0, 4-5=-821/0

**BOT CHORD** 9-10=0/493, 8-9=0/821, 7-8=0/489 **WEBS** 2-10=-619/0, 2-9=0/460, 5-7=-609/0, 5-8=0/469

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 7-10=-10, 1-6=-100 Concentrated Loads (lb)

Vert: 1=-3400



November 9,2021

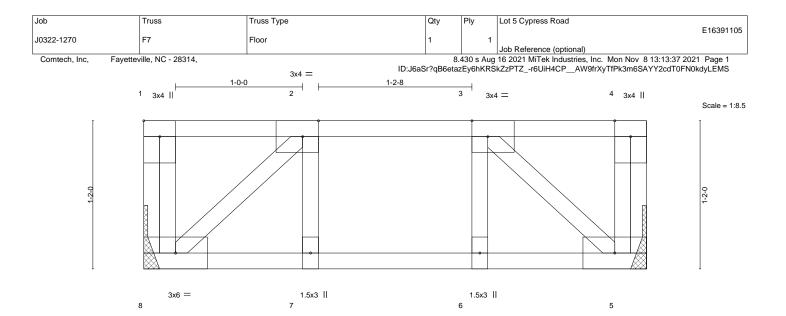
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ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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





3x6 =

Structural wood sheathing directly applied or 3-11-8 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

| Plate Offsets (X,Y) |         | 1:Edge,0-1-8], [2:0-1-8,Edge], [3:0-1-8,Edge] |        |       |      |          |       |            |        |     |               |                 |
|---------------------|---------|---|--------|-------|------|----------|-------|------------|--------|-----|---------------|-----------------|
| LOADING             | G (psf) | SPACING-                                      | 2-0-0  | CSI.  |      | DEFL.    | in    | (loc)      | I/defl | L/d | PLATES        | GRIP            |
| TCLL                | 40.ó    | Plate Grip DOL                                | 1.00   | TC    | 0.06 | Vert(LL) | -0.00 | ` <i>7</i> | >999   | 480 | MT20          | 244/190         |
| TCDL                | 10.0    | Lumber DOL                                    | 1.00   | BC    | 0.06 | Vert(CT) | -0.00 | 7          | >999   | 360 |               |                 |
| BCLL                | 0.0     | Rep Stress Incr                               | YES    | WB    | 0.05 | Horz(CT) | 0.00  | 5          | n/a    | n/a |               |                 |
| BCDL                | 5.0     | Code IRC2015/TI                               | PI2014 | Matri | x-S  |          |       |            |        |     | Weight: 24 lb | FT = 20%F, 11%E |

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

2x4 SP No.3(flat) WFBS

REACTIONS.

(size) 8=Mechanical, 5=Mechanical Max Grav 8=204(LC 1), 5=204(LC 1)

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

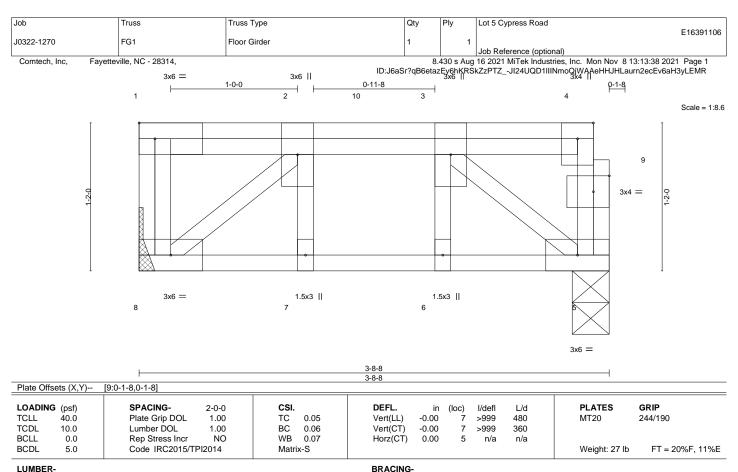
- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



November 9,2021







TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

**REACTIONS.** (size) 8=Mechanical, 5=0-3-8 Max Grav 8=242(LC 1), 5=236(LC 1)

Wax Grav 6-242(LC 1), 3-230(LC 1)

WEBS 2-8=-294/0, 3-5=-291/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.

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

- 3) Refer to girder(s) for truss to truss connections.4) Recommend 2x6 strongbacks, on edge, spaces
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 122 lb down at 1-10-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100 Concentrated Loads (lb) Vert: 10=-104(F)



Structural wood sheathing directly applied or 3-8-8 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

November 9,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



Job Truss Truss Type Qty Ply Lot 5 Cypress Road F16391107 J0322-1270 FG2 Floor Girder Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Nov 8 13:13:38 2021 Page 1 ID:J6aSr?qB6etazEy6hKRSkZzPTZ\_-JI24UQD1IIINmoQiWAAeHHJFkarVn1EcEv6aH3yLEMR 3x6 = 3x6 || 1-0-0 0-8-0 Scale = 1:8.6

3x6 =

5

3-5-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP in (loc) I/defl L/d Plate Grip DOL TC Vert(LL) 244/190 **TCLL** 40.0 1.00 0.16 -0.01 >999 480 MT20 **TCDL** 10.0 Lumber DOL 1.00 вс 0.21 Vert(CT) -0.01 >999 360 WB **BCLL** 0.0 Rep Stress Incr NO 0.16 Horz(CT) 0.00 5 n/a n/a BCDL Code IRC2015/TPI2014 Weight: 26 lb FT = 20%F, 11%E

1.5x3 II

LUMBER-

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

BRACING-

1.5x3 II

TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins,

except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=Mechanical

Max Grav 8=596(LC 1), 5=427(LC 1)

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

3x6 =

TOP CHORD 2-3=-528/0

BOT CHORD 7-8=0/528, 6-7=0/528, 5-6=0/528 WEBS 2-8=-684/0, 3-5=-684/0

### NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 705 lb down at 1-6-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)

Vert: 5-8=-10, 1-4=-100 Concentrated Loads (lb) Vert: 2=-675(B)



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

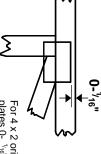


## Symbols

# PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Apply plates to both sides of truss Dimensions are in ft-in-sixteenths.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss

ω

O

S

required direction of slots in connector plates This symbol indicates the

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

### PLATE SIZE



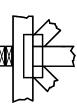
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

### BEARING



number where bearings occur.

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

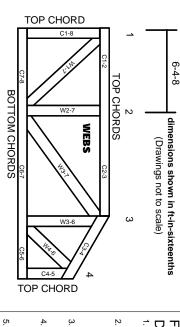
### Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing

# **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

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

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

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

# **General Safety Notes**

## Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions camber for dead load deflection.
- Lumber used shall be of the species and size, and

indicated are minimum plating requirements.

- in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.