

RE: J0621-4013

Lot 10 Pendegraft Rd.

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0621-4013

Lot/Block: Model:
Address: Subdivision:
City: State:

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

Design Code: IRC2015/TPl2014 Design Program: MiTek 20/20 8.3

Wind Code: ASCE 7-10 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

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

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|
| 1 | E15364184 | A1 | 6/24/2021 |
| 2 | E15364185 | A2 | 6/24/2021 |
| 3 | E15364186 | A2-P | 6/24/2021 |
| 4 | E15364187 | A3 | 6/24/2021 |
| 5 | E15364188 | A4 | 6/24/2021 |
| 6 | E15364189 | B1 | 6/24/2021 |
| 7 | E15364190 | B2 | 6/24/2021 |
| 8 | E15364191 | G01 | 6/24/2021 |
| 9 | E15364192 | G02 | 6/24/2021 |
| 10 | E15364193 | M01 | 6/24/2021 |
| 11 | E15364194 | M02 | 6/24/2021 |
| 12 | E15364195 | P1 | 6/24/2021 |
| 13 | E15364196 | P2 | 6/24/2021 |

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

Truss Engineering Co. under my direct supervision

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2021

North Carolina COA: C-0844

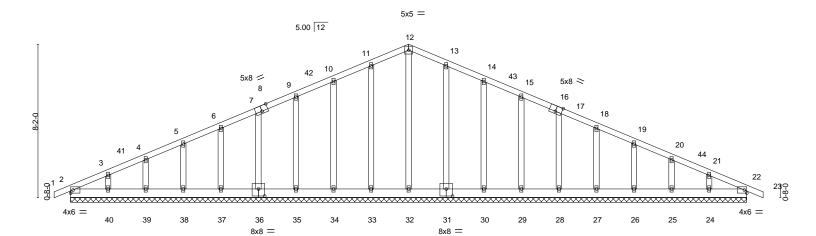
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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



June 24, 2021

Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364184 J0621-4013 **GABLE** A1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:28 2021 Page 1 Comtech, Inc.

> 36-10₇8 0-10-8 Scale = 1:61.3



36-0-0 Plate Offsets (X,Y)--[7:0-1-14,0-0-0], [8:0-4-0,Edge], [8:0-0-0,0-1-12], [16:0-4-0,Edge], [16:0-0-0,0-1-12], [17:0-1-14,0-0-0], [31:0-4-0,0-4-8], [36:0-4-0,0-4-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00 22 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 22 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.13 Horz(CT) 0.01 22 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S FT = 20% Weight: 244 lb

36-0-0

LUMBER-

-0-10-8 0-10-8

TOP CHORD 2x4 SP No 1

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

BRACING-

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

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-JNH7dos7ZfEq1nWsJGoSyTRAlivVX64v1?2rX6zppjv

36-0-0

18-0-0

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

REACTIONS. All bearings 36-0-0.

Max Horz 2=-159(LC 17)

Max Uplift All uplift 100 lb or less at joint(s) 2, 22, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 28, 27, 26, 25, 24

All reactions 250 lb or less at joint(s) 2, 22, 32, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 28, Max Grav 27, 26, 25, 24

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 10-11=-85/252, 11-12=-101/296, 12-13=-101/296, 13-14=-85/253

18-0-0

18-0-0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 18-0-0, Corner(3) 18-0-0 to 22-4-13, Exterior(2) 22-4-13 to 36-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 22, 33, 34, 35, 36, 37, 38, 39, 40, 31, 30, 29, 28, 27, 26, 25, 24.



February 1,2021

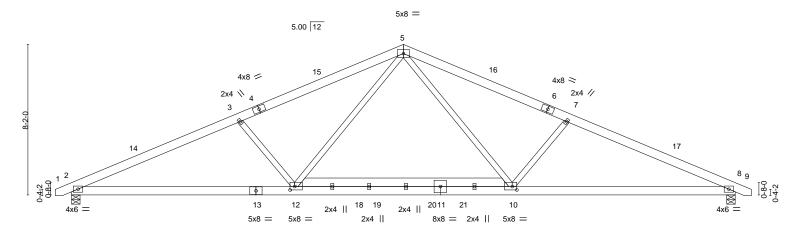
Design Valid to its 80 mly with win New Commercials. This design is based only upon parameters shown, and is for an individual orusining Component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, 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 10 Pendeg | raft Rd. | |
|---------------|---------------------------|------------|-------------|------------|----------------|-----------------------------------|------------------|
| | | | | | | | E15364185 |
| J0621-4013 | A2 | COMMON | 4 | 1 | | | |
| | | | | | Job Reference | (optional) | |
| Comtech, Inc. | Fayetteville, NC - 28314, | | ' | 8.330 s Oc | t 7 2020 MiTek | Industries, Inc. Sun Jan 31 13:50 |):29 2021 Page 1 |
| | | | ID:0iJ2hz3v | p6ahZXSx7 | 7jdYHSym1hi-na | aqVq8tlKzMhfx53tzJhUhzGu64DG | Yc2GfnO3Zzppju |
| -Q-10-8 | 9-1-12 | 18-0-0 | | 26-10-4 | , , | 36-0-0 | 36-10₁8 |
| 0 10 9 | 0.1.12 | 0.40.4 | | 0.10.4 | | 0.1.12 | 0 10 0 |

Scale = 1:62.5



| H | | 12-1-3 12-1-3 | | | | 23-10-13 11-9-11 | | + | | 36-0-0 12-1-3 | |
|---------------|-------|-----------------------------|----------|-------|------|---------------------|-------------|--------|-----|------------------|-------------|
| Plate Offsets | (X.Y) | [10:0-3-0,0-2-4], [12:0-3-0 | 0.0-2-41 | | | 11-9-11 | | | | 12-1-3 | |
| | | , ,, | <u> </u> | | | | | | | | |
| LOADING (p | psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20 | 0.0 | Plate Grip DOL | 1.15 | TC | 0.35 | Vert(LL) | -0.22 10-12 | >999 | 360 | MT20 | 244/190 |
| TCDL 10 | 0.0 | Lumber DOL | 1.15 | BC | 0.75 | Vert(CT) | -0.55 10-12 | >780 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.24 | Horz(CT) | 0.08 8 | n/a | n/a | | |
| BCDL 10 | 0.0 | Code IRC2015/TF | PI2014 | Matri | x-S | Wind(LL) | 0.07 2-12 | >999 | 240 | Weight: 248 lb | FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 *Except* **WEBS** 10-12: 2x6 SP No.1

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

Max Horz 2=-93(LC 13)

Max Uplift 2=-2(LC 12), 8=-2(LC 13) Max Grav 2=1577(LC 1), 8=1577(LC 1)

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

TOP CHORD 2-3=-3053/329, 3-5=-2733/293, 5-7=-2733/293, 7-8=-3053/329

BOT CHORD 2-12=-205/2722. 10-12=-21/1832. 8-10=-206/2722 WEBS 5-10=0/993, 7-10=-518/317, 5-12=0/993, 3-12=-518/317

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 36-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- $3)\ 200.0 lb\ AC\ unit\ load\ placed\ on\ the\ bottom\ chord,\ 18-0-0\ from\ left\ end,\ supported\ at\ two\ points,\ 3-0-0\ apart.$
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



Structural wood sheathing directly applied or 4-1-3 oc purlins.

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

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

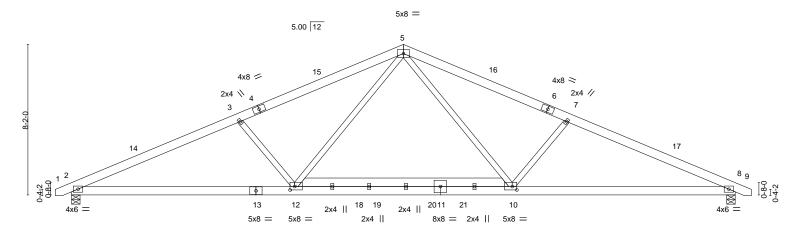
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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| Job | Truss | Truss Type | Qty | Ply | Lot 10 Pendeg | raft Rd. | |
|------------------|--------------------------|------------|-----------------|------------|----------------|-----------------------------------|----------------------|
| | | | | | | | E15364186 |
| J0621-4013 | A2-P | COMMON | 2 | 1 | | | |
| | | | | | Job Reference | (optional) | |
| Comtech, Inc, Fa | ayetteville, NC - 28314, | · | | 8.330 s Oc | t 7 2020 MiTek | Industries, Inc. Sun Jan 31 13:50 | :30 2021 Page 1 |
| | | | ID:0iJ2hz3vp6ah | ZXSx7jdYHS | ym1hi-FmOu2T | tN5HUYG5fFRhqw1uWQMWNm? | _eCUJXyb?zppjt |
| -Q-10-8 | 9-1-12 | 18-0-0 | | 26-10-4 | | 36-0-0 | 36-10 ₇ 8 |
| 0-10-8 | 9-1-12 | 8-10-4 | | 8-10-4 | | 9-1-12 | 0-10-8 |

Scale = 1:62.5



| —— | 12-1-3 12-1-3 | | 23-10-13 11-9-11 | | 36-0-0 12-1-3 | — |
|--|--|---|---|---|---|-------------|
| Plate Offsets (X,Y) | [10:0-3-0,0-2-4], [12:0-3-0,0-2-4] | | 11-9-11 | | 12-1-3 | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0 | SPACING- 2-1-8 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr NO Code IRC2015/TPI2014 | CSI. TC 0.43 BC 0.86 WB 0.26 Matrix-S | DEFL. in (loc) Vert(LL) -0.23 10-12 Vert(CT) -0.57 10-12 Horz(CT) 0.08 8 Wind(LL) 0.08 2-12 | l/defl L/d >999 360 >750 240 n/a n/a >999 240 | PLATES GRIP MT20 244/19 Weight: 248 lb FT = | 90 : 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 *Except* **WEBS** 10-12: 2x6 SP No.1

REACTIONS.

(size) 2=0-5-8, 8=0-5-8 Max Horz 2=-99(LC 17) Max Uplift 2=-9(LC 12), 8=-9(LC 13)

Max Grav 2=1669(LC 1), 8=1669(LC 1)

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

TOP CHORD $2-3=-3227/366,\ 3-5=-2886/329,\ 5-7=-2886/329,\ 7-8=-3227/366$

BOT CHORD 2-12=-233/2877, 10-12=-33/1935, 8-10=-234/2877 WEBS 5-10=0/1047, 7-10=-552/336, 5-12=0/1047, 3-12=-552/336

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 36-8-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- $3)\ 200.0 lb\ AC\ unit\ load\ placed\ on\ the\ bottom\ chord,\ 18-0-0\ from\ left\ end,\ supported\ at\ two\ points,\ 3-0-0\ apart.$
- 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



Structural wood sheathing directly applied or 3-11-4 oc purlins.

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

February 1,2021

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

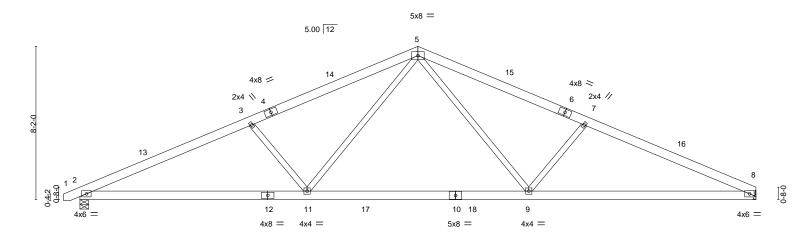
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364187 J0621-4013 COMMON 8 A3 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:30 2021 Page 1 Comtech, Inc. ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-FmOu2TtN5HUYG5fFRhqw1uWQ_WRZ??_CUJXyb?zppjt -0-10-8 0-10-8 18-0-0 <u>26-1</u>0-4 36-0-0 9-1-12 8-10-4 8-10-4 9-1-12

Scale = 1:61.3



| | 12-1-3 | + | 11-9-11 | + | 12-1-3 |
|-----------------------------------|--|----------------------------|---|------------------------------------|--|
| LOADING (psf) TCLL 20.0 TCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 | CSI. TC 0.39 BC 0.62 | DEFL. in (loc) Vert(LL) -0.33 9-11 Vert(CT) -0.46 9-11 | l/defl L/d >999 360 >929 240 | PLATES GRIP MT20 244/190 |
| BCLL 0.0 * BCDL 10.0 | Rep Stress Incr YES Code IRC2015/TPI2014 | WB 0.23 Matrix-S | Horz(CT) 0.07 8 Wind(LL) 0.07 11 | n/a n/a >999 240 | Weight: 220 lb FT = 20% |

23-10-13

LUMBER-

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

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 4-1-11 oc purlins.

36-0-0

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

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

Max Horz 2=95(LC 16)

Max Uplift 2=-102(LC 12), 8=-90(LC 13) Max Grav 2=1483(LC 1), 8=1427(LC 1)

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

2-3=-2795/606, 3-5=-2523/575, 5-7=-2541/593, 7-8=-2823/631 TOP CHORD **BOT CHORD** 2-11=-464/2490 9-11=-207/1686 8-9=-470/2523

12-1-3

WEBS 5-9=-120/956, 7-9=-556/311, 5-11=-115/931, 3-11=-534/302

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 18-0-0, Exterior(2) 18-0-0 to 22-4-13, Interior(1) 22-4-13 to 35-11-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=102.



February 1,2021

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

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Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364188 J0621-4013 **GABLE** A4 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:32 2021 Page 1 Comtech, Inc.

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-C9WeT9vedukGWOpeY6tO6JbrlJGNTv4Vyd02guzppjr 36-0-0

18-0-0

Scale = 1:61.5

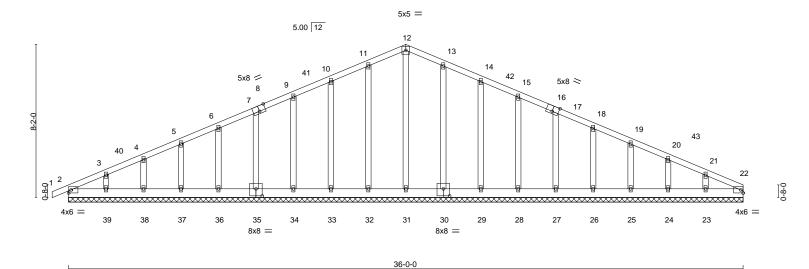


Plate Offsets (X,Y)--[7:0-1-14,0-0-0], [8:0-4-0,Edge], [8:0-0-0,0-1-12], [16:0-4-0,Edge], [16:0-0-0,0-1-12], [17:0-1-14,0-0-0], [30:0-4-0,0-4-8], [35:0-4-0,0-4-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.06 Vert(LL) -0.00 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.13 Horz(CT) 0.01 22 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 243 lb FT = 20%

36-0-0

LUMBER-

-0-10-8 0-10-8

TOP CHORD 2x4 SP No 1 BOT CHORD 2x6 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. All bearings 36-0-0.

Max Horz 2=161(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 39, 30, 29, 28, 27, 26, 25, 24,

23

All reactions 250 lb or less at joint(s) 2, 22, 31, 32, 33, 34, 35, 36, 37, 38, 39, 30, 29, 28, 27, Max Grav 26, 25, 24, 23

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

10-11=-84/251, 11-12=-101/295, 12-13=-101/298, 13-14=-84/255

18-0-0

18-0-0

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 18-0-0, Corner(3) 18-0-0 to 22-4-13, Exterior(2) 22-4-13 to 36-0-0 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 33, 34, 35, 36, 37, 38, 39, 30, 29, 28, 27, 26, 25, 24, 23.



February 1,2021

Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364189 J0621-4013 **GABLE** В1 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:33 2021 Page 1 Comtech, Inc.

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-gL40gVwGOCs77YOq6pOdeX80mjcdCNFeAHlcCKzppjq 8-9-12 17-7-8 18-6-0 0-10-8 8-9-12 8-9-12

> Scale: 1/4"=1 4x6 =

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

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

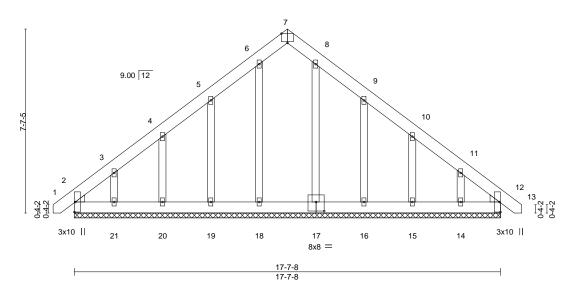


Plate Offsets (X,Y)--[2:0-0-6,0-3-10], [2:0-0-3,0-0-4], [7:0-3-0,Edge], [12:0-0-6,0-3-10], [12:0-0-3,0-0-4], [17:0-4-0,0-4-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defl L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.04 Vert(LL) -0.00 12 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 12 n/r 120 WB **BCLL** 0.0 Rep Stress Incr YES 0.07 Horz(CT) 0.00 12 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 142 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEDGE

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

REACTIONS. All bearings 17-7-8.

(lb) - Max Horz 2=-171(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 16, 15, 14, 12

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 17, 16, 15, 14, 12

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 (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-8-11 to 3-7-12, Exterior(2) 3-7-12 to 8-9-12, Corner(3) 8-9-12 to 13-2-9, Exterior(2) 13-2-9 to 18-4-3 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 19, 20, 21, 16, 15, 14, 12.



February 1,2021



Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364190 J0621-4013 B2 Common Girder 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:34 2021 Page 1 Comtech, Inc.

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-8XeOurwu9V__liz0gXvsBkhy?7pkxjFoPxV9kmzppjp 4-6-10 8-9-12 13-0-14 17-7-8 4-6-10 4-3-2 4-6-10

Scale = 1:43.9

Structural wood sheathing directly applied or 5-10-11 oc purlins.

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

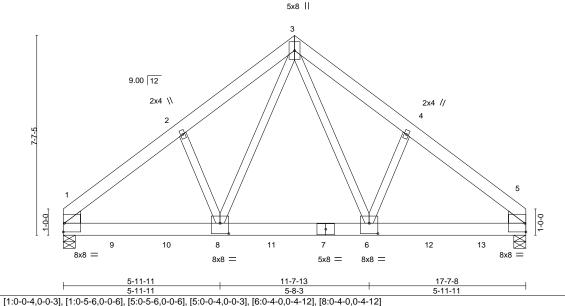


Plate Offsets (X,Y)--LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.97 Vert(LL) -0.07 1-8 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.60 Vert(CT) -0.15 1-8 >999 240 WB **BCLL** 0.0 Rep Stress Incr NO 0.54 Horz(CT) 0.03 5 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.05 >999 240 Weight: 259 lb FT = 20% 1-8

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x6 SP 2400F 2 0F 2x4 SP No 2 WFBS

WEDGE

Left: 2x6 SP No.1, Right: 2x6 SP No.1

REACTIONS. (size) 1=0-5-8, 5=0-5-8

Max Horz 1=170(LC 24)

Max Uplift 1=-435(LC 8), 5=-444(LC 9) Max Grav 1=6247(LC 1), 5=6381(LC 1)

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

 $1\hbox{-}2\hbox{-}7349/535,\ 2\hbox{-}3\hbox{-}7051/598,\ 3\hbox{-}4\hbox{-}7059/598,\ 4\hbox{-}5\hbox{-}7357/535$ TOP CHORD

BOT CHORD 1-8=-411/5448, 6-8=-240/3992, 5-6=-350/5454

WEBS 3-6=-382/4380, 4-6=-191/571, 3-8=-380/4363, 2-8=-191/571

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 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 (3-second gust) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=435, 5=444.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1407 lb down and 110 lb up at 1-11-4, 1407 lb down and 110 lb up at 3-11-4, 1407 lb down and 110 lb up at 5-11-4, 1407 lb down and 110 lb up at 7-11-4, 1407 lb down and 110 lb up at 9-11-4, 1407 lb down and 110 lb up at 11-11-4, and 1407 lb down and 110 lb up at 13-11-4, and 1407 lb down and 110 lb up at 15-11-4 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

JORTH

February 1,2021

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

Design Valid to its 9 this with Min New Commercials. This design is based only upon parameters shown, and is 10 at an individual obtaining Component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI Quality Criteria, 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 10 Pendegraft Rd. |
|------------|-------|---------------|-----|-----|--------------------------|
| | DO. | | | | E15364190 |
| J0621-4013 | B2 | Common Girder | 1 | 2 | Joh Reference (entional) |

Comtech, Inc, Fayetteville, NC - 28314,

▲ Job Reference (optional)
8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:34 2021 Page 2 ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-8XeOurwu9V__liz0gXvsBkhy?7pkxjFoPxV9kmzppjp

LOAD CASE(S) Standard

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-1407(B) 6=-1407(B) 8=-1407(B) 9=-1407(B) 10=-1407(B) 11=-1407(B) 12=-1407(B) 13=-1407(B)



818 Soundside Road Edenton, NC 27932

Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364191 J0621-4013 G01 **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:35 2021 Page 1 Comtech, Inc. ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-ckCm5BxWwp6qNsYDDEQ5kyDM9XIAgILxebEjHCzppjo

0-10-8

Scale = 1:36.2

4x4 = 5.00 12 9 5 10 11 3x4 = 3x4 = 22 20 18 21 19 17 16 15 14 8x8 = 20-8-0 20-8-0 Plate Offsets (X,Y)--[18:0-4-0,0-4-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.05 Vert(LL) -0.00 12 n/r 120 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.02 Vert(CT) -0.00 12 120 n/r

LUMBER-

OTHERS

BCLL

BCDL

-0-10-8 0-10-8

2x4 SP No 1

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

0.0

10.0

BRACING-

Horz(CT)

0.00

12

n/a

n/a

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.

Weight: 117 lb

FT = 20%

20-8-0

REACTIONS. All bearings 20-8-0.

(lb) -Max Horz 2=94(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 12, 2, 19, 20, 21, 22, 17, 16, 15, 14 Max Grav All reactions 250 lb or less at joint(s) 12, 2, 18, 19, 20, 21, 22, 17, 16, 15, 14

NO

10-4-0

10-4-0

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

1) Unbalanced roof live loads have been considered for this design.

Rep Stress Incr

Code IRC2015/TPI2014

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 10-4-0, Exterior(2) 10-4-0 to 16-4-0, Interior(1) 16-4-0 to 21-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip

WB

Matrix-S

0.04

- 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 12, 2, 19, 20, 21, 22, 17, 16, 15, 14.



February 1,2021

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

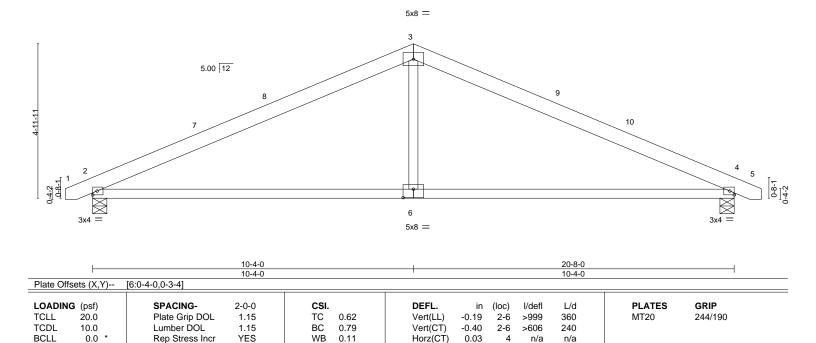
ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364192 J0621-4013 COMMON 5 G02 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:36 2021 Page 1 Comtech, Inc.

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-4wm9IXy8h7Eh_07PnyxKG9mOwxSHPkU4tF_Gpfzppjn 20-8-0

Scale = 1:37.1



Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.06

2-6

>999

240

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

Structural wood sheathing directly applied or 5-4-12 oc purlins.

Weight: 94 lb

FT = 20%

LUMBER-

BCDL

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

10.0

0-10-8 0-10-8

REACTIONS. (size) 4=0-5-8, 2=0-5-8

Max Horz 2=-55(LC 13)

Max Uplift 4=-63(LC 13), 2=-63(LC 12) Max Grav 4=864(LC 1), 2=864(LC 1)

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-1216/288, 3-4=-1216/288 **BOT CHORD** 2-6=-140/1030, 4-6=-140/1030

WFBS 3-6=0/468

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-5 to 3-8-8, Interior(1) 3-8-8 to 10-4-0, Exterior(2) 10-4-0 to 14-8-13, Interior(1) 14-8-13 to 21-4-5 zone; 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.

10-4-0 10-4-0

- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 4, 2.



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

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ANSI/TPI 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 10 Pendegraft Rd. E15364193 J0621-4013 M01 MONOPITCH SUPPORTED 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:37 2021 Page 1 Comtech, Inc. ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-Y6JXWtzmSQMYcAibLfSZpNJh0Kz58CXE5vjpL5zppjm -0-10<u>-8</u> 0-10-8 Scale = 1:11.5 4 2x4_H 2x4 | 3.00 12 3 -9-1 6 5 2x4 | 2x4 || 3x4 =LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.09 Vert(LL) -0.00 120 MT20 244/190

Vert(CT)

Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

0.00

n/r

n/r

n/a

120

n/a

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

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

Weight: 19 lb

FT = 20%

LUMBER-

TCDL

BCLL

BCDL

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

0.0

10.0

REACTIONS.

(size) 5=5-0-0, 2=5-0-0, 6=5-0-0

Lumber DOL

Rep Stress Incr

Code IRC2015/TPI2014

Max Horz 2=47(LC 8)

Max Uplift 5=-7(LC 8), 2=-37(LC 8), 6=-34(LC 12) Max Grav 5=41(LC 1), 2=160(LC 1), 6=240(LC 1)

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

WEBS 3-6=-176/310

NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -0-10-8 to 3-6-5, Exterior(2) 3-6-5 to 4-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

вс

WB

Matrix-P

0.05

0.05

- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable requires continuous bottom chord bearing.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

YES

- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.
- 8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.



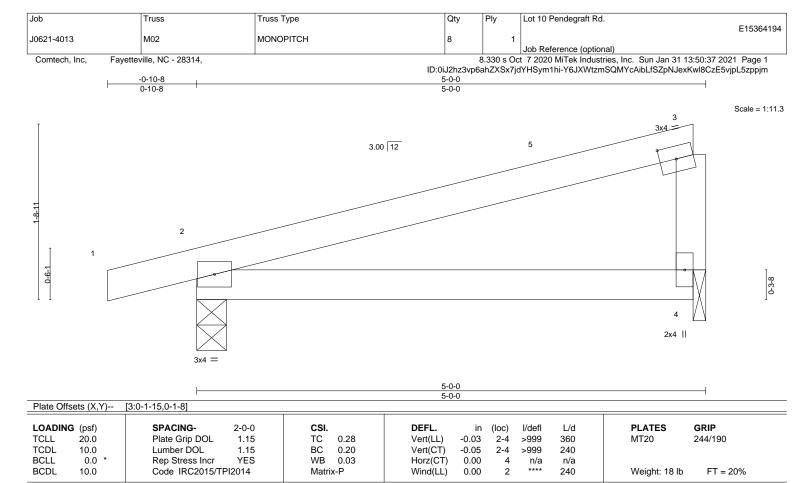
February 1,2021

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





BRACING-

TOP CHORD

BOT CHORD

LUMBER-

WFBS

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

2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 4=0-1-8 Max Horz 2=47(LC 8)

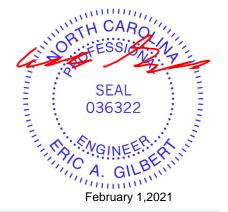
Max Uplift 2=-54(LC 8), 4=-25(LC 12)

Max Grav 2=256(LC 1), 4=181(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 4-10-1 zone; 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 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 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) 2, 4.



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

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

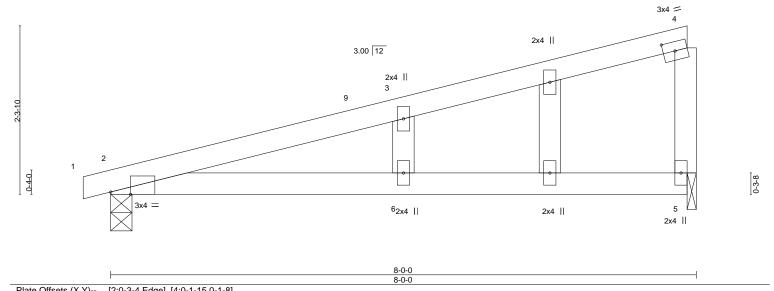


Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364195 J0621-4013 P1 **GABLE** 2 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:38 2021 Page 1 Comtech, Inc.

ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-0JtvjDzPCkUPEJHnvM_oLarm6kDCtf?NKZTNtXzppjl 8-0-0

0-4-8 8-0-0

Scale = 1:15.7



| Plate Offsets (X, Y) | Plate Offsets (A, Y) [2:0-3-4, Edge], [4:0-1-15,0-1-8] | | | | | |
|----------------------|--|----------|---------------------------|------------------------|--|--|
| 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 0.45 | Vert(LL) -0.16 6 >562 360 | MT20 244/190 | | |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.44 | Vert(CT) -0.33 6 >280 240 | | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.04 | Horz(CT) -0.00 5 n/a n/a | | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.26 6 >354 240 | Weight: 30 lb FT = 20% | | |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

OTHERS

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

2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 5=0-1-8

Max Horz 2=97(LC 8)

Max Uplift 2=-103(LC 8), 5=-99(LC 12) Max Grav 2=341(LC 1), 5=306(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -0-4-8 to 4-0-0, Exterior(2) 4-0-0 to 7-10-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Bearing at joint(s) 5 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) 5.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=103.



February 1,2021

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

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

Job Truss Truss Type Qty Ply Lot 10 Pendegraft Rd. E15364196 J0621-4013 P2 MONOPITCH 6 Job Reference (optional) Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Sun Jan 31 13:50:38 2021 Page 1 Comtech, Inc. ID:0iJ2hz3vp6ahZXSx7jdYHSym1hi-0JtvjDzPCkUPEJHnvM_oLarf0kEQtf4NKZTNtXzppjl 8-0-0 Scale = 1:15.7 3 3.00 12 0-4-0 2x4 || 8-0-0 8-0-0 Plate Offsets (X,Y)--[2:0-3-4,Edge], [3:0-1-15,0-1-8]

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

(loc)

2-4

2-4

-0.15

-0.30

0.00

0.32

I/defI

>624

>312

>285

n/a

L/d

360

240

n/a

240

PLATES

Weight: 27 lb

MT20

Structural wood sheathing directly applied or 2-2-0 oc purlins.

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

GRIP

244/190

FT = 20%

LUMBER-

LOADING (psf)

20.0

10.0

0.0

10.0

TCLL

TCDL

BCLL

BCDL

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

REACTIONS.

(size) 2=0-3-8, 4=0-1-8 Max Horz 2=68(LC 8)

Max Uplift 2=-130(LC 8), 4=-126(LC 8) Max Grav 2=341(LC 1), 4=306(LC 1)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-4-8 to 4-0-5, Interior(1) 4-0-5 to 7-10-1 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

CSI.

0.90

0.36

0.04

TC

BC

WB

Matrix-P

2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

1.15

YES

- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=130, 4=126.



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

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

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

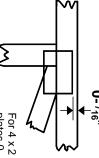


Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

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

PLATE SIZE

4 × 4

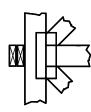
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



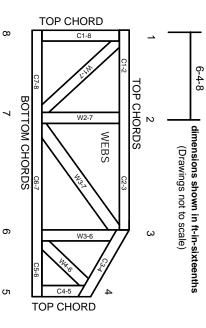
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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

ANSI/TPI1: DSB-89:

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- 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.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

4.

- 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.

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- 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.

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- 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 responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- 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 and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.