

RE: J0520-2109

Weaver / 3 Adcock Farm / Harnett

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0520-2109

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

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3

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

This package includes 12 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|
| 1 | E14248395 | F1 | 5/18/2020 |
| 2 | E14248396 | F1A | 5/18/2020 |
| 3 | E14248397 | F2 | 5/18/2020 |
| 4 | E14248398 | F2A | 5/18/2020 |
| 5 | E14248399 | F3 | 5/18/2020 |
| 6 | E14248400 | F3A | 5/18/2020 |
| 7 | E14248401 | F4 | 5/18/2020 |
| 8 | E14248402 | F5 | 5/18/2020 |
| 9 | E14248403 | KW1 | 5/18/2020 |
| 10 | E14248404 | KW2 | 5/18/2020 |
| 11 | E14248405 | KW3 | 5/18/2020 |
| 12 | E14248406 | KW4 | 5/18/2020 |

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, 2020

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.



May 18, 2020

Job Weaver / 3 Adcock Farm / Harnett Truss Truss Type Qty E14248395 J0520-2109 F1 Floor Job Reference (optional)

Comtech, Inc,

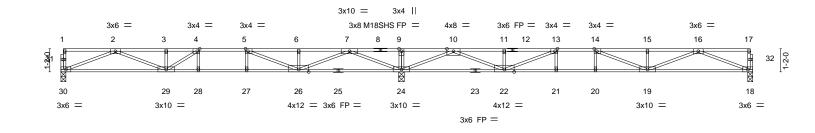
Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:50 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-jYPOd4RJ6Hi3XkJ0Ci41y2xgwDGKWM7VG0DwlyzV8ud

0-1-8



1-10-4 0-1-8 Scale = 1:58.1



| 1 | 34-11-0 | | | | |
|---------------------------|--|---|--|--|--|
| I I | 17-8-12 | | | | |
| -8,Edge], [14:0-1-8,Edge] | | | | | |
| CSI. DEFL. | in (loc) I/defl L/d PLATES | GRIP | | | |
| TC 0.80 Vert(LL) | -0.27 19-20 >791 480 MT20 | 244/190 | | | |
| BC 0.66 Vert(CT) | -0.36 19-20 >585 360 M18SHS | 244/190 | | | |
| WB 0.89 Horz(CT) | 0.05 18 n/a n/a | | | | |
| Matrix-S | Weight: 168 lb | FT = 20%F, 11%E | | | |
| | TC 0.80 Vert(LL) BC 0.66 Vert(CT) WB 0.89 Horz(CT) | -8,Edge], [14:0-1-8,Edge] CSI. DEFL. in (loc) l/defl L/d PLATES TC 0.80 Vert(LL) -0.27 19-20 >791 480 MT20 BC 0.66 Vert(CT) -0.36 19-20 >585 360 M18SHS WB 0.89 Horz(CT) 0.05 18 n/a n/a | | | |

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

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

23-25: 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

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: 24-26,22-24.

REACTIONS. (size) 30=0-3-0, 24=0-3-8, 18=0-3-0

Max Grav 30=817(LC 3), 24=2262(LC 1), 18=851(LC 4)

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

TOP CHORD 2-3=-2725/0, 3-4=-2725/0, 4-5=-2891/0, 5-6=-1981/416, 6-7=-1981/416, 7-9=0/2825,

9-10=0/2825, 10-11=-2107/394, 11-13=-2107/394, 13-14=-3126/0, 14-15=-2925/0,

BOT CHORD 29-30=0/1752, 28-29=0/2891, 27-28=0/2891, 26-27=0/2891, 24-26=-1049/449, 22-24=-1040/517, 21-22=0/3126, 20-21=0/3126, 19-20=0/3126, 18-19=0/1832

9-24=-286/0, 2-30=-1878/0, 2-29=0/1051, 3-29=-293/0, 7-24=-2546/0, 7-26=0/1818,

6-26=-260/23, 5-26=-1378/0, 4-29=-269/380, 10-24=-2610/0, 10-22=0/1879,

11-22=-263/23, 13-22=-1468/0, 16-18=-1964/0, 16-19=0/1180, 15-19=-330/0,

14-19=-295/415

NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 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.



April 1,2020



Job Weaver / 3 Adcock Farm / Harnett Truss Truss Type Qty E14248396 J0520-2109 F1A Floor Job Reference (optional)

Comtech, Inc,

Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:51 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-BlzmqQSxtbqw9uuClPcGVGTredXdFpMeUgzUHOzV8uc

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

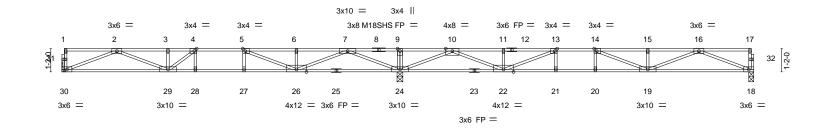
Rigid ceiling directly applied or 2-2-0 oc bracing.

except end verticals.

0-1-8

2-6-0 1-3-0 2-3-12 1-10-4

0-1-8 Scale = 1:57.7



| | | 16-11-4 | | 34-8-0 | |
|---------------------------------|------------------------------|--|---------------------------------------|--|---|
| | 16-11-4 | | | 17-8-12 | l l |
| Plate Offse | ets (X,Y) | [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8 | 3,Edge], [14:0-1-8,Edge] | | |
| LOADING TCLL TCDL BCLL | (psf) 40.0 10.0 0.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES | CSI. TC 0.80 BC 0.98 WB 0.90 | DEFL. in (loc) l/defl L/d Vert(LL) -0.27 19-20 >790 480 Vert(CT) -0.36 19-20 >585 360 Horz(CT) 0.06 18 n/a n/a | PLATES GRIP MT20 244/190 M18SHS 244/190 |
| BCDL | 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 167 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) *Except*

18-23: 2x4 SP 2400F 2.0E(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 30=Mechanical, 24=0-3-8, 18=0-3-0

Max Grav 30=799(LC 3), 24=2252(LC 1), 18=852(LC 4)

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

2-3=-2634/0, 3-4=-2634/0, 4-5=-2766/0, 5-6=-1895/408, 6-7=-1895/408, 7-9=0/2839,

9-10=0/2839, 10-11=-2126/425, 11-13=-2126/425, 13-14=-3140/0, 14-15=-2932/0,

15-16=-2932/0

BOT CHORD 29-30=0/1706, 28-29=0/2766, 27-28=0/2766, 26-27=0/2766, 24-26=-1030/383,

22-24=-1077/540, 21-22=0/3140, 20-21=0/3140, 19-20=0/3140, 18-19=0/1836 9-24=-286/0, 7-24=-2520/0, 7-26=0/1793, 6-26=-261/25, 5-26=-1327/0, 2-30=-1829/0,

2-29=0/1001, 3-29=-304/0, 4-29=-246/393, 10-24=-2613/0, 10-22=0/1881,

11-22=-262/23, 16-18=-1968/0, 16-19=0/1184, 15-19=-330/0, 14-19=-291/423,

13-22=-1476/0

NOTES-

WEBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 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.



April 1,2020



Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248397 |
| J0520-2109 | F2 | Floor | 3 | 1 | |
| | | | | | Job Reference (optional) |

Fayetteville, NC - 28314, Comtech. Inc.

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:52 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-gxX82mTZevynn2TOJ67V1T0431vi_J2ojKi1qqzV8ub

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

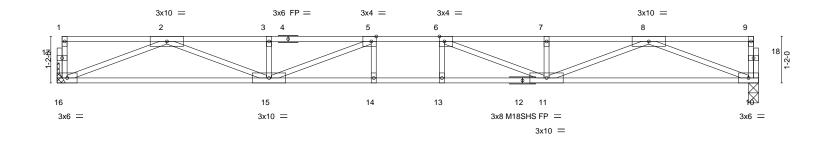
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



1-7-0

0-1-8 Scale = 1:28.9



| - | 17-7-0 17-7-0 | | | | | | | | |
|-------------|------------------|--------------------------------|----------|-------------------------------|-------------------------------|--|--|--|--|
| Plate Offse | ts (X,Y) | [5:0-1-8,Edge], [6:0-1-8,Edge] | | | | | | | |
| LOADING | (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d | PLATES GRIP | | | | |
| TCLL | 40.0 | Plate Grip DOL 1.00 | TC 0.57 | Vert(LL) -0.30 13-14 >702 480 | MT20 244/190 | | | | |
| TCDL | 10.0 | Lumber DOL 1.00 | BC 0.86 | Vert(CT) -0.41 13-14 >508 360 | M18SHS 244/190 | | | | |
| BCLL | 0.0 | Rep Stress Incr YES | WB 0.68 | Horz(CT) 0.07 10 n/a n/a | | | | | |
| BCDL | 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 86 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) **WEBS**

REACTIONS. (size) 10=0-3-0, 16=Mechanical Max Grav 10=947(LC 1), 16=947(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $2\hbox{-}3\hbox{-}3385/0,\,3\hbox{-}5\hbox{-}-3385/0,\,5\hbox{-}6\hbox{-}-3944/0,\,6\hbox{-}7\hbox{-}-3385/0,\,7\hbox{-}8\hbox{-}-3385/0$

BOT CHORD 15-16=0/2071, 14-15=0/3944, 13-14=0/3944, 11-13=0/3944, 10-11=0/2071

WEBS 2-16=-2221/0, 2-15=0/1418, 3-15=-299/0, 8-10=-2221/0, 8-11=0/1418, 7-11=-299/0,

6-11=-885/0, 5-15=-885/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 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.



April 1,2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248398 |
| J0520-2109 | F2A | Floor | 1 | 1 | |
| | | | | | Inh Reference (ontional) |

Comtech. Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:53 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-875WF6TBPC4eOC2btqekahZEdRKYjkTxy_SbMHzV8ua

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

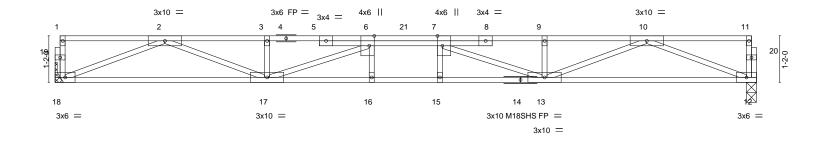
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0-1-8 2-6-0

1-7-0

0-1-8 Scale = 1:28.9



17-7-0 17-7-0 Plate Offsets (X,Y)--[6:0-3-0,Edge], [7:0-3-0,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d 244/190 TCLL 40.0 Plate Grip DOL 1.00 TC 0.58 Vert(LL) -0.31 15-16 >680 480 MT20 BC 0.57 >493 360 M18SHS 244/190 TCDL 10.0 Lumber DOL 1.00 Vert(CT) -0.42 15-16 **BCLL** 0.0 Rep Stress Incr NO WB 0.79 Horz(CT) 0.07 12 n/a n/a BCDL 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 92 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP 2400F 2.0E(flat)

2x4 SP No.3(flat) **WEBS**

REACTIONS. (size) 18=Mechanical, 12=0-3-0 Max Grav 18=1053(LC 1), 12=1054(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-3882/0, 3-6=-3886/0, 6-7=-4960/0, 7-9=-3892/0, 9-10=-3888/0 **BOT CHORD** 17-18=0/2345, 16-17=0/4960, 15-16=0/4960, 13-15=0/4960, 12-13=0/2347

WEBS 2-18=-2516/0, 2-17=0/1659, 10-12=-2519/0, 10-13=0/1663, 7-13=-1348/0, 6-17=-1354/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 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.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 12-18=-10, 1-11=-100

Concentrated Loads (lb) Vert: 21=-213



April 1,2020

M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248399 |
| J0520-2109 | F3 | Floor | 3 | 1 | |
| | | | | | Loh Reference (ontional) |

Comtech. Inc. Fayetteville, NC - 28314,

8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:54 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-cKfuTSUpAWCV0LdnRX9z6u5Nrqb8SD34AeB8ujzV8uZ

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

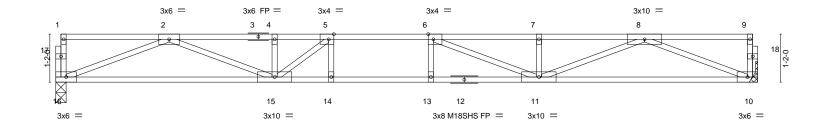
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.





0-1₃8 Scale = 1:28.0



| <u> </u> | 17-0-8 17-0-8 | | | | | | | | |
|-----------------|------------------|---------------------------------------|------------------------|---|-------------------------------|--|--|--|--|
| Plate Offse | ets (X,Y) | [5:0-1-8,Edge], [6:0-1-8,Edge] | | 17 00 | | | | | |
| LOADING TCLL | (psf) 40.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 | CSI. TC 0.74 | DEFL. in (loc) I/defl L/d Vert(LL) -0.30 11-13 >677 480 | PLATES GRIP MT20 244/190 | | | | |
| TCDL BCLL | 10.0 | Lumber DOL 1.00 Rep Stress Incr YES | BC 0.86 WB 0.64 | Vert(CT) -0.40 11-13 >502 360 Horz(CT) 0.06 10 n/a n/a | M18SHS 244/190 | | | | |
| BCDL | 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 83 lb FT = 20%F, 11%E | | | | |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat)

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

10-12: 2x4 SP No.1(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 16=0-3-0, 10=Mechanical

Max Grav 16=917(LC 1), 10=917(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $2-4=-3195/0,\ 4-5=-3195/0,\ 5-6=-3659/0,\ 6-7=-3249/0,\ 7-8=-3249/0$ **BOT CHORD** 15-16=0/2002, 14-15=0/3659, 13-14=0/3659, 11-13=0/3659, 10-11=0/1998

WEBS 2-16=-2148/0, 2-15=0/1288, 8-10=-2143/0, 8-11=0/1350, 7-11=-304/0, 6-11=-781/0,

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Refer to girder(s) for truss to truss connections.
- 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.



April 1,2020



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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Weaver / 3 Adcock Farm / Harnett Truss Truss Type Qty E14248400 J0520-2109 F3A Floor Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:55 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-4WDHgoVRxqKMeVCz_FgCf6eaEEx7BeTEPIxhR9zV8uY

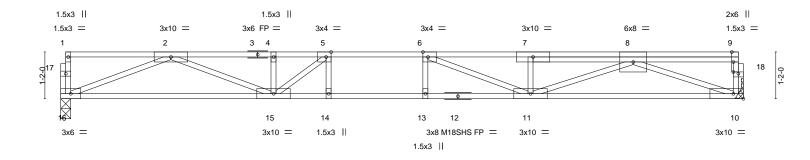
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.



0-1₋8 Scale = 1:28.8



17-0-8 Plate Offsets (X,Y)--[5:0-1-8,Edge], [6:0-1-8,Edge], [9:0-3-0,Edge], [18:0-1-8,0-0-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) I/defI I/d 244/190 TCLL 40.0 Plate Grip DOL 1.00 TC 0.64 Vert(LL) -0.31 11-13 >646 480 MT20 BC 0.82 >476 360 M18SHS 244/190 TCDL 10.0 Lumber DOL 1.00 Vert(CT) -0.42 11-13 BCLL 0.0 Rep Stress Incr NO WB 0.82 Horz(CT) 0.06 10 n/a n/a BCDL 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 90 lb FT = 20%F, 11%E

BOT CHORD

17-0-8

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

3-9: 2x4 SP 2400F 2.0E(flat) 2x4 SP 2400F 2.0E(flat) **BOT CHORD**

WEBS 2x4 SP No.3(flat)

REACTIONS. (size) 16=0-3-0, 10=Mechanical Max Grav 16=973(LC 1), 10=1219(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-3466/0, 4-5=-3466/0, 5-6=-4078/0, 6-7=-3897/0, 7-8=-3900/0 **BOT CHORD** 15-16=0/2142, 14-15=0/4078, 13-14=0/4078, 11-13=0/4078, 10-11=0/2859

WEBS 2-16=-2298/0, 2-15=0/1429, 8-10=-3042/0, 8-11=0/1112, 7-11=-293/14, 6-11=-559/230,

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates 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.

LOAD CASE(S) Standard

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

Vert: 10-16=-10, 1-9=-100 Concentrated Loads (lb)

Vert: 8=-358



M WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



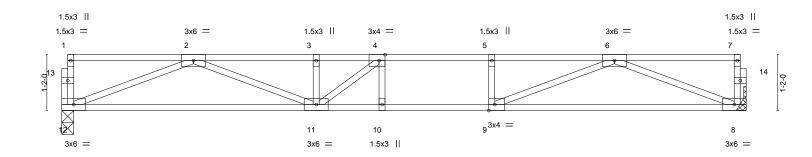
Job Truss Type Weaver / 3 Adcock Farm / Harnett Truss Qty E14248401 J0520-2109 F4 Floor Job Reference (optional)

Comtech. Inc. Fayetteville, NC - 28314, 8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:55 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-4WDHgoVRxqKMeVCz_FgCf6ebZEwmBjeEPIxhR9zV8uY

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

0-1-8 Scale: 1/2"=1

0-1-8 2-6-0 $H \vdash$



14-3-8 14-3-8 Plate Offsets (X,Y)--[4:0-1-8,Edge], [9:0-1-8,Edge] LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defI I/d TCLL 40.0 Plate Grip DOL 1.00 TC 0.55 Vert(LL) -0.20 10-11 >829 480 244/190 MT20 BC 0.84 >655 360 TCDL 10.0 Lumber DOL 1.00 Vert(CT) -0.26 10-11 BCLL 0.0 Rep Stress Incr YES WB 0.49 Horz(CT) 0.04 8 n/a n/a BCDL 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 69 lb FT = 20%F, 11%E

LUMBER-**BRACING-**

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

BOT CHORD 2x4 SP No.1(flat) except end verticals. 2x4 SP No.3(flat) BOT CHORD **WEBS** Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-0, 8=Mechanical Max Grav 12=766(LC 1), 8=766(LC 1)

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

TOP CHORD $2\hbox{-}3\hbox{-}-2475/0,\, 3\hbox{-}4\hbox{-}-2475/0,\, 4\hbox{-}5\hbox{-}-2529/0,\, 5\hbox{-}6\hbox{-}-2529/0$ **BOT CHORD** 11-12=0/1624, 10-11=0/2529, 9-10=0/2529, 8-9=0/1621

WEBS 2-12=-1740/0, 2-11=0/919, 3-11=-271/33, 4-11=-439/212, 6-8=-1737/0, 6-9=0/1035,

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.



MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

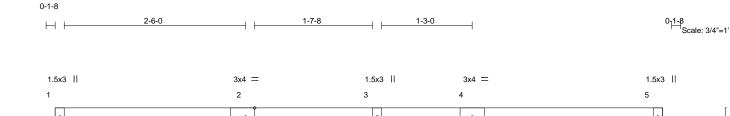


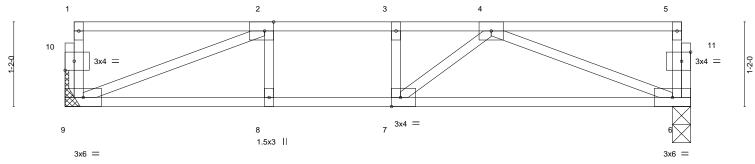


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8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:56 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-Yimfu8W4i7SCFfn9YyBRBJBq4eO0wDWNeygFzczV8uX





8-7-8 8-7-8 Plate Offsets (X,Y)--[2:0-1-8,Edge], [7:0-1-8,Edge], [10:0-1-8,0-1-8], [11:0-1-8,0-1-8] LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP (loc) I/defI I/d 244/190 TCLL 40.0 Plate Grip DOL 1.00 TC 0.31 Vert(LL) -0.07 >999 480 6-7 MT20 TCDL BC >986 360 10.0 Lumber DOL 1.00 0.33 Vert(CT) -0.10 6-7 BCLL 0.0 Rep Stress Incr YES WB 0.26 Horz(CT) 0.01 6 n/a n/a

BRACING-

TOP CHORD

BOT CHORD

Matrix-S

LUMBER-

BCDL

TOP CHORD 2x4 SP No.1(flat) **BOT CHORD** 2x4 SP No.1(flat) 2x4 SP No.3(flat) **WEBS**

5.0

REACTIONS. (size) 9=Mechanical, 6=0-3-0

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-895/0, 3-4=-895/0

BOT CHORD 8-9=0/895, 7-8=0/895, 6-7=0/836 **WEBS** 4-6=-893/0, 2-9=-954/0

- 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.

Max Grav 9=454(LC 1), 6=454(LC 1)

- 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.



Weight: 43 lb

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

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

except end verticals.

FT = 20%F, 11%E

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 permanent. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248403 |
| J0520-2109 | KW1 | GABLE | 1 | 1 | |
| | | | | | Inh Reference (ontional) |

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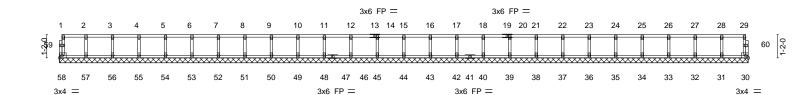
0-1/8

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8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:57 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-0uK15UWiTRb3tpMM6gigkXj3n2pDfkMXtbQoV2zV8uW

0-1/8

Scale = 1:58.0



| LOADIN TCLL TCDL | G (psf) 40.0 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 | CSI. TC 0.06 BC 0.01 | DEFL. Vert(LL) Vert(CT) | in (lo n/a n/a | oc) I/defl - n/a - n/a | L/d 999 999 | PLATES MT20 | GRIP 244/190 |
|------------------------|--------------------------------|--|----------------------------|-------------------------------|----------------------|------------------------------|-------------------|----------------|---------------------|
| BCLL | 0.0 | Rep Stress Incr YES | WB 0.03 | Horz(CT) | 0.00 | 30 n/a | n/a | | |
| BCDL | 5.0 | Code IRC2015/TPI2014 | Matrix-R | | | | | Weight: 142 lb | FT = 20%F, 11%E |

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) 2x4 SP No.3(flat) **WEBS**

2x4 SP No.3(flat) **OTHERS**

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

except end verticals.

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

REACTIONS. All bearings 34-8-0.

 $\text{(lb) - Max Grav} \quad \text{All reactions 250 lb or less at joint(s) 30, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 46, 45, 44, } \\$ 43, 42, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31

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.





| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248404 |
| J0520-2109 | KW2 | GABLE | 1 | 1 | |
| | | | | | Job Reference (optional) |

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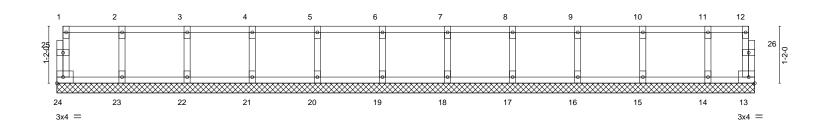
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8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:55:58 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-U5uPlqXKEljwVzxYgNEvHkGEUS9POBbg5F9L1UzV8uV

0-1-8

Scale = 1:23.6





| 1-4-0 1-4-0 | 2-8-0 4-0-0 1-4-0 1-4-0 | 5-4-0 6-8-0 1-4-0 1-4-0 | 8-0-0 1-4-0 | 9-4-0 1-4-0 | 10-8-0 1-4-0 | 12-0-0 1-4-0 1-4-0 | 14-3-8 0-11-8 |
|---|---|---------------------------------------|---|---------------------------------------|---|---------------------------------|--|
| LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI. TC 0.06 BC 0.01 WB 0.03 Matrix-R | DEFL. Vert(LL) Vert(CT) Horz(CT) | in (loc) n/a - n/a - 0.00 13 | l/defl L/d n/a 999 n/a 999 n/a n/a | PLATES MT20 Weight: 61 lb | GRIP 244/190 FT = 20%F, 11%E |

LUMBER-**BRACING-**

TOP CHORD 2x4 SP No.1(flat) BOT CHORD 2x4 SP No.1(flat) 2x4 SP No.3(flat) **WEBS OTHERS** 2x4 SP No.3(flat) TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

REACTIONS. All bearings 14-3-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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) 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.



April 1,2020



| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248405 |
| J0520-2109 | KW3 | GABLE | 1 | 1 | |
| | | | | | Inh Reference (ontional) |

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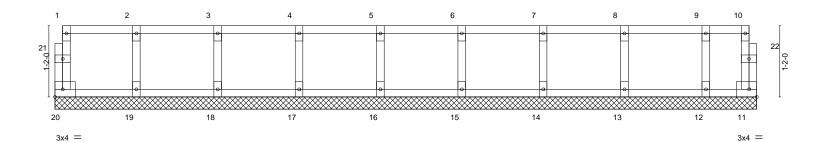
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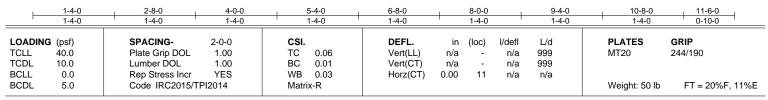
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0-1-8

Scale = 1:18.9





LUMBER-**BRACING-**

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

2x4 SP No.3(flat) **WEBS OTHERS** 2x4 SP No.3(flat)

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

except end verticals.

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

REACTIONS. All bearings 11-6-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

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) 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.



April 1,2020



| Job | Truss | Truss Type | Qty | Ply | Weaver / 3 Adcock Farm / Harnett |
|------------|-------|------------|-----|-----|----------------------------------|
| | | | | | E14248406 |
| J0520-2109 | KW4 | GABLE | 1 | 1 | |
| | | | | | Inh Reference (ontional) |

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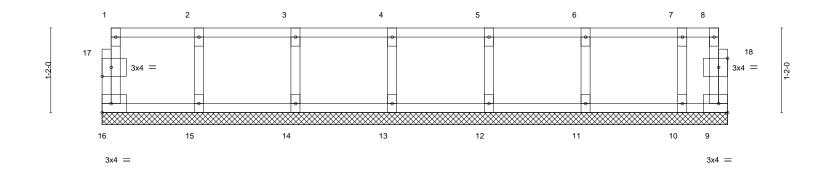
0₁1-8

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8.330 s Mar 23 2020 MiTek Industries, Inc. Wed Apr 1 07:56:00 2020 Page 1 ID:uB1kUybQLa2UVI5EAk1M8Myf?Wk-RT09jVZamMzekG4xnoGNM9LazFros55zZZeS6NzV8uT

0₁1-8

Scale: 3/4"=1"



| H | 1-4-0 1-4-0 | 2-8-0 1-4-0 | 4-0-0 1-4-0 | 5-4-0 1-4-0 | 6-8-0 1-4-0 | 8-0-0 1-4-0 | 8-7-8 0-7-8 |
|---|--|---------------------|---|----------------|---|---------------------------|-------------------------------------|
| | | 18:0-1-8,0-1-8] | 1 + 0 | 140 | 1 4 0 | 140 | 0.70 |
| LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0 | SPACING- Plate Grip I Lumber DC Rep Stress Code IRC2 | DOL 1.00 DL 1.00 | CSI. TC 0.06 BC 0.02 WB 0.03 Matrix-R | Vert(LL) n | in (loc) l/defl L/d /a - n/a 999 /a - n/a 999 l0 9 n/a n/a | PLATES MT20 Weight: 38 lb | GRIP 244/190 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) **WEBS OTHERS** 2x4 SP No.3(flat) **BRACING-**

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

except end verticals.

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

REACTIONS. All bearings 8-7-8.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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.

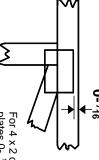


Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

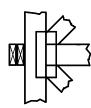
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



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

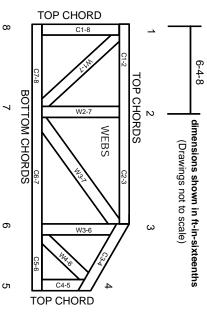
Industry Standards:

National Design Specification for Metal

DSB-89: ANSI/TPI1:

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

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

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
- Ņ Truss bracing must be designed by an engineer. For bracing should be considered may require bracing, or alternative Tor I wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- Cut members to bear tightly against each other

Ģ

- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

œ

- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 10. Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design
- 14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted
- 15. Connections not shown are the responsibility of others.
- 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 project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.