

Trenco 818 Soundside Rd Edenton, NC 27932

Re: J1021-6183

Precision/15 Liberty Meadows/Harnett

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

Pages or sheets covered by this seal: I52908755 thru I52908772

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

North Carolina COA: C-0844



July 5,2022

Gilbert, Eric

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

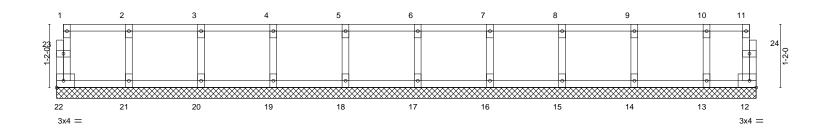
| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| 14004 0400 | FT4 | CARLE | _ | | 152908755 |
| J1021-6183 | EII | GABLE | 1 | 1 | Joh Deference (entional) |

| Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:29 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-Nh_TT_7HPCn8?JUYMpZLlvTbsYwD3eoAd?QquCz?6wW

0118

0₁1₇8

Scale = 1:21.3



| 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 1-1-0 1-1-0 |
|---|---|---|--|----------------|-------------------|--|
| 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. in Vert(LL) n/a Vert(CT) n/a Horz(CT) 0.00 | | 999 999 n/a | PLATES GRIP MT20 244/190 Weight: 55 lb FT = 20%F, 11%E |

LUMBER-**BRACING-**

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

2x4 SP No.3(flat) **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 12-11-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 16, 15, 14, 13

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.



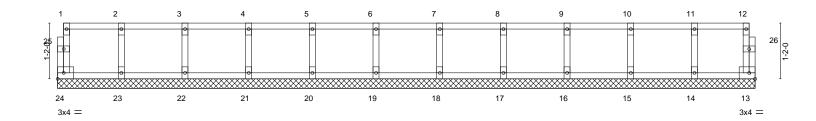


| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| J1021-6183 | FT2 | GABLE | 1 | 1 | 152908756 |
| 01021 0100 | | ONDEE | l ' | | Joh Peteronee (entional) |

| Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:29 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-Nh_TT_7HPCn8?JUYMpZLIvTbuYwH3epAd?QquCz?6wW

0₁1₈

Scale: 1/2"=1'



| 1-4-0 1-4-0 | 2-8-0 4-0-0 5-4 1-4-0 1-4-0 1-4 | | 8-0-0 1-4-0 | 9-4-0 1-4-0 | 10-8-0 1-4-0 | 12-0-0 1-4-0 | 13-4-0 1-4-0 | 14-7-4 |
|---|---|---|---|--------------------------------|--|--------------------------|---------------------------------|--|
| 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 (lo n/a n/a 0.00 1 | nc) l/defl - n/a - n/a 13 n/a | L/d 999 999 n/a | PLATES MT20 Weight: 62 lb | GRIP 244/190 FT = 20%F, 11%E |

LUMBER-**BRACING-**

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

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

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

REACTIONS. All bearings 14-7-4.

(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.



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett | 7 |
|------------|-------|------------|-----|-----|--------------------------------------|---|
| J1021-6183 | FT3 | GABLE | 1 | 1 | 152908757 | |
| 01021-0103 | L13 | OABLE | ' | ' | Joh Deference (entional) | |

Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:30 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-ruYrgK8vAVv_dT2kvW5ar7?mcxGTo52Ksf9ORez?6wV

20

19

18

17

3x4 =

21

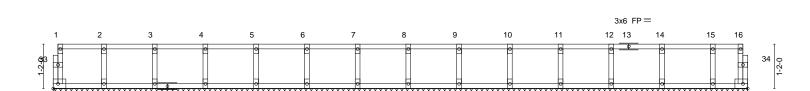
0-<u>11</u>-8

32

3x4 =

31

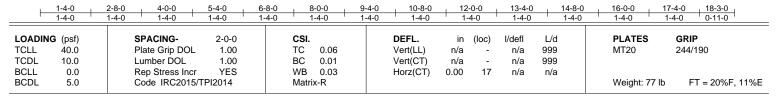
0-1-8 Scale = 1:30.3



24

23

22



LUMBER-**BRACING-**

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

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

25

REACTIONS. All bearings 18-3-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18

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

28

27

26

30 29

3x6 FP =

- 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 | Precision/15 Liberty Meadows/Harnett | |
|------------|-------|------------|-----|-----|--------------------------------------|---|
| | | | | | 15290875 | 8 |
| J1021-6183 | F01 | Floor | 2 | 1 | Job Reference (optional) | |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:31 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-J46Duf9Xxp1rFddwTEcpNKYrALUbXUwT5Jvxz4z?6wU

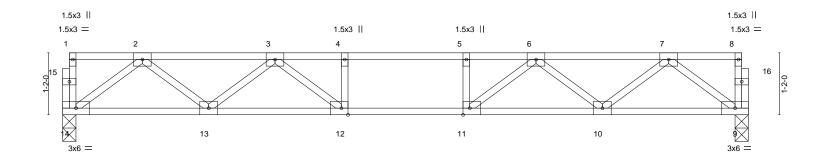
0-1-8

1-3-0 $H \vdash$

2-2-0

0-1-8 Scale = 1:21.7

FT = 20%F, 11%E



| Plate Offsets (X,Y) | [11:0-1-8,Edge], [12:0-1-8,Edge] | dge] | | | | | | | | |
|---------------------|----------------------------------|------------------|------|----------|-------------|--------|-----|--------|---------|--|
| LOADING (psf) | SPACING- 2 | -0-0 CSI. | | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL 40.0 | Plate Grip DOL | 1.00 TC | 0.39 | Vert(LL) | -0.10 12-13 | >999 | 480 | MT20 | 244/190 | |
| TCDL 10.0 | Lumber DOL | 1.00 BC | 0.47 | Vert(CT) | -0.13 12-13 | >999 | 360 | | | |
| DOLL 0.0 | D Ot 1 \ | /FO W/D | 0.04 | LI (OT) | 0.00 | 1- | / | | | |

TOP CHORD

12-11-0

TC **BCLL** Rep Stress Incr WB 0.31 0.0 Horz(CT) 0.03 n/a n/a **BCDL** 5.0 Code IRC2015/TPI2014 Matrix-S Weight: 64 lb LUMBER-**BRACING-**

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.

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

2x4 SP No.1(flat)

(size) 14=0-3-0, 9=0-3-0

Max Grav 14=690(LC 1), 9=690(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1356/0, 3-4=-2072/0, 4-5=-2072/0, 5-6=-2072/0, 6-7=-1356/0 TOP CHORD **BOT CHORD** 13-14=0/854, 12-13=0/1823, 11-12=0/2072, 10-11=0/1823, 9-10=0/854 **WEBS** 2-14=-1069/0, 2-13=0/654, 3-13=-609/0, 3-12=0/526, 4-12=-251/0, 7-9=-1069/0,

7-10=0/654, 6-10=-609/0, 6-11=0/526, 5-11=-251/0

NOTES-

TOP CHORD

REACTIONS.

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



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

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

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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

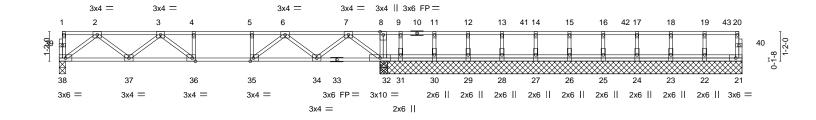


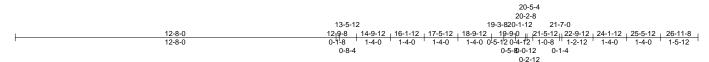
| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| | | | | | 152908759 |
| J1021-6183 | F02 | GABLE | 1 | 1 | |
| | | | | | Inh Reference (ontional) |

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0-1-8

HI-3-0 2-2-0 0-1-8 Scale = 1:45.5





| Tiate Officeto (71,1) | [00:0 1 0,2490], [00:0 1 0,2490] | | | |
|-----------------------|----------------------------------|----------|-------------------------------|--------------------------------|
| 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 0.31 | Vert(LL) -0.08 35 >999 480 | MT20 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.44 | Vert(CT) -0.11 35-36 >999 360 | |
| BCLL 0.0 | Rep Stress Incr NO | WB 0.31 | Horz(CT) 0.03 21 n/a n/a | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 141 lb FT = 20%F, 11%E |

LUMBER-2x4 SP No 1(flat)

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

2x4 SP No.3(flat) WFBS **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 14-3-8 except (jt=length) 38=0-3-0.

Plate Offsets (X-Y)-- [35:0-1-8 Edge] [36:0-1-8 Edge]

(lb) - Max Grav All reactions 250 lb or less at joint(s) 21, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22 except 38=693(LC 1), 32=811(LC 1), 32=811(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1362/0, 3-4=-2090/0, 4-5=-2090/0, 5-6=-2090/0, 6-7=-1365/0 **BOT CHORD** 37-38=0/857, 36-37=0/1833, 35-36=0/2090, 34-35=0/1843, 32-34=0/906 WFBS 2-38=-1073/0, 2-37=0/657, 3-37=-613/0, 3-36=0/328, 7-32=-1054/0, 7-34=0/599,

6-34=-622/0, 6-35=0/316

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 studs spaced at 1-4-0 oc.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 21-38=-10, 1-20=-100

Concentrated Loads (lb)

Vert: 10=-91 12=-91 15=-91 18=-91 41=-91 42=-91 43=-97



July 5,2022



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| | Γ02 | | | | 152908760 |
| J1021-6183 | F03 | Floor | 2 | 1 | Job Reference (optional) |

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

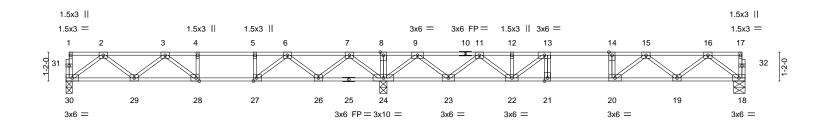
Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

0-1-8



0-1-8 Scale = 1:46.5 2-4-4



| | 12-9-12 12-9-12 | | 27-5-0 14-7-4 | | | | | |
|----------------------|---|------------------------|--|--------------|--|--|--|--|
| Plate Offsets (X | | | 14-7-4 | | | | | |
| LOADING (psf) | SPACING- 2-0-0 Plate Grip DOL 1.00 | CSI. TC 0.68 | DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.13 19-20 >999 480 MT20 244/1 | 20 | | | | |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.63 | Vert(CT) -0.17 19-20 >999 360 | 10 | | | | |
| BCLL 0.0 BCDL 5.0 | Rep Stress Incr YES Code IRC2015/TPI2014 | WB 0.48 Matrix-S | Horz(CT) 0.04 18 n/a n/a Weight: 138 lb FT = | = 20%F, 11%E | | | | |

BRACING-TOP CHORD

BOT CHORD

LUMBER-TOP CHORD

REACTIONS.

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

BOT CHORD

WFBS 2x4 SP No.3(flat)

(size) 30=0-3-0, 24=0-3-8, 18=0-5-8

Max Grav 30=622(LC 3), 24=1745(LC 1), 18=703(LC 4)

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

2-3=-1194/0, 3-4=-1654/37, 4-5=-1654/37, 5-6=-1654/37, 6-7=-672/600, 7-8=0/1680, TOP CHORD

8-9=0/1680, 9-11=-614/251, 11-12=-1757/0, 12-13=-1757/0, 13-14=-2140/0,

14-15=-2140/0 15-16=-1387/0

29-30=0/765, 28-29=0/1565, 27-28=-37/1654, 26-27=-342/1240, 24-26=-851/100, **BOT CHORD**

23-24=-636/0, 22-23=-29/1311, 21-22=0/2140, 20-21=0/2140, 19-20=0/1867,

18-19=0/870

WEBS 2-30=-956/0, 2-29=0/558, 3-29=-484/29, 7-24=-1270/0, 7-26=0/836, 6-26=-866/0,

 $6-27=0/832,\ 5-27=-373/0,\ 16-18=-1089/0,\ 16-19=0/673,\ 15-19=-625/0,\ 15-20=-17/423,$

9-24=-1409/0, 9-23=0/999, 11-23=-961/0, 11-22=0/614, 13-22=-762/0

NOTES-

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





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



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| | | | | | 152908761 |
| J1021-6183 | F04 | Floor | 7 | 1 | |
| | | | | | Inh Reference (ontional) |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:35 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-CrLkj1C2_2XHkExii4gIYAjXAysXTlw3?xt96rz?6wQ

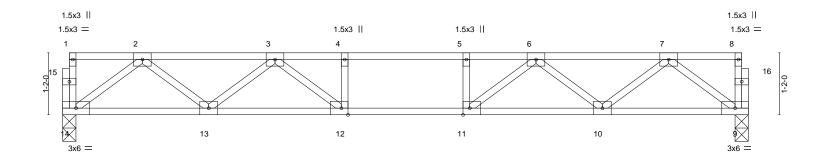
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.



0-1-8 Scale = 1:21.7



| T. | 12-11-0 | I |
|---------------------|----------------------------------|---|
| | 12-11-0 | |
| Plate Offsets (X,Y) | [11:0-1-8,Edge], [12:0-1-8,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 0.39 | Vert(LL) -0.10 12-13 >999 480 | MT20 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.47 | Vert(CT) -0.13 12-13 >999 360 | |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.31 | Horz(CT) 0.03 9 n/a n/a | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 64 lb FT = 20%F, 11%E |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 14=0-3-0, 9=0-3-0

Max Grav 14=690(LC 1), 9=690(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. 2-3=-1356/0, 3-4=-2072/0, 4-5=-2072/0, 5-6=-2072/0, 6-7=-1356/0 TOP CHORD 13-14=0/854, 12-13=0/1823, 11-12=0/2072, 10-11=0/1823, 9-10=0/854 **BOT CHORD WEBS** 2-14=-1069/0, 2-13=0/654, 3-13=-609/0, 3-12=0/526, 4-12=-251/0, 5-11=-251/0,

7-9=-1069/0, 7-10=0/654, 6-10=-609/0, 6-11=0/526

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.





| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| | | | | | I52908762 |
| J1021-6183 | F05 | Floor | 2 | 1 | |
| | | | l | | I loh Reference (ontional) |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:36 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-g2v6xNCglLf8LOWuGnC_4OFkVMDKCmiCEbcielz?6wP

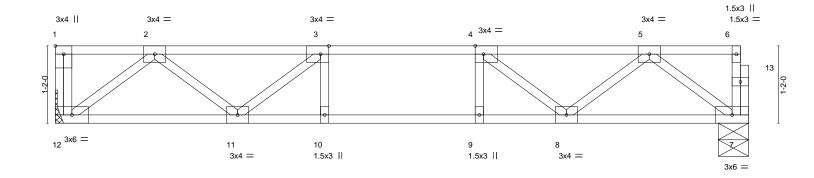
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0,1,8 1-3-0

Scale = 1:17.4



| 1 | | | | 10-5-8 | Ĺ | |
|-------|---------------|---|-------|--------|---|--|
| | | | | 10-5-8 | | |
| Plate | Offsets (X,Y) | [1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8, | Edge] | | | |
| | | | | | | |

| Plate Off | Plate Offsets (X,Y) [1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge] | | | | | | | | |
|--------------|--|---------------------------------------|---------------------|--|--|--|--|--|--|
| LOADIN | G (psf) 40.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 | CSI. TC 0.29 | DEFL. in (loc) l/defl L/d PLATES GRIP Vert(LL) -0.06 9 >999 480 MT20 244/190 | | | | | |
| TCDL BCLL | 10.0 | Lumber DOL 1.00 Rep Stress Incr YES | BC 0.43 WB 0.21 | Vert(CT) -0.08 9 >999 360 Horz(CT) 0.01 7 n/a n/a | | | | | |
| BCDL | 5.0 | Code IRC2015/TPI2014 | Matrix-S | Weight: 53 lb FT = 20%F, 1 | | | | | |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD

WFBS 2x4 SP No.3(flat)

REACTIONS. (size) 12=Mechanical, 7=0-5-8 Max Grav 12=561(LC 1), 7=555(LC 1)

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

TOP CHORD 2-3=-1018/0, 3-4=-1348/0, 4-5=-1018/0

BOT CHORD 11-12=0/675, 10-11=0/1348, 9-10=0/1348, 8-9=0/1348, 7-8=0/674 **WEBS** 2-12=-847/0, 2-11=0/446, 3-11=-465/0, 5-7=-843/0, 5-8=0/447, 4-8=-465/0

NOTES-

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





| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| 14004 0400 | F00 | - | | | 152908763 |
| J1021-6183 | F06 | Floor | 2 | 1 | Job Reference (optional) |

Fayetteville, NC - 28314, Comtech, Inc.

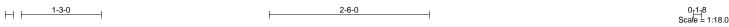
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:36 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-g2v6xNCglLf8LOWuGnC_4OFjeMCoCmTCEbcielz?6wP

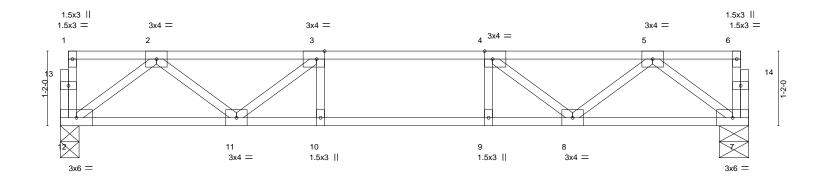
Structural wood sheathing directly applied or 6-0-0 oc purlins,

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

except end verticals.

0-1-8





| i i | 10-9-0 | |
|---------------------|-------------------------------|--|
| | 10-9-0 | |
| Plate Offsets (X Y) | [3:0-1-8 Edge] [4:0-1-8 Edge] | |

| _ Flate Off | Fiate Offsets (A, I) [5.0-1-6,Euge], [4.0-1-6,Euge] | | | | | | | | | | | |
|-------------|---|--------------------|------|-------|------|----------|-------|-------|--------|-----|---------------|-----------------|
| LOADING | G (psf) | SPACING- 2- | -0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 40.0 | Plate Grip DOL 1 | 1.00 | TC | 0.34 | Vert(LL) | -0.08 | 10 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL 1 | 1.00 | BC | 0.46 | Vert(CT) | -0.09 | 10 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr Y | /ES | WB | 0.23 | Horz(CT) | 0.02 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2015/TPI20 | 14 | Matri | x-S | | | | | | Weight: 53 lb | FT = 20%F, 11%E |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD

2x4 SP No.3(flat) WFBS

REACTIONS. (size) 12=0-3-8, 7=0-5-8

Max Grav 12=571(LC 1), 7=571(LC 1)

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

2-3=-1060/0, 3-4=-1416/0, 4-5=-1060/0 TOP CHORD

BOT CHORD 11-12=0/693, 10-11=0/1416, 9-10=0/1416, 8-9=0/1416, 7-8=0/693 **WEBS** 5-7=-867/0, 5-8=0/478, 4-8=-504/0, 2-12=-867/0, 2-11=0/478, 3-11=-504/0

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) 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.



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/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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



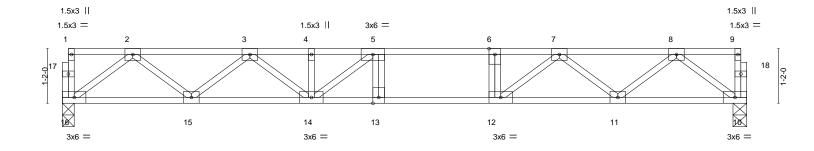
| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| | | | | | 152908764 |
| J1021-6183 | F07 | Floor | 8 | 1 | Job Reference (optional) |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:37 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-8ETU8jDIWfn?zY54qUjDdboqwmS5xBKMTFMFBkz?6wO



2-2-12

 0_{1} 8 Scale = 1:24.6



| | 14-7-4 | | | | | | | | |
|---------|---------|----------------------|----------|----------------------|------------|---------------|-----------------|--|--|
| LOADING | G (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) | I/defl L/d | PLATES (| GRIP | | |
| TCLL | 40.0 | Plate Grip DOL 1.00 | TC 0.63 | Vert(LL) -0.19 13-14 | >899 480 | MT20 2 | 244/190 | | |
| TCDL | 10.0 | Lumber DOL 1.00 | BC 0.84 | Vert(CT) -0.25 13-14 | >677 360 | | | | |
| BCLL | 0.0 | Rep Stress Incr YES | WB 0.38 | Horz(CT) 0.04 10 | n/a n/a | | | | |
| BCDL | 5.0 | Code IRC2015/TPI2014 | Matrix-S | | | Weight: 76 lb | FT = 20%F, 11%E | | |

14-7-4

LUMBER-**BRACING-**

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

2x4 SP No.1(flat) except end verticals.

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

REACTIONS. (size) 16=0-3-0, 10=0-3-8 Max Grav 16=783(LC 1), 10=783(LC 1)

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

TOP CHORD 2-3=-1588/0, 3-4=-2523/0, 4-5=-2523/0, 5-6=-2640/0, 6-7=-2640/0, 7-8=-1576/0 **BOT CHORD** 15-16=0/974, 14-15=0/2173, 13-14=0/2640, 12-13=0/2640, 11-12=0/2170, 10-11=0/974

WEBS 2-16=-1219/0, 2-15=0/799, 3-15=-762/0, 3-14=0/448, 8-10=-1220/0, 8-11=0/783, 7-11=-774/0, 7-12=0/772,

6-12=-332/0, 5-14=-488/129

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett | _ |
|------------|-------|------------|-----|-----|--------------------------------------|---|
| J1021-6183 | F08 | Floor | 3 | 1 | Is290876 | 5 |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:38 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-cQ1sM3EwHzvsbigHNCES9pL_FAn4gdTViv5pjAz?6wN

0-1-8





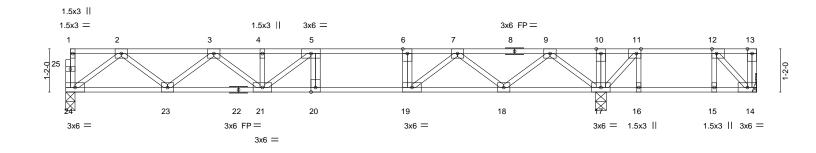


14_r7-0 16-0-4 18-8-0

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

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

except end verticals.



| | | | 14-5-8 | 8 | | 0-1 | -8 1-5-4 | 2-7-12 |
|-------------|-----------|--------------------------------|-----------------|---------------|------------------|--------|---------------|-----------------|
| Plate Offse | ets (X,Y) | [11:0-1-8,Edge], [12:0-1-8,Edg | e <u>j</u> | | | | I | |
| LOADING | (psf) | SPACING- 2-0 | -0 CSI . | DEFL. | in (loc) I/def | fl L/d | PLATES | GRIP |
| TCLL | 40.0 | Plate Grip DOL 1.0 | 00 TC 0. | 0.66 Vert(LL) | -0.19 20-21 >897 | 7 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL 1.0 | 00 BC 0. | 0.86 Vert(CT) | -0.26 20-21 >67 | 1 360 | | |
| BCLL | 0.0 | Rep Stress Incr YE | S WB 0. | 0.39 Horz(CT) | 0.03 14 n/a | a n/a | | |
| BCDL | 5.0 | Code IRC2015/TPI201 | Matrix-S | S | | | Weight: 97 lb | FT = 20%F, 11%E |

BRACING-TOP CHORD

BOT CHORD

14-5-8

LUMBER-

REACTIONS.

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

WFBS 2x4 SP No.3(flat)

(size) 24=0-3-0, 14=Mechanical, 17=0-3-8

Max Uplift 14=-28(LC 3)

Max Grav 24=758(LC 10), 14=198(LC 4), 17=1131(LC 1)

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

2-3=-1523/0, 3-4=-2404/0, 4-5=-2404/0, 5-6=-2447/0, 6-7=-2447/0, 7-9=-1295/0, TOP CHORD 9-10=0/414 10-11=0/414

BOT CHORD 23-24=0/940, 21-23=0/2079, 20-21=0/2447, 19-20=0/2447, 18-19=0/1923, 17-18=0/675

 $2-24=-1177/0,\ 2-23=0/759,\ 3-23=-723/0,\ 3-21=0/415,\ 5-21=-377/165,\ 11-17=-575/0,$

 $6-19=-346/0,\ 9-17=-1260/0,\ 9-18=0/814,\ 7-18=-827/0,\ 7-19=0/801$

NOTES-

WFBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 14.
- 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.





| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| | | | | | I52908766 |
| J1021-6183 | F09 | FLOOR | 2 | 1 | |
| | | | | | Inh Reference (ontional) |

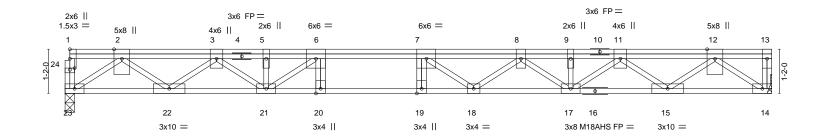
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:39 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-4dbFZOFZ2G1jCsETxvlhi0tFkaC_P2xewZrMFdz?6wM

0-1-8



2-5-0

Scale = 1:30.4



| | | 10 0 0 | | |
|--------------------|----------------------|----------|---|---|
| Plate Offsets (X,Y | [24:0-1-8,0-0-8] | | | |
| 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 0.29 | Vert(LL) -0.27 19 >829 480 MT20 244/190 | |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.56 | Vert(CT) -0.37 19 >604 360 M18AHS 186/179 | |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.57 | Horz(CT) 0.07 14 n/a n/a | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | Weight: 121 lb FT = 20%F, 11%E | Ε |

18-8-0 18-8-0

LUMBER-TOP CHORD

2x4 SP 2400F 2 0F(flat) 2x4 SP 2400F 2.0E(flat)

BOT CHORD WFBS

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.

(size) 23=0-3-0, 14=Mechanical Max Grav 23=1007(LC 1), 14=1013(LC 1)

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

TOP CHORD 2-3=-2266/0, 3-5=-3793/0, 5-6=-3793/0, 6-7=-4583/0, 7-8=-4515/0, 8-9=-3820/0,

9-11=-3820/0, 11-12=-2265/0

 $22 - 23 = 0/1332, \ 21 - 22 = 0/3160, \ 20 - 21 = 0/4583, \ 19 - 20 = 0/4583, \ 18 - 19 = 0/4583, \ 17 - 18 = 0/4376.$ BOT CHORD 15-17=0/3158, 14-15=0/1335

2-23=-1632/0, 2-22=0/1187, 3-22=-1135/0, 3-21=0/791, 5-21=-152/264, 6-21=-1230/0,

12-14=-1639/0, 12-15=0/1182, 11-15=-1134/0, 11-17=0/826, 8-17=-694/0, 8-18=-51/450,

7-18=-460/197

NOTES-

WFBS

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 3x6 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.



July 5,2022

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



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett | |
|------------|-------|------------|-----|-----|--------------------------------------|--|
| J1021-6183 | F10 | FLOOR | 6 | 1 | I5290876: | |

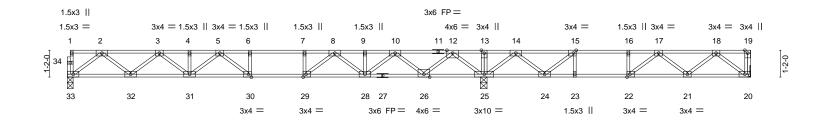
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:40 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-Yp8dnkGBpa9aq?pfVdGwFEQEWzRS8UUo9Davn3z?6wL

0-1-8

H| 1-3-0

2-2-8

Scale = 1:50.1



| <u> </u> | | | 17-11- 17-11- | - | | | 18 ₁ 1-8 0-2-0 | | | 29-8-8 11-7-0 | |
|-------------------------|-----------------------|---|-----------------------|-----------------|---------------|--------------------------------------|--|------------------------|-------------------|------------------|---------------------|
| Plate Offse | ets (X,Y) | [15:0-1-8,Edge], [22:0-1-8 | ,Edge], [29:0 | -1-8,Edge], [30 | 0:0-1-8,Edge] | | | | | | |
| LOADING TCLL TCDL | (psf) 40.0 10.0 | SPACING- Plate Grip DOL Lumber DOL | 2-0-0 1.00 1.00 | | 0.99 0.99 | DEFL. Vert(LL) Vert(CT) | in (loc) -0.26 30-31 -0.36 30-31 | l/defl >823 >600 | L/d 480 360 | PLATES MT20 | GRIP 244/190 |
| BCLL BCDL | 0.0 5.0 | Rep Stress Incr Code IRC2015/TP | NO 12014 | WB Matrix- | 0.61 -S | Horz(CT) | 0.05 20 | n/a | n/a | Weight: 148 lb | FT = 20%F, 11%E |

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

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

20-27: 2x4 SP No.1(flat)

WFBS 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 6-0-0 oc bracing.

REACTIONS. 33=0-3-0, 20=Mechanical, 25=0-3-8

Max Grav 33=898(LC 10), 20=2169(LC 4), 25=1886(LC 1)

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

TOP CHORD 19-20=-1643/0, 2-3=-1874/0, 3-4=-3084/0, 4-5=-3084/0, 5-6=-3482/0, 6-7=-3482/0,

7-8=-3482/0, 8-9=-2443/0, 9-10=-2443/0, 10-12=-826/1, 12-13=0/1900, 13-14=0/1900,

2-3-0

14-15=-676/883, 15-16=-1302/420, 16-17=-1302/420, 17-18=-1054/5

32-33=0/1122, 31-32=0/2601, 30-31=0/3398, 29-30=0/3482, 28-29=0/2993, 26-28=0/1748,

 $25 - 26 = -546/0,\ 24 - 25 = -1224/146,\ 23 - 24 = -420/1302,\ 22 - 23 = -420/1302,\ 21 - 22 = -120/1343,$ 20-21=0/690

WEBS $2\text{-}33\text{=-}1405/0,\ 2\text{-}32\text{=-}0/979,\ 3\text{-}32\text{=-}946/0,\ 3\text{-}31\text{=-}0/616,\ 12\text{-}25\text{=-}1699/0,\ 12\text{-}26\text{=-}0/1281,}$

10-26=-1238/0, 10-28=0/928, 18-20=-865/0, 8-28=-749/0, 18-21=-29/474,

17-21=-375/150, 14-25=-1116/0, 14-24=0/880, 8-29=0/885, 5-31=-401/0, 5-30=-222/420,

7-29=-385/0, 15-24=-1099/0, 17-22=-433/0, 15-23=0/291

NOTES-

BOT CHORD

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

LOAD CASE(S) Standard

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

Vert: 20-33=-10, 1-19=-100 Concentrated Loads (lb)

Vert: 19=-1600



July 5,2022

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| Job | Truss | Truss Type | Qty Ply Precision/15 Liberty Meadows/Harne | | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|--|---|--------------------------------------|
| J1021-6183 | F11 | FLOOR | 1 | 1 | I52908768 |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:42 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-VBGNBQHRLBQI3Jz2c2IOKfVeAnC2cHK5dX30sxz?6wJ

29-8-8

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

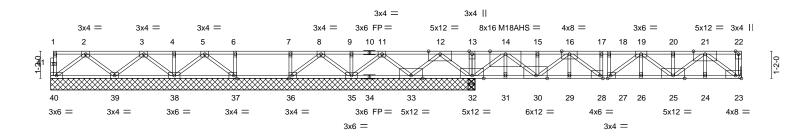
ORTH

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

0-1-8

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

Scale = 1:49.6



| | | | 18-1-8 | 3 | | 0-1 ¹ -8 | | 11- | 5-8 | |
|---------------|-------------------------|-------------------------------|----------------|---------------------------|----------------------|-------------------------|----------------|------------|----------------|---------------------|
| Plate C | Offsets (X,Y) | [23:Edge,0-1-8], [27:0-1- | 8,Edge], [28:0 | -1-8,Edge], [30:0-5-12,Ed | ge], [36:0-1-8,Edg | e], [37:0-1-8,Ec | lge] | | | |
| LOADI TCLL | NG (psf) 40.0 | SPACING- Plate Grip DOL | 2-0-0 1.00 | CSI. TC 0.72 | DEFL. Vert(LL) | in (loc) -0.14 26-27 | l/defl >998 | L/d 480 | PLATES MT20 | GRIP 244/190 |
| TCDL BCLL | 10.0 0.0 | Lumber DOL Rep Stress Incr | 1.00 NO | BC 0.67 WB 0.97 | Vert(CT) Horz(CT) | -0.19 26-27 0.03 23 | >726 | 360 n/a | M18AHS | 186/179 |
| BCDL | 5.0 | Code IRC2015/TF | PI2014 | Matrix-S | | | | | Weight: 159 lb | FT = 20%F, 11%E |

BRACING-

TOP CHORD

BOT CHORD

18-3-0

except end verticals.

LUMBER-TOP CHORD

2x4 SP 2400F 2.0E(flat) *Except* 1-10: 2x4 SP No.1(flat)

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

34-40: 2x4 SP No.1(flat) **WEBS** 2x4 SP No.3(flat) *Except*

12-33,14-32,14-30: 2x4 SP No.2(flat)

REACTIONS. All bearings 18-3-0 except (jt=length) 23=Mechanical.

Max Uplift All uplift 100 lb or less at joint(s) except 33=-1195(LC 4), 35=-133(LC 4) (lb) -

18-1-8

Max Grav All reactions 250 lb or less at joint(s) 40, 36, 35 except 39=288(LC 3), 38=291(LC 3), 37=281(LC 1),

32=4730(LC 1), 32=4730(LC 1), 23=2214(LC 4)

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

22-23=-264/0, 11-12=0/849, 12-13=0/4523, 13-14=0/4523, 14-15=-1927/0, 15-16=-1927/0, 16-17=-4941/0, 17-18=-4941/0, 18-19=-4941/0, 19-20=-4260/0,

20-21=-4260/0

BOT CHORD 33-35=-443/0, 32-33=-2587/0, 31-32=-834/0, 30-31=-834/0, 29-30=0/3814,

28-29=0/3814, 27-28=0/4941, 26-27=0/5090, 25-26=0/5090, 24-25=0/2671, 23-24=0/2671

12-32=-2529/0, 12-33=0/2331, 14-32=-4562/0, 14-30=0/3443, 15-30=-612/0,

16-30=-2370/0, 16-28=0/1465, 17-28=-581/0, 21-23=-3299/0, 21-25=0/1994,

20-25=-570/0, 19-25=-1041/0, 19-27=-323/0, 13-32=-448/0, 11-33=-608/0, 11-35=0/388

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1195 lb uplift at joint 33 and 133 lb uplift
- 7) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
- 8) 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.
- 9) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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

July 5,2022



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett | IE2000760 |
|------------|-------|------------|-----|-----|--------------------------------------|-----------|
| J1021-6183 | F11 | FLOOR | 1 | 1 | In Reference (optional) | 8 |

Comtech, Inc,

Fayetteville, NC - 28314,

| Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:42 2022 Page 2
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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 23-40=-10, 1-13=-100, 13-22=-450

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

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

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



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| J1021-6183 | F12 | Floor | 6 | 1 | I52908769 |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:43 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-zOqlPml36VY8hTYEAlqdss2pvBVtLrTErBpaOOz?6wl

Structural wood sheathing directly applied or 5-10-10 oc purlins,

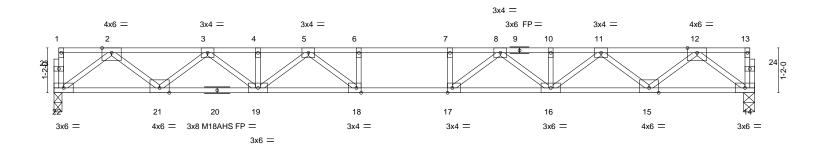
Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.

0-1-8



0-1-8 Scale = 1:30.0



| | | | 1000 | |
|---------------------|----------------------------------|----------|-------------------------------|-------------------------------|
| Plate Offsets (X,Y) | [17:0-1-8,Edge], [18:0-1-8,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 0.73 | Vert(LL) -0.31 17-18 >702 480 | MT20 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.88 | Vert(CT) -0.42 17-18 >510 360 | M18AHS 186/179 |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.53 | Horz(CT) 0.07 14 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

18-3-0

LUMBER-TOP CHORD

REACTIONS.

BOT CHORD

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

WFBS 2x4 SP No.3(flat)

(size) 22=0-2-8, 14=0-3-8

Max Grav 22=984(LC 1), 14=984(LC 1)

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

TOP CHORD 2-3=-2093/0, 3-4=-3504/0, 4-5=-3504/0, 5-6=-4222/0, 6-7=-4222/0, 7-8=-4222/0,

8-10=-3504/0, 10-11=-3504/0, 11-12=-2093/0 21-22=0/1237, 19-21=0/2914, 18-19=0/3934, 17-18=0/4222, 16-17=0/3934, 15-16=0/2914,

14-15=0/1237 WFBS

 $2-22 = -1550/0, \ 2-21 = 0/1113, \ 3-21 = -1069/0, \ 3-19 = 0/753, \ 5-19 = -549/0, \ 5-18 = -46/715, \ 5-19 = -549/0,$ 6-18=-333/0, 7-17=-333/0, 12-14=-1550/0, 12-15=0/1113, 11-15=-1069/0, 11-16=0/753,

8-16=-549/0, 8-17=-46/715

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) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22.
- 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 | Precision/15 Liberty Meadows/Harnett |
|------------|-------|------------|-----|-----|--------------------------------------|
| 14004 0400 | F04 | Floor | _ | | 152908770 |
| J1021-6183 | FG1 | Floor | 1 | 1 | Job Reference (optional) |

Fayetteville, NC - 28314, Comtech, Inc.

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:44 2022 Page 1 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-RaO8c6Jhtpg?Jd7QkTLsP4bwqbrh4BMO4rY7wqz?6wH

0-1-8

H| 1-3-0

2-2-4

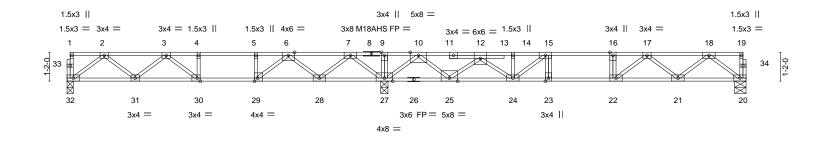
2-4-4

27-5-0

Structural wood sheathing directly applied, except end verticals.

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

0-1-8 Scale = 1:46.5



| | 12-9-12 | | 14-7-4 | 1 |
|--|---|---------------------------------------|--|---|
| Plate Offsets (X,Y) | [29:0-1-8,Edge], [30:0-1-8,Edge] | | | |
| LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 | SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr NO | CSI. TC 0.97 BC 0.78 WB 1.00 | DEFL. in (loc) l/defl L/d Vert(LL) -0.21 23-24 >812 480 Vert(CT) -0.28 23-24 >613 360 Horz(CT) 0.03 20 n/a n/a n/a | PLATES GRIP MT20 244/190 M18AHS 186/179 |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | 11012(01) 0.03 20 11/4 11/4 | Weight: 141 lb FT = 20%F, 11%E |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.1(flat) *Except* 1-8: 2x4 SP 2400F 2.0E(flat)

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

20-26: 2x4 SP 2400F 2.0E(flat)

WEBS 2x4 SP No.3(flat)

REACTIONS.

(size) 32=0-3-0, 27=0-3-8, 20=0-5-8

Max Uplift 32=-10(LC 4)

Max Grav 32=510(LC 3), 27=2558(LC 1), 20=845(LC 4)

12-9-12

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

2-3=-929/93, 3-4=-981/638, 4-5=-981/638, 5-6=-981/638, 6-7=0/1569, 7-9=0/2870, TOP CHORD 9-10=0/2870, 10-12=-1198/0, 12-14=-3058/0, 14-15=-3052/0, 15-16=-3020/0,

16-17=-3020/0, 17-18=-1717/0

BOT CHORD 31-32=-33/618, 30-31=-246/1154, 29-30=-638/981, 28-29=-1180/303, 27-28=-1922/0, $25-27 = -917/0,\ 24-25 = 0/2867,\ 23-24 = 0/3020,\ 22-23 = 0/3020,\ 21-22 = 0/2405,\ 20-21 = 0/1051$ **WEBS** 2-32=-773/43, 2-31=-78/405, 3-31=-292/198, 3-30=-536/0, 7-27=-1422/0, 7-28=0/970,

6-28=-1037/0, 6-29=0/1139, 5-29=-522/0, 18-20=-1317/0, 18-21=0/867, 17-21=-895/0,

17-22=0/849, 16-22=-348/0, 10-27=-2560/0, 10-25=0/2104, 12-25=-2172/0,

12-24=-53/285, 15-24=-210/292

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 3x6 MT20 unless otherwise indicated.
- 4) Plates checked for a plus or minus 1 degree rotation about its center.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 32.
- 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.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 935 lb down at 16-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 20-32=-10, 1-19=-100



July 5,2022

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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

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/TPI1 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 | Precision/15 Liberty Meadows/Harnett | |
|------------|-------|------------|-----|-----|--------------------------------------|---|
| J1021-6183 | FG1 | Floor | 1 | 1 | I5290877(| J |

Job Reference (optional)

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:44 2022 Page 2
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LOAD CASE(S) Standard Concentrated Loads (lb) Vert: 12=-855(B)



| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett | |
|------------|-------|------------|-----|-----|--------------------------------------|---|
| | F00 | | | | 15290877 | 1 |
| J1021-6183 | FG2 | FLOOR | 1 | 1 | | |
| | | | | | Job Reference (optional) | |

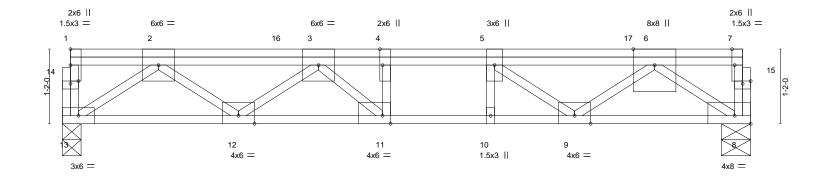
8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:45 2022 Page 1 $ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-vmyWqSJJe6oswnidlAs5xH7Dz_B4pg9XJVlgTGz?6wG$

0-1-8 1-3-0

H +



0₁1₇8 Scale = 1:18.0



| | 10-9-0 | | | | | | | | | | | |
|------------|---|-----------------|-------|---------|----------|-------|-------|--------|-----|--------|---------|--|
| Plate Offs | Plate Offsets (X,Y) [4:0-3-0,Edge], [7:0-3-0,Edge], [8:Edge,0-1-8], [11:0-1-8,Edge], [14:0-1-8,0-0-8], [15:0-1-8,0-0-8] | | | | | | | | | | | |
| LOADING | (ncf) | SPACING- | 2-0-0 | CSI. | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL | φοι) 40.0 | Plate Grip DOL | 1.00 | TC 0.50 | Vert(LL) | -0.12 | 100 | >999 | 480 | MT20 | 244/190 | |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC 0.77 | Vert(CT) | -0.16 | 10 | >796 | 360 | =- | | |
| BCI I | 0.0 | Ren Stress Incr | NO | WB 0.84 | Horz(CT) | 0.04 | 8 | n/a | n/a | | | |

BRACING-

TOP CHORD

BOT CHORD

10-9-0

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

5.0

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

WFBS 2x4 SP No.3(flat)

REACTIONS. (size) 8=0-5-8, 13=0-3-8 Max Grav 8=1998(LC 1), 13=1264(LC 1)

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

TOP CHORD 2-3=-2787/0, 3-4=-4812/0, 4-5=-4812/0, 5-6=-3901/0

BOT CHORD 12-13=0/1704, 11-12=0/3883, 10-11=0/4812, 9-10=0/4812, 8-9=0/2908

Code IRC2015/TPI2014

WEBS 6-8=-3577/0, 6-9=0/1261, 5-9=-1146/0, 2-13=-2089/0, 2-12=0/1377, 3-12=-1392/0,

3-11=0/1382, 4-11=-789/0

NOTES-

BCDL

- 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) 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.
- 4) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 178 lb down and 128 lb up at 1-5-4, 178 lb down and 128 lb up at 3-5-4, 143 lb down and 128 lb up at 4-11-4, and 963 lb down at 6-11-4, and 993 lb down at 8-11-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.

Matrix-S

5) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 8-13=-10, 1-7=-100

Concentrated Loads (lb)

Vert: 5=-913(B) 2=-98(B) 4=-98(B) 16=-98(B) 17=-913(B)



Weight: 69 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

July 5,2022



Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908772 J1021-6183 FG3 FLOOR GIRDER Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:46 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-NzWu1oKyOQwjYwHprtNKUVgUCOb0YFMgX91E?jz?6wF 0-1-8 1-3-0 1-0-8 Scale = 1:10.6 5x8 || 3x6 || 4x6 || 3x6 II 2x6 || 2 3 5 12 3x4 = 1.5x3 || 8 7 3x4 = 3x4 = 3x6 =3x6 = 5-8-0 1-1-8 1-1-8 4-6-8 Plate Offsets (X,Y)--[4:0-3-0,Edge], [7:0-1-8,Edge], [8:0-1-8,Edge], [12:0-1-8,0-0-8] LOADING (psf) SPACING-2-0-0 DEFL. (loc) I/defI L/d **PLATES GRIP TCLL** 40.0 Plate Grip DOL 1.00 TC 0.08 Vert(LL) -0.01 8-9 >999 480 MT20 244/190 TCDL Vert(CT) 10.0 Lumber DOL 1.00 BC 0.53 -0.02 8-9 >999 360 WB **BCLL** 0.0 Rep Stress Incr NO 0.33 Horz(CT) 0.01 6 n/a n/a BCDL 5.0 Code IRC2015/TPI2014 Matrix-P Weight: 42 lb FT = 20%F, 11%E

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD WFBS

2x4 SP No.3(flat)

REACTIONS. (size) 11=1-5-0, 6=Mechanical, 10=0-3-8

Max Grav 11=590(LC 1), 6=955(LC 1), 10=610(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1189/0, 3-4=-1162/0

BOT CHORD 10-11=0/771, 9-10=0/771, 8-9=0/771, 7-8=0/1189, 6-7=0/1162 **WEBS** 2-11=-922/0, 2-9=-602/0, 4-6=-1406/0, 3-8=-280/0, 2-8=0/591

NOTES-

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Plates checked for a plus or minus 1 degree rotation about its center.
- 3) Refer to girder(s) for truss to truss connections.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 523 lb down at 1-9-12, and 541 Ib down at 3-9-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 6-11=-10, 1-5=-220

Concentrated Loads (lb)

Vert: 2=-461(B) 4=-461(B)



Structural wood sheathing directly applied or 5-8-0 oc purlins,

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

except end verticals.

July 5,2022

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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



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

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

DSB-89: ANSI/TPI1:

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. 5/19/2020

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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

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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- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 13. 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
- 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.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.



Trenco 818 Soundside Rd Edenton, NC 27932

Re: J1021-6182

Precision/15 Liberty Meadows/Harnett

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

Pages or sheets covered by this seal: I52908726 thru I52908754

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

North Carolina COA: C-0844



July 6,2022

Gilbert, Eric

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

Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908726 J1021-6182 **GABLE** A1-GE Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:25 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-Uwkydc4mLzGiXiAn7zVP83luLwY47oQbiOSdlQz?6wa 14-10-8 25-9-0 7-6-13 7-6-13 7-3-11 10-10-8 Scale: 3/16"=1' 4x6 = 8.00 12 11 12 10 4x6 🗸 13 14 15 6 16 5 17

| | | ı | | 10-0-1 | | | 9-8-14 | | | 1 | 6-0-1 | | |
|--------------|----------|---------------------|----------------|---------|------|----------|--------|-------|--------|-----|------------|----------------|--|
| Plate Offset | ts (X,Y) | [11:0-3-0,Edge], [2 | 3:0-4-0,0-4-8] | | | | | | | | | | |
| | | | | | | | | | | | | | |
| LOADING | (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | I/defI | L/d | PLATES | GRIP | |
| TCLL | 20.0 | Plate Grip D | OCL 1.15 | TC | 0.09 | Vert(LL) | -0.00 | 1 | n/r | 120 | MT20 | 244/190 | |
| TCDL | 10.0 | Lumber DO | L 1.15 | BC | 0.02 | Vert(CT) | -0.00 | 1 | n/r | 120 | | | |
| BCLL | 0.0 * | Rep Stress | Incr YES | WB | 0.18 | Horz(CT) | 0.00 | 18 | n/a | n/a | | | |
| BCDL | 10.0 | Code IRC2 | 015/TPI2014 | Matrix- | ·S | | | | | | Weight: 24 | 44 lb FT = 20% | |

25

24

19-8-15

23

8x8 =

22

21

20

25-9-0

19 18

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

2x4 SP No.2

BRACING-TOP CHORD **BOT CHORD**

WEBS

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. Rigid ceiling directly applied or 10-0-0 oc bracing.

T-Brace: 2x4 SPF No.2 - 10-24, 12-23 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 25-9-0.

Max Horz 2=309(LC 12) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 18, 24, 26, 27, 28, 29, 21, 20 except 2=-153(LC 8), 25=-106(LC 12), 30=-129(LC 12), 22=-116(LC 13), 19=-152(LC

Max Grav All reactions 250 lb or less at joint(s) 2, 18, 25, 26, 27, 28, 29, 30, 22, 21, 20, 19 except 24=295(LC 22), 23=263(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-358/320, 3-4=-287/270, 7-9=-186/285, 9-10=-256/343, 10-11=-216/257, 12-13=-256/309

3x4 =

30

29

28

10-0-1

27

26

NOTES-

OTHERS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18, 24, 26, 27, 28, 29, 21, 20 except (jt=lb) 2=153, 25=106, 30=129, 22=116, 19=152.
- 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

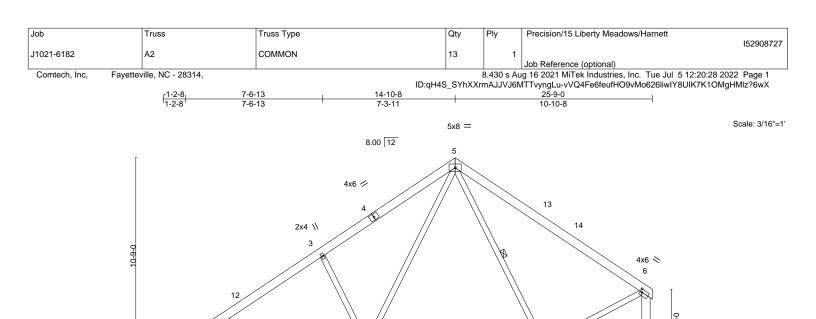


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not

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





| Plate Offsets (X,Y) | [2:0-0-0,0-0-3], [6:0-1- | 4,0-2-0] | | | |
|---------------------|--------------------------|----------|------|-------|-----------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) I/defl |

10-0-1

10-0-1

16

11

5x8 =

17

2x4

14-10-8

4-10-7

Vert(LL) -0.12 9-11 >999 360 Vert(CT) -0.17 9-11 >999 240 Horz(CT) 0.02 8 n/a n/a Wind(LL) 0.03 2-11

10

6x8 =

2x4 ||

BRACING-

TOP CHORD

18

19-8-15

4-10-7

2x4 ||

>999 240 Weight: 215 lb FT = 20%

25-9-0

6-0-1

L/d

8 7

4x4 ||

PLATES

MT20

GRIP

244/190

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.

5x8 =

WEBS 1 Row at midpt

| LOADING | (psf) | SPACING- | 2-0-0 | CSI. |
|---------|-------|-----------------|--------|----------|
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC 0.54 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC 0.44 |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB 0.30 |
| BCDL | 10.0 | Code IRC2015/T | PI2014 | Matrix-S |

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

2x4 SP No.2 *Except* 6-8: 2x6 SP No.1

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

Max Horz 2=248(LC 9) Max Uplift 2=-71(LC 12), 8=-34(LC 13) Max Grav 2=1206(LC 19), 8=1086(LC 20)

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

TOP CHORD 2-3=-1521/277, 3-5=-1392/369, 5-6=-987/235, 6-8=-1067/232

BOT CHORD 2-11=-229/1309, 9-11=-54/757

WEBS 6-9=0/757, 5-11=-136/895, 3-11=-439/271

NOTES-

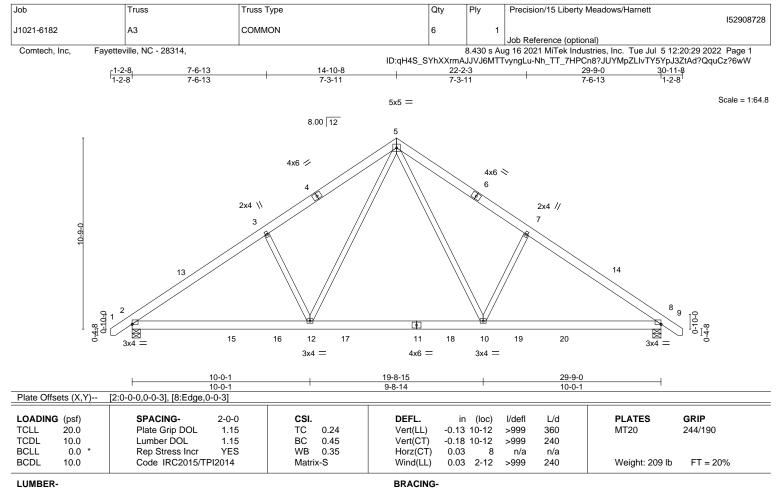
WEBS

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-10-8, Exterior(2) 14-10-8 to 19-3-5, Interior(1) 19-3-5 to 25-4-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) 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) 2, 8.







BOT CHORD

LUMBER-

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

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

Max Horz 2=-255(LC 10)

Max Uplift 2=-79(LC 12), 8=-79(LC 13) Max Grav 2=1410(LC 19), 8=1410(LC 20)

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

2-3=-1865/342, 3-5=-1736/436, 5-7=-1736/436, 7-8=-1865/342 TOP CHORD

BOT CHORD 2-12=-137/1615, 10-12=0/1068, 8-10=-146/1448

WFBS 5-10=-156/885, 7-10=-457/287, 5-12=-156/885, 3-12=-457/287

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 14-10-8, Exterior(2) 14-10-8 to 19-3-5, Interior(1) 19-3-5 to 30-9-15 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



Structural wood sheathing directly applied or 5-6-14 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.

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



Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908729 J1021-6182 **GABLE** A4-GE Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:30 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-ruYrgK8vAVv_dT2kvW5ar7?iZxBVo2KKsf9ORez?6wV 14-10-8 22-2-3 7-3-11 29-9-0 30-11-8 7-6-13 7-6-13 7-3-11 7-6-13 Scale = 1:68.3 5x5 = 8.00 12 6 4x6 / 4x6 <> 9 4x8 // 10 4 11 12 13 8x10 || 14 3x10 || 15 3x10 II 16 Ø 31 32 25 26 5x5 = 4x6 = 24 23 22 21 20 19 18 10-0-1 18-3-8 19-8-15 29-9-0 10-0-1 8-3-7 1-5-7 10-0-1 Plate Offsets (X,Y)--[2:0-6-0,0-0-1], [23:0-6-5,0-2-0] **PLATES** GRIP

LOADING (psf) SPACING-

2-0-0 CSI. **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.32 TCDL 10.0 Lumber DOL 1.15 BC 0.33 WB **BCLL** 0.0 Rep Stress Incr YES 0.21 BCDL 10.0 Code IRC2015/TPI2014 Matrix-S

DEFL. (loc) I/defI L/d Vert(LL) -0.05 2-26 >999 360 Vert(CT) -0.10 2-26 >999 240 Horz(CT) 0.01 16 n/a n/a Wind(LL) 0.04 2-26 >999 240

BRACING-

TOP CHORD

BOT CHORD

JOINTS

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

MT20

Weight: 270 lb

244/190

FT = 20%

Rigid ceiling directly applied or 10-0-0 oc bracing. 1 Brace at Jt(s): 27, 28, 30

LUMBER-

WEBS

OTHERS

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

3-23: 2x8 SP No.1 2x4 SP No.2

REACTIONS. All bearings 11-9-0 except (jt=length) 2=0-5-8, 24=0-3-8.

Max Horz 2=-319(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 16, 22, 21, 20, 19 except 2=-167(LC 12), 23=-397(LC 12),

18=-159(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 22, 21, 20, 19, 18 except 2=992(LC 19), 16=312(LC 22),

23=495(LC 19), 24=535(LC 3)

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

TOP CHORD 2-3=-1140/165, 3-5=-338/148, 13-14=-270/112, 14-15=-331/177, 15-16=-444/260 **BOT CHORD** $2 - 26 = -139/1032, \ 24 - 26 = -140/1027, \ 23 - 24 = -140/1027, \ 22 - 23 = -204/356, \ 21 - 22 = -204/356$

20-21=-204/356, 19-20=-204/356, 18-19=-204/356, 16-18=-204/356

3-26=0/587, 3-29=-1039/405, 28-29=-933/323, 27-28=-1005/382, 27-30=-1004/358,

23-30=-1007/373

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 22, 21, 20, 19 except (jt=lb) 2=167, 23=397, 18=159.



July 6,2022







| | 5. 65 | 0.5.5 | | | 152908730 |
|--|---|--|--|--|--|
| J1021-6182 | B1-GE | GABLE | 1 | Job Reference (opt | ional) |
| Comtech, Inc, Faye | etteville, NC - 28314, | | | | dustries, Inc. Tue Jul 5 12:20:31 2022 Page 1 |
| Connecti, inc, Faye | etteville, NC - 20314, | | | | xp1rFddwTEcpNKYveLWqXWIT5Jvxz4z?6wU |
| | 1-2-8 | 9-1-12 | 1B.q1140_0111XXIII | 18-3-8 | . 19-6-0 . |
| | 1-2-8 1-2-8 | 9-1-12 | | 9-1-12 | 19-6-0 |
| | | | | | |
| | | | 5x5 = | | Scale = 1:41.8 |
| | | | | | |
| | | | | | |
| 0.4-8 0.10-0, | 8.00 | 5 5 | 7 | 9 | 11 12 13 000 000 000 000 000 000 000 000 000 00 |
| F # 7 | | | | | |
| 40 | 3x4 = 23 | 2 21 20 | 19 18 | $ \begin{array}{rrr} & 16 & 15 \\ & 4x6 = & \end{array} $ | 14 3x4 = |
| | | 9-1-12 | | 18-3-8 | |
| | - | 9-1-12 | | 9-1-12 | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * | SPACING- 2-C Plate Grip DOL 1. Lumber DOL 1. Rep Stress Incr Yi | -0 CSI. 15 TC 0.17 15 BC 0.32 | DEFL. ir Vert(LL) -0.06 Vert(CT) -0.09 Horz(CT) 0.01 | n (loc) I/defl L/d 6 17 >999 360 9 15-17 >999 240 | PLATES GRIP MT20 244/190 |

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

0.08 21-22 >999

240

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

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

Weight: 143 lb

FT = 20%

Qty

Precision/15 Liberty Meadows/Harnett

LUMBER-

BCDL

Job

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

10.0

REACTIONS.

(size) 12=0-5-8, 2=0-5-8 Max Horz 2=-204(LC 10)

Truss

Truss Type

Max Uplift 12=-173(LC 13), 2=-173(LC 12) Max Grav 12=792(LC 1), 2=792(LC 1)

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-880/124, 3-4=-775/154, 4-5=-724/205, 5-6=-727/258, 6-7=-752/317, 7-8=-752/317,

 $8-9 = -727/258, \ 9-10 = -724/205, \ 10-11 = -775/154, \ 11-12 = -880/124$

BOT CHORD 2-23=-57/592, 22-23=-57/592, 21-22=-57/592, 20-21=-57/592, 19-20=-57/592,

18-19=-57/592, 17-18=-57/592, 15-17=-57/592, 14-15=-57/592, 12-14=-57/592

WEBS 7-19=-195/516

NOTES-

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

Matrix-S

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=173, 2=173.



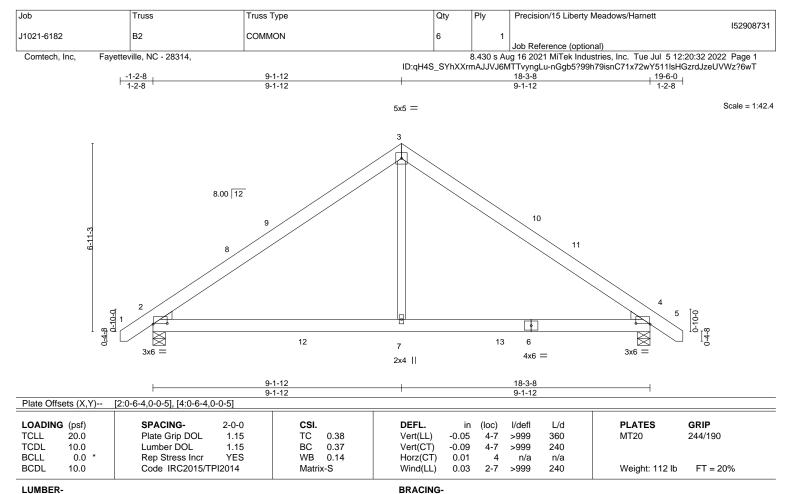


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BOT CHORD

LUMBER-

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

WEDGE

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

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

Max Horz 2=-163(LC 10)

Max Uplift 4=-55(LC 13), 2=-55(LC 12) Max Grav 4=898(LC 20), 2=898(LC 19)

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

2-3=-1047/190, 3-4=-1047/190 TOP CHORD

BOT CHORD 2-7=0/780, 4-7=0/780 WEBS

3-7=0/621

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 9-1-12, Exterior(2) 9-1-12 to 13-6-9, Interior(1) 13-6-9 to 19-4-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.



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

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



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| Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MTRek Industries, Inc. Tue Jul 5 12:203 2022 Page 1 DrqH4S_SYhXXmAJJVISMTTYnglu-PTD2LIAoSQHZUxnJbleHSIdGXSYPSZJmW3 2022 Page 1 12:28 6:6:0 13:0:0 14:2:8 12:28 | 31021-0102 | 01-02 | CABLE | ' | | | Job Reference (option | nal) | |
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Qty

Ply

Precision/15 Liberty Meadows/Harnett

LUMBER-

BCDL

Job

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

10.0

Wind(LL) BRACING-

TOP CHORD **BOT CHORD**

0.02 13-14

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

Weight: 89 lb

FT = 20%

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

240

>999

REACTIONS.

(size) 2=0-5-8, 8=0-5-8 Max Horz 2=-132(LC 10)

Truss

Truss Type

Max Uplift 2=-136(LC 12), 8=-136(LC 13) Max Grav 2=579(LC 1), 8=579(LC 1)

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

Code IRC2015/TPI2014

TOP CHORD 2-3=-614/124, 3-4=-543/170, 4-5=-559/220, 5-6=-559/220, 6-7=-543/171, 7-8=-614/124

BOT CHORD $2\text{-}14\text{=-}42/446,\ 13\text{-}14\text{=-}42/446,\ 12\text{-}13\text{=-}42/446,\ 11\text{-}12\text{=-}42/446,\ 10\text{-}11\text{=-}42/446,\ 10\text{-}11\text{=-}42/446,\$

8-10=-42/446 **WEBS** 5-12=-93/307

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

Matrix-S

- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=136, 8=136.

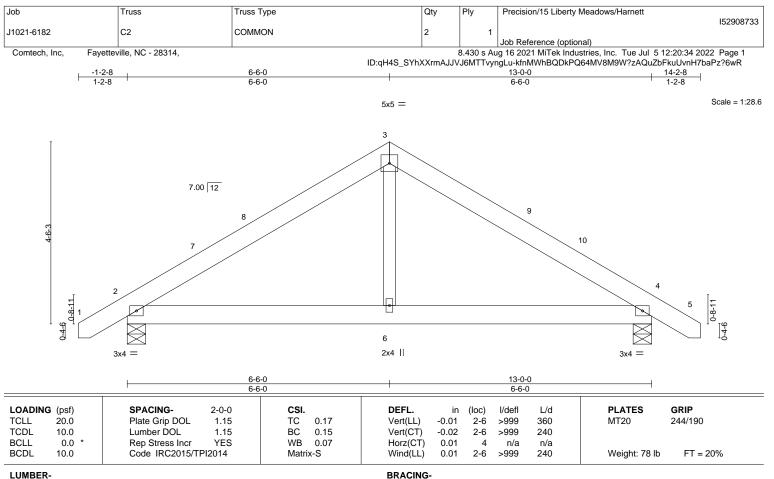


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BOT CHORD

LUMBER-

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

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

Max Horz 2=-106(LC 10)

Max Uplift 2=-46(LC 12), 4=-46(LC 13) Max Grav 2=579(LC 1), 4=579(LC 1)

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

2-3=-621/152, 3-4=-621/152 TOP CHORD **BOT CHORD** 2-6=-2/439, 4-6=-2/439

WEBS 3-6=0/301

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-13 to 3-4-0, Interior(1) 3-4-0 to 6-6-0, Exterior(2) 6-6-0 to 10-10-13, Interior(1) 10-10-13 to 14-0-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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

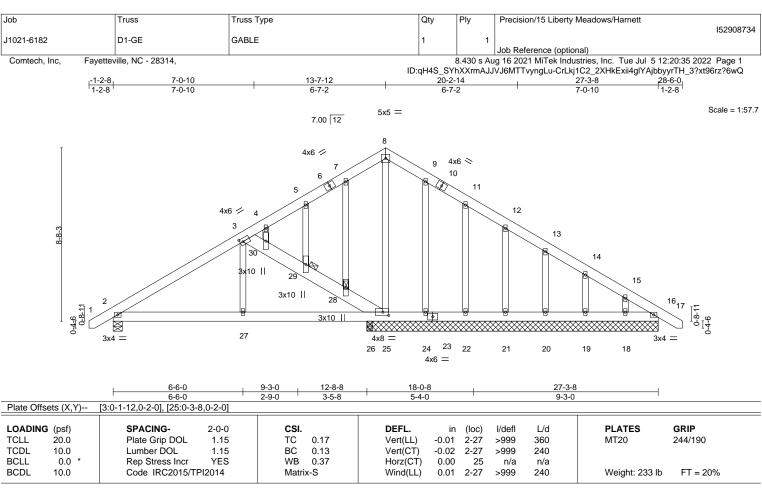
Rigid ceiling directly applied or 10-0-0 oc bracing.

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LUMBER-

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

2x4 SP No.2 *Except* WFBS 3-25: 2x8 SP No.1

OTHERS 2x4 SP No.2 **BRACING-**

TOP CHORD **BOT CHORD JOINTS**

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 2-27,26-27,25-26.

1 Brace at Jt(s): 28, 29

REACTIONS. All bearings 14-7-0 except (jt=length) 2=0-5-8, 26=0-3-8.

(lb) - Max Horz 2=-257(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 24, 22, 21, 20, 19, 18, 16 except 2=-137(LC 12), 25=-279(LC 12) All reactions 250 lb or less at joint(s) 24, 22, 21, 20, 19, 18, 16 except 2=551(LC 1), 25=645(LC 19), Max Grav 26=312(LC 3)

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

TOP CHORD 2-3=-575/182, 15-16=-201/280

BOT CHORD 2-27=-143/511, 26-27=-144/509, 25-26=-144/509

WEBS $3-27=0/275,\ 8-25=-332/43,\ 3-30=-688/324,\ 29-30=-609/269,\ 28-29=-668/314,$

NOTES-

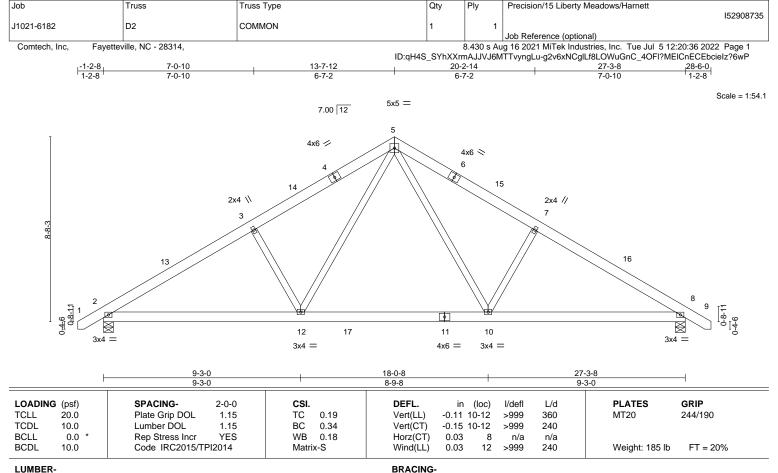
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 22, 21, 20, 19, 18, 16 except (jt=lb) 2=137, 25=279.



July 6,2022







BOT CHORD

LUMBER-

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

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

Max Horz 2=206(LC 11)

Max Uplift 2=-78(LC 12), 8=-78(LC 13) Max Grav 2=1179(LC 19), 8=1180(LC 20)

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

2-3=-1702/335, 3-5=-1540/388, 5-7=-1543/388, 7-8=-1704/335 TOP CHORD **BOT CHORD** 2-12=-165/1501, 10-12=-2/993, 8-10=-176/1349

WEBS 5-10=-121/718, 7-10=-406/245, 5-12=-121/713, 3-12=-406/245

NOTES-

- 1) Unbalanced roof live loads have been considered for this design
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-13 to 3-4-0, Interior(1) 3-4-0 to 13-7-12, Exterior(2) 13-7-12 to 18-0-9, Interior(1) 18-0-9 to 28-4-5 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



Structural wood sheathing directly applied or 5-10-13 oc purlins.

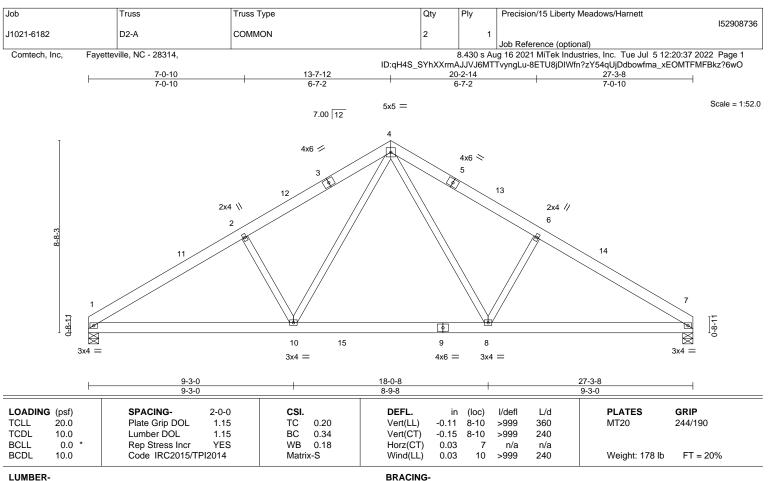
Rigid ceiling directly applied or 10-0-0 oc bracing.

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BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=0-5-8, 7=0-5-8

Max Horz 1=-196(LC 10)

Max Uplift 1=-60(LC 12), 7=-60(LC 13) Max Grav 1=1106(LC 19), 7=1107(LC 20)

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

TOP CHORD 1-2=-1694/354, 2-4=-1551/408, 4-6=-1554/408, 6-7=-1697/354 **BOT CHORD** 1-10=-198/1509. 8-10=-20/993. 7-8=-198/1363

WEBS 4-8=-125/726, 6-8=-407/250, 4-10=-125/722, 2-10=-407/250

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 13-7-12, Exterior(2) 13-7-12 to 18-0-9, Interior(1) 18-0-9 to 27-0-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



Structural wood sheathing directly applied or 5-10-8 oc purlins.

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

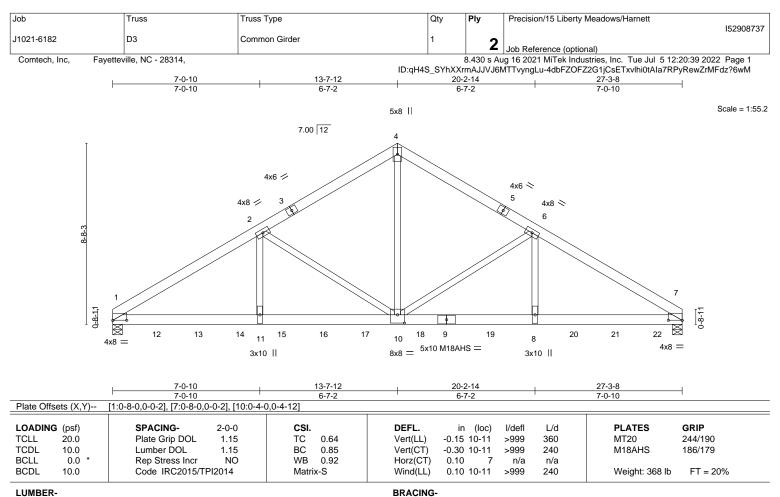


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BOT CHORD

LUMBER-

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

REACTIONS. (size) 1=0-5-8, 7=0-5-8

Max Horz 1=196(LC 24)

Max Uplift 1=-352(LC 8), 7=-371(LC 9) Max Grav 1=7481(LC 2), 7=7910(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 1-2=-11604/554 2-4=-7852/441 4-6=-7853/441 6-7=-11626/556 BOT CHORD 1-11=-485/9760, 10-11=-485/9760, 8-10=-388/9783, 7-8=-388/9783

WFBS 4-10=-333/7479, 6-10=-3687/303, 6-8=-88/3924, 2-10=-3660/301, 2-11=-86/3906

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 0-7-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) All plates are MT20 plates unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1039 lb down and 54 lb up at 2-0-12, 1039 lb down and 54 lb up at 4-0-12, 1039 lb down and 54 lb up at 8-0-12, 1039 lb down and 54 lb up at 10-0-12, 1039 lb down and 54 lb up at 12-0-12, 1039 lb down and 54 lb up at 14-0-12, 1039 lb down and 54 lb up at 16-0-12, 1039 lb down and 54 lb up at 18-0-12, 1039 lb down and 54 lb up at 20-0-12, 1039 lb down and 54 lb up at 22-0-12, and 1039 lb down and 54 lb up at 24-0-12, and 1039 lb down and 54 lb up at 26-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



Structural wood sheathing directly applied or 4-3-0 oc purlins.

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

July 6,2022

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AMSI/TPI1 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 | Precision/15 Liberty Meadows/Harnett |
|------------|-------|---------------|-----|-----|--------------------------------------|
| | | | | | 152908737 |
| J1021-6182 | D3 | Common Girder | 1 | 2 | |
| | | | | | Job Reference (optional) |

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:39 2022 Page 2 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-4dbFZOFZ2G1jCsETxvlhi0tAla7RPyRewZrMFdz?6wM

LOAD CASE(S) Standard

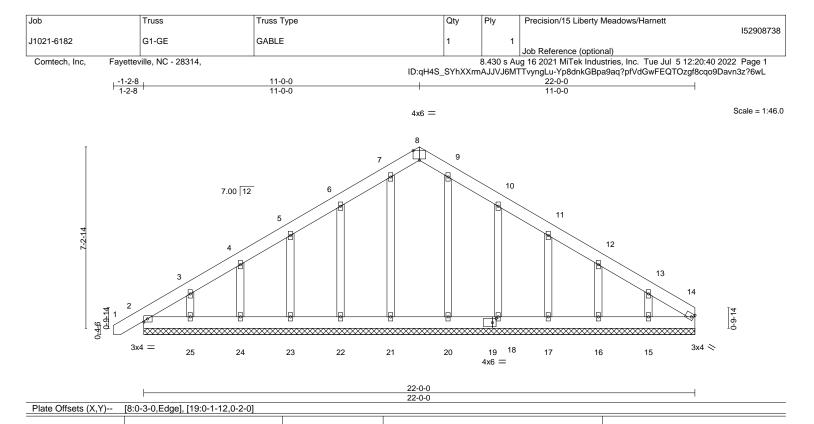
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 9=-992(B) 18=-992(B) 12=-992(B) 13=-992(B) 14=-992(B) 15=-992(B) 15=-992(B) 17=-992(B) 18=-992(B) 19=-992(B) 20=-992(B) 21=-992(B) 22=-992(B) 21=-992(B) 21=-99



LUMBER-

OTHERS

LOADING (psf)

20.0

10.0

0.0

10.0

TCLL

TCDL

BCLL

BCDL

TOP CHORD 2x6 SP No 1 BOT CHORD

2x6 SP No.1 2x4 SP No.2 **BRACING-**

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

(loc)

-0.00

-0.00

0.00

I/defI

n/r

n/r

n/a

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

PLATES

Weight: 165 lb

MT20

GRIP

244/190

FT = 20%

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

L/d

120

120

n/a

REACTIONS. All bearings 22-0-0.

(lb) -Max Horz 2=208(LC 9)

Max Uplift All uplift 100 lb or less at joint(s) 14, 2, 21, 22, 23, 24, 18, 17, 16 except 25=-104(LC 12),

CSI.

0.04

0.02

0.08

TC

BC

WB

Matrix-S

15=-118(LC 13)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

1.15

1.15

YES

Max Grav All reactions 250 lb or less at joint(s) 14, 2, 21, 22, 23, 24, 25, 20, 18, 17, 16, 15

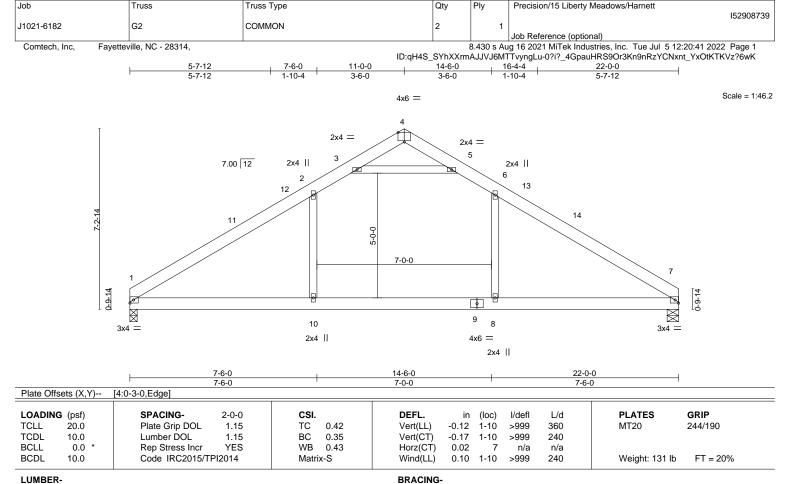
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 2, 21, 22, 23, 24, 18, 17, 16 except (jt=lb) 25=104, 15=118.







TOP CHORD

BOT CHORD

Ply

Precision/15 Liberty Meadows/Harnett

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

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

LUMBER-

Job

Truss

Truss Type

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

2x4 SP No.2 WFBS

REACTIONS. (size) 1=0-3-8, 7=0-5-8 Max Horz 1=162(LC 11)

Max Uplift 1=-48(LC 12), 7=-48(LC 13)

Max Grav 1=972(LC 19), 7=972(LC 20)

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

TOP CHORD 1-2=-1442/246, 2-3=-1052/300, 3-4=-92/352, 4-5=-92/351, 5-6=-1053/300, 6-7=-1446/247

BOT CHORD 1-10=-89/1139, 8-10=-89/1139, 7-8=-89/1139

WEBS 2-10=0/404, 6-8=0/408, 3-5=-1478/441

NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-9-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



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



Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908740 J1021-6182 G3 COMMON 2 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:42 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-VBGNBQHRLBQI3Jz2c2IOKfVkYnHacQG5dX30sxz?6wJ 7-6-0 11-0-0 14-6-0 16-4-4 22-0-0 1-10-4 3-6-0 3-6-0 1-10-4 Scale = 1:46.2 4x6 = 4 2x4 = 2x4 =7.00 12 2x4 || 2x4 || 6 13 12 7 4x4 ≥ 2-0-0 4x4 > 7-0-0 \mathbb{A} 10 11 9 3x4 = 3x6 II 2x4 || 4x6 = 2x4 || 7-6-0 14-6-0 22-0-0 7-6-0 7-0-0 7-6-0 Plate Offsets (X,Y)--[1:0-0-0,0-0-8], [4:0-3-0,Edge], [8:0-3-15,0-0-0]

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

(loc)

1-11

1-11

1-11

8

-0.12

-0.18

0.02

0.10

I/defI

>999

>999

>999

n/a

L/d

360

240

n/a

240

PLATES

Weight: 135 lb

MT20

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

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

GRIP

244/190

FT = 20%

LUMBER-

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

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

20.0

10.0

0.0

10.0

SLIDER Right 2x4 SP No.2 3-8-5

REACTIONS.

(size) 1=0-3-8, 8=0-5-8 Max Horz 1=-162(LC 10)

Max Uplift 1=-48(LC 12), 8=-46(LC 13) Max Grav 1=962(LC 19), 8=964(LC 20)

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. TOP CHORD $1\hbox{-}2\hbox{--}1401/239,\ 2\hbox{-}3\hbox{--}1024/296,\ 3\hbox{-}4\hbox{--}75/287,\ 4\hbox{-}5\hbox{--}79/289,\ 5\hbox{-}6\hbox{--}1021/294,}$

6-8=-1425/250

BOT CHORD 1-11=-83/1105, 9-11=-83/1105, 8-9=-83/1105 WEBS 2-11=0/386, 6-9=0/419, 3-5=-1372/417

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13, Interior(1) 15-4-13 to 21-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

2-0-0

1.15

1.15

YES

TC

BC

WB

Matrix-S

0.38

0.38

0.40

- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8.



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Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908741 J1021-6182 G4 COMMON GIRDER Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:43 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-zOqlPml36VY8hTYEAlqdss2u6BbRLp3ErBpaOOz?6wl 11-0-0 21-8-8 5-4-4 5-6-0 Scale = 1:46.2 5x8 || 3 7.00 12 5x8 <> 3x6 / 2 10 137 14 16 9 8 6x12 > 8x8 = 2x6 || 8x12 || 4x12 || 17 11-0-0 16-2-8 21-8-8 5-7-12 Plate Offsets (X,Y)-- [5:0-6-0,0-1-1], [6:0-8-0,0-2-0], [8:0-8-0,0-4-0]

| LOADING TCLL | G (psf) 20.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 | CSI. TC 0.39 | DEFL. Vert(LL) | in (lo | oc) I/defl 6-8 >999 | L/d 360 | PLATES MT20 | GRIP 244/190 |
|-----------------|---------------------|---------------------------------------|------------------------|-------------------|--------|------------------------|------------|----------------|---------------------|
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.46 | Vert(CT) | -0.15 | 6-8 >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr NO | WB 0.68 | Horz(CT) | 0.03 | 5 n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) | 0.02 | 3-9 >999 | 240 | Weight: 544 lb | FT = 20% |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No 1 BOT CHORD 2x10 SP 2400F 2 0F WFBS 2x4 SP No.2 *Except*

3-8: 2x4 SP No.1 WEDGE

Right: 2x4 SP No.3

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

Max Horz 1=158(LC 24)

Max Uplift 1=-280(LC 8), 5=-212(LC 9) Max Grav 1=5514(LC 14), 5=11697(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD $1\hbox{-}2\hbox{-}9919/529,\ 2\hbox{-}3\hbox{-}9867/449,\ 3\hbox{-}4\hbox{-}9857/451,\ 4\hbox{-}5\hbox{-}-14928/365}$ BOT CHORD 1-9=-459/8349, 8-9=-459/8349, 6-8=-239/12605, 5-6=-239/12605 **WEBS** 2-9=-71/500, 2-8=-733/224, 3-8=-362/9700, 4-8=-4937/260, 4-6=-99/5731

NOTES-

- 1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-4-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=280, 5=212.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1495 lb down and 403 lb up at 9-1-8, 2519 lb down at 10-1-12, 2140 lb down at 11-6-4, 2140 lb down at 13-6-4, 2140 lb down at 15-6-4, 2140 lb down at 17-6-4, and 2140 lb down at 19-6-4, and 2147 lb down at 21-6-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

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

July 6,2022

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818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Precision/15 Liberty Meadows/Harnett | |
|------------|-------|---------------|-----|-----|--------------------------------------|----|
| 14004 0400 | 04 | COMMON CIPPED | _ | | 15290874 | 11 |
| J1021-6182 | G4 | COMMON GIRDER | 1 | 3 | Joh Poforonco (antional) | |

Comtech, Inc, Fayetteville, NC - 28314, Job Reference (optional)

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LOAD CASE(S) Standard

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

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

Concentrated Loads (lb)

Vert: 10=-1464(F) 11=-671(F) 12=-545(F) 13=-545(F) 14=-545(F) 15=-545(F) 16=-545(F) 17=-552(F)

Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908742 J1021-6182 G5 FLAT GIRDER 2 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:43 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-zOqlPml36VY8hTYEAlqdss2zsBeMLx8ErBpaOOz?6wl 11-9₋0 0-3-8 5-8-12 5-8-12 Scale: 3/8"=1" 2x4 || 4x6 = 4x6 = 0-5-8 \bowtie 8 10 5 4 6 4x12 || 3x10 = 3x4 II 5-8-12 11-5-8 5-8-12 5-8-12

DEFL.

Vert(LL)

Vert(CT)

Horz(CT)

Wind(LL)

BRACING-TOP CHORD

BOT CHORD

in (loc)

4-5

4-5

4-5

-0.02

-0.04

0.00

0.02

I/defI

>999

>999

>999

n/a

L/d

360

240

n/a

2-0-0 oc purlins (6-0-0 max.): 1-3, except end verticals.

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

240

LUMBER-

TCLL

TCDL

BCLL

BCDL

LOADING (psf)

20.0

10.0

10.0

0.0

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

1-6.3-4: 2x6 SP No.1

REACTIONS. 6=Mechanical, 4=0-3-8

Max Uplift 6=-383(LC 4), 4=-510(LC 4) Max Grav 6=1515(LC 2), 4=1956(LC 2)

SPACING-

Plate Grip DOL

Rep Stress Incr

Code IRC2015/TPI2014

Lumber DOL

2-0-0

1.15

1.15

NO

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

TOP CHORD 1-6=-1055/287, 1-2=-1061/271, 2-3=-1061/271, 3-4=-1055/287

1-5=-348/1361, 2-5=-341/159, 3-5=-348/1361 **WEBS**

NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

CSI.

0.09

0.28

0.17

TC

вс

WB

Matrix-S

- 3) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=383, 4=510,
- 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 461 lb down and 142 lb up at 1-8-4, 461 lb down and 142 lb up at 3-8-4, 461 lb down and 142 lb up at 5-8-4, 461 lb down and 142 lb up at 7-8-4, and 461 lb down and 142 lb up at 9-8-4, and 466 lb down and 136 lb up at 11-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Vert: 1-3=-60, 4-6=-20

ORTH July 6,2022

GRIP

244/190

FT = 20%

PLATES

Weight: 205 lb

MT20

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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AMSI/TPI1 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 | Precision/15 Liberty Meadows/Harnett |
|------------|-------|-------------|-----|-----|--------------------------------------|
| J1021-6182 | OF. | FLAT GIRDER | , | _ | 152908742 |
| J1021-0102 | Go | FLAT GIRDER | | 2 | Job Reference (optional) |

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:43 2022 Page 2 ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-zOqlPml36VY8hTYEAlqdss2zsBeMLx8ErBpaOOz?6wl

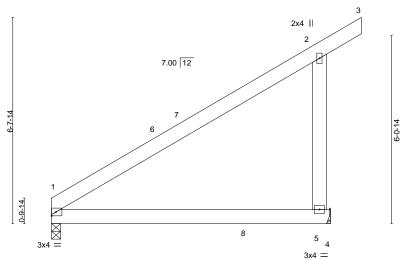
LOAD CASE(S) Standard Concentrated Loads (lb)

Vert: 4=-420(F) 5=-415(F) 7=-415(F) 8=-415(F) 9=-415(F) 10=-415(F)





Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908743 J1021-6182 G6 JACK-CLOSED 6 Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:44 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-RaO8c6Jhtpg?Jd7QkTLsP4b2qbzD4Q?O4rY7wqz?6wH Scale = 1:37.2



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 0.46 Vert(LL) -0.07 1-5 >999 360 MT20 244/190 TCDL Lumber DOL 1.15 вс 0.30 Vert(CT) -0.14 1-5 >725 240 WB 0.00 Horz(CT) **BCLL** 0.0 Rep Stress Incr YES 0.00 n/a n/a Wind(LL) BCDL 10.0 Code IRC2015/TPI2014 Matrix-S 0.00 240 Weight: 60 lb FT = 20%

> **BRACING-**TOP CHORD

BOT CHORD

9-0-0 9-0-0

LUMBER-

REACTIONS.

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

2x6 SP No.1

(size) 1=0-3-8, 5=Mechanical Max Horz 1=195(LC 12)

Max Uplift 5=-122(LC 12) Max Grav 1=333(LC 1), 5=546(LC 19)

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

TOP CHORD 2-5=-409/330

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 10-0-0 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 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=122.



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

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

except end verticals.



Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908744 J1021-6182 H1-GE **GABLE** Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:45 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-vmyWqSJJe6oswnidlAs5xH7KA_NpptHXJVIgTGz?6wG 10-0-0 20-0-0 1-2-8 10-0-0 Scale = 1:42.6 4x6 = 8 7.00 12 9 11 13 3x4 = 3x4 = 22 21 20 19 17 16 18 15 4x6 = 20-0-0

| Plate Off | Plate Offsets (X,Y) [7:0-3-0,Edge] | | | | | | | | | | | | |
|-----------|------------------------------------|-----------------|-------|-------|------|----------|------|-------|--------|-----|----------------|----------|--|
| LOADIN | G (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL | 20.0 | Plate Grip DOL | 1.15 | TC | 0.04 | 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 | | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.06 | Horz(CT) | 0.00 | 12 | n/a | n/a | | | |
| BCDL | 10.0 | Code IRC2015/TP | 12014 | Matri | x-S | | | | | | Weight: 148 lb | FT = 20% | |

20-0-0

LUMBER-

TOP CHORD 2x6 SP No 1

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

BRACING-

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

REACTIONS. All bearings 20-0-0.

(lb) -Max Horz 2=-193(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 19, 20, 21, 17, 15 except 22=-124(LC 12), 14=-121(LC 13)

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

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.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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, 17, 15 except (jt=lb) 22=124, 14=121.

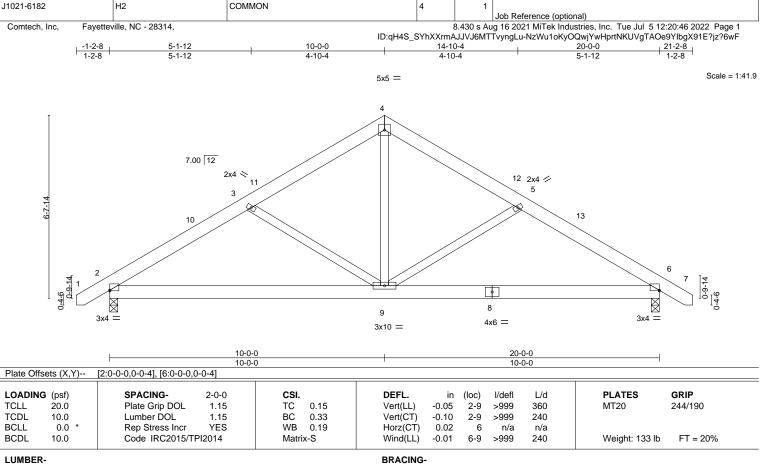


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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TOP CHORD

BOT CHORD

Qty

Ply

Precision/15 Liberty Meadows/Harnett

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

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

152908745

LUMBER-

Job

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

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

Max Horz 2=155(LC 11)

Truss

Truss Type

Max Uplift 6=-61(LC 13), 2=-61(LC 12) Max Grav 6=861(LC 1), 2=861(LC 1)

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

TOP CHORD 2-3=-1108/269, 3-4=-856/221, 4-5=-856/221, 5-6=-1108/269

BOT CHORD 2-9=-135/903, 6-9=-143/880

WFBS 3-9=-320/198, 4-9=-68/571, 5-9=-320/198

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-13 to 3-4-0, Interior(1) 3-4-0 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 21-0-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.

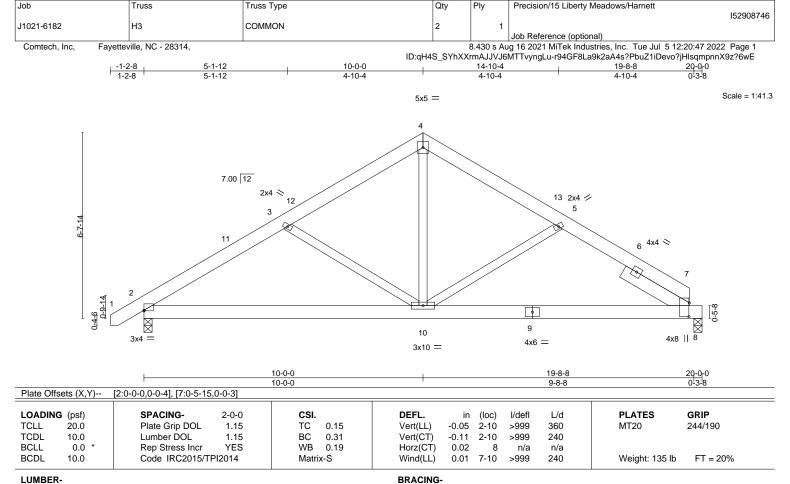


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TOP CHORD

BOT CHORD

LUMBER-

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

SLIDER Right 2x6 SP No.1 2-8-1

REACTIONS.

(size) 8=0-3-8, 2=0-3-8 Max Horz 2=152(LC 9) Max Uplift 8=-37(LC 13), 2=-61(LC 12) Max Grav 8=767(LC 1), 2=863(LC 1)

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

TOP CHORD 2-3=-1110/278, 3-4=-858/225, 4-5=-853/233, 5-7=-1111/287

BOT CHORD 2-10=-156/899. 7-10=-147/882

WEBS 3-10=-319/195, 4-10=-78/560, 5-10=-308/184

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-13 to 3-4-0, Interior(1) 3-4-0 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 19-6-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 2.



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

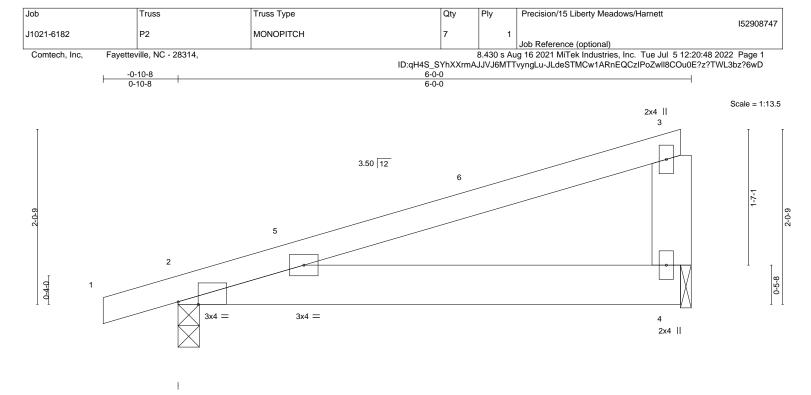
Rigid ceiling directly applied or 10-0-0 oc bracing.

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| Plate Off | late Offsets (X,Y) [2:0-2-13,Edge] | | | | | | | | | | | |
|-----------|------------------------------------|----------------------|----------|-----------------------------|------------------------|--|--|--|--|--|--|--|
| LOADIN | G (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d | PLATES GRIP | | | | | | | |
| TCLL | 20.0 | Plate Grip DOL 1.15 | TC 0.44 | Vert(LL) -0.01 2-4 >999 360 | MT20 244/190 | | | | | | | |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.12 | Vert(CT) -0.03 2-4 >999 240 | | | | | | | | |
| BCLL | 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 n/a n/a | | | | | | | | |
| BCDL | 10.0 | Code IRC2015/TPI2014 | Matrix-P | Wind(LL) 0.03 2-4 >999 240 | Weight: 27 lb FT = 20% | | | | | | | |

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

BOT CHORD WFBS 2x6 SP No.1

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

Max Horz 2=68(LC 8)

Max Uplift 2=-119(LC 8), 4=-91(LC 8) Max Grav 2=291(LC 1), 4=221(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 5-9-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=119.



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

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

except end verticals.



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Job Truss Truss Type Qty Ply Precision/15 Liberty Meadows/Harnett 152908748 J1021-6182 VD1 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:48 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-JLdeSTMCw1ARnEQCzIPoZwlq?COS0EHz?TWL3bz?6wD 6-9-11 13-7-7 6-9-11 6-9-12 Scale = 1:25.7 4x4 = 3 7.00 12 11 10 2x4 || 2x4 || 12 7 6 3x4 // 3x4 < 2x4 || 2x4 || 2x4 || 0-0₋10 0-0-10 13-7-7 13-6-13 Plate Offsets (X,Y)--[4:0-0-0,0-0-0] LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.13 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 BC 0.09 Vert(CT) n/a n/a 999 0.0 WB **BCLL** Rep Stress Incr YES 0.05 Horz(CT) 0.00 5 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Weight: 50 lb FT = 20%

LUMBER-TOP CHORD

2x4 SP No 1

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

BRACING-

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

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

REACTIONS. All bearings 13-6-2.

(lb) -Max Horz 1=-88(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=274(LC 1), 8=320(LC 19), 6=320(LC 20)

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

WEBS 2-8=-267/180, 4-6=-267/180

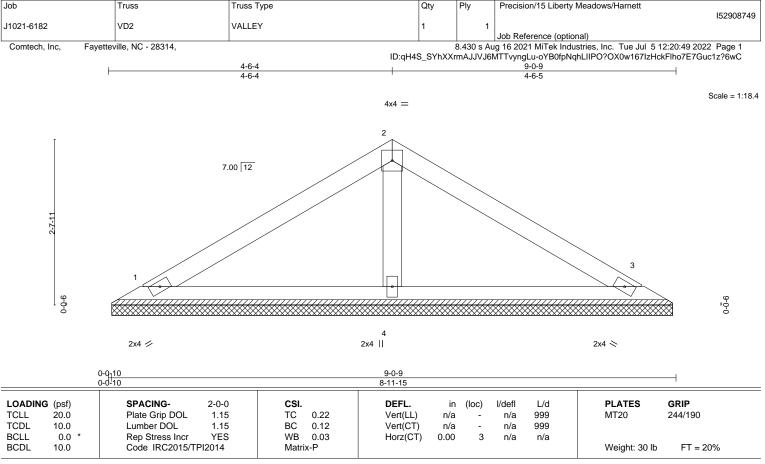
NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 6-9-11, Exterior(2) 6-9-11 to 11-2-8, Interior(1) 11-2-8 to 13-0-11 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
- 6) Non Standard bearing condition. Review required.









LUMBER-

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

BRACING-

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

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

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

Max Horz 1=-56(LC 10)

Max Uplift 1=-27(LC 12), 3=-32(LC 13)

Max Grav 1=167(LC 1), 3=167(LC 1), 4=300(LC 1)

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

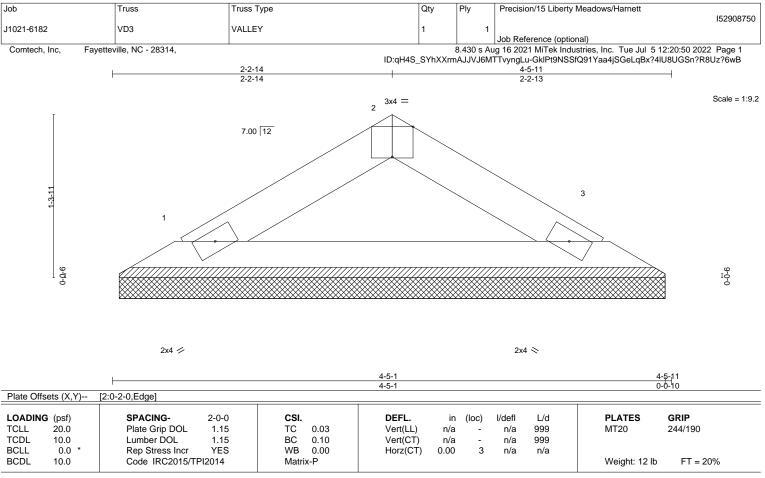
NOTES-

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









LUMBER-

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

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 4-5-11 oc purlins.

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

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

Max Horz 1=24(LC 11)

Max Uplift 1=-8(LC 12), 3=-8(LC 13) Max Grav 1=134(LC 1), 3=134(LC 1)

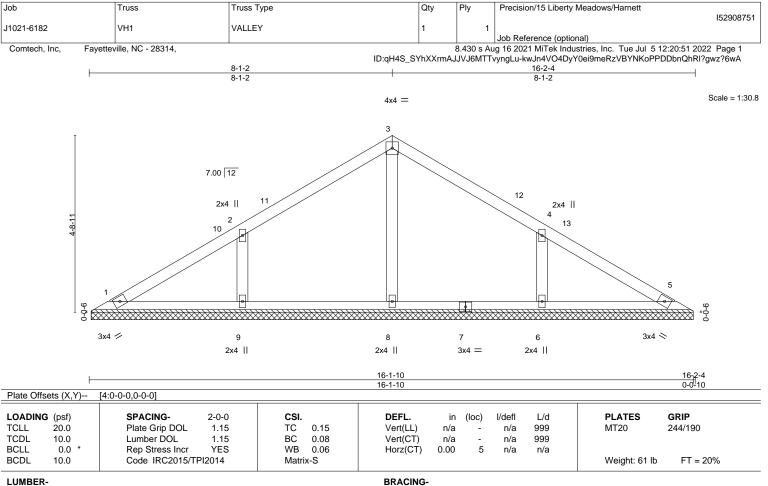
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

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







TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 OTHERS

REACTIONS. All bearings 16-1-0. (lb) -Max Horz 1=106(LC 9)

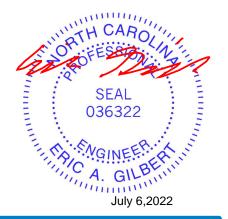
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 6

Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=256(LC 1), 9=376(LC 19), 6=376(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. **WEBS** 2-9=-304/192, 4-6=-304/192

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 8-1-2, Exterior(2) 8-1-2 to 12-5-15, Interior(1) 12-5-15 to 15-7-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 6.



Structural wood sheathing directly applied or 6-0-0 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 chorembers 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, rerection and bracing of trusses and truss systems, see

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



J1021-6182 VH2 VALLEY Job Reference (optional) Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Tue Jul 5 12:20:51 2022 Page 1 Comtech, Inc. ID:qH4S_SYhXXrmAJJVJ6MTTvyngLu-kwJn4VO4DyY0ei9meRzVBYNH5PN2DboQhRI?gwz?6wA 6-1-2 6-1-2 12-2-4 6-1-2 Scale = 1:23.2 4x6 = 2 7.00 12 3x4 // 3x4 > 2x4 || 12-1-10 12₁2-4 0-0-10 12-1-10 GRIP LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defI L/d **PLATES TCLL** 20.0 Plate Grip DOL 1.15 TC 0.33 Vert(LL) n/a n/a 999 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 вс 0.22 Vert(CT) n/a n/a 999 YES WB 0.06 **BCLL** 0.0 Rep Stress Incr Horz(CT) 0.00 3 n/a n/a Code IRC2015/TPI2014 Weight: 41 lb BCDL 10.0 Matrix-S FT = 20% LUMBER-BRACING-

TOP CHORD

BOT CHORD

Qty

Ply

Precision/15 Liberty Meadows/Harnett

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

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

152908752

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

REACTIONS.

(size) 1=12-1-0, 3=12-1-0, 4=12-1-0

Max Horz 1=-78(LC 8)

Truss

Truss Type

Max Uplift 1=-27(LC 12), 3=-35(LC 13)

Max Grav 1=211(LC 1), 3=211(LC 1), 4=463(LC 1)

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

WEBS 2-4=-300/137

NOTES-

Job

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-6-12 to 4-11-9, Interior(1) 4-11-9 to 6-1-2, Exterior(2) 6-1-2 to 10-5-15, Interior(1) 10-5-15 to 11-7-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

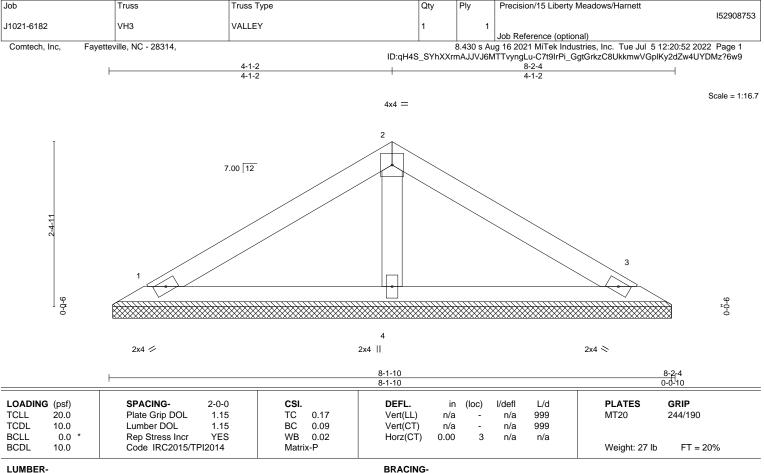


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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





TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 1=8-1-0, 3=8-1-0, 4=8-1-0

Max Horz 1=-50(LC 8)

Max Uplift 1=-24(LC 12), 3=-29(LC 13)

Max Grav 1=149(LC 1), 3=149(LC 1), 4=268(LC 1)

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

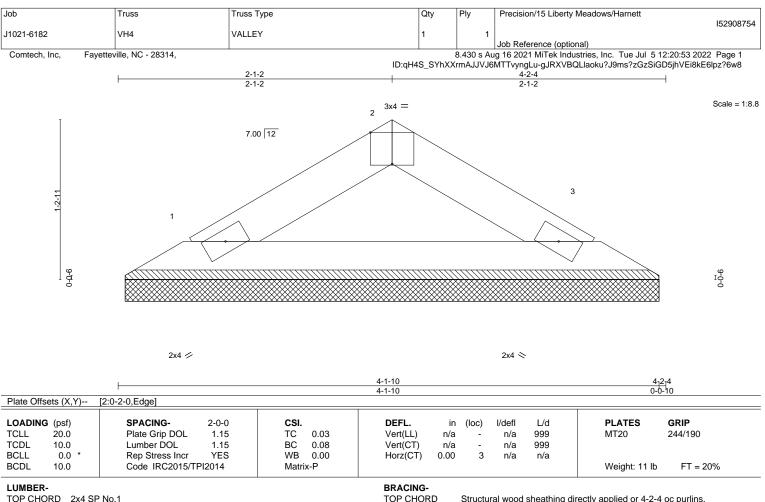
NOTES-

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



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

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



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

BOT CHORD

Structural wood sheathing directly applied or 4-2-4 oc purlins.

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

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

Max Horz 1=-22(LC 8)

Max Uplift 1=-7(LC 12), 3=-7(LC 13) Max Grav 1=123(LC 1), 3=123(LC 1)

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

NOTES-

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



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



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

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

DSB-89: ANSI/TPI1:

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. 5/19/2020

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

ω

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

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

φ.

- 9 Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. responsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 13. 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
- 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.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.



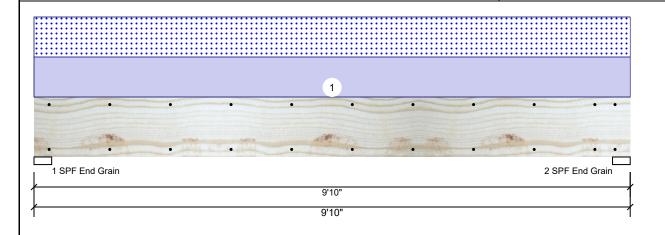
Client: Project: Address: Date: 6/29/2022 Input by: Neal Baggett

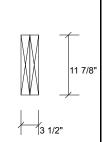
Job Name: 15 LIBERTY MEADOWS

Project #:

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

Level: Level





Ld. Comb.

Page 1 of 12

Member Information

Type: Plies: 2 Moisture Condition: Dry Deflection LL: 480 Deflection TL: 360 Importance: Normal - II Temp <= 100°F Temperature:

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

| Rea | Reactions UNPATTERNED lb (Uplift) | | | | | | | | | | | | |
|-----|-----------------------------------|------|------|------|------|-------|--|--|--|--|--|--|--|
| Brg | Direction | Live | Dead | Snow | Wind | Const | | | | | | | |
| 1 | Vertical | 0 | 1107 | 1062 | 0 | 0 | | | | | | | |
| 2 | Vertical | 0 | 1107 | 1062 | 0 | 0 | | | | | | | |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment | 4848 ft-lb | 4'11" | 22897 ft-lb | 0.212 (21%) | D+S | L |
| Unbraced | 4848 ft-lb | 4'11" | 9857 ft-lb | 0.492 (49%) | D+S | L |
| Shear | 1613 lb | 1'3 3/8" | 10197 lb | 0.158 (16%) | D+S | L |
| LL Defl inch | 0.045 (L/2499) | 4'11" | 0.234 (L/480) | 0.192 (19%) | S | L |
| TL Defl inch | 0.092 (L/1224) | 4'11" | 0.312 (L/360) | 0.294 (29%) | D+S | L |

Bearings

Bearing Length

Dir.

1-SPF 3.500" 1107 / 1062 D+S Vert 2169 L End Grain 2 - SPF 3.500" 1107 / 1062 D+S Vert 21% 2169 L End Grain

Cap. React D/L lb

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|-------------|----------|------------|------|----------|--------|-----------|----------|-------------|----------|
| 1 | Uniform | | | Тор | 216 PLF | 0 PLF | 216 PLF | 0 PLF | 0 PLF | H2 |
| | Self Weight | | | | 9 PLF | | | | | |

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

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

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

Manufacturer Info

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Total Ld. Case



This design is valid until 11/3/2024

isDesign

Client: Project: Address: Date: 6/29/2022 Input by:

Neal Baggett

Page 2 of 12

Job Name: 15 LIBERTY MEADOWS

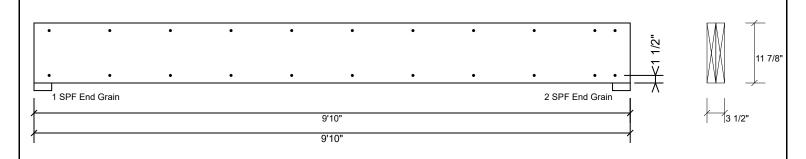
Project #:

Kerto-S LVL GDH-2

1.750" X 11.875"

2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

| rasterrain pries asing E ro | vis or roa box mans (. 120x5) at |
|-----------------------------|-----------------------------------|
| Capacity | 0.0 % |
| Load | 0.0 PLF |
| Yield Limit per Foot | 163.7 PLF |
| Yield Limit per Fastener | 81.9 lb. |
| Yield Mode | IV |
| Edge Distance | 1 1/2" |
| Min. End Distance | 3" |
| Load Combination | |
| Duration Factor | 1.00 |

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info



Client: Project: Address: 6/29/2022

Input by: Neal Baggett Job Name: 15 LIBERTY MEADOWS Page 3 of 12

Wind

1509 / 168

1677 L

0

0

Const

Ld. Comb.

D+S

D+S

0

0

Project #:

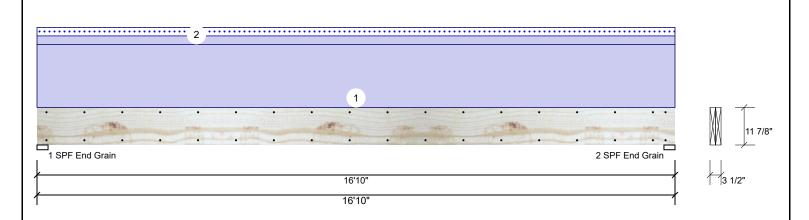
2 - SPF 3.500"

End Grain Vert

16%

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

Level: Level



Member Information Reactions UNPATTERNED Ib (Uplift) Application: Live Type: Floor Brg Direction Dead Snow Plies: 2 Design Method: ASD 0 1509 Vertical 168 1 Moisture Condition: Dry **Building Code: IBC/IRC 2015** 2 Vertical 0 1509 168 Deflection LL: 480 Load Sharing: No Deflection TL: 360 Deck: Not Checked Importance: Normal - II Temp <= 100°F Temperature: **Bearings** Bearing Length Dir. Cap. React D/L lb Total Ld. Case 1 - SPF 3.500" Vert 16% 1509 / 168 1677 I End Grain

| Analysis | Results |
|----------|---------|
| Analysis | Actua |

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|-----------------|-------|---------|
| Moment | 6008 ft-lb | 8'5" | 17919 ft-lb | 0.335 (34%) | D | Uniform |
| Unbraced | 6678 ft-lb | 8'5" | 6684 ft-lb | 0.999 (100%) | D+S | L |
| Shear | 1288 lb | 1'3 3/8" | 7980 lb | 0.161 (16%) | D | Uniform |
| LL Defl inch | 0.035 (L/5617) | 8'5 1/16" | 0.409 (L/480) | 0.085 (9%) | S | L |
| TL Defl inch | 0.348 (L/564) | 8'5 1/16" | 0.546 (L/360) | 0.638 (64%) | D+S | L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 14'10 7/16" o.c.
- 7 Bottom must be laterally braced at end bearings.

| 8 Lateral siende | erness ratio based on | single ply wlath. | | | | | | | | | |
|------------------|-----------------------|-------------------|------------|------|----------|--------|-----------|----------|-------------|----------|--|
| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments | |
| 1 | Uniform | | | Тор | 150 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | G1-GE | |
| 2 | Tie-In | 0-0-0 to 16-10-0 | 1-0-0 | Тор | 20 PSF | 0 PSF | 20 PSF | 0 PSF | 0 PSF | RAKE OH | |
| | Self Weight | | | | 9 PLF | | | | | | |

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

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

- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 Damaged Beams must not be used

Handling & Installation

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

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Manufacturer Info

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This design is valid until 11/3/2024 CSD DESIGN isDesign

Client: Project: Address: Date: 6/29/2022 Input by: Neal Baggett

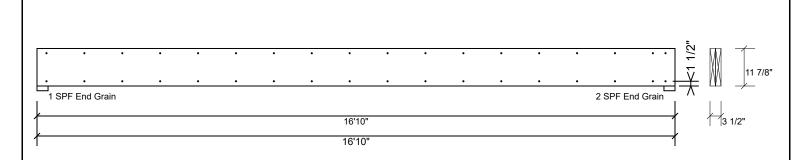
Job Name: 15 LIBERTY MEADOWS

Page 4 of 12

Project #:

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

Level: Level



Multi-Ply Analysis

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

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

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

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This design is valid until 11/3/2024 CSD DESIGN

Manufacturer Info



Client: Project: Address: Date: 6/29/2022 Input by: Neal Baggett

Job Name: 15 LIBERTY MEADOWS

Page 5 of 12

Wind

2542 / 2218

2542 / 2218

4759 L

4759 L

0

0

Const

Ld. Comb.

D+0.75(L+S)

D+0.75(L+S)

0

0

Project #:

1 - SPF 3.500"

2 - SPF 3.500"

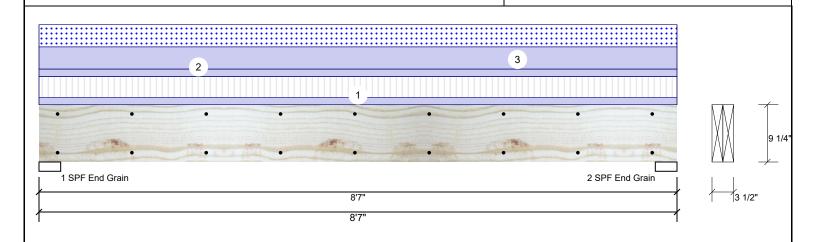
End Grain

End Grain Vert

Vert

2-Ply - PASSED Kerto-S LVL 1.750" X 9.250" BM1

Level: Level



Reactions UNPATTERNED Ib (Uplift) Application: Type: Brg Direction Live Dead Snow Plies: 2 Design Method: ASD 1442 2542 1515 Vertical 1 Moisture Condition: Dry **Building Code: IBC/IRC 2015** 2 Vertical 1442 2542 1515 Deflection LL: 480 Load Sharing: No Deflection TL: 360 Deck: Not Checked Importance: Normal - II Temperature: Temp <= 100°F **Bearings** Bearing Length Dir. Cap. React D/L lb Total Ld. Case

Analysis Results

Member Information

| • | | | | | | |
|--------------|---------------|-----------|---------------|-----------------|-------------|------|
| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
| Moment | 9151 ft-lb | 4'3 1/2" | 14423 ft-lb | 0.634 (63%) | D+0.75(L+S) | L |
| Unbraced | 9151 ft-lb | 4'3 1/2" | 9176 ft-lb | 0.997 (100%) | D+0.75(L+S) | L |
| Shear | 3587 lb | 7'6 1/4" | 7943 lb | 0.452 (45%) | D+0.75(L+S) | L |
| LL Defl inch | 0.125 (L/780) | 4'3 9/16" | 0.203 (L/480) | 0.615 (62%) | 0.75(L+S) | L |
| TL Defl inch | 0.268 (L/364) | 4'3 9/16" | 0.271 (L/360) | 0.990 (99%) | D+0.75(L+S) | L |
| | | | | | | |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at a maximum of 7'6 1/4" o.c.
- 7 Bottom must be laterally braced at end bearings.

| 8 Lateral signderness ratio based on single ply width. | | | | | | | | | | |
|--|-------------|----------|------------|------|----------|---------|-----------|----------|-------------|----------|
| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
| 1 | Uniform | | | Тор | 112 PLF | 336 PLF | 0 PLF | 0 PLF | 0 PLF | F10 |
| 2 | Uniform | | | Тор | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | WALL |
| 3 | Uniform | | | Тор | 353 PLF | 0 PLF | 353 PLF | 0 PLF | 0 PLF | A3 |
| | Self Weight | | | | 7 PLF | | | | | |

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

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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

(800) 622-5850 www.metsawood.com/us

Manufacturer Info





isDesign

Client: Project: Address: Date: 6/29/2022 Input by: Neal Baggett

Job Name: 15 LIBERTY MEADOWS

Page 6 of 12

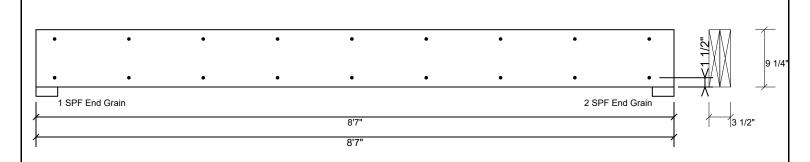
Project #:

Kerto-S LVL BM1

1.750" X 9.250"

2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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

Manufacturer Info

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



CSD DESIGN



Client: Project: Address:

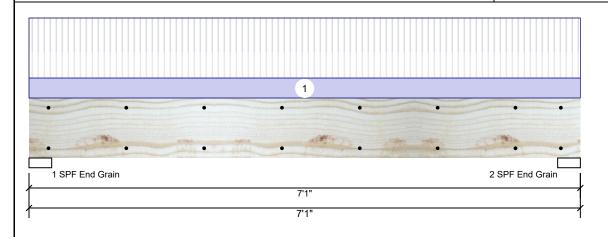
6/29/2022 Input by: Neal Baggett

Job Name: 15 LIBERTY MEADOWS

Project #:

1.750" X 9.250" 2-Ply - PASSED Kerto-S LVL BM₂

Level: Level



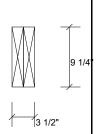
Floor

ASD

No

IBC/IRC 2015

Not Checked



Page 7 of 12

Member Information

| Туре: | Girder |
|---------------------|----------|
| Plies: | 2 |
| Moisture Condition: | Dry |
| Deflection LL: | 480 |
| Deflection TL: | 360 |
| Importance: | Normal - |
| | |

Ш Temperature: Temp <= 100°F

Reactions UNPATTERNED Ib (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 3396 | 1155 | 0 | 0 | 0 |
| 2 | Vertical | 3396 | 1155 | 0 | 0 | 0 |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|---------------|----------|---------------|-------------|-------|------|
| Moment | 7051 ft-lb | 3'6 1/2" | 12542 ft-lb | 0.562 (56%) | D+L | L |
| Unbraced | 7051 ft-lb | 3'6 1/2" | 9559 ft-lb | 0.738 (74%) | D+L | L |
| Shear | 3192 lb | 6' 1/4" | 6907 lb | 0.462 (46%) | D+L | L |
| LL Defl inch | 0.109 (L/731) | 3'6 1/2" | 0.166 (L/480) | 0.657 (66%) | L | L |
| TL Defl inch | 0.146 (L/545) | 3'6 1/2" | 0.221 (L/360) | 0.660 (66%) | D+L | L |

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

| Design Notes | | | | | | | |
|--------------|---------------|----------|---------------|-------------------|---|--|--|
| TL Defl inch | 0.146 (L/545) | 3'6 1/2" | 0.221 (L/360) | 0.660 (66%) D+L | L | | |
| LL Defl inch | 0.109 (L/731) | 3'6 1/2" | 0.166 (L/480) | 0.657 (66%) L | L | | |
| Shear | 3192 lb | 6' 1/4" | 6907 lb | 0.462 (46%) D+L | L | | |
| Unbraced | 7051 ft-lb | 3'6 1/2" | 9559 ft-lb | 0.738 (74%) D+L | L | | |
| MOTHETIL | 7001 11-10 | 30 1/2 | 12342 11-10 | 0.302 (30 /0) DIL | _ | | |

Bearings

| ı | Bearing | Length | Dir. | Cap. F | React D/L lb | Iotal | Ld. Case | Ld. Comb |
|---|-------------------------|--------|------|--------|--------------|-------|----------|----------|
| | 1 - SPF End Grain | 3.500" | Vert | 44% | 1155 / 3396 | 4552 | L | D+L |
| ı | 2 - SPF End Grain | 3.500" | Vert | 44% | 1155 / 3396 | 4552 | L | D+L |

De

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

ID Location Trib Width Load Type Side Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Const. 1.25 Comments 1 Uniform 319 PLF 959 PLF 0 PLF 0 PLF 0 PLF FG1 Top

Self Weight

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

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

- Handling & Installation
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code
- approvals

 Damaged Beams must not be used
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

7 PLF

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Manufacturer Info





isDesign

Client: Project: Address: Date: 6/29/2022 Input by:

Neal Baggett Job Name: 15 LIBERTY MEADOWS

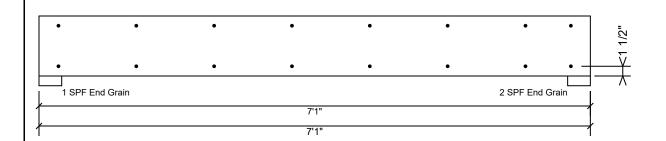
Project #:

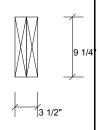
Kerto-S LVL BM₂

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 8 of 12

Multi-Ply Analysis

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

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

Notes

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

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

Handling & Installation

Handling & Installation

1. UVI beams must not be cut or drilled

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

3. Damaged Beams must not be used

4. Design assumes top edge is laterally restrained

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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Manufacturer Info







Client: Project: Address:

6/29/2022 Input by: Neal Baggett

Job Name: 15 LIBERTY MEADOWS

Page 9 of 12

Ld. Comb.

D+0.75(L+S)

D+0.75(L+S)

D+0.75(L+S)

Project #:

1-SPF 3.500"

2 - SPF 3.500"

End Grain

End Grain 3 - SPF 3.500"

End Grain Vert

Vert

Vert

24%

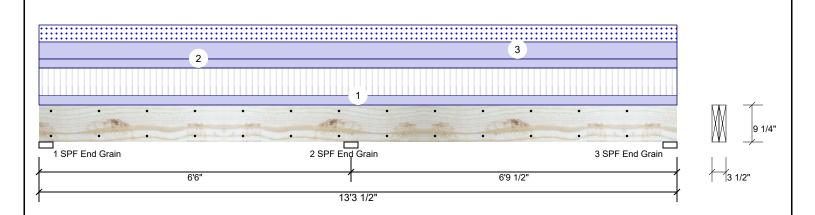
65%

26%

1.750" X 9.250" Kerto-S LVL BM₃

2-Ply - PASSED

Level: Level



| Member Info | rmation | | | Rea | ctions UNP | ATTERN | IED lb (Uplift |) | |
|--------------------|---------------|----------------|--------------|-----|--------------|--------|----------------|---------|----------|
| Type: | Girder | Application: | Floor | Brg | Direction | Live | Dead | Snow | Wind |
| Plies: | 2 | Design Method: | ASD | 1 | Vertical | 958 | 1234 | 584 | 0 |
| Moisture Condition | on: Dry | Building Code: | IBC/IRC 2015 | 2 | Vertical | 2922 | 3764 | 1782 | 0 |
| Deflection LL: | 480 | Load Sharing: | No | 3 | Vertical | 1024 | 1319 | 625 | 0 |
| Deflection TL: | 360 | Deck: | Not Checked | | | | | | |
| Importance: | Normal - II | | | | | | | | |
| Temperature: | Temp <= 100°F | | | | | | | | |
| | | | | Bea | rings | | | | |
| | | | | Be | aring Length | Dir. | Cap. React D/L | lb Tota | Ld. Case |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|------------|---------------|-------------|-------------|------|
| Neg Moment | -4352 ft-lb | 6'6" | 12542 ft-lb | 0.347 (35%) | D+L | LL |
| Unbraced | -4746 ft-lb | 6'6" | 5949 ft-lb | 0.798 (80%) | D+0.75(L+S) | LL |
| Pos Moment | 2977 ft-lb | 10'4 7/8" | 12542 ft-lb | 0.237 (24%) | D+L | _L |
| Unbraced | 3207 ft-lb | 10'5 1/16" | 5949 ft-lb | 0.539 (54%) | D+0.75(L+S) | _L |
| Shear | 2665 lb | 7'5" | 6907 lb | 0.386 (39%) | D+L | LL |
| LL Defl inch | 0.035 (L/2221) | 9'11 7/16" | 0.164 (L/480) | 0.216 (22%) | 0.75(L+S) | _L |
| TL Defl inch | 0.065 (L/1216) | 10' 5/16" | 0.219 (L/360) | 0.296 (30%) | D+0.75(L+S) | _L |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.

| 8 Lateral slenderness ratio based on single ply width. | | | | | | | | | | |
|--|-------------|----------|------------|------|----------|---------|-----------|----------|-------------|----------|
| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
| 1 | Uniform | | | Тор | 123 PLF | 369 PLF | 0 PLF | 0 PLF | 0 PLF | F12 |
| 2 | Uniform | | | Тор | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | WALL |
| 3 | Uniform | | | Тор | 225 PLF | 0 PLF | 225 PLF | 0 PLF | 0 PLF | B2 |
| | Self Weight | | | | 7 PLF | | | | | |

Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals Damaged Beams must not be used

Handling & Installation

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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Manufacturer Info

1208 / 1291

3813 / 3575

1295 / 1346

2499 L

7388 LL

2641 _L





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Client: Project: Address: Date: 6/29/2022 Input by: Neal Baggett

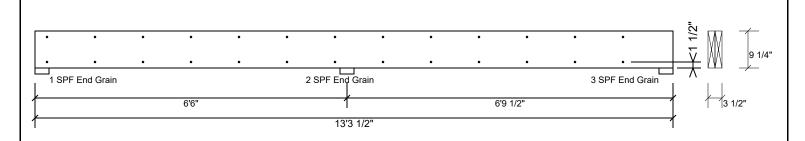
Job Name: 15 LIBERTY MEADOWS

Page 10 of 12

Project #:

1.750" X 9.250" 2-Ply - PASSED **Kerto-S LVL** BM₃

Level: Level



Multi-Ply Analysis

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

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

Notes

Notes

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

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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Manufacturer Info







Client: Project: Address:

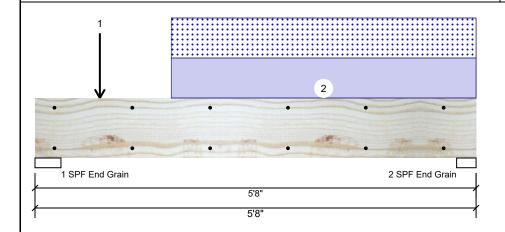
6/29/2022 Input by: Neal Baggett

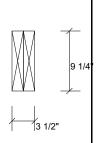
Job Name: 15 LIBERTY MEADOWS

Project #:

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

Level: Level





Page 11 of 12

Member Information

| Plies: 2 Moisture Condition: Dry | |
|-------------------------------------|------|
| Moisture Condition: Dry | |
| | |
| Deflection LL: 480 | |
| Deflection TL: 360 | |
| Importance: Normal - II | |
| Temperature: Temp <= 10 | 00°F |

Application: Floor Design Method: ASD **Building Code: IBC/IRC 2015** Load Sharing: No Deck: Not Checked

| Rea | ctions UNP | ATTERNED | lb (Uplift |) | | |
|-----|------------|----------|------------|------|------|-------|
| Brg | Direction | Live | Dead | Snow | Wind | Const |
| 1 | Vertical | 0 | 5289 | 5268 | 0 | 0 |
| 2 | Vertical | 0 | 861 | 841 | 0 | 0 |
| | | | | | | |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|-------------|-------|------|
| Moment | 5936 ft-lb | 10" | 14423 ft-lb | 0.412 (41%) | D+S | L |
| Unbraced | 5936 ft-lb | 10" | 11402 ft-lb | 0.521 (52%) | D+S | L |
| Shear | 6492 lb | 1'1 1/4" | 7943 lb | 0.817 (82%) | D+S | L |
| LL Defl inch | 0.031 (L/2030) | 2'3 9/16" | 0.130 (L/480) | 0.236 (24%) | S | L |
| TL Defl inch | 0.062 (L/1010) | 2'3 9/16" | 0.174 (L/360) | 0.357 (36%) | D+S | L |

Bearings

| Bearing | Length | Dir. | Cap. I | React D/L lb | Iotal | Ld. Case | Ld. Comb. |
|-------------------------|--------|------|--------|--------------|-------|----------|-----------|
| 1 - SPF End Grain | 4.000" | Vert | 90% | 5289 / 5268 | 10556 | L | D+S |
| 2 - SPF End Grain | 3.000" | Vert | 19% | 861 / 841 | 1702 | L | D+S |

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 3 Refer to last page of calculations for fasteners required for specified loads.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be laterally braced at end bearings.
- 7 Bottom must be laterally braced at end bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments | |
|----|----------------|----------------|------------|------|----------|--------|-----------|----------|-------------|----------|--|
| 1 | Point | 0-10-0 | | Тор | 5780 lb | 0 lb | 5780 lb | 0 lb | 0 lb | G4 | |
| | Bearing Length | 0-3-15 | | | | | | | | | |
| 2 | Part. Uniform | 1-9-0 to 5-8-0 | | Тор | 84 PLF | 0 PLF | 84 PLF | 0 PLF | 0 PLF | G6 | |
| | Self Weight | | | | 7 PLF | | | | | | |

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals

 2 Damaged Beams must not be used

- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid
 lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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Manufacturer Info





isDesign

Client: Project: Address: Date: 6/29/2022 Input by:

Neal Baggett Job Name: 15 LIBERTY MEADOWS

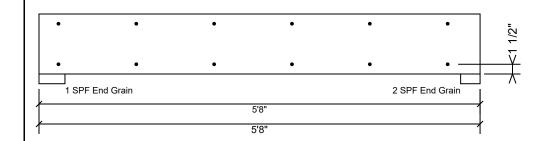
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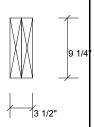
Kerto-S LVL BM4

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 12 of 12

Multi-Ply Analysis

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

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

Notes

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

Handling & Installation

- Handling & Installation

 1. UVI beams must not be cut or drilled

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

 3. Damaged Beams must not be used

 4. Design assumes top edge is laterally restrained

 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- - This design is valid until 11/3/2024

6. For flat roofs provide proper drainage to prevent ponding

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

Manufacturer Info

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



CSD DESIGN