

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0722-3736
Lot 33 Liberty Meadows

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: I56654210 thru I56654233

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



February 15, 2023

Gilbert, Eric

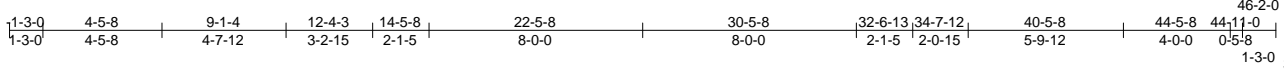
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 J0722-3736 | Truss A1 | Truss Type ATTIC | Qty 3 | Ply 1 | Lot 33 Liberty Meadows Job Reference (optional) | I56654210 |
|-------------------|-------------|---------------------|----------|----------|--|-----------|

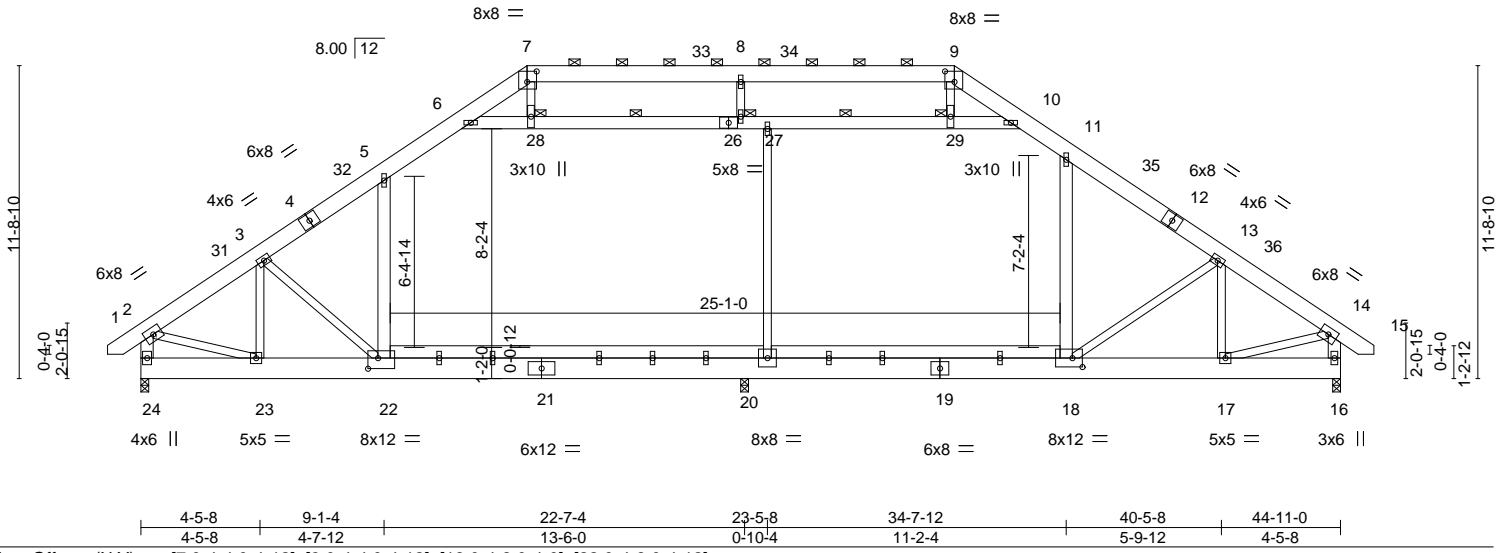
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Scale = 1:86.3



| | | | | | |
|----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.31 | Vert(LL) -0.29 20-22 >921 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.45 | Vert(CT) -0.40 20-22 >672 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.64 | Horz(CT) 0.03 16 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.22 18-20 >999 240 | Weight: 547 lb | FT = 20% |

| | |
|---|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x8 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9. |
| BOT CHORD 2x10 SP 2400F 2.0E *Except* 22-25,18-25: 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* 5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1 | WEBS 1 Row at midpt 27-28, 27-29 |
| | JOINTS 1 Brace at Jt(s): 27, 28, 29 |

| | |
|-------------------|--|
| REACTIONS. | (size) 24=0-3-8, 16=0-3-8, 20=0-3-8 Max Horz 24=299(LC 11) Max Grav 24=2234(LC 2), 16=2157(LC 2), 20=1817(LC 18) |
|-------------------|--|

| | |
|----------------|---|
| FORCES. | (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD | 2-3=-2432/199, 3-5=-2785/211, 5-6=-2309/356, 6-7=-1823/473, 7-8=-1566/452, 8-9=-1566/452, 9-10=-1820/476, 10-11=-2262/362, 11-13=-2712/247, 13-14=-2334/222, 2-24=-2097/244, 14-16=-2019/257 |
| BOT CHORD | 23-24=-224/433, 22-23=-95/2157, 20-22=0/2151, 18-20=0/2151, 17-18=-81/1885 |
| WEBS | 5-22=0/730, 11-18=0/576, 6-28=-1169/0, 27-28=-1143/0, 27-29=-1143/0, 10-29=-1175/0, 2-23=-45/1839, 7-28=0/474, 9-29=-5/470, 3-23=-839/74, 3-22=-246/450, 13-18=-244/562, 13-17=-784/101, 14-17=-76/1744 |

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-7 to 3-6-7, Interior(1) 3-6-7 to 14-5-8, Exterior(2) 14-5-8 to 20-9-12, Interior(1) 20-9-12 to 30-5-8, Exterior(2) 30-5-8 to 36-9-12, Interior(1) 36-9-12 to 45-10-7 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are 2x6 MT20 unless otherwise indicated.
 - 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
 - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) Attic room checked for L/360 deflection.



February 15, 2023

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

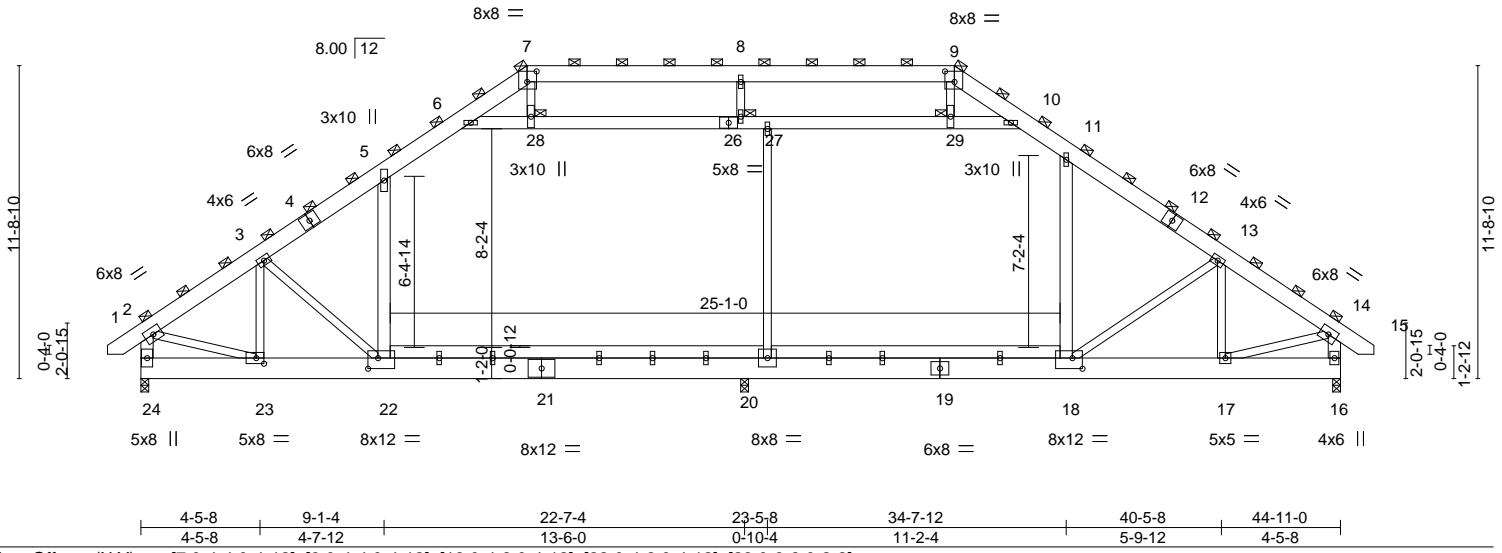
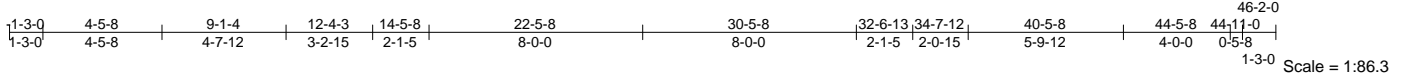
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | 156654211 |
| J0722-3736 | A1-GR | ATTIC | 1 | 2 | Job Reference (optional) | |

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| | | | | | |
|------------|-------|------------|-----|-----|------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3736 | A1-GR | ATTIC | 1 | 2 | I56654211 |

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NOTES-

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-120(F=-40), 16-22=-80, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=16
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

15) Dead: Lumber Increase=1.00, Plate Increase=1.00

Continued on page 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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Edenton, NC 27932

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3736 | A1-GR | ATTIC | 1 | 2 | I56654211 |
| | | | | | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
 Drag: 5-22=-20, 11-18=-20

24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=29, 2-7=2, 9-14=46, 14-15=32
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
 Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
 Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
 Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 4

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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818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|------------|-------|------------|-----|----------|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3736 | A1-GR | ATTIC | 1 | 2 | I56654211 |
| | | | | | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:09 2023 Page 4
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-GeNDz5VxFT1bED51mARH5L?2Oq2XKaDlckSEizkyAW

LOAD CASE(S) Standard

- Uniform Loads (plf)
Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

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

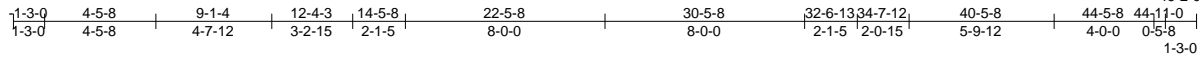


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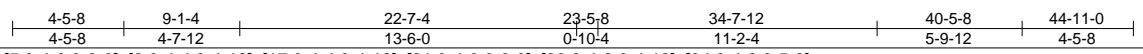
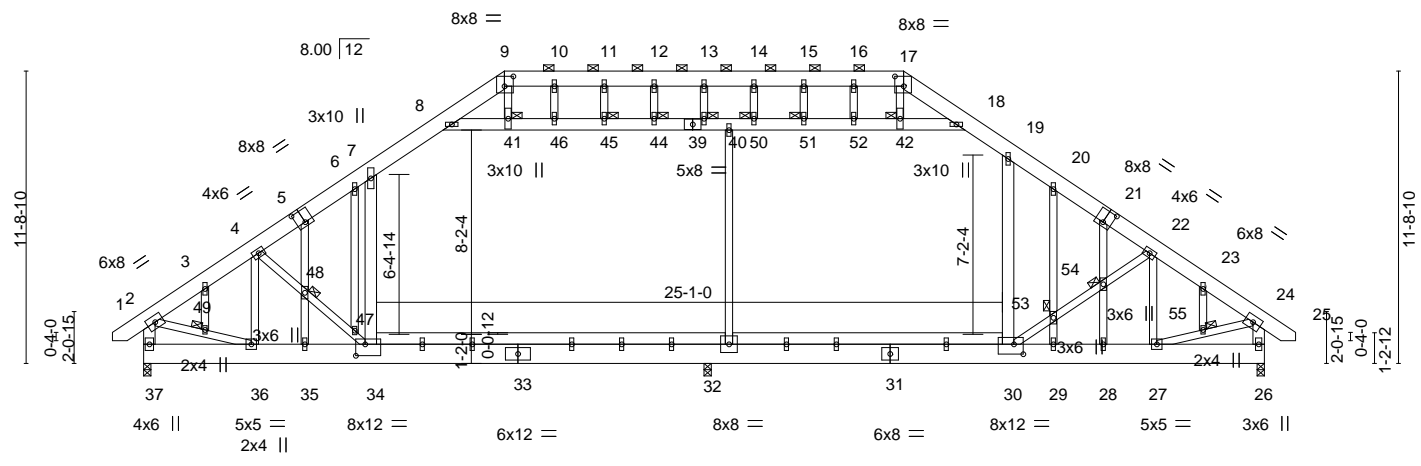
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|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654212 |
| J0722-3736 | A1GE | GABLE | 1 | 1 | Job Reference (optional) | |

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:06 2023 Page 1
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Scale = 1:92.3



| | |
|------------------------|---|
| Plate Offsets (X, Y)-- | [5:0-4-0,0-6-0], [9:0-4-4,0-4-12], [17:0-4-4,0-4-12], [21:0-4-0,0-6-0], [30:0-4-8,0-4-12], [34:0-4-8,0-5-8] |
|------------------------|---|

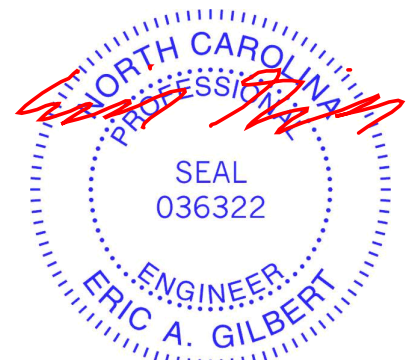
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.31 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.44 | Vert(LL) -0.28 32-34 >956 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.58 | Vert(CT) -0.38 32-34 >699 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.03 26 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.27 30-32 >983 240 | Weight: 596 lb | FT = 20% |

| LUMBER- | BRACING- |
|---|--|
| TOP CHORD 2x8 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 9-17. |
| BOT CHORD 2x10 SP 2400F 2.0E *Except* 34-38,30-38: 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* 7-34,19-30,8-39,2-37,24-26,18-39: 2x6 SP No.1 | JOINTS 1 Brace at Jt(s): 40, 41, 42, 44, 45, 48, 49, 50, 51, 53, 54, 55 |
| OTHERS 2x4 SP No.2 | |

| REACTIONS. |
|---|
| (size) 37=0-3-8, 26=0-3-8, 32=0-3-8 |
| Max Horz 37=374(LC 11) |
| Max Uplift 37=-89(LC 12), 26=-93(LC 13) |
| Max Grav 37=2252(LC 2), 26=2176(LC 2), 32=1780(LC 18) |

| FORCES. |
|--|
| (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. |
| TOP CHORD 2-3=-2532/306, 3-4=-2381/316, 4-5=-2664/309, 5-6=-2869/322, 6-7=-2827/345, 7-8=-2332/478, 8-9=-1898/615, 9-10=-1650/569, 10-11=-1645/569, 11-12=-1645/569, 12-13=-1645/569, 13-14=-1645/569, 14-15=-1645/569, 15-16=-1645/569, 16-17=-1650/569, 17-18=-1891/609, 18-19=-2282/478, 19-20=-2752/386, 20-21=-2663/348, 21-22=-2648/311, 22-23=-2281/345, 23-24=-2426/336, 2-37=-2145/338, 24-26=-2065/361 |
| BOT CHORD 36-37=-303/527, 35-36=-243/2160, 34-35=-243/2160, 32-34=-45/2177, 30-32=-45/2177, 29-30=-180/1906, 28-29=-180/1906, 27-28=-180/1906, 26-27=-38/298 |
| WEBS 7-34=0/974, 19-30=0/812, 8-41=-1224/52, 41-46=-1198/60, 45-46=-1198/60, 44-45=-1198/60, 40-44=-1198/60, 40-50=-1198/60, 50-51=-1198/60, 51-52=-1198/60, 42-52=-1198/60, 18-42=-1237/67, 2-49=-122/1773, 36-49=-125/1830, 9-41=-206/679, 17-42=-227/667, 4-36=-534/188, 4-48=-346/496, 47-48=-344/471, 34-47=-419/490, 30-53=-376/597, 53-54=-341/556, 22-54=-356/585, 22-27=-632/181, 27-55=-153/1735, 24-55=-149/1682, 10-46=-277/144, 5-48=-549/9, 35-48=-538/7, 16-52=-270/156, 20-53=-306/47, 29-53=-338/31 |

- 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; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) All plates are 2x6 MT20 unless otherwise indicated.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.



February 15, 2023

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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A MiTek Affiliate

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| | | | | | |
|-------------------|---------------|---------------------|----------|----------|---|
| Job J0722-3736 | Truss A1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 33 Liberty Meadows I56654212 Job Reference (optional) |
|-------------------|---------------|---------------------|----------|----------|---|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:07 2023 Page 2
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NOTES-

- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Ceiling dead load (10.0 psf) on member(s). 7-8, 18-19, 8-41, 41-46, 45-46, 44-45, 40-44, 40-50, 50-51, 51-52, 42-52, 18-42; Wall dead load (5.0psf) on member(s).7-34, 19-30
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 30-32
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 37, 26.
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

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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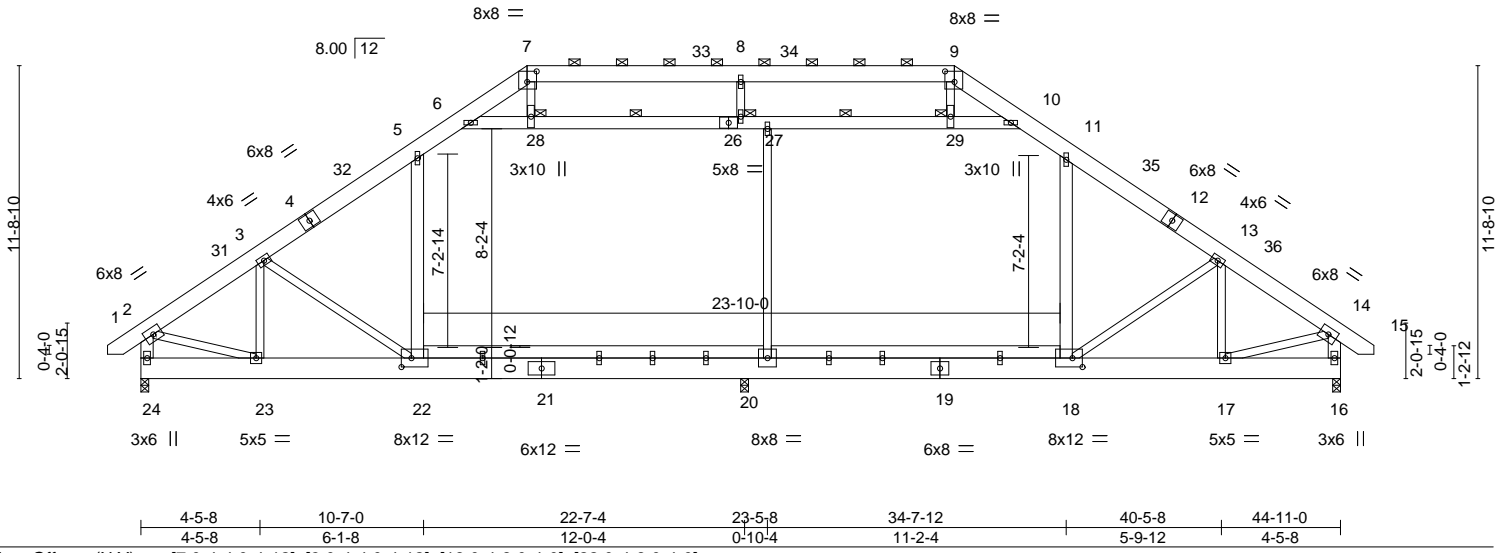
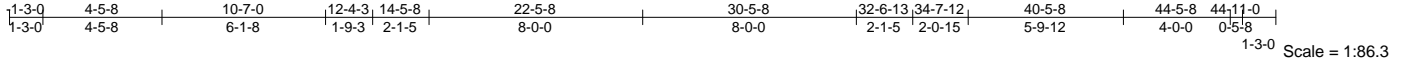
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| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654213 |
| J0722-3736 | A2 | ATTIC | 1 | 1 | Job Reference (optional) | |

Comtech, Inc. Fayetteville, NC - 28314,

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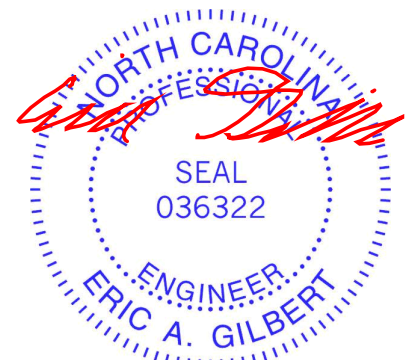
| | | | | | |
|------------------------|--|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X, Y)-- | [7:0-4-4,0-4-12], [9:0-4-4,0-4-12], [18:0-4-8,0-4-0], [22:0-4-8,0-4-0] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.26 | Vert(LL) -0.23 20-22 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.41 | Vert(CT) -0.29 20-22 >916 240 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.64 | Horz(CT) 0.03 16 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.22 20-22 >999 240 | Weight: 548 lb | FT = 20% |

| | |
|---|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x8 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9. |
| BOT CHORD 2x10 SP 2400F 2.0E *Except* 22-25,18-25: 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* 5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1 | WEBS 1 Row at midpt 27-28, 27-29 |
| | JOINTS 1 Brace at Jt(s): 27, 28, 29 |

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
 Max Horz 24=247(LC 10)
 Max Grav 24=2179(LC 2), 16=2174(LC 2), 20=1721(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-2370/206, 3-5=-2728/233, 5-6=-2261/352, 6-7=-1845/460, 7-8=-1591/434, 8-9=-1591/434, 9-10=-1847/458, 10-11=-2267/352, 11-13=-2726/233, 13-14=-2360/208, 2-24=-2051/249, 14-16=-2043/251
 BOT CHORD 23-24=-183/405, 22-23=-76/2093, 20-22=0/2154, 18-20=0/2154, 17-18=-91/1909
 WEBS 5-22=0/606, 11-18=0/596, 6-28=-1081/0, 27-28=-1051/0, 27-29=-1051/0, 10-29=-1084/0, 2-23=-84/1792, 7-28=-1/467, 9-29=0/471, 3-23=-752/71, 3-22=-223/510, 13-18=-223/526, 13-17=-766/75, 14-17=-86/1776

- 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) -0-11-7 to 3-6-7, Interior(1) 3-6-7 to 14-5-8, Exterior(2) 14-5-8 to 20-9-12, Interior(1) 20-9-12 to 30-5-8, Exterior(2) 30-5-8 to 36-9-12, Interior(1) 36-9-12 to 45-10-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are 2x6 MT20 unless otherwise indicated.
 - 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
 - 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
 - 9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - 10) Attic room checked for L/360 deflection.



February 15, 2023

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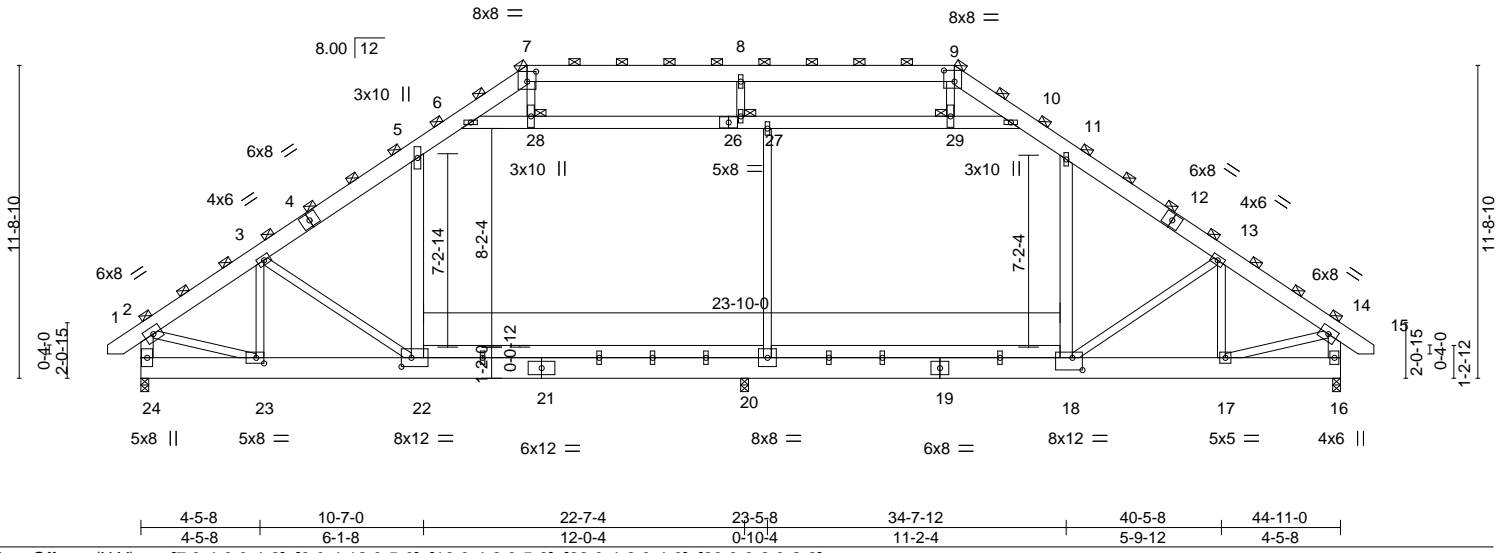
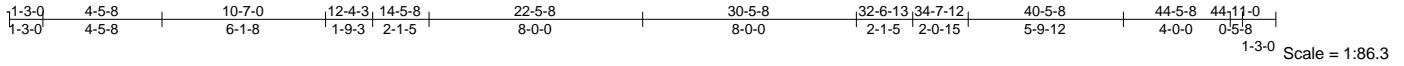
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 818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|-------------------|----------------|---------------------|----------|----------|--|-----------|
| Job J0722-3736 | Truss A2-GR | Truss Type ATTIC | Qty 1 | Ply 2 | Lot 33 Liberty Meadows Job Reference (optional) | I56654214 |
|-------------------|----------------|---------------------|----------|----------|--|-----------|

Comtech, Inc. Fayetteville, NC - 28314,

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ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-1AsEfqbyMw1SBRiaEra9Q1KR13oACAKwRxtWFzkyAO



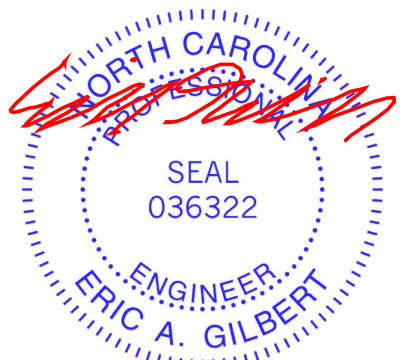
| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|-----------------|----------|
| TCLL 20.0 | 4-0-0 | TC 0.39 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.47 | Vert(LL) -0.41 20-22 >652 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.67 | Vert(CT) -0.54 20-22 >496 240 | | |
| BCDL 10.0 | Rep Stress Incr NO | Matrix-S | Horz(CT) 0.04 16 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.22 20-22 >999 240 | Weight: 1095 lb | FT = 20% |

| LUMBER- | BRACING- |
|--|---|
| TOP CHORD 2x8 SP 2400F 2.0E | TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals |
| BOT CHORD 2x10 SP 2400F 2.0E *Except* 22-25,18-25: 2x6 SP No.1 | (Switched from sheeted: Spacing > 2-8-0). BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* 5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1 | JOINTS 1 Brace at Jt(s): 7, 9, 2, 14, 27, 28, 29 |

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
 Max Horz 24=494(LC 6)
 Max Grav 24=5786(LC 2), 16=4525(LC 2), 20=3460(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-6237/0, 3-5=-6111/0, 5-6=-4873/0, 6-7=-3651/530, 7-8=-3153/463, 8-9=-3153/464,
 9-10=-3689/494, 10-11=-4949/0, 11-13=-5951/0, 13-14=-4815/0, 2-24=-5318/0,
 14-16=-4167/0
 BOT CHORD 23-24=-339/916, 22-23=0/5449, 20-22=0/4769, 18-20=0/4769, 17-18=0/3877,
 16-17=0/538
 WEBS 5-22=0/1895, 11-18=0/1379, 6-28=-2843/0, 27-28=-2804/0, 27-29=-2804/0,
 10-29=-2865/0, 2-23=0/4804, 8-27=-176/258, 7-28=-23/912, 9-29=0/980, 3-23=-931/369,
 3-22=-919/681, 13-18=-321/1550, 13-17=-1956/44, 14-17=0/3556

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x6 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
 - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.



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Continue on page 2

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

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3736 | A2-GR | ATTIC | 1 | 2 | I56654214 |
| | | | | | Job Reference (optional) |

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NOTES-

- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-120(F=-40), 16-22=-80, 6-10=-40
Drag: 5-22=-20, 11-18=-20

4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-29, 2-7=2, 9-14=46, 14-15=32
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=16
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

14) Dead + Attic Floor: Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (plf)

Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20

15) Dead: Lumber Increase=1.00, Plate Increase=1.00

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818 Soundside Road
Edenton, NC 27932

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3736 | A2-GR | ATTIC | 1 | 2 | I56654214 |
| | | | | | Job Reference (optional) |

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LOAD CASE(S) Standard

- Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-40, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-240(F=-200), 18-22=-240, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20
- 16) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 17) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 18) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 20) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-120, 2-5=-120, 5-6=-160, 6-7=-120, 7-9=-120, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20
- 21) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-120, 9-10=-120, 10-11=-160, 11-14=-120, 14-15=-120, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20
- 22) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-100, 2-5=-100, 5-6=-140, 6-7=-100, 7-9=-100, 9-10=-40, 10-11=-80, 11-14=-40, 14-15=-40, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20
- 23) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-40, 2-5=-40, 5-6=-80, 6-7=-40, 7-9=-100, 9-10=-100, 10-11=-140, 11-14=-100, 14-15=-100, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Drag: 5-22=-20, 11-18=-20
- 24) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-5=-26, 5-6=-50, 6-7=-26, 7-9=41, 9-10=22, 10-11=-2, 11-14=22, 14-15=8, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=29, 2-7=2, 9-14=46, 14-15=32
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=8, 2-5=22, 5-6=-2, 6-7=22, 7-9=41, 9-10=-26, 10-11=-50, 11-14=-26, 14-15=5, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-32, 2-7=-46, 9-14=-2, 14-15=29
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 26) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-56, 2-5=-69, 5-6=-109, 6-7=-69, 7-9=-2, 9-10=-21, 10-11=-61, 11-14=-21, 14-15=-8, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=16, 2-7=29, 9-14=19, 14-15=32
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 27) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-8, 2-5=-21, 5-6=-61, 6-7=-21, 7-9=-2, 9-10=-69, 10-11=-109, 11-14=-69, 14-15=-56, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-32, 2-7=-19, 9-14=-29, 14-15=-16
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20
- 29) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

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818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654214 |
| J0722-3736 | A2-GR | ATTIC | 1 | 2 | Job Reference (optional) | |

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LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

30) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=28, 2-5=41, 5-6=17, 6-7=41, 7-9=17, 9-10=17, 10-11=-7, 11-14=17, 14-15=4, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-52, 2-7=-65, 9-14=41, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

31) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=4, 2-5=17, 5-6=-7, 6-7=17, 7-9=17, 9-10=41, 10-11=17, 11-14=41, 14-15=28, 22-24=-64(F=-40), 18-22=-48, 16-18=-24, 6-10=-24
Horz: 1-2=-28, 2-7=-41, 9-14=65, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

32) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=12, 2-5=-2, 5-6=-42, 6-7=-2, 7-9=-26, 9-10=-26, 10-11=-66, 11-14=-26, 14-15=-12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-52, 2-7=-38, 9-14=14, 14-15=28
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

33) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-12, 2-5=-26, 5-6=-66, 6-7=-26, 7-9=-26, 9-10=-2, 10-11=-42, 11-14=-2, 14-15=12, 22-24=-80(F=-40), 18-22=-80, 16-18=-40, 6-10=-40
Horz: 1-2=-28, 2-7=-14, 9-14=38, 14-15=52
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-112, 2-5=-122, 5-6=-162, 6-7=-122, 7-9=-71, 9-10=-86, 10-11=-126, 11-14=-86, 14-15=-76, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=12, 2-7=22, 9-14=14, 14-15=24
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

35) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-76, 2-5=-86, 5-6=-126, 6-7=-86, 7-9=-71, 9-10=-122, 10-11=-162, 11-14=-122, 14-15=-112, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-24, 2-7=-14, 9-14=-22, 14-15=-12
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

36) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-61, 2-5=-71, 5-6=-111, 6-7=-71, 7-9=-89, 9-10=-89, 10-11=-129, 11-14=-89, 14-15=-79, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-39, 2-7=-29, 9-14=11, 14-15=21
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

37) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-79, 2-5=-89, 5-6=-129, 6-7=-89, 7-9=-89, 9-10=-71, 10-11=-111, 11-14=-71, 14-15=-61, 22-24=-200(F=-160), 18-22=-200, 16-18=-40, 6-10=-40
Horz: 1-2=-21, 2-7=-11, 9-14=29, 14-15=39
Drag: 7-8=0, 8-9=0, 5-22=-20, 11-18=-20

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



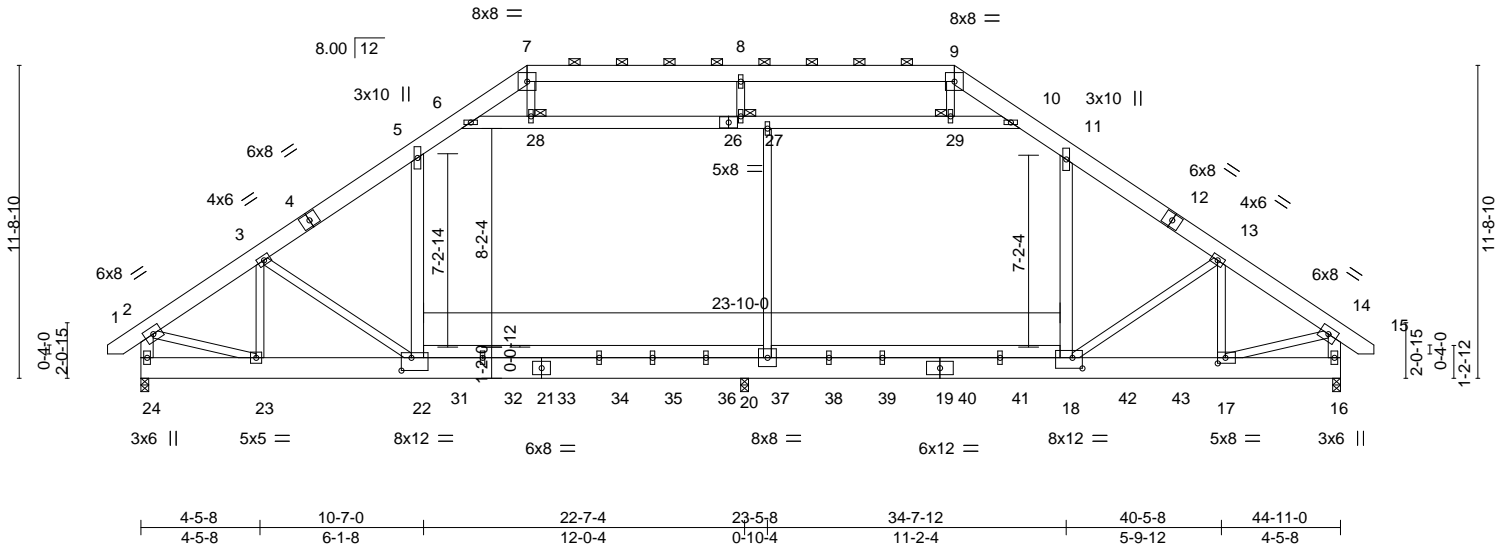
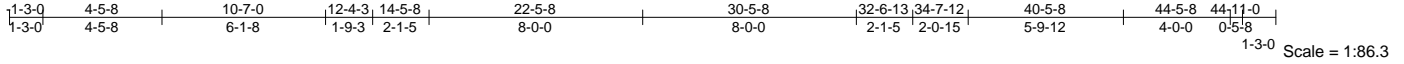
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-----------------|---------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss A2A-GR | Truss Type ATTIC | Qty 1 | Ply 3 | Lot 33 Liberty Meadows I56654215 |
|-------------------|-----------------|---------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

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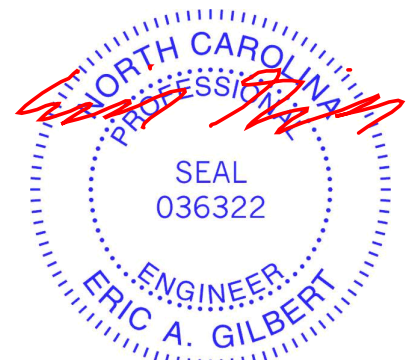
| | | | | | |
|-----------------------|--|-------------|----------------------------------|-----------------|-------------|
| Plate Offsets (X,Y)-- | [17:0-3-8,0-2-8], [18:0-4-8,0-4-12], [22:0-4-8,0-5-12] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.33 | Vert(LL) -0.21 18-20 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.43 | Vert(CT) -0.30 18-20 >876 240 | | |
| BCLL 0.0 * | Rep Stress Incr NO | WB 0.53 | Horz(CT) 0.03 16 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | Wind(LL) 0.07 20-22 >999 240 | Weight: 1643 lb | FT = 20% |

| | |
|---|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x8 SP 2400F 2.0E | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-9. |
| BOT CHORD 2x10 SP 2400F 2.0E *Except* 22-25,18-25: 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.2 *Except* 5-22,11-18,6-26,2-24,14-16,10-26: 2x6 SP No.1 | JOINTS 1 Brace at Jt(s): 27, 28, 29 |

REACTIONS. (size) 24=0-3-8, 16=0-3-8, 20=0-3-8
 Max Horz 24=-247(LC 6)
 Max Grav 24=4333(LC 2), 16=6344(LC 14), 20=4983(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-4887/0, 3-5=-6016/0, 5-6=-4428/0, 6-7=-1709/246, 7-8=-1386/218, 8-9=-1386/218, 9-10=-1680/244, 10-11=-4391/0, 11-13=-6162/0, 13-14=-7218/0, 2-24=-4091/0, 14-16=-5915/0
 BOT CHORD 23-24=-183/485, 22-23=-31/4002, 20-22=0/4845, 18-20=0/4845, 17-18=0/5997, 16-17=0/667
 WEBS 5-22=0/2848, 11-18=0/3199, 6-28=-5018/0, 27-28=-4980/0, 27-29=-4980/0, 10-29=-5005/0, 2-23=0/3734, 7-28=-1/563, 9-29=0/470, 3-23=-1566/71, 3-22=-223/1121, 13-18=-1429/457, 13-17=-766/946, 14-17=0/5642

- NOTES-**
- 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
 Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 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: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
 - 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.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x6 MT20 unless otherwise indicated.



Continued on page 2

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

| | | | | | | |
|------------|--------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654215 |
| J0722-3736 | A2A-GR | ATTIC | 1 | 3 | Job Reference (optional) | |

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NOTES-

- 7) Concentrated loads from layout are not present in Load Case(s): #3 Dead + Uninhabitable Attic Without Storage; #4 Dead + 0.6 MWFRS Wind (Pos. Internal) Left; #5 Dead + 0.6 MWFRS Wind (Pos. Internal) Right; #6 Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #7 Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #8 Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel; #9 Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel; #10 Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #11 Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel; #12 Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #13 Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #20 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #21 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #22 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #23 Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel); #36 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left; #37 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right; #38 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left; #39 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right; #40 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel; #41 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel; #42 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel; #43 Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel; #44 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel; #45 Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel; #46 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left); #47 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right); #48 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel); #49 Reversal: Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel).
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Ceiling dead load (10.0 psf) on member(s). 5-6, 10-11, 6-28, 27-28, 27-29, 10-29; Wall dead load (5.0psf) on member(s).5-22, 11-18
- 11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 20-22, 18-20
- 12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2488 lb down at 10-4-12, 142 lb down and 119 lb up at 11-9-4, 142 lb down and 119 lb up at 13-9-4, 142 lb down and 119 lb up at 15-9-4, 142 lb down and 119 lb up at 17-9-4, 142 lb down and 119 lb up at 19-9-4, 142 lb down and 119 lb up at 21-9-4, 899 lb down at 23-9-4, 899 lb down at 25-9-4, 899 lb down at 27-9-4, 243 lb down at 29-9-4, 243 lb down at 30-9-4, 243 lb down at 32-9-4, 243 lb down at 34-9-4, 243 lb down at 36-9-4, and 243 lb down at 38-9-4, and 3158 lb down at 40-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)
 Vert: 1-2=-60, 2-5=-60, 5-6=-80, 6-7=-60, 7-9=-60, 9-10=-60, 10-11=-80, 11-14=-60, 14-15=-60, 22-24=-20, 18-22=-40, 16-18=-20, 6-10=-20
 Drag: 5-22=-10, 11-18=-10
 Concentrated Loads (lb)
 Vert: 22=-767(B) 18=-40(B) 19=-40(B) 17=-1083(B) 37=-231(B) 38=-231(B) 39=-231(B) 40=-40(B) 41=-40(B) 42=-40(B) 43=-40(B)

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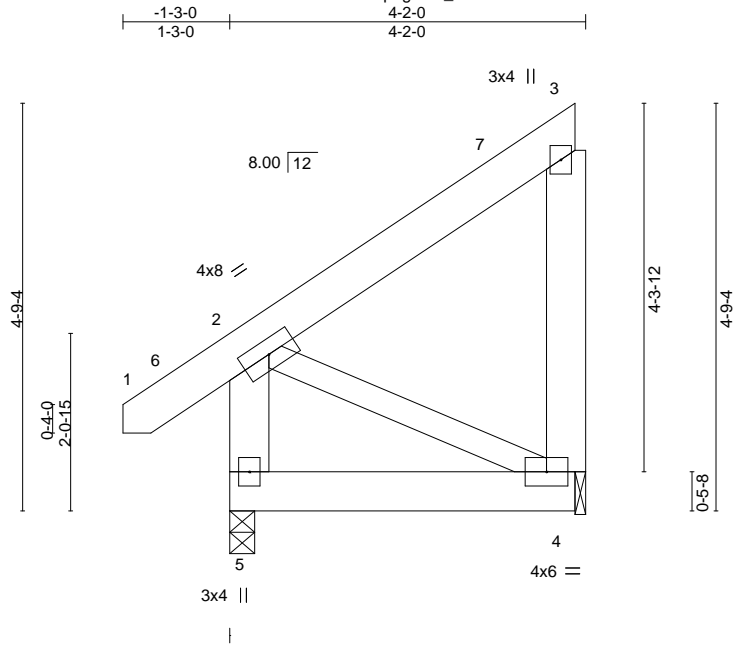
818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|-------------------|-------------|-------------------------|----------|----------|--|-----------|
| Job J0722-3736 | Truss A3 | Truss Type MONOPITCH | Qty 2 | Ply 1 | Lot 33 Liberty Meadows Job Reference (optional) | I56654216 |
|-------------------|-------------|-------------------------|----------|----------|--|-----------|

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Scale = 1:27.0

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|-----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.09 | Vert(LL) | -0.00 4-5 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.05 | Vert(CT) | -0.01 4-5 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.05 | Horz(CT) | -0.00 4 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-P | Wind(LL) | 0.00 5 | **** | 240 | | |
| | | | | | | | | Weight: 42 lb | FT = 20% |

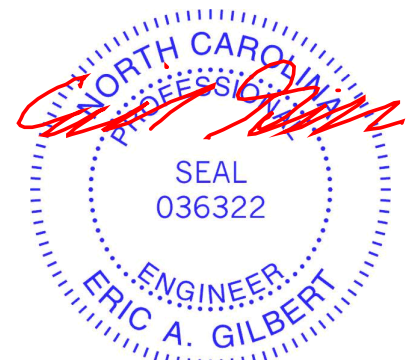
| LUMBER- | BRACING- |
|---|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x6 SP No.1 *Except* 2-4: 2x4 SP No.2 | |

REACTIONS. (size) 5=0-3-8, 4=0-1-8
 Max Horz 5=106(LC 9)
 Max Uplift 4=81(LC 12)
 Max Grav 5=241(LC 1), 4=167(LC 19)

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; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 3-11-0 zone; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4.



February 15, 2023

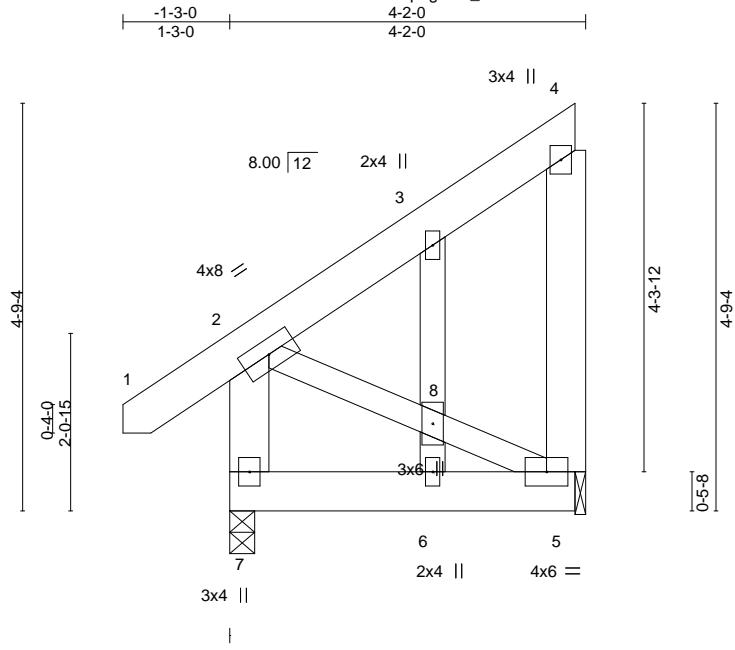
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| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual 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</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|--|

| | | | | | |
|-------------------|---------------|---------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss A3GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 33 Liberty Meadows 156654217 |
|-------------------|---------------|---------------------|----------|----------|-------------------------------------|

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Scale = 1:27.0

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.04 | Vert(LL) | -0.00 | 6 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.04 | Vert(CT) | -0.00 | 6 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.04 | Horz(CT) | -0.00 | 5 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.00 | 6 | >999 | | |
| | | | | | | | | Weight: 46 lb | FT = 20% |

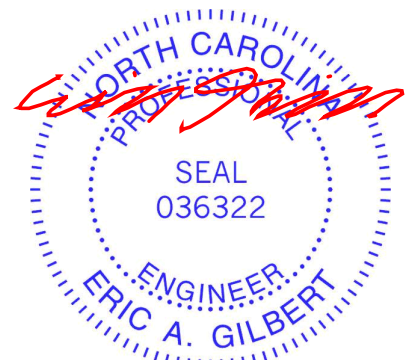
| LUMBER- | BRACING- |
|---|---|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x6 SP No.1 *Except* 2-5: 2x4 SP No.2 | |
| OTHERS 2x4 SP No.2 | |

REACTIONS. (size) 7=0-3-8, 5=0-1-8
 Max Horz 7=150(LC 12)
 Max Uplift 5=139(LC 12)
 Max Grav 7=241(LC 1), 5=165(LC 19)

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) 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
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) Gable studs spaced at 2-0-0 oc.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=139.



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| | |
|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

| | | | | | | |
|------------|-------|--------------|-----|-----|------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654218 |
| J0722-3736 | B1 | ROOF SPECIAL | 7 | 1 | | |

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5x5 =

Scale = 1:71.7

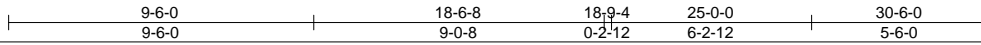
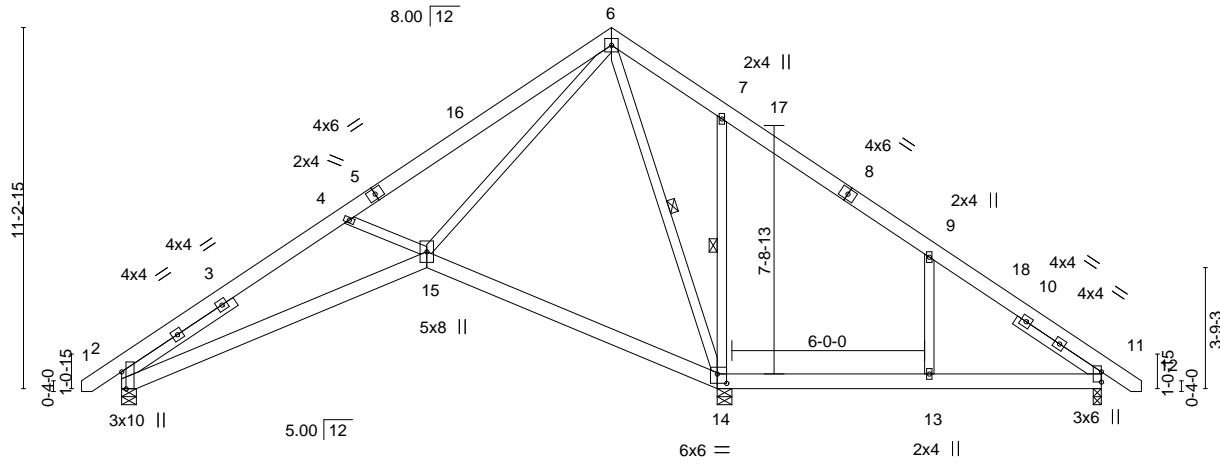


Plate Offsets (X, Y)-- [2:0-6-5,Edge], [14:0-3-8,0-3-8]

| LOADING (psf) | SPACING- | CSI. | DEFL. | PLATES | GRIP |
|---------------|----------------------|----------|-------------------------------|----------------|----------|
| TCLL 20.0 | 2-0-0 | TC 0.55 | in (loc) l/defl L/d | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.53 | Vert(LL) -0.25 13-14 >574 360 | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.47 | Vert(CT) -0.42 13-14 >338 240 | | |
| BCDL 10.0 | Rep Stress Incr YES | Matrix-S | Horz(CT) 0.09 14 n/a n/a | | |
| | Code IRC2015/TPI2014 | | Wind(LL) 0.32 13-14 >451 240 | Weight: 230 lb | FT = 20% |

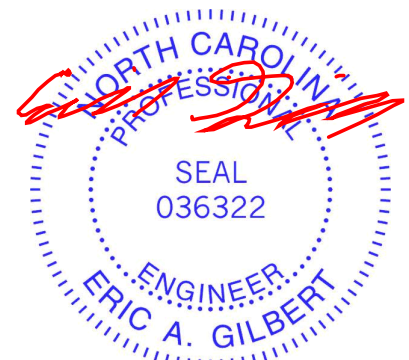
LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 SLIDER Left 2x4 SP No.2 4-3-8, Right 2x4 SP No.2 3-2-0

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
 10-0-0 oc bracing: 2-15.
 WEBS 1 Row at midpt 7-14, 6-14

REACTIONS. (size) 2=0-5-8, 14=0-5-8, 11=0-3-0
 Max Horz 2=-262(LC 10)
 Max Uplift 2=-95(LC 13), 14=-71(LC 12), 11=-375(LC 8)
 Max Grav 2=727(LC 1), 14=1553(LC 19), 11=631(LC 26)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-1447/716, 4-6=-1074/633, 6-7=-419/769, 7-9=-258/492, 9-11=-438/453
 BOT CHORD 2-15=-498/1305, 13-14=-303/231, 11-13=-303/231
 WEBS 4-15=-495/289, 6-15=-232/1121, 7-14=-699/516, 6-14=-849/141

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-1 to 3-3-12, Interior(1) 3-3-12 to 15-3-0, Exterior(2) 15-3-0 to 19-7-13, Interior(1) 19-7-13 to 31-7-1 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14 except (jt=lb) 11=375.
 - 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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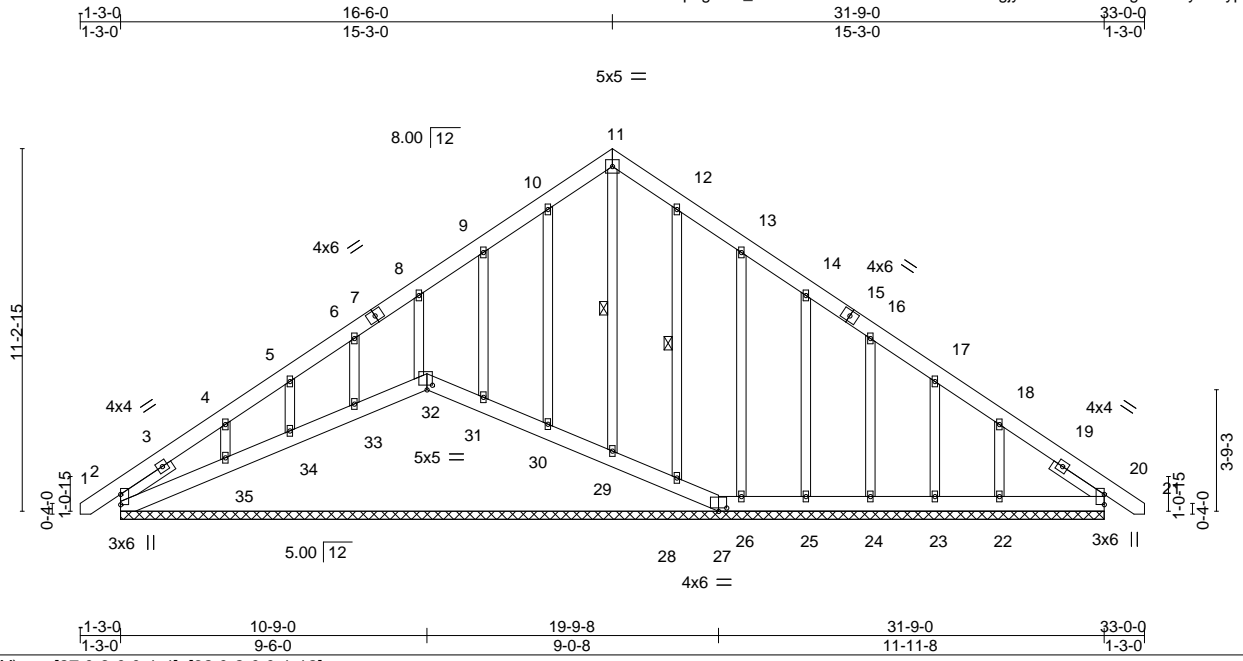
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 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 | Lot 33 Liberty Meadows | I56654219 |
| J0722-3736 | B1GE | GABLE | 1 | 1 | | |

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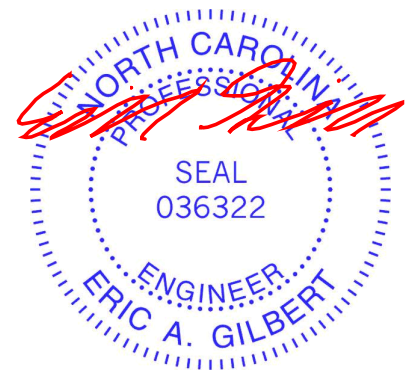
| | | | | | |
|-----------------------|-------------------------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [27:0-3-0,0-1-4], [32:0-2-0,0-1-12] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.07 | Vert(LL) 0.00 20 n/r 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.04 | Vert(CT) 0.00 20 n/r 120 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.17 | Horz(CT) 0.01 20 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 266 lb | FT = 20% |

| | |
|--|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | WEBS 1 Row at midpt 11-29, 12-28 |
| SLIDER Left 2x4 SP No.2 1-11-14, Right 2x4 SP No.2 1-10-13 | |

REACTIONS. All bearings 30-6-0.
 (lb) - Max Horz 2=-327(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 32, 27, 20, 30, 31, 33, 34, 28, 25, 24, 23 except 2=-181(LC 8), 35=-230(LC 12), 26=-109(LC 13), 22=-190(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 27, 20, 30, 31, 33, 34, 28, 26, 25, 24, 23 except 2=324(LC 20), 32=268(LC 19), 29=254(LC 13), 35=296(LC 19), 22=284(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-292/240, 9-10=-260/286, 10-11=-293/319, 11-12=-294/319, 12-13=-260/273
 BOT CHORD 31-32=-142/251, 30-31=-143/253, 29-30=-143/253, 28-29=-143/253, 27-28=-138/253
 WEBS 4-35=-251/239, 18-22=-250/206

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 20, 30, 31, 33, 34, 28, 25, 24, 23 except (jt=lb) 2=181, 35=230, 26=109, 22=190.
 - 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



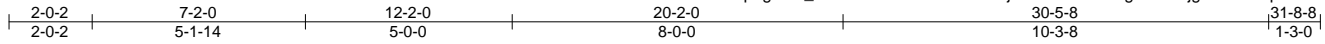
| | | | | | |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss C1 | Truss Type ROOF SPECIAL | Qty 1 | Ply 1 | Lot 33 Liberty Meadows I56654220 |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|

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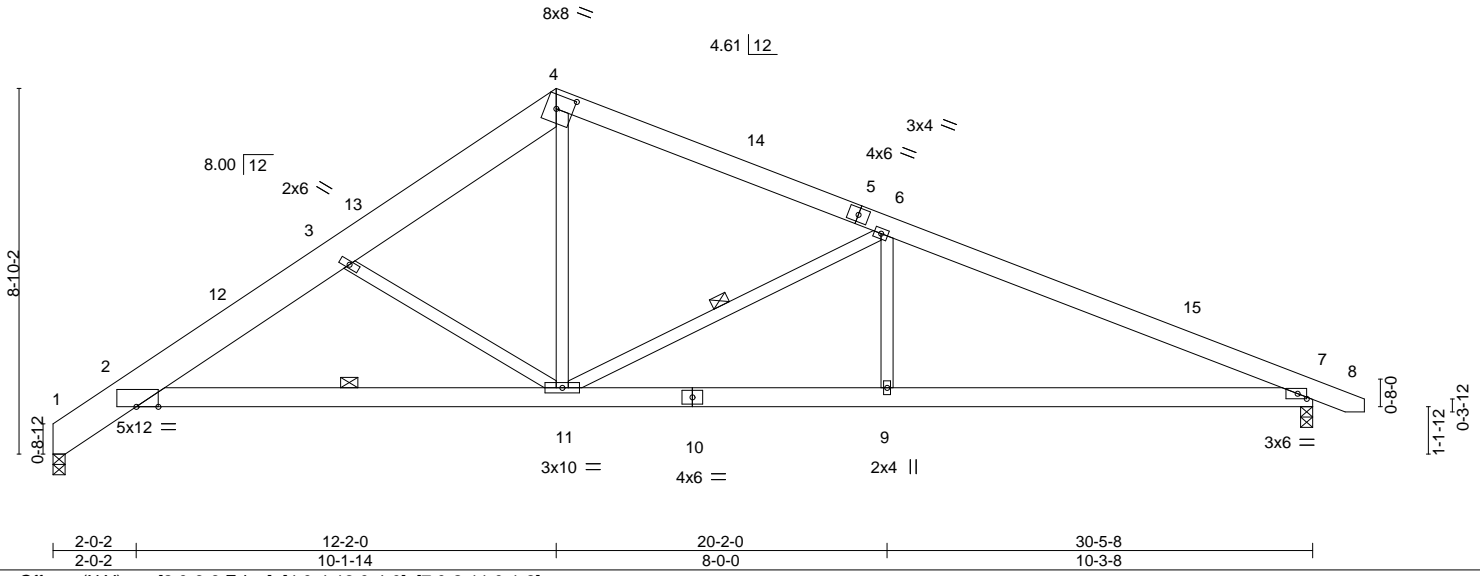
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Job Reference (optional)



Scale = 1:55.7



| | |
|-----------------------|--|
| Plate Offsets (X,Y)-- | [2:0-6-6,Edge], [4:0-4-13,0-4-0], [7:0-2-11,0-1-8] |
|-----------------------|--|

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|------------|--------|-----|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.71 | Vert(LL) | -0.11 2-11 | >999 | 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.47 | Vert(CT) | -0.28 2-11 | >999 | 240 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.51 | Horz(CT) | 0.12 7 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.08 2-11 | >999 | 240 | Weight: 212 lb | FT = 20% |

| LUMBER- | BRACING- |
|---|---|
| TOP CHORD 2x6 SP No.1 *Except* 1-4: 2x10 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-5-9 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 10-0-0 oc bracing: 2-11 |
| WEBS 2x4 SP No.2 | WEBS 1 Row at midpt 6-11 |

REACTIONS. (size) 1=0-3-8, 7=0-3-8
 Max Horz 1=-201(LC 10)
 Max Uplift 1=-48(LC 12), 7=-104(LC 13)
 Max Grav 1=1210(LC 1), 7=1278(LC 1)

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

| | |
|-----------|--|
| TOP CHORD | 1-2=-569/121, 2-3=-2092/501, 3-4=-1644/425, 4-6=-1467/377, 6-7=-2383/481 |
| BOT CHORD | 2-11=-353/1874, 9-11=-346/2112, 7-9=-346/2112 |
| WEBS | 3-11=-791/296, 4-11=-169/1036, 6-11=-960/266, 6-9=0/375 |

- 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 12-2-0, Exterior(2) 12-2-0 to 16-6-13, Interior(1) 16-6-13 to 31-5-11 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 7=104.



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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

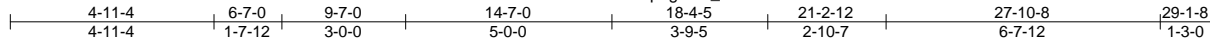
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss C2 | Truss Type ROOF SPECIAL | Qty 7 | Ply 1 | Lot 33 Liberty Meadows I56654222 |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|

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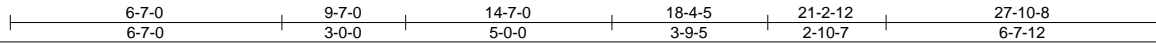
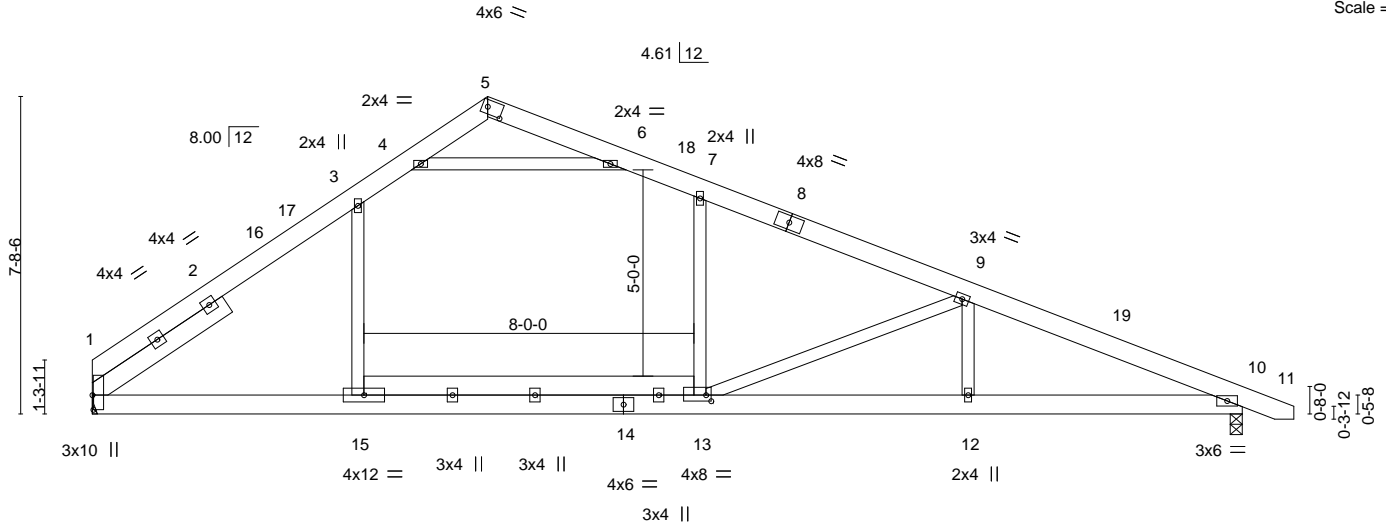


Plate Offsets (X,Y)-- [1:0-4-4,0-0-4], [5:0-4-7,0-2-0], [13:0-1-8,0-1-12]

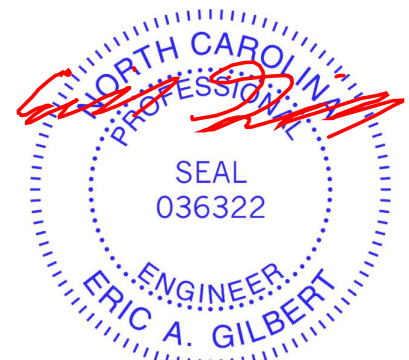
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.51 | Vert(LL) | -0.31 | 12-13 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.90 | Vert(CT) | -0.56 | 12-13 | >598 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.92 | Horz(CT) | 0.04 | 10 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.23 | 12-13 | >999 | | |
| | | | | | | | | Weight: 205 lb | FT = 20% |

| LUMBER- | BRACING- |
|--------------------------------|--|
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 9-2-13 oc bracing. |
| WEBS 2x4 SP No.1 *Except* | |
| 9-12,9-13: 2x4 SP No.2 | |
| SLIDER Left 2x6 SP No.1 3-11-6 | |

REACTIONS. (size) 1=Mechanical, 10=0-3-8
 Max Horz 1=-189(LC 10)
 Max Uplift 1=-37(LC 12), 10=-104(LC 13)
 Max Grav 1=1108(LC 1), 10=1180(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-3=-1685/375, 3-4=-1221/401, 5-6=-39/275, 6-7=-1215/378, 7-9=-1449/349, 9-10=-2434/469
 BOT CHORD 1-15=-153/1243, 13-15=-161/1248, 12-13=-366/2187, 10-12=-366/2187
 WEBS 3-15=0/525, 7-13=0/385, 4-6=-1466/447, 9-12=0/375, 9-13=-1095/232

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 9-7-0, Exterior(2) 9-7-0 to 13-11-13, Interior(1) 13-11-13 to 28-10-11 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) 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) 1 except (jt=lb) 10=104.

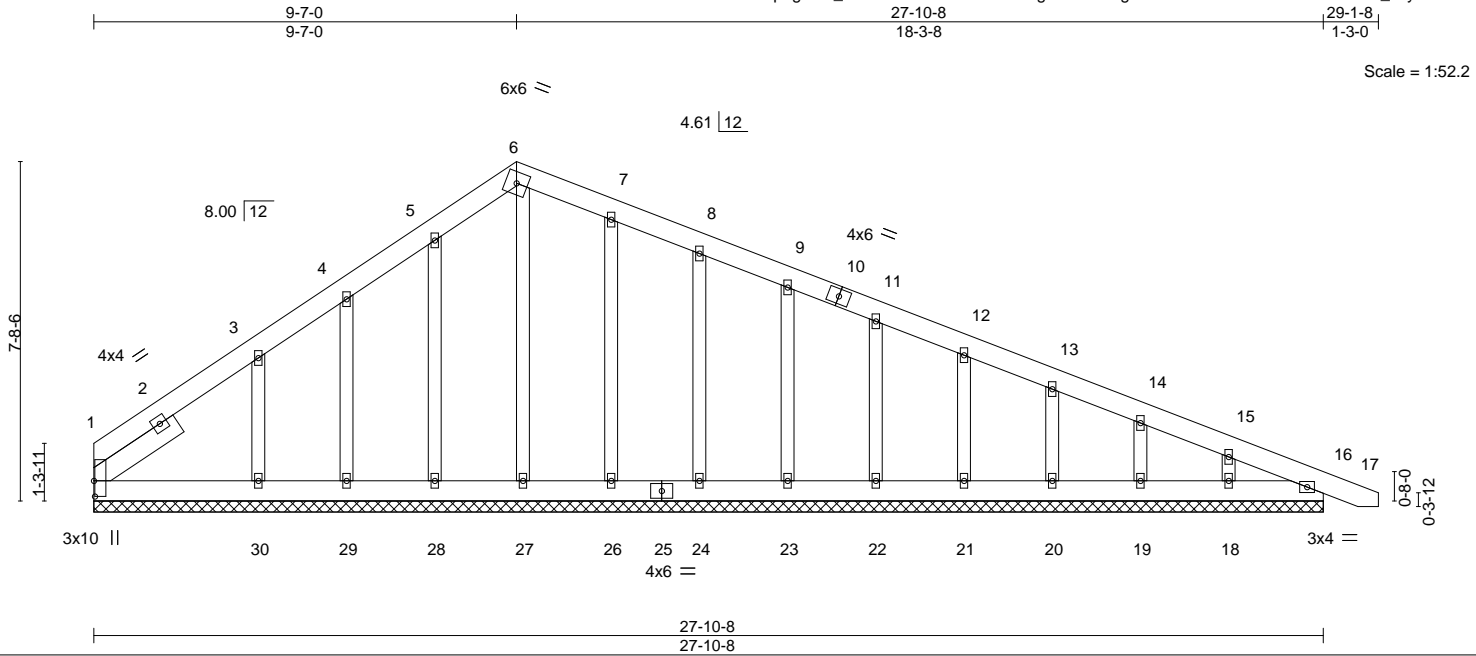


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| | | | | | |
|-------------------|---------------|------------------------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss C2GE | Truss Type ROOF SPECIAL SUPPORT | Qty 1 | Ply 1 | Lot 33 Liberty Meadows I56654223 |
|-------------------|---------------|------------------------------------|----------|----------|-------------------------------------|

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| | | | | | |
|-----------------------|-----------------------|-------------|----------------------------------|----------------|-------------|
| Plate Offsets (X,Y)-- | [1:0-4-4,0-0-4] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.07 | Vert(LL) -0.00 16 n/r 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.03 | Vert(CT) -0.00 16 n/r 120 | | |
| BCLL 0.0 * | Rep Stress Incr YES | WB 0.12 | Horz(CT) 0.00 16 n/a n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 215 lb | FT = 20% |

| | |
|--------------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x6 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| OTHERS 2x4 SP No.2 | |
| SLIDER Left 2x6 SP No.1 2-3-13 | |

REACTIONS. All bearings 27-10-8.
 (lb) - Max Horz 1--260(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except 30--206(LC 12)
 Max Grav All reactions 250 lb or less at joint(s) 1, 27, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except 30=346(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 5-6--158/274, 6-7--157/257
 WEBS 3-30--281/228

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 28, 29, 26, 24, 23, 22, 21, 20, 19, 18, 16 except (jt=lb) 30=206.
 - 10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 1.



February 15, 2023

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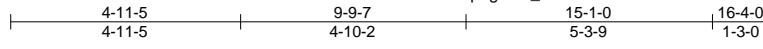
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss D1 | Truss Type ROOF SPECIAL | Qty 2 | Ply 1 | Lot 33 Liberty Meadows I56654224 |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

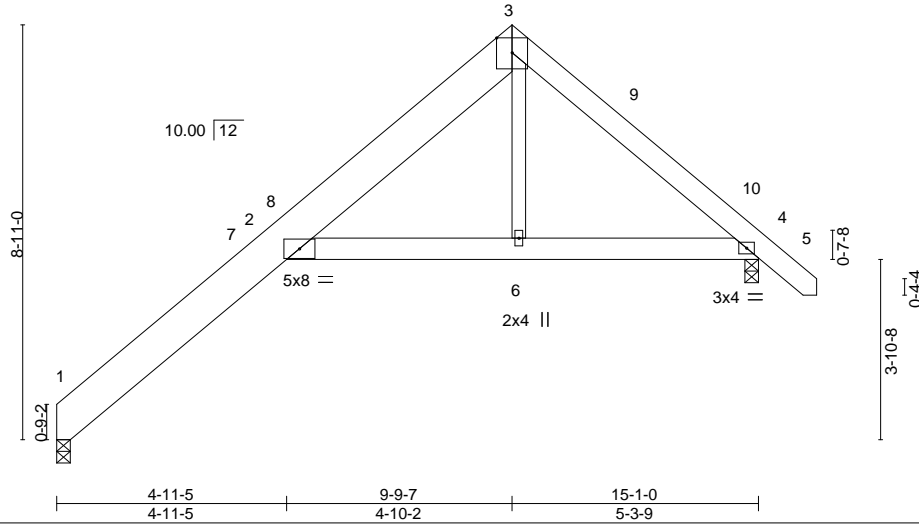
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:31 2023 Page 1

ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-ctiXbcmk3DoTbnG3nrR__wn?icxUfd_f73d0RzkyAA



8x8 =

Scale = 1:49.5



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.66 | Vert(LL) | -0.15 | 2 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.31 | Vert(CT) | -0.30 | 2 | >597 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.06 | Horz(CT) | 0.23 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.15 | 2 | >999 | | |
| | | | | | | | | Weight: 102 lb | FT = 20% |

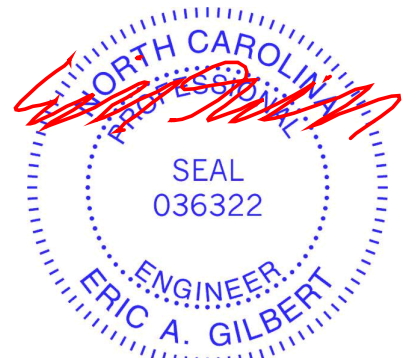
LUMBER-
 TOP CHORD 2x10 SP No.1 *Except*
 3-5: 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

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

REACTIONS. (size) 1=0-3-8, 4=0-3-8
 Max Horz 1=179(LC 9)
 Max Uplift 1=6(LC 12), 4=46(LC 12)
 Max Grav 1=610(LC 1), 4=674(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-394/97, 2-3=-530/150, 3-4=-768/205
 BOT CHORD 2-6=-14/550, 4-6=-13/557
 WEBS 3-6=0/284

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=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 9-9-7, Exterior(2) 9-9-7 to 14-2-4, Interior(1) 14-2-4 to 16-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.



February 15, 2023

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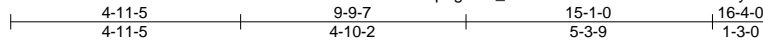
818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3736 | D1SG | GABLE | 1 | 1 | I56654225 |
| | | | | | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

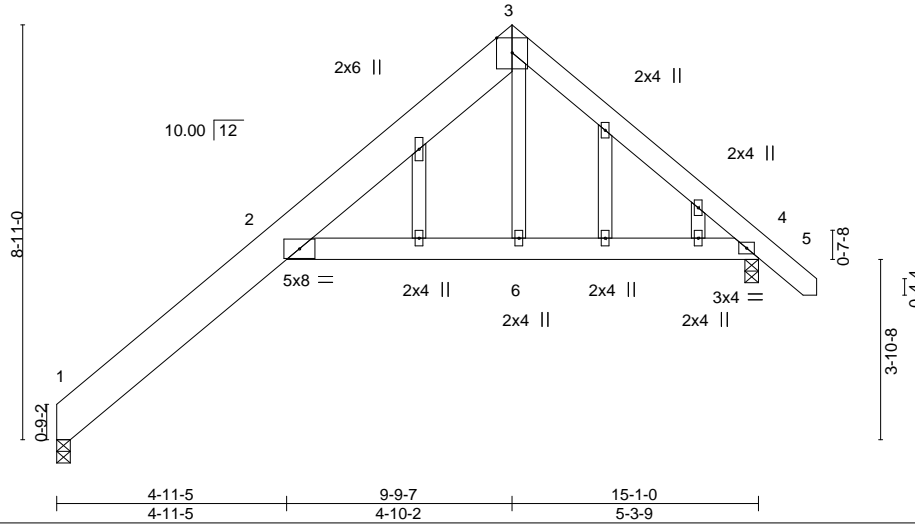
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:32 2023 Page 1

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8x8 =

Scale = 1:49.5



| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|----------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.66 | Vert(LL) | -0.15 | 2 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.31 | Vert(CT) | -0.30 | 2 | >597 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.06 | Horz(CT) | 0.23 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) | 0.22 | 2 | >814 | | |
| | | | | | | | | Weight: 110 lb | FT = 20% |

LUMBER-

TOP CHORD 2x10 SP No.1 *Except*
3-5: 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-

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

REACTIONS.

(size) 1=0-3-8, 4=0-3-8
Max Horz 1=247(LC 12)
Max Uplift 1=-83(LC 12), 4=-145(LC 12)
Max Grav 1=610(LC 1), 4=674(LC 1)

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

TOP CHORD 1-2=-415/127, 2-3=-530/161, 3-4=-783/245
BOT CHORD 2-6=-93/570, 4-6=-93/577
WEBS 3-6=0/284

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 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) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 4=145.



February 15, 2023

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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



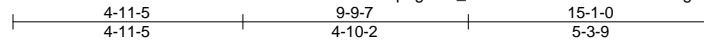
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss D2 | Truss Type ROOF SPECIAL | Qty 2 | Ply 1 | Lot 33 Liberty Meadows I56654226 |
|-------------------|-------------|----------------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

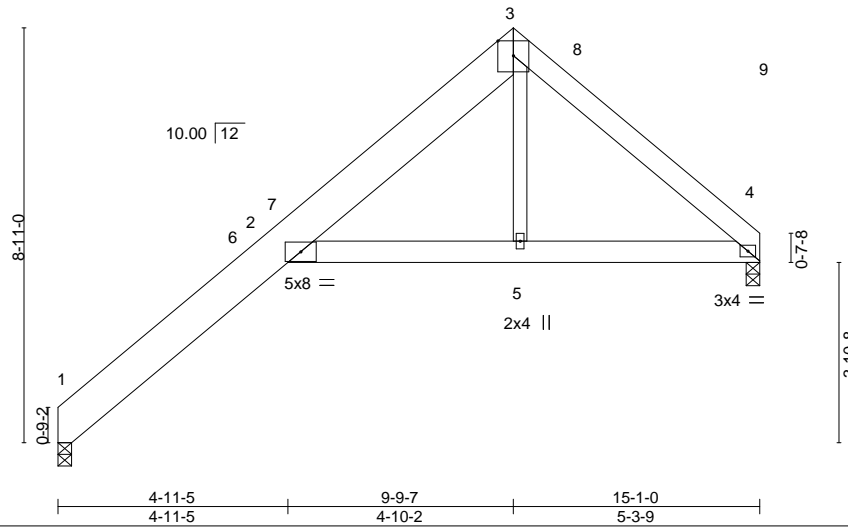
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:34 2023 Page 1

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8x8 =

Scale = 1:49.5



| | | | | | | | | |
|----------------------|----------------------|-------|-------------|-----------------------|--------|------|---------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.67 | Vert(LL) -0.15 | 2 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.31 | Vert(CT) -0.30 | 2 | >594 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.06 | Horz(CT) 0.24 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | Wind(LL) 0.16 | 2 | >999 | | |
| | | | | | | | Weight: 99 lb | FT = 20% |

LUMBER-

TOP CHORD 2x10 SP No.1 *Except*
3-4: 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-

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

REACTIONS.

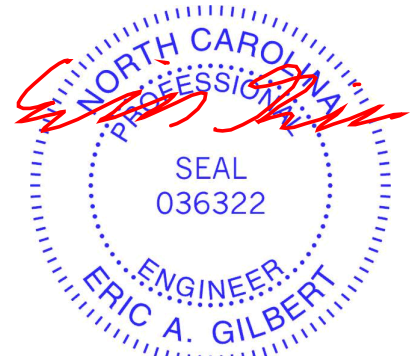
(size) 1=0-3-8, 4=0-3-8
Max Horz 1=191(LC 9)
Max Uplift 1=-3(LC 12), 4=-47(LC 12)
Max Grav 1=613(LC 1), 4=596(LC 1)

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

TOP CHORD 1-2=-391/85, 2-3=-540/159, 3-4=-774/241
BOT CHORD 2-5=-71/542, 4-5=-70/549
WEBS 3-5=0/287

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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-9-7, Exterior(2) 9-9-7 to 14-2-4, Interior(1) 14-2-4 to 14-11-4 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.
- 5) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4.



February 15, 2023

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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



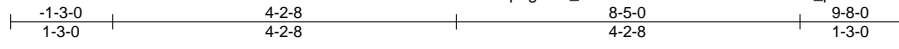
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-------------|----------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss G1 | Truss Type COMMON | Qty 3 | Ply 1 | Lot 33 Liberty Meadows I56654227 |
|-------------------|-------------|----------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

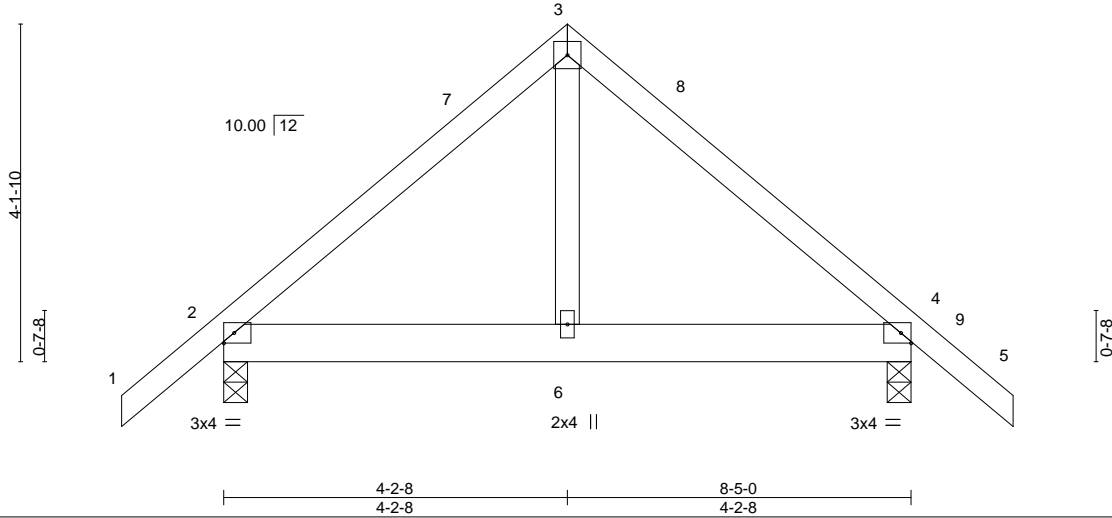
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:35 2023 Page 1

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4x4 =

Scale = 1:28.2



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|------|---------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.29 | Vert(LL) | -0.00 | 6 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.06 | Vert(CT) | -0.01 | 2-6 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.04 | Horz(CT) | 0.00 | 4 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-P | Wind(LL) | -0.00 | 6 | >999 | | |
| | | | | | | | | Weight: 46 lb | FT = 20% |

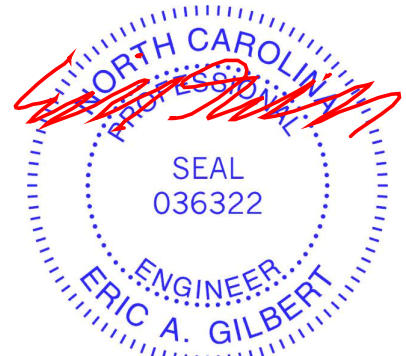
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
 Max Horz 2=109(LC 11)
 Max Uplift 2=-34(LC 12), 4=-34(LC 13)
 Max Grav 2=409(LC 1), 4=409(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-321/71, 3-4=-321/71

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



February 15, 2023

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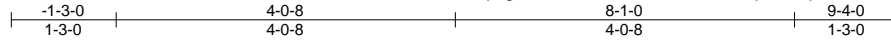
818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|-------------------|---------------|---------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss G1GE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 33 Liberty Meadows I56654228 |
|-------------------|---------------|---------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

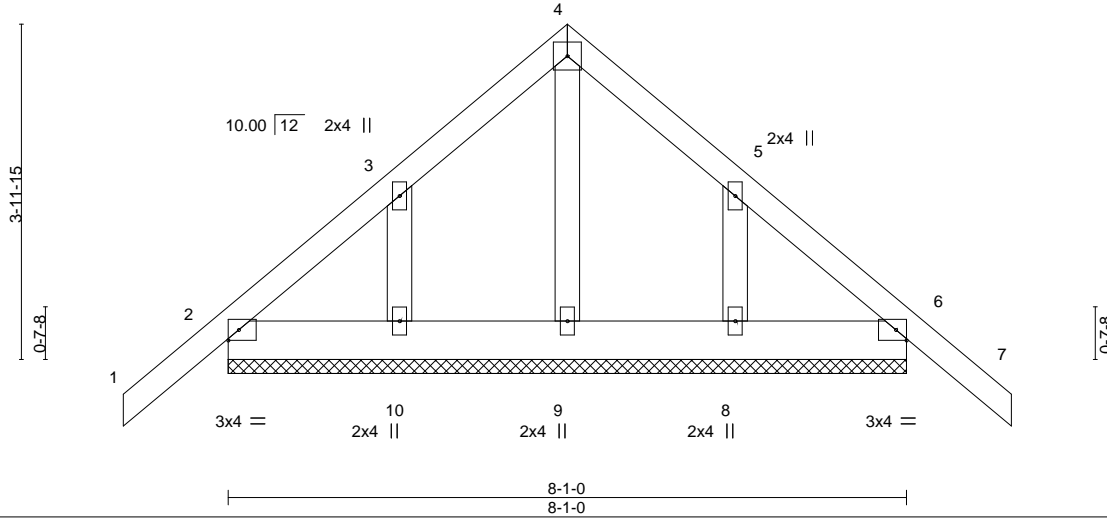
8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:36 2023 Page 1

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4x4 =

Scale = 1:27.5



| | | | | | | | | | |
|----------------------|----------------------|-------|-------------|--------------|----------|--------|-----|---------------|-------------|
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.08 | Vert(LL) | -0.01 | 7 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.01 | Vert(CT) | -0.01 | 7 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.03 | Horz(CT) | 0.00 | 6 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-P | | | | | Weight: 50 lb | FT = 20% |

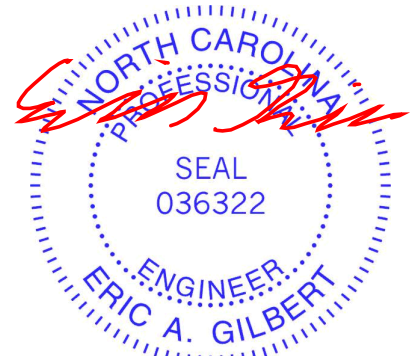
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 8-1-0.
(lb) - Max Horz 2=132(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-126(LC 12), 8=-124(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=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
 - 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.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=126, 8=124.



February 15, 2023

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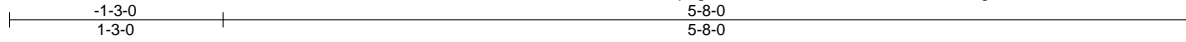
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|-------------------|-------------|------------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss M1 | Truss Type MONOPICH | Qty 3 | Ply 1 | Lot 33 Liberty Meadows I56654229 |
|-------------------|-------------|------------------------|----------|----------|-------------------------------------|

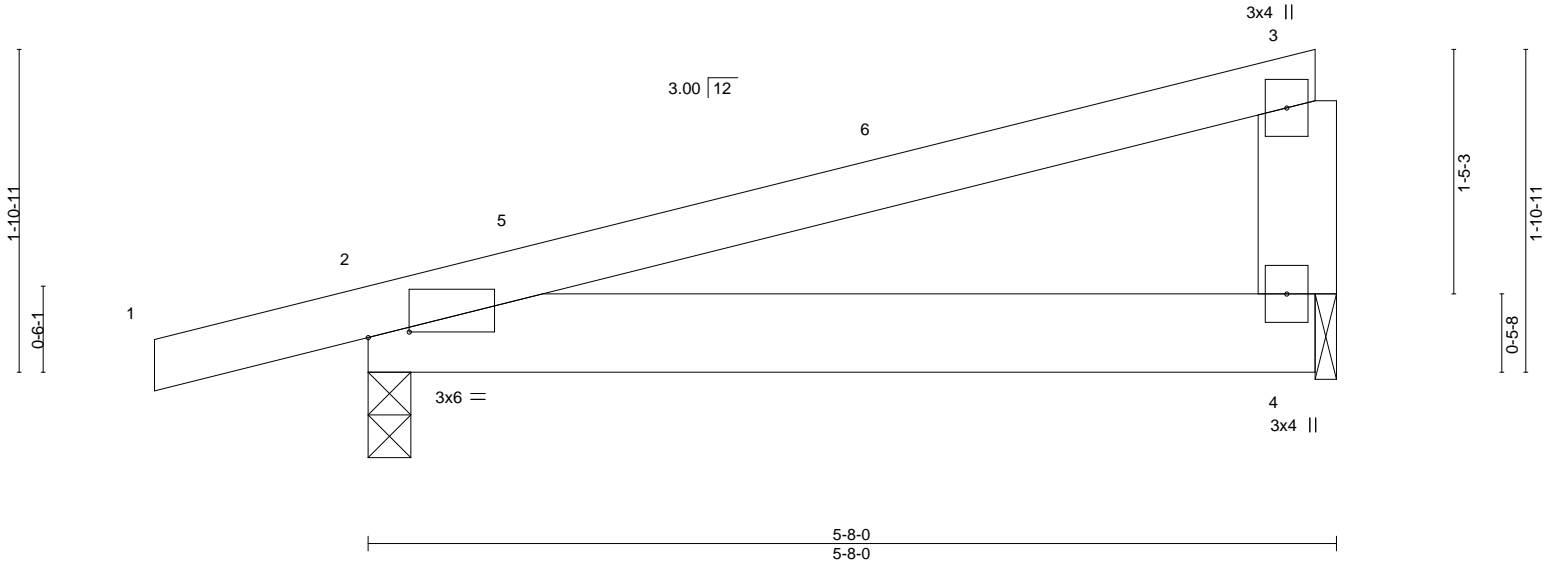
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:37 2023 Page 1

ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-R03osgrVf3ZdbWEQP2xrEF9t7iTuN6t22WxD4zkyA4



Scale = 1:13.5



| | | | | | |
|-----------------------|-----------------------|-------------|----------------------------------|---------------|-------------|
| Plate Offsets (X,Y)-- | [2:0-2-14,0-0-6] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 20.0 | Plate Grip DOL 1.15 | TC 0.36 | Vert(LL) -0.01 2-4 >999 360 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.15 | BC 0.11 | Vert(CT) -0.02 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) 0.02 2-4 >999 240 | Weight: 26 lb | FT = 20% |

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

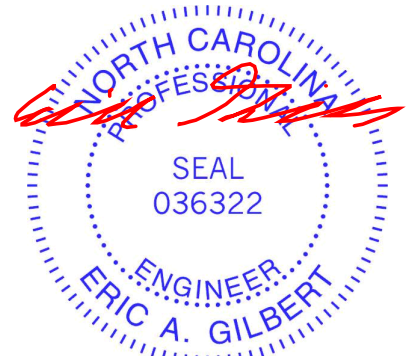
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
 Max Horz 2=57(LC 8)
 Max Uplift 2=-132(LC 8), 4=-82(LC 8)
 Max Grav 2=306(LC 1), 4=202(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) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 5-5-4 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=132.



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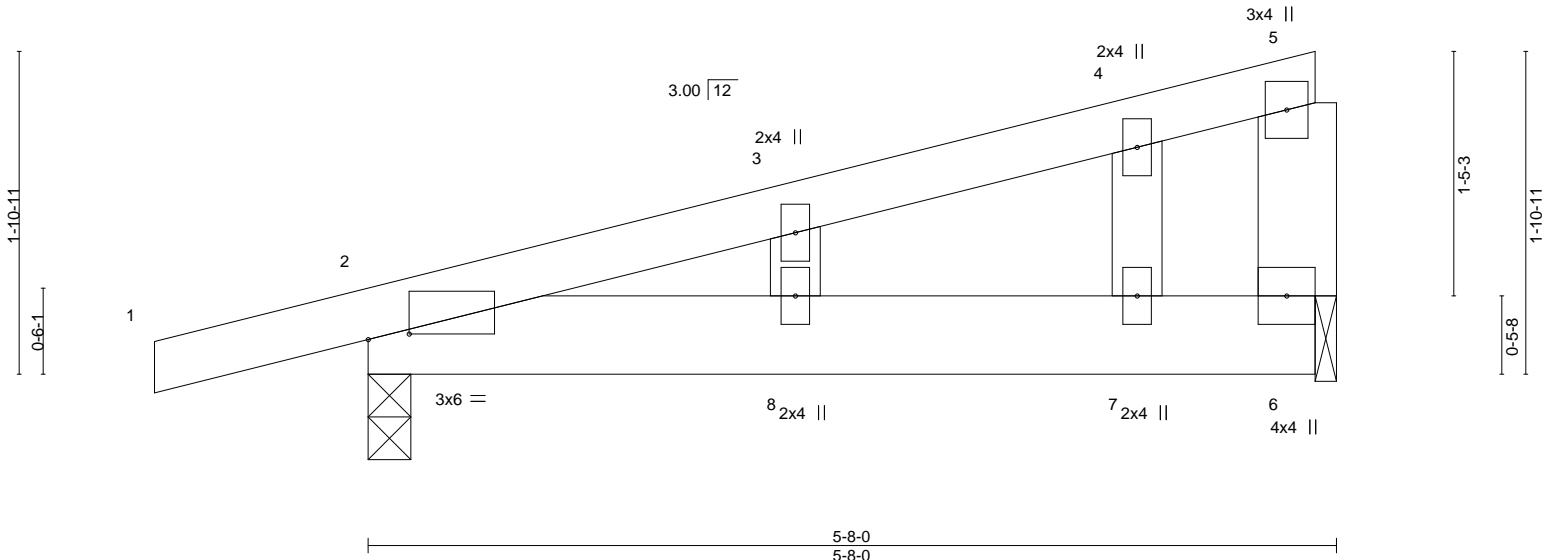


818 Soundside Road
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| | | | | | | |
|--|-------|------------|-----|-----|------------------------|---|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654230 |
| J0722-3736 | M1GE | GABLE | 1 | 1 | | |
| Comtech, Inc. Fayetteville, NC - 28314, | | | | | | 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:38 2023 Page 1 |
| ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-vDdA3?r7QNhUCgpczIT4nTi6sW2Xdq70GiFUmXzkyA3 | | | | | | |
| Job Reference (optional) | | | | | | |



Scale = 1:13.5



| | |
|-----------------------|------------------|
| Plate Offsets (X,Y)-- | [2:0-2-14,0-0-6] |
|-----------------------|------------------|

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.11 | Vert(LL) | 0.02 | 8 | >999 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.12 | Vert(CT) | -0.02 | 8 | >999 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.02 | Horz(CT) | -0.00 | 6 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | Weight: 28 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|---|
| TOP CHORD 2x4 SP No.1 | TOP CHORD Structural wood sheathing directly applied or 5-8-0 oc purlins, except end verticals. |
| BOT CHORD 2x6 SP No.1 | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x6 SP No.1 | |
| OTHERS 2x4 SP No.2 | |

REACTIONS. (size) 2=0-3-0, 6=0-1-8
 Max Horz 2=81(LC 8)
 Max Uplift 2=-189(LC 8), 6=-120(LC 8)
 Max Grav 2=306(LC 1), 6=202(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) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 3) Gable studs spaced at 2-0-0 oc.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 6=120.

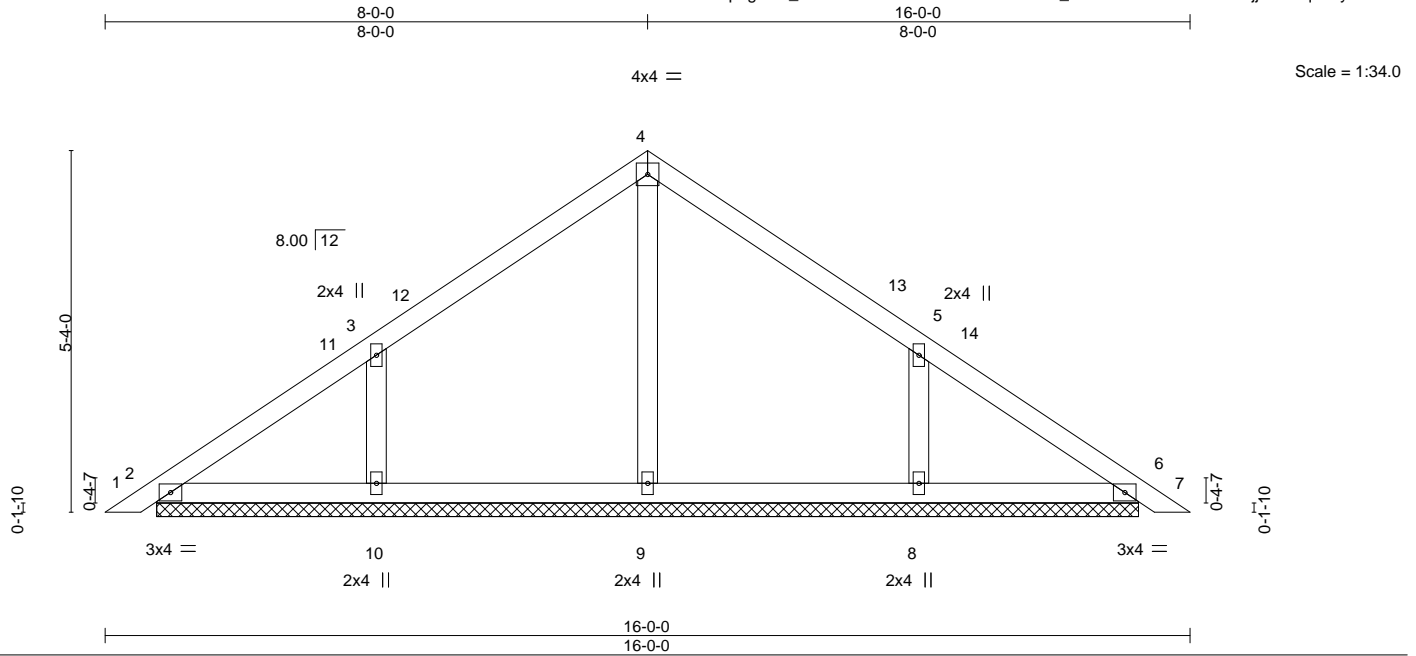


February 15, 2023

| | | | | | | |
|-------------------|-------------|---------------------|----------|----------|--|-----------|
| Job J0722-3736 | Truss PB | Truss Type GABLE | Qty 5 | Ply 1 | Lot 33 Liberty Meadows Job Reference (optional) | I56654231 |
|-------------------|-------------|---------------------|----------|----------|--|-----------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:40 2023 Page 1
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Scale = 1:34.0

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.14 | Vert(LL) | 0.00 | 6 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.08 | Vert(CT) | 0.00 | 7 | n/r | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.07 | Horz(CT) | 0.00 | 6 | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | Weight: 63 lb | FT = 20% |

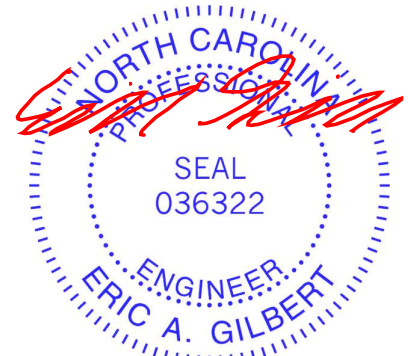
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 14-5-12.
 (lb) - Max Horz 2=-124(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=-104(LC 12), 8=-104(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 2, 6 except 9=252(LC 1), 10=363(LC 19), 8=362(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-309/207, 5-8=-310/207

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 15-8-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 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.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 4'-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=104, 8=104.
 - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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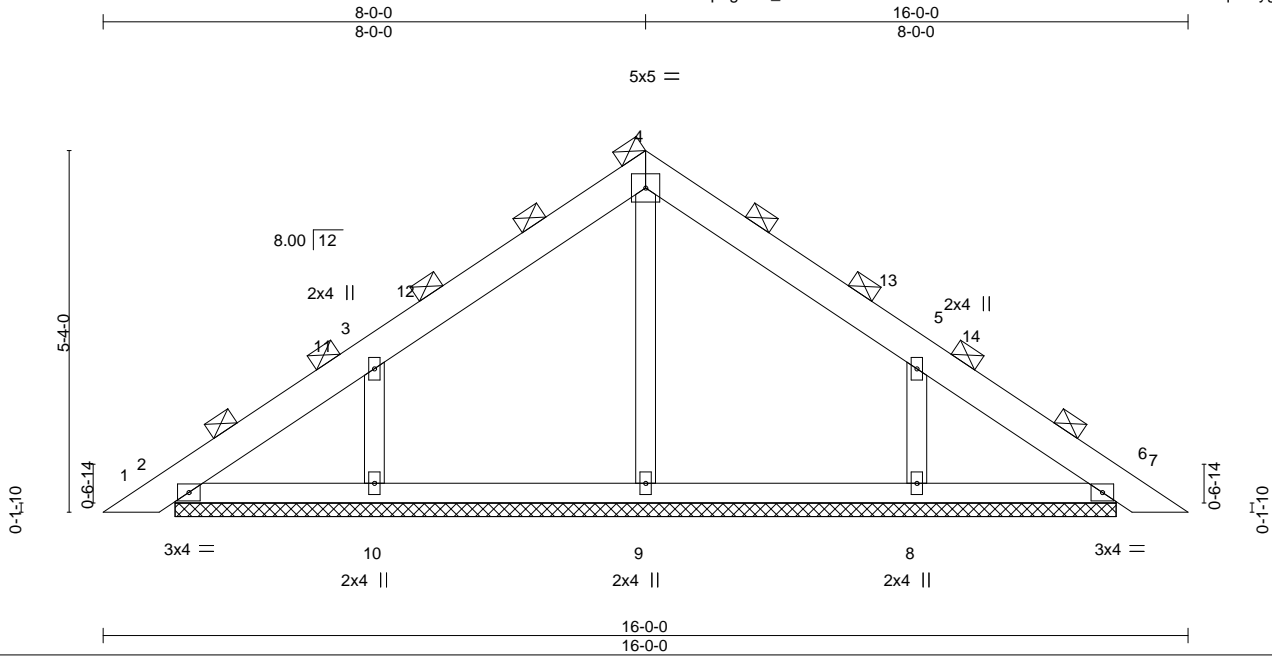


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| | | | | | |
|-------------------|--------------|---------------------|----------|----------|-------------------------------------|
| Job J0722-3736 | Truss PBA | Truss Type GABLE | Qty 2 | Ply 1 | Lot 33 Liberty Meadows I56654232 |
|-------------------|--------------|---------------------|----------|----------|-------------------------------------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:41 2023 Page 1
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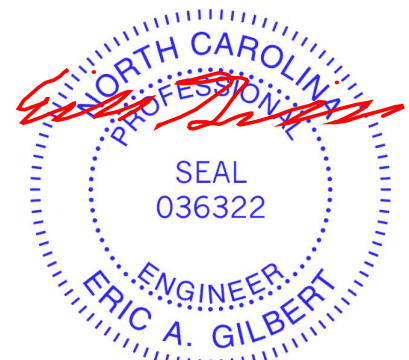
| LOADING (psf) | SPACING- | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP |
|---------------|----------------------|----------|----------|----------|--------|-----|---------------|----------|
| TCLL 20.0 | 5-0-0 | TC 0.17 | Vert(LL) | 0.00 | 6 | n/r | MT20 | 244/190 |
| TCDL 10.0 | Plate Grip DOL 1.15 | BC 0.23 | Vert(CT) | 0.00 | 7 | n/r | | |
| BCLL 0.0 * | Lumber DOL 1.15 | WB 0.16 | Horz(CT) | 0.00 | 6 | n/a | | |
| BCDL 10.0 | Rep Stress Incr NO | Matrix-S | | | | | | |
| | Code IRC2015/TPI2014 | | | | | | Weight: 77 lb | FT = 20% |

| LUMBER- | BRACING- |
|-----------------------|--|
| TOP CHORD 2x6 SP No.1 | TOP CHORD 2-0-0 oc purlins (6-0-0 max.) |
| BOT CHORD 2x4 SP No.1 | (Switched from sheeted: Spacing > 2-8-0). |
| OTHERS 2x4 SP No.2 | Rigid ceiling directly applied or 10-0-0 oc bracing. |

REACTIONS. All bearings 13-10-9.
 (lb) - Max Horz 2=303(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2 except 10=253(LC 12), 8=249(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) except 2=392(LC 1), 6=392(LC 1), 9=617(LC 1), 10=864(LC 19), 8=858(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-326/230, 3-4=-389/340, 4-5=-388/348
 WEBS 4-9=-411/0, 3-10=-756/503, 5-8=-757/504

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-15 to 4-9-12, Interior(1) 4-9-12 to 8-0-0, Exterior(2) 8-0-0 to 12-4-13, Interior(1) 12-4-13 to 15-7-1 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) Gable requires continuous bottom chord bearing.
 - 5) Gable studs spaced at 4-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 10=253, 8=249.
 - 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
 - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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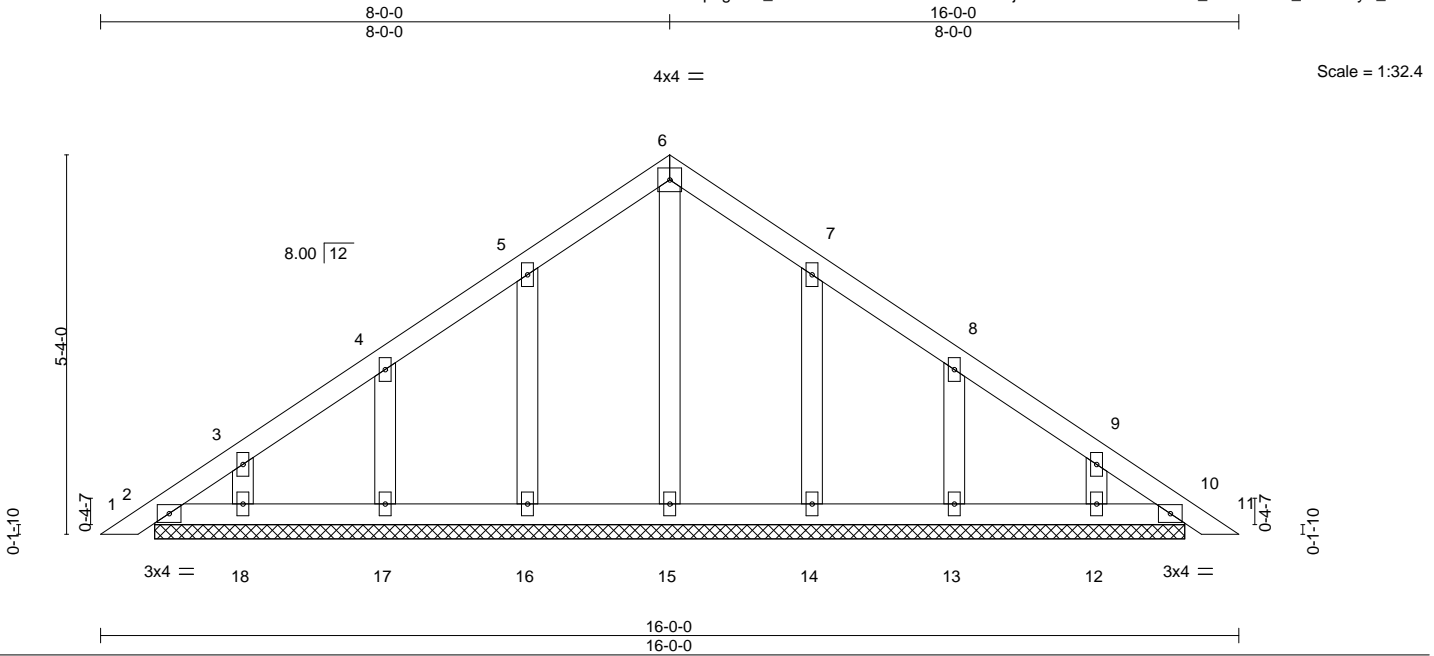
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|--|--|
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|--|--|

| | | | | | | |
|-------------------|---------------|---------------------|----------|----------|--|-----------|
| Job J0722-3736 | Truss PGBE | Truss Type GABLE | Qty 1 | Ply 1 | Lot 33 Liberty Meadows Job Reference (optional) | I56654233 |
|-------------------|---------------|---------------------|----------|----------|--|-----------|

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| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|-----|--------|---------------|----------|
| TCLL 20.0 | Plate Grip DOL | 1.15 | TC 0.03 | Vert(LL) | -0.00 | 10 | n/r | 120 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.15 | BC 0.02 | Vert(CT) | -0.00 | 10 | n/r | 120 | | |
| BCLL 0.0 * | Rep Stress Incr | YES | WB 0.05 | Horz(CT) | 0.00 | 10 | n/a | n/a | | |
| BCDL 10.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | Weight: 75 lb | FT = 20% |

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

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

REACTIONS. All bearings 14-5-12.
 (lb) - Max Horz 2=-155(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 17, 18, 14, 13, 12
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 17, 18, 14, 13, 12.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



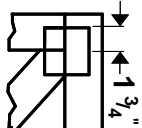
February 15, 2023

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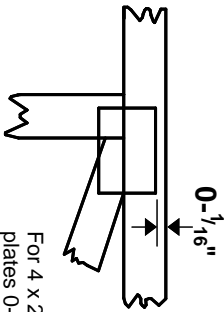


Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

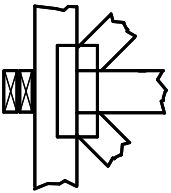
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



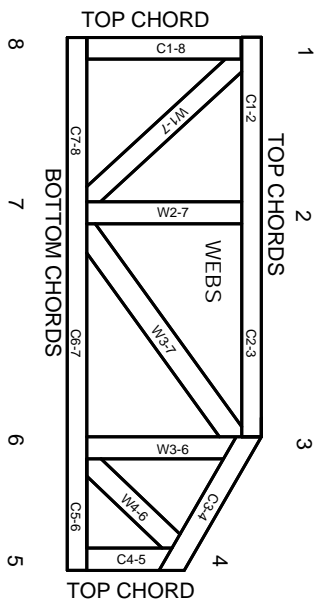
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 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: J0722-3737
Lot 33 Liberty Meadows

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: I56654234 thru I56654238

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844



February 15, 2023

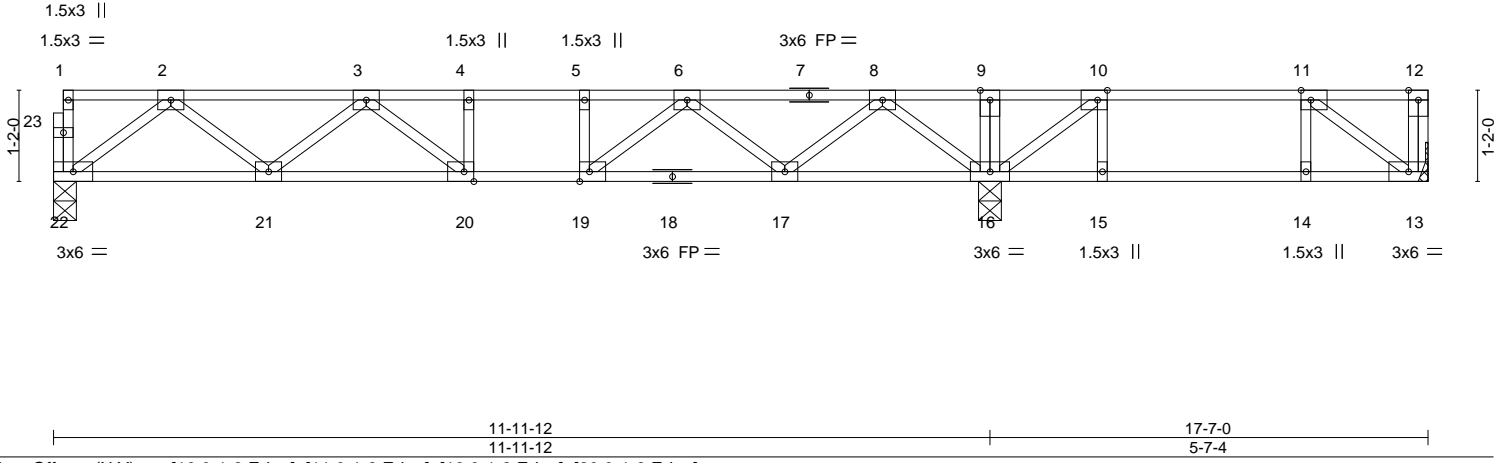
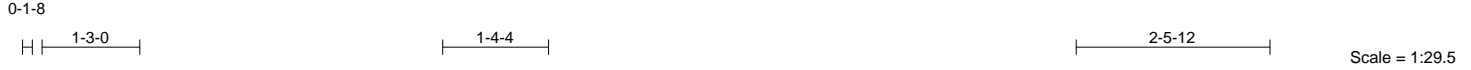
Gilbert, Eric

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 J0722-3737 | Truss F1 | Truss Type FLOOR | Qty 6 | Ply 1 | Lot 33 Liberty Meadows I56654234 |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:02 2023 Page 1
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| | | | | | |
|-----------------------|--|-------------|----------------------------------|---------------|-----------------|
| Plate Offsets (X,Y)-- | [10:0-1-8,Edge], [11:0-1-8,Edge], [19:0-1-8,Edge], [20:0-1-8,Edge] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL 1.00 | TC 0.37 | Vert(LL) -0.06 20-21 >999 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.37 | Vert(CT) -0.09 20-21 >999 360 | | |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.30 | Horz(CT) 0.02 13 n/a n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | Weight: 89 lb | 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, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 22=0-3-8, 16=0-3-8, 13=Mechanical
Max Grav 22=628(LC 10), 16=1033(LC 9), 13=284(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1204/0, 3-4=-1732/0, 4-5=-1732/0, 5-6=-1732/0, 6-8=-1092/0, 8-9=0/336, 9-10=0/336, 10-11=-309/29
BOT CHORD 21-22=0/771, 20-21=0/1597, 19-20=0/1732, 17-19=0/1529, 16-17=0/624, 15-16=-29/309, 14-15=-29/309, 13-14=-29/309
WEBS 2-22=-965/0, 2-21=0/562, 3-21=-512/0, 3-20=-39/343, 8-16=-1043/0, 8-17=0/628, 6-17=-593/0, 6-19=0/430, 10-16=-600/0, 11-13=-382/36

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



February 15, 2023

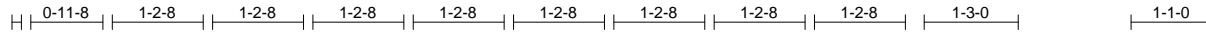
| | |
|---|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss 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</p> | 818 Soundside Road Edenton, NC 27932 |
|---|---|

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654235 |
| J0722-3737 | F1A | FLOOR | 1 | 1 | | |
| | | | | | Job Reference (optional) | |

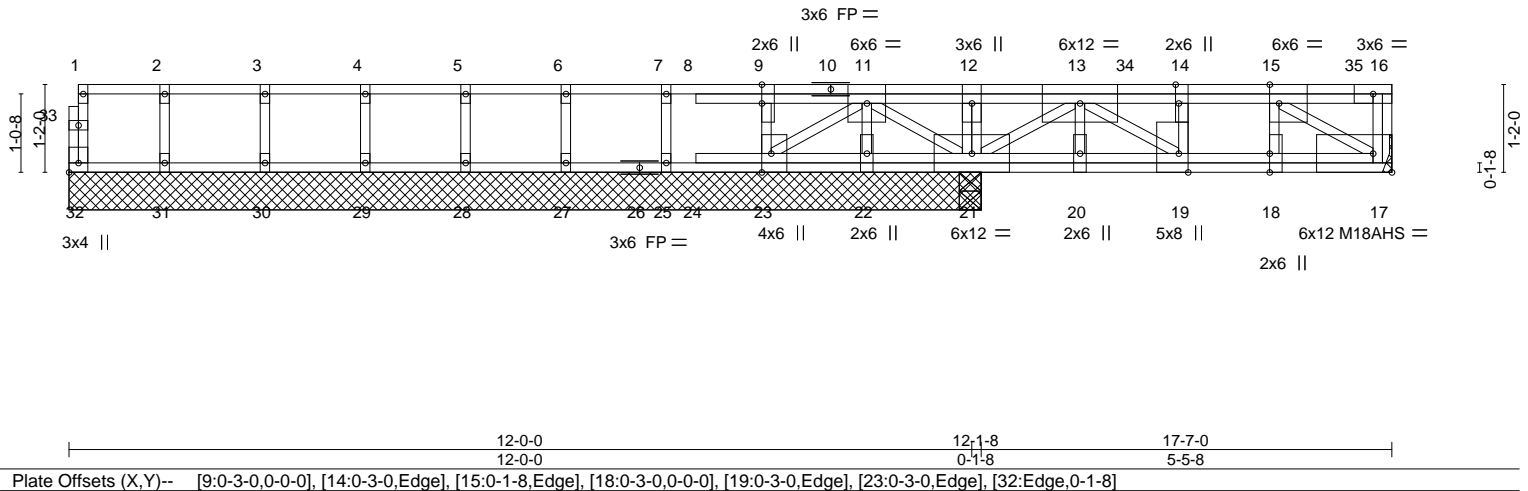
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:04 2023 Page 1
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0-1-8



Scale = 1:30.6



| | | | | | |
|------------------------|--|-------------|----------------------------------|----------------|-----------------|
| Plate Offsets (X, Y)-- | [9:0-3-0,0-0-0], [14:0-3-0,Edge], [15:0-1-8,Edge], [18:0-3-0,0-0-0], [19:0-3-0,Edge], [23:0-3-0,Edge], [32:Edge,0-1-8] | | | | |
| 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 0.67 | Vert(LL) -0.02 19 >999 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | BC 0.47 | Vert(CT) -0.04 19 >999 360 | M18AHS | 186/179 |
| BCLL 0.0 | Rep Stress Incr NO | WB 0.82 | Horz(CT) 0.01 17 n/a n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | | |
| | | | | Weight: 110 lb | 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, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 22-23,21-22. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. All bearings 12-1-8 except (jt=length) 17=Mechanical.
 (lb) - Max Uplift All uplift 100 lb or less at joint(s) except 22=-286(LC 4), 23=-289(LC 4)
 Max Grav All reactions 250 lb or less at joint(s) 32, 23, 25, 27, 28, 29, 30, 31 except 21=2863(LC 1), 21=2863(LC 1), 17=2966(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 16-17=-1087/0, 11-12=0/1454, 12-13=0/1455, 13-14=-2946/0, 14-15=-2946/0
 BOT CHORD 22-23=-606/0, 21-22=-606/0, 20-21=0/1599, 19-20=0/1599, 18-19=0/2946, 17-18=0/2946
 WEBS 11-21=-1014/0, 13-21=-3440/0, 13-19=0/1624, 14-19=-864/0, 15-17=-3494/0, 15-18=-276/245, 11-23=0/739, 12-21=-274/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are MT20 plates unless otherwise indicated.
 - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
 - 4) Plates checked for a plus or minus 1 degree rotation about its center.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 286 lb uplift at joint 22 and 289 lb uplift at joint 23.
 - 7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 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
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
 Concentrated Loads (lb)
 Vert: 15=-1306 34=-1306 35=-1250
- 2) Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100



February 15, 2023

Continued on page 2

| | |
|--|--|
| <p>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</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|--|

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3737 | F1A | FLOOR | 1 | 1 | I56654235 |
| | | | | | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:05 2023 Page 2
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LOAD CASE(S) Standard

- Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 3) 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-140, 16-35=-20
Concentrated Loads (lb)
Vert: 15=-397 34=-397 35=-341
- 4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-20, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-140, 16-35=-20
Concentrated Loads (lb)
Vert: 15=-397 34=-397 35=-341
- 6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-20, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 11) 5th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 12) 6th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 13) 7th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 14) 8th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 15) 9th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 16) 10th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 17) 11th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Continued on page 3

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



818 Soundside Road
 Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654235 |
| J0722-3737 | F1A | FLOOR | 1 | 1 | | |
| | | | | | Job Reference (optional) | |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:05 2023 Page 3
 ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-l0bLb93uBf8HXWSBkSmt?rkWDhI0jS9h4mF5xzyAa

LOAD CASE(S) Standard

- Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 18) 12th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 19) 13th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 20) 14th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 21) 15th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-15=-220, 15-35=-140, 16-35=-20
Concentrated Loads (lb)
Vert: 15=-397 34=-1306 35=-341
- 22) 16th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-14=-140, 14-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-397 35=-1250
- 23) 17th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 24) 18th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 25) 19th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 26) 20th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 27) 21st chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 28) 22nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 29) 23rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 30) 24th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 31) 25th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
Concentrated Loads (lb)
Vert: 15=-1306 34=-1306 35=-1250
- 32) 26th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100

Continued on page 4

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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818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|------------|-------|------------|-----|-----|--------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows | I56654235 |
| J0722-3737 | F1A | FLOOR | 1 | 1 | Job Reference (optional) | |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:05 2023 Page 4
 ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-l0bLb93uBf8HXWSBkSlmt?rKWDhI0jS9h4mF5xzyAa

LOAD CASE(S) Standard

- Concentrated Loads (lb)
 Vert: 15=-1306 34=-1306 35=-1250
- 33) 27th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
 Concentrated Loads (lb)
 Vert: 15=-1306 34=-1306 35=-1250
- 34) 28th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
 Concentrated Loads (lb)
 Vert: 15=-1306 34=-1306 35=-1250
- 35) 29th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
 Concentrated Loads (lb)
 Vert: 15=-1306 34=-1306 35=-1250
- 36) 30th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-35=-220, 16-35=-100
 Concentrated Loads (lb)
 Vert: 15=-1306 34=-1306 35=-1250
- 37) 31st chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-15=-220, 15-35=-140, 16-35=-20
 Concentrated Loads (lb)
 Vert: 15=-397 34=-1306 35=-341
- 38) 32nd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 Uniform Loads (plf)
 Vert: 17-32=-10, 1-12=-100, 12-14=-140, 14-35=-220, 16-35=-100
 Concentrated Loads (lb)
 Vert: 15=-1306 34=-397 35=-1250

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



818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3737 | F2 | FLOOR | 3 | 1 | I56654236 |
| | | | | | Job Reference (optional) |

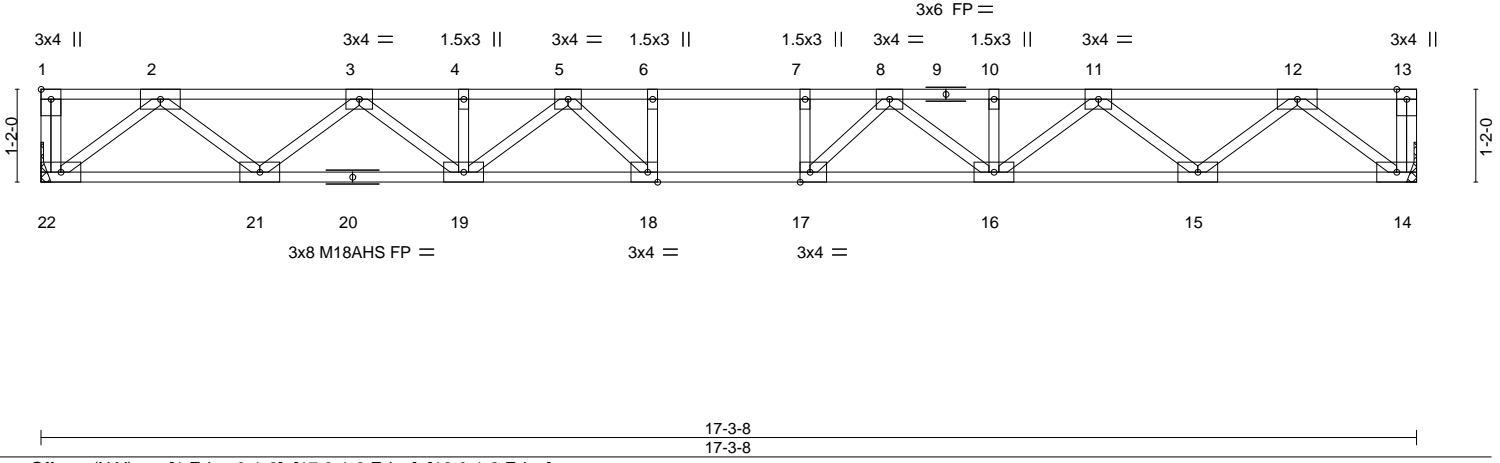
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:06 2023 Page 1

ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-mD9joV4XyzH89g1NI9G?QDNYLdzG7FnJvkVodNzkyAZ



Scale = 1:29.0



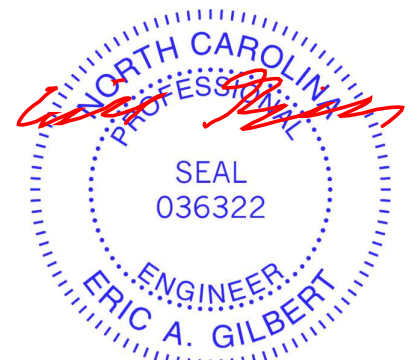
| | | | | | |
|-----------------------|--|-------------|----------------------------------|-------------------------------|-------------|
| Plate Offsets (X,Y)-- | [1:Edge,0-1-8], [17:0-1-8,Edge], [18:0-1-8,Edge] | | | | |
| LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES | GRIP |
| TCLL 40.0 | Plate Grip DOL 1.00 | BC 0.47 | Vert(LL) -0.25 17-18 >821 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL 1.00 | TC 0.75 | Vert(CT) -0.34 17-18 >597 360 | M18AHS | 186/179 |
| BCLL 0.0 | Rep Stress Incr YES | WB 0.49 | Horz(CT) 0.06 14 n/a n/a | Weight: 89 lb FT = 20%F, 11%E | |
| BCDL 5.0 | Code IRC2015/TPI2014 | Matrix-S | | | |

| | |
|-----------------------------|---|
| LUMBER- | BRACING- |
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 22=Mechanical, 14=Mechanical
Max Grav 22=937(LC 1), 14=937(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1961/0, 3-4=-3242/0, 4-5=-3242/0, 5-6=-3793/0, 6-7=-3793/0, 7-8=-3793/0, 8-10=-3242/0, 10-11=-3242/0, 11-12=-1961/0
BOT CHORD 21-22=0/1169, 19-21=0/2719, 18-19=0/3607, 17-18=0/3793, 16-17=0/3607, 15-16=0/2719, 14-15=0/1169
WEBS 2-22=-1467/0, 2-21=0/1031, 3-21=-986/0, 3-19=0/668, 12-14=-1467/0, 12-15=0/1031, 11-15=-986/0, 11-16=0/668, 5-19=-466/0, 8-16=-466/0, 8-17=-99/572, 7-17=-301/10, 5-18=-99/572, 6-18=-301/10

- 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) 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.



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|--|---|
| <p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</p> <p>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</p> | <p>ENGINEERING BY</p> <p>TRENCO</p> <p>A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|--|---|

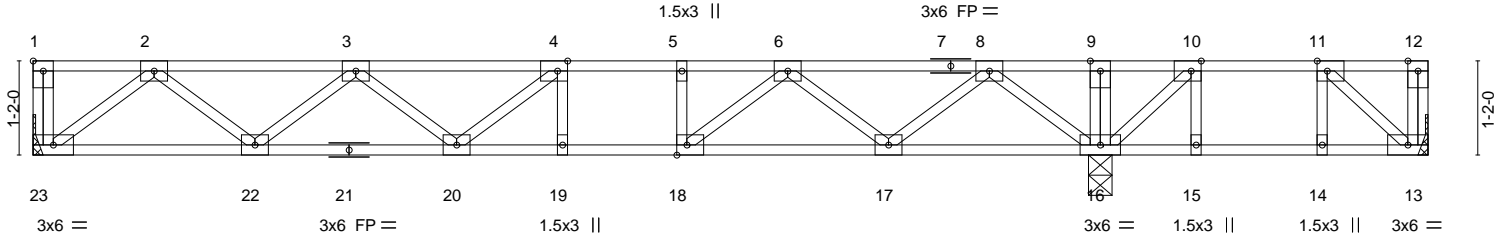
| | | | | | |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|
| Job J0722-3737 | Truss F3 | Truss Type FLOOR | Qty 6 | Ply 1 | Lot 33 Liberty Meadows I56654237 |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|

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8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:06 2023 Page 1
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Scale = 1:28.6



| | |
|---------|--------|
| 13-2-12 | 17-3-8 |
| 13-2-12 | 4-0-12 |

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [18:0-1-8,Edge]

| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | in (loc) | l/defl | L/d | PLATES | GRIP | |
|---------------|----------------------|-------|----------|----------|----------|--------|------|--------|------|---------|
| TCLL 40.0 | Plate Grip DOL | 1.00 | TC 0.37 | Vert(LL) | -0.11 | 19-20 | >999 | 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.65 | Vert(CT) | -0.15 | 19-20 | >999 | 360 | | |
| BCLL 0.0 | Rep Stress Incr | YES | WB 0.35 | Horz(CT) | 0.03 | 16 | n/a | n/a | | |
| BCDL 5.0 | Code IRC2015/TPI2014 | | Matrix-S | | | | | | | |

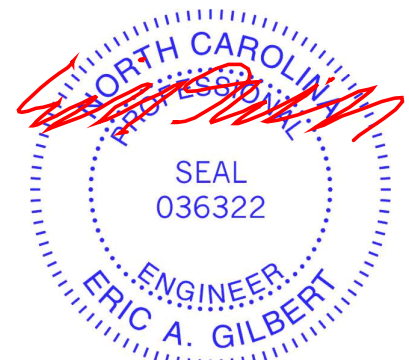
Weight: 90 lb FT = 20%F, 11%E

| LUMBER- | BRACING- |
|-----------------------------|---|
| TOP CHORD 2x4 SP No.1(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 23=Mechanical, 13=Mechanical, 16=0-3-8
Max Uplift 13=63(LC 3)
Max Grav 23=686(LC 10), 13=180(LC 4), 16=1100(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1338/0, 3-4=-1948/0, 4-5=-1992/0, 5-6=-1992/0, 6-8=-1059/0, 8-9=0/507, 9-10=0/507
BOT CHORD 22-23=0/829, 20-22=0/1819, 19-20=0/1992, 18-19=0/1992, 17-18=0/1617, 16-17=0/498
WEBS 2-23=-1041/0, 2-22=0/662, 3-22=-626/0, 8-16=-1167/0, 8-17=0/740, 6-17=-739/0, 6-18=0/605, 10-16=-560/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
 - 2) All plates are 3x4 MT20 unless otherwise indicated.
 - 3) Plates checked for a plus or minus 1 degree rotation about its center.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 13.
 - 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.



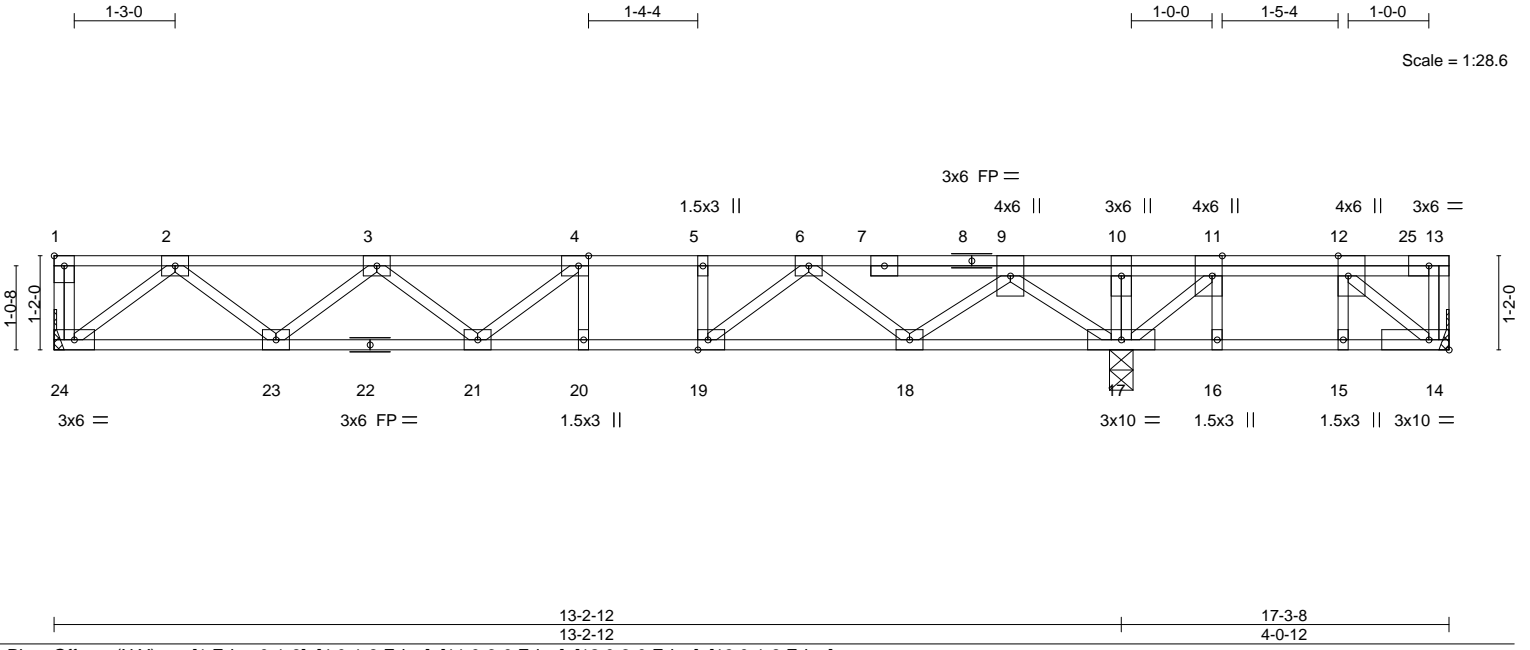
February 15, 2023

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|---|---|
| <p>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</p> | <p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p> |
|---|---|

| | | | | | |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|
| Job J0722-3737 | Truss F4 | Truss Type FLOOR | Qty 1 | Ply 1 | Lot 33 Liberty Meadows I56654238 |
|-------------------|-------------|---------------------|----------|----------|-------------------------------------|

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:08 2023 Page 1
ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-jbHUDB5nUaXsO_BmPalTVeTvrRg7b9ocN2_vIGzkyAX



| 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 0.41 | Vert(LL) | -0.10 20-21 | >999 | 480 | MT20 | 244/190 |
| TCDL 10.0 | Lumber DOL | 1.00 | BC 0.66 | Vert(CT) | -0.13 20-21 | >999 | 360 | | |
| BCLL 0.0 | Rep Stress Incr | NO | WB 0.46 | Horz(CT) | 0.03 14 | n/a | n/a | | |
| BCDL 5.0 | Code IRC2015/TP12014 | | Matrix-S | | | | | Weight: 99 lb | FT = 20%F, 11%E |

| LUMBER- | BRACING- |
|-----------------------------------|---|
| TOP CHORD 2x4 SP 2400F 2.0E(flat) | TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. |
| BOT CHORD 2x4 SP No.1(flat) | BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS 2x4 SP No.3(flat) | |

REACTIONS. (size) 24=Mechanical, 14=Mechanical, 17=0-3-8
Max Grav 24=700(LC 10), 14=2508(LC 4), 17=1748(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 13-14=-1282/0, 2-3=-1374/0, 3-4=-2016/0, 4-5=-2093/0, 5-6=-2093/0, 6-9=-1230/0, 9-10=-296/671, 10-11=-295/671, 11-12=-1522/0
BOT CHORD 23-24=0/848, 21-23=0/1871, 20-21=0/2093, 19-20=0/2093, 18-19=0/1719, 17-18=0/695, 16-17=0/1522, 15-16=0/1522, 14-15=0/1522
WEBS 2-24=-1064/0, 2-23=0/684, 3-23=-647/0, 3-21=0/282, 9-17=-1207/0, 9-18=0/736, 6-18=-707/0, 6-19=0/558, 4-21=-284/37, 12-14=-1972/0, 11-17=-1955/0

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
 - All plates are 3x4 MT20 unless otherwise indicated.
 - Plates checked for a plus or minus 1 degree rotation about its center.
 - Refer to girder(s) for truss to truss connections.
 - Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
 - 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.
 - CAUTION, Do not erect truss backwards.

- LOAD CASE(S)** Standard
- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250
 - Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 1-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
Concentrated Loads (lb)
Vert: 12=-1250 25=-1250
 - 1st Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00



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Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

| | | | | | |
|------------|-------|------------|-----|-----|--------------------------|
| Job | Truss | Truss Type | Qty | Ply | Lot 33 Liberty Meadows |
| J0722-3737 | F4 | FLOOR | 1 | 1 | I56654238 |
| | | | | | Job Reference (optional) |

Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Feb 15 08:19:08 2023 Page 2
 ID:0HpugN1S_QSTWxS0z0zGz9z5iCa-jbHUDB5nUaXsO_BmPalTVeTvrRg7b9ocN2_vlGzkyAX

LOAD CASE(S) Standard

- Uniform Loads (plf)
 - Vert: 1-10=-100, 10-25=-140, 13-25=-20, 14-24=-10
- Concentrated Loads (lb)
 - Vert: 12=-341 25=-341
- 4) 2nd Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 5) 3rd unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-100, 10-25=-140, 13-25=-20, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-341 25=-341
- 6) 4th unbalanced Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 7) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-5=-100, 5-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 8) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-4=-20, 4-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 9) 3rd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-100, 10-12=-220, 12-25=-140, 13-25=-20, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-341
- 10) 4th chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-100, 10-11=-140, 11-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 11) 5th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-5=-100, 5-10=-20, 10-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 12) 6th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-4=-20, 4-10=-100, 10-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250
- 13) 7th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-100, 10-12=-220, 12-25=-140, 13-25=-20, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-341
- 14) 8th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
 - Uniform Loads (plf)
 - Vert: 1-10=-100, 10-11=-140, 11-25=-220, 13-25=-100, 14-24=-10
 - Concentrated Loads (lb)
 - Vert: 12=-1250 25=-1250

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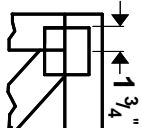
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



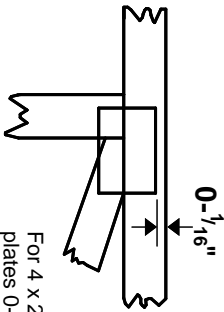
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

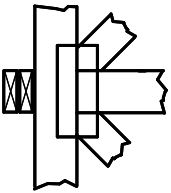
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



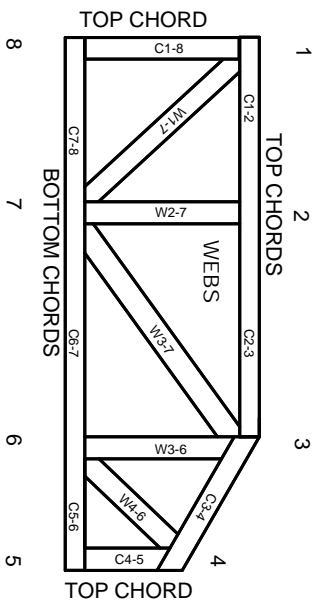
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TFP 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8
dimensions shown in ft-in-sixteenths
(Drawings not to scale)



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



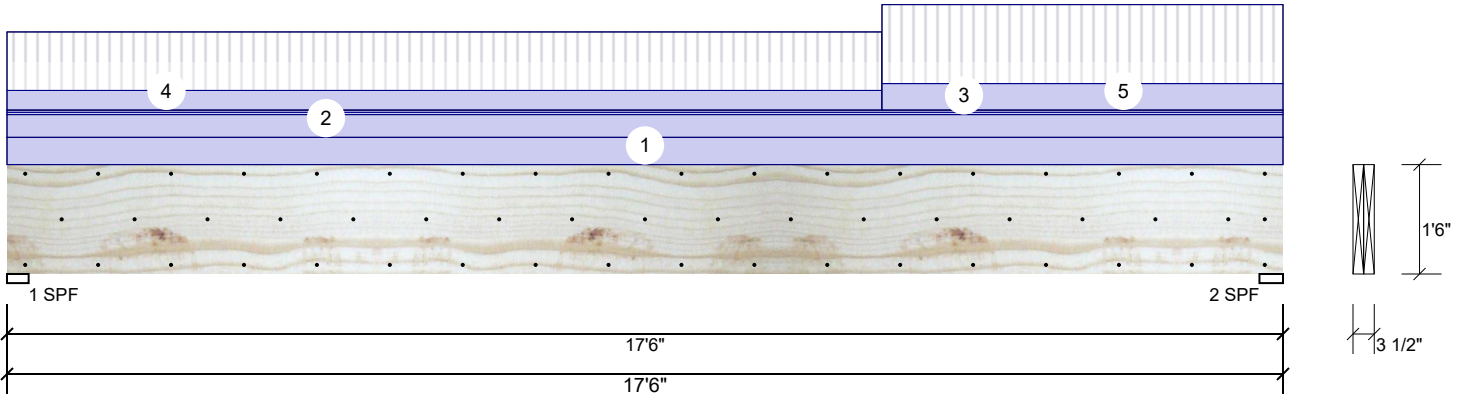
General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TFP 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TFP 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Rewriting pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TFP 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

BM1 Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED

Level: Level



Member Information

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

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

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 2318 | 2907 | 87 | 0 | 0 |
| 2 | Vertical | 2674 | 3033 | 88 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 3.563" | Vert | 99% | 2907 / 2318 | 5226 | L | D+L |
| 2 - SPF | 3.875" | Vert | 99% | 3033 / 2674 | 5707 | L | D+L |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-------------|---------------|-------------|-------|------|
| Moment | 22105 ft-lb | 8'10 13/16" | 42981 ft-lb | 0.514 (51%) | D+L | L |
| Unbraced | 22105 ft-lb | 8'10 13/16" | 42981 ft-lb | 0.514 (51%) | D+L | L |
| Shear | 4439 lb | 15'8 1/8" | 13440 lb | 0.330 (33%) | D+L | L |
| LL Defl inch | 0.172 (L/1190) | 8'9 15/16" | 0.426 (L/480) | 0.403 (40%) | L | L |
| TL Defl inch | 0.381 (L/536) | 8'9 1/2" | 0.568 (L/360) | 0.671 (67%) | D+L | 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 3 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 continuously laterally braced.
- 7 Bottom must be laterally braced at bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|---------------|------------------|------------|------|----------|---------|-----------|----------|-------------|------------|
| 1 | Uniform | | | Top | 120 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above |
| 2 | Uniform | | | Top | 100 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | C2GE |
| 3 | Tie-In | 0-0-0 to 17-6-0 | 0-6-0 | Top | 20 PSF | 0 PSF | 20 PSF | 0 PSF | 0 PSF | Roof Load |
| 4 | Part. Uniform | 0-0-0 to 12-0-0 | | Top | 86 PLF | 257 PLF | 0 PLF | 0 PLF | 0 PLF | F3 |
| 5 | Part. Uniform | 12-0-0 to 17-6-0 | | Top | 116 PLF | 347 PLF | 0 PLF | 0 PLF | 0 PLF | F2 |
| | Self Weight | | | | 14 PLF | | | | | |

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.

Lumber
 1. Dry service conditions, unless noted otherwise
 2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation
 1. LVL 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

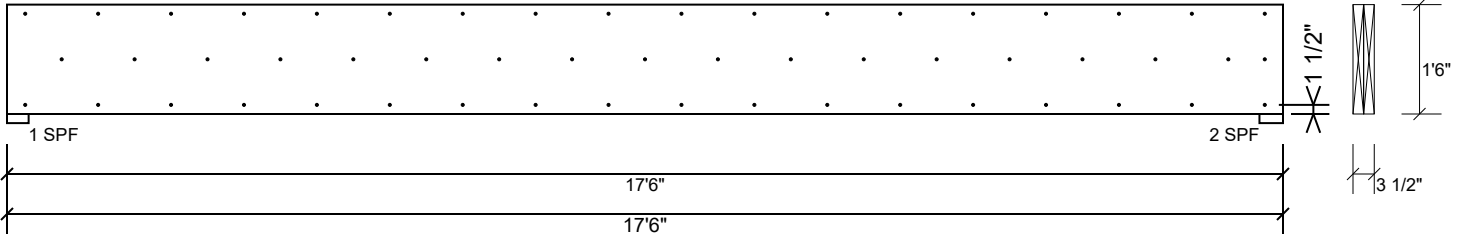
This design is valid until 11/3/2024

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

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

BM1 Kerto-S LVL 1.750" X 18.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

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.

Lumber

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

chemicals

Handling & Installation

1. LVL 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

Manufacturer Info

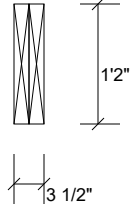
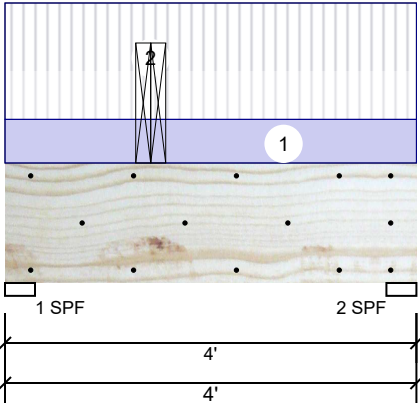
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BM2 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

| | | | |
|---------------------|---------------|----------------|--------------|
| Type: | Girder | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 480 | Load Sharing: | No |
| Deflection TL: | 360 | Deck: | Not Checked |
| Importance: | Normal - II | | |
| Temperature: | Temp <= 100°F | | |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 80 | 1806 | 1701 | 0 | 0 |
| 2 | Vertical | 80 | 937 | 858 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 3.500" | Vert | 67% | 1806 / 1701 | 3507 | L | D+S |
| 2 - SPF | 3.500" | Vert | 34% | 937 / 858 | 1795 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|----------|---------------|-------------|-------|------|
| Moment | 4138 ft-lb | 1'5" | 31049 ft-lb | 0.133 (13%) | D+S | L |
| Unbraced | 4138 ft-lb | 1'5" | 31049 ft-lb | 0.133 (13%) | D+S | L |
| Shear | 3296 lb | 1'5 1/2" | 12021 lb | 0.274 (27%) | D+S | L |
| LL Defl inch | 0.007 (L/6271) | 1'5" | 0.089 (L/480) | 0.077 (8%) | S | L |
| TL Defl inch | 0.014 (L/3057) | 1'5" | 0.118 (L/360) | 0.118 (12%) | 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 3 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 continuously laterally braced.
- 7 Bottom must be laterally braced at bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|----------------|----------------|------------|------|----------|--------|-----------|----------|-------------|------------|
| 1 | Tie-In | 0-0-0 to 4-0-0 | 1-0-0 | Top | 15 PSF | 40 PSF | 0 PSF | 0 PSF | 0 PSF | Floor Load |
| 2 | Point | 1-5-0 | | Top | 2640 lb | 0 lb | 2559 lb | 0 lb | 0 lb | B3 Brg 2 |
| | Bearing Length | 0-3-8 | | | | | | | | |
| | Self Weight | | | | 11 PLF | | | | | |

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.

Lumber

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

chemicals

Handling & Installation

1. LVL 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

Manufacturer Info

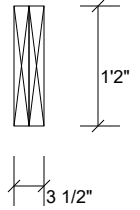
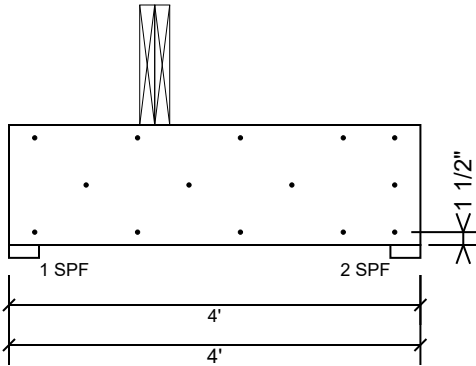
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BM2 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

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.

Lumber

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

Handling & Installation

1. LVL 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

Manufacturer Info

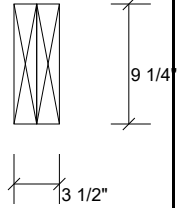
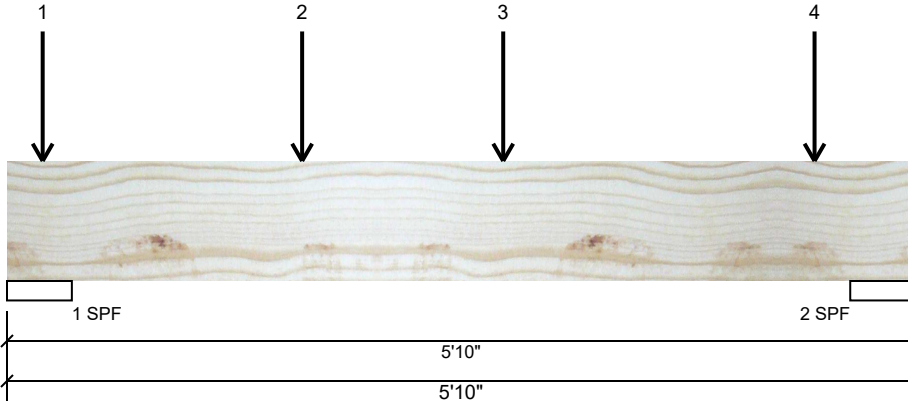
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

| | |
|---------------------|---------------|
| Type: | Girder |
| Plies: | 2 |
| Moisture Condition: | Dry |
| Deflection LL: | 480 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| Temperature: | Temp <= 100°F |

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

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 0 | 3107 | 3086 | 0 | 0 |
| 2 | Vertical | 0 | 2835 | 2814 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 5.000" | Vert | 83% | 3107 / 3086 | 6193 | L | D+S |
| 2 - SPF | 5.000" | Vert | 76% | 2835 / 2814 | 5649 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|----------------|-----------|---------------|-------------|-------|------|
| Moment | 9142 ft-lb | 1'10 3/4" | 14423 ft-lb | 0.634 (63%) | D+S | L |
| Unbraced | 9142 ft-lb | 1'10 3/4" | 11505 ft-lb | 0.795 (79%) | D+S | L |
| Shear | 5936 lb | 1'2 1/4" | 7943 lb | 0.747 (75%) | D+S | L |
| LL Defl inch | 0.058 (L/1065) | 2'8 7/16" | 0.128 (L/480) | 0.451 (45%) | S | L |
| TL Defl inch | 0.116 (L/531) | 2'8 7/16" | 0.256 (L/240) | 0.452 (45%) | 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 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at end bearings.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|----------------|----------|------------|------|----------|--------|-----------|----------|-------------|----------|
| 1 | Point | 0-2-12 | | Top | 127 lb | 0 lb | 127 lb | 0 lb | 0 lb | A2 |
| | Bearing Length | 0-3-8 | | | | | | | | |
| 2 | Point | 1-10-12 | | Top | 3363 lb | 0 lb | 3363 lb | 0 lb | 0 lb | A1-GR |
| | Bearing Length | 0-3-8 | | | | | | | | |
| 3 | Point | 3-2-4 | | Top | 1205 lb | 0 lb | 1205 lb | 0 lb | 0 lb | A1 |
| | Bearing Length | 0-3-8 | | | | | | | | |

Continued on page 2...

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.

Lumber

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

chemicals

Handling & Installation

1. LVL 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

Manufacturer Info

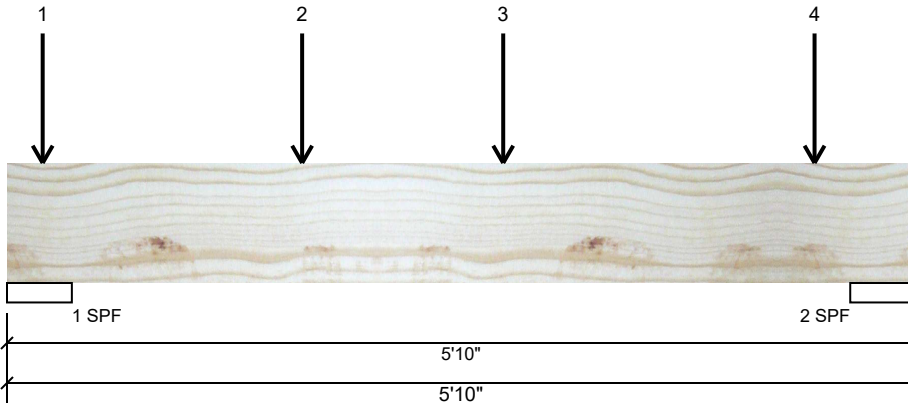
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BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



...Continued from page 1

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|----------------|----------|------------|------|----------|--------|-----------|----------|-------------|----------|
| 4 | Point | 5-2-4 | | Top | 1205 lb | 0 lb | 1205 lb | 0 lb | 0 lb | A1 |
| | Bearing Length | 0-3-8 | | | | | | | | |
| | Self Weight | | | | 7 PLF | | | | | |

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.

Lumber

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

Handling & Installation

1. LVL 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

Manufacturer Info

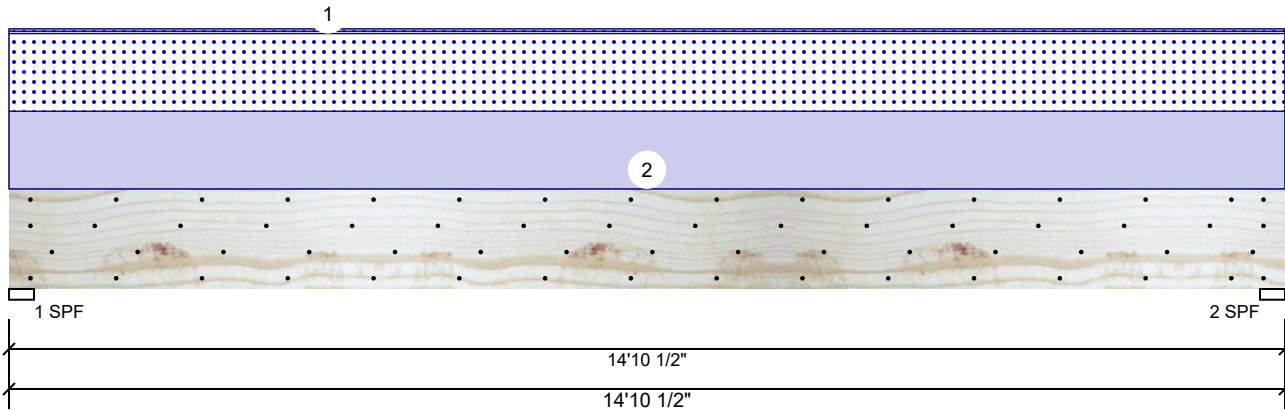
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BM4 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

| | |
|---------------------|---------------|
| Type: | Girder |
| Plies: | 2 |
| Moisture Condition: | Dry |
| Deflection LL: | 360 |
| Deflection TL: | 240 |
| Importance: | Normal - II |
| Temperature: | Temp <= 100°F |

| | |
|----------------|--------------|
| Application: | Roof |
| Slope: | 0/12 |
| Design Method: | ASD |
| Building Code: | IBC/IRC 2015 |
| Load Sharing: | No |
| Deck: | Not Checked |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 0 | 2639 | 2559 | 0 | 0 |
| 2 | Vertical | 0 | 2639 | 2559 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. | React D/L lb | Total | Ld. Case | Ld. Comb. |
|---------|--------|------|------|--------------|-------|----------|-----------|
| 1 - SPF | 3.500" | Vert | 100% | 2639 / 2559 | 5198 | L | D+S |
| 2 - SPF | 3.500" | Vert | 100% | 2639 / 2559 | 5198 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|---------------|-----------|---------------|-------------|-------|------|
| Moment | 18157 ft-lb | 7'5 1/4" | 31049 ft-lb | 0.585 (58%) | D+S | L |
| Unbraced | 18157 ft-lb | 7'5 1/4" | 31049 ft-lb | 0.585 (58%) | D+S | L |
| Shear | 4994 lb | 1'5 1/2" | 12021 lb | 0.415 (42%) | D+S | L |
| LL Defl inch | 0.230 (L/753) | 7'5 5/16" | 0.481 (L/360) | 0.478 (48%) | S | L |
| TL Defl inch | 0.467 (L/370) | 7'5 5/16" | 0.721 (L/240) | 0.648 (65%) | 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 4 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 must be continuously laterally braced.
- 6 Bottom must be laterally braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead | Live | Snow | Wind | Const. | Comments |
|----|-------------|------------------|------------|-----------|---------|-------|---------|-------|--------|-----------|
| 1 | Tie-In | 0-0-0 to 14-10-8 | 0-6-0 | Near Face | 20 PSF | 0 PSF | 20 PSF | 0 PSF | 0 PSF | Roof Load |
| 2 | Uniform | | | Far Face | 334 PLF | 0 PLF | 334 PLF | 0 PLF | 0 PLF | C2 |
| | Self Weight | | | | 11 PLF | | | | | |

Notes

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Lumber

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

chemicals

Handling & Installation

1. LVL 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

Manufacturer Info

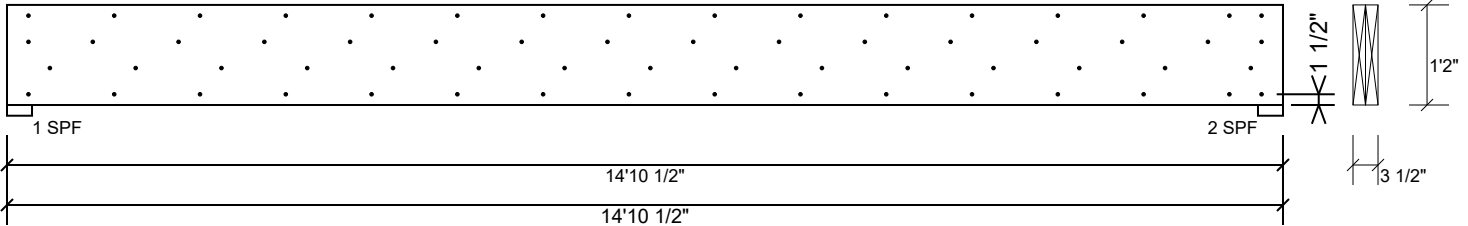
Metsä Wood
 301 Merritt 7 Building, 2nd Floor
 Norwalk, CT 06851
 (800) 622-5850
www.metsawood.com/us

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



BM4 Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

| | |
|--------------------------|-----------|
| Capacity | 88.7 % |
| Load | 334.0 PLF |
| Yield Limit per Foot | 376.5 PLF |
| Yield Limit per Fastener | 94.1 lb. |
| Yield Mode | IV |
| Edge Distance | 1 1/2" |
| Min. End Distance | 3" |
| Load Combination | D+S |
| Duration Factor | 1.15 |

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.

Lumber

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

Handling & Installation

1. LVL 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

Manufacturer Info

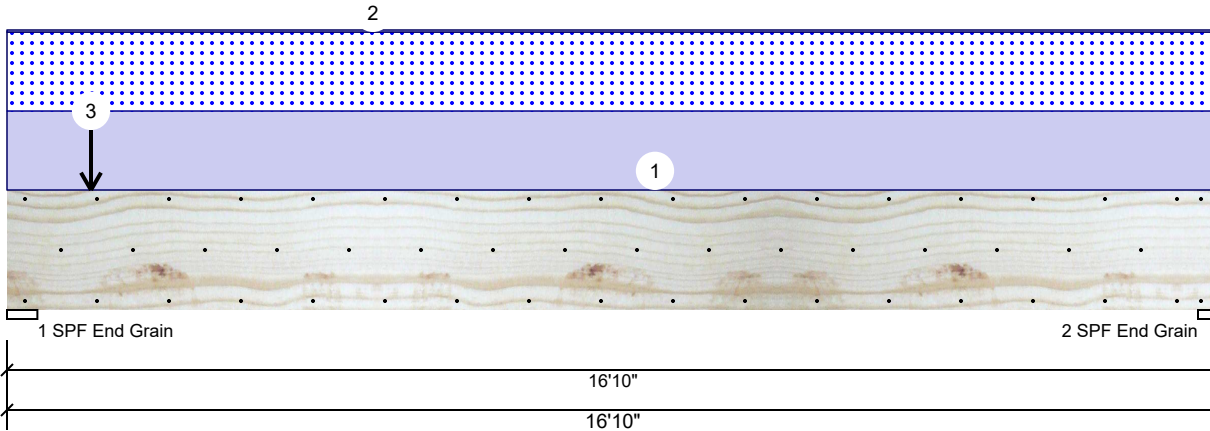
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GDH Kerto-S LVL 1.750" X 20.000" 2-Ply - PASSED

Level: Level



Member Information

| | | | |
|---------------------|---------------|------------------|--------------|
| Type: | Header | Application: | Floor |
| Plies: | 2 | Design Method: | ASD |
| Moisture Condition: | Dry | Building Code: | IBC/IRC 2015 |
| Deflection LL: | 360 | Load Sharing: | No |
| Deflection TL: | 240 | Header Supports: | No |
| Importance: | Normal - II | Glass: | |
| Temperature: | Temp <= 100°F | Deck: | Not Checked |

Reactions UNPATTERNED lb (Uplift)

| Brg | Direction | Live | Dead | Snow | Wind | Const |
|-----|-----------|------|------|------|------|-------|
| 1 | Vertical | 0 | 7562 | 7303 | 0 | 0 |
| 2 | Vertical | 0 | 5273 | 5017 | 0 | 0 |

Bearings

| Bearing | Length | Dir. | Cap. React | D/L lb | Total | Ld. Case | Ld. Comb. |
|-------------------|--------|------|------------|-------------|-------|----------|-----------|
| 1 - SPF End Grain | 5.063" | Vert | 100% | 7562 / 7303 | 14865 | L | D+S |
| 2 - SPF End Grain | 3.500" | Vert | 100% | 5273 / 5017 | 10290 | L | D+S |

Analysis Results

| Analysis | Actual | Location | Allowed | Capacity | Comb. | Case |
|--------------|---------------|------------|---------------|-------------|-------|------|
| Moment | 41804 ft-lb | 8'3 5/16" | 60066 ft-lb | 0.696 (70%) | D+S | L |
| Unbraced | 41804 ft-lb | 8'3 5/16" | 60066 ft-lb | 0.696 (70%) | D+S | L |
| Shear | 9662 lb | 2'1 1/16" | 17173 lb | 0.563 (56%) | D+S | L |
| LL Defl inch | 0.244 (L/801) | 8'4 13/16" | 0.542 (L/360) | 0.449 (45%) | S | L |
| TL Defl inch | 0.499 (L/391) | 8'4 13/16" | 0.813 (L/240) | 0.614 (61%) | 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 3 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 continuously laterally braced.
- 7 Bottom must be laterally braced at bearings.
- 8 Lateral slenderness ratio based on single ply width.

| ID | Load Type | Location | Trib Width | Side | Dead 0.9 | Live 1 | Snow 1.15 | Wind 1.6 | Const. 1.25 | Comments |
|----|----------------|----------|------------|------|----------|--------|-----------|----------|-------------|------------|
| 1 | Uniform | | | Top | 586 PLF | 0 PLF | 586 PLF | 0 PLF | 0 PLF | A1 |
| 2 | Uniform | | | Top | 15 PLF | 0 PLF | 0 PLF | 0 PLF | 0 PLF | Wall Above |
| 3 | Point | 1-2-0 | | Top | 2456 lb | 0 lb | 2456 lb | 0 lb | 0 lb | A1-GR |
| | Bearing Length | 0-3-8 | | | | | | | | |
| | Self Weight | | | | 16 PLF | | | | | |

Notes

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Lumber

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2. LVL not to be treated with fire retardant or corrosive

chemicals

Handling & Installation

1. LVL 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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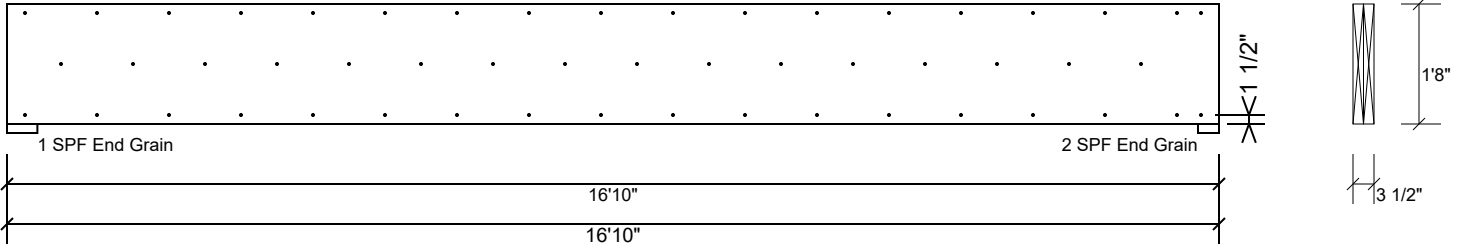
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GDH Kerto-S LVL 1.750" X 20.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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