

Trenco 818 Soundside Rd Edenton, NC 27932

Re: Master_Craftsman Master Craftsman

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Builders FirstSource-Apex,NC.

Pages or sheets covered by this seal: I52126476 thru I52126501

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

North Carolina COA: C-0844



May 24,2022

Gilbert, Eric

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



| | 9-7-12 9-7-12 | <u>19-0-0</u> 9-4-4 | <u>28-4-4</u> 9-4-4 | 38-0-0 9-7-12 |
|--|---|--|---|--|
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0 | SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014 | CSI. TC 0.58 BC 0.75 WB 0.72 Matrix-MS | DEFL. in (loc) I/defl L/d Vert(LL) -0.24 15-17 >999 360 Vert(CT) -0.41 15-17 >999 240 Horz(CT) 0.10 12 n/a n/a Wind(LL) 0.06 13-15 >999 240 | PLATES GRIP MT20 244/190 Weight: 226 lb FT = 20% |
| LUMBER- TOP CHORD 2x4 SP | No.2 | 1 | BRACING- TOP CHORD Structural wood sheathing | directly applied or 3-9-5 oc purlins, |

BOT CHORD

WEBS

| LOW | | |
|-----|-------|-----|
| TOP | CHORD | 1 2 |

2x4 SP No 2 BOT CHORD 2x4 SP No.1 WEBS 2x4 SP No.3

REACTIONS. 18=0-3-8, 12=0-3-8 (size) Max Horz 18=60(LC 16) Max Grav 18=1577(LC 1), 12=1577(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 2-18=-317/128, 3-5=-2106/122, 5-6=-1704/166, 6-7=-1704/166, 7-9=-2106/122, 10-12=-317/128 BOT CHORD 17-18=-59/1828, 15-17=-31/1823, 13-15=-9/1823, 12-13=-44/1828 WEBS 6-15=-13/963, 7-15=-539/97, 7-13=-1/258, 9-12=-2059/48, 5-15=-539/97, 5-17=-1/258, 3-18=-2059/48

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-0-0, Exterior(2) 19-0-0 to 24-4-8, Interior(1) 24-4-8 to 39-0-0 zone; cantilever left and right exposed ; 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) All plates are 4x6 MT20 unless otherwise indicated.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.



Structural wood sheathing directly applied or 3-9-5 oc purlins,

7-15, 9-12, 5-15, 3-18

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

except end verticals.

1 Row at midpt

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

818 Soundside Road Edenton, NC 27932



| | 9-7-12 9-7-12 | 19-0-0 9-4-4 | <u>28-4-4</u> 9-4-4 | 37-9-0 9-4-12 |
|--|---|--|---|--|
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI. DB TC 0.58 Ve BC 0.94 Ve WB 0.72 Ho Matrix-MS W | EFL. in (loc) I/defl L/d vrt(LL) -0.24 12-14 >999 360 vrt(CT) -0.42 12-14 >999 240 orz(CT) 0.10 11 n/a n/a ind(LL) 0.06 14 >999 240 | PLATES GRIP MT20 244/190 Weight: 224 lb FT = 20% |
| | | BE | | |

TOP CHORD

BOT CHORD

WEBS

| LU | IVI | BE | к- | | |
|----|-----|----|----|----|---|
| TΟ | Р | CF | łO | RI | D |

| TOP CHORD | 2x4 SP No.2 |
|-----------|----------------------|
| BOT CHORD | 2x4 SP No.1 *Except* |
| | - |

| | 11-13: 2x4 SP No.2 |
|------|--------------------|
| WEBS | 2x4 SP No.3 |

REACTIONS. (size) 17=0-3-8, 11=Mechanical Max Horz 17=65(LC 12)

Max Grav 17=1568(LC 1), 11=1497(LC 1)

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

TOP CHORD 2-17=-317/128, 3-5=-2089/121, 5-6=-1685/165, 6-7=-1685/167, 7-9=-2058/128

- 16-17=-85/1815, 14-16=-57/1807, 12-14=-37/1790, 11-12=-76/1767 BOT CHORD
- WEBS 6-14=-14/949, 7-14=-519/96, 9-11=-2058/81, 5-14=-540/96, 5-16=-1/260,
- 3-17=-2044/47

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-0-0, Exterior(2) 19-0-0 to 24-4-8, Interior(1) 24-4-8 to 37-7-4 zone; cantilever left and right exposed ; 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) All plates are 4x6 MT20 unless otherwise indicated.

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

* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 5) will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Refer to girder(s) for truss to truss connections.



Structural wood sheathing directly applied or 3-9-8 oc purlins,

7-14, 9-11, 5-14, 3-17

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

except end verticals.

1 Row at midpt

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| 1 | 2-3-8 | 8-8-12 | 1 1 | 5-2-0 | I | 22-8-3 | 1 | | 30-2-5 | 1 | 37-9-0 | 1 |
|--|---|--|-----------------------------------|---|------------------------------|--|--------------------------------------|--|--|---------------------------------------|--|------------------------------------|
| | 2-3-8 | 6-5-4 | | 6-5-4 | 1 | 7-6-3 | 1 | | 7-6-3 | 1 | 7-6-11 | 1 |
| Plate Offsets (X, | ,Y) [| 2:0-2-12,0-2-8], [9:0-1-12,0-3 | 3-4], [16:0-2 | 2-12,0-2-8], | [18:0-5-12,0-2 | 2-8] | | | | | | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | * | SPACING- 2- Plate Grip DOL 1 Lumber DOL 1 Rep Stress Incr Y Code IRC2015/TPI20 | -0-0 I.15 I.15 /ES 14 | CSI. TC BC WB Matrix | 0.53 0.76 0.69 <-MS | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.18 -0.31 0.12 0.07 | (loc) 12-14 12-14 11 16-17 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 251 lb | GRIP 244/190 FT = 20% |
| LUMBER- TOP CHORD BOT CHORD WEBS | 2x4 SP 2x4 SP 3-19,6-1 2x4 SP 2-18: 2x | No.2 No.2 *Except* 15: 2x4 SP No.3 No.3 *Except* t4 SP No.2 | | | | BRACING- TOP CHOR BOT CHOR WEBS | D D | Structu except Rigid c 1 Row | ural wood end verti ceiling dire at midpt | sheathing d cals. actly applied | lirectly applied or 3-3-4 c or 10-0-0 oc bracing. 8-12, 9-11 | oc purlins, |
| REACTIONS. | REACTIONS. (size) 11=Mechanical, 20=0-3-8 Max Horz 20=65(LC 12) Max Grav 11=1497(LC 1), 20=1568(LC 1) | | | | | | | | | | | |
| FORCES. (lb) TOP CHORD | - Max. (2-3=-1 8-9=-2 | Comp./Max. Ten All forces 1609/81, 3-5=-2440/111, 5-6 2030/143, 2-20=-1518/92 | 250 (lb) or =-2079/150 | less except , 6-7=-2028/ | when shown. /215, 7-8=-18 | 86/180, | | | | | | |
| BOT CHORD | 3-18=- | -755/82, 17-18=-107/1556, 1 | 6-17=-69/2 | 185, 6-16=-3 | 318/127, 12-1 | 4=-37/1797, | | | | | | |
| WEBS | 3-17=(8-14=- | 70, 1732 0/655, 5-16=-461/76, 14-16= -443/125, 9-12=0/252, 9-11= | -12/1319, 1 -2084/68, 2 | 7-16=-82/86 2-18=-44/167 | 1, 7-14=-32/5: 76 | 35, | | | | | | |
| NOTES | | | | | | | | | | | | |

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-9-10, Interior(1) 2-9-10 to 19-0-0, Exterior(2) 19-0-0 to 24-4-8, Interior(1) 24-4-8 to 37-7-4 zone; cantilever left and right exposed ; 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) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

5) Refer to girder(s) for truss to truss connections.



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| | | | 37-9-0 37-9-0 | | |
|--|---|--|--|--|--|
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYESCode IRC2015/TPI2014 | CSI. TC 0.15 BC 0.07 WB 0.15 Matrix-R | DEFL. ii Vert(LL) 0.00 Vert(CT) -0.00 Horz(CT) -0.00 | n (loc) l/defl L/d 0 1 n/r 120 0 1 n/r 120 0 25 n/a n/a | PLATES GRIP MT20 244/190 Weight: 277 lb FT = 20% |
| LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S OTHERS 2x4 S | P No.2 P No.2 P No.3 P No.3 | | BRACING- TOP CHORD BOT CHORD WEBS | Structural wood sheathing d except end verticals. Rigid ceiling directly applied 1 Row at midpt | irectly applied or 6-0-0 oc purlins, or 6-0-0 oc bracing. 13-36, 12-37, 14-35 |

REACTIONS. All bearings 37-9-0.

(lb) - Max Horz 47=65(LC 12)

 Max Uplift
 All uplift 100 lb or less at joint(s) 47, 38, 39, 41, 42, 43, 44, 45, 34, 33, 31, 30, 29, 28, 27

 except 25=-124(LC 16), 46=-139(LC 12), 26=-139(LC 13)

 Max Grav
 All reactions 250 lb or less at joint(s) 47, 25, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 35, 34, 33, 34, 35, 34, 3

31, 30, 29, 28, 27, 26

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=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 3-0-0, Interior(1) 3-0-0 to 19-0-0, Exterior(2) 19-0-0 to 24-4-8, Interior(1) 24-4-8 to 37-7-4 zone; cantilever left and right exposed ; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 38, 39, 41, 42, 43, 44, 45, 34, 33, 31, 30, 29, 28, 27 except (jt=lb) 25=124, 46=139, 26=139.



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Continued on page 2

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A MiTek Affi 818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Master Craftsman | | | | |
|--|---|--|-------------|------------------------|------------------|-----------|--|--|--|
| MASTER_CRAFTSMAN | A01T | COFFER | 1 | 1 | | 152126480 | | | |
| Builders FirstSource, Apex, NC 27523 8.530 s Dec 6 2021 MiTek Industries, Inc. Tue May 24 09:07:39 | | | | | | | | | |
| ID:x1XjjwWBLqE?VCReTaQN3tymvXu-jidaG1dKzZrGjGXm67ZF7yxzvvUaZ3OEB8EDeRzDKnI | | | | | | | | | |
| LOAD CASE(S) | | | | | | | | | |
| 2) Dead + 0.75 Roof Live (I | balanced) + 0.75 Uninhab. At | ttic Storage: Lumber Increase=1.15, Plate Incre | ase=1.15 | | | | | | |
| Vert: 1-2=-50, 2 | -7=-50, 7-10=-50, 10-11=-50 | , 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-50 | 12-34=-20 |), 35-36= [.] | -30(F) | | | | |
| 3) Dead + Uninhabitable At | tic Without Storage: Lumber | Increase=1.25, Plate Increase=1.25 | | | | | | | |
| Uniform Loads (plf) Vert: 1-2=-20_2 | -7=-20 7-10=-20 10-11=-20 | 22-23=-40 19-21=-40 12-18=-40 35-36=-40 | F) | | | | | | |
| 4) Dead + 0.6 C-C Wind (P | os. Internal) Case 1: Lumber | Increase=1.60, Plate Increase=1.60 | • / | | | | | | |
| Uniform Loads (plf) | 07 00 7 07 40 7 00 00 44 | | 10 | | | | | | |
| Vert: 1-2=42, 2- Horz: 1-2=-54 2 | 27=22, 7-27=12, 7-30=22, 10 2-27=-34 7-27=-24 7-30=34 | J-30=12, 10-11=8, 22-23=-12, 19-21=-12, 12-1 10-30=24 10-11=20 2-23=13 10-12=24 | 3=-12 | | | | | | |
| 5) Dead + 0.6 C-C Wind (P | os. Internal) Case 2: Lumber | Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Uniform Loads (plf) | 0 10 7 00 00 7 00 10 10 | 22 22 40 41 42 22 22 42 40 21 42 42 4 | 10 | | | | | | |
| Horz: 1-2=-20, 2 | 9=12, 7-29=22, 7-32=12, 10- 2-29=-24, 7-29=-34, 7-32=24 | , 10-32=34, 10-11=42, 22-23=-12, 19-21=-12, 12-1 | b=-12 | | | | | | |
| 6) Dead + 0.6 C-C Wind (N | leg. Internal) Case 1: Lumber | r Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Uniform Loads (plf) | -732 7-1032 10-1127 | 22-2320 19-2120 12-1820 | | | | | | | |
| Horz: 1-2=-7, 2- | 7=12, 7-10=-12, 10-11=-7, 2 | -23=-15, 10-12=-22 | | | | | | | |
| 7) Dead + 0.6 C-C Wind (N | leg. Internal) Case 2: Lumber | r Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Uniform Loads (plf) Vert: 1-2=-27 2 | -7=-32 7-10=-32 10-11=-13 | 22-23=-20 19-21=-20 12-18=-20 | | | | | | | |
| Horz: 1-2=7, 2-7 | 7=12, 7-10=-12, 10-11=7, 2-2 | 23=22, 10-12=15 | | | | | | | |
| 8) Dead + 0.6 MWFRS Wir | nd (Pos. Internal) Left: Lumbe | er Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Vert: 1-2=20, 2- | 7=10. 7-10=8. 10-11=4. 22-2 | 3=-12. 19-21=-12. 12-18=-12 | | | | | | | |
| Horz: 1-2=-32, 2 | 2-7=-22, 7-10=20, 10-11=16, | 2-23=13, 10-12=16 | | | | | | | |
| 9) Dead + 0.6 MWFRS Wir Uniform Loads (plf) | nd (Pos. Internal) Right: Lumb | per Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Vert: 1-2=4, 2-7 | =8, 7-10=10, 10-11=20, 22-2 | 3=-12, 19-21=-12, 12-18=-12 | | | | | | | |
| Horz: 1-2=-16, 2 | 2-7=-20, 7-10=22, 10-11=32, | 2-23=-16, 10-12=-13 | | | | | | | |
| 10) Dead + 0.6 MWFRS W Uniform Loads (plf) | ind (Neg. Internal) Left: Lumi | ber Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Vert: 1-2=-2, 2 | -7=-7, 7-10=-8, 10-11=-4, 22 | -23=-20, 19-21=-20, 12-18=-20 | | | | | | | |
| Horz: 1-2=-18, | 2-7=-13, 7-10=12, 10-11=16 | 5, 2-23=21, 10-12=7 | | | | | | | |
| Uniform Loads (plf) | ind (Neg. Internal) Right. Lui | The increase=1.00, Flate increase=1.00 | | | | | | | |
| Vert: 1-2=-4, 2 | -7=-8, 7-10=-7, 10-11=-2, 22 | -23=-20, 19-21=-20, 12-18=-20 | | | | | | | |
| Horz: 1-2=-16, 12) Dead + 0.6 MWFRS W | 2-7=-12, 7-10=13, 10-11=18 ind (Pos. Internal) 1st Paralle | 3, 2-23=-7, 10-12=-21 el: Lumber Increase=1.60. Plate Increase=1.60 | | | | | | | |
| Uniform Loads (plf) | | | | | | | | | |
| Vert: 1-2=14, 2 | 2-28=19, 7-28=9, 7-10=2, 10- 2-28=-31, 7-28=-21, 7-10=1 | -11=-3, 22-23=-12, 19-21=-12, 12-18=-12 4 10-11=0 2-23=11 10-12=12 | | | | | | | |
| 13) Dead + 0.6 MWFRS W | ind (Pos. Internal) 2nd Parall | el: Lumber Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Uniform Loads (plf) | 7 0 7 04 0 40 04 40 40 | | | | | | | | |
| Vert: 1-2=-3, 2 Horz: 1-2=-9, 2 | -7=2, 7-31=9, 10-31=19, 10- 2-7=-14. 7-31=21. 10-31=31. | 11=14, 22-23=-12, 19-21=-12, 12-18=-12 10-11=26, 2-23=-12, 10-12=-11 | | | | | | | |
| 14) Dead + 0.6 MWFRS W | ind (Pos. Internal) 3rd Paralle | el: Lumber Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Uniform Loads (plf) | 7-9 7-10-2 10-113 22-2 | 312 19-2112 12-1812 | | | | | | | |
| Horz: 1-2=-17, | 2-7=-21, 7-10=14, 10-11=9, | 2-23=5, 10-12=12 | | | | | | | |
| 15) Dead + 0.6 MWFRS W | ind (Pos. Internal) 4th Paralle | el: Lumber Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Vert: 1-2=-3, 2 | -7=2, 7-10=9, 10-11=5, 22-2 | 3=-12, 19-21=-12, 12-18=-12 | | | | | | | |
| Horz: 1-2=-9, 2 | 2-7=-14, 7-10=21, 10-11=17, | 2-23=-12, 10-12=-5 | | | | | | | |
| 16) Dead + 0.6 MWFRS W Uniform Loads (plf) | ind (Neg. Internal) 1st Paralle | el: Lumber Increase=1.60, Plate Increase=1.60 | | | | | | | |
| Vert: 1-2=6, 2- | 28=2, 7-28=-7, 7-10=-15, 10 | -11=-11, 22-23=-20, 19-21=-20, 12-18=-20 | | | | | | | |
| Horz: 1-2=-26, | 2-28=-22, 7-28=-13, 7-10=5 | , 10-11=9, 2-23=19, 10-12=3 | | | | | | | |
| Uniform Loads (plf) | ind (Neg. Internal) zha i ala | | | | | | | | |
| Vert: 1-2=-11, | 2-7=-15, 7-31=-7, 10-31=2, 1 | 10-11=6, 22-23=-20, 19-21=-20, 12-18=-20 | | | | | | | |
| Horz: 1-2=-9, 2 18) Dead + Uninhabitable | 2-7=-5, 7-31=13, 10-31=22, 1 Attic Storage: Lumber Increas | 10-11=26, 2-23=-3, 10-12=-19 se=1.25. Plate Increase=1.25 | | | | | | | |
| Uniform Loads (plf) | | | | | | | | | |
| Vert: 1-2=-20, 2-7=-20, 7-10=-20, 10-11=-20, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-60, 12-34=-20, 35-36=-40(F) | | | | | | | | | |
| Increase=1.60 | | | | | | | | | |
| | | | | | | | | | |
| Vert: 1-2=-37, 2-7=-40, 7-10=-41, 10-11=-38, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-50, 12-34=-20, 35-36=-30(F) Horz: 1-2=-13, 2-7=-10, 7-10=9, 10-11=12, 2-23=16, 10-12=6 | | | | | | | | | |
| 20) Dead + 0.75 Roof Live | (bal.) + 0.75 Uninhab. Attic S | Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Rig | ht): Lumbe | r Increas | e=1.60, Plate | | | | |
| Increase=1.60 | | | | | | | | | |
| Vert: 1-2=-38, | 2-7=-41, 7-10=-40, 10-11=-3 | 7, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-5 |), 12-34=-2 | 20, 35-36 | =-30(F) | | | | |
| Horz: 1-2=-12, | 2-7=-9, 7-10=10, 10-11=13, | 2-23=-6, 10-12=-16 | | | | | | | |
| | | | | | | | | | |

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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 | Master Craftsman | |
|--------------------------------|-------|------------|-----|-----|--|-----------|
| | | | | | | 152126480 |
| MASTER_CRAFTSMAN | A01T | COFFER | 1 | 1 | lah Deference (antional) | |
| | | | | | Job Reference (optional) | |
| Builders FirstSource Apex NC 2 | 7523 | | | | 8 530 s Dec. 6 2021 MiTek Industries, Inc., Tue May 24 00:07:30 2022 | Page 3 |

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LOAD CASE(S)

- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
 - Vert: 1-2=-30, 2-28=-34, 7-28=-41, 7-10=-46, 10-11=-43, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-50, 12-34=-20, 35-36=-30(F)
 - Horz: 1-2=-20, 2-28=-16, 7-28=-9, 7-10=4, 10-11=7, 2-23=15, 10-12=2

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-43, 2-7=-46, 7-31=-41, 10-31=-34, 10-11=-30, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-50, 12-34=-20, 35-36=-30(F)

- Horz: 1-2=-7, 2-7=-4, 7-31=9, 10-31=16, 10-11=20, 2-23=-2, 10-12=-15
- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-60, 2-7=-60, 7-10=-20, 10-11=-20, 22-23=-20, 19-21=-20, 12-18=-20
- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-7=-20, 7-10=-60, 10-11=-60, 22-23=-20, 19-21=-20, 12-18=-20

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

- Vert: 1-2=-50, 2-7=-50, 7-10=-20, 10-11=-20, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-50, 12-34=-20, 35-36=-30(F)
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-20, 2-7=-20, 7-10=-50, 10-11=-50, 22-23=-20, 19-21=-20, 18-33=-20, 33-34=-50, 12-34=-20, 35-36=-30(F)

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| L | 7-9-5 | 14-4- | 0 | 17-0-0 | 21-0-0 | 23-8-0 | 1 | 30-2-1 | 1 | 38-0-0 | |
|--|--|---|---|---|--|--|---|---|---|--|------------------------------------|
| I | 7-9-5 | 6-6-1 | 1 | 2-8-0 | 4-0-0 | 2-8-0 | 1 | 6-6-1 | 1 | 7-9-5 | I |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code IRC2015/T | 2-0-0 1.15 1.15 NO "PI2014 | CSI. TC BC WB Matrix | 0.58 0.74 0.67 -MS | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.16 -0.38 0.11 0.06 | (loc) 16-17 16-17 12 17 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 253 lb | GRIP 244/190 FT = 20% |
| LUMBER- TOP CHORD 2x4 SF BOT CHORD 2x4 SF WEBS 2x4 SF 2-21,10 REACTIONS. (siz: Max H Max G | P No.2 P No.2 P No.3 *Except* D-12: 2x6 SP No.2 e) 21=0-3-8, 12=0-3-8 forz 21=-60(LC 17) irav 21=1575(LC 1), 12= | -1575(LC 1) | | | BRACING TOP CHC BOT CHC WEBS | j- IRD IRD | Structu except Rigid c 1 Row | ral wood s end vertic eiling direc at midpt | sheathing dir als. ctly applied c 7 [.] | ectly applied or 3-7-14 or 10-0-0 oc bracing. -13, 9-12, 5-20, 3-21, | l oc purlins, 22-23 |
| FORCES. (lb) - Max. TOP CHORD 2-21: 6-28: 9-30: BOT CHORD 20-2: 17-18 14-22 | ORCES. (lb) - Max. Comp./Max. Ten All forces 250 (lb) or less except when shown. OP CHORD 2-21=-325/134, 3-27=-2057/113, 4-27=-2021/115, 4-5=-1987/139, 5-28=-1949/162, 6-28=-1871/188, 6-29=-1871/188, 7-29=-1949/162, 7-8=-1987/139, 8-30=-2021/115, 9-30=-2057/113, 10-12=-325/134 3OT CHORD 20-21=-49/1801, 20-32=-26/1814, 19-32=-26/1814, 19-33=-26/1814, 18-33=-26/1814, 17-18=0/1488, 15-16=0/1488, 15-34=-4/1814, 14- | | | | | | | | | | |
| WEBS 6-23= 3-21= | =-4/1814, 13-33=-4/181 =-36/669, 15-23=-47/640 =-2035/27, 5-18=-450/13 | 4, 12-13=-33/18 , 9-12=-2035/27 1, 7-15=-450/13 | 7, 18-22=-48/6 1 | 640, 6-22=-3 | 6/669, | | | | | | |
| NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V gable end zone and 39-0-0 zone; cantile reactions shown; Lu 3) All plates are 4x6 M 4) This truss has been will fit between the b 6) This truss is designed standard ANSI/TPI - 7) N/A | e loads have been consid (ult=115mph Vasd=91mp C-C Exterior(2) -1-0-0 to ver left and right exposed mber DOL=1.60 plate gr T20 unless otherwise inc designed for a 10.0 psf I n designed for a live load iottom chord and any oth ad in accordance with the I. | dered for this de: bh; TCDL=6.0ps b 2-9-10, Interior d; end vertical le ip DOL=1.60 bicated. bottom chord live d of 20.0psf on t ler members, wi e 2015 Internatic | sign. f; BCDL=6.0; (1) 2-9-10 to fft and right e e load noncoi he bottom ch th BCDL = 10 inal Resident | osf; h=32ft; (19-0-0, Exte exposed;C-C ncurrent with ord in all are 0.0psf. ial Code sec | Cat. II; Exp B; End rior(2) 19-0-0 to : for members and any other live lo as where a recta | closed; M 24-4-8, Ir d forces & ads. ngle 3-6- and R802 | IWFRS hterior(1 & MWFI 0 tall by 2.10.2 a | (envelope) 24-4-8 tc RS for 2-0-0 wid nd referen | e ced | SEA 0363 | ROL 22 |
| LOAD CASE(S) 1) Dead + Roof Live (b Uniform Loads (plf) Vert: 1-2=-6 2) Dead + 0.75 Roof Li Uniform Loads (plf) | alanced): Lumber Increa 30, 2-6=-60, 6-10=-60, 10 ve (balanced) + 0.75 Un | use=1.15, Plate I 0-11=-60, 12-21: inhab. Attic Stor | ncrease=1.1 =-20 age: Lumber | 5 Increase=1. | 15, Plate Increas | e=1.15 | | | | ANGIN ANIC A. C | EER. KIN |

- Vert: 1-2=-60, 2-6=-60, 6-10=-60, 10-11=-60, 12-21=-20
- 2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-50, 2-6=-50, 6-10=-50, 10-11=-50, 21-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 12-35=-20

tinued on page 2

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May 24,2022

| Job | Truss | Truss Type | (| Qty | Ply | Master Craftsman | |
|---|---|---|---------------|-------------|------------|---------------------------|--|
| MASTER CRAFTSMAN | A02 | COMMON | Ę | 5 | 1 | | 152126481 |
| Builders EirstSource Apex NC 2 | 07523 | | | | | Job Reference (optional) | s Inc. Tue May 24 09:07:53 2022 Page 2 |
| Builders FirstSource, Apex, NC 2 | 1 525 | | ID:x1XjjwW | BLqE?VC | ReTaQN | 3tymvXu-JSTsCqo6gscHOPcTw | 3pXhvWMuZGVrPZIPJdy7dzDKn4 |
| | | | | | | | |
| 3) Dead + Uninhabitable A | ttic Without Storage: Lumber | Increase=1.25, Plate Increase=1.25 | | | | | |
| Uniform Loads (plf) | | | | | | | |
| Vert: 1-2=-20, 2 | 2-6=-20, 6-10=-20, 10-11=-20 | , 12-21=-40 | | | | | |
| Uniform Loads (plf) | US. Internal) Case 1. Lumber | | | | | | |
| Vert: 1-2=42, 2- | -26=22, 6-26=12, 6-29=22, 10 |)-29=12, 10-11=8, 12-21=-12 | | | | | |
| Horz: 2-21=13, 5) Dead + 0.6 C-C Wind (F | 1-2=-54, 2-26=-34, 6-26=-24, 205 Internal) Case 2: Lumber | , 6-29=34, 10-29=24, 10-11=20, 10-12 Increase 1 60 Plate Increase 1 60 | =24 | | | | |
| Uniform Loads (plf) | OS. Internal) Case 2. Lumber | increase=1.00, Flate increase=1.00 | | | | | |
| Vert: 1-2=8, 2-2 | 28=12, 6-28=22, 6-31=12, 10- | 31=22, 10-11=42, 12-21=-12 | | | | | |
| Horz: 2-21=-24 | , 1-2=-20, 2-28=-24, 6-28=-34 leg_Internal) Case 1: Lumber | l, 6-31=24, 10-31=34, 10-11=54, 10-12 : Ipcrease=1.60, Plate Ipcrease=1.60 | 2=-13 | | | | |
| Uniform Loads (plf) | eg. Internal) Case 1. Lumber | niciease=1.00, 1 late increase=1.00 | | | | | |
| Vert: 1-2=-13, 2 | 2-6=-32, 6-10=-32, 10-11=-27 | , 12-21=-20 | | | | | |
| Horz: 2-21=-15, 7) Dead + 0.6 C-C Wind (N | , 1-2=-7, 2-6=12, 6-10=-12, 10 Jeg. Internal) Case 2: Lumber | 0-11=-7, 10-12=-22 : Increase=1.60. Plate Increase=1.60 | | | | | |
| Uniform Loads (plf) | tog. Internal/ ease 2. Earnset | | | | | | |
| Vert: 1-2=-27, 2 | 2-6=-32, 6-10=-32, 10-11=-13 | , 12-21=-20 | | | | | |
| Horz: 2-21=22, 8) Dead + 0.6 MWFRS Wir | 1-2=7, 2-6=12, 6-10=-12, 10- nd (Pos_Internal) eft [.] umbe | 11=7, 10-12=15 r Increase=1 60 Plate Increase=1 60 | | | | | |
| Uniform Loads (plf) | | | | | | | |
| Vert: 1-2=20, 2- | 6=10, 6-10=8, 10-11=4, 12-2 | 1=-12 | | | | | |
| Horz: 2-21=13, 9) Dead + 0.6 MWFRS Wir | 1-2=-32, 2-6=-22, 6-10=20, 1 nd (Pos. Internal) Right: Lumb | 0-11=16, 10-12=16 per Increase=1.60, Plate Increase=1.60 |) | | | | |
| Uniform Loads (plf) | | | | | | | |
| Vert: 1-2=4, 2-6 | S=8, 6-10=10, 10-11=20, 12-2 | 1=-12 | | | | | |
| 10) Dead + 0.6 MWFRS W | , 1-2=-16, 2-6=-20, 6-10=22, /ind (Neg. Internal) Left: Lumb | per Increase=1.60, Plate Increase=1.60 | C | | | | |
| Uniform Loads (plf) | (U) | , | | | | | |
| Vert: 1-2=-2, 2 | 2-6=-7, 6-10=-8, 10-11=-4, 12 | -21=-20 10 11-16 10 12-7 | | | | | |
| 11) Dead + 0.6 MWFRS W | /ind (Neg. Internal) Right: Lun | nber Increase=1.60, Plate Increase=1. | 60 | | | | |
| Uniform Loads (plf) | | | | | | | |
| Vert: 1-2=-4, 2 Horz: 2-21=-7 | 2-6=-8, 6-10=-7, 10-11=-2, 12 1-2=-16 | -21=-20 10-11=18 10-12=-21 | | | | | |
| 12) Dead + 0.6 MWFRS W | /ind (Pos. Internal) 1st Paralle | el: Lumber Increase=1.60, Plate Increas | se=1.60 | | | | |
| Uniform Loads (plf) | | 44 0 40 04 40 | | | | | |
| Vert: 1-2=14, 2 Horz: 2-21=11 | 2-27=19, 6-27=9, 6-10=2, 10- 1-2=-26 2-27=-31 6-27=-2 | 11=-3, 12-21=-12 1 6-10=14 10-11=9 10-12=12 | | | | | |
| 13) Dead + 0.6 MWFRS W | /ind (Pos. Internal) 2nd Parall | el: Lumber Increase=1.60, Plate Increa | ase=1.60 | | | | |
| Uniform Loads (plf) | | 11 11 10 01 10 | | | | | |
| Horz: 2-21=-1 | 2-6=2, 6-30=9, 10-30=19, 10- 2, 1-2=-9, 2-6=-14, 6-30=21. | 11=14, 12-21=-12 10-30=31, 10-11=26, 10-12=-11 | | | | | |
| 14) Dead + 0.6 MWFRS W | /ind (Pos. Internal) 3rd Paralle | el: Lumber Increase=1.60, Plate Increa | se=1.60 | | | | |
| Uniform Loads (plf) | -6-9 6-10-2 10-113 12-2 | 112 | | | | | |
| Horz: 2-21=5, | 1-2=-17, 2-6=-21, 6-10=14, 1 | 0-11=9, 10-12=12 | | | | | |
| 15) Dead + 0.6 MWFRS W | /ind (Pos. Internal) 4th Paralle | el: Lumber Increase=1.60, Plate Increa | se=1.60 | | | | |
| Uniform Loads (pif) Vert: 1-2=-3-2 | 2-6=2 6-10=9 10-11=5 12-2 | 1=-12 | | | | | |
| Horz: 2-21=-12 | 2, 1-2=-9, 2-6=-14, 6-10=21, | 10-11=17, 10-12=-5 | | | | | |
| 16) Dead + 0.6 MWFRS W | /ind (Neg. Internal) 1st Paralle | el: Lumber Increase=1.60, Plate Increa | se=1.60 | | | | |
| Vert: 1-2=6. 2- | -27=2. 6-27=-7. 6-10=-15. 10- | -11=-11. 12-21=-20 | | | | | |
| Horz: 2-21=19 | 9, 1-2=-26, 2-27=-22, 6-27=-1 | 3, 6-10=5, 10-11=9, 10-12=3 | | | | | |
| 17) Dead + 0.6 MWFRS W | /ind (Neg. Internal) 2nd Parall | el: Lumber Increase=1.60, Plate Increa | ase=1.60 | | | | |
| Vert: 1-2=-11, | 2-6=-15, 6-30=-7, 10-30=2, 1 | 0-11=6, 12-21=-20 | | | | | |
| Horz: 2-21=-3 | , 1-2=-9, 2-6=-5, 6-30=13, 10 | -30=22, 10-11=26, 10-12=-19 | | | | | |
| Dead + Uninhabitable . Uniform Loads (plf) | Attic Storage: Lumber Increas | se=1.25, Plate Increase=1.25 | | | | | |
| Vert: 1-2=-20, | 2-6=-20, 6-10=-20, 10-11=-2 | 0, 21-32=-20, 32-33=-60, 33-34=-20, 3 | 4-35=-60, | 12-35=-2 | 20 | | |
| 19) Dead + 0.75 Roof Live | (bal.) + 0.75 Uninhab. Attic S | Storage + 0.75(0.6 MWFRS Wind (Neg | . Int) Left): | Lumber I | ncrease= | =1.60, Plate | |
| Uniform Loads (plf) | | | | | | | |
| Vert: 1-2=-37, | 2-6=-40, 6-10=-41, 10-11=-3 | 8, 21-32=-20, 32-33=-50, 33-34=-20, 3 | 4-35=-50, | 12-35=-2 | 20 | | |
| Horz: 2-21=16 | 6, 1-2=-13, 2-6=-10, 6-10=9, 1 | 0-11=12, 10-12=6 | Int) Diaba | Lumber | r Increase | | |
| Increase=1.60 | (bai.) + 0.75 Uninnab. Attic S | Norage + 0.75(0.0 WWERS WIND (Neg | . mų ragnu) | | i increase | - 1.00, FICE | |
| Uniform Loads (plf) | | | | | | | |
| Vert: 1-2=-38, | 2-6=-41, 6-10=-40, 10-11=-3 | 7, 21-32=-20, 32-33=-50, 33-34=-20, 3 0-11-13 | 4-35=-50, | 12-35=-2 | 20 | | |
| 21) Dead + 0.75 Roof Live | (bal.) + 0.75 Uninhab. Attic S | Storage + 0.75(0.6 MWFRS Wind (Neg | . Int) 1st Pa | arallel): L | umber In | crease=1.60, | |
| Plate Increase=1.60 | | | | | | | |
| | | | | | | | |

ntinued on page 3

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| I | Job | Truss | Truss Type | Qty | Ply | Master Craftsman | |
|---|------------------------------------|-------|------------|-----|-----|---|-------|
| | | | | | | 1521 | 26481 |
| | MASTER_CRAFTSMAN | A02 | COMMON | 5 | 1 | | |
| | | | | | | Job Reference (optional) | |
| | Builders FirstSource Apex NC 27523 | | | | | 3 530 s Dec. 6 2021 MiTek Industries, Inc., Tue May 24 09:07:53 2022, Pag | ne 3 |

Builders FirstSource, Apex, NC 27523

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LOAD CASE(S)

Uniform Loads (plf)

Vert: 1-2=-30, 2-27=-34, 6-27=-41, 6-10=-46, 10-11=-43, 21-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 12-35=-20

Horz: 2-21=15, 1-2=-20, 2-27=-16, 6-27=-9, 6-10=4, 10-11=7, 10-12=2

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-43, 2-6=-46, 6-30=-41, 10-30=-34, 10-11=-30, 21-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 12-35=-20 Horz: 2-21=-2, 1-2=-7, 2-6=-4, 6-30=9, 10-30=16, 10-11=20, 10-12=-15

- 23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
- Vert: 1-2=-60, 2-6=-60, 6-10=-20, 10-11=-20, 12-21=-20

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

- Vert: 1-2=-20, 2-6=-20, 6-10=-60, 10-11=-60, 12-21=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
- Vert: 1-2=-50, 2-6=-50, 6-10=-20, 10-11=-20, 21-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 12-35=-20
- 26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-20, 2-6=-20, 6-10=-50, 10-11=-50, 21-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 12-35=-20

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- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)
 - Vert: 1-2=-60, 2-6=-60, 6-10=-60, 11-20=-20

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MARNING - 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 preven tbuckling 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 sand 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



minim

May 24,2022

| Job | Truss | Truss Type | Qty | Ply | Master Craftsman |
|---------------------------|-----------------------|--|----------------------------|---------|---|
| | | | | | 15 |
| MASTER_CRAFTSMAN | A02A | COMMON | 2 | | 1 Joh Poteroneo (ontional) |
| Builders FirstSource Apex | NC 27523 | | | | 8 530 s Dec. 6 2021 MiTek Industries. Inc. Tue May 24 09:08:04 2022 P |
| | 10 21 020 | | ID:x1XjjwWBLqE? | VCReTaC | aQN3tymvXu-UZe0Wbw04F_jD5ya4tW6dETE7_0rwMjwxXn1?UzDK |
| | | | | | |
| LOAD CASE(S) | | | | | |
| 2) Dead + 0.75 Roof Liv | ve (balanced) + 0.75 | 5 Uninhab. Attic Storage: Lumber Increas | e=1.15, Plate Increase=1.1 | 5 | |
| Uniform Loads (plf) | | | | | |
| Vert: 1-2=-5 | 0, 2-6=-50, 6-10=-5 | 0, 20-32=-20, 32-33=-50, 33-34=-20, 34- | 35=-50, 11-35=-20, 21-22=- | 30 | |
| 3) Dead + Uninhabitabl | e Attic Without Stora | age: Lumber Increase=1.25, Plate Increa | se=1.25 | | |
| Uniform Loads (plf) | | | | | |
| Vert: 1-2=-2 | 0, 2-6=-20, 6-10=-2 | 0, 11-20=-40, 21-22=-40 | | | |
| 4) Dead + 0.6 C-C Win | d (Pos. Internal) Cas | se 1: Lumber Increase=1.60, Plate Increa | ase=1.60 | | |
| Uniform Loads (plf) | | | | | |
| Vert: 1-2=42 | 2, 2-26=22, 6-26=12 | , 6-29=22, 10-29=12, 11-20=-12 | | | |
| Horz: 20-25 | =13, 1-2=-54, 2-26= | -34, 6-26=-24, 6-29=34, 10-29=24, 11-3 | 1=24 | | |
| 5) Dead + 0.6 C-C Win | d (Pos. Internal) Cas | se 2: Lumber Increase=1.60. Plate Increa | ase=1.60 | | |
| Uniform Loads (plf) | (,, | | | | |
| Vert: 1-2=8. | 2-28=12.6-28=22. | 6-30=12, 10-30=22, 11-20=-12 | | | |
| Horz: 20-25 | =-24, 1-2=-20, 2-28= | =-24, 6-28=-34, 6-30=24, 10-30=34, 11-3 | 31=-13 | | |
| 6) Dead + 0.6 C-C Win | d (Neg. Internal) Ca | se 1: Lumber Increase=1.60. Plate Increa | ase=1.60 | | |
| Uniform Loads (nlf) | | | | | |

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=20, 2-6=10, 6-10=8, 11-20=-12 Horz: 20-25=13, 1-2=-32, 2-6=-22, 6-10=20, 11-31=16 9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=4, 2-6=8, 6-10=10, 11-20=-12 Horz: 20-25=-16, 1-2=-16, 2-6=-20, 6-10=22, 11-31=-13 10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-2, 2-6=-7, 6-10=-8, 11-20=-20 Horz: 20-25=21, 1-2=-18, 2-6=-13, 6-10=12, 11-31=7 11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-4, 2-6=-8, 6-10=-7, 11-20=-20 Horz: 20-25=-7, 1-2=-16, 2-6=-12, 6-10=13, 11-31=-21 12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=14, 2-27=19, 6-27=9, 6-10=2, 11-20=-12 Horz: 20-25=11, 1-2=-26, 2-27=-31, 6-27=-21, 6-10=14, 11-31=12 13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-3, 2-6=2, 6-8=9, 8-10=19, 11-20=-12 Horz: 20-25=-12, 1-2=-9, 2-6=-14, 6-8=21, 8-10=31, 11-31=-11 14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=5. 2-6=9. 6-10=2. 11-20=-12 Horz: 20-25=5, 1-2=-17, 2-6=-21, 6-10=14, 11-31=12 15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-3, 2-6=2, 6-10=9, 11-20=-12 Horz: 20-25=-12, 1-2=-9, 2-6=-14, 6-10=21, 11-31=-5 16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=6, 2-27=2, 6-27=-7, 6-10=-15, 11-20=-20 Horz: 20-25=19, 1-2=-26, 2-27=-22, 6-27=-13, 6-10=5, 11-31=3 17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf) Vert: 1-2=-11, 2-6=-15, 6-8=-7, 8-10=2, 11-20=-20 Horz: 20-25=-3, 1-2=-9, 2-6=-5, 6-8=13, 8-10=22, 11-31=-19 18) Dead + Uninhabitable Attic Storage: Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-2=-20, 2-6=-20, 6-10=-20, 20-32=-20, 32-33=-60, 33-34=-20, 34-35=-60, 11-35=-20, 21-22=-40 19) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate

Vert: 1-2=-13, 2-6=-32, 6-10=-32, 11-20=-20 Horz: 20-25=-15, 1-2=-7, 2-6=12, 6-10=-12, 11-31=-22

Vert: 1-2=-27, 2-6=-32, 6-10=-32, 11-20=-20 Horz: 20-25=22, 1-2=7, 2-6=12, 6-10=-12, 11-31=15

Uniform Loads (plf)

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60

Increase=1.60

Uniform Loads (plf)

Vert: 1-2=-37, 2-6=-40, 6-10=-41, 20-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 11-35=-20, 21-22=-30 Horz: 20-25=16, 1-2=-13, 2-6=-10, 6-10=9, 11-31=6

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

Uniform Loads (plf)

Vert: 1-2=-38, 2-6=-41, 6-10=-40, 20-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 11-35=-20, 21-22=-30 Horz: 20-25=-6, 1-2=-12, 2-6=-9, 6-10=10, 11-31=-16

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| Job | Truss | Truss Type | Qty | Ply | Master Craftsman | |
|--------------------------------------|-------|------------|-----|-----|---|-------|
| | | | | | 15212 | 26482 |
| MASTER_CRAFTSMAN | A02A | COMMON | 2 | 1 | | |
| | | | | | Job Reference (optional) | |
| Builders FirstSource, Apex, NC 27523 | | | | | 3.530 s Dec 6 2021 MiTek Industries, Inc. Tue May 24 09:08:04 2022 Page | je 3 |

ID:x1XjjwWBLqE?VCReTaQN3tymvXu-UZe0Wbw04F_jD5ya4tW6dETE7_0rwMjwxXn1?UzDKmv

LOAD CASE(S)

- 21) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)
 - Vert: 1-2=-30, 2-27=-34, 6-27=-41, 6-10=-46, 20-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 11-35=-20, 21-22=-30
 - Horz: 20-25=15, 1-2=-20, 2-27=-16, 6-27=-9, 6-10=4, 11-31=2

22) Dead + 0.75 Roof Live (bal.) + 0.75 Uninhab. Attic Storage + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60 Uniform Loads (plf)

Vert: 1-2=-43, 2-6=-46, 6-8=-41, 8-10=-34, 20-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 11-35=-20, 21-22=-30

Horz: 20-25=-2, 1-2=-7, 2-6=-4, 6-8=9, 8-10=16, 11-31=-15

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-2=-60, 2-6=-60, 6-10=-20, 11-20=-20

- 24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-20, 2-6=-20, 6-10=-60, 11-20=-20
- 25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-50, 2-6=-50, 6-10=-20, 20-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 11-35=-20, 21-22=-30

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Uninhab. Attic Storage: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf)

Vert: 1-2=-20, 2-6=-20, 6-10=-50, 20-32=-20, 32-33=-50, 33-34=-20, 34-35=-50, 11-35=-20, 21-22=-30

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4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 6.



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818 Soundside Road Edenton, NC 27932



LUMBER-

| TOP CHORD | 2x4 SP No.2 |
|-----------|-------------|
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.3 |

BRACING-TOP CHORD

Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. BOT CHORD

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

REACTIONS. All bearings 12-8-0.

Max Horz 16=-45(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-4-0, Corner(3) 6-4-0 to 9-4-0, Exterior(2) 9-4-0 to 13-8-0 zone; cantilever left and right exposed ; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide 9) will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.



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2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-8-12 to 3-8-12, Interior(1) 3-8-12 to 4-2-11, Exterior(2) 4-2-11 to 7-2-11, Interior(1) 7-2-11 to 7-8-10 zone; cantilever left and right exposed ; 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) Gable requires continuous bottom chord bearing.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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2x4 ⋍

2x4 🗢

Structural wood sheathing directly applied or 4-5-6 oc purlins.

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

| F | | <u>2-11-10</u> 2-11-10 | | - | 4-5-6 1-5-12 |
|---------------------|-----------------------|---------------------------|-----------------|------------|------------------------|
| late Offsets (X,Y) | [2:0-3-0,Edge] | | | | |
| DADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) | l/defl L/d | PLATES GRIP |
| CLL 20.0 | Plate Grip DOL 1.15 | TC 0.04 | Vert(LL) n/a - | n/a 999 | MT20 244/190 |
| CDL 10.0 | Lumber DOL 1.15 | BC 0.11 | Vert(CT) n/a - | n/a 999 | |
| CLL 0.0 * | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 3 | n/a n/a | |
| CDL 10.0 | Code IRC2015/TPI2014 | Matrix-P | . , | | Weight: 12 lb FT = 20% |

BOT CHORD

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

REACTIONS. 1=4-5-6, 3=4-5-6 (size) Max Horz 1=8(LC 16) Max Uplift 1=-4(LC 12), 3=-4(LC 13) Max Grav 1=120(LC 1), 3=120(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; 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) Gable requires continuous bottom chord bearing.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide

will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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RENCO

818 Soundside Road Edenton, NC 27932



LUMBER-

| TOP CHORD | 2x4 SP No.2 |
|-----------|-------------|
| BOT CHORD | 2x4 SP No.2 |
| WEBS | 2x4 SP No.3 |
| OTHERS | 2x4 SP No.3 |

BRACING-TOP CHORD

 TOP CHORD
 Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.

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

REACTIONS. All bearings 12-0-0.

Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 15, 12, 11

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

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 6-0-0, Corner(3) 6-0-0 to 9-0-0, Exterior(2) 9-0-0 to 13-0-0 zone; cantilever left and right exposed ; 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) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 15, 12, 11.



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⁽lb) - Max Horz 16=-45(LC 10)



NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; 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) Gable requires continuous bottom chord bearing.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide

will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



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2x4 ⋍

4x6 🗢

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

| ⊢ | | | <u>3-9-6</u> 3-9-6 | |
|--|---|--|---|--|
| Plate Offsets (X,Y) [| 2:0-3-0,Edge] | | | - |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 | SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrYES | CSI. TC 0.02 BC 0.07 WB 0.00 | DEFL. in (loc) I/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 3 n/a n/a | PLATES GRIP MT20 244/190 |
| LUMBER- | Code IRC2015/TPI2014 | Matrix-P | BRACING- TOP CHORD Structural wood sheathing di | Weight: 9 lb FT = 20% |

BOT CHORD

TOP CHORD2x4 SP No.2BOT CHORD2x4 SP No.2

REACTIONS. (size) 1=3-9-6, 3=3-9-6 Max Horz 1=15(LC 12) Max Grav 1=81(LC 1), 3=87(LC 3)

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

NOTES-

 Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; 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

2) Gable requires continuous bottom chord bearing.

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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



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[2:0.2.9 Edgo

| Plate Offse | ets (X,Y) | [2:0-3-8,Edge] | | 1 | | | | | | | | |
|-------------|-----------|-----------------|--------|-------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADING | (psf) | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 20.0 | Plate Grip DOL | 1.15 | тс | 0.32 | Vert(LL) | -0.02 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.26 | Vert(CT) | -0.05 | 4-7 | >999 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/T | PI2014 | Matri | x-MP | Wind(LL) | 0.03 | 4-7 | >999 | 240 | Weight: 21 lb | FT = 20% |
| LUMBER- | | | | | | BRACING- | | | | | | |

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 WEDGE Left: 2x4 SP No.3

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

Max Horz 2=79(LC 11) Max Uplift 4=-23(LC 12), 2=-24(LC 12) Max Grav 4=186(LC 1), 2=259(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-9-12 zone; cantilever left and right exposed ; 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

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

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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, 2.



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

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

except end verticals.

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Max Uplift 5=-6(LC 9), 2=-13(LC 8), 6=-40(LC 12) Max Grav 5=42(LC 1), 2=170(LC 1), 6=236(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-0-0 to 2-0-0, Exterior(2) 2-0-0 to 4-10-4 zone; cantilever left and right exposed; 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

2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

3) Gable studs spaced at 2-0-0 oc.

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

5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2, 6.

7) Non Standard bearing condition. Review required.



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| LOADING | i (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) I/defl L/d PLATES GRIP |
|---------|---------|-----------------------|-----------|---|
| TCLL | 20.0 | Plate Grip DOL 1.15 | TC 0.38 | Vert(LL) -0.03 4-7 >999 360 MT20 244/190 |
| TCDL | 10.0 | Lumber DOL 1.15 | BC 0.50 | Vert(CT) -0.06 4-7 >999 240 |
| BCLL | 0.0 * | Rep Stress Incr NO | WB 0.00 | Horz(CT) 0.01 2 n/a n/a |
| BCDL | 10.0 | Code IRC2015/TPI2014 | Matrix-MP | Wind(LL) 0.02 4-7 >999 240 Weight: 24 lb FT = 20% |
| | | | | |

LUMBER-

TOP CHORD2x4 SP No.2BOT CHORD2x6 SP No.2WEBS2x4 SP No.3

BRACING-TOP CHORD BOT CHORD

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

REACTIONS. (size) 4=0-1-8, 2=0-3-8 Max Horz 2=78(LC 22) Max Uplift 4=-60(LC 8), 2=-45(LC 8) Max Grav 4=477(LC 1), 2=401(LC 1)

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

NOTES-

- Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; 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.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 216 lb down and 40 lb up at 2-3-4, and 213 lb down and 31 lb up at 4-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 - Uniform Loads (plf) Vert: 1-3=-60, 4-5=-20 Concentrated Loads (lb)
 - Vert: 8=-216(F) 9=-213(F)



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| Plate Off | sets (X,Y) | [2:0-3-8,Edge] | | | | | | | | | |
|-----------|------------|--------------------|------------------|------|----------|-------|-------|--------|-----|---------------|----------|
| LOADIN | G (psf) | SPACING- 2- | 0-0 CSI . | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL | 20.0 | Plate Grip DOL 1 | .15 TC | 0.44 | Vert(LL) | -0.04 | 4-7 | >999 | 360 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL 1 | .15 BC | 0.36 | Vert(CT) | -0.10 | 4-7 | >693 | 240 | | |
| BCLL | 0.0 * | Rep Stress Incr Y | 'ES WB | 0.00 | Horz(CT) | 0.02 | 2 | n/a | n/a | | |
| BCDL | 10.0 | Code IRC2015/TPI20 | 14 Matri | k-MP | Wind(LL) | 0.04 | 4-7 | >999 | 240 | Weight: 24 lb | FT = 20% |
| | • | 1 | | | BRACING | | | | | | |

TOP CHORD

BOT CHORD

LUMBER-

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 WEDGE
 Left: 2x4 SP No.3

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

Max Horz 2=89(LC 11) Max Uplift 4=-27(LC 12), 2=-25(LC 12) Max Grav 4=215(LC 1), 2=286(LC 1)

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

NOTES-

 Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 5-6-4 zone; cantilever left and right exposed; 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

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

3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas 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) 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, 2.



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

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

except end verticals.

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| 0 <u>-2-8</u> 0-2-8 | 2-0-0 1-9-8 | 7-0-0 5-0-0 | | | | | 12-0- 5-0-0 | 0 | | |
|---|---|---|---|--------------------------------------|--------------------------------|---------------------------------------|---------------------------------|---------------------------------|------------------------------------|--|
| Plate Offsets (X,Y) | [2:0-3-8,Edge], [3:0-5-4,0-2-0] | | | | | | | | | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING-2-0-0Plate Grip DOL1.15Lumber DOL1.15Rep Stress IncrNOCode IRC2015/TPI2014 | CSI. TC 0.43 BC 0.36 WB 0.47 Matrix-MS | DEFL. Vert(LL) Vert(CT) Horz(CT) Wind(LL) | in -0.05 -0.10 0.01 0.04 | (loc) 7-8 7-8 13 7 | l/defl >999 >999 n/a >999 | L/d 360 240 n/a 240 | PLATES MT20 Weight: 56 lb | GRIP 244/190 FT = 20% | |
| LUMBER- TOP CHORD 2x4 SP No.2 BRACING- TOP CHORD BOT CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-5 max.): 3-5. WEBS 2x4 SP No.3 *Except* 5-6: 2x4 SP No.2 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. WEDGE Left: 2x4 SP No.3 Structural wood sheathing directly applied or 10-0-0 oc bracing. | | | | | | | | | oc purlins, ax.): 3-5. | |
| REACTIONS. (size) 2=0-3-0, 13=0-1-8 Max Horz 2=32(LC 8) Max Uplift 2=-45(LC 4), 13=-37(LC 5) Max Grav 2=553(LC 1), 13=459(LC 1) | | | | | | | | | | |
| FORCES. (lb) - Max. TOP CHORD 2-3=- BOT CHORD 2-8=- WEBS 3-7=- | Comp./Max. Ten All forces 250 (lb) or 864/52, 3-4=-1346/110, 4-5=-1346/110 59/775, 7-8=-52/780 65/600, 4-7=-306/101, 5-7=-93/1129, 5- | less except when shown. 13=-521/45 | | | | | | | | |
| NOTES- 1) Unbalanced roof live 2) Wind: ASCE 7-10; V gable end zone; can 3) Provide adequate di 4) This truss has been 5) * This truss has been will fit between the b 6) Bearing at joint(s) 13 capacity of bearing at 7) Provide mechanical | OP CHORD 2-3=-864/52, 3-4=-1346/110, 4-5=-1346/110 IOT CHORD 2-8=-59/775, 7-8=-52/780 VEBS 3-7=-65/600, 4-7=-306/101, 5-7=-93/1129, 5-13=-521/45 IOTES- Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60 Provide adequate drainage to prevent water ponding. 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members. Bearing at joint(s) 13 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) 2, 13.

9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5 lb down and 17 lb up at 2-0-0, 5 lb down and 17 lb up at 4-0-12, 5 lb down and 15 lb up at 6-0-12, and 5 lb down and 17 lb up at 8-0-12, and 5 lb down and 17 lb up at 10-0-12 on top chord, and 5 lb down at 2-0-12, 5 lb down at 4-0-12, 5 lb down at 6-0-12, and 5 lb down at 8-0-12, and 5 lb down at 10-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others. 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Continued on page 2

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SEAL



| Job | Truss | Truss Type | Qty | Ply | Master Craftsman | |
|-----------------------------|------------------------|------------|-----|------------|--|-----------|
| | | | | | | 152126496 |
| MASTER_CRAFTSMAN | E01-1PL | MONO HIP | 1 | 1 | | |
| | | | | | Job Reference (optional) | |
| Builders FirstSource (Apex, | NC), Apex, NC - 27523, | | 8 | .530 s Dec | 6 2021 MiTek Industries, Inc. Tue May 24 08:18:41 2022 | Page 2 |

ID:x1XjjwWBLqE?VCReTaQN3tymvXu-Pq3nYngVrjxX2bltgFt1NeFwCasqBM?ob2XIWkzDLVC

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 6-10=-20 Concentrated Loads (lb) Vert: 8=-5(F) 18=-5(F) 19=-5(F) 20=-5(F) 21=-5(F)

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Edenton, NC 27932



BOT CHORD

 TOP CHORD
 2x4 SP No.2

 BOT CHORD
 2x4 SP No.2

 WEBS
 2x4 SP No.3

 WEDGE
 Left: 2x4 SP No.3

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

Max Horz 2=71(LC 11)

Max Uplift 5=-16(LC 9), 2=-29(LC 12) Max Grav 5=229(LC 1), 2=299(LC 1)

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

NOTES-

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

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 4-2-8, Exterior(2) 4-2-8 to 5-10-4 zone; cantilever left and right exposed ; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide
- will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



except end verticals, and 2-0-0 oc purlins: 3-4.

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

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| LOADING TCLL TCDL BCLL | (psf) 20.0 10.0 0.0 * | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES | CSI. TC 0.07 BC 0.04 WB 0.00 | DEFL. Vert(LL) -(Vert(CT) -(Horz(CT) (| in 0.00 0.00 0.00 | (loc) 7 7 2 | l/defl >999 >999 n/a | L/d 360 240 n/a | PLATES MT20 | GRIP 244/190 |
|---------------------------------|--------------------------------|---|---------------------------------------|---|----------------------------|----------------------|-------------------------------|--------------------------|----------------|------------------------|
| BCDL | 10.0 | Code IRC2015/TPI2014 | Matrix-MP | Wind(LL) | 0.00 | 7 | >999 | 240 | Weight: 10 lb | FT = 20% |

LUMBER-

TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEDGE Left: 2x4 SP No.3

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

Max Horz 2=39(LC 12) Max Uplift 3=-17(LC 12), 2=-16(LC 8) Max Grav 3=46(LC 1), 4=36(LC 3), 2=160(LC 1)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; 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
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide

will fit between the bottom chord and any other members.

4) Refer to girder(s) for truss to truss connections.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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BRACING-TOP CHORD BOT CHORD

Structural wood sheathing directly applied or 2-2-8 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.



| | 6-0-0 | | - | | | | | |
|---|---|--|--|---|--|------------------------------------|--|--|
| Plate Offsets (X,Y) | <u>6-0-0</u> [2:0-0-0.0-1-6], [2:0-3-3.Edae], [4:0-0-0. | 0-1-6]. [4:0-3-3.Edge] | 1 | 6-0-0 | | 1 | | |
| LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 BCDL 10.0 | SPACING- 2-0-0 Plate Grip DOL 1.15 Lumber DOL 1.15 Rep Stress Incr YES Code IRC2015/TPI2014 | CSI. TC 0.39 BC 0.35 WB 0.10 Matrix-MS | DEFL. ir Vert(LL) -0.04 Vert(CT) -0.07 Horz(CT) 0.01 Wind(LL) 0.03 | n (loc) l/defl L/d 6-12 >999 360 6-12 >999 240 2 n/a n/a 6-9 >999 240 | PLATES MT20 Weight: 47 lb | GRIP 244/190 FT = 20% | | |
| LUMBER- TOP CHORD 2x4 S BOT CHORD 2x4 S WEBS 2x4 S WEDGE Left: 2x4 SP No.3 , R | SP No.2 SP No.2 SP No.3 light: 2x4 SP No.3 | | BRACING- TOP CHORD BOT CHORD | Structural wood sheathing di Rigid ceiling directly applied | rectly applied or 6-0-0 o or 10-0-0 oc bracing. | oc purlins. | | |
| REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=50(LC 12) Max Uplift 2=-25(LC 12), 4=-25(LC 13) Max Grav 2=540(LC 1), 4=540(LC 1) | | | | | | | | |
| FORCES.(lb) - MaTOP CHORD2-3BOT CHORD2-6WEBS3-6 | x. Comp./Max. Ten All forces 250 (lb) or =-686/89, 3-4=-686/85 =-5/578, 4-6=-5/578 =0/251 | less except when shown. | | | | | | |
| NOTES- 1) Unbalanced roof li 2) Wind: ASCE 7-10 | ve loads have been considered for this de | sign. fr BCDI =6 0nsfr h=32ftr Cat | II: Exp B: Enclosed: | MWERS (envelope) | | | | |

2) Wind: ASCE 7-10; Vult=115mph Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=32ft; Cat. II; Exp B; Enclosed; MWFRS (envelop gable end zone and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-0-0, Exterior(2) 6-0-0 to 10-2-15, Interior(1) 10-2-15 to 13-0-0 zone; cantilever left and right exposed ; 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) 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 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



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