

Trenco 818 Soundside Rd Edenton, NC 27932

Re: 34893A 5 SERENITY

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I56131948 thru I56132001

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

North Carolina COA: C-0844



January 17,2023

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 | Truss | Truss Type Qty | | Ply | 5 SERENITY | | |
|--------|-------|------------------------|---|-----|--------------------------|-----------|--|
| 34893A | A1E | Common Supported Gable | 1 | 1 | Job Reference (optional) | 156131948 | |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:48 ID:C1WouytSkAbxAH8_CW9Vkiy6NQX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

January 17,2023

818 Soundside Road Edenton, NC 27932



| Scale = | 1:54.6 |
|---------|--------|
|---------|--------|

Plate Offsets (X, Y): [22:0-3-0,0-1-4]

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC20 ⁷ | 15/TPI2014 | CSI TC BC WB Matrix-MS | 0.14 0.13 0.18 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (lo 1 | c) I/de - n - n 16 n | efl /a /a /a | L/d 999 999 n/a | PLATES MT20 Weight: 171 II | GRIP 244/19 D FT = 2 | 90 20% |
|---|--|---|--|---|---|--|--|--|---|-----------------------------------|---|--|---|--|--|---|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD | 2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No SP No.2 Structural 6-0-0 oc p Rigid ceili bracing. | 0.2 0.3 0.3 *Except wood shea purlins, exc ng directly | t* 23-9,24-8,21-10:2 athing directly applie cept end verticals. applied or 10-0-0 oc 16-26-8-8, 17-26-8 | T 2x4 Bed or C 2. 8 V | OP CHORD | 1-2=-116/91, 2-3=: 4-5=-73/156, 5-7=: 8-9=-103/265, 9-11 10-11=-89/198, 11 12-13=-63/106, 13 15-16=-26/16 1-29=-30/47, 28-2! 26-27=-30/39, 21-: 19-20=-30/39, 18- 16-17=-30/39 9-23=-162/22, 8-2! | -98/88, 3 -76/192, 0=-103/2 -12=-76/ -14=-49/ 9=-30/39 26=-30/3 23=-30/3 19=-30/3 19=-30/3 | -4=-82/116, 7-8=-89/231, 56, 143, (68, 14-15=-35 9, 27-28=-30/3 9, 24-25=-30/ 9, 20-21=-30/ 9, 17-18=-30/ 09, 7-25=-115 | 5/35, 9, 39, 39, 39, 39, | 8) | ^t This tru on the b 3-06-00 chord ar Provide bearing 1, 3 lb up at joint 2 17 lb up at joint 2 28 lb up uplift at j | iss h otton d ar meclolate olift a 5, 27 ift at 1, 29 ift at oint | nas b n cho oy 1-0 hy oth hanic capa capa capa capa capa capa capa ca | een designed fc ord in all areas v 00-00 wide will fi her members, w cal connection (t able of withstan ht 16, 27 lb uplifi uplift at joint 26, 5 .28, 54 lb uplift at joint 20, 5 .18, 38 lb uplift | r a live loa /here a re t betweer th BCDL y others) ding 4 lb u at joint 2 30 lb uplif at joint 29 27 lb uplif at joint 17 | ad of 20.0psf ictangle in the bottom = 10.0psf. of truss to uplift at joint 14, 29 lb uplift if at joint 27, i, 25 lb uplift if at joint 19, ' and 4 lb |
| REACTIONS | (size) Max Horiz Max Uplift Max Grav | 1=26-8-8, 18=26-8-8 21=26-8-8 25=26-8-8 28=26-8-8 1=-24 (LC 6 (LC 13), 1 (LC 13), 2 (LC 12), 2 (L2 | 16=26-8-8, 17=26-8 8, 19=26-8-8, 20=26 9, 23=26-8-8, 24=26 1, 26=26-8-8, 30=26 2, 29=26-8-8, 30=26 2, 11), 30=128 (LC 12), 17 8=-28 (LC 13), 19=- 0=-29 (LC 13), 21=- 4=-27 (LC 12), 25=- 6=-27 (LC 12), 27=- 8=-17 (LC 12), 27=- 8=-17 (LC 12), 29=- 0=-4 (LC 8) 20), 16=31 (LC 22 C 24), 18=176 (LC 22 C 26), 20=198 (LC 22 C 26), 23=222 (LC 22) C 19), 25=198 (LC 22) C 25), 27=183 (LC 22) C 25), 27=182 (LC 22) C 25), 27= | 5-8, -8-8, -8-8, -8-8, -8-8, -8-8, -8-8 1 7=-38 227 229 30 54), 22), 22), 32 22), 32 22), 32 22), 33 22), 33 22), 34 22), 34 32 34 34 34 34 34 34 34 34 34 34 34 34 34 | IOTES) Unbalanced this design.) Wind: ASCE Vasd=91mpl II; Exp B; En and C-C Cor 15-8-12, Cor 20-3-2 to 26- exposed; er members an Lumber DOL) Truss desig only. For stu | 5-26=-119/58, 4-2' 2-29=-202/160, 10 11-20=-119/99, 12 13-18=-125/114, 1 roof live loads hav 7-10; Vult=115mp n; TCDL=6.0psf; B closed; MWFRS (ner (3) 0-0 to 4- ner (3) 15-8-12 to 6-12 zone; cantile d vertical left and d forces & MWFR _=1.60 plate grip D ned for wind loads uds exposed to win | 7=-127/6 -21=-12: -19=-11: 4-17=-9: we been of bh (3-sec CDL=6.0 envelope 6-6, Exte 20-3-2, ver left a right exp S for rea VOL=1.60 in the p nd (norm | 4, 3-28=-88/4 9/107, 9/75, 5/98 considered for cond gust) 0psf; h=30ft; C 9) exterior zom rior (2) 4-6-6 : Exterior (2) and right oosed;C-C for ctions shown; 0) lane of the true al to the face) | 8, Cat. e to ss | 10) ⁻ I I LOA | This trus nternati R802.10 D CASE | s is conal .2 ar | desig Resi nd re Sta | gned in accordan dential Code se ferenced standa undard | AROC | he 2015 02.11.1 and TPI 1. |
| FORCES | 28=101 (LC 1), 29=304 (LC 23), 30=131 (LC 20) (lb) - Maximum Compression/Maximum Tension (lb) - Maximum Compression/Maximum Tension (lb) - Maximum Compression/Maximum Tension (lb) - Maximum Compression/Maximum Tension (lb) - Maximum Compression/Maximum (lb) - Maximum Compression/Maximum Compression/Maximum Compression/Maximum Compression/Lb) - Maximum Compression/Lb) - Maximum Compression/Lb) - Max | | | | d Industry Gable E lailfied building de § 1.5x4 MT20 unle es continuous bott spaced at 2-0-0 o ls been designed f ad nonconcurrent | nd Deta signer as ss othen com chor c. for a 10.0 with any | IIs as applicab s per ANSI/TP wise indicated d bearing. O psf bottom other live load | ble, 111. ds. | | | 11110 March | | | 322 NEER GILB | A State | |

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | A2 | Common | 6 | 1 | Job Reference (optional) | 156131949 |

Run: 8,63 S Nov 19 2022 Print: 8,630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:51 ID:oXxNXBfDQ9njTGcUVgqltPy6NPW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



* This truss has been designed for a live load of 20.0psf

3-06-00 tall by 1-00-00 wide will fit between the bottom

bearing plate capable of withstanding 38 lb uplift at joint

International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

This truss is designed in accordance with the 2015

on the bottom chord in all areas where a rectangle

Refer to girder(s) for truss to truss connections. Provide mechanical connection (by others) of truss to

chord and any other members.

1 and 11 lb uplift at joint 7.

LOAD CASE(S) Standard

| BCDL | | | | | | | |
|------|--|--|--|--|--|--|--|
| | | | | | | | |

Loading

TCDL

BCLL

B

W

в

T

B

W R

| LUM | BER |
|-----|-----|
| TOP | CHC |

| OP CHORD | 2x4 SP No.2 |
|----------|---|
| OT CHORD | 2x4 SP No.2 |
| 'EBS | 2x4 SP No.3 *Except* 9-4,9-5,9-2:2x4 SP |
| | No.2 |
| RACING | |
| OP CHORD | Structural wood sheathing directly applied of |
| | 2-4-4 oc purlins, except end verticals. |
| OT CHORD | Rigid ceiling directly applied or 10-0-0 oc |
| | bracing, Except: |
| | 6-0-0 oc bracing: 7-8. |
| 'EBS | 1 Row at midpt 5-9, 2-9 |
| EACTIONS | (size) 1=0-5-8, 7= Mechanical |
| | Max Horiz 1=128 (LC 11) |
| | Max Uplift 1=-38 (LC 12), 7=-11 (LC 13) |
| | Max Cray 1-1062 (LC 1) 7-1062 (LC 1) |

Max Grav 1=1062 (LC 1), 7=1063 (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=-1842/98, 2-4=-1115/125, 4-5=-1108/120, 5-6=-919/68, 6-7=-1051/70 BOT CHORD 1-10=-100/1592, 8-10=-100/1592, 7-8=-31/35 WEBS 4-9=0/544, 5-9=-51/180, 5-8=-500/112, 2-9=-806/152, 2-10=0/339, 6-8=-56/1037

NOTES

- Unbalanced roof live loads have been considered for 1) this design
- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 4-6-6, Interior (1) 4-6-6 to 15-8-12, Exterior (2) 15-8-12 to 20-3-2, Interior (1) 20-3-2 to 26-6-12 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Varmonter MALLIN MALL SEAL 036322 GI mmm January 17,2023



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

4)

5)

6)

7)

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | A2A | Attic | 2 | 1 | Job Reference (optional) | 156131950 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:51 ID:oXxNXBfDQ9njTGcUVgqltPy6NPW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 4-6-6, Interior (1) 4-6-6 to 15-8-12, Exterior (2) 15-8-12 to 20-3-2, Interior (1) 20-3-2 to 26-6-12 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
 All plate are 26 MTC0.
- 3) All plates are 3x6 MT20 unless otherwise indicated.





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | АЗА | Attic | 1 | 1 | Job Reference (optional) | 156131951 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:52 ID:zB90_aCSqzSKNAY7ed8ICvy6NOp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Plate Offsets (X, Y): [12:0-2-12,0-4-0], [14:0-1-8,0-1-8], [16:0-4-12,0-2-0]

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--|--|------------------------|----------|---|--|--|--|--------------|-------|--------|-----|----------------|----------|--|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.39 | Vert(LL) | -0.20 | 14-15 | >999 | 240 | MT20 | 244/190 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.90 | Vert(CT) | -0.36 | 14-15 | >833 | 180 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.49 | Horz(CT) | 0.03 | 10 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2015/ | /TPI2014 | Matrix-MS | | Attic | -0.14 | 12-14 | >737 | 360 | Weight: 190 lb | FT = 20% | |
| L UMBER TOP CHORD BOT CHORD | 2x4 SP No.2 2x6 SP No.2 *Excep | t* 13-10:2x6 SP DSS | 2) S, | Wind: ASCE Vasd=91mpt II; Exp B; En | 7-10; Vult=115n n; TCDL=6.0psf; closed; MWFRS | nph (3-sec BCDL=6.0 (envelope | ond gust) psf; h=30ft;) exterior zoi | Cat. ne | | | | | | |
| WEBS | 2x4 SP No.3 *Excep 16-2:2x6 SP No.2 | t* 5-7:2x4 SP No.2, | | to 15-8-12, E 20-3-2 to 26- | enor (2) -0-3-6 te exterior (2) 15-8- 6-12 zone; canti | 12 to 20-3- lever left a | 2, Interior (1) nd right |) r | | | | | | |
| TOP CHORD | Structural wood sheat 4-0-4 oc purlins, exc | athing directly applie | d or | members an Lumber DOL | d forces & MWF =1.60 plate grip | RS for rea DOL=1.60 | ctions shown | n; | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 9-1-6 oc | 3) | This truss ha chord live loa | s been designed ad nonconcurren | d for a 10.0 t with any |) psf bottom other live loa | ads. | | | | | | |
| WEBS JOINTS | 1 Row at midpt 1 Brace at Jt(s): 17 | 3-16 | 4) | * This truss h on the bottor 3-06-00 tall b | has been designe n chord in all are by 1-00-00 wide | ed for a live as where will fit betw | e load of 20. a rectangle een the bott | 0psf tom | | | | | | |

Ceiling dead load (5.0 psf) on member(s). 5-17, 7-17; Wall dead load (5.0psf) on member(s).5-14, 7-12

Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14

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

This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and

R802.10.2 and referenced standard ANSI/TPI 1.

ATTIC SPACE SHOWN IS DESIGNED AS

chord and any other members.

UNINHABITABLE.

5)

6)

7)

8)

9)

| REACTIONS | (size) | 10= Mechanical, 16=0-5-8 | | | | | |
|-----------|--|-----------------------------------|--|--|--|--|--|
| | Max Horiz | 16=131 (LC 11) | | | | | |
| | Max Grav | 10=1330 (LC 2), 16=1298 (LC 2) | | | | | |
| FORCES | (lb) - Max | imum Compression/Maximum | | | | | |
| | Tension | | | | | | |
| TOP CHORD | 1-2=0/41, | 2-3=-59/104, 3-5=-1742/0, | | | | | |
| | 5-6=-402/48, 6-7=-416/47, 7-8=-1692/0, | | | | | | |
| | 8-9=-107 | 1/0, 9-10=-1206/0 | | | | | |
| BOT CHORD | 15-16=0/1 | 1771, 14-15=0/1770, 12-14=0/1496, | | | | | |
| | 11-12=0/9 | 923, 10-11=-21/39 | | | | | |
| WEBS | 3-14=-497 | 7/143, 3-15=0/306, 9-11=0/1110, | | | | | |
| | 5-14=0/416, 7-12=0/366, 5-17=-1208/0, | | | | | | |
| | 7-17=-120 | 08/0, 6-17=0/108, 8-11=-1079/0, | | | | | |
| | 8-12=0/93 | 33, 2-16=-223/156, 3-16=-2060/0 | | | | | |
| | | | | | | | |

NOTES

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

SEAL 036322 January 17,2023



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | A4A | Attic | 2 | 1 | Job Reference (optional) | 156131952 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:52 ID:LE3_IX5EePfzdOd9QSxQfly6NNg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



| | | | - | | - | | | | | | | |
|--|---|---|--|--|--|--|---|-------|--------|-----|--|----------|
| Loading | (psf) | Spacing | 2-0-0 | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.79 | Vert(LL) | -0.43 | 14-15 | >727 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.71 | 14-15 | >441 | 180 | M18AHS | 186/179 |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.95 | Horz(CT) | 0.04 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | Attic | -0.31 | 12-14 | >319 | 360 | Weight: 171 lb | FT = 20% |
| BCDL BCDL LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD JOINTS REACTIONS FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC Vasd=91m II; Exp B; E and C-C E: to 15-8-12, 20-3-2 to 2 end vertica forces & M DOL=1.60 3) All plates a | 10.0 2x4 SP No.1 2x4 SP DSS *Except 2x4 SP DSS *Except 2x4 SP No.3 *Except Left 2x6 SP No.2 2 Structural wood sheet 2-4-13 oc purlins, e: Rigid ceiling directly bracing. 1 Brace at Jt(s): 16 (size) 2=0-5-8, 1 Max Horiz 2=127 (LC Max Grav 2=1315 (L (lb) - Maximum Com 1-2=0/35, 2-4=-2040 6-7=-394/55, 7-8=-48 9-10=-79/60, 10-11= 2-15=-125/1759, 14- 12=14=-0/1493, 11-12 4-14=-616/174, 4-15 6-14=0/481, 8-12=0/ 8-16=-1190/0, 7-16= d roof live loads have CE 7-10; Vult=115mph ph; TCDL=6.0psf; BCI Enclosed; MWFRS (en xterior (2) -0-3-8 to 4-2 , Exterior (2) 15-8-12 to 7-0-4 zone; cantilever WFRS for reactions sist plate grip DOL=1.60 are MT20 plates unless | Code Code t* 14-12:2x6 SP No.2 t* 6-8:2x4 SP No.2 2-0-0 athing directly applier xcept end verticals. applied or 9-4-10 oc 1=0-5-8 C 11) C 2), 11=1350 (LC 2 pression/Maximum /0, 4-6=-1735/0, 50/53, 8-9=-1669/0, -122/39 15=0/1759, 2=0/1109 =-18/325, 9-11=-167 286, 6-16=-1190/0, 0/107, 9-12=0/604 been considered for (3-second gust) DL=6.0psf; h=30ft; C velope) exterior zono 2-14, Interior (1) 4-2- o 20-3-2, Interior (1) left and right exposed cf.C- for members a hown; Lumber s otherwise indicated | IRC2015/TPI2014 4) This truss chord live 5) * This trus on the bo 3-06-00 t chord and d or 6) Ceiling de Wall deax 7) Bottom cl chord dei 8) This truss Internation R802.10. 9) ATTIC SI UNINHAE LOAD CASE 3/0, at. at. <th>Matrix-MS Matrix-MS thas been designed load nonconcurrent is has been designed tom chord in all area all by 1-00-00 wide w d any other members bad load (5.0 psf) on me- hord live load (40.0 p d load (5.0 psf) apply is designed in according to a discidential Code 2 and referenced state PACE SHOWN IS DE BITABLE. (S) Standard</th> <th>for a 10.0 with any d for a liv as where vill fit betw s, member(s).1 wsf) and a lied only t rdance w a sections a sections</th> <th>Attic Attic) ps bottom other live load e load of 20. a rectangle ween the bott (s). 6-16, 8-1 5-14, 8-12 dditional bott o room. 12-1 ith the 2015 R502.11.1 a ISI/TPI 1. AS</th> <th>-0.31 ads. .0psf tom 6; tom 14 and</th> <th>12-14</th> <th>>319</th> <th>360</th> <th>Weight: 171 Ib H CA SEA 03632</th> <th>FT = 20%</th> | Matrix-MS Matrix-MS thas been designed load nonconcurrent is has been designed tom chord in all area all by 1-00-00 wide w d any other members bad load (5.0 psf) on me- hord live load (40.0 p d load (5.0 psf) apply is designed in according to a discidential Code 2 and referenced state PACE SHOWN IS DE BITABLE. (S) Standard | for a 10.0 with any d for a liv as where vill fit betw s, member(s).1 wsf) and a lied only t rdance w a sections a sections | Attic Attic) ps bottom other live load e load of 20. a rectangle ween the bott (s). 6-16, 8-1 5-14, 8-12 dditional bott o room. 12-1 ith the 2015 R502.11.1 a ISI/TPI 1. AS | -0.31 ads. .0psf tom 6; tom 14 and | 12-14 | >319 | 360 | Weight: 171 Ib H CA SEA 03632 | FT = 20% |
| | | | | | | | | | | | | 17.0000 |

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



January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------------------|-----|-----|--------------------------|-----------|
| 34893A | A5E | Common Supported Gable | 1 | 1 | Job Reference (optional) | 156131953 |





Scale = 1:54.6

| Plate Offsets | (X, Y): | [2:0-3-4,0-0-1] |
|---------------|---------|-----------------|
|---------------|---------|-----------------|

8-4-1 8-2-6

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC20 | 15/TPI2014 | CSI TC BC WB Matrix-MS | 0.11 0.04 0.18 | DEFL Vert(LL) Vert(CT) Horz(CT) | in 0.00 0.00 0.00 | (lo 31-3 31-3 | c) l/defl 34 >999 34 >999 2 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 174 lb | GRIP 244/190 FT = 20% |
|--|--|--|---|--|---|--|---|--|--|--|--|--|---|--|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N SP No.2 Left 2x6 S Structural 6-0-0 oc r Rigid ceill bracing. (size) | o.2 o.2 o.3 SP No.2 1 I wood shea purlins, exc ing directly 2=26-2-0. | t* 25-11,26-10,23-12 -6-0 athing directly applied xept end verticals. applied or 10-0-0 oc 18=26-2-0, 19=26-2 | - ::2x4 d or -0. | TOP CHORD BOT CHORD WEBS | 1-2=0/35, 2-4=-10 5-6=-82/122, 6-7=- 9-10=-91/236, 10- 11-12=-104/261, 1 13-14=-77/150, 14 15-16=-51/73, 16- 2-31=-26/37, 30-3 28-29=-26/37, 23- 25-26=-26/37, 23- 21-22=-26/37, 20- 18-19=-26/37 11-25=-166/23, 10 9-27=-118/98, 7-21 | 7/81, 4-5 -70/160, 11=-104/ 2-13=-9 -15=-65/ 17=-36/3 1=-26/37 28=-26/3 25=-26/3 25=-26/3 21=-26/3 21=-26/3 21=-26/3 21=-26/3 | =-89/87, 7-9=-77/197, 270, 1/203, 111, 8, 17-18=-35/2 7, 29-30=-26/37 7, 29-30=-26/37 7, 22-23=-26/3 7, 19-20=-26/3 9/108, 8, 6-29=-121/6 | 23 7, 37, 37, 37, 37, | 7) 7 8) 1 2 3 4 5 7 7 9) 7 | This trust on the bott 3-06-00 ta chord and Provide m bearing pla 2, 6 lb uplift at joint 27, 14 lb uplift at joint 23, 27 lb uplift uplift at join This truss | s has bo om cho I by 1-0 any othe chanic te capa t at joint 27 lb u at joint 30 lb u at joint t 2. s desig | een designed for ord in all areas wh 00-00 wide will fit her members, with cal connection (by able of withstandid able of withstandid that 18, 27 lb uplift at pplift at joint 28, 37 30, 70 lb uplift at pplift at joint 22, 20 20, 39 lb uplift at aned in accordance | a live load of 20.0psf lere a rectangle between the bottom 1 BCDL = 10.0psf. others) of truss to ng 34 lb uplift at joint 1 lb uplift at joint 29, joint 31, 25 lb uplift 3 lb uplift at joint 21, joint 19 and 34 lb ce with the 2015 |
| | Max Horiz Max Uplift Max Grav | 20-20-20; 20-26-2-C 23=26-2-C 27=26-2-C 2=127 (LC 2=-34 (LC 19=-39 (L1 21=-28 (L1 23=-25 (L1 27=-29 (L1 27=-29 (L1 27=-29 (L1 29=-31 (L1 31=-70 (L1 27=203 (L1 23=207 (L1 23=207 (L1 23=204 (L1 23=204 (L1 23=204 (L1 23=204 (L1) 23=192 (L1) 23=19 | $\begin{array}{l} 10-202, 0, 3-2022\\ 1, 21-26-20, 22-26-20, 22-26-20, 22-26-20, 22-26-20, 23-26-20, 23-26-20, 23-26-20, 23-26-20, 23-26-20, 23-20, 20-20,$ | -2,-0, 2-0, 2-0, 2-0, 2-0, -1, -3), -2), -2), -2), -2), -2), -2), -2), -2), -2), -2), -2), -2, -2, -2, -2, -2, -2, -2, -2 | NOTES 1) Unbalanced this design. 2) Wind: ASCE Vasd=91mp II; Exp B; Er and C-C Co to 14-8-12, (19-3-2 to 26 end vertical forces & MW DOL=1.60 p 3) Truss desig only. For st see Standar or consult q 0.41 blace or | 5-30=-115/54, 4-3; 12-23=-129/107, 1 14-21=-120/67, 15 16-19=-106/105 roof live loads hav 57-10; Vult=115mp h; TCDL=6.0psf; B iclosed; MWFRS (ir mer (3) -1-3-8 to 3; Corner (3) 14-8-12 -0-4 zone; cantilev left and right expos /FRS for reactions late grip DOL=1.60 ned for wind loads uds exposed to win d Industry Gable E Jalified building det a 1 5/4 MT20 unlo | 1=-137/1 3-22=-11 -20=-12: we been of bh (3-sec CDL=6.0 envelope -2-14, E) to 19-3- er left ar sed;C-C shown; b in the pl d (norm ind Detai signer as | 09, 19/99, 3/108, considered for cond gust) 0psf; h=30ft; C c) exterior zone (terior (2) 3-2- 2, Exterior (2) d right expose for members a Lumber ane of the trus al to the face), ils as applicable s per ANSI/TPI | at. e l4 ed; und es e, 1. | LOA | Internation R802.10.2 D CASE(| al Resi and rei 5) Sta | dential Code sect ferenced standard indard | In Store 11.1 and ANSI/TPI 1. |
| FORCES | (lb) - Max Tension | imum Com | pression/Maximum | | All plates ar Gable studs This truss had be chord live lo | spaced at 2-0-0 or spaced at 2-0-0 or as been designed f ad nonconcurrent v | ss other c. for a 10.0 with any | wise indicated.) psf bottom other live load | s. | | | | A C | EEP. KIN |

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



January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------------------|-----|-----|--------------------------|-----------|
| 34893A | B1E | Common Supported Gable | 1 | 1 | Job Reference (optional) | 156131954 |

Run: 8.63 S. Nov 19 2022 Print: 8.630 S. Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:54 ID:uCk0ehjwrutpK8S6qJt4dmy6NLZ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



818 Soundside Road Edenton, NC 27932



Scale = 1:43.4

Plate Offsets (X, Y): [2:0-3-8,Edge], [14:0-4-1,Edge], [20:0-3-0,0-3-0]

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC20 | 015/TPI2014 | CSI TC BC WB Matrix-MS | 0.07 0.05 0.06 | DEFL Vert(LL) Vert(CT) Horz(CT) | in n/a n/a 0.00 | (loc) - - 14 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 110 lb | GRIP 244/190 FT = 20% |
|---|--|--|--|--|--|--|---|---|--|-----------------------|-----------------------------|---|----------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD OTHERS SLIDER BRACING TOP CHORD BOT CHORD | 2x4 SP N 2x4 SP N 2x4 SP N Left 2x4 S 1-6-0 Structura 6-0-0 oc I Rigid ceil | o.2 o.3 SP No.3 1 I wood shea purlins. ing directly | I-6-0, Right 2x4 SP I athing directly applie applied or 10-0-0 oc | No.3 ed or c | WEBS § NOTES 1) Unbalanced this design. 2) Wind: ASCE Vasd=91mpt II; Exp B; En | 3-20=-104/0, 7-21= 5-23=-122/73, 4-24 9-19=-129/112, 10 11-17=-122/73, 12 roof live loads hav 7-10; Vult=115mp n; TCDL=6.0psf; Bi closed; MWFRS (e | 129/11 I=-112/1 -18=-112 -16=-112 e been o h (3-sec CDL=6.0 envelope | 2, 6-22=-118 08, 3/97, 2/108 considered fo cond gust) 0psf; h=30ft; (e) exterior zor | /97, r Cat. ie | | | | | |
| REACTIONS | bracing. (size) Max Horiz Max Uplift | 2=20-0-0, 17=20-0-0 20=20-0-0 23=20-0-0 2=72 (LC 2=-7 (LC 17=-25 (L 19=-28 (L 22=-29 (L) 24=-47 (L) | 14=20-0-0, 16=20-0 0, 18=20-0-0, 19=20-0 0, 21=20-0-0, 22=20 12), 25=72 (LC 12) 13), 16=-41 (LC 13), C 13), 18=-29 (LC 1 C 13), 21=-29 (LC 1 C 12), 23=-24 (LC 1 C 12), 23=-24 (LC 1 | 0-0, -0-0, -0-0, -0-0, 3), 2), 2), | and C-C Cor 10-0-0, Corn to 21-0-0 zor vertical left a forces & MW DOL=1.60 pl 3) Truss desig only. For stu see Standard or consult qu 4) All plates are 5) Gable requiri | ner (3) -1-0-0 to 3- er (3) 10-0-0 to 14 e; cantilever left a nd right exposed;C (FRS for reactions ate grip DOL=1.60 ned for wind loads dds exposed to win d Industry Gable E alified building des e 1.5x4 MT20 unles es continuous bott | 6-6, Ext -6-6, Ex -C-C for n shown; in the p d (norm nd Deta signer as so other | erior (2) 3-6-6 terior (2) 14-6 exposed ; en hembers and Lumber ane of the tru al to the face is a applical s per ANSI/TR wise indicated d bearing. | 6 to 6-6 d Iss), ble, PI 1. d. | | | | | |
| | Max Grav | 24=-47 (L) 2=152 (LC) 16=155 (L) 18=158 (L) 20=212 (L) 22=158 (L) 24=155 (L) 29=152 (L) | C 12), 25=-7 (LC 13 C 1), 14=152 (LC 1), C 24), 17=161 (LC C 1), 19=176 (LC 2) C 22), 21=176 (LC 2) C 22), 21=176 (LC 1) C 23), 25=152 (LC C 1) | 9 6), 25),), 1), | 6) Gable studs 7) This truss ha chord live loa 8) * This truss h on the bottor 3-06-00 tall b chord and ar | spaced at 2-0-0 oc s been designed fr ad nonconcurrent w has been designed n chord in all areas by 1-00-00 wide will by other members, | or a 10.0 vith any for a liv s where Il fit betv with BC |) psf bottom other live loa e load of 20.0 a rectangle veen the botto DL = 10.0psf | ds.)psf om | | 4 | | ORTH CA | ROLIN |
| FORCES | (lb) - Max | imum Com | pression/Maximum | | Provide mechanical plate | hanical connection capable of withsta | (by oth anding 7 | ers) of truss t Ib uplift at jo | o int | | Ξ | - 1 | SEA | L i E |
| TOP CHORD | 1-2=0/27, 5-6=-48/8 8-9=-58/1 11-12=-4: 2-24=-13, 21-22=-1: 17-18=-1: | 2-4=-75/40 31, 6-7=-44, 57, 9-10= 2/40, 12-14 /78, 23-24= 3/78, 19-21 3/78, 16-17 | 0, 4-5=-61/47, /118, 7-8=-58/155, 44/121, 10-11=-43/8 =-50/17, 14-15=0/21 -13/78, 22-23=-13/7 =-13/78, 18-19=-13, /=-13/78, 14-16=-13/ | 34, 7 78, /78, /78 | 2, 29 lb uplift uplift at joint 19, 29 lb upli uplift at joint 10) This truss is International R802.10.2 at LOAD CASE(S) | at joint 21, 29 lb u 23, 47 lb uplift at jo ft at joint 18, 25 lb 16 and 7 lb uplift a designed in accorr Residential Code nd referenced stan Standard | plift at joint 24, 2 uplift at t joint 2. dance w sections dard AN | bint 22, 24 lb 28 lb uplift at joint 17, 41 lt ith the 2015 R502.11.1 a ISI/TPI 1. | joint o | | 11112. | A MARTINE AND A | | |

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | B2 | Common | 9 | 1 | Job Reference (optional) | 156131955 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:54 ID:yMf6Le6_JjhHA3uFi1RawWy6NL3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45

Plate Offsets (X, Y): [2:0-3-8,Edge], [8:0-4-1,Edge], [10:0-4-0,0-3-0]

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|---|---|--|-----------------|---|--|--------------------------------|---|------------|-------|---------|-----|---------------|--------------------|---------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.32 | Vert(LL) | -0.13 | 10-13 | >999 | 240 | MT20 | 244/190 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.83 | Vert(CT) | -0.26 | 10-13 | >907 | 180 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.22 | Horz(CT) | 0.03 | 8 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2015 | /TPI2014 | Matrix-MS | | | | | | | Weight: 95 lb | FT = 20% | |
| LUMBER TOP CHORD BOT CHORD | 2x4 SP No.2 2x4 SP No.2 | | 4) | * This truss h on the botton 3-06-00 tall b | as been designed a chord in all areas y 1-00-00 wide will y other members | for a liv where fit betw | e load of 20.0 a rectangle veen the botte | Opsf om | | | | | | |
| SLIDER | Left 2x4 SP No.3 1-6-0 | 1-6-0, Right 2x4 SP N | lo.3 5) | Provide mech bearing plate | capable of withsta | (by oth Inding 3 | ers) of truss t 5 lb uplift at j | to oint | | | | | | |
| BRACING TOP CHORD | Structural wood she 5-2-0 oc purlins. | athing directly applied | dor 6) | 2 and 35 lb u This truss is a International R802 10 2 ar | plift at joint 8. designed in accord Residential Code s of referenced stand | ance wi | ith the 2015 R502.11.1 a | Ind | | | | | | |
| BOT CHORD | Rigid ceiling directly bracing. | applied or 10-0-0 oc | LO | AD CASE(S) | Standard | | | | | | | | | |
| REACTIONS | (size) 2=0-5-8, 8 Max Horiz 2=72 (LC Max Uplift 2=-35 (LC Max Grav 2=860 (LC | 3=0-5-8 12) \$ 12), 8=-35 (LC 13) \$ 1), 8=860 (LC 1) | | | | | | | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | | | | | | | | | | | | |
| TOP CHORD | 1-2=0/27, 2-4=-1225 5-6=-947/84, 6-8=-12 | 5/107, 4-5=-947/84, 225/107, 8-9=0/27 | | | | | | | | | | | | |
| BOT CHORD | 2-8=-138/1057 | , | | | | | | | | | | | | |
| WEBS | 5-10=0/537, 4-10=-3 | 36/131, 6-10=-336/1 | 32 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | 11. | |
| Unbalance this design | ed roof live loads have n. | been considered for | | | | | | | | | | "TH CA | Bolin | |
| Wind: ASC Vasd=91m II; Exp B; I and C-C E 10-0-0, Ex to 21-0-0 z vertical left forces & M DOL=1.60 This truss chord live | CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC Enclosed; MWFRS (en xterior (2) -1-0-0 to 3-6 terior (2) 10-0-0 to 14- toone; cantilever left and t and right exposed;C- IWFRS for reactions sl plate grip DOL=1.60 has been designed for has noconcurrent wi | (3-second gust) DL=6.0psf; h=30ft; C ivelope) exterior zone 6-6, Interior (1) 3-6-6 6-6, Interior (1) 14-6- d right exposed ; end C for members and hown; Lumber r a 10.0 psf bottom th any other live load | at. eto 6 | | | | | | | Willing | | SEA 0363 | L 22 EFR (1) | Manning |
| | | , | - | | | | | | | | 11 | CAG | BEIN | |

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



GI 111111111 January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | B3 | Common | 2 | 1 | Job Reference (optional) | 156131956 |

TCDL

BCLL

BCDL

1)

2)

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:54 ID:Q5HLhcXy3T5JsR4_FtZnruy6NKW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3) chord live load nonconcurrent with any other live loads.

> 818 Soundside Road Edenton, NC 27932

GI mmm January 17,2023

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 a duss system planteers and property incorporate using the dust very are approximately and be add/or chord members only. Additional temporary and permanent bracing is always required for stability and 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 buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|---------------|-----|-----|--------------------------|-----------|
| 34893A | B4G | Common Girder | 1 | 2 | Job Reference (optional) | 156131957 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:55 ID:cIYDHcUVTk25rac9NzUJYZy6NJH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

January 17,2023

818 Soundside Road Edenton, NC 27932



Scale = 1:43

Plate Offsets (X, Y): [1:Edge,0-3-1], [2:0-3-0,0-1-12], [4:0-3-0,0-1-12], [5:Edge,0-3-1]

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MS | 0.97 0.72 0.68 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.13 -0.26 0.04 | (loc) 8-11 6-14 5 | l/defl >999 >927 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 225 lb | GRIP 244/190 FT = 20% |
|--|--|---|--|---|---|---|--|--|---|----------------------------|-------------------------------|--------------------------|----------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x6 SP DSS 2x4 SP No.3 Left: 2x4 SP Right: 2x4 S Structural we Rigid ceiling bracing. (size) 1= Max Horiz 1= Max Uplift 1= Max Grav 1= | 2 3 *Except No.3 P No.3 ood sheat directly =0-5-8, 5 =-65 (LC =-83 (LC =5476 (L | t* 7-3:2x4 SP No.2 athing directly applied applied or 10-0-0 oc i=0-5-8 33) 12) C 1), 5=5615 (LC 1) | 4) i. 5) 6) | Wind: ASCE Vasd=91mph II; Exp B; En and C-C Exter to 20-0.2 cor vertical left a forces & MW DOL=1.60 pl This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an | 7-10; Vult=115mp ; TCDL=6.0psf; B closed; MWFRS (erior (2) 0-0-0 to 4- ior (2) 10-0-0 to 1- le; cantilever left a nd right exposed; FRS for reactions ate grip DOL=1.60 s been designed f id nonconcurrent v has been designed in chord in all areas by 1-00-00 wide wi by other members. | ch (3-sec CDL=6.0 cDL=6.0 ch-6-6, Int ch-6-6, Int ch-6, Int ch | orond gust) Opsf; h=30ft; () exterior zor erior (1) 4-6-6 terior (1) 4-6-6 terior (1) 14-6 exposed ; en hembers and Lumber 0 psf bottom other live loa e load of 20.0 a rectangle veen the botto | Cat. ne 5 to 6-6 nd dds. Opsf | | | | | |
| TOP CHORD BOT CHORD WEBS NOTES 1) 2-ply truss (0.131"x3' Top chord oc. Bottom ch staggered Web conn 2) All loads a except if r CASE(S) provided t unless ott 3) Unbalanci | (Ib) - Maximi Tension 1-2=-8673/1 3-4=-6444/1 1-8=-133/76 3-7=-101/55 4-6=0/3046, s to be connecte ") nails as follow as connected as nords connected at 0-9-0 oc. nected as follow are considered toted as follow for the following of the following section. Ply to to distribute onlinerwise indicate ed roof live load n. | um Com 81, 2-3= 62, 4-5= 73, 6-8= 42, 2-7= 2-8=-5/2 ted toget ws: s follows d as follows d as follows d as follows f) or bac ply conn y loads r ed. ds have | Pression/Maximum -6442/165, -8707/27 -108/7791, 5-6=-95/7 -3036/141, 4-7=-311t 2932 her with 10d : 2x4 - 1 row at 0-9-0 ows: 2x6 - 2 rows 1 row at 0-9-0 oc. applied to all plies, ck (B) face in the LOA ections have been noted as (F) or (B), been considered for | 7) 7706 6/0, 9) 10 LC 1) | Provide mect bearing plate 1. This truss is International R802.10.2 ar Use MiTek H 6-16d nails ir max. starting connect truss DAD CASE(S) Dead + Roo Plate Increa Uniform Loa Vert: 1-3: Concentratt Vert: 7=- 21=-1042 (F), 25=- | hanical connectior capable of withst designed in accord Residential Code of referenced star US26 (With 14-16 to Truss) or equiv at 2-0-12 from the s(es) to front face of les where hanger Standard of Live (balanced): isse=1.15 ads (lb/ft) =-60, 3-5=-60, 9-1 ed Loads (lb) 1042 (F), 19=-1042 (F), 22=-1042 (F) 1043 (F), 26=-115 | 1 (by oth anding 8 dance w sections idard AN id nails in alent sp e left enc of bottom is in cor Lumber 2=-20 2 (F), 20), 23=-10 1 (F) | ers) of truss t 3 lb uplift at j R502.11.1 a ISI/TPI 1. nto Girder & aced at 2-0-C to 18-0-12 t n chord. tact with lum Increase=1. | io oint) oc o ber. 15, 1043 | | Van 1111 | | SEA 0363 | EER.K |

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | C1 | Common | 3 | 1 | Job Reference (optional) | 156131958 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:56 ID:ARSCp7pMrCKJ1xLrpLSWFWy6MjQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

| | -1-0-0 7- 1-0-0 7- | 0-13 0-13 | <u>13-2-14</u> 6-2-0 | 19-4 6-1 | 4-0 -2 | 25-6-12 6-2-12 | 27-0-0 | <u>30-7-1</u> 3-7-1 | | <u>38-0-2</u> 7-5-1 | | | 46-4-0 8-3-14 | 47-4-0 |
|---|--|--------------------------------------|---|--|--|---|--------------------------------|------------------------|--------------|------------------------|------------|--------------|------------------|-------------------|
| | | | | | | | 5x6 | i= | | | | | | |
| | | | | | 5x6= 6 3 | 6 | 2x4 nr 7 37 8 | | | | | | | |
| ΤT | | | | | Æ | | | | | | | | | |
| | | | | | // | | 27 | | 9 | | | | | |
| | | | 6 ¹² | 355 | /2x4= | | 4x6= | | Ŵ | 38 | | 2x4 <i>µ</i> | | |
| 5-15 | | 2x4 | 4 | | | | | | | | | 0 | | |
| 10-10- | | 3 | ~ | / \\ / | // | | ⊠ // | \$ | | \mathbb{N} | | 1 | < | |
| | 3 | 4 | | \\ // | , , | | | | | | . / | // | 39 | |
| ٩_ | 1 2 | | | | | | | | _ | ``` | \bigvee | / | | 12 13 |
| \uparrow \uparrow \downarrow 4^{-1} | | | 25 40 | 0 41 244222 | 46 - 1 20 43 21 | <u>48</u> 19 | 图 167 | 44 | 15 | 45 | 14 | | | |
| | 4x6= | | | 5x8 🥡 | 2x4 II | 4x8= | 5x12= | | 4x6= | | | | | 4x6= |
| | | | | 16-0-0 15-4-6 | 0 4x8= | 2x4 II | 25-6-12 | | | | | | | |
| | ŀ | <u>9-11-7</u> 9-11-7 | <u> </u> | <u>-11-2 15-3-9</u> 11-11 0-4-7 | <u>19-4-0</u> 2 3-4-0 3 | 2-9-8 25-8 3-5-9 2-7 | 5-0 '-7 | <u>32-0-0</u> 6-5-4 | | <u>36-4-9</u> 4-4-9 | -+ | | 46-4-0 9-11-7 | |
| Scolo - 1:92 | | | | 0-0-13 0-7-10 | 0 | | 0-1-12 | | | | | | | |
| Plate Offsets (| (X, Y): [6:0-3-0,0-2- | 0], [8:0-3-0,0-2-0] | | | | | | | | | | | | |
| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 20.0 | Plate Grip DC | DL 1.15 | | TC BC | 0.92 | Vert(LL) | -0.34 -0.52 | 14-16 24 | >734 >584 | 240 180 | MT20 | 244/19 | 0 |
| BCLL | 0.0 | * Rep Stress In | icr YES | | WB | 0.93 | Horz(CT) | 0.02 | 12 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC20 | 015/TPI2014 | Matrix-MS | | | | | | | Weight: 30 | 3 lb FT = 20 |)% |
| LUMBER TOP CHORD | 2x4 SP No.2 *Exc | ept* 4-1,10-13:2x4 | 4 SP No.1 | WEBS | 23-24=-120/6 6-26=-28/945 | 588, 23-26=-3 5, 3-25=-388/ ⁻ | 4/1066, 147, 5-25=-: | 25/580, | LOAD | CASE(S) | Star | ndard | | |
| BOT CHORD | 2x4 SP DSS *Exc 23-17:2x4 SP No | ept* 15-12:2x4 SF 2 | P No.1, | | 5-24=-729/17 11-14=-473/1 | 75, 9-14=-70/8 189, 16-17=-8 | 336, 31/121, | | | | | | | |
| WEBS | 2x4 SP No.3 *Exc | ept* 24-6,7-16:2x4 | 4 SP | | 17-27=-773/1 | 130, 7-27=-62 | 4/121, | | | | | | | |
| | 5-25,24-5,9-14,8-1 | 16,16-9,26-27,6-2 | 7:2x4 SP | | 18-19=-103/0 |), 20-21=-212 | /0, 21-23=0 | /1122, | | | | | | |
| BRACING | NO.2 | | | | 26-27=-17/30 |)3, 6-27=-768 | /46 | | | | | | | |
| TOP CHORD | Structural wood sl 2-2-1 oc purlins, e | heathing directly a except | applied or | NOTES 1) Unbalanced | d roof live load | ls have been | considered | for | | | | | | |
| | 2-0-0 oc purlins (2 Rigid ceiling direc | 2-2-0 max.): 6-8. |)-0 oc | this design. | E 7-10: \/ult–1 | 15mph (3-se | cond quet) | | | | | | | |
| BOT ONORD | bracing. Except: | . 17 00 | , | Vasd=91m | ph; TCDL=6.0 | psf; BCDL=6. | 0psf; h=30f | t; Cat. | | | | | | |
| WEBS | 1 Row at midpt | 16-27, 9-16 | | and C-C Ex | (terior (2) -1-0 | -0 to 3-7-10, I | nterior (1) 3 | 8-7-10 | | | | | | |
| JOINTS REACTIONS | 1 Brace at Jt(s): 2 (size) 2=0-5-8 | 7 3. 12=0-5-8. 16=0· | -5-8 | to 19-4-0, E 25-10-10 to | 27-0-0, Exter | -4-0 to 25-10- ior (2) 27-0-0 | 10, Interior to 33-6-10, | (1) | | | | | | |
| | Max Horiz 2=-133 | (LC 13) | 12) | Interior (1) | 33-6-10 to 47- ed ; end vertic | 4-0 zone; car al left and rig | ntilever left a ht exposed; | and C-C | | | | | | |
| | Max Grav 2=1585 | i (LC 23), 12=144 | 0 (LC 1), | for member Lumber DC | rs and forces & DL=1.60 plate (| & MWFRS for arip DOL=1.6 | reactions s | hown; | | | | | | |
| FORCES | 16=142 (lb) - Maximum Co | 0 (LC 26) ompression/Maxin | num | 3) Provide ade | equate drainag | ge to prevent | water pond | ing. | | | | min | | |
| TOP CHORD | Tension 1-2=0/27, 2-3=-29 | 12/156. 3-5=-270 | 6/155. | 5) This truss h | nas been desig | gned for a 10. | 0 psf bottor | n | | | S | ATH | CARO | 111 |
| | 5-6=-2277/220, 6- 7-81354/222, 8- | 7=-1040/200, | (| 6) * This truss | has been des | rrent with any signed for a liv | e load of 20 | oads. 0.0psf | | | K 2 | OFE | SS | North Contraction |
| | 9-11=-2366/213, 1 | 11-12=-2491/163, | | on the botto 3-06-00 tall | om chord in all by 1-00-00 w | l areas where ide will fit betv | a rectangle ween the bo | e ottom | | 4 | I | | 1-4 | |
| BOT CHORD | 2-25=-187/2566, 2 | 24-25=-80/2120, | | chord and a 7) Provide me | any other men chanical conn | nbers, with BO | CDL = 10.0p ers) of trus | osf. s to | | Ξ | | S | EAL | 1 E - |
| | 21-24=0/1825, 19 14-16=-10/1547, 1 | -21=0/1693, 16-19 12-14=-34/2180, | 9=0/1727, | bearing pla | te capable of v | withstanding 2 | 2 lb uplift at | joint | | | | . 03 | 6322 | i E − |
| | 20-23=-1411/0, 18 17-18=-25/613 | 3-20=-1411/0, | ; | 8) This truss is | s designed in | accordance w | vith the 201 | 5 and | | 11. | | · | | |
| | | | | R802.10.2 | 302.10.2 and referenced standard ANSI/TPI 1. | | | | | | 115 | A NG | INEE | P. M. |
| | | | 4 | 9) Graphical p or the orien | ourlin represen Itation of the p | utation does n | ot depict the e top and/oi | e size | | | | in A. | GILBL | 111 |
| | | | | bottom cho | rd. | | | | | | | Jani | uary 17.20 | 23 |
| | | | | | | | | | | | | | , ,_0 | |



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | C2 | Common | 1 | 1 | Job Reference (optional) | 156131959 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:56 ID:8i3eSRXZJr7c_Hu1s1_kkTy6Mec-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:81.3

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

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MS | 1.00 0.84 0.59 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.47 -0.86 0.13 | (loc) 15-17 15-17 12 | l/defl >661 >360 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 251 lb | GRIP 244/190 FT = 20% | |
|--|---|---|---|---|--|--|---|---|-------------------------------|-------------------------------|--------------------------|----------------------------------|------------------------------------|---|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD | 2x4 SP No.2 *Excep 2x4 SP DSS *Excep 2x4 SP No.2 *Excep No.3 Structural wood she except 2-0-0 oc purlins (2-2 | t* 10-12,4-1:2x4 SP t* 12-14:2x4 SP No.1 t* 3-18,11-13:2x4 SF athing directly applied t-0 max.): 6-8. | 2) No.1 , | Wind: ASCE Vasd=91mph II; Exp B; En and C-C Ext to 19-4-0, Ex 23-11-10 to 2 Interior (1) 3 ⁻ right exposed for member PO | 7-10; Vult=115mp n; TCDL=6.0psf; B closed; MWFRS (e arior (2) -1-0-0 to 3 terior (2) 19-4-0 to 27-0-0, Exterior (2) I-7-10 to 46-4-0 zc d; end vertical left and forces & MWI 1 60 pleta grip D | h (3-sec CDL=6.0 envelope 3-7-10, li 23-11- 27-0-0 one; can and righ FRS for | ond gust) Dpsf; h=30ft; (e) exterior zor terior (1) 3-7 10, Interior (1) to 31-7-10, tilever left and t exposed;C- reactions sho | Cat. he -10) d •C own; | | | | | | |
| BOT CHORD WEBS REACTIONS | Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=139 (LC Max Uplift 2=-139 (L 15=-63 (L Max Grav 2=1726 (L | applied or 10-0-0 oc 7-15, 9-15 12= Mechanical, 15=(C 16) C 12), 12=-29 (LC 12 C 13) _C 23), 12=1609 (LC | 3) 4) D-5-8 5) 2), 6) 1), | Lumber DOL Provide adeo All plates are This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar | =1.60 plate grip D juate drainage to p 3x6 MT20 unless s been designed f ad nonconcurrent v las been designed n chord in all areas by 1-00-00 wide willy o other members. | OL=1.60 orevent of or a 10.0 with any for a liv s where Il fit betw with BC |) water ponding se indicated.) psf bottom other live loa e load of 20.0 a rectangle veen the botto DL = 10.0psf | g. ds.)psf om | | | | | | |
| FORCES | 15=819 (L (lb) - Maximum Com Tension | ₋ C 26) pression/Maximum | 7) 8) | Refer to gird Provide mec | er(s) for truss to tru hanical connection | uss conr (by oth | ections. ers) of truss t | 0 oint | | | | | | |
| TOP CHORD | 6-7=-1764/285, 7-8= 2-3=-3164/290, 3-5= 5-6=-2498/329, 8-9= 9-11=-2855/296, 11- | 1749/283, 1-2=0/27 2918/289, 1875/292, -12=-3004/245 | , 9) | 12, 139 lb up This truss is International R802 10 2 a | bearing plate capable of withstanding 29 lb uplift at joint 12, 139 lb uplift at joint 2 and 63 lb uplift at joint 15. This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and | | | | | | | WITH CA | Route | |
| BOT CHORD | 2-18=-312/2784, 17- 15-17=-117/1764, 13 12-13=-132/2632 | -18=-200/2306, 3-15=-109/1971, | 10 | or the orienta bottom chorc | rlin representation ation of the purlin a | does no | ot depict the s top and/or | size | | | A.S. | ORIFESS | Maria | 7 |
| WEBS | 5-18=-41/544, 5-17= 3-18=-387/145, 11-1 6-17=-88/956, 7-15= 8-15=-147/1034, 9-1 | =-711/187, 9-13=-79/8 3=-477/189, =-585/118, 5=-701/179 | ^{327,} L(| DAD CASE(S) | Standard | | | | | N 1111 | | SEA 0363 | | |
| NOTES 1) Unbalance this design | ed roof live loads have 1. | been considered for | | | | | | | | 1111. | | | E.R. KIN | |



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | C2A | Common | 1 | 1 | Job Reference (optional) | 156131960 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:57 ID:8i3eSRXZJr7c_Hu1s1_kkTy6Mec-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

7-0-13 13-2-14 19-4-0 27-0-0 30-7-1 38-0-2 46-2-0 25-6-12 7-0-13 6-2-0 6-1-2 6-2-12 3-7-1 7-5-1 8-1-14 1-5-4 5x6= 5x6= 2x4 II 6 27 7 8 3x6**≈** 9 3x6 🞜 6¹² 2x4 🏿 26⁵ 28 3x6 🞜 3x6 10-5-15 10-0-0 4 10 2x4 11 3 29 25 120-9 120-9 12-0 0-4-0 ⊟ Ŕ Ř 30 31 17 1632 35 18 34 14 13 335 3x6= 3x6= 4x6= 3x6= 4x6= 3x8= 4x6= 3x6= 9-11-7 14-11-2 25-6-12 36-4-9 46-2-0 10-7-10 10-9-13 9-9-7 9-11-7 4-11-11

Scale = 1:82.7

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

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015 | 5/TPI2014 | CSI TC BC WB Matrix-MS | 0.80 0.75 0.59 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.46 -0.84 0.12 | (loc) 15-17 15-17 12 | l/defl >672 >367 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 250 lb | GRIP 244/190 FT = 20% | |
|---|---|--|--|--|---|---|--|--|-------------------------------|-------------------------------|--|----------------------------------|------------------------------------|---------|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD WEBS REACTIONS FORCES TOP CHORD BOT CHORD WEBS | 2x4 SP No.1 *Excep 2x4 SP DSS *Excep 2x4 SP DSS *Excep No.3 Structural wood shea 2-2-0 oc purlins, exc 2-0-0 oc purlins, exc 2-0-0 oc purlins (3-5 Rigid ceiling directly bracing. 1 Row at midpt (size) 2=0-5-8, 1 Max Horiz 2=141 (LC Max Uplift 2=-139 (Li 15=-61 (Li Max Grav 2=1722 (L 15=815 (L (Ib) - Maximum Com Tension 1-2=0/27, 2-3=-3156 5-6=-2489/351, 6-7= 7-8=-1741/323, 8-9= 9-11=-2799/335, 11- 2-18=-313/2776, 17- 15-17=-118/1756, 13 12-13=-169/2574 5-18=-41/544, 5-17= 3-18=-387/145, 11-1 | t* 4-6,10-8:2x4 SP N t* 12-14:2x4 SP No.1 t* 3-18,11-13:2x4 SP athing directly applied ept -8 max.): 6-8. applied or 10-0-0 oc 7-15, 9-15 12=0-3-8, 15=0-5-8 C 12) C 12), 12=-30 (LC 12 C 12), 12=-30 (LC 1 | 2) b.2 d or 3) 4) 5) 6) 1), 7) 8) 9) | Wind: ASCE Vasd=91mph II; Exp B; End and C-C Exte 19-4-0, Exter 25-6-12 to 27 (1) 33-6-6 to exposed; en members and Lumber DOL Provide adec All plates are This truss ha chord live loa * This truss ha chord live loa * This truss ha chord live loa * This truss ha on the bottom 3-06-00 tall b chord and an Provide mecl bearing plate 12, 139 lb up This truss is a International R802.10.2 ar Graphical pu or the orienta bottom chord | 7-10; Vult=115mph ; TCDL=6.0psf; BC closed; MWFRS (ei erior (2) 1-0-0 to 3- ior (2) 19-4-0 to 25 '-0-0, Exterior (2) 2 46-2-0 zone; cantilid d vertical left and ri d forces & MWFRS =1.60 plate grip DC uate drainage to pi 3x6 MT20 unless of s been designed fo d nonconcurrent w as been designed fo d | a (3-sec DL=6.0 DL=6.0 7-6, Int -6-12, I 7-0-0 tc ever lef ght exp for rea DL=1.60 revent v botherwis for a liv where fit betw with BC (by oth- nding 3 Ib uplif ance wis lard AN does no ong the | ond gust) ond gust))psf; h=30ft; () exterior zor erior (1) 3-7-6 nterior (1) o 33-6-6, Inter t and right osed;C-C for ctions shown) vater ponding see indicated.) psf bottom other live loa e load of 20.0 a rectangle veen the bottod DL = 10.0psf ers) of truss t 0 lb uplift at jut t at joint 15. R502.11.1 a ISI/TPI 1. t depict the s t op and/or | Cat. ne 5 to rior ; g. ds. ppsf om oint nd iize | | | | H CA | ROLIN | |
| NOTES 1) Unbalance this desigr | 8-15=-173/1044, 9-1 ed roof live loads have 1. | 5=-689/179 been considered for | | | | | | | | HILF. | and the second s | | EP. Kul | H Trans |

NOTES



G

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|-------------------------|-----|-----|--------------------------|-----------|
| 34893A | C3 | Common Structural Gable | 3 | 1 | Job Reference (ontional) | 156131961 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:57 ID:?zX1aR2TILFeMZHCBE68sDy6MUw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Plate Offsets (X, Y): [1:0-3-11,0-1-2], [9:0-1-7,0-0-2]

| | - | | | | | | | | | | | | |
|-------------|-------|-----------------|-----------------|-----------|------|----------|-------|-------|--------|-----|----------------|----------|--|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.85 | Vert(LL) | -0.08 | 13-15 | >999 | 240 | MT20 | 244/190 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.62 | Vert(CT) | -0.16 | 13-15 | >999 | 180 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.70 | Horz(CT) | 0.03 | 9 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 289 lb | FT = 20% | |

LUMBER

| TOP CHORD | 2x4 SP N | 0.2 | | |
|-----------|-------------------------|----------------------|-------------------------------|------|
| BOT CHORD | 2x6 SP N | o.2 *Exc | ept* 16-14:2x4 SP No. | 2 |
| WEBS | 2x4 SP N | o.2 *Exc | ept* 8-10,2-17:2x4 SP | No.3 |
| BRACING | | | | |
| TOP CHORD | Structural 4-3-14 oc | wood s purlins. | heathing directly applie | d or |
| BOT CHORD | Rigid ceili bracing. | ng direc | tly applied or 6-0-0 oc | |
| WEBS | 1 Row at | midpt | 5-13, 6-13, 8-12, 4-1 2-15 | 3, |
| REACTIONS | (size) | 1=0-5-8 | 3, 9= Mechanical, 13=0 | -5-8 |
| | Max Horiz | 1=152 | (LC 12) | |
| | Max Uplift | 1=-39 (| LC 12), 9=-54 (LC 13), | |
| | | 13=-26 | (LC 12) | |
| | Max Grav | 1=772 | (LC 23), 9=548 (LC 24) | , |
| | | 13=255 | i0 (LC 1) | |
| FORCES | (lb) - Max | imum Co | ompression/Maximum | |
| | Tension | | | |
| TOP CHORD | 1-2=-1236 | 6/80, 2-4 | =-481/78, 4-5=0/703, | |
| | 5-6=0/956 | 6, 6-8=-3 | 4/477, 8-9=-737/110 | |
| BOT CHORD | 1-17=-140 |)/1028, ⁻ | 15-17=-140/1030, | |
| | 13-15=-24 | 4/366, 12 | 2-13=-397/123, | |
| | 10-12=-43 | 3/580, 9 | 10=-43/580 | |
| WEBS | 5-13=-109 | 92/35, 6 | 13=-824/183, 6-12=0/4 | 151, |
| | 8-12=-782 | 2/125, 8 | ·10=0/387, 4-13=-981/1 | 65, |
| | 4-15=0/59 | 92, 2-15 | =-781/132, 2-17=0/376 | |
| NOTES | | | | |

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

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-0-0 to 4-7-10, Interior (1) 4-7-10 to 23-2-0, Exterior (2) 23-2-0 to 27-9-10, Interior (1) 27-9-10 to 46-3-4 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. * This truss has been designed for a live load of 20.0psf 4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 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. Provide mechanical connection (by others) of truss to 6) bearing plate capable of withstanding 39 lb uplift at joint 1, 26 lb uplift at joint 13 and 54 lb uplift at joint 9.

This truss is designed in accordance with the 2015 7) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.





818 Soundside Road Edenton, NC 27932

Page: 1

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|-------------------------|-----|-----|--------------------------|-----------|
| 34893A | C4E | Common Structural Gable | 1 | 1 | Job Reference (optional) | 156131962 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:58 ID:OLtS_PDt2LihFa9VuBo1Lzy6MPX-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Continued on page 2



| 34893A C4E Common Structural Gable 1 1 Job Reference (optional) | Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|---|--------|-------|-------------------------|-----|-----|--------------------------|-----------|
| | 34893A | C4E | Common Structural Gable | 1 | 1 | Job Reference (optional) | 156131962 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:58 ID:OLtS_PDt2LihFa9VuBo1Lzy6MPX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 1, 24 lb uplift at joint 41 and 57 lb uplift at joint 29.
 This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and
- International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------------------|-----|-----|--------------------------|-----------|
| 34893A | D1E | Common Supported Gable | 1 | 1 | Job Reference (optional) | 156131963 |

Scale = 1:48.2

Loading

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:16:59 ID:jR3nkdzOnUo5VhxSIXGa8Ry6MEE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

GRIP

January 17,2023

818 Soundside Road Edenton, NC 27932



| | TCLL (roof) TCDL | 20.0 10.0 | Plate Grip DOL 1 Lumber DOL 1 | 1.15 1.15 | | TC BC | 0.07 | Vert(LL) Vert(CT) | n/a n/a | - | n/a n/a | 999 999 | MT20 | 244/190 |
|---|---|---|---|--|--|--|--|--|--|----|------------|---|---------------|-----------|
| | BCDL | 10.0 | Code I | RC201 | 15/TPI2014 | WB Matrix-MP | 0.09 | Horz(CT) | 0.00 | 10 | n/a | n/a | Weight: 90 lb | FT = 20% |
| | LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x6 SP No.2 Right: 2x6 SP No.2 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 2=13-9-0, 13=13-9-0 16=13-9-0 21=13-9-0 Max Horiz 2=-132 (L 12=-65 (LC 12=-70 (L 21=-65 (LC 12=-70 (L 14=-62 (L 12=-61 (L 12=137 (I 14=211 (I 18=127 (I 18=1 | Pathing directly applied c r applied or 6-0-0 oc , 10=13-9-0, 12=13-9-0, 0, 14=13-9-0, 15=13-9-0 0, 23=13-9-0 C 10), 21=-132 (LC 10) C 3), 10=-29 (LC 9), C 13), 13=-54 (LC 13), C 13), 16=-63 (LC 12), C 12), 18=-152 (LC 12), C 20), 10=119 (LC 24), LC 20), 13=166 (LC 20) LC 20), 15=233 (LC 22), LC 19), 17=168 (LC 19), LC 19), 17=168 (LC 19), LC 24), 10224 | V N 1 2 2 0, 0, 3 5 6 6 , 7 8 | VEBS 6 3 VOTES) Unbalanced i this design.) Wind: ASCE Vasd=91mph II; Exp B; Enc and C-C Corner 7-2-0, Corner 15-4-0 zone; vertical left ar forces & MW DOL=1.60 pla) Truss design only. For stu see Standarc or consult qu) All plates are) Gable studs s) This truss ha chord live loa) * This truss ha on the bottom 3-06-00 tall b chord and an) Provide mech | -15=-124/57, 5-1 -18=-118/101, 7- -12=-111/73 roof live loads hav 7-10; Vult=115mm ; TCDL=6.0psf; E closed; MWFRS (ner (3) -1-0-0 to 3 · (3) 7-2-0 to 11-8 cantilever left and nd right exposed; FRS for reactions ate grip DOL=1.6 ted for wind loads ds exposed to wind I Industry Gable E alified building de 1.5x4 MT20 unle spaced at 22-0-0 o s been designed d nonconcurrent as been designed n chord in all area votice wind loads ter nembers nanical connectio | 6=-142/8 14=-142/8 ve been of ph (3-sec 3CDL=6.1 envelope -6-6, Exte- d right ex- C-C for n s shown; 0 s in the p nd (norm End Deta signer a sis other is, for a 10.0 with any d for a liv as where ill fit betw NBCC n (by oth | 45, 4-17=-129 45, 8-13=-12 45, 8-13=-12 46, 8-13=-12 47, 90 48, 90 49, 90 49, 90 49, 90 49, 90 40, 90 | v/80, v9/80, v9/80, vr Cat. ne 6 to i to usss), ble, PI 1. d. vi uds. Dpsf f. to vi | | U | in the second | ORTH CA | ROLL |
| Tension TOP CHORD 1-2=0/38, 2-3=-135/96, 3-4=-69/83, 4-5=-56/72, 5-6=-116/119, 6-7=-116/119, 7-8=-56/66, 8-9=-63/74, 9-10=-109/88, 10-11=0/38 BOT CHORD 2-18=-67/114, 17-18=-67/114, 16-17=-67/114, 15-16=-67/114, 14-15=-67/114, 13-14=-67/114, 12-13=-67/114, 10-12=-67/114 | | | | | bearing plate 2, 29 lb uplift uplift at joint joint 14, 54 lb | capable of withs at joint 10, 63 lb 17, 152 lb uplift at uplift at joint 13, | tanding 6 uplift at jo t joint 18, 70 lb upl | 5 lb uplift at j pint 16, 51 lb 62 lb uplift a ift at joint 12, | oint t 65 | | THUN IN | | SEA 0363 | L 22 |
| | | | | | Ib uplift at joir Non Standard This truss is a International R802.10.2 ar OAD CASE(S) | nt 2 and 29 lb upli d bearing condition designed in accor Residential Code nd referenced star Standard | ift at joint on. Revie rdance w sections ndard AN | 10. w required. ith the 2015 R502.11.1 a ISI/TPI 1. | and | | 111. | A A A A A A A A A A A A A A A A A A A | AC A. G | EER. KING |

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | D2 | Common | 4 | 1 | Job Reference (optional) | 156131964 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:00 ID:8NN2Cj1a3Wuc2CfNv0rDi_y6MCs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

-1-0-0 15-4-0 3-7-10 10-8-7 14-4-0 7-2-0 1-0-0 3-7-10 1-0-0 3-6-6 3-6-7 3-7-9 4x6= 4 12 10 Г 1.5x4 1.5x4 🥠 3 5 6-7-11 7-2-4 16 17 6 0-8-0 ĕ Ø 8 3x8= 3x8 II 3x8 II 14-4-0 7-2-0 14-1-8 6-9-8 6-11-8 0-2-8

| Scale = 1:48.2 | | | 0-4-8 | | | | | | | 0-2- | 0 | |
|--|--|--|--|--|---|---|------------------------------------|----------------------------|-------------------------------|--------------------------|---------------------------------|------------------------------------|
| Plate Offsets | (X, Y): [2:Edge,0-0-1], | [6:Edge,0-0-1] | | | | | | | | | | |
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015/TI | CSI TC BC WB Pl2014 Matrix-MP | 0.44 0.45 0.13 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.04 -0.08 -0.01 | (loc) 8-15 8-15 2 | l/defl >999 >999 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 79 lb | GRIP 244/190 FT = 20% |
| LUMBER TOP CHORD BOT CHORD WEDS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Left: 2x6 SP DSS Right: 2x6 SP No.2 Structural wood shea 6-0-0 cc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0, 6 Max Horiz 2=-132 (Li | athing directly applie applied or 10-0-0 or 3=0-3-0 C 10) | 4) * oi 3 ct 5) P bi 2 2 d or 6) T ir c R c R | This truss has been dee n the bottom chord in al -06-00 tall by 1-00-00 w oord and any other mer rovide mechanical conr earing plate capable of and 18 lb uplift at joint of his truss is designed in ternational Residential 802.10.2 and reference D CASE(S) Standard | signed for a liv I areas where ide will fit betv hbers. hection (by oth withstanding 1 6. accordance w Code sections d standard AN | e load of 20 a rectangle veen the bot ers) of truss 8 lb uplift at ith the 2015 5 R502.11.1 ISI/TPI 1. | .0psf tom to joint and | | | | | |
| FORCES TOP CHORD BOT CHORD | Max Uplift 2=-18 (LC Max Grav 2=656 (LC (Ib) - Maximum Com Tension 1-2=0/38, 2-3=-603/6 4-5=-476/82, 5-6=-6 2-8=-37/422, 6-8=0/4 | : 12), 6=-18 (LC 13) C 1), 6=610 (LC 1) pression/Maximum 66, 3-4=-466/79, 17/70, 6-7=0/38 441 | | | | | | | | | | |
| WEBS NOTES 1) Unbalanc: this desig 2) Wind: ASt Vasd=91r II; Exp B; and C-C E 7-2-0, Ext 15-40-00 vertical lei forces & M DOL=1.60 | 4-8=-43/358, 3-8=-19 ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BCI Enclosed; MWFRS (en Exterior (2) -1-0-0 to 3-6 terior (2) 7-2-0 to 11-8-6 ne; cantilever left and ri ft and right exposed;C-1 WWFRS for reactions sl 0 plate grip DOL=1.60 | 51/117, 5-8=-205/11 been considered for (3-second gust) DL=6.0psf; h=30ft; (ivelope) exterior zor 5-4, Interior (1) 3-6-4 5, Interior (1) 11-8-6 ight exposed ; end C for members and hown; Lumber | 8 Cat. le 4 to to | | | | | | (Walling) | | SEA 0363 | L 22 |

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

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



January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------------------|-----|-----|--------------------------|-----------|
| 34893A | E1E | Common Supported Gable | 1 | 1 | Job Reference (optional) | 156131965 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:00 ID:3vyfz6tENv2hLUBccWHLJKy6LqX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



18-8-0

Scale = 1:58.2 Plate Offsets (X, Y); [2:Edge.0-0-1], [7:0-3-0.Edge], [12:Edge.0-0-1]

| | (X, T). [2.Euge,0 0 | i], [7:0 0 0,Euge], [12: | .Luge,o | 1 | | | | | | | | | | |
|--|---|--|---|---|---|---|---|---|--|--|--|---|---|--|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC20 | 015/TPI2014 | CSI TC BC WB Matrix-MS | 0.07 0.09 0.10 | DEFL Vert(LL) Vert(CT) Horz(CT) | in n/a n/a 0.01 | (loc) - - 12 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 122 lb | GRIP 244/190 FT = 20% | |
| LUMBER TOP CHORD BOT CHORD OTHERS WEDGE BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Exc Left: 2x4 SP No.3 Right: 2x4 SP No.3 Structural wood si 6-0-0 oc purlins. Rigid ceiling direc bracing. (size) 2=18-8 15=18- 22=18- Max Horiz 2=-167 Max Uplift 2=-32 (14=-12 16=-10 18=-22 20=-64 23=-32 Max Grav 2=227 14==22 Max Grav 2=227 14==22 20=-64 23=-32 Max Grav 2=227 (b) - Maximum Co Tension 1-2=0/38, 2-3=-21 4-5=-100/57, 5-6= 7-8=-71/56, 8-9=- 10-11=-123/74, 1* | ept* 18-6,17-8:2x4 SP 3 heathing directly applied tly applied or 10-0-0 o 0, 12=18-8-0, 14=18-1 3-0, 16=18-8-0, 17=18 3-0, 19=18-8-0, 20=18 3-0, 23=18-8-0, 26=18 (LC 10), 23=-167 (LC LC 8), 12=-16 (LC 9), 7 (LC 13), 15=-64 (LC (LC 12), 19=-98 (LC 1 (LC 12), 15=211 (LC (LC 20), 15=211 (LC (LC 19), 22=208 (LC (LC 19), 22=208 (LC (LC 21), 26=219 (LC compression/Maximum 2/137, 3-4=-137/78, -88/58, 6-7=-71/56, 73/44, 9-10=-88/36, 1-12=-197/140, 12-13= | ed or c 8-0, 3-8-0, 3-8-0, 10) 13), 12), 12), 12), 20), 20), 19), 22) =0/38 | BOT CHORD WEBS 1) Unbalance this design 2) Wind: ASC Vasd=91m II; Exp B; E and C-C C 9-4-0, Corr to 19-8-0 z vertical left forces & M DOL=1.60 3) Truss des or consult 4) All plates a 5) Gable requ 6) Gable requ 6) Gable stuc 7) This truss chord live I 8) * This truss on the bott 3-06-00 tal chord and | 2-22=-125/192, 20- 19-20=-125/192, 18 17-18=-125/192, 16 15-16=-125/192, 14 12-14=-125/192 6-18=-115/24, 8-17 4-20=-125/71, 3-22 10-15=-125/71, 3-22 10-15=-125/71, 3-22 10-15=-125/71, 3-22 10-15=-125/71, 11- ad roof live loads have by TCDL=6.0ps; BC Enclosed; MWFRS (e concer (3) -1-0-0 to 3- her (3) 9-4-0 to 13-10 cone; cantilever left at and right exposed; C WFRS for reactions : plate grip DOL=1.60 igned for wind loads studs exposed to wina rd Industry Gable Er qualified building des are 1.5x4 MT20 unles ilres continuous bottot is spaced at 2-0-0 oc has been designed for load nonconcurrent w s has been designed for and null areas II by 1-00-00 wide will any other members, | 22=-12 3-19=-1 3-17=-1 4-15=-1 =-105/1 =-144/5 14=-14 a been of h (3-sec CDL=6. nvelope 6-6, Ext hd right -C for r shown; in the p d (norm nd Deta is other or a 10. vith any for a liv is where I fit betw with BC | 5/192, 25/192, 25/192, 25/192, 2, 5-19=-138/ 7, 9-16=-138/ 4/96 considered for cond gust) Opsf; h=30ft; C 9) exterior zon erior (2) 3-6-6 erior (2) 3-6-6 erior (2) 13-10 exposed ; enc nembers and Lumber lane of the tru: al to the face) is as applicab s per ANSI/TP wise indicated d bearing. D psf bottom other live loac e load of 20.0 a rectangle veen the botto DL = 10.0psf. | 93, 96, e to -6 d ss , le, , l. 1. s. psf m | 9) Probes 2, 1 at ju 129 upli join 10) This Inte R80 11) "NA (0.1 12) In ti of ti LOAD (1) De PI Ur Co | vide metring plat 6 lb uplif bint 17, 9 1 lb uplif ft at joint t 2 and 1 s truss is rrationa 02.10.2 a JILED" irr 48"x3.2 the LOAD the truss CASE(S) cead + Ro ate Incredit Vert: 1- oncentra 22=-32 23=-40 | chanic te capa ft at join 28 lb uj at join t 15, 12 16 lb uj a desig and ref dicate 5°) toe 0 CASI are no 0 CASI A CASI CASI A A | al connection (by able of withstandi nt 12, 22 lb uplift plift at joint 19, 64 t 22, 101 lb uplift 27 lb uplift at joint 12. ned in accordance dential Code sect dential Section, load ted as front (F) o ndard a (balanced): Lun .15 b/ft) 7-113=-60, 23-26: ads (lb) B), 17=-32 (B), 15=-32 (B), 15=-32 (B), 15=-32 (B), 15=-32 (B), 15=-32 (C), 15=-32 (C | others) of truss 19 32 lb uplift at at joint 18, 11 ll 1b uplift at joint at joint 16, 64 ll 14, 32 lb uplift e with the 2015 ions R502.11.1 1 ANSI/TPI 1. 3") or 3-12d Jidlines. Is applied to the r back (B). 10 10 10 10 10 10 10 10 10 10 | to joint 20, at and face .15, .2 (B), |

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

January 17,2023

-

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|---------------|-----|-----|--------------------------|-----------|
| 34893A | E2G | Common Girder | 1 | 2 | Job Reference (optional) | 156131966 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:01 ID:Boy7DpBkBBs10AAJuOYciVy6Lbw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:59

Plate Offsets (X, Y): [8:0-5-0,0-4-8]

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MS | 0.30 0.46 0.45 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.06 -0.11 0.02 | (loc) 8-9 8-9 6 | l/defl >999 >999 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 251 lb | GRIP 244/190 FT = 20% |
|---|---|--|---------------------------------------|--|--|---|--|---------------------------------|--------------------------|---|---------------------------------------|---|-------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS WEDGE BRACING TOP CHORD | 2x4 SP No.2 2x6 SP DSS 2x4 SP No.3 *Excep Left: 2x6 SP No.2 Right: 2x6 SP No.2 Structural wood she 5-7-3 oc purlins | ot* 8-4:2x4 SP No.2 Pathing directly applie | 4) d or | Wind: ASCE Vasd=91mph II; Exp B; End and C-C Exte 9-4-0, Exterit to 18-8-0 zor vertical left a forces & MW DOL=1.60 pl | 7-10; Vult=115mp 1; TCDL=6.0psf; B closed; MWFRS (erior (2) -1-0-0 to 3 or (2) 9-4-0 to 13- 10; cantilever left a nd right exposed; FRS for reactions ate grip DOL=1.60 | oh (3-sec CDL=6.0 envelope 3-6-6, Int 10-3, Inte and right C-C for n shown; D | cond gust) Dpsf; h=30ft; e) exterior zon erior (1) 3-6- erior (1) 13-10 exposed ; er nembers and Lumber | Cat. ne 6 to 0-3 nd | Co | oncentra Vert: 17 (F), 21= 24=-158 | ted Loa =-924 -528 (F 39 (F) | ads (lb) (F), 18=-580 (F), -), 22=-528 (F), 2 | 19=-586 (F), 20=-532 3=-528 (F), |
| BOT CHORD | Rigid ceiling directly bracing. | applied or 10-0-0 oc | 5) | This truss ha chord live loa * This truss h | s been designed f ad nonconcurrent | for a 10.0 with any 1 for a liv |) psf bottom other live loa e load of 20 (| ids. Opsf | | | | | |
| REACTIONS | (size) 2=0-5-8, Max Horiz 2=161 (L Max Uplift 2=-355 (L Max Gray 2=3297 (J | 6=0-5-8 C 9) .C 12), 6=-289 (LC 13 LC 1), 6=4051 (LC 1) | 3) | on the botton 3-06-00 tall b chord and an | n chord in all area by 1-00-00 wide wi by other members. | s where ill fit betv | a rectangle veen the bott | om | | | | | |
| FORCES | (lb) - Maximum Con Tension | npression/Maximum | 7) | bearing plate | capable of withst | anding 2 | 89 lb uplift at | t | | | | | |
| TOP CHORD | 1-2=0/38, 2-3=-4486 4-5=-3160/411, 5-6= | 6/523, 3-4=-3154/406 =-4667/449 | 5, 8) | This truss is International | designed in accor Residential Code | dance w sections | ith the 2015 R502.11.1 a | and | | | | | |
| BOT CHORD | 2-9=-405/3363, 7-9= 6-7=-271/3524 | =-405/3524, | 9) | R802.10.2 ar Use MiTek T | nd referenced star HD26-2 (With 18- | ndard AN 16d nails | ISI/TPI 1. s into Girder 8 | & | | | | | |
| WEBS | 3-9=-194/1555, 3-8= 4-8=-440/3659, 5-8= | =-1393/300, =-1614/214, 5-7=-81/ | 1786 | 12-10d nails left end to co | into Truss) or equ nnect truss(es) to | ivalent a front fac | t 4-1-8 from t e of bottom | the | | | | | 11111 |
| NOTES | | | | chord. | | | | | | | | "TH UA | ROM |
| 1) 2-ply trus (0.131"x3 Top chore | s to be connected toge ") nails as follows: ds connected as follows | ther with 10d s: 2x4 - 1 row at 0-9-0 | 1(D |)) Use MiTek J nails into Tru starting at 5- truss(es) to f | US24 (With 4-10d iss) or equivalent s 11-4 from the left ront face of botton | nails int spaced a end to 14 n chord | o Girder & 2- at 2-0-0 oc ma 4-4-12 to con | 10d ax. nect | | 4 | i | ON FESS | |
| Bottom cl staggered Web conr | hords connected as foll d at 0-6-0 oc. nected as follows: 2x4 | ows: 2x6 - 2 rows - 1 row at 0-9-0 oc. | 11 | Use MiTek H 4-16d nails ir left end to co | IUS26 (With 14-16 nto Truss) or equiv nnect truss(es) to | od nails i alent at front fac | nto Girder & 16-4-12 from e of bottom | the | | | | SEA 0363 | L 22 |
| 2) All loads except if I | are considered equally noted as front (F) or ba | ck (B) face in the LO | AD 12 | 2) Fill all nail ho | les where hanger | is in cor | tact with lum | ber. | | - | | | |
| CASE(S) provided unless ot | section. Ply to ply con to distribute only loads herwise indicated. | nections have been noted as (F) or (B), | L(1) | DAD CASE(S) Dead + Roo Plate Increa | Standard of Live (balanced): ase=1.15 | Lumber | Increase=1. | 15, | | | | A CNGIN | EFREATING |
| Unbalance this designation | ed roof live loads have n. | been considered for | | Uniform Loa Vert: 1-4 | ads (lb/ft) =-60, 4-6=-60, 10- | 13=-20 | | | | | | A. G | |

January 17,2023

Page: 1



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|-------------|-----|-----|--------------------------|-----------|
| 34893A | FG1 | Flat Girder | 1 | 2 | Job Reference (optional) | 156131967 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:05 ID:STjoheRf8E5zdgg7rGYHEKy6Llx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

| | 6-6-0 | 12-10-4 | 19-2-8 | 25-6-12 | 30-8-10 | 35-10-8 | 41-0-6 | 46-4-0 |
|---|-------|---------|--------|---------|---------|---------|--------|--------|
| 1 | 6-6-0 | 6-4-4 | 6-4-4 | 6-4-4 | 5-1-14 | 5-1-14 | 5-1-14 | 5-3-10 |



Scale = 1:75.6

| Loading | | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------|-------------|---------------------------|--------------------------|----------|------------------------|-------------------------|-----------|-----------------|------------|-------|----------------|-------------------|--------------------------------------|-----------------|-----------|
| TCLL (roof) | | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.32 | Vert(LL) | 0.04 | 20 | >999 | 240 | MT20 | 244/190 | |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.23 | Vert(CT) | -0.08 | 20-21 | >999 | 180 | | | |
| BCLL | | 0.0* | Rep Stress Incr | NO | | WB | 0.52 | Horz(CT) | 0.02 | 12 | n/a | n/a | | | |
| BCDL | | 10.0 | Code | IRC2015 | /TPI2014 | Matrix-MS | | | | | | | Weight: 665 lb | FT = 20% | |
| | | | | 1) | 2-ply truss to | be connected toge | ther wi | h 10d | | | CASE(S) | Sta | ndard | | |
| | 2x6 SP N | 02 | | •, | (0.131"x3") n | ails as follows: | | in rou | | 1) De | ad + Rc | of Live | e (balanced): I un | ber Increase | 1 15 |
| BOT CHORD | 2x6 SP N | 0.2 | | | Top chords c | onnected as follow: | s: 2x4 - | 1 row at 0-9- | -0 | Pla | ate Incre | ase=1 | .15 | iser mereace | , |
| WFBS | 2x4 SP N | o.3 *Excen | t* | | oc, 2x6 - 2 ro | ws staggered at 0- | 9-0 oc. | | | Ur | hiform Lo | ads (I | b/ft) | | |
| | 5-17,21-1 | ,20-2,18-3: | 2x4 SP No.2 | | Bottom chord | Is connected as foll | ows: 2 | 6 - 2 rows | | | Vert: 1-1 | 11=-60 | , 12-23=-20 | | |
| BRACING | | | | | staggered at | 0-9-0 oc. | | | | Co | oncentra | ted Lo | ads (lb) | | |
| TOP CHORD | 2-0-0 oc p | ourlins (6-0 | -0 max.): 1-11, exce | pt | Web connect | ed as follows: 2x4 | - 1 row | at 0-9-0 oc. | | | Vert: 4= | -38 (B |), 11=-64 (B), 12= | =-41 (B), 9=-3 | 3 (B), |
| | end vertic | cals. | , , | 2) | All loads are | considered equally | applied | to all plies, | | | 14=-32 | (B), 8= | -38 (B), 15=-32 (| B), 19=-32 (B) | , |
| BOT CHORD | Rigid ceili | ing directly | applied or 10-0-0 oc | | except if note | d as front (F) or ba | ck (B) 1 | ace in the LC | DAD | | 24=-38 | (B), 25 | i=-38 (B), 27=-38 | (B), 28=-38 (B | 3), |
| | bracing, | Except: | | | CASE(S) sec | tion. Ply to ply con | nection | s have been | | | 29=-38 | (B), 30 |)=-38 (B), 31=-38 | (B), 32=-38 (I | 3), |
| | 6-0-0 oc b | bracing: 16 | -17. | | provided to d | vise indicated | noted | as (F) or (B), | | | 33=-38 | (B), 34 | =-38 (B), 35=-38 | (B), 36=-38 (B | 3), |
| REACTIONS | (size) | 12= Mech | anical, 17=0-5-8, | 3) | Wind: ASCE | 7-10. Vult–115mph | (3-500 | and aust) | | | 37=-38 | (B), 38 | 3=-38 (B), 39=-38 | (B), 40=-38 (B) | 3),) |
| | | 23=0-5-8 | | 5) | Vasd=91mph | TCDI =6 0psf: BC | DI = 6 |)nsf: h=30ft: (| Cat | | 41=-38 | (D), 43 (D) 47 |)=-38 (В), 44=-38 / 22 (В) 49 22 | (B), 45=-32 (B) | 5), 2) |
| | Max Horiz | 23=-100 (| LC 8) | | II: Exp B: End | closed: MWFRS (er | nvelope |) exterior zor | ne | | 40=-32 5032 | (D), 47 (B) 51 | =-32 (D), 40=-32 32 (B) 5232 | (B) 5332 (B) | 5), 3) |
| | Max Uplift | 12=-181 (| LC 9), 17=-626 (LC 9 | 9), | and C-C Exte | erior (2) 0-1-12 to 4 | -9-6, In | terior (1) 4-9- | 6 to | | 54=-32 | (B) 55 | = 32 (B), 52= 32 5=-32 (B) 56=-32 | (B) 57=-32 (B) | 3) |
| | May Cray | 23=-221 (| | ` | 46-2-4 zone; | cantilever left and i | right ex | posed ; end | | | 58=-32 | (B). 59 | =-32 (B), 60=-32 | (B), 61=-32 (B | 3). |
| | wax Grav | 12=944 (L 23-1180 / | (LC 1), 17=3202 (LC 1 |), | vertical left a | nd right exposed;C· | C for n | nembers and | | | 62=-32 | (B), 63 | 8=-32 (B) | | ,, |
| FORCES | (lb) Max | | | | forces & MW | FRS for reactions s | hown; | Lumber | | | | | | | |
| FORCES | (ID) - Max | | pression/maximum | • | DOL=1.60 pl | ate grip DOL=1.60 | | | | | | | | | |
| TOP CHORD | 1-23=-108 | 87/259, 1-2 | 2=-1621/320. | 4) | Provide adeq | uate drainage to pr | event v | vater ponding |] . | | | | | | |
| | 2-3=-181 | 1/340. 3-5= | -708/132. | 5) 6) | All plates are | 4x6 IVI 1 20 Unless (| | se indicated. | | | | | | | |
| | 5-6=-354/ | /1624, 6-7= | -354/1624, 7-9=-41/2 | 28, 0) | chord live los | d nonconcurrent w | ith anv | other live loa | de | | | | | | |
| | 9-10=-890 | 0/184, 10-1 | 1=-909/194, | 7) | * This truss h | as been designed f | for a liv | e load of 20 (| nsf | | | | minin | 1111 | |
| | 11-12=-83 | 33/229 | | • , | on the botton | n chord in all areas | where | a rectangle | ,po: | | | | WH CA | ROUL | |
| BOT CHORD | 21-23=-92 | 2/120, 20-2 | 21=-364/1621, | | 3-06-00 tall b | y 1-00-00 wide will | fit betw | een the botto | om | | | N | R | all' | |
| | 18-20=-38 | 84/1811, 17 | 7-18=-153/708, | | chord and an | y other members. | | | | | | 1. | O' FESS | Diz V | 11 |
| | 16-17=-3 | 7/64, 14-16 |)=-180/890, 42, 27/50 | 8) | Refer to girde | er(s) for truss to trus | ss conr | ections. | | | 6 | 3 | IP / | in | 4 |
| WERS | 6 17 - 51 | 09/909, 12- 2/2/1 7 16 | -13=-27/50 | 9) | Provide mech | nanical connection | (by oth | ers) of truss t | 0 | | | | .0 | | - |
| WEB3 | 7-17196 | 2/241,7-10 67/386 9-1 | =-23/730, 61084/212 | | bearing plate | capable of withsta | nding 2 | 21 lb uplift at | | | - | | CEA | r 1. | 1 |
| | 9-14=0/30 | 07/000, 0 1 02 10-14=- | -22/14 10-13=-424/2 | 19 | joint 23, 181 | lb uplift at joint 12 a | ind 626 | Ib uplift at jo | int | | - | : | SEA | - : | 1 |
| | 11-13=-19 | 98/1081.5- | -17=-2670/530. | 10) | 17. This trues is a | decigned in eccord | | th the 2015 | | | | | 0363 | 22 : | - |
| | 2-21=-649 | 9/305, 1-21 | =-355/1821, | 10) | International | Residential Code s | ance W | R502 11 1 a | nd | | - | | | 1 | E |
| | 2-20=-49/ | /218, 3-20= | 0/269, 3-18=-1263/2 | 64, | R802 10 2 ar | d referenced stand | lard AN | ISI/TPI 1 | nu - | | - | - | 1. A. | | 5 |
| | 5-18=-4/8 | 314 | | 11) | Graphical pu | rlin representation of | does no | t depict the s | ize | | | 20 | N.S.NOW | EFR. X | 2 |
| NOTES | | | | , | or the orienta | tion of the purlin al | ong the | top and/or | - | | | 1 | P/ GIN | F | |
| | | | | | bottom chord | | • | - | | | | 1 | A C | IL BUN | |
| | | | | 12) | "NAILED" inc | licates 3-10d (0.148 | 3"x3") c | r 3-12d | | | | | 1111.6 | in in its | |
| | | | | | (0.148"x3.25 |) toe-nails per NDS | S auidlii | nes. | | | | | | LT 192 | |

12) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.

January 17,2023

Page: 1

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 | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | H1 | Нір | 1 | 1 | Job Reference (optional) | 156131968 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:06 ID:QFT5X45i4kr93yZnQiPkOpy6Lc2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:79.8

Plate Offsets (X, Y): [3:0-2-12,Edge], [7:0-4-10,Edge]

| Loading TCLL (roof) TCDL BCLL BCDL | (pst) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | TC BC WB Matrix-MS | 0.88 0.59 0.86 | Vert(LL) Vert(CT) Horz(CT) | in -0.11 -0.23 0.04 | (loc) 11-13 11-13 9 | l/defl >999 >999 n/a | L/d 240 180 n/a | MT20 Weight: 243 lb | 244/190 FT = 20% | |
|--|---|--|--|--|---|---|--|---|------------------------------|-------------------------------|--------------------------|------------------------|---------------------|--|
| LUMBER TOP CHORD BOT CHORD BOT CHORD TOP CHORD BOT CHORD WEBS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS WEBS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Except 16-2,14-3,13-4,11-6, Structural wood sheat 4-3-12 oc purlins, ex 2-0-0 oc purlins, ex 2-0-0 oc bracing: 11- 1 Row at midpt (size) 1=0-5-8,9 Max Horiz 1=-78 (LC Max Uplift 1=-31 (LC 13=-27 (LI Max Grav 1=838 (LC (18) - Maximum Com 1-2=-1446/106, 2-3= 4-6=0/892, 6-7=-272 4-9=-934/113 1-17=-73/1251, 16-1 14-16==9/750, 13-14 11-13=-638/111, 10- 9-10=-39/794 2-17=0/250, 2-16=-5 3-14=-682/47, 4-14= 6-13=-1178/145, 6-1 7-11=-253/76, 8-11= ed roof live loads have n. | t* 11-8:2x4 SP No.2 athing directly applied cept -0 max.): 3-7. applied or 10-0-0 oc -13. 3-14, 4-13 = Mechanical, 13=0- 13) 12), 9=-52 (LC 13), C 9) 2 23), 9=606 (LC 24) (LC 1) pression/Maximum -905/107, 3-4=-260/x /112, 7-8=-389/98, 7=-73/1251, =-42/258, 11=-39/794, 83/118, 3-16=0/473, 0/587, 4-13=-1466/8 1=-51/1069, -592/121, 8-10=0/24 been considered for | 2) d or 3) 4) 5) -5-8 6) 7) 8) 95, 9) 10 LC 7, 1 | Wind: ASCE Vasd=91mph II; Exp B; En and C-C Exti to 12-0-11, E 18-7-5 to 34- (1) 40-9-15 ti exposed ; en members an Lumber DOL Provide adee All plates are This truss ha chord live loa * This truss ha chord and ar Refer to girdd Provide mec bearing plate 1, 52 lb uplift This truss is International R802.10.2 ar) Graphical pu or the orienta bottom chorc DAD CASE(S) | 7-10; Vult=115mpf ; TCDL=6.0psf; BC closed; MWFRS (e rior (2) 0-0-0 to 4- xterior (2) 12-0-11 3-5, Exterior (2) 34 0 46-4-0 zone; cand d vertical left and ri d forces & MWFRS =1.60 plate grip DC juate drainage to p 3x6 MT20 unless s been designed for d nonconcurrent w as been d nonconcurrent w as been designed for d nonconcurrent w as been d | n (3-sec CDL=6.0 nvelope 7-10, In to 18-7 -3-5 to illever le ight exp for rea DL=1.60 revent v otherwi for a 10.0 thith any for a liv where fit betw with BC ss conr (by oth nding 3 ance w sections dard AN does no ong the | ond gust) ppsf; h=30ft; C) exterior zon terior (1) 4-7- 5, Interior (1) 40-9-15, Interior (1) 40-9-15, Interior eff and right oseed;C-C for ctions shown;) vater ponding se indicated.) psf bottom other live load e load of 20.0 a rectangle veen the botto DL = 10.0psf. tections. arcs of truss to 1 lb uplift at jc t joint 13. th the 2015 R502.11.1 at 15 depict the si t op and/or | Cat. e 10 ior ds. psf m c bint nd ize | | | | SEAL 03632 | ER. KIN | |

NC

818 Soundside Road Edenton, NC 27932

GI A. GIL January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | H2 | Half Hip | 1 | 1 | Job Reference (optional) | 156131969 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:07 ID:fgtnAonWO83TSAU6yPrxRwy6LUi-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1.5x4 🛚



3x6 =



Scale = 1:33.8

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MP | 0.49 0.53 0.04 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.08 -0.19 0.00 | (loc) 6-11 6-11 2 | l/defl >972 >423 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 26 lb | GRIP 244/190 FT = 20% | |
|---|--|---|--|--|---|---|--|------------------------------|----------------------------|-------------------------------|--------------------------|---------------------------------|------------------------------------|--|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins; a-4 Rigid ceiling directly bracing | athing directly appli cept end verticals, a applied or 10-0-0 o | 7; 8; and 9; c L | Provide mec bearing plate 5 and 51 lb u This truss is International R802.10.2 an Graphical pu or the orienta bottom chorc DAD CASE(S) | hanical connection capable of withst plift at joint 2. designed in accor Residential Code nd referenced star rlin representatior ation of the purlin a l. Standard | n (by oth anding 1 dance wi sections ndard AN n does no along the | ers) of truss : 9 lb uplift at j ith the 2015 R502.11.1 a ISI/TPI 1. t depict the s top and/or | to joint and size | | | | | | |
| REACTIONS | (size) 2=0-3-0, 5 Max Horiz 2=50 (LC Max Uplift 2=-51 (LC Max Grav 2=347 (LC | 5= Mechanical 11) C 8), 5=-19 (LC 8) C 1), 5=248 (LC 1) | | | | | | | | | | | | |
| FORCES | (lb) - Maximum Corr Tension | pression/Maximum | | | | | | | | | | | | |
| TOP CHORD | 1-2=0/15, 2-3=-113/ 4-529/16 | 78, 3-4=-20/22, | | | | | | | | | | | | |
| BOT CHORD WEBS NOTES | 2-6=-84/89, 5-6=-20 3-6=-177/89 | /22 | or. | | | | | | | | | | | |
| this design | | | /1 | | | | | | | | | mun | 1111 | |
| ZI Wind AS(| - /-10: Vult-115mph | I K-SECOND DUST) | | | | | | | | | | | | |

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 3-6-6, Interior (1) 3-6-6 to 5-8-8, Exterior (2) 5-8-8 to 6-8-4 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
- 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. 5) * This truss has been designed for a live load of 20.0psf
- on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
- 6) Refer to girder(s) for truss to truss connections.

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



Page: 1

A MiTek Aff 818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|-----------------|-----|-----|--------------------------|-----------|
| 34893A | H3G | Half Hip Girder | 1 | 1 | Job Reference (optional) | 156131970 |

3-8-8

3-8-8

84 Components (Dunn), Dunn, NC - 28334,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:07 ID:qn1xUYwQoWRvGtqD5DYXNFy6LUX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-10-0

3-1-8







-1-0-0

1-0-0

NAILED NAILED



Scale = 1:34.9

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 NO IRC2015 | 5/TPI2014 | CSI TC BC WB Matrix-MP | 0.44 0.97 0.05 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.15 -0.32 0.00 | (loc) 6-11 6-11 2 | l/defl >536 >250 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 24 lb | GRIP 244/190 FT = 20% | |
|---|--|--|---|---|--|---|---|----------------------------------|----------------------------|-------------------------------|--------------------------|---------------------------------|------------------------------------|--|
| LUMBER TOP CHORD 30T CHORD WEBS 3RACING TOP CHORD 30T CHORD 30T CHORD 30T CHORD 30T CHORD WEBS NOTES 1) Wind: ASC | 2x4 SP No.2 2x4 SP No.1 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins; 3:4 Rigid ceiling directly bracing. (size) 2=0-3-0, 5 Max Horiz 2=34 (LC Max Grav 2=382 (LC (lb) - Maximum Com Tension 1-2=0/15, 2-3=-143/2 4-5=-111/44 2-6=-85/110, 5-6=-1: 3-6=-260/86 CE 7-10; Vult=115mph | athing directly applic cept end verticals, a applied or 5-0-0 oc 5= Mechanical 11) 8), 5=-10 (LC 8) 1), 5=332 (LC 1) pression/Maximum 77, 3-4=-13/14, 3/14 (3-second gust) | 7) ed or 9) 10 LC 1) | This truss is international R802.10.2 ar Graphical pu or the orienta bottom choro "NAILED" ind (0.148"x3.25) In the LOAD of the truss a DAD CASE(S) Dead + Roo Plate Increas Uniform Loa Vert: 1-3: Concentrate Vert: 3=-3 | designed in accorr Residential Code nd referenced star rlin representation ation of the purlin a dicates 3-10d (0.14 ") toe-nails per NE CASE(S) section, re noted as front (Standard of Live (balanced): ase=1.15 ads (lb/ft) =-60, 3-4=-60, 5-7 ed Loads (lb) 28 (F), 6=-29 (F), | dance w sections (dard AN does no long the #8"x3") of S guidlin loads ap F) or ba Lumber =-20 12=-31 (| ith the 2015 R502.11.1 a ISI/TPI 1. of depict the set top and/or or 3-12d nes. oplied to the ck (B). Increase=1. | and size face 15, -) | | | | | | |
| Vood 01p | anh: TCDL 6 Onof: BC | DI 6 Opofi h 20fti (| Cot | | | | | | | | | | | |

asd=91mph; TCDL 6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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

- Provide adequate drainage to prevent water ponding. 2)
- 3) 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 4) on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to 6) bearing plate capable of withstanding 10 lb uplift at joint 5 and 50 lb uplift at joint 2.



818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | H4 | Flat | 1 | 1 | Job Reference (optional) | 156131971 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:08 ID:HSLt8Lh5t8OHRdibeP6a?Cy5wMH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:79.6

Plate Offsets (X, Y): [3:0-4-12,0-3-0], [7:0-2-8, Edge]

| Loading TCLL (roof) TCDL BCLL BCDL LUMBER TOP CHORD BOT CHORD | (psf) 20.0 10.0 0.0* 10.0 2x4 SP No.2 *Excep 2x4 SP No.2 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015 2) | 5/TPI2014 Wind: ASCE Vasd=91mph II; Exp B; End | CSI TC BC WB Matrix-MS 7-10; Vult=115mph; ; TCDL=6.0psf; BC closed; MWFRS (er | 0.81 0.59 0.74 (3-sec DL=6.0 | DEFL Vert(LL) Vert(CT) Horz(CT) ond gust) 0psf; h=30ft; e) exterior zor | in -0.11 -0.25 0.04 Cat. | (loc) 15-17 15-17 9 | I/defl >999 >999 n/a | L/d 240 180 n/a | PLATES MT20 M18AHS Weight: 240 lb | GRIP 244/190 186/179 FT = 20% | |
|--|--|---|---|---|---|--|---|--------------------------------------|------------------------------|-------------------------------|--------------------------|--|---|--|
| WEBS | 2x4 SP No.3 *Excep No.2 | t* 15-3,14-4,13-7:2x4 | 4 SP | and C-C Exte to 10-5-8, Ex 17-0-2 to 35- | rior (2) 0-0-0 to 4-7 terior (2) 10-5-8 to 10-8, Exterior (2) 3 | r-10, İn 17-0-2, 5-10-8 | , Interior (1) 4-7- Interior (1) to 42-5-2, Int | -10 erior | | | | | | |
| TOP CHORD | Structural wood she 4-4-12 oc purlins, ex 2-0-0 oc purlins (6-0 | athing directly applie ccept -0 max.): 3-7. | d or | (1) 42-5-2 to exposed ; en members and | 46-4-0 zone; cantile d vertical left and ri forces & MWFRS | ever lef ght exp for rea | t and right osed;C-C for ctions shown | r 1; | | | | | | |
| BOT CHORD | Rigid ceiling directly bracing, Except: 6-0-0 oc bracing: 13 | applied or 10-0-0 oc -14. | 3) 4) | Provide adec All plates are | uate drainage to pr MT20 plates unles | s other | vater ponding wise indicate | g. ed. | | | | | | |
| WEBS | 1 Row at midpt | 3-15, 4-14 | 5) | All plates are | 3x6 MT20 unless of | otherwi | se indicated. | | | | | | | |
| REACTIONS | (size) 1=0-5-8, 9 Max Horiz 1=67 (LC Max Uplift 1=-23 (LC 14=-65 (L Max Grav 1=835 (LC 14=2325 (LC) | }= Mechanical, 14=0 16) ; 12), 9=-43 (LC 13), C 9) C 23), 9=600 (LC 24) (LC 1) | -5-8 (7) , , 8) | chord live loa * This truss h on the botton 3-06-00 tall b chord and an Refer to girde | d nonconcurrent w as been designed f a chord in all areas y 1-00-00 wide will y other members, v er(s) for truss to trus | ith any for a liv where fit betw with BC | other live loa e load of 20.0 a rectangle veen the botto DL = 10.0pst ections. | ids. Opsf om f. | | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | 9) | Provide mech | nanical connection | (by oth nding 2 | ers) of truss t 3 lb uplift at i | to oint | | | | | | |
| TOP CHORD | 1-2=-1477/112, 2-3= 4-6=0/1032, 6-7=0/2 8-9=-966/91 | 1039/103, 3-4=-387 15, 7-8=-500/86, | 7/91, 10 | 1, 43 lb uplift This truss is International | at joint 9 and 65 lb designed in accorda | uplift a ance w | t joint 14. th the 2015 R502 11 1 a | and | | | | TH CA | RO | |
| BOT CHORD | 1-18=-63/1284, 17-1 15-17=-13/886, 14-1 13-14=-609/102, 11- 10-11=-30/827, 9-10 | 8=-63/1284, 5=-45/385, -13=0/400, 9=-30/827 | 11 | R802.10.2 ar) Graphical pu or the orienta | id referenced stand lin representation of tion of the purlin al | lard AN does no ong the | ISI/TPI 1. of depict the s top and/or | size | | 4 | in the | ORIEESS | Bener, | |
| WEBS | 2-18=0/195, 2-17=-4 3-15=-634/49, 4-15= 6-14=-1252/132, 6-1 7-11=0/378, 8-11=-4 | 66/106, 3-17=0/446, 0/577, 4-14=-1679/9 3=0/759, 7-13=-762/ 99/96, 8-10=0/229 | 4, LC 78, | DAD CASE(S) | Standard | | | | | | | SEAI 03632 | 22 | |
| NOTES | | | | | | | | | | - | | N | 1 5 | |
| Unbalance this design | ed roof live loads have n. | been considered for | | | | | | | | | in the | A G | ERERTIN | |

NOTES



G A. GIL January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------------------------|-----|-----|--------------------------|-----------|
| 34893A | J1 | Jack-Partial Supported Gable | 1 | 1 | Job Reference (optional) | 156131972 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:08 ID:5WwvdwNWKiThWvn92jz6XHy6Lm0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





Page: 1



Scale = 1:32.4

| L oading TCLL (roof) TCDL BCLL BCDL | (ps 20. 10. 0. 10. | f) Spacing 0 Plate Grip DOL 0 Lumber DOL 0* Rep Stress Inc 0 Code | 2-0-0 - 1.15 1.15 r YES IRC2015 | 5/TPI2014 | CSI TC BC WB Matrix-MP | 0.20 0.05 0.03 | DEFL Vert(LL) Vert(CT) Horz(CT) | in n/a n/a 0.00 | (loc) - - 2 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 24 lb | GRIP 244/190 FT = 20% | |
|--|---|--|---|---|---|--|--|--|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|--|
| LUMBER TOP CHORD 30T CHORD WEBS DTHERS WEDGE BRACING TOP CHORD BOT CHORD | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Left: 2x4 SP No.3 Structural wood 3-11-8 oc purlin: Rigid ceiling dire bracing. | 3 sheathing directly ap s, except end vertica ectly applied or 10-0- | 5) 6) pplied or als. 0 oc 8) 1 8 | This truss ha chord live loa * This truss h on the bottom 3-06-00 tall b chord and an Provide mect bearing plate 2, 19 lb uplift uplift at joint : This truss is International | s been designe ad nonconcurre has been design n chord in all ar hy 1-00-00 wide y other membe hanical connec capable of witi at joint 5, 75 lb 2. designed in acc Residential Co | ed for a 10.0 ont with any ned for a live reas where a will fit betw ers. tion (by othe hstanding 1 o uplift at join cordance wi de sections | o psf bottom other live loa e load of 20. a rectangle even the bott ers) of truss 1 lb uplift at j tt 6 and 11 ll th the 2015 R502.11.1 a | ads. Opsf om to joint b | | | | | | |
| FORCES TOP CHORD | (size) 7=3-1 7=3-1 Max Horiz 2=11' (LC 1 Max Grav 2=14: 6=18: (lb) - Maximum 1 Tension 1-2=0/38, 2-3=- 4-5=-88/60 2-6=-118/123, 5 2-6=-110/106 | 1-8, 0=3-11-8, 0=3-1 1-8 1 (LC 11), 7=111 (LC (LC 8), 5=-19 (LC 9 2), 7=-11 (LC 8) 7 (LC 20), 5=68 (LC - 7 (LC 19), 7=147 (LC Compression/Maximu 158/168, 3-4=-79/94, -6=-50/67 | : 11) LC : 11) LC), 6=-75 19), : 20) um | R802.10.2 ar DAD CASE(S) | nd referenced s Standard | standard AN | SI/TPI 1. | | | | | | 11 | |

NOTES

- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 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
- 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.





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | J2 | Jack-Open | 23 | 1 | Job Reference (optional) | 156131973 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:08 ID:XTqiWjUtHj?t9vygcFrRmKy5wQQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





3x6 II

| 4-0-0 |
|-------|
| |

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|--|----------------------------|-----------------------|---|---|---|-----------------------------|-------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.20 | Vert(LL) | 0.02 | 4-7 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.18 | Vert(CT) | -0.03 | 4-7 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.01 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | | | | | | | Weight: 17 lb | FT = 20% |
| L UMBER TOP CHORD BOT CHORD | 2x4 SP No.2 2x4 SP No.2 | | 6) This truss is Internationa R802.10.2 a | designed in acc Residential Co and referenced s | cordance w de sections tandard AN | ith the 2015 R502.11.1 a | and | - | - | | | |
| WEDGE | Left: 2x6 SP No.2 | | LOAD CASE(S | Standard | | | | | | | | |
| BRACING | | | | | | | | | | | | |
| | Structural wood cho | athing directly appli | od or | | | | | | | | | |

| TOP CHORD | Structura | wood sheathing directly applied or |
|-----------|-------------------------|--|
| | 4-0-0 oc p | ourlins. |
| BOT CHORD | Rigid ceili bracing. | ing directly applied or 10-0-0 oc |
| REACTIONS | (size) | 2=0-5-8, 3= Mechanical, 4= Mechanical |
| | Max Horiz | 2=121 (LC 12) |
| | Max Uplift | 3=-62 (LC 12) |
| | Max Grav | 2=225 (LC 1), 3=105 (LC 19), 4=73 (LC 3) |
| FORCES | (lb) - Max | imum Compression/Maximum |
| | Tension | |

Scale - 1.29 7

TOP CHORD 1-2=0/38, 2-3=-92/67 BOT CHORD 2-4=-80/92

NOTES

- Wind: ASCE 7-10; Vult=115mph (3-second gust) 1) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 3-6-6, Interior (1) 3-6-6 to 3-11-4 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
- This truss has been designed for a 10.0 psf bottom 2) 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 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections. 4)
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 3.





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|----------------------------|-----|-----|--------------------------|-----------|
| 34893A | J3 | Jack-Open Structural Gable | 2 | 1 | Job Reference (optional) | 156131974 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:09 ID:bjPHmmsccbwqkKcQ3pm6n7y6LqY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







3x6 =



Scale = 1:24.2

| Loading | | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|-----------------------------|-------------------------|-------------------------|------------------------|---|---------------|--------------------|----------|--------------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) | | 20.0 | Plate Grip DOL | 1.15 | | тс | 0.07 | Vert(LL) | 0.00 | 4-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.06 | Vert(CT) | 0.00 | 4-9 | >999 | 180 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC201 | 5/TPI2014 | Matrix-MP | | | | | | | Weight: 10 lb | FT = 20% |
| LUMBER | | | | 7) | This truss is | designed in accord | lance w | ith the 2015 | | | | | | |
| TOP CHORD | 2x4 SP N | o.2 | | | International | Residential Code | sections | R502.11.1 a | nd | | | | | |
| BOT CHORD | 2x4 SP N | 0.2 | | | R802.10.2 ar | nd referenced stan | dard AN | ISI/TPI 1. | | | | | | |
| BRACING | | | | L | DAD CASE(S) | Standard | | | | | | | | |
| TOP CHORD | Structura | wood shea | athing directly applie | ed or | | | | | | | | | | |
| | 2-10-0 oc | purlins. | | | | | | | | | | | | |
| BOT CHORD | Rigid ceili bracing. | ing directly | applied or 10-0-0 o | C | | | | | | | | | | |
| REACTIONS | (size) | 2=0-3-0, 3 Mechanica | = Mechanical, 4= al | | | | | | | | | | | |
| | Max Horiz | 2=31 (LC | 8) | | | | | | | | | | | |
| | Max Uplift | 2=-44 (LC | 8), 3=-14 (LC 12) | | | | | | | | | | | |
| | Max Grav | 2=203 (LC | C 1), 3=52 (LC 1), 4= | =40 | | | | | | | | | | |
| | | (LC 3) | | | | | | | | | | | | |
| FORCES | (lb) - Max Tension | imum Com | pression/Maximum | | | | | | | | | | | |
| TOP CHORD | 1-2=0/15, | 2-3=-51/82 | 1 | | | | | | | | | | | |
| BOT CHORD | 2-4=-87/7 | '1 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-10; Vu | lt=115mph | (3-second gust) | | | | | | | | | | | |
| Vasd=91n | nph; TCDL= | 6.0psf; BC | DL=6.0psf; h=30ft; (| Cat. | | | | | | | | | | |
| II; Exp B; | Enclosed; N | IWFRS (en | velope) exterior zor | ne | | | | | | | | | | |
| and C-C E | Exterior (2) z | one; cantile | ever left and right | | | | | | | | | | | |
| exposed ; | end vertica | l left and rig | ht exposed;C-C for | | | | | | | | | | WILL CA | D'''' |
| members | and forces a | & MWFRS | for reactions shown | ; | | | | | | | | 1 | THUA | ROIL |
| 2) This trues | OL=1.60 pla | ate grip DO | L=1.60 | | | | | | | | | 5 | N .= 50 | All's |
| z) This truss chord live | load nonco | esigned for | a 10.0 psi bollom | de | | | | | | | 1 | 82 | | THAT |
| 3) * This trus | s has been | designed for | or a live load of 20 0 | us. Insf | | | | | | | - | D | 121 1 | 4. 4. |
| on the bot | tom chord i | n all areas v | where a rectangle | , | | | | | | | - | | | |
| 3-06-00 ta | all by 1-00-0 | 0 wide will f | fit between the botto | om | | | | | | | = | : | SEA | L : = |
| chord and | any other n | nembers. | | | | | | | | | = | : | 0363 | 22 = |
| 4) Refer to a | irder(s) for | trues to true | ss connections | | | | | | | | - | | 0303 | 44 : E |

Reter to girder(s) for truss to truss connections.
 Provide mechanical connection (by others) of truss to

bearing plate at joint(s) 2.Provide mechanical connection (by others) of truss to

bearing plate capable of withstanding 14 lb uplift at joint 3 and 44 lb uplift at joint 2.

SEAL 036322 January 17,2023

Page: 1



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|----------------------------|-----|-----|--------------------------|-----------|
| 34893A | J4 | Jack-Open Structural Gable | 8 | 1 | Job Reference (optional) | 156131975 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:09 ID:bjPHmmsccbwqkKcQ3pm6n7y6LqY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







3x6 =



Scale = 1:24.2

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|----------------|---|-------------------------|--------|---------------|--------------------|----------|--------------|------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.07 | Vert(LL) | 0.00 | 4-9 | >999 | 240 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.06 | Vert(CT) | 0.00 | 4-9 | >999 | 180 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.00 | Horz(CT) | 0.00 | 3 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC201 | 5/TPI2014 | Matrix-MP | | | | | | | Weight: 10 lb | FT = 20% |
| LUMBER | | | 7) | This truss is | designed in accor | dance w | ith the 2015 | | | | | | |
| TOP CHORD | 2x4 SP No.2 | | | International | Residential Code | sections | R502.11.1 a | nd | | | | | |
| BOT CHORD | 2x4 SP No.2 | | | R802.10.2 a | nd referenced star | ndard AN | ISI/TPI 1. | | | | | | |
| BRACING | | | LC | DAD CASE(S) | Standard | | | | | | | | |
| TOP CHORD | Structural wood she 2-10-0 oc purlins. | athing directly appli | ed or | | | | | | | | | | |
| BOT CHORD | Rigid ceiling directly bracing. | applied or 10-0-0 o | C | | | | | | | | | | |
| REACTIONS | (size) 2=0-3-0, 3 Mechanic | 3= Mechanical, 4= al | | | | | | | | | | | |
| | Max Horiz 2=31 (LC | 8) | | | | | | | | | | | |
| | Max Uplift 2=-44 (LC | 28). 3=-14 (LC 12) | | | | | | | | | | | |
| | Max Grav 2=203 (L0 | C 1), 3=52 (LC 1), 4 | =40 | | | | | | | | | | |
| | (LC 3) | | | | | | | | | | | | |
| FORCES | (lb) - Maximum Corr | pression/Maximum | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | |
| TOP CHORD | 1-2=0/15, 2-3=-51/8 | 1 | | | | | | | | | | | |
| BOT CHORD | 2-4=-87/71 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: AS | CE 7-10; Vult=115mph | (3-second gust) | | | | | | | | | | | |
| Vasd=91n | nph; TCDL=6.0psf; BC | DL=6.0psf; h=30ft; | Cat. | | | | | | | | | | |
| II; Exp B; | Enclosed; MWFRS (er | velope) exterior zor | ne | | | | | | | | | | |
| and C-C E | Exterior (2) zone; cantil | ever left and right | | | | | | | | | | | 111. |
| exposed ; | end vertical left and rig | ght exposed;C-C for | r | | | | | | | | | N' ULCA | Dalle |
| members | And forces & MWFRS | TOF reactions shown | 1; | | | | | | | | | TH UN | MO1 11 |
| 2) This trucs | bas been designed fo | r = 1.00 | | | | | | | | | A | OFFE | in Alle |
| 2) This truss | load nonconcurrent wi | th any other live loa | de | | | | | | | | 27 | 10 PL | No. Sin |
| 3) * This trus | s has been designed f | or a live load of 20 (| Onsf | | | | | | | - | | | All |
| on the bot | tom chord in all areas | where a rectangle | 000 | | | | | | | 1 | | | |
| 3-06-00 ta | all by 1-00-00 wide will | fit between the bott | om | | | | | | | = | : | SEA | L : = |
| chord and | any other members. | | - 1 | | | | | | | = | : | 0262 | 22 : = |
| 4) Refer to g | irder(s) for truss to tru | ss connections. | | | | | | | | 1 | | 0303 | |

- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 3 and 44 lb uplift at joint 2.



818 Soundside Road Edenton, NC 27932 Page: 1

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | J5 | Jack-Open | 2 | 1 | Job Reference (optional) | 156131976 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:09 ID:MbTZHCvo1CJ2ejF1XW0Ir1y6LUY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





818 Soundside Road Edenton, NC 27932 Page: 1





Scale = 1:23.9

| LUMBER TOP CHORD 2x4 SP No BOT CHORD 2x4 SP No BRACING TOP CHORD Structural 3-8-8 oc p BOT CHORD Rigid ceili bracing. REACTIONS (size) | 0.2 0.2 wood shea vurlins. ng directly a 2=0-3-0, 3 | thing directly applie applied or 10-0-0 oc | LOAD CASE(S) | Standard | | | | | |
|--|---|--|-------------------------------------|----------|--|--|--|-------------|--|
| REACTIONS (size) | 2=0-3-0, 3 | | | | | | | | |
| Max Horiz Max Uplift Max Grav | 2=38 (LC 8 2=-40 (LC 2=214 (LC (LC 3) | = Mechanical, 4= tl 8), 3=-22 (LC 12) 1), 3=88 (LC 1), 4= | 63 | | | | | | |
| FORCES (Ib) - Maxi Tension TOP CHORD 1-2=0/15, BOT CHORD 2-4=-18/6 NOTES 1) Wind: ASCE 7-10; Vull Vasd=91mph; TCDL= II; Exp B; Enclosed; M and C-C Exterior (2) z exposed ; end vertical members and forces & Lumber DOL=1.60 pla 2) This truss has been du chord live load noncor 3) * This truss has been du chord live load noncor 3) * This truss has been du chord live load noncor 3) * This truss has been du chord live load noncor 3) * This truss has been du chord and any other m 4) Refer to girder(s) for t 5) Provide mechanical cc bearing plate capable 3 and 40 lb uplift at joi 6) This truss is designed International Resident R802.10.2 and referer | mum Comp 2-3=-78/18 8 (t=115mph 6.0psf; BCI WFRS (envone; cantile left and rig WFRS (envone; cantile left and rig wwFRS fit esigned for a current wit designed for a current wit designed for a current wit designed for a all areas v o wide will fi tembers. rruss to trus onnection (to of withstan- nt 2. in accordati ial Code se acced standati | (3-second gust))L=6.0psf; h=30ft; C yelope) exterior zone ver left and right ht exposed;C-C for or reactions shown; _=1.60 a 10.0 psf bottom h any other live load or a live load of 20.0p where a rectangle it between the botton is connections. by others) of truss to ding 22 lb uplif at jo nce with the 2015 ctions R502.11.1 ar ard ANSI/TPI 1. | cat. e Is. psf m int | | | | Manual and a second sec | SEA 0363 | ROL 22 L L L BER L L L L L L L L L L L L L L L L L L L |

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | M1 | Monopitch | 3 | 1 | Job Reference (optional) | 156131977 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:10 ID:q7I4P7THF2pZNfaU7BHidYy6LOf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



| Scale = 1.76.4 | Scale = 1 | 1:76.4 |
|----------------|-----------|--------|
|----------------|-----------|--------|

Plate Offsets (X, Y): [6:0-3-0,0-2-0], [12:0-1-12,0-2-0]

| Loading | | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|--|---|--|---|---|--|--|--|---|---|-------|----------|-----|--|-----------|----------|
| TCLL (roof) | | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.93 | Vert(LL) | -0.24 | 15-16 | >999 | 240 | MT20 | 244/190 | |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.37 | Vert(CT) | -0.48 | 16-21 | >566 | 180 | | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.90 | Horz(CT) | 0.02 | 8 | n/a | n/a | | | |
| BCDL | | 10.0 | Code | IRC2015 | 5/TPI2014 | Matrix-MS | | | | | | | Weight: 164 lb | FT = 20% | |
| BECL LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD WEBS TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS | 2x4 SP No. 2x4 SP No. 2x4 SP No. 2x4 SP No. No.2, 15-6; Structural w 4-3-1 oc pu 2-0-0 oc pu Rigid ceiling bracing, E 6-0-0 oc bra 1 Row at m 1 Brace at 1 7 (size) 2 Max Horiz 2 Max Horiz 2 Max Horiz 2 Max Grav 2 (lb) - Maxim Tension 1-2=0/27, 2 5-6=-829/1 10-18=-630 2-16=-193/ 12-15=-210 11-14=-653 5-16=-25/6 3-16=-384/ 14-17=-67// 17-18=-105 | 10.0 1 *Except S *Except 0.2 3 *Except 0.2 3 *Except 0.2 3 *Except 0.2 3 *Except 0.2 3 *Except 0.2 3 *Except 0.2 10.0 10. | Code * 4-6:2x4 SP No.2 * 14-10:2x4 SP No.2 * 14-10:2x4 SP No.2 * 5-16,15-5:2x4 SP P DSS athing directly applies expt end verticals, ar 0-0 max.): 6-7. applied or 10-0-0 oc 0. -14 7-8 = Mechanical 2:11) 12) C 1), 8=1037 (LC 1) pression/Bacimous 59, 3-5=-1316/58, 51/370, 8-10=-1024/2 =-121/33 16=-143/835, 2=0/792, 8-9=-692/2 =-657/0 -754/175, 5=-112/515, =-56/614, 8=-1213/172, -66/1293, | IRC2015 2) 2 or d or id 3) 4) 5) 6) 7) 8) 9) 77, LC 36, | 5/TPI2014 Wind: ASCE Vasd=91mph II; Exp B; End and C-C Exte 19-4-0, Exter left and right exposed;C-C reactions sho DOL=1.60 Provide aded This truss ha chord live loa * This truss for a-06-00 tall b chord and an Refer to girdd Provide mecl bearing plate 2. This truss is International R802.10.2 ar Graphical puo or the orienta bottom chorc DAD CASE(S) | Matrix-MS 7-10; Vult=115mpt; ; TCDL=6.0psf; BC closed; MWFRS (eri- rior (2) 19-4-0 to 22 exposed; end vert for members and 1 wm; Lumber DOL= uate drainage to p is been designed for d nonconcurrent w as been d nonconcurrent w as been designed for d nonconcurrent w as been d nonconcure | a (3-sect DL=6.6 Int IDL=6.6 I | oond gust))psf; h=30ft; i)) exterior zor erior (1) 3-6- one; cantilevu and right & MWFRS for ate grip water ponding) psf bottom other live loa e load of 20.0 a rectangle veen the bottw DL = 10.0psf hections. ers) of truss t 6 lb uplift at j ith the 2015 R502.11.1 a ISI/TPI 1. ot depict the se top and/or | Cat. ne 6 to er g. ds. Dpsf om f. oint size | | With the | | Weight: 164 Ib WH CA OR FESS SEA 03632 | FT = 20% | Norman . |
| this design | n. | | | | | | | | | | | | 111111 | in in its | |
| | | | | | | | | | | | | | | | |

NOTES

A. GILBERT January 17,2023



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|----------------------------|-----|-----|--------------------------|-----------|
| 34893A | M2 | Monopitch Structural Gable | 1 | 1 | Job Reference (optional) | 156131978 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:10 ID:fYenD_liq6jIeBqvzWC52Oy6LOI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3x6 =



Scale = 1:26.5

| Loading TCLL (roof) TCDL BCLL BCDL | (ps 20. 10. 0. 10. | f) 0 0 0* 0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015/TPI2014 | CSI TC BC WB Matrix-MP | 0.41 0.32 0.00 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.03 -0.08 0.00 | (loc) 4-9 4-9 2 | l/defl >999 >837 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 21 lb | GRIP 244/190 FT = 20% | |
|--|---|---|--|--|---|----------------------|--|------------------------------|--------------------------|-------------------------------|--------------------------|---------------------------------|--|--|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD NOTES 1) Wind: ASC Vasd=91m II; Exp B; E and C-C E 5-8-4 zone vertical left forces & M DOL=1.60 2) This truss chord live I 3) * This truss on the bott 3-06-00 tal chord and 4) Refer to gi 5) Provide me bearing pla 4 and 49 lt 5) This truss in Internation R802.10.2 | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood 5-10-0 oc purlin: Rigid ceiling dire bracing. (size) 2=0-3 Max Horiz 2=50 Max Uplift 2=-49 Max Grav 2=309 (lb) - Maximum T Tension 1-2=0/15, 2-3=-4 2-4=-85/74 CE 7-10; Vult=115in ph; TCDL=6.0psf Enclosed; MWFRS xterior (2) -1-0-0 t c; cantilever left ar t and right expose IWFRS for reaction plate grip DOL=1 has been designe load nonconcurrent s has been designe hom hom hom hom hom hom hom hom hom hom | shea s, ex s, ex sectly a sectly a sectly a sl-0, 4 (LC - O (LC - Comp 38/79 mph (S (LC Comp 38/79 mph (S (LC Comp 5 S (LC S (LC Comp 5 S (LC S (LC | athing directly applied coept end verticals. applied or 10-0-0 oc = Mechanical 11) 8), 4=-18 (LC 12) i 1), 4=206 (LC 1) pression/Maximum 0, 3-4=-138/76 (3-second gust) DL=6.0psf; h=30ft; C velope) exterior zone i-6, Interior (1) 3-6-6 ht exposed ; end C for members and nown; Lumber a 10.0 psf bottom h any other live load or a live load of 20.0p where a rectangle it between the bottor s connections. by others) of truss to ding 18 lb uplift at jo nce with the 2015 vections R502.11.1 an ard ANSI/TPI 1. | at. at. at. b to s. s. s. f m int int id | Standard | | | | | | | SEA 0363 | ROU 22 E.R. H. | |
| | | | | | | | | | | | | candary | ,_0_0 | |



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|----------------------------|-----|-----|--------------------------|-----------|
| 34893A | M3 | Monopitch Structural Gable | 8 | 1 | Job Reference (optional) | 156131979 |

5-10-0

5-10-0

-1-0-0

1-0-0

84 Components (Dunn), Dunn, NC - 28334,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:10 ID:yuZQhNq5BFbIzGsFtUqkqsy6LOB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Scale = 1:26.5

Plate Offsets (X, Y): [4:Edge,0-1-12]

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015/TPI2014 | CSI TC BC WB Matrix-MP | 0.41 0.32 0.00 | DEFL Vert(LL) Vert(CT) Horz(CT) | in -0.03 -0.08 0.00 | (loc) 4-9 4-9 2 | l/defl >999 >837 n/a | L/d 240 180 n/a | PLATES MT20 Weight: 21 lb | GRIP 244/190 FT = 20% |
|---|--|--|--|--|--|--|------------------------------|--------------------------|-------------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood sh 5-10-0 oc purlins, Rigid ceiling direct bracing. | eathing directly applie except end verticals. y applied or 10-0-0 oc | 6) Provide m bearing pl 2 and 18 II 7) This truss Internation R802.10.2 LOAD CASE(| echanical connection ate capable of withst o uplift at joint 4. Is designed in accor al Residential Code and referenced star 5) Standard | n (by oth anding 4 dance w sections ndard AN | ers) of truss t 19 lb uplift at j ith the 2015 \$ R502.11.1 a ISI/TPI 1. | to oint and | | | | | |
| REACTIONS | (size) 2=0-3-0 Max Horiz 2=50 (L Max Uplift 2=-49 (L Max Grav 2=309 (| 4=0-1-8 C 11) C 8), 4=-18 (LC 12) LC 1), 4=206 (LC 1) | | | | | | | | | | |
| FORCES | (lb) - Maximum Co | mpression/Maximum | | | | | | | | | | |
| TOP CHORD | 1-2=0/15, 2-3=-88/ | 79, 3-4=-138/76 | | | | | | | | | | |
| BOT CHORD | 2-4=-85/74 | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | |
| Wind: ASC Vasd=91n II; Exp B; I and C-C E 5-8-4 zone vertical lef forces & M DOL=1.60 | CE 7-10; Vult=115mp nph; TCDL=6.0psf; B Enclosed; MWFRS (Exterior (2) -1-0-0 to 3 e; cantilever left and t and right exposed; MWFRS for reactions o plate orip DDL=1.6 | h (3-second gust) CDL=6.0psf; h=30ft; C novelope) exterior zon -6-6, Interior (1) 3-6-6 ight exposed ; end >-C for members and shown; Lumber | Cat. e 6 to | | | | | | | - Martin | OR FESS | ROUT |
| 2) This truss | has been designed f | or a 10.0 psf bottom | | | | | | | 4 | | | h |
| chord live | load nonconcurrent | vith any other live load | ds. Inst | | | | | | - | | OF A | |
| on the bot 3-06-00 ta chord and | tom chord in all area Ill by 1-00-00 wide wi any other members. | where a rectangle if the tween the botto | psi pm | | | | | | | | 0363 | L |
| Bearing at using ANS designer s | t joint(s) 4 considers SI/TPI 1 angle to grai should verify capacity | barallel to grain value formula. Building of bearing surface. | | | | | | | | | S. SNGINI | ERA |
| 5) Provide m bearing pla | echanical connection ate at joint(s) 4. | (by others) of truss to | 2 | | | | | | | 11 | CA. G | ILBENIN |

818 Soundside Road Edenton, NC 27932

January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | M4 | Monopitch | 1 | 1 | Job Reference (optional) | 156131980 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:11 ID:WbNIDi5MUwPpE?KyoNnuBkzvowA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



| Scale = | 1:68.3 |
|---------|--------|
|---------|--------|

| Scale = 1:68.3 | | | | | | | | | | | | | |
|--|---|--|--|---|--|--|-------|-------|--------|-----|----------------|----------|--|
| _oading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
| FCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.65 | Vert(LL) | -0.45 | 7-9 | >562 | 240 | MT20 | 244/190 | |
| FCDL | 10.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.68 | 7-9 | >369 | 180 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | WB | 0.36 | Horz(CT) | 0.03 | 7 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC2015/TPI2014 | Matrix-MS | | | | | | | Weight: 116 lb | FT = 20% | |
| - UMBER JOP CHORD BOT CHORD WEBS | 2x4 SP No.2 2x4 SP No.1 *Excep 2x4 SP No.2 *Excep | t* 8-7:2x4 SP No.2 t* 9-3:2x4 SP No.3 | 5) This truss is International R802.10.2 a LOAD CASE(S) | designed in ac Residential Co nd referenced s Standard | cordance wi ode sections standard AN | th the 2015 R502.11.1 a ISI/TPI 1. | and | | | | | | |

| WEBS | 2x4 SP No.2 *Except* 9-3:2x4 SP No.3 |
|-----------|--|
| BRACING | |
| TOP CHORD | Structural wood sheathing directly applied or 3-9-5 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |
| WEBS | 1 Row at midpt 6-7, 5-7 |
| REACTIONS | (size) 2=0-5-8, 7=0-5-8 |
| | Max Horiz 2=329 (LC 11) |
| | Max Uplift 2=-39 (LC 12), 7=-105 (LC 12) |
| | Max Grav 2=896 (LC 1), 7=834 (LC 19) |
| FORCES | (lb) - Maximum Compression/Maximum Tension |
| TOP CHORD | 1-2=0/27, 2-3=-1319/73, 3-5=-1050/74, |
| | 5-6=-202/127, 6-7=-171/113 |
| BOT CHORD | 2-9=-185/1135, 7-9=-152/585 |
| WEBS | 5-7=-813/163, 5-9=0/675, 3-9=-424/162 |

NOTES

- 1) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) -1-0-0 to 3-6-6, Interior (1) 3-6-6 to 20-10-4 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) 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 3) on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 7 and 39 lb uplift at joint 2.





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | PB1 | Piggyback | 3 | 1 | Job Reference (optional) | 156131981 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:11 ID:q7I4P7THF2pZNfaU7BHidYy6LOf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



2x4 =



1.5x4 =

Scale = 1:28.2

| | | - | | | | | | | | | | | |
|--|--|---|--|---|--|--|--|--|----------------------|-----------------------------|--------------------------|----------------|------------------------|
| Loading TCLL (roof) TCDL BCLL | (psf) 20.0 10.0 0.0* | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr | 2-0-0 1.15 1.15 YES | | CSI TC BC WB | 0.12 0.04 0.00 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 4 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 | GRIP 244/190 |
| BCDL | 10.0 | Code | IRC2018 | 5/TPI2014 | Matrix-MP | | | | | | | Weight: 12 lb | FT = 20% |
| LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD REACTIONS | $\begin{array}{c} 2x4 \text{ SP No.2} \\ 2x4 \text{ SP No.2} \\ 2x4 \text{ SP No.3} \\ \\ \text{Structural wood she} \\ 3-8-0 \text{ oc purlins, ex} \\ \text{Rigid ceiling directly} \\ \text{bracing.} \\ (size) & 1=3-8-0, 2 \\ & 5=3-8-0, 6 \\ \\ \text{Max Horiz} & 1=49 (\text{LC} \\ \text{Max Uplift} & 1=-60 (\text{LC} 12), 6 \\ \\ \text{Max Grav} & 1=21 (\text{LC} \\ (\text{LC 1}), 6= \\ \end{array}$ | athing directly applie cept end verticals. applied or 10-0-0 oc 2=3-8-0, 4=3-8-0, 5=3-8-0 11) 5:1, 2=-23 (LC 12), 4 5=-23 (LC 12) 9), 2=243 (LC 1), 4= -243 (LC 1) | 6) 7) ed or 5 8) 9) 4=-10 =85 10 | * This truss I on the bottor 3-06-00 tall I chord and ar Bearing at jo value using designer sho Provide mec bearing plate 2, 10 lb upliff uplift at joint This truss is International R802.10.2 a) See Standar Detail for Co consult quali | has been designe n chord in all area by 1-00-00 wide w ny other members int(s) 2, 4, 1, 5, 2 ANSI/TPI 1 angle vald verify capacit hanical connectio e capable of withs a t joint 4, 60 lb u 2. designed in accoo Residential Code nd referenced sta d Industry Piggyb nnection to base fied building desig | d for a liv as where vill fit betw consider: to grain f y of bear n (by oth tanding 2 plift at joi rdance wi e sections ndard AN wack Truss truss as a gner. | e load of 20. a rectangle veen the bott s parallel to g ormula. Buil ng surface. ers) of truss 3 lb uplift at nt 1 and 23 l ith the 2015 R502.11.1 a (SI/TPI 1. s Connectior applicable, or | Opsf om grain ding to joint b and | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | LC | DAD CASE(S) | Standard | | | | | | | | |
| TOP CHORD BOT CHORD | 1-2=-83/100, 2-3=-3 2-4=-28/30 | 4/32, 4-5=0/0, 3-4=- | 57/29 | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Wind: ASC Vasd=91m | CE 7-10; Vult=115mph nph; TCDL=6.0psf; BC | (3-second gust) DL=6.0psf; h=30ft; (| Cat. | | | | | | | | | muu | 10. |

- II; Exp B; Enclosed; MWFRS (envelope) exterior 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) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. 3) Gable requires continuous bottom chord bearing.

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

5)

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

11111111111 SEAL 036322 GILB munin January 17,2023



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | PB2 | Piggyback | 5 | 1 | Job Reference (optional) | 156131982 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:11

1.5x4 🛚

5-9-6

2x4 =







Scale = 1:24

| Loading (psf) TCLL (roof) 20.0 TCDL 10.0 BCLL 0.0* | Spacing2-Plate Grip DOL1.Lumber DOL1.Rep Stress IncrYI | -0-0 .15 .15 ′ES | CSI TC 0.13 BC 0.07 WB 0.02 | DEFLinVert(LL)n/aVert(TL)n/aHoriz(TL)0.00 | (loc) - - 4 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 | GRIP 244/190 |
|--|---|---|---|---|----------------------|-----------------------------|--------------------------|----------------|------------------------|
| BCDL 10.0 | Code IR | RC2015/TPI2014 | Matrix-MP | | | | | Weight: 23 lb | FT = 20% |
| LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3 BRACING TOP CHORD Structural wood shea 6-0-0 oc purlins. BOT CHORD Rigid ceiling directly a bracing. REACTIONS (size) 1=7-8-0, 2 5=7-8-0, 6 10=7-8-0 Max Horiz 1=-23 (LC Max Uplift 1=-81 (LC 7=-38 (LC Max Grav 1=28 (LC 1 4=-42 (LC 7=-38 (LC 10=259 (LC FORCES (lb) - Maximum Comp Tension TOP CHORD 1-2=-32/63, 2-3=-63/4 4-5=-16/55 BOT CHORD 2-6=-23/30, 4-6=-23/3 WEBS 3-6=-99/29 NOTES 1) Unbalanced roof live Ioads have B this design. 2) Wind: ASCE 7-10; Vult=115mp h Vasd=91mph; TCDL=6-0psf; BCC II; Exp B; Enclosed; MWFRS (env and C-C Exterior (2) zone; cantile exposed ; end vertical left and rig members and forces & MWFRS fe | athing directly applied or applied or 10-0-0 oc =7-8-0, 7=7-8-0, =7-8-0, 7=7-8-0, 13) 23), 2=-39 (LC 12), 13), 5=-77 (LC 24), 12), 10=-42 (LC 13) 12), 2=274 (LC 23), c 24), 5=20 (LC 13), 1), 7=274 (LC 23), c 24) pression/Maximum 44, 3-4=-64/44, 30 been considered for (3-second gust) DL=6.0psf; h=30ft; Cat. velope) exterior zone ever left and right ht exposed;C-C for for reactions shown; i=160 | 3) Truss design only. For stu see Standarc or consult qu 4) Gable require 5) Gable studs: 6) This truss ha chord live loa 7) * This truss ha on the botton 3-06-00 tall b chord and an 8) Provide med bearing plate 2, 42 lb uplift at joint 5, 39 9) This truss is International R802.10.2 ar 10) See Standard Detail for Con consult qualifit LOAD CASE(S) | ned for wind loads in the p lds exposed to wind (norm d Industry Gable End Deta valified building designer a es continuous bottom chor spaced at 2-0-0 oc. Is been designed for a 10. ad nonconcurrent with any has been designed for a liv n chord in all areas where by 1-00-00 wide will fit betw y other members. hanical connection (by oth e capable of withstanding 3 at joint 4, 81 lb uplift at joi lb uplift at joint 2 and 42 lb designed in accordance w Residential Code sections and referenced standard AN d Industry Piggyback Trus nnection to base trus as a fied building designer. Standard | lane of the truss al to the face), ils as applicable, s per ANSI/TPI 1. d bearing. 0 psf bottom other live loads. e load of 20.0psf a rectangle veen the bottom ers) of truss to 9 lb uplift at joint nt 1, 77 lb uplift o uplift at joint 4. ith the 2015 r R502.11.1 and ISI/TPI 1. s Connection applicable, or | | | 2 | SEA 0363 | |





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V1 | Valley | 1 | 1 | Job Reference (optional) | 156131983 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:12 ID:5WwvdwNWKiThWvn92jz6XHy6Lm0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:43.9

| Loa TCL TCC BCL BCL | i ding .L (roof) DL .L DL | | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015 | 5/TPI2014 | CSI TC BC WB Matrix-P | 0.22 0.14 0.13 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 4 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 52 lb | GRIP 244/190 FT = 20% |
|---|--|---|---|---|---|---|---|--|--|--------------------------------|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUN TOF BOT WEI OTH BR/ TOF BOT | ABER CHORD CHORD BS HERS ACING CHORD CHORD ACTIONS | 2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc Rigid ceil bracing. (size) | 0.2 0.2 0.3 0.3 I wood shea ourlins, exc ing directly 4=10-3-15 7=10-3-15 | athing directly applie cept end verticals. applied or 10-0-0 or 5, 5=10-3-15, 6=10-3 | 5) 6) 7) ed or 8) c 3-15, 9) | Gable studs : This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Provide mecl bearing plate 7, 39 lb uplift uplift at joint : This truss is | spaced at 4-0-0 o s been designed id nonconcurrent ias been designed n chord in all area y 1-00-00 wide w y other members hanical connection capable of withs at joint 4, 5 lb upl 5. | c. for a 10.0 with any d for a liv is where ill fit betw , with BC n (by oth tanding 3 lift at join |) psf bottom other live loa e load of 20.0 a rectangle veen the bott DL = 10.0psf ers) of truss t 6 lb uplift at j t 6 and 127 lb th the 2015 | ds. Dpsf om oint o | | | | | |
| 7=10-3-15 Max Horiz 7=-150 (LC 8) Max Uplift 4=-39 (LC 9), 5=-127 (LC 13), 6=-5 (LC 8), 7=-36 (LC 9) Max Grav 4=127 (LC 19), 5=384 (LC 20), 6=382 (LC 20), 7=151 (LC 19) | | | | | | International R802.10.2 ar AD CASE(S) | Residential Code nd referenced star Standard | sections ndard AN | R502.11.1 a ISI/TPI 1. | Ind | | | | | |
| FOF | RCES | (lb) - Max | imum Com | pression/Maximum | | | | | | | | | | | |
| TOF | P CHORD | 1-7=-125/ | /98, 1-2=-1 | 12/121, 2-3=-149/12 | 22, | | | | | | | | | | |
| BO WE | r CHORD BS | 3-4=-153/ 6-7=-123/ 2-6=-197/ | /161 /130, 5-6=- /54, 3-5=-28 | 123/130, 4-5=-123/1 85/175 | 30 | | | | | | | | | | |
| NO ⁻ 1) 2) 3) | TES Unbalance this design Wind: AS(Vasd=91m II; Exp B; and C-C E 9-11-6 zor vertical lef forces & M DOL=1.60 Truss des only. For see Stand | ed roof live I n. CE 7-10; Vu ph; TCDL= Enclosed; M Exterior (2) (ne; cantileve ft and right e dWFRS for 0 plate grip I signed for w studs expos dard Industry | loads have lt=115mph :6.0psf; BC WFRS (en)-1-12 to 7- er left and r exposed;C- reactions sl DOL=1.60 ind loads ir sed to wind v Gable End | been considered for (3-second gust) DL=6.0psf; h=30ft; 0 velope) exterior zon 5-6, Interior (1) 7-5-1 ight exposed ; end C for members and hown; Lumber n the plane of the tru (normal to the face) d Details as applicat | r Cat. ne 6 to ss), obe, | | | | | | | M. Contraction | | SEA 0363 | ROLUMENTING |

- II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 7-5-6, Interior (1) 7-5-6 to 9-11-6 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) Gable requires continuous bottom chord bearing.

818 Soundside Road Edenton, NC 27932

GI

11111111 January 17,2023

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V2 | Valley | 1 | 1 | Job Reference (optional) | 156131984 |

2-11-0

2-11-0

84 Components (Dunn), Dunn, NC - 28334,

5-2-6

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:12 ID:ZiUHrGO840bY82MLcQUL3Uy6Lm?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



2x4 💊

1.5x4 u



| Scale | = 1:37.9 | |
|-------|----------|--|
| oouic | - 1.07.0 | |

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-P | 0.21 0.10 0.09 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 4 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 43 lb | GRIP 244/190 FT = 20% |
|--|---|--|--|--|--|---|---|--|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex Rigid ceiling directly bracing. (size) 4=9-1-8, Max Horiz 7=-120 (L Max Uplift 4=-58 (LC 7=-32 (LC Max Grav 4=89 (LC (LC 20), | Pathing directly applie cept end verticals. r applied or 10-0-0 oc 5=9-1-8, 6=9-1-8, 7= C 8) C 11), 5=-119 (LC 13 C 12) 8), 5=335 (LC 20), 6 7=127 (LC 19) | 6) 7) d or 8) 9) 9-1-8), L), L | This truss ha chord live loa * This truss h on the bottor 3-06-00 tall t chord and ar Provide mec bearing plate 7, 58 lb uplifi This truss is International R802.10.2 a OAD CASE(S) | as been designed ad nonconcurrent has been designe in chord in all are by 1-00-00 wide hanical connectio e capable of withs at joint 4 and 11 designed in acco Residential Cod nd referenced sta Standard | I for a 10.0 t with any ed for a liv- as where will fit betw s, with BC on (by oth- standing 3 9 lb uplift ordance wi e sections andard AN |) psf bottom other live load e load of 20. a rectangle veen the bott DL = 10.0ps ers) of truss 2 lb uplift at at joint 5. th the 2015 R502.11.1 a ISI/TPI 1. | ads. Opsf om f. to joint and | | | | | |
| FORCES | (lb) - Maximum Con Tension | npression/Maximum | | | | | | | | | | | |
| TOP CHORD | 1-7=-115/88, 1-2=-9 | 6/104, 2-3=-138/102 | | | | | | | | | | | |

1.5x4 u

9-1-8

 TOP CHORD
 1-7=-115/88, 1-2=-96/104, 2-3=-138/102

 3-4=-134/136
 3-4=-134/136

 BOT CHORD
 6-7=-90/104, 5-6=-90/104, 4-5=-90/104

 WEBS
 2-6=-194/42, 3-5=-262/164

NOTES

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 7-5-6, Interior (1) 7-5-6 to 8-9-0 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
- 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.





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V3 | Valley | 1 | 1 | Job Reference (optional) | 156131985 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:12 ID:ZiUHrGO840bY82MLcQUL3Uy6Lm?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



2-11-0 7-7-0 2-11-0 4-8-0

7-11-2

Page: 1



Scale = 1:33.7

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-P | 0.43 0.17 0.07 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 34 lb | GRIP 244/190 FT = 20% |
|--|--|--|--|--|--|---|--|----------------------------------|----------------------|-----------------------------|--------------------------|--|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood shea 7-11-7 oc purlins, e: Rigid ceiling directly bracing. (size) 3=7-11-2, Max Horiz 5=-90 (LC Max Grav 3=177 (LC 5=112 (LC 5=112 (LC | athing directly applia xcept end verticals. applied or 10-0-0 or 4=7-11-2, 5=7-11-2 2 10) 2 13), 5=-40 (LC 12) 2 1), 4=331 (LC 20), 2 19) | 7) 8) ed or 9) c 2 Lu | * This truss f on the bottor 3-06-00 tall f chord and ar Provide mec bearing plate 5 and 14 lb u This truss is International R802.10.2 a DAD CASE(S) | has been desig in chord in all a by 1-00-00 wid hy other memb hanical conne e capable of wi uplift at joint 3. designed in ac Residential C nd referenced Standard | gned for a liv areas where e will fit betw vers. ction (by oth- ithstanding 4 ccordance wi ode sections standard AN | e load of 20. a rectangle veen the bott o lb uplift at j ith the 2015 R502.11.1 a ISI/TPI 1. | Opsf om to joint and | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | | | | | | | | | | | |
| TOP CHORD BOT CHORD WEBS | 1-5=-105/77, 1-2=-8 4-5=-67/81, 3-4=-67/ 2-4=-234/57 | 0/86, 2-3=-116/104 /81 | | | | | | | | | | | |

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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) 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. 4)

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

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





| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V4 | Valley | 1 | 1 | Job Reference (optional) | 156131986 |

2-11-0

12 10 ∟

84 Components (Dunn), Dunn, NC - 28334,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:13 ID:ZiUHrGO840bY82MLcQUL3Uy6Lm?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> 4x6 = 2

٢

4

1.5x4 u 6-8-12 6-4-10

3-5-10

6-8-12

3

2x4 💊



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



3-2-6

2-10-14 3-2-6

0-9-3

Scale = 1:29.6

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

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015 | 5/TPI2014 | CSI TC BC WB Matrix-P | 0.22 0.10 0.04 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 27 lb | GRIP 244/190 FT = 20% | |
|---|---|--|--|--|--|---|--|---------------------------|----------------------|-----------------------------|---|---------------------------------|------------------------------------|-------------|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood shea 6-9-0 oc purlins, exc Rigid ceiling directly bracing. (size) 3=6-8-12, Max Horiz 5=-61 (LC Max Grav 3=130 (LC 5=111 (LC (lb) - Maximum Com Tension 1-5=-94/67, 1-2=-63/ 4-5=-53/58, 3-4=-53/ 2-4=-191/22 d roof live loads have E 7-10; Vult=115mph | athing directly applie cept end verticals. applied or 10-0-0 oc 4=6-8-12, 5=6-8-12 (3) (12), 5=-41 (LC 12) (1), 4=269 (LC 20), (1), 4=269 (LC 20), (1), 4=269 (LC 20), (1), 4=269 (LC 20), (2), 4=269 (LC 20), (3), 4=268 (AC 20), (4), 4=268 (AC 20), (5), 5=268 (AC 20), (5), 4=268 (AC 20), (5), 5=268 (AC 20), | 7) 8) 9) 5 LC | * This truss h on the botton 3-06-00 tall b chord and an Provide mect bearing plate 5 and 28 lb u This truss is of International R802.10.2 ar DAD CASE(S) | as been designed a chord in all areas y 1-00-00 wide will y other members. nanical connection capable of withsta plift at joint 3. designed in accord Residential Code s d referenced stand Standard | for a live where fit betw (by othen nding 4 ance with sections dard AN | e load of 20.0 a rectangle reen the botto ers) of truss ti 1 lb uplift at ju th the 2015 R502.11.1 a ISI/TPI 1. | 0psf om ooint nd | | | . In the second s | H CA | ROLIN | |
| Vasd=91m II; Exp B; E and C-C E: exposed; c members a Lumber DO 3) Truss desis only. For s see Standa or consult (4) Gable requ 5) Gable stud 6) This truss h chord live I | ph; TCDL=6.0psf; BCI inclosed; MWFRS (en kterior (2) zone; cantile and forces & MWFRS (en lend vertical left and rig and forces & MWFRS DL=1.60 plate grip DO gigned for wind loads in studs exposed to wind rud Industry Gable Enc qualified building desig irres continuous bottor is spaced at 2-0-0 oc. has been designed for oad nonconcurrent wit | DL=6.0psf; h=30ft; C vvelope) exterior zon ever left and right ght exposed;C-C for for reactions shown; L=1.60 the plane of the tru (normal to the face) d Details as applicat gner as per ANSI/TP n chord bearing. | Cat. e ss ole, ole, rl 1. | | | | | | | V. minner | | SEA 0363 | 22 E.R. A.L. 17,2023 | Normanning. |

2-11-0

1

5

Ř

3x8 II

Page: 1

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V5 | Valley | 1 | 1 | Job Reference (optional) | 156131987 |

1-10-11

-0-0

2-2-6

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:13 ID:ZiUHrGO840bY82MLcQUL3Uy6Lm?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





5-2-11

Scale - 1:25.6

| 00010 = 1.20.0 | | | | | | | | | | | | | | |
|---|---|---|--|--|---|--|---|--------------------------|----------------------|-----------------------------|--------------------------|--|------------------------------------|--|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-P | 0.15 0.09 0.02 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 19 lb | GRIP 244/190 FT = 20% | |
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.3 2x4 SP No.3 2x4 SP No.3 Structural wood sheat 5-3-4 oc purlins. Rigid ceiling directly bracing. (size) 1=5-2-11, Max Horiz 1=36 (LC Max Uplift 1=-11 (LC Max Grav 1=102 (LC (LC 1) | athing directly applie applied or 10-0-0 or 3=5-2-11, 4=5-2-11 9) 13), 3=-15 (LC 13) 2 1), 3=102 (LC 1), 4 | 7) 8) ed or C 9) L1 4=154 | * This truss h on the bottor 3-06-00 tall b chord and ar Provide med bearing plate 1 and 15 lb u This truss is International R802.10.2 ar OAD CASE(S) | as been design n chord in all are by 1-00-00 wide y other member hanical connect hanical connect e capable of with uplift at joint 3. designed in acco Residential Coo nd referenced st Standard | ed for a liv was where will fit betw rs. on (by oth standing 1 ordance w le sections andard AN | e load of 20.0 a rectangle veen the botto ers) of truss t 1 lb uplift at j ith the 2015 R502.11.1 a ISI/TPI 1. | Dpsf om oint nd | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalanc this desig 2) Wind: AS Vasd=91r | (lb) - Maximum Com Tension 1-2=-65/30, 2-3=-62/ 1-4=-7/29, 3-4=-7/29 2-4=-98/23 ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC | pression/Maximum /26 been considered fo (3-second gust) DL=6.0psf; h=30ft; (| r Cat. | | | | | | | | | | | |



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. 4)

5)

Gable studs spaced at 2-0-0 oc.

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

C anninnin an CHILLIAN AND AND SEAL 036322 GI 111111111 January 17,2023

Page: 1



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V8 | Valley | 1 | 1 | Job Reference (optional) | 156131988 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:13 ID:ZiUHrGO840bY82MLcQUL3Uy6Lm?-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



13-7-5

Scale = 1:50.9

| Loading | (ps | f) Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|--|--|--|--|---|---|---|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20 | 0 Plate Grip DC | L 1.15 | | TC | 0.28 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10 | 0 Lumber DOL | 1.15 | | BC | 0.18 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0 | 0* Rep Stress In | cr YES | | WB | 0.17 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10 | 0 Code | IRC202 | 5/TPI2014 | Matrix-P | | | | | | | Weight: 69 lb | FT = 20% |
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 *E Structural wood 6-0-0 oc purlins Rigid ceiling dir | ccept* 7-3:2x4 SP N sheathing directly a except end vertica ectly applied or 10-0 | 3 0.2 4 5 pplied or 6 Is. -0 oc 7 | Truss desig only. For st see Standa or consult q Gable requi Gable studs This truss h chord live lc * This truss | gned for wind lo tuds exposed to rd Industry Gab ualified building res continuous s spaced at 4-0 as been desigr aad nonconcurr has been desig | bads in the p bowind (norm ble End Deta g designer a bottom chor -0 oc. ned for a 10. ent with any gned for a liv | lane of the tr ial to the face ils as applica s per ANSI/T d bearing. 0 psf bottom other live loa re load of 20. | uss e), ble, PI 1. ads. 0psf | | | | | |
| REACTIONS | (size) 5=13 8=13 Max Horiz 9=-15 Max Uplift 5=-46 8=-10 Max Grav 5=17 7=42 9=49 | 7-5, 6=13-7-5, 7=1(7-5, 9=13-7-5 9 (LC 8) 6 (LC 9), 6=-144 (LC 2 (LC 12), 9=-104 (2 (LC 12), 6=461 (L0 3 (LC 20), 8=432 (L0 (LC 12) | 3-7-5, 8 13), LC 2) C 20), 9 C 19), 9 | on the botto 3-06-00 tall chord and a) Provide me bearing plat joint 9, 45 lt 144 lb uplift) This truss is Internationa | om chord in all a by 1-00-00 wid nny other memb chanical conne te capable of w o uplift at joint 5 at joint 6. s designed in ac al Residential C | areas where le will fit betw bers, with BC ction (by oth ithstanding 1 5, 132 lb uplit ccordance w ode sections | a rectangle veen the bott CDL = 10.0ps ers) of truss 104 lb uplift a t at joint 8 ar ith the 2015 s R502.11.1 a | om f. to t id | | | | | |
| FORCES | (lb) - Maximum Tension | Compression/Maxim | ^{num} L | OAD CASE(S |) Standard | Stanuaru Ar | NOI/TETT. | | | | | | |
| TOP CHORD | 1-9=-63/93, 1-2 3-4=-167/174, 4 | =-56/91, 2-3=-162/1 -5=-170/184 | 62, | | | | | | | | | | |
| BOT CHORD | 8-9=-118/142, 7 5-6=-118/142 | -8=-118/142, 6-7=-1 | 18/142, | | | | | | | | | mm | um. |
| WEBS NOTES | 3-7=-213/51, 2- | 3=-289/176, 4-6=-32 | 25/199 | | | | | | | | | TH CA | ROU |

 \vdash

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust)
 Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 4-8-2, Interior (1) 4-8-2 to 5-1-0, Exterior (2) 5-1-0 to 9-7-6, Interior (1) 9-7-6 to 13-2-13 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



Page: 1



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V9 | Valley | 1 | 1 | Job Reference (optional) | 156131989 |

. ... -

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:14 ID:ZiUHrGO840bY82MLcQUL3Uy6Lm?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

12-4-15 5-1-0 12-0-13 5-1-0 6-11-13 4x6 = 3 11 12 10 □ 1.5x4 II 12 1.5x4 **I** 1.5x4 **I** 5-10-0 6-1-8 6-1-8 4 2 10 13 1 1-10-11 5 9 8 14 15 6 3x6 💊 1.5x4 u 1.5x4 u 1.5x4 II

1.5x4 **I**

12-4-15

| Scale = 1:46.5 | | | | | | | | | | | | | |
|----------------|------------------------|-------------------------|-------------------|-----------------|--------------------|----------------|------------------|------------|-------|--------|-----|---------------|----------|
| oading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| FCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.15 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.14 | Horiz(TL) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC2015 | 5/TPI2014 | Matrix-P | | | | | | | Weight: 59 lb | FT = 20% |
| UMBER | | | 3) | Truss desig | ned for wind loa | ds in the p | ane of the tru | uss | | | | | |
| | 2x4 SP No 2 | | 0) | only. For stu | ids exposed to v | wind (norm | al to the face | acc e). | | | | | |
| BOT CHORD | 2x4 SP No.2 | | | see Standar | d Industry Gable | e End Deta | Is as applica | ible, | | | | | |
| WEBS | 2x4 SP No.3 | | | or consult qu | alified building | designer as | per ANSI/TI | PI 1. | | | | | |
| OTHERS | 2x4 SP No.3 | | 4) | Gable requir | es continuous b | ottom chor | d bearing. | | | | | | |
| BRACING | | | 5) | Gable studs | spaced at 4-0-0 | OC. | | | | | | | |
| TOP CHORD | Structural wood she | eathing directly applie | dor ⁶⁾ | This truss ha | as been designe | d for a 10.0 |) psf bottom | | | | | | |
| | 6-0-0 oc purlins, ex | cept end verticals. | | chord live lo | ad nonconcurrer | nt with any | other live loa | ads. | | | | | |
| BOT CHORD | Rigid ceiling directly | / applied or 10-0-0 oc | ; () | 1 his truss i | has been design | ied for a liv | e load of 20.0 | Upst | | | | | |
| | bracing. | | | On the botton | n chord in all ar | eas where | a rectangle | ~ m | | | | | |
| REACTIONS | (size) 5=12-4-1 | 5, 6=12-4-15, 7=12-4 | -15, | chord and a | by 1-00-00 wide | re with BC | | 6 f | | | | | |
| | 8=12-4-1 | 5, 9=12-4-15 | 8) | Provide mer | hanical connect | ion (by oth | DL = 10.0ps | to | | | | | |
| | Max Horiz 9=-129 (L | _C 8) | 0) | bearing plate | capable of with | nstanding 9 | 4 lh unlift at i | ioint | | | | | |
| | Max Uplift 5=-53 (LC | C 9), 6=-127 (LC 13), | | 9 53 lb uplif | t at joint 5 135 l | b uplift at id | pint 8 and 12 | 7 lb | | | | | |
| | 8=-135 (L | _C 12), 9=-94 (LC 19) |) | uplift at joint | 6. | 2 ap | | | | | | | |
| | Max Grav 5=124 (L | C 19), 6=376 (LC 20) | , 9) | This truss is | designed in acc | ordance w | th the 2015 | | | | | | |
| | 7=411 (L | C 20), 8=390 (LC 19) | , -/ | International | Residential Co | de sections | D502 11 1 c | and | | | | | |

- 9=46 (LC 12) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-9=-58/88, 1-2=-47/83, 2-3=-147/146, 3-4=-149/154, 4-5=-145/158 BOT CHORD 8-9=-104/119, 7-8=-104/119, 6-7=-104/119,
- 5-6=-104/119 WEBS 3-7=-216/34, 2-8=-291/177, 4-6=-282/173 NOTES
- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 4-8-2, Interior (1) 4-8-2 to 5-1-0, Exterior (2) 5-1-0 to 9-7-6, Interior (1) 9-7-6 to 12-0-6 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
- International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Page: 1

818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V10 | Valley | 1 | 1 | Job Reference (optional) | 156131990 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:14 ID:5WwvdwNWKiThWvn92jz6XHy6Lm0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



-200:1



11-2-8

Scale = 1:42

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015/TP | 12014 | CSI TC BC WB Matrix-P | 0.22 0.12 0.09 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 5 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 49 lb | GRIP 244/190 FT = 20% |
|--|---|---|---|---|---|---|---|---|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 2x4 SP No.3 Structural wood shea 6-0-0 oc purlins, exx Rigid ceiling directly bracing. (size) 5=11-2-8, 8=11-2-8, Max Horiz 9=-100 (L Max Uplift 5=-68 (LC 8=-137 (L Max Grav 5=83 (LC 9=43 (LC | athing directly applied cept end verticals. applied or 10-0-0 oc 6=11-2-8, 7=11-2-8, 9=11-2-8 C 8) 9), 6=-121 (LC 13), C 12), 9=-90 (LC 19) 10), 6=332 (LC 20), 2 20), 8=366 (LC 19), 12) | 3) Tr onl sea or (4) Ga 5) Ga 5) Ga 5) Ga 5) Ga 7) * T on 3-C chc 8) Prc bea 9, (upl 9) Thi Intu Pra | uss design ly. For stu e Standarc consult qu able require able studs s is truss ha rord live loa his truss ha the botton 06-00 tall b ord and an ovide mect aring plate 68 lb uplift lift at joint (i is truss is o ernational 02 10 2 ar | ted for wind load: ds exposed to wi l Industry Gable I alified building de es continuous boi spaced at 4-0-0 c s been designed id nonconcurrent as been designed d nonconcurrent as been designed y 1-00-00 wide w y other members nanical connectio capable of withs at joint 5, 137 lb 6. designed in acco Residential Code | s in the pi nd (norm End Deta ssigner as ttom chor oc. for a 10.0 with any d for a 1iva as where with BC n (by oth tanding 9 uplift at jo rdance w e sections nedard AD | ane of the true al to the face) ils as applicab s per ANSI/TP d bearing. D psf bottom other live loac e load of 20.0 DL = 10.0psf. ers) of truss to 0 lb uplift at jc oint 8 and 121 ith the 2015 R502.11.1 at | ss le, l 1. ls. osf m int lb | | | | | |
| FORCES | (lb) - Maximum Com Tension | pression/Maximum | LOAD | CASE(S) | Standard | | | | | | | | |
| TOP CHORD | 1-9=-53/82, 1-2=-38/ 3-4=-138/136, 4-5=- | /84, 2-3=-131/129, 123/143 | | | | | | | | | | | |
| BOT CHORD | 8-9=-89/95, 7-8=-89/ 5-6=-89/95 | /95, 6-7=-89/95, | | | | | | | | | | mun | un. |
| WEBS NOTES | 3-7=-213/25, 2-8=-29 | 93/180, 4-6=-262/161 | | | | | | | | | 11 | "TH CA | ROLIN |

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

 Wind: ASCE 7-10; Vult=115mph (3-second gust)
 Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) 0-1-12 to 4-8-2, Interior (1) 4-8-2 to 5-1-0, Exterior (2) 5-1-0 to 9-7-6, Interior (1) 9-7-6 to 10-10-0 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



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

A MITek Affiliate 818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V11 | Valley | 1 | 1 | Job Reference (optional) | 156131991 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:15 ID:5WwvdwNWKiThWvn92jz6XHy6Lm0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



| Scale = 1:33.4 | |
|----------------|--|
| | |

| | | | _ | | | | | | | | | | |
|--|--|---|--|---|---|---|--|----------------------------------|----------------------|-----------------------------|--------------------------|----------------|------------------------|
| Loading TCLL (roof) TCDL BCLL | (psf) 20.0 10.0 0.0* | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr | 2-0-0 1.15 1.15 YES | | CSI TC BC WB | 0.41 0.21 0.06 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 | GRIP 244/190 |
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=9-10-4, Max Horiz 1=73 (LC Max Uplift 1=-22 (LC Max Grav 1=209 (LC (LC 1) | code eathing directly applie v applied or 10-0-0 oc , 3=9-10-4, 4=9-10-4 11) C 13), 3=-31 (LC 13) C 1), 3=209 (LC 1), 4 | (1000) (1 | * This truss h on the bottor 3-06-00 tall h chord and ar Provide mec bearing plate 1 and 31 lb u This truss is International R802.10.2 ar DAD CASE(S) | Matrix-P has been design in chord in all an oy 1-00-00 wide hanical conneccies hanical conneccies capable of witi uplift at joint 3. designed in act Residential Co nd referenced s Standard | ned for a liv reas where e will fit betw ers. tion (by oth hstanding 2 cordance w de sections standard AN | l e load of 20. a rectangle veen the bott ers) of truss s 22 lb uplift at j ith the 2015 s R502.11.1 a ISI/TPI 1. | Opsf om to joint and | | | | vveignt: 38 ib | FT = 20% |
| FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Wind: ASC | (lb) - Maximum Corr Tension 1-2=-135/62, 2-3=-1 1-4=-14/61, 3-4=-14 2-4=-197/40 ed roof live loads have 0. E 7-10: Vult=115mph | npression/Maximum 30/50 //61 : been considered for | | | | | | | | | | | |

Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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) 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.
- 4)
- 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.

GI

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/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

C

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V12 | Valley | 1 | 1 | Job Reference (optional) | 156131992 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:15 ID:Yx2rTE1Bsg3FMTxHAn5yLly6LMe-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f





7-5-7

| Coolo | _ | 1.20 E |
|-------|---|--------|
| Scale | = | 1:29.5 |

| | | | 1 | | | 1 | | · · · · | | | | | 1 | |
|-------------|-------------------------|--------------------|------------------------|-------|-----------------------------------|------------------|-----------------|-------------------|------|-------|--------|-----|---------------|----------|
| Loading | | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.29 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | | 10.0 | Lumber DOL | 1.15 | | BC | 0.18 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | | 0.0* | Rep Stress Incr | YES | | WB | 0.09 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | |
| BCDL | | 10.0 | Code | IRC2 | 015/TPI2014 | Matrix-MP | | | | | | | Weight: 28 lb | FT = 20% |
| LUMBER | | | | | 7) * This truss | has been desid | ned for a liv | e load of 20. | Opsf | | | | | |
| TOP CHORD | 2x4 SP N | 0.3 | | | on the botto | m chord in all a | areas where | a rectangle | | | | | | |
| BOT CHORD | 2x4 SP N | 0.2 | | | 3-06-00 tall | by 1-00-00 wid | e will fit betv | veen the bott | om | | | | | |
| OTHERS | 2x4 SP N | 0.3 | | | chord and a | ny other memb | ers. | | | | | | | |
| BRACING | | | | | Provide med | hanical conne | ction (by oth | ers) of truss | to | | | | | |
| TOP CHORD | Structura | wood she | athing directly applie | d or | bearing plate | e capable of wi | thstanding 8 | B lb uplift at jo | pint | | | | | |
| | 7-5-7 oc p | ourlins. | | | 1, 8 lb uplift | at joint 3 and 3 | 17 lb uplift at | joint 4. | | | | | | |
| BOT CHORD | Rigid ceili bracing. | ng directly | applied or 6-0-0 oc | | 9) This truss is International | Residential Co | ode sections | R502.11.1 a | and | | | | | |
| REACTIONS | (size) | 1=7-5-7, 3 | 3=7-5-7, 4=7-5-7 | | R802.10.2 a | nd referenced | standard AN | NSI/TPI 1. | | | | | | |
| | Max Horiz | 1=-57 (LC | ; 8) | | LOAD CASE(S) | Standard | | | | | | | | |
| | Max Uplift | 1=-8 (LC | 24), 3=-8 (LC 23), 4= | -37 | | | | | | | | | | |
| | | (LC 12) | | | | | | | | | | | | |
| | Max Grav | 1=66 (LC (LC 1) | 23), 3=66 (LC 24), 4 | =519 | | | | | | | | | | |
| FORCES | (lb) - Max | imum Com | pression/Maximum | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | | |
| TOP CHORD | 1-2=-48/2 | 00, 2-3=-4 | 8/200 | | | | | | | | | | | |
| BOT CHORD | 1-4=-157/ | 87, 3-4=-1 | 57/87 | | | | | | | | | | | |
| WEBS | 2-4=-367/ | 94 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | |
| 1) Unbalanc | ed roof live l | oads have | been considered for | | | | | | | | | | | |
| this desig | n | | | | | | | | | | | | | |

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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) 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.

4)

- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

GILB munin January 17,2023



SEAL

036322

The manual start

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V13 | Valley | 1 | 1 | Job Reference (optional) | 156131993 |

2-1-8

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:15 ID:cNWNI_dwKkFJk?BhYaURq4y6LLt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2x4 💊

Page: 1



2x4 🧳



5-0-11

Scale = 1:25.5

| Loading | (psf) | Spacing | 2-0-0 | | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP | |
|-------------------------|---|------------------------|------------|-------------------------------|---------------------------------------|---------------|-----------------|-------|-------|--------|-----|---------------|----------|--|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | | TC | 0.11 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 | |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.14 | Vert(TL) | n/a | - | n/a | 999 | | | |
| BCLL | 0.0* | Rep Stress Incr | YES | | WB | 0.04 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | | |
| BCDL | 10.0 | Code | IRC201 | 5/TPI2014 | Matrix-MP | | | | | | | Weight: 18 lb | FT = 20% | |
| LUMBER | | | 7) | * This truss h | nas been desigr | ned for a liv | e load of 20.0 | 0psf | | | | | | |
| TOP CHORD | 2x4 SP No.3 | | , | on the bottor | n chord in all ar | eas where | a rectangle | | | | | | | |
| BOT CHORD | 2x4 SP No.3 | | | 3-06-00 tall b | y 1-00-00 wide | will fit betw | veen the bott | om | | | | | | |
| OTHERS | THERS 2x4 SP No.3 chord and any other members. | | | | | | | | | | | | | |
| BRACING | | | 8) | Provide mec | hanical connect | tion (by oth | ers) of truss t | to | | | | | | |
| TOP CHORD | Structural wood she 5-0-11 oc purlins. | athing directly applie | ed or | bearing plate and 14 lb up | e capable of with lift at joint 4. | nstanding 3 | lb uplift at jo | int 3 | | | | | | |
| BOT CHORD | CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and | | | | | | | | | | | | | |
| REACTIONS | (size) 1=5-0-11 | 3=5-0-11, 4=5-0-11 | | R802.10.2 a | nd referenced s | tandard AN | ISI/TPI 1. | | | | | | | |
| | Max Horiz 1=37 (LC | 11) | L | DAD CASE(S) | Standard | | | | | | | | | |
| | Max Uplift 3=-3 (LC | 13), 4=-14 (LC 12) | | | | | | | | | | | | |
| | Max Grav 1=62 (LC | 23), 3=62 (LC 24), 4 | 4=306 | | | | | | | | | | | |
| | (LC 1) | | | | | | | | | | | | | |
| FORCES | (lb) - Maximum Com | pression/Maximum | | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | | |
| TOP CHORD | 1-2=-55/97, 2-3=-55 | /97 | | | | | | | | | | | | |
| BOT CHORD | 1-4=-77/48, 3-4=-77 | /48 | | | | | | | | | | | | |
| WEBS | 2-4=-193/41 | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | |
| 1) Unbalanc | ed roof live loads have | been considered fo | r | | | | | | | | | | | |
| this desig | n. | | | | | | | | | | | | | |
| 2) Wind: AS | CE 7-10; Vult=115mph | (3-second gust) | • • | | | | | | | | | mm | UIII. | |
| Vasd=91r | mpn; ICDL=6.0psf; BC | DL=6.0pst; h=30tt; (| Uat. | | | | | | | | - | WHY CA | Pall | |
| ii; ⊑xp B; and C-C I | II; Exp B; Enclosed; MWERS (envelope) exterior zone and C-C Exterior (2) zone: cantilever left and right | | | | | | | | | | | | | |

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,

exposed ; end vertical left and right exposed;C-C for

- or consult qualified building designer as per ANSI/TPI 1. Gable requires continuous bottom chord bearing. 4)
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.

818 Soundside Road Edenton, NC 27932

GI munin January 17,2023

SEAL 036322

Annun mana

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V15 | Valley | 1 | 1 | Job Reference (optional) | 156131994 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:16 ID:5Smkx04C3bMH7SMmandaiNy6LK?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



| Scale = 1:49.3 | |
|-----------------------|----------------------------------|
| Plate Offsets (X, Y): | [6:0-3-0,Edge], [16:0-2-1,0-1-8] |

| | | | | | | | | | | | | - | |
|-------------|---------------------------------|-------------------------------|------------|------------------------------------|------------------------|--------------|----------------------|-----------|-------|--------|-----|---------------|--|
| Loading | (psf) | Spacing | 2-0-0 | | csi | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | | тс | 0.05 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.15 | | BC | 0.05 | Vert(TL) | n/a | - | n/a | 999 | - | |
| BCU | 0.0* | Rep Stress Incr | YES | | WB | 0.08 | Horiz(TL) | 0.00 | 11 | n/a | n/a | | |
| BCDL | 10.0 | Code | IRC20 | 15/TPI2014 | Matrix-MS | 0.00 | | 0.00 | | | | Weight: 99 lb | FT = 20% |
| | | | | | | | | | | | | - 5 | |
| LUMBER | | | ١ | WEBS | 5-17=-118/35, 7-1 | 5=-108/2 | 24, 4-18=-132 | /89, | | | | | |
| TOP CHORD | 2x4 SP No.2 | | | : | 3-19=-129/81, 2-2 | 0=-118/5 | 54, 8-14=-132 | /91, | | | | | |
| BOT CHORD | 2x4 SP No.2 | | | 9 | 9-13=-130/81, 10- | 12=-113 | /50 | | | | | | |
| OTHERS | 2x4 SP No.3 | | 1 | NOTES | | | | | | | | | |
| BRACING | | | | 1) Unbalanced | roof live loads have | ve been | considered fo | r | | | | | |
| TOP CHORD | Structural wood she | athing directly applied | lor | this design. | | | | | | | | | |
| | 6-0-0 oc purlins. | | 2 | Wind: ASCE | 7-10; Vult=115m | ph (3-seo | cond gust) | | | | | | |
| BOT CHORD | Rigid ceiling directly | applied or 10-0-0 oc | | Vasd=91mpl | h; TCDL=6.0psf; E | BCDL=6. | 0psf; h=30ft; (| Cat. | | | | | |
| | bracing. | | | II; Exp B; En | closed; MWFRS (| envelope | e) exterior zor | ie | | | | | |
| REACTIONS | (size) 1=17-7-14 | 4, 11=17-7-14, | | and C-C Cor | mer (3) 0-0-5 to 4- | -6-11, Ex | terior (2) 4-6- | 11 | | | | | |
| | 12=17-7-2 | 14, 13=17-7-14, | | to 8-10-4, Co | orner (3) 8-10-4 to | 13-4-10 | , Exterior (2) | | | | | | |
| | 14=17-7-1 | 14, 15=17-7-14, | | 13-4-10 to 1 | 7-3-10 zone; canti | lever left | and right | | | | | | |
| | 17=17-7-1 | 14, 18=17-7-14, | | exposed; er | | ngni exp | osed;C-C Ior | | | | | | |
| | 19=17-7-1 | 14, 20=17-7-14 | | Internitiers an | 1 60 ploto grip F | | cuons snown | , | | | | | |
| | Max Horiz 1=139 (LC | C 9) | | 2) Truce decig | = 1.00 plate grip L | in the n |) Iana of tha tru | | | | | | |
| | Max Uplift 1=-24 (LC | 5 10), 11=-11 (LC 11), | . · | only Forst | ids exposed to wi | nd (norm | al to the face | 155 | | | | | |
| | 12=-11 (L | .C 13), 13=-60 (LC 13 |), | see Standar | d Industry Gable F | Ind (norm | ils as annlicat | /, hle | | | | | |
| | 14=-67 (L | C 13), 17=-9 (LC 12), | 、 、 | or consult a | alified building de | signer a | s per ANSI/TE | 911 | | | | | |
| | 18=-05 (L | C 12), 19=-59 (LC 12 |), | All plates are | a 1 5x4 MT20 unle | ess other | wise indicated | 4 | | | | | |
| | 20=-21 (L Max Cray 1-106 (L(| 0 12) 2 21) 11 02 (I C 12) | ! | 5) Gable requir | es continuous bot | tom chor | d bearing. | | | | | | |
| | 12-165 (LC | C 1) 13-166 (LC 13), | \ (| 6) Gable studs | spaced at 2-0-0 o | ю. | | | | | | | |
| | 14-200 (1 | C(20) 15-212 (LC 20) | ,, n) 7 | This truss has | s been designed | for a 10. | D psf bottom | | | | | | 1111 |
| | 17=230 (1 | C 19) 18=197 (LC 1) | 9), 9) | chord live loa | ad nonconcurrent | with any | other live loa | ds. | | | | White CA | Dalle |
| | 19=164 (I | C 19) 20=173 (I C 1) | 9) 8 | B) * This truss h | nas been designed | d for a liv | e load of 20.0 |)psf | | | | "aTH OH | 10/11 |
| FORCES | (lb) - Maximum Com | nression/Maximum | ., | on the bottor | n chord in all area | as where | a rectangle | • | | | - 5 | O .: FSS | A. M. |
| 1 ONOLO | Tension | procoroni, maximum | | 3-06-00 tall b | oy 1-00-00 wide w | ill fit betv | veen the botto | om | | / | 20 | CO | 1 al |
| TOP CHORD | 1-2=-197/133 2-3=- | 155/95 3-4=-102/58 | | chord and ar | ny other members | , with BC | DL = 10.0psf | | | 4 | | :0 | 1. 1 |
| | 4-5=-82/41 5-6=-61 | /45 6-7=-61/45 | ę | Provide mec | hanical connection | n (by oth | ers) of truss to | 0 | | - | 2 B | | |
| | 7-8=-69/27, 8-9=-93 | /42. 9-10=-143/95. | | bearing plate | e capable of withst | tanding 2 | 24 lb uplift at jo | oint | | = | : | SEA | L 1 1 |
| | 10-11=-182/132 | ,, | | 1, 11 lb uplif | t at joint 11, 9 lb u | plift at joi | nt 17, 65 lb u | plift | | - | : | 0262 | oo : = |
| BOT CHORD | 1-20=-105/157, 19-2 | 20=-105/157, | | at joint 18, 5 | 9 lb uplift at joint 1 | 9, 21 lb | uplift at joint 2 | 20, | | 1 | | 0303 | ZZ : : |
| | 18-19=-105/157, 17- | -18=-105/157, | | 67 lb uplift at | t joint 14, 60 lb up | lift at join | t 13 and 11 lb |) | | | 8 | | 1 |
| | 15-17=-105/157, 14 | -15=-105/157, | | uplift at joint | 1Z. | | 11 th - 0045 | | | | 2 | · | all S |
| | 13-14=-105/157, 12- | -13=-105/157, | | 10) This truss is | designed in accor | dance w | itn the 2015 | I | | | 3.5 | A SAGINI | Envir |
| | 11-12=-105/157 | | | International | Residential Code | sections | 5 K502.11.1 a | nd | | | 11 | 710 | THE AND |
| | | | - | ROUZ. 10.2 a | Oten dend | nuaru Ar | NOI/ I PI I. | | | | | A G | ILD |
| | | | 1 | LUAD CASE(S) | Standard | | | | | | | 1111 | in the second se |
| | | | | | | | | | | | | 1111 | Carl Martin |

818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V16 | Valley | 1 | 1 | Job Reference (optional) | 156131995 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:16 ID:?ODfKum05c?Qwz3gnA8PNvy6LHp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:45

| Loading TCLL (roof) TCDL BCLL BCDL LUMBER TOP CHORD | 2x4 SP N | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 4) 5) | 5/TPI2014 Gable requir Gable studs | CSI TC BC WB Matrix-MP es continuous bott spaced at 4-0-0 o | 0.23 0.16 0.15 tom chor c. | DEFL Vert(LL) Vert(TL) Horiz(TL) d bearing. | in n/a n/a 0.00 | (loc) - - 5 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 67 lb | GRIP 244/190 FT = 20% | |
|---|---|--|---|--|---|---|---|---|--------------------------------|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|--|
| BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP N 2x4 SP N Structura 10-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav | o.2 o.3 I wood she purlins. ing directly 1=15-3-1, 7=15-3-1, 1=120 (L0 8=-127 (L 8=-127 (L 6=407 (L) | athing directly applie applied or 6-0-0 oc 5=15-3-1, 6=15-3-1 8=15-3-1 2 9) 6 8), 6=-125 (LC 13), C 12) 2 20), 5=95 (LC 24), 2 20), 5=95 (LC 24), | 6) 7) ed or 8) , 9) | This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 1, 127 lb upli This truss is International R802.10.2 ar DAD CASE(S) | is been designed to ad nonconcurrent has been designed in chord in all area by 1-00-00 wide w by other members hanical connection e capable of withst ff at joint 8 and 12 designed in accor Residential Code nd referenced star Standard | for a 10.0 with any d for a liv is where ill fit betw, with BC n (by oth- canding 1 25 lb uplif dance with sections ndard AN |) psf bottom other live loa e load of 20.0 DL = a rectangle veen the botto DL = 10.0psf ers) of truss t 4 lb uplift at jy t at joint 6. th the 2015 R502.11.1 a ISI/TPI 1. | ds. Dpsf o oint nd | | | | | | |
| FORCES TOP CHORD | (lb) - Max Tension 1-2=-134, 4-5=-111 | 8=409 (L(imum Com /149, 2-3=- /118 | C 19) pression/Maximum 91/104, 3-4=-72/93, | | | | | | | | | | | | |
| BOT CHORD | 1-8=-85/1 | 14, 7-8=-8 1 | 5/91, 6-7=-85/91, | | | | | | | | | | | | |

WEBS NOTES

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

3-7=-218/0, 2-8=-288/168, 4-6=-286/167

- Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-0-5 to 4-6-11, Exterior (2) 4-6-11 to 7-7-13, Corner (3) 7-7-13 to 12-2-4, Exterior (2) 12-2-4 to 15-3-6 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.

 \cap SEAL 036322 G

mmm January 17,2023 1111111111



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V17 | Valley | 1 | 1 | Job Reference (optional) | 156131996 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:16 ID:iJqRQJulkhG?7VqbMHKIn0y6LHf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Page: 1



Scale = 1:40.6

| Loading TCLL (roof) TCDL BCLL BCDL | | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MP | 0.22 0.12 0.07 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 5 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 54 lb | GRIP 244/190 FT = 20% |
|--|--|--|--|---|---|---|---|---|--------------------------|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No 2x4 SP No 2x4 SP No Structural 6-0-0 oc p Rigid ceilin bracing. (size) Max Horiz Max Uplift Max Grav | 0.2 0.2 0.3 veg directly 1=12-10-4 1=-20 (LC 8=-113 (L1 1=92 (LC (LC 20), 7 19) | athing directly applie applied or 10-0-0 or 4, 5=12-10-4, 6=12-4 5, 8=12-10-4 C 10) 8), 6=-110 (LC 13), C 12) 20), 5=73 (LC 19), 8=34 | 4; 5; 6; 7; ed or c 8; 10-4, 9; , 5=344 L 6=344 L | Gable requir. Gable studs This truss ha chord live loa * This truss f on the bottor 3-06-00 tall t chord and ar Provide mec bearing plate 1, 113 lb upli This truss is International R802.10.2 ai OAD CASE(S) | es continuous bo spaced at 4-0-0 is been designed ad nonconcurren nas been designed ad ponconcurren in chord in all are by 1-00-00 wide that ical connecti e capable of with ff at joint 8 and 1 designed in acco Residential Cod nd referenced st Standard | ottom chor oc. d for a 10. t with any ed for a liv ass where will fit betw s, with BC on (by oth standing 2 110 lb uplil ordance w le sections andard AN | d bearing.) psf bottom other live load e load of 20.0 DL = 10.0psf ers) of truss tr 0 lb uplift at joint 6. ith the 2015 R502.11.1 a ISI/TPI 1. | ds. psf o bint | | | | | |
| FORCES | (lb) - Maxi Tension | mum Com | pression/Maximum | | | | | | | | | | | |
| TOP CHORD | 1-2=-113/9 | 94, 2-3=-1: 1 | 36/94, 3-4=-130/89, | | | | | | | | | | | |
| BOT CHORD | 1-8=-31/82 5-6=-31/7 | 2, 7-8=-31/ 1 | 68, 6-7=-31/68, | | | | | | | | | | | |
| WEBS | 3-7=-145/0 |), 2-8=-27 | 5/163, 4-6=-274/162 | 2 | | | | | | | | | MILLIN | un, |
| NOTES 1) Unbalance | ed roof live lo | oads have | been considered fo | r | | | | | | | | and the | OR FES | ROLIN |

Wind: ASCE 7-10; Vult=115mph (3-second gust) 2) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-0-5 to 4-6-11, Exterior (2) 4-6-11 to 6-5-7, Corner (3) 6-5-7 to 10-11-13, Exterior (2) 10-11-13 to 12-10-9 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. Voumment WWWWWWWW SEAL 036322 GI mmm January 17,2023

818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V18 | Valley | 1 | 1 | Job Reference (optional) | 156131997 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:17 ID:fzTdPo6CGXflvQnE_m9C20y6LHM-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



10-5-7

Scale = 1:36.2

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC20 | 15/TPI2014 | CSI TC BC WB Matrix-MP | 0.39 0.33 0.23 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.01 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 40 lb | GRIP 244/190 FT = 20% |
|--|--|---|---------------------------------------|---|---|--|--|---------------------------------|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 10-0-0 oc purlins. Rigid ceiling directly bracing. (size) 1=10-5-7 Max Horiz 1=-81 (LC Max Uplift 1=-58 (LC 4=-84 (LC Max Grav 1=46 (LC (LC 1) | eathing directly applied y applied or 6-0-0 oc , 3=10-5-7, 4=10-5-7 C 8) C 24), 3=-58 (LC 23), C 12) 2 3), 3=50 (LC 12), 4= | € 7 1 or ε ⊊ 855 | This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar Provide mec bearing plate 1, 58 lb upliff This truss is International R802.10.2 ai CAAD CASE(S) | as been designed f ad nonconcurrent has been designed n chord in all area by 1-00-00 wide wi y other members. hanical connection capable of withst at joint 3 and 84 I designed in accor Residential Code nd referenced star Standard | for a 10.0 with any s where ill fit betw h n (by oth anding 5 b uplift a dance w sections ndard AN | D psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss to 8 lb uplift at jo t joint 4. ith the 2015 R502.11.1 a ISI/TPI 1. | ds. Ipsf om oint nd | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS | (lb) - Maximum Con Tension 1-2=-107/388, 2-3=- 1-4=-298/148, 3-4=- 2-4=-659/181 | npression/Maximum -107/388 -298/148 | | | | | | | | | | | |
| 1) Unbalance this design | ed roof live loads have | been considered for | | | | | | | | | | mm | 90.5 |

2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 0-0-5 to 4-6-11, Exterior (2) 4-6-11 to 5-3-0, Corner (3) 5-3-0 to 9-8-6, Exterior (2) 9-8-6 to 10-5-12 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

 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.

5) Gable studs spaced at 4-0-0 oc.

SEAL 036322 January 17,2023



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V19 | Valley | 1 | 1 | Job Reference (optional) | 156131998 |

3-4-8

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:17 ID:UOMKEgOerbY19y1fq54cUty6LH?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

8-0-11 4-0-5 7-8-8 4-0-5 3-8-3 4x6 = 2 3-0-13 12 10 Г 3 0-0-4 Р 4 1.5x4 u 2x4 💊 2x4 🍫

8-0-11

Scale - 1:30 5

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MP | 0.35 0.21 0.11 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 30 lb | GRIP 244/190 FT = 20% | |
|--|--|--|--|---|---|--|--|-------------------------------|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|--|
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.3 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shee 8-0-11 oc purlins. Rigid ceiling directly bracing. (size) 1=8-0-11, Max Horiz 1=62 (LC Max Uplift 1=-16 (LC 4=-45 (LC Max Grav 1=64 (LC (LC 1) | athing directly applie applied or 6-0-0 oc 3=8-0-11, 4=8-0-11 11) 24), 3=-16 (LC 23), 12) 23), 3=64 (LC 24), 4 | 7) 8) 9) LC =580 | * This truss h on the botton 3-06-00 tall b chord and an Provide mect bearing plate 1, 16 lb uplift This truss is of International R802.10.2 ar DAD CASE(S) | as been designe n chord in all are by 1-00-00 wide w by other members hanical connectio ocapable of withs at joint 3 and 45 designed in acco Residential Cod hd referenced sta Standard | ed for a liv as where vill fit betv s. on (by oth standing 1 Ib uplift a ordance w e sections andard AN | e load of 20.0 a rectangle veen the bottc ers) of truss tr 6 lb uplift at jc t joint 4. ith the 2015 R502.11.1 at ISI/TPI 1. |)psf om o oint nd | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design 2) Windt ASC | (lb) - Maximum Com Tension 1-2=-58/233, 2-3=-58 1-4=-182/98, 3-4=-18 2-4=-419/110 ed roof live loads have 0. E 7-10: Vult=115mph | pression/Maximum 8/233 82/98 been considered for (3-second gust) | | | | | | | | | | mmm | 000,- | |

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner (3) 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) 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.

ORT COLORADO DE CARACTERISTA WWWWWWWW SEAL 036322 GI munin

CAR

С

January 17,2023



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V20 | Valley | 1 | 1 | Job Reference (optional) | 156131999 |

2-9-15

2-9-15

84 Components (Dunn), Dunn, NC - 28334,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:18 ID:uEatRVeB8k4CZ1ZV?IRIH5y6LGh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-3-12

2-5-13

5-7-14

3

2x4 💊



3x6 =

2x4 🍫

5-7-14

Scale = 1:26.6

Plate Offsets (X, Y): [2:0-3-0,Edge]

| Plate Olisets | (A, T). [2.0-3-0,Euge] | | | | | | | | | | | |
|--|---|--|---|---|-------------------------------------|---|--------------------------|----------------------|-----------------------------|--------------------------|---------------------------------|------------------------------------|
| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC2015/TPI2014 | CSI TC BC WB Matrix-MP | 0.36 0.33 0.00 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.01 | (loc) - - 3 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 18 lb | GRIP 244/190 FT = 20% |
| LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT | 2x4 SP No.3 2x4 SP No.3 Structural wood she 5-7-14 oc purlins. Rigid ceiling directly bracing. (size) 1=5-7-14, Max Horiz 1=42 (LC Max Uplift 1=-3 (LC Max Uplift 1=-3 (LC Max Grav 1=226 (LC (lb) - Maximum Com Tension 1-2=-315/39, 2-3=-3 1-3=-22/238 ed roof live loads have n. CE 7-10; Vult=115mph mph; TCDL=6.0psf; BC Enclosed; MWFRS (er Enclosed; MWFRS (sc Enclosed; MWFRS (sc) and forces & MWFRS OL=1.60 plate grip DO signed for wind loads in studs exposed to wind lard Industry Gable En- qualified building desig uires continuous botton load nonconcurrent wi ss has been designed for load nonconcurrent wi ss has been designed for lo | athing directly applied applied or 10-0-0 oc 3=5-7-14 11) 12), 3=-3 (LC 13) C 1), 3=-226 (LC 1) pression/Maximum 15/39 been considered for (3-second gust) DL=6.0psf; h=30ft; C ivelope) exterior zone ever left and right ght exposed;C-C for for reactions shown; L=1.60 n the plane of the trus (normal to the face), d Details as applicabl gner as per ANSI/TPI m chord bearing. r a 10.0 psf bottom th any other live load or a live load of 20.0p where a rectangle fit between the bottor | 8) Provide r bearing p and 3 lb (9) This truss Internatic R802.10. LOAD CASE | nechanical connectio late capable of withs uplift at joint 3. is is designed in acco nal Residential Code 2 and referenced sta (S) Standard | rdance w e sections andard AN | ers) of truss tu Ib uplift at joi ith the 2015 R502.11.1 a ISI/TPI 1. | o int 1 nd | | | | SEA 0363 | L 22 L 11,2023 |
| | | | | | | | | | | | | |

ENGINEERING BY EREPACIO A MITEK Affiliate 818 Soundside Road Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | |
|--------|-------|------------|-----|-----|--------------------------|-----------|
| 34893A | V21 | Valley | 1 | 1 | Job Reference (optional) | 156132000 |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:18 ID:7F8iuOyU0jLWh0YVWmvOLay6LGH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





3-3-1

2x4 🎣

2x4 💊

Scale = 1:23.5

Plate Offsets (X, Y): [2:0-3-0,Edge]

| | | - | | | | | | | | | | | |
|------------------------------------|-------------------------|--------------------------|------------------------------|----------------------|-----------|-----------------|-------|-------|--------|------|---------------------------|----------|---|
| oading | (nsf) | Spacing | 2-0-0 | CSI | | DEEL | in | (loc) | l/defl | l /d | PLATES | GRIP | |
| TCLL (roof) | 20.0 | Plate Grip DOI | 1 15 | TC | 0 13 | Vert(LL) | n/a | (100) | n/a | 999 | MT20 | 244/190 | |
| | 10.0 | Lumber DOI | 1 15 | BC | 0.11 | Vert(TL) | n/a | - | n/a | 999 | | 210,000 | |
| BCLI | 0.0* | Rep Stress Incr | YES | WB | 0.00 | Horiz(TL) | 0.00 | 3 | n/a | n/a | | | |
| BCDI | 10.0 | Code | IRC2015/TPI2014 | Matrix-MP | 0.00 | | 0.00 | 0 | | | Weight [.] 10 lb | FT = 20% | |
| 5052 | | 0000 | | | | - | | | | | troight to is | 2070 | |
| LUMBER | | | Provide me | echanical connectio | n (by oth | ers) of truss t | 0 | | | | | | |
| TOP CHORD | 2x4 SP No.3 | | bearing pla | ate capable of withs | tanding 2 | lb uplift at jo | int 1 | | | | | | |
| BOT CHORD | 2x4 SP No.3 | | and 2 lb up | olift at joint 3. | | | | | | | | | |
| BRACING | | | 9) This truss | is designed in accor | rdance w | ith the 2015 | | | | | | | |
| TOP CHORD | Structural wood sh | eathing directly applie | d or Internation | al Residential Code | sections | R502.11.1 a | nd | | | | | | |
| | 3-3-1 oc purlins. | | R802.10.2 | and referenced sta | ndard AN | 151/TPL1. | | | | | | | |
| BOT CHORD | Rigid ceiling direct | ly applied or 10-0-0 oc | ; LOAD CASE(| 5) Standard | | | | | | | | | |
| | bracing. | | | | | | | | | | | | |
| REACTIONS | (size) 1=3-3-1 | , 3=3-3-1 | | | | | | | | | | | |
| | Max Horiz 1=-23 (L | _C 10) | | | | | | | | | | | |
| | Max Uplift 1=-2 (LC | C 12), 3=-2 (LC 13) | | | | | | | | | | | |
| | Max Grav 1=130 (| LC 1), 3=130 (LC 1) | | | | | | | | | | | |
| FORCES | (lb) - Maximum Co | mpression/Maximum | | | | | | | | | | | |
| | Tension | | | | | | | | | | | | |
| | 0 1-2=-170/21, 2-3≕ | -170/21 | | | | | | | | | | | |
| BOICHORL | 1-3=-10/127 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | |
| 1) Unbaland | ced roof live loads hav | e been considered for | | | | | | | | | | | |
| this desig | jn. | | | | | | | | | | | | |
| 2) Wind: AS | CE 7-10; Vult=115mp | on (3-second gust) | No. | | | | | | | | | | |
| | Enclosed: MW/EBS (| CDL=0.0psi, n=30ii, C | /al. | | | | | | | | | | |
| and C-C | Enclosed, MWERS (| tilever left and right | e | | | | | | | | | 1111 | |
| exposed | end vertical left and | right exposed C-C for | | | | | | | | 13 | IN THUA | ROUL | |
| members | and forces & MWFR | S for reactions shown: | | | | | | | | 15 | A | De lat | 6 |
| Lumber [| DOL=1.60 plate grip D | OL=1.60 | | | | | | | | 11 | | Di | 1 |
| 3) Truss de | signed for wind loads | in the plane of the tru | SS | | | | | | 1 | | 19 10 | Va. | 1 |
| only. Fo | r studs exposed to wir | nd (normal to the face) | , | | | | | | - | | . 4 | × : | - |
| see Stan | dard Industry Gable E | ind Details as applicab | ole, | | | | | | = | 1 | SEA | L 🗄 | Ξ |
| or consul | t qualified building de | signer as per ANSI/TP | 11. | | | | | | = | | 0000 | | |
| Gable red | quires continuous bott | om chord bearing. | | | | | | | 1 | | 0363 | 22 : | - |
| 5) Gable stu | uds spaced at 2-0-0 or | C. | | | | | | | - | 8 | | | 2 |
| b) This trust about 1 | s has been designed f | or a 10.0 pst bottom | | | | | | | | 2 | · | a.i. | 3 |
| cnora live | e load nonconcurrent | with any other live load | 15. nof | | | | | | | 3.5 | NGINI | FERIA | 5 |
| on the bo | ss has been designed | s where a rectangle | hai | | | | | | | 11, | 710 | - AFT | |
| 3-06-00 t | all by 1-00-00 wide wi | Il fit between the botto | m | | | | | | | | IL A G | ILD | |
| chord an | d any other members | | | | | | | | | | 1111111 | 11111 | |
| 0.1014 011 | | | | | | | | | | | lanuary | 17 2023 | |
| | | | | | | | | | | | January | 17,2020 | |



| Job | Truss | Truss Type | Qty | Ply | 5 SERENITY | | | | |
|--------|-------|------------|-----|-----|--------------------------|-----------|--|--|--|
| 34893A | V22 | Valley | 1 | 1 | Job Reference (optional) | 156132001 | | | |

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Fri Jan 13 10:17:18 ID:??TEpGWXYMWfaMbCIDhZony6LBg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

7-9-12

Page: 1





Scale = 1:24.9

| Loading TCLL (roof) TCDL BCLL BCDL | (psf) 20.0 10.0 0.0* 10.0 | Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code | 2-0-0 1.15 1.15 YES IRC201 | 5/TPI2014 | CSI TC BC WB Matrix-MP | 0.29 0.19 0.07 | DEFL Vert(LL) Vert(TL) Horiz(TL) | in n/a n/a 0.00 | (loc) - - 4 | l/defl n/a n/a n/a | L/d 999 999 n/a | PLATES MT20 Weight: 25 lb | GRIP 244/190 FT = 20% | |
|--|---|---|--|--|--|--|---|--------------------------|----------------------|-----------------------------|--------------------------|--|------------------------------------|--|
| LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS | 2x4 SP No.3 2x4 SP No.2 2x4 SP No.3 Structural wood she 7-9-12 oc purlins. Rigid ceiling directly bracing. (size) 1=7-9-12, Max Horiz 1=-24 (LC Max Uplift 1=-5 (LC (LC 12) Max Grav 1=80 (LC (LC 1)) | athing directly applie applied or 6-0-0 oc 3=7-9-12, 4=7-9-12 13) 12), 3=-10 (LC 13), 4 23), 3=80 (LC 24), 4 | 7) 8) ed or 9) | * This truss h on the botton 3-06-00 tall b chord and an Provide mecl bearing plate 1, 10 lb uplift This truss is of International R802.10.2 ar OAD CASE(S) | as been designe n chord in all are: by 1-00-00 wide w by other members hanical connection a capable of withs a t joint 3 and 8 II designed in acco Residential Code nd referenced sta Standard | d for a liv as where vill fit betw s. on (by oth- itanding 5 b uplift at rdance wi e sections undard AN | e load of 20.0 a rectangle veen the bottc ers) of truss tr lb uplift at joi joint 4. ith the 2015 R502.11.1 ar ISI/TPI 1. | ipsf om nt nd | | | | | | |
| FORCES TOP CHORD BOT CHORD WEBS NOTES 1) Unbalance this design | (lb) - Maximum Com Tension 1-2=-86/246, 2-3=-8 1-4=-195/95, 3-4=-1 2-4=-354/117 ed roof live loads have | pression/Maximum 6/246 95/95 been considered fo | r | | | | | | | | | | | |
| | | (0 () | | | | | | | | | | ALL DE LE DE | 111, | |

- 2) Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 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) 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 2-0-0 oc. 6)

This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. Vanannon WILLING THE SEAL 036322 GI munin January 17,2023



