

RE: 4600445

BONNET FLOOR - LOT 26 - ILA'S WAY

Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: 4600445

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

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.8

Wind Code: Wind Speed: 120 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 13 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|
| 1 | I71640883 | F01 | 2/25/2025 |
| 2 | I71640884 | F02 | 2/25/2025 |
| 3 | I71640885 | F03 | 2/25/2025 |
| 4 | I71640886 | F04 | 2/25/2025 |
| 5 | 171640887 | F05 | 2/25/2025 |
| 6 | I71640888 | F06 | 2/25/2025 |
| 7 | I71640889 | F07 | 2/25/2025 |
| 8 | I71640890 | F08 | 2/25/2025 |
| 9 | I71640891 | F09 | 2/25/2025 |
| 10 | I71640892 | F09G | 2/25/2025 |
| 11 | I71640893 | F10 | 2/25/2025 |
| 12 | I71640894 | F11 | 2/25/2025 |
| 13 | 171640895 | F12 | 2/25/2025 |

The truss drawing(s) referenced above have been prepared by

Truss Engineering Co. under my direct supervision

based on the parameters provided by Builders FirstSource (Albermarle, NC).

Truss Design Engineer's Name: Gagan, Iqbal

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844

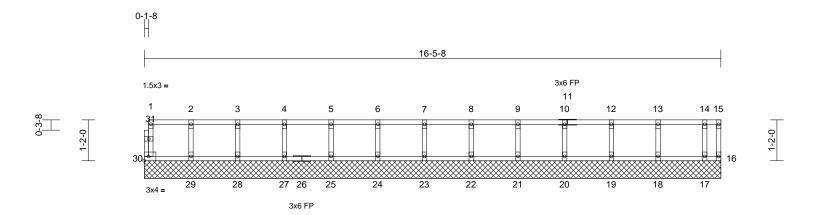
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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



| Job | Truss | Truss Type | Qty | Ply | BONNET FLOOR - LOT 26 - ILA'S WAY | |
|---------|-------|-----------------------|-----|-----|-----------------------------------|-----------|
| 4600445 | F01 | Floor Supported Gable | 1 | 1 | Job Reference (optional) | I71640883 |

Run: 8.83 S. Feb 18 2025 Print: 8.830 S. Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:37 ID:fOITtuprVzhw5LScXsjJ0?zz23O-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:32.9

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|-----------|------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horiz(TL) | 0.00 | 16 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 69 lb | FT = 20%F, 11%E |

LUMBER

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

BRACING

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

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

bracing.

REACTIONS (size)

16=16-5-8, 17=16-5-8, 18=16-5-8, 19=16-5-8, 20=16-5-8, 21=16-5-8, 22=16-5-8, 23=16-5-8, 24=16-5-8, 25=16-5-8, 27=16-5-8, 28=16-5-8, 29=16-5-8, 30=16-5-8

Max Grav 16=7 (LC 1), 17=105 (LC 1), 18=153 (LC 1), 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1),

24=147 (LC 1), 25=147 (LC 1), 27=147 (LC 1), 28=146 (LC 1), 29=149 (LC 1), 30=51 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-30=-48/0, 15-16=0/0, 1-2=-5/0, 2-3=-5/0, 3-4=-5/0, 4-5=-5/0, 5-6=-5/0, 6-7=-5/0, 7-8=-5/0, 8-9=-5/0, 9-10=-5/0, 10-12=-5/0,

12-13=-5/0, 13-14=-5/0, 14-15=-5/0 BOT CHORD 29-30=0/5, 28-29=0/5, 27-28=0/5, 25-27=0/5,

24-25=0/5, 23-24=0/5, 22-23=0/5, 21-22=0/5,

20-21=0/5, 19-20=0/5, 18-19=0/5, 17-18=0/5,

12-19=-132/0, 13-18=-138/0, 14-17=-102/0

16-17=0/5

WEBS 2-29=-133/0, 3-28=-134/0, 4-27=-133/0, 5-25=-133/0, 6-24=-133/0, 7-23=-133/0, 8-22=-133/0. 9-21=-133/0. 10-20=-134/0.

All plates are 1.5x3 (||) MT20 unless otherwise 1)

NOTES

- indicated
- Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard





WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Job Truss Truss Type Qty Ply BONNET FLOOR - LOT 26 - ILA'S WAY 171640884 4600445 F02 Floor 1 11 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:38 ID:Cque4Q1Bj?Qbitg0xa1?clzz21p-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1

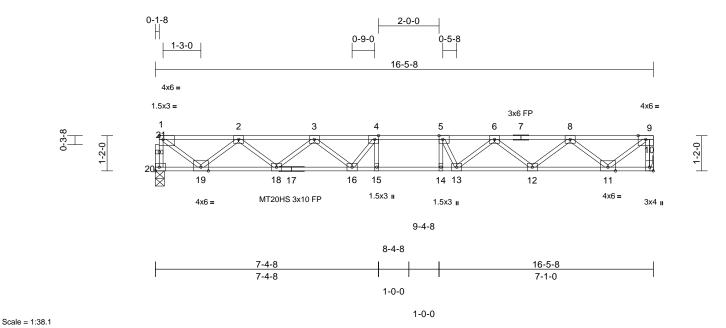


Plate Offsets (X, Y): [1:Edge,0-1-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [10:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.51 | Vert(LL) | -0.22 | 14-15 | >868 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.91 | Vert(CT) | -0.31 | 14-15 | >631 | 240 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.61 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 83 lb | FT = 20%F, 11%E |

LOAD CASE(S) Standard

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) *Except* 17-10:2x4 SP BOT CHORD

No.1(flat)

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

BRACING

LUMBER

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals.

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

bracing

REACTIONS (size) 10= Mechanical, 20=0-3-8

Max Grav 10=891 (LC 1), 20=885 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-20=-880/0, 9-10=-884/0, 1-2=-1030/0, 2-3=-2494/0, 3-4=-3282/0, 4-5=-3425/0,

5-6=-3299/0, 6-8=-2492/0, 8-9=-1029/0

BOT CHORD 19-20=0/53, 18-19=0/1936, 16-18=0/3020 15-16=0/3425, 14-15=0/3425, 13-14=0/3425,

12-13=0/3012, 11-12=0/1940, 10-11=0/0

4-15=-206/195. 5-14=-232/307. 1-19=0/1248. 2-19=-1180/0. 2-18=0/726. 3-18=-686/0.

3-16=0/465, 4-16=-498/89, 9-11=0/1290,

8-11=-1187/0, 8-12=0/718, 6-12=-676/0,

6-13=0/511, 5-13=-582/116

NOTES

WEBS

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are MT20 plates unless otherwise indicated. All plates are 3x4 (=) MT20 unless otherwise indicated.
- 4) Bearings are assumed to be: Joint 20 SP No.2. Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.



February 25,2025

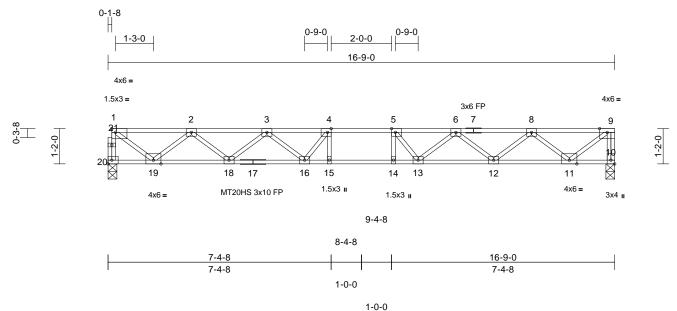


Ply Job Truss Truss Type Qty BONNET FLOOR - LOT 26 - ILA'S WAY I71640885 4600445 F03 Floor 4 1 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:38 ID:CNyVD2SWiSimn5GYxjez?Tzz21H-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:38.1

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

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.49 | Vert(LL) | -0.24 | 14-15 | >838 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.90 | Vert(CT) | -0.33 | 14-15 | >607 | 240 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.63 | Horz(CT) | 0.06 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 84 lb | FT = 20%F, 11%E |

LOAD CASE(S) Standard

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) *Except* 17-10:2x4 SP BOT CHORD

No.1(flat)

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

BRACING

FORCES

LUMBER

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals.

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

bracing

REACTIONS (size) 10=0-3-8, 20=0-3-8

Max Grav 10=907 (LC 1), 20=901 (LC 1) (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-20=-896/0, 9-10=-900/0, 1-2=-1051/0,

2-3=-2553/0, 3-4=-3380/0, 4-5=-3553/0, 5-6=-3381/0, 6-8=-2554/0, 8-9=-1049/0

BOT CHORD 19-20=0/54, 18-19=0/1977, 16-18=0/3097,

15-16=0/3553, 14-15=0/3553, 13-14=0/3553,

12-13=0/3097, 11-12=0/1979, 10-11=0/0

4-15=-195/223, 5-14=-196/223, 1-19=0/1273,

2-19=-1205/0, 2-18=0/750, 3-18=-708/0, 3-16=0/491, 4-16=-544/71, 9-11=0/1316,

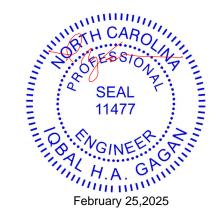
8-11=-1211/0, 8-12=0/748, 6-12=-707/0,

6-13=0/491, 5-13=-544/72

NOTES

WEBS

- Unbalanced floor live loads have been considered for 1) this design.
- All plates are MT20 plates unless otherwise indicated. All plates are 3x4 (=) MT20 unless otherwise indicated.
- 4) Bearings are assumed to be: Joint 20 SP No.2, Joint 10
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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

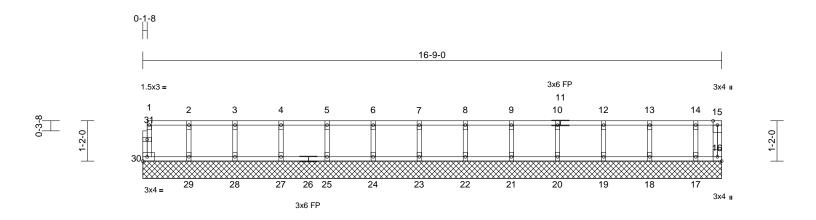
a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



| Job | Truss | Truss Type | Qty | Ply | BONNET FLOOR - LOT 26 - ILA'S WAY | |
|---------|-------|-----------------------|-----|-----|-----------------------------------|-----------|
| 4600445 | F04 | Floor Supported Gable | 1 | 1 | Job Reference (optional) | I71640886 |

Run: 8.83 S. Feb 18 2025 Print: 8.830 S. Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:38 ID:Djae27TrhZPiU9GuQ3gvxOzz2?y-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:33.3

Plate Offsets (X, Y): [16:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defI | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|-----------|------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horiz(TL) | 0.00 | 16 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 71 lb | FT = 20%F, 11%E |

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or

6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 16=16-9-0, 17=16-9-0, 18=16-9-0, 19=16-9-0, 20=16-9-0, 21=16-9-0,

22=16-9-0, 23=16-9-0, 24=16-9-0, 25=16-9-0, 27=16-9-0, 28=16-9-0, 29=16-9-0, 30=16-9-0

Max Grav 16=27 (LC 1), 17=110 (LC 1), 18=153 (LC 1), 19=145 (LC 1),

20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 24=147 (LC 1), 25=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=148 (LC 1), 30=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-30=-49/0, 15-16=-20/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-12=-6/0,

12-13=-6/0, 13-14=-6/0, 14-15=-6/0

BOT CHORD 29-30=0/6, 28-29=0/6, 27-28=0/6, 25-27=0/6,

24-25=0/6, 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6,

16-17=0/6

WEBS 2-29=-132/0, 3-28=-134/0, 4-27=-133/0,

5-25=-133/0, 6-24=-133/0, 7-23=-133/0, 8-22=-133/0, 9-21=-133/0, 10-20=-134/0,

12-19=-132/0, 13-18=-139/0, 14-17=-105/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2 . 5)
- Recommend 2x6 strongbacks, on edge, spaced at 6) 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

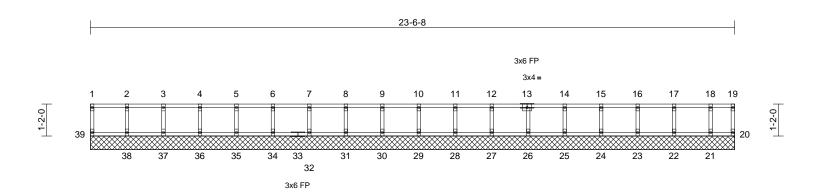


February 25,2025



| Job | Truss | Truss Type | Qty | Ply | BONNET FLOOR - LOT 26 - ILA'S WAY | |
|---------|-------|-----------------------|-----|-----|-----------------------------------|-----------|
| 4600445 | F05 | Floor Supported Gable | 1 | 1 | Job Reference (optional) | 171640887 |

Run: 8.83 S. Feb 18 2025 Print: 8.830 S. Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:38 ID:ONoeVV035O4KN4CXY0_SGtzz2?F-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:42.1

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|-----------|------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horiz(TL) | 0.00 | 20 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 96 lb | FT = 20%F, 11%E |

| LONDLIN | |
|-----------|-------------------|
| TOP CHORD | 2x4 SP No.2(flat) |
| BOT CHORD | 2x4 SP No.2(flat) |
| WEBS | 2x4 SP No.3(flat) |
| | C 10.0(nat) |

2x4 SP No.3(flat) OTHERS BRACING

TOP CHORD

LUMBER

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

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

bracing.

REACTIONS (size)

20=23-6-8, 21=23-6-8, 22=23-6-8, 23=23-6-8, 24=23-6-8, 25=23-6-8, 26=23-6-8, 27=23-6-8, 28=23-6-8, 29=23-6-8, 30=23-6-8, 31=23-6-8, 32=23-6-8, 34=23-6-8, 35=23-6-8, 36=23-6-8, 37=23-6-8, 38=23-6-8, 39=23-6-8

Max Grav 20=32 (LC 1), 21=127 (LC 1), 22=151 (LC 1), 23=146 (LC 1), 24=146 (LC 1), 25=150 (LC 1), 26=147 (LC 1), 27=143 (LC 1), 28=148 (LC 1), 29=146 (LC 1), 30=147 (LC 1), 31=147 (LC 1),

32=147 (LC 1), 34=147 (LC 1), 35=147 (LC 1), 36=147 (LC 1), 37=146 (LC 1), 38=151 (LC 1), 39=63 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-39=-56/0, 19-20=-28/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0,

7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 12-14=-8/0, 14-15=-2/0, 15-16=-2/0, 16-17=-2/0, 17-18=-2/0,

18-19=-2/0

BOT CHORD 38-39=0/8, 37-38=0/8, 36-37=0/8, 35-36=0/8,

34-35=0/8, 32-34=0/8, 31-32=0/8, 30-31=0/8, 29-30=0/8, 28-29=0/8, 27-28=0/8, 26-27=0/8,

25-26=0/2, 24-25=0/2, 23-24=0/2, 22-23=0/2, 21-22=0/2, 20-21=0/2

WEBS 2-38=-139/0, 3-37=-132/0, 4-36=-134/0,

5-35=-133/0, 6-34=-133/0, 7-32=-133/0, 8-31=-133/0, 9-30=-133/0, 10-29=-133/0, 11-28=-134/0, 12-27=-130/0, 13-26=-134/0,

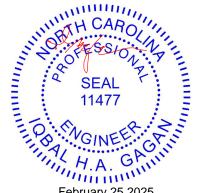
14-25=-137/0, 15-24=-133/0, 16-23=-133/0,

17-22=-137/0, 18-21=-116/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise 1) indicated
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely 3) braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2 .
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



February 25,2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

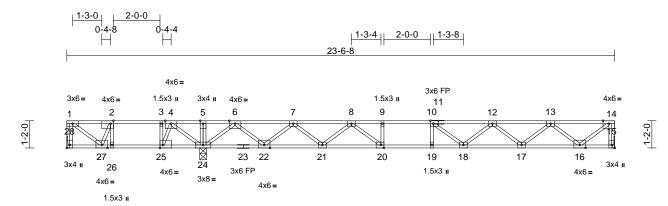


Ply Job Truss Truss Type Qty BONNET FLOOR - LOT 26 - ILA'S WAY I71640888 4600445 F06 Floor 7 1 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:38 ID:ltfOhrUXvN?oZ3h1KjBcL5zz2_e-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



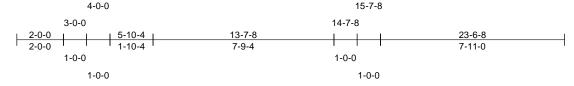


Plate Offsets (X, Y): [2:0-1-8,Edge], [10:0-1-8,Edge], [15:Edge,0-1-8], [20:0-1-8,Edge], [25:0-1-8,Edge], [28:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|----------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.93 | Vert(LL) | -0.27 | 18-19 | >778 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.87 | Vert(CT) | -0.37 | 18-19 | >569 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.05 | 15 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 119 lb | FT = 20%F, 11%E |

LUMBER

Scale = 1:49.5

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) *Except* 23-15:2x4 SP BOT CHORD

2400F 2.0E or 2x4 SP DSS or 2x4 SP SS

(flat)

WEBS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or

2-2-0 oc purlins, except end verticals.

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

bracing, Except:

6-0-0 oc bracing: 26-27,25-26,24-25. REACTIONS (size) 15= Mechanical, 24=0-3-8, 28=

Mechanical Max Uplift 28=-115 (LC 4)

15=904 (LC 7), 24=1551 (LC 1), Max Grav

28=256 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-28=-252/112, 14-15=-897/0, 1-2=-221/231,

2-3=-245/439, 3-4=-245/439, 4-5=0/1191, 5-6=0/1191, 6-7=-1157/0, 7-8=-2572/0, 8-9=-3507/0, 9-10=-3507/0, 10-12=-3338/0,

12-13=-2545/0, 13-14=-1042/0

BOT CHORD 27-28=0/0, 26-27=-439/245, 25-26=-439/245,

24-25=-696/97, 22-24=0/234, 21-22=0/2028, 20-21=0/3120, 19-20=0/3507, 18-19=0/3507,

17-18=0/3101, 16-17=0/1964, 15-16=0/0

2-26=-429/0, 3-25=-636/0, 5-24=-156/0,

9-20=-279/0, 10-19=-197/102, 4-24=-795/0,

4-25=0/896, 6-24=-1603/0, 6-22=0/1216,

7-22=-1150/0, 7-21=0/721, 8-21=-732/0,

8-20=0/742, 1-27=-289/277, 2-27=-63/539,

14-16=0/1308, 13-16=-1200/0, 13-17=0/756 12-17=-724/0, 12-18=0/407, 10-18=-476/102

NOTES

WEBS

Unbalanced floor live loads have been considered for this design.

- All plates are 3x4 (=) MT20 unless otherwise indicated.
- 3) Bearings are assumed to be: , Joint 24 SP No.2 .
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 115 lb uplift at joint 28.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

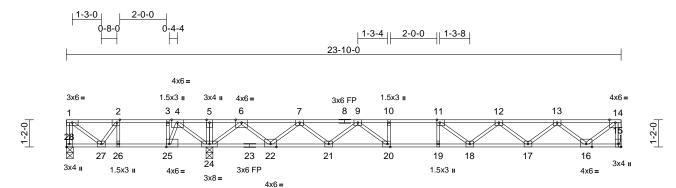


JobTrussTruss TypeQtyPlyBONNET FLOOR - LOT 26 - ILA'S WAY4600445F07Floor11Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:39 ID:idQHxbY5Q6ySVRrixUE?NSzz1zH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



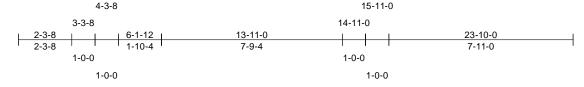


Plate Offsets (X, Y): [2:0-1-8,Edge], [11:0-1-8,Edge], [15:Edge,0-1-8], [20:0-1-8,Edge], [25:0-1-8,Edge], [28:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|----------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.94 | Vert(LL) | -0.27 | 18-19 | >776 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.86 | Vert(CT) | -0.37 | 18-19 | >568 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.05 | 15 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 120 lb | FT = 20%F, 11%E |

LUMBER

Scale = 1:49.5

TOP CHORD 2x4 SP No.2(flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 SP

2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (flat)

2x4 SP No.3(flat)

WEBS
BRACING
TOP CHORD

D Structural wood sheathing directly applied or

2-2-0 oc purlins, except end verticals.

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

bracing, Except:

6-0-0 oc bracing: 26-27,25-26,24-25. **REACTIONS** (size) 15= Mechanical, 24=0-3-8,

28=0-3-8

Max Uplift 28=-102 (LC 4)

Max Grav 15=906 (LC 7), 24=1550 (LC 1),

28=284 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-28=-282/94, 14-15=-899/0, 1-2=-243/199,

2-3=-312/452, 3-4=-312/452, 4-5=0/1192, 5-6=0/1192, 6-7=-1185/0, 7-9=-2595/0, 9-10=-3523/0, 10-11=-3523/0, 11-12=-3350/0,

12-13=-2552/0, 13-14=-1045/0

BOT CHORD 27-28=0/0, 26-27=-452/312, 25-26=-452/312,

24-25=-710/156, 22-24=0/263, 21-22=0/2054, 20-21=0/3141, 19-20=0/3523, 18-19=0/3523, 17-18=0/3110, 16-17=0/1969, 15-16=0/0

WEBS 2-26=-308/0, 3-25=-646/0, 5-24=-157/0,

10-20=276/0, 11-19=-194/104, 4-24=-801/0, 4-25=0/912, 6-24=-1604/0, 6-22=0/1217, 7-22=-1150/0, 7-21=0/721, 9-21=-732/0, 9-20=0/735, 1-27=-250/305, 2-27=-121/441, 41-16=0/1311, 13-16=-1203/0, 13-17=0/759, 12-17=-727/0, 12-18=0/411, 11-18=-483/94

- 1) Unbalanced floor live loads have been considered for
- this design.
 2) All plates are 3x4 (=) MT20 unless otherwise indicated.
- Bearings are assumed to be: Joint 28 SP No.2, Joint 24 SP No.2.
- 4) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 102 lb uplift at joint 28.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



NOTES

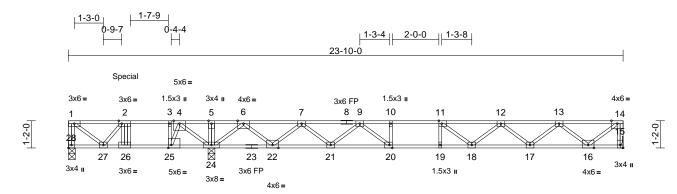


Ply Job Truss Truss Type Qty BONNET FLOOR - LOT 26 - ILA'S WAY I71640890 4600445 F08 Floor Girder 1 1 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:39 ID:idQHxbY5Q6ySVRrlxUE?NSzz1zH-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

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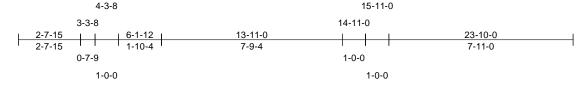


Plate Offsets (X, Y): [2:0-1-8,Edge], [11:0-1-8,Edge], [15:Edge,0-1-8], [20:0-1-8,Edge], [25:0-1-8,Edge], [28:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|----------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.90 | Vert(LL) | -0.27 | 18-19 | >783 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.93 | Vert(CT) | -0.37 | 18-19 | >574 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.62 | Horz(CT) | 0.05 | 15 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 123 lb | FT = 20%F, 11%E |

LUMBER

Scale = 1:49.5

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

(flat)

BOT CHORD 2x4 SP No.2(flat) *Except* 23-15:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-0-0 oc bracing: 26-27,24-25

2-2-0 oc bracing: 25-26.

REACTIONS (size) 15= Mechanical, 24=0-3-8, 28=0-3-8

Max Uplift 28=-130 (LC 4)

15=903 (LC 7), 24=1599 (LC 8), Max Grav

28=317 (LC 10)

FORCES (lb) - Maximum Compression/Maximum

Tension

1-28=-323/119, 14-15=-897/0, 1-2=-264/233, 2-3=-363/552, 3-4=-363/552, 4-5=0/1264, 5-6=0/1264, 6-7=-1151/0, 7-9=-2565/0,

9-10=-3503/0, 10-11=-3503/0, 11-12=-3335/0,

12-13=-2543/0, 13-14=-1042/0

BOT CHORD

TOP CHORD

27-28=0/0, 26-27=-543/367, 25-26=-552/363, 24-25=-835/194, 22-24=0/224, 21-22=0/2023, 20-21=0/3114. 19-20=0/3503. 18-19=0/3503. 17-18=0/3099. 16-17=0/1963. 15-16=0/0

WEBS

2-26=-307/0, 3-25=-744/0, 5-24=-160/0, 10-20=-275/0. 11-19=-190/103. 4-24=-861/0. 4-25=0/1057, 6-24=-1618/0, 6-22=0/1224, 7-22=-1155/0, 7-21=0/725, 9-21=-738/0, 9-20=0/728, 1-27=-292/331, 2-27=-155/464, 14-16=0/1307, 13-16=-1199/0, 13-17=0/755, 12-17=-724/0, 12-18=0/409, 11-18=-480/86

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- All plates are 3x4 (=) MT20 unless otherwise indicated
- 3) Bearings are assumed to be: Joint 28 SP No.2, Joint 24 SP No.2
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 28
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 116 lb down at 2-5-11 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 15-28=-10. 1-14=-100 Concentrated Loads (lb)

Vert: 2=-36 (B)



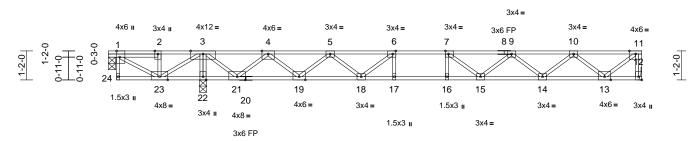
Job Truss Truss Type Qty BONNET FLOOR - LOT 26 - ILA'S WAY 171640891 4600445 F09 Floor 1 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries. Inc. Tue Feb 25 14:20:39 ID:3SzZaN8j4jqT4QuQWAsE8Xzha8D-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1







Scale = 1:46.4 Plate Offsets (X, Y): [1:0-3-0,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge], [12:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defI | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|----------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.75 | Vert(LL) | -0.24 | 15-16 | >867 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.73 | Vert(CT) | -0.33 | 15-16 | >631 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.76 | Horz(CT) | 0.02 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 110 lb | FT = 20%F, 11%E |

LUMBER

TOP CHORD 2x4 SP No.2(flat)

2x4 SP No.2(flat) *Except* 20-12:2x4 SP BOT CHORD

2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (flat)

2x4 SP No.3(flat)

WEBS BRACING

TOP CHORD Structural wood sheathing directly applied or

5-6-0 oc purlins, except end verticals.

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

bracing, Except:

6-0-0 oc bracing: 22-23,21-22,19-21.

REACTIONS 1=0-3-8, 12= Mechanical, 22=0-3-8 (size)

Max Uplift 1=-697 (LC 4)

1=-20 (LC 3), 12=820 (LC 4), Max Grav

22=2052 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-24=0/9, 11-12=-814/0, 1-2=0/1166,

2-3=0/1165, 3-4=0/1126, 4-5=-864/0,

5-6=-2160/0, 6-7=-2814/0, 7-9=-2828/0,

9-10=-2235/0, 10-11=-932/0

BOT CHORD 23-24=0/0, 22-23=-2379/0, 21-22=-2396/0,

19-21=-95/49, 18-19=0/1645, 17-18=0/2814,

16-17=0/2814, 15-16=0/2814, 14-15=0/2702,

13-14=0/1752. 12-13=0/0

WFBS 3-22=-2005/0, 6-17=-7/302, 7-16=-267/40,

2-23=-205/0, 1-23=-1351/0, 3-23=0/1564, 3-21=0/1596, 4-21=-1501/0, 4-19=0/1085, 5-19=-1020/0, 5-18=0/670, 6-18=-883/0, 11-13=0/1170, 10-13=-1067/0, 10-14=0/630,

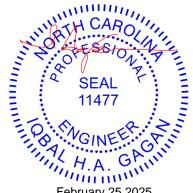
9-14=-607/0, 9-15=0/279, 7-15=-283/221

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- Bearings are assumed to be: Joint 1 SP No.2, Joint 22
- Refer to girder(s) for truss to truss connections.

- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 697 lb uplift at joint
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in. CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



February 25,2025

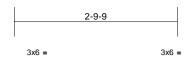
Job Truss Truss Type Qty Ply BONNET FLOOR - LOT 26 - ILA'S WAY 171640892 4600445 F09G Floor Girder 1 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

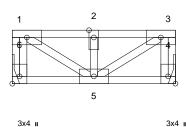
Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 ID:YeXxoj9Lr0zKhaTc4tNTglzha8C-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1





2x4 II



3x6 =

Scale = 1:19.8

Plate Offsets (X, Y): [4:Edge,0-1-8], [6:Edge,0-1-8]

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|----------|------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.27 | Vert(LL) | 0.00 | 5 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.05 | Vert(CT) | 0.00 | 5 | >999 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.30 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-P | | | | | | | Weight: 17 lb | FT = 20%F, 11%E |

Concentrated Loads (lb)

Vert: 2=174

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-9-9 oc purlins, except end verticals.

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

bracing.

REACTIONS 4= Mechanical, 6= Mechanical

Max Uplift 4=-258 (LC 3), 6=-258 (LC 3) Max Grav 4=53 (LC 1), 6=53 (LC 1) (lb) - Maximum Compression/Maximum

Tension

TOP CHORD 1-6=-48/258, 3-4=-48/258, 1-2=-1/482,

2-3=-1/482 BOT CHORD 5-6=0/0, 4-5=0/0

WEBS 2-5=0/626, 3-5=-568/1, 1-5=-568/1

NOTES

FORCES

- Unbalanced floor live loads have been considered for 1) this design.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 258 lb uplift at joint 6 and 258 lb uplift at joint 4.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 797 lb up at 1-5-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00 Uniform Loads (lb/ft) Vert: 4-6=-10, 1-3=-100



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)

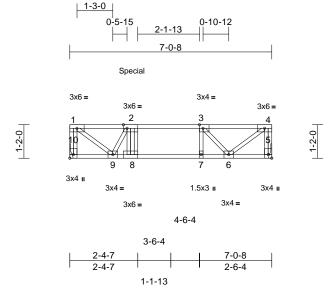


Job Truss Truss Type Qty Ply BONNET FLOOR - LOT 26 - ILA'S WAY 171640893 4600445 F10 Floor Girder 1 1 Job Reference (optional)

Builders FirstSource (Albermarle), Albemarle, NC - 28001,

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 ID:bCE4UOCbT?uebuYJfXkv52zz1yQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



1-0-0 Scale = 1:40.2

| - | | | | | | | | | | | | |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|-----------------|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defI | L/d | PLATES | GRIP |
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.56 | Vert(LL) | -0.06 | 6-7 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.81 | Vert(CT) | -0.08 | 6-7 | >999 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.22 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | | | | | | Weight: 40 lb | FT = 20%F, 11%E |

LUMBER

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

BRACING

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

bracing.

REACTIONS 5= Mechanical, 10= Mechanical (size) Max Grav 5=360 (LC 1), 10=365 (LC 3)

FORCES (lb) - Maximum Compression/Maximum

Tension TOP CHORD

1-10=-361/0, 4-5=-357/0, 1-2=-367/0, 2-3=-535/0, 3-4=-341/0

BOT CHORD 9-10=0/0, 8-9=0/532, 7-8=0/535, 6-7=0/535,

WEBS 2-8=-50/293, 3-7=-198/74, 1-9=0/460,

2-9=-365/0, 4-6=0/428, 3-6=-327/0

NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 33 lb down and 358 lb up at 2-2-3 on top chord. The design/ selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 5-10=-10, 1-4=-100 Concentrated Loads (lb) Vert: 2=47 (F)

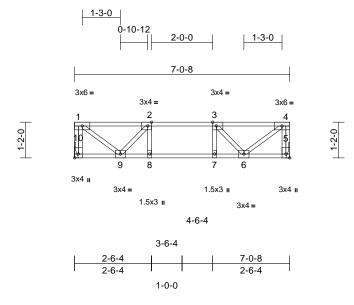
> THIN TOTAL February 25,2025



| Job | Truss | Truss Type | Qty | Ply | BONNET FLOOR - LOT 26 - ILA'S WAY | |
|---------|-------|------------|-----|-----|-----------------------------------|-----------|
| 4600445 | F11 | Floor | 2 | 1 | Job Reference (optional) | I71640894 |

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 ID:bCE4UOCbT?uebuYJfXkv52zz1yQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



1-0-0 Scale = 1:37.7

| - | | | | | | | | | | | | |
|---------|-------|-----------------|-----------------|----------|------|----------|-------|-------|--------|-----|---------------|-----------------|
| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | I/defI | L/d | PLATES | GRIP |
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.34 | Vert(LL) | -0.03 | 8 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.35 | Vert(CT) | -0.03 | 8 | >999 | 240 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.21 | Horz(CT) | 0.00 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-S | | , , | | | | | Weight: 38 lb | FT = 20%F, 11%E |

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. **BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc

bracing.

REACTIONS (size) 5= Mechanical, 10= Mechanical Max Grav 5=374 (LC 1), 10=374 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-10=-366/0, 4-5=-366/0, 1-2=-357/0,

2-3=-596/0, 3-4=-357/0

BOT CHORD 9-10=0/0, 8-9=0/596, 7-8=0/596, 6-7=0/596,

> 2-8=-56/90, 3-7=-56/90, 1-9=0/448, 2-9=-353/0, 4-6=0/448, 3-6=-353/0

WEBS NOTES

- Unbalanced floor live loads have been considered for 1) this design.
- Refer to girder(s) for truss to truss connections.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

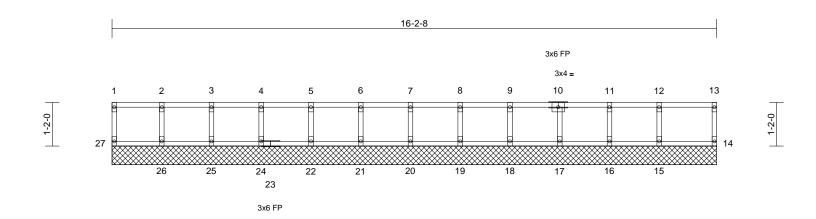




| Job | Truss | Truss Type | Qty | Ply | BONNET FLOOR - LOT 26 - ILA'S WAY | |
|---------|-------|-----------------------|-----|-----|-----------------------------------|-----------|
| 4600445 | F12 | Floor Supported Gable | 1 | 1 | Job Reference (optional) | 171640895 |

Run: 8.83 S Feb 18 2025 Print: 8.830 S Feb 18 2025 MiTek Industries, Inc. Tue Feb 25 14:20:40 ID:YCWOJyTrzy_u4tVJINbIJ_zz1wo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:30.9

| Loading | (psf) | Spacing | 2-0-0 | CSI | | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---------|-------|-----------------|-----------------|----------|------|-----------|------|-------|--------|-----|---------------|-----------------|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.10 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.03 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horiz(TL) | 0.00 | 14 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2015/TPI2014 | Matrix-R | | | | | | | Weight: 66 lb | FT = 20%F, 11%E |

LUMBER

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

BRACING

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

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

bracing.

REACTIONS (size) 14=16-2-8, 15=16-2-8, 16=16-2-8, 17=16-2-8, 18=16-2-8, 19=16-2-8, 20=16-2-8, 21=16-2-8, 22=16-2-8, 24=16-2-8, 25=16-2-8, 26=16-2-8, 27=16-2-8 Max Grav 14=73 (LC 1), 15=167 (LC 1), 16=144 (LC 1), 17=148 (LC 1),

18=143 (LC 1), 19=147 (LC 1), 20=146 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 24=146 (LC 1), 25=148 (LC 1), 26=143 (LC 1), 27=69 (LC 1)

FORCES (lb) - Maximum Compression/Maximum

TOP CHORD 1-27=-59/0, 13-14=-67/0, 1-2=-14/0,

2-3=-14/0, 3-4=-14/0, 4-5=-14/0, 5-6=-14/0, 6-7=-14/0, 7-8=-14/0, 8-9=-14/0, 9-11=-14/0,

11-12=-9/0, 12-13=-9/0

BOT CHORD 26-27=0/14, 25-26=0/14, 24-25=0/14,

22-24=0/14, 21-22=0/14, 20-21=0/14, 19-20=0/14, 18-19=0/14, 17-18=0/14, 16-17=0/9. 15-16=0/9. 14-15=0/9

WEBS 2-26=-135/0, 3-25=-133/0, 4-24=-133/0, 5-22=-133/0, 6-21=-133/0, 7-20=-133/0, 8-19=-134/0 9-18=-130/0 10-17=-134/0

11-16=-132/0, 12-15=-152/0

NOTES

- All plates are 1.5x3 (||) MT20 unless otherwise indicated
- Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- All bearings are assumed to be SP No.2.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



February 25,2025



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22 available from Truss Plate Institute (www.tpinst.org) and BCSI Building Component Safety Information available from the Structural Building Component Association (www.sbcacomponents.com)



Symbols

PLATE LOCATION AND ORIENTATION



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



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

₹

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

* Plate location details available in MiTek software or upon request

PLATE SIZE

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

LATERAL BRACING LOCATION



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

BEARING



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

ANSI/TPI1: Industry Standards: National Design Specification for Metal

DSB-22:

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

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282 ESR-4722, ESL-1388

Design General Notes

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

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

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MiTek



MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

Damage or Personal Injury Failure to Follow Could Cause Property

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

'n

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

œ

Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- Camber is a non-structural consideration and is the camber for dead load deflection responsibility of truss fabricator. General practice is to
- 11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- 15. Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.