

RE: 4600469
LONGLEAF B - LOT 36 - ILA'S WAY

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Project Name: 4600469
Lot/Block:

Model:

Address:

Subdivision:

City:

State:

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

Design Code: IRC2018/TPI2014

Design Program: MiTek 20/20 8.8

Wind Code: ASCE 7 - 16[Low Rise]

Wind Speed: 130 mph

Roof Load: 40.0 psf

Floor Load: N/A psf

This package includes 12 individual, dated Truss Design Drawings and 0 Additional Drawings.

| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|-----------|
| 1 | I72827217 | A01 | 4/18/2025 |
| 2 | I72827218 | A02 | 4/18/2025 |
| 3 | I72827219 | A03 | 4/18/2025 |
| 4 | I72827220 | A04 | 4/18/2025 |
| 5 | I72827221 | A05 | 4/18/2025 |
| 6 | I72827222 | B01G | 4/18/2025 |
| 7 | I72827223 | B02 | 4/18/2025 |
| 8 | I72827224 | M01 | 4/18/2025 |
| 9 | I72827225 | M02 | 4/18/2025 |
| 10 | I72827226 | M03 | 4/18/2025 |
| 11 | I72827227 | V01 | 4/18/2025 |
| 12 | I72827228 | V02 | 4/18/2025 |

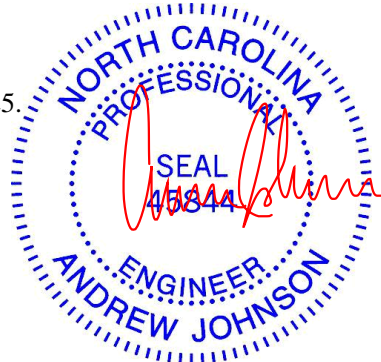
The truss drawing(s) referenced above have been prepared by
Truss Engineering Co. under my direct supervision
based on the parameters provided by Builders FristSource (Pooler, GA).

Truss Design Engineer's Name: Johnson, Andrew

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.



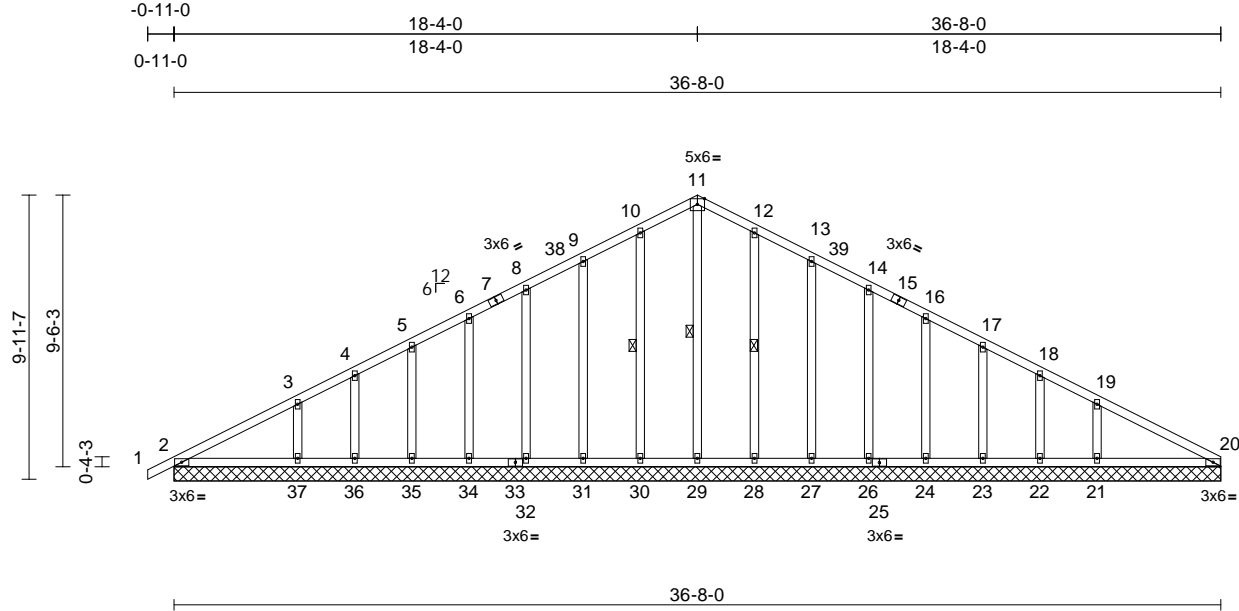
| | | | | | | |
|---------|-------|------------------------|-----|-----|---------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY | I72827217 |
| 4600469 | A01 | Common Supported Gable | 1 | 1 | Job Reference (optional) | |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:56:58

Page: 1

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| | | | | | | | | | | | | |
|----------------|-----------|-----------------|-----------------|------------|------|-------------|------|-------|--------|-----|----------------|-------------|
| Scale = 1:80.7 | | | | | | | | | | | | |
| 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 | 0.22 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.15 | Horz(CT) | 0.01 | 20 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 234 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 sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 11-29, 10-30, 12-28

REACTIONS (size)
2=36-8-0, 20=36-8-0, 21=36-8-0,
22=36-8-0, 23=36-8-0, 24=36-8-0,
26=36-8-0, 27=36-8-0, 28=36-8-0,
29=36-8-0, 30=36-8-0, 31=36-8-0,
32=36-8-0, 34=36-8-0, 35=36-8-0,
36=36-8-0, 37=36-8-0

Max Horiz 2=168 (LC 12)

Max Uplift 2=-17 (LC 13), 21=-109 (LC 13),
22=-22 (LC 13), 23=-54 (LC 13),
24=-48 (LC 13), 26=-48 (LC 13),
27=-52 (LC 13), 28=-43 (LC 13),
30=-46 (LC 12), 31=-51 (LC 12),
32=-48 (LC 12), 34=-48 (LC 12),
35=-54 (LC 12), 36=-26 (LC 12),
37=-104 (LC 12)

Max Grav 2=209 (LC 2), 20=147 (LC 2),
21=357 (LC 33), 22=72 (LC 33),
23=189 (LC 3), 24=200 (LC 35),
26=200 (LC 3), 27=219 (LC 6),
28=239 (LC 6), 29=252 (LC 29),
30=239 (LC 5), 31=219 (LC 5),
32=200 (LC 3), 34=200 (LC 34),
35=187 (LC 3), 36=79 (LC 32),
37=343 (LC 32)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/31, 2-3=-191/92, 3-4=-117/87,
4-5=-84/107, 5-6=-65/133, 6-8=-54/157,
8-9=-44/181, 9-10=-45/206, 10-11=-51/228,
11-12=-51/220, 12-13=-46/179,
13-14=-39/134, 14-16=-39/92, 16-17=-40/68,
17-18=-32/42, 18-19=-69/23, 19-20=-128/59

BOT CHORD 2-37=-14/143, 36-37=-14/143,
35-36=-14/143, 34-35=-14/143,
32-34=-14/143, 31-32=-14/143,
30-31=-14/143, 29-30=-14/143,
28-29=-14/143, 27-28=-14/143,
26-27=-14/143, 24-26=-14/143,
23-24=-14/143, 22-23=-14/143,
21-22=-14/143, 20-21=-14/143

WEBS 11-29=-152/0, 10-30=-172/70, 9-31=-146/75,
8-32=-121/72, 6-34=-117/71, 5-35=-132/79,
4-36=-67/44, 3-37=-243/143, 12-28=-172/67,
13-27=-146/76, 14-26=-121/72,
16-24=-117/71, 17-23=-134/80,
18-22=-61/39, 19-21=-255/151

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 17 lb uplift at joint 2, 46 lb uplift at joint 30, 51 lb uplift at joint 31, 48 lb uplift at joint 32, 48 lb uplift at joint 34, 54 lb uplift at joint 35, 26 lb uplift at joint 36, 104 lb uplift at joint 37, 43 lb uplift at joint 28, 52 lb uplift at joint 27, 48 lb uplift at joint 26, 48 lb uplift at joint 24, 54 lb uplift at joint 23, 22 lb uplift at joint 22 and 109 lb uplift at joint 21.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 18, 2025

Continued on page 2

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)

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818 Soundside Road
Edenton, NC 27932

| | | | | | |
|---------|-------|------------------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | A01 | Common Supported Gable | 1 | 1 | I72827217 |
| | | | | | Job Reference (optional) |

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.**

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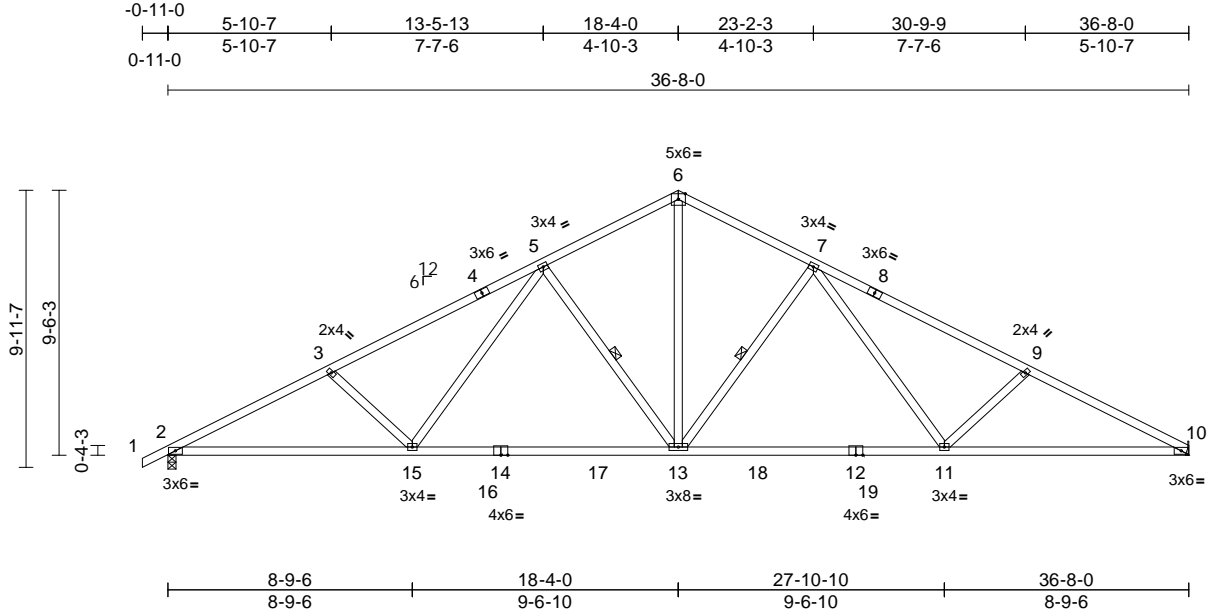
818 Soundside Road
Edenton, NC 27932

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|---------|-------|------------|-----|-----|---------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY | 172827218 |
| 4600469 | A02 | Common | 10 | 1 | Job Reference (optional) | |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:56:59
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Page: 1



Scale = 1:82.7

| 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 | 0.83 | Vert(LL) | -0.28 | 11-13 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.81 | Vert(CT) | -0.51 | 13-15 | >853 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.54 | Horz(CT) | 0.11 | 10 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 190 lb | FT = 20% |

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 9-8-12 oc bracing.

WEBS 1 Row at midpt 5-13, 7-13

REACTIONS

(size) 2=0-3-8, 10= Mechanical
Max Horiz 2=168 (LC 12)
Max Uplift 2=194 (LC 12), 10=172 (LC 13)
Max Grav 2=1523 (LC 2), 10=1457 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/32, 2-3=-2779/355, 3-5=-2516/317,
5-6=-1720/262, 6-7=-1719/260,
7-9=-2540/323, 9-10=-2812/364

BOT CHORD 2-15=-406/2429, 13-15=-195/1840,
11-13=-82/1847, 10-11=-263/2467

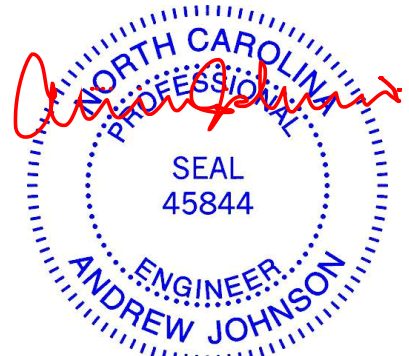
WEBS 6-13=-159/1301, 3-15=-384/242,
5-15=-64/578, 5-13=-655/264,
7-13=-665/265, 7-11=-69/594, 9-11=-406/250

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 194 lb uplift at joint 2 and 172 lb uplift at joint 10.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 2025

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

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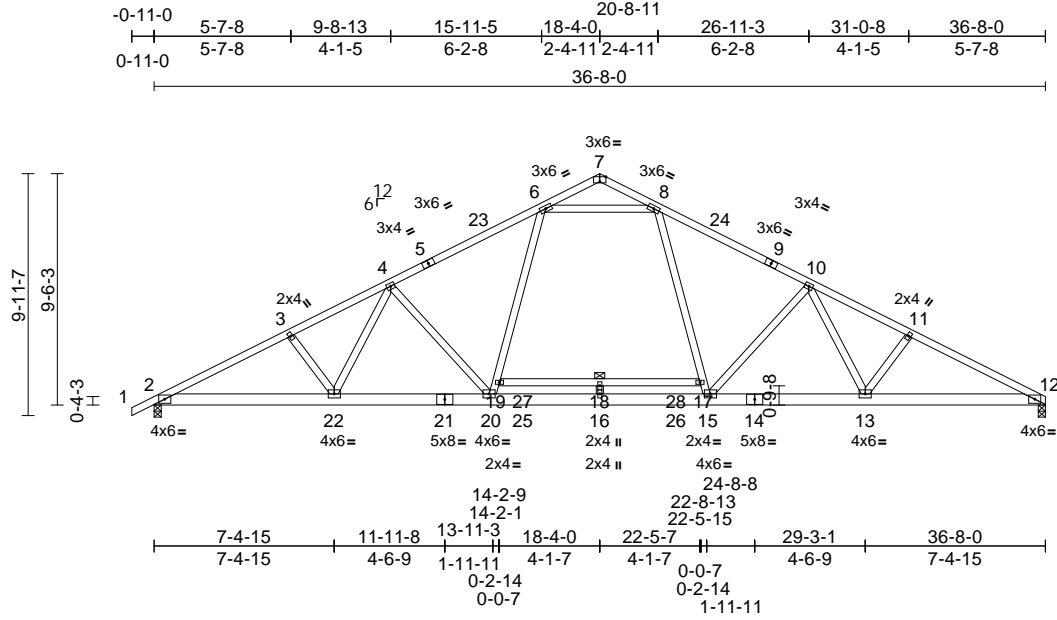
818 Soundside Road
Edenton, NC 27932

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|---------|-------|------------|-----|-----|---------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY | 172827219 |
| 4600469 | A03 | Common | 6 | 1 | Job Reference (optional) | |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:00
ID:D?1nVn1fDGF?FkWnuSYA7qz465?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:94.8

Plate Offsets (X, Y): [7:0-3-0,Edge]

| 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 | 0.81 | Vert(LL) | -0.35 | 13-15 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.95 | Vert(CT) | -0.48 | 17-18 | >901 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.89 | Horz(CT) | 0.09 | 12 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 233 lb | FT = 20% |

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 19-17:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-3-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 12=0-3-8
Max Horiz 2=169 (LC 12)
Max Uplift 2=143 (LC 12), 12=120 (LC 13)
Max Grav 2=1605 (LC 2), 12=1547 (LC 3)

FORCES

(lb) - Maximum Compression/Maximum Tension

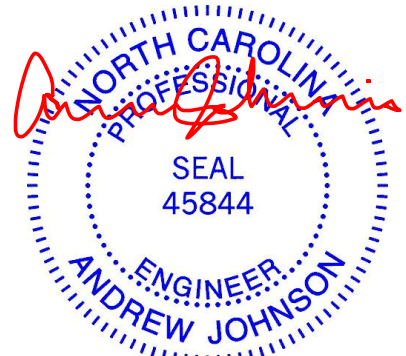
TOP CHORD 1-2=0/37, 2-3=-3033/232, 3-4=-2885/237,
4-6=-2490/145, 6-7=-88/34, 7-8=-88/35,
8-10=-2491/144, 10-11=-2893/242,
11-12=-3042/239
BOT CHORD 2-22=-291/2653, 20-22=-174/2434,
16-20=0/1948, 15-16=0/1948,
13-15=-23/2436, 12-13=-149/2664,
18-19=-6/12, 17-18=-6/12
WEBS 8-17=0/836, 15-17=0/757, 19-20=0/757,
6-19=0/835, 6-8=-1946/211, 16-18=-232/0,
3-22=-232/132, 4-22=-97/428,
4-20=-635/276, 10-15=-637/276,
10-13=-103/438, 11-13=-245/143

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 120 lb uplift at joint 12 and 143 lb uplift at joint 2.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 2025

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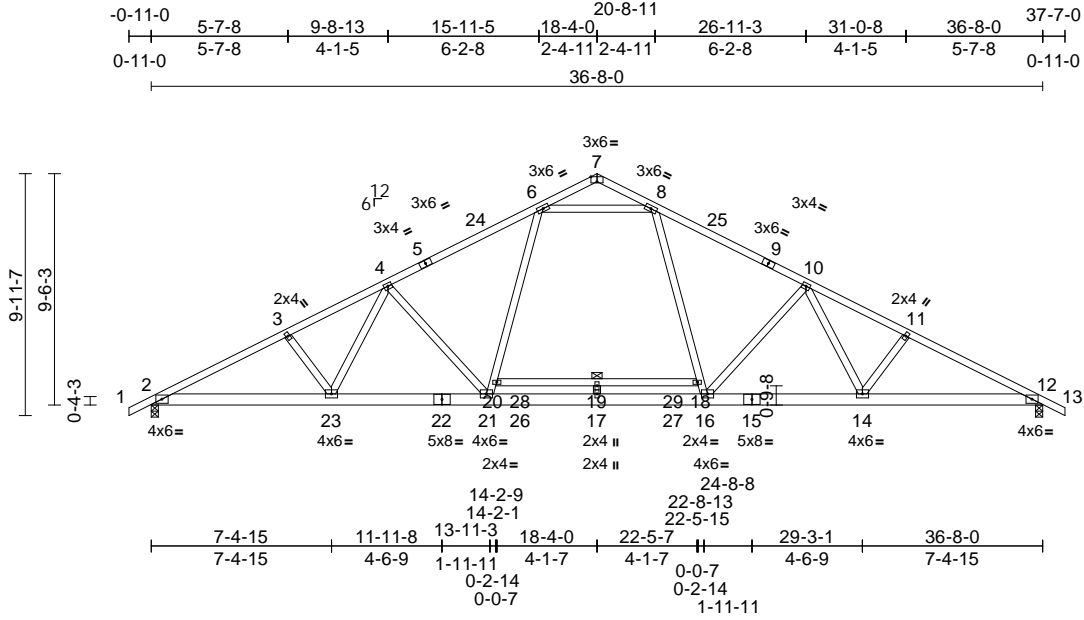
818 Soundside Road
Edenton, NC 27932

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|---------|-------|------------|-----|-----|---------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY | 172827220 |
| 4600469 | A04 | Common | 1 | 1 | Job Reference (optional) | |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:00
ID:8yRFT?Fpz4M4pF?McCyQjz45bk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDdi7J4zJC?f

Page: 1



Scale = 1:94.8

Plate Offsets (X, Y): [7:0-3:0,Edge]

| 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 | 0.80 | Vert(LL) | -0.34 | 14-16 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.94 | Vert(CT) | -0.48 | 18-19 | >904 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.89 | Horz(CT) | 0.09 | 12 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 235 lb | FT = 20% |

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 20-18:2x4 SP No.2
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 2-3-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 12=0-3-8
Max Horiz 2=161 (LC 13)
Max Uplift 2=143 (LC 12), 12=143 (LC 13)
Max Grav 2=1604 (LC 2), 12=1604 (LC 2)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-3032/232, 3-4=-2884/237,
4-6=-2488/144, 6-7=-89/34, 7-8=-89/34,
8-10=-2488/144, 10-11=-2884/237,
11-12=-3032/233, 12-13=0/37
BOT CHORD 2-23=-283/2651, 21-23=-165/2432,
17-21=0/1946, 16-17=0/1946, 14-16=-5/2432,
12-14=-123/2651, 19-20=-6/12, 18-19=-6/12

WEBS

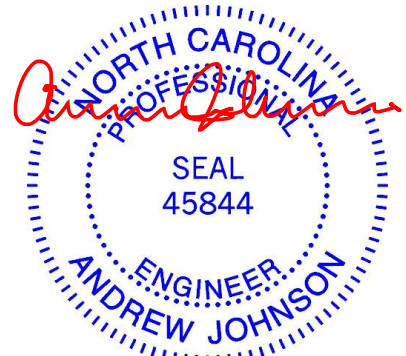
20-21=0/756, 6-20=0/835, 8-18=0/835,
16-18=0/756, 6-8=-1944/210, 17-19=-232/0,
3-23=-232/132, 4-23=-97/428,
4-21=-635/276, 10-16=-635/276,
10-14=-98/428, 11-14=-232/133

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 143 lb uplift at joint 2 and 143 lb uplift at joint 12.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 2025

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

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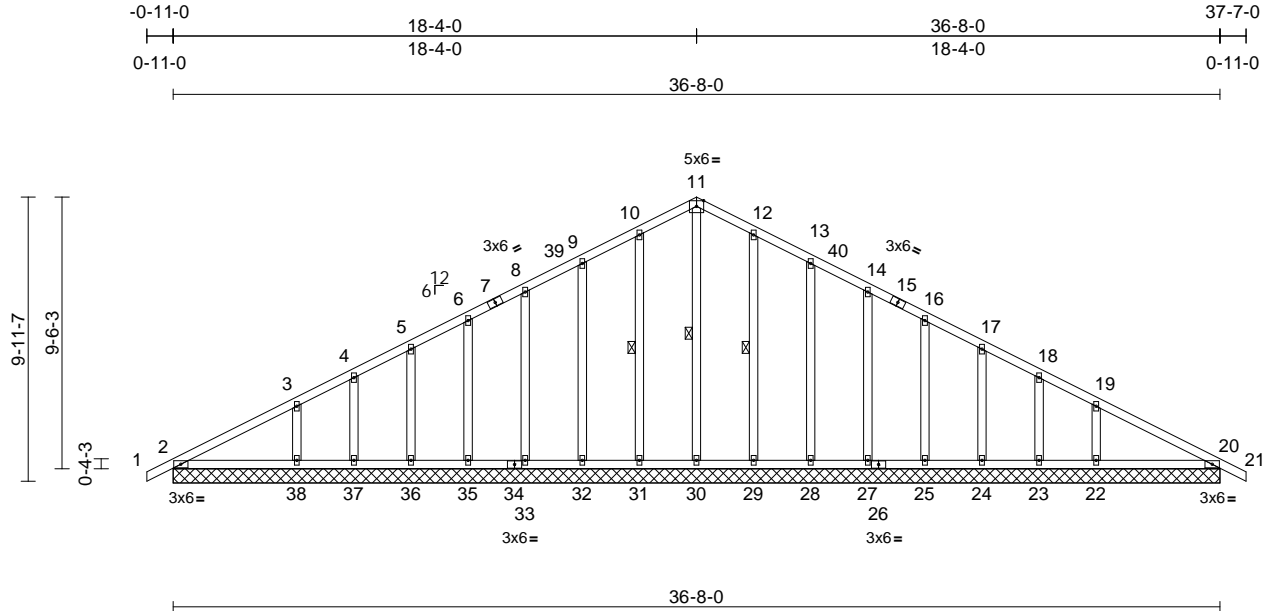
| | | | | | |
|---------|-------|------------------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | A05 | Common Supported Gable | 1 | 1 | Job Reference (optional) |
| | | | | | I72827221 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:01

Page: 1

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| | | | | | | | | | | | | | | | |
|----------------|--|-----------|-----------------|--|-----------------|------------|--|-------------|----------|------|-------|--------|----------------|---------------|-------------|
| Scale = 1:80.7 | | | | | | | | | | | | | | | |
| 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) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | | 15.4/20.0 | Lumber DOL | | 1.15 | BC | | 0.14 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | | 10.0 | Rep Stress Incr | | YES | WB | | 0.15 | Horz(CT) | 0.01 | 20 | n/a | n/a | | |
| BCLL | | 0.0* | Code | | IRC2018/TPI2014 | Matrix-S | | | | | | | | | |
| BCDL | | 10.0 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | Weight: 236 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 sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 11-30, 10-31, 12-29

REACTIONS (size) 2=36-8-0, 20=36-8-0, 22=36-8-0, 23=36-8-0, 24=36-8-0, 25=36-8-0, 27=36-8-0, 28=36-8-0, 29=36-8-0, 30=36-8-0, 31=36-8-0, 32=36-8-0, 33=36-8-0, 35=36-8-0, 36=36-8-0, 37=36-8-0, 38=36-8-0

Max Horiz 2=-161 (LC 13)

Max Uplift 2=-19 (LC 13), 22=-103 (LC 13), 23=-26 (LC 13), 24=-54 (LC 13), 25=-48 (LC 13), 27=-48 (LC 13), 28=-53 (LC 13), 29=-42 (LC 13), 31=-45 (LC 12), 32=-51 (LC 12), 33=-48 (LC 12), 35=-48 (LC 12), 36=-54 (LC 12), 37=-26 (LC 12), 38=-104 (LC 12)

Max Grav 2=209 (LC 2), 20=209 (LC 2), 22=343 (LC 33), 23=79 (LC 33), 24=187 (LC 3), 25=200 (LC 35), 27=200 (LC 3), 28=219 (LC 6), 29=239 (LC 6), 30=256 (LC 29), 31=239 (LC 5), 32=219 (LC 5), 33=200 (LC 3), 35=200 (LC 34), 36=187 (LC 3), 37=79 (LC 32), 38=343 (LC 32)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/31, 2-3=-188/97, 3-4=-115/93, 4-5=-81/113, 5-6=-64/138, 6-8=-53/163, 8-9=-43/187, 9-10=-45/212, 10-11=-51/233, 11-12=-51/226, 12-13=-45/185, 13-14=-39/140, 14-16=-39/97, 16-17=-40/71, 17-18=-30/45, 18-19=-64/25, 19-20=-120/57, 20-21=0/31
BOT CHORD 2-38=-14/152, 37-38=-14/152, 36-37=-14/152, 35-36=-14/152, 33-35=-14/152, 32-33=-14/152, 31-32=-14/152, 30-31=-14/152, 29-30=-14/152, 28-29=-14/152, 27-28=-14/152, 25-27=-14/152, 24-25=-14/152, 23-24=-14/152, 22-23=-14/152, 20-22=-14/152
WEBS 11-30=-156/0, 10-31=-172/69, 9-32=-146/75, 8-33=-121/72, 6-35=-117/71, 5-36=-132/79, 4-37=-67/44, 3-38=-243/143, 12-29=-172/66, 13-28=-146/76, 14-27=-121/72, 16-25=-117/71, 17-24=-132/79, 18-23=-67/44, 19-22=-243/142

NOTES
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
5) Unbalanced snow loads have been considered for this design.

- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 (||) MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 19 lb uplift at joint 2, 45 lb uplift at joint 31, 51 lb uplift at joint 32, 48 lb uplift at joint 33, 48 lb uplift at joint 35, 54 lb uplift at joint 36, 26 lb uplift at joint 37, 104 lb uplift at joint 38, 42 lb uplift at joint 29, 53 lb uplift at joint 28, 48 lb uplift at joint 27, 48 lb uplift at joint 25, 54 lb uplift at joint 24, 26 lb uplift at joint 23 and 103 lb uplift at joint 22.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 18, 2025

Continued on page 2

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

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Edenton, NC 27932

| | | | | | |
|---------|-------|------------------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | A05 | Common Supported Gable | 1 | 1 | I72827221 |
| | | | | | Job Reference (optional) |

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.**

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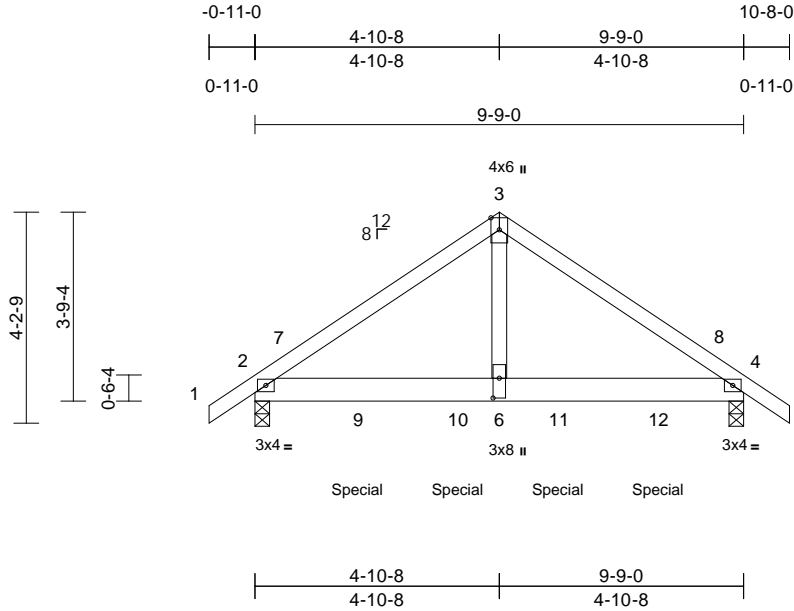
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|---------|-------|---------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | B01G | Common Girder | 1 | 2 | Job Reference (optional) |
| | | | | | I72827222 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:01
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Page: 1



Scale = 1:46

Plate Offsets (X, Y): [6:0-4-12,0-1-8]

| 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 | TC | 0.41 | Vert(LL) | -0.04 | 4-6 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.49 | Vert(CT) | -0.08 | 4-6 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | NO | WB | 0.85 | Horz(CT) | 0.01 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 97 lb | FT = 20% |

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP 2400F 2.0E or 2x6 SP DSS
WEBS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 4=0-3-8
Max Horiz 2=95 (LC 11)
Max Uplift 2=-416 (LC 12), 4=-445 (LC 13)
Max Grav 2=3259 (LC 26), 4=3494 (LC 27)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/37, 2-3=-3982/510, 3-4=-3979/509, 4-5=0/37
BOT CHORD 2-6=-359/3238, 4-6=-359/3238
WEBS 3-6=-472/4248

NOTES

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-7-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.

- Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 416 lb uplift at joint 2 and 445 lb uplift at joint 4.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1484 lb down and 184 lb up at 2-0-12, 1484 lb down and 184 lb up at 4-0-12, and 1484 lb down and 184 lb up at 6-0-12, and 1484 lb down and 184 lb up at 8-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

- Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (lb/ft)
Vert: 1-3=-51, 3-5=-51, 2-4=-20

Concentrated Loads (lb)
Vert: 9=-1270 (B), 10=-1270 (B), 11=-1270 (B), 12=-1270 (B)



April 18, 2025

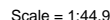
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

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Builders FirstSource (Savannah), Pooler, GA - 31322, Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:01 Page: 1
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NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; CTDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60
plate grip DOL=1.60

- LOAD CASE(S) Standard



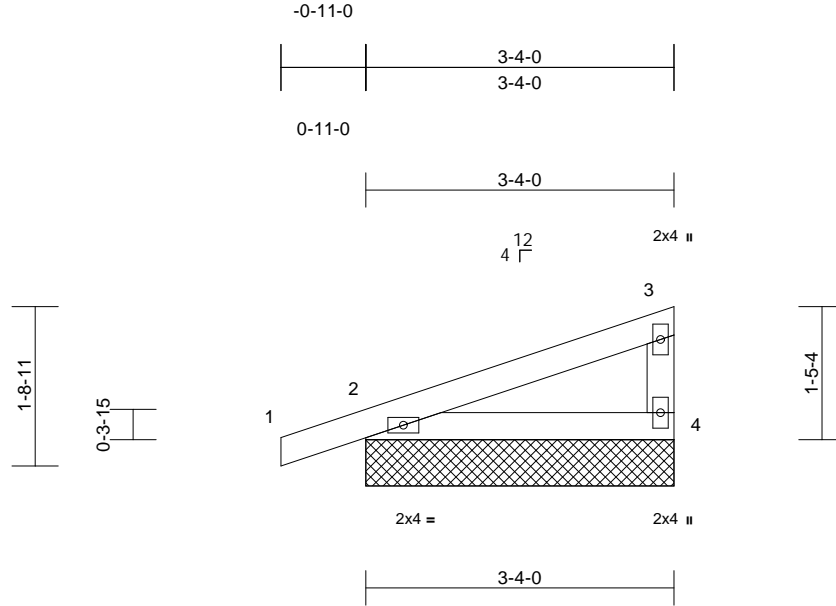
| | | | | | |
|---------|-------|---------------------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | M01 | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) |
| | | | | | I72827224 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:02

Page: 1

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| | | | | | | | | | | | | |
|----------------|-----------|-----------------|-----------------|------------|------|-------------|-----|-------|--------|-----|---------------|-------------|
| 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 | 0.19 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.12 | Vert(CT) | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | n/a | - | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-P | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | Weight: 13 lb | FT = 20% |

LUMBER

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

BRACING

| | |
|-----------|---|
| TOP CHORD | Structural wood sheathing directly applied or 3-4-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

REACTIONS

| | |
|------------|------------------------------|
| (size) | 2=3-4-0, 4=3-4-0 |
| Max Horiz | 2=56 (LC 8) |
| Max Uplift | 2=-58 (LC 8), 4=-27 (LC 12) |
| Max Grav | 2=222 (LC 19), 4=137 (LC 19) |

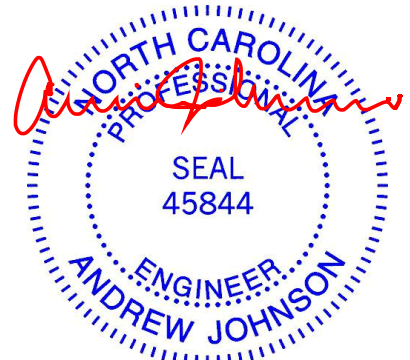
FORCES

| | |
|-----------|--|
| | (lb) - Maximum Compression/Maximum Tension |
| TOP CHORD | 1-2=0/22, 2-3=-40/27, 3-4=-105/47 |
| BOT CHORD | 2-4=0/0 |

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.

- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 1-00-00 wide will fit between the bottom chord and any other members.
 - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 27 lb uplift at joint 4 and 58 lb uplift at joint 2.
 - 11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- LOAD CASE(S)** Standard



April 18, 2025

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818 Soundside Road
Edenton, NC 27932

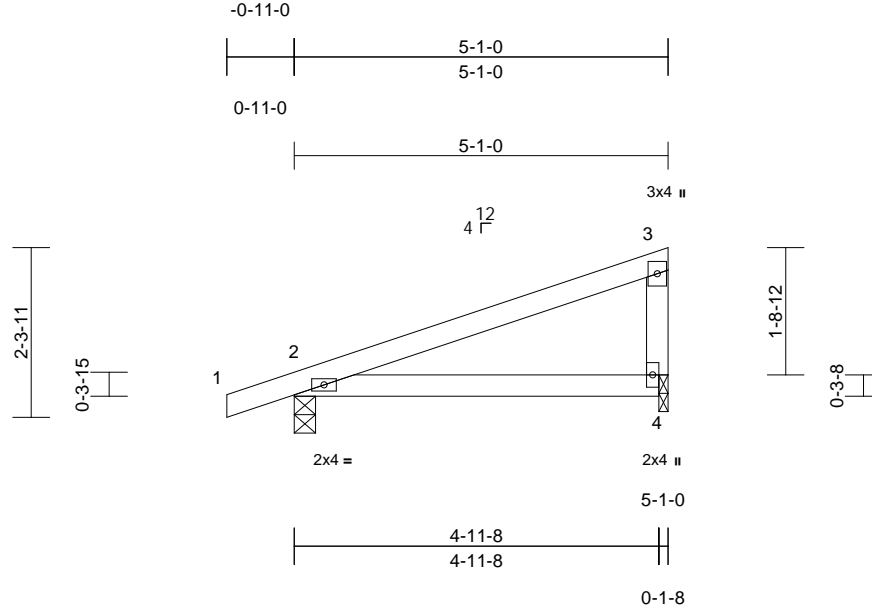
| | | | | | |
|---------|-------|------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | M02 | Monopitch | 12 | 1 | Job Reference (optional) |
| | | | | | I72827225 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:02

Page: 1

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Scale = 1:31.3

| 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 | 0.34 | Vert(LL) | -0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.19 | Vert(CT) | -0.03 | 2-4 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 19 lb | FT = 20% |

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS

(size) 2=0-3-8, 4=0-1-8
Max Horiz 2=79 (LC 8)
Max Uplift 2=-71 (LC 8), 4=-44 (LC 12)
Max Grav 2=314 (LC 19), 4=217 (LC 19)

FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=0/22, 2-3=-188/3, 3-4=-145/64
BOT CHORD 2-4=-25/125

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 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.

- 7) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 2 and 44 lb uplift at joint 4.
- 10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 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.sbcacompoments.com)

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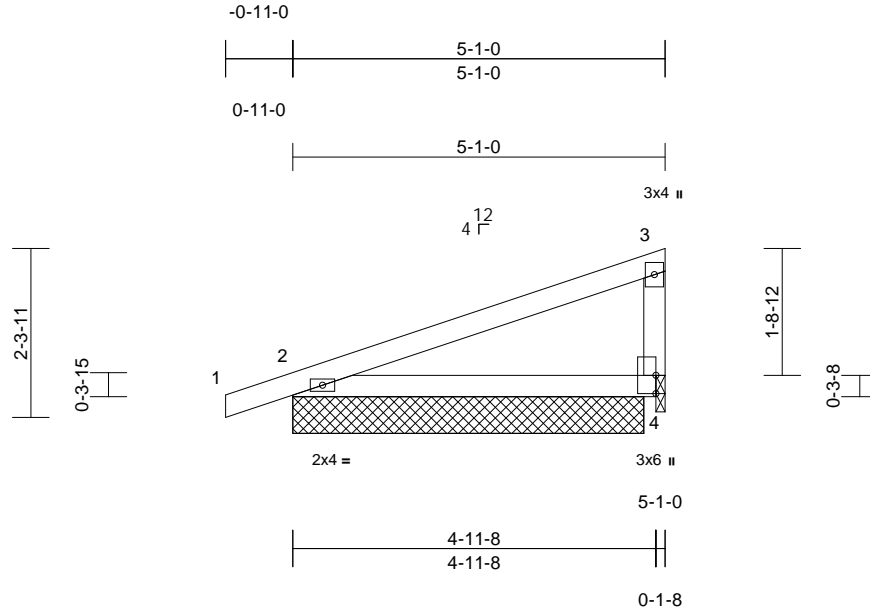
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|---------|-------|---------------------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | M03 | Monopitch Supported Gable | 1 | 1 | Job Reference (optional) |
| | | | | | I72827226 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:02
ID:JvG68O7kGldXAPD8nWaEfNz45Nh-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?fi

Page: 1



Scale = 1:31.5

| 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 | 0.37 | Vert(LL) | -0.01 | 2-4 | >999 | 240 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.21 | Vert(CT) | -0.03 | 2-4 | >999 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.00 | Horz(CT) | 0.00 | 4 | n/a | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | | |
| | | | | | | | | | | | Weight: 19 lb | FT = 20% |

LUMBER

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

BRACING

| | |
|-----------|---|
| TOP CHORD | Structural wood sheathing directly applied or 5-1-0 oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10-0-0 oc bracing. |

REACTIONS (size)

| | |
|------------|------------------------------|
| Max Horiz | 2=79 (LC 8) |
| Max Uplift | 2=-65 (LC 8), 4=-45 (LC 12) |
| Max Grav | 2=308 (LC 19), 4=227 (LC 19) |

FORCES

| | |
|-----------|--|
| | (lb) - Maximum Compression/Maximum Tension |
| TOP CHORD | 1-2=0/22, 2-3=-199/5, 3-4=-150/66 |
| BOT CHORD | 2-4=-27/136 |

NOTES

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust)
Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; 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) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.4 psf on overhangs non-concurrent with other live loads.
- 6) Gable studs spaced at 2-0-0 oc.

- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 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.
- 9) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 2 and 45 lb uplift at joint 4.
- 12) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 2025

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

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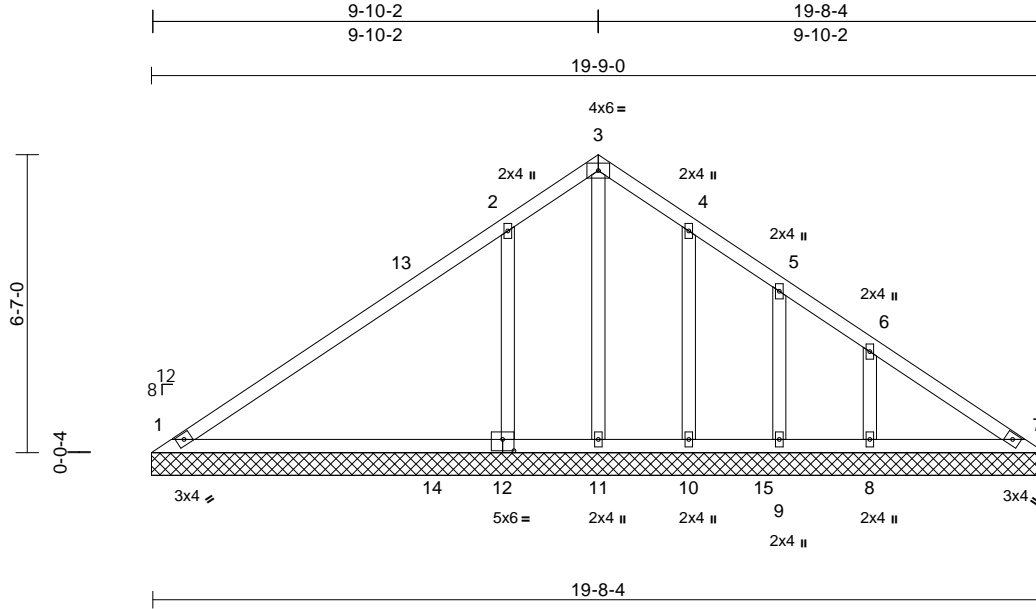
818 Soundside Road
Edenton, NC 27932

| | | | | | | |
|---------|-------|------------|-----|-----|---------------------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY | |
| 4600469 | V01 | Valley | 1 | 1 | Job Reference (optional) | I72827227 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:02
ID:k1WWUUnCtRseilWxrYurmz45Mr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:50.9

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

| 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 | 0.75 | Vert(LL) | n/a | - | n/a | 999 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.45 | Vert(TL) | n/a | - | n/a | 999 | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.26 | Horiz(TL) | 0.00 | 7 | n/a | n/a | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | |
| | | | | | | | | | | Weight: 94 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 sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 1=19-9-0, 7=19-9-0, 8=19-9-0, 9=19-9-0, 10=19-9-0, 11=19-9-0, 12=19-9-0
Max Horiz 1=-155 (LC 8)
Max Uplift 1=-11 (LC 13), 8=-109 (LC 13), 9=-49 (LC 13), 10=-66 (LC 13), 11=-147 (LC 31), 12=-273 (LC 12)
Max Grav 1=222 (LC 2), 7=112 (LC 32), 8=293 (LC 26), 9=131 (LC 26), 10=298 (LC 6), 11=172 (LC 12), 12=813 (LC 25)

FORCES

(lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-128/215, 2-3=-128/160, 3-4=-62/126, 4-5=-44/65, 5-6=-49/34, 6-7=-106/96
BOT CHORD 1-11=-56/123, 10-11=-55/120, 9-10=-55/120, 8-9=-55/120, 7-8=-55/120
WEBS 3-11=-170/89, 2-12=-533/341, 4-10=-202/100, 5-9=-106/68, 6-8=-216/141

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; 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.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 11 lb uplift at joint 1, 147 lb uplift at joint 11, 273 lb uplift at joint 12, 66 lb uplift at joint 10, 49 lb uplift at joint 9 and 109 lb uplift at joint 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 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.sbcacompnents.com)

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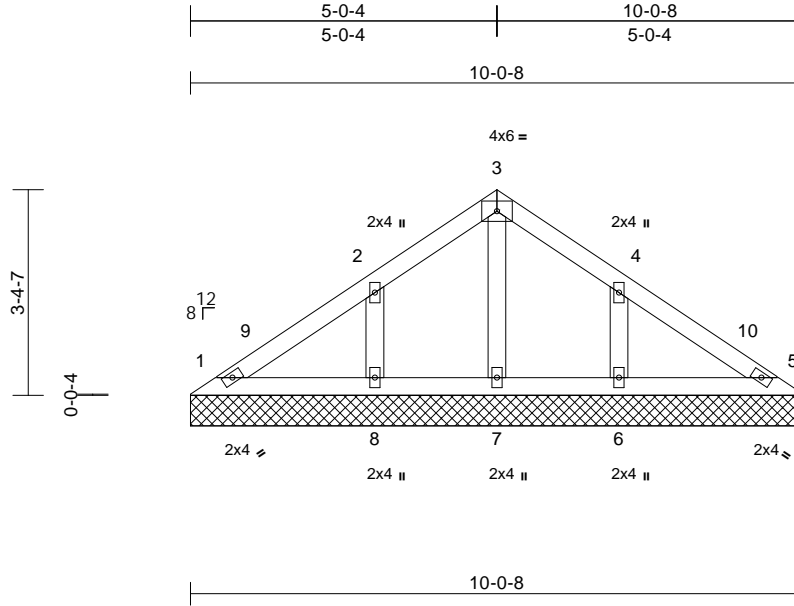
818 Soundside Road
Edenton, NC 27932

| | | | | | |
|---------|-------|------------|-----|-----|---------------------------------|
| Job | Truss | Truss Type | Qty | Ply | LONGLEAF B - LOT 36 - ILA'S WAY |
| 4600469 | V02 | Valley | 1 | 1 | Job Reference (optional) |
| | | | | | I72827228 |

Builders FirstSource (Savannah), Pooler, GA - 31322,

Run: 8.83 S Apr 11 2025 Print: 8.830 S Apr 11 2025 MiTek Industries, Inc. Wed Apr 16 17:57:03
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Page: 1



Scale = 1:37.7

| Loading | (psf) | Spacing | 2'-0" | CSI | DEFL | in | (loc) | l/defl | L/d | PLATES | GRIP |
|--------------|-----------|-----------------|-----------------|----------|------|-----------|-------|--------|-----|---------------|----------|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.11 | n/a | - | n/a | 999 | MT20 | 244/190 |
| Snow (Pf/Pg) | 15.4/20.0 | Lumber DOL | 1.15 | BC | 0.05 | n/a | - | n/a | 999 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.05 | Horiz(TL) | 0.00 | 5 | n/a | | |
| BCLL | 0.0* | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | |
| BCDL | 10.0 | | | | | | | | | | |
| | | | | | | | | | | Weight: 40 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 sheathing directly applied or 6'-0" oc purlins. |
| BOT CHORD | Rigid ceiling directly applied or 10'-0" oc bracing. |

REACTIONS

| | |
|------------|---|
| (size) | 1=10'-0"-8, 5=10'-0"-8, 6=10'-0"-8, 7=10'-0"-8, 8=10'-0"-8 |
| Max Horiz | 1=-75 (LC 8) |
| Max Uplift | 1=-7 (LC 13), 6=-90 (LC 13), 8=-90 (LC 12) |
| Max Grav | 1=95 (LC 18), 5=95 (LC 19), 6=284 (LC 19), 7=104 (LC 28), 8=284 (LC 18) |

FORCES

| | |
|--|--|
| (lb) - Maximum Compression/Maximum Tension | |
| TOP CHORD | 1-2=-71/64, 2-3=-72/70, 3-4=-72/60, 4-5=-54/51 |
| BOT CHORD | 1-8=-24/52, 7-8=-24/52, 6-7=-24/52, 5-6=-24/52 |
| WEBS | 3-7=-74/0, 2-8=-222/116, 4-6=-222/116 |

NOTES

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed ; 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.

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=20.0 psf; Pf=15.4 psf (Lum DOL = 1.15 Plate DOL = 1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2'-0" oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 7 lb uplift at joint 1, 90 lb uplift at joint 8 and 90 lb uplift at joint 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



April 18, 2025

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

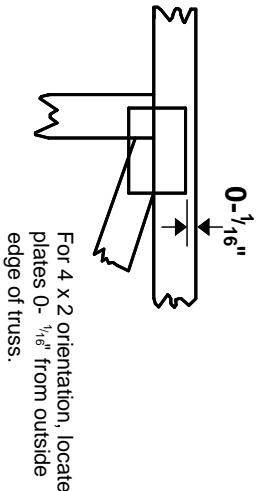
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.sbcacompnents.com)

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Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

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

LATERAL BRACING LOCATION



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

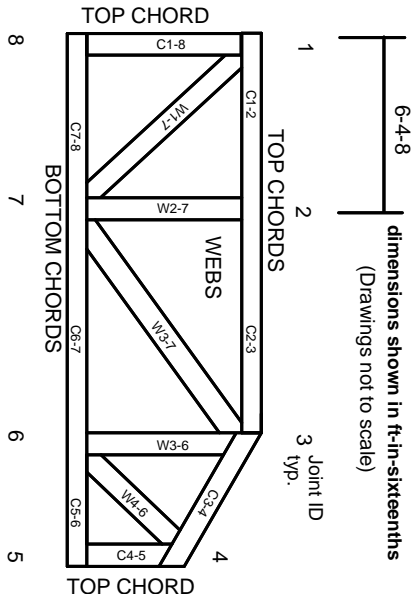
BEARING



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

Industry Standards:
ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

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

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

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

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

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