Job Truss Truss Type Qty LOT 0.0007 HONEYCUTT HILLS I 135 SHELBY MEADOW LANE ANGIER, NO 167912660 24-2501-F02 Floor F2-06 Job Reference (optional)

Atlantic Building Components & Services, Inc.,

Moncks Corner, SC - 29461,

8.530 s Aug 2 2023 MiTek Industries, Inc. Thu Aug 29 22:54:15 2024 Page 1 ID:oDuWOOMhLxMOj2fwcp2aKqzMG6w-wJacqyk2W8yb9544rlwFTpruG7oDENF5QTp1\_0yirUM

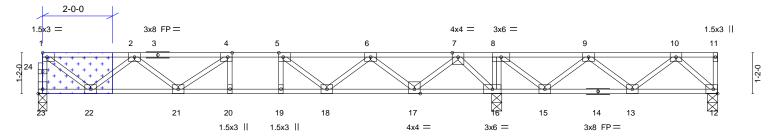




0-11-12

Scale = 1:32.9

#### REPAIR: PLATES ARE DAMAGED AT JOINT(S) { 1 }.



ATTACH 3/4" PLYWOOD OR OSB GUSSET (23/32" RATED SHEATHING 48/24 EXP 1) TO EACH SIDE OF TRUSS WITH ONE ROW OF (0.131" X 2.5") NAILS SPACED 2" O.C. FROM EACH FACE INTO EACH COVERED TRUSS MEMBER. IN ADDITION TO REQUIRED NAILING, CONSTRUCTION QUALITY ADHESIVE RECOMMENDED TO REDUCE POTENTIAL SQUEAKS.

1-6-0 1-6-0	4-0-0 5-6-8 6-2-8 2-6-0 1-6-8 0-8-0		10-9-0 2-6-0	12-11-12 13 <sub>T</sub> 1-4 14-5-12 2-2-12 0-1-8 1-4-8	16-11-12 19-3-8 19 <sub>1</sub> 5-0 2-6-0 2-3-12 0-1-8
Plate Offsets (X,Y)	[4:0-1-8,Edge], [5:0-1-8,Edge], [23:Edge	e,0-1-8]			
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2021/TPI2014	CSI. TC 0.41 BC 0.52 WB 0.43 Matrix-SH	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) I/defl L/d -0.07 20 >999 480 -0.10 20 >999 360 0.02 16 n/a n/a	PLATES GRIP MT20 244/190  Weight: 99 lb FT = 20%F, 11%E

LUMBER-TOP CHORD

2x4 SP No.1(flat)

BOT CHORD 2x4 SP No.1(flat) WEBS 2x4 SP No.3(flat) BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins,

except end verticals.

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

REACTIONS. (size) 23=0-3-0, 12=0-3-8, 16=0-3-8

Max Uplift 12=-123(LC 3)

Max Grav 23=603(LC 3), 12=264(LC 4), 16=1403(LC 1)

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

1-23=-597/0, 1-2=-664/0, 2-4=-1438/0, 4-5=-1604/0, 5-6=-1234/0, 7-8=0/1341, TOP CHORD

8-9=0/919, 9-10=-282/360

**BOT CHORD** 21-22=0/1242, 20-21=0/1604, 19-20=0/1604, 18-19=0/1604, 17-18=0/887, 16-17=-573/0,

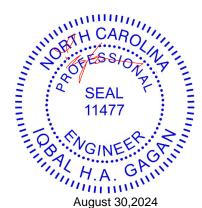
15-16=-1341/0. 13-15=-608/281

WEBS 8-16=-631/0, 1-22=0/802, 2-22=-752/0, 2-21=0/256, 4-21=-278/0, 5-18=-514/0, 6-18=0/463, 6-17=-874/0, 7-17=0/913, 7-16=-1122/0, 8-15=0/724, 9-15=-665/0,

9-13=0/323, 10-13=-277/43, 10-12=-339/201

#### NOTES-(6)

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x4 MT20 unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 12.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.





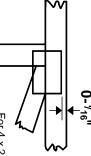
Edenton, NC 27932

### Symbols

### PLATE LOCATION AND ORIENTATION



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



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

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

\* Plate location details available in MiTek software or upon request.

#### PLATE SIZE

4 × 4

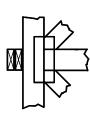
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

### 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.

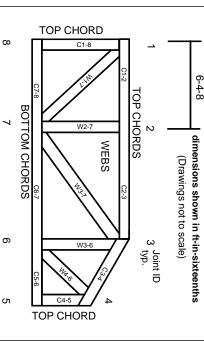
#### Industry Standards:

National Design Specification for Metal Plate Connected Wood Truss Construction Design Standard for Bracing.

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

ANSI/TPI1: DSB-22:

## 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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### MiTek



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

# ▲ General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.

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- 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.

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- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- 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.

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- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- 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 specified.
- 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 environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.