



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

RE: 4148996 - MIKE TODD - CARPORT

MiTek, Inc.

16023 Swingley Ridge Rd.
Chesterfield, MO 63017
914.434.1200

Site Information:

Customer Info: MIKE TODD CONST. Project Name: Phillips Garage Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 104 SE Ponce De Leon Ave., N/A
City: Columbia Cty State: FL

Name Address and License # of Structural Engineer of Record, if there is one, for the building.

Name: License #:
Address:
City: State:

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

Design Code: FBC2023/TPI2014 Design Program: MiTek 20/20 8.7
Wind Code: ASCE 7-22 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 2 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

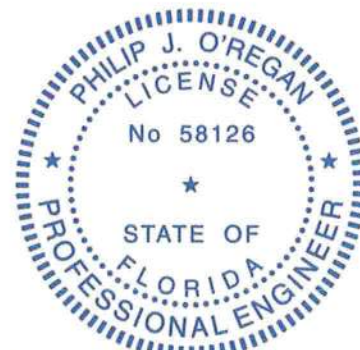
| No. | Seal# | Truss Name | Date |
|-----|-----------|------------|---------|
| 1 | T35227559 | T01 | 10/9/24 |
| 2 | T35227560 | T01G | 10/9/24 |

This item has been digitally signed and sealed by ORegan, Philip, PE on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

The truss drawing(s) referenced above have been prepared by
MiTek USA, Inc. under my direct supervision based on the parameters
provided by Builders FirstSource-Lake City, FL.

Truss Design Engineer's Name: ORegan, Philip
My license renewal date for the state of Florida is February 28, 2025.

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



Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 9, 2024

ORegan, Philip

1 of 1

| | | | | | | |
|---------|-------|------------|-----|-----|---------------------|-----------|
| Job | Truss | Truss Type | Qty | Ply | MIKE TODD - CARPORT | T35227559 |
| 4148996 | T01 | HOWE | 12 | 1 | | |

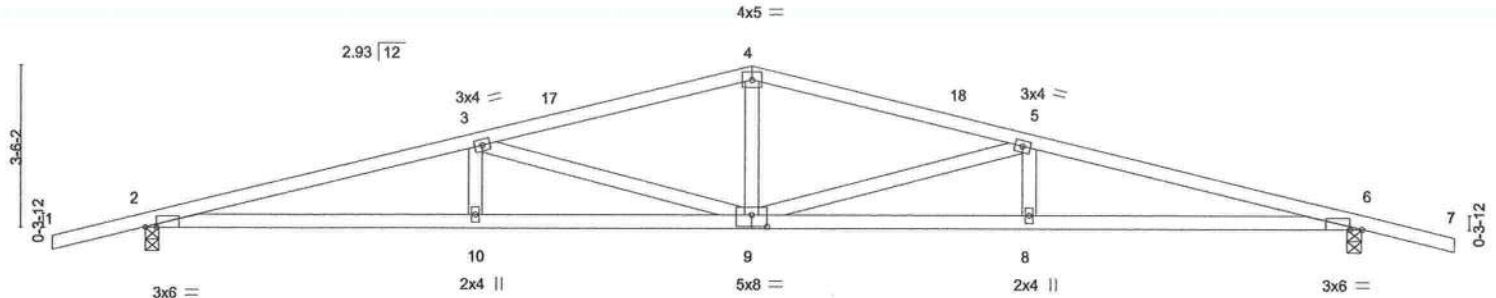
Builders FirstSource (Lake City,FL), Lake City, FL - 32055,

8.730 s Sep 25 2024 MiTek Industries, Inc. Wed Oct 9 10:06:14 2024 Page 1

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| | | | | | |
|--------|--------|---------|---------|--------|--------|
| -2-0-0 | 7-1-10 | 13-1-8 | 19-1-6 | 26-3-0 | 28-3-0 |
| 2-0-0 | 7-1-10 | 5-11-14 | 5-11-14 | 7-1-10 | 2-0-0 |

Scale = 1:48.5



| | | | | | |
|-----------------------|----------------------|---|-------------|-----------------------------|---------------|
| Plate Offsets (X,Y) = | | 7-1-10 | 13-1-8 | 19-1-6 | 26-3-0 |
| | | 7-1-10 | 5-11-14 | 5-11-14 | 7-1-10 |
| | | [2:0-2-14,Edge], [6:0-2-14,Edge], [9:0-4-0,0-3-0] | | | |
| LOADING (psf) | SPACING- | 2-0-0 | CSI. | DEFL. | PLATES |
| TCLL 20.0 | Plate Grip DOL 1.25 | | TC 0.61 | in (loc) l/defl L/d | MT20 |
| TCDL 7.0 | Lumber DOL 1.25 | | BC 0.92 | Ver(LL) 0.33 9-10 >960 240 | GRIP 244/190 |
| BCLL 0.0 * | Rep Stress Incr YES | | WB 0.75 | Ver(CT) -0.47 9-10 >666 180 | |
| BCDL 10.0 | Code FBC2023/TPI2014 | | Matrix-MS | Horz(CT) 0.12 6 n/a n/a | |
| | | | | Weight: 112 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 2-7-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=61(LC 12)
Max Uplift 2=600(LC 8), 6=600(LC 9)
Max Grav 2=1079(LC 1), 6=1079(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3048/1549, 3-4=-2094/1057, 4-5=-2094/1057, 5-6=-3048/1550
BOT CHORD 2-10=-1499/2938, 9-10=-1499/2938, 8-9=-1440/2938, 6-8=-1440/2938
WEBS 3-10=-98/263, 4-9=-357/677, 5-8=-98/263, 3-9=-1013/599, 5-9=-1013/600

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-22; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Zone3 -2-0-0 to 1-1-12, Zone1 1-1-12 to 13-1-8, Zone2 13-1-8 to 17-4-7, Zone1 17-4-7 to 28-3-0 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=600, 6=600.

This item has been digitally signed and sealed by O'Regan, Philip, PE on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Philip J. O'Regan PE No.58126
MiTek Inc. DBA MiTek USA FL Cert 6634
16023 Swingley Ridge Rd. Chesterfield, MO 63017
Date:

October 9,2024

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK 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.tpinstitute.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcsccomponents.com)

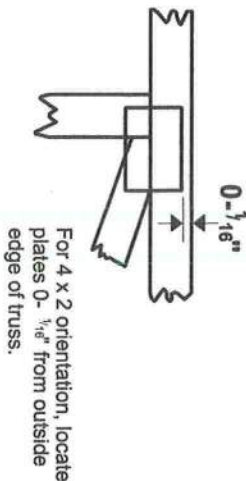
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Symbols

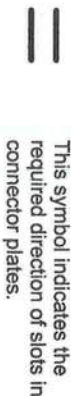
PLATE LOCATION AND ORIENTATION



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- $\frac{1}{16}$ \" from outside edge of truss.



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

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

PLATE SIZE

4 X 4

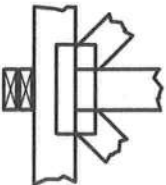
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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:

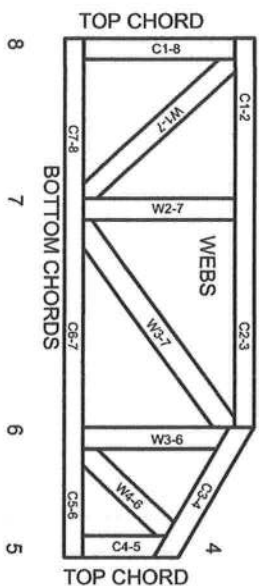
ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



(Drawings not to scale)

1 Joint ID
2 TOP CHORDS
3 t/p.



JOINTS ARE GENERALLY NUMBERED/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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MITek®

MITek Engineering Reference Sheet: MIL-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 for 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.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- 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.
- 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/TP1 1 Quality Criteria.
- The design does not take into account any dynamic or other loads other than those expressly stated.



THE ARROWHEAD AT THE TOP OF THE TRUSS CORRESPONDS WITH THE PLAN LAYOUT. THE TRUSS LAYOUT CORRESPONDS WITH THE INDIVIDUAL TRUSS DRAWING. USE THIS AS AN INDICATION OF THE TRUSS LAYOUT WHEN SETTING THE TRUSSES ON THE STRUCTURE.

General Notes:

- Per ANSIS/PTA 1-2002, all "Truss to Wall" connections are to be made in accordance with the provisions of the Building Designer, not the Truss Manufacturer's specifications for all hanger connections unless noted otherwise.
- All hangers are to be Simpson or equivalent U.N.O.
- Use 10d x 1 1/2" Nails in hanger connections to single ply gable end trusses.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches-Sixteenths.

Notes:

No load drawings will be accepted by Builders FirstSource unless approved in writing first.

ACI lumber is required to be truss plates. Any ACI lumber that comes in contact with truss plates (i.e., embedded on tails) must have an approved barrier applied first.

Refer to BCSI-B1 Summary Sheet-Guide for handling, installing and bracing of Metal Plate Connected Wood Trusses prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper installation of the trusses. The trusses are to be installed in accordance with the erection documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the trusses are installed in the correct orientation with the lights, etc., as the trusses do not interfere with them.

All contract framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer. It is a layout drawing only and is not to be used as a final design. It is intended to be used as a guide for the layout of the trusses. Complete truss engineering and analysis must be performed by a qualified engineer. The design drawings which may be supplied by the truss design engineer.

Gable and truss requires continuous bottom chord bracing. Refer to steel code for wall framing requirements.

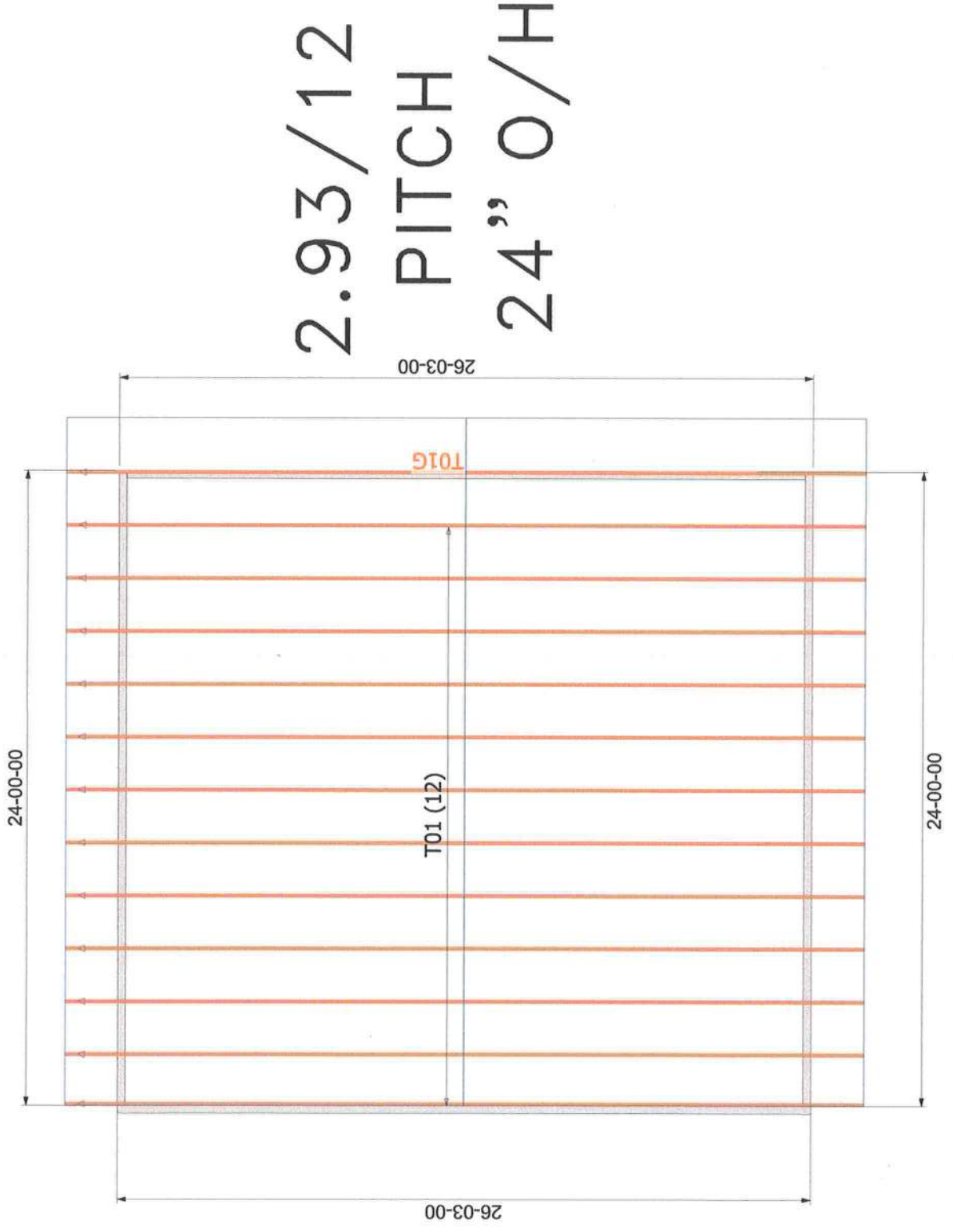
Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.



Lake City
PHONE: 386-755-6884
FAX: 386-755-7973
Jacksonville
PHONE: 904-772-6100
FAX: 904-772-1973
Tallahassee
PHONE: 850-576-5177

Builder: MIKE TODD CONST.
Legal Address: Phillips Carport

| | |
|--------------|---------|
| Model: | Custom |
| Drawn By: | KLH |
| Drawn Date: | 7-23-24 |
| Drawn Job #: | 4148996 |
| Drawn Job #: | N/A |
| Drawn Job #: | N/A |
| Drawn Job #: | 4148996 |



MITEK PLATE APPROVAL #'S 2197.2-2197.4, BOISE EWP PRODUCT #'S LVL FL1644-R2, BCI JOISTS FL1392-R2