



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

RE: 2530623 - DON REED - LUEN MARC GARAGE

MiTek USA, Inc.

6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:

Customer Info: Don Reed Const. - Reed McDaniel Project Name: Luen Marc Model: Garage
Lot/Block: N/A Subdivision: N/A
Address: 422 Darwin Glen, 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: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10 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.

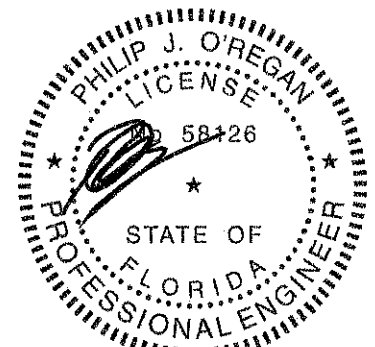
No.	Seal#	Truss Name	Date
1	T21834679	T01	11/9/20
2	T21834680	T01G	11/9/20

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-Jacksonville.

Truss Design Engineer's Name: O'Regan, Philip

My license renewal date for the state of Florida is February 28, 2021.

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 USA, Inc. FL Cart 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

November 9, 2020

O'Regan, Philip

1 of 1

Job	Truss	Truss Type	Qty	Ply	DON REED - LUEN MARC GARAGE	T21834679
2530623	T01	Common	23	1	Job Reference (optional)	

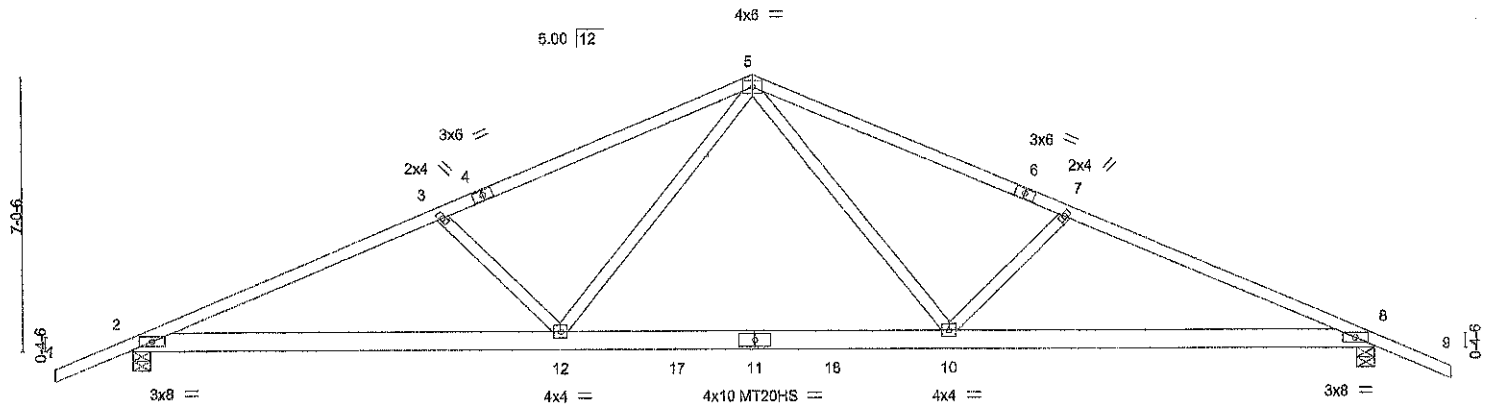
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8,240 s Mar 9 2020 MITek Industries, Inc. Mon Nov 9 09:45:38 2020 Page 1

ID:awJ6eYnh6huN2KknfCDeWyOdNJ-R79ihclZSVGtAFw_S4AtGsY4AbkMba_7RDOyYyKyJR

-2-0-0 8-0-0 16-0-0 24-0-0 32-0-0 34-0-0
2-0-0 8-0-0 8-0-0 8-0-0 8-0-0 2-0-0

Scale = 1:57.7



10-11-15		21-0-1		32-0-0	
10-11-15		10-0-2		10-11-15	
LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.60	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.37	Vert(LL) 0.27 10-12 >999 240	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr NO	WB 0.76	Vert(CT) -0.44 10-12 >863 180		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS	Horz(CT) 0.08 8 n/a n/a		
				Weight: 170 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP M 31
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

BRACING-

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 4-0-8 oc purlins.
Rigid ceiling directly applied or 8-0-13 oc bracing.

REACTIONS.

(size) 2=0-5-8, 8=0-5-8
Max Horz 2=158(LC 12)
Max Uplift 2=656(LC 12), 8=656(LC 13)
Max Grav 2=1592(LC 1), 8=1592(LC 1)

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

TOP CHORD 2-3=-3262/1759, 3-5=-2958/1626, 5-7=-2958/1627, 7-8=-3262/1760
BOT CHORD 2-12=-1469/2956, 10-12=-835/1969, 8-10=-1484/2956
WEBS 5-10=-570/1140, 7-10=-461/444, 5-12=-570/1140, 3-12=-461/444

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=656, 8=656.
- 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 + Roof Live (balanced); Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 5-9=-54, 2-12=-20, 10-12=-80(F=-60), 8-10=-20



Philip J. O'Regan PE No.58126
MITek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

November 9, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIK-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

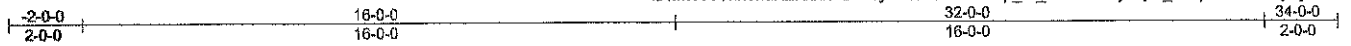
MITek

6904 Parke East Blvd.
Tampa, FL 33610

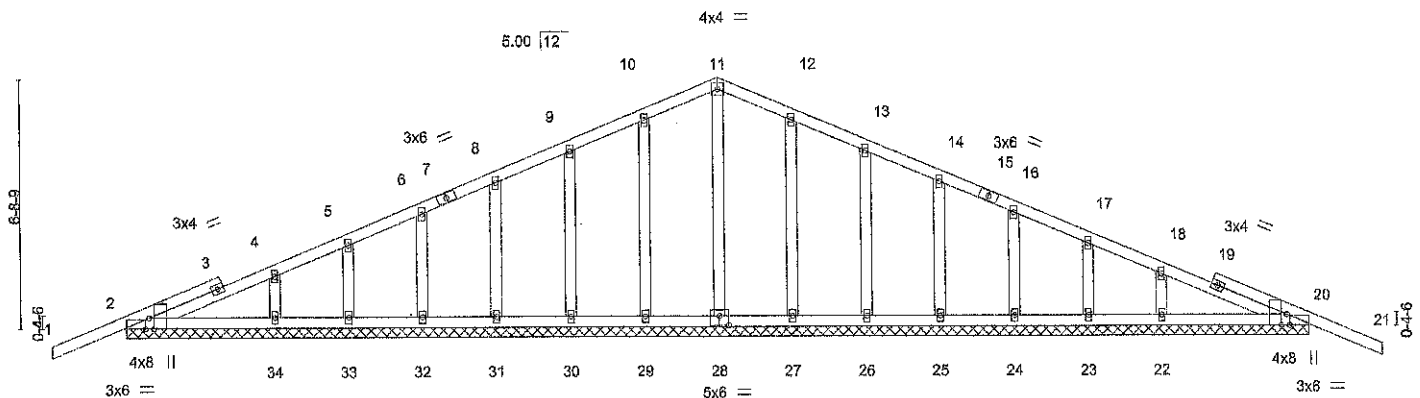
Job	Truss	Truss Type	Qty	Ply	DON REED - LUEN MARC GARAGE	T21834680
2530623	T01G	Common Supported Gable	2	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MITek Industries, Inc. Mon Nov 9 09:45:40 2020 Page 1
ID:awJ6eYnh6huN2KknfCDwWyOdNJ-NOHS8lJp_HI_6UOJ5l6eyhxyO_LQqfGHalV1QyKyJP



Scale = 1:80.6



32-0-0									
32-0-0									
Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-1-1,Edge], [20:0-1-1,Edge], [20:0-3-8,Edge], [28:0-3-0-0-3-0]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.29	Vert(LL) -0.02 21 n/r 120			MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.10	Vert(CT) -0.02 21 n/r 120				
BCLL 0.0 *		Rep Stress Incr YES		WB 0.10	Horz(CT) 0.01 20 n/a n/a				
BCDL 10.0		Code FBC2017/TPI2014		Matrix-S				Weight: 179 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

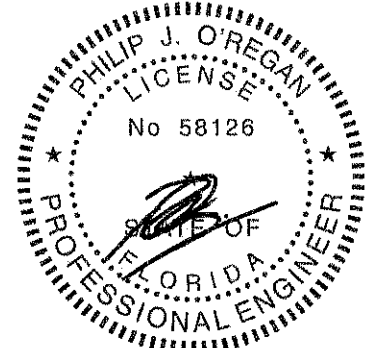
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 32-0-0.
(lb) - Max Horz 2=151(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 29, 30, 31, 32, 33, 27, 26, 25, 24, 23 except 2=134(LC 8),
34=106(LC 12), 22=112(LC 13), 20=140(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 28, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22 except
2=267(LC 1), 20=267(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-87/265, 11-12=-87/265

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 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 3-6-0 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) 29, 30, 31, 32, 33, 27, 26, 25, 24, 23 except (jt=lb) 2=134, 34=106, 22=112, 20=140.



Phillip J. O'Regan PE No.58126
MITek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

November 9,2020

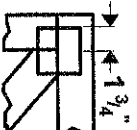
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI 1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

MITek

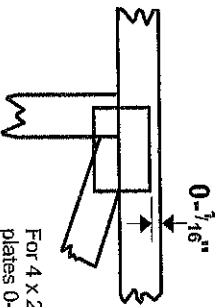
6904 Parke East Blvd.
Tampa, FL 33610

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- 1/16" from outside edge of truss.

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

* Plate location details available in MITEK 20/20 software or upon request.

PLATE SIZE

4 X 4

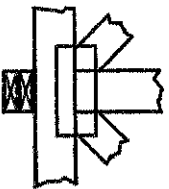
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



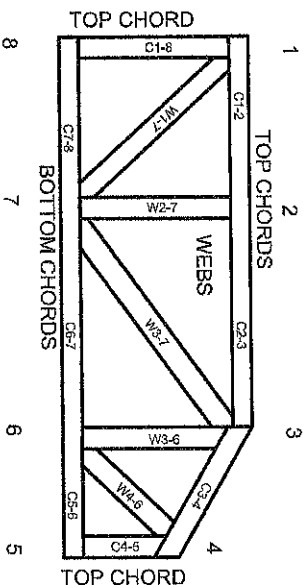
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

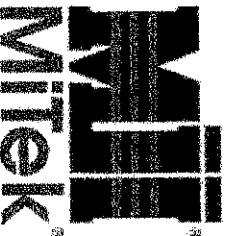
ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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.

© 2012 MITek® All Rights Reserved



MITek Engineering Reference Sheet: MIT-7473 rev. 5/19/2020



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 10' l 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/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

5/12 PITCH - 24" O/H

48'-00"-00

32'-00"-00

T01G

T01(23)

T01G

32'-00"-00

48'-00"-00

FL Approval Codes - Mitek Plates #'s 2197.2 - 2197.4, Versa-Lam #1644-R4 & BCI Joists #1392-R4

BEARING HEIGHT SCHEDULE

	8' 1-1/8"
	9' 1-1/8"
	10' 1-1/8"
	11' 1-1/8"
	12' 1-1/8"

NOTES:

- 1) REFER TO ALL RELEVANT CODES FOR THE LATEST REQUIREMENTS FOR BEARING HEIGHTS TO BE DETERMINED BY THE ENGINEER.
- 2) ALL JOISTS INCLUDING TRUSSES MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 3) ALL JOISTS ARE TO BE CONVENTIONALLY TRUSSED BY DESIGN.
- 4) ALL JOISTS ARE TO BE INSTALLED WITH THE TRUSS CHORDS IN THE SAME PLANE.
- 5) ALL JOISTS ARE TO BE INSTALLED WITH THE TRUSS CHORDS IN THE SAME PLANE.
- 6) 3/4\"/>
- 7) BEARING HEIGHTS ARE TO BE DETERMINED BY THE ENGINEER.



Jack & Jill
Builders
FirstSource
 PHONE 904-725-4100 FAX 904-772-7173
 PHONE 813-421-0551 FAX 813-421-0556
 Tampa
 Lake City
 PHONE 306-755-4554 FAX 306-755-1103

DON REED CONST.

EDEN MARC GARAGE

DATE	10-29-20	KLH	2530623
REVISION			
BY			
CHECKED			
APPROVED			
DATE	10-29-20	KLH	2530623