

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

RE: 2369239 - RWK - HISCOCK GARAGE

MiTek USA, Inc. 6904 Parke East Blvd.

Tampa, FL 33610-4115

Site Information:

Customer Info: RWK Enterprises Project Name: Hiscock Garage Model: Custom

Lot/Block: N/A

Subdivision: N/A

Address: 101 Ginne Springs Rd., N/A

City: Gilchrist 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: N/A Roof Load: N/A psf

Wind Speed: N/A mph 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.

Truss Name Date No. Seal# T01 T01G T20682586 7/9/20 1 T20682587 7/9/20



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: Velez, Joaquin

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.

Joaquin Velez PF No 68182 MITek USA, Inc. FL Cert 6634

6904 Parke East Blvd. Tampa FL 33610

July 9,2020

Velez, Joaquin

1 of 1

Job Truss Truss Type Qty RWK - HISCOCK GARAGE Ply T20682586 2369239 T01 ATTIC 17 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Jul 9 10:45:34 2020 Page 1 Builders FirstSource Jacksonville, FL - 32244, ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-cB?q1b7vGdLMpbKjhgSH3?oqcJsDtt_Df3aDvHyzpxV 9-10-4 15-0-0 20-1-12 3-5-7 16-8-5 24-4-0 30-0-0 1-8-5 4-2-4

Scale = 1:54.5

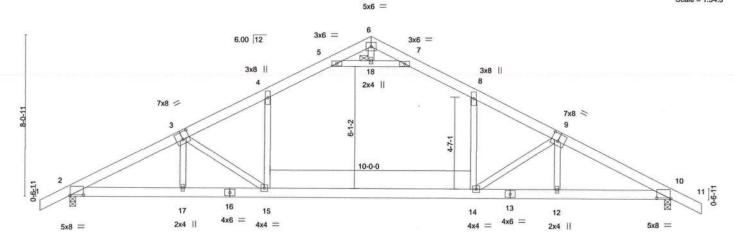


Plate Offsets (X,Y)	5-8-0 [2:0-8-3,0-0-7], [3:0-4-0,0	4-2-4 1-4-8], [9:0-4-0,0	-4-8], [10:0-8-3,0-0-7]	10-3-8		1	4-2-4	5-8-0	
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2017/Ti	2-0-0 1.25 1.25 YES PI2014	CSI. TC 0.48 BC 0.58 WB 0.66 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT) Attic	in (loc) -0.31 14-15 -0.62 14-15 0.06 10 -0.15 14-15	l/defl >999 >581 n/a 808	L/d 240 180 n/a 360	PLATES MT20 Weight: 199 lb	GRIP 244/190 FT = 20%

BRACING-

JOINTS

TOP CHORD

BOT CHORD

20-1-12

24-4-0

Structural wood sheathing directly applied or 4-3-13 oc purlins.

Rigid ceiling directly applied or 9-6-15 oc bracing.

1 Brace at Jt(s): 18

30-0-0

LUMBER-

TOP CHORD 2x6 SP No.2 *Except* 3-6.6-9: 2x6 SP M 26 **BOT CHORD**

2x6 SP No.2 *Except* 13-16: 2x6 SP M 26

WEBS 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 10=0-3-8

5-8-0

Max Horz 2=-173(LC 13)

Max Uplift 2=-323(LC 12), 10=-323(LC 13) Max Grav 2=1462(LC 2), 10=1462(LC 2)

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

TOP CHORD 2-3=-2682/786, 3-4=-2412/593, 4-5=-1901/603, 5-6=-100/845, 6-7=-100/845,

7-8=-1901/603, 8-9=-2412/593, 9-10=-2682/785

BOT CHORD 2-17=-565/2390, 15-17=-565/2385, 14-15=-251/1986, 12-14=-583/2385, 10-12=-582/2390 WEBS

5-18=-2998/803, 7-18=-2998/803, 4-15=-77/903, 8-14=-77/903, 3-15=-684/426,

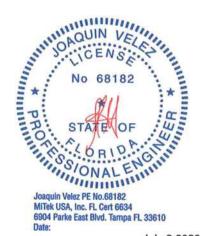
9-10-4

9-14=-684/428, 6-18=-45/257

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) 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
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * 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.
- 5) Ceiling dead load (5.0 psf) on member(s). 4-5, 7-8, 5-18, 7-18; Wall dead load (5.0 psf) on member(s).4-15, 8-14
- 6) Bottom chord live load (30.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-15
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 323 lb uplift at joint 2 and 323 lb uplift at joint 10.
- 8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



July 9,2020

MARNING - Verily 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 property 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 Composarety information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Qty Truss Truss Type Ply RWK - HISCOCK GARAGE T20682587 2369239 TO1G GABLE Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Thu Jul 9 10:45:36 2020 Page 1 **Builders FirstSource** Jacksonville, FL - 32244, ID:nxAp0lu8aVJEoCbDQLOyp6y5Ask-Ya6aSG9AoFc42vU6o5VI8QuF56alLvhW7N3K_AyzpxT 16-0-7 1-6-0 5-7-2 1-0-7 1-0-7 Scale = 1:55.5 5x6 = 6.00 12 5 7x8 = 7-8-12 7x8 > 6-1-2 10 3x4 3x4 // 3x4 3x4 // 11 10-0-0 13 14-90 5x8 = 3x6 > 20 19 15 5x8 = 18 17 16 3x6 = 4x6 = 3x4 = 3x4 = 20-1-12 24-4-14 30-0-0 Plate Offsets (X,Y)--[2:0-4-0,0-3-1], [4:0-4-0,0-4-8], [10:0-4-0,0-4-8], [12:0-4-0,0-3-1] LOADING (psf) SPACING-2-0-0 CSI DEFL. (loc) **V**defI L/d **PLATES** GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.16 Vert(LL) 0.00 12 n/r 120 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.45 Vert(CT) 0.00 12-13 n/r 120 BCLL 0.0 Rep Stress Incr YES WB 0.14 Horz(CT) 0.01 12 n/a n/a BCDI 10.0 Code FBC2017/TPI2014 Matrix-S Weight: 214 lb FT = 20% LUMBER-**BRACING-**2x6 SP No.2 *Except* TOP CHORD TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 1-3,11-13: 2x4 SP No.2 Rigid ceiling directly applied or 10-0-0 oc bracing. BOT CHORD **BOT CHORD** 2x6 SP No.2 WEBS 2x4 SP No.3 **OTHERS** 2x4 SP No.3

REACTIONS. All bearings 30-0-0.

(lb) -Max Horz 2=-165(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) except 2=-109(LC 12), 19=-136(LC 12),

17=-156(LC 13), 21=-175(LC 12), 15=-130(LC 13), 16=-564(LC 18), 20=-564(LC

18), 12=-133(LC 13)

All reactions 250 lb or less at joint(s) 14, 22 except 2=336(LC 1),

19=650(LC 26), 17=650(LC 27), 21=725(LC 20), 15=724(LC 2), 12=336(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown TOP CHORD 2-4=-266/110, 4-5=-446/151, 5-6=-463/276, 8-9=-463/276, 9-10=-446/150,

10-12=-266/65

BOT CHORD 17-19=0/367

WEBS 5-19=-331/183, 9-17=-331/182, 4-21=-457/248, 10-15=-457/254

1) Unbalanced roof live loads have been considered for this design.

- 2) 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
- 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) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 9) Ceiling dead load (5.0 psf) on member(s). 5-6, 8-9, 6-23, 8-23; Wall dead load (5.0 psf) on member(s).5-19, 9-17
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 2, 136 lb uplift at joint 19, 156 lb uplift at joint 17, 175 lb uplift at joint 21, 130 lb uplift at joint 15, 564 lb uplift at joint 16, 564 lb uplift at joint 20 and 133 lb uplift at joint 12.
- 11) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



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July 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 show, 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPII Quality Criteria, DSB-89 and BCSI Building Composately Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



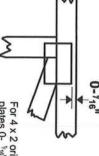
Symbols

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.

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0 0

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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 × 4

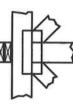
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

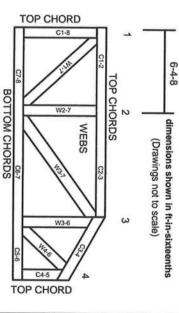
Industry Standards: ANSI/TPI1: National D

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 & 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-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.

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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.

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- 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/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

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- 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 after 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.