

RE: Gromko Shop - Gromko Shop

MiTek USA, Inc.

6904 Parke East Blvd. Tampa, FL 33610-4115

Site Information:

Customer Info: SCCI Project Name: . Model: .

Lot/Block: .

Subdivision: .

Address: ., .

City: Lake City

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: 40.0 psf

Floor Load: N/A psf

This package includes 3 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	T18284902	A1	10/4/19
2	T18284903	A2GE	10/4/19
3	T18284904	A3GE	10/4/19



The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Albani, Thomas

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.

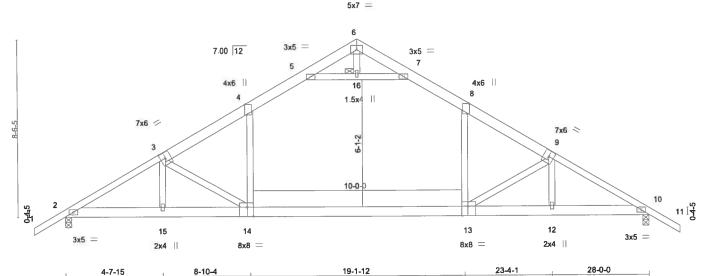


Thomas A. Albani PE No.39380 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

October 4,2019

Gromko Shop Ply Truss Truss Type Qty Job T98284902 COMMON 17 Gromko Shop A1 Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Fri Oct 4 07:59:22 2019 Page 1 ID:nN6fNGwdq0ewisjBThSNjayeLng-yvtrAnTEO1?GFGMdZkTR52KT3fgl?JBxmXaRUGyWs7J Mayo, FL - 32066, Mayo Truss Company, Inc., 23-4-1 28-0-0 29-6-0 8-10-4 4-2-5 19-1-12 14-0-0 16-2-11 -1-6-0 1-6-0 1-6-0 2-2-11

Scale = 1:55.6



1	4-7-15	4-2-5		10-3-8			4-2-5	4-7-15	
Plate Offsets (X,Y)	[3:0-3-0,0-3-4], [4:0-5-11	I,Edge], [8:0-5-11	,Edge], [9:0-3-0,0-3-4], [	3:0-3-8,Edge], [	14:0-3-8,Edge]				
LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2017/	2-0-0 1.25 1.25 YES	CSI. TC 0.59 BC 0.65 WB 0.30 Matrix-AS	DEFL. Vert(LL) Vert(CT) Horz(CT) Attic	in (loc) -0.38 13-14 -0.63 13-14 0.05 10 -0.24 13-14	l/defl >880 >529 n/a 534	L/d 240 180 n/a 360	PLATES MT20 Weight: 181 lb	<b>GRIP</b> 244/190 FT = 0%

**BRACING-**

TOP CHORD

**BOT CHORD** 

**JOINTS** 

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

1 Brace at Jt(s): 16

**LUMBER-**

TOP CHORD 2x6 SP SS \*Except\*

1-3,9-11: 2x4 SP No.2

2x6 SP SS **BOT CHORD WEBS** 2x4 SP No.2

(lb/size) 2=1365/0-3-8, 10=1365/0-3-8 REACTIONS.

Max Horz 2=155(LC 11)

Max Grav 2=1566(LC 18), 10=1566(LC 19)

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

TOP CHORD 2-3=-2624/95, 3-4=-2420/50, 4-5=-1811/137, 5-6=0/568, 6-7=0/568, 7-8=-1812/137,

8-9=-2421/50, 9-10=-2623/95

**BOT CHORD** 2-15=0/2358, 14-15=0/2361, 13-14=0/1954, 12-13=0/2243, 10-12=0/2241 **WEBS** 

5-16=-2581/108, 7-16=-2581/108, 8-13=0/1004, 9-13=-575/154, 4-14=0/1004,

3-14=-575/154

### 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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed;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.
- \* 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, 5-16, 7-16; Wall dead load (5.0 psf) on member(s).8-13, 4-14 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



6904 Parke East Blvd. Tampa FL 33610

October 4,2019

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rov. 10/03/2015 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

\*\*ANSITP!\* Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\*

available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Gromko Shop Truss Type Qty Job Truss T18284903 GABLE @romko\_Shop A2GE Job Reference (optional) 8.240 s Jul 14 2019 MiTek Industries, Inc. Fri Oct 4 07:59:24 2019 Page 1 Mayo Truss Company, Inc., Mayo, FL - 32066, ID:nN6fNGwdq0ewisjBThSNjayeLng-vH?bbTVUweF\_UaW?g9VvBTPwbSWuTFreDr3XY9yWs7H -1-6-0 1-6-0 14-0-0 28-0-0 14-0-0 Scale = 1:53.2 4x4 =11 7.00 12 12 10 13 3x4 / 14 3x4 15 7 16 6 17 5 18 4x8 4x8 || 23 22 25 24 34 33 32 31 30 29 28 27 26 3x4 = 5x5 = 3x4 = 4x16 // 4x16 \\ 28-0-0 [2:0-3-8,Edge], [2:0-1-9,Edge], [3:0-0-0,0-2-0], [19:0-0-0,0-2-0], [20:0-1-9,Edge], [20:0-3-8,Edge], [22:0-0-14,0-1-8], [22:0-2-8,1-4-2], [28:0-2-8,0-3-0], Plate Offsets (X,Y)-[34:0-0-14,0-1-8], [34:0-2-8,1-4-2] LOADING (psf) SPACING-CSI. DEFL. in (loc) l/defl **PLATES GRIP** 2-0-0 Plate Grip DOL 1.25 TC 0.14 Vert(LL) -0.01 21 n/r 120 MT20 244/190 TCLL 20.0 ВС 0.03 Vert(CT) -0.01 21 120 1.25 n/r TCDL 10.0 Lumber DOL WB 0.00 20 0.16 Horz(CT) n/a n/a **BCLL** 0.0 Rep Stress Incr YES

LUMBER-

BCDL

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

10.0

2x4 SP No.2 **OTHERS** 

**BRACING-**

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

Weight: 178 lb

FT = 0%

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 28-0-0.

Max Horz 2=-151(LC 10) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 29, 30, 31, 32, 33, 27, 26, 25, 24, 23

All reactions 250 lb or less at joint(s) 2, 20, 28, 29, 30, 31, 32, 33, 34, 27, 26, 25, 24, 23, 22

Matrix-S

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

Code FBC2017/TPI2014

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; 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 1.5x4 MT20 unless otherwise indicated.
- 5) 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.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 29, 30, 31, 32, 33, 27, 26, 25, 24, 23.



6904 Parke East Blvd. Tampa FL 33610 Date:

October 4,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 rev. 10/03/2015 BEFORE USE.

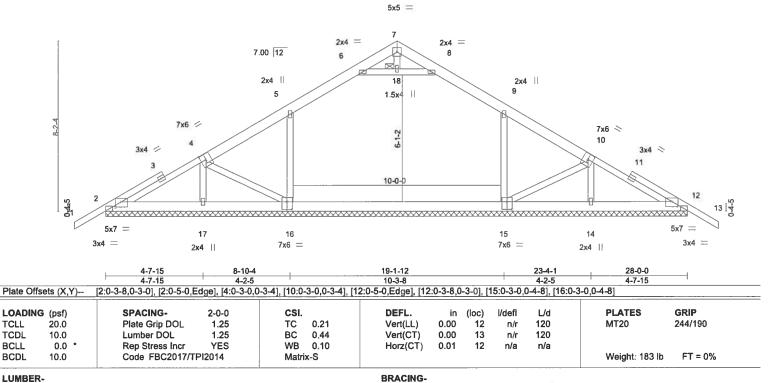
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

ANSUTPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



Job Truss Truss Type Qty Ply Gromko Shop T18284904 A3GE COMMON Gromko\_Shop Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066, 8.240 s Jul 14 2019 MiTek Industries, Inc. Fri Oct 4 07:59:25 2019 Page 1 ID:nN6fNGwdq0ewisjBThSNjayeLng-NUZzppW6hyNr6k5CEs08jgy4GsliCj2NSVp54byWs7G -1-6-0 1-6-0 15-7-12 23-4-1 8-10-4 19-1-12 4-7-15 4-2-5 3-6-0 1-7-12 3-6-0 4.2.5 1-6-0

Scale = 1:55.7



TOP CHORD

**BOT CHORD** 

**JOINTS** 

LUMBER-

2x4 SP No.2 \*Except\* TOP CHORD

4-7,7-10: 2x6 SP No.2

**BOT CHORD** 2x6 SP No.2

**WEBS** 2x4 SP No.2

REACTIONS. All bearings 28-0-0. Max Horz 2=149(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 12

All reactions 250 lb or less at joint(s) except 2=324(LC 1), 16=576(LC 17), 15=587(LC 18), 14=545(LC 1), 17=545(LC 1), 12=324(LC 1)

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

TOP CHORD 4-5=-407/81, 5-6=-415/170, 8-9=-415/170, 9-10=-407/80

BOT CHORD 15-16=0/307

9-15=-280/142, 10-14=-479/118, 5-16=-280/143, 4-17=-479/112 WEBS

### 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=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

1 Brace at Jt(s): 18

Date:

October 4.2019

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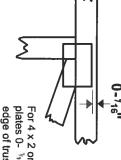


### Symbols

# PLATE LOCATION AND ORIENTATION



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



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

00

O

S

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

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

### PLATE SIZE



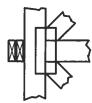
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

### **BEARING**



number where bearings occur.

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

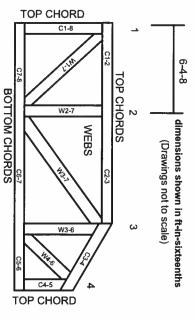
### industry Standards:

ANSI/TPI1: National Design Specification for Metal Guide to Good Practice for Handling, Building Component Safety Information, Plate Connected Wood Truss Construction. Design Standard for Bracing.

DSB-89:

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

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

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

# General Safety Notes

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

- 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 bracing should be considered. wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ω

- 4. Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other
- Place plates on each face of truss at each locations are regulated by ANSI/TPI 1. joint and embed fully. Knots and wane at joint

6

- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- œ 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 camber for dead load deflection. responsibility of truss fabricator. General practice is to
- 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
- 13. 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 project engineer before use. environmental, health or performance risks. Consult with
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.