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

RE: Jeff_Johnson - Jeff Johnson

MiTek USA, Inc.
6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:
Customer Info: Jeff Johnson Project Name: . Model: .
Lot/Block: . Subdivision: .
Address: ., .
City: Columbia County 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 4 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	T22070683	A1	12/4/20
2	T22070684	A2GE	12/4/20
3	T22070685	A3GE	12/4/20
4	T22070686	A4G3	12/4/20

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for FILE COPY
Code Compliance
PLANS EXAMINER

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

PHILIP J. O'REGAN LICENSE No. 58126 STATE OF FLORIDA PROFESSIONAL ENGINEER

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: December 4,2020

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.

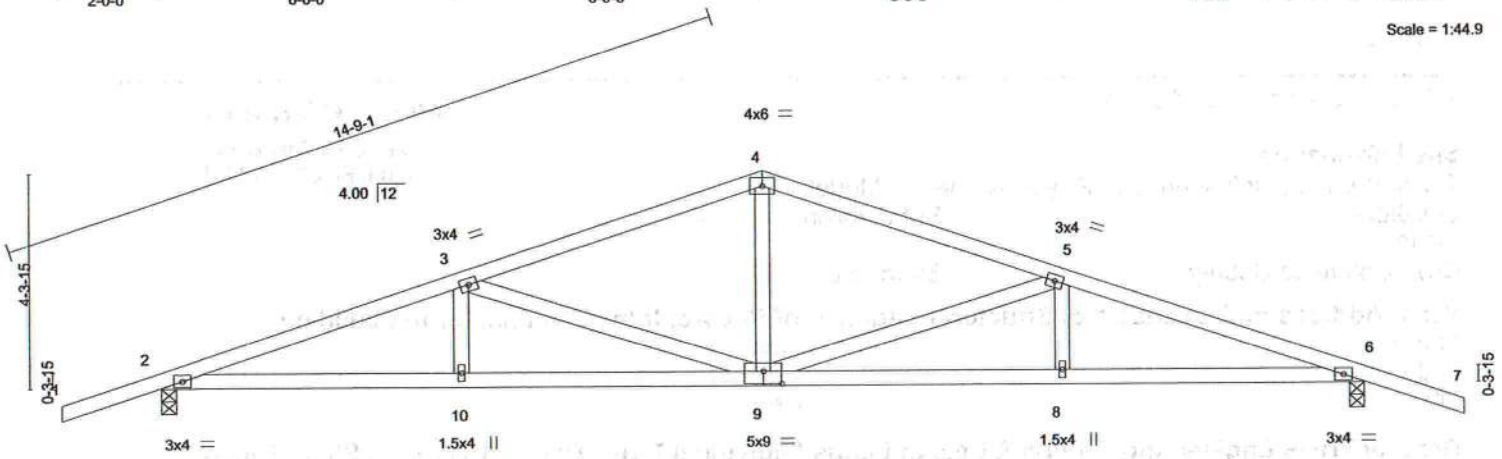
Job	Truss	Truss Type	Qty	Ply	Jeff Johnson	T22070683
JEFF_JOHNSON	A1	COMMON	25	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Dec 3 14:09:30 2020 Page 1
ID:X6Bh?8wDT8?sgPle899futzJbMB-Meq96hkU_gKmmT03jlDpEVEqQGu4TLsQwyLB_0yCf63

-2-0-0	6-0-0	12-0-0	18-0-0	24-0-0	26-0-0
2-0-0	6-0-0	6-0-0	6-0-0	6-0-0	2-0-0

Scale = 1:44.9



6-0-0	12-0-0	18-0-0	24-0-0
6-0-0	6-0-0	6-0-0	6-0-0

Plate Offsets (X,Y)-- [9:0-4-8,0-3-0]

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	0.31	Vert(LL)	-0.12	8-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.25	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.08	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 108 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-49(LC 10)
Max Uplift 2=-49(LC 12), 6=-49(LC 12)
Max Grav 2=1080(LC 1), 6=1080(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2320/529, 3-4=-1587/398, 4-5=-1587/398, 5-6=-2320/529
BOT CHORD 2-10=-401/2161, 9-10=-401/2161, 8-9=-422/2161, 6-8=-422/2161
WEBS 4-9=-63/617, 3-9=-775/220, 5-9=-775/219

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=24ft; 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.
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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 2 and 49 lb uplift at joint 6.
6) 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.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
December 4,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

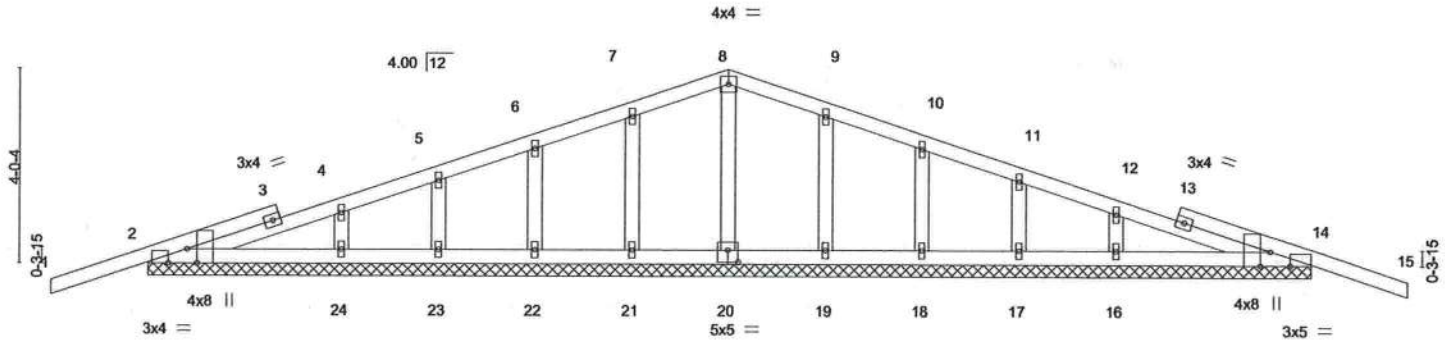
Job	Truss	Truss Type	Qty	Ply	Jeff Johnson
JEFF_JOHNSON	A2GE	GABLE	1	1	T22070684
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066,

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Dec 3 14:09:31 2020 Page 1
ID:X6Bh?8wDT8?sgPle899futzJbMB-qqOXK1l6l_TdOcbFH?k2nin02gLWCw0Z8c5lXTyCf62

-2-0-0 2-0-0 | 12-0-0 12-0-0 | 24-0-0 12-0-0 | 26-0-0 2-0-0

Scale = 1:46.4



24-0-0
24-0-0

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [2:0-4-12,Edge], [14:0-3-8,Edge], [14:0-4-12,Edge], [20:0-2-8,0-3-0]

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	0.25	Vert(LL)	-0.01	15	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.10	Vert(CT)	-0.02	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 112 lb	FT = 0%

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

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 24-0-0.
(lb) - Max Horz 2=-46(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 21, 22, 23, 19, 18, 17
Max Grav All reactions 250 lb or less at joint(s) 20, 21, 22, 23, 24, 19, 18, 17, 16 except 2=293(LC 21), 14=293(LC 22)

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

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=24ft; 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, 14, 21, 22, 23, 19, 18, 17.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
December 4,2020

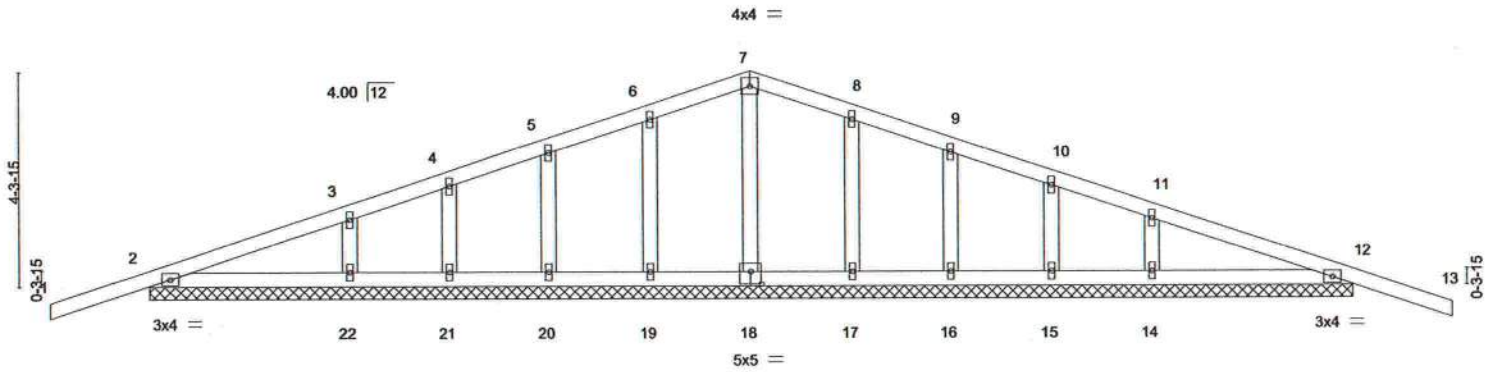
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Jeff Johnson	T22070685
JEFF_JOHNSON	A3GE	GABLE	1	1	Job Reference (optional)	

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Dec 3 14:09:32 2020 Page 1
ID:X6Bh?8wDT8?sgPle899futzJbMB-I1yvXNlkWlbU0mARqjFHJwJBo4hhxNEjNGqI3vyCf61

-2-0-0 2-0-0 | 12-0-0 12-0-0 | 24-0-0 12-0-0 | 26-0-0 2-0-0

Scale = 1:44.9



24-0-0
24-0-0

Plate Offsets (X,Y)-- [18:0-2-8,0-3-0]

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	0.25	Vert(LL)	-0.02	13	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.03	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 111 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz 2=-49(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 19, 20, 21, 17, 16, 15
Max Grav All reactions 250 lb or less at joint(s) 18, 19, 20, 21, 17, 16, 15 except 2=292(LC 1), 12=292(LC 1), 22=261(LC 1), 14=261(LC 1)

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

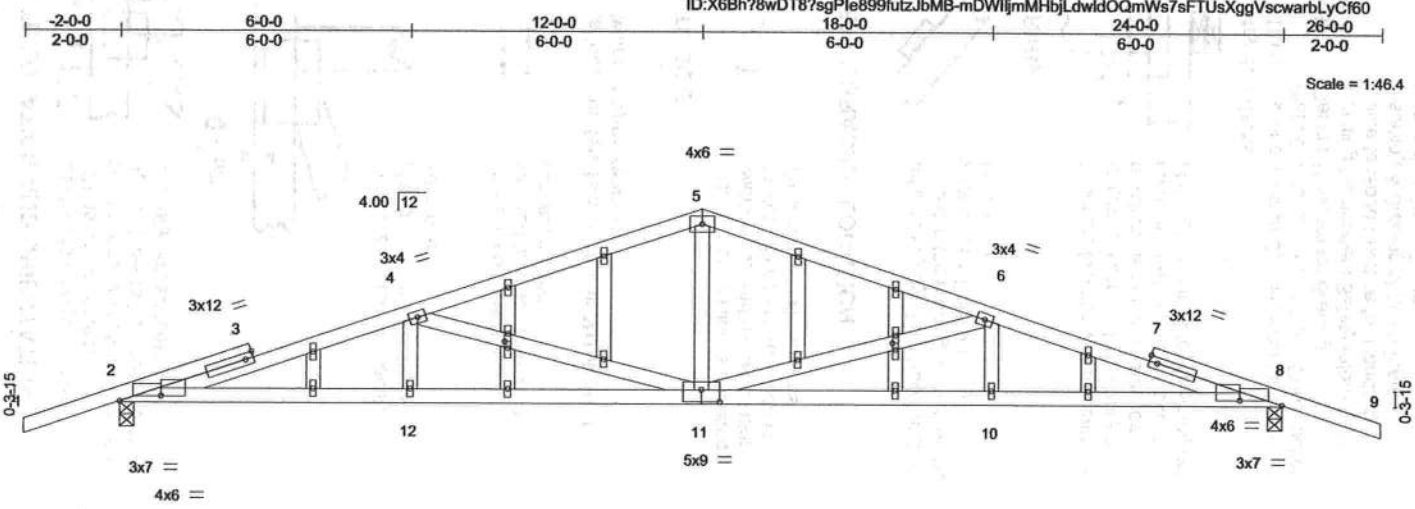
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2) zone; cantilever left and right 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, 12, 19, 20, 21, 17, 16, 15.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
December 4,2020

6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	Jeff Johnson
JEFF_JOHNSON	A4G3	GABLE	1	1	T22070686
					Job Reference (optional)

Mayo Truss Company, Inc., Mayo, FL - 32066, 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Dec 3 14:09:33 2020 Page 1
ID:X6Bh?8wDT8?sgPIe899futzJbMB-mDWIljmMHbjLdwldOQmWs7sFTUsXggVscwarbLyCf60



	6-0-0	12-0-0	18-0-0	24-0-0
	6-0-0	6-0-0	6-0-0	6-0-0

Plate Offsets (X,Y)-- [2:0-10-4,0-1-4], [2:0-10-4,0-1-4], [8:0-10-4,0-1-4], [8:0-10-4,0-1-4], [11:0-4-8,0-3-0], [15:0-1-10,0-0-12], [24:0-1-10,0-0-12]

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	0.64	Vert(LL)	-0.15	11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.32	11-12	>884	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.08	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							Weight: 127 lb	FT = 0%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
2-5,5-8: 2x4 SP No.1
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-46(LC 10)
Max Uplift 2=-53(LC 12), 8=-53(LC 12)
Max Grav 2=1077(LC 1), 8=1077(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2595/589, 4-5=-1668/406, 5-6=-1668/406, 6-8=-2595/588
BOT CHORD 2-12=-474/2484, 11-12=-474/2484, 10-11=-496/2484, 8-10=-496/2484
WEBS 5-11=-69/681, 4-11=-998/272, 6-11=-998/271

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=24ft; 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) 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 studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
9) 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.

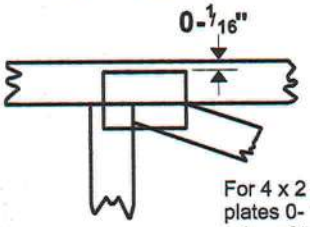
Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
December 4,2020

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

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

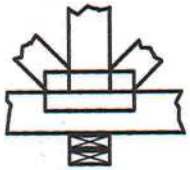
4 x 4

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

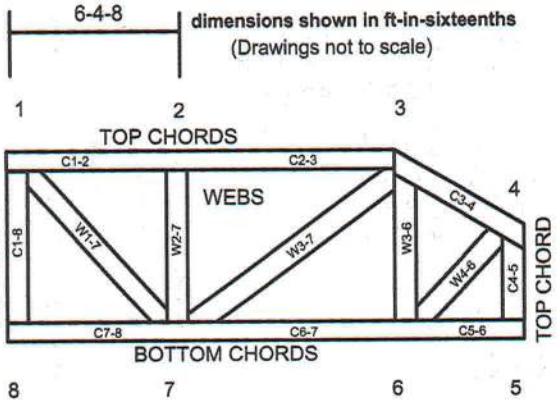


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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



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.

MiTek

MiTek Engineering Reference Sheet: MII-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 Tor I 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.