



RE: saunders - Saunders MiTek USA, Inc. 6904 Parke East Blvd. Site Information:

Customer Info: CW GIlbert Project Name: . Model: .

Lot/Block: .

Subdivision: .

Address: ., . City: Fort White 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: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: 130 mph Roof Load: 55.0 psf Floor Load: N/A psf

This package includes 9 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	T22149396	A1	12/11/20
2	T22149397	A2	12/11/20
3	T22149398	A3	12/11/20
4	T22149399	A4GE	12/11/20
5	T22149400	CJ01	12/11/20
6	T22149401	J1	12/11/20
7	T22149402	J2	12/11/20
8	T22149403	J3	12/11/20
9	T22149404	J4	12/11/20



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.

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.

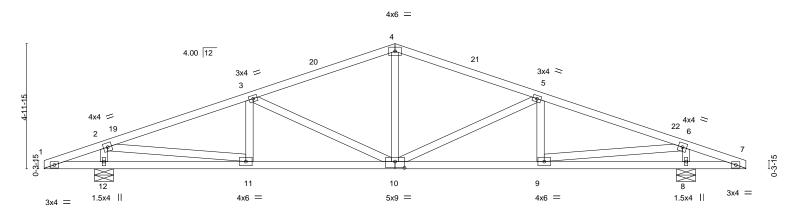


Tampa, FL 33610-4115

6904 Parke East Blvd. Tampa FL 33610

Job Truss Truss Type Qty Saunders Ply T22149396 SAUNDERS Α1 Common Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:46 2020 Page 1 ID:raC52gnWeUX6ZWLOal1iiHyAJy_-nVuXHX4HGcY84mAiY06qk2ovLRzNHuT25_ZHiwyA5ix 2-4-10 14-0-0 19-9-11 25-7-6 28-0-0 2-4-10 5-9-11 5-9-11 5-9-11 5-9-11 2-4-10

Scale = 1:46.0



2	-0-0 2-4-1 ₀	8-2-5		14-(J-U		19-9-11			25-7-6	2g-0 ₁ 0 28-0-0	
2	-0-0 0-4-1 ¹ 0	5-9-11		5-9-	11	'	5-9-11		1	5-9-11	0-4-10 2-0-0	
Plate Offse	ets (X,Y) [[10:0-4-8,0-3-0]										
		-										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defI	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	-0.06 10-11	>999	240	MT20	244/190	
TCDL	15.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.20 10-11	>999	180			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.04 8	n/a	n/a			
BCDL	20.0	Code FBC2020/TI	PI2014	Matri	x-AS	` ′				Weight: 136 I	b FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

2x4 SP No.2 WEBS

REACTIONS. (size) 8=0-9-4, 12=0-9-4

Max Horz 12=75(LC 11)

Max Uplift 8=-156(LC 12), 12=-223(LC 12) Max Grav 8=1540(LC 1), 12=1540(LC 1)

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

2-3=-2168/445, 3-4=-1722/411, 4-5=-1722/411, 5-6=-2168/445 TOP CHORD

BOT CHORD 10-11=-326/1995, 9-10=-331/1995

4-10=-48/682, 5-10=-533/133, 6-9=-448/1991, 6-8=-1311/421, 3-10=-533/133, **WEBS**

2-11=-448/1991, 2-12=-1311/421

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 14-0-0, Exterior(2R) 14-0-0 to 17-0-0, Interior(1) 17-0-0 to 28-0-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 8 and 223 lb uplift at
- 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.



MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

December 11,2020



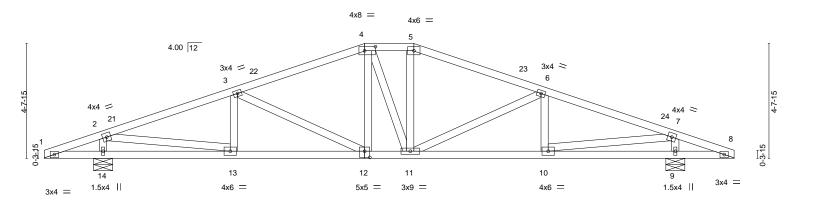
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE

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 in-juny and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Truss Type Job Truss Saunders Qty Ply T22149397 SAUNDERS Α2 Hip Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:47 2020 Page 1 $ID: raC52gnWeUX6ZWLOal1iiHyAJy_-FhSvUt5v1wg?iwlu6jd3HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLr0LaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLaBKeJrENyA5iwlog1iwlu6jd4HGK4iqLaBKeJrENyA5iwlog1iwlu6jd4HGK4iwlog1iwlu6jd4HGK4iqLibWidiwlu6jd4HGK4iqLibWidiwlu6jd4HGWidiwlu6jd4HGK4iqLibWi$ 2-4-10 7-8-5 13-0-0 15-0-0 20-3-11 25-7-6 28-0-0 2-4-10 5-3-11 5-3-11 2-0-0 5-3-11 5-3-11 2-4-10

Scale = 1:46.8



2-0-0 2- 4 -1 ₁ 0	7-8-5	13-0-0	15-0-0	20-3-11	_ 25⋅	-7-6 26-0 ₁	0 28-0-0
2-0-0 0-4-10	5-3-11	5-3-11	2-0-0	5-3-11	5-3	3-11 0-4-1	0 2-0-0
Plate Offsets (X,Y) [4:0-5-	4,0-2-0], [12:0-2-8,0-3-0]						_
LOADING (psf)	SPACING- 2-0	-0 CSI.	DEFL.	in (loc) I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.3	25 TC 0.34	Vert(LL)	-0.06 12-13 >999	240	MT20	244/190
TCDL 15.0	Lumber DOL 1.2	25 BC 0.57	Vert(CT)	-0.20 10-11 >999	180		
BCLL 0.0 *	Rep Stress Incr YE	S WB 0.46	Horz(CT)	0.04 9 n/a	n/a		
BCDL 20.0	Code FBC2020/TPI201	4 Matrix-AS	, ,			Weight: 145 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2

BOT CHORD 2x4 SP No.2 WEBS

REACTIONS. (size) 14=0-9-4, 9=0-9-4

Max Horz 14=70(LC 11) Max Uplift 14=-223(LC 12), 9=-156(LC 12)

Max Grav 14=1540(LC 1), 9=1540(LC 1)

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

2-3=-2148/466, 3-4=-1800/460, 4-5=-1652/461, 5-6=-1794/457, 6-7=-2148/471 TOP CHORD

BOT CHORD 12-13=-373/1981, 11-12=-277/1647, 10-11=-360/1981

2-14=-1324/428, 2-13=-501/2031, 3-12=-411/110, 4-12=-11/332, 5-11=-32/340, **WEBS**

6-11=-417/111, 7-10=-485/2031, 7-9=-1325/421

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-0-0, Exterior(2E) 13-0-0 to 15-0-0, Exterior(2R) 15-0-0 to 19-2-15, Interior(1) 19-2-15 to 28-0-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 14 and 156 lb uplift
- 8) 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.



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December 11,2020



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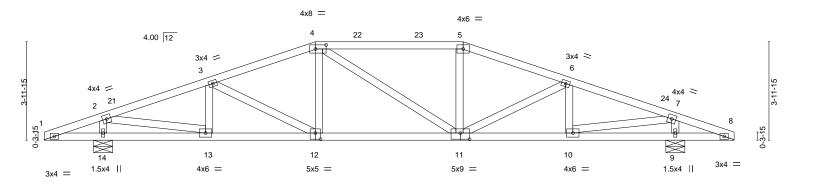
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not Design Valid to Use Only with New Connectors. This design is based only upon parameters shown, and is for an individual rounding component, not a truss system. Before use, the building designe 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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Saunders Ply T22149398 SAUNDERS АЗ Hip Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:47 2020 Page 1 2-4-10 6-8-5 11-0-0 17-0-0 21-3-11 25-7-6 28-0-0 2-4-10 4-3-11 4-3-11 6-0-0 4-3-11 4-3-11 2-4-10

Scale = 1:46.8



2-0-0 2- 4 -1 ₀	6-8-5	11-0-0		17-0-0	1 21-3-11	25-7-6 26-0	0 ₁ 0 28-0-0
2-0-0 0-4-10	4-3-11	4-3-11	ı	6-0-0	4-3-11	4-3-11 0-4-	10 2-0-0
Plate Offsets (X,Y)	[4:0-5-4,0-2-0], [11:0-4-	8,0-3-0], [12:0-2-8	3,0-3-0]				
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51	Vert(LL) -	0.06 12 >999 240	MT20	244/190
TCDL 15.0	Lumber DOL	1.25	BC 0.59	Vert(CT) -	0.21 11-12 >999 180)	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.45	Horz(CT)	0.04 9 n/a n/a	a	
BCDL 20.0	Code FBC2020/	TPI2014	Matrix-AS	, ,		Weight: 138 lb	FT = 20%
						=	

LUMBER-

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

2x4 SP No.2

BRACING-

TOP CHORD BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

REACTIONS. (size) 14=0-9-4, 9=0-9-4

Max Horz 14=59(LC 11)

Max Uplift 14=-223(LC 12), 9=-156(LC 12) Max Grav 14=1540(LC 1), 9=1540(LC 1)

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

2-3=-2033/464, 3-4=-1991/509, 4-5=-1852/515, 5-6=-1988/508, 6-7=-2034/464 TOP CHORD

BOT CHORD 12-13=-376/1879, 11-12=-350/1847, 10-11=-363/1880

WEBS 2-14=-1335/429, 2-13=-516/2001, 4-12=0/338, 5-11=0/341, 7-10=-516/2002,

7-9=-1336/429

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 17-0-0, Exterior(2R) 17-0-0 to 21-3-11, Interior(1) 21-3-11 to 28-0-0 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) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) 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.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 223 lb uplift at joint 14 and 156 lb uplift
- 8) 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

December 11,2020

MARNING - 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 Design Valid to Use only will read control to the second of the second o fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Saunders Ply T22149399 SAUNDERS A4GE Hip Girder Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:50 2020 Page 1 ID:raC52gnWeUX6ZWLOal1iiHyAJy_-fG726v7nJr2aZNUTnsBmvuyYi2K1Dhle0cXVrhyA5it 28-0-0 2-4-10 9-0-0 14-0-0 19-0-0 25-7-6

5-0-0

19-0-0

6-7-6

25-7-6

Structural wood sheathing directly applied or 4-7-7 oc purlins.

"Special" indicates special hanger(s) or other connection device(s) required at location(s)shown. The design/selection of such special connection device(s) is the responsibility of others. This applies

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

to all applicable truss designs in this job.

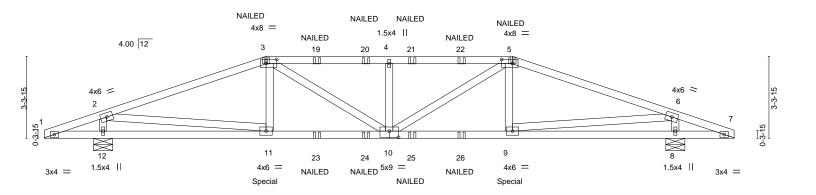
5-0-0

14-0-0

Scale = 1:46.8

2-4-10

26-010 28-0-0



	2-0-0 0-4-10	6-7-6		5-	-0-0	5-	-0-0			(6-7-6	0-4-10 2-0-0
Plate Offs	sets (X,Y)	[3:0-5-4,0-2-0], [5:0-5-4,0	-2-0], [10:0-4	-8,0-3-0]								
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATE	S GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	Vert(LL)	-0.11	10	>999	240	MT20	244/190
TCDL	15.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.28	9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.52	Horz(CT)	0.04	8	n/a	n/a		
BCDL	20.0	Code FBC2020/T	PI2014	Matri	x-MS						Weight:	268 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2-0-0 2-4-10

2-4-10

6-7-6

REACTIONS. (size) 12=0-9-4, 8=0-9-4

Max Horz 12=-48(LC 6)

Max Uplift 12=-553(LC 8), 8=-486(LC 8) Max Grav 12=2887(LC 1), 8=2887(LC 1)

9-0-0

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

TOP CHORD 1-2=-319/52, 2-3=-5256/978, 3-4=-5872/1086, 4-5=-5872/1086, 5-6=-5256/990,

6-7=-321/64

BOT CHORD 1-12=-49/338, 11-12=-54/374, 10-11=-847/4929, 9-10=-858/4929, 8-9=-63/339,

7-8=-63/339

WFBS 2-12=-2605/604, 2-11=-862/4633, 3-11=-59/571, 3-10=-155/1179, 4-10=-740/262,

5-10=-145/1179. 5-9=-55/571. 6-9=-808/4634. 6-8=-2605/566

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.

Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=28ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 6) Provide adequate drainage to prevent water ponding.
- 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 553 lb uplift at joint 12 and 486 lb uplift
- 10) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 822 lb down and 295 lb up at 9-0-0, and 822 lb down and 295 lb up at 18-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

Continued on page 2



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

December 11,2020

👠 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 in-juny and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSVTP/1 Qu Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Type Qty Saunders Truss Ply T22149399 SAUNDERS A4GE Hip Girder Job Reference (optional)

Mayo Truss Company, Inc.,

Mayo, FL - 32066,

8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:50 2020 Page 2 $ID: raC52 gnWeUX6ZWLOal1iiHyAJy_-fG726v7nJr2aZNUTnsBmvuyYi2K1Dhle0cXVrhyA5it$

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=-70, 3-5=-70, 5-7=-70, 13-16=-40

Concentrated Loads (lb)

Vert: 3=-121(B) 5=-121(B) 11=-822(B) 9=-822(B) 19=-121(B) 20=-121(B) 21=-121(B) 22=-121(B) 23=-82(B) 24=-82(B) 25=-82(B) 26=-82(B)

Job Truss Truss Type Qty Saunders Ply T22149400 SAUNDERS CJ01 Diagonal Hip Girder Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:51 2020 Page 1 ID:raC52gnWeUX6ZWLOal1iiHyAJy_-7ThQKF8P48ARBX3gLZi?R6VeVSday8VnFGH2N8yA5is 3-3-11 7-10-7 12-8-12 3-3-11 4-6-12 4-10-4 Scale = 1:22.2 4 5 2.83 12 3x4 = 3x4 = 14 15 16 8 7 3x4 = NAILED NAILED Special 4x6 = 4x6 = 6NAILED NAILED Special 5x10 \\ 3-3-11 0-6-9 7-10-7 2-9-3 4-6-12 4-10-4 Plate Offsets (X,Y)--[1:0-5-5,0-0-5] SPACING-**PLATES** GRIP LOADING (psf) 2-0-0 CSL DEFI in (loc) I/defl L/d TCLL 20.0 Plate Grip DOL 1.25 TC 0.87 Vert(LL) -0.04 7-8 >999 240 MT20 244/190 TCDL 15.0 Lumber DOL 1.25 вс 0.91 Vert(CT) -0.08 7-8 >999 180 0.0 Rep Stress Incr NO WB 0.53 **BCLL** Horz(CT) -0.01 n/a n/a

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

BCDL

TOP CHORD 2x4 SP No.2 **BOT CHORD** 2x6 SP No.2

20.0

2x4 SP No.2 WEBS

REACTIONS. (size) 9=1-1-1, 7=Mechanical

Max Horz 9=193(LC 7)

Max Uplift 9=-910(LC 8), 7=-239(LC 8) Max Grav 9=1278(LC 31), 7=850(LC 30)

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

Code FBC2020/TPI2014

1-2=-430/2295, 2-3=-693/455 TOP CHORD

BOT CHORD 1-9=-2189/414, 8-9=-2286/502, 7-8=-417/653

WEBS 2-9=-1168/47, 2-8=-368/2334, 3-8=-384/351, 3-7=-625/415

NOTES-

 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional); cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60

Matrix-MS

- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 910 lb uplift at joint 9 and 239 lb uplift at
- "NAILED" indicates 3-10d (0.148"x3") or 2-12d (0.148"x3.25") toe-nails per NDS guidlines.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 157 lb down and 45 lb up at 0-0-0, and 157 lb down and 45 lb up at 0-0-0 on top chord, and 71 lb down at 0-0-0, 71 lb down at 0-0-0, and 133 lb down and 649 lb up at 4-2-10, and 133 lb down and 649 lb up at 4-2-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) 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

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-30(F=40), 4-5=10(F=40)

Concentrated Loads (lb)

Vert: 1=-393(F=-197, B=-197) 14=909(F=454, B=454) 15=-48(F=-24, B=-24) 16=-141(F=-70, B=-70)

Continued on page 2



Weight: 69 lb

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

Rigid ceiling directly applied or 2-9-7 oc bracing.

except end verticals.

FT = 20%

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Job	Truss	Truss Type	Qty	Ply	Saunders
					T22149400
SAUNDERS	CJ01	Diagonal Hip Girder	4	1	
					Job Reference (optional)

Mayo Truss Company, Inc.,

Mayo, FL - 32066,

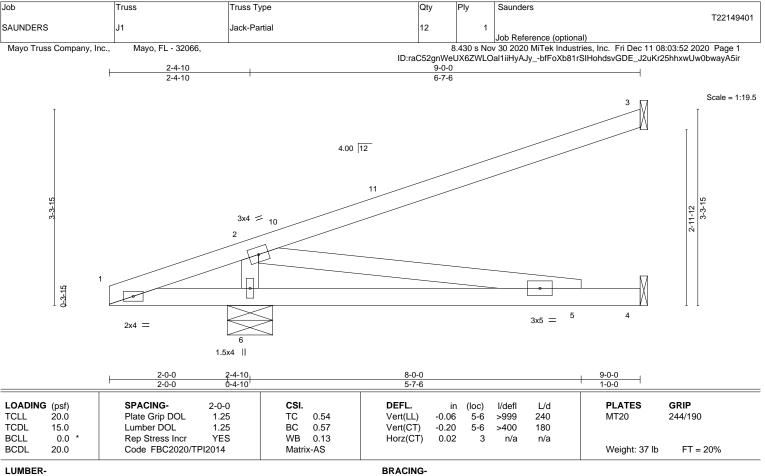
8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:51 2020 Page 2 $ID: raC52gnWeUX6ZWLOal1iiHyAJy_-7ThQKF8P48ARBX3gLZi?R6VeVSday8VnFGH2N8yA5 is$

LOAD CASE(S) Standard

Trapezoidal Loads (plf)

Vert: 1=0(F=20, B=20)-to-13=-48(F=-4, B=-4), 13=0(F=20, B=20)-to-6=-242(F=-101, B=-101)





TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

WFBS 2x4 SP No.2

REACTIONS. (size) 3=Mechanical, 4=Mechanical, 6=0-9-4

Max Horz 6=105(LC 12)

Max Uplift 3=-71(LC 12), 6=-117(LC 12)

Max Grav 3=191(LC 1), 4=169(LC 3), 6=671(LC 1)

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

WEBS

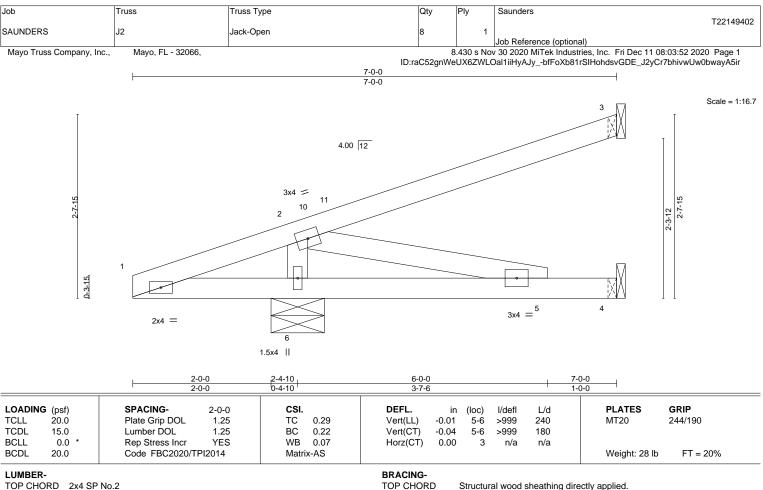
NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 71 lb uplift at joint 3 and 117 lb uplift at ioint 6.
- 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.



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BOT CHORD

Rigid ceiling directly applied.

LUMBER-

REACTIONS.

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

WFBS 2x4 SP No.2

(size) 3=Mechanical, 4=Mechanical, 6=0-9-4

Max Horz 6=82(LC 12)

Max Uplift 3=-49(LC 12), 6=-116(LC 12) Max Grav 3=130(LC 1), 4=91(LC 3), 6=582(LC 1)

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

WFBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 3 and 116 lb uplift at ioint 6.
- 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.



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Job Truss Truss Type Qty Saunders Ply T22149403 SAUNDERS J3 Jack-Open Job Reference (optional) Mayo Truss Company, Inc., Mayo, FL - 32066 8.430 s Nov 30 2020 MiTek Industries, Inc. Fri Dec 11 08:03:53 2020 Page 1 ID:raC52gnWeUX6ZWLOal1iiHyAJy_-3rpBlx9gcmQ8QrC2S_kTWXa6QFR3QAN4iam9S0yA5iq 5-0-0 5-0-0 Scale = 1:13.7 4.00 12 1.5x4 II 1-7-12 0-3-15 2x4 = 1.5x4 2-0-0 2-0-0 2-4-10 0-4-10 5-0-0 2-7-6 LOADING (psf) SPACING-**PLATES** GRIP CSI. DEFL. 2-0-0 (loc) I/defI I/d 244/190 **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.33 Vert(LL) -0.01 4-5 >999 240 MT20 TCDL 15.0 Lumber DOL 1.25 BC 0.33 Vert(CT) 0.01 4-5 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.05 Horz(CT) -0.04 n/a n/a Code FBC2020/TPI2014 Weight: 16 lb FT = 20% **BCDL** 20.0 Matrix-AS **BRACING-**

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied.

Rigid ceiling directly applied.

LUMBER-

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

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-9-4

Max Horz 5=58(LC 12)

Max Uplift 3=-21(LC 9), 4=-7(LC 1), 5=-124(LC 12) Max Grav 3=32(LC 17), 4=25(LC 14), 5=525(LC 1)

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

WEBS

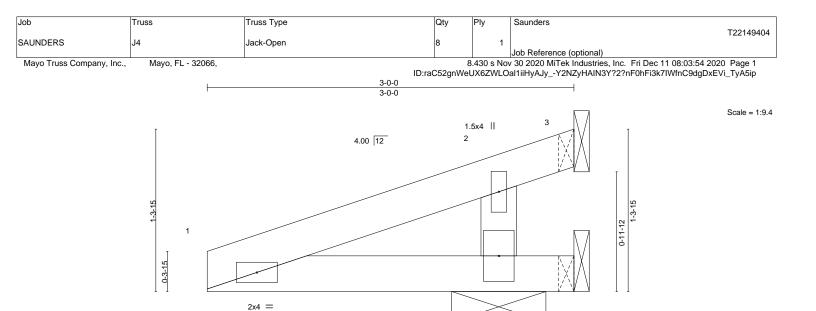
NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 4-11-4 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 21 lb uplift at joint 3, 7 lb uplift at joint 4 and 124 lb uplift at joint 5.
- 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.



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	-	2-9-4 2-9-4	3-0-0 0-2-12	
LOADING (psf) TCLL 20.0 TCDL 15.0 BCLL 0.0 *	SPACING- 2-0-0 Plate Grip DOL 1.25 Lumber DOL 1.25 Rep Stress Incr YES	CSI. DEFL. TC 0.30 Vert(LL) BC 0.34 Vert(CT) WB 0.05 Horz(CT)	in (loc) I/defl L/d 0.00 5 >999 240 0.00 5 >999 180 0-0.02 3 n/a n/a	PLATES GRIP MT20 244/190
BCDL 20.0	Code FBC2020/TPI2014	Matrix-MP	0.02	Weight: 10 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

3x5 ||

LUMBER-

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

REACTIONS.

(size) 3=Mechanical, 4=Mechanical, 5=0-9-4

Max Horz 5=35(LC 12)

Max Uplift 3=-251(LC 1), 4=-285(LC 1), 5=-249(LC 12) Max Grav 3=69(LC 12), 4=85(LC 12), 5=859(LC 1)

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

WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (directional) and C-C Exterior(2E) 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
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 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) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 251 lb uplift at joint 3, 285 lb uplift at joint 4 and 249 lb uplift at joint 5.



Structural wood sheathing directly applied or 3-0-0 oc purlins.

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

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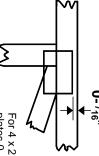


Symbols

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 20/20 software or upon request.

PLATE SIZE



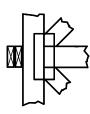
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



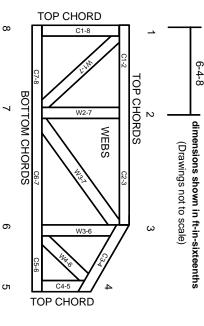
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only

Industry Standards:

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.

ANSI/TPI1: DSB-89:

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.

9

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.

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- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.

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Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.

9

- 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.
- 17. 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.
- 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.