



RE: 2576563 - STEVE SMITH - NEWTON FW

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

Site Information:

Customer Info: Steve Smith Const. Project Name: Newton Model: Csutom

Lot/Block: N/A Subdivision: N/A

Address: TBD SW Rum Island Terrace, N/A

City: Columbia Cty State: FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:

Address:

City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4

Wind Code: N/A Wind Speed: 130 mph Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 15 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	T22909443	CJ01	2/18/21
2	T22909444	CJ03	2/18/21
3	T22909445	CJ05	2/18/21
4 5	T22909446	EJ01	2/18/21
5	T22909447	HJ01	2/18/21
6	T22909448	T01	2/18/21
7	T22909449	T02	2/18/21
8	T22909450	T03	2/18/21
9	T22909451	T04	2/18/21
10	T22909452	T05	2/18/21
11	T22909453	T06	2/18/21
12	T22909454	<u>T</u> 08	2/18/21
13	T22909455	<u>T</u> 09	2/18/21
14	T22909456	<u>T</u> 10	2/18/21
15	T22909457	T11	2/18/21



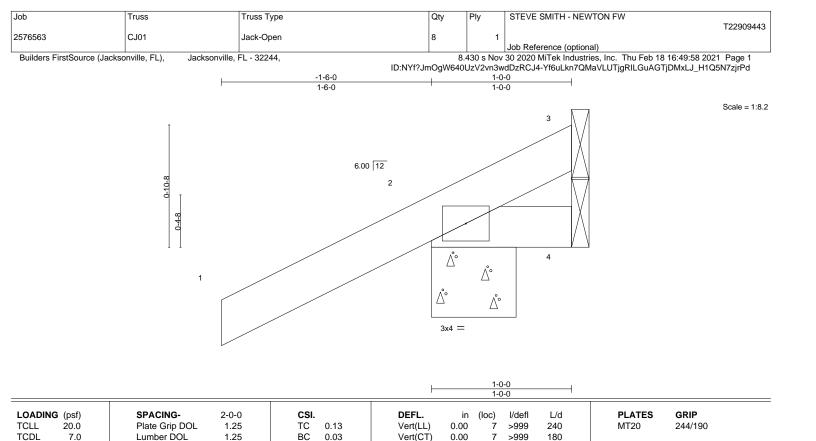
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: Velez, Joaquin

My license renewal date for the state of Florida is February 28, 2023.

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.





Horz(CT)

BRACING-

TOP CHORD

BOT CHORD

0.00

2

n/a

n/a

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

Structural wood sheathing directly applied or 1-0-0 oc purlins.

Weight: 6 lb

FT = 20%

LUMBER-

REACTIONS.

BCLL

BCDL

TOP CHORD 2x4 SP No.2

0.0

10.0

BOT CHORD 2x4 SP No.2

(size) 3=Mechanical, 2=0-7-4, 4=Mechanical

Code FBC2020/TPI2014

Rep Stress Incr

Max Horz 2=38(LC 12)

Max Uplift 3=-6(LC 1), 2=-64(LC 12), 4=-19(LC 1) Max Grav 3=8(LC 8), 2=179(LC 1), 4=18(LC 16)

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

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-MP

0.00

- 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.

YES

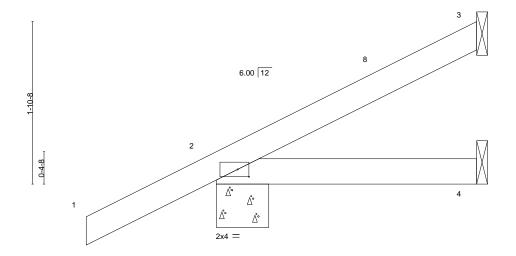
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



STEVE SMITH - NEWTON FW Job Truss Truss Type Qty Ply T22909444 2576563 8 **CJ03** Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:49:59 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244.

ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-0rgGZ4olBgiMzd2vE8pap6jRD7YygoY8VhAfvZzjrPc

Scale = 1:13.3



3-0-0

Plate Off	Plate Offsets (X,Y) [2:0-1-9,0-1-0]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	ВС	0.07	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MP	, ,					Weight: 12 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD **BOT CHORD** Structural wood sheathing directly applied or 3-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-7-4, 4=Mechanical

Max Horz 2=70(LC 12)

Max Uplift 3=-34(LC 12), 2=-55(LC 12)

Max Grav 3=60(LC 1), 2=210(LC 1), 4=50(LC 3)

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

NOTES-

1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 2-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

-1-6-0 1-6-0

- 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.
- 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 100 lb uplift at joint(s) 3, 2.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



STEVE SMITH - NEWTON FW Job Truss Truss Type Qty Ply T22909445 2576563 8 CJ05 Jack-Open Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:49:59 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-0rgGZ4olBgiMzd2vE8pap6jPv7WKgoY8VhAfvZzjrPc -1-6-0 5-0-0 1-6-0 Scale = 1:18.2 6.00 12 0-4-8 Δ° 3x4 =5-0-0 LOADING (psf) SPACING-2-0-0 CSI. DEFL. (loc) I/defI L/d **PLATES** GRIP **TCLL** 20.0 Plate Grip DOL 1.25 TC 0.28 Vert(LL) 0.03 MT20 244/190 4-7 >999 240 **TCDL** 7.0 Lumber DOL 1.25 BC 0.24 Vert(CT) -0.05 4-7 >999 180 **BCLL** 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 3 n/a n/a **BCDL** 10.0 Code FBC2020/TPI2014 Matrix-MF Weight: 18 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

(size) 3=Mechanical, 2=0-7-4, 4=Mechanical

Max Horz 2=104(LC 12)

Max Uplift 3=-64(LC 12), 2=-61(LC 12)

Max Grav 3=113(LC 1), 2=276(LC 1), 4=88(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 4-11-4 zone; 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 100 lb uplift at joint(s) 3, 2.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 5-0-0 oc purlins.

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





Job Truss Truss Type Qty Ply STEVE SMITH - NEWTON FW T22909446 2576563 JACK-CLOSED EJ01 24 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:00 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-V1EfmQpNyzqDand5orKpLJFW_XpdPFoHkLvCR?zjrPb -1-6-0 1-6-0 6-5-4 Scale = 1:21.8 6.00 12 0-4-8, 3x4 =Plate Offsets (X,Y)-- [2:0-0-3,0-0-5] **PLATES** GRIP

2x4 SP No.2

2x4 SP No.2

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	
TCLL 20.0 TCDL 7.0	Plate Grip DOL 1.25 Lumber DOL 1.25	TC 0.51 BC 0.42	Vert(LL) Vert(CT)	0.08 -0.15	4-7 4-7	>955 >501	240 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.13	4-7	/301 n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MP	1.0.2(0.7)	0.0.	_	.,,	.,, a	

BRACING-

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

MT20

Weight: 23 lb

REACTIONS. (size) 3=Mechanical, 2=0-7-4, 4=Mechanical

Max Horz 2=128(LC 12)

Max Uplift 3=-85(LC 12), 2=-68(LC 12)

Max Grav 3=149(LC 1), 2=326(LC 1), 4=115(LC 3)

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

NOTES-

LUMBER-

TOP CHORD

BOT CHORD

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 6-4-8 zone; 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.
- 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 100 lb uplift at joint(s) 3, 2.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



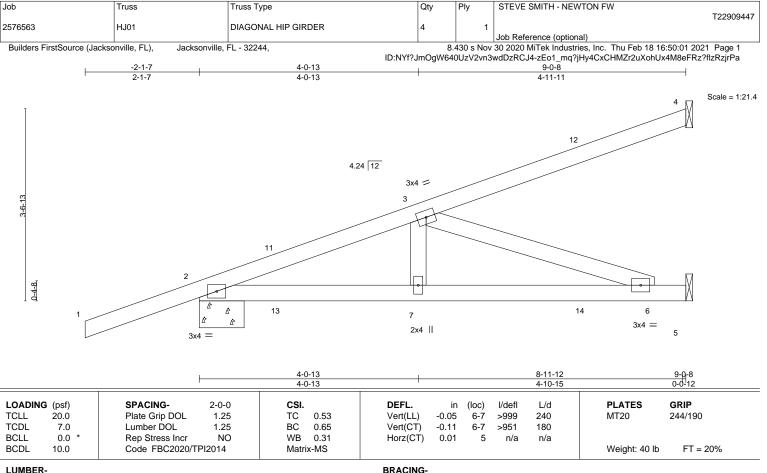
244/190

FT = 20%

February 18,2021







LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 **BOT CHORD** WFBS 2x4 SP No.3

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

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

REACTIONS. (size) 4=Mechanical, 2=0-10-0, 5=Mechanical

Max Horz 2=139(LC 4)

Max Uplift 4=-100(LC 4), 2=-124(LC 4), 5=-65(LC 9) Max Grav 4=154(LC 1), 2=490(LC 1), 5=273(LC 3)

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

TOP CHORD 2-3=-712/191

BOT CHORD 2-7=-216/649. 6-7=-216/649 WFBS 3-7=0/267, 3-6=-686/229

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=124
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 35 lb down and 61 lb up at 1-6-1, 35 lb down and 61 lb up at 1-6-1, 5 lb down and 43 lb up at 4-4-0, 5 lb down and 43 lb up at 4-4-0, and 36 lb down and 87 lb up at 7-1-15, and 36 lb down and 87 lb up at 7-1-15 on top chord, and 39 lb up at 1-6-1, 39 lb up at 1-6-1, 3 lb down at 4-4-0, 3 lb down at 4-4-0, and 32 lb down and 16 lb up at 7-1-15, and 32 lb down and 16 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 5-8=-20

Concentrated Loads (lb)

Vert: 7=-6(F=-3, B=-3) 12=-73(F=-36, B=-36) 14=-59(F=-29, B=-29)



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

February 18,2021





STEVE SMITH - NEWTON FW Job Truss Truss Type Qty Ply T22909448 2576563 T01 HIP 2 2 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:02 2021 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-RQMPB6qdUb4xq5nUvGMHRkLv3LSdt49aCfOJWuzjrPZ -1-6-0 1-6-0 28-2-12 11-11-8 17-4-0 34-8-0

5-4-8

5-6-4

Structural wood sheathing directly applied or 5-5-15 oc purlins.

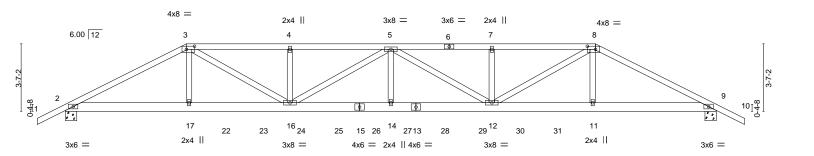
Rigid ceiling directly applied or 10-0-0 oc bracing.

5-4-8

Scale = 1:61.4

1-6-0

6-5-4



		6-5-4	11-11-8	1	17-4-0	22-	-8-8	1	28	3-2-12	34-8-0	
		6-5-4	5-6-4	'	5-4-8	5-4	4-8		5	5-6-4	6-5-4	<u> </u>
Plate Offse	ets (X,Y)	[3:0-5-4,0-2-0], [8:0-5	-4,0-2-0]									
-												
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	0.35	Vert(LL)	-0.17	14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.36	14	>999	180		
BCLL	0.0 *	Rep Stress Inc	r NO	WB	0.33	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code FBC202	0/TPI2014	Matr	ix-MS	,					Weight: 392 lb	FT = 20%

TOP CHORD

BOT CHORD

LUMBER-BRACING-

5-6-4

TOP CHORD 2x4 SP No.2 2x6 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

> (size) 2=0-7-4, 9=0-7-4 Max Horz 2=58(LC 12)

6-5-4

Max Uplift 2=-440(LC 8), 9=-479(LC 9) Max Grav 2=1964(LC 1), 9=2013(LC 1)

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

TOP CHORD $2-3=-3794/830,\ 3-4=-4780/1100,\ 4-5=-4780/1100,\ 5-7=-4828/1143,\ 7-8=-$

8-9=-3902/938

2-17=-713/3328, 16-17=-716/3353, 14-16=-1172/5297, 12-14=-1172/5297,

11-12=-782/3449, 9-11=-779/3424

WEBS $3-17=-93/648,\ 3-16=-431/1732,\ 4-16=-311/148,\ 5-16=-637/208,\ 5-14=0/451,$

5-12=-571/149, 7-12=-311/148, 8-12=-371/1666, 8-11=-93/648

NOTES-(11)

BOT CHORD

REACTIONS.

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: 2x6 - 2 rows staggered 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.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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.
- * 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) except (jt=lb) 2=440. 9=479.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 106 lb down and 116 lb up at 28-2-12 on top chord, and 301 lb down and 123 lb up at 6-5-4, 75 lb down and 21 lb up at 8-6-0, 75 lb down and 21 lb up at 10-6-0, 75 lb down and 21 lb up at 12-6-0, 75 lb down and 21 lb up at 14-6-0, 75 lb down and 21 lb up at 16-6-0, 75 lb down and 21 lb up at 18-2-0, 75 lb down and 21 lb up at 20-2-0, 75 lb down and 21 lb up at 22-2-0, 75 lb down and 21 lb up at 24-2-0, and 75 lb down and 21 lb up at 26-2-0, and 301 lb down and 123 lb up at 28-2-0 on bottom chord. The design/selection of such

Continue chiqued evice(s) is the responsibility of others. February 18,2021



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

No 68

No 68

STATE

Joaquin Velez PE No.68182

MiTek USA, Inc. FI 6904 Pc

JORQUIN VE

68182

Job	Truss	Truss Type	Qty	Ply	STEVE SMITH - NEWTON FW
0570500	T04	1115			T22909448
2576563	T01	HIP	2	2	Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:03 2021 Page 2 ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-vcwnOSrFFuCoRFMgT_tWzyt4pkoscXPjQJ8s2KzjrPY

11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

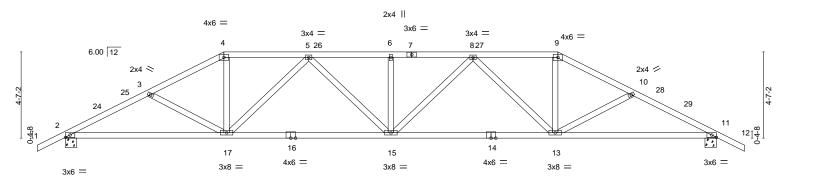
Vert: 1-3=-54, 3-8=-54, 8-10=-54, 2-9=-20

Concentrated Loads (lb)

Vert: 8=-78(F) 17=-301(F) 11=-301(F) 22=-57(F) 23=-57(F) 24=-57(F) 25=-57(F) 26=-57(F) 27=-57(F) 28=-57(F) 29=-57(F) 30=-57(F) 31=-57(F) 31=-57(F)

Job Truss Truss Type Qty Ply STEVE SMITH - NEWTON FW T22909449 2576563 HIP 2 T02 1 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:04 2021 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-NpT9cost0CKf3Pxs1hPlW9QGy83eLxgtfztQamzjrPX -1-6-0 1-6-0 4-6-7 12-11-8 26-2-12 17-4-0 30-1-9 4-6-7 3-10-13 4-6-4 4-4-8 4-4-8 4-6-4 3-10-13 4-6-7 1-6-0

Scale = 1:61.4



L	8-7-0	17-4-0	26-1-0	34-8-0	
	8-7-0	8-9-0	8-9-0	8-7-0	
Plate Offsets (X,Y)	[11:0-2-15,Edge]				
LOADING (psf)	SPACING- 2-0	0-0 CSI.	DEFL. in (loc) I/defl L	/d PLATES GRIP	
TCLL 20.0	Plate Grip DOL 1.	.25 TC 0.26	Vert(LL) -0.19 15 >999 2	40 MT20 244/190	
TCDL 7.0	Lumber DOL 1.	.25 BC 0.87	Vert(CT) -0.41 13-15 >999 1	80	
BCLL 0.0 *	Rep Stress Incr Y	'ES WB 0.52	Horz(CT) 0.12 11 n/a r	ı/a	
BCDL 10.0	Code FBC2020/TPI201	14 Matrix-MS		Weight: 177 lb FT = 20)%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 11=0-7-4

Max Horz 2=-72(LC 13)

Max Uplift 2=-294(LC 12), 11=-294(LC 13) Max Grav 2=1364(LC 1), 11=1364(LC 1)

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

2-3=-2440/509, 3-4=-2202/441, 4-5=-1947/423, 5-6=-2614/540, 6-8=-2614/540, TOP CHORD

8-9=-1947/423. 9-10=-2202/441. 10-11=-2440/510

BOT CHORD 2-17=-457/2143, 15-17=-470/2410, 13-15=-442/2410, 11-13=-386/2143 **WEBS** 4-17=-109/747, 9-13=-109/747, 3-17=-252/145, 5-17=-712/229, 5-15=-92/341,

8-15=-93/341, 8-13=-712/229, 10-13=-252/146

(8)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 8-5-4, Exterior(2R) 8-5-4 to 13-4-10, Interior(1) 13-4-10 to 26-2-12, Exterior(2R) 26-2-12 to 31-2-2, Interior(1) 31-2-2 to 36-2-0 zone; 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 100 lb uplift at joint(s) except (jt=lb) 2=294. 11=294.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 3-6-6 oc purlins.

Rigid ceiling directly applied or 8-7-1 oc bracing.

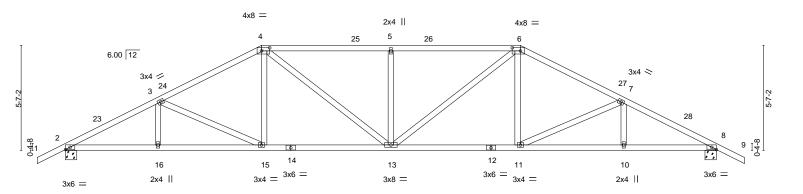
February 18,2021





STEVE SMITH - NEWTON FW Job Truss Truss Type Qty Ply T22909450 2576563 2 T03 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:05 2021 Page 1 Builders FirstSource (Jacksonville, FL) Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-r?1Yp7tWnWSWhYW3bPw_2NzN5YT44SD0uddz6DzjrPW -1-6-0 1-6-0 4-11-3 29-8-13 10-5-4 17-4-0 24-2-12 4-11-3 6-10-12 6-10-12 5-6-1 4-11-3 1-6-0

Scale = 1:61.4



⊢	4-11-3 4-11-3	10-5- 5-6-1			7-4-0 10-12		24-2-12 6-10-12	-	29-8-13	34-8-0 4-11-3	
Plate Offsets (X		-0], [6:0-5-4,0-2			10-12		0-10-12		5-6-1	4-11-3	
Tiate Offices (X	1 [4.0 0 4,0 2	0], [0.0 0 4,0 2	2 0], [0.0 2 10	,_ugoj							
LOADING (psf)	SPA	CING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate	Grip DOL	1.25	TC	0.55	Vert(LL)	-0.16 13	>999	240	MT20	244/190
TCDL 7.0		er DOL	1.25	BC	0.60	Vert(CT)	-0.30 11-13	>999	180		
BCLL 0.0		Stress Incr	YES	WB	0.31	Horz(CT)	0.11 8	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI	12014	Matri	x-MS					Weight: 183 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 8=0-7-4

Max Horz 2=-86(LC 13)

Max Uplift 2=-292(LC 12), 8=-292(LC 13) Max Grav 2=1364(LC 1), 8=1364(LC 1)

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

TOP CHORD 2-3=-2469/491, 3-4=-2059/417, 4-5=-2147/467, 5-6=-2147/467, 6-7=-2059/417,

5-6-1

7-8=-2469/491

2-16=-455/2163, 15-16=-455/2163, 13-15=-299/1788, 11-13=-237/1788, 10-11=-369/2163,

8-10=-369/2163

3-15=-424/172, 4-15=-34/384, 4-13=-164/563, 5-13=-426/200, 6-13=-164/563,

6-11=-34/384, 7-11=-424/172

NOTES-(8)

BOT CHORD

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 10-5-4, Exterior(2R) 10-5-4 to 15-4-10, Interior(1) 15-4-10 to 24-2-12, Exterior(2R) 24-2-12 to 29-2-2, Interior(1) 29-2-2 to 36-2-0 zone;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.
- 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 100 lb uplift at joint(s) except (jt=lb) 2=292, 8=292,
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 3-3-6 oc purlins.

Rigid ceiling directly applied or 8-9-6 oc bracing.

February 18,2021





STEVE SMITH - NEWTON FW Job Truss Truss Type Qty Ply T22909451 2576563 2 T04 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:06 2021 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-JBbw1Tt8YpaNli5F86RDbaVYVypeproA6HMWffzjrPV

4-10-12

22-2-12

4-10-12

28-6-14

6-4-2

Structural wood sheathing directly applied or 3-7-6 oc purlins.

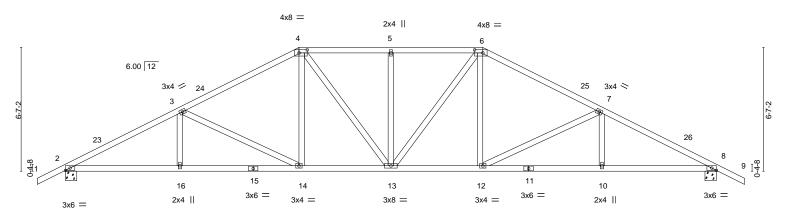
Rigid ceiling directly applied or 8-9-13 oc bracing.

Scale = 1:61.4

1-6-0

34-8-0

6-1-2



	6-1-2	12-5-4	17-4-0	22-2-12	28-6-14	34-8-0
	6-1-2	6-4-2	4-10-12	4-10-12	6-4-2	6-1-2
Plate Offsets (X,Y)	[4:0-5-4,0-2-0], [6:	0-5-4,0-2-0], [8:0-2-15,	,Edge]			
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL. in (oc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip [OOL 1.25	TC 0.51	Vert(LL) -0.14	13 >999 240	MT20 244/190
TCDL 7.0	Lumber DC	L 1.25	BC 0.58	Vert(CT) -0.26 14	-16 >999 180	
BCLL 0.0 *	Rep Stress	Incr YES	WB 0.54	Horz(CT) 0.11	8 n/a n/a	
BCDL 10.0	Code FBC	2020/TPI2014	Matrix-MS	·		Weight: 191 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

-1-6-0 1-6-0

6-1-2

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 8=0-7-4 Max Horz 2=-101(LC 13)

Max Uplift 2=-289(LC 12), 8=-289(LC 13) Max Grav 2=1364(LC 1), 8=1364(LC 1)

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

TOP CHORD 2-3=-2435/477, 3-4=-1908/402, 4-5=-1775/420, 5-6=-1775/420, 6-7=-1908/402,

7-8=-2435/477

2-16=-446/2124, 14-16=-446/2124, 13-14=-254/1639, 12-13=-203/1639, 10-12=-347/2124,

6-4-2

8-10=-347/2124

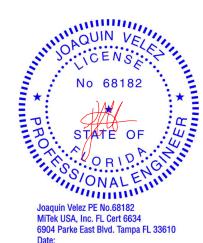
WEBS $3-16=0/256,\ 3-14=-552/214,\ 4-14=-57/412,\ 4-13=-110/348,\ 5-13=-288/138,$

6-13=-110/348, 6-12=-57/412, 7-12=-552/215, 7-10=0/256

NOTES-(8)

BOT CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 12-5-4, Exterior(2R) 12-5-4 to 17-4-0, Interior(1) 17-4-0 to 22-2-12, Exterior(2R) 22-2-12 to 27-2-2, Interior(1) 27-2-2 to 36-2-0 zone; 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.
- 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 100 lb uplift at joint(s) except (jt=lb) 2=289, 8=289,
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

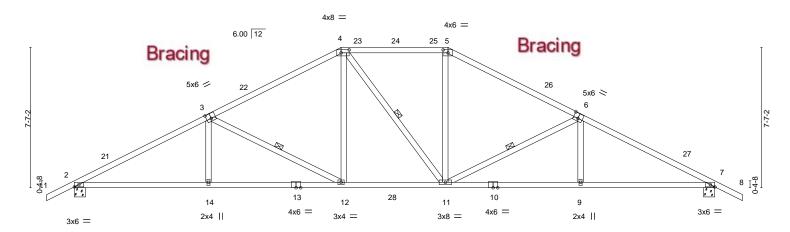






STEVE SMITH - NEWTON FW Job Truss Truss Type Qty Ply T22909452 2576563 T05 Hip 1 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:07 2021 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-nO9IEpumJ7iEwsfRipyS7o2iEM5OYNZJLw64B5zjrPU 1-6-0 1-6-0 27-4-14 20-2-12 34-8-0 7-3-2 5-9-8 7-2-2 7-3-2 7-2-2

Scale = 1:62.4



	7-3-2	14-	5-4	20-2-12	27-4-14	34-8-0	
	7-3-2	7-2	2-2	5-9-8	7-2-2	7-3-2	
Plate Offsets (X,Y) [3:0)-3-0,0-3-4], [4:0-5-4,0	-2-0], [5:0-3-4,0-2	2-0], [6:0-3-0,0-3	-4], [7:0-2-15,Edge]			
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 10.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr Code FBC2020/T	2-0-0 1.25 1.25 YES PI2014	CSI. TC 0.58 BC 0.80 WB 0.25 Matrix-MS	Vert(CT)	in (loc) I/defl L/d -0.17 12-14 >999 240 -0.32 12-14 >999 180 0.11 7 n/a n/a	PLATES GRIP MT20 244/190 Weight: 181 lb FT = 2	

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 7=0-7-4 Max Horz 2=-115(LC 13)

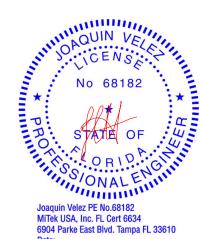
Max Uplift 2=-287(LC 12), 7=-287(LC 13) Max Grav 2=1456(LC 2), 7=1453(LC 2)

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

2-3=-2575/457, 3-4=-1908/390, 4-5=-1640/388, 5-6=-1901/390, 6-7=-2568/458 TOP CHORD BOT CHORD $2 - 14 = -431/2252,\ 12 - 14 = -432/2246,\ 11 - 12 = -210/1647,\ 9 - 11 = -330/2240,\ 7 - 9 = -329/2246$ **WEBS** $3-14=0/309,\ 3-12=-692/252,\ 4-12=-76/566,\ 5-11=-68/552,\ 6-11=-692/253,\ 6-9=0/308$

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=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 14-5-4, Exterior(2R) 14-5-4 to 19-4-10, Interior(1) 19-4-10 to 20-2-12, Exterior(2R) 20-2-12 to 25-2-2, Interior(1) 25-2-2 to 36-2-0 zone; 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=287, 7=287.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 3-2-7 oc purlins.

3-12, 4-11, 6-11

Rigid ceiling directly applied or 8-10-3 oc bracing.

1 Row at midpt

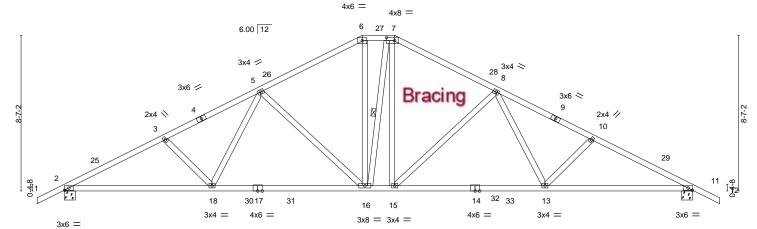




-1-6-0 1-6-0

ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-GajgS9vO4Rq5Y0EeGXThg?bxolPZHiJSaardjYzjrPT 18-2-12 10-10-1 23-9-15 5-6-13 16-5-4 29-1-3 5-6-13 5-3-5 5-7-3 1-9-8 5-3-4 5-6-13 1-6-0 5-7-3

Scale: 3/16"=1"



		8-1-12	1	16-5-4	18-2-12	26-6-4	1	34-8-0	
		8-1-12		8-3-8	1-9-8	8-3-8		8-1-12	1
Plate Offs	sets (X,Y)	[7:0-5-8,0-2-0], [11:0-2-15	,Edge]						
LOADING	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/	/defl L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC 0.3	33 Vert(LL)	-0.26 13-15 >	999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.9	93 Vert(CT)	-0.45 13-15 >	916 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.7	73 Horz(CT) 0.11 11	n/a n/a		
BCDL	10.0	Code FBC2020/TF	12014	Matrix-MS	S	,		Weight: 201 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

2x4 SP No.2 TOP CHORD 2x4 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 11=0-7-4 Max Horz 2=130(LC 12)

Max Uplift 2=-283(LC 12), 11=-283(LC 13) Max Grav 2=1470(LC 2), 11=1470(LC 2)

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

TOP CHORD 2-3=-2620/471, 3-5=-2465/444, 5-6=-1726/367, 6-7=-1498/357, 7-8=-1723/366,

8-10=-2467/444, 10-11=-2621/471

2-18=-472/2315, 16-18=-330/1921, 15-16=-143/1495, 13-15=-239/1921, 11-13=-343/2315

WEBS 3-18=-268/159, 5-18=-73/547, 5-16=-601/237, 6-16=-115/592, 7-15=-130/586,

8-15=-605/238, 8-13=-73/550, 10-13=-268/159

NOTES-(8)

BOT CHORD

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 16-5-4, Exterior(2E) 16-5-4 to 18-2-12, Exterior(2R) 18-2-12 to 23-2-2, Interior(1) 23-2-2 to 36-2-0 zone; 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, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=283, 11=283,
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 3-4-5 oc purlins.

7-16

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt

February 18,2021





Job Truss Truss Type Qty Ply STEVE SMITH - NEWTON FW T22909454 2576563 T08 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:09 2021 Page 1 Builders FirstSource (Jacksonville, FL) Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-kmH2fVw0rkyy9ApqqE_wDD7zL9nx0EAcpEbBF_zjrPS |-1-6-0 | 1-6-0 4-11-0 20-2-12 24-2-12 28-0-6 34-8-0

5-9-8

4-0-0

3-9-10

Structural wood sheathing directly applied or 1-8-5 oc purlins.

Rigid ceiling directly applied or 8-5-15 oc bracing.

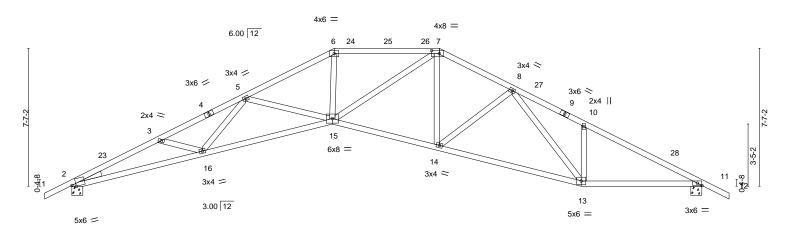
6-7-10

4-10-7

4-7-13

Scale: 3/16"=1"

1-6-0



7-	2-3 ₁ 14	-4-0	20-2-12	1 28-0-6	1	34-8-0	
7-	2-3 7-	-13	5-10-12	7-9-10		6-7-10	<u> </u>
Plate Offsets (X,Y) [2:0-2-	12,Edge], [7:0-5-4,0-2-0], [11:0-2-	15,Edge]					
TCLL 20.0 TCDL 7.0 BCLL 0.0 *	SPACING- 2-0-0	CSI. TC 0.92 BC 0.80 WB 0.44 Matrix-MS	DEFL. Vert(LL) Vert(CT) Horz(CT)	in (loc) I/defl -0.36 15-16 >999 -0.71 15-16 >589 0.35 11 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 177 lb	GRIP 244/190 FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.2 *Except* 2-15: 2x4 SP M 31

WEBS 2x4 SP No.3 WEDGE

Left: 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 11=0-7-4

4-11-0

Max Horz 2=115(LC 16)

Max Uplift 2=-286(LC 12), 11=-286(LC 13) Max Grav 2=1364(LC 1), 11=1364(LC 1)

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

TOP CHORD 2-3=-4142/873, 3-5=-3943/782, 5-6=-3237/585, 6-7=-2802/547, 7-8=-2327/468,

8-10=-2367/543, 10-11=-2393/457

2-16=-842/3724, 15-16=-682/3504, 14-15=-238/2120, 13-14=-330/2224, 11-13=-329/2078 **BOT CHORD**

WEBS 5-16=-28/359, 5-15=-584/262, 7-15=-224/921, 7-14=-92/338, 10-13=-294/176,

6-15=-144/1154

NOTES-(9)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 14-5-4, Exterior(2R) 14-5-4 to 19-4-10, Interior(1) 19-4-10 to 20-2-12, Exterior(2R) 20-2-12 to 25-2-2, Interior(1) 25-2-2 to 36-2-0 zone; 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=286, 11=286,
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.





Job Truss Truss Type Qty Ply STEVE SMITH - NEWTON FW T22909455 2576563 T₀9 Hip Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:10 2021 Page 1 Builders FirstSource (Jacksonville, FL) Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-CyrRtrxec24pnKO0NyV9lQgC?Z5Hlf1l1uKkoQzjrPR 18-2-12 |-1-6-0 | 1-6-0 4-11-0 34-8-0 16-5-4 28-0-6

1-9-8

5-4-4

4-5-6

Structural wood sheathing directly applied or 2-8-3 oc purlins.

9-14

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt

2-1-4

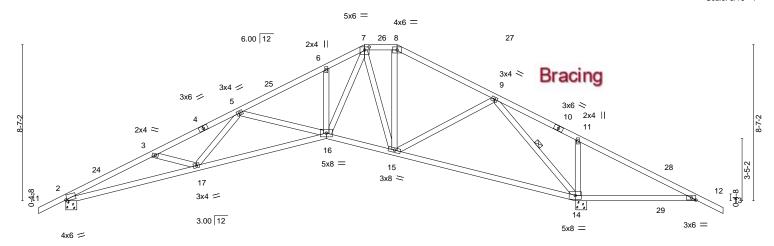
4-9-3

4-7-13

Scale: 3/16"=1"

1-6-0

6-7-10



		7-2-3	14-	-4-0	18-2	2-12 20-4-12	1	28-0-6	28-8 ₁ 0	34-8-0	
		7-2-3	7-1	-13	3-10)-12 2-2-0		7-7-10	0-7-10	6-0-0	1
Plate Offs	sets (X,Y)	[2:0-0-13,Edge], [7:0-3-0),0-2-0], [12:0-2-	15,Edge]							
		I									
LOADING	G (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.	67	Vert(LL)	-0.29 14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.	92	Vert(CT)	-0.60 14-15	>559	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.	53	Horz(CT)	0.24 14	n/a	n/a		
BCDL	10.0	Code FBC2020/	ΓPI2014	Matrix-M	is	` ′				Weight: 185 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP No.2 **BOT CHORD WEBS** 2x4 SP No.3

REACTIONS. (size) 2=0-7-4, 14=0-7-4 Max Horz 2=130(LC 12)

4-11-0

Max Uplift 2=-244(LC 12), 14=-350(LC 13) Max Grav 2=1041(LC 1), 14=1686(LC 1)

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

TOP CHORD 2-3=-2946/729, 3-5=-2711/634, 5-6=-1879/425, 6-7=-1853/490, 7-8=-930/250,

8-9=-1102/260, 9-11=-266/694, 11-12=-349/716

BOT CHORD 2-17=-726/2644, 16-17=-552/2299, 15-16=-135/1105, 14-15=-62/478, 12-14=-564/388

WEBS 5-17=-40/435, 5-16=-620/262, 7-15=-550/159, 8-15=-63/330, 9-15=-55/557,

11-14=-329/186, 7-16=-383/1387, 9-14=-1635/351

NOTES-(9)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 16-5-4, Exterior(2E) 16-5-4 to 18-2-12, Exterior(2R) 18-2-12 to 23-2-2, Interior(1) 23-2-2 to 36-2-0 zone; cantilever 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=244, 14=350
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



February 18,2021





Job Truss Truss Type Qty Ply STEVE SMITH - NEWTON FW T22909456 2576563 T10 Roof Special Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:11 2021 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-g9Pp4BxGMMCfPTzCxf1OleCM7zSmU4TvGY4HKszjrPQ 23-7-0 -1-6-0 1-6-0 28-0-6 4-10-6 9-10-8 17-4-0 34-8-0

6-3-0

3-0-0

4-5-8

5-0-2

Scale = 1:62.6

6-7-10

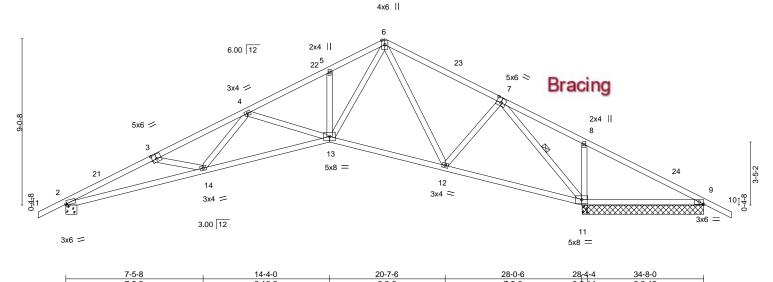


Plate Offsets (X,) [2:0-0-9,Edge], [3:0-3-0	,0-3-0], [7:0-3-0,	0-3-0], [9:0-2-15,Edge]					-	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.71	Vert(LL)	-0.20 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.84	Vert(CT)	-0.41 13-14	>826	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.21 11	n/a	n/a		
BCDL 10.0	Code FBC2020/	Code FBC2020/TPI2014		` ′				Weight: 179 lb	FT = 20%

LUMBER-

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

WEBS 2x4 SP No.3 BRACING-

TOP CHORD **BOT CHORD WEBS**

Structural wood sheathing directly applied or 3-0-6 oc purlins. Rigid ceiling directly applied or 4-7-10 oc bracing.

1 Row at midpt 7-11

4-5-6

REACTIONS. All bearings 6-7-4 except (jt=length) 2=0-7-4.

(lb) -Max Horz 2=136(LC 12)

4-10-6

Max Uplift All uplift 100 lb or less at joint(s) except 2=-212(LC 12), 11=-363(LC 12), 9=-454(LC 23), 9=-341(LC 1)

Max Grav All reactions 250 lb or less at joint(s) 9 except 2=960(LC 1), 11=2108(LC 1), 11=2108(LC 1)

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

TOP CHORD 2-3=-2646/620, 3-4=-2371/511, 4-5=-1536/297, 5-6=-1499/361, 6-7=-565/185,

7-8=-273/1444, 8-9=-329/1468

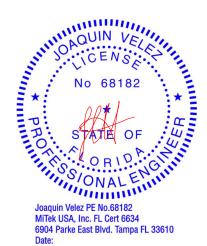
BOT CHORD 2-14=-632/2375, 13-14=-426/1960, 12-13=-16/714, 9-11=-1235/326 **WEBS**

4-14=-60/452, 4-13=-604/255, 6-13=-317/1293, 6-12=-572/155, 7-12=-81/647,

7-11=-2059/360, 8-11=-323/172

NOTES-(8)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-4-0, Exterior(2R) 17-4-0 to 20-10-0, Interior(1) 20-10-0 to 36-2-0 zone; 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.
- 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 212 lb uplift at joint 2, 363 lb uplift at joint 11, 454 lb uplift at joint 9 and 454 lb uplift at joint 9.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.







Job Truss Truss Type Qty Ply STEVE SMITH - NEWTON FW T22909457 2576563 ROOF SPECIAL 7 T11 Job Reference (optional) 8.430 s Nov 30 2020 MiTek Industries, Inc. Thu Feb 18 16:50:12 2021 Page 1 Builders FirstSource (Jacksonville, FL). Jacksonville, FL - 32244. ID:NYf?JmOgW640UzV2vn3wdDzRCJ4-8LyBHXyv7fKW0dYPVNYdqrlYhNnYDYC2VCprsJzjrPP -1-6-0 28-0-6 4-10-6 17-4-0 23-7-0

6-3-0

4-5-6

Structural wood sheathing directly applied or 2-8-10 oc purlins.

7-11

Rigid ceiling directly applied or 2-2-0 oc bracing.

1 Row at midpt

3-0-0

4-5-8

Scale = 1:62.3

6-7-10

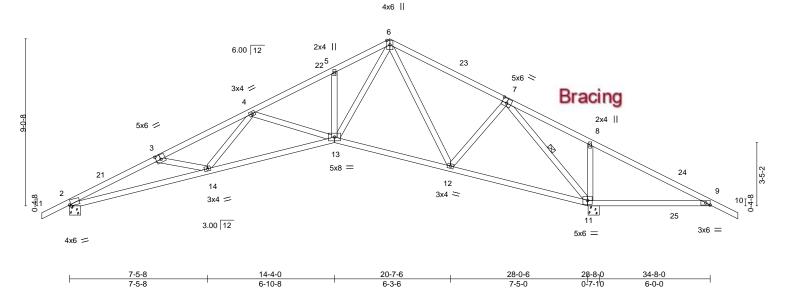


Plate Offsets (X,Y)--[2:0-0-13,Edge], [3:0-3-0,0-3-0], [7:0-3-0,0-3-0], [9:0-2-15,Edge]

5-0-2

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 0.66	Vert(LL) -0.23 13-14 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.93	Vert(CT) -0.46 13-14 >737 180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.55	Horz(CT) 0.24 11 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 179 lb FT = 20%

BRACING-TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

1-6-0

4-10-6

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

2x4 SP No.3

(size) 2=0-7-4, 11=0-7-4 Max Horz 2=136(LC 12)

Max Uplift 2=-242(LC 12), 11=-348(LC 13) Max Grav 2=1041(LC 1), 11=1686(LC 1)

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

TOP CHORD 2-3=-2944/730, 3-4=-2683/627, 4-5=-1876/423, 5-6=-1837/487, 6-7=-921/245,

7-8=-267/708. 8-9=-345/727

BOT CHORD $2-14 = -733/2641,\ 13-14 = -539/2264,\ 12-13 = -105/953,\ 11-12 = -57/478,\ 9-11 = -575/386$ **WEBS** 4-14=-51/432, 4-13=-593/252, 6-13=-372/1439, 6-12=-370/107, 7-12=-33/475,

7-11=-1680/349, 8-11=-313/174

NOTES-(8)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-0-0, Interior(1) 2-0-0 to 17-4-0, Exterior(2R) 17-4-0 to 20-10-0, Interior(1) 20-10-0 to 36-2-0 zone; cantilever 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) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 242 lb uplift at joint 2 and 348 lb uplift at ioint 11.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



February 18,2021

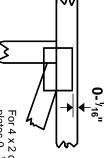


Symbols

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 × 4

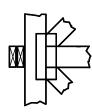
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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



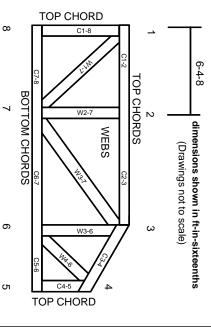
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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.
- 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.
- Cut members to bear tightly against each other.

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- 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.
- 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
- 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.