



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

RE: 2742662 - WCH - NELSON RES.

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

**Site Information:**

Customer Info: Wade Custom Homes Project Name: Nelson Res. Model: Custom  
 Lot/Block: N/A Subdivision: N/A  
 Address: TBD SW Durant Street, 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: State:  
 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

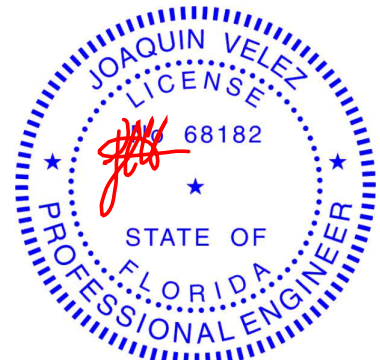
This package includes 36 individual, Truss Design Drawings and 0 Additional Drawings.  
 With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T23566437	CJ01	4/15/21	23	T23566459	T16	4/15/21
2	T23566438	CJ03	4/15/21	24	T23566460	T16G	4/15/21
3	T23566439	CJ05	4/15/21	25	T23566461	T17	4/15/21
4	T23566440	EJ01	4/15/21	26	T23566462	T17G	4/15/21
5	T23566441	EJ02	4/15/21	27	T23566463	T18	4/15/21
6	T23566442	HJ05	4/15/21	28	T23566464	T18G	4/15/21
7	T23566443	HJ10	4/15/21	29	T23566465	T19	4/15/21
8	T23566444	T01	4/15/21	30	T23566466	V01	4/15/21
9	T23566445	T02	4/15/21	31	T23566467	V02	4/15/21
10	T23566446	T03	4/15/21	32	T23566468	V03	4/15/21
11	T23566447	T04	4/15/21	33	T23566469	V04	4/15/21
12	T23566448	T05	4/15/21	34	T23566470	V05	4/15/21
13	T23566449	T06	4/15/21	35	T23566471	V06	4/15/21
14	T23566450	T07	4/15/21	36	T23566472	V07	4/15/21
15	T23566451	T08	4/15/21				
16	T23566452	T09	4/15/21				
17	T23566453	T10	4/15/21				
18	T23566454	T11	4/15/21				
19	T23566455	T12	4/15/21				
20	T23566456	T13	4/15/21				
21	T23566457	T14	4/15/21				
22	T23566458	T15	4/15/21				

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.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

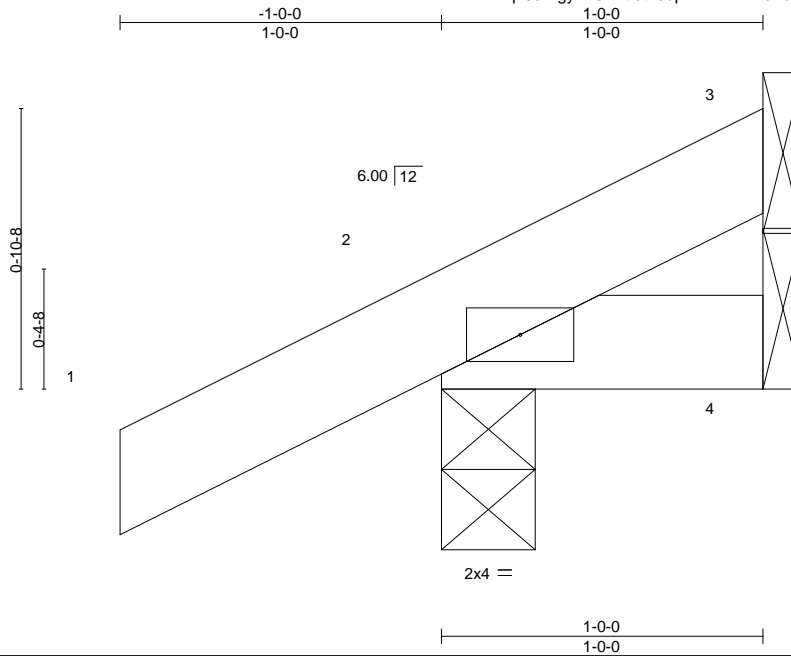
April 15,2021

Job 2742662	Truss CJ01	Truss Type Jack-Open	Qty 8	Ply 1	WCH - NELSON RES. T23566437
----------------	---------------	-------------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:24 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-izeZciS\_Zczi?1NZ8O71n2OUXQkCptDHLzjg5FzR4Mf



Scale = 1:7.2

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.06	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.01	Vert(LL) 0.00 7 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Vert(CT) -0.00 7 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP	Horz(CT) -0.00 2 n/a n/a		
	Code FBC2020/TPI2014			Weight: 5 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

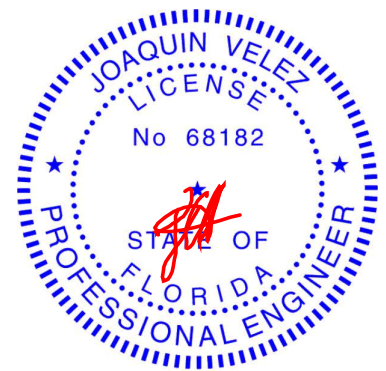
**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=32(LC 12)  
Max Uplift 3=-6(LC 12), 2=-39(LC 12), 4=-4(LC 9)  
Max Grav 3=9(LC 1), 2=118(LC 1), 4=13(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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch 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 100 lb uplift at joint(s) 3, 2, 4.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

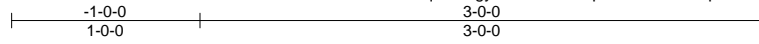
Job 2742662	Truss CJ03	Truss Type Jack-Open	Qty 6	Ply 1	WCH - NELSON RES. T23566438
----------------	---------------	-------------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

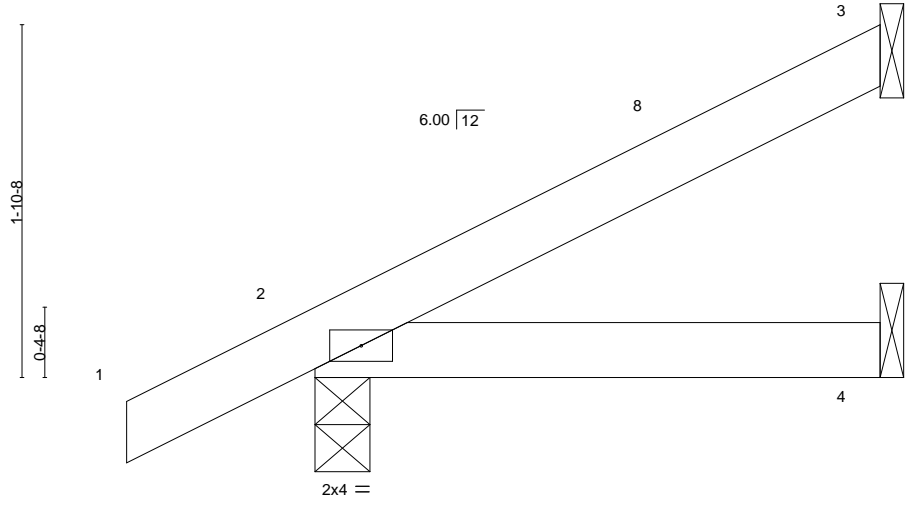
Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:25 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-A9Bxp1TcKv5ccBxmi5eGKFxeuq2QYKTRadTDdHzR4Me



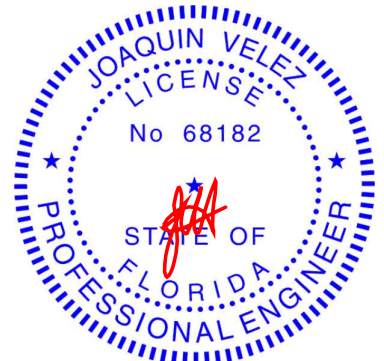
Scale = 1:12.2



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.08	Vert(LL)	-0.00 4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 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/TPI2014		Matrix-MP					Weight: 11 lb	FT = 20%

- LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2
- BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
- REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=65(LC 12)  
Max Uplift 3=-38(LC 12), 2=-41(LC 12), 4=-1(LC 12)  
Max Grav 3=65(LC 1), 2=172(LC 1), 4=51(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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 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
  - 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 100 lb uplift at joint(s) 3, 2, 4.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

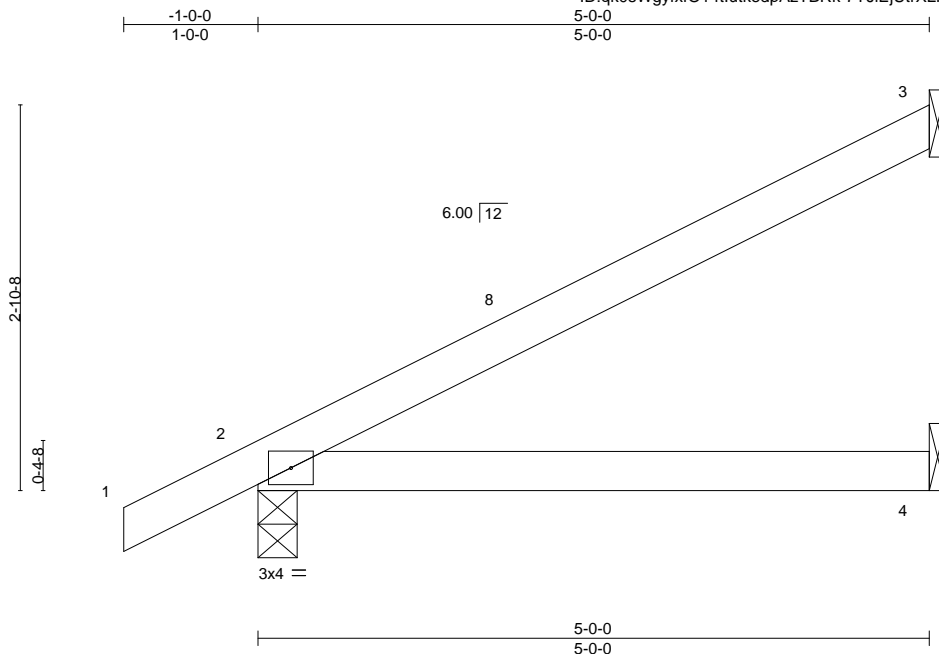
Job 2742662	Truss CJ05	Truss Type Jack-Open	Qty 6	Ply 1	WCH - NELSON RES. T23566439
----------------	---------------	-------------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:27 2021 Page 1

ID:qk0sWgyfxIO14tlutkedpAzTBRk-7YJiEjUtrXLKsU58pWhkPg0w4diFOEj1xyKiazR4Mc



Scale = 1:17.2

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	Vert(LL)	0.04	4-7	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.24	Vert(CT)	-0.06	4-7	>999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MP					Weight: 18 lb	FT = 20%
	Code FBC2020/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

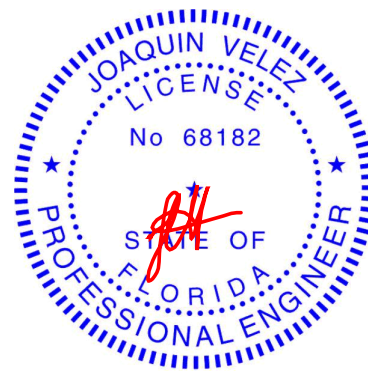
**REACTIONS.**

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=100(LC 12)  
Max Uplift 3=-68(LC 12), 2=-51(LC 12), 4=-1(LC 12)  
Max Grav 3=116(LC 1), 2=242(LC 1), 4=89(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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 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.
- 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 100 lb uplift at joint(s) 3, 2, 4.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss EJ01	Truss Type Jack-Partial	Qty 32	Ply 1	WCH - NELSON RES. T23566440
----------------	---------------	----------------------------	-----------	----------	--------------------------------

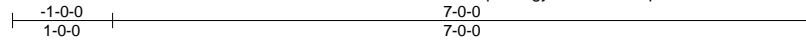
Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:28 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-bkt4S3VvcqTBTegKNECzXuZ?N1zAkhCtGbhTE0zR4Mb

Job Reference (optional)



Scale = 1:23.0

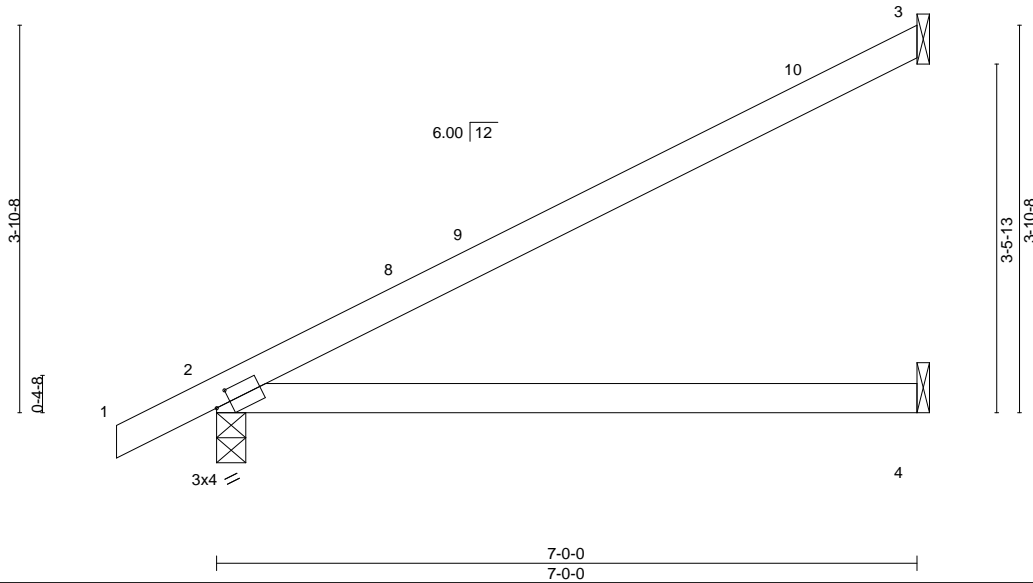


Plate Offsets (X,Y)-- [2:0-1-13,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.64	Vert(LL)	0.11	4-7	>745	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.52	Vert(CT)	-0.22	4-7	>374	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 24 lb	FT = 20%

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

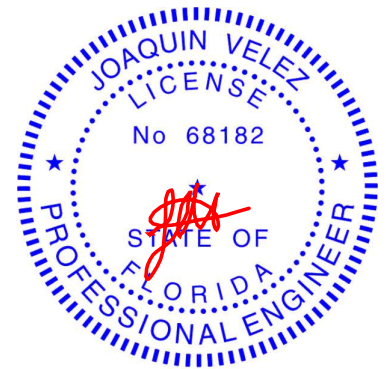
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=129(LC 12)  
Max Uplift 3=87(LC 12), 2=63(LC 12)  
Max Grav 3=166(LC 1), 2=315(LC 1), 4=126(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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 6-11-4 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.
- 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 100 lb uplift at joint(s) 3, 2.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

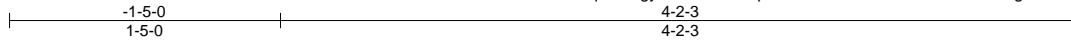


Job 2742662	Truss HJ05	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	WCH - NELSON RES. Job Reference (optional)	T23566442
----------------	---------------	-----------------------------------	----------	----------	---	-----------

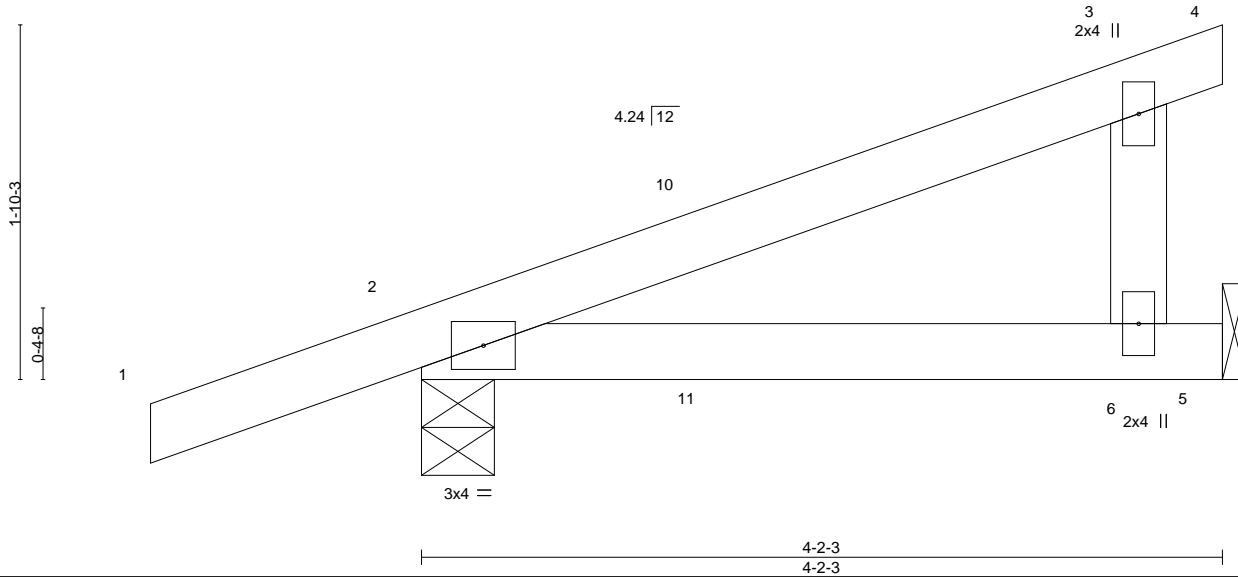
Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:31 2021 Page 1  
ID:qk0sWgyfxIO14tlutkedpAzTBRk-?JZC45XNvlrmK6Pv2MlgZWBe2F5Ax1yJyZwXrLzR4MY



Scale: 1"=1'



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 0.17	Vert(LL)	0.02	6-9	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.18	Vert(CT)	-0.03	6-9	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.00	2	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP						
								Weight: 17 lb	FT = 20%

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

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-2-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-4-9, 5=Mechanical  
Max Horz 2=73(LC 4)  
Max Uplift 2=-129(LC 4), 5=-75(LC 4)  
Max Grav 2=237(LC 1), 5=140(LC 1)

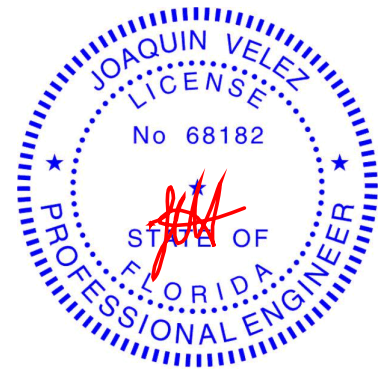
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; 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 100 lb uplift at joint(s) 5 except (jt=lb) 2=129.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 9 lb up at 1-6-1, and 52 lb down and 9 lb up at 1-6-1 on top chord, and 28 lb down and 7 lb up at 1-6-1, and 28 lb down and 7 lb up at 1-6-1 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).

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 5-7=-20  
Concentrated Loads (lb)  
Vert: 11=8(F=4, B=4)



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



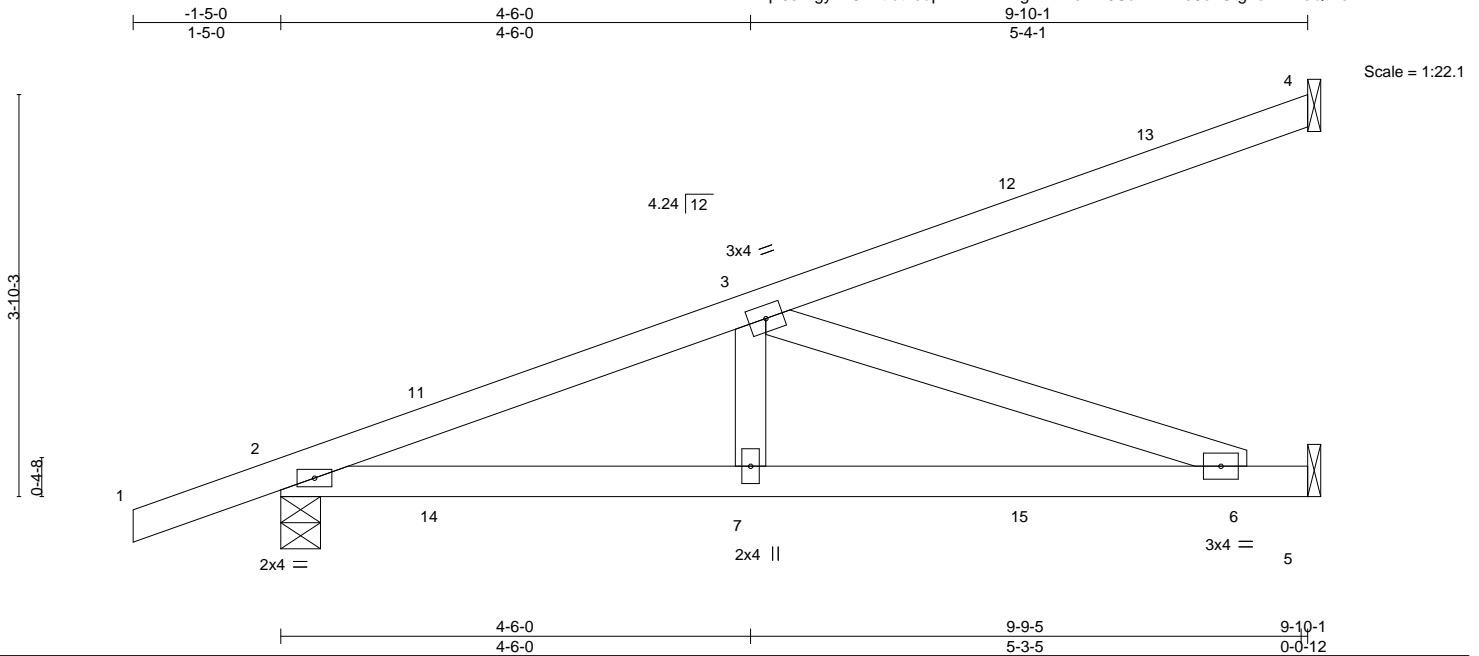
6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss HJ10	Truss Type Diagonal Hip Girder	Qty 3	Ply 1	WCH - NELSON RES. Job Reference (optional)	T23566443
----------------	---------------	-----------------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:33 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-xigzVmZeRN6UaPZiAno8exGtg2eXPhcQtPevDzR4MW



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.70	Vert(LL) -0.06 6-7 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.43	Vert(CT) -0.15 6-7 >797 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 5 n/a n/a		
	Code FBC2020/TPI2014			Weight: 42 lb	FT = 20%

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

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

**REACTIONS.** (size) 4=Mechanical, 2=0-4-9, 5=Mechanical  
 Max Horz 2=137(LC 4)  
 Max Uplift 4=79(LC 4), 2=-175(LC 4), 5=-95(LC 8)  
 Max Grav 4=153(LC 1), 2=485(LC 1), 5=316(LC 1)

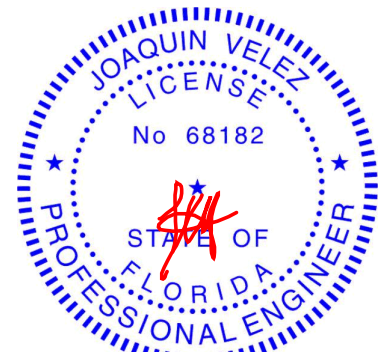
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-859/250  
 BOT CHORD 2-7=-321/787, 6-7=-321/787  
 WEBS 3-7=-13/303, 3-6=-834/340

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; 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.
- 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 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=175.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 52 lb down and 9 lb up at 1-6-1, 52 lb down and 9 lb up at 1-6-1, 23 lb down and 41 lb up at 4-4-0, 23 lb down and 41 lb up at 4-4-0, and 43 lb down and 80 lb up at 7-1-15, and 43 lb down and 80 lb up at 7-1-15 on top chord, and 5 lb down and 7 lb up at 1-6-1, 5 lb down and 7 lb up at 1-6-1, 21 lb down and 10 lb up at 4-4-0, 21 lb down and 10 lb up at 4-4-0, and 40 lb down and 16 lb up at 7-1-15, and 40 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).

**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: 3=-1(F=-1, B=-1) 7=-15(F=-8, B=-8) 12=-79(F=-39, B=-39) 14=8(F=4, B=4) 15=-66(F=-33, B=-33)



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
 Tampa, FL 33610



Job 2742662	Truss T01	Truss Type Half Hip Girder	Qty 1	Ply 1	WCH - NELSON RES.  Job Reference (optional)	T23566444
----------------	--------------	-------------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:35 2021 Page 2  
ID:qk0sWgyfxO14tlutkedpAzTBRk-u4ojwSauz\_MCpjihHCqcjML9YsPjtdGvtBul\_6zR4MU

**NOTES-**

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 131 lb down and 91 lb up at 7-0-0, 112 lb down and 91 lb up at 9-0-12, 112 lb down and 91 lb up at 11-0-12, 112 lb down and 91 lb up at 13-0-12, 112 lb down and 91 lb up at 15-0-12, 112 lb down and 91 lb up at 17-0-12, 112 lb down and 91 lb up at 19-0-12, 112 lb down and 91 lb up at 21-0-12, 112 lb down and 91 lb up at 23-0-12, 112 lb down and 91 lb up at 25-0-12, 112 lb down and 91 lb up at 27-0-12, and 112 lb down and 91 lb up at 29-0-12, and 112 lb down and 91 lb up at 31-0-12 on top chord, and 355 lb down and 143 lb up at 7-0-0, 86 lb down and 20 lb up at 9-0-12, 86 lb down and 20 lb up at 11-0-12, 86 lb down and 20 lb up at 13-0-12, 86 lb down and 20 lb up at 15-0-12, 86 lb down and 20 lb up at 17-0-12, 86 lb down and 20 lb up at 19-0-12, 86 lb down and 20 lb up at 21-0-12, 86 lb down and 20 lb up at 23-0-12, 86 lb down and 20 lb up at 25-0-12, 86 lb down and 20 lb up at 27-0-12, and 86 lb down and 20 lb up at 29-0-12, and 86 lb down and 20 lb up at 31-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) 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=-54, 4-10=-54, 2-11=-20

Concentrated Loads (lb)

Vert: 4=-112(B) 7=-112(B) 18=-355(B) 22=-112(B) 23=-112(B) 24=-112(B) 25=-112(B) 26=-112(B) 27=-112(B) 28=-112(B) 29=-112(B) 30=-112(B) 31=-112(B) 32=-112(B) 33=-67(B) 34=-67(B) 35=-67(B) 36=-67(B) 37=-67(B) 38=-67(B) 39=-67(B) 40=-67(B) 41=-67(B) 42=-67(B) 43=-67(B) 44=-67(B)

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

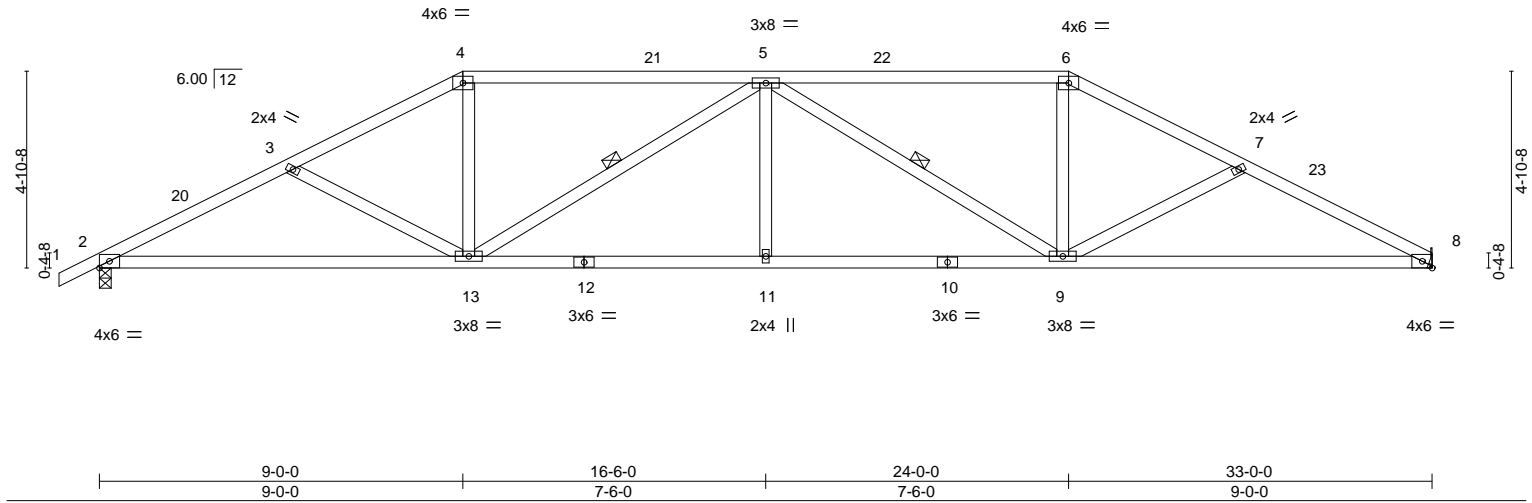
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T02	Truss Type Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566445
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:37 2021 Page 1
1-0-0 1-0-0					ID:qk0sWgyfxIO14tlutkedpAzTBRk-qTwTL8c8Vbcv31s3Pds4pnRY8f_SLhJCKVNs2?zR4MS
4-9-8 4-9-8					24-0-0 7-6-0
9-0-0 4-2-8					28-2-8 4-2-8
16-6-0 7-6-0					33-0-0 4-9-8

Scale = 1:57.1



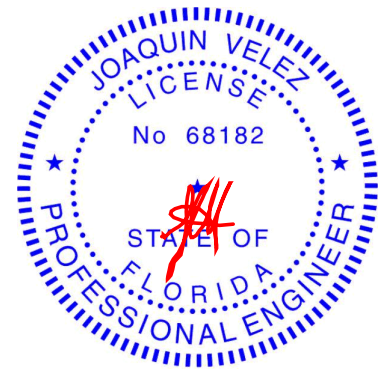
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.83	Vert(LL) -0.16 11 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.26	Vert(CT) -0.34 9-16 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.11 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 161 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-3-12 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-6-13 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-13, 5-9

**REACTIONS.** (size) 8=Mechanical, 2=0-3-8  
 Max Horz 2=82(LC 12)  
 Max Uplift 8=264(LC 13), 2=286(LC 12)  
 Max Grav 8=1220(LC 1), 2=1276(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2295/512, 3-4=-2044/437, 4-5=-1799/423, 5-6=-1802/425, 6-7=-2048/439,  
 7-8=-2303/517  
 BOT CHORD 2-13=-474/2025, 11-13=-447/2278, 9-11=-447/2278, 8-9=-412/2034  
 WEBS 3-13=-279/158, 4-13=-83/601, 5-13=-661/209, 5-11=0/265, 5-9=-659/208, 6-9=-83/604,  
 7-9=-286/162


- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-3-10, Interior(1) 2-3-10 to 9-0-0, Exterior(2R) 9-0-0 to 13-8-0, Interior(1) 13-8-0 to 24-0-0, Exterior(2R) 24-0-0 to 28-4-7, Interior(1) 28-4-7 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - 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) except (jt=lb) 8=264, 2=286.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



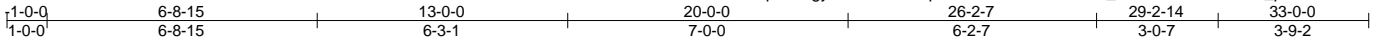
6904 Parke East Blvd.  
 Tampa, FL 33610



Job 2742662	Truss T04	Truss Type Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566447
----------------	--------------	-------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:40 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-E2bczAe1nW\_UwUbe4lQnQQ323t\_pYzne1TbWfJzR4MP



Scale = 1:57.5

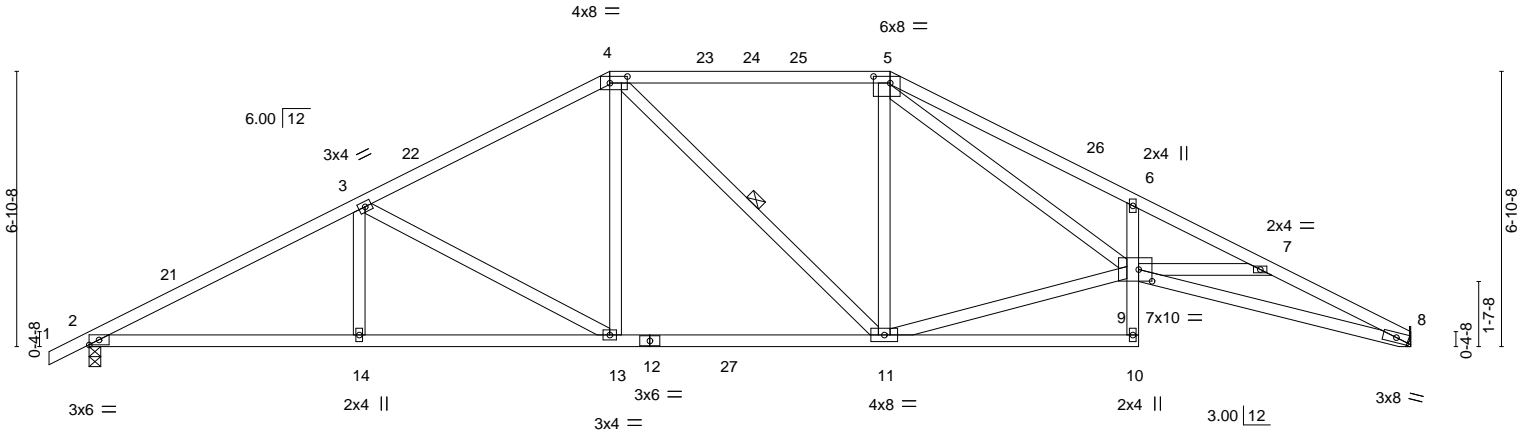


Plate Offsets (X,Y)--	[4:0-5-4,0-2-0], [5:0-5-0,0-2-0], [9:0-4-0,0-3-8]
-----------------------	---

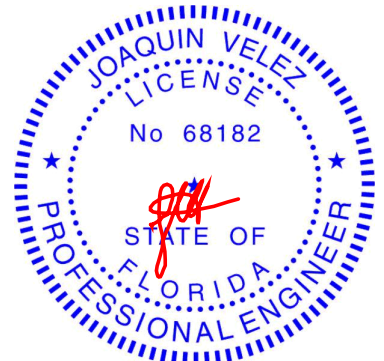
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/def L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.85	Vert(LL) -0.28 10 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.60	Vert(CT) -0.49 10-11 >802 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.24 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 182 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 5-8: 2x4 SP M 31	TOP CHORD Structural wood sheathing directly applied or 3-0-9 oc purlins.
BOT CHORD 2x4 SP No.2 *Except* 6-10: 2x4 SP No.3, 8-9: 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 8-8-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 5-9: 2x4 SP No.2	WEBS 1 Row at midpt 4-11

REACTIONS.
(size) 8=Mechanical, 2=0-3-8
Max Horz 2=112(LC 12)
Max Uplift 8=-259(LC 13), 2=-281(LC 12)
Max Grav 8=1321(LC 2), 2=1372(LC 2)

FORCES.
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2465/470, 3-4=-1892/405, 4-5=-1640/397, 5-6=-4188/880, 6-7=-4301/779, 7-8=-4325/841
BOT CHORD 2-14=-449/2158, 13-14=-449/2158, 11-13=-244/1643, 6-9=-267/197, 8-9=-726/3932
WEBS 3-14=0/268, 3-13=-606/235, 4-13=-70/549, 5-11=-279/137, 9-11=-190/1509, 5-9=-584/2663

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-3-10, Interior(1) 2-3-10 to 13-0-0, Exterior(2R) 13-0-0 to 17-8-0, Interior(1) 17-8-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-8-0, Interior(1) 24-8-0 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - 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) except (jt=lb) 8=-259, 2=-281.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

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

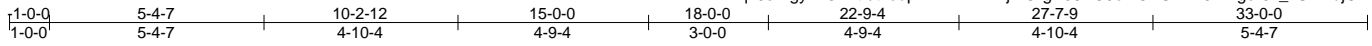
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T05	Truss Type Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566448
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					Job Reference (optional)

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:42 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-BRjMOrghJ8EC9o1CASFWr8Pmger0x\_xUm4djCzR4MN



Scale = 1:57.7

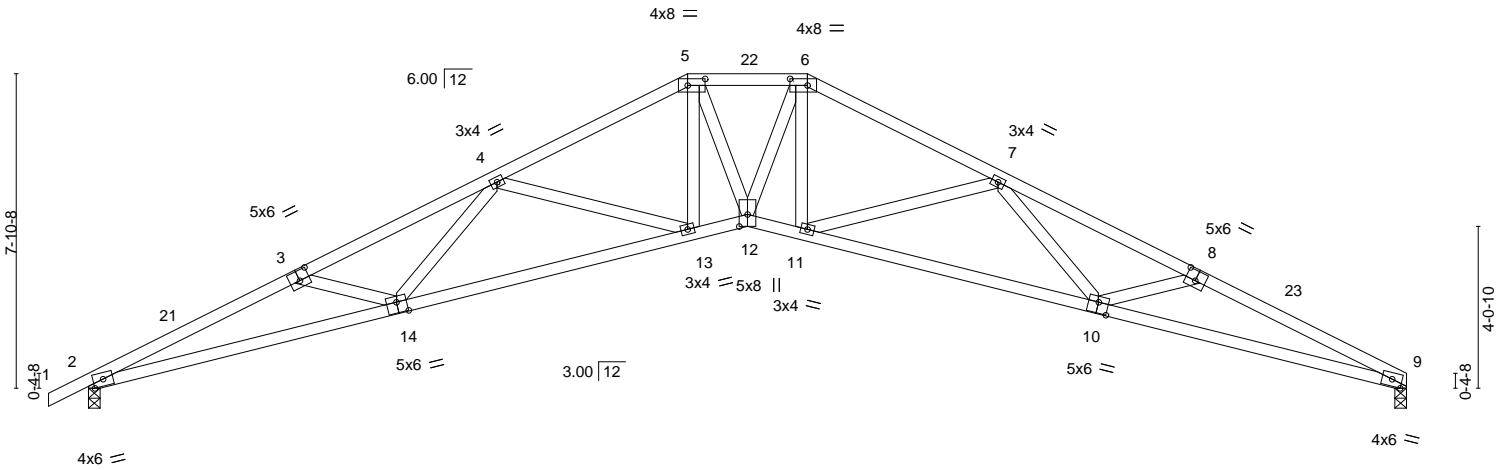


Plate Offsets (X,Y)--	[2:0-3-0,Edge], [3:0-3-0,0-3-0], [5:0-5-4,0-2-0], [6:0-5-4,0-2-0], [8:0-3-0,0-3-0], [9:0-3-0,Edge], [10:0-3-0,0-3-4], [12:0-3-10,0-2-8], [14:0-3-0,0-3-4]
-----------------------	---

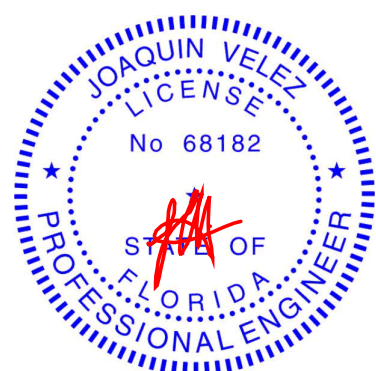
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.59	Vert(LL)	-0.44	12	>905	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 1.00	Vert(CT)	-0.84	13-14	>470		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.36	Horz(CT)	0.58	9	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS						
								Weight: 162 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-5-1 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 9=0-3-8  
 Max Horz 2=127(LC 12)  
 Max Uplift 2=-277(LC 12), 9=-256(LC 13)  
 Max Grav 2=1276(LC 1), 9=1220(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-4169/939, 3-4=-3881/823, 4-5=-2950/557, 5-6=-2835/561, 6-7=-2950/553, 7-8=-3892/732, 8-9=-4183/837  
 BOT CHORD 2-14=-921/3784, 13-14=-688/3333, 12-13=-391/2654, 11-12=-333/2655, 10-11=-544/3337, 9-10=-715/3800  
 WEBS 3-14=-254/189, 4-14=-81/470, 4-13=-675/304, 5-13=-119/556, 5-12=-122/610, 6-12=-178/609, 6-11=-117/556, 7-11=-678/308, 7-10=-91/472, 8-10=-260/197

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-3-10, Interior(1) 2-3-10 to 15-0-0, Exterior(2E) 15-0-0 to 18-0-0, Exterior(2R) 18-0-0 to 22-9-4, Interior(1) 22-9-4 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - Bearing at joint(s) 2, 9 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=277, 9=256.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

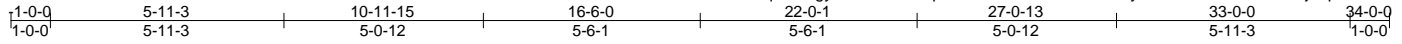
April 15, 2021

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 6904 Parke East Blvd. Tampa, FL 33610
--	--

Job 2742662	Truss T06	Truss Type Scissor	Qty 6	Ply 1	WCH - NELSON RES. T23566449
----------------	--------------	-----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:43 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-fdHibBhv4RM3nyKDltzU22hcm4?VIHL4jQqAGezR4MM



Scale = 1:58.5

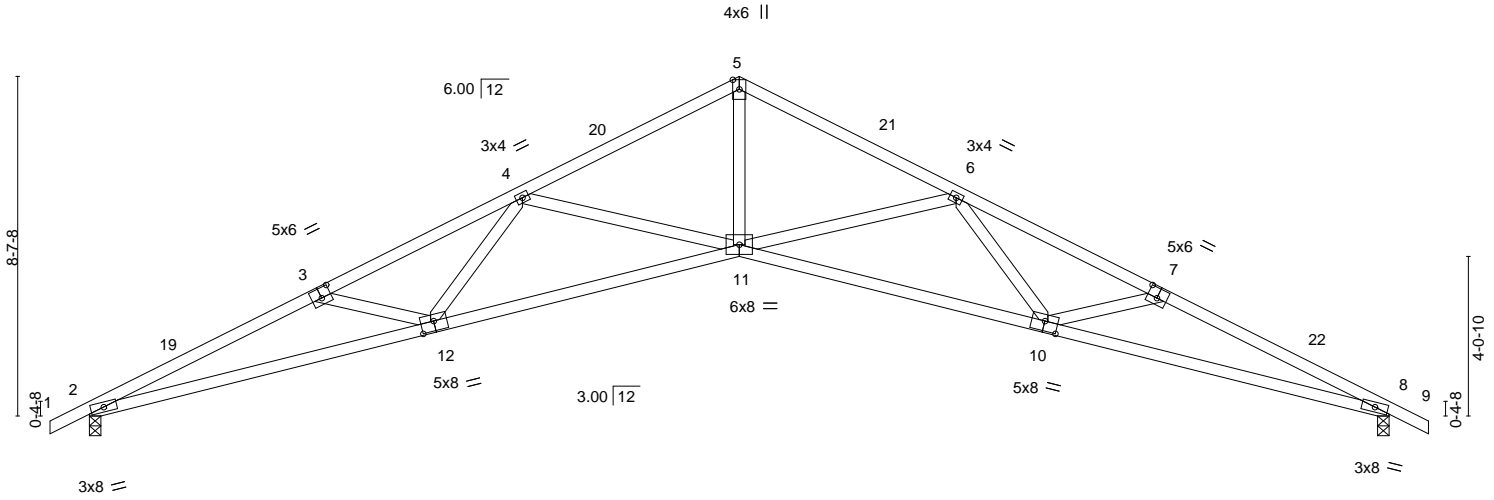


Plate Offsets (X,Y)--	[3:0-3-0,0-3-0], [7:0-3-0,0-3-0], [10:0-4-0,0-3-0], [12:0-4-0,0-3-0]
-----------------------	--

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.50	Vert(LL)	-0.43 11-12	>925	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.91	Vert(CT)	-0.85 11-12	>466	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.81	Horz(CT)	0.54 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 152 lb	FT = 20%

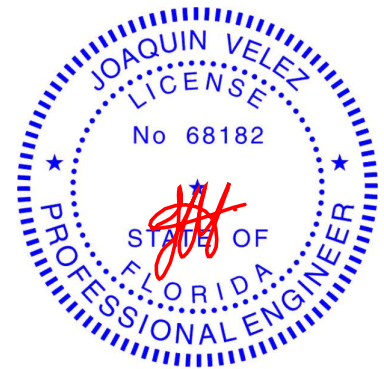
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-12,8-10: 2x4 SP M 31  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-6-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=-130(LC 13)  
Max Uplift 2=-274(LC 12), 8=-274(LC 13)  
Max Grav 2=1275(LC 1), 8=1275(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4145/921, 3-4=-3803/782, 4-5=-2745/491, 5-6=-2745/500, 6-7=-3803/668,  
7-8=-4145/791  
BOT CHORD 2-12=-904/3769, 11-12=-646/3236, 10-11=-471/3236, 8-10=-651/3769  
WEBS 5-11=-337/2116, 6-11=-781/339, 6-10=-88/527, 7-10=-316/220, 4-11=-781/336,  
4-12=-82/527, 3-12=-316/216

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-3-10, Interior(1) 2-3-10 to 16-6-0, Exterior(2R) 16-6-0 to 19-9-10, Interior(1) 19-9-10 to 34-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Bearing at joint(s) 2, 8 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=274, 8=274.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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

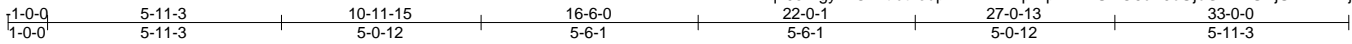


6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T07	Truss Type Scissor	Qty 4	Ply 1	WCH - NELSON RES. T23566450
----------------	--------------	-----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:44 2021 Page 1  
ID:qk0sWgyxfO14tlutkedpAzTBRk-7pr7pXhXrIUwO6uPjUjbGDnVUKjUkZEX4Zjo5zR4ML



Scale = 1:58.4

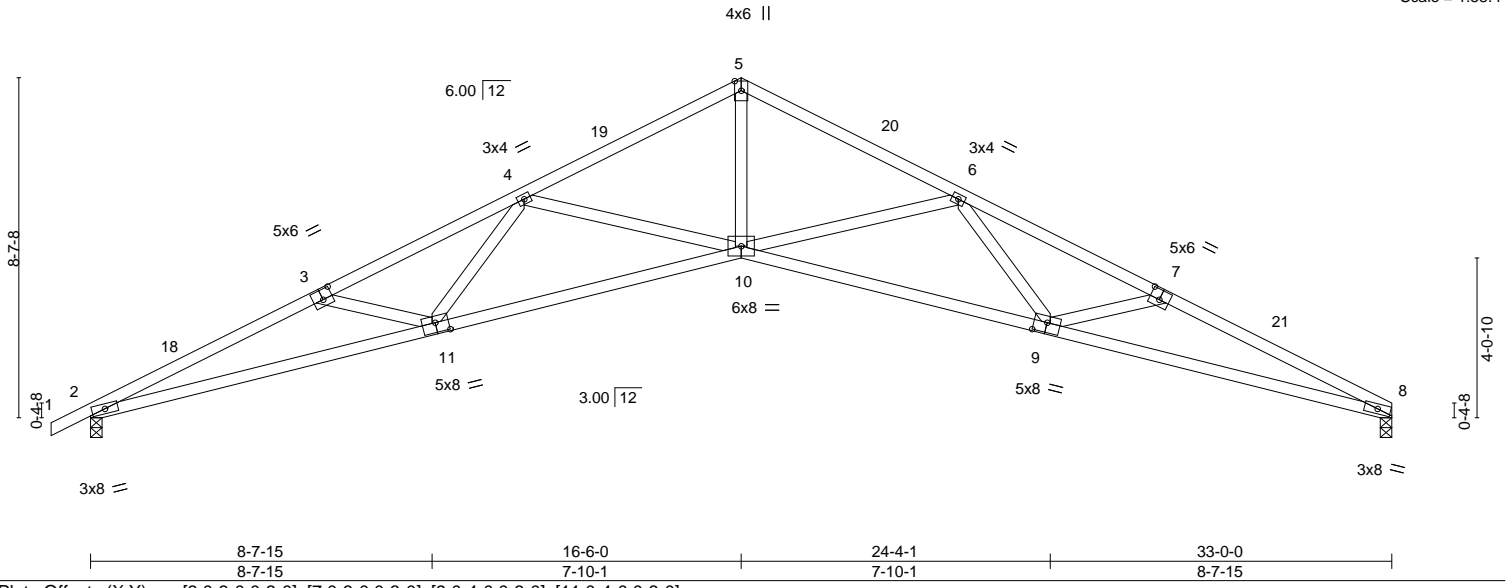


Plate Offsets (X,Y)--	[3:0-3-0,0-3-0], [7:0-3-0,0-3-0], [9:0-4-0,0-3-0], [11:0-4-0,0-3-0]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.51	Vert(LL) -0.43 10-11 >923 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.91	Vert(CT) -0.85 10-11 >465 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.81	Horz(CT) 0.54 8 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 150 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-11,8-9: 2x4 SP M 31  
WEBS 2x4 SP No.3

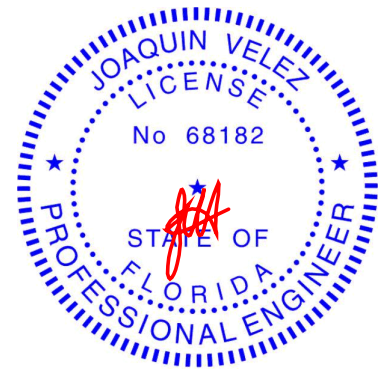
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-6-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
Max Horz 2=137(LC 12)  
Max Uplift 8=-253(LC 13), 2=-275(LC 12)  
Max Grav 8=1220(LC 1), 2=1276(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-4148/929, 3-4=-3807/790, 4-5=-2748/506, 5-6=-2748/519, 6-7=-3815/707,  
7-8=-4160/813  
BOT CHORD 2-11=-918/3773, 10-11=-661/3239, 9-10=-499/3243, 8-9=-687/3785  
WEBS 5-10=-344/2118, 6-10=-785/340, 6-9=-90/529, 7-9=-321/222, 4-10=-781/335,  
4-11=-82/527, 3-11=-316/216

**NOTES-**

- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-3-10, Interior(1) 2-3-10 to 16-6-0, Exterior(2R) 16-6-0 to 19-9-10, Interior(1) 19-9-10 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Bearing at joint(s) 8, 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) 8=253, 2=275.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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**

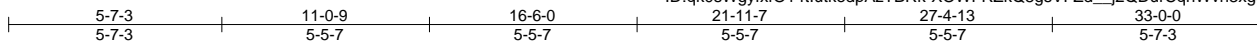
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T08	Truss Type FLAT GIRDER	Qty 1	Ply 1	WCH - NELSON RES. Job Reference (optional)	T23566451
----------------	--------------	---------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:47 2021 Page 1  
 ID:qk0sWgyfxFO14tlutkedpAzTBRk-XOWFRZkQ8gsVFZd\_j2QDuRcqhWvh3xge2oOPPzR4MI



Scale = 1:60.5

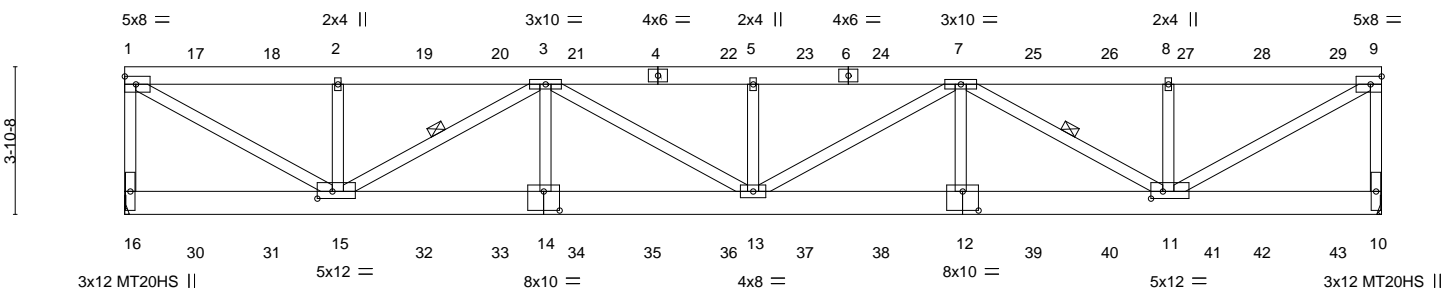


Plate Offsets (X,Y)--	[11:0-3-12,0-2-4], [12:0-5-0,0-6-0], [14:0-5-0,0-6-0], [15:0-4-12,0-2-4]
-----------------------	--

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 0.88	Vert(LL)	-0.28	13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.31	Vert(CT)	-0.53	13	>741	180	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.96	Horz(CT)	0.07	10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS							
									Weight: 260 lb	FT = 20%

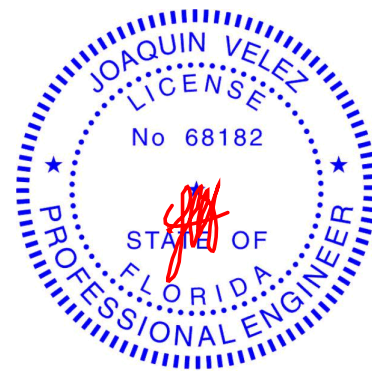
**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x8 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\*  
 1-15,3-15,3-13,7-13,7-11,9-11: 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 8-7-8 oc bracing.  
 WEBS 1 Row at midpt 3-15, 7-11

**REACTIONS.** (size) 16=Mechanical, 10=Mechanical  
 Max Uplift 16=-853(LC 4), 10=-873(LC 4)  
 Max Grav 16=2614(LC 1), 10=2667(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-16=-2450/838, 1-2=-3655/1195, 2-3=-3655/1195, 3-5=-6515/2131, 5-7=-6515/2131, 7-8=-3667/1199, 8-9=-3667/1199, 9-10=-2487/857  
 BOT CHORD 14-15=-1923/5871, 13-14=-1923/5865, 12-13=-1928/5878, 11-12=-1928/5883  
 WEBS 1-15=-1381/4232, 2-15=-628/329, 3-15=-2599/854, 3-14=-13/483, 3-13=-245/762, 5-13=-574/300, 7-13=-238/747, 7-12=-14/485, 7-11=-2601/855, 8-11=-632/331, 9-11=-1386/4246

- NOTES-**
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - All plates are MT20 plates unless otherwise indicated.
  - 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.
  - 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) except (jt=lb) 16=853, 10=873.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 76 lb up at 1-9-10, 112 lb down and 76 lb up at 3-9-10, 112 lb down and 76 lb up at 5-9-10, 112 lb down and 76 lb up at 7-9-10, 112 lb down and 76 lb up at 9-9-10, 112 lb down and 76 lb up at 11-9-10, 112 lb down and 76 lb up at 13-9-10, 112 lb down and 76 lb up at 15-9-10, 112 lb down and 76 lb up at 17-9-10, 112 lb down and 76 lb up at 19-9-10, 112 lb down and 76 lb up at 21-9-10, 112 lb down and 76 lb up at 23-9-10, 112 lb down and 76 lb up at 25-9-10, 112 lb down and 76 lb up at 27-9-10, and 112 lb down and 76 lb up at 29-9-10, and 112 lb down and 76 lb up at 31-9-10 on top chord, and 86 lb down and 20 lb up at 1-9-10, 86 lb down and 20 lb up at 3-9-10, 86 lb down and 20 lb up at 5-9-10, 86 lb down and 20 lb up at 7-9-10, 86 lb down and 20 lb up at 9-9-10, 86 lb down and 20 lb up at 11-9-10, 86 lb down and 20 lb up at 13-9-10, 86 lb down and 20 lb up at 15-9-10, 86 lb down and 20 lb up at 17-9-10, 86 lb down and 20 lb up at 19-9-10, 86 lb down and 20 lb up at 21-9-10, 86 lb down and 20 lb up at 23-9-10, 86 lb down and 20 lb up at 25-9-10, 86 lb down and 20 lb up at 27-9-10, and 86 lb down and 20 lb up at 29-9-10, and 86 lb down and 20 lb up at 31-9-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job 2742662	Truss T08	Truss Type FLAT GIRDER	Qty 1	Ply 1	WCH - NELSON RES.  Job Reference (optional)	T23566451
----------------	--------------	---------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:47 2021 Page 2  
ID:qk0sWgyfxfO14tlutkedpAzTBRk-XOWFRZkQ8gsVFZd\_\_j2QDurCqhWvh3xge2oOPPzR4MI

**NOTES-**

10) 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: 1-9=-54, 10-16=-20

Concentrated Loads (lb)

Vert: 4=-112(F) 15=-67(F) 2=-112(F) 12=-67(F) 7=-112(F) 17=-112(F) 18=-112(F) 19=-112(F) 20=-112(F) 21=-112(F) 22=-112(F) 23=-112(F) 24=-112(F) 25=-112(F) 26=-112(F) 27=-112(F) 28=-112(F) 29=-112(F) 30=-67(F) 31=-67(F) 32=-67(F) 33=-67(F) 34=-67(F) 35=-67(F) 36=-67(F) 37=-67(F) 38=-67(F) 39=-67(F) 40=-67(F) 41=-67(F) 42=-67(F) 43=-67(F)

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

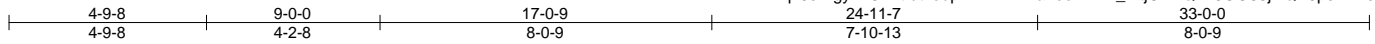
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T09	Truss Type Half Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566452
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					Job Reference (optional)

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:48 2021 Page 1  
ID:qk0sWgyfxfO14tlutkedpAzTBRk-?a4eevk2vz\_MjCAYQZfl6OO85jwQYOpsixxsR4MH



Scale = 1:55.9

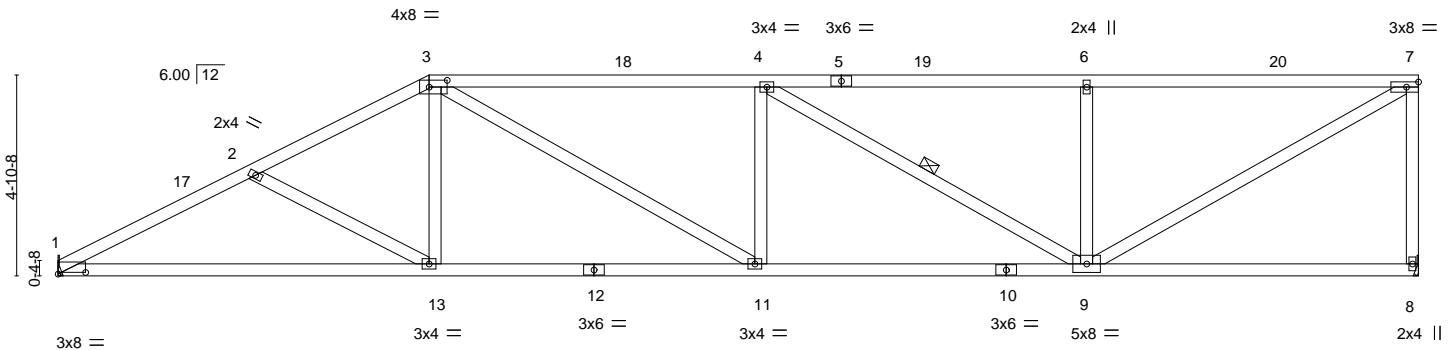


Plate Offsets (X,Y)--	[1:0-8-0,0-0-7], [3:0-5-4,0-2-0]
-----------------------	----------------------------------

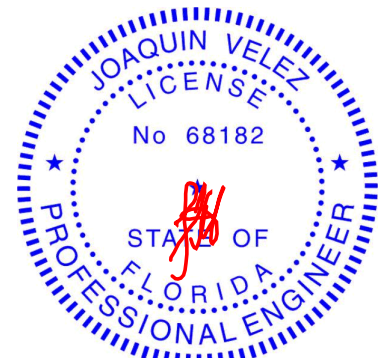
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.78	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.83	Vert(LL) -0.15 13-16 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.78	Vert(CT) -0.33 13-16 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.08 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 172 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 3-5: 2x4 SP M 31	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 7-6-13 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-9

**REACTIONS.** (size) 1=Mechanical, 8=Mechanical  
 Max Horz 1=155(LC 12)  
 Max Uplift 1=-286(LC 12), 8=-319(LC 9)  
 Max Grav 1=1216(LC 1), 8=1216(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-2292/563, 2-3=-2040/486, 3-4=-2264/583, 4-6=-1683/438, 6-7=-1683/438, 7-8=-1144/338  
 BOT CHORD 1-13=-608/2024, 11-13=-467/1787, 9-11=-583/2264  
 WEBS 2-13=-278/160, 3-13=-25/412, 3-11=-223/654, 4-9=-672/260, 6-9=-450/218, 7-9=-495/1905

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-3-10, Interior(1) 3-3-10 to 9-0-0, Exterior(2R) 9-0-0 to 13-8-0, Interior(1) 13-8-0 to 32-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - 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) except (jt=lb) 1=286, 8=319.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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

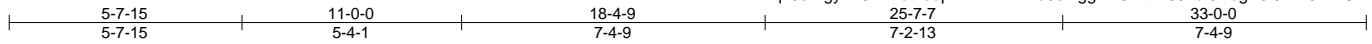


6904 Parke East Blvd.  
 Tampa, FL 36610

Job 2742662	Truss T10	Truss Type Half Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566453
----------------	--------------	------------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:49 2021 Page 1  
ID:qk0sWgyfxIO14tlutkedpAzTBRk-Tne0sFlggH7CVtnN684ulJwbgV5i9?zz5MHUTizR4MG



Scale = 1:56.0

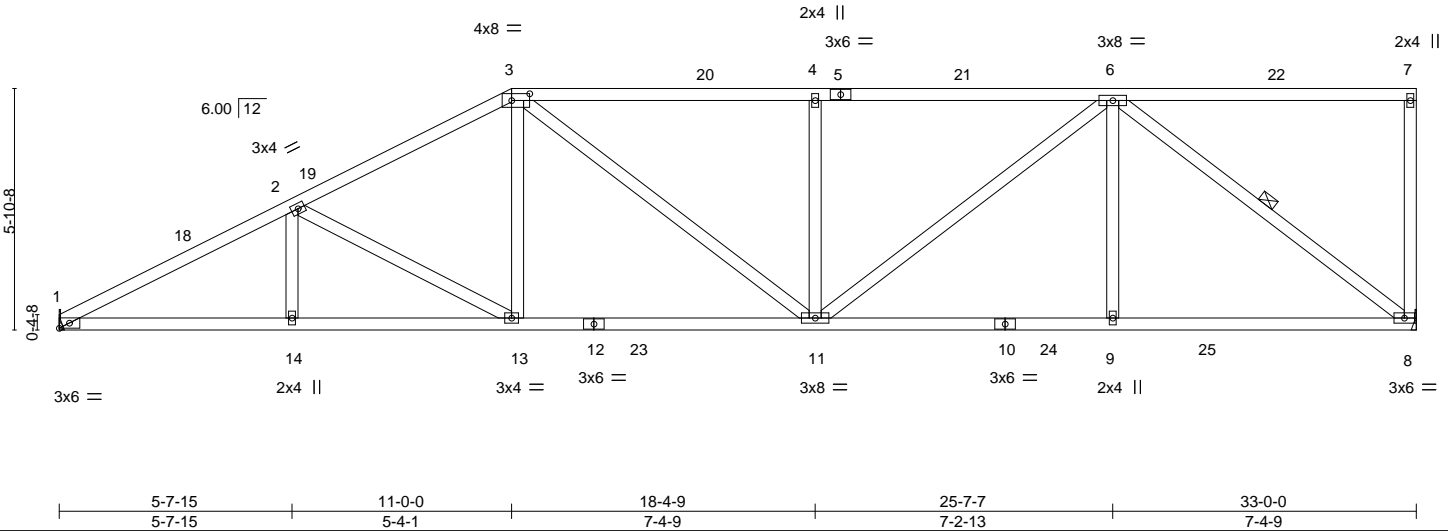


Plate Offsets (X,Y)-- [3:0-5-4,0-2-0]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc) l/def L/d
TCLL 20.0	Plate Grip DOL 1.25		TC 0.67	Vert(LL) -0.18 11-13 >999 240	<b>PLATES</b> MT20
TCDL 7.0	Lumber DOL 1.25		BC 0.73	Vert(CT) -0.32 11-13 >999 180	<b>GRIP</b> 244/190
BCLL 0.0 *	Rep Stress Incr YES		WB 0.80	Horz(CT) 0.10 8 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS		Weight: 183 lb FT = 20%

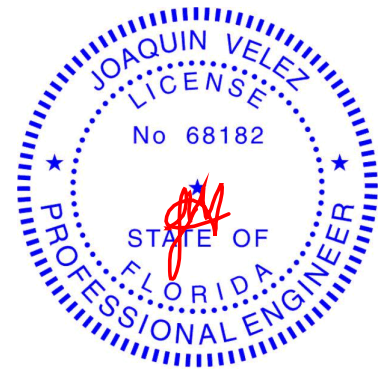
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-1-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 7-5-10 oc bracing.  
WEBS 1 Row at midpt 6-8

**REACTIONS.** (size) 1=Mechanical, 8=Mechanical  
Max Horz 1=190(LC 12)  
Max Uplift 1=-286(LC 12), 8=-314(LC 9)  
Max Grav 1=1334(LC 2), 8=1363(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2533/542, 2-3=-2074/460, 3-4=-2029/457, 4-6=-2029/457  
BOT CHORD 1-14=-617/2225, 13-14=-617/2225, 11-13=-447/1817, 9-11=-330/1462, 8-9=-330/1462  
WEBS 2-13=-488/194, 3-13=-51/491, 3-11=-143/374, 4-11=-419/202, 6-11=-245/717, 6-9=0/396, 6-8=-1817/410

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-3-10, Interior(1) 3-3-10 to 11-0-0, Exterior(2R) 11-0-0 to 15-8-0, Interior(1) 15-8-0 to 32-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - 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) except (jt=lb) 1=286, 8=314.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T11	Truss Type Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566454
----------------	--------------	-------------------	----------	----------	--------------------------------

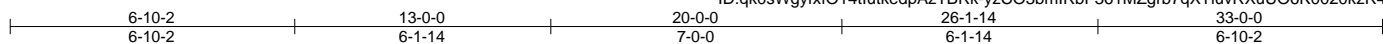
Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:50 2021 Page 1

ID:qk0sWgyfxO14tlutkedpAzTBRk-yzCO3bmlRbF361MZgrb7qXTIuvRXuUO6K0020kzR4MF

Job Reference (optional)



Scale = 1:55.4

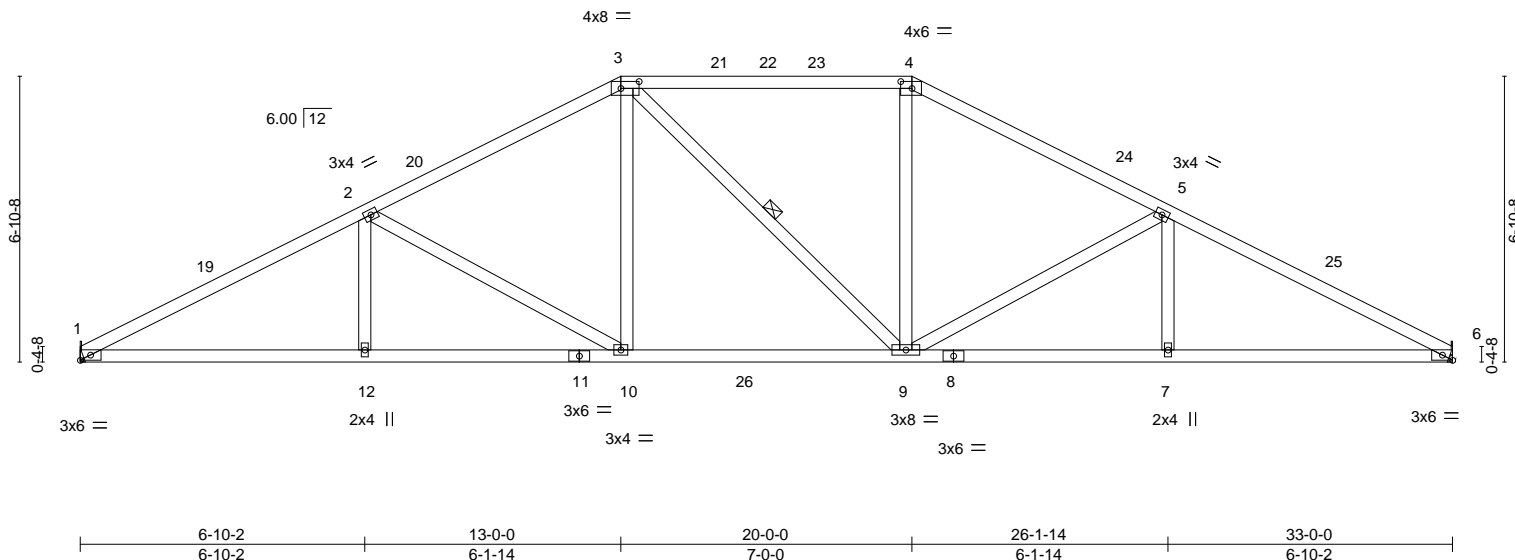


Plate Offsets (X,Y)--	[3:0-5-4,0-2-0], [4:0-3-4,0-2-0], [6:0-2-15,Edge]
-----------------------	---

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/def	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.77	Vert(LL)	-0.18	9-10	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.76	Vert(CT)	-0.31	9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.59	Horz(CT)	0.10	6	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS						Weight: 165 lb	FT = 20%

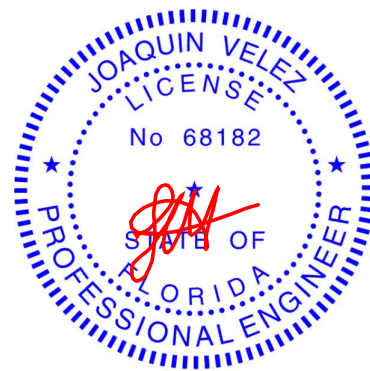
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-7-7 oc bracing.  
WEBS 1 Row at midpt 3-9

**REACTIONS.** (size) 1=Mechanical, 6=Mechanical  
Max Horz 1=97(LC 12)  
Max Uplift 1=-259(LC 12), 6=-259(LC 13)  
Max Grav 1=1327(LC 2), 6=1322(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-2452/472, 2-3=-1894/407, 3-4=-1635/400, 4-5=-1882/407, 5-6=-2441/473  
BOT CHORD 1-12=-451/2157, 10-12=-451/2157, 9-10=-245/1645, 7-9=-360/2147, 6-7=-360/2147  
WEBS 2-12=0/268, 2-10=-607/237, 3-10=-72/556, 4-9=-60/537, 5-9=-608/237, 5-7=0/267

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-3-10, Interior(1) 3-3-10 to 13-0-0, Exterior(2R) 13-0-0 to 17-8-0, Interior(1) 17-8-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-8-0, Interior(1) 24-8-0 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - 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) except (jt=lb) 1=259, 6=259.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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

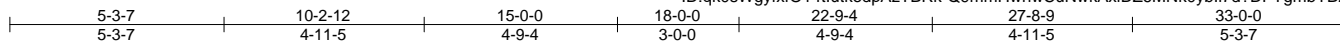


6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T12	Truss Type Hip	Qty 1	Ply 1	WCH - NELSON RES. T23566455
----------------	--------------	-------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:51 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-Q9mmHwnwCuNwkAxIDZ6Mnk0yblI7d?DFYgmbYBzR4ME



Scale = 1:56.9

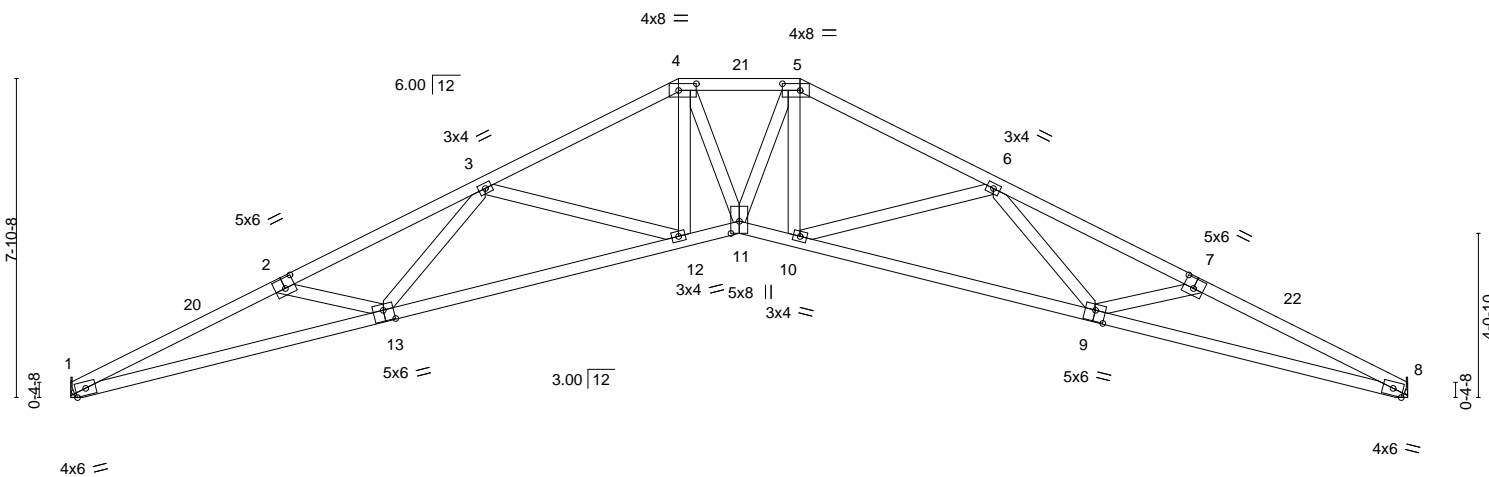


Plate Offsets (X,Y)--	[1:0-3-0,Edge], [2:0-3-0,0-3-0], [4:0-5-4,0-2-0], [5:0-5-4,0-2-0], [7:0-3-0,0-3-0], [8:0-3-0,Edge], [9:0-3-0,0-3-4], [11:0-3-10,0-2-8], [13:0-3-0,0-3-4]
-----------------------	--

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.58	Vert(LL)	-0.44	11	>903	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.99	Vert(CT)	-0.84	9-10	>470		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.36	Horz(CT)	0.58	8	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS						
								Weight: 161 lb	FT = 20%

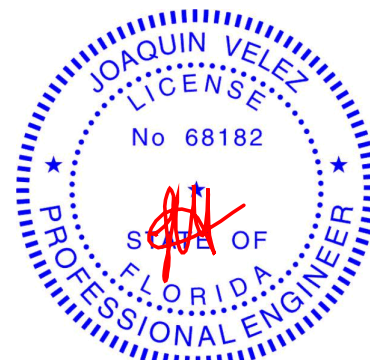
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-5-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.** (size) 1=Mechanical, 8=Mechanical  
Max Horz 1=112(LC 12)  
Max Uplift 1=-256(LC 12), 8=-256(LC 13)  
Max Grav 1=1221(LC 1), 8=1221(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-4187/947, 2-3=-3895/829, 3-4=-2954/558, 4-5=-2839/562, 5-6=-2954/554,  
6-7=-3895/733, 7-8=-4187/838  
BOT CHORD 1-13=-930/3803, 12-13=-691/3340, 11-12=-393/2658, 10-11=-335/2658, 9-10=-550/3340,  
8-9=-715/3803  
WEBS 2-13=-260/192, 3-13=-85/472, 3-12=-678/305, 4-12=-120/556, 4-11=-122/611,  
5-11=-179/611, 5-10=-117/556, 6-10=-678/308, 6-9=-91/472, 7-9=-260/197

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-3-10, Interior(1) 3-3-10 to 15-0-0, Exterior(2E) 15-0-0 to 18-0-0, Exterior(2R) 18-0-0 to 22-9-4, Interior(1) 22-9-4 to 33-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - 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) except (jt=lb) 1=256, 8=256.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

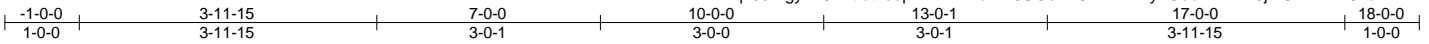
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T13	Truss Type Hip Girder	Qty 1	Ply 1	WCH - NELSON RES. T23566456
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:52 2021 Page 1
ID:qk0sWgyfxFO14tlutkedpAzTBRk-uMK8UGoYzCVnMKWynGdbwxYB4i9jMUNPhKV84dzR4MD					Job Reference (optional)



Scale = 1:31.0

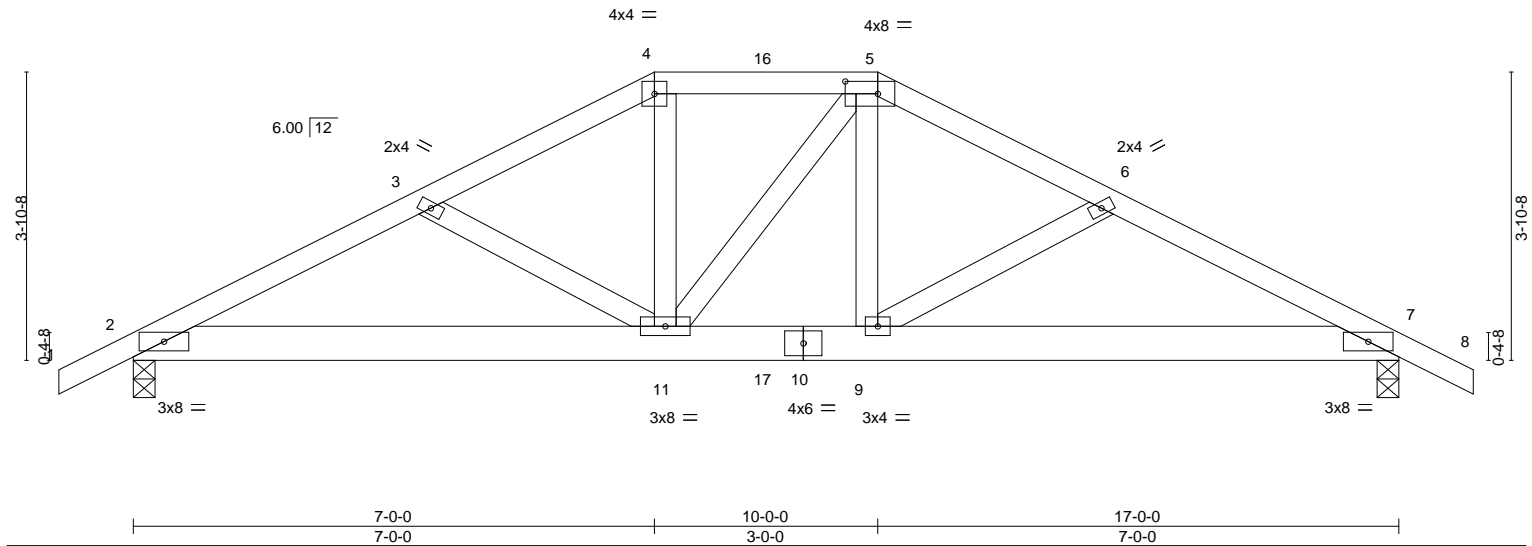


Plate Offsets (X,Y)--	[5:0-5-4,0-2-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25		TC 0.34	Vert(LL) -0.06	9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.52	Vert(CT) -0.12	9-15	>999	180		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.24	Horz(CT) 0.04	7	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 97 lb	FT = 20%

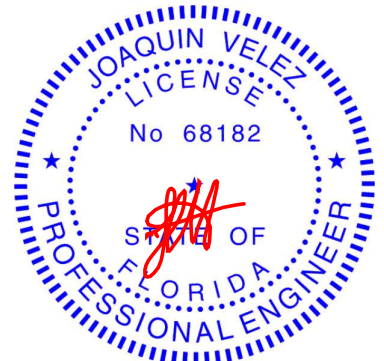
<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-8-1 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 8-11-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
 Max Horz 2=60(LC 27)  
 Max Uplift 2=-395(LC 8), 7=-393(LC 9)  
 Max Grav 2=1270(LC 1), 7=1284(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2370/768, 3-4=-2195/716, 4-5=-1953/667, 5-6=-2221/726, 6-7=-2398/765  
 BOT CHORD 2-11=-687/2099, 9-11=-589/1974, 7-9=-625/2124  
 WEBS 4-11=-153/635, 5-9=-149/613

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=395, 7=393.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 131 lb down and 91 lb up at 7-0-0, and 112 lb down and 84 lb up at 8-6-0, and 235 lb down and 176 lb up at 10-0-0 on top chord, and 355 lb down and 143 lb up at 7-0-0, and 86 lb down and 20 lb up at 8-6-0, and 355 lb down and 143 lb up at 9-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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=-54, 4-5=-54, 5-8=-54, 2-7=-20  
 Concentrated Loads (lb)  
 Vert: 4=-112(B) 5=-188(B) 11=-355(B) 9=-355(B) 16=-112(B) 17=-67(B)



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
 Tampa, FL 33610

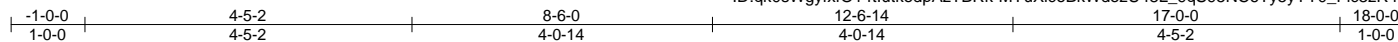
Job 2742662	Truss T14	Truss Type Common	Qty 2	Ply 1	WCH - NELSON RES. T23566457
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:53 2021 Page 1

ID:qk0sWgyfxIO14tlutkedpAzTBRk-MYuXicoBkWdezU48L\_9qS95NC6Ty5yYY0\_Fic3zR4MC

Job Reference (optional)



Scale = 1:31.2

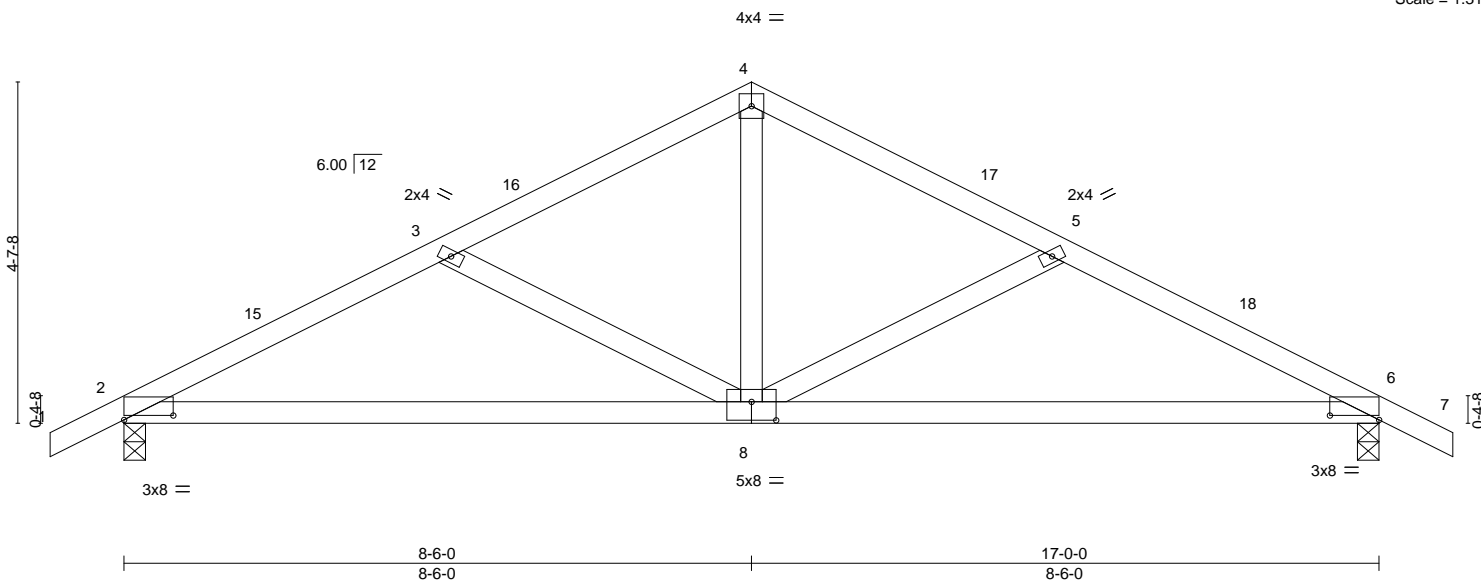


Plate Offsets (X,Y)--	[2:0-8-0,0-0-11], [6:0-8-0,0-0-11], [8:0-4-0,0-3-0]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.65	Vert(LL) -0.08 8-14 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.18	Vert(CT) -0.18 8-14 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.02 6 n/a n/a		
	Code FBC2020/TPI2014			Weight: 77 lb	FT = 20%

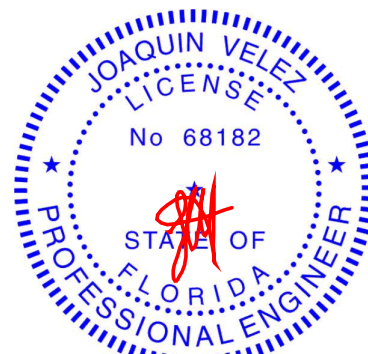
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-6-12 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=71(LC 12)  
Max Uplift 2=-152(LC 12), 6=-152(LC 13)  
Max Grav 2=683(LC 1), 6=683(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1041/353, 3-4=-787/271, 4-5=-787/271, 5-6=-1041/353  
BOT CHORD 2-8=-250/912, 6-8=-255/912  
WEBS 4-8=-108/478, 5-8=-304/181, 3-8=-304/181

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-6-0, Exterior(2R) 8-6-0 to 11-6-0, Interior(1) 11-6-0 to 18-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=152, 6=152.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T15	Truss Type Common Girder	Qty 1	Ply 2	WCH - NELSON RES. Job Reference (optional)	T23566458
----------------	--------------	-----------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:58 2021 Page 1  
ID:qk0sWgyfxFO14tlutkedpAzTBRk-jWhQIKsJY2Fx4Fz58Xk?9Co9Z7FJm6oH9GyTIHzR4M7

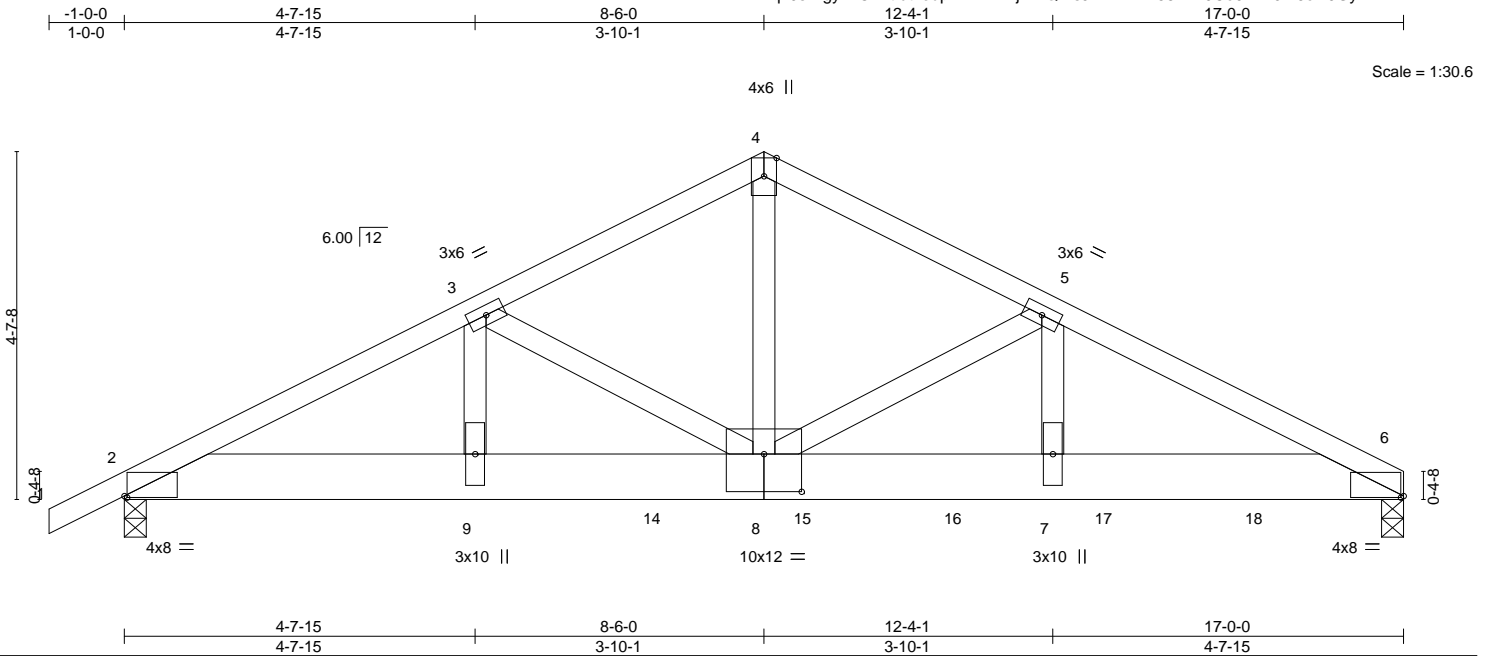


Plate Offsets (X,Y)--	[2:0-0-7,0-0-4], [6:0-0-7,0-0-4], [8:0-6-0,0-6-0]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25		TC 0.53	Vert(LL) -0.10	8-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.38	Vert(CT) -0.18	8-9	>999	180		
BCLL 0.0 *	Rep Stress Incr NO		WB 0.63	Horz(CT) 0.03	6	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 211 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
4-8: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-10-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

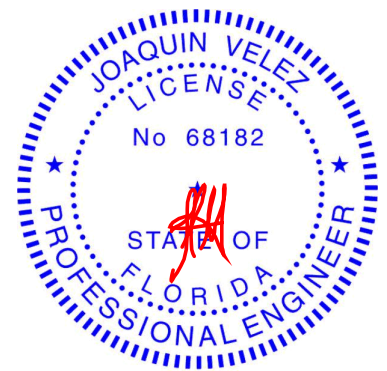
**REACTIONS.** (size) 6=0-3-8, 2=0-3-8  
Max Horz 2=79(LC 31)  
Max Uplift 6=-1269(LC 9), 2=-982(LC 8)  
Max Grav 6=5110(LC 1), 2=3575(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-7414/2042, 3-4=-6551/1790, 4-5=-6553/1790, 5-6=-9064/2302  
BOT CHORD 2-9=-1833/6580, 8-9=-1833/6580, 7-8=-2008/8079, 6-7=-2008/8079  
WEBS 4-8=-1512/5586, 5-8=-2685/619, 5-7=-445/2361, 3-8=-876/346, 3-9=-202/669

**NOTES-**

- 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: 2x8 - 2 rows staggered at 0-4-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1269, 2=982.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2594 lb down and 873 lb up at 7-0-12, 1196 lb down and 306 lb up at 9-0-12, 1314 lb down and 306 lb up at 11-0-12, and 1307 lb down and 279 lb up at 13-0-12, and 1201 lb down and 276 lb up at 15-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

Continued on page 2

**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 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



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T15	Truss Type Common Girder	Qty 1	Ply <b>2</b>	WCH - NELSON RES. T23566458 Job Reference (optional)
----------------	--------------	-----------------------------	----------	-----------------	--

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:21:59 2021 Page 2  
ID:qk0sWgyfxfO14tlutkedpAzTBRk-BiFoyftxJMNohPYIhEFEiQLKJXbYVZ1ROwi0qjzR4M6

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-6=-54, 2-6=-20  
Concentrated Loads (lb)  
Vert: 14=-2594(F) 15=-1196(F) 16=-1196(F) 17=-1201(F) 18=-1201(F)

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T16	Truss Type Common	Qty 2	Ply 1	WCH - NELSON RES. T23566459
----------------	--------------	----------------------	----------	----------	--------------------------------

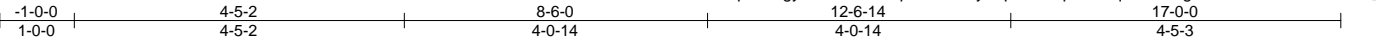
Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:07 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-yEkpePzzRpOffe9q9wP606glXIFCNI0cE9eR6FzR4M\_

Job Reference (optional)



Scale = 1:30.9

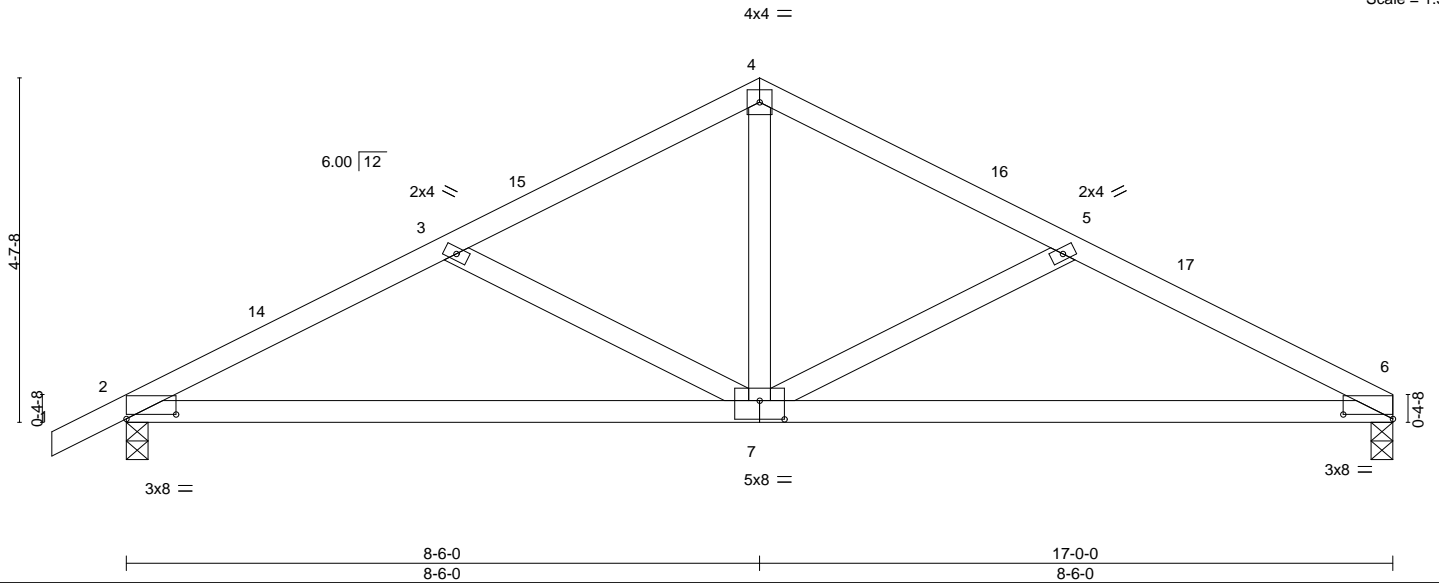


Plate Offsets (X,Y)--	[2:0-8-0,0-0-11], [6:0-8-0,0-0-11], [7:0-4-0,0-3-0]							
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.32	Vert(LL)	-0.08	7-10	>999	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.65	Vert(CT)	-0.18	7-10	>999		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.18	Horz(CT)	0.02	6	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 75 lb	FT = 20%

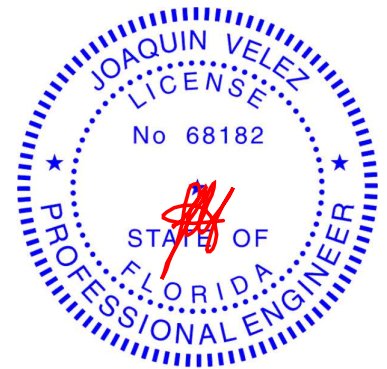
**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-5-14 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=78(LC 16)  
 Max Uplift 6=130(LC 13), 2=152(LC 12)  
 Max Grav 6=627(LC 1), 2=685(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1045/359, 3-4=-791/273, 4-5=-792/278, 5-6=-1050/364  
 BOT CHORD 2-7=-282/916, 6-7=-275/922  
 WEBS 4-7=-115/480, 5-7=-311/184, 3-7=-304/180

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 8-6-0, Exterior(2R) 8-6-0 to 11-6-0, Interior(1) 11-6-0 to 17-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=130, 2=152.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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**

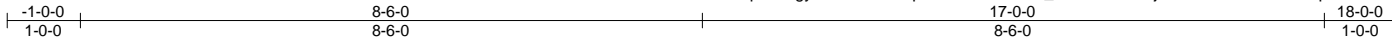
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
 Tampa, FL 36610

Job 2742662	Truss T16G	Truss Type Common Supported Gable	Qty 1	Ply 1	WCH - NELSON RES. T23566460
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					Job Reference (optional)

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:08 2021 Page 1  
ID:qk0sWgyfxFO14tlutkedpAzTBRk-QRlCrk\_bB7WWHok0jdwLZJD?U9lx6mamTpN?dizR4Lz



Scale = 1:31.5

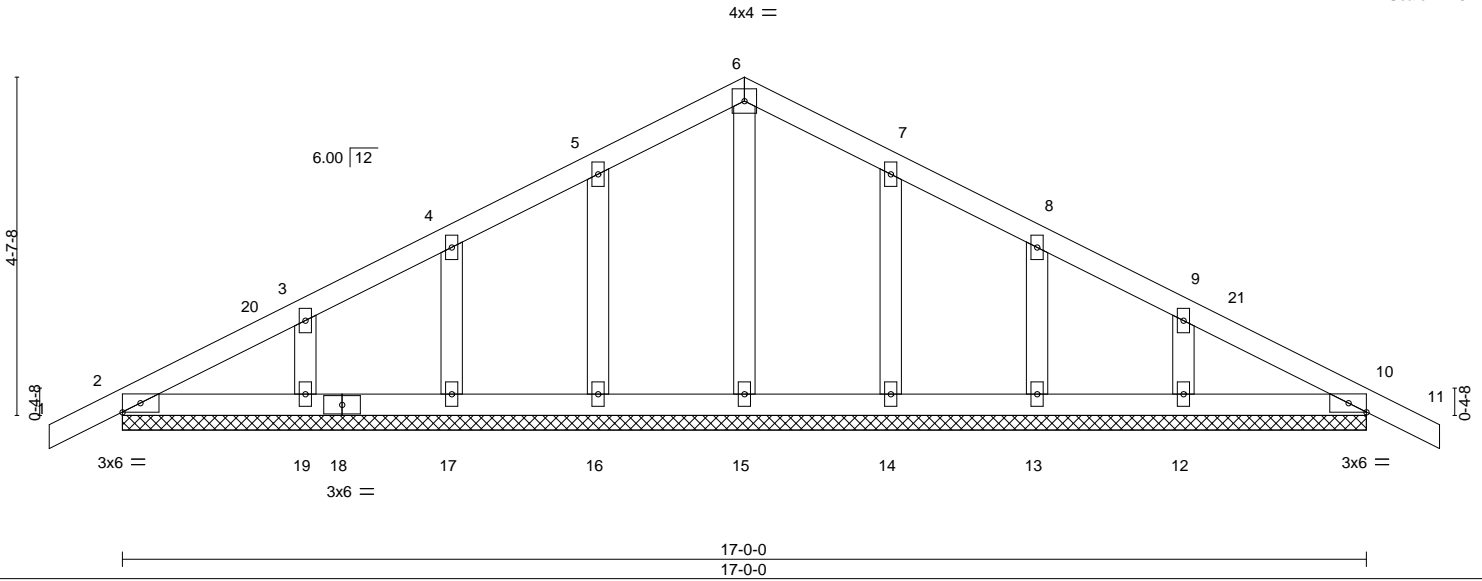


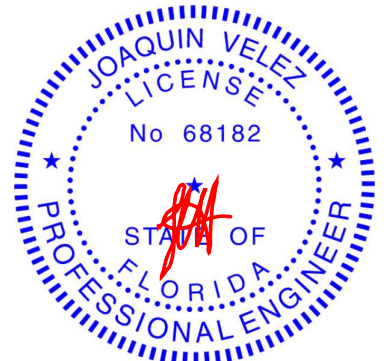
Plate Offsets (X,Y)--	[10:0-2-15,Edge]								
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25		TC 0.06	Vert(LL) -0.00	10	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.04	Vert(CT) -0.00	10	n/r	120		
BCLL 0.0 *	Rep Stress Incr YES		WB 0.03	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S						
								Weight: 82 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

**REACTIONS.** All bearings 17-0-0.  
 (lb) - Max Horz 2=71(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 19, 14, 13, 12, 10  
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 19, 14, 13, 12, 10

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

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 8-6-0, Corner(3R) 8-6-0 to 11-6-0, Exterior(2N) 11-6-0 to 18-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 17, 19, 14, 13, 12, 10.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

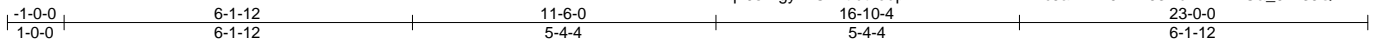
April 15,2021

Job 2742662	Truss T17	Truss Type Common Girder	Qty 1	Ply 2	WCH - NELSON RES. T23566461
----------------	--------------	-----------------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:16 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-BznDXT4cJaWNE0LZBJ3Du?YHENoa\_9xl3JQvEzR4Lr



Scale = 1:40.6

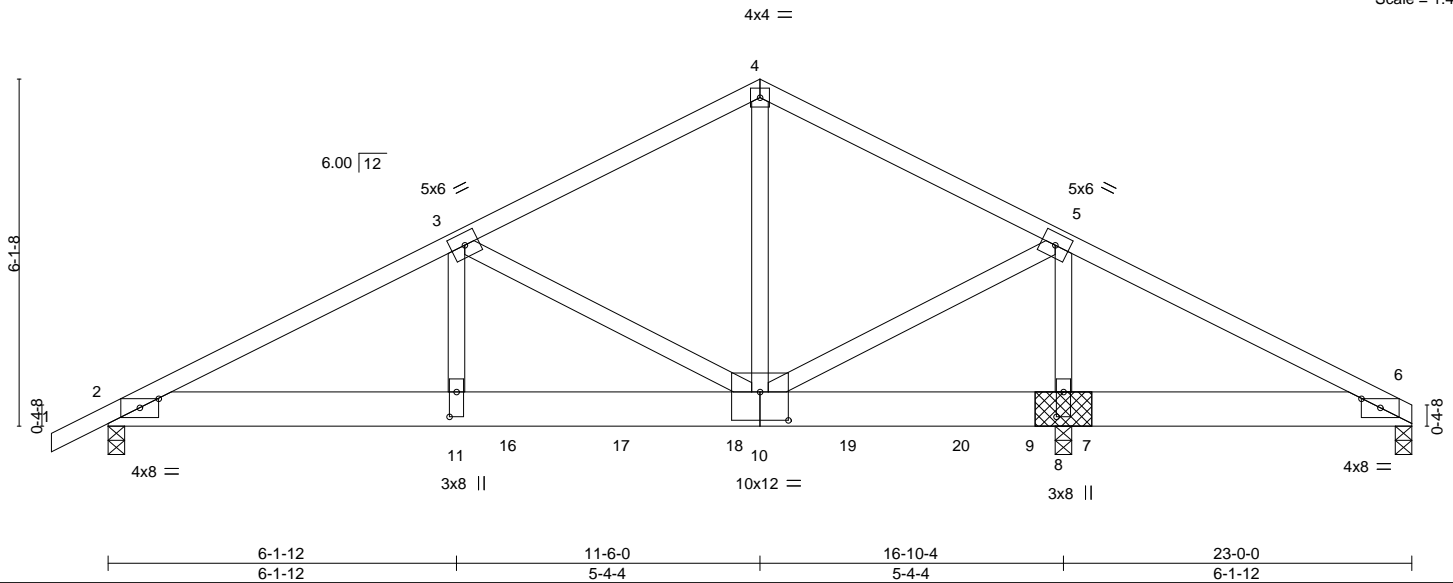


Plate Offsets (X,Y)--	[2:0-4-0,0-1-15], [6:0-4-0,0-1-15], [8:0-5-4,0-1-8], [10:0-6-0,0-6-0], [11:0-5-4,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.33	Vert(LL) -0.09 10-11 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.38	Vert(CT) -0.17 10-11 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.98	Horz(CT) 0.02 8 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 299 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-7-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 6=0-3-8, 2=0-3-8, 8=(0-3-8 + bearing block) (req. 0-3-13)  
Max Horz 2=101(LC 31)  
Max Uplift 6=-722(LC 19), 2=-949(LC 8), 8=-1658(LC 9)  
Max Grav 6=260(LC 12), 2=3306(LC 1), 8=6493(LC 1)

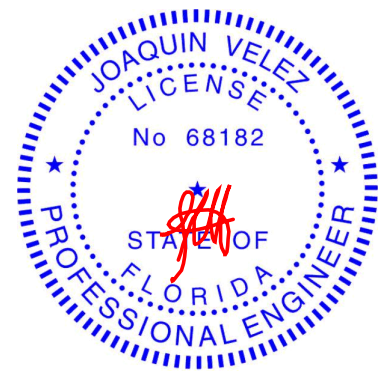
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-7048/2033, 3-4=-3748/1024, 4-5=-3755/1043, 5-6=-410/1416  
BOT CHORD 2-11=-1835/6244, 10-11=-1835/6244, 8-10=-1239/397, 6-8=-1239/397  
WEBS 4-10=-823/3056, 5-10=-1409/5157, 5-8=-5061/1399, 3-10=-3378/1140, 3-11=-865/2851

**NOTES-**

- 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: 2x8 - 2 rows staggered at 0-4-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- 2x8 SP 2400F 2.0E bearing block 12" long at jt. 8 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=722, 2=949, 8=1658.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2647 lb down and 893 lb up at 7-0-12, 1196 lb down and 339 lb up at 9-0-12, 1343 lb down and 334 lb up at 11-0-12, and 1302 lb down and 279 lb up at 13-0-12, and 1201 lb down and 276 lb up at 15-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

Continued on page 2



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T17	Truss Type Common Girder	Qty 1	Ply <b>2</b>	WCH - NELSON RES. T23566461 Job Reference (optional)
----------------	--------------	-----------------------------	----------	-----------------	--

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:16 2021 Page 2  
ID:qk0sWgyfxfO14tlutkedpAzTBRk-BznDXT4cJaWNE0LZBJ3Du?YHENOa\_9lxl3JQvEzR4Lr

**LOAD CASE(S)** Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-6=-54, 2-6=-20  
Concentrated Loads (lb)  
Vert: 16=-2647(B) 17=-1196(B) 18=-1196(B) 19=-1201(B) 20=-1201(B)

**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 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

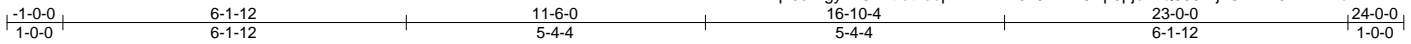


6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T17G	Truss Type GABLE	Qty 1	Ply 1	WCH - NELSON RES. Job Reference (optional)	T23566462
----------------	---------------	---------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:20 2021 Page 1  
ID:qk0sWgyfxfO14tlutkedpAzTBRk-3k0kMr76Np0pjefKQ9892rjxG?IKw6zXDhHd2zR4Ln



Scale = 1:41.2

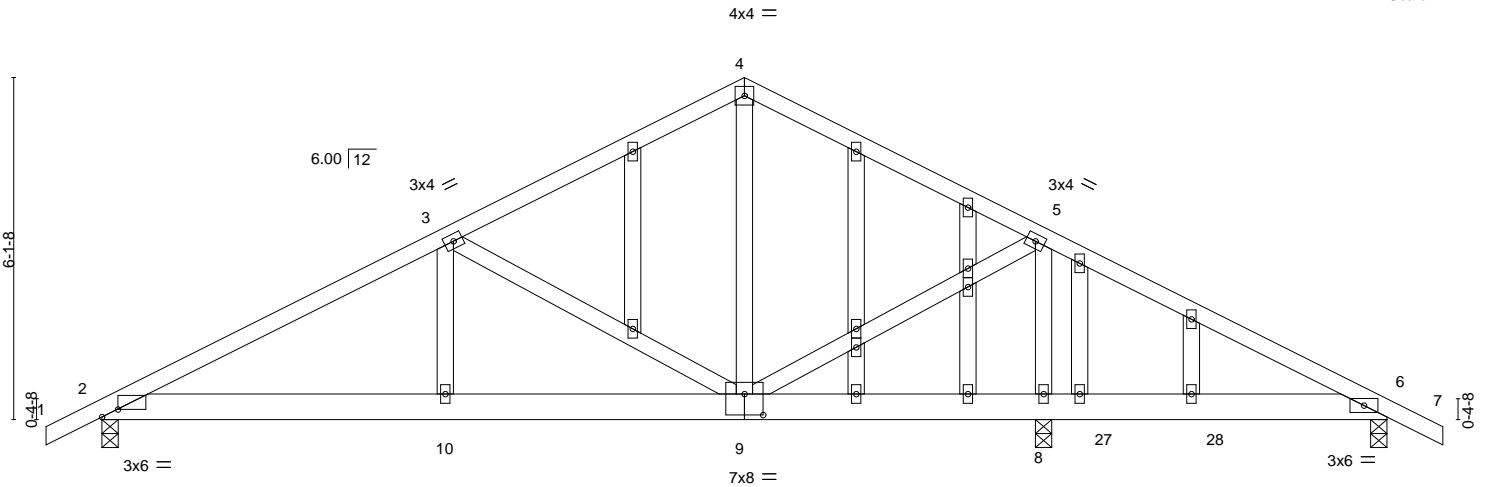


Plate Offsets (X,Y)--	[2:0-3-7,0-1-10], [9:0-4-0,0-4-8]
-----------------------	-----------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.45	in (loc) l/def L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.39	Vert(LL) 0.05 8-26 >999 240		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.39	Vert(CT) -0.06 8-26 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.01 8 n/a n/a		
	Code FBC2020/TPI2014			Weight: 151 lb	FT = 20%

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

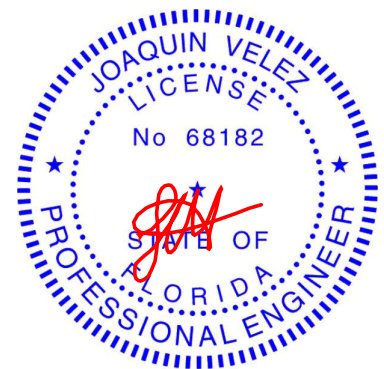
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-10-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8, 6=0-3-8  
Max Horz 2=93(LC 12)  
Max Uplift 2=-161(LC 27), 8=-313(LC 9), 6=-124(LC 9)  
Max Grav 2=625(LC 1), 8=1209(LC 1), 6=291(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-912/219, 3-4=-400/139, 4-5=-402/149  
BOT CHORD 2-10=-209/766, 9-10=-209/766  
WEBS 5-9=-113/501, 5-8=-808/193, 3-9=-548/220, 3-10=0/272

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=161, 8=313, 6=124.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 81 lb down and 62 lb up at 17-11-4, and 192 lb down and 169 lb up at 19-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 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=-54, 4-7=-54, 2-6=-20



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

Continued on page 2

**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 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



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2742662	Truss T17G	Truss Type GABLE	Qty 1	Ply 1	WCH - NELSON RES.  Job Reference (optional)	T23566462
----------------	---------------	---------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:20 2021 Page 2  
ID:qk0sWgyxfO14tlutkedpAzTBRk-3k0kMr76Np0pjefKQ9892rjxG?IKw6zXDhHd2?zR4Ln

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 27=-81(F) 28=-192(F)

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

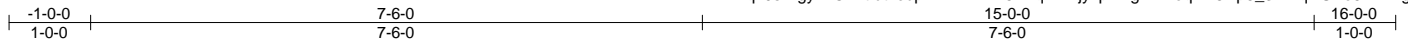
Job 2742662	Truss T18	Truss Type Common	Qty 3	Ply 1	WCH - NELSON RES. T23566463
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:27 2021 Page 1  
ID:qk0sWgyfxfO14tlutkedpAzTBRk-M5xNqEDVjyvp2ihgK7moqKV5Np5\_3KIZqHUVo5zR4Lg

Job Reference (optional)



Scale = 1:28.2

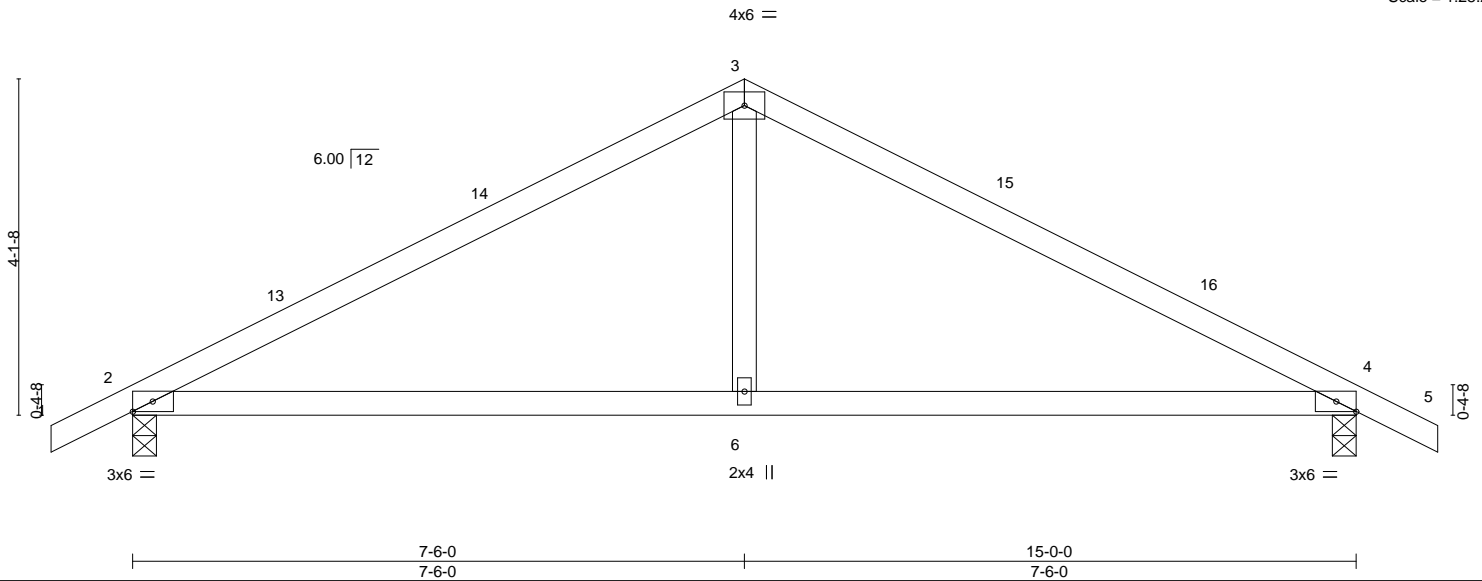


Plate Offsets (X,Y)--	[4:0-2-15,Edge]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25		TC 0.65	Vert(LL) -0.10	6-9	>999	240		MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.58	Vert(CT) -0.18	6-9	>983	180			
BCLL 0.0 *	Rep Stress Incr YES		WB 0.13	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS							
									Weight: 56 lb	FT = 20%

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

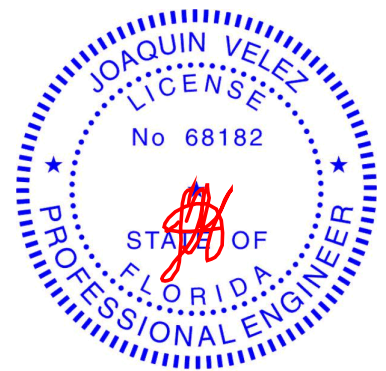
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5'-1'-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10'-0'-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
Max Horz 2=63(LC 12)  
Max Uplift 2=-137(LC 12), 4=-137(LC 13)  
Max Grav 2=609(LC 1), 4=609(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-788/276, 3-4=-788/276  
BOT CHORD 2-6=-131/633, 4-6=-131/633  
WEBS 3-6=-5/347

**NOTES-**

- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 7-6-0, Exterior(2R) 7-6-0 to 10-6-0, Interior(1) 10-6-0 to 16-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=137, 4=137.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

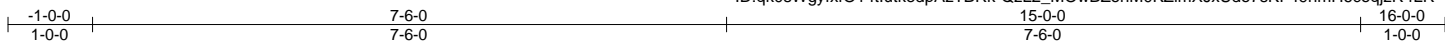
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T18G	Truss Type GABLE	Qty 1	Ply 1	WCH - NELSON RES. T23566464
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:42 2021 Page 1
ID:qk0sWgyfxfO14tlutkedpAzTBRk-QzL2_MOWBZohM0KZimXJxUdo7sKF49nmH6coqjzR4LR					Job Reference (optional)



Scale = 1:27.3

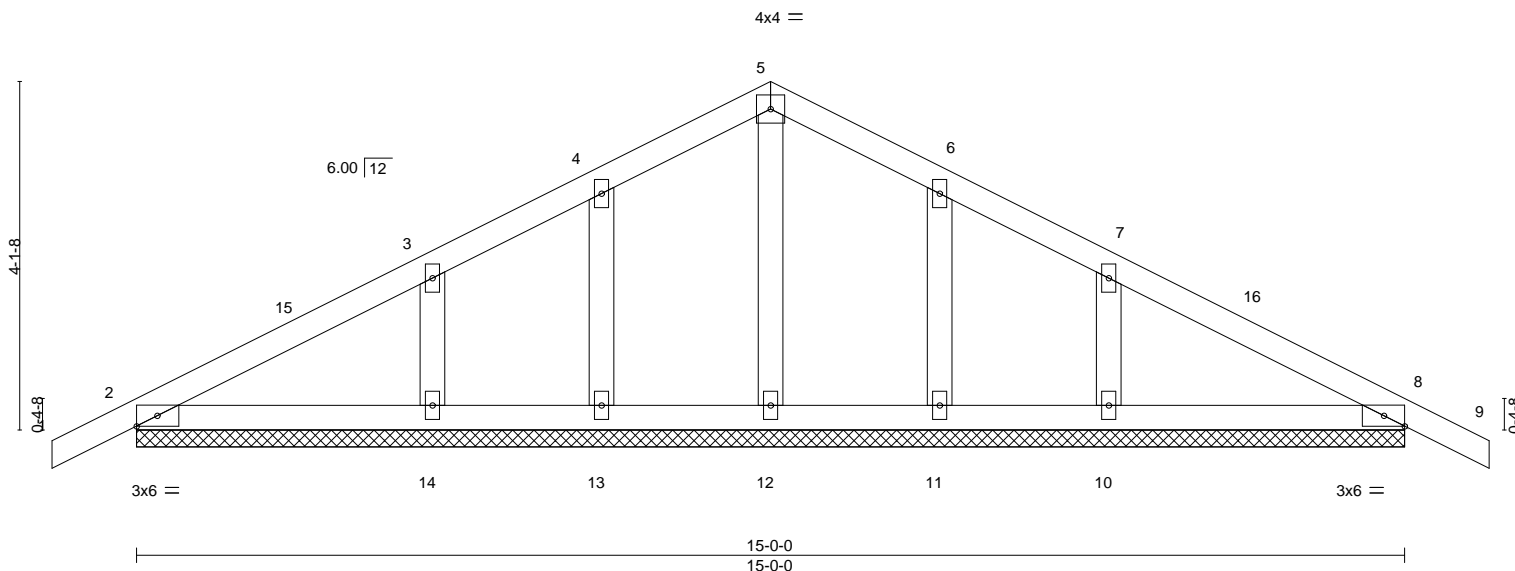


Plate Offsets (X,Y)--	[8:0-2-15,Edge]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.10	Vert(LL) 0.00 9 n/r 120	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.09	Vert(CT) 0.01 9 n/r 120		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.05	Horz(CT) 0.00 8 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-S		Weight: 69 lb	FT = 20%

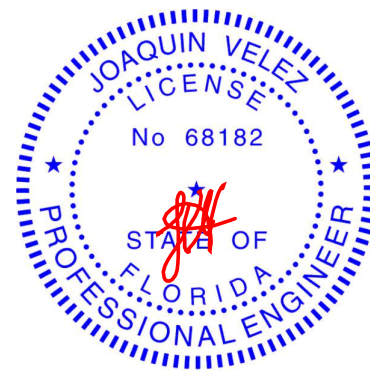
**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3

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

**REACTIONS.** All bearings 15-0-0.  
(lb) - Max Horz 2=63(LC 17)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 13, 14, 11, 10  
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 12, 13, 14, 11, 10

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

- NOTES-**
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 7-6-0, Corner(3R) 7-6-0 to 10-6-0, Exterior(2N) 10-6-0 to 16-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 13, 14, 11, 10.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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**

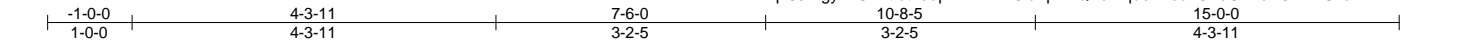
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2742662	Truss T19	Truss Type Common Girder	Qty 1	Ply 2	WCH - NELSON RES. T23566465
----------------	--------------	-----------------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:46 2021 Page 1  
 ID:qk0sWgyxfIO14tlutkedpAzTBRk-JlbZpkRQFol7qdeKxcbF6KoOzTeH0kFMCKa?zVzR4LN



Scale = 1:27.3

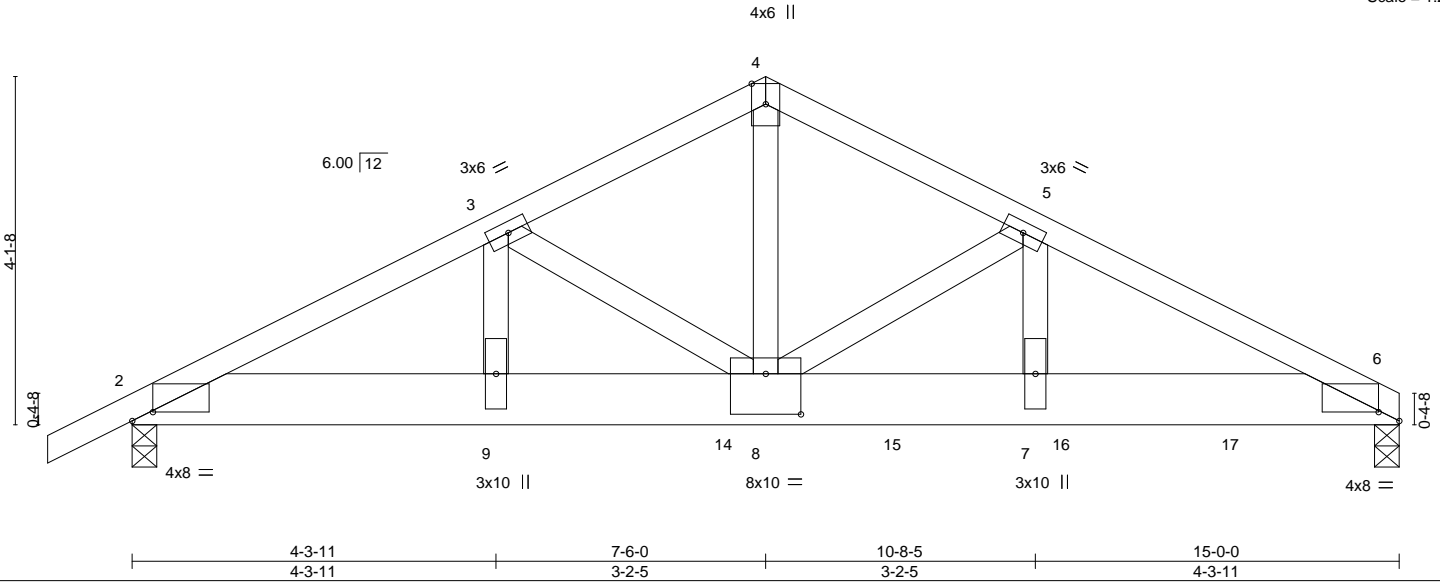


Plate Offsets (X,Y)--	[2:0-2-15,0-1-4], [6:0-2-15,0-1-4], [8:0-5-0,0-5-12]				
<b>LOADING</b> (psf)	<b>SPACING-</b> 2-0-0	<b>CSI.</b>	<b>DEFL.</b> in (loc) l/def L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 1.25	TC 0.43	Vert(LL) -0.07 7-8 >999 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.34	Vert(CT) -0.14 7-8 >999 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.91	Horz(CT) 0.03 6 n/a n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 186 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-10 oc purlins.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

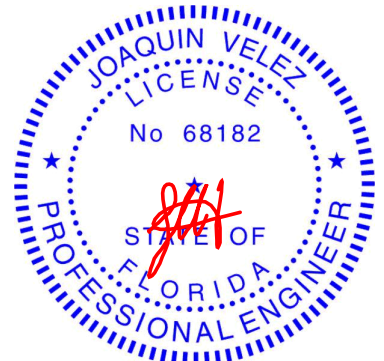
**REACTIONS.** (size) 6=0-3-8, 2=0-3-8  
 Max Horz 2=72(LC 12)  
 Max Uplift 6=-1111(LC 9), 2=-800(LC 8)  
 Max Grav 6=4440(LC 1), 2=2917(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-5843/1600, 3-4=-5634/1559, 4-5=-5634/1558, 5-6=-7769/1992  
 BOT CHORD 2-9=-1433/5179, 8-9=-1433/5179, 7-8=-1733/6921, 6-7=-1733/6921  
 WEBS 4-8=-1317/4797, 5-8=-2275/537, 5-7=-406/2037

**NOTES-**

- 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: 2x8 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1111, 2=800.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2606 lb down and 871 lb up at 7-0-12, 1200 lb down and 284 lb up at 9-0-12, and 1200 lb down and 282 lb up at 11-0-12, and 1301 lb down and 279 lb up at 13-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
 Uniform Loads (plf)  
 Vert: 1-4=-54, 4-6=-54, 2-6=-20



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

Continued on page 2

<p><b>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.</b>          Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see <b>ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information</b> available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	 6904 Parke East Blvd. Tampa, FL 33610
--	--

Job 2742662	Truss T19	Truss Type Common Girder	Qty 1	Ply <b>2</b>	WCH - NELSON RES. T23566465 Job Reference (optional)
----------------	--------------	-----------------------------	----------	-----------------	--

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:46 2021 Page 2  
ID:qk0sWgyxfO14tlutkedpAzTBRk-JlbZpkRQFol7qdeKxcbF6KoOzTeH0kFMCKa?zVzR4LN

**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 14=-2606(F) 15=-1200(F) 16=-1200(F) 17=-1200(F)

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

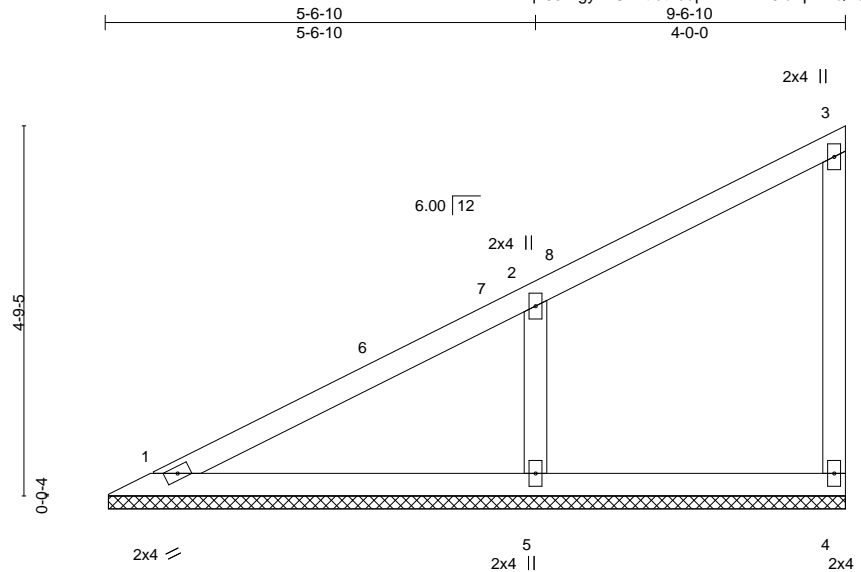
Job 2742662	Truss V01	Truss Type Valley	Qty 1	Ply 1	WCH - NELSON RES. Job Reference (optional)	T23566466
----------------	--------------	----------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:46 2021 Page 1

ID:qk0sWgyfxFO14tlutkedpAzTBRk-JlbZpkRQFol7qdeKxcbF6KoQhThX0xQMcka?zVzR4LN



Scale = 1:29.7

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 0.26	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.19	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S					Weight: 38 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x4 SP No.3

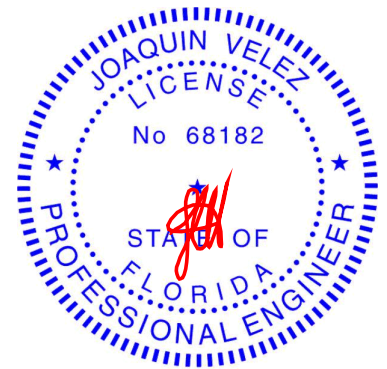
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=9-6-2, 4=9-6-2, 5=9-6-2  
 Max Horz 1=134(LC 12)  
 Max Uplift 4=-21(LC 14), 5=-135(LC 12)  
 Max Grav 1=147(LC 1), 4=98(LC 1), 5=405(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-5=-288/236

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 9-4-14 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=135.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

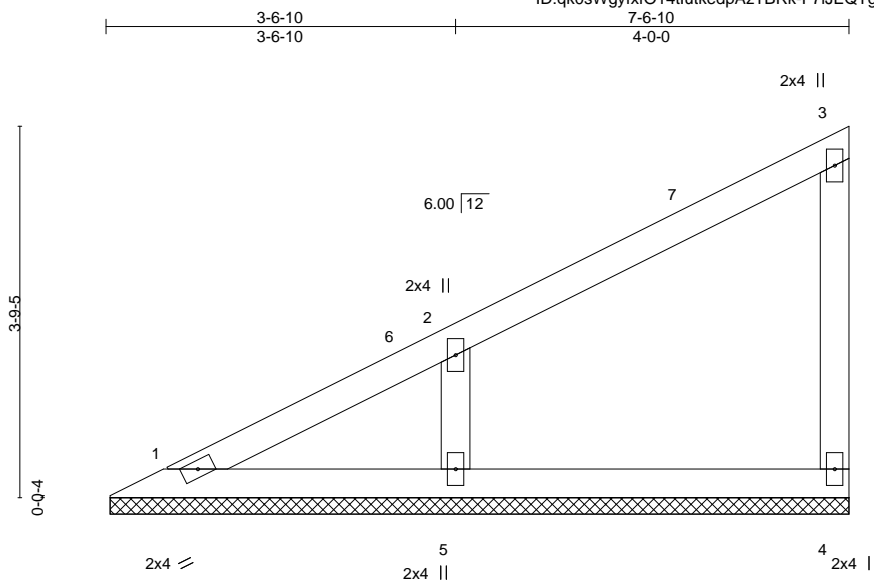
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
 Tampa, FL 36610

Job 2742662	Truss V02	Truss Type Valley	Qty 1	Ply 1	WCH - NELSON RES. T23566467
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:48 2021 Page 1
					ID:qk0sWgyxfxFO14tlutkedpAzTBRk-F7iJEQTgnPYr4xoi31ejBltowHNEUr0ef2362NzR4LL
					Job Reference (optional)



Scale = 1:23.4

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.15	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.11	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	4	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-S					Weight: 29 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

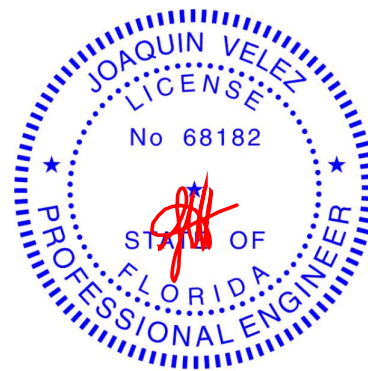
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=7-6-2, 4=7-6-2, 5=7-6-2  
Max Horz 1=110(LC 12)  
Max Uplift 4=-32(LC 12), 5=-114(LC 12)  
Max Grav 1=77(LC 1), 4=119(LC 1), 5=305(LC 1)

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

**NOTES-**

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-6-10, Interior(1) 3-6-10 to 7-4-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Gable requires continuous bottom chord bearing.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=114.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
Tampa, FL 36610

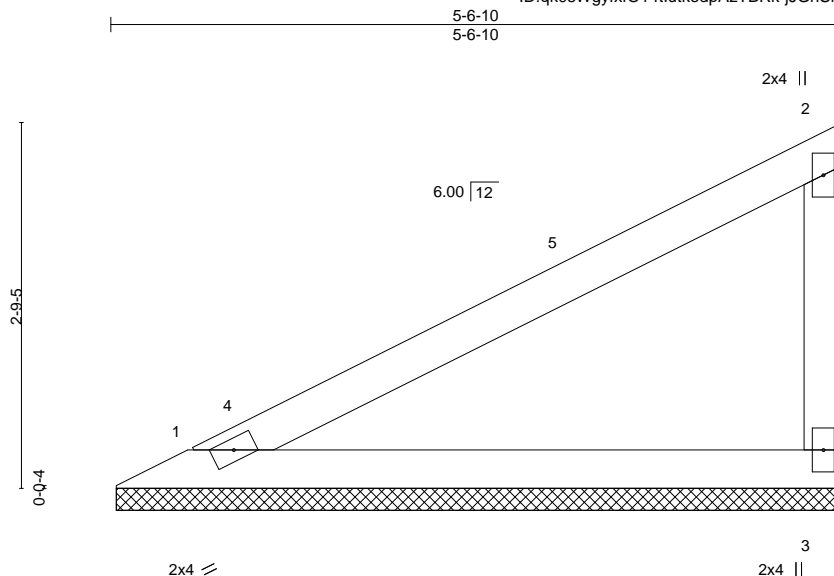
Job 2742662	Truss V03	Truss Type Valley	Qty 2	Ply 1	WCH - NELSON RES. T23566468
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:49 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-jJGhSmUJXjgh5Mvdk9yzQwBhgpDJGouipgapzR4LK



Scale = 1:17.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.37	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.28	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 20 lb	FT = 20%
	Code FBC2020/TPI2014							

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

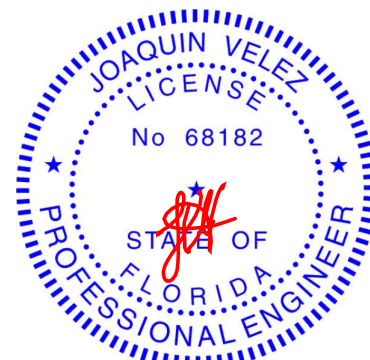
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-6-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=5-6-2, 3=5-6-2  
 Max Horz 1=82(LC 12)  
 Max Uplift 1=27(LC 12), 3=68(LC 12)  
 Max Grav 1=177(LC 1), 3=177(LC 1)

**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; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 5-4-14 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
 Tampa, FL 33610

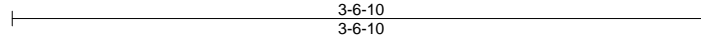
Job 2742662	Truss V04	Truss Type Valley	Qty 2	Ply 1	WCH - NELSON RES. T23566469
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

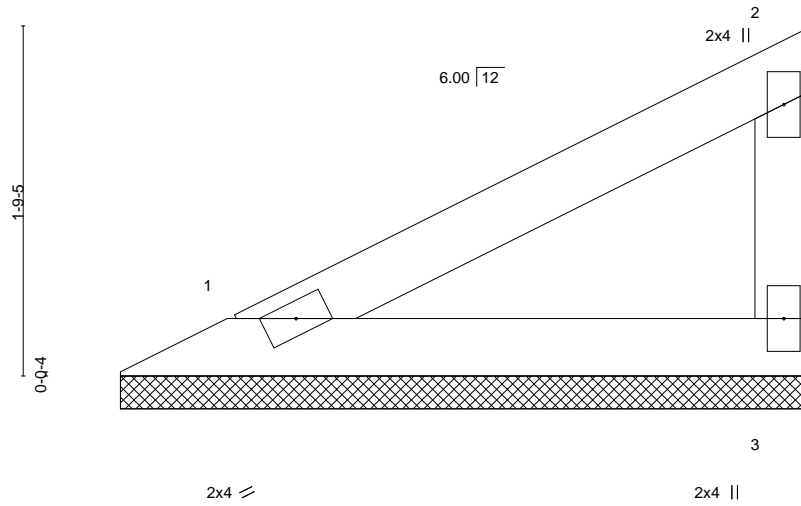
Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:50 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-BWq4f6Ux1toYJFx5ASgBGAY9y534ymVx7MYD6GzR4LJ



Scale = 1:11.7



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 0.11	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-P					Weight: 12 lb	FT = 20%

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

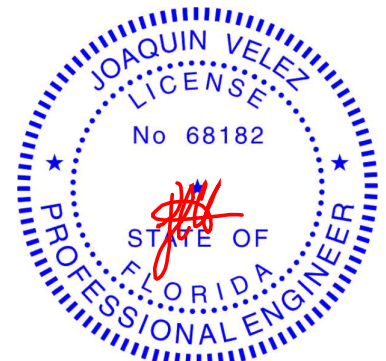
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-6-2, 3=3-6-2  
 Max Horz 1=48(LC 12)  
 Max Uplift 1=-16(LC 12), 3=-40(LC 12)  
 Max Grav 1=103(LC 1), 3=103(LC 1)

**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=20ft; 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
- 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
 Tampa, FL 36610

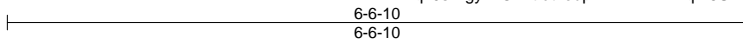
Job 2742662	Truss V05	Truss Type Valley	Qty 1	Ply 1	WCH - NELSON RES. T23566470
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

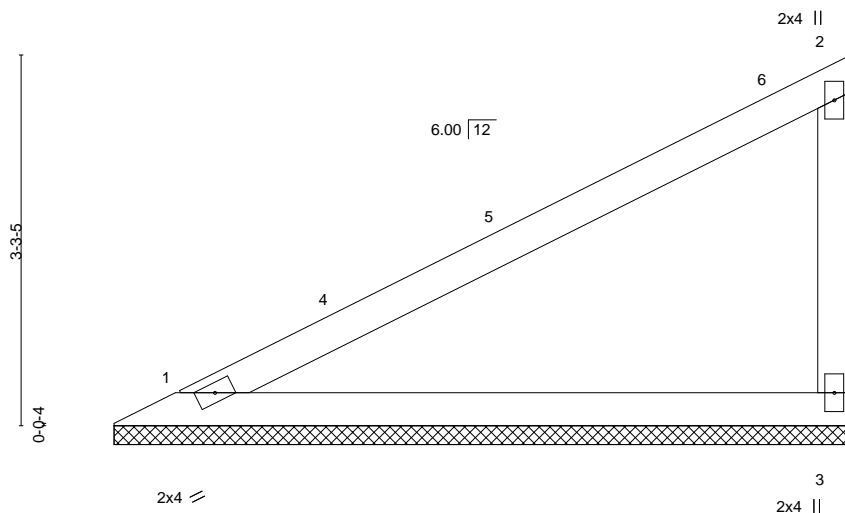
Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:50 2021 Page 1

ID:qk0sWgyxfO14tlutkedpAzTBRk-BWq4f6Ux1toYJF5ASgBGAY2\_5\_oymVx7MYD6GzR4LJ



Scale = 1:20.4



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.56	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.43	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 23 lb	FT = 20%
	Code FBC2020/TPI2014							

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.

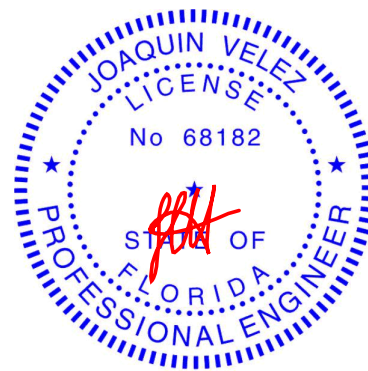
**REACTIONS.**

(size) 1=6-6-2, 3=6-6-2  
 Max Horz 1=98(LC 12)  
 Max Uplift 1=34(LC 12), 3=-78(LC 12)  
 Max Grav 1=214(LC 1), 3=214(LC 1)

**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; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 6-4-14 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
 Tampa, FL 33610

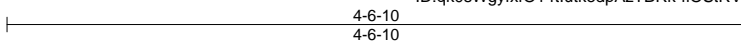
Job 2742662	Truss V06	Truss Type Valley	Qty 1	Ply 1	WCH - NELSON RES. T23566471
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

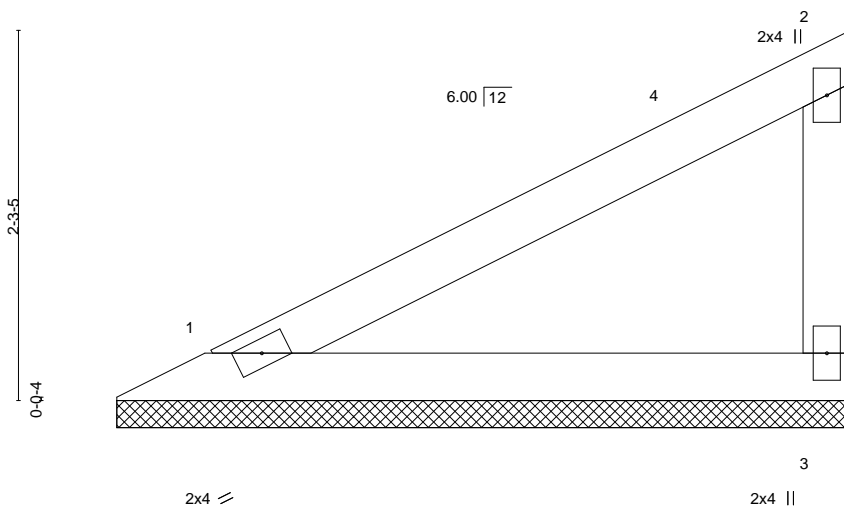
Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:51 2021 Page 1

ID:qk0sWgyfxfO14tlutkedpAzTBRk-fiOSTrVZ3KwPxPWHk9BQpOVI?UO1hDI5L0lmfizR4LI



Scale = 1:14.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.17	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 16 lb	FT = 20%
	Code FBC2020/TPI2014							

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

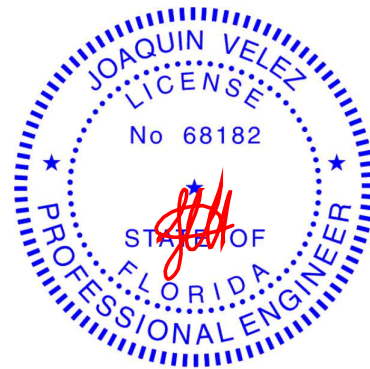
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 4-6-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=4-6-2, 3=4-6-2  
 Max Horz 1=65(LC 12)  
 Max Uplift 1=21(LC 12), 3=54(LC 12)  
 Max Grav 1=140(LC 1), 3=140(LC 1)

**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; TC DL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-4-14 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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



6904 Parke East Blvd.  
 Tampa, FL 36610

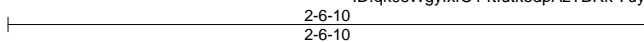
Job 2742662	Truss V07	Truss Type Valley	Qty 1	Ply 1	WCH - NELSON RES. T23566472
----------------	--------------	----------------------	----------	----------	--------------------------------

Builders FirstSource (Jacksonville, FL),

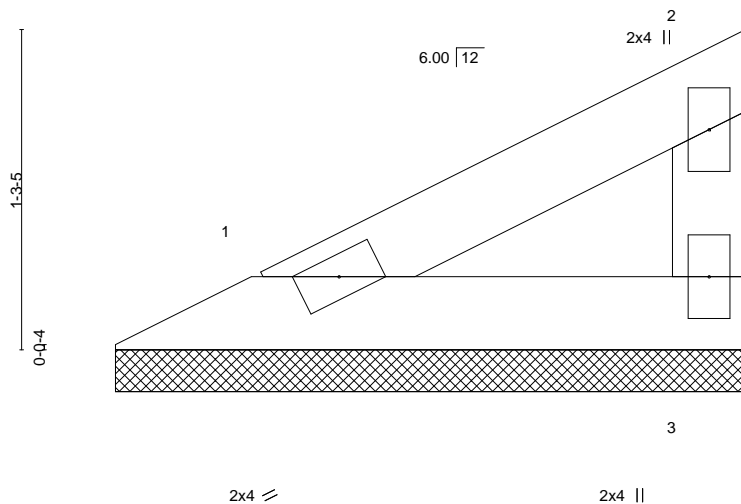
Jacksonville, FL - 32244,

8.430 s Mar 22 2021 MiTek Industries, Inc. Tue Apr 13 16:22:52 2021 Page 1

ID:qk0sWgyfxO14tlutkedpAzTBRk-7uyq4nWBqe3GYY5UltifLb1WZUmOQg?Eaf1KB8zR4LH



Scale = 1:9.2



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.04	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.03	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.00		n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-P					Weight: 8 lb	FT = 20%
	Code FBC2020/TPI2014							

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

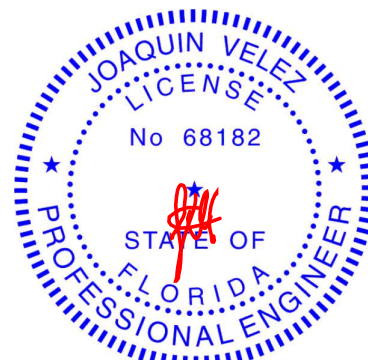
**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-6-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=2-6-2, 3=2-6-2  
 Max Horz 1=31(LC 12)  
 Max Uplift 1=-10(LC 12), 3=-26(LC 12)  
 Max Grav 1=66(LC 1), 3=66(LC 1)

**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=20ft; 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
- 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) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



Joaquin Velez PE No.68182  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

April 15, 2021

**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 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**

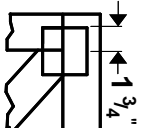
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



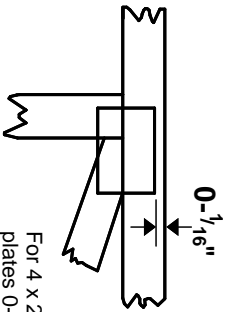
6904 Parke East Blvd.  
 Tampa, FL 36610

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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



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

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

## PLATE SIZE

4 X 4

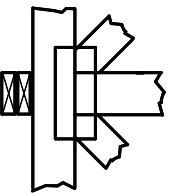
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



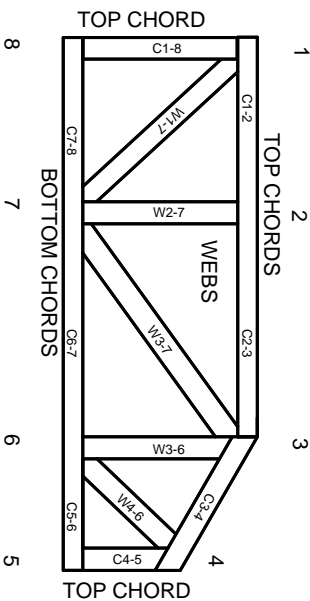
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



**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.

© 2012 MITek® All Rights Reserved

# General Safety Notes

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

1. Additional stability/bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T or I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020