

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

RE: 2777223 - WCH - ROACH RES.

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

Site Information:

Customer Info: Wade Custom Homes Project Name: Roach Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: 409 Buffalo Court, N/A
City: Columbia Cty State: FL

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

Name: _____ License #: _____
Address: _____
City: _____ State: _____

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

Design Code: FBC2020/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 12 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

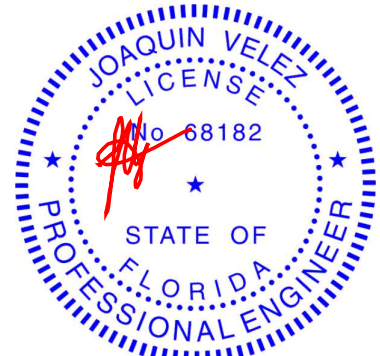
No.	Seal#	Truss Name	Date
1	T24033829	CJ01	5/20/21
2	T24033830	CJ03	5/20/21
3	T24033831	CJ05	5/20/21
4	T24033832	EJ01	5/20/21
5	T24033833	HJ10	5/20/21
6	T24033834	T01	5/20/21
7	T24033835	T02	5/20/21
8	T24033836	T03	5/20/21
9	T24033837	T04	5/20/21
10	T24033838	T05	5/20/21
11	T24033839	T06	5/20/21
12	T24033840	T07	5/20/21



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:

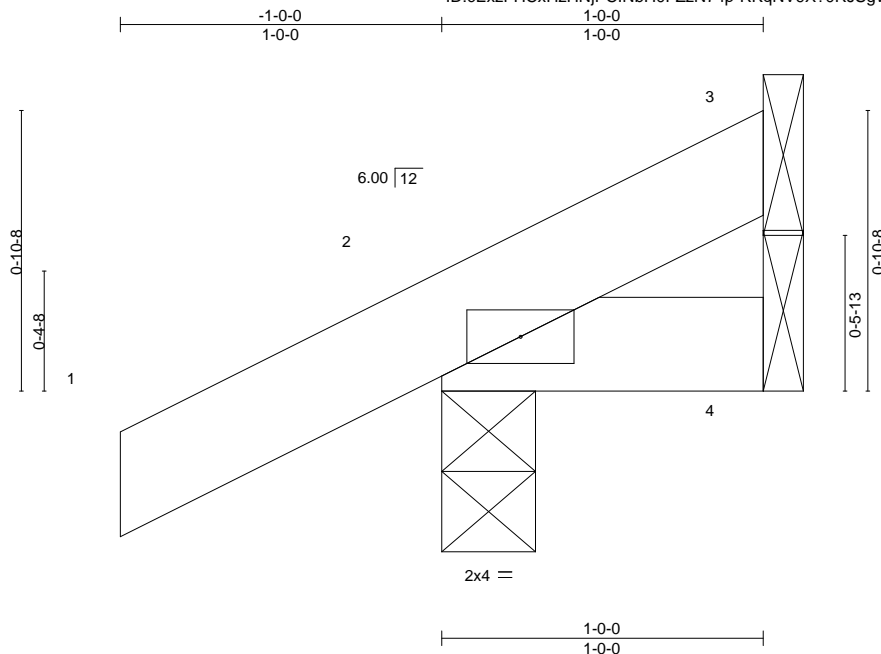
May 20,2021

Job 2777223	Truss CJ01	Truss Type Jack-Open	Qty 8	Ply 1	WCH - ROACH RES. T24033829
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					Job Reference (optional)

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 10:31:29 2021 Page 1

ID:cExzFHCxHzHNjPCINbH0FZzN74p-RKqNV9X?0RJSgWBxDCjxz67zNiQbm3m_a3m8xGzEz0i



Scale = 1:7.2

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

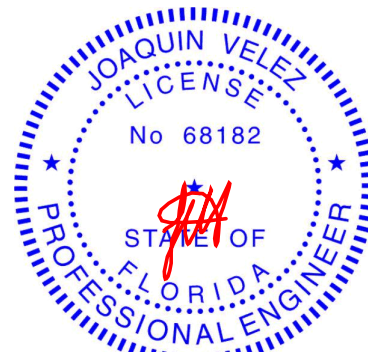
REACTIONS.

(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)
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;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.



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6904 Parke East Blvd. Tampa FL 33610
Date:

May 20,2021

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

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

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



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Tampa, FL 36610

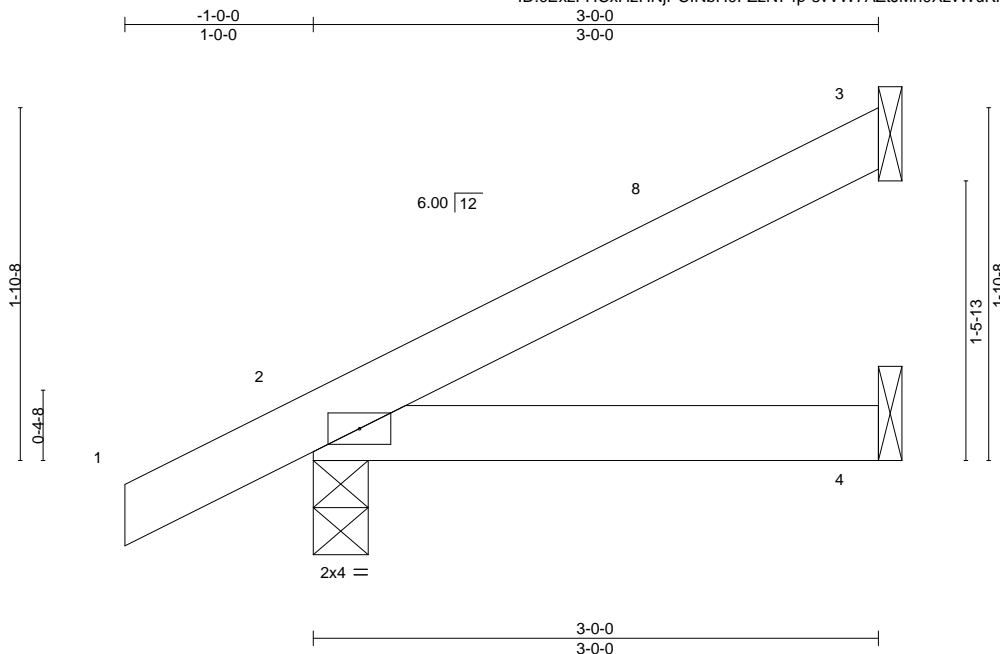
Job	Truss	Truss Type	Qty	Ply	WCH - ROACH RES.	T24033830
2777223	CJ03	Jack-Open	8	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 10:31:32 2021 Page 1

ID:cExzFHCxHzHNjPCINbH0FZzN74p-svVW7AZtJMh0XzvWuKHeallTEwQIzQVRG1?oYbzEz0f



Scale = 1:12.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.08	Vert(LL)	-0.00	4-7	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.07	Vert(CT)	-0.01	4-7	>999	180	244/190
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
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May 20,2021

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



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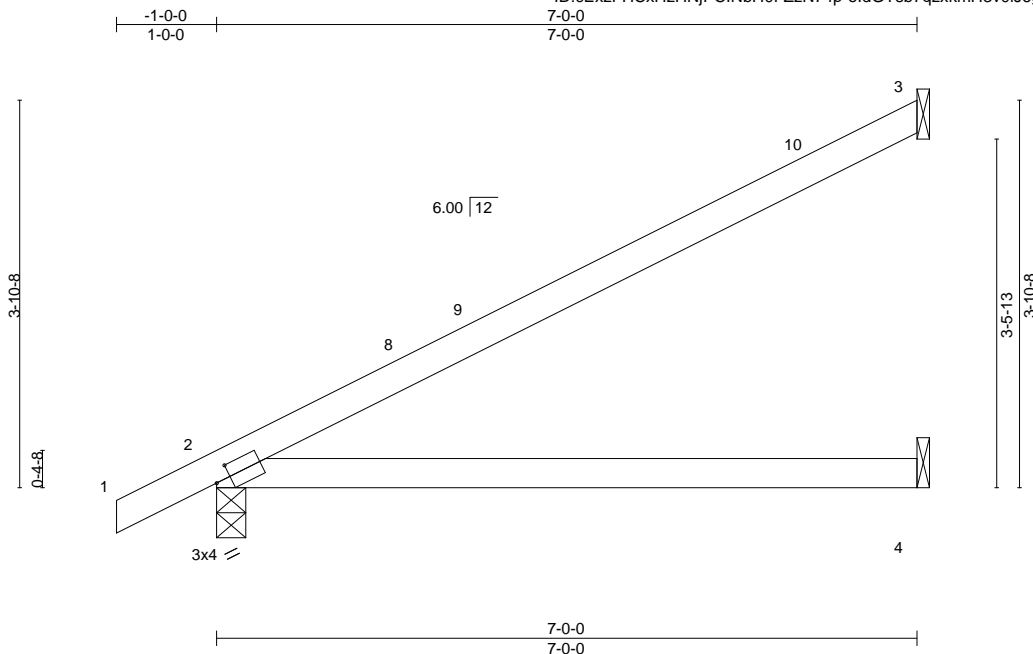
Job 2777223	Truss EJ01	Truss Type Jack-Partial	Qty 20	Ply 1	WCH - ROACH RES. T24033832
Job Reference (optional)					

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

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ID:cExzFHCxHzHNjPCINbH0FZzN74p-oldGYsb7qzxkmH3v0UJ6gAqgzj?PRK?kkLUvcUzEz0d



Scale = 1:23.0

Plate Offsets (X,Y)--		[2:0-1-13,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.64
TCDL 7.0	Lumber DOL	1.25	BC 0.52
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS
			DEFL.
			in (loc) l/def L/d
			Vert(LL) 0.11 4-7 >745 240
			Vert(CT) -0.22 4-7 >374 180
			Horz(CT) 0.01 2 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 24 lb FT = 20%

LUMBER-

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

BRACING-

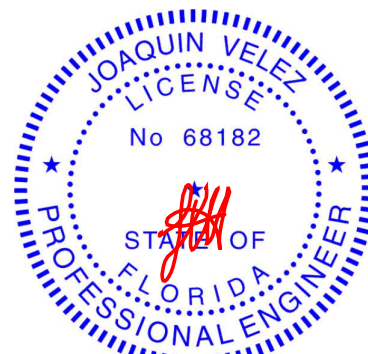
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

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
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6904 Parke East Blvd. Tampa FL 33610
Date:

May 20,2021

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



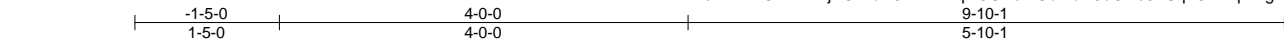
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	WCH - ROACH RES.	T24033833
2777223	HJ10	Diagonal Hip Girder	4	1		
Job Reference (optional)						

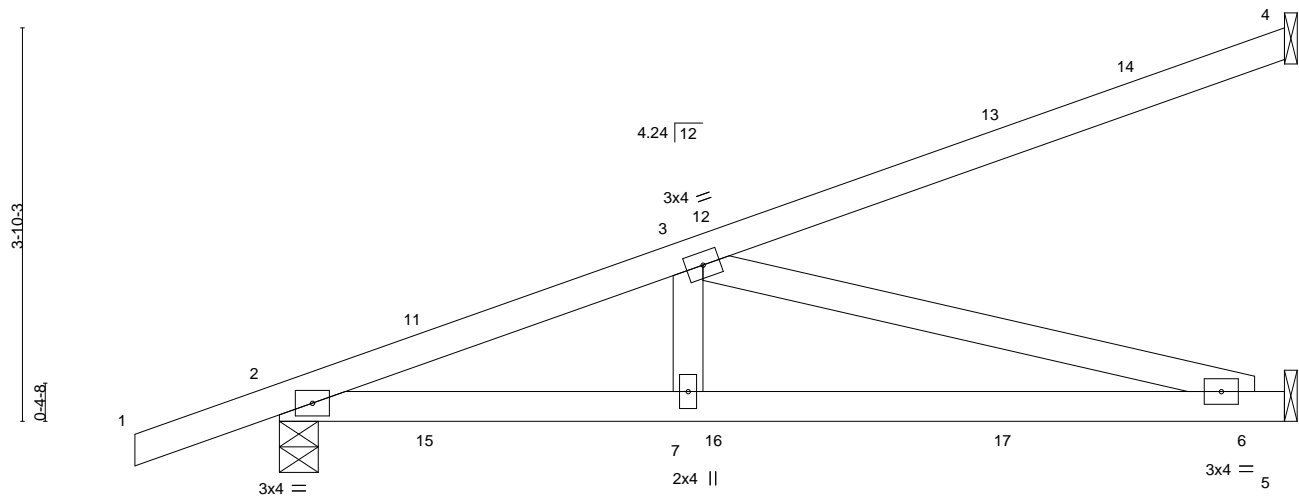
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 10:31:35 2021 Page 1

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Scale = 1:22.6



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.72	Vert(LL)	-0.07	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.16				
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.01				
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							
								Weight: 43 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 5-9-6 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=88(LC 4), 2=-166(LC 4), 5=-84(LC 8)
Max Grav 4=167(LC 1), 2=485(LC 1), 5=301(LC 1)

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

TOP CHORD 2-3=-926/264
BOT CHORD 2-7=-342/859, 6-7=-342/859
WEBS 3-7=0/290, 3-6=-889/354

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; 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=166.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 54 lb down and 9 lb up at 1-6-1, 54 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 7 lb down and 4 lb up at 1-6-1, 7 lb down and 4 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: 12=-1(F=-1, B=-1) 13=-79(F=-39, B=-39) 15=8(F=4, B=4) 16=-15(F=-8, B=-8) 17=-66(F=-33, B=-33)



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
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Date:

May 20,2021

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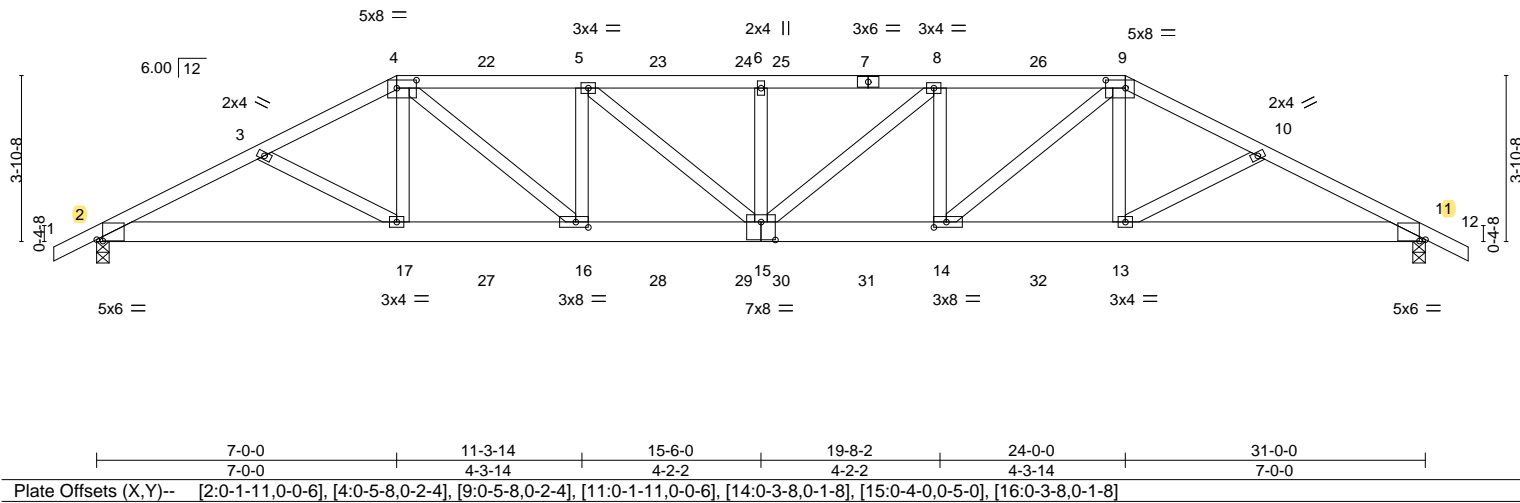
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	WCH - ROACH RES.	T24033834
2777223	T01	Hip Girder	2	1		
Job Reference (optional)						

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 10:31:37 2021 Page 1
ID:cExzFHCxHzHNjPCINbH0FZzN74p-CtJ0Bud07uJdloUhtspHoSDox3teXtAQJiZDpzEz0a
1-0-0 3-10-15 7-0-0 11-3-14 15-6-0 19-8-2 24-0-0 27-1-1 31-0-0 32-0-0
1-0-0 3-10-15 3-1-1 4-3-14 4-2-2 4-2-2 4-3-14 3-1-1 3-10-15 1-0-0
Scale = 1:53.8



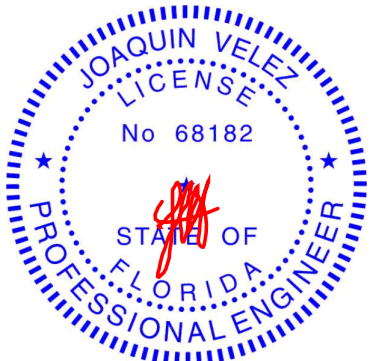
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.29	15	>999	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.37	Vert(CT)	-0.53	15	>696	180			
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.11	11	n/a	n/a			
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 188 lb	FT = 20%	

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except	TOP CHORD Structural wood sheathing directly applied or 2-4-14 oc purlins.
4-7,7-9: 2x4 SP M 31	BOT CHORD Rigid ceiling directly applied or 7-7-2 oc bracing.
BOT CHORD 2x6 SP M 26	
WEBS 2x4 SP No.3	

REACTIONS.	(size) 2=0-3-8, 11=0-3-8
	Max Horz 2=60(LC 8)
	Max Uplift 2=741(LC 8), 11=765(LC 9)
	Max Grav 2=2388(LC 1), 11=2439(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-4856/1538, 3-4=-4684/1488, 4-5=-5569/1800, 5-6=-6032/1920, 6-8=-6032/1920, 8-9=-5620/1813, 9-10=-4794/1540, 10-11=-4967/1590
BOT CHORD	2-17=-1374/4307, 16-17=-1283/4187, 15-16=-1726/5569, 14-15=-1741/5620, 13-14=-1282/4286, 11-13=-1360/4405
WEBS	4-17=-125/659, 4-16=-638/1828, 5-16=-912/398, 5-15=-241/644, 6-15=-507/262, 8-15=-197/568, 8-14=-865/369, 9-14=-593/1755, 9-13=-124/658

- 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=741, 11=765.
 - 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 87 lb up at 15-0-12, 112 lb down and 87 lb up at 15-11-4, 112 lb down and 91 lb up at 17-11-4, 112 lb down and 91 lb up at 19-11-4, and 112 lb down and 91 lb up at 21-11-4, and 250 lb down and 185 lb up at 24-0-0 on top chord, and 340 lb down and 133 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 15-11-4, 86 lb down and 20 lb up at 17-11-4, 86 lb down and 20 lb up at 19-11-4, and 86 lb down and 20 lb up at 21-11-4, and 340 lb down and 133 lb up at 23-11-4 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).



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: May 20,2021

LOAD CASE(S) Standard

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6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	WCH - ROACH RES.	T24033834
2777223	T01	Hip Girder	2	1	Job Reference (optional)	

LOAD CASE(S)
Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-9=-54, 9-12=-54, 2-11=-20
Concentrated Loads (lb)
Vert: 4=-112(F) 7=-112(F) 9=-203(F) 17=-340(F) 16=-67(F) 5=-112(F) 8=-112(F) 14=-67(F) 13=-340(F) 22=-112(F) 23=-112(F) 24=-112(F) 25=-112(F) 26=-112(F) 27=-67(F) 28=-67(F) 29=-67(F) 30=-67(F) 31=-67(F) 32=-67(F)



Job 2777223	Truss T02	Truss Type Hip	Qty 2	Ply 1	WCH - ROACH RES. T24033835
Job Reference (optional)					

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

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ID:cExzFHCxHzHNjPCINbH0FZZN74p-g3snODEeuCRAFuNgFbO2q0?OQLIaN5qJfzS7IFzEzOZ

1-0-0	4-9-8	9-0-0	15-6-0	22-0-0	26-2-8	31-0-0	32-0-0
1-0-0	4-9-8	4-2-8	6-6-0	6-6-0	4-2-8	4-9-8	1-0-0

Scale = 1:53.8

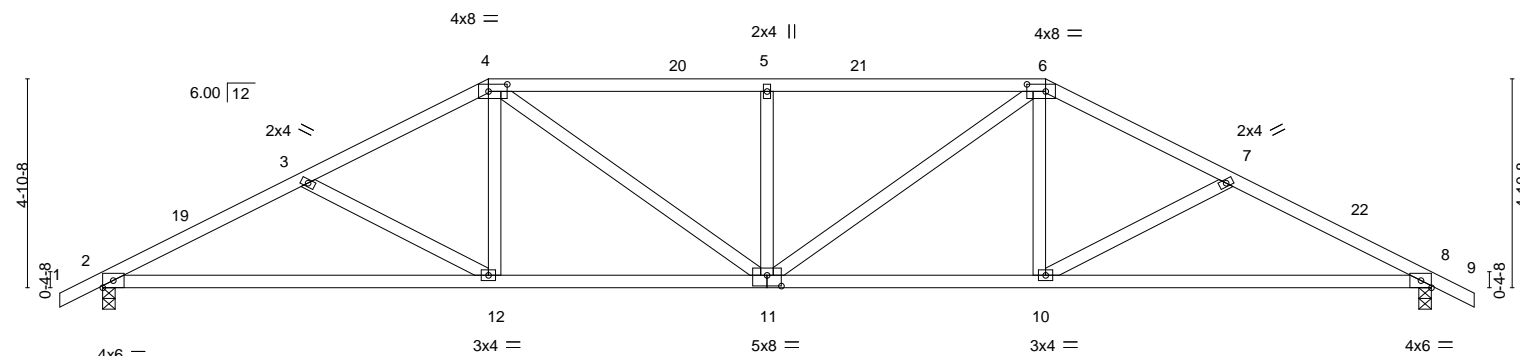


Plate Offsets (X,Y)--	[4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [11:0-4-0,0-3-0]
-----------------------	--

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 0.49	Vert(LL)	-0.15 12-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.79	Vert(CT)	-0.33 12-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.20	Horz(CT)	0.08 8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 155 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 3-7-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.

REACTIONS.

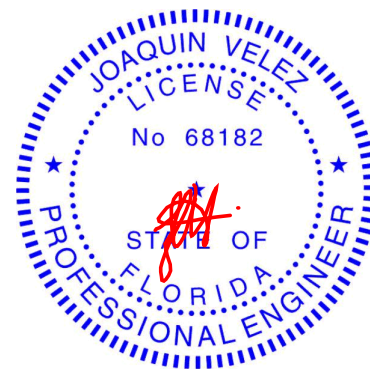
(size) 2=0-3-8, 8=0-3-8
Max Horz 2=75(LC 12)
Max Uplift 2=-269(LC 12), 8=-269(LC 13)
Max Grav 2=1201(LC 1), 8=1201(LC 1)

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

TOP CHORD 2-3=-2134/478, 3-4=-1876/399, 4-5=-1993/457, 5-6=-1993/457, 6-7=-1876/400, 7-8=-2134/478
BOT CHORD 2-12=-436/1883, 11-12=-292/1636, 10-11=-234/1636, 8-10=-361/1883
WEBS 3-12=-292/163, 4-12=-29/395, 4-11=-174/532, 5-11=-404/196, 6-11=-174/532, 6-10=-29/395, 7-10=-292/163

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 2-1-3, Interior(1) 2-1-3 to 9-0-0, Exterior(2R) 9-0-0 to 13-4-10, Interior(1) 13-4-10 to 22-0-0, Exterior(2R) 22-0-0 to 26-4-7, Interior(1) 26-4-7 to 32-0-0 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=269, 8=269.



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

May 20,2021

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

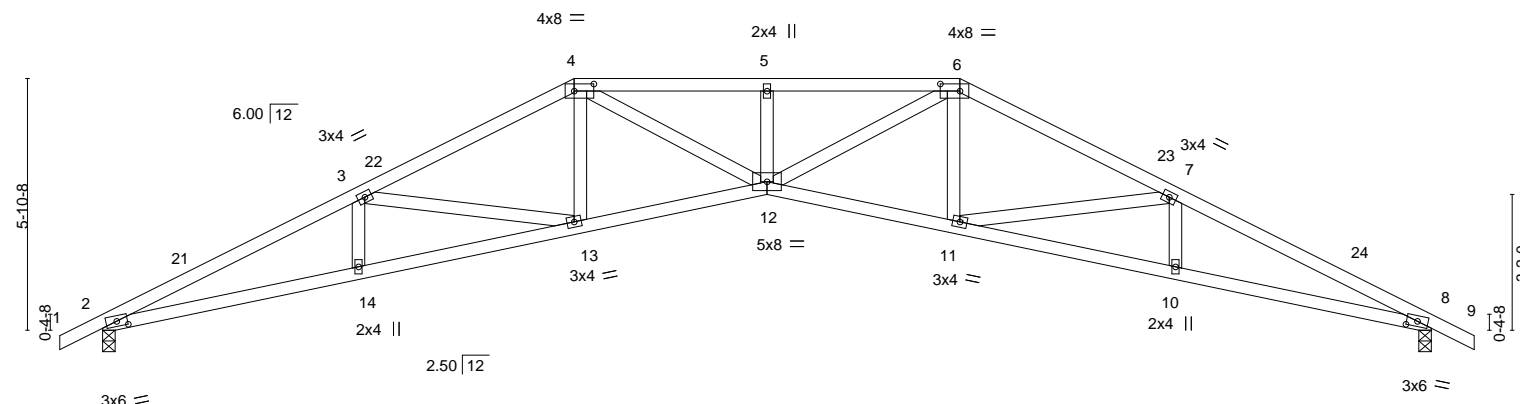


6904 Parke East Blvd.
Tampa, FL 36610

Job 2777223	Truss T04	Truss Type Hip	Qty 1	Ply 1	WCH - ROACH RES. T24033837
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,					
8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 10:31:41 2021 Page 1					
ID:cExzFHCxHzHNjPCINbH0FZzN74p-5eYv0FgWB7pL6M5FwjxlSedvfYKLaMSmLwgnMazEz0W					
Job Reference (optional)					

1-0-0	5-11-10	11-0-0	15-6-0	20-0-0	25-0-6	31-0-0	32-0-0
1-0-0	5-11-10	5-0-6	4-6-0	4-6-0	5-0-6	5-11-10	1-0-0

Scale = 1:53.8



	5-11-10	11-0-0	15-6-0	20-0-0	25-0-6	31-0-0	
	5-11-10	5-0-6	4-6-0	4-6-0	5-0-6	5-11-10	

Plate Offsets (X,Y)-- [2:0-3-0,0-1-7], [4:0-5-8,0-2-0], [6:0-5-8,0-2-0], [8:0-3-0,0-1-7]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.49	Vert(LL)	-0.36 12	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.78	Vert(CT)	-0.67 12	>557	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.53	Horz(CT)	0.42 8	n/a	n/a
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS				
				PLATES	GRIP		
				MT20	244/190		
				Weight: 146 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 2-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-2-2 oc bracing.

REACTIONS.

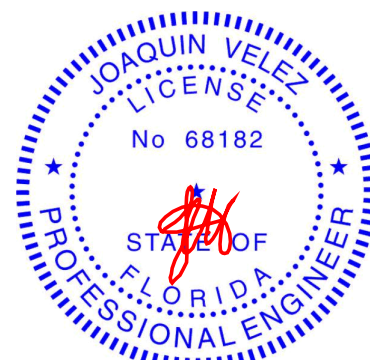
(size) 2=0-3-8, 8=0-3-8
Max Horz 2=89(LC 12)
Max Uplift 2=-266(LC 12), 8=-266(LC 13)
Max Grav 2=1201(LC 1), 8=1201(LC 1)

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

TOP CHORD 2-3=-3398/727, 3-4=-2804/557, 4-5=-3692/703, 5-6=-3692/703, 6-7=-2804/539,
7-8=-3398/664
BOT CHORD 2-14=-679/3045, 13-14=-679/3054, 12-13=-428/2520, 11-12=-351/2520, 10-11=-536/3054,
8-10=-535/3045
WEBS 3-13=-550/250, 4-13=-62/355, 4-12=-235/1393, 6-12=-293/1393, 6-11=-63/355,
7-11=-550/255

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 2-1-3, Interior(1) 2-1-3 to 11-0-0, Exterior(2R) 11-0-0 to 15-6-0, Interior(1) 15-6-0 to 20-0-0, Exterior(2R) 20-0-0 to 24-4-10, Interior(1) 24-4-10 to 32-0-0 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, 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=266, 8=266.



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

May 20,2021

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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	WCH - ROACH RES.	T24033838
2777223	T05	Hip	2	1		

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

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ID:cExzFHCxHzHNjPCINbH0FZzN74p-Zq6HEbh9yRxckWgRUQS_sA2SyzJpEvaaQKu0zEz0V

1-0-0	6-11-11	13-0-0	18-0-0	24-0-5	31-0-0	32-0-0
1-0-0	6-11-11	6-0-5	5-0-0	6-0-5	6-11-11	1-0-0

Scale = 1:53.8

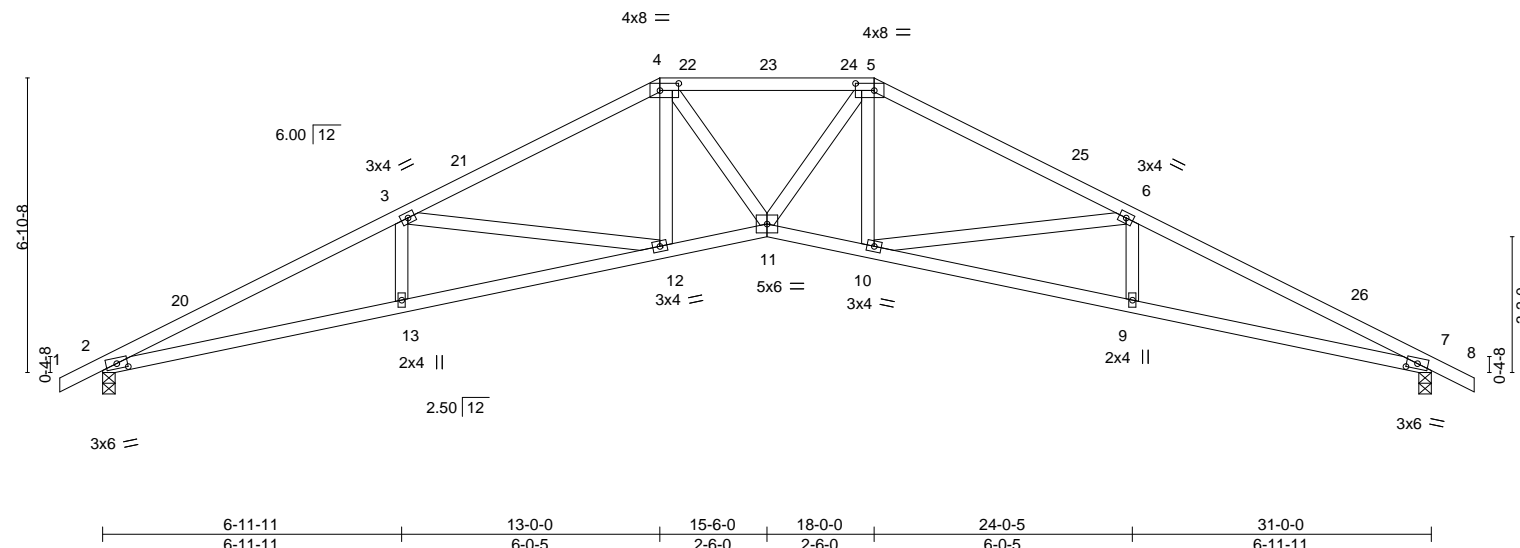


Plate Offsets (X,Y)-- [2:0-3-0,0-1-7], [4:0-5-4,0-2-0], [5:0-5-4,0-2-0], [7:0-3-0,0-1-7]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	-0.29 11 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.54 12-13 >695	180	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.36 7 n/a	n/a	
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 147 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 2-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-1-11 oc bracing.

REACTIONS.

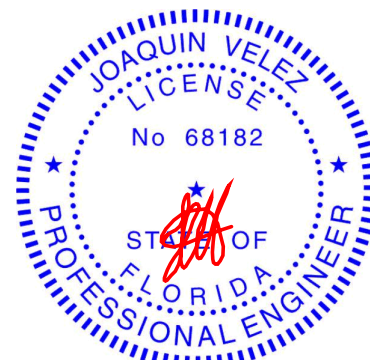
(size) 2=0-3-8, 7=0-3-8
Max Horz 2=104(LC 12)
Max Uplift 2=-263(LC 12), 7=-263(LC 13)
Max Grav 2=1201(LC 1), 7=1201(LC 1)

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

TOP CHORD 2-3=-3364/712, 3-4=-2563/490, 4-5=-2566/515, 5-6=-2563/497, 6-7=-3364/644
BOT CHORD 2-13=-672/3015, 12-13=-672/3018, 11-12=-350/2279, 10-11=-291/2279, 9-10=-520/3018,
7-9=-520/3015
WEBS 3-12=-747/320, 4-12=-80/405, 4-11=-98/578, 5-11=-143/578, 5-10=-80/405,
6-10=-747/325

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 2-1-3, Interior(1) 2-1-3 to 13-0-0, Exterior(2R) 13-0-0 to 17-4-10, Interior(1) 17-4-10 to 18-0-0, Exterior(2R) 18-0-0 to 22-4-10, Interior(1) 22-4-10 to 32-0-0 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, 7 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=263, 7=263.



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

May 20,2021

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

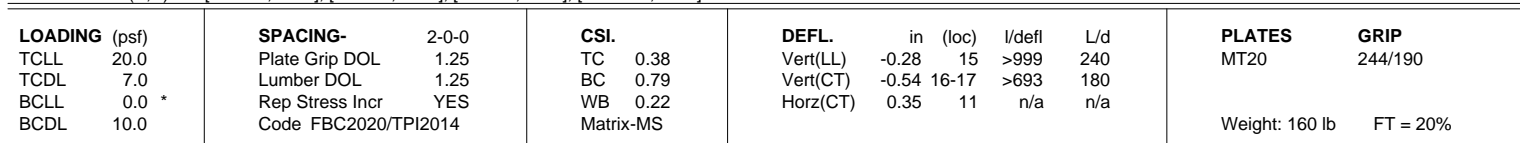


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Job Reference (optional)

Scale = 1:54.6

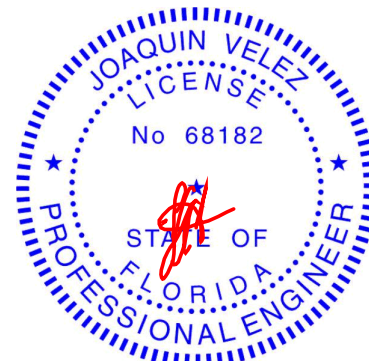


Structural wood sheathing directly applied or 2-11-13 oc purlins.
Rigid ceiling directly applied or 6-11-13 oc bracing.

(size) 2=0-3-8, 11=0-3-8
 Max Horz 2=119(LC 12)
 Max Uplift 2=-260(LC 12), 11=-260(LC 13)
 Max Grav 2=1201(LC 1), 11=1201(LC 1)

TOP CHORD	2-3=-3395/735, 3-5=-3203/699, 5-6=-2477/493, 6-7=-2016/413, 7-8=-2477/472, 8-10=-3203/612, 10-11=-3395/649
BOT CHORD	2-17=-718/3049, 16-17=-522/2620, 15-16=-269/2011, 14-15=-250/2011, 13-14=-380/2620, 11-13=-519/3049
WEBS	5-17=-130/462, 5-16=-503/238, 6-16=-172/568, 6-15=-96/476, 7-15=-137/476, 7-14=-172/568, 8-14=-503/240, 8-13=-136/462

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-1-3, Interior(1) 2-1-3 to 15-0-0, Exterior(2E) 15-0-0 to 16-0-0, Exterior(2R) 16-0-0 to 20-4-10, Interior(1) 20-4-10 to 32-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Bearing at joint(s) 2, 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=260, 11=260.



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May 20, 2021



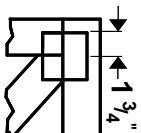
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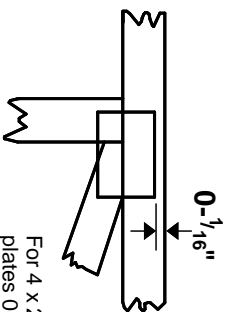
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Tampa, FL 36610

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- $\frac{1}{16}$ " from outside edge of truss.



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

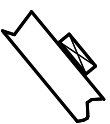
* Plate location details available in **MiTek 20/20** software or upon request.

PLATE SIZE

4 X 4

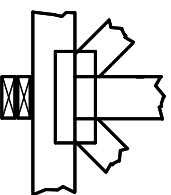
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: 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)

