



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

RE: 2433436 - ROBERTS

**MiTek USA, Inc.**

6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: ROBERTS Project Name: Roberts Model: Custom  
Lot/Block: N/A Subdivision: N/A  
Address: 161 SE Holly Terrace, N/A  
City: Columbia Cty State: FL

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

Name: License #:  
Address:  
City: State:

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

Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2  
Wind Code: ASCE 7-10 Wind Speed: 130 mph  
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 35 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	T20939618	CJ01	8/5/20	23	T20939640	T07	8/5/20
2	T20939619	CJ01A	8/5/20	24	T20939641	T07A	8/5/20
3	T20939620	CJ02	8/5/20	25	T20939642	T08	8/5/20
4	T20939621	CJ02A	8/5/20	26	T20939643	T09	8/5/20
5	T20939622	CJ03	8/5/20	27	T20939644	T09A	8/5/20
6	T20939623	CJ03A	8/5/20	28	T20939645	T10	8/5/20
7	T20939624	CJ04	8/5/20	29	T20939646	T11	8/5/20
8	T20939625	CJ05	8/5/20	30	T20939647	T12	8/5/20
9	T20939626	CJ06	8/5/20	31	T20939648	T13	8/5/20
10	T20939627	EJ01	8/5/20	32	T20939649	T14	8/5/20
11	T20939628	EJ02	8/5/20	33	T20939650	T14A	8/5/20
12	T20939629	EJ03	8/5/20	34	T20939651	T15	8/5/20
13	T20939630	HJ01	8/5/20	35	T20939652	T16	8/5/20
14	T20939631	HJ02	8/5/20				
15	T20939632	HJ03	8/5/20				
16	T20939633	T01	8/5/20				
17	T20939634	T01G	8/5/20				
18	T20939635	T02	8/5/20				
19	T20939636	T03	8/5/20				
20	T20939637	T04	8/5/20				
21	T20939638	T05	8/5/20				
22	T20939639	T06	8/5/20				



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, 2021.

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



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

August 5, 2020

Velez, Joaquin

1 of 1

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Job 2433436	Truss CJ01	Truss Type Jack-Open	Qty 6	Ply 1	ROBERTS	T20939618
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:33 2020 Page 1  
ID:9D8?TpDeBomegp9nvbeUe7zkFz6-kJ9m\_M21KL12\_k2XTr?HEL1B13Q\_lvjZu3rvfnyqt4i



Scale = 1:9.5

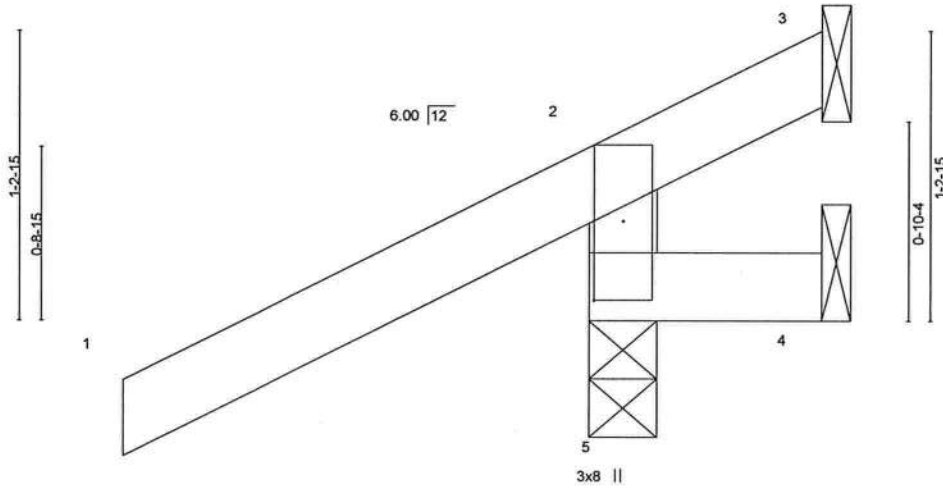


Plate Offsets (X,Y)-- [5:0-4-1,0-1-8]

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 0.38	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.07	Vert(CT)	0.00	5	>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 FBC2017/TPI2014		Matrix-MR						Weight: 7 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 1-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=65(LC 12)  
Max Uplift 5=161(LC 12), 3=84(LC 1), 4=32(LC 1)  
Max Grav 5=295(LC 1), 3=46(LC 16), 4=18(LC 16)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=245/344

- NOTES-** (6)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=161.
  - 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal 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-69 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 2433436	Truss CJ01A	Truss Type Jack-Open	Qty 2	Ply 1	ROBERTS	T20939619
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:33 2020 Page 1

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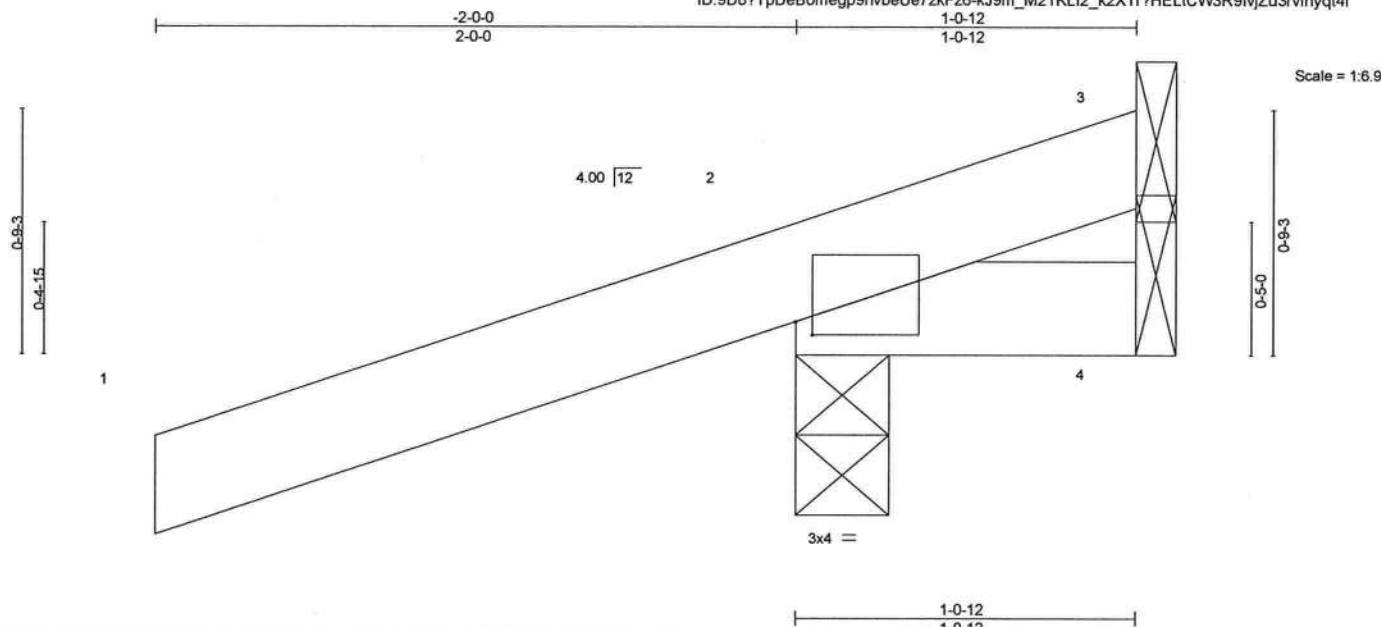


Plate Offsets (X,Y)--		[2'-0"-0'-10, 0'-0"-8]													
LOADING (psf)	SPACING-	2'-0"-0'	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP					
TCLL 20.0	Plate Grip DOL	1.25	TC 0.28	Vert(LL)	0.00	7	>999	240	MT20	244/190					
TCDL 7.0	Lumber DOL	1.25	BC 0.06	Vert(CT)	0.00	7	>999	180							
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	2	n/a	n/a							
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP												
									Weight: 7 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"-12 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=60(LC 8)  
Max Uplift 3=-25(LC 1), 2=-255(LC 8), 4=-39(LC 1)  
Max Grav 3=34(LC 8), 2=250(LC 1), 4=48(LC 8)

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

- NOTES-** (6)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=255.
  - 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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



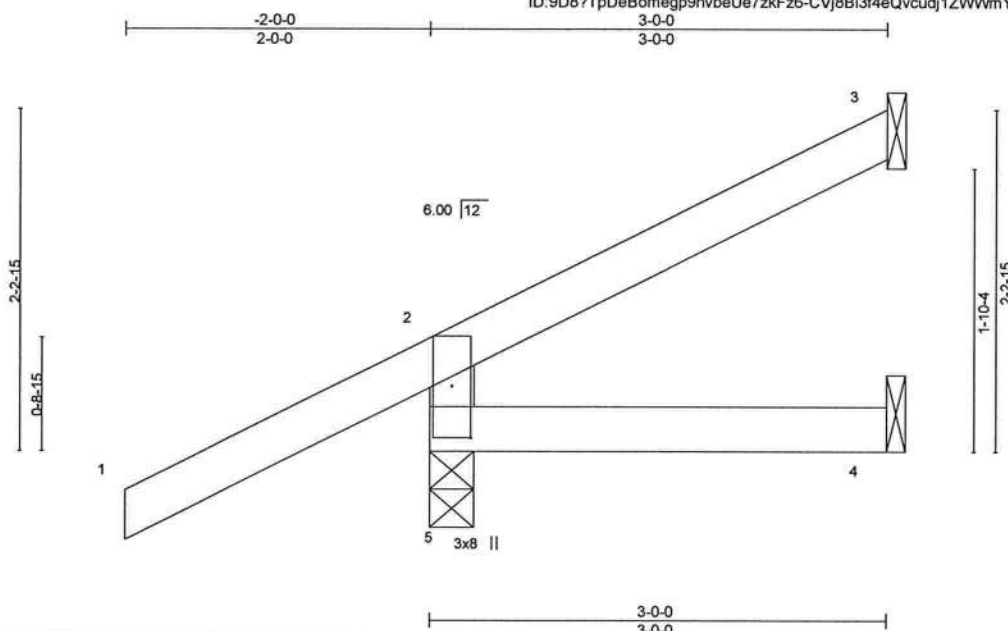
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2433436	Truss CJ02	Truss Type Jack-Open	Qty 6	Ply 1	ROBERTS	T20939620
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:34 2020 Page 1

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Scale = 1:14.6

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

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 0.41	Vert(LL)	0.01	4-5	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.10	Vert(CT)	0.01	4-5	>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 FBC2017/TPI2014		Matrix-MR							
									Weight: 13 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 3-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=104(LC 12)  
Max Uplift 5=-118(LC 12), 3=-53(LC 12), 4=-26(LC 9)  
Max Grav 5=264(LC 1), 3=44(LC 1), 4=48(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-223/266

#### NOTES- (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed; 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=118.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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 2433436	Truss CJ02A	Truss Type Jack-Open	Qty 2	Ply 1	ROBERTS	T20939621
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:35 2020 Page 1

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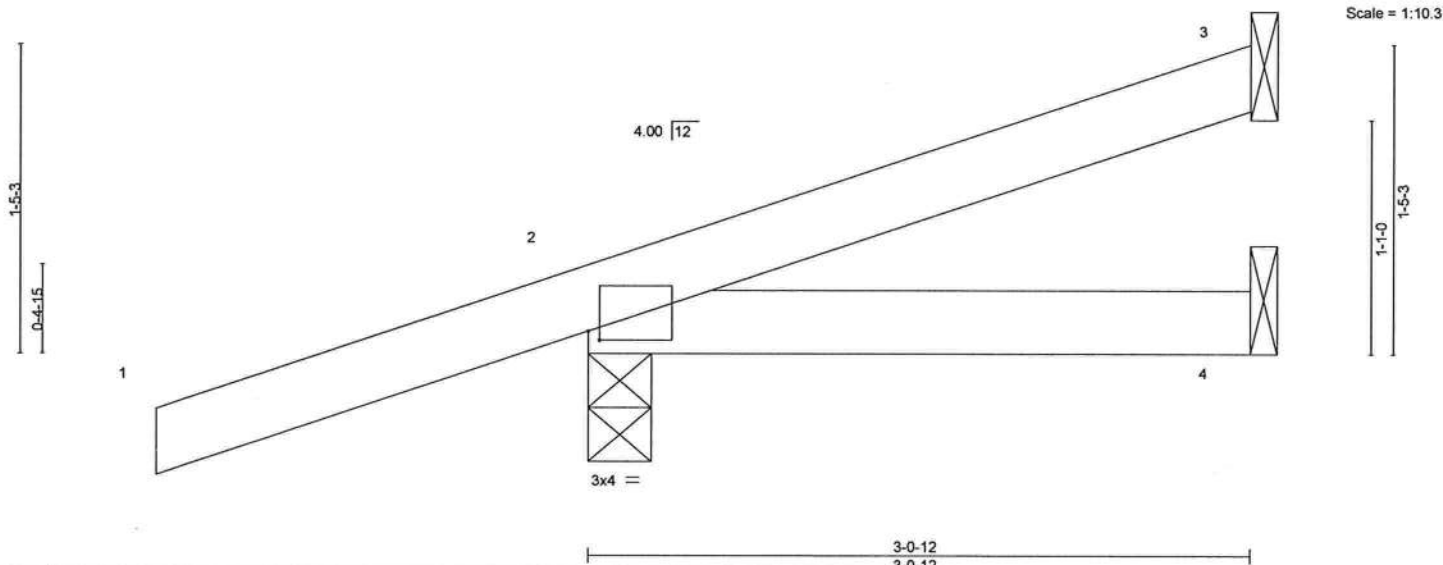


Plate Offsets (X,Y)- [2-0-0-10,0-0-8]

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 0.28	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.08	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 FBC2017/TPI2014		Matrix-MP							
									Weight: 13 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 3-0-12 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=92(LC 8)  
Max Uplift 3=-43(LC 12), 2=230(LC 8), 4=-23(LC 9)  
Max Grav 3=53(LC 1), 2=255(LC 1), 4=48(LC 3)

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

**NOTES-** (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=230.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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



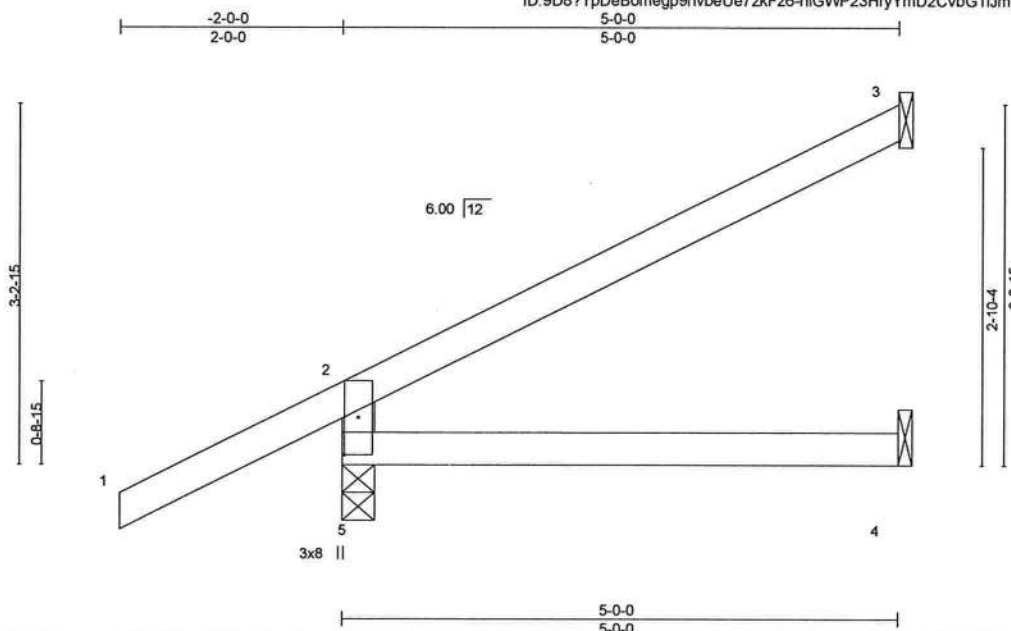
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2433436	Truss CJ03	Truss Type Jack-Open	Qty 6	Ply 1	ROBERTS	T20939622
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:35 2020 Page 1

ID:9D8?TpDeBomegp9nvbeUe7zkFz6-hiGWP23HryYmD2CvbG1JmyWSI26mpDsLNK?jgyqt4g



Scale = 1:20.0

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

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 0.44	Vert(LL)	0.07	4-5	>768	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.35	Vert(CT)	0.07	4-5	>855	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.03	3	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						
								Weight: 20 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=161(LC 12)  
Max Uplift 5=128(LC 12), 3=108(LC 12), 4=45(LC 9)  
Max Grav 5=319(LC 1), 3=106(LC 1), 4=86(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-269/295

- NOTES-** (7)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 3) \* 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.
  - 4) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 5=128, 3=108.
  - 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job 2433436	Truss CJ03A	Truss Type Jack-Open	Qty 2	Ply 1	ROBERTS	T20939623
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:36 2020 Page 1

ID:9D8?TpDeBomegp9nvbeUe7zkFz6-9uqucO4vcGdrCm69\_Z\_szi0HOkVFT?a14ZG6yqt4f

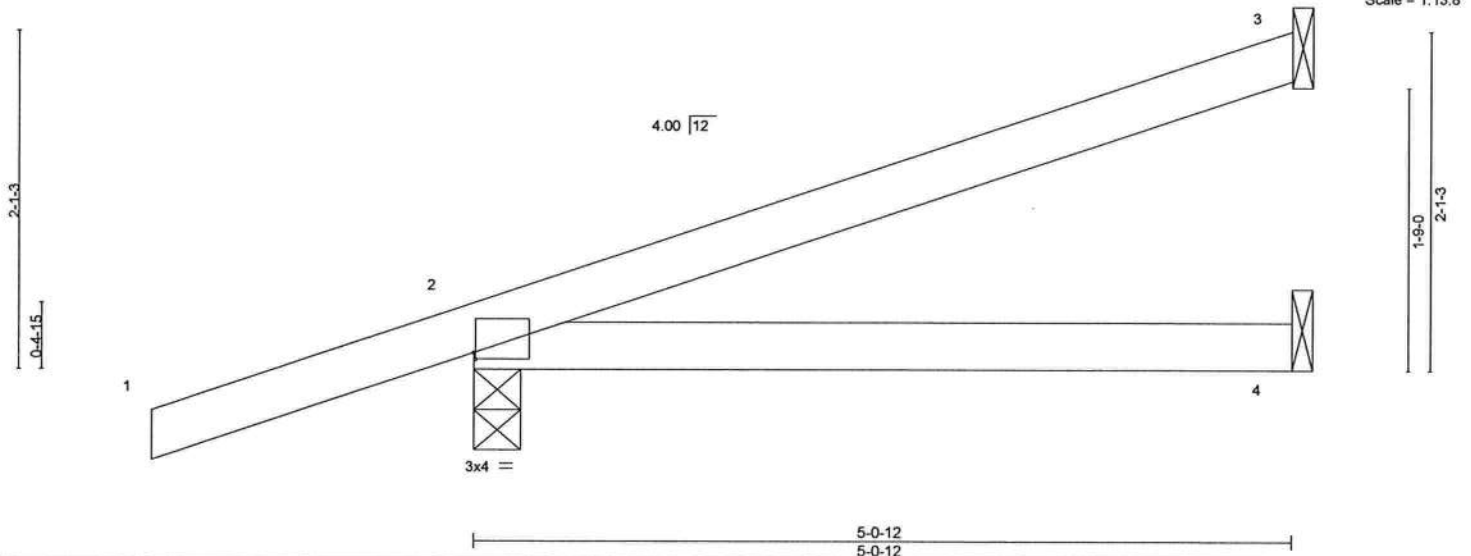


Plate Offsets (X,Y)-- [2:0-0-2,0-0-8]

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 0.33	Vert(LL)	0.08	4-7	>795	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.32	Vert(CT)	0.07	4-7	>911	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						Weight: 19 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=124(LC 8)  
Max Uplift 3=-92(LC 8), 2=-266(LC 8), 4=-43(LC 9)  
Max Grav 3=111(LC 1), 2=315(LC 1), 4=86(LC 3)

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

#### NOTES- (7)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=266.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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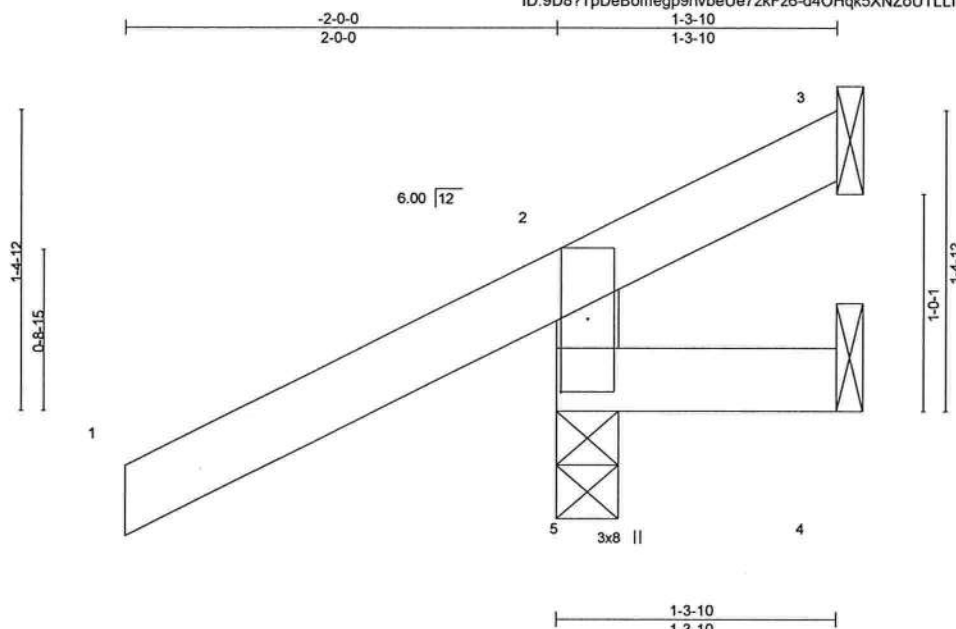
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Tampa, FL 33610

Job 2433436	Truss CJ04	Truss Type Jack-Open	Qty 1	Ply 1	ROBERTS	T20939624
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Builders FirstSource, Jacksonville, FL - 32244,

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ID:9D87TpDeBomegp9nvbeUe7zkFz6-d4OHqk5XNZoUTLLih4DOB2i0gopEij9ohp6oYyqt4e



Scale = 1:10.3

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

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 0.38	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.08	Vert(CT)	0.00	5	>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 FBC2017/TPI2014		Matrix-MR							
									Weight: 8 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 1-3-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical

Max Horz 5=72(LC 12)  
Max Uplift 5=-140(LC 12), 3=-45(LC 1), 4=-22(LC 19)  
Max Grav 5=267(LC 1), 3=26(LC 8), 4=19(LC 16)

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

TOP CHORD 2-5=-222/301

#### NOTES- (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=140.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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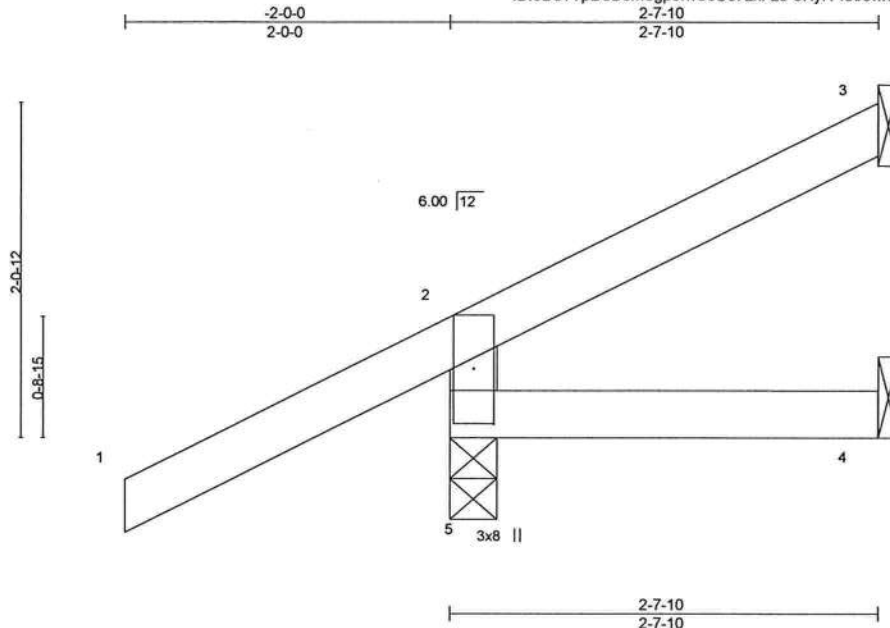
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939625
2433436	CJ05	JACK	1	1		

Builders FirstSource, Jacksonville, FL - 32244,

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Scale = 1:13.7

Plate Offsets (X,Y)--		[5:0-4-1,0-1-8]													
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	0.40	Vert(LL)	0.00	4-5	>999	240	MT20	244/190			
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	-0.00	4-5	>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 FBC2017/TPI2014		Matrix-MR											
										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 2-7-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 5=0-3-8, 3=Mechanical, 4=Mechanical  
Max Horz 5=104(LC 12)  
Max Uplift 5=-118(LC 12), 3=-42(LC 12), 4=-21(LC 9)  
Max Grav 5=257(LC 1), 3=30(LC 1), 4=41(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-5=-216/264

**NOTES-** (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 5=118.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:38 2020 Page 1  
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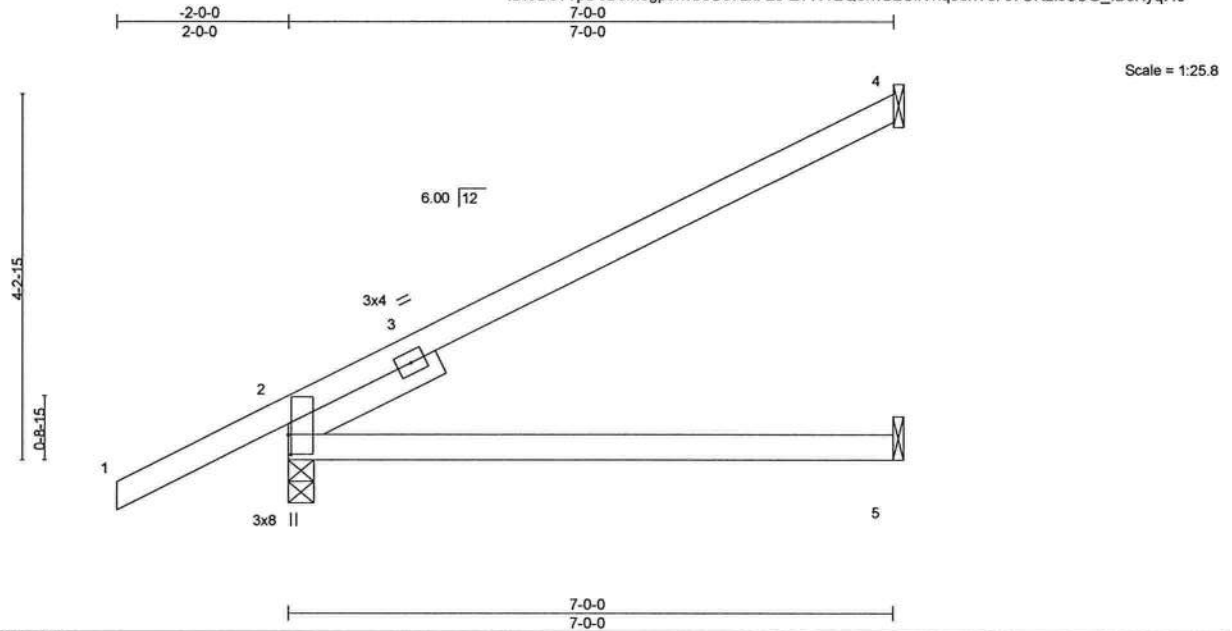


Plate Offsets (X,Y)– [2-0-2-12,0-0-6]									
LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.25	TC 0.85	Vert(LL) 0.32	5-8	>262	240	MT20	244/190
TCDL 7.0		Lumber DOL 1.25	BC 0.73	Vert(CT) 0.28	5-8	>299	180		
BCLL 0.0 *		Rep Stress Incr YES	WB 0.00	Horz(CT) -0.06	4	n/a	n/a		
BCDL 10.0		Code FBC2017/TP12014	Matrix-AS					Weight: 28 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2  
**BOT CHORD** 2x4 SP No.2  
**SLIDER** Left 2x4 SP No.3 1-11-8

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horiz 2=210(LC 12)  
Max Uplift 4=-155(LC 12), 2=-143(LC 12), 5=-64(LC 9)  
Max Grav 4=165(LC 1), 2=380(LC 1), 5=120(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-4=-351/315

NOTES- (7)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCFL=4.2psf; BCFL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=155, 2=143.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TP1 1 as referenced by the building code.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
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August 5, 2020

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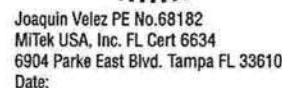
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Weight: 34 lb      FT = 20%

BRACING-	
TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied.

**NOTES- (7)**

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* 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.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=280, 5=108.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



August 5, 2020

6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939629
2433436	EJ03	Half Hip	1	1		

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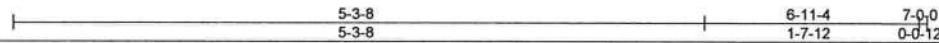
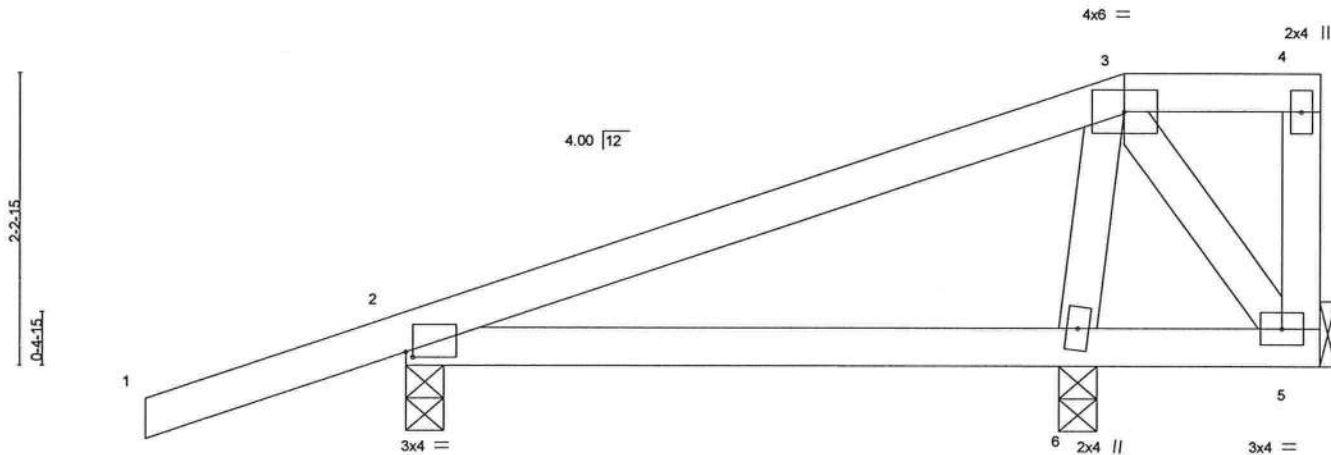


Plate Offsets (X,Y)-- [2-0-0-10,0-0-8]

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 0.27	Vert(LL)	0.05	6-9	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.23	Vert(CT)	0.04	6-9	>999	180	244/190
BCLL 0.0	Rep Stress Incr	YES	WB 0.10	Horz(CT)	-0.00	2	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						
									Weight: 33 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, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8, 5=Mechanical  
Max Horz 2=133(LC 8)  
Max Uplift 2=-277(LC 8), 6=-126(LC 8), 5=-63(LC 8)  
Max Grav 2=329(LC 1), 6=195(LC 23), 5=94(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 3-5=-182/338

- NOTES-** (9)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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) Refer to girder(s) for truss to truss connections.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=277, 6=126.
  - 8) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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Job 2433436	Truss HJ01	Truss Type Diagonal Hip Girder	Qty 3	Ply 1	ROBERTS	T20939630
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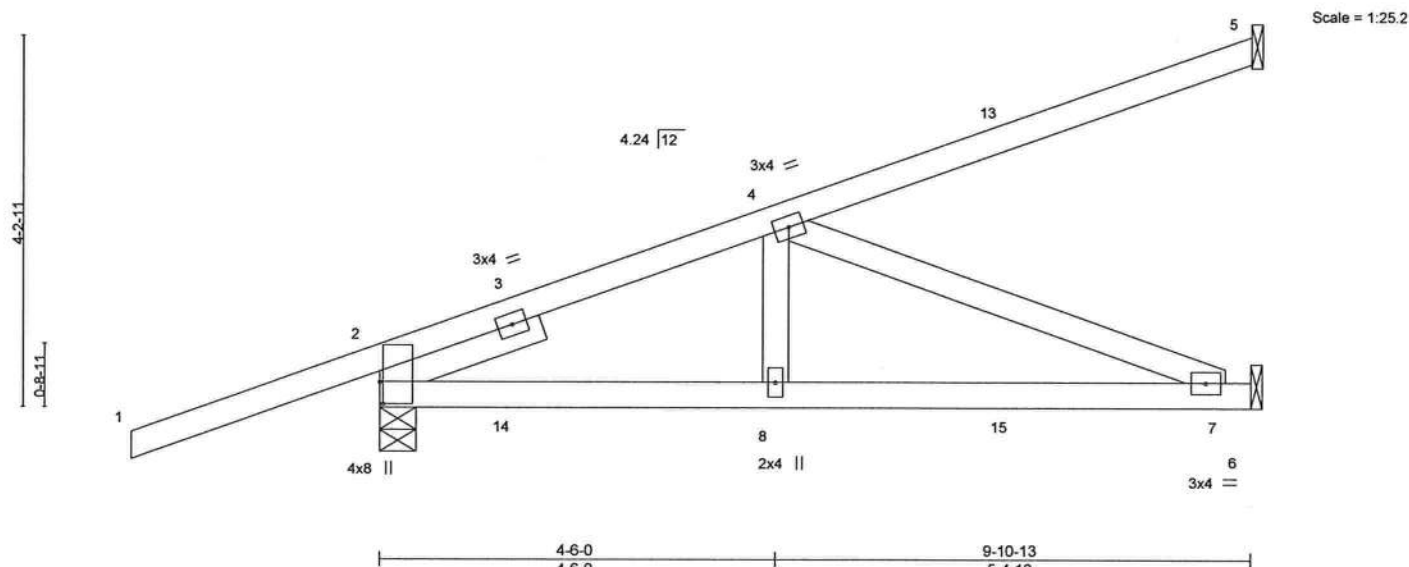
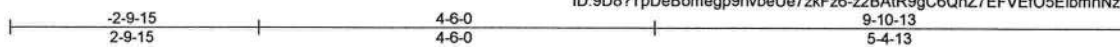


Plate Offsets (X,Y) [2-0-3-0,0-0-7]

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 0.89	Vert(LL)	0.13	7-8	>942	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.59	Vert(CT)	-0.13	7-8	>915	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.28	Horz(CT)	-0.02	5	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 48 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-9-15 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-4-15, 6=Mechanical  
Max Horz 2=234(LC 4)  
Max Uplift 5=152(LC 4), 2=417(LC 4), 6=243(LC 5)  
Max Grav 5=154(LC 1), 2=437(LC 1), 6=252(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=483/471  
BOT CHORD 2-8=490/425, 7-8=490/425  
WEBS 4-7=457/527

- NOTES-** (8)  
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60  
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
3) \* 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.  
4) Refer to girder(s) for truss to truss connections.  
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=152, 2=417, 6=243.  
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 112 lb down and 160 lb up at 1-5-12, 112 lb down and 160 lb up at 1-5-12, 23 lb down and 41 lb up at 4-3-11, 23 lb down and 41 lb up at 4-3-11, and 49 lb down and 106 lb up at 7-1-10, and 49 lb down and 106 lb up at 7-1-10 on top chord, and 42 lb down and 61 lb up at 1-5-12, 42 lb down and 61 lb up at 1-5-12, 50 lb down and 32 lb up at 4-3-11, 50 lb down and 32 lb up at 4-3-11, and 38 lb down and 58 lb up at 7-1-10, and 38 lb down and 58 lb up at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.  
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).  
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=54, 6-9=20

Continued on page 2



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

August 5, 2020

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6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939630
2433436	HJ01	Diagonal Hip Girder	3	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:42 2020 Page 2  
ID:9D8?TpDeBomegp9nvbeUe7zkFz6-z2BAIR9gC6QnZ7EFVEfO5ElbmhNzvvduyyXtTmyqt4Z

**LOAD CASE(S)** Standard  
Concentrated Loads (lb)

Vert: 8=12(F=6, B=6) 3=82(F=41, B=41) 13=-59(F=-30, B=-30) 14=62(F=31, B=31) 15=-34(F=-17, B=-17)

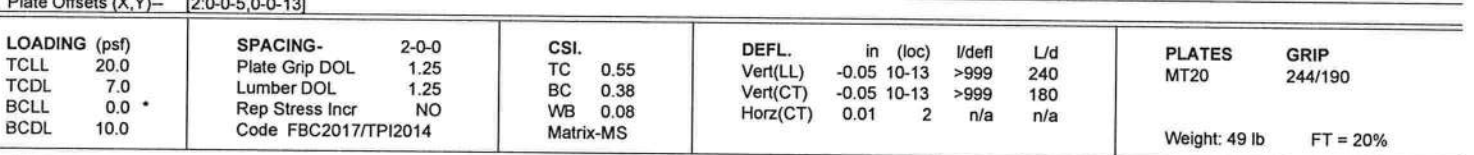
**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:44 2020 Page 1  
ID:9D8?TpDeBomegp9nvbeUe7zkFz6-wRjwI7AwkkgVoQOedfisAfq0YV6dNs8BPBG0\_YeyqI4X



**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=330/77  
**WEBS** 3-9=406/260, 4-9=338/250

1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60

3) \* 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.

4) Refer to girder(s) for truss to truss connections.  
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb)  
2=212 9=441

6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 96 lb down and 101 lb up at 1-6-1, 96 lb down and 101 lb up at 1-6-1, 26 lb down and 39 lb up at 4-4-0, 26 lb down and 39 lb up at 4-4-0, and 50 lb down and 96 lb up at 7-1-15, and 50 lb down and 96 lb up at 7-1-15 on top chord, and 76 lb down and 68 lb up at 1-6-1, 76 lb down and 68 lb up at 1-6-1, 52 lb down and 30 lb up at 4-4-0, 52 lb down and 30 lb up at 4-4-0, and 39 lb down and 61 lb up at 7-1-15, and 39 lb down and 61 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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

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 5-6=14 7-11=20

Concentrated Loads (lb)

Vert: 10=3(F=2, B=2) 9=-48(F=24, B=24) 14=48(F=24, B=24) 15=-70(F=35, B=35) 16=66(F=33, B=33)

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Date: \_\_\_\_\_

August 5, 20

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and specify components that comply with the design.

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

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

Tampa, FL 36610



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

August 5, 2020

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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939632
2433436	HJ03	Roof Special Girder	1	1		

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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:45 2020 Page 1

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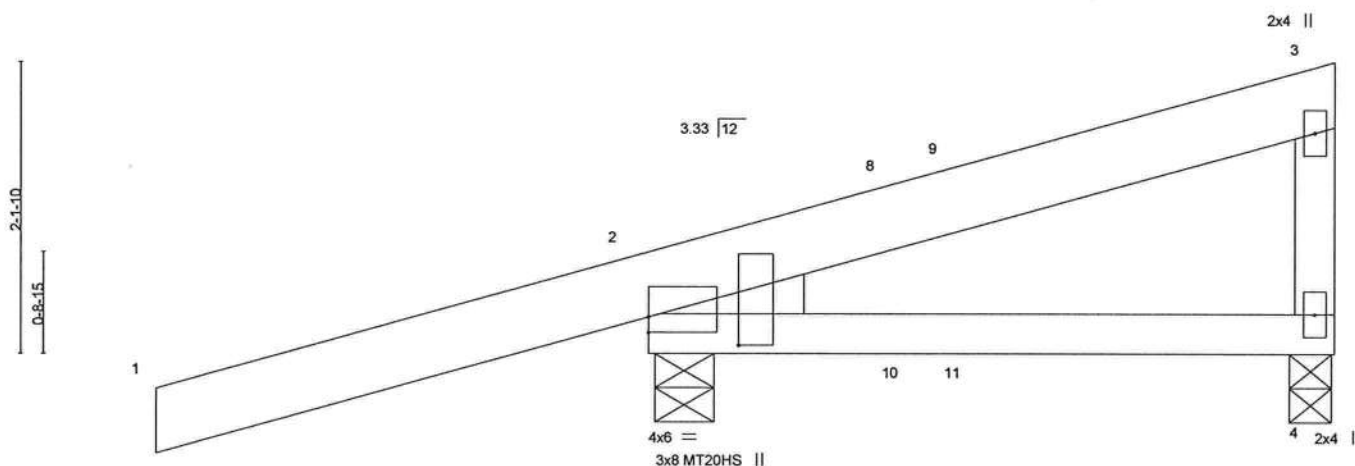
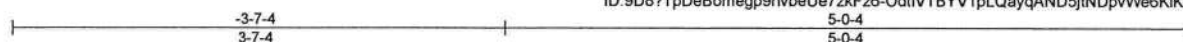


Plate Offsets (X,Y)-- [2-0-0-0,0-1-6], [2-0-2-8,0-7-14]

LOADING (psf)	SPACING-		CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.39	Vert(LL)	-0.03	4-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.14	Vert(CT)	-0.03	4-7	>999	180	MT20HS	187/143
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.01	2	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP							
									Weight: 32 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 4=0-3-11, 2=0-5-3  
Max Horz 2=131(LC 4)  
Max Uplift 4=106(LC 5), 2=390(LC 4)  
Max Grav 4=114(LC 35), 2=430(LC 1)

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

#### NOTES- (8)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=106, 2=390.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 21 lb down and 21 lb up at 1-10-10, and 86 lb down and 110 lb up at 2-4-2, and 19 lb down and 38 lb up at 4-10-8 on top chord, and 57 lb down and 23 lb up at 1-10-10, and 44 lb down and 48 lb up at 2-4-2 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

#### LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=54, 4-5=20  
Concentrated Loads (lb)  
Vert: 3=-0(B) 9=28(B) 10=4(F)



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

August 5,2020

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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939633
2433436	T01	Common	9	1		

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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:47 2020 Page 1

ID:9D8?TpDeBomegp9nvbeUe7zkFz6-K073w9Dp1e33fu6DloFZoISXsi1AaCCd6EE9zyql4U

Job Reference (optional)



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4x6 =

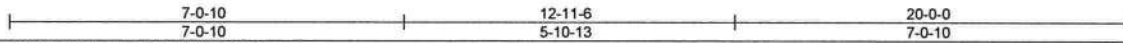
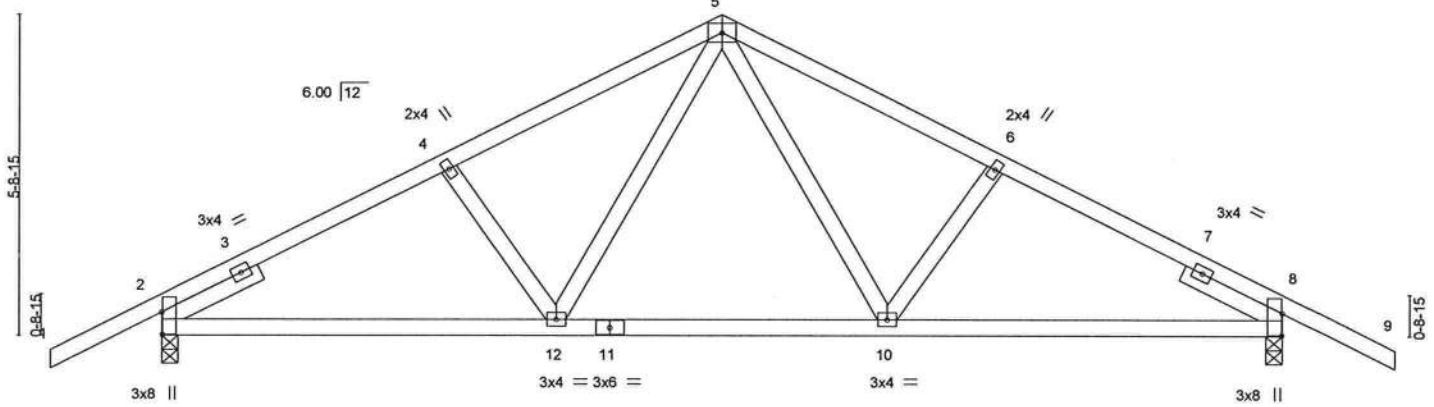


Plate Offsets (X,Y)=[2-0-4-12,0-0-2], [8-0-4-12,0-0-2]

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 0.54	Vert(LL)	0.17 10-12	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.78	Vert(CT)	-0.26 10-12	>920	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.19	Horz(CT)	0.05 8	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						
								Weight: 103 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=126(LC 12)  
Max Uplift 2=-425(LC 12), 8=-425(LC 13)  
Max Grav 2=1025(LC 1), 8=1025(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1435/788, 4-5=-1320/779, 5-6=-1320/779, 6-8=-1435/788  
BOT CHORD 2-12=-541/1223, 10-12=-321/922, 8-10=-559/1223  
WEBS 5-10=-259/497, 5-12=-259/497

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=425, 8=425.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-54, 5-9=-54, 12-13=-20, 10-12=-80(F=-60), 10-17=-20



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

August 5, 2020

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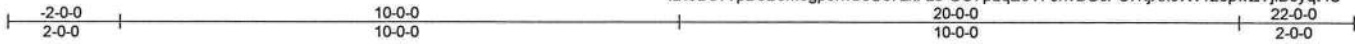
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939634
2433436	T01G	Common Supported Gable	1	1		

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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:49 2020 Page 1

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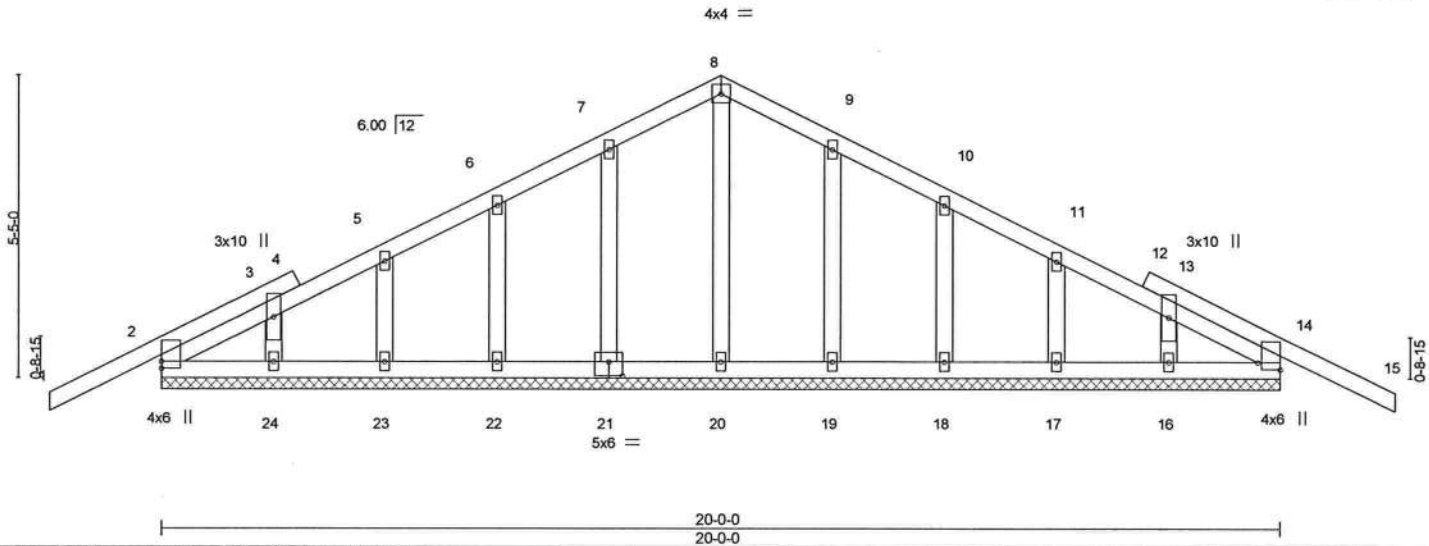


Plate Offsets (X,Y)-- [14:Edge,0-4-13], [21:0-3-0,0-3-0]

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.27	Vert(LL)	-0.02	15	n/r	120	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.05	Vert(CT)	-0.03	15	n/r	120		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	14	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-S							
									Weight: 113 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 20-0-0.  
(lb) - Max Horz 2=-119(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 21, 22, 23, 24, 19, 18, 17, 16  
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 20, 21, 22, 23, 24, 19, 18, 17, 16

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

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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.
  - 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, 14, 21, 22, 23, 24, 19, 18, 17, 16.
  - Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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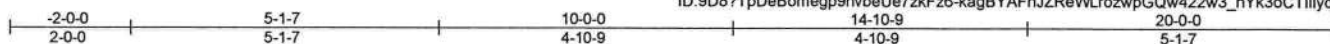
Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939635
2433436	T02	Common	3	1		

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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:50 2020 Page 1

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Job Reference (optional)



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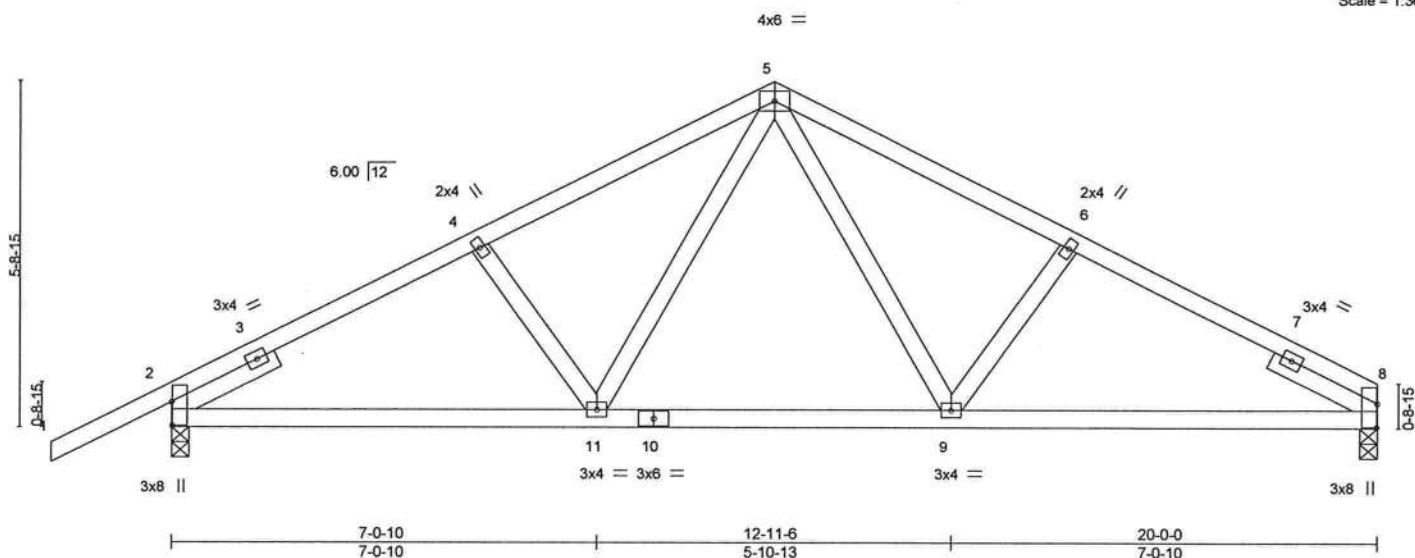


Plate Offsets (X,Y) - [2:0-4-12,0-0-2], [8:0-4-12,0-0-2]

LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.55	Vert(LL)	0.16	9-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.77	Vert(CT)	-0.26	9-11	>941	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.21	Horz(CT)	0.04	8	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS							
									Weight: 100 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 8=0-3-8, 2=0-3-8  
Max Horz 2=89(LC 16)  
Max Uplift 8=200(LC 13), 2=240(LC 12)  
Max Grav 8=912(LC 1), 2=1030(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1445/802, 4-5=-1330/794, 5-6=-1346/806, 6-8=-1464/817  
BOT CHORD 2-11=-618/1232, 9-11=-382/932, 8-9=-636/1256  
WEBS 5-9=-278/523, 5-11=-255/496

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 8=200, 2=240.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-5=-54, 5-8=-54, 11-16=-20, 9-11=-80(F=-60), 9-12=-20



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

August 5,2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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

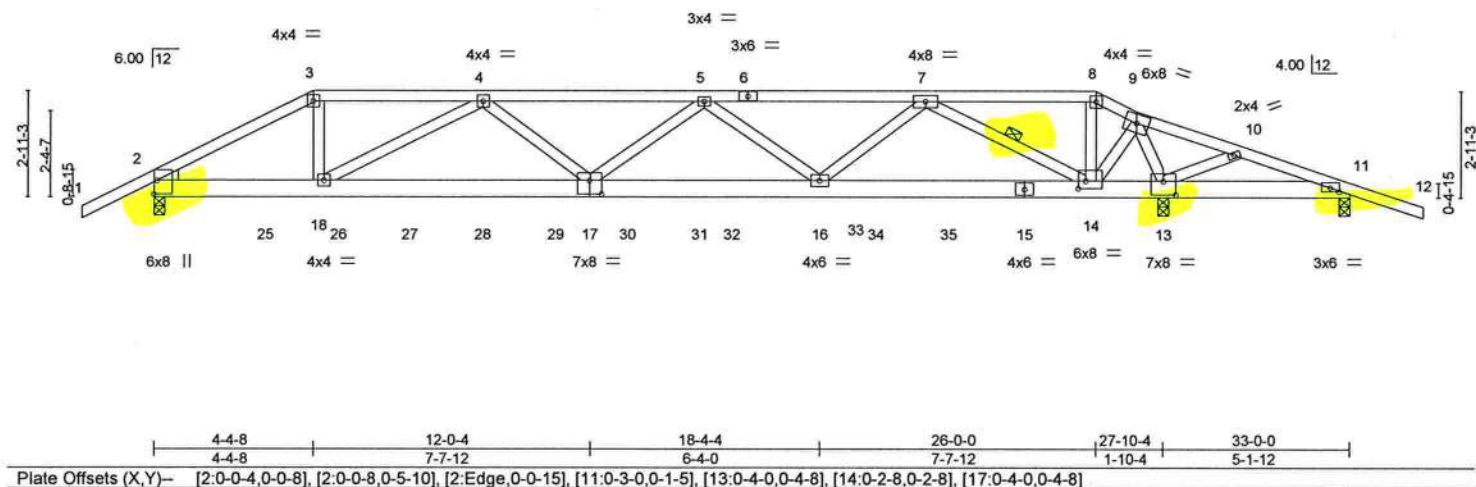


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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:52 2020 Page 1

Scale = 1:61.3



<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 0.85	Vert(LL) 0.37 17-18 >894 240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.94	Vert(CT) -0.41 17-18 >817 180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.89	Horz(CT) 0.07 13 n/a n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 188 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2  
**BOT CHORD** 2x6 SP No.2  
**WEBS** 2x4 SP No.3  
**WEDGE**  
 Left: 2x4 SP No.3

<b>BRACING-</b>	
<b>TOP CHORD</b>	Structural wood sheathing directly applied or 2-6-15 oc purlins.
<b>BOT CHORD</b>	Rigid ceiling directly applied or 4-5-1 oc bracing.
<b>WEBS</b>	1 Row at midpt                      7-14

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8, 11=0-3-8  
 Max Horz 2=70(LC 38)  
 Max Uplift 2=-981(LC 5), 13=-2224(LC 5), 11=-814(LC 19)  
 Max Grav 2=1553(LC 19), 13=2951(LC 1), 11=556(LC 4)

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

**TOP CHORD** 2-3=-2471/1757, 3-4=-2200/1617, 4-5=-3857/2921, 5-7=-3038/2345, 7-8=-231/425,  
8-9=-262/472, 9-10=-2057/2820, 10-11=-1920/2616

**BOT CHORD** 2-18=-1431/2147, 17-18=-2427/3426, 16-17=-2654/3657, 14-16=-1377/1893,  
13-14=-1662/1314, 11-13=-2459/1850

**WEBS** 3-18=-701/945, 4-18=-1439/1120, 4-17=-474/590, 5-17=-210/257, 5-16=-795/570,  
7-16=-1127/1517, 7-14=-2656/1975, 8-14=-354/219, 9-14=-1767/2335, 9-13=-2896/2193,  
10-13=-305/243

**NOTES-** (9)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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) except (jt=lb) 2=981, 13=2224, 11=814.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 90 lb up at 3-0-12, 98 lb down and 128 lb up at 5-0-12, 98 lb down and 128 lb up at 7-0-12, 98 lb down and 128 lb up at 9-0-12, 98 lb down and 128 lb up at 11-0-12, 98 lb down and 128 lb up at 13-0-12, 98 lb down and 128 lb up at 15-0-12, 98 lb down and 128 lb up at 17-11-4, 98 lb down and 128 lb up at 19-11-4, 98 lb down and 128 lb up at 21-11-4, and 98 lb down and 128 lb up at 23-11-4, and 62 lb down and 213 lb up at 25-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



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Date:

August 5, 2020

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6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939636
2433436	T03	Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:52 2020 Page 2  
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#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-8=-54, 8-9=-54, 9-12=-54, 19-22=-20

Concentrated Loads (lb)

Vert: 14=-62(B) 15=-98(B) 25=-74(B) 26=-98(B) 27=-98(B) 28=-98(B) 29=-98(B) 30=-98(B) 31=-98(B) 32=-98(B) 33=-98(B) 34=-98(B) 35=-98(B)



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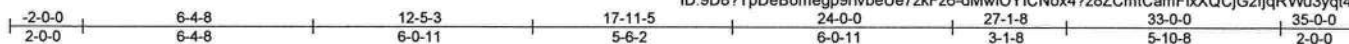
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



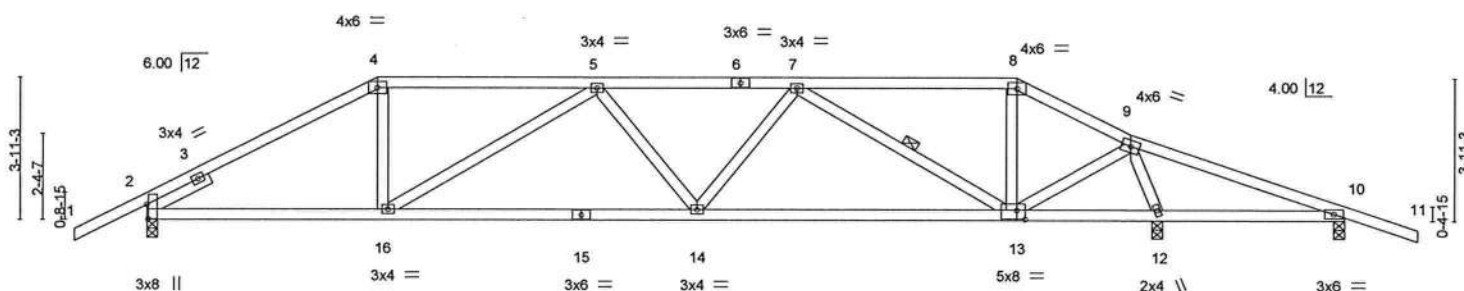
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Builders FirstSource, Jacksonville, FL - 32244.

8 240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:54 2020 Page 1  
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Scale = 1:61.3



**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

<b>BRACING-</b>	
TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 7-13

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 10=0-3-8  
 Max Horz 2=-57(LC 10)  
 Max Uplift 2=-220(LC 9), 12=-373(LC 8), 10=-199(LC 23)  
 Max Grav 2=1087(LC 1), 12=1573(LC 1), 10=6(LC 24)

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

TOP CHORD	2-4=-1530/769, 4-5=-1320/751, 5-7=-1734/928, 7-8=-612/424, 8-9=-725/438, 9-10=-300/945
BOT CHORD	2-16=-504/1304, 14-16=-763/1771, 13-14=-672/1551, 12-13=-385/125, 10-12=-854/390
WEBS	4-16=-103/449, 5-16=-604/298, 7-14=-45/375, 7-13=-1118/556, 9-13=-364/1109, 9-12=-1544/742

NOTES- (8)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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) except (jt=lb) 2=220, 12=373, 10=199.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Joaquin Velez PE No.68182  
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Date:

August 5, 2020



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**WARNING - Veilny design parameters** READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE 11/473 (REV. 5/19/2020) BEFORE USE. Design valid for use only with MitEx® 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/TPI 1 Quality Criteria, DSB-89 and BCS Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20681



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2433436	Truss T05	Truss Type Hip	Qty 1	Ply 1	ROBERTS	T20939638
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:55 2020 Page 1

ID:9D87TpDeBomegp9nvbeUe7zkFz6-5YU4buJq853xd6jlmTOR7\_nxxo5SdqoxUA3RVyqt4M

-2-0-0	4-2-7	8-4-8	15-2-4	22-0-0	27-1-8	33-0-0	35-0-0
2-0-0	4-2-7	4-2-1	6-9-12	6-9-12	5-1-8	5-10-8	2-0-0

Scale = 1:61.3

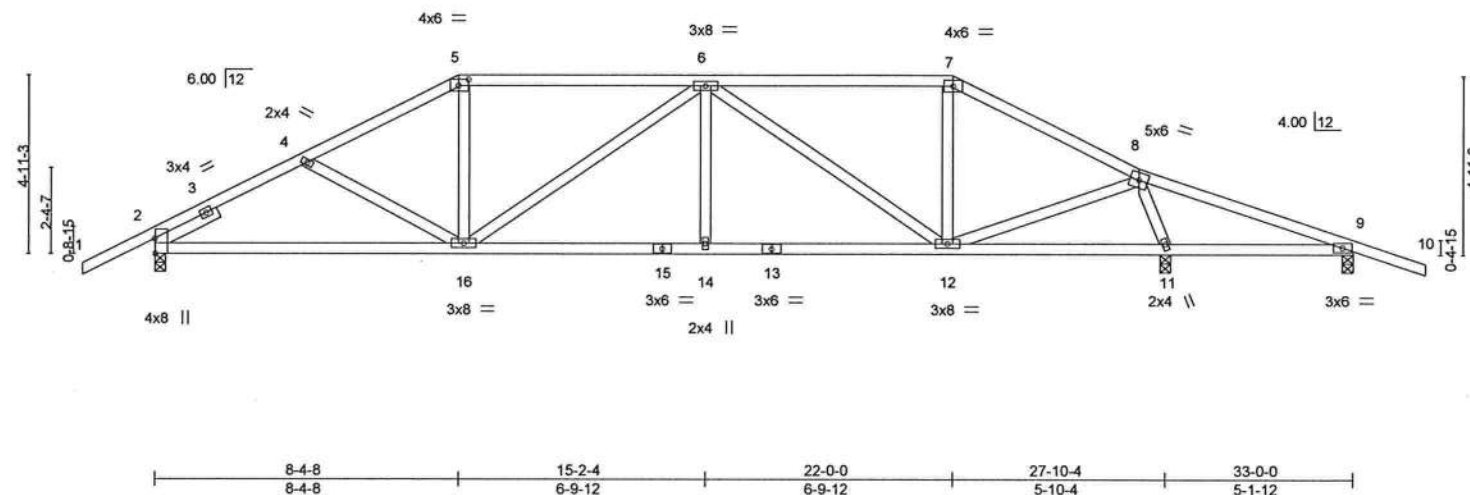


Plate Offsets (X,Y) - [2:0-5-0,Edge], [5:0-3-4,0-2-0]		8-4-8		15-2-4	22-0-0	27-10-4	33-0-0
		8-4-8		6-9-12	6-9-12	5-10-4	5-1-12
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.42	Vert(LL)	-0.09 14-16	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.65	Vert(CT)	-0.18 16-19	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.92	Horz(CT)	0.05 11	n/a	n/a
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS				
				PLATES		GRIP	
				MT20		244/190	
				Weight: 171 lb		FT = 20%	

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 9=0-3-8  
Max Horz 2=-70(LC 10)  
Max Uplift 2=-216(LC 12), 11=-296(LC 8), 9=-193(LC 9)  
Max Grav 2=1109(LC 1), 11=1430(LC 1), 9=143(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1549/838, 4-5=-1436/768, 5-6=-1270/750, 6-7=-911/586, 7-8=-1077/589,  
8-9=-186/576  
BOT CHORD 2-16=-579/1324, 14-16=-584/1479, 12-14=-584/1479, 9-11=-499/279  
WEBS 5-16=-96/386, 6-16=-348/147, 6-14=0/261, 6-12=-739/339, 7-12=-23/259,  
8-12=-325/987, 8-11=-1367/737

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=216, 11=296, 9=193.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610



Job 2433436	Truss T06	Truss Type Hip	Qty 1	Ply 1	ROBERTS	T20939639
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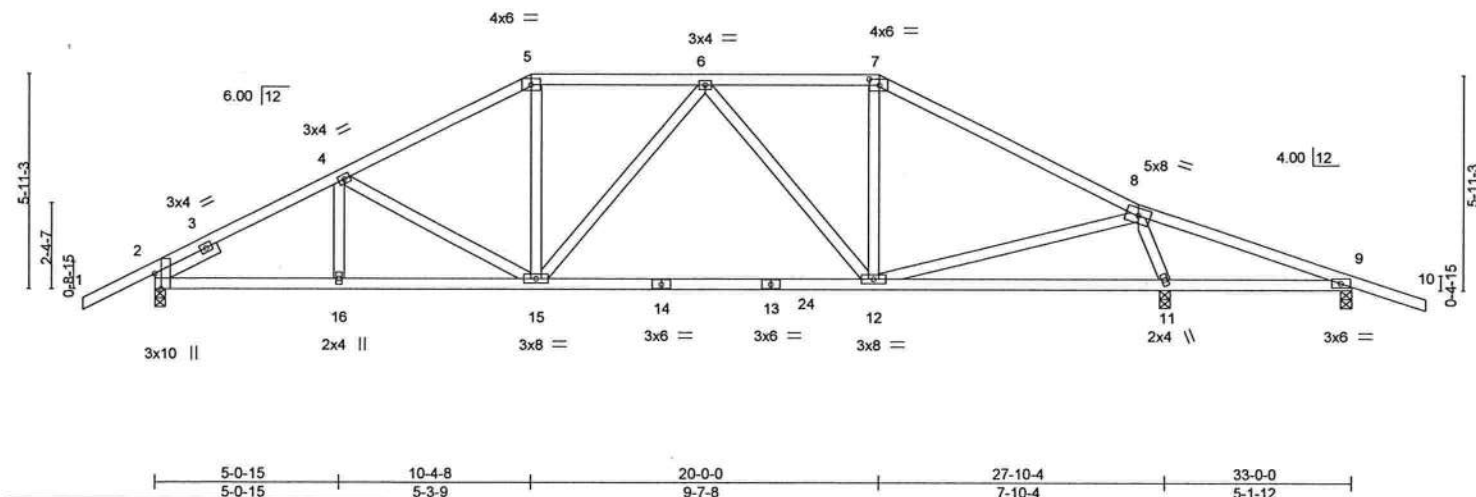
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:56 2020 Page 1

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-2-0-0	5-0-15	10-4-8	15-2-4	20-0-0	27-1-8	33-0-0	35-0-0
2-0-0	5-0-15	5-3-9	4-9-12	4-9-12	7-1-8	5-10-8	2-0-0

Scale = 1:61.3



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)	-0.19 12-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.74	Vert(CT)	-0.37 12-15	>911	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.40	Horz(CT)	0.04 11	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS					Weight: 175 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8, 9=0-3-8  
 Max Horz 2=-84(LC 10)  
 Max Uplift 2=-231(LC 12), 11=-249(LC 8), 9=-212(LC 9)  
 Max Grav 2=1116(LC 1), 11=1380(LC 1), 9=185(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=-1581/837, 4-5=-1349/751, 5-6=-1173/737, 6-7=-987/649, 7-8=-1188/634, 8-9=-126/421  
 BOT CHORD 2-16=-581/1358, 15-16=-581/1358, 12-15=-429/1182, 9-11=-350/220  
 WEBS 5-15=-104/350, 6-12=-384/180, 7-12=-31/283, 8-12=-257/903, 8-11=-1305/752

- NOTES-** (8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=231, 11=249, 9=212.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



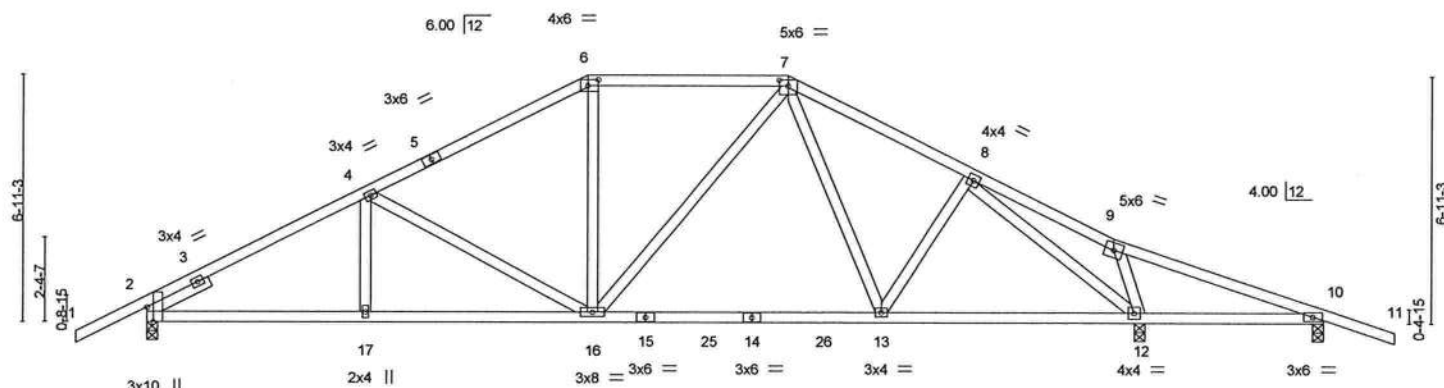
6904 Parke East Blvd.  
 Tampa, FL 33610



T20939640

-2-0-0 | 6-1-9 | 12-4-8 | 18-0-0 | 23-0-13 | 27-1-8 | 33-0-0 | 35-0-0  
 2-0-0 | 6-1-9 | 6-2-15 | 5-7-8 | 5-0-14 | 4-0-11 | 5-10-8 | 2-0-0

Scale = 1:62.3


$$FT =$$

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

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

TOP CHORD	2-4=-1613/859, 4-6=-1263/727, 6-7=-1069/722, 7-8=-1156/707
BOT CHORD	2-17=-592/1383, 16-17=-592/1383, 13-16=-292/953, 12-13=-368/923
WEBS	4-16=-377/315, 6-16=-64/300, 7-16=-68/277, 8-12=-1308/541, 9-12=-319/353

**NOTES- (8)**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCFL=4.2psf; BCLD=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 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, with BCLD = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=244, 12=245, 10=209.
- 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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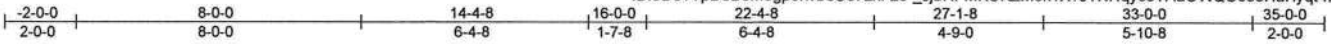
6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939641
2433436	T07A	Hip	1	1		

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:32:59 2020 Page 1

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Scale = 1:62.3

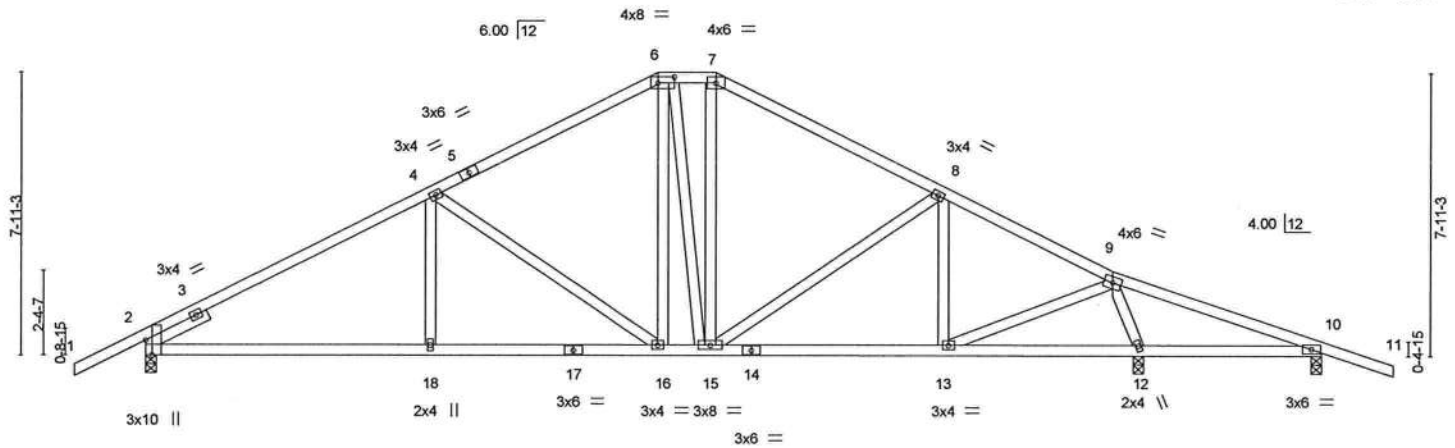


Plate Offsets (X, Y) - [2-0-5-0, Edge], [6-0-5-8, 0-2-0]		8-0-0		14-4-8	16-0-0	22-4-8	27-10-4	33-0-0
		8-0-0		6-4-8	1-7-8	6-4-8	5-5-12	5-1-12
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.43	Vert(LL)	-0.07 16-18	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.61	Vert(CT)	-0.15 16-18	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.62	Horz(CT)	0.04 12	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-AS					Weight: 191 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8, 10=0-3-8  
Max Horz 2=-111(LC 10)  
Max Uplift 2=-254(LC 12), 12=-257(LC 13), 10=-230(LC 9)  
Max Grav 2=1115(LC 1), 12=1386(LC 1), 10=195(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1549/845, 4-6=-1083/693, 6-7=-881/683, 7-8=-1062/682, 8-9=-1088/652, 9-10=-104/474  
BOT CHORD 2-18=-560/1316, 16-18=-560/1316, 15-16=-247/899, 13-15=-376/927, 10-12=-404/203  
WEBS 4-18=0/286, 4-16=-528/400, 6-16=-191/350, 7-15=-113/287, 8-13=-266/194, 9-13=-331/938, 9-12=-1325/723

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCdL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=254, 12=257, 10=230.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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6904 Parke East Blvd. Tampa FL 33610  
Date:

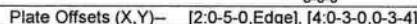
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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:33:00 2020 Page 1  
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**LUMBER-**  
**TOP CHORD** 2x4 SP No.2  
**BOT CHORD** 2x4 SP No.2  
**WEBS** 2x4 SP No.3  
**SLIDER** Left 2x4 SP No.3 1-11-8

BRACING-		
TOP CHORD	Structural wood sheathing directly applied.	
BOT CHORD	Rigid ceiling directly applied.	
WEBS	1 Row at midpt	4-13, 6-13

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8, 8=0-3-8  
 Max Horz 2=-116(LC 10)  
 Max Uplift 2=-256(LC 12), 10=-264(LC 13), 8=-232(LC 9)  
 Max Grav 2=1114(LC 1), 10=1396(LC 1), 8=194(LC 24)

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

TOP CHORD	2-4=1544/848, 4-5=1050/680, 5-6=1049/674, 6-7=1083/656, 7-8=120/501
BOT CHORD	2-15=562/1312, 13-15=563/1309, 12-13=382/925, 8-10=430/218
WEBS	4-15=0/286, 4-13=564/415, 5-13=281/526, 6-12=269/201, 7-12=351/958, 7-10=1338/732

NOTES- (7)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=256, 10=264, 8=232.
- 6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TP1 1 as referenced by the building code.



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Date:

August 5.2020

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**WARNING:** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-7431 5/8". 5/19/2020 BEFORE USE.

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



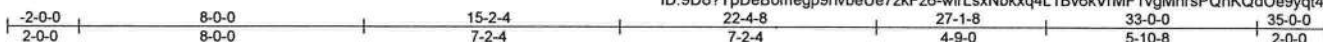
6904 Parke East Blvd.  
Tampa, FL 36610

Job 2433436	Truss T09	Truss Type ROOF SPECIAL	Qty 7	Ply 1	ROBERTS	T20939643
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:33:01 2020 Page 1

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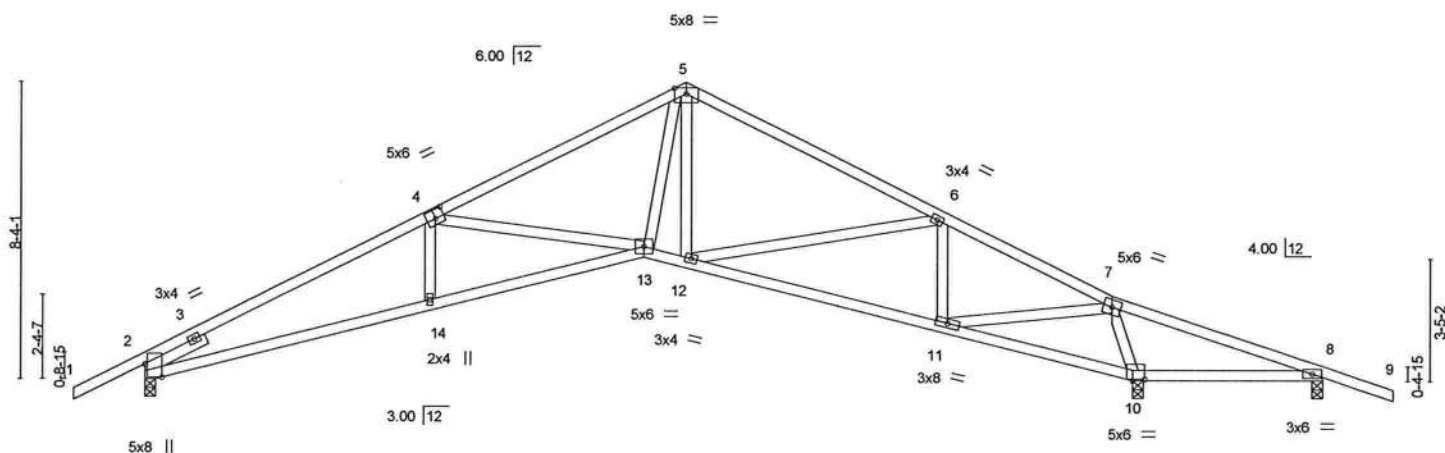


Plate Offsets (X,Y)-- [2-0-4-7, Edge], [4-0-3-0, 0-3-0], [10-0-4-0, 0-0-8]

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 0.59	Vert(LL)	-0.20 13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.95	Vert(CT)	-0.38 13-14	>872	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.20 10	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						
								Weight: 165 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2 \*Except\*  
1-4: 2x4 SP M 31  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8, 10=0-3-8  
Max Horz 2=-116(LC 10)  
Max Uplift 2=-245(LC 12), 8=-265(LC 11), 10=-291(LC 13)  
Max Grav 2=1049(LC 1), 8=37(LC 12), 10=1747(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-2386/1205, 4-5=-1709/846, 5-6=-1438/735, 6-7=-1006/612, 7-8=-480/1357  
BOT CHORD 2-14=-904/2112, 13-14=-912/2121, 12-13=-297/1239, 11-12=-358/898, 10-11=-889/350,  
8-10=-1238/540  
WEBS 4-13=-659/527, 5-13=-389/989, 6-12=-41/446, 6-11=-575/331, 7-11=-667/1722,  
7-10=-1437/783

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 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=245, 8=265, 10=291.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

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6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939644
2433436	T09A	ROOF SPECIAL	4	1		

Builders FirstSource, Jacksonville, FL - 32244,

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Job Reference (optional)



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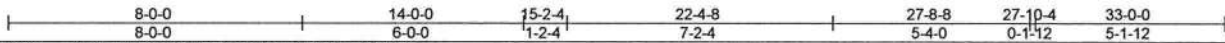
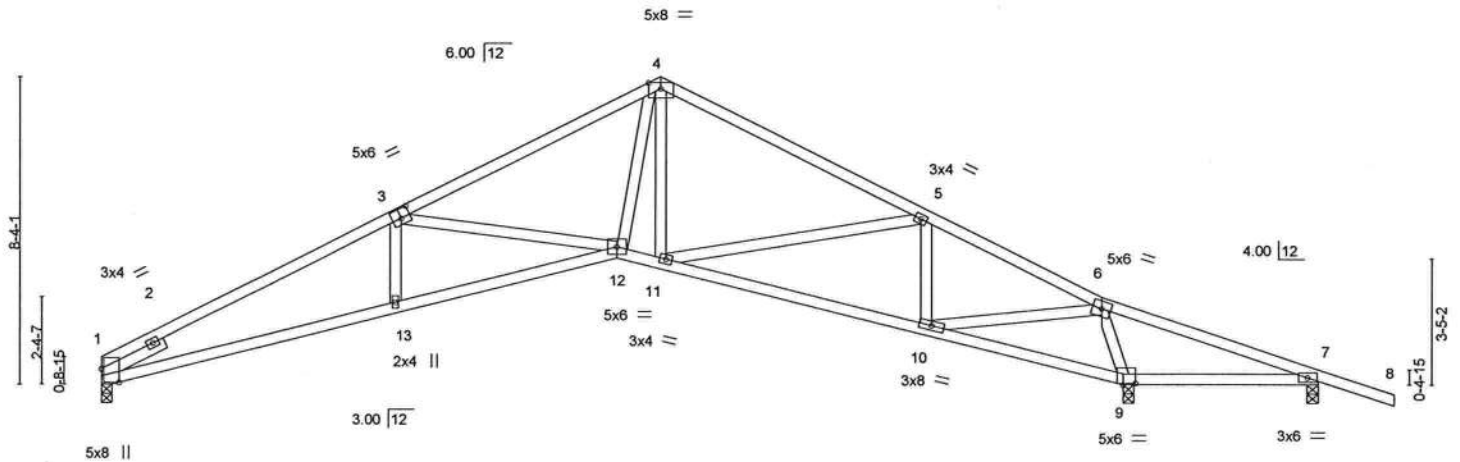


Plate Offsets (X,Y) - [1:0-4-7, Edge], [3:0-3-0, 0-3-0], [9:0-4-0, 0-0-8]

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 1.00	Vert(LL)	-0.20 12-13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.92	Vert(CT)	-0.39 12-13	>848	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.21 9	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						
								Weight: 161 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8, 9=0-3-8  
Max Horz 1=-124(LC 8)  
Max Uplift 1=-206(LC 12), 7=-274(LC 11), 9=-292(LC 13)  
Max Grav 1=935(LC 1), 7=37(LC 12), 9=1766(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2414/1252, 3-4=-1715/870, 4-5=-1441/753, 5-6=-994/621, 6-7=-470/1395  
BOT CHORD 1-13=-967/2143, 12-13=-973/2151, 11-12=-312/1241, 10-11=-373/887, 9-10=-923/355,  
7-9=-1274/545  
WEBS 3-12=-684/546, 4-12=-408/999, 5-11=-41/456, 5-10=-584/333, 6-10=-671/1744,  
6-9=-1448/788

- NOTES- (8)**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 1 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) 1=206, 7=274, 9=292.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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6904 Parke East Blvd.  
Tampa, FL 33610



Job 2433436	Truss T10	Truss Type Half Hip Girder	Qty 1	Ply 1	ROBERTS	T20939645
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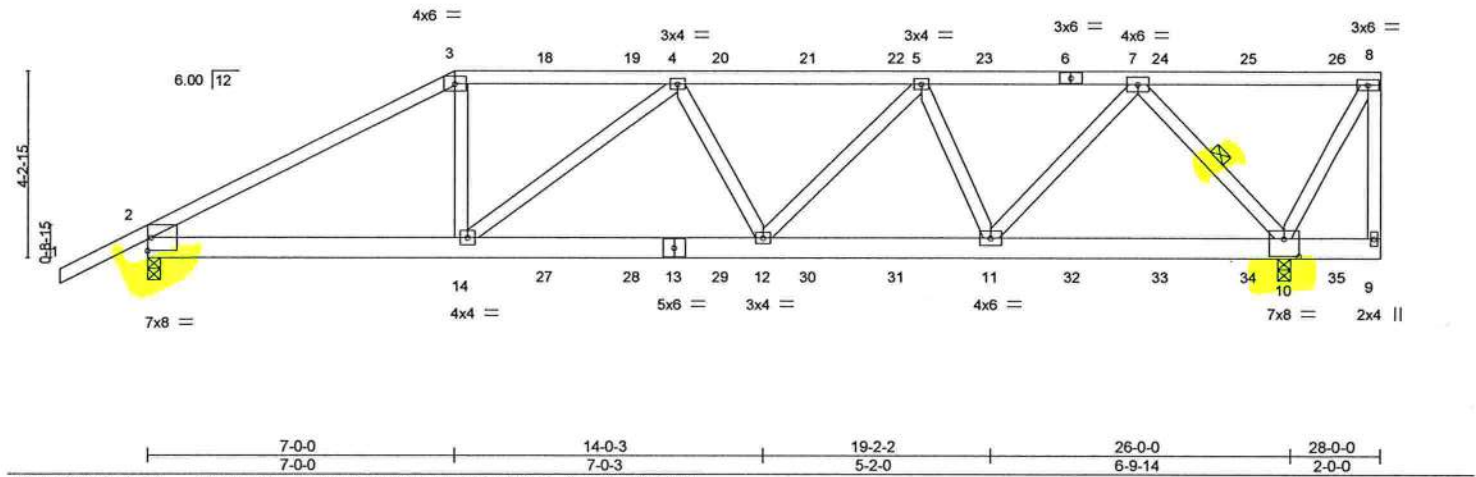
Builders FirstSource, Jacksonville, FL - 32244,

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ID:9D8?TpDeBomegp9nvbeUe7zkFz6-KHXUuZQT0sCfCvVuos3Y\_tflCZsh3mh70Ns2FUyqt4D



Scale = 1:50.5



LOADING (psf)		SPACING-		CSL		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.95	Vert(LL)	0.27 12-14 >999 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.74	Vert(CT)	-0.26 12-14 >999 180				
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(CT)	-0.06 10 n/a n/a				
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							
								Weight: 171 lb FT = 20%			

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2 *Except* 1-3: 2x4 SP M 31	TOP CHORD	Structural wood sheathing directly applied or 2-6-5 oc purlins, except end verticals.
BOT CHORD	2x6 SP M 26 *Except* 9-13: 2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 4-3-13 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 7-10
WEDGE			
Left: 2x4 SP No.3			

REACTIONS.	
(size)	2=0-3-8, 10=0-3-8
Max Horz	2=213(LC 8)
Max Uplift	2=-1381(LC 8), 10=-1947(LC 5)
Max Grav	2=1889(LC 1), 10=2403(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-3141/2477, 3-4=-2755/2266, 4-5=-3373/2753, 5-7=-2569/2080
BOT CHORD	2-14=-2240/2723, 12-14=-2819/3425, 11-12=-2423/2969, 10-11=-1234/1505
WEBS	3-14=-681/893, 4-14=-913/746, 5-12=-489/594, 5-11=-1061/910, 7-11=-1294/1628, 7-10=-2436/2015

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=1381, 10=1947.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 236 lb down and 307 lb up at 7-0-0, 111 lb down and 155 lb up at 9-0-12, 111 lb down and 155 lb up at 11-0-12, 111 lb down and 155 lb up at 13-0-12, 111 lb down and 155 lb up at 15-0-12, 111 lb down and 155 lb up at 17-0-12, 111 lb down and 155 lb up at 19-0-11, 111 lb down and 155 lb up at 21-0-11, 111 lb down and 155 lb up at 23-0-11, and 111 lb down and 155 lb up at 25-0-11, and 116 lb down and 155 lb up at 27-0-11 on top chord, and 276 lb down and 364 lb up at 7-0-0, 80 lb down and 84 lb up at 9-0-12, 80 lb down and 84 lb up at 11-0-12, 80 lb down and 84 lb up at 13-0-12, 80 lb down and 84 lb up at 15-0-12, 80 lb down and 84 lb up at 17-0-12, 80 lb down and 84 lb up at 19-0-11, 80 lb down and 84 lb up at 21-0-11, 80 lb down and 84 lb up at 23-0-11, and 80 lb down and 84 lb up at 25-0-11, and 84 lb down and 81 lb up at 27-0-11 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).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5,2020

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6904 Parke East Blvd.  
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939645
2433436	T10	Half Hip Girder	1	1	Job Reference (optional)	

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#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-8=-54, 9-15=-20

Concentrated Loads (lb)

Vert: 3=-189(F) 6=-111(F) 14=-255(F) 11=-56(F) 18=-111(F) 19=-111(F) 20=-111(F) 21=-111(F) 22=-111(F) 23=-111(F) 24=-111(F) 25=-111(F) 26=-116(F) 27=-56(F) 28=-56(F) 29=-56(F) 30=-56(F) 31=-56(F) 32=-56(F) 33=-56(F) 34=-56(F) 35=-58(F)



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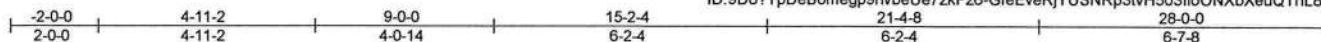
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Tampa, FL 36610

Job 2433436	Truss T11	Truss Type Hip	Qty 1	Ply 1	ROBERTS	T20939646
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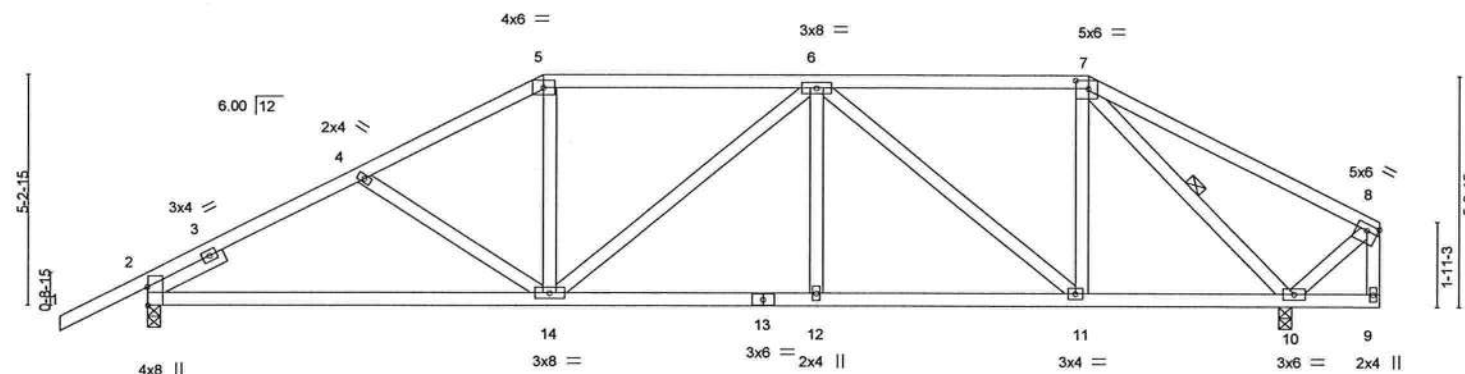
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8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:33:06 2020 Page 1

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Scale = 1:50.5



	9-0-0 9-0-0	15-2-4 6-2-4	21-4-8 6-2-4	25-10-4 4-5-12	26-0-0 28-0-0 0-1-12 2-0-0
Plate Offsets (X,Y)--	[2-0-5-0,Edge],	[7-0-3-8,0-2-4],	[8-Edge,0-1-12]		

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 0.46	Vert(LL)	-0.12 14-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.72	Vert(CT)	-0.23 14-17	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.77	Horz(CT)	0.05 10	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS					Weight: 158 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.  
WEBS 1 Row at midpt 7-10

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=110(LC 12)  
Max Uplift 2=215(LC 12), 10=190(LC 8)  
Max Grav 2=1069(LC 1), 10=1100(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1473/789, 4-5=-1318/709, 5-6=-1160/692, 6-7=-765/501  
BOT CHORD 2-14=-674/1262, 12-14=-564/1250, 11-12=-564/1250, 10-11=-321/750  
WEBS 5-14=-86/358, 6-11=-670/308, 7-11=-156/533, 7-10=-1200/583

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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 20.0 psf 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=215, 10=190.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
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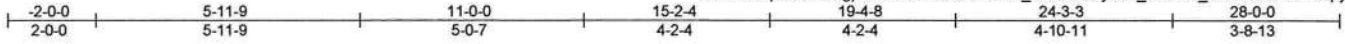
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Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939647
2433436	T12	Hip	1	1		

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Scale = 1:50.1

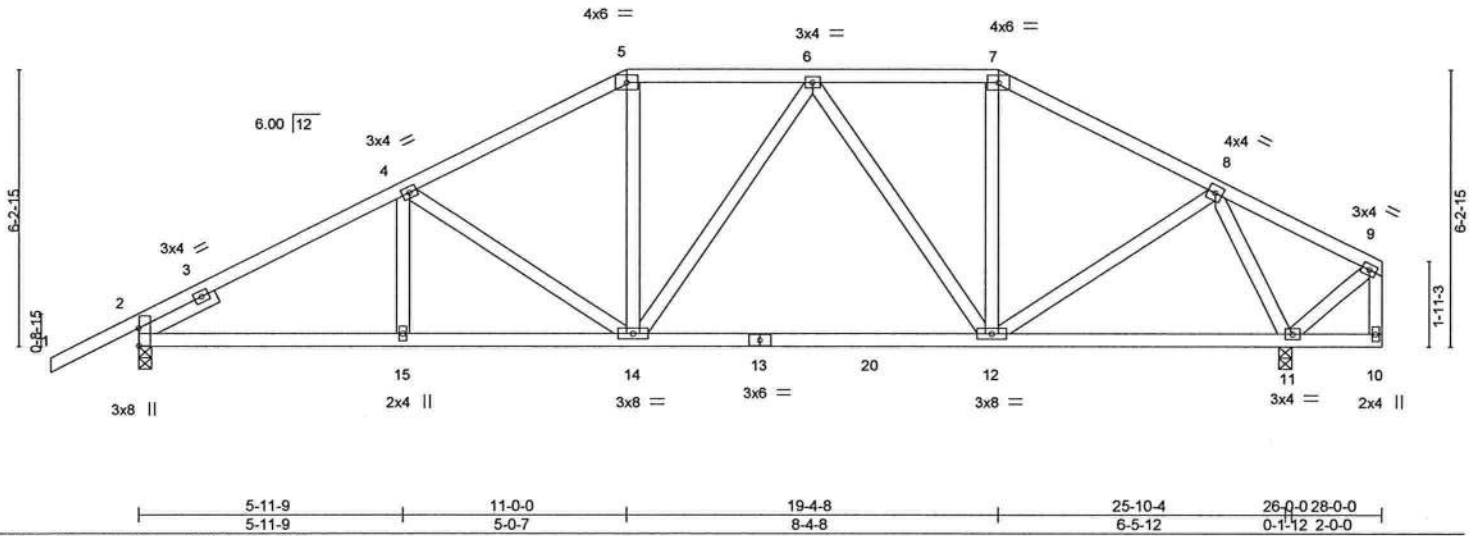


Plate Offsets (X,Y)-- [2-0-4-12,0-0-2]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		PLATES	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.42		in (loc)	l/defl	L/d	GRIP
TCDL 7.0		Lumber DOL 1.25		BC 0.57		Vert(LL) -0.12 12-14	>999	240	MT20 244/190
BCLL 0.0 *		Rep Stress Incr YES		WB 0.38		Vert(CT) -0.23 12-14	>999	180	
BCDL 10.0		Code FBC2017/TPI2014		Matrix-AS		Horz(CT) 0.04 11	n/a	n/a	
								Weight: 164 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
Max Horz 2=123(LC 12)  
Max Uplift 2=227(LC 12), 11=194(LC 13)  
Max Grav 2=1066(LC 1), 11=1103(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1481/775, 4-5=-1206/680, 5-6=-1031/666, 6-7=-804/545, 7-8=-958/548  
BOT CHORD 2-15=-657/1266, 14-15=-657/1266, 12-14=-432/994, 11-12=-208/413  
WEBS 4-14=-295/265, 5-14=-101/307, 6-12=-385/206, 8-12=-130/471, 8-11=-1050/600

- NOTES-** (8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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, with BCDL = 10.0psf.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=227, 11=194.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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



Job 2433436	Truss T13	Truss Type Hip	Qty 1	Ply 1	ROBERTS	T20939648
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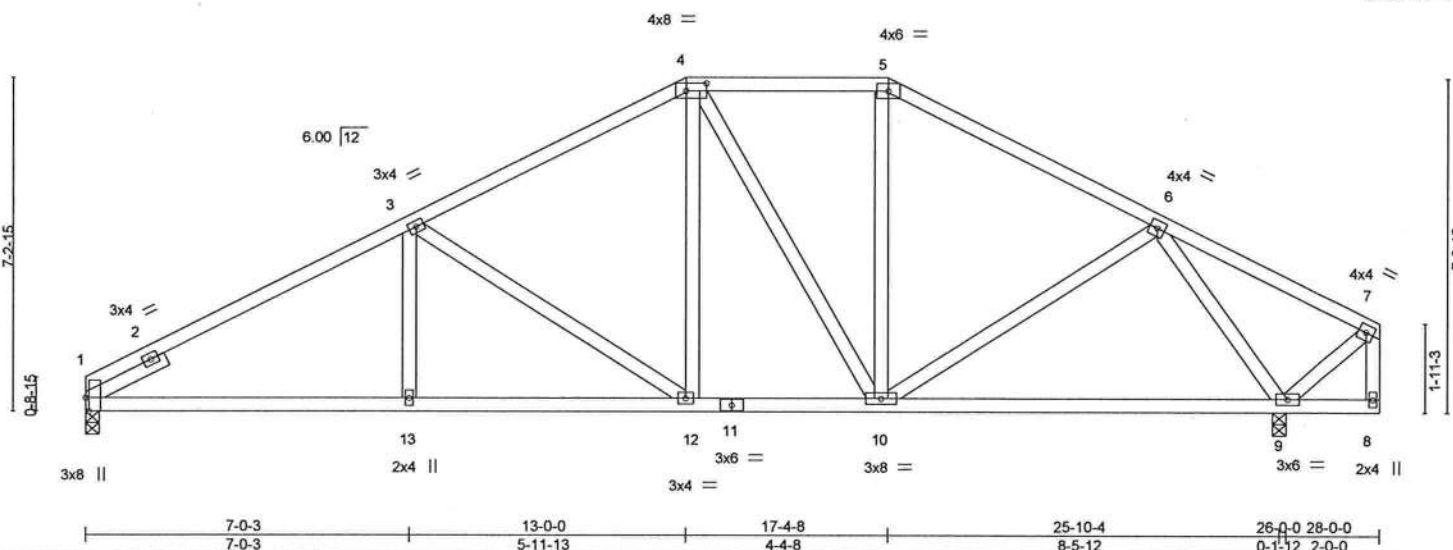
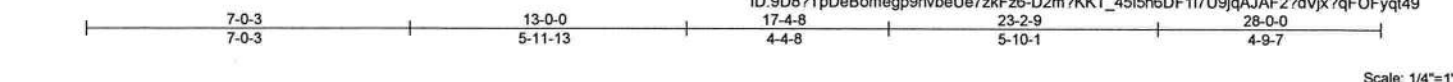


Plate Offsets (X,Y)-- [1:0-3-8,Edge], [4:0-5-4,0-2-0]

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 0.37	Vert(LL)	-0.12	9-10	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.59	Vert(CT)	-0.25	9-10	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.51	Horz(CT)	0.04	9	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS						
								Weight: 160 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 1=0-3-8, 9=0-3-8  
Max Horz 1=108(LC 12)  
Max Uplift 1=199(LC 12), 9=209(LC 13)  
Max Grav 1=955(LC 1), 9=1106(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-1503/799, 3-4=-1083/653, 4-5=-811/592, 5-6=-980/590  
BOT CHORD 1-13=-671/1286, 12-13=-671/1286, 10-12=-367/906, 9-10=-302/583  
WEBS 3-13=0/258, 3-12=-468/365, 4-12=-174/346, 4-10=-260/112, 6-10=-38/310, 6-9=-1075/659

- NOTES-** (8)
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 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) except (jt=lb) 1=199, 9=209.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Tampa, FL 33610



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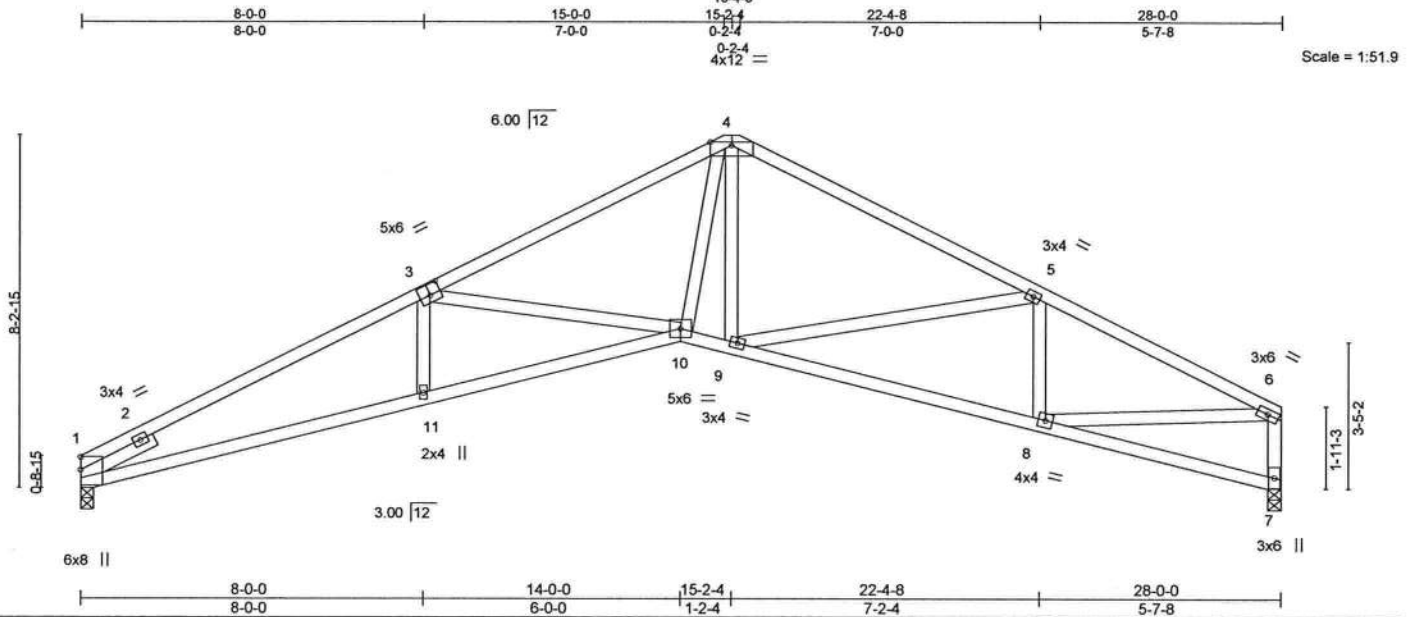


Plate Offsets (X,Y)-- [3:0-3:0,0-3:0]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES GRIP</b>	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.20 10-11 >999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.39 10-11 >856 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.22 7 n/a n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS				Weight: 143 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2 *Except* 1-3: 2x4 SP M 31	TOP CHORD	Structural wood sheathing directly applied, except end verticals. Rigid ceiling directly applied.
BOT CHORD	2x4 SP M 31	BOT CHORD	
WEBS	2x4 SP No.3		
SLIDER	Left 2x4 SP No.3 1-11-8		

REACTIONS. (size) 1=0-3-8, 7=0-3-8  
Max Horz 1=121(LC 12)  
Max Uplift 1=-220(LC 12), 7=-207(LC 13)  
Max Grav 1=1031(LC 1), 7=1031(LC 1)

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

TOP CHORD	1-3=-2743/1464, 3-4=-2103/1120, 4-5=-1786/961, 5-6=-1782/949, 6-7=-993/568
BOT CHORD	1-11=-1277/2439, 10-11=-1286/2453, 9-10=-626/1563, 8-9=-807/1610
WEBS	3-10=-637/501, 4-10=-563/1516, 5-8=-344/1263, 6-8=-733/1480, 4-9=-48/253

- NOTES- (8)**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 5) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=220, 7=207.
  - 7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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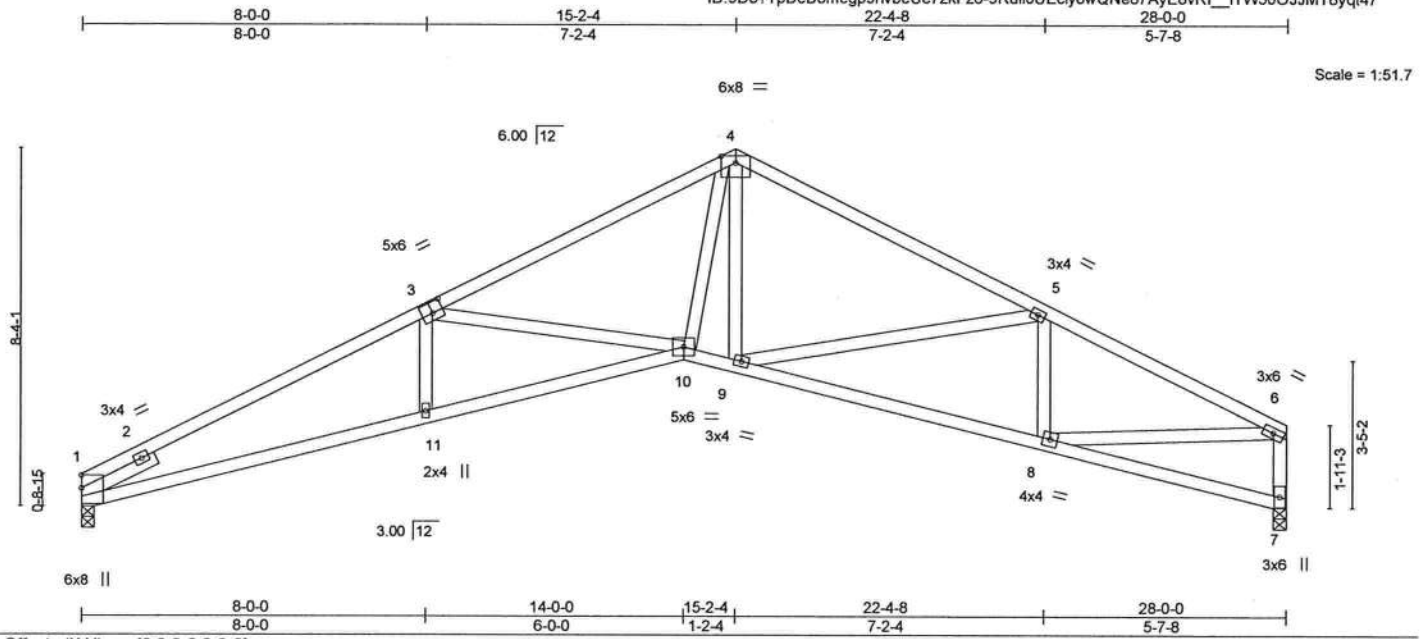


6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939650
2433436	T14A	Scissor	2	1		

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:33:10 2020 Page 1  
ID:9D8?TpDeBomegp9nvbeUe7zkFz6-9Rull0UEciyowQNe87AyE8vRI\_ITW500JJMT8yqt47



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.20 10-11 >999 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.39 10-11 >857 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.22 7 n/a n/a				
BCDL	10.0	Code FBC2017/TPI2014		Matrix-AS							
								Weight: 143 lb		FT = 20%	

**LUMBER-**  
TOP CHORD 2x4 SP No.2 \*Except\*  
1-3: 2x4 SP M 31  
BOT CHORD 2x4 SP M 31  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied, except end verticals.  
BOT CHORD Rigid ceiling directly applied.

**REACTIONS.** (size) 1=0-3-8, 7=0-3-8  
Max Horz 1=122(LC 12)  
Max Uplift 1=-220(LC 12), 7=-207(LC 13)  
Max Grav 1=1031(LC 1), 7=1031(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-3=-2743/1464, 3-4=-2089/1113, 4-5=-1775/955, 5-6=-1782/949, 6-7=-993/568  
BOT CHORD 1-11=-1277/2439, 10-11=-1287/2453, 9-10=-617/1548, 8-9=-808/1610  
WEBS 3-10=-650/512, 4-10=-562/1149, 4-9=-52/258, 5-8=-344/283, 6-8=-733/1480

- NOTES-** (8)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 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) 1, 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) 1=220, 7=207.
  - This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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	Truss	Truss Type	Qty	Ply	ROBERTS	T20939651
2433436	T15	Hip Girder	1	1		

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:33:11 2020 Page 1

ID:9D8?7pDeBomegp9nvbeUe7zkFz6-ddS7yMVsn04fYayqihBmMSaCOEdC3d9dz2v?ayqt46

-2-0-0	7-0-0	9-0-0	16-0-0	18-0-0
2-0-0	7-0-0	2-0-0	7-0-0	2-0-0

Scale = 1:32.6

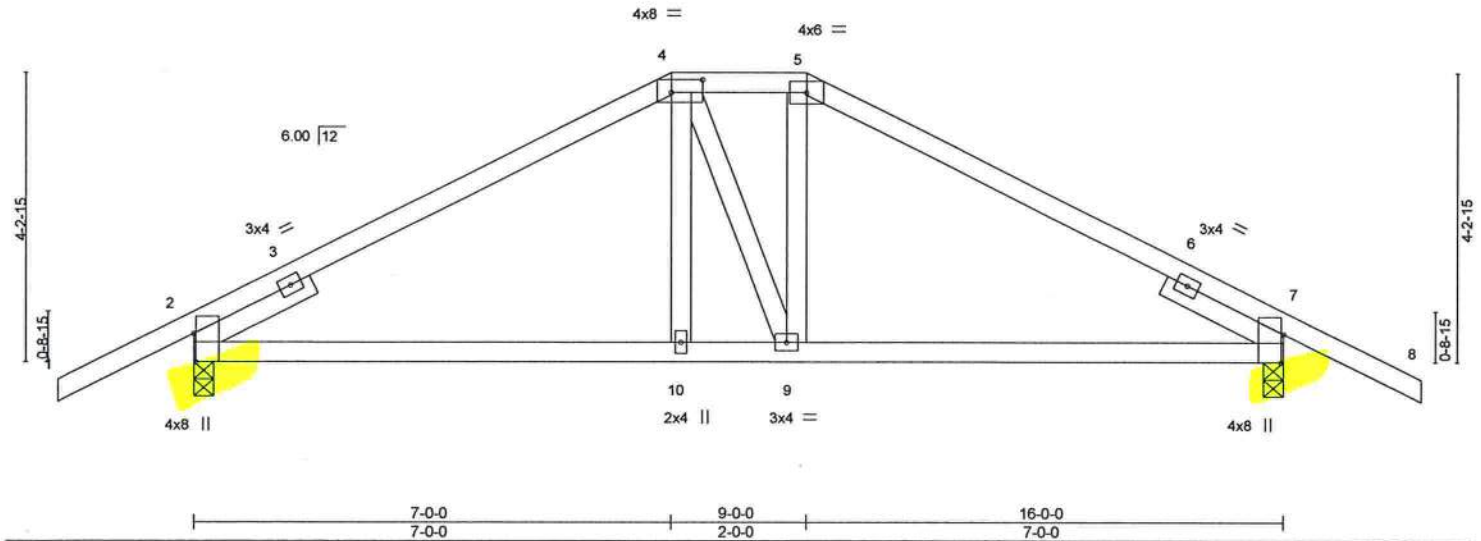


Plate Offsets (X,Y)~ [2-0-5-0,Edge], [4-0-5-8,0-2-4], [7-0-5-0,Edge]											
LOADING (psf)		SPACING- 2-0-0		CSI.	DEFL. in (loc)		l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC 0.77	Vert(LL)	0.13 9-10	>999	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC 0.79	Vert(CT)	0.12 9-10	>999	180			
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.16	Horz(CT)	-0.06 7	n/a	n/a			
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 80 lb	FT = 20%	

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 3-4-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-11-1 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 7=0-3-8  
Max Horz 2=-95(LC 32)  
Max Uplift 2=-856(LC 8), 7=-856(LC 9)  
Max Grav 2=1144(LC 1), 7=1144(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-1598/1364, 4-5=-1370/1268, 5-7=-1599/1365  
BOT CHORD 2-10=-1161/1357, 9-10=-1174/1369, 7-9=-1129/1359  
WEBS 4-10=-343/418, 5-9=-353/421

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 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=856, 7=856.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 236 lb down and 307 lb up at 7-0-0, and 236 lb down and 307 lb up at 9-0-0 on top chord, and 276 lb down and 364 lb up at 7-0-0, and 276 lb down and 364 lb up at 8-11-4 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).
  - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

#### LOAD CASE(S) Standard

- 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, 11-15=-20  
Concentrated Loads (lb)  
Vert: 4=-189(F) 5=-189(F) 10=-255(F) 9=-255(F)



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

August 5, 2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not 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

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	ROBERTS	T20939652
2433436	T16	Common	2	1		

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Aug 5 14:33:13 2020 Page 1

ID:9D8?TpDeBomegp9nvbeUe7zkFz6-Z0ZuN2X6vdKNnt5DpFjfsnX\_sBzWgyeS4HX03Tyqt44

-2-0-0	8-0-0	16-0-0	18-0-0
2-0-0	8-0-0	8-0-0	2-0-0

Scale = 1:32.8

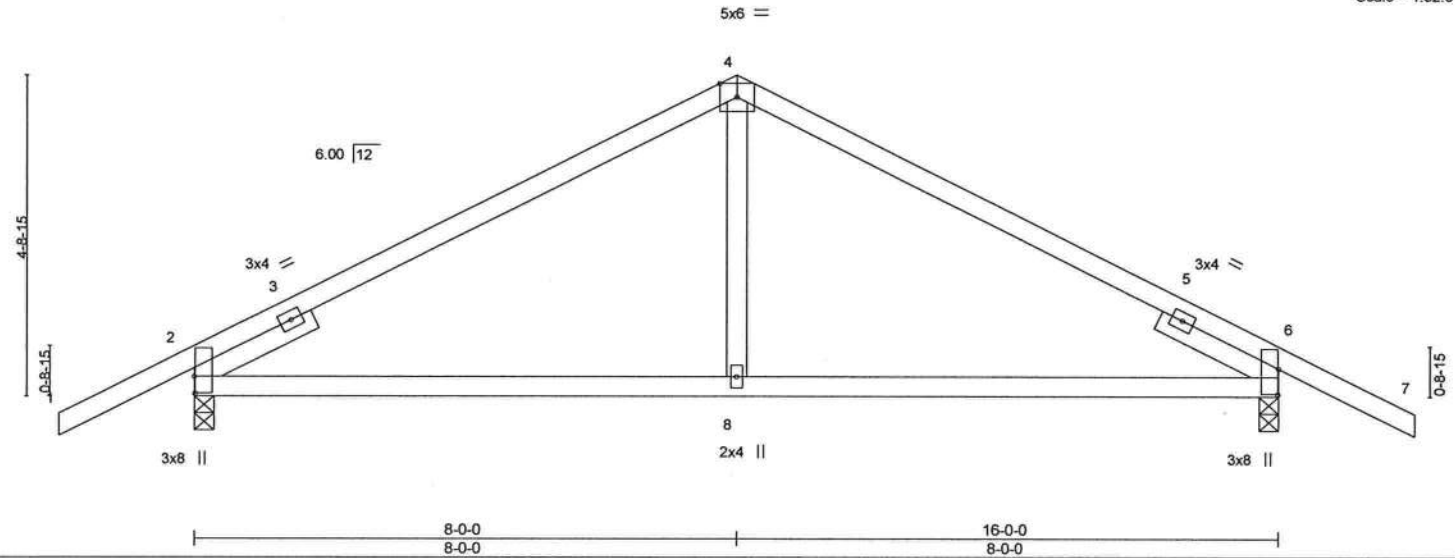


Plate Offsets (X,Y)-- [2:0-3-0,0-0-2], [6:0-4-8,0-0-2]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.51	Vert(LL)	0.16	8-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.57	Vert(CT)	0.14	8-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.19	Horz(CT)	0.03	2	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-AS							
									Weight: 69 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 1-11-8, Right 2x4 SP No.3 1-11-8

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

**REACTIONS.** (size) 2=0-3-8, 6=0-3-8  
Max Horz 2=68(LC 11)  
Max Uplift 2=-247(LC 9), 6=-247(LC 8)  
Max Grav 2=700(LC 1), 6=700(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-4=-654/988, 4-6=-654/989  
BOT CHORD 2-8=-711/585, 6-8=-711/585  
WEBS 4-8=-499/330

#### NOTES- (7)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) 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
- 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=247, 6=247.
- This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

August 5, 2020

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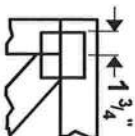


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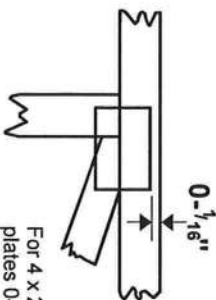


# Symbols

## PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 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

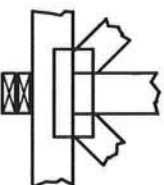
4 X 4

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 L bracing if indicated.



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/TP11:

National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89:

Design Standard for Bracing.

BCSI:

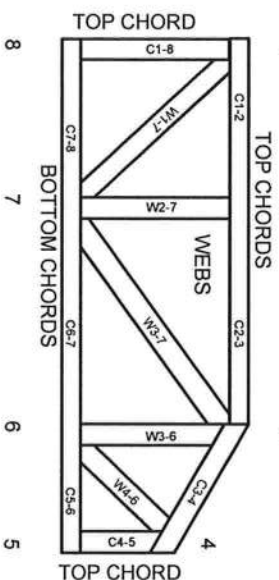
Building Component Safety Information, Guide to Good Practice for Handling,

Installing & Bracing of Metal Plate

Connected Wood Trusses.

# Numbering System

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/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

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



# General Safety Notes

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

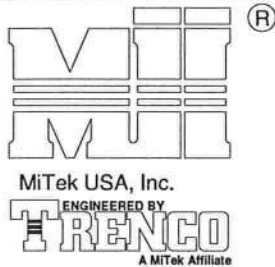
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



AUGUST 1, 2016

# T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY

MII-T-BRACE 2



MiTek USA, Inc. Page 1 of 1

Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

## Nailing Pattern

T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)		

## Brace Size for One-Ply Truss

### Specified Continuous Rows of Lateral Bracing

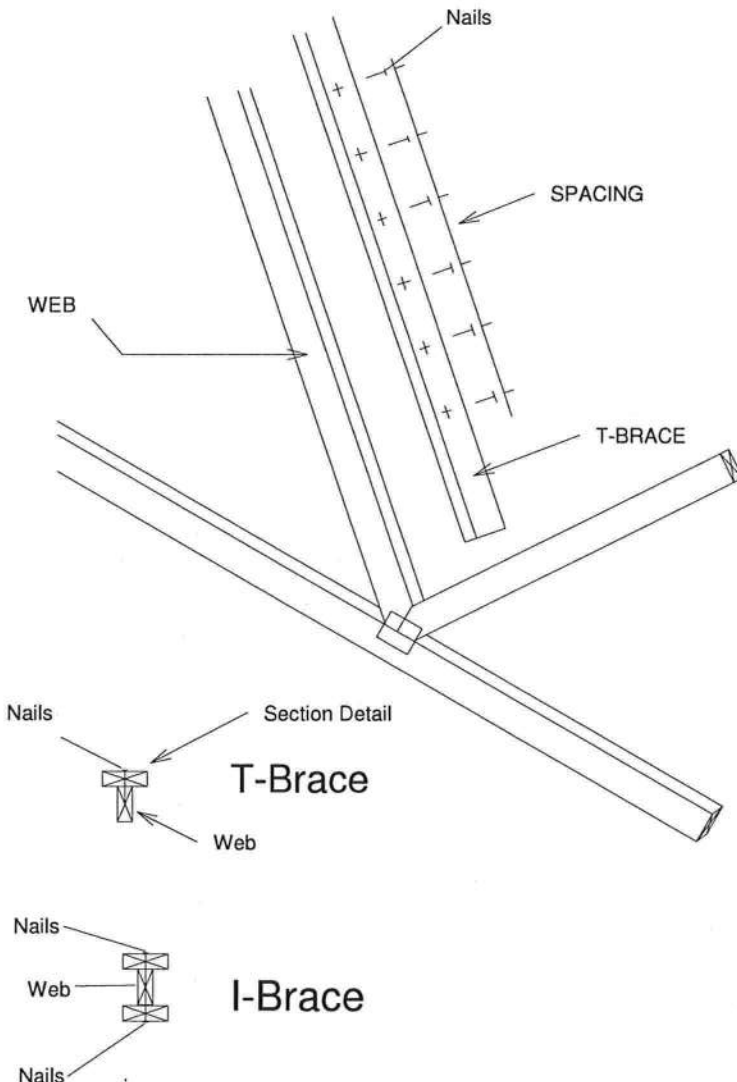
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

## Brace Size for Two-Ply Truss

### Specified Continuous Rows of Lateral Bracing

Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

T-Brace / I-Brace must be same species and grade (or better) as web member.



Thomas A. Albani PE No. 39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

AUGUST 1, 2016

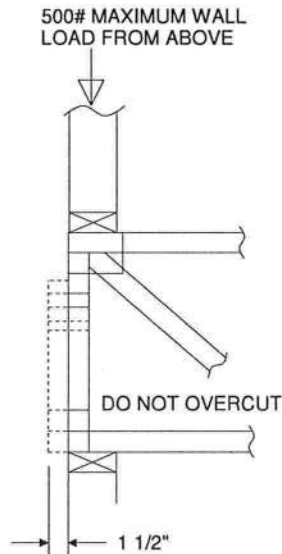
# STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)

MII-REP05

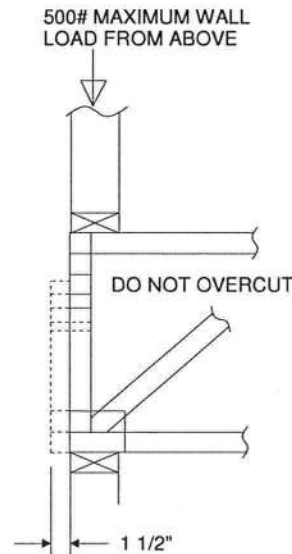
MiTek USA, Inc. Page 1 of 1



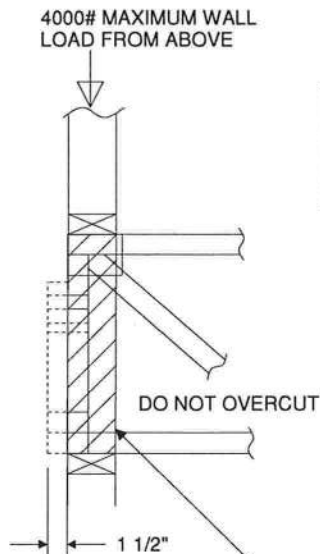
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.
4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X ORIENTATION ONLY.
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.



REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS



REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



TRUSSES BUILT WITH 4x2 MEMBERS

ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d (0.131\" X 3\") NAILS SPACED 3\" O.C.



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

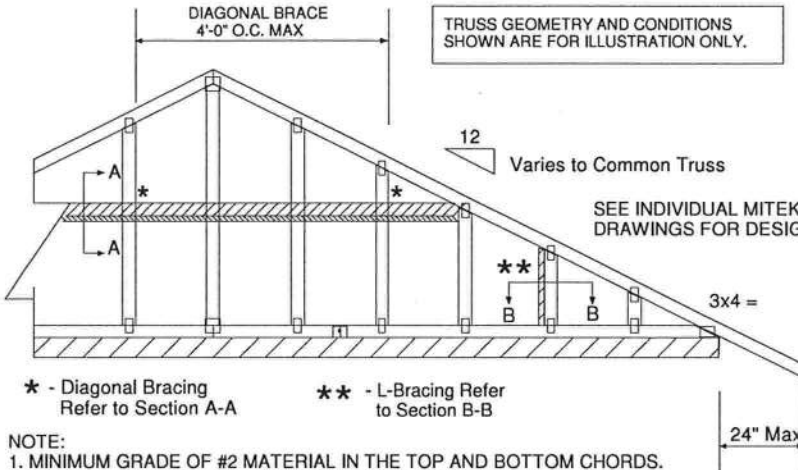
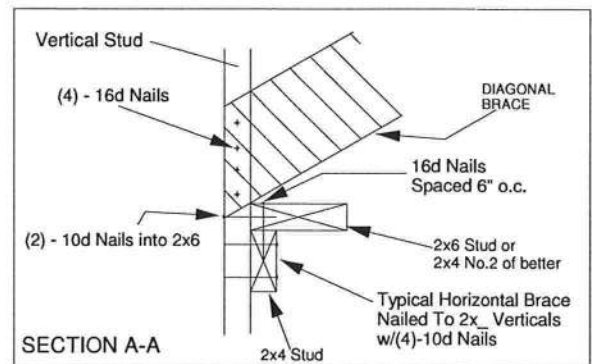
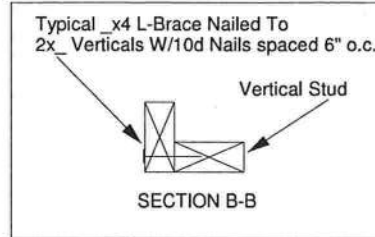
AUGUST 1, 2016

## Standard Gable End Detail

MII-GE130-SP

MiTek USA, Inc.

Page 1 of 2



## NOTE:

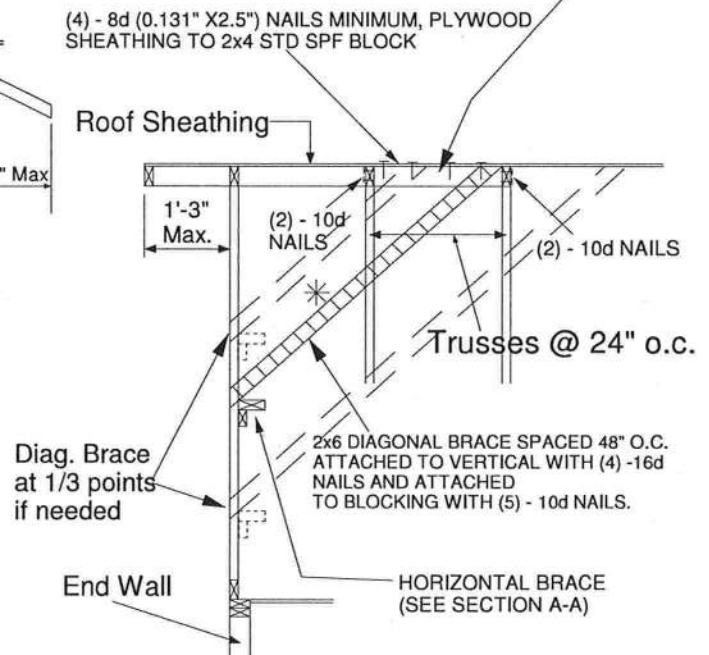
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS  $L/240$ .
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1
2x4 SP No. 3 / Stud	24" O.C.	3-0-10	3-1-12	4-5-6	6-1-5	9-1-15

- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

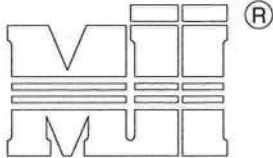
MAX MEAN ROOF HEIGHT = 30 FEET  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH  
 ASCE 7-10 160 MPH  
 DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
 CONNECTION OF BRACING IS BASED ON MWFRS.



Thomas A. Albani PE No.39380  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

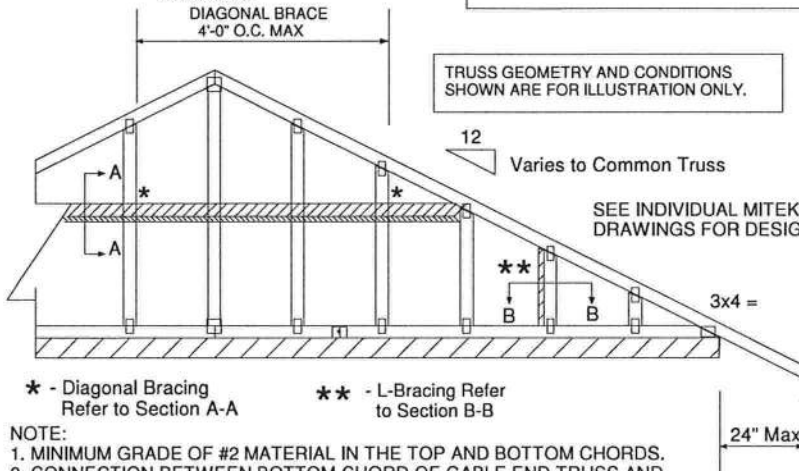
February 12, 2018



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**TRENCO**

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\* - Diagonal Bracing  
Refer to Section A-A\*\* - L-Bracing Refer  
to Section B-B

## NOTE:

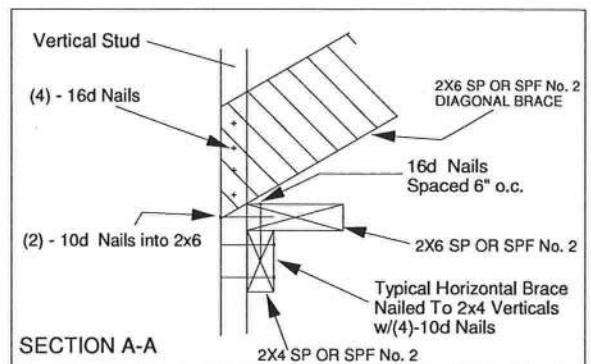
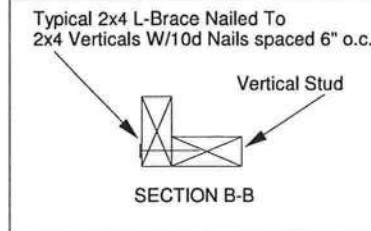
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH, SPF or SP No.3 OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A 2x4 AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST GABLE STUD. ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-9-7	5-8-8	6-11-1	11-4-4
2x4 SP No. 3 / Stud	16" O.C.	3-4-12	4-11-15	6-9-8	10-2-3
2x4 SP No. 3 / Stud	24" O.C.	2-9-4	4-0-7	5-6-8	8-3-13
2x4 SP No. 2	12" O.C.	3-11-13	5-8-8	6-11-1	11-11-7
2x4 SP No. 2	16" O.C.	3-7-7	4-11-5	6-11-1	10-10-5
2x4 SP No. 2	24" O.C.	3-1-15	4-0-7	6-3-14	9-5-14

- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 6" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length. T or I braces must be 2x4 SPF No. 2 or SP No. 2.

MAX MEAN ROOF HEIGHT = 30 FEET  
EXPOSURE D  
ASCE 7-10 170 MPH  
DURATION OF LOAD INCREASE : 1.60

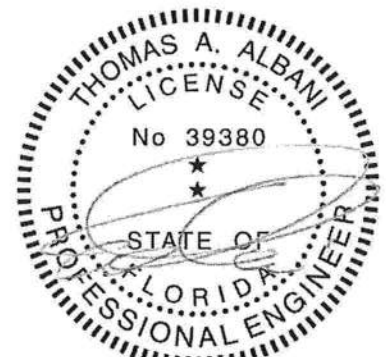
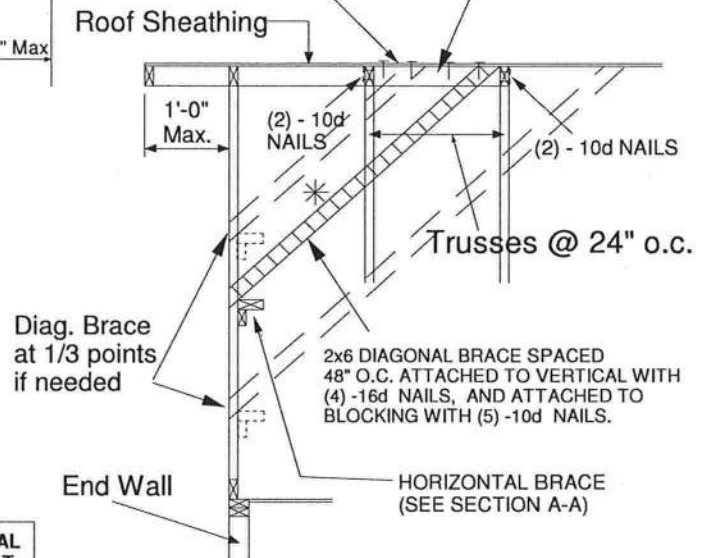
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

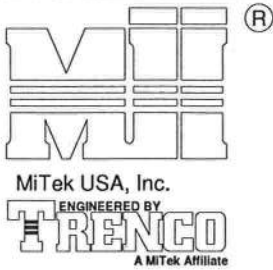
(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
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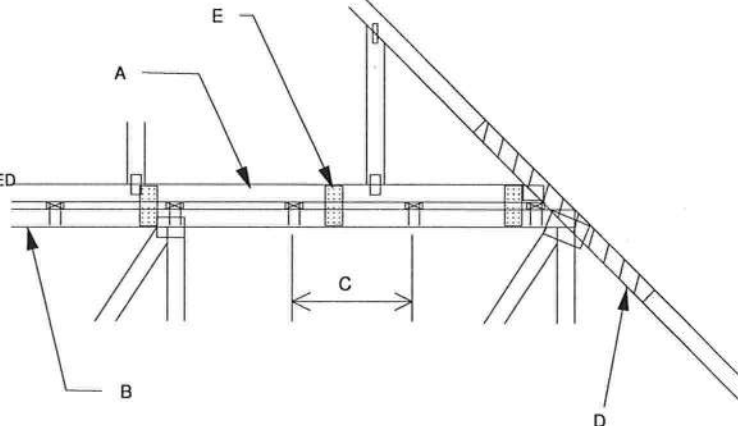
February 12, 2018



MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 MAX TRUSS SPACING = 24" O.C.  
 CATEGORY II BUILDING  
 EXPOSURE B or C  
 ASCE 7-10  
 DURATION OF LOAD INCREASE : 1.60

DETAIL IS NOT APPLICABLE FOR TRUSSES  
 TRANSFERRING DRAG LOADS (SHEAR TRUSSES).  
 ADDITIONAL CONSIDERATIONS BY BUILDING  
 ENGINEER/DESIGNER ARE REQUIRED.

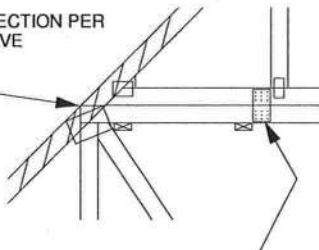
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
  2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



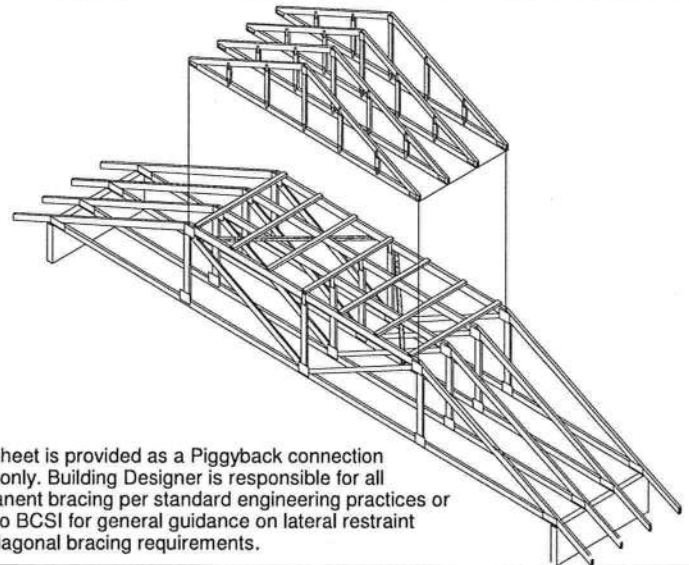
#### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.

SCAB CONNECTION PER  
NOTE D ABOVE

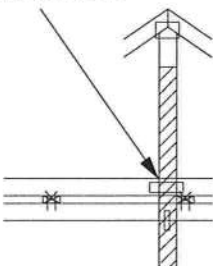


FOR ALL WIND SPEEDS, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



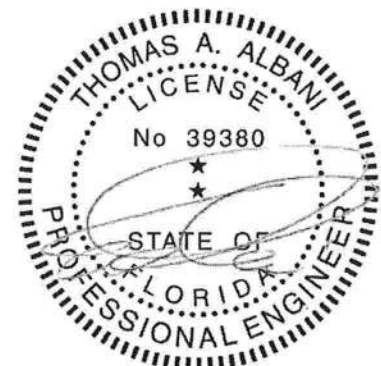
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO  
EXTEND THROUGH  
BOTTOM CHORD  
OF PIGGYBACK



#### FOR LARGE CONCENTRATED LOADS APPLIED TO CAP TRUSS REQUIRING A VERTICAL WEB:

- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
- 2) ATTACH 2 x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)
- 3) THIS CONNECTION IS ONLY VALID FOR A MAXIMUM CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.
- 4) FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
- 5) CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



Thomas A. Albani PE No.39380  
 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
 Date:

February 12, 2018



AUGUST 1, 2016

STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS  
AND DAMAGED OR MISSING CHORD SPLICE PLATES

MII-REP01A1

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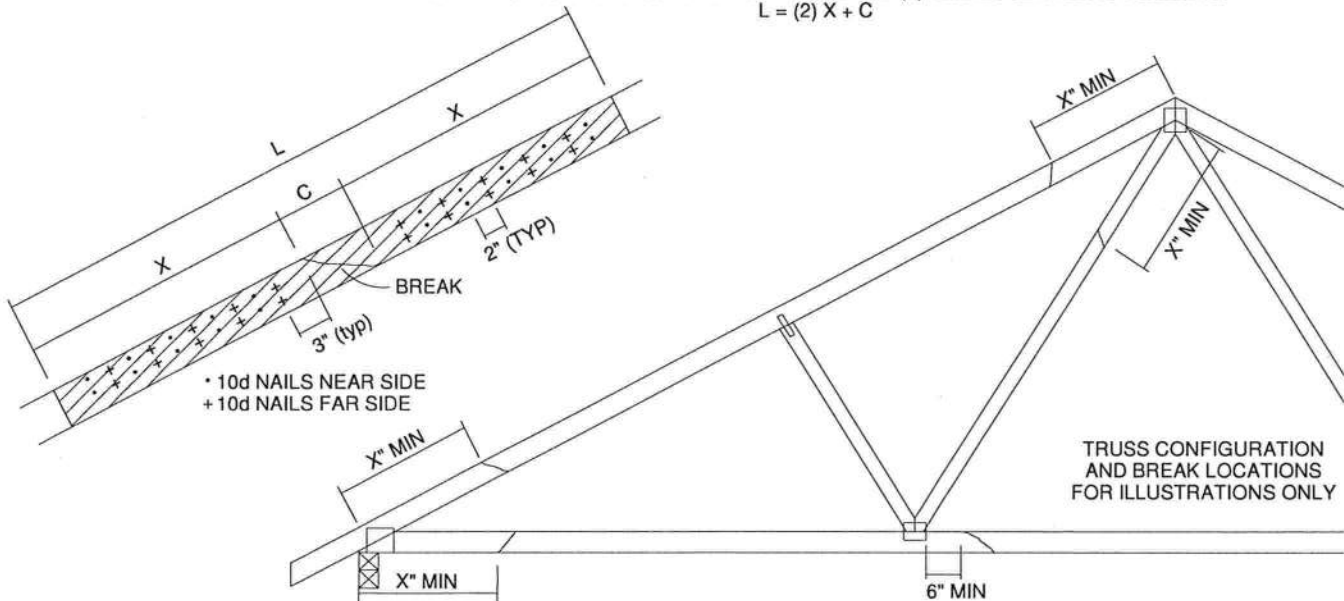
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	2900	4350	2451	3677	2511	3767
44	66	48"	3657	5485	3346	5019	2829	4243	2898	4347

\* DIVIDE EQUALLY FRONT AND BACK

ATTACH 2x SCAB OF THE SAME SIZE AND GRADE AS THE BROKEN MEMBER TO EACH FACE OF THE TRUSS (CENTER ON BREAK OR SPLICE) WITH 10d (0.131" X 3") NAILS (TWO ROWS FOR 2x4, THREE ROWS FOR 2x6) SPACED 4" O.C. AS SHOWN. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 0-2-0 O.C. SPACING IN THE MAIN MEMBER. USE A MIN. 0-3-0 MEMBER END DISTANCE.

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)  
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:

$$L = (2) X + C$$

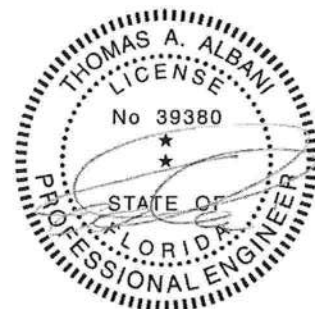


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

## NOTES:

1. THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.
3. THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
4. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x ORIENTATION ONLY.
6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

January 19, 2018

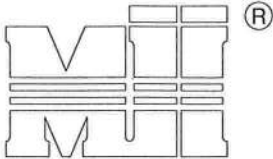
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# TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND1

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Page 1 of 1

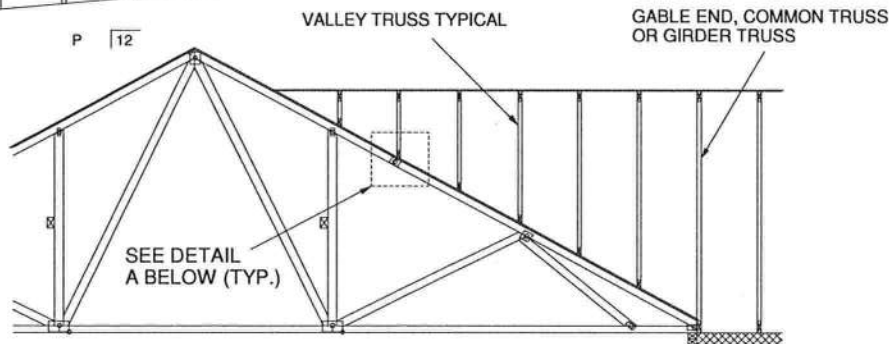
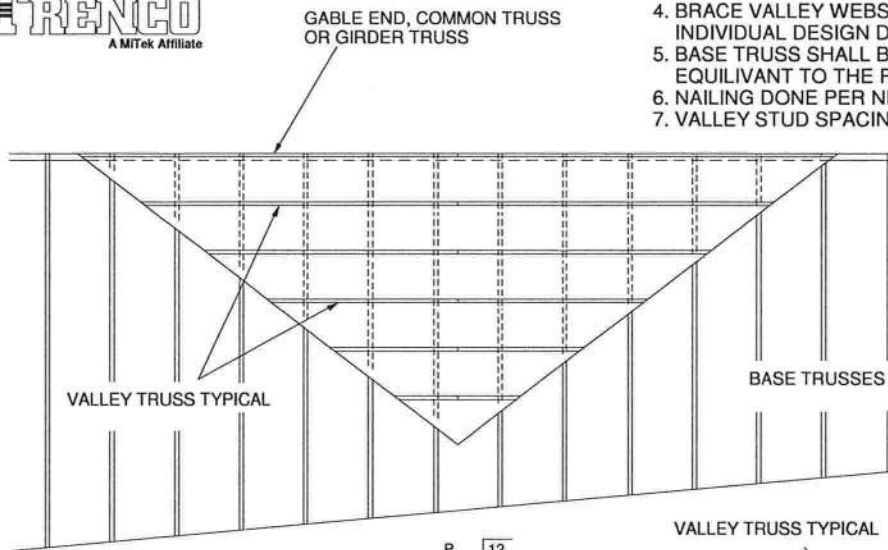


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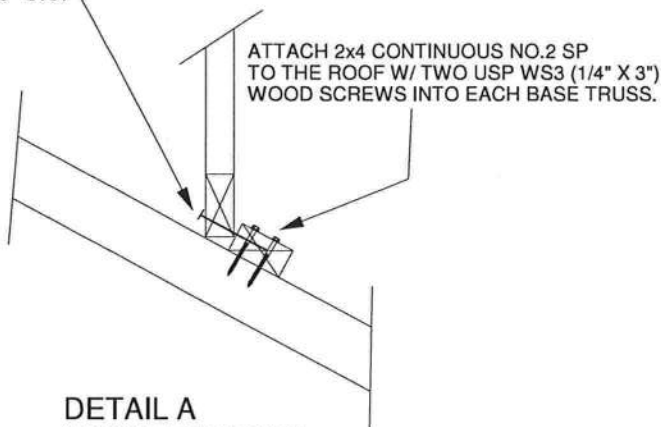
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## GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT  
DO NOT USE DRYWALL OR DECKING TYPE SCREW
3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND  
SECURE PER DETAIL A
4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE  
INDIVIDUAL DESIGN DRAWINGS.
5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING  
EQUIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
6. NAILING DONE PER NDS - 01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.



SECURE VALLEY TRUSS  
W/ ONE ROW OF 10d  
NAILS 6" O.C.



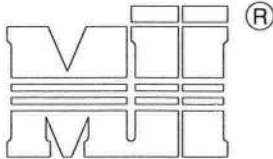
DETAIL A  
(NO SHEATHING)  
N.T.S.

WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH  
WIND DESIGN PER ASCE 7-10 160 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12  
CATEGORY II BUILDING  
EXPOSURE C  
WIND DURATION OF LOAD INCREASE : 1.60  
MAX TOP CHORD TOTAL LOAD = 50 PSF  
MAX SPACING = 24" O.C. (BASE AND VALLEY)  
MINIMUM REDUCED DEAD LOAD OF 6 PSF  
ON THE TRUSSES



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

January 19, 2018

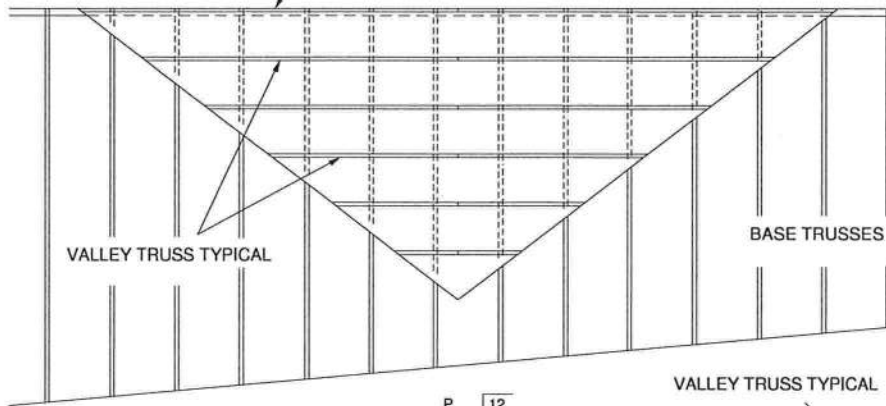


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 ENGINEERED BY  
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## GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVALENT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.

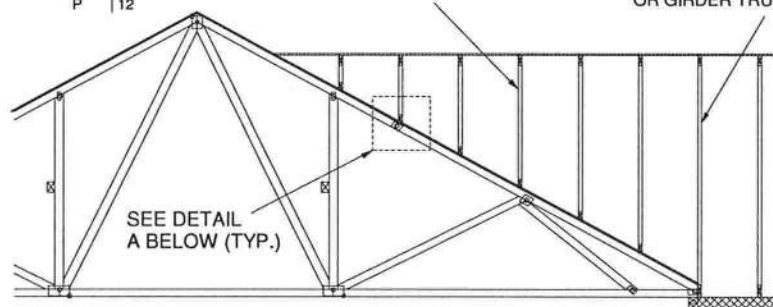
 GABLE END, COMMON TRUSS  
 OR GIRDER TRUSS


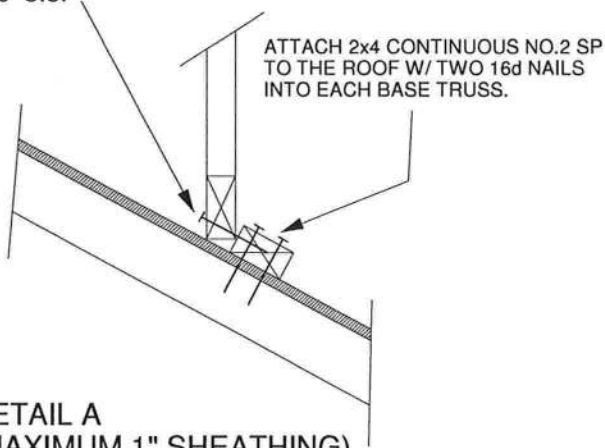
VALLEY TRUSS TYPICAL

BASE TRUSSES

P 12

VALLEY TRUSS TYPICAL

 GABLE END, COMMON TRUSS  
 OR GIRDER TRUSS

 SEE DETAIL  
 A BELOW (TYP.)

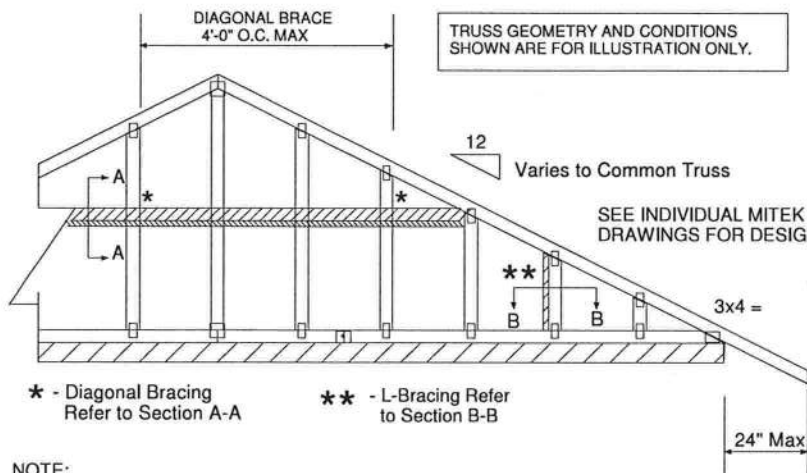
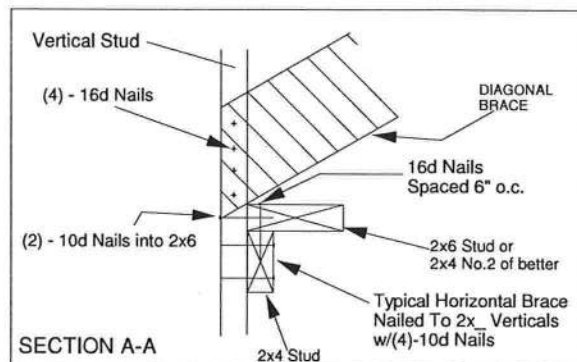
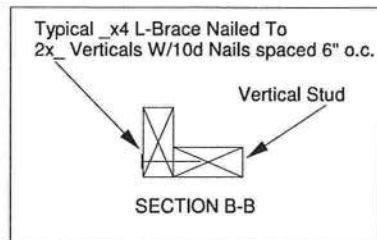
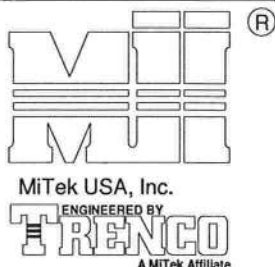
 SECURE VALLEY TRUSS  
 W/ ONE ROW OF 16d  
 NAILS 6" O.C.

 ATTACH 2x4 CONTINUOUS NO.2 SP  
 TO THE ROOF W/ TWO 16d NAILS  
 INTO EACH BASE TRUSS.

 DETAIL A  
 (MAXIMUM 1" SHEATHING)  
 N.T.S.

 WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH  
 WIND DESIGN PER ASCE 7-10 150 MPH  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12  
 CATEGORY II BUILDING  
 EXPOSURE C OR B  
 WIND DURATION OF LOAD INCREASE : 1.60  
 MAX TOP CHORD TOTAL LOAD = 60 PSF  
 MAX SPACING = 24" O.C. (BASE AND VALLEY)  
 MINIMUM REDUCED DEAD LOAD OF 4.2 PSF  
 ON THE TRUSSES

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 MiTek USA, Inc. FL Cert 6634  
 6904 Parke East Blvd. Tampa FL 33610  
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February 12, 2018



\* - Diagonal Bracing  
Refer to Section A-A

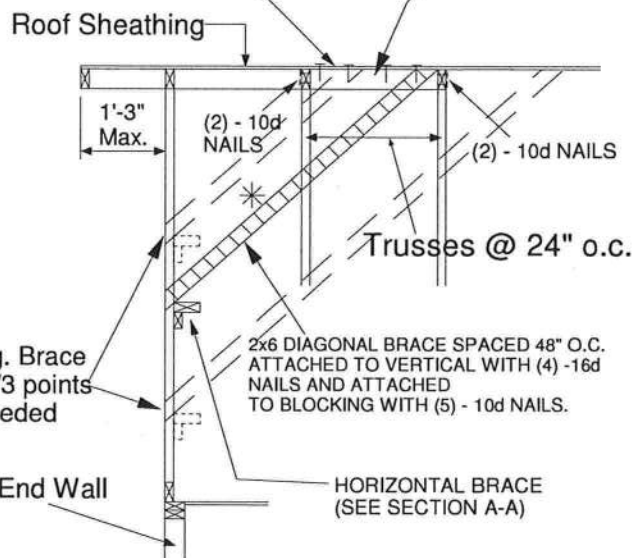
\*\* - L-Bracing Refer  
to Section B-B

## NOTE:

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES:  
2x4 No 3/STUD SP OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SP BLOCK



Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No 3/Stud	12" O.C.	3-11-3	6-8-0	7-2-14	11-9-10
2x4 SP No 3/Stud	16" O.C.	3-6-14	5-9-5	7-1-13	10-8-11
2x4 SP No 3/Stud	24" O.C.	3-1-8	4-8-9	6-2-15	9-4-7

- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

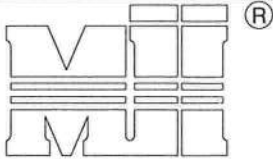
MAXIMUM WIND SPEED = 146 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

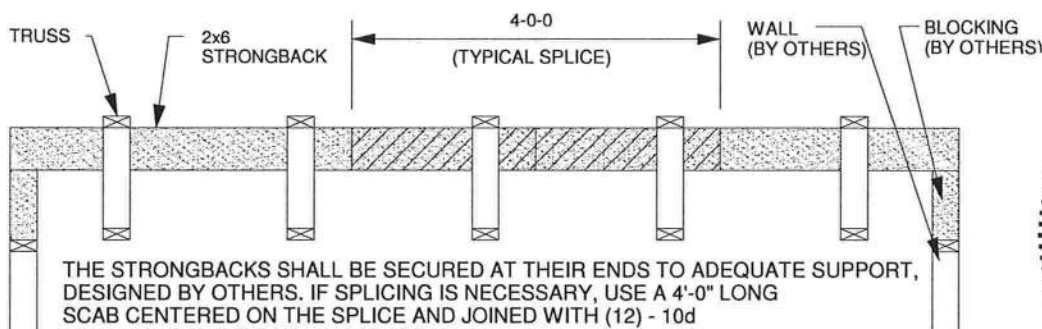
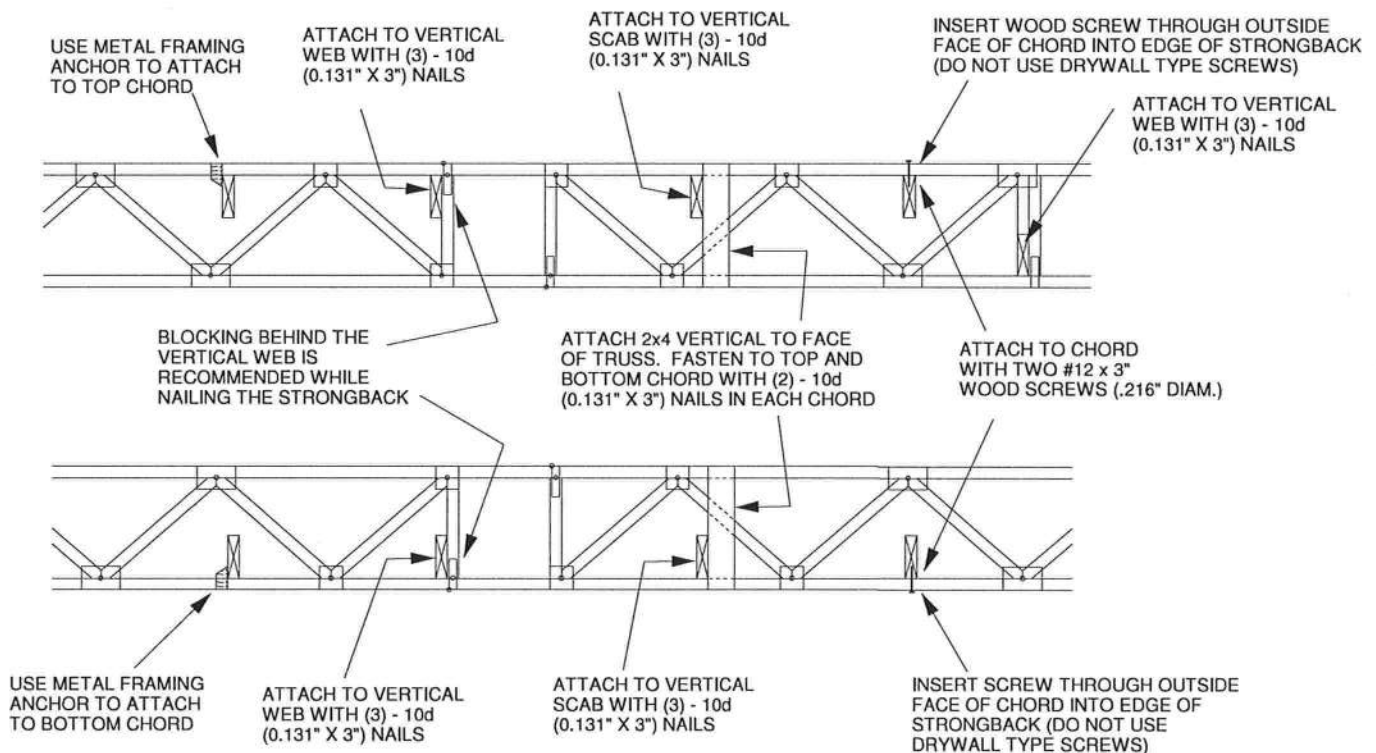
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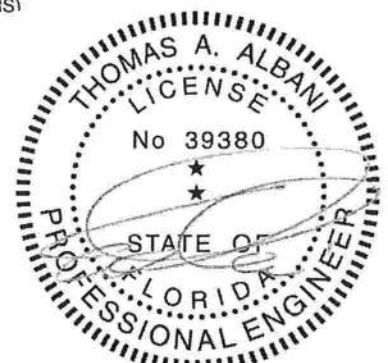
TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.



ALTERNATE METHOD OF SPLICING:  
OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.  
(TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018