



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

# 39052

RE: 2135432 - CHEMERY CONST. - LOT 7 FWS

**MiTek USA, Inc.**

6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: Chemery's Const. Project Name: Spec House Model: Custom  
Lot/Block: 7 Subdivision: Fort White Station  
Address: N/A, 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 21 individual, Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

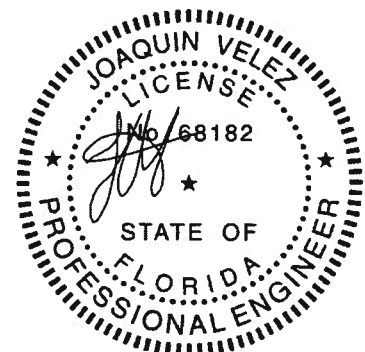
No.	Seal#	Truss Name	Date
1	T19096838	CJ01	1/10/20
2	T19096839	CJ03	1/10/20
3	T19096840	CJ05	1/10/20
4	T19096841	EJ01	1/10/20
5	T19096842	EJ02	1/10/20
6	T19096843	HJ06	1/10/20
7	T19096844	HJ10	1/10/20
8	T19096845	T01	1/10/20
9	T19096846	T02	1/10/20
10	T19096847	T03	1/10/20
11	T19096848	T04	1/10/20
12	T19096849	T04G	1/10/20
13	T19096850	T05	1/10/20
14	T19096851	T05G	1/10/20
15	T19096852	T06	1/10/20
16	T19096853	T07	1/10/20
17	T19096854	T08	1/10/20
18	T19096855	T09	1/10/20
19	T19096856	T10	1/10/20
20	T19096857	T11	1/10/20
21	T19096858	T11G	1/10/20

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:

January 10, 2020

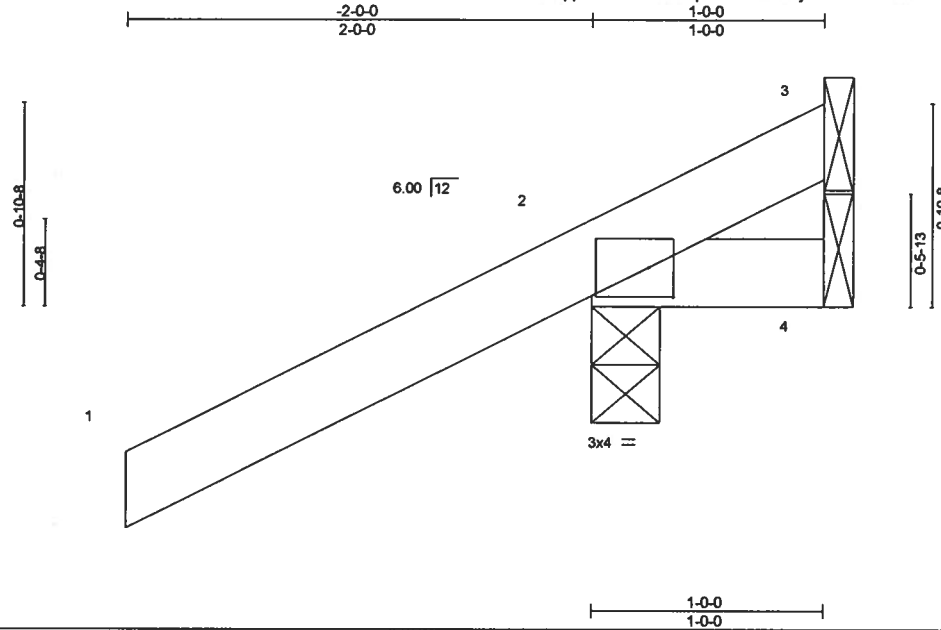
Velez, Joaquin

1 of 1

Job 2135432	Truss CJ01	Truss Type JACK-OPEN	Qty 6	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096838
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:19 2020 Page 1  
ID:5lppGi3mIXfNNmnlqREYFDz9EIn-yGhXv1DfERiif0Z6UbtQHrN11fHhcPK432QBTzwqJ6



Scale = 1:9.5

Plate Offsets (X,Y)--		[2:0-1-4,0-1-9]									
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 0.32	Vert(LL)	0.00	7	>999	240	MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC 0.07	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

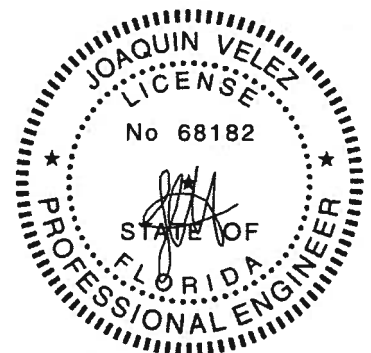
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 1-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=27/Mechanical, 2=254/0-3-8, 4=46/Mechanical  
Max Horz 2=66(LC 12)  
Max Uplift 3=27(LC 1), 2=162(LC 12), 4=46(LC 1)  
Max Grav 3=25(LC 16), 2=254(LC 1), 4=44(LC 16)

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

#### NOTES-

- 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (it=lb) 2=162.



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Date:

January 10,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

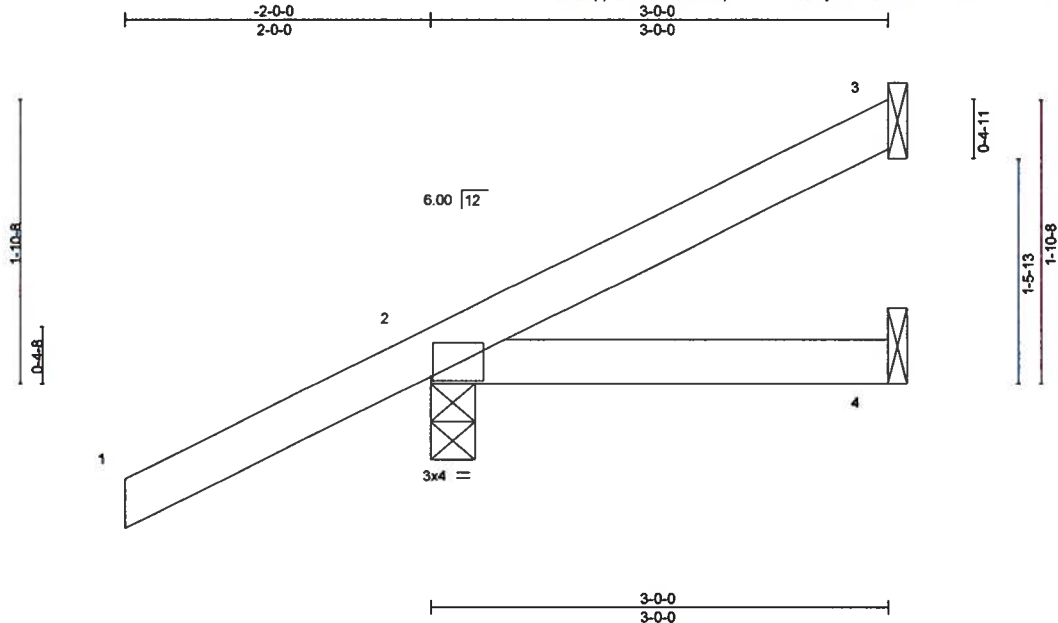
**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss CJ03	Truss Type JACK-OPEN	Qty 6	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096839
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Builders FirstSource, Jacksonville, FL - 32244,

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:20 2020 Page 1  
ID:5ppGi3mIXfNNmnlqREYFDz9EIn-yGhXv1DfERiif0Z6UbtQHrN11fBhcPK432QBSzwqJ6



Scale = 1:14.6

Plate Offsets (X,Y) - [2:0-0-3,0-0-5]							
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 0.32	Vert(LL)	-0.00 4-7	>999	240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.07	Vert(CT)	-0.01 4-7	>999	180	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00 3	n/a	n/a	
BCDL 10.0	Code FBC2017/TP12014	Matrix-MP					Weight: 13 lb FT = 20%

#### LUMBER-

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

#### BRACING-

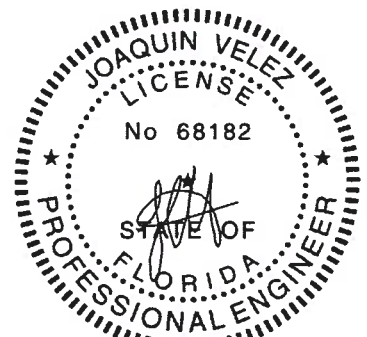
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 3=52/Mechanical, 2=253/0-3-8, 4=20/Mechanical  
Max Horz 2=113(LC 12)  
Max Uplift 3=48(LC 12), 2=126(LC 12)  
Max Grav 3=52(LC 1), 2=253(LC 1), 4=48(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; End., 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
- 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (it=lb) 2=126.



Joaquin Velez PE No.68182  
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Date:

January 10,2020

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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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

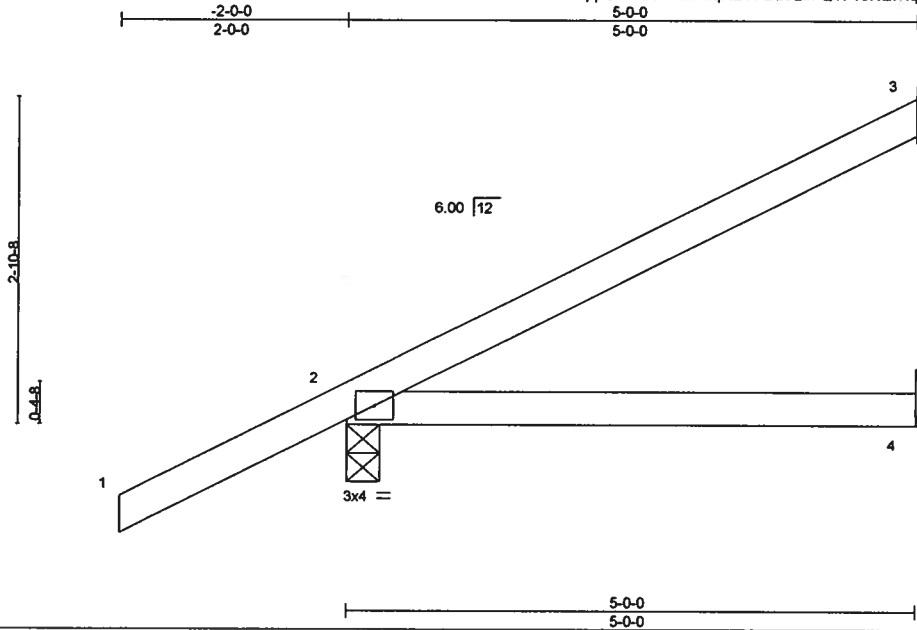
**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss CJ05	Truss Type Jack-Open	Qty 4	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096840
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Builders FirstSource, Jacksonville, FL - 32244,

8,240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:20 2020 Page 1  
ID:5lppGi3mIXNNmnlqREYFDz9Eln-QTFv6NEI?lqZJoblgB66zUOYnRz?Q3eT.JjnzjvzwqJ5



Scale = 1:19.5

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.32	Vert(LL) 0.03 4-7 >999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.23	Vert(CT) -0.05 4-7 >999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00 3 n/a	n/a		
BCDL 10.0	Code FBC2017/TP12014	Matrix-MP			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 or 5-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 3=108/Mechanical, 2=313/0-3-8, 4=53/Mechanical  
Max Horz 2=162(LC 12)  
Max Uplift 3=98(LC 12), 2=137(LC 12), 4=1(LC 12)  
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

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

**NOTES-**

- 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., GCp=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
- 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=137.



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Date:

January 10,2020

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**MiTek**

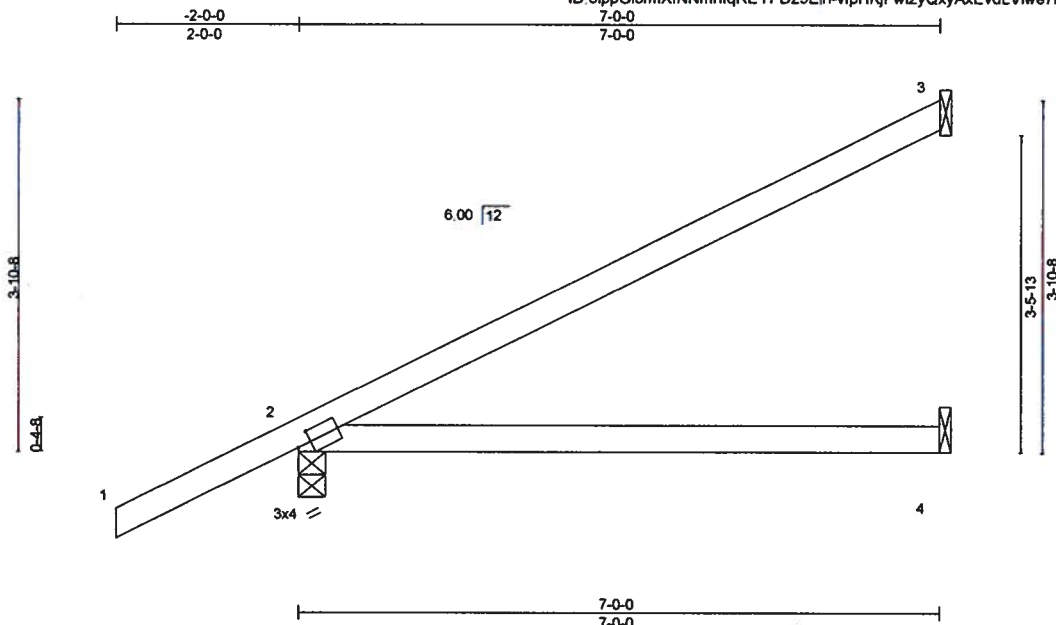
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss EJ01	Truss Type Jack-Partial	Qty 5	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096841
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Builders FirstSource, Jacksonville, FL - 32244

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:21 2020 Page 1

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Scale: 1/2"=1'

Plate Offsets (X,Y) - [2-0-1-13,0-1-8]									
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 0.67	Vert(LL) 0.12	4-7	>670	240		MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.51	Vert(CT) -0.21	4-7	>393	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/TP12014	Matrix-MS						Weight: 26 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

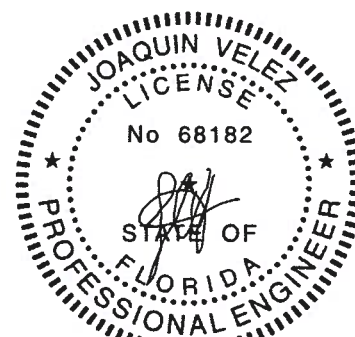
#### REACTIONS.

(lb/size) 3=160/Mechanical, 2=380/0-3-8, 4=81/Mechanical  
Max Horz 2=144(LC 12)  
Max Uplift 3=94(LC 12), 2=81(LC 12)  
Max Grav 3=160(LC 1), 2=380(LC 1), 4=125(LC 3)

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

#### NOTES-

- 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) 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
- 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



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

January 10,2020

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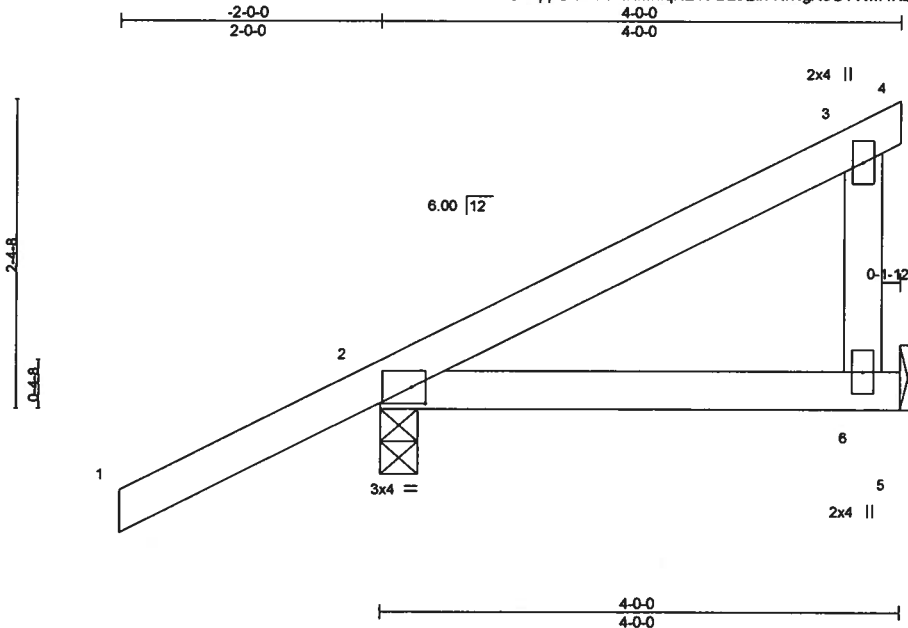
6904 Parke East Blvd.  
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096842
2135432	EJ02	Jack-Closed	11	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MITek Industries, Inc. Fri Jan 10 07:27:22 2020 Page 1

ID:5ippGi3mIXfNNmnlqREYFDz9Ein-NrNgX3GYWM4HZ6I7oc8a2vTuHFgdz8mm1G4nozwqJ3



Scale = 1:17.0

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

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 0.32	Vert(LL)	0.02 6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.16	Vert(CT)	0.02 6-9	>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: 19 lb	FT = 20%

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

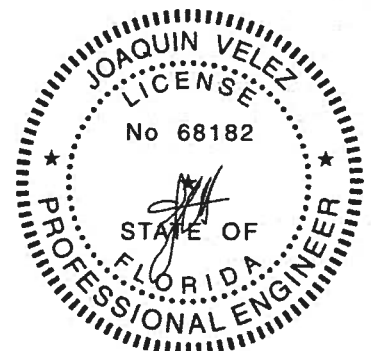
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 6=118/Mechanical, 2=274/0-3-8  
Max Horz 2=138(LC 12)  
Max Uplift 6=80(LC 9), 2=125(LC 12)

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

#### NOTES-

- 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=125.



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

January 10,2020

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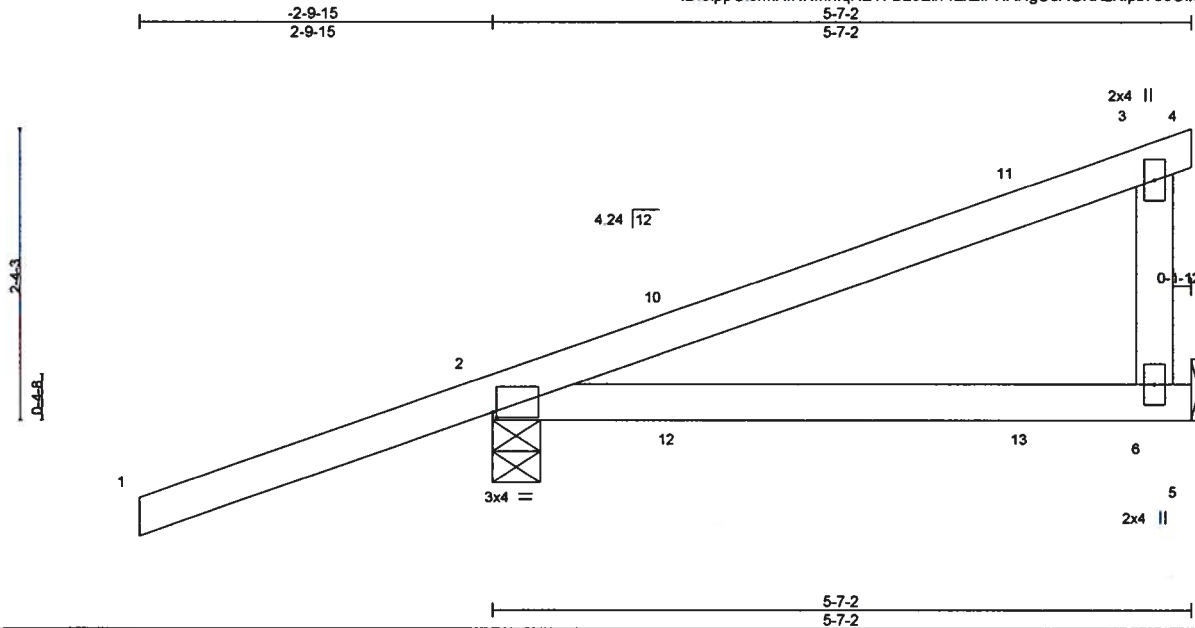
**MITek**

6904 Parke East Blvd.  
Tampa, FL 36610

Job 2135432	Truss HJ06	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096843
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8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:23 2020 Page 1  
ID:5lppGi3mIXfNNmnlqREYFDz9EIn-r2x2IPHAHgC8AGKKLkfbp700OfxrdQOv?h0dKEzwqJ2



Scale = 1:17.8

Plate Offsets (X,Y)--		[2:0-0-6,0-0-8]													
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES		GRIP	
TCCL	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	-0.10	6-9	>669	240		MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.10	6-9	>663	180					
BCCL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	2	n/a	n/a					
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MP											
												Weight: 24 lb		FT = 20%	

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-7-2 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 6=128/Mechanical, 2=303/0-4-9  
Max Horz 2=160(LC 4)  
Max Uplift 6=93(LC 5), 2=234(LC 4)

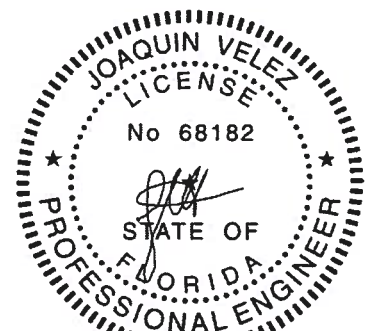
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

#### NOTES-

- 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
- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=234.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 83 lb down and 103 lb up at 1-6-1, and 83 lb down and 103 lb up at 1-6-1, and 25 lb down and 38 lb up at 4-4-0 on top chord, and 69 lb down and 74 lb up at 1-6-1, 69 lb down and 74 lb up at 1-6-1, and 56 lb down and 2 lb up at 4-4-0, and 56 lb down and 2 lb up at 4-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=54, 3-4=14, 5-7=20  
Concentrated Loads (lb)  
Vert: 10=50(F=25, B=25) 12=70(F=35, B=35) 13=5(F=2, B=2)



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

January 10,2020

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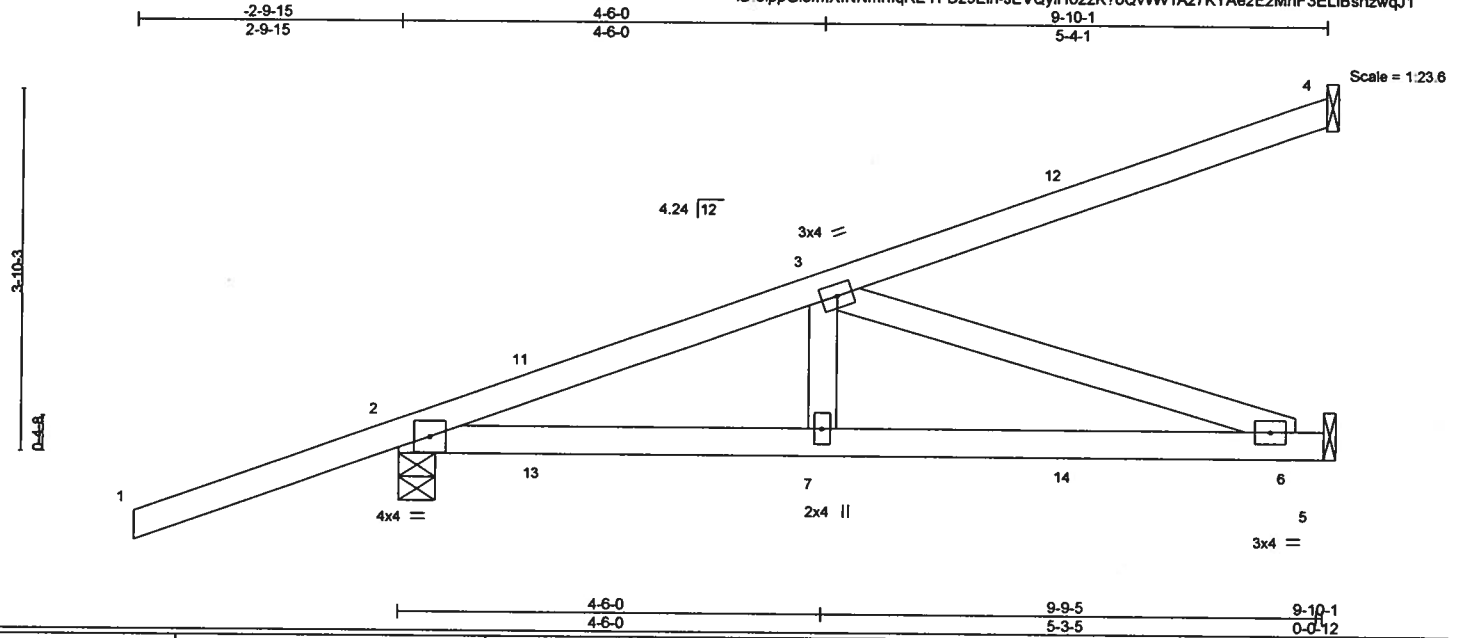
6904 Parke East Blvd.  
Tampa, FL 33610



Job 2135432	Truss HJ10	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096844
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:24 2020 Page 1  
ID:5lppGi3mIXfNNmnlqREYFDz9ElN-JEVQyIHozK?oQvVwV1A27KYAe2E2MnF3ELIBshwqJ1



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 0.59	Vert(LL)	0.06	6-7	>999	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	-0.12	6-7	>967		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.35	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 44 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

REACTIONS. (lb/size) 4=150/Mechanical, 2=463/0-4-9, 5=251/Mechanical  
Max Horz 2=233(LC 22)  
Max Uplift 4=141(LC 4), 2=264(LC 4), 5=103(LC 8)  
Max Grav 4=150(LC 1), 2=463(LC 1), 5=266(LC 3)

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

TOP CHORD 2-3=628/252  
BOT CHORD 2-7=327/573, 6-7=327/573  
WEBS 3-6=603/345

#### NOTES-

- 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; 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 4=141, 2=264, 5=103.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 103 lb up at 1-6-1, 86 lb down and 103 lb up at 1-6-1, 26 lb down and 38 lb up at 4-4-0, 26 lb down and 38 lb up at 4-4-0, and 50 lb down and 97 lb up at 7-1-15, and 50 lb down and 97 lb up at 7-1-15 on top chord, and 36 lb down and 74 lb up at 1-6-1, 36 lb down and 74 lb up at 1-6-1, 28 lb down and 2 lb up at 4-4-0, 28 lb down and 2 lb up at 4-4-0, and 44 lb down and 15 lb up at 7-1-15, and 44 lb down and 15 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=5(F=2, B=2) 11=50(F=25, B=25) 12=64(F=32, B=32) 13=70(F=35, B=35) 14=49(F=24, B=24)



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

January 10, 2020

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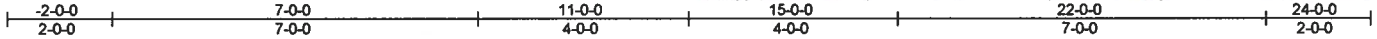


Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096845
2135432	T01	Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:25 2020 Page 1

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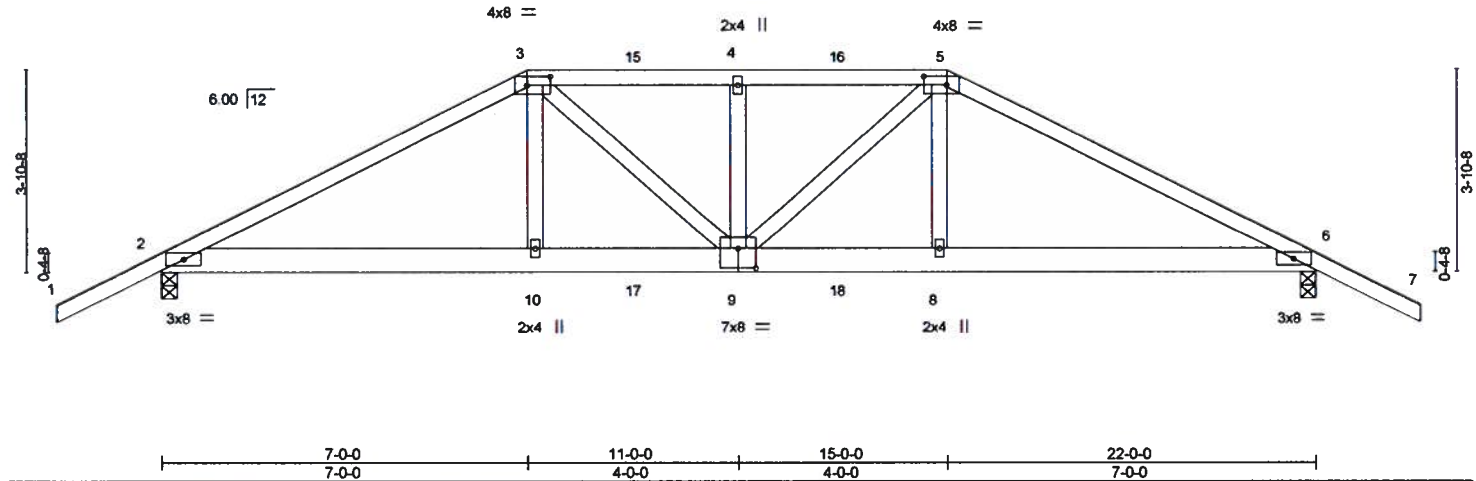


Plate Offsets (X,Y)=[3:0-5-4,0-2-0], [5:0-5-4,0-2-0], [9:0-4-0,0-4-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.95	Vert(LL)	-0.11 9	>999	240
TCDL	7.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.20 9	>999	180
BCLL	0.0	Rep Stress Incr	NO	WB	0.24	Horz(CT)	0.06 6	n/a	n/a
BCDL	10.0	Code	FBC2017/TP12014	Matrix-MS				Weight: 122 lb FT = 20%	

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 8-2-9 oc bracing.

#### REACTIONS.

(lb/size) 2=1586/0-3-8, 6=1613/0-3-8  
Max Horz 2=61(LC 6)  
Max Uplift 2=495(LC 8), 6=534(LC 9)

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

TOP CHORD 2-3=2831/898, 3-4=2831/954, 4-5=2831/954, 5-6=2890/982  
BOT CHORD 2-10=752/2460, 9-10=755/2482, 8-9=800/2534, 6-8=797/2513  
WEBS 3-10=93/624, 3-9=267/564, 4-9=465/267, 5-9=143/480, 5-8=91/623

#### NOTES-

- 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); 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=495, 6=534.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 100 lb up at 7-0-0, 106 lb down and 100 lb up at 9-0-12, 106 lb down and 100 lb up at 11-0-0, and 106 lb down and 100 lb up at 12-11-4, and 227 lb down and 250 lb up at 15-0-0 on top chord, and 294 lb down and 131 lb up at 7-0-0, 85 lb down at 9-0-12, 85 lb down at 11-0-0, and 85 lb down at 12-11-4, and 294 lb down and 131 lb up at 14-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

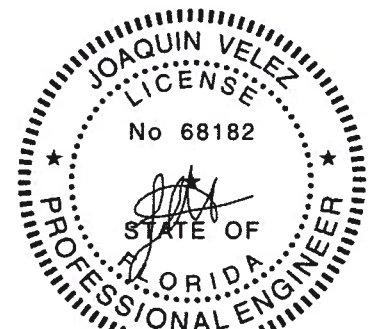
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-3=54, 3-5=54, 5-7=54, 2-6=20

Concentrated Loads (lb)

Vert: 3=106(F) 5=180(F) 10=284(F) 9=61(F) 4=106(F) 8=284(F) 15=106(F) 16=106(F) 17=61(F) 18=61(F)



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

January 10,2020

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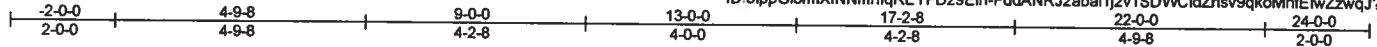


6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss T02	Truss Type Hip	Qty 1	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096846
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:26 2020 Page 1  
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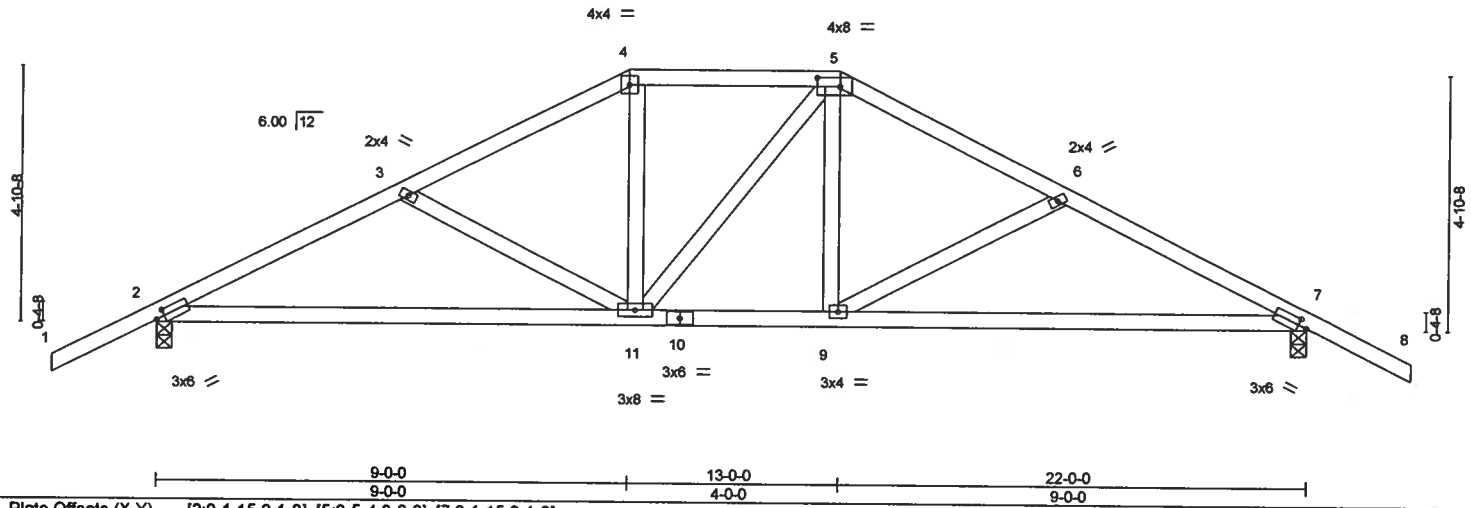


Plate Offsets (X,Y)- [2.0-1-15,0-1-8], [5.0-5-4,0-2-0], [7.0-1-15,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.25		TC	0.42	Vert(LL)	-0.16 9-17 >999	240	MT20 244/190
TCDL	7.0	Lumber DOL 1.25		BC	0.69	Vert(CT)	-0.32 9-17 >823	180	
BCLL	0.0 *	Rep Stress Incr YES		WB	0.15	Horz(CT)	0.04 7 n/a	n/a	
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS					
								Weight: 111 lb FT = 20%	

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

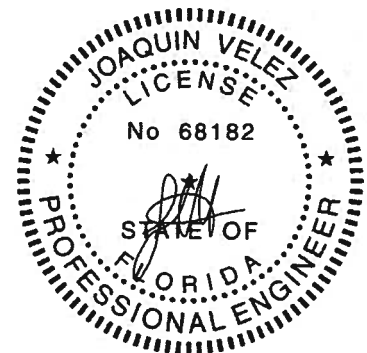
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 7-11-15 oc bracing.

**REACTIONS.** (lb/size) 2=922/0-3-8, 7=922/0-3-8  
Max Horz 2=75(LC 10)  
Max Uplift 2=199(LC 12), 7=199(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=1378/742, 3-4=1115/596, 4-5=952/583, 5-6=1114/595, 6-7=1378/742  
BOT CHORD 2-11=513/1207, 9-11=294/951, 7-9=539/1207  
WEBS 3-11=300/281, 4-11=90/318, 5-9=97/318, 6-9=300/281

#### NOTES-

- 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 reactions 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=199, 7=199.



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

January 10,2020

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Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096847
2135432	T03	Common	6	1		

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8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:27 2020 Page 1  
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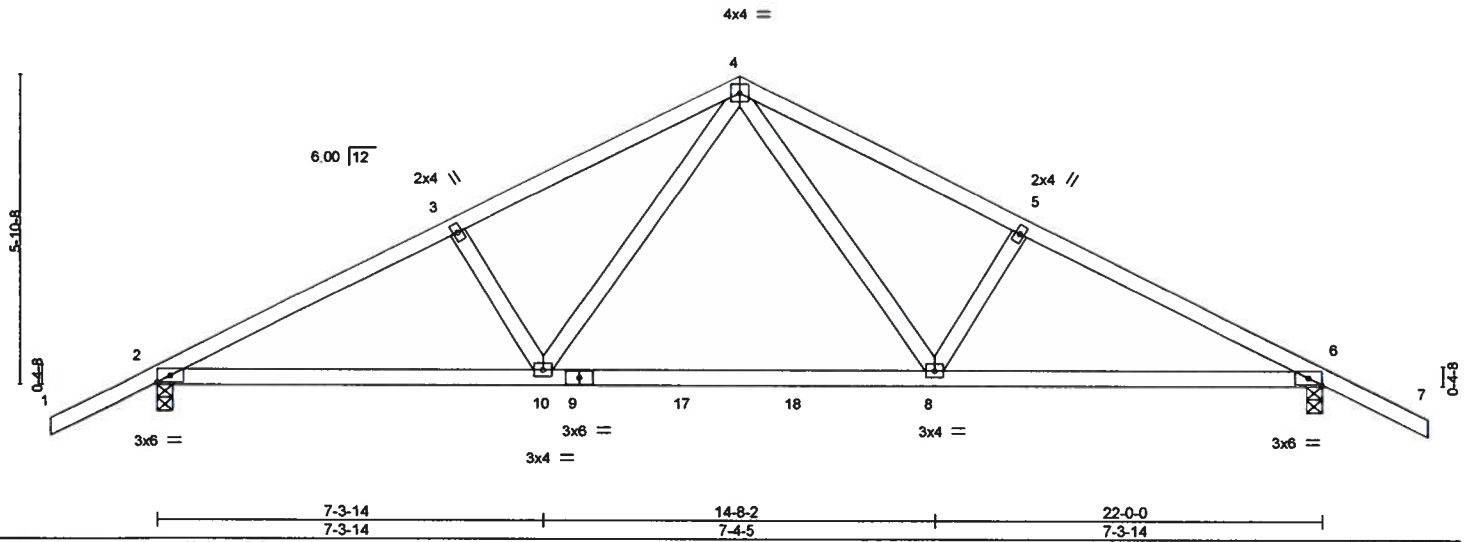
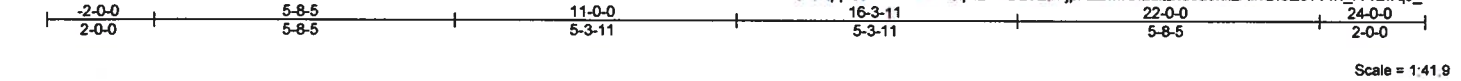


Plate Offsets (X,Y) - [6:0-2-15,Edge]		7-3-14		14-8-2		22-0-0	
		7-3-14		7-4-5		7-3-14	
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.47	Vert(LL)	0.22 8-10	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.46	Vert(CT)	-0.36 8-10	>742	180
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.35	Horz(CT)	0.04 6	n/a	n/a
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS				
				Weight: 105 lb FT = 20%			

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP M 31  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-9-10 oc bracing.

**REACTIONS.** (lb/size) 2=1143/0-3-8, 6=1143/0-3-8  
Max Horz 2=88(LC 11)  
Max Uplift 2=267(LC 12), 6=267(LC 13)

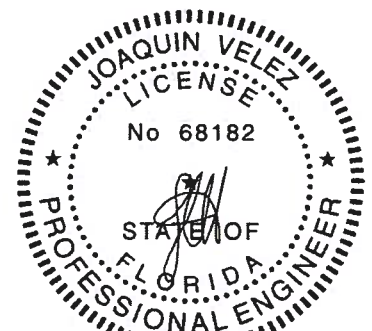
**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=1913/1009, 3-4=1770/1009, 4-5=1770/1009, 5-6=1913/1009  
BOT CHORD 2-10=745/1655, 8-10=396/1111, 6-8=765/1655  
WEBS 4-8=406/757, 5-8=268/285, 4-10=406/757, 3-10=268/285

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCCL=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, with BCCL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=267, 6=267.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-80(F=-60), 8-14=-20



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

January 10,2020

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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, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss T04	Truss Type COMMON	Qty 3	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096848
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:28 2020 Page 1

ID: 5lppGi3miXfNNmnlqREYFDz9Eln-B7kx06KJ6CqQH1CH8tF\_IjvXfgElf6e8yjO\_Szwqlz

Job Reference (optional)



Scale = 1:22.4

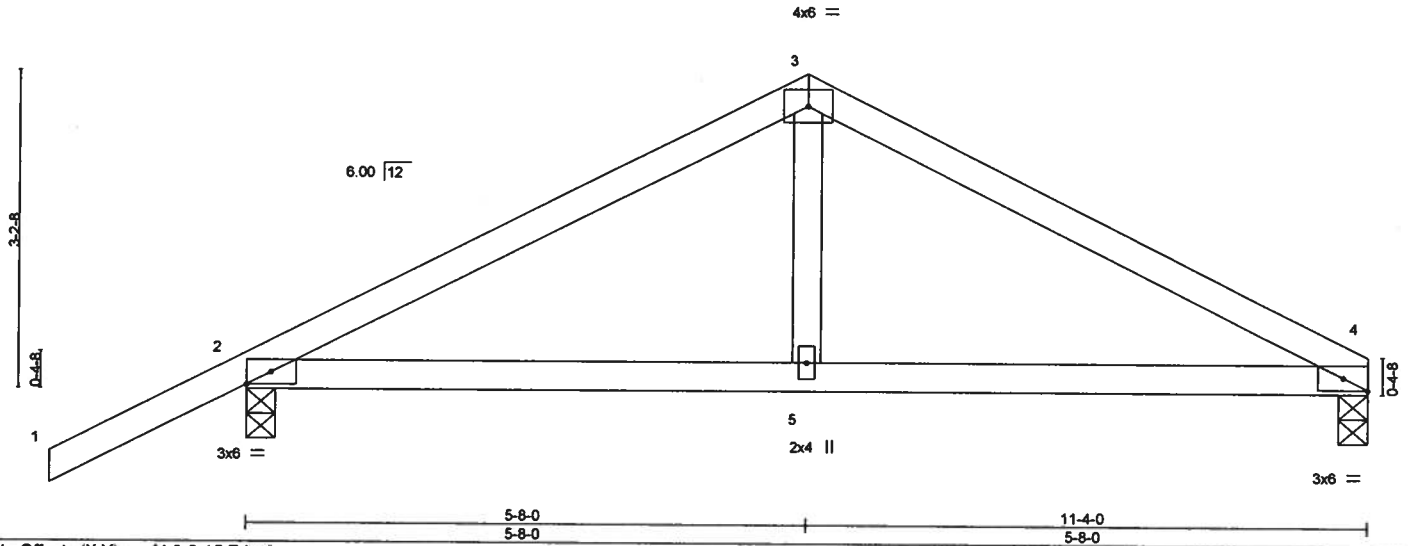


Plate Offsets (X,Y) - [4:0-2-15, Edge]

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.34		Vert(LL)	0.05	5-8	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.33		Vert(CT)	-0.07	5-8	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.10		Horz(CT)	0.01	4	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS								
										Weight: 43 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

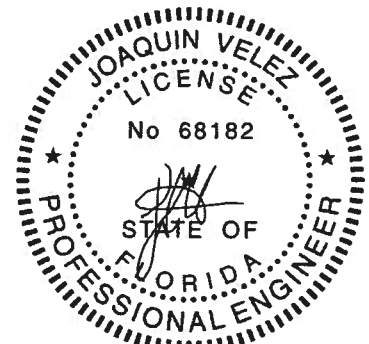
(lb/size) 4=410/0-3-8, 2=537/0-3-8  
Max Horz 2=101(LC 12)  
Max Uplift 4=154(LC 13), 2=231(LC 12)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=571/342, 3-4=567/338  
BOT CHORD 2-5=201/455, 4-5=201/455  
WEBS 3-5=25/255

#### NOTES-

- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=154, 2=231.



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

January 10, 2020

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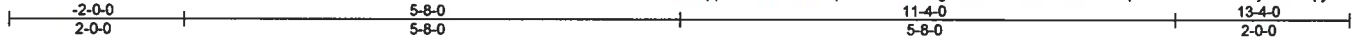
**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss T04G	Truss Type Common Supported Gable	Qty 1	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096849
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Builders FirstSource, Jacksonville, FL - 32244,

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:29 2020 Page 1  
ID: 5lppGi3mIXfNNmnlqREYFDz9EIn-gCIJ?SLxtWzHuBnUiamDqOF5f34L172oNcTyWuzwqly



Scale = 1:25.4

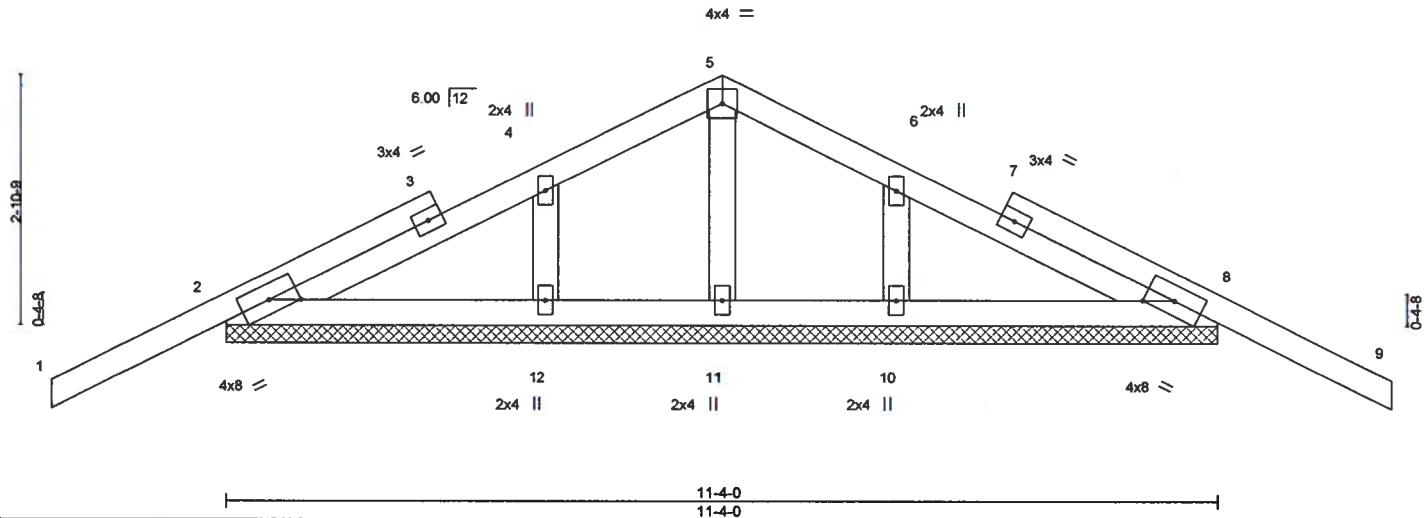


Plate Offsets (X,Y) - [2:0-4-0,0-1-15], [8:0-4-0,0-1-15]							
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	L/d	PLATES
TCLL 20.0	Plate Grip DOL 1.25	TC 0.31	Vert(LL)	-0.02	9	n/r	MT20
TCDL 7.0	Lumber DOL 1.25	BC 0.09	Vert(CT)	-0.02	9	n/r	GRIP 244/190
BCLL 0.0	Rep Stress Incr YES	WB 0.05	Horz(CT)	0.00	8	n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-S					Weight: 56 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 6-0-0 oc bracing.

#### REACTIONS.

All bearings 11-4-0.  
(lb) - Max Horz 2=47(LC 11)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 10  
Max Grav All reactions 250 lb or less at joint(s) 11, 12, 10 except 2=258(LC 23), 8=258(LC 24)

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

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 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
- 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.
- 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.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8, 12, 10.



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

January 10, 2020

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**MiTek**

6904 Parke East Blvd.  
Tampa, FL 36610



Job 2135432	Truss T05	Truss Type Roof Special	Qty 1	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096850
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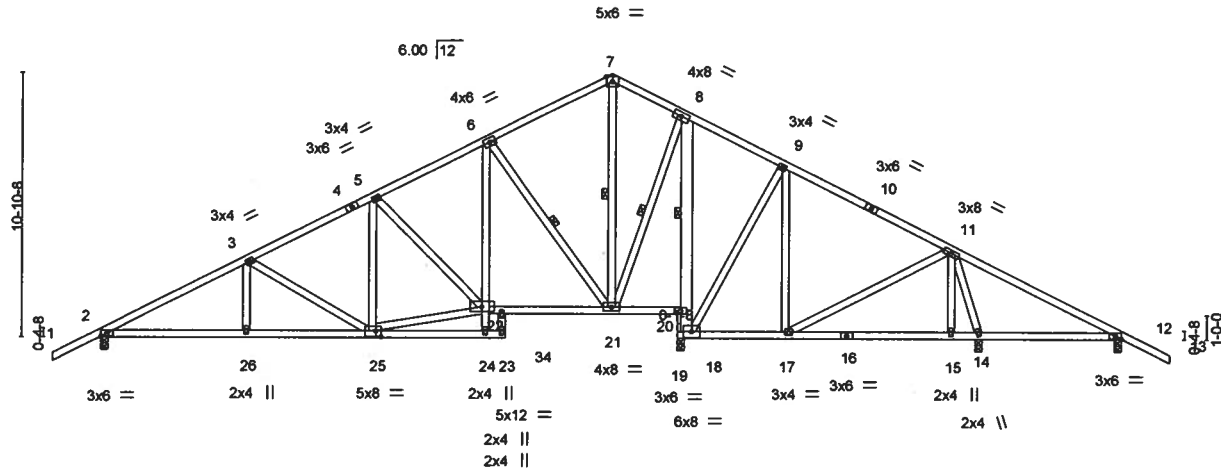
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:31 2020 Page 1

ID:5lppGi3mIXfNNmnlqREYFDz9EIn-caQ3Q8NBP7D?8Vxsp?ohvpLOEdtVWvX5rwy3bnzwlw

2-0-0	6-0-0	11-2-4	16-0-0	21-0-0	23-8-8	28-1-12	35-0-0	42-0-0	44-0-0	2-0-0
2-0-0	6-0-0	5-2-4	4-9-12	5-0-0	2-8-8	4-5-4	6-10-4	7-0-0		

Scale = 1:91.1



6-0-0	11-2-4	16-0-0	16-8-0	21-0-0	23-8-8	28-1-12	35-0-0	36-3-8	42-0-0
6-0-0	5-2-4	4-9-12	0-8-0	4-4-0	2-8-8-0-11-12	4-3-8	6-10-4	1-3-8	5-8-8

Plate Offsets (X,Y)- [12:0-2-15,Edge], [25:0-2-12,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.50	Vert(LL)	0.10 25-26	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.62	Vert(CT)	-0.10 25-26	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.02 12	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
Weight: 291 lb									FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 "Except"  
6-24: 2x4 SP No.3, 8-18: 2x6 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-11 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-9-15 oc bracing. Except:  
1 Row at midpt 8-20  
6-0-0 oc bracing: 18-20  
10-0-0 oc bracing: 22-24  
WEBS 1 Row at midpt 6-21, 7-21, 8-21

#### REACTIONS.

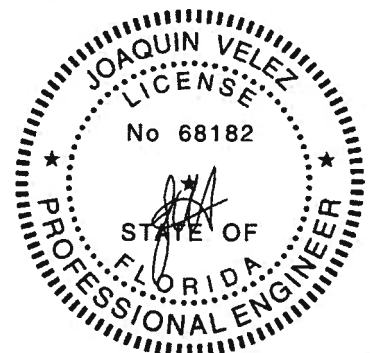
All bearings 0-3-8.  
(lb) - Max Horz 2=242(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) except 2=427(LC 9), 18=527(LC 9), 14=317(LC 13), 12=189(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) except 2=923(LC 1), 18=1593(LC 1), 14=589(LC 24), 12=321(LC 24)

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

TOP CHORD 2-3=1389/1599, 3-5=949/1181, 5-6=636/889, 6-7=175/426, 7-8=172/441,  
8-9=32/395, 9-11=202/278  
BOT CHORD 2-26=1369/1186, 25-26=1369/1186, 6-22=729/579, 21-22=364/581, 20-21=242/482,  
18-20=1181/1081, 8-20=1138/1011, 17-18=98/255  
WEBS 3-25=458/609, 5-25=312/241, 22-25=785/776, 5-22=386/556, 6-21=766/945,  
8-21=764/881, 9-18=457/386, 9-17=101/298, 11-14=478/272

#### NOTES-

- 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; 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 427 lb uplift at joint 2, 527 lb uplift at joint 18, 317 lb uplift at joint 14 and 189 lb uplift at joint 12.



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

January 10,2020

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6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096851
2135432	T05G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:5ppGi3mIXfNNmnlqREYFDz9Eln-ULfaGWQiSMjRc6Ed2nd4V34U01ReyglYwGkYzwqls

2-0-0	5-8-0	11-2-4	15-10-4	19-0-0	21-0-0	23-0-0	25-10-14	28-1-12	35-0-0	42-0-0	44-0-0
2-0-0	5-8-0	5-6-4	4-8-0	3-1-12	2-0-0	2-0-0	2-10-14	2-2-14	6-10-4	7-0-0	2-0-0

Scale = 1:82.3

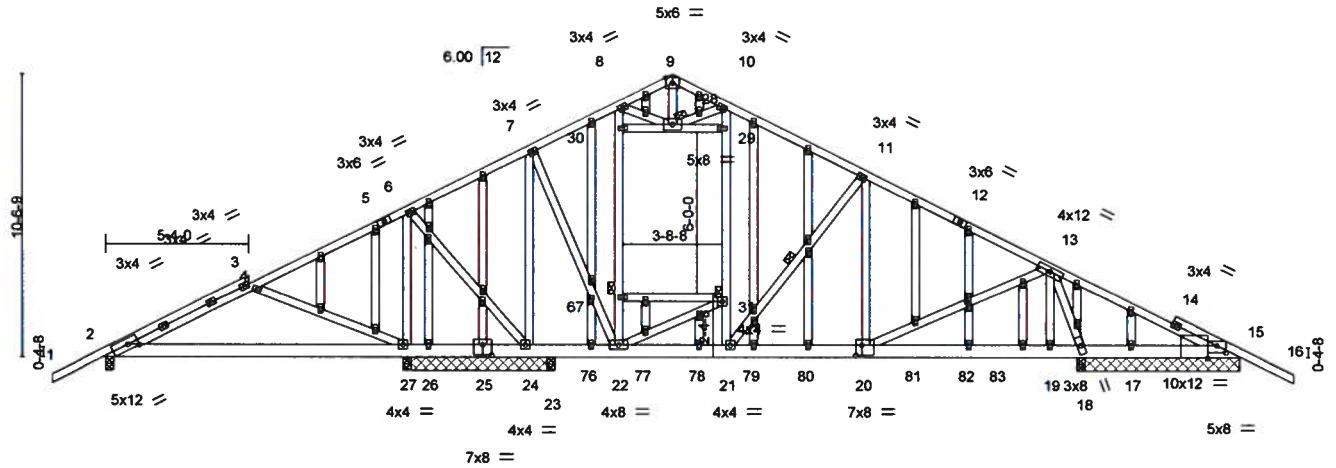


Plate Offsets (X,Y)-	[2:0-4-12,Edge], [15:0-4-0,Edge], [15:0-4-0,0-3-1], [20:0-2-12,0-4-8], [25:0-4-0,0-4-8], [39:0-1-13,0-1-0]
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	0.12 20-21	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.52	Vert(CT)	-0.14 20-21	>999	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.86	Horz(CT)	0.02 18	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 412 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-7-8 oc purlins.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.3	6-0-0 oc bracing: 17-18,15-17.
OTHERS 2x4 SP No.3	1 Row at midpt 11-21
	JOINTS 1 Brace at Jt(s): 28, 31, 67

**REACTIONS.** All bearings 0-3-8 except (jt=length) 24=5-7-8, 27=5-7-8, 27=5-7-8, 17=6-0-0, 15=6-0-0, 26=5-7-8, 15=6-0-0.  
 (lb) - Max Horz 2=235(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) except 2=272(LC 4), 24=542(LC 8), 27=643(LC 5), 17=151(LC 23), 15=136(LC 24), 26=423(LC 13), 23=282(LC 20), 18=1267(LC 9)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 15, 23, 15 except 2=653(LC 1), 24=846(LC 1), 27=1237(LC 1), 27=1237(LC 1), 26=373(LC 24), 18=2025(LC 1), 18=2025(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-4=780/693, 4-6=404/348, 6-7=694/580, 7-8=917/739, 8-9=501/399,  
 9-10=482/379, 10-11=1043/751, 11-13=1326/839, 13-15=458/733  
 BOT CHORD 2-27=372/706, 26-27=85/336, 24-26=85/336, 23-24=135/579, 22-23=135/579,  
 21-22=297/916, 20-21=461/1114, 17-18=594/527, 15-17=594/527  
 WEBS 9-28=325/361, 11-21=416/382, 13-20=585/1097, 13-19=188/293, 7-22=263/567,  
 6-24=204/404, 6-27=734/412, 4-27=441/339, 7-24=807/478, 13-18=1958/1257,  
 21-31=307/409, 29-31=245/339, 10-29=246/339, 8-28=266/280, 10-28=647/542

- NOTES-**
- 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) 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.
  - 4) na
  - 5) All plates are 2x4 MT20 unless otherwise indicated.
  - 6) Gable studs spaced at 2-0-0 oc.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - 9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
  - 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 272 lb uplift at joint 2, 542 lb uplift at joint 24, 643 lb uplift at joint 27, 151 lb uplift at joint 17, 136 lb uplift at joint 15, 423 lb uplift at joint 26, 282 lb uplift at joint 23, 1267 lb uplift at joint 18 and 136 lb uplift at joint 15.



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

January 10,2020

Continued on page 2

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
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**MiTek**  
 6904 Parke East Blvd.  
 Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096851
2135432	T05G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID:5lppGi3mIXfNNmnlqREYFDz9EIn-ULfaGWQISMJRc6Ed2td4fV34U01ReygyYwGkYzwqls

#### NOTES-

- 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 98 lb down and 100 lb up at 11-10-3, 98 lb down and 100 lb up at 13-10-3, 98 lb down and 100 lb up at 15-10-3, 98 lb down and 100 lb up at 17-10-3, 98 lb down and 100 lb up at 19-10-3, 98 lb down and 100 lb up at 21-10-3, 98 lb down and 100 lb up at 23-10-3, 98 lb down and 100 lb up at 25-10-3, 98 lb down and 100 lb up at 27-10-3, 98 lb down and 100 lb up at 29-10-3, and 98 lb down and 100 lb up at 31-10-3, and 102 lb down and 128 lb up at 33-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

##### Uniform Loads (plf)

Vert: 1-3=54, 3-4=54, 4-9=54, 9-16=54, 2-75=20

##### Concentrated Loads (lb)

Vert: 20=98(F) 24=98(F) 26=98(F) 25=98(F) 76=98(F) 77=98(F) 78=98(F) 79=98(F) 80=98(F) 81=98(F) 82=98(F) 83=100(F)



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6904 Parke East Blvd.  
Tampa, FL 36610

Job 2135432	Truss T06	Truss Type Roof Special	Qty 3	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096852
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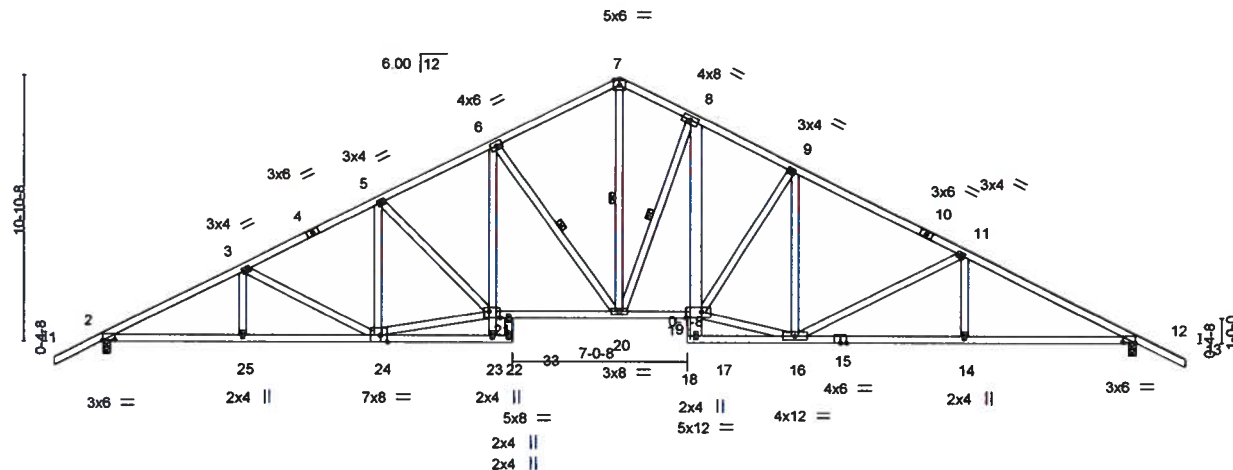
Builders FirstSource, Jacksonville, FL - 32244,

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:37 2020 Page 1

ID:5ppGi3mIXfNNmnlqREYFDz9EIn-RknKhBRy\_zz9sQ00AGv594bOCleMvYgzDsPNoQzwqlq

2-0-0	5-8-0	11-2-12	16-0-0	21-0-0	28-1-12	35-0-0	42-0-0	44-0-0
2-0-0	5-8-0	5-6-12	4-9-4	5-0-0	7-1-12	6-10-4	7-0-0	2-0-0

Scale = 1:90.4



<div><div></div><div>5-8-0</div><div>11-2-12</div><div>16-0-0</div><div>16-8-0</div><div>21-0-0</div><div>23-8-8</div><div>28-1-12</div><div>35-0-0</div><div>42-0-0</div></div>										
<div><div></div><div>5-8-0</div><div>5-6-12</div><div>4-9-4</div><div>0-8-0</div><div>4-4-0</div><div>2-8-8</div><div>4-5-4</div><div>6-10-4</div><div>7-0-0</div></div>										
Plate Offsets (X,Y)– [2:0-6-0,0-0-3], [12:0-6-0,0-0-3], [19:0-7-8,0-3-0], [21:0-5-8,0-3-4], [24:0-3-4,Edge]										
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 0.60		Vert(LL) 0.24 22		>999 240		MT20 244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.72		Vert(CT) -0.44 20-21		>999 180		
BCLL 0.0 *		Rep Stress Incr YES		WB 0.84		Horz(CT) 0.18 12		n/a n/a		
BCDL 10.0		Code FBC2017/TP12014		Matrix-MS						
										Weight: 291 lb FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
6-23: 2x4 SP No.3, 8-17: 2x6 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 5-3-4 oc bracing. Except:  
10-0-0 oc bracing: 21-23, 17-19  
WEBS 1 Row at midpt 6-20, 7-20, 8-20

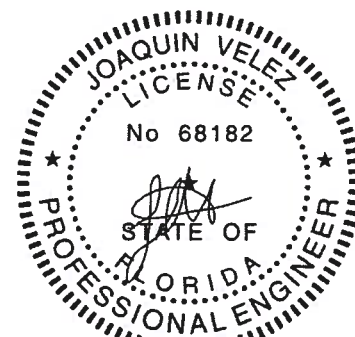
REACTIONS. (lb/size) 2=1675/0-3-8, 12=1672/0-3-8  
Max Horz 2=242(LC 13)  
Max Uplift 2=645(LC 12), 12=646(LC 13)

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

TOP CHORD 2-3=3037/1569, 3-5=2617/1421, 5-6=2541/1422, 6-7=2000/1214, 7-8=1954/1229,  
8-9=2296/1349, 9-11=2433/1347, 11-12=2991/1550  
BOT CHORD 2-25=1234/2659, 24-25=1234/2659, 6-21=310/671, 20-21=856/2228, 19-20=714/2003,  
8-19=413/715, 14-16=1233/2609, 12-14=1233/2609  
WEBS 3-24=436/313, 21-24=946/2217, 6-20=840/552, 7-20=896/1493, 8-20=766/512,  
16-19=815/1976, 9-19=276/297, 11-16=583/417, 11-14=0/286

#### NOTES-

- 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 645 lb uplift at joint 2 and 646 lb uplift at joint 12.



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

January 10,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N Lee Street, Suite 312, Alexandria, VA 22314.

**MiTek**

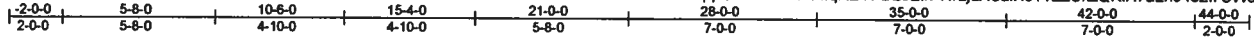
6904 Parke East Blvd.  
Tampa, FL 36610

Job 2135432	Truss T07	Truss Type Roof Special	Qty 4	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096853
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:38 2020 Page 1

ID:5lppGi3mIXNNmnlqREYFDz9EIn-vwLjuXSaiH5?TZzCkzQKiH7aLh04e2i7SW8wLtzwqlp



Scale = 1:82.2

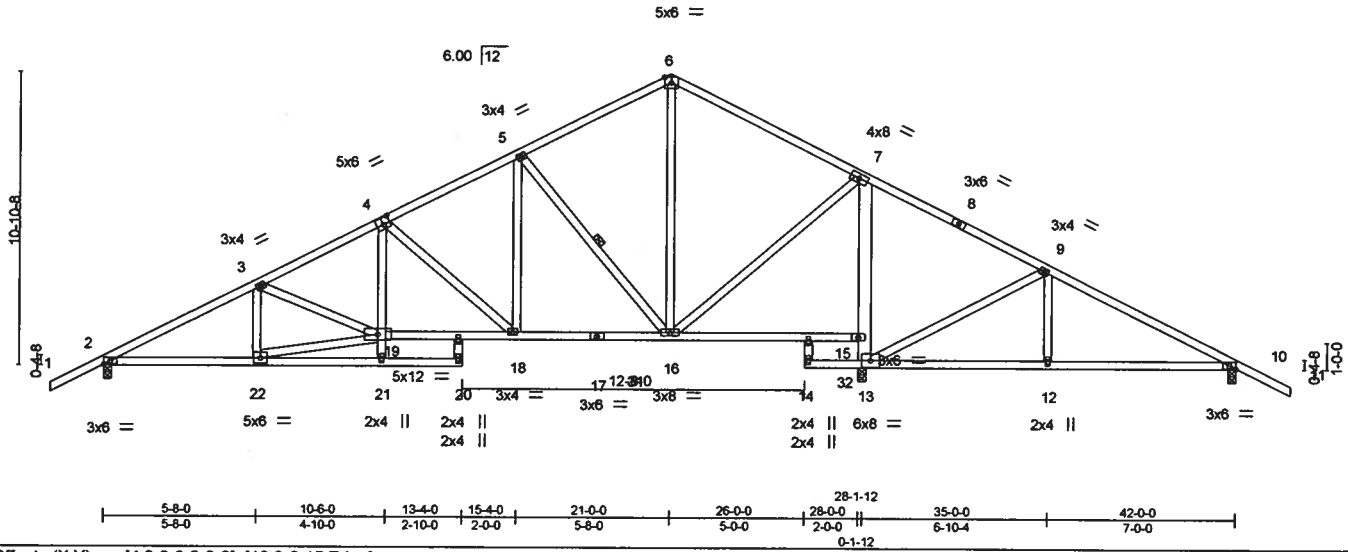


Plate Offsets (X,Y)- [4:0-3-0,0-3-0], [10:0-2-15,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.13	20	>999	240	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.62	Vert(CT)	-0.29	20	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.03	13	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						
								Weight: 264 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 "Except"  
4-21: 2x4 SP No.3, 7-13: 2x6 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-2 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. Except:  
5-8-0 oc bracing: 13-15  
10-0-0 oc bracing: 19-21  
1 Row at midpt 5-16

#### REACTIONS.

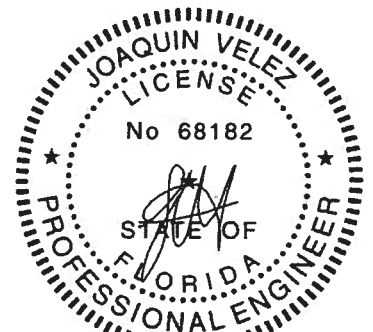
(lb/size) 2=1103/0-3-8, 13=1883/0-3-8, 10=442/0-3-8  
Max Horz 2=156(LC 10)  
Max Uplift 2=261(LC 12), 13=262(LC 12), 10=189(LC 13)  
Max Grav 2=1103(LC 1), 13=1883(LC 1), 10=503(LC 24)

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

TOP CHORD 2-3=1784/958, 3-4=1697/930, 4-5=1124/740, 5-6=551/534, 6-7=578/521, 7-9=0/501,  
9-10=438/316  
BOT CHORD 2-22=680/1541, 4-19=131/542, 13-15=1504/681, 7-15=1429/696, 12-13=120/330,  
10-12=120/330, 18-19=545/1481, 16-18=250/969, 15-16=369/297  
WEBS 19-22=621/1512, 4-18=685/391, 5-16=826/522, 7-16=261/1041, 9-13=611/429,  
9-12=0/307, 5-18=237/620

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) 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; 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, with BCDL = 10.0psf.
- 5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 2, 262 lb uplift at joint 13 and 189 lb uplift at joint 10.



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

January 10,2020

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MIT-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCS Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096854
2135432	T08	Roof Special	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:40 2020 Page 1

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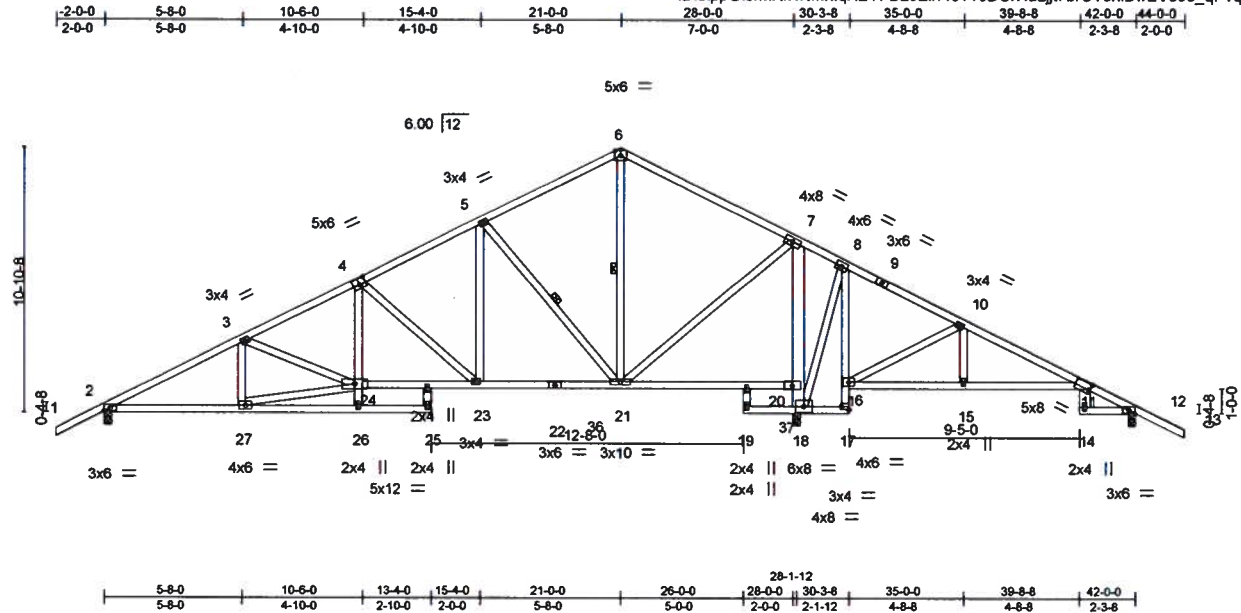


Plate Offsets (X,Y)- [4:0-3-0,0-3-0], [11:0-0-13,0-3-0], [12:0-2-15,Edge], [17:Edge,0-1-8]

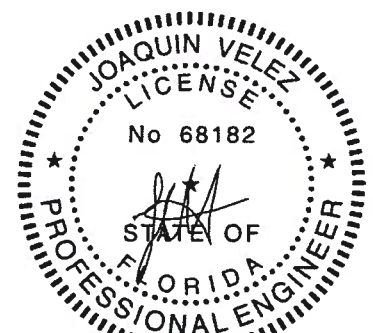
LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.55	Vert(LL)	-0.13	11-15	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.84	Vert(CT)	-0.28	25	>999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.56	Horz(CT)	0.03	18	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code FBC2017/TPI2014						Weight: 279 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-2-14 oc purlins.
BOT CHORD	2x4 SP No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
	4-26,8-17: 2x4 SP No.3, 7-18,11-14: 2x6 SP No.2		5-5-0 oc bracing: 18-20
WEBS	2x4 SP No.3	WEBS	10-0-0 oc bracing: 24-26
			1 Row at midpt

**REACTIONS.** (lb/size) 2=1062/0-3-8, 18=2009/0-3-8, 12=361/0-3-8  
Max Horz 2=156(LC 11)  
Max Uplift 2=264(LC 12), 18=290(LC 13), 12=155(LC 13)  
Max Grav 2=1081(LC 23), 18=2009(LC 1), 12=380(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=1735/943, 3-4=1637/912, 4-5=1067/723, 5-6=495/517, 6-7=475/504, 7-8=0/627,  
8-10=0/539, 10-11=123/297  
**BOT CHORD** 2-27=667/1498, 4-24=130/538, 18-20=1558/664, 7-20=1482/678, 17-18=403/271,  
8-16=173/303, 23-24=511/1426, 21-23=212/930, 20-21=551/375  
**WEBS** 24-27=609/1473, 4-23=680/391, 5-23=236/616, 5-21=825/521, 7-21=325/1153,  
8-18=381/267, 10-16=547/373

- NOTES-**
- 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, with BCDL = 10.0psf.
  - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 264 lb uplift at joint 2, 290 lb uplift at joint 18 and 155 lb uplift at joint 12.



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

January 10,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

**MiTek**

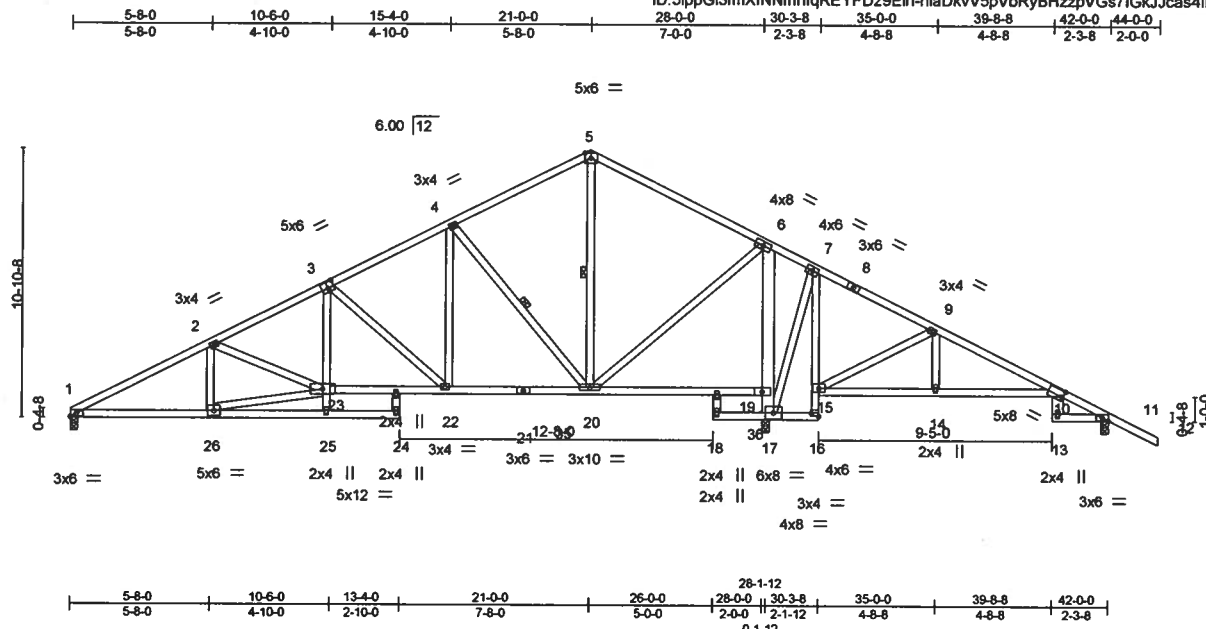
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2135432	Truss T09	Truss Type Roof Special	Qty 4	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096855
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:42 2020 Page 1

ID:5lppGi3mIXfNNmnlqREYFDz9EIn-niaDkvV5pVbRyBHzzpVGs7IGkJcas4IM868Uezwqll





Job	Truss	Truss Type	Qty	Ply	CHEMERY CONST. - LOT 7 FWS	T19096856
2135432	T10	Roof Special	5	1		

Builders FirstSource, Jacksonville, FL - 32244,

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:43 2020 Page 1

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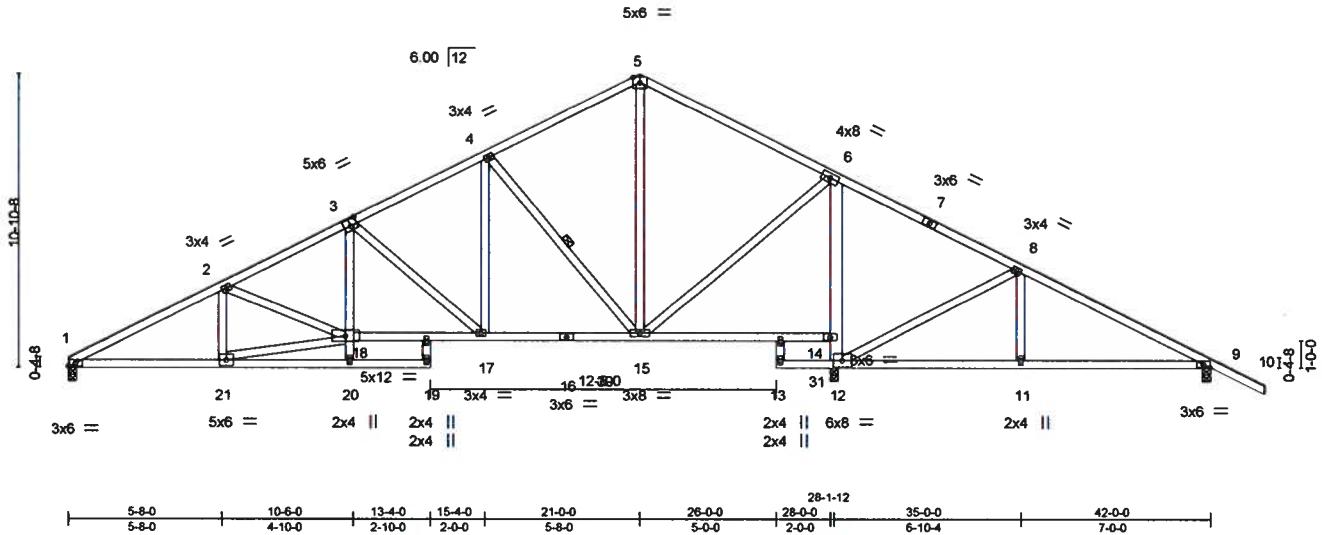


Plate Offsets (X,Y)- [3:0-3:0,0-3:0], [9:0-2:15,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.57	Vert(LL)	-0.13	19	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.63	Vert(CT)	-0.29	19	>999	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.03	12	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS							
									Weight: 260 lb	FT = 20%

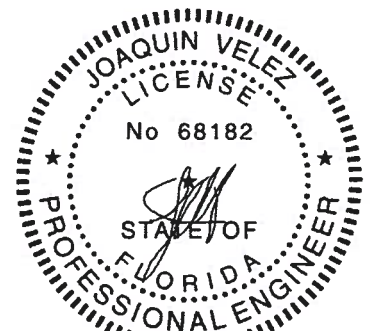
<b>LUMBER-</b>			<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2		TOP CHORD	Structural wood sheathing directly applied or 4-0-9 oc purlins.
BOT CHORD	2x4 SP No.2 *Except*		BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing. Except:
	3-20: 2x4 SP No.3, 6-12: 2x6 SP No.2			5-8-0 oc bracing: 12-14
WEBS	2x4 SP No.3			10-0-0 oc bracing: 18-20
			WEBS	1 Row at midpt 4-15

**REACTIONS.** (lb/size) 1=991/0-3-8, 12=1888/0-3-8, 9=441/0-3-8  
Max Horz 1=159(LC 10)  
Max Uplift 1=222(LC 12), 12=264(LC 12), 9=189(LC 13)  
Max Grav 1=991(LC 1), 12=1888(LC 1), 9=503(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=1823/993, 2-3=1714/945, 3-4=1131/747, 4-5=553/536, 5-6=580/523, 6-8=0/503,  
8-9=438/314  
BOT CHORD 1-21=741/1580, 3-18=146/546, 12-14=1509/691, 6-14=1435/705, 11-12=116/330,  
9-11=116/330, 17-18=569/1495, 15-17=262/974, 14-15=371/299  
WEBS 18-21=684/1556, 3-17=695/402, 4-17=245/622, 4-15=833/530, 6-15=270/1045,  
8-12=611/429, 8-11=0/307

#### NOTES-

- 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 222 lb uplift at joint 1, 264 lb uplift at joint 12 and 189 lb uplift at joint 9.



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

January 10,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

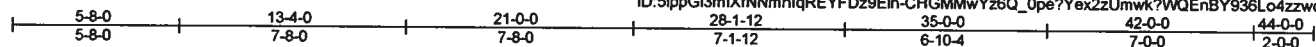
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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-99 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

**MiTek**

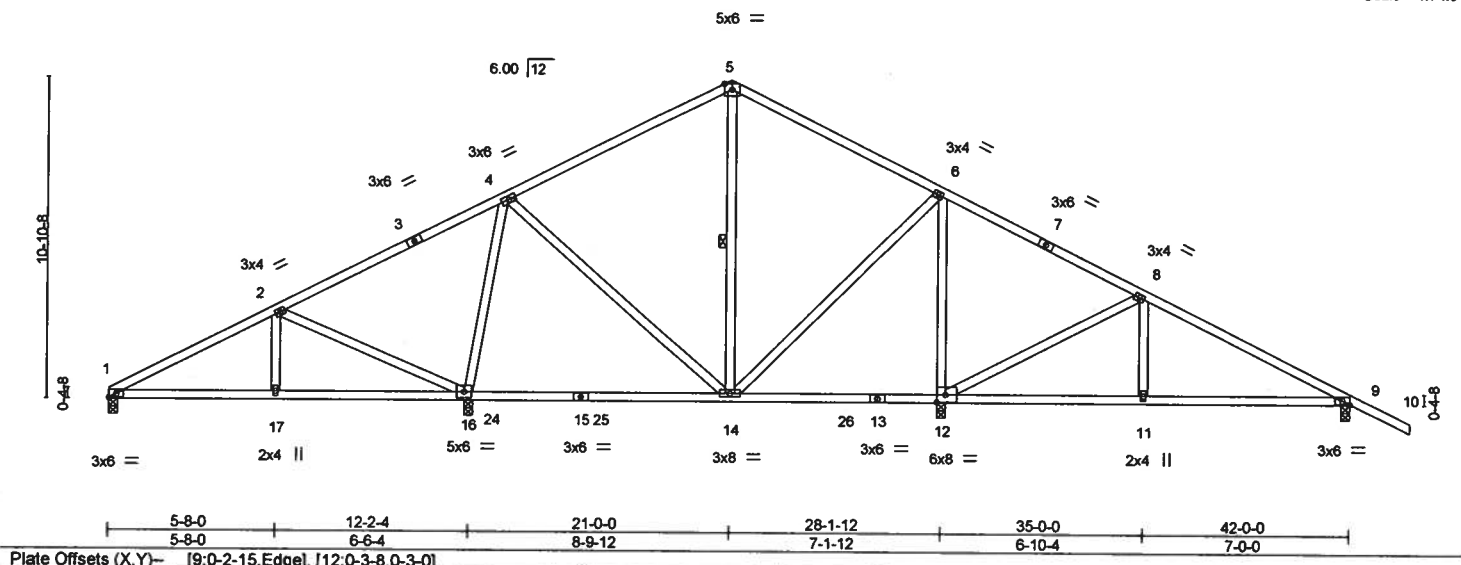
6904 Parke East Blvd.  
Tampa, FL 36610

Job 2135432	Truss T11	Truss Type Common	Qty 2	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096857
Builders FirstSource, Jacksonville, FL - 32244,						Job Reference (optional)

8.240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:45 2020 Page 1  
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Scale = 1:74.9



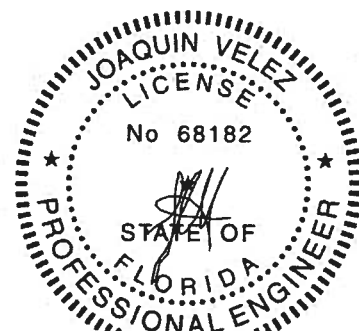
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.67	Vert(LL)	-0.14 14-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.52	Vert(CT)	-0.25 14-16	>756	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.72	Horz(CT)	0.01 9	n/a	n/a		
BCDL 10.0	Code	FBC2017/TPI2014	Matrix-MS						
								Weight: 230 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD
BOT CHORD 2x4 SP No.2	BOT CHORD
WEBS 2x4 SP No.3	WEBS
	Structural wood sheathing directly applied or 6-0-0 oc purlins.
	Rigid ceiling directly applied or 6-0-0 oc bracing.
	1 Row at midpt 5-14

REACTIONS. All bearings 0-3-8.  
(lb) - Max Horz 1=262(LC 17)  
Max Uplift All uplift 100 lb or less at joint(s) except 1=144(LC 9), 12=475(LC 13), 16=539(LC 12), 9=272(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) except 1=355(LC 23), 12=1171(LC 1), 16=1154(LC 1), 9=551(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=456/483, 2-4=163/316, 4-5=266/259, 8-9=538/517  
BOT CHORD 1-17=298/380, 16-17=298/380, 14-16=92/361, 12-14=147/424, 11-12=317/420, 9-11=317/420  
WEBS 6-14=75/348, 6-12=766/509, 8-12=596/805, 8-11=307/296, 4-16=765/533, 2-16=588/797, 2-17=275/235

- NOTES-
- 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., GCp=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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 144 lb uplift at joint 1, 475 lb uplift at joint 12, 539 lb uplift at joint 16 and 272 lb uplift at joint 9.



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

January 10,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 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 ANS/TP11 Quality Criteria, DSB-89 and BCS Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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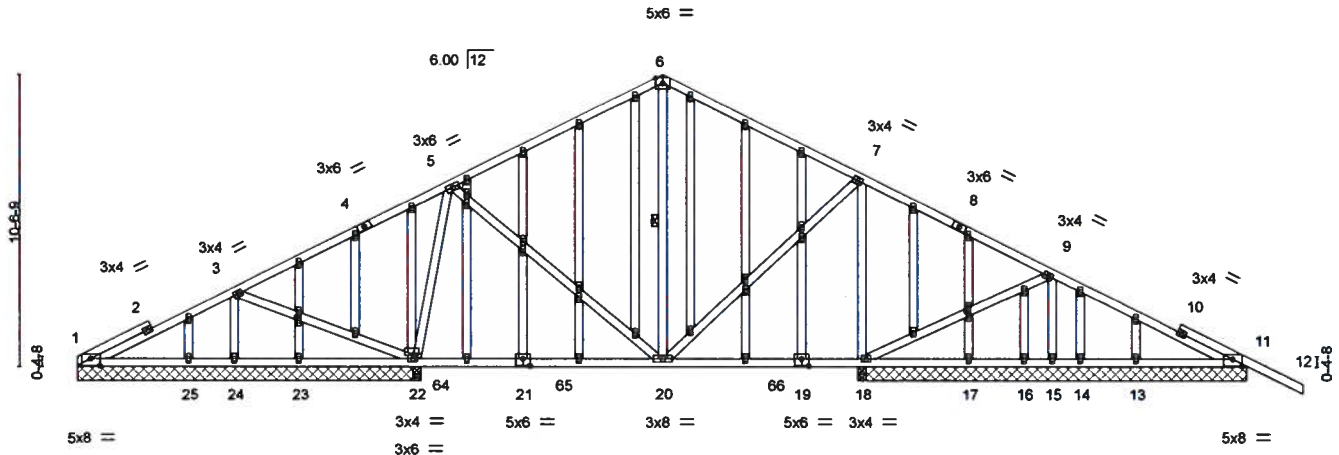


Job 2135432	Truss T11G	Truss Type GABLE	Qty 1	Ply 1	CHEMERY CONST. - LOT 7 FWS	T19096858
Builders FirstSource, Jacksonville, FL - 32244,						Job Reference (optional)

8 240 s Dec 6 2019 MiTek Industries, Inc. Fri Jan 10 07:27:50 2020 Page 1  
ID:5ppGi3miXfNNmnlqREYFDz9EIn-YE3FPeb6wzcJwPuWRUe8Bpdx7GSUhuCN2ZmAzqld



Scale = 1.79.7



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#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
WEBS 1 Row at midpt 6-20

#### REACTIONS.

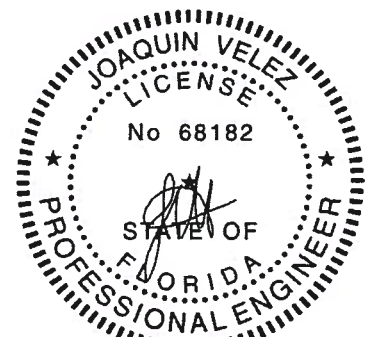
All bearings 14-0-0 except (jt=length) 1=12-4-0, 24=12-4-0, 22=12-4-0, 22=12-4-0, 25=12-4-0, 23=12-4-0, 1=12-4-0.  
(lb) - Max Horz 1=256(LC 13)  
Max Uplift All uplift 100 lb or less at joint(s) 1, 14, 16, 17, 25, 23 except 24=232(LC 12), 22=359(LC 12), 18=318(LC 13), 15=329(LC 13), 11=122(LC 13), 13=114(LC 8)  
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 14, 16, 17, 25, 23, 1 except 24=375(LC 23), 22=847(LC 2), 22=829(LC 1), 18=767(LC 2), 18=762(LC 1), 15=512(LC 1), 11=254(LC 1), 11=254(LC 1)

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

TOP CHORD 5-6=-370/345, 6-7=-361/348  
BOT CHORD 18-20=-63/252  
WEBS 3-24=-364/287, 5-22=-677/436, 7-20=-56/298, 7-18=-700/457, 9-15=-464/376

#### NOTES-

- 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; porch left and right exposed; 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 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, with BCDL = 10.0psf.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 14, 16, 17, 25, 23, 1 except (jt=lb) 24=232, 22=359, 18=318, 15=329, 11=122, 13=114, 11=122.



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

January 10,2020

#### WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

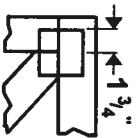
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



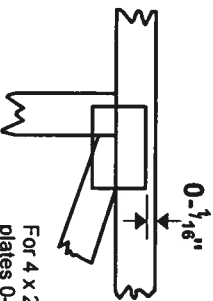
6904 Parke East Blvd.  
Tampa, FL 36610

# Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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

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

## PLATE SIZE

4 X 4

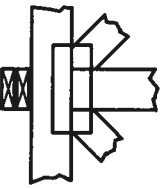
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



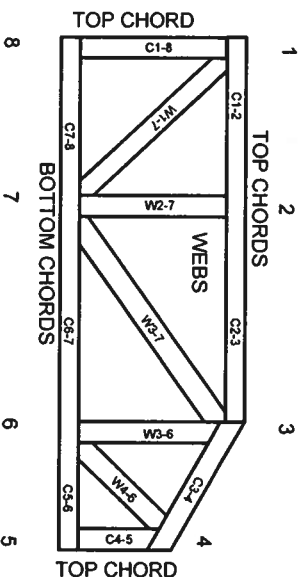
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/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/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  
ESR-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: MII-7473 rev. 10/03/2015

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

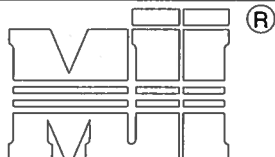
1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor 1 bracing should be considered.
3. Never exceed 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.



AUGUST 1, 2016

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

MII-T-BRACE 2



MiTek USA, Inc. Page 1 of 1

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ENGINEERED BY  
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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

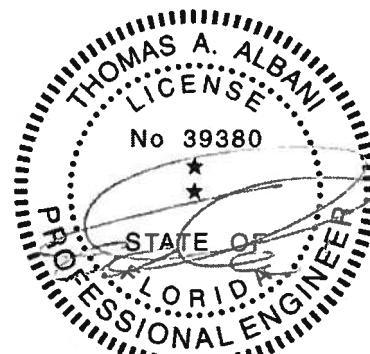
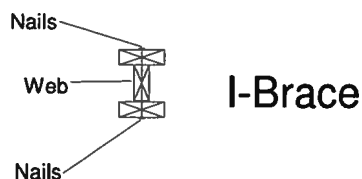
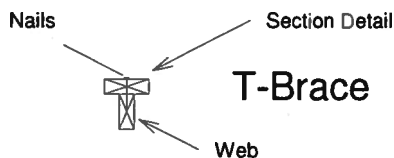
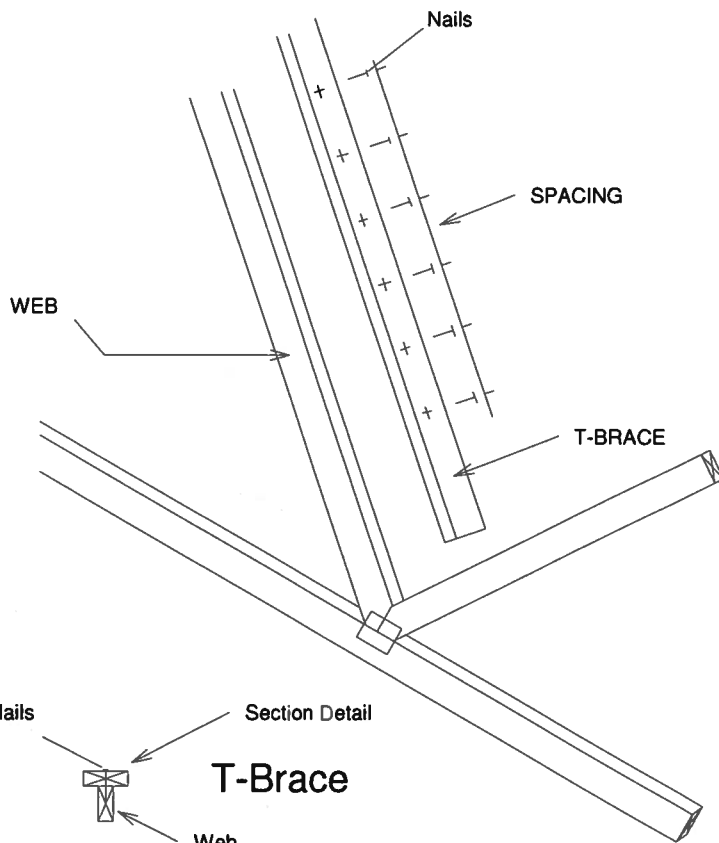
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

## 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.



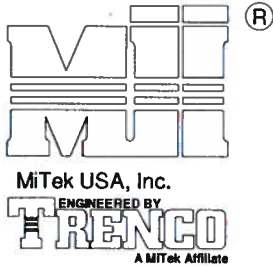
Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

AUGUST 1, 2016

## SCAB-BRACE DETAIL

MII-SCAB-BRACE



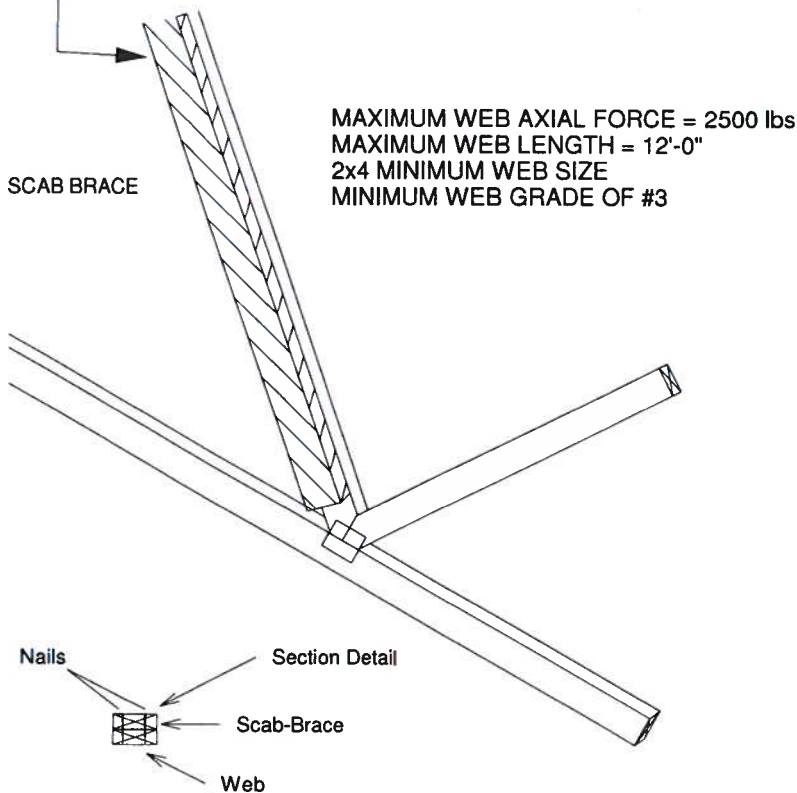
MiTek USA, Inc.

Page 1 of 1

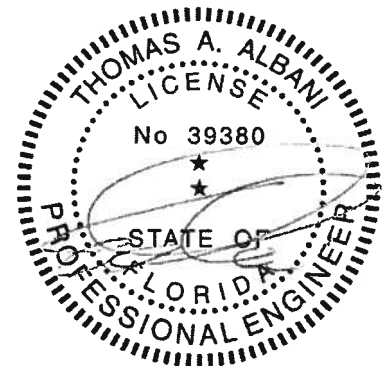
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.  
Scab must cover full length of web +/- 6".

\*\*\* THIS DETAIL IS NOT APPLICABLE WHEN BRACING IS \*\*\*  
REQUIRED AT 1/3 POINTS OR I-BRACE IS SPECIFIED.

APPLY 2x\_\_\_ SCAB TO ONE FACE OF WEB WITH  
2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.  
SCAB MUST BE THE SAME GRADE, SIZE AND  
SPECIES (OR BETTER) AS THE WEB.



Scab-Brace must be same species grade (or better) as web member.



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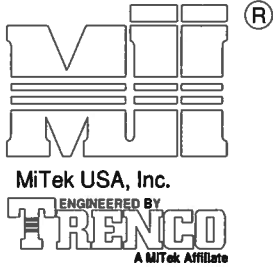
February 12, 2018

AUGUST 1, 2016

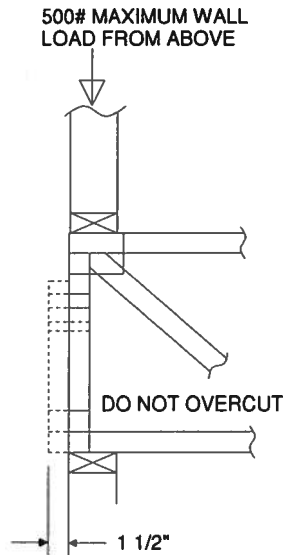
# STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)

MII-REP05

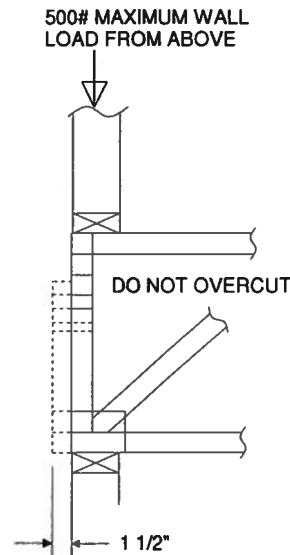
MiTek USA, Inc. Page 1 of 1



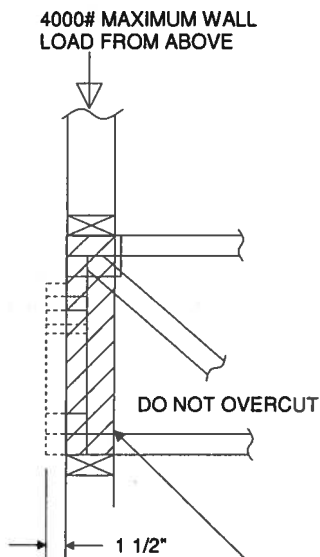
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS 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.



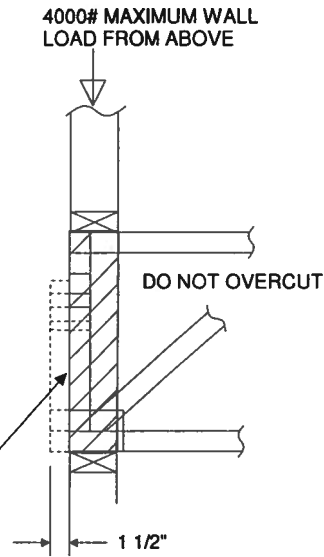
REFER TO INDIVIDUAL  
TRUSS DESIGN FOR  
PLATE SIZES AND  
LUMBER GRADES



TRUSSES BUILT  
WITH 4x2 MEMBERS

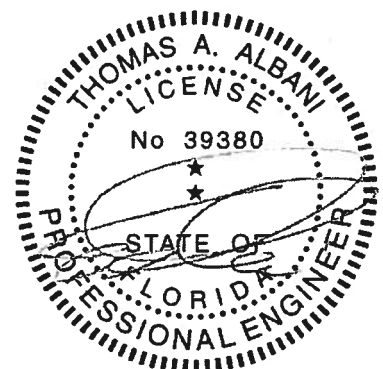


REFER TO INDIVIDUAL  
TRUSS DESIGN FOR  
PLATE SIZES AND  
LUMBER GRADES



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.



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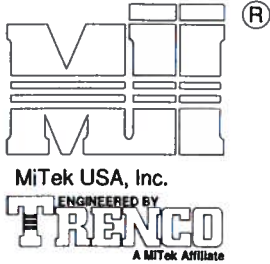
February 12, 2018

AUGUST 1, 2016

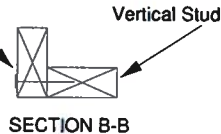
## Standard Gable End Detail

MII-GE130-D-SP

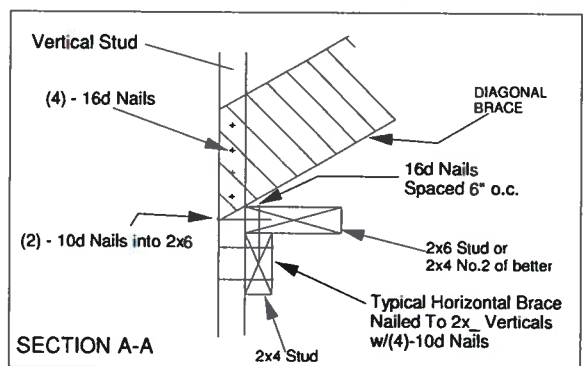
MiTek USA, Inc. Page 1 of 2



Typical 1x4 L-Brace Nailed To  
2x Verticals W/10d Nails spaced 6" o.c.



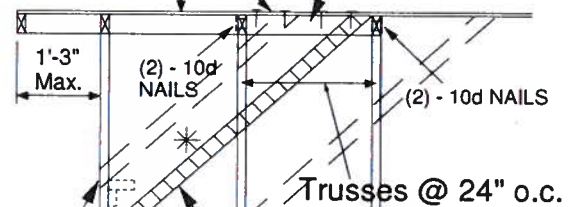
TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.



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

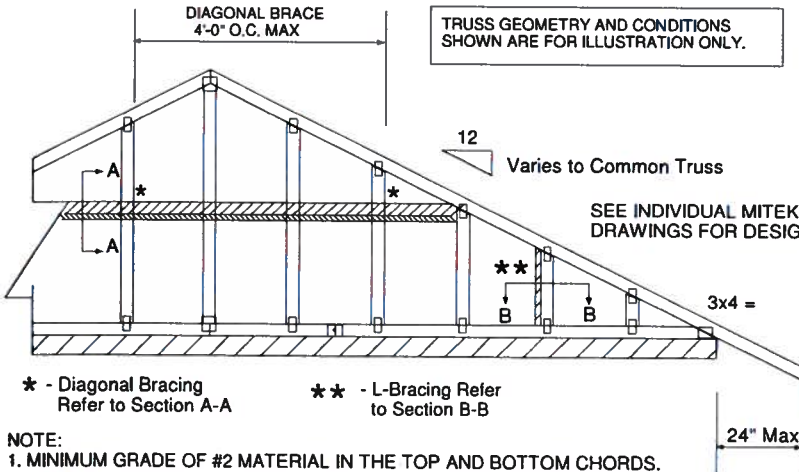


Diag. Brace at 1/3 points if needed

2x6 DIAGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH (4) - 16d NAILS AND ATTACHED TO BLOCKING WITH (5) - 10d NAILS.

End Wall

HORIZONTAL BRACE (SEE SECTION A-A)



## NOTE:

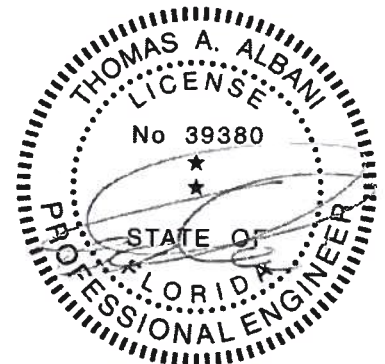
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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	Maximum Stud Length				
		Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
2x4 SP No. 3 / Stud	12" O.C.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1

- \* 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 D  
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH  
ASCE 7-10 160 MPH  
DURATION OF LOAD INCREASE : 1.60

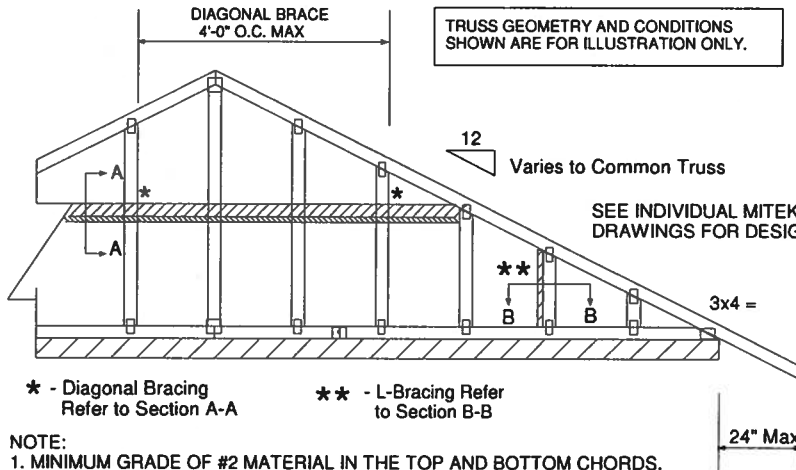
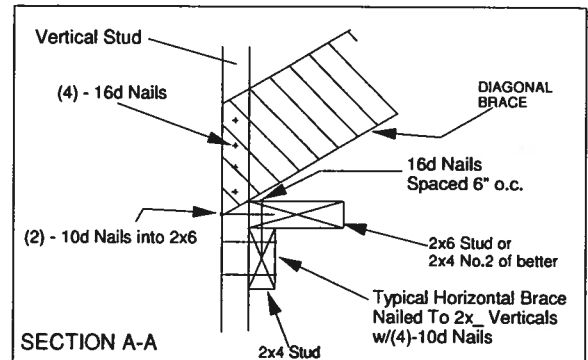
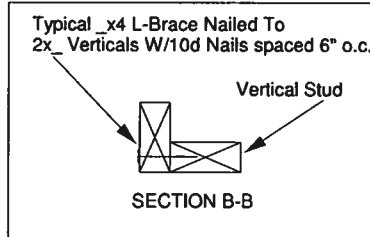
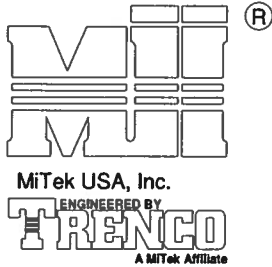
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



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MiTek USA, Inc. FL Cert 6634  
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Date:

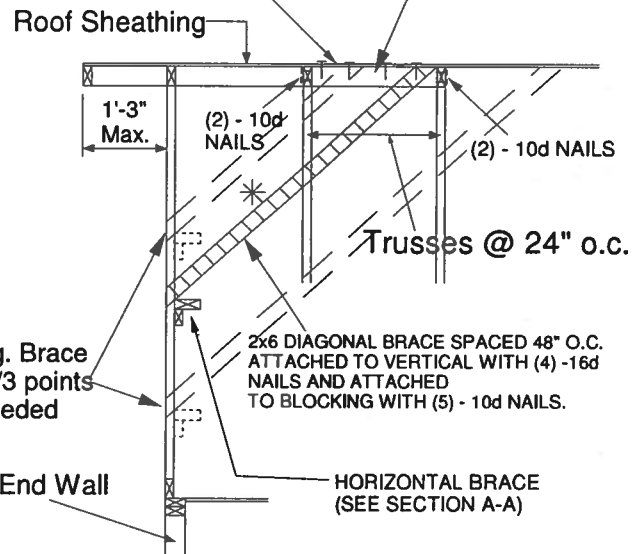
February 12, 2018





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



## NOTE:

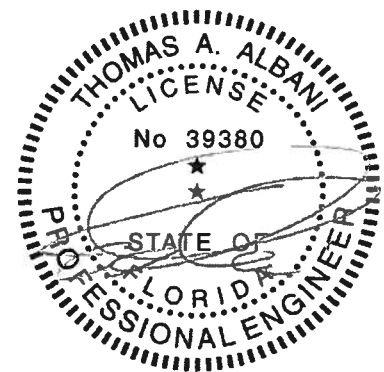
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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.

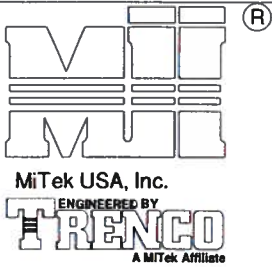
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH  
ASCE 7-10 160 MPH  
DURATION OF LOAD INCREASE : 1.60

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



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Date:

February 12, 2018

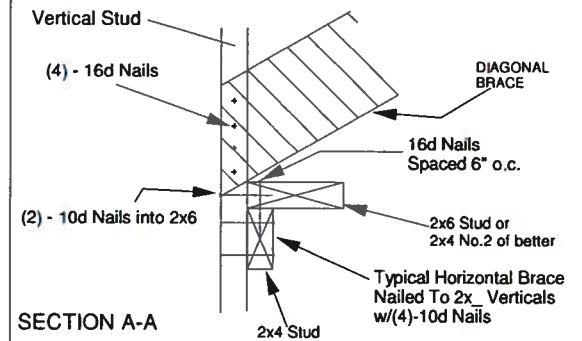


Typical 2x4 L-Brace Nailed To  
2x Verticals w/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

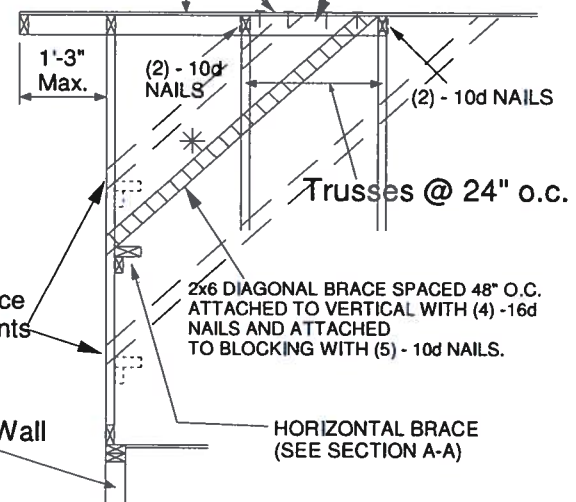


SECTION A-A

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.

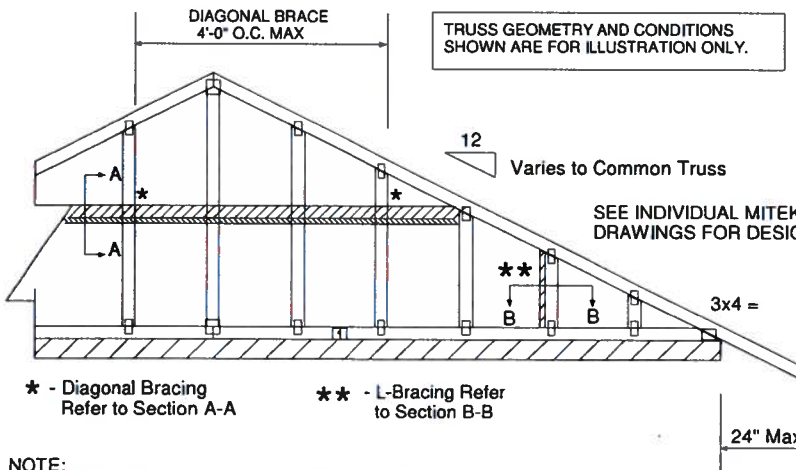
(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD DF/SPF BLOCK

Roof Sheathing



Diag. Brace at 1/3 points if needed

End Wall



#### NOTE:

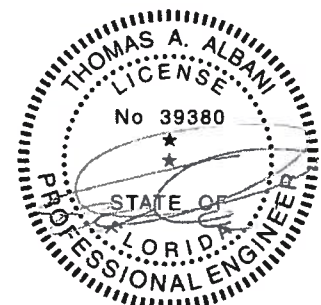
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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. 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 DF/SPF Std/Stud	12" O.C.	3-10-1	3-11-7	5-7-2	7-8-2	11-6-4
2x4 DF/SPF Std/Stud	16" O.C.	3-3-14	3-5-1	4-10-2	6-7-13	9-11-11
2x4 DF/SPF Std/Stud	24" O.C.	2-8-9	2-9-8	3-11-7	5-5-2	8-1-12

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

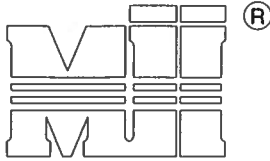
MAXIMUM WIND SPEED = 140 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

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

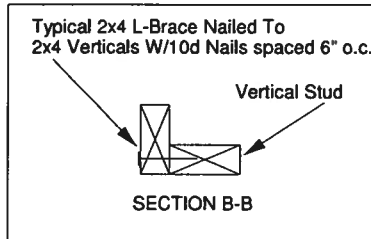


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Date:

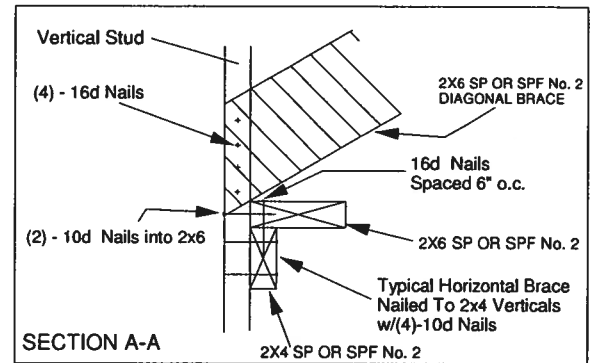
January 19, 2018



MiTek USA, Inc.

ENGINEERED BY  
**TRENCO**  
A MiTek Affiliate

SECTION B-B

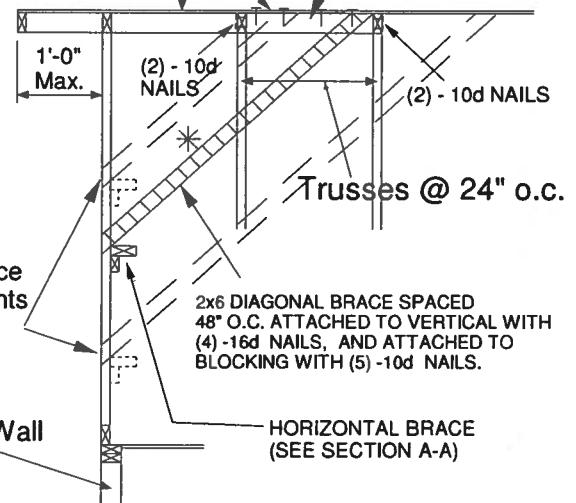
TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

SECTION A-A

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



Diag. Brace  
at 1/3 points  
if needed

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)

\* - Diagonal Bracing  
Refer to Section A-A

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

## NOTE:

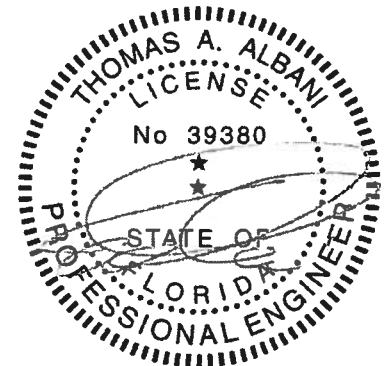
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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.



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Date:

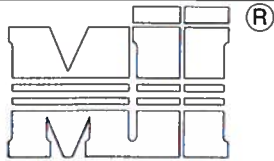
February 12, 2018

AUGUST 1, 2016

## Standard Gable End Detail

MII-GE180-D-SP

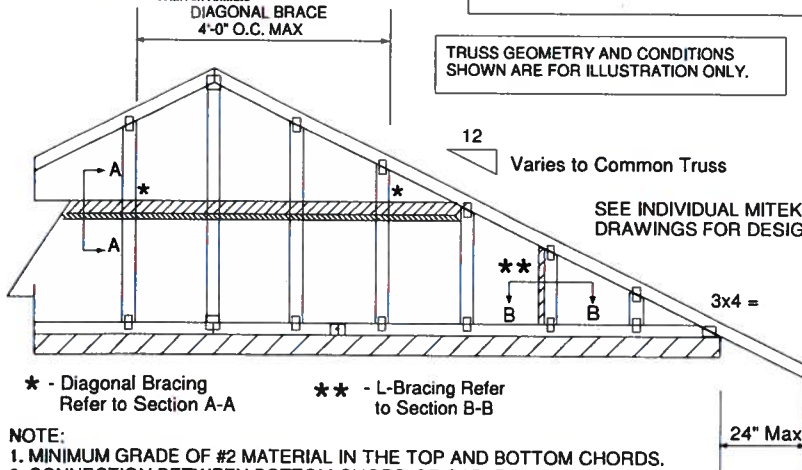
MiTek USA, Inc. Page 1 of 2



MiTek USA, Inc.

ENGINEERED BY  
**TRENCO**

A MiTek Affiliate

DIAGONAL BRACE  
4'-0" O.C. MAX\* - 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
2x4 SP No. 3 / Stud	12" O.C.	3-7-12	5-4-11	6-2-1	10-11-3
2x4 SP No. 3 / Stud	16" O.C.	3-2-8	4-8-1	6-2-1	9-7-7
2x4 SP No. 3 / Stud	24" O.C.	2-7-7	3-9-12	5-2-13	7-10-4
2x4 SP No. 2	12" O.C.	3-10-0	5-4-11	6-2-1	11-6-1
2x4 SP No. 2	16" O.C.	3-5-13	4-8-1	6-2-1	10-5-7
2x4 SP No. 2	24" O.C.	3-0-8	3-9-12	6-1-1	9-1-9

- \* 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 6in o.c., with 3in 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 7-10 180 MPH  
DURATION OF LOAD INCREASE : 1.60

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

Typical 2x4 L-Brace Nailed To  
2x4 Verticals W/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

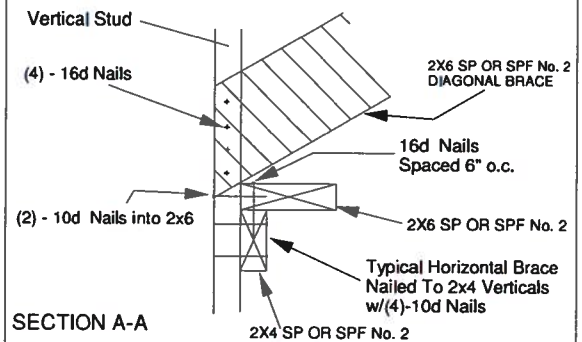
TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

12

Varies to Common Truss

SEE INDIVIDUAL MITEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIA

24" Max



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

1'-0" Max.

(2) - 10d NAILS

(2) - 10d NAILS

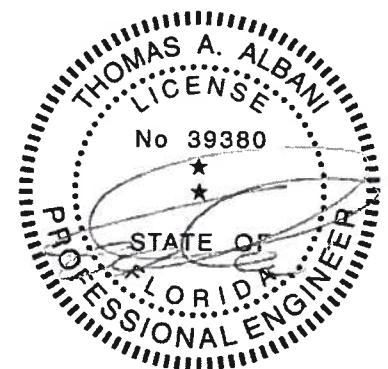
Trusses @ 24" o.c.

Diag. Brace  
at 1/3 points  
if needed

2x6 DIAGONAL BRACE SPACED  
48" O.C. ATTACHED TO VERTICAL WITH  
(4) - 16d NAILS, AND ATTACHED TO  
BLOCKING WITH (5) - 10d NAILS.

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)



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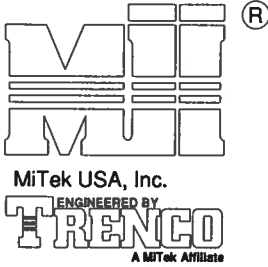
February 12, 2018

AUGUST 1, 2016

# STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-7-10

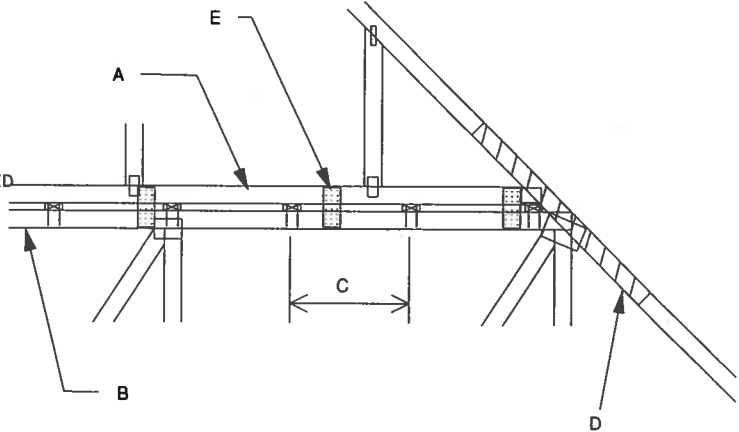
MiTek USA, Inc. Page 1 of 1



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.

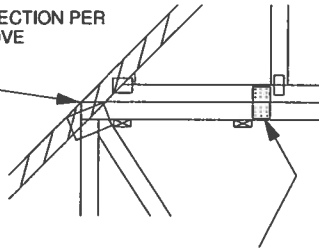
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X  $\frac{1}{4}$  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)



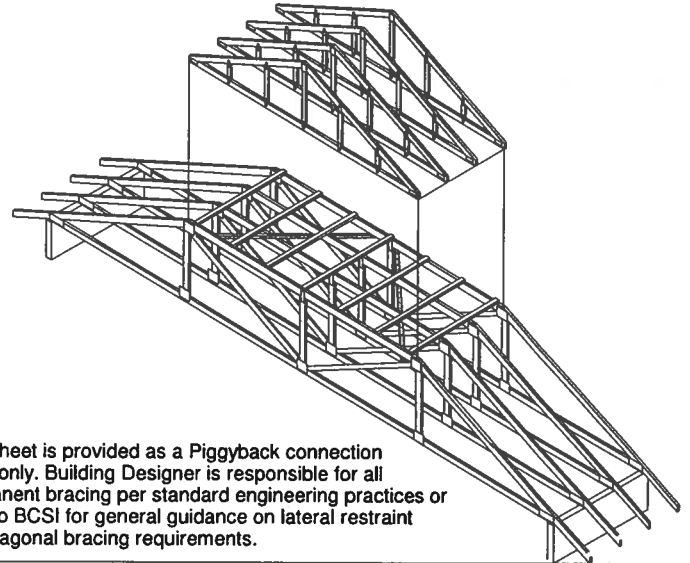
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

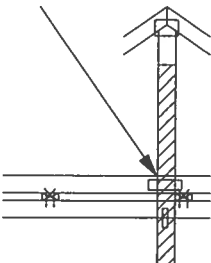


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



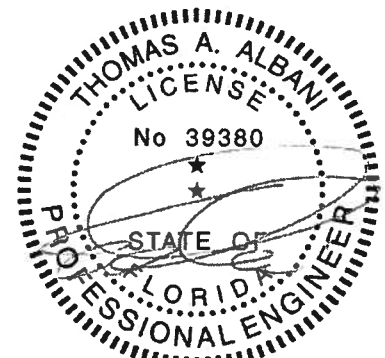
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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  $\frac{1}{4}$  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.



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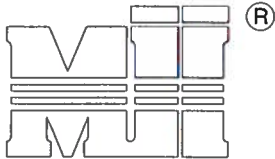
February 12, 2018



AUGUST 1, 2016

# STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT  
7-10



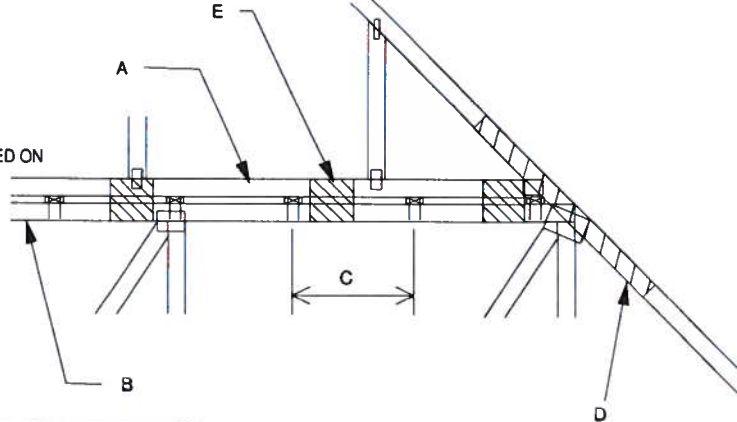
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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
MAX MEAN ROOF HEIGHT = 30 FEET  
MAX TRUSS SPACING = 24" O.C.  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-10  
DURATION OF LOAD INCREASE : 1.60

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

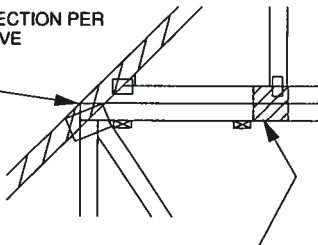
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0.131" X 3.5" TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. 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 SPEED IN THE RANGE 126 MPH - 160 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



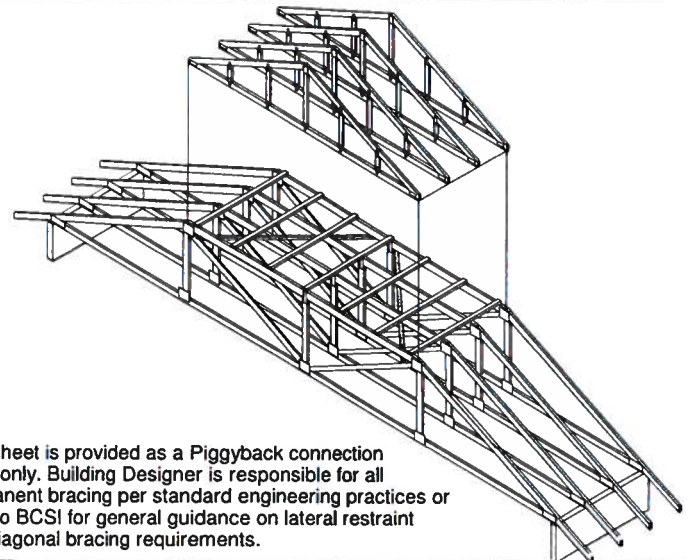
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS 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

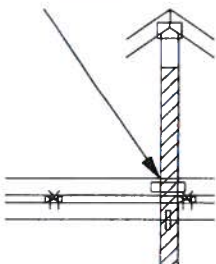


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



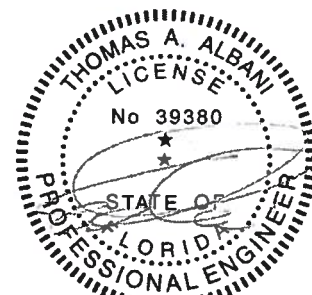
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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.



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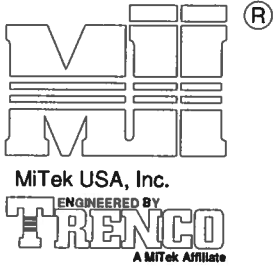
January 19, 2018

AUGUST 1, 2016

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

MII-REP01A1

MiTek USA, Inc. Page 1 of 1



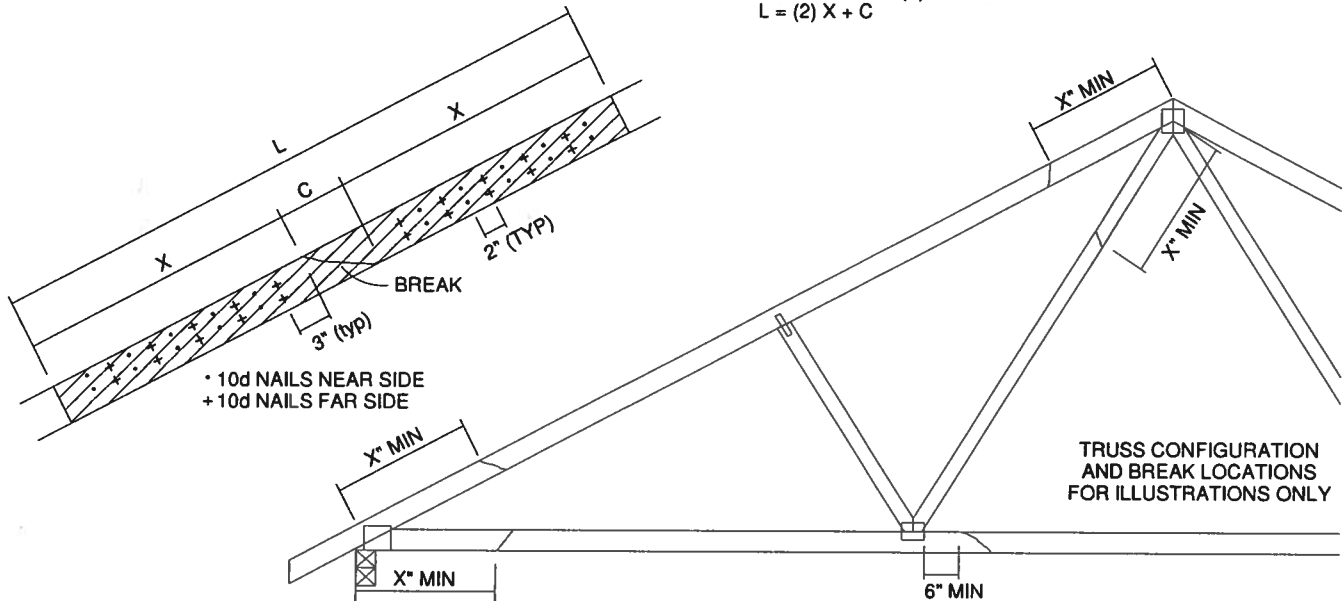
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	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:

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

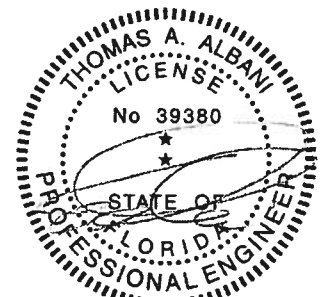


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

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.



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Date:

January 19, 2018



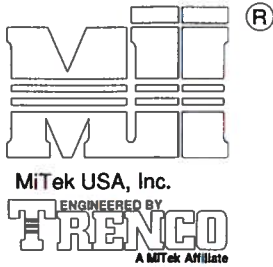
AUGUST 1, 2016

## LATERAL TOE-NAIL DETAIL

MII-TOENAIL\_SP

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Page 1 of 1



## NOTES:

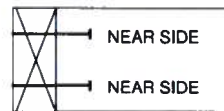
1. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 45 DEGREES WITH THE MEMBER AND MUST HAVE FULL WOOD SUPPORT. (NAIL MUST BE DRIVEN THROUGH AND EXIT AT THE BACK CORNER OF THE MEMBER END AS SHOWN.)
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

THIS DETAIL APPLICABLE TO THE  
THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR  
ILLUSTRATION PURPOSES ONLY

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)						
	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

SIDE VIEW  
(2x3)  
2 NAILS



VALUES SHOWN ARE CAPACITY PER TOE-NAIL.  
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

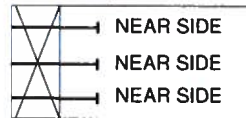
## EXAMPLE:

(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

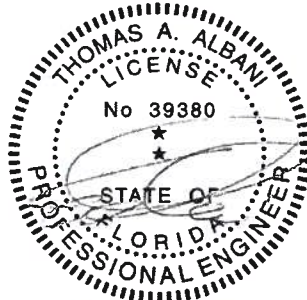
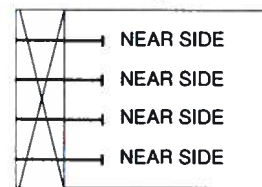
For load duration increase of 1.15:

3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

SIDE VIEW  
(2x4)  
3 NAILS

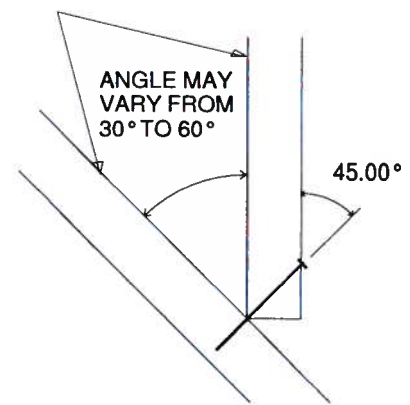
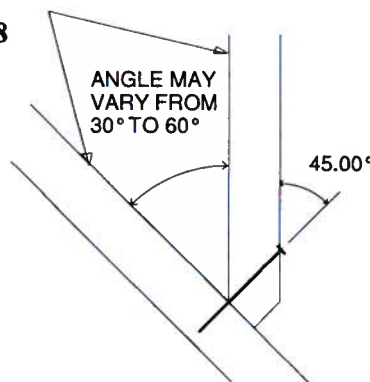
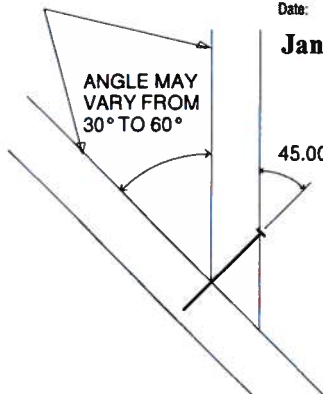


SIDE VIEW  
(2x6)  
4 NAILS



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Date:

January 19, 2018



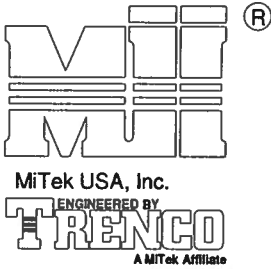
AUGUST 1, 2016

# TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND1

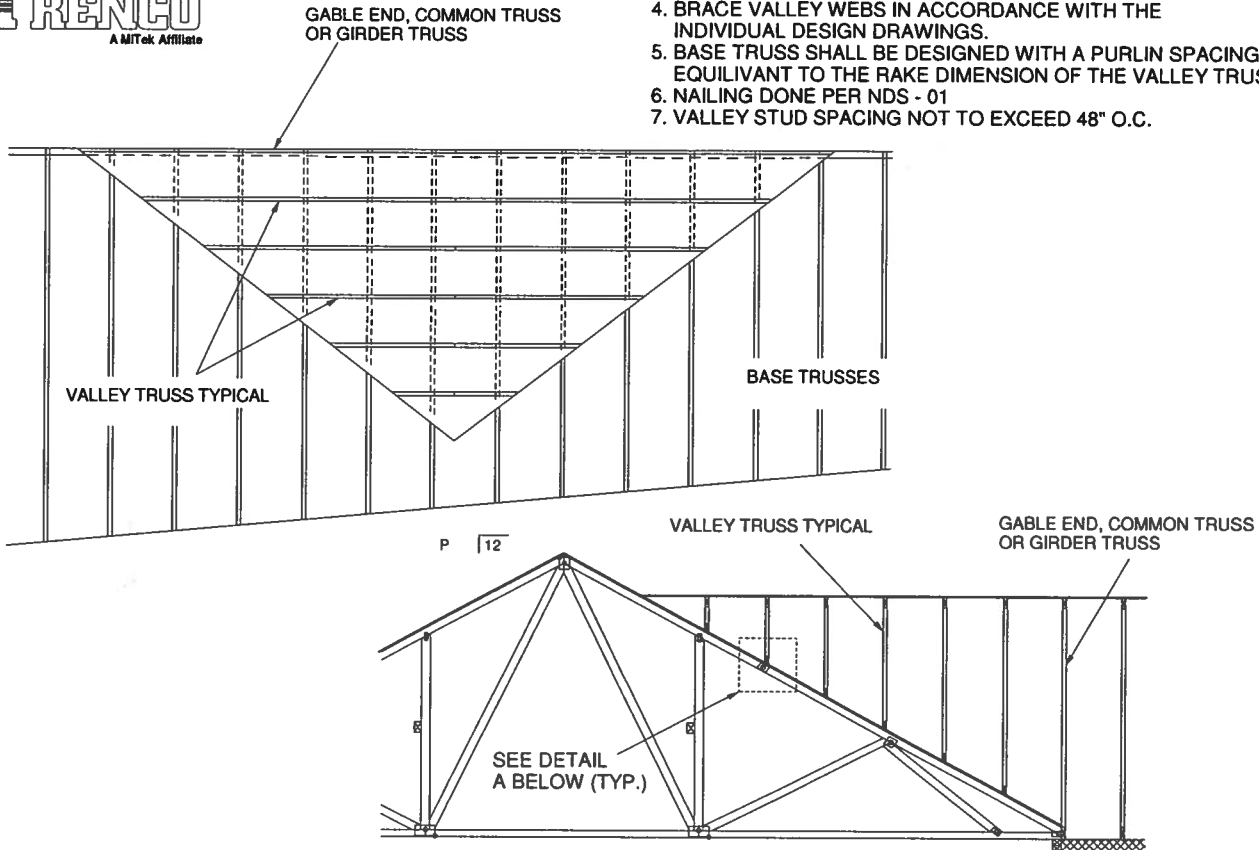
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Page 1 of 1

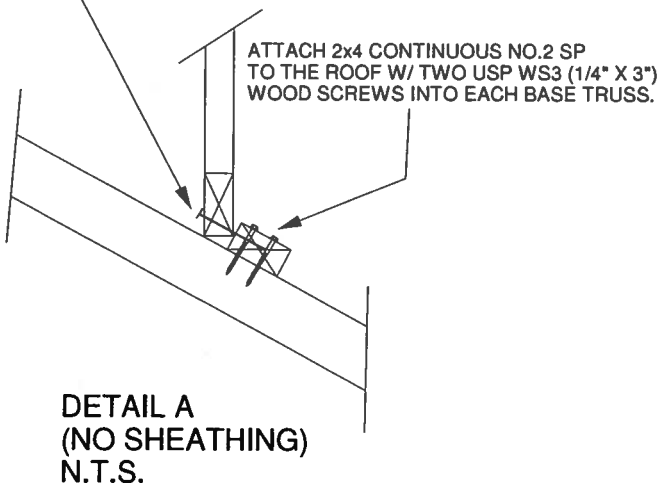


## GENERAL SPECIFICATIONS

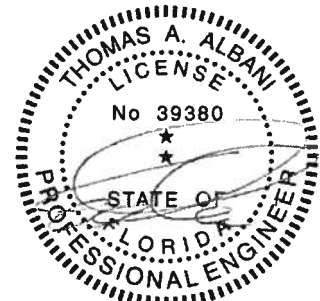
1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT  
DO NOT USE DRYWALL OR DECKING TYPE SCREW
3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUIVALENT 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.

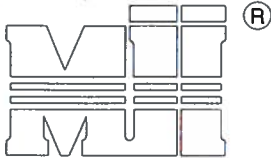


WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH  
WIND DESIGN PER ASCE 7-10 160 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12  
CATEGORY II BUILDING  
EXPOSURE C  
WIND DURATION OF LOAD INCREASE : 1.60  
MAX TOP CHORD TOTAL LOAD = 50 PSF  
MAX SPACING = 24" O.C.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



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January 19, 2018

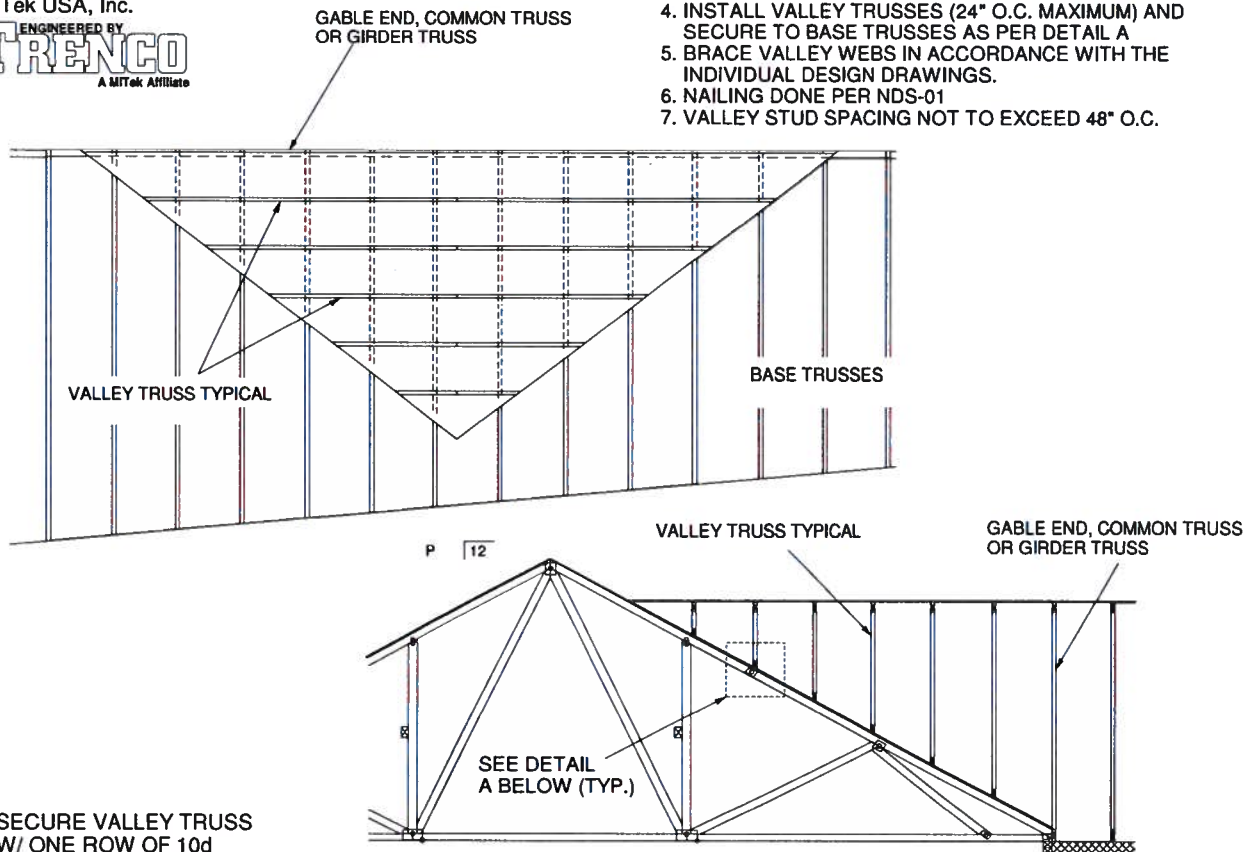
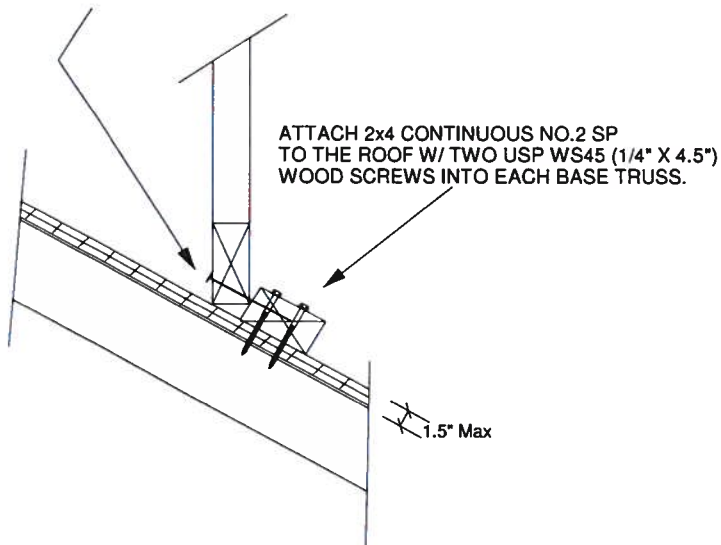


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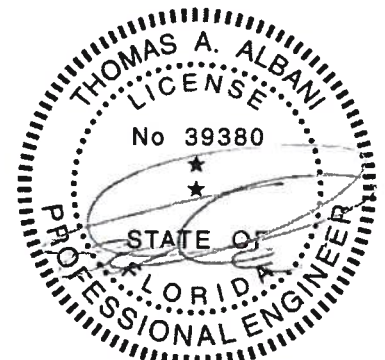
 ENGINEERED BY  
**TRENCO**  
 A MiTek Affiliate

## GENERAL SPECIFICATIONS

1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUIVANT
3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A
5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
6. NAILING DONE PER NDS-01
7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

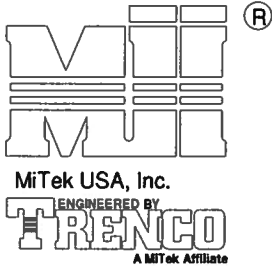

 SECURE VALLEY TRUSS  
 W/ ONE ROW OF 10d  
 NAILS 6" O.C.


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



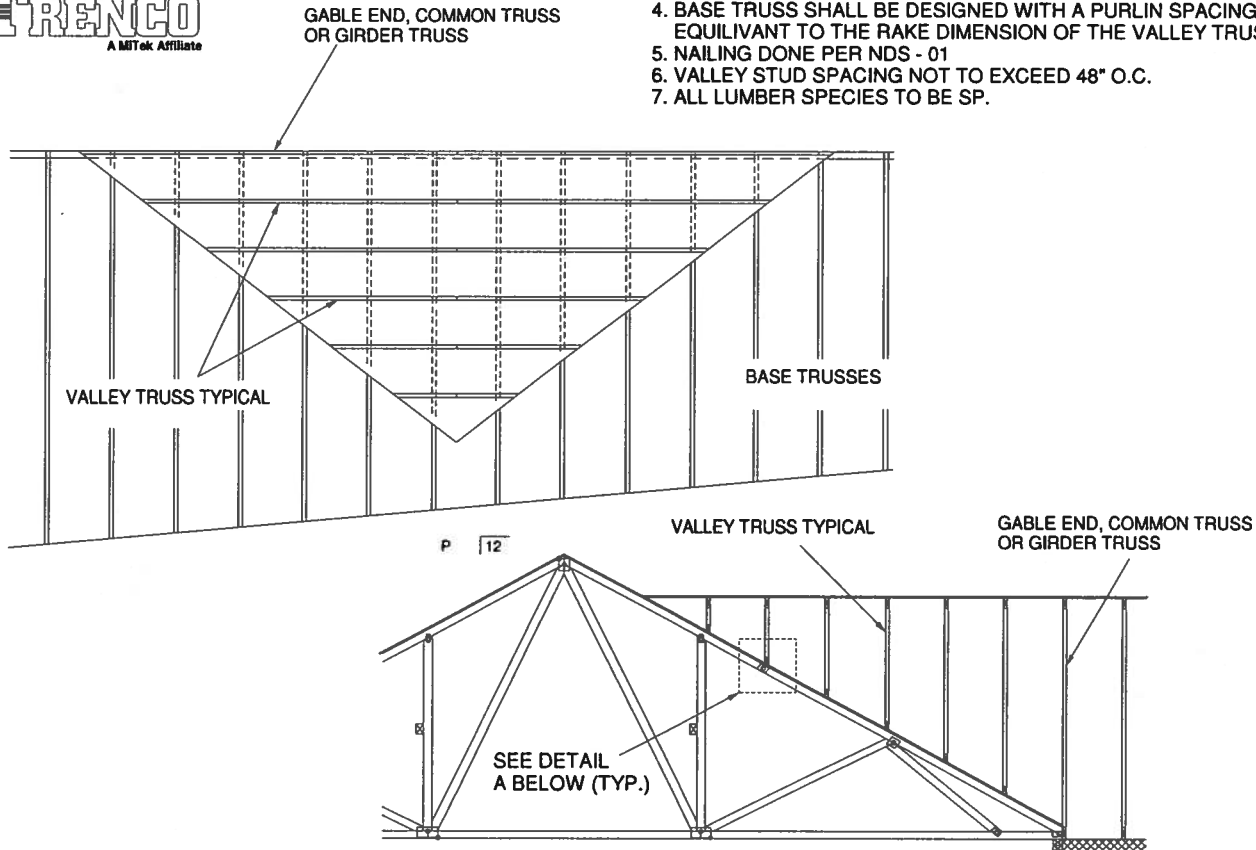
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 6904 Parke East Blvd. Tampa FL 33610  
 Date:

February 12, 2018

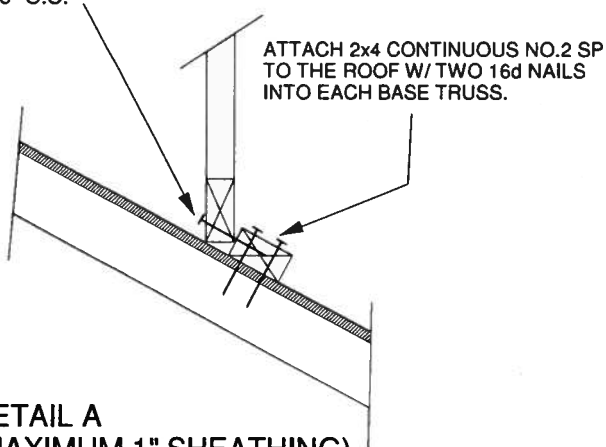


## GENERAL SPECIFICATIONS

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 EQUIVARIANT 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.

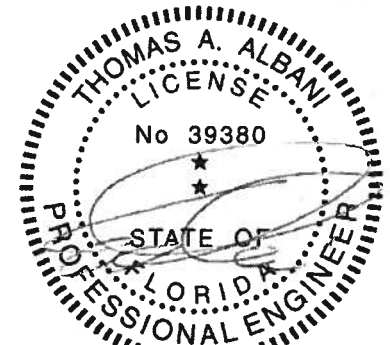


SECURE VALLEY TRUSS  
W/ ONE ROW OF 16d  
NAILS 6" O.C.



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



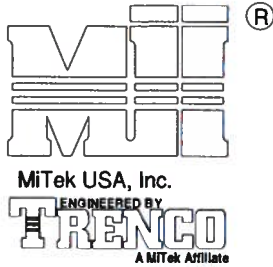
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6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

AUGUST 1, 2016

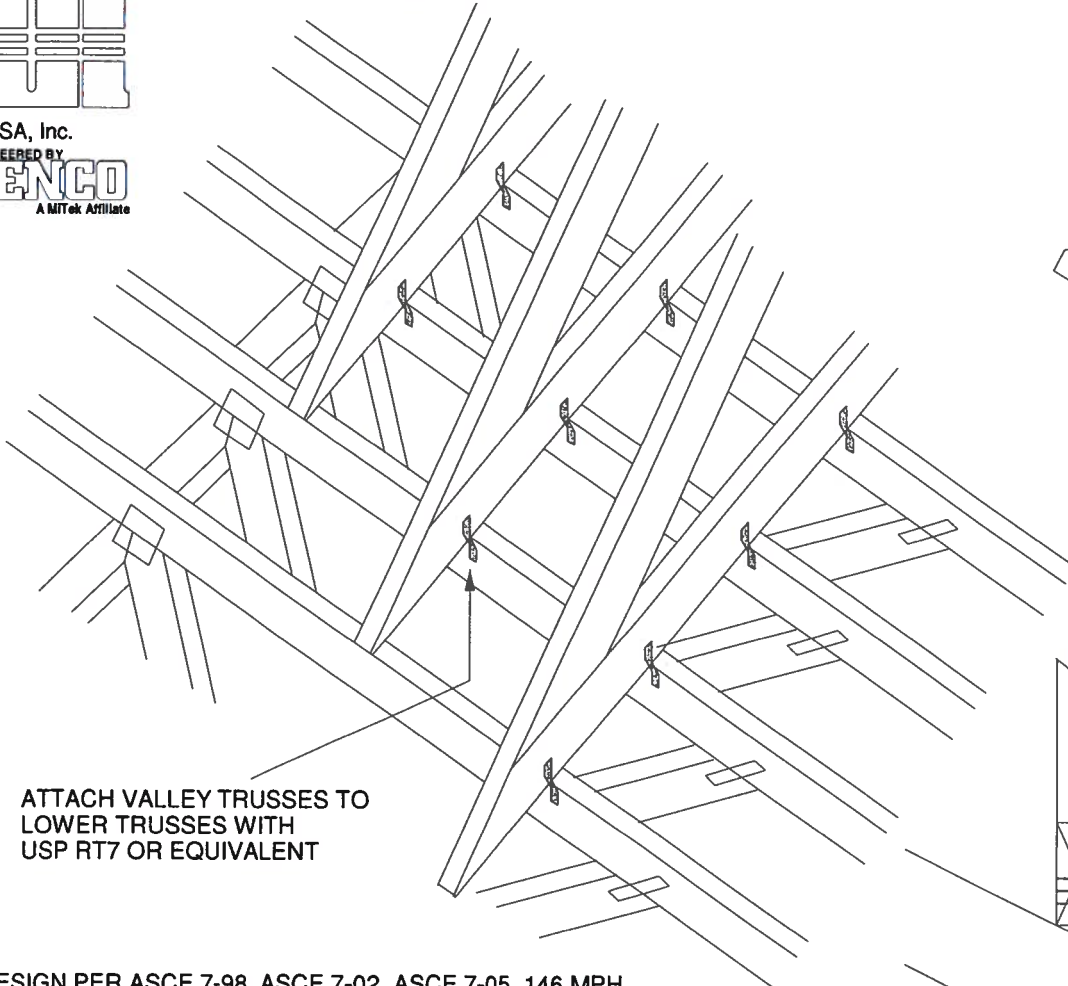
TRUSSED VALLEY SET DETAIL  
(HIGH WIND VELOCITY)

MII-VALLEY

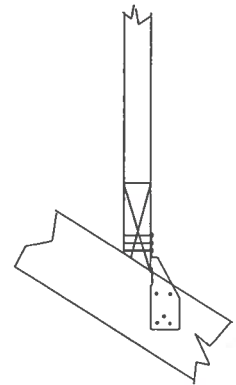


NOTE: VALLEY STUD SPACING NOT  
TO EXCEED 48" O.C. SPACING

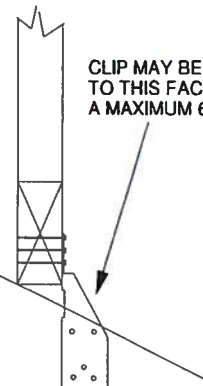
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ATTACH VALLEY TRUSSES TO  
LOWER TRUSSES WITH  
USP RT7 OR EQUIVALENT



FOR BEVELED BOTTOM  
CHORD, CLIP MAY BE  
APPLIED TO EITHER FACE



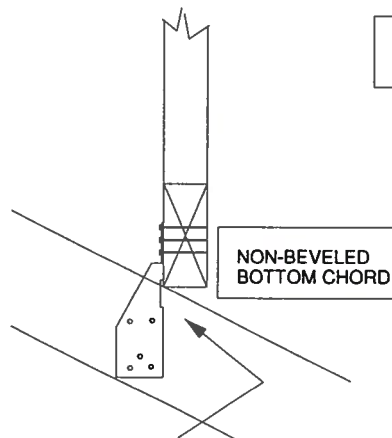
CLIP MAY BE APPLIED  
TO THIS FACE UP TO  
A MAXIMUM 6/12 PITCH

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  
CATEGORY II BUILDING  
EXPOSURE B or C  
WIND DURATION OF LOAD INCREASE : 1.6  
MAX TOP CHORD TOTAL LOAD = 50 PSF  
MAX SPACING = 24" O.C. (BASE AND VALLEY)

SUPPORTING TRUSSES DIRECTLY UNDER  
VALLEY TRUSSES MUST BE DESIGNED  
WITH A MAXIMUM UNBRACED LENGTH OF  
2'-10" ON AFFECTED TOP CHORDS.

NOTES:

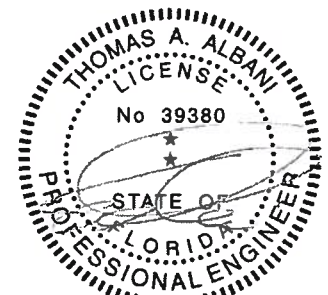
- SHEATHING APPLIED AFTER  
INSTALLATION OF VALLEY TRUSSES
- THIS DETAIL IS NOT APPLICABLE FOR  
SPF-S SPECIES LUMBER.



NON-BEVELED  
BOTTOM CHORD

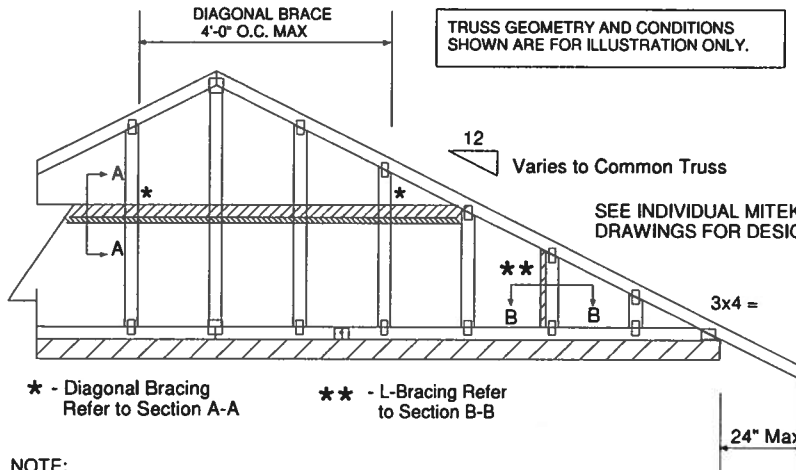
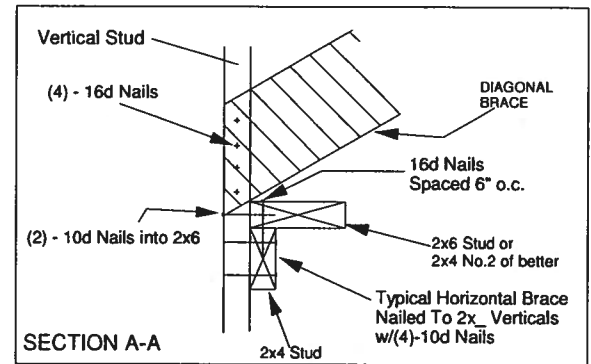
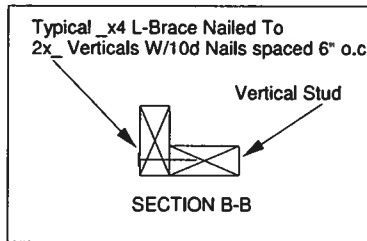
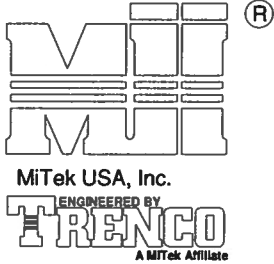
NON-BEVELED  
BOTTOM CHORD

CLIP MUST BE APPLIED  
TO THIS FACE WHEN  
PITCH EXCEEDS 6/12.  
(MAXIMUM 12/12 PITCH)



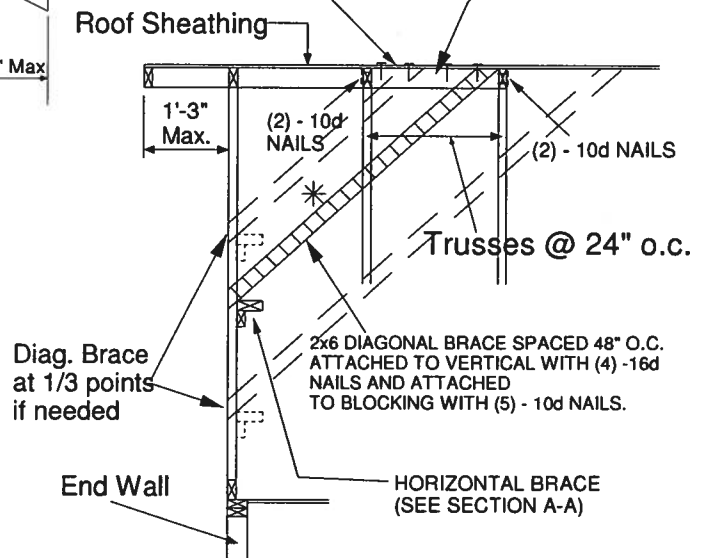
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Date:

January 19, 2018



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



## NOTE:

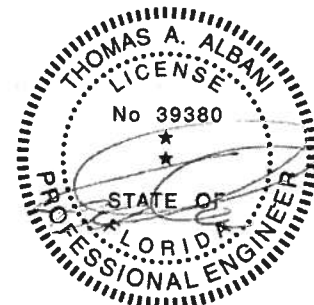
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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")

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

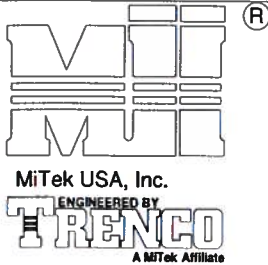
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



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## TRUSS CRITERIA:

LOADING: 40-10-0-10

DURATION FACTOR: 1.15

SPACING: 24" O.C.

TOP CHORD: 2x4 OR 2x6

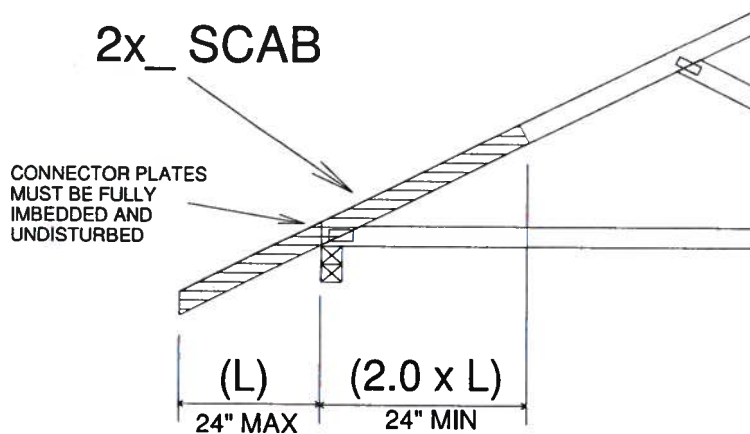
PITCH: 4/12 - 12/12

HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL

END BEARING CONDITION

## NOTES:

1. ATTACH 2x SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.
2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
3. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.

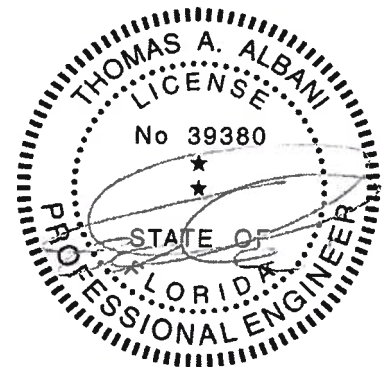


## IMPORTANT

This detail to be used only with trusses (spans less than 40') spaced 24" o.c. maximum and having pitches between 4/12 and 12/12 and total top chord loads not exceeding 50 psf.

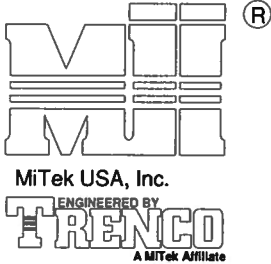
Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN  
FOR PLATE SIZES AND LUMBER GRADES



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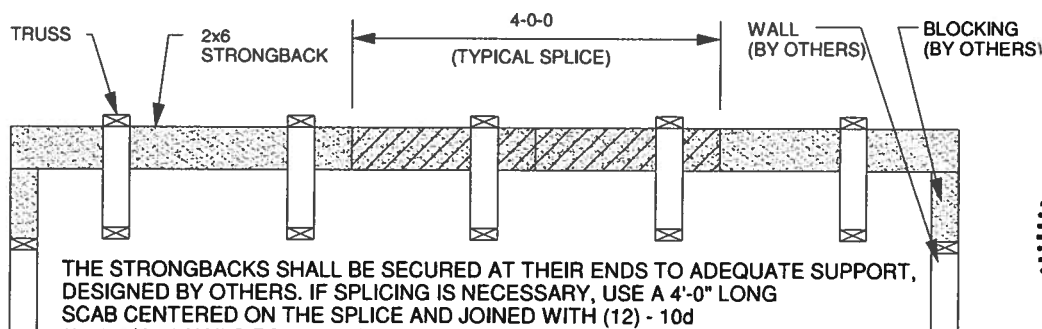
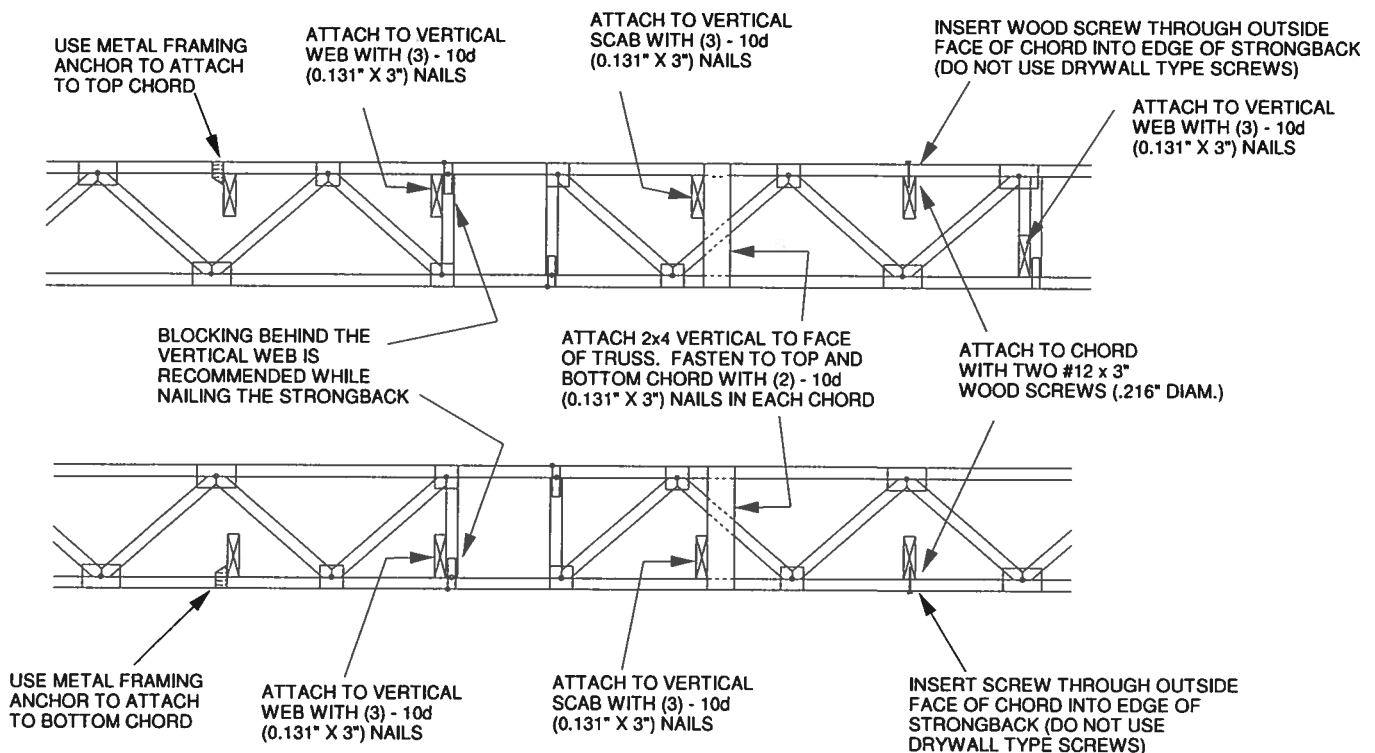
February 12, 2018



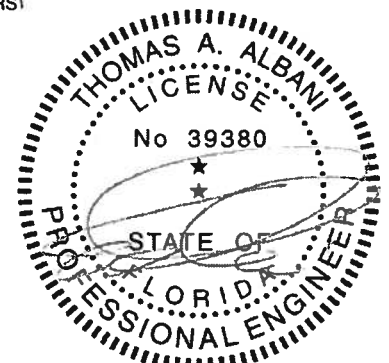
TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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)



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BEARING HEIGHT SCHEDULE

q' 1-1/8"

NOTES:

- 1) REFER TO HD 91 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING) REFER TO ENGINEER DRAWINGS FOR PERMANENT BRACING REQUIRED
- 2) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL 1005 FOR ALTERNATE BRACING REQUIREMENTS.
- 3) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER
- 4) ALL TRUSSES ARE DESIGNED FOR 2 o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
- 5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
- 6) 5/4x2 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP
- 7) BEAMS ARE UNFINISHED (UNF) TO BE FINISHED BY BUILDER



Jacksonville  
Tampa

PHONE: 904-772-6100 FAX: 904-772-1973

PHONE: 813-621-9831 FAX: 813-628-8756

Lake City  
PHONE: 386-755-6844 FAX: 386-755-7473

BUILDER  
CHEMERY CONST.

LOT 7 FWS

DATE: 1-10-2020 BY: KLH

DATE: 1-10-2020 BY: KLH

FL Approval Codes - Mitek Plates #'s 2197.2 - 2197.4. Versa-Lam #1644-R4 & BCI Joists #1392-R4