



RE: 2802407  
SIMQUE - LOT 57 PLL

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

**Site Information:**

Customer: Aaron Simque Homes Project Name: 2802407  
Lot/Block: 57 Model: 2281  
Address: TBD Subdivision: The Preserve at Laurel Lake  
City: Columbia Cty State: FL

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

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

This package includes 37 individual, dated Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T24043985	CJ01	5/24/2021	21	T24044005	T08A	5/24/2021
2	T24043986	CJ01P	5/24/2021	22	T24044006	T08B	5/24/2021
3	T24043987	CJ03	5/24/2021	23	T24044007	T09	5/24/2021
4	T24043988	CJ03A	5/24/2021	24	T24044008	T10	5/24/2021
5	T24043989	CJ05	5/24/2021	25	T24044009	T11	5/24/2021
6	T24043990	CJ05A	5/24/2021	26	T24044010	T12	5/24/2021
7	T24043991	EJ01	5/24/2021	27	T24044011	T13	5/24/2021
8	T24043992	EJ02	5/24/2021	28	T24044012	T14	5/24/2021
9	T24043993	EJ03	5/24/2021	29	T24044013	T15	5/24/2021
10	T24043994	HJ05	5/24/2021	30	T24044014	T16	5/24/2021
11	T24043995	HJ10	5/24/2021	31	T24044015	T17	5/24/2021
12	T24043996	HJ10A	5/24/2021	32	T24044016	T18	5/24/2021
13	T24043997	T01	5/24/2021	33	T24044017	T19	5/24/2021
14	T24043998	T02	5/24/2021	34	T24044018	T20	5/24/2021
15	T24043999	T03	5/24/2021	35	T24044019	T21	5/24/2021
16	T24044000	T04	5/24/2021	36	T24044020	T22	5/24/2021
17	T24044001	T05	5/24/2021	37	T24044021	T23	5/24/2021
18	T24044002	T06	5/24/2021				
19	T24044003	T07	5/24/2021				
20	T24044004	T08	5/24/2021				

The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision  
based on the parameters provided by Builders FirstSource-Jacksonville.  
Truss Design Engineer's Name: Velez, Joaquin  
My license renewal date for the state of Florida is February 28, 2023.  
Florida COA: 6634

**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. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



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

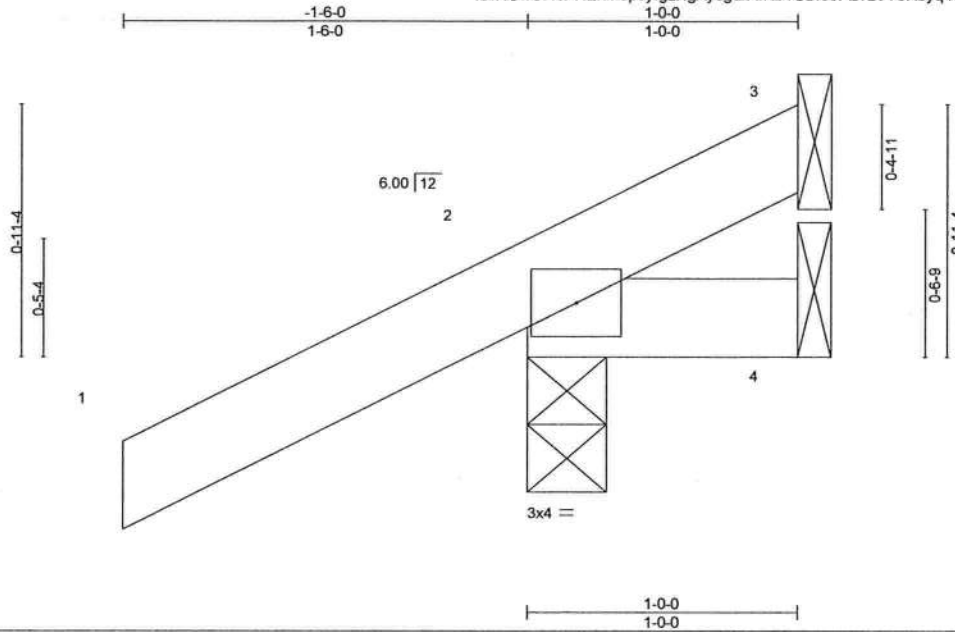
May 24, 2021

Velez, Joaquin

Job 2802407	Truss CJ01	Truss Type JACK-OPEN	Qty 8	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24043985
----------------	---------------	-------------------------	----------	----------	---	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:39 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-ifRb1GBfe0FEVLVY6Rbyq4CXnxCQtYy1JmmAVOzEuHk



Scale = 1:8.2

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.20	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.04	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 FBC2020/TPI2014		Matrix-MP						Weight: 6 lb	FT = 20%

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

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

**REACTIONS.** (size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=57(LC 12)  
Max Uplift 3=-6(LC 1), 2=-106(LC 12), 4=-19(LC 1)  
Max Grav 3=9(LC 8), 2=179(LC 1), 4=25(LC 16)

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

**NOTES-**

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=106.



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

May 22, 2021

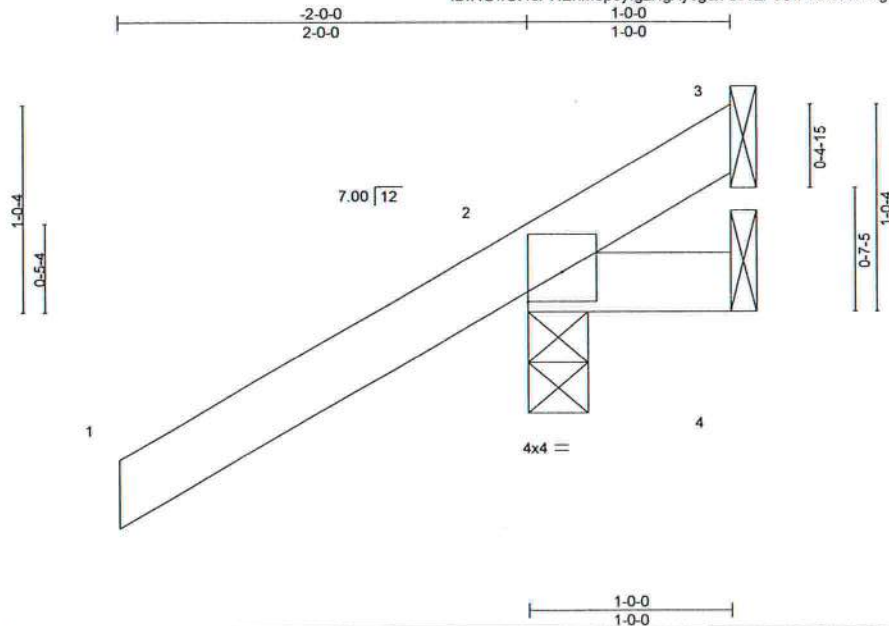
**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before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



6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24043986
2802407	CJ01P	JACK-OPEN	4	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:40 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-Br?zFcCIPKN5XV4kg96BMHlfyLWSc?CAXQV1rzEuHj



Scale = 1:10.9

Plate Offsets (X,Y)--		[2:Edge,0-1-12]													
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP				
TCLL 20.0		Plate Grip DOL	1.25	TC 0.43		Vert(LL)	-0.00	7	>999	240					
TCDL 7.0		Lumber DOL	1.25	BC 0.12		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	FBC2020/TPI2014	Matrix-MP											

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=78(LC 12)  
Max Uplift 3=-27(LC 1), 2=-166(LC 12), 4=-52(LC 19)  
Max Grav 3=25(LC 16), 2=254(LC 1), 4=47(LC 16)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=166.



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

May 22,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

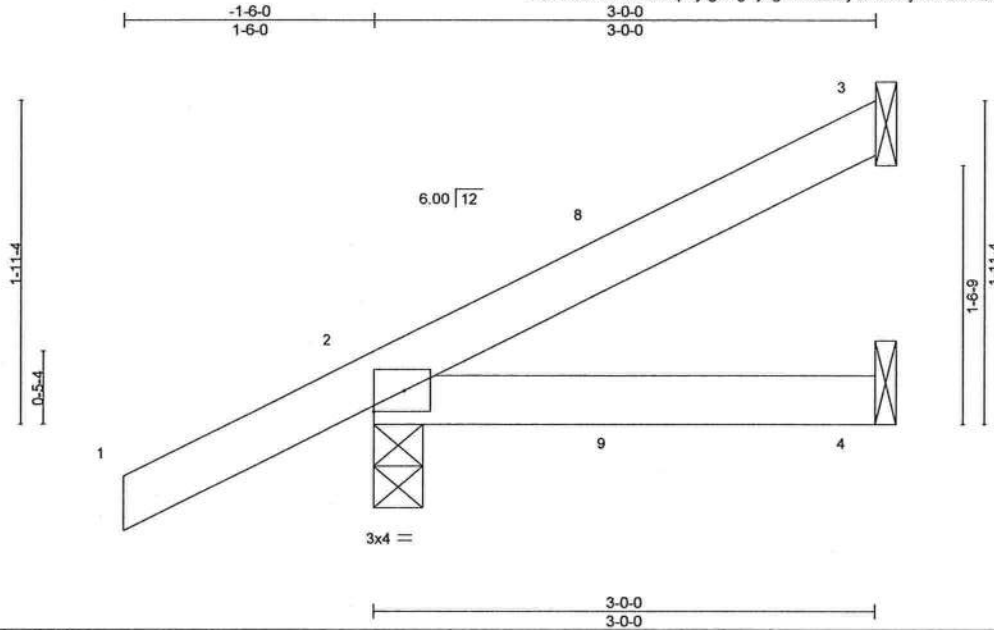


Job 2802407	Truss CJ03	Truss Type JACK-OPEN	Qty 6	Ply 1	SIMQUE - LOT 57 PLL T24043987
----------------	---------------	-------------------------	----------	----------	----------------------------------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:41 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-f1ZLSyCwAdVy8efxDsdQvVHlHrCLSSKm4FHZHZeHi



Scale = 1:13.3

Plate Offsets (X,Y)-- [2:Edge,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 0.20	Vert(LL)	0.01	4-7	>999	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.15	Vert(CT)	-0.01	4-7	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	3	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP						
								Weight: 12 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

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

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=105(LC 12)  
Max Uplift 3=58(LC 12), 2=98(LC 12), 4=27(LC 9)  
Max Grav 3=60(LC 1), 2=210(LC 1), 4=50(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



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

May 22,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss CJ03A	Truss Type JACK-OPEN	Qty 2	Ply 1	SIMQUE - LOT 57 PLL	T24043988
----------------	----------------	-------------------------	----------	----------	---------------------	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:42 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-7E7kgHDYxxdpmoE7na8gSiq218CF4viT?k\_q5jzEuHh



Scale = 1:13.3

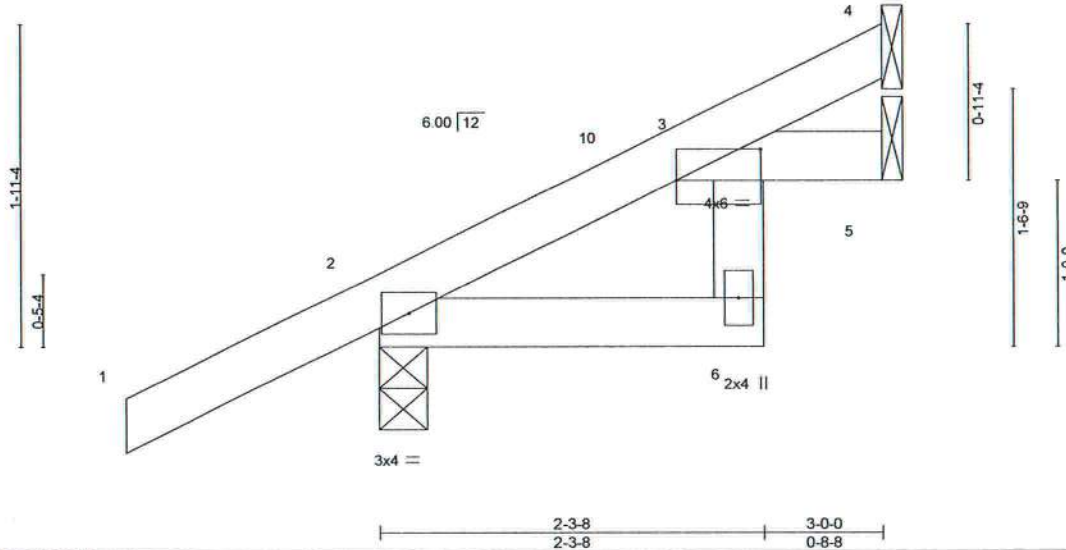


Plate Offsets (X,Y)-- [3:0-6-0,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.20	Vert(LL)	0.01	6	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.10	Vert(CT)	-0.01	6	>999		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.00	Horz(CT)	0.01	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MR						
	Code FBC2020/TPI2014						Weight: 14 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
3-6: 2x4 SP No.3

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

**REACTIONS.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=105(LC 12)  
Max Uplift 4=38(LC 12), 2=97(LC 12), 5=19(LC 12)  
Max Grav 4=49(LC 1), 2=211(LC 1), 5=45(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 2-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



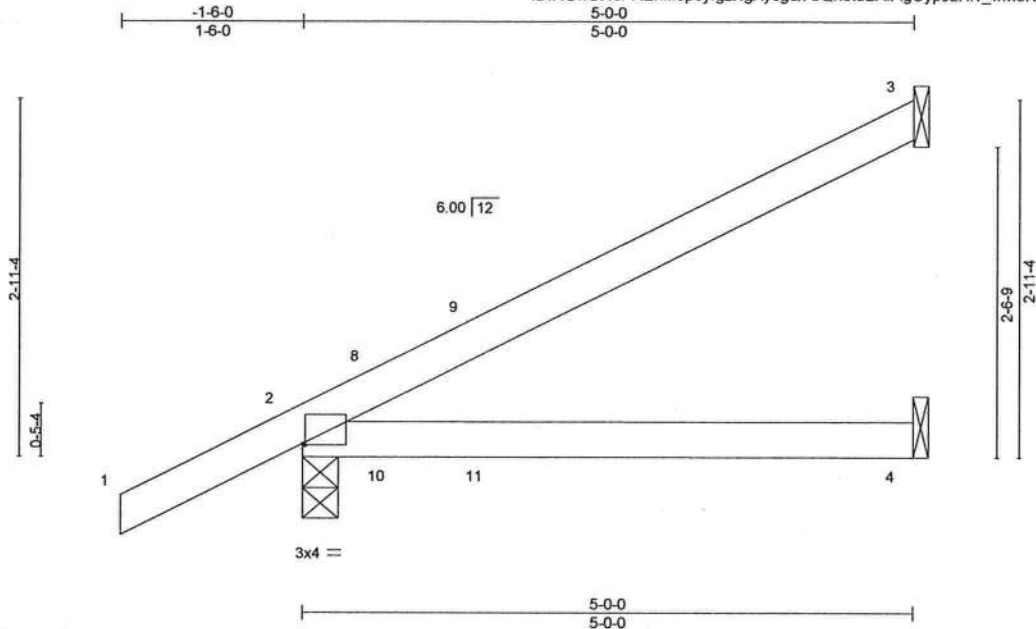
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2802407	Truss CJ05	Truss Type JACK-OPEN	Qty 6	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24043989
----------------	---------------	-------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:43 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-bQh6tdEAiFgOypJLHfv\_wM8NYRQpMydDOKoe9zEuHg



Scale = 1:18.2

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

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 0.55	Vert(LL)	0.13 4-7	>473	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.55	Vert(CT)	0.11 4-7	>518	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01 3	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MP					Weight: 18 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.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=155(LC 12)  
Max Uplift 3=107(LC 12), 2=114(LC 12), 4=48(LC 9)  
Max Grav 3=114(LC 1), 2=276(LC 1), 4=89(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) - 1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-11-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=107, 2=114.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24043990
2802407	CJ05A	JACK-OPEN	2	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:44 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-3cFU5zFoTYIX?6OWW?B8X7vLWYqXpCmS2TxAczEuHf

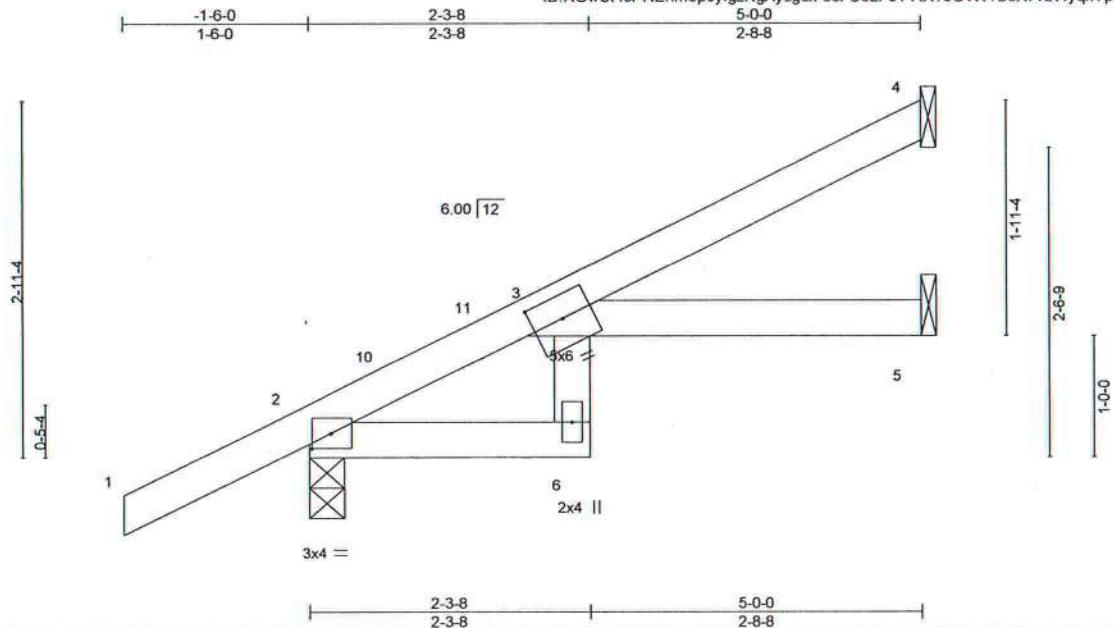


Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [3:0-3-0,0-2-4]

LOADING (psf)	SPACING-		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.40		Vert(LL)	0.08	6	>731	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.34		Vert(CT)	-0.08	6	>728	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.05	5	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 20 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
3-6: 2x4 SP No.3

#### BRACING-

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

#### REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=155(LC 12)  
Max Uplift 4=87(LC 12), 2=114(LC 12), 5=24(LC 12)  
Max Grav 4=102(LC 1), 2=278(LC 1), 5=83(LC 3)

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

#### NOTES-

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=114.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

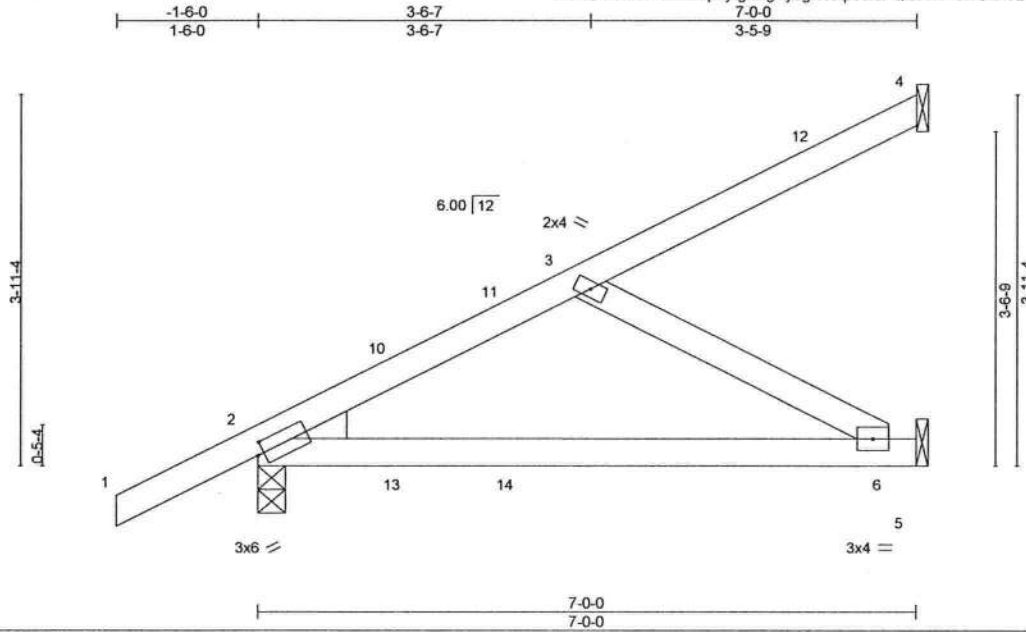
6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss EJ01	Truss Type Jack-Partial	Qty 24	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24043991
----------------	---------------	----------------------------	-----------	----------	---	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:45 2021 Page 1  
ID.RGwSt4cPREnm5p9yfgzNgAycgdx-XposIJFQEs?NdGziSiN3LSVWM4jHEyvhDVizEuHe



Scale = 1:23.5

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

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 0.51	Vert(LL)	0.25	6-9	>329	240	MT20
TCDL 7.0	Lumber DOL	1.25	BC 0.75	Vert(CT)	0.23	6-9	>364	180	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	-0.01	2	n/a	n/a	
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS						
								Weight: 31 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 5-2-14 oc bracing.

#### REACTIONS.

(size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=197(LC 12)  
Max Uplift 4=-64(LC 12), 2=-137(LC 12), 5=-125(LC 9)  
Max Grav 4=74(LC 1), 2=346(LC 1), 5=175(LC 3)

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

TOP CHORD 2-3=-268/243  
BOT CHORD 2-6=-471/230  
WEBS 3-6=-261/536

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-11-4 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=137, 5=125.



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

May 22, 2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24043992
2802407	EJ02	JACK-PARTIAL	4	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:46 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-??MEWfG2\_A7EFQYu0PDccY\_dumQe0jh3wMy2EUzEuHd

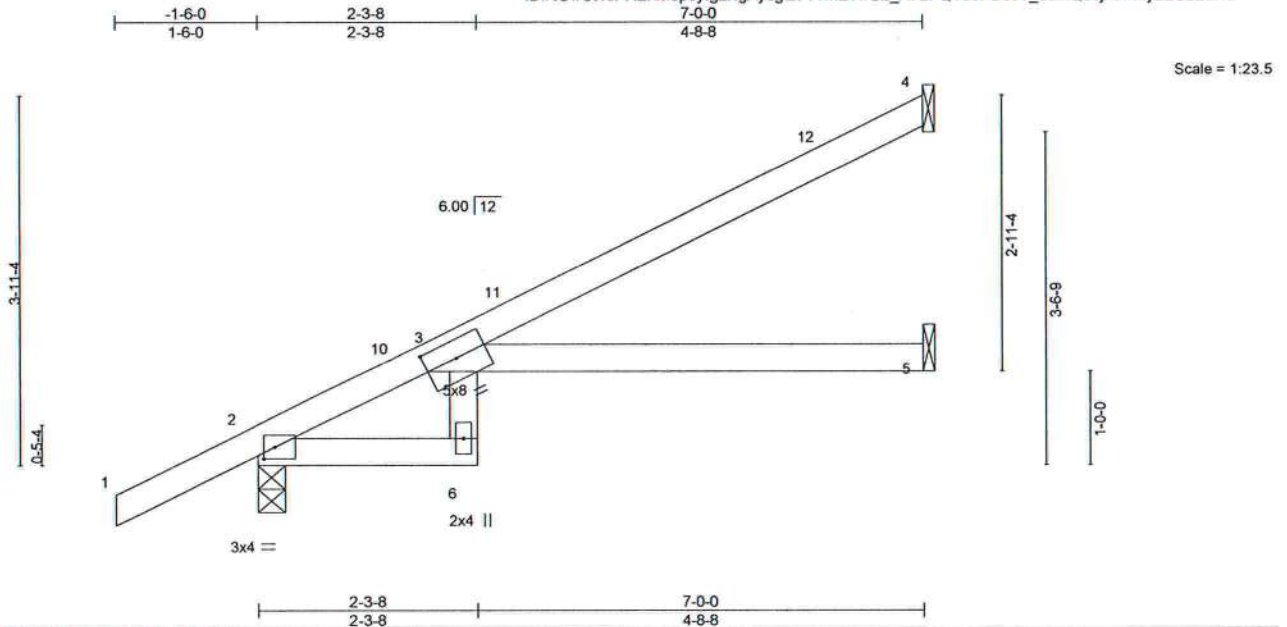


Plate Offsets (X,Y)- [2:0-1-7,0-1-8], [3:0-4-0,0-2-4]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.66	Vert(LL)	0.23	3-5	>363	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.65	Vert(CT)	-0.26	3-5	>316		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.13	5	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MR					Weight: 27 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
3-6: 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.** (size) 4=Mechanical, 2=0-3-8, 5=Mechanical  
Max Horz 2=197(LC 12)  
Max Uplift 4=118(LC 12), 2=136(LC 12), 5=27(LC 12)  
Max Grav 4=153(LC 1), 2=348(LC 1), 5=120(LC 3)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 4=118, 2=136.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

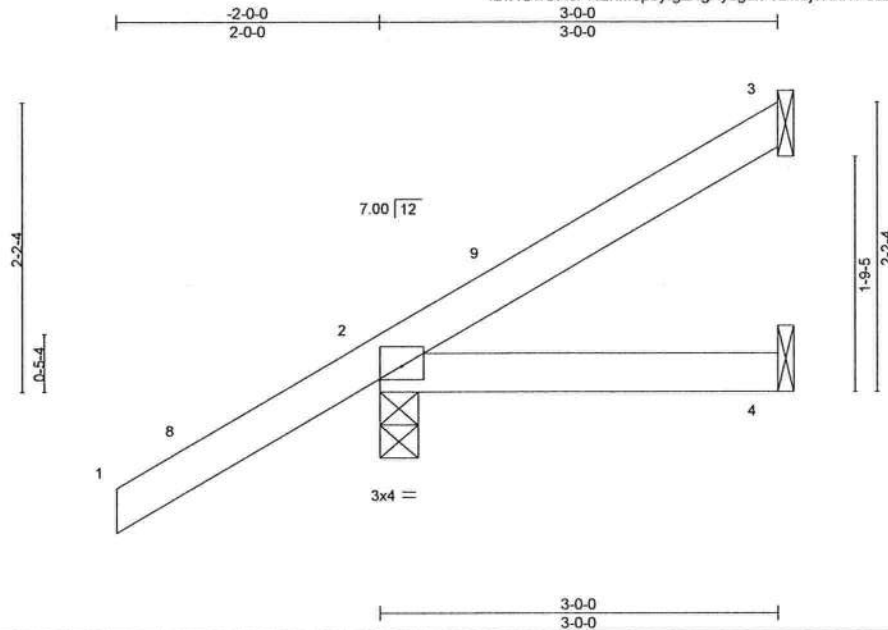
Job 2802407	Truss EJ03	Truss Type JACK-OPEN	Qty 3	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24043993
----------------	---------------	-------------------------	----------	----------	---	-----------

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:47 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-TBwdj?HhITF5sZ64a7kr9mXsw9vDIAxC80lbnxzEuHc



Scale = 1:16.8

Plate Offsets (X,Y) - [2.Edge,0-1-4]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.39	Vert(LL)	-0.01 4-7	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.11	Vert(CT)	-0.01 4-7	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00 3	n/a	n/a
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MP				
						Weight: 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.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical  
Max Horz 2=135(LC 12)  
Max Uplift 3=57(LC 12), 2=123(LC 12)  
Max Grav 3=63(LC 19), 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 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 2-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=123.



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

May 22,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



6904 Parke East Blvd.  
Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24043994
2802407	HJ05	DIAGONAL HIP GIRDER	2	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:48 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-yOU?wLlJWnNyUjhH8qF4hz4?zZAUUdBMNfR9JNzEuHb

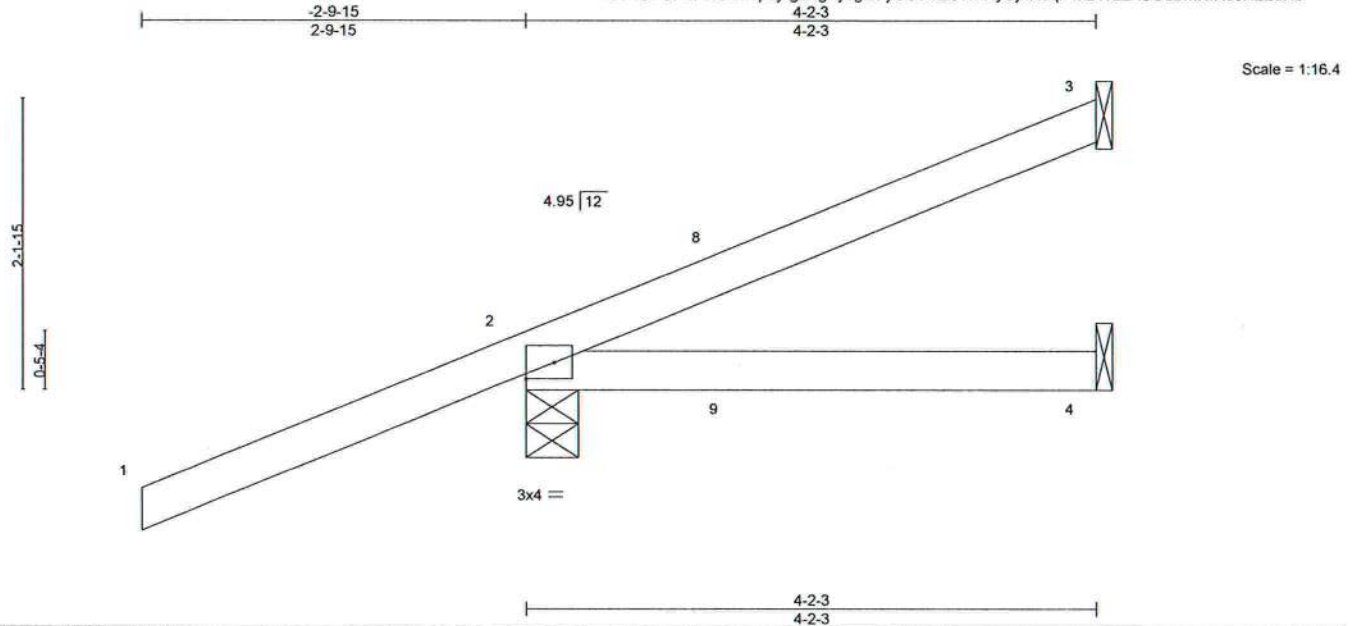


Plate Offsets (X,Y)--		[2:Edge,0-1-8]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.56
TCDL 7.0	Lumber DOL	1.25	BC 0.43
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MP
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) -0.06 4-7 >893 240
			Vert(CT) 0.05 4-7 >951 180
			Horz(CT) 0.01 2 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 18 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 4-2-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-4-9, 4=Mechanical  
Max Horz 2=134(LC 8)  
Max Uplift 3=-77(LC 8), 2=-281(LC 4), 4=-46(LC 16)  
Max Grav 3=54(LC 1), 2=282(LC 1), 4=67(LC 30)

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

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=16) 2=281.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 85 lb down and 103 lb up at 1-6-1, and 85 lb down and 103 lb up at 1-6-1 on top chord, and 72 lb down and 74 lb up at 1-6-1, and 72 lb down and 74 lb up at 1-6-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

##### Uniform Loads (plf)

Vert: 1-3=-54, 4-5=-20

##### Concentrated Loads (lb)

Vert: 8=51(F=25, B=25) 9=69(F=34, B=34)



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

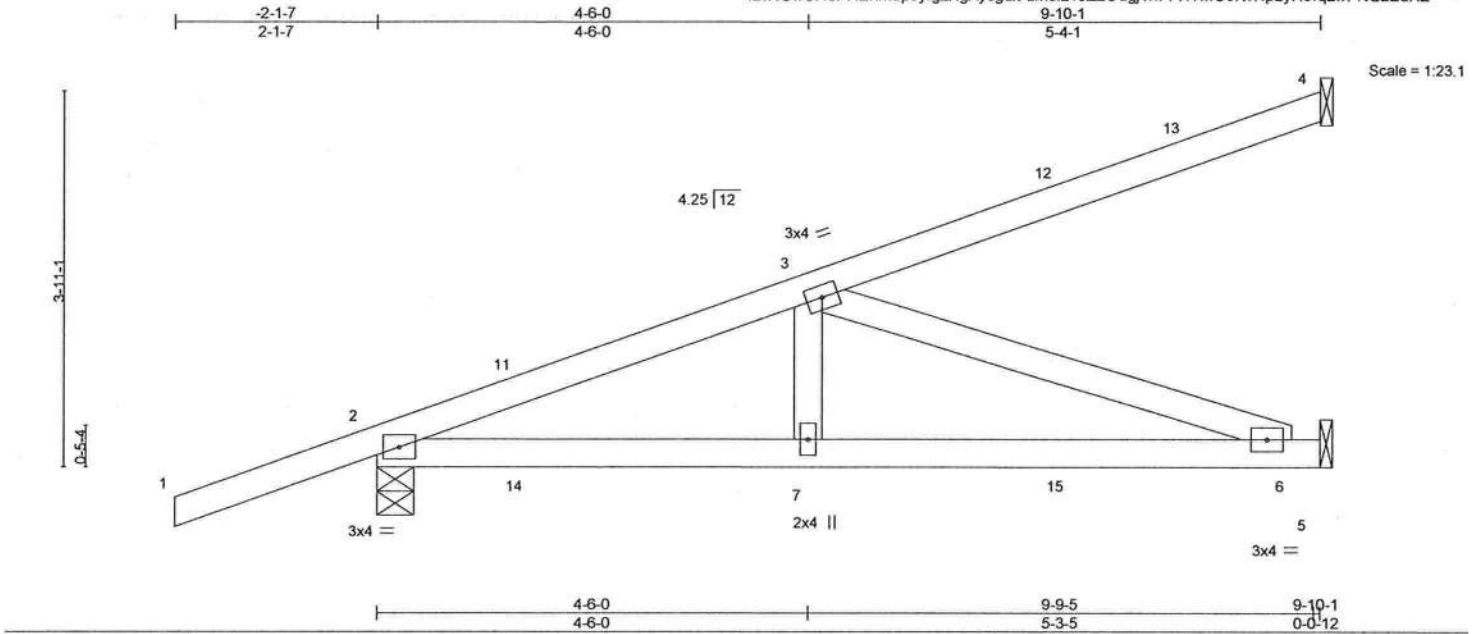
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2802407	Truss HJ10	Truss Type DIAGONAL HIP GIRDER	Qty 3	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24043995
----------------	---------------	-----------------------------------	----------	----------	---	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:50 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-umcLL1JZ2Odgi1rffFHYmO9KvNp2yR5fzqwFNGzEuHZ



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.59	Vert(LL)	0.12	6-7	>999	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.62	Vert(CT)	-0.12	6-7	>980		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.42	Horz(CT)	-0.01	5	n/a		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS						
	Code FBC2020/TPI2014						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 6-8-13 oc bracing.

**REACTIONS.** (size) 4=Mechanical, 2=0-4-9, 5=Mechanical  
Max Horz 2=215(LC 4)  
Max Uplift 4=126(LC 4), 2=477(LC 4), 5=276(LC 4)  
Max Grav 4=151(LC 1), 2=526(LC 1), 5=297(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=765/594  
BOT CHORD 2-7=663/692, 6-7=663/692  
WEBS 3-7=143/276, 3-6=732/701

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=126, 2=477, 5=276.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 77 lb up at 1-6-1, 87 lb down and 77 lb up at 1-6-1, 28 lb down and 57 lb up at 4-4-0, 28 lb down and 57 lb up at 4-4-0, and 52 lb down and 115 lb up at 7-1-15, and 52 lb down and 115 lb up at 7-1-15 on top chord, and 57 lb down and 46 lb up at 1-6-1, 57 lb down and 46 lb up at 1-6-1, 20 lb down and 35 lb up at 4-4-0, 20 lb down and 35 lb up at 4-4-0, and 41 lb down and 63 lb up at 7-1-15, and 41 lb down and 63 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=4(F=2, B=2) 12=74(F=37, B=37) 15=57(F=29, B=29)



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

May 22, 2021

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



6904 Parke East Blvd.  
Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24043996
2802407	HJ10A	DIAGONAL HIP GIRDER	1	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:51 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-MyA7ZMKBpiiXLBQspzpnJciRMn69htZo3dgpwizEuHY

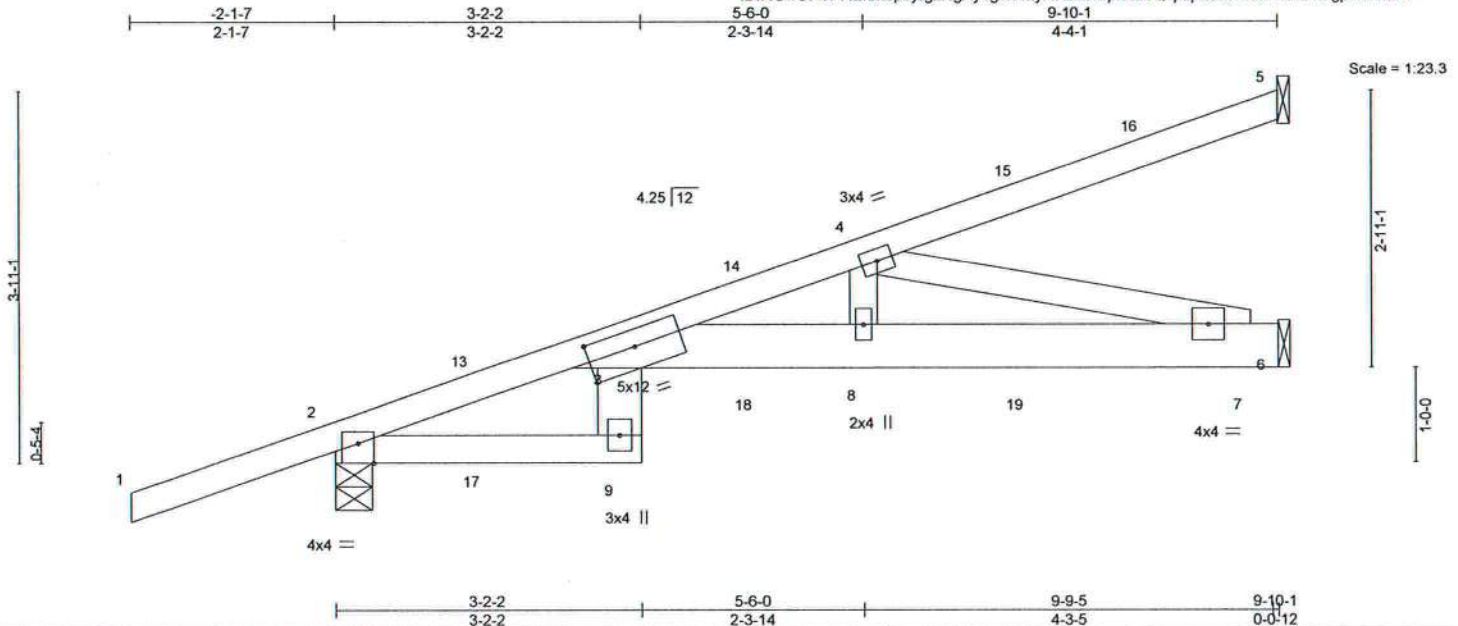


Plate Offsets (X,Y)-	[2:0-2-0,Edge], [3:0-6-0,0-2-2]								
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.80	Vert(LL)	0.33	3	>356	240	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.82	Vert(CT)	-0.37	3	>320	180	
BCLL 0.0	Rep Stress Incr	NO	WB 0.47	Horz(CT)	0.16	6	n/a	n/a	
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 50 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP M 31  
BOT CHORD 2x6 SP No.2 \*Except\*  
2-9: 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 7-0-8 oc bracing.

**REACTIONS.** (size) 5=Mechanical, 2=0-4-9, 6=Mechanical  
Max Horz 2=215(LC 4)  
Max Uplift 5=-82(LC 4), 2=-392(LC 4), 6=-219(LC 8)  
Max Grav 5=111(LC 1), 2=542(LC 1), 6=351(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 3-11=-268/88, 3-4=-1277/818  
BOT CHORD 3-8=-885/1214, 7-8=-893/1225  
WEBS 4-8=-208/373, 4-7=-1262/920

#### NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5 except (jt=lb) 2=392, 6=219.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 87 lb down and 77 lb up at 1-6-1, 87 lb down and 77 lb up at 1-6-1, 28 lb down and 36 lb up at 4-4-0, 28 lb down and 36 lb up at 4-4-0, and 51 lb down and 94 lb up at 7-1-15, and 51 lb down and 94 lb up at 7-1-15 on top chord, and 24 lb down and 46 lb up at 1-6-1, 24 lb down and 46 lb up at 1-6-1, 24 lb down and 28 lb up at 4-4-0, 24 lb down and 28 lb up at 4-4-0, and 41 lb down and 41 lb up at 7-1-15, and 41 lb down and 41 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: 1-3=-54, 3-5=-54, 9-10=-20, 3-6=-20  
Concentrated Loads (lb)  
Vert: 14=-3(F=-2, B=-2) 15=-51(F=-26, B=-26) 18=-31(F=-15, B=-15) 19=-83(F=-41, B=-41)



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

May 22, 2021

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

**MiTek**  
6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss T01	Truss Type HIP GIRDER	Qty 1	Ply 2	SIMQUE - LOT 57 PLL T24043997
----------------	--------------	--------------------------	----------	----------	----------------------------------

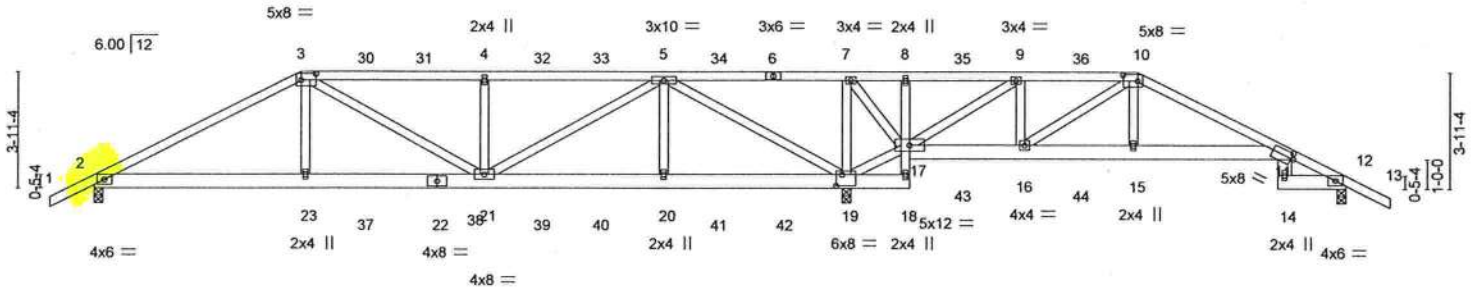
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:58 2021 Page 1

ID:RGwSI4cPREnm5p9yfgzNgAycgdx-fJ5n1mPaAseXhGSCjxRQ54UecbbwxtqgDshgozEuHR

1-6-0	7-0-0	13-2-14	19-3-15	25-5-12	27-7-8	31-4-1	35-4-0	40-0-8	42-4-0	43-10-0
1-6-0	7-0-0	6-2-14	6-1-1	6-1-13	2-1-12	3-8-8	3-11-15	4-8-8	2-3-8	1-6-0

Scale = 1:75.1



<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div>7-0-013-2-1419-3-1525-5-1227-7-831-4-135-4-040-0-842-4-0</div> <div>7-0-06-2-146-1-16-1-132-1-123-8-83-11-154-8-82-3-8</div>									
Plate Offsets (X,Y)-- [3.0-6.0,0-2.8], [10.0-6.0,0-2.8], [11.0-0-14,0-2.4], [19.0-2.8,0-4.8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) I/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.80	Vert(LL)	0.13 21-23 >999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.16 11-15 >999 180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.09 12 n/a n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS				Weight: 503 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\*  
8-18: 2x4 SP No.3  
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, Except:  
6-0-0 oc bracing: 18-19, 17-18, 16-17.

#### REACTIONS.

(size) 2=0-3-8, 12=0-3-8, 19=0-3-8  
Max Horz 2=92(LC 27)  
Max Uplift 2=1172(LC 5), 12=279(LC 9), 19=3286(LC 4)  
Max Grav 2=1480(LC 19), 12=514(LC 20), 19=4727(LC 1)

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

TOP CHORD 2-3=-2639/2284, 3-4=-2408/2359, 4-5=-2408/2359, 5-7=-1671/3040, 7-8=-1652/2912,  
8-9=-1629/2879, 9-10=-418/758, 10-11=-654/333, 11-12=-426/246  
BOT CHORD 2-23=-2005/2289, 21-23=-2026/2312, 20-21=-1208/781, 19-20=-1208/781,  
18-19=-321/185, 16-17=-758/609, 15-16=-189/594, 11-15=-180/548, 11-14=-141/369  
WEBS 3-23=-495/697, 3-21=-411/153, 4-21=-709/581, 5-21=-1359/1980, 5-20=-265/539,  
5-19=-4121/3140, 7-19=-818/565, 17-19=-3040/1894, 7-17=-92/255, 9-17=-2546/1472,  
9-16=-473/972, 10-16=-1591/919, 10-15=-357/742

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl.,  
GCpi=0.18; MWFRS (envelope) gable end zone; porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)  
2=1172, 12=279, 19=3286.



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

May 22,2021

Continued on page 2



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2802407	Truss T01	Truss Type HIP GIRDER	Qty 1	Ply 2	SIMQUE - LOT 57 PLL T24043997
----------------	--------------	--------------------------	----------	----------	----------------------------------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:54:59 2021 Page 2  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-7Vf9E5QCx9mOIP1OHeyfel1pM?w9ZO7zvtcECEzEuHQ

#### NOTES-

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 129 lb down and 138 lb up at 7-0-0, 110 lb down and 138 lb up at 9-0-12, 110 lb down and 138 lb up at 11-0-12, 110 lb down and 138 lb up at 13-0-12, 110 lb down and 138 lb up at 15-0-12, 110 lb down and 138 lb up at 17-0-12, 110 lb down and 138 lb up at 19-0-12, 110 lb down and 129 lb up at 21-0-12, 110 lb down and 129 lb up at 21-3-4, 110 lb down and 138 lb up at 23-3-4, 110 lb down and 138 lb up at 25-3-4, 110 lb down and 138 lb up at 27-3-4, 99 lb down and 118 lb up at 29-3-4, 99 lb down and 118 lb up at 31-3-4, and 99 lb down and 118 lb up at 33-3-4, and 117 lb down and 118 lb up at 35-4-0 on top chord, and 332 lb down and 399 lb up at 7-0-0, 86 lb down and 88 lb up at 9-0-12, 86 lb down and 88 lb up at 11-0-12, 86 lb down and 88 lb up at 13-0-12, 86 lb down and 88 lb up at 15-0-12, 86 lb down and 88 lb up at 17-0-12, 86 lb down and 88 lb up at 19-0-12, 86 lb down and 88 lb up at 21-0-12, 86 lb down and 88 lb up at 21-3-4, 86 lb down and 88 lb up at 23-3-4, 86 lb down and 88 lb up at 25-3-4, 86 lb down and 88 lb up at 27-5-12, 80 lb down and 47 lb up at 29-3-4, 80 lb down and 47 lb up at 31-3-4, and 80 lb down and 47 lb up at 33-3-4, and 399 lb down and 294 lb up at 35-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

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

##### Uniform Loads (plf)

Vert: 1-3=-54, 3-10=-54, 10-11=-54, 11-13=-54, 18-24=-20, 11-17=-20, 14-27=-20

##### Concentrated Loads (lb)

Vert: 3=-110(F) 6=-110(F) 10=-99(F) 18=-63(F) 8=-110(F) 23=-332(F) 21=-63(F) 4=-110(F) 5=-110(F) 20=-63(F) 7=-110(F) 19=-63(F) 9=-99(F) 16=-76(F) 15=-399(F) 30=-110(F) 31=-110(F) 32=-110(F) 33=-110(F) 34=-221(F) 35=-99(F) 36=-99(F) 37=-63(F) 38=-63(F) 39=-63(F) 40=-63(F) 41=-127(F) 42=-63(F) 43=-76(F) 44=-76(F)

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610



Job 2802407	Truss T02	Truss Type HIP	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24043998
----------------	--------------	-------------------	----------	----------	---------------------	-----------

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

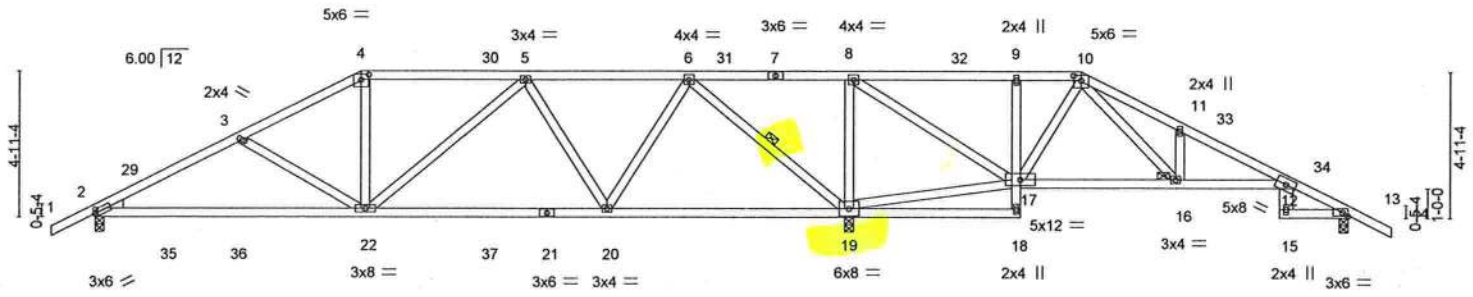
8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:01 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-3umvfnSTSn06YjBnO3\_7j6BGpXf1HJGMB5LG7zEuHO

Job Reference (optional)

1-6-0 4-11-14 9-0-0 14-6-11 20-0-12 25-5-12 31-3-8 33-4-0 36-8-4 40-0-8 42-4-0 43-10-0  
1-6-0 4-11-14 4-0-2 5-6-11 5-6-1 5-5-0 5-9-12 2-0-8 3-4-4 3-4-4 2-3-8 1-6-0

Scale = 1:75.1



		9-0-0		17-3-11		25-5-12		31-3-8		36-8-4		40-0-8		42-4-0	
		9-0-0		8-3-11		8-2-1		5-9-12		5-4-12		3-4-4		2-3-8	
Plate Offsets (X,Y)-- [2:0-0-14,0-1-8], [4:0-3-0,0-2-0], [10:0-3-0,0-2-0]															
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP					
TCLL	20.0	Plate Grip DOL 1.25		TC 0.65		Vert(LL) 0.37 22-25 >818 240		MT20		244/190					
TCDL	7.0	Lumber DOL 1.25		BC 0.74		Vert(CT) 0.33 22-25 >925 180									
BCLL	0.0 *	Rep Stress Incr YES		WB 0.90		Horz(CT) 0.07 13 n/a n/a									
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 233 lb		FT = 20%			

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
9-18: 2x4 SP No.3, 12-15: 2x6 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-2-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 3-3-5 oc bracing.  
WEBS 1 Row at midpt 6-19  
JOINTS 1 Brace at Jt(s): 16

**REACTIONS.** (size) 2=0-3-8, 13=0-3-8, 19=0-3-8  
Max Horz 2=113(LC 16)  
Max Uplift 2=568(LC 9), 13=194(LC 13), 19=1166(LC 8)  
Max Grav 2=829(LC 23), 13=304(LC 24), 19=2264(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=1233/1853, 3-4=976/1697, 4-5=829/1568, 5-6=396/1211, 6-8=596/1482,  
8-9=306/594, 9-10=319/608  
BOT CHORD 2-22=1579/1060, 20-22=1161/669, 19-20=587/406, 16-17=323/384, 12-16=25/262  
WEBS 3-22=282/317, 4-22=625/204, 5-22=223/347, 5-20=640/401, 6-20=1049/823,  
6-19=1498/1601, 8-19=875/477, 17-19=1410/712, 8-17=429/1030, 10-17=554/295,  
10-16=315/572, 11-16=265/236

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-0-0, Exterior(2R) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 33-4-0, Exterior(2R) 33-4-0 to 37-6-15, Interior(1) 37-6-15 to 43-10-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load design covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=568, 13=194, 19=1166.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24043999
2802407	T03	HIP	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:02 2021 Page 1

ID:RGWSt4cPREnm5p9yfgzNgAycgdx-X4KHs7T5D48zAtmzymVMGwfOHcvmI6QbrqpZzEuHN

1-6-0 5-8-0 11-0-0 18-2-14 25-5-12 31-4-0 35-8-4 40-0-8 42-4-0 43-10-0  
1-6-0 5-8-0 5-4-0 7-2-14 7-2-14 5-10-4 4-4-4 4-4-4 2-3-8 1-6-0

Scale = 1:75.1

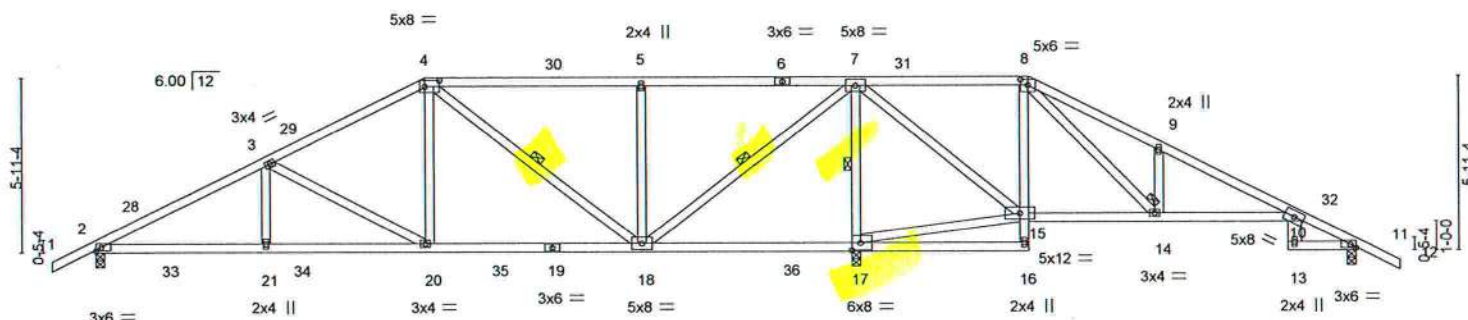


Plate Offsets (X,Y)-	[4:0-6-0,0-2-8], [8:0-3-0,0-2-4], [17:0-3-8,0-3-0]
----------------------	--

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 0.57	Vert(LL)	0.19 18-20	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.62	Vert(CT)	-0.19 10-14	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.87	Horz(CT)	0.07 11	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 239 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
8-16: 2x4 SP No.3, 10-13: 2x6 SP No.2  
WEBS 2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-7 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 4-3-13 oc bracing.  
WEBS 1 Row at midpt 4-18, 7-18, 7-17  
JOINTS 1 Brace at Jt(s): 14

#### REACTIONS.

(size) 2=0-3-8, 11=0-3-8, 17=0-3-8  
Max Horz 2=-136(LC 17)  
Max Uplift 2=-571(LC 9), 11=-174(LC 13), 17=-1078(LC 8)  
Max Grav 2=864(LC 25), 11=276(LC 24), 17=2518(LC 2)

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

TOP CHORD 2-3=-1323/2005, 3-4=-872/1479, 4-5=-357/1016, 5-7=-357/1016, 7-8=-176/603,  
8-9=-49/282  
BOT CHORD 2-21=-1683/1139, 20-21=-1683/1139, 18-20=-1111/741, 17-18=-1374/667, 8-15=-740/364,  
14-15=-599/431  
WEBS 3-21=-360/214, 3-20=-475/672, 4-20=-755/481, 4-18=-739/487, 5-18=-426/326,  
7-18=-1728/1723, 7-17=-1990/1460, 15-17=-1357/610, 7-15=-308/996, 8-14=-390/690,  
9-14=-308/286

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 31-2-6, Exterior(2R) 31-2-6 to 35-8-4, Interior(1) 35-8-4 to 43-10-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=571, 11=174, 17=1078.



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

May 22,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2802407	Truss T04	Truss Type HIP	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044000
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,						

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:04 2021 Page 1  
ID:RGwSI4cPREnm5p9yfgzNgAycgdx-UTS2HpULiOhPBwM4BYqLLkee0ZpEi8i39J?iSzEuHL

1-6-0 6-10-0 13-0-0 21-2-0 29-4-0 35-6-0 42-4-0 43-10-0  
1-6-0 6-10-0 6-2-0 8-2-0 8-2-0 6-2-0 6-10-0 1-6-0

Scale = 1:75.1

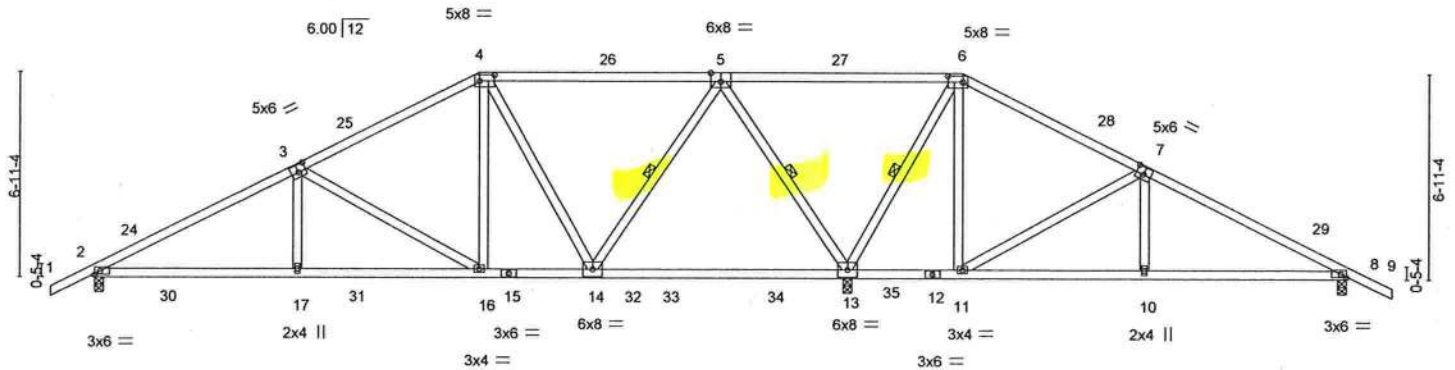


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-6-0,0-2-8], [5:0-4-0,Edge], [6:0-6-0,0-2-8], [7:0-3-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.90	Vert(LL)	0.32 13-14	>944	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.71	Vert(CT)	-0.33 13-14	>940	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.64	Horz(CT)	0.03 13	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 230 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 4-5-5 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 5-14, 5-13, 6-13

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 8=0-3-8  
Max Horz 2=156(LC 13)  
Max Uplift 2=496(LC 9), 13=1018(LC 9), 8=288(LC 13)  
Max Grav 2=912(LC 25), 13=2197(LC 2), 8=512(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=1383/1775, 3-4=799/1094, 4-5=457/807, 5-6=527/731, 6-7=420/417, 7-8=541/317  
BOT CHORD 2-17=1468/1186, 16-17=1472/1188, 14-16=733/681, 11-13=280/621, 10-11=157/456, 8-10=158/454  
WEBS 3-17=488/290, 3-16=611/870, 4-16=690/410, 4-14=466/479, 5-14=1045/793, 5-13=1286/1396, 6-13=945/453, 6-11=153/444, 7-11=644/378, 7-10=0/303

- NOTES-
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-6-0 to 1-6-0, Interior(1) 1-6-0 to 13-0-0, Exterior(2R) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 29-4-0, Exterior(2R) 29-4-0 to 33-6-15, Interior(1) 33-6-15 to 43-10-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=496, 13=1018, 8=288.



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

May 22,2021

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24044001
2802407	T05	HIP	1	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:06 2021 Page 1  
ID:RGwSI4cPREnm5p9yfgzNgAycgdx-QraoiVWbHJePeU3kBcalQmp1CqCYig1?WT06yKzEuHJ

1-6-0 7-11-0 15-0-0 21-2-0 27-4-0 34-5-0 42-4-0 43-10-0  
1-6-0 7-11-0 7-1-0 6-2-0 6-2-0 7-1-0 7-11-0 1-6-0

Scale = 1:75.1

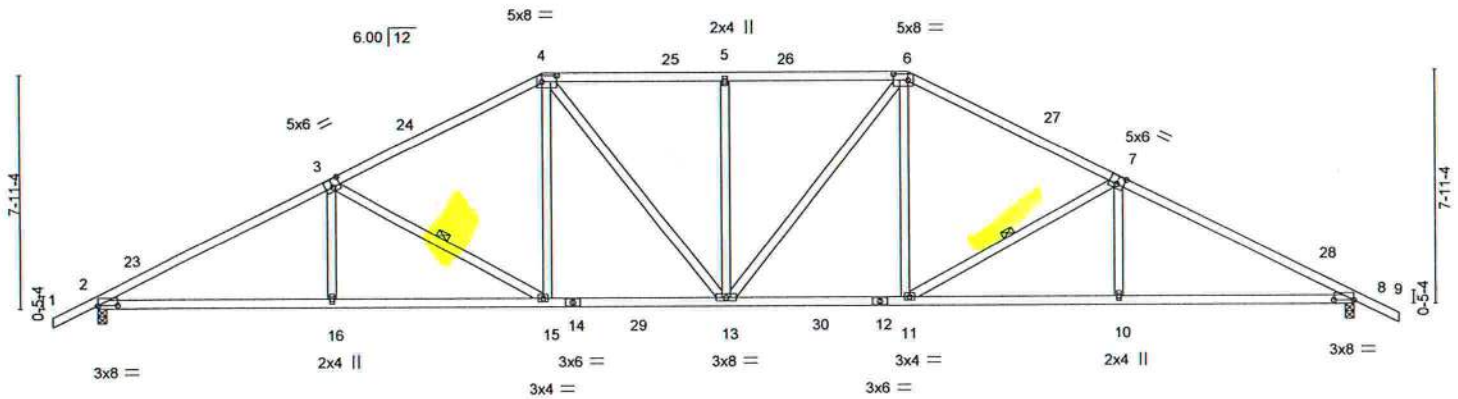


Plate Offsets (X,Y)-- [2:0-8-0,0-0-1], [3:0-3-0,0-3-4], [4:0-6-0,0-2-8], [6:0-6-0,0-2-8], [7:0-3-0,0-3-4], [8:0-8-0,0-0-1]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.76	Vert(LL) -0.26	11-13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.89	Vert(CT) -0.43	11-13	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.42	Horz(CT) 0.17	8	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS						
							Weight: 232 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.  
BOT CHORD Rigid ceiling directly applied or 5-8-0 oc bracing.  
WEBS 1 Row at midpt 3-15, 7-11

#### REACTIONS.

(size) 2=0-3-8, 8=0-3-8  
Max Horz 2=178(LC 12)  
Max Uplift 2=672(LC 12), 8=672(LC 13)  
Max Grav 2=1783(LC 2), 8=1783(LC 2)

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

TOP CHORD 2-3=-3195/1116, 3-4=-2563/918, 4-5=-2439/948, 5-6=-2439/948, 6-7=-2563/918, 7-8=-3195/1117  
BOT CHORD 2-16=-1034/2794, 15-16=-1034/2794, 13-15=-662/2232, 11-13=-548/2232, 10-11=-856/2794, 8-10=-857/2794  
WEBS 3-16=0/304, 3-15=-673/431, 4-15=-170/599, 4-13=-234/450, 5-13=-373/291, 6-13=-234/450, 6-11=-170/599, 7-11=-673/431, 7-10=0/304

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 1-6-0 to 1-6-0, Interior(1) 1-6-0 to 15-0-0, Exterior(2R) 15-0-0 to 19-2-15, Interior(1) 19-2-15 to 27-4-0, Exterior(2R) 27-4-0 to 31-6-15, Interior(1) 31-6-15 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=672, 8=672.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss T06	Truss Type Hip	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044002
----------------	--------------	-------------------	----------	----------	---------------------	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:08 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-MEHZ7AXspwu7uoD7J1cmVBvQ9dtTAU9IznHC0DzEuHH

1-6-0	7-0-0	13-4-0	17-0-0	21-2-0	25-4-0	29-0-0	35-4-0	42-4-0	43-10-0
1-6-0	7-0-0	6-4-0	3-8-0	4-2-0	4-2-0	3-8-0	6-4-0	7-0-0	1-6-0

Scale = 1:76.3

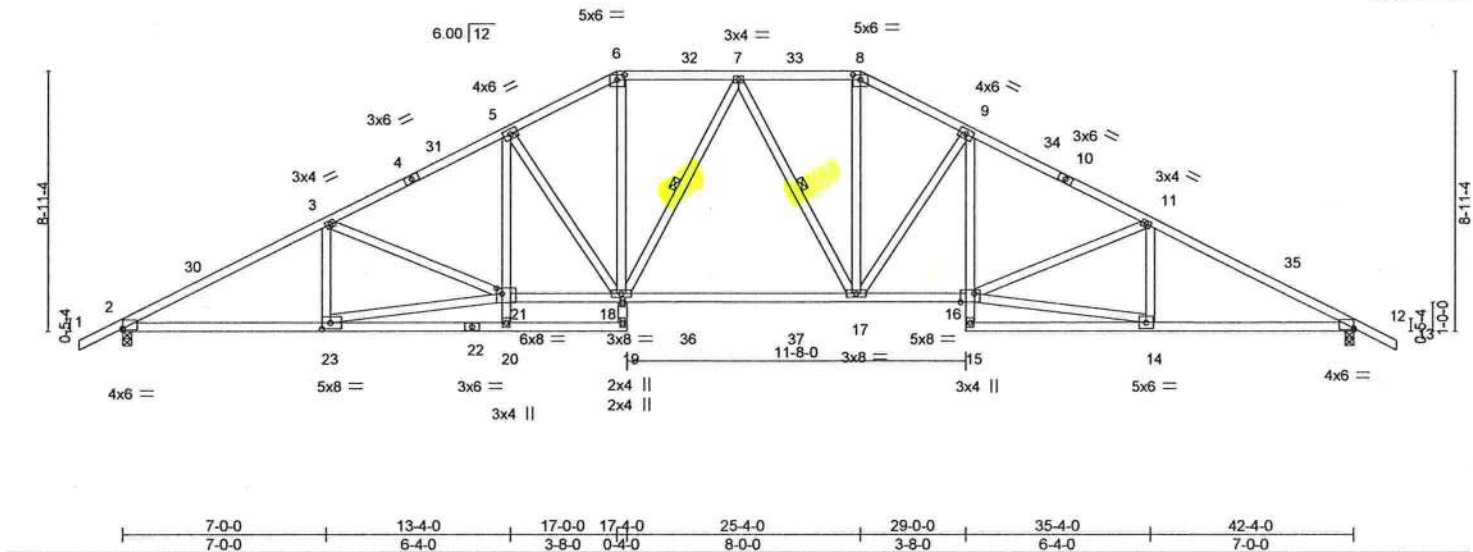


Plate Offsets (X,Y)~	[2:0-0-0,0-0-11], [6:0-3-0,0-2-0], [8:0-3-0,0-2-0], [12:0-0-0,0-0-11], [16:0-5-12,Edge], [21:0-2-4,0-2-4], [23:0-3-8,0-2-8]
----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.48	Vert(LL)	-0.52	19	>971	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.92	Vert(CT)	-1.02	19	>499		
BCLL 0.0 *	Lumber DOL 1.25	WB 0.83	Horz(CT)	0.21	12	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS					Weight: 277 lb	FT = 20%
	Code FBC2020/TP12014							

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-9-15 oc purlins.
BOT CHORD 2x4 SP No.2 *Except*	BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
5-20-9-15: 2x4 SP No.3, 16-21: 2x4 SP M 31	10-0-0 oc bracing: 20-21
WEBS 2x4 SP No.3 *Except*	WEBS 1 Row at midpt 7-18, 7-17
21-23,14-16: 2x4 SP No.2	

<b>REACTIONS.</b>	(size) 2=0-3-8, 12=0-3-8
	Max Horz 2=199(LC 12)
	Max Uplift 2=652(LC 12), 12=659(LC 13)
	Max Grav 2=1859(LC 2), 12=1818(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-3380/1086, 3-5=-3391/1068, 5-6=-2809/981, 6-7=-2490/912, 7-8=-2435/925, 8-9=-2748/995, 9-11=-3227/1101, 11-12=-3305/1100
BOT CHORD	2-23=-1038/2963, 20-21=0/314, 5-21=-183/756, 18-21=-854/2982, 17-18=-602/2514, 16-17=-750/2836, 9-16=-197/577, 12-14=-852/2895
WEBS	3-23=-328/192, 21-23=-965/2928, 5-18=-902/422, 6-18=-323/1090, 7-18=-263/217, 7-17=-330/196, 8-17=-329/1064, 9-17=-741/434, 14-16=-827/2698, 11-14=-285/178

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 17-0-0, Exterior(2R) 17-0-0 to 22-11-13, Interior(1) 22-11-13 to 25-4-0, Exterior(2R) 25-4-0 to 31-3-13, Interior(1) 31-3-13 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=652, 12=659.



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

May 22,2021

**WARNING** - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

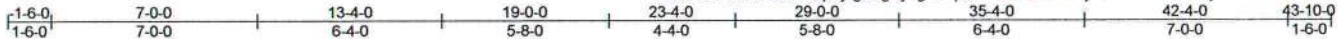
**MiTek**  
6904 Parke East Blvd.  
Tampa, FL 33610

Job 2802407	Truss T07	Truss Type Hip	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044003
Job Reference (optional)						

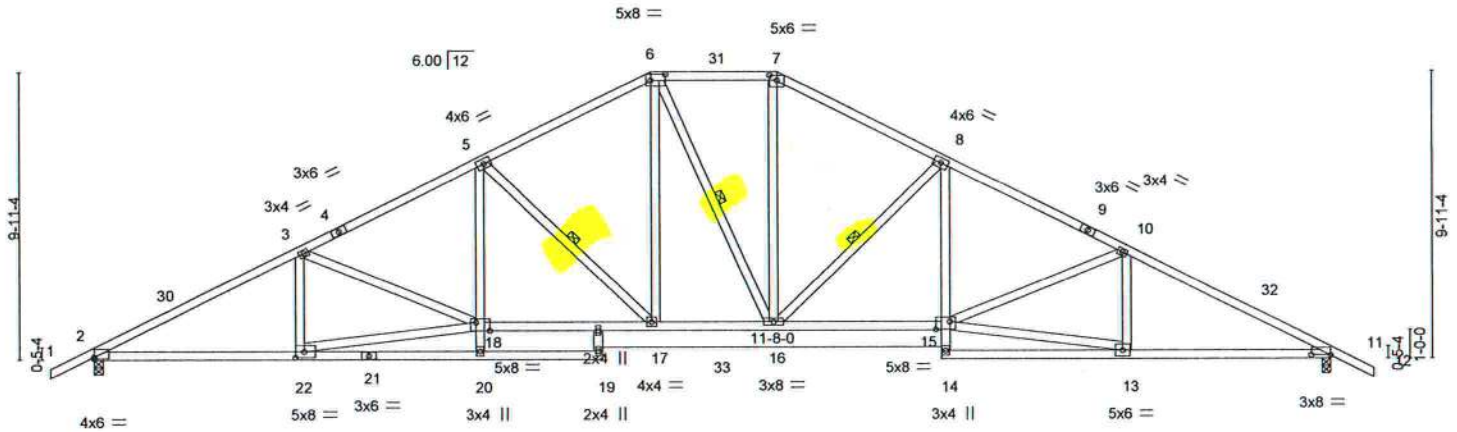
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:09 2021 Page 1

ID:RGWSt4cPREnm5p9fyzNgAycgdx-qQFkKWWUaE0zVyoJsi772PRbo1CyzvsSCR1mYfzEuHG



Scale = 1:76.3



	7-0-0	13-4-0	17-4-0	19-0-0	23-4-0	29-0-0	35-4-0	42-4-0
	7-0-0	6-4-0	4-0-0	1-8-0	4-4-0	5-8-0	6-4-0	7-0-0
Plate Offsets (X,Y)-	[2:0-0-0,0-0-11], [6:0-6-0,0-2-8], [7:0-3-0,0-2-0], [11:0-8-0,0-0-1], [15:0-5-12,0-3-4], [18:0-5-12,Edge], [22:0-3-8,0-2-8]							

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.49	Vert(LL)	-0.53	19	>950	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.97	Vert(CT)	-1.04	19	>487	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.23	11	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 273 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2  
**BOT CHORD** 2x4 SP No.2 \*Except\*  
5-20,8-14: 2x4 SP No.3  
**WEBS** 2x4 SP No.3 \*Except\*  
18-22,13-15: 2x4 SP No.2

**BRACING-**  
**TOP CHORD** Structural wood sheathing directly applied or 2-10-4 oc purlins.  
**BOT CHORD** Rigid ceiling directly applied or 5-8-8 oc bracing. Except:  
10-0-0 oc bracing: 18-20  
**WEBS** 1 Row at midpt 5-17, 6-16, 8-16

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
Max Horz 2=221(LC 16)  
Max Uplift 2=647(LC 12), 11=654(LC 13)  
Max Grav 2=1848(LC 2), 11=1806(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-3355/1074, 3-5=-3381/1060, 5-6=-2528/905, 6-7=-2190/870, 7-8=-2499/911,  
8-10=-3213/1081, 10-11=-3277/1088  
**BOT CHORD** 2-22=-1048/2940, 18-20=0/313, 5-18=-171/851, 17-18=-881/2985, 16-17=-531/2217,  
15-16=-743/2835, 8-15=-182/670, 11-13=-840/2870  
**WEBS** 3-22=-334/192, 18-22=-968/2987, 5-17=-1087/491, 6-17=-310/956, 7-16=-261/885,  
8-16=-915/501, 13-15=-807/2751, 10-13=-291/171

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 19-0-0, Exterior(2E) 19-0-0 to 23-4-0, Exterior(2R) 23-4-0 to 29-1-12, Interior(1) 29-1-12 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=647, 11=654.



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

May 22,2021

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



6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss T08	Truss Type Roof Special	Qty 4	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24044004
----------------	--------------	----------------------------	----------	----------	---	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:11 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-mpNhlCak6rHhIgyi\_9AT7qXworulNrwkgkVdYzEuHE



Scale = 1:78.2

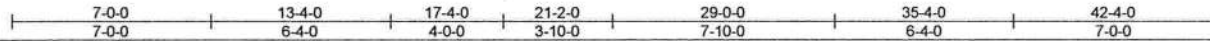
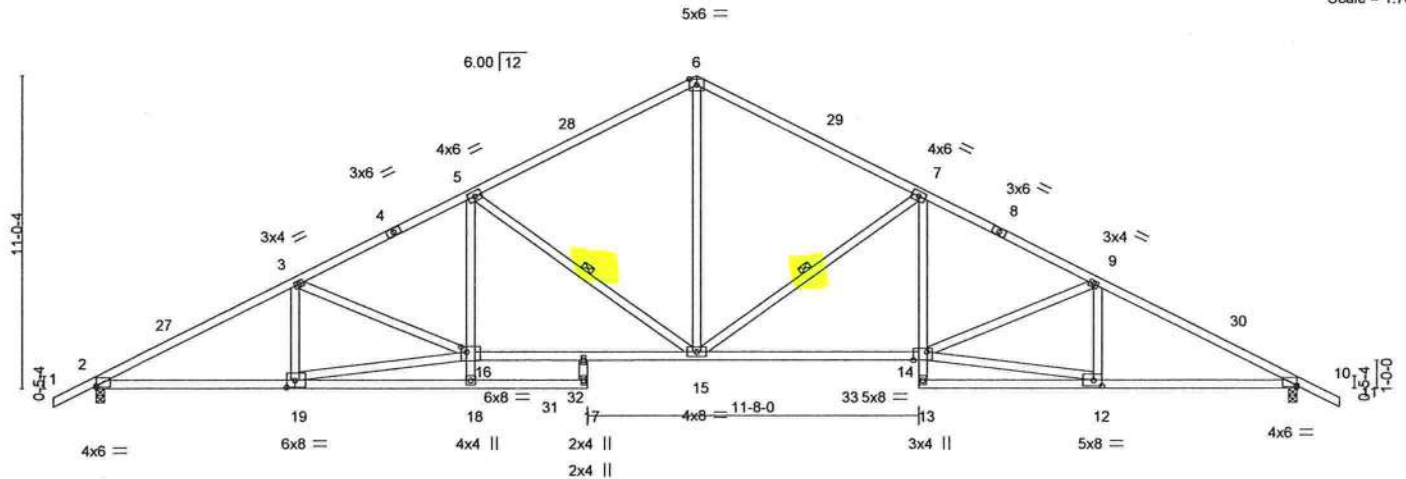


Plate Offsets (X,Y)- [2:0-0-0,0-0-11], [10:0-0-0,0-0-11], [12:0-3-8,0-2-8], [14:0-5-12,Edge], [16:0-2-4,0-2-4], [19:0-3-8,0-3-0]

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 0.52	Vert(LL)	-0.60	17	>847	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.98	Vert(CT)	-1.09	17	>466	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.22	10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 254 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP M 31 \*Except\*  
1-4,8-11: 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
5-18,7-13: 2x4 SP No.3, 14-16: 2x4 SP M 31  
WEBS 2x4 SP No.3 \*Except\*  
16-19,12-14: 2x4 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:  
WEBS 10-0-0 oc bracing: 16-18  
1 Row at midpt 5-15, 7-15

#### REACTIONS.

(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=-244(LC 17)  
Max Uplift 2=-641(LC 12), 10=-648(LC 13)  
Max Grav 2=1898(LC 2), 10=1844(LC 2)

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

TOP CHORD 2-3=-3457/1058, 3-5=-3529/1056, 5-6=-2391/848, 6-7=-2392/846, 7-9=-3322/1064,  
9-10=-3356/1073  
BOT CHORD 2-19=-1055/3030, 16-18=0/372, 5-16=-158/951, 15-16=-915/3130, 14-15=-733/2946,  
7-14=-167/725, 10-12=-825/2939  
WEBS 3-19=-331/188, 16-19=-958/3133, 5-15=-1312/588, 6-15=-457/1735, 7-15=-1084/597,  
12-14=-776/2840, 9-12=-288/164

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 21-2-0, Exterior(2R) 21-2-0 to 25-4-13, Interior(1) 25-4-13 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=641, 10=648.



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

May 22, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610



Job 2802407	Truss T08A	Truss Type Roof Special	Qty 4	Ply 1	SIMQUE - LOT 57 PLL	T24044005
Job Reference (optional)						

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

8 430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:12 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-F?x3zYamI9PYMPXuYthf13?nEEs6HuuOFQ9\_zEuHD

1-6-0	3-1-15	5-11-8	9-3-8	13-2-4	21-2-0	29-0-0	35-4-0	42-4-0	43-10-0
1-6-0	3-1-15	2-9-9	3-4-0	3-10-12	7-11-12	7-10-0	6-4-0	7-0-0	1-6-0

Scale = 1:79.5

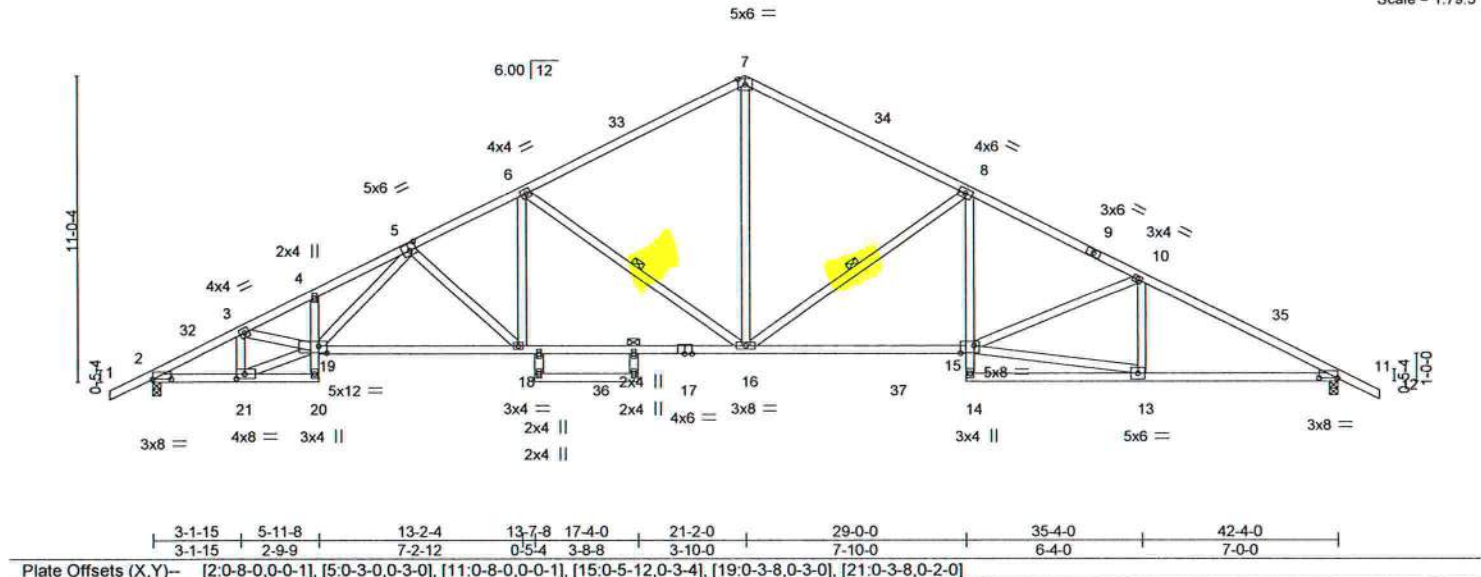


Plate Offsets (X,Y)-- [2:0-8-0,0-0-1], [5:0-3-0,0-3-0], [11:0-8-0,0-0-1], [15:0-5-12,0-3-4], [19:0-3-8,0-3-0], [21:0-3-8,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.95	Vert(LL)	-0.36 15-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.96	Vert(CT)	-0.63 15-16	>802	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.86	Horz(CT)	0.24 11	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 258 lb	FT = 20%

<b>LUMBER-</b>				<b>BRACING-</b>		
TOP CHORD	2x4 SP No.2 *Except*			TOP CHORD	Structural wood sheathing directly applied.	
	5-7: 2x4 SP M 31			BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing. Except:	
BOT CHORD	2x4 SP No.2 *Except*				8-0-0 oc bracing: 16-18	
	17-19,15-17: 2x4 SP M 31, 8-14,22-23: 2x4 SP No.3			WEBS	1 Row at midpt	6-16, 8-16
WEBS	2x4 SP No.3 *Except*					
	19-21,13-15: 2x4 SP No.2					

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
Max Horz 2=244(LC 12)  
Max Uplift 2=657(LC 12), 11=657(LC 13)  
Max Grav 2=1778(LC 2), 11=1778(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-3219/1104, 3-4=-4637/1679, 4-5=-4724/1792, 5-6=-3157/1119, 6-7=-2224/869,  
7-8=-2226/868, 8-10=-3152/1086, 10-11=-3215/1092  
**BOT CHORD** 2-21=-1141/2827, 18-19=-1218/3290, 16-18=-953/2806, 15-16=-754/2796, 8-15=-169/723,  
11-13=-842/2814  
**WEBS** 3-21=-1042/465, 19-21=-1109/2805, 3-19=-477/1352, 5-18=-659/361, 6-18=-200/769,  
6-16=-1096/611, 7-16=-474/1583, 8-16=-1082/598, 13-15=-787/2724, 10-13=-278/166,  
5-19=-602/1368

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 21-2-0, Exterior(2R) 21-2-0 to 25-4-13, Interior(1) 25-4-13 to 43-10-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=657, 11=657.



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

May 22,2021

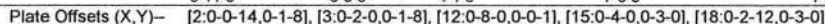
**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MIT-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see *ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:14 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-BO3qOEccOmfGcjhHfljAIS9RP2xNaCRBMikXEtzEuHB

Weight: 265 lb      FT = 20%

TOP CHORD	Structural wood sheathing directly applied or 2-5-10 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 5-5-12 oc bracing.
WEBS	1 Row at midpt                      8-18, 9-16

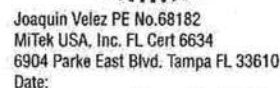
(size) 2=0-3-8, 12=0-3-8  
Max Horz 2=244(LC 12)  
Max Uplift 2=-657(LC 12), 12=-657(LC 13)  
Max Grav 2=1757(LC 2), 12=1770(LC 2)

TOP CHORD 2-3=3186/1141, 3-4=4354/1602, 4-5=3655/1318, 5-7=2976/1087, 7-8=3015/1283,  
8-9=1999/840, 9-11=2640/956, 11-12=3202/1098

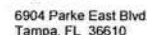
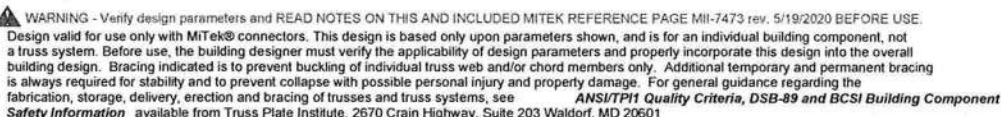
BOT CHORD 2-21=1162/2782, 20-21=552/1404, 4-20=202/610, 19-20=1611/4066,  
18-19=1191/3235, 7-18=375/373, 15-16=607/2304, 14-15=850/2803, 12-14=850/2803

WEBS 3-21=2619/1130, 3-20=1389/3459, 4-19=948/480, 5-18=806/386, 16-18=394/1538,  
8-18=813/1510, 8-16=2917/16, 9-16=840/506, 9-15=124/550, 11-15=572/363,  
11-14=0/270, 5-19=238/704

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) VastD=101mph; TCDF=4.2psf; BCDF=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 3-0-1, Interior(1) 3-0-1 to 21-2-0, Exterior(2R) 21-2-0 to 25-4-13, Interior(1) 25-4-13 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDF = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=657, 12=657.



May 22, 2021





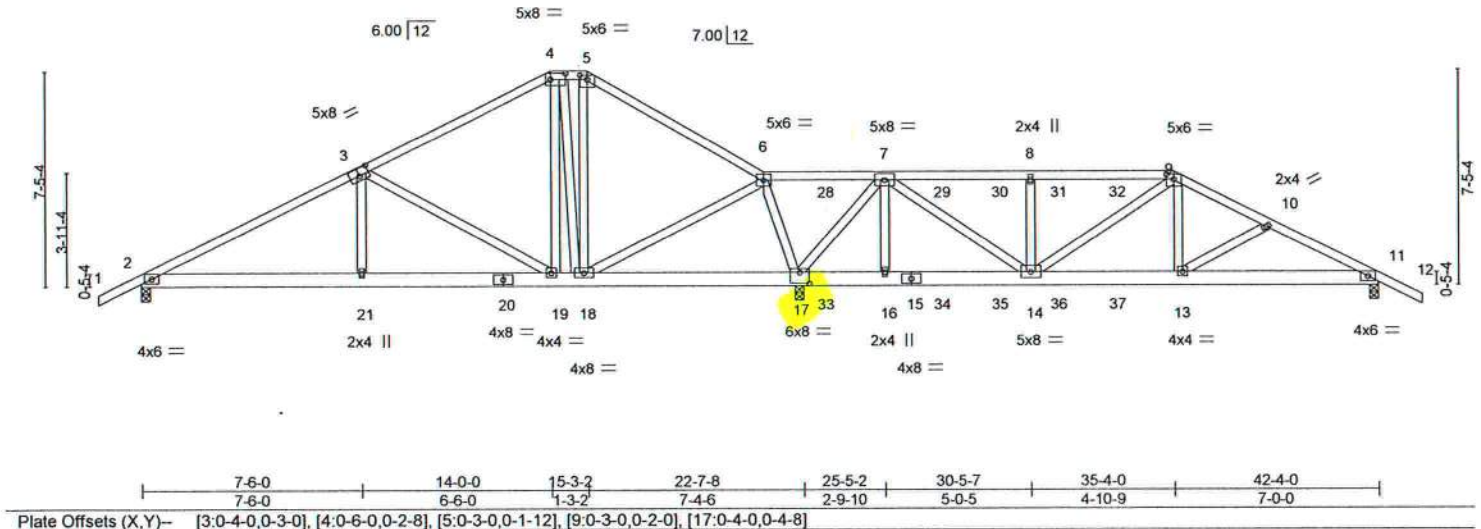
Job 2802407	Truss T09	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044007
Job Reference (optional)						

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:16 2021 Page 1  
ID: RGWSt4cPREnm5p9yfgzNgAycgdx-7mAAowdtwOv\_r1qfnleqEkRskM23TP0DellzEuH9

1-6-0 7-6-0 14-0-0 15-3-2 21-3-2 25-5-2 30-5-7 35-4-0 38-6-5 42-4-0 43-10-0  
1-6-0 7-6-0 6-6-0 1-3-2 6-0-0 4-2-0 5-0-5 4-10-9 3-2-5 3-9-11 1-6-0

Scale = 1.76.3



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.72	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Plate Grip DOL 1.25	BC 0.41	Vert(LL) 0.12 13-14 >999 240		
BCLL 0.0	Lumber DOL 1.25	WB 0.93	Vert(CT) -0.12 13-14 >999 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-MS	Horz(CT) 0.02 11 n/a n/a		
	Code FBC2020/TP12014			Weight: 276 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 or 3-10-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 17=0-3-8, 11=0-3-8  
Max Horz 2=186(LC 7)  
Max Uplift 2=419(LC 27), 17=1816(LC 9), 11=895(LC 9)  
Max Grav 2=724(LC 15), 17=2937(LC 1), 11=1245(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1090/599, 3-4=-613/387, 4-5=-467/393, 5-6=-577/406, 6-7=-809/1332,  
7-8=-1594/1345, 8-9=-1594/1345, 9-10=-2047/1631, 10-11=-2207/1701  
BOT CHORD 2-21=-565/1013, 19-21=-565/1019, 18-19=-196/558, 17-18=-994/845, 16-17=-388/319,  
14-16=-388/319, 13-14=-1280/1775, 11-13=-1423/1938  
WEBS 3-21=-3/333, 3-19=-663/434, 4-19=-128/272, 4-18=-423/287, 5-18=-250/264,  
6-18=-684/1305, 6-17=-1100/513, 7-16=-127/290, 7-14=-1288/1736, 8-14=-580/476,  
9-14=-263/175, 9-13=-442/648, 7-17=-2217/1686

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=419, 17=1816, 11=895.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 150 lb down and 138 lb up at 23-3-4, 150 lb down and 138 lb up at 25-3-4, 150 lb down and 138 lb up at 27-3-4, 150 lb down and 138 lb up at 29-3-4, 150 lb down and 138 lb up at 31-3-4, and 150 lb down and 138 lb up at 33-3-4, and 282 lb down and 265 lb up at 35-4-0 on top chord, and 86 lb down and 88 lb up at 23-3-4, 86 lb down and 88 lb up at 25-3-4, 86 lb down and 88 lb up at 27-3-4, 86 lb down and 88 lb up at 29-3-4, 86 lb down and 88 lb up at 31-3-4, and 86 lb down and 88 lb up at 33-3-4, and 332 lb down and 399 lb up at 35-3-4 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

Continued on page 2



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

May 22, 2021

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

**MiTek**  
6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss T09	Truss Type ROOF SPECIAL GIRDER	Qty 1	Ply 1	SIMQUE - LOT 57 PLL T24044007 Job Reference (optional)
----------------	--------------	-----------------------------------	----------	----------	--

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:16 2021 Page 2  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-7mAaowdtwOv\_r1qfnjleqtEkRskM23fTp0DellzEuH9

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-54, 5-6=-54, 6-9=-54, 9-12=-54, 22-25=-20

Concentrated Loads (lb)

Vert: 9=-185(B) 7=-110(B) 16=-63(B) 13=-332(B) 28=-110(B) 29=-110(B) 30=-110(B) 31=-110(B) 32=-110(B) 33=-63(B) 34=-63(B) 35=-63(B) 36=-63(B) 37=-63(B)



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2802407	Truss T10	Truss Type ROOF SPECIAL	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044008
Job Reference (optional)						

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:18 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-39ILDbf7S?9i4K\_2u8o6vJl0mfHAW?FmHKKikNezEuH7

1-6-0 7-6-0 14-8-2 19-6-9 26-5-5 33-4-0 37-6-0 42-4-0 43-10-0  
1-6-0 7-6-0 7-2-2 4-10-7 6-10-12 6-10-11 4-2-0 4-10-0 1-6-0

Scale = 1:76.3

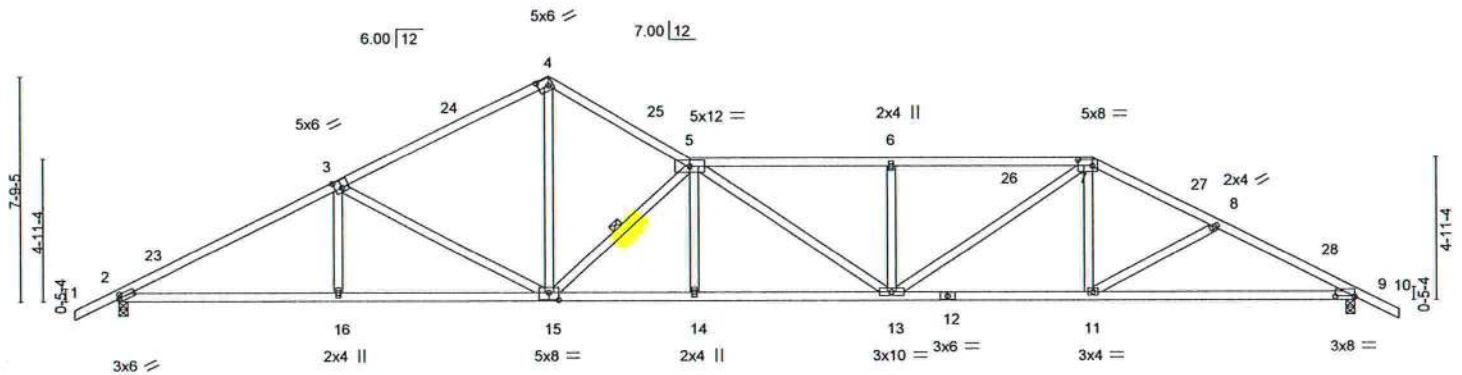


Plate Offsets (X,Y)-- [2:0-0-14,0-1-8], [3:0-3-0,0-3-4], [4:0-4-2,0-3-0], [7:0-6-0,0-2-8], [9:0-8-0,0-0-1], [15:0-4-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.98	Vert(LL) 0.37	13-14	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.90	Vert(CT) -0.68	13-14	>752	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.79	Horz(CT) 0.19	9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS					Weight: 224 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.  
BOT CHORD Rigid ceiling directly applied or 5-4-7 oc bracing.  
WEBS 1 Row at midpt 5-15

#### REACTIONS.

(size) 2=0-3-8, 9=0-3-8  
Max Horz 2=179(LC 11)  
Max Uplift 2=592(LC 12), 9=731(LC 13)  
Max Grav 2=1647(LC 1), 9=1647(LC 1)

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

TOP CHORD 2-3=-2938/1067, 3-4=-2361/961, 4-5=-2402/993, 5-6=-3405/1509, 6-7=-3405/1509,  
7-8=-2743/1197, 8-9=-2969/1308  
BOT CHORD 2-16=-889/2551, 15-16=-890/2548, 14-15=-1221/3557, 13-14=-1219/3560,  
11-13=-863/2417, 9-11=-1059/2598  
WEBS 3-16=0/295, 3-15=-626/426, 4-15=-737/1876, 5-15=-2115/999, 5-13=-272/149,  
6-13=-425/337, 7-13=-469/1192, 7-11=-55/362

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 14-8-2, Exterior(2R) 14-8-2 to 17-8-2, Interior(1) 17-8-2 to 33-4-0, Exterior(2R) 33-4-0 to 36-4-0, Interior(1) 36-4-0 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=592, 9=731.



Joaquin Velez PE No.68182  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date: May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job 2802407	Truss T11	Truss Type ROOF SPECIAL	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044009
----------------	--------------	----------------------------	----------	----------	---------------------	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:19 2021 Page 1

ID:RGWSt4cPREnm5p9yfgzNgAycgdx-XLsjRxlDJHziUZESrJLSWSEF3ggFRnwV\_Slv4zEuH6

1-6-0 7-6-0 14-8-2 17-10-0 24-7-0 31-4-0 36-4-4 42-4-0 43-10-0  
1-6-0 7-6-0 7-2-2 3-1-14 6-9-0 6-9-0 5-0-4 5-11-12 1-6-0

Scale = 1:76.3

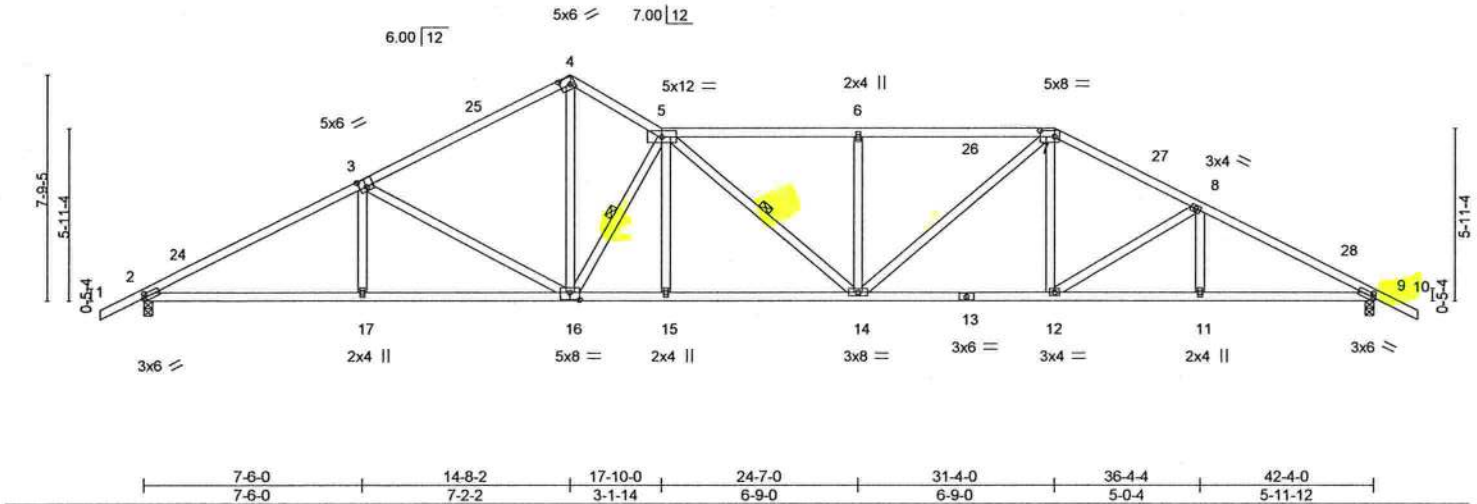


Plate Offsets (X,Y)-- [2:0-0-14,0-1-8], [3:0-3-0,0-3-4], [4:0-4-2,0-3-0], [7:0-6-0,0-2-8], [9:0-0-14,0-1-8], [16:0-4-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.81	Vert(LL)	0.30 14-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.75	Vert(CT)	-0.56 14-15	>905	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.83	Horz(CT)	0.17 9	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 235 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.  
BOT CHORD Rigid ceiling directly applied or 5-10-9 oc bracing.  
WEBS 1 Row at midpt 5-16, 5-14

#### REACTIONS.

(size) 2=0-3-8, 9=0-3-8  
Max Horz 2=174(LC 16)  
Max Uplift 2=592(LC 12), 9=731(LC 13)  
Max Grav 2=1647(LC 1), 9=1647(LC 1)

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

TOP CHORD 2-3=-2938/1072, 3-4=-2360/960, 4-5=-2372/1011, 5-6=-2909/1314, 6-7=-2909/1314,  
7-8=-2602/1159, 8-9=-2968/1270  
BOT CHORD 2-17=-889/2552, 16-17=-890/2549, 15-16=-905/2867, 14-15=-904/2869, 12-14=-782/2278,  
11-12=-1015/2587, 9-11=-1015/2587  
WEBS 3-17=0/297, 3-16=-625/425, 4-16=-785/1910, 5-16=-1725/837, 6-14=-420/328,  
7-14=-333/823, 7-12=-112/381, 8-12=-380/275

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 14-8-2, Exterior(2E) 14-8-2 to 17-10-0, Interior(1) 17-10-0 to 31-4-0, Exterior(2R) 31-4-0 to 34-4-0, Interior(1) 34-4-0 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=592, 9=731.



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

May 22, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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



6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss T12	Truss Type HIP	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044010
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,						

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:21 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-Uk\_Tsdh?lwXHxojdZGLpXxxdutJajQvDzIxO\_zzEuH4

1-6-0 6-9-1 13-0-0 18-5-8 23-10-8 29-4-0 35-6-15 42-4-0 43-10-0  
1-6-0 6-9-1 6-2-15 5-5-8 5-5-0 5-5-8 6-2-15 6-9-1 1-6-0

Scale = 1:75.1

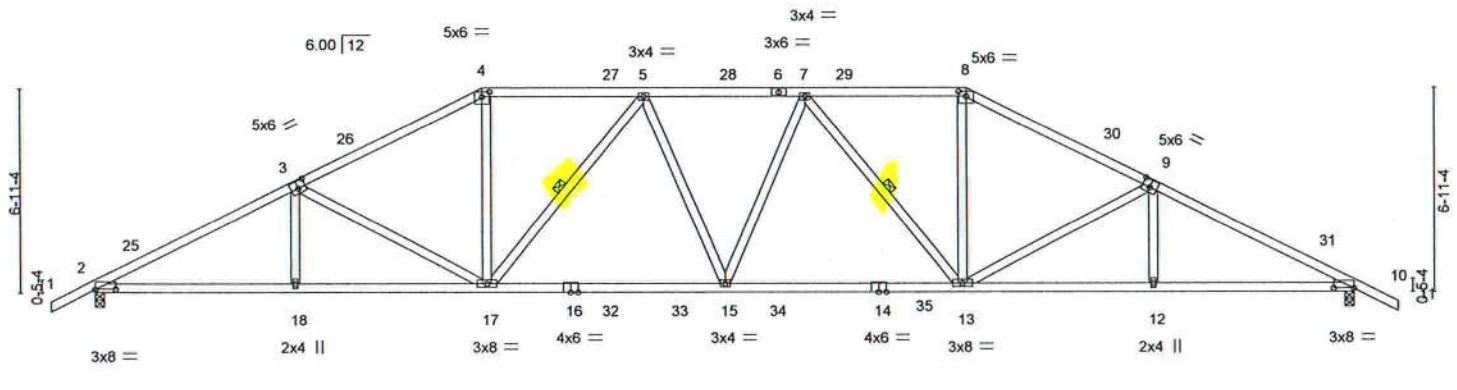


Plate Offsets (X,Y)~ [2-0-8-0,0-0-1], [3-0-3-0,0-3-0], [4-0-3-0,0-2-0], [8-0-3-0,0-2-0], [9-0-3-0,0-3-0], [10-0-8-0,0-0-1]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.61	Vert(LL)	-0.31 15-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.92	Vert(CT)	-0.54 15-17	>941	180		
BCLL 0.0	Rep Stress Incr	YES	WB 0.54	Horz(CT)	0.17 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS						
								Weight: 230 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
14-16: 2x4 SP M 31  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 5-17, 7-13

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=156(LC 13)  
Max Uplift 2=675(LC 12), 10=675(LC 13)  
Max Grav 2=1786(LC 2), 10=1786(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3241/1143, 3-4=-2730/979, 4-5=-2402/938, 5-7=-2814/1012, 7-8=-2402/938,  
8-9=-2730/979, 9-10=-3241/1144  
BOT CHORD 2-18=-1050/2840, 17-18=-1051/2837, 15-17=-812/2741, 13-15=-780/2741,  
12-13=-895/2837, 10-12=-894/2840  
WEBS 3-17=-542/363, 4-17=-243/956, 5-17=-627/322, 5-15=-100/290, 7-15=-99/290,  
7-13=-627/322, 8-13=-242/956, 9-13=-543/363

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 13-0-0, Exterior(2R) 13-0-0 to 17-2-15, Interior(1) 17-2-15 to 29-4-0, Exterior(2R) 29-4-0 to 33-6-15, Interior(1) 33-6-15 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=675, 10=675.



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

May 22, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

Job 2802407	Truss T13	Truss Type HIP	Qty 1	Ply 1	SIMQUE - LOT 57 PLL Job Reference (optional)	T24044011
----------------	--------------	-------------------	----------	----------	---	-----------

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:22 2021 Page 1

ID:RGWSt4cPREnm5p9yfgzNgAycgdx-ywYr3zieWEf7Zylp7zs238UmAGgHSv?MBYgyVPzEuH3

1-6-0	7-11-0	15-0-0	21-2-0	27-4-0	34-5-0	42-4-0	43-10-0
1-6-0	7-11-0	7-1-0	6-2-0	6-2-0	7-1-0	7-11-0	1-6-0

Scale = 1:75.1

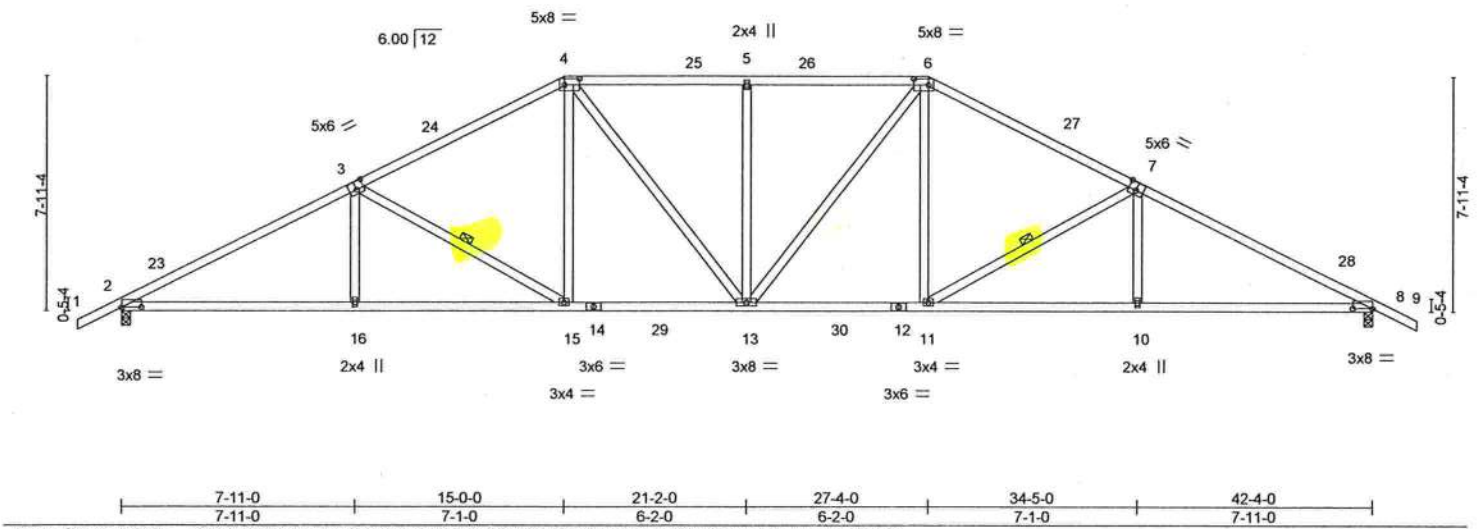


Plate Offsets (X,Y)~ [2:0-8-0,0-0-1], [3:0-3-0,0-3-4], [4:0-6-0,0-2-8], [6:0-6-0,0-2-8], [7:0-3-0,0-3-4], [8:0-8-0,0-0-1]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.76	Vert(LL)	-0.26 11-13	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.89	Vert(CT)	-0.43 11-13	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.42	Horz(CT)	0.17 8	n/a	n/a		
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS					Weight: 232 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.  
BOT CHORD Rigid ceiling directly applied or 5-8-0 oc bracing.  
WEBS 1 Row at midpt 3-15, 7-11

**REACTIONS.** (size) 2=0-3-8, 8=0-3-8  
Max Horz 2=178(LC 12)  
Max Uplift 2=672(LC 12), 8=672(LC 13)  
Max Grav 2=1783(LC 2), 8=1783(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3195/1116, 3-4=-2563/918, 4-5=-2439/948, 5-6=-2439/948, 6-7=-2563/918, 7-8=-3195/1117  
BOT CHORD 2-16=-1034/2794, 15-16=-1034/2794, 13-15=-662/2232, 11-13=-548/2232, 10-11=-856/2794, 8-10=-857/2794  
WEBS 3-16=0/304, 3-15=-673/431, 4-15=-170/599, 4-13=-234/450, 5-13=-373/291, 6-13=-234/450, 6-11=-170/599, 7-11=-673/431, 7-10=0/304

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 15-0-0, Exterior(2R) 15-0-0 to 19-2-15, Interior(1) 19-2-15 to 27-4-0, Exterior(2R) 27-4-0 to 31-6-15, Interior(1) 31-6-15 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=672, 8=672.



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

May 22, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610



8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:24 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdX-uJfcUfku2rvroFRcFOvW9ZZAp4TwwqJffG93aHzEuH1

1-6-0	5-7-8	11-3-2	17-0-0	21-2-0	25-4-0	31-0-14	36-8-8	42-4-0	43-10-0
1-6-0	5-7-8	5-7-10	5-8-14	4-2-0	4-2-0	5-8-14	5-7-10	5-7-8	1-6-0

Scale = 1:75.1

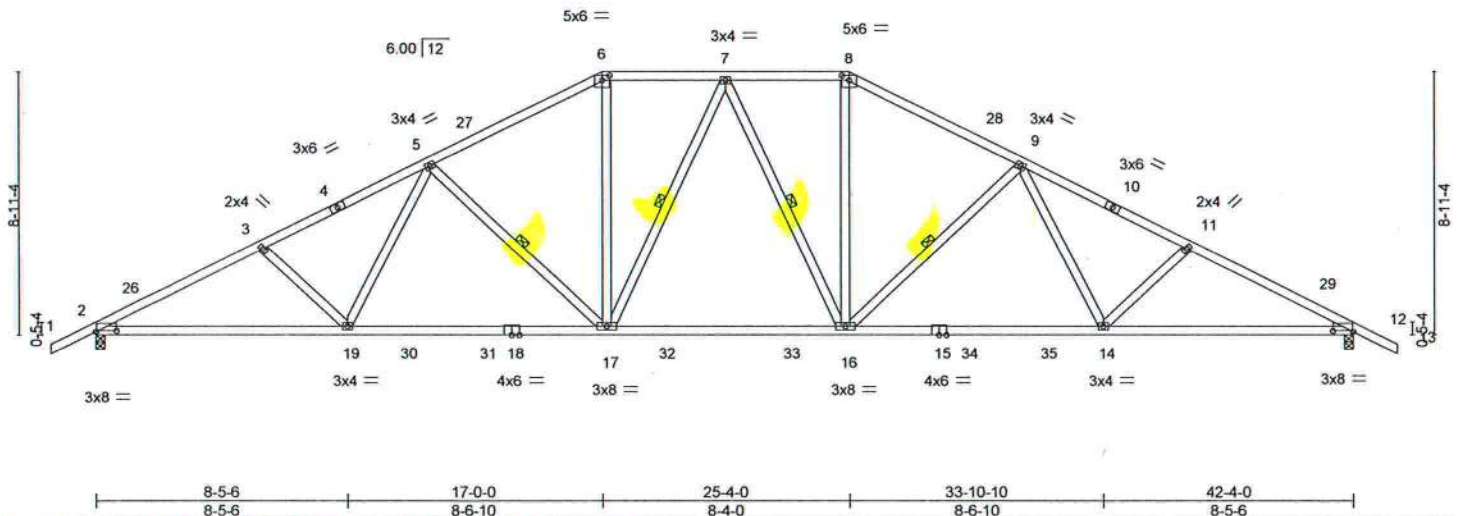


Plate Offsets (X,Y)→ [2-0-8-4,0-0-5], [6-0-3-0,0-2-0], [8-0-3-0,0-2-0], [12-0-8-4,0-0-5]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	20.0	Plate Grip DOL	1.25	TC	0.43	Vert(LL)	-0.29 14-16 >999 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.43	Vert(CT)	-0.49 14-16 >999 180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.13 12 n/a n/a		
BCDL	10.0	Code	FCB2020/TPI2014	Matrix-MS				Weight: 243 lb	FT = 20%

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

<b>BRACING-</b>	
<b>TOP CHORD</b>	Structural wood sheathing directly applied or 3-0-6 oc purlins.
<b>BOT CHORD</b>	Rigid ceiling directly applied or 7-4-12 oc bracing.
<b>WEBS</b>	1 Row at midpt                      5-17, 7-17, 7-16, 9-16

**REACTIONS.** (size) 2=0-3-8, 12=0-3-8  
 Max Horz 2=199(LC 16)  
 Max Uplift 2=-667(LC 12), 12=-667(LC 13)  
 Max Grav 2=1810(LC 2), 12=1810(LC 2)

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

<b>TOP CHORD</b>	2-3=-3296/1157, 3-5=-3129/1093, 5-6=-2419/893, 6-7=-2119/851, 7-8=-2119/851, 8-9=-2419/893, 9-11=-3129/1093, 11-12=-3296/1157
<b>BOT CHORD</b>	2-19=-1118/2898, 17-19=-869/2531, 16-17=-552/2161, 14-16=-700/2531, 12-14=-919/2898
<b>WEBS</b>	3-19=-256/263, 5-19=-141/516, 5-17=-599/414, 6-17=-257/854, 7-17=-287/194, 7-16=-287/193, 8-16=-257/854, 9-16=-599/414, 9-14=-141/516, 11-14=-256/263

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 17-0-0, Exterior(2R) 17-0-0 to 21-2-0, Interior(1) 21-2-0 to 25-4-0, Exterior(2R) 25-4-0 to 29-6-15, Interior(1) 29-6-15 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=667, 12=667.



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

May 22, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI 1 Quality Criteria, DSB-99 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610

Job 2802407	Truss T15	Truss Type PIGGYBACK BASE	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044013
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,						8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:25 2021 Page 1
Job Reference (optional)						ID:RGwSt4cPREnm5p9yfgzNgAycgdx-MVD_h_kWp91iQP0Oo6Qlnh6KeUgAfEJouwvc7kzEuH0

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:25 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-MVD\_h\_kWp91iQP0Oo6Qlnh6KeUgAfEJouwvc7kzEuH0

1-6-0 6-7-8 12-7-14 19-0-0 23-4-0 29-8-2 35-8-8 42-4-0 43-10-0  
1-6-0 6-7-8 6-0-6 6-4-2 4-4-0 6-4-2 6-0-6 6-7-8 1-6-0

Scale = 1:75.1

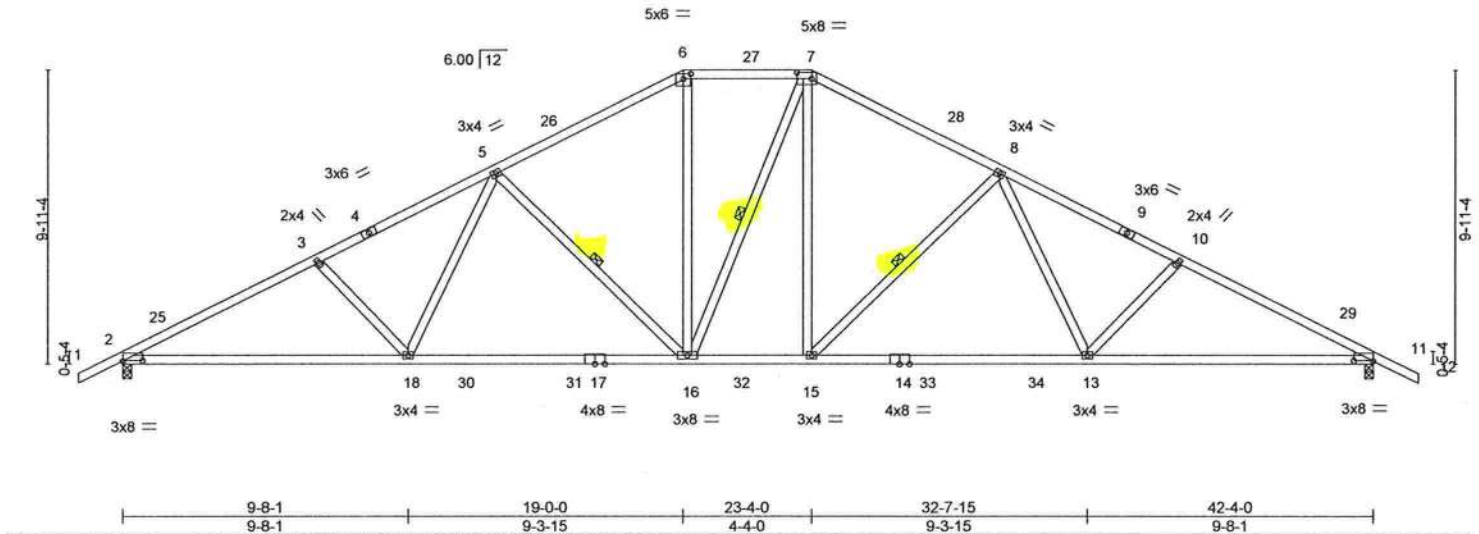


Plate Offsets (X,Y)-- [2:0-8-0,0-0-1], [6:0-3-0,0-2-0], [7:0-6-0,0-2-8], [11:0-8-0,0-0-1]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.49	Vert(LL)	-0.38 13-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.94	Vert(CT)	-0.65 13-15	>784	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.51	Horz(CT)	0.13 11	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 240 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP M 31 \*Except\*  
14-17: 2x4 SP No.2  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-11-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 5-16, 7-16, 8-15

**REACTIONS.** (size) 2=0-3-8, 11=0-3-8  
Max Horz 2=-221(LC 17)  
Max Uplift 2=-663(LC 12), 11=-663(LC 13)  
Max Grav 2=1810(LC 2), 11=1811(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3256/1125, 3-5=-3066/1063, 5-6=-2237/861, 6-7=-1948/827, 7-8=-2239/861,  
8-10=-3070/1064, 10-11=-3259/1125  
BOT CHORD 2-18=-1098/2857, 16-18=-821/2430, 15-16=-438/1950, 13-15=-658/2433,  
11-13=-878/2860  
WEBS 3-18=-302/300, 5-18=-176/631, 5-16=-698/461, 6-16=-241/752, 7-15=-286/760,  
8-15=-699/462, 8-13=-176/632, 10-13=-302/300

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 19-0-0, Exterior(2E) 19-0-0 to 23-4-0, Exterior(2R) 23-4-0 to 27-6-15, Interior(1) 27-6-15 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=663, 11=663.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIT/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

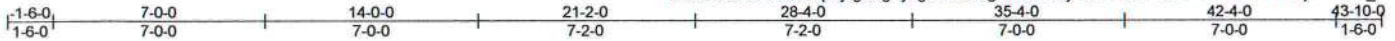


Job 2802407	Truss T16	Truss Type Common	Qty 6	Ply 1	SIMQUE - LOT 57 PLL	T24044014
Job Reference (optional)						

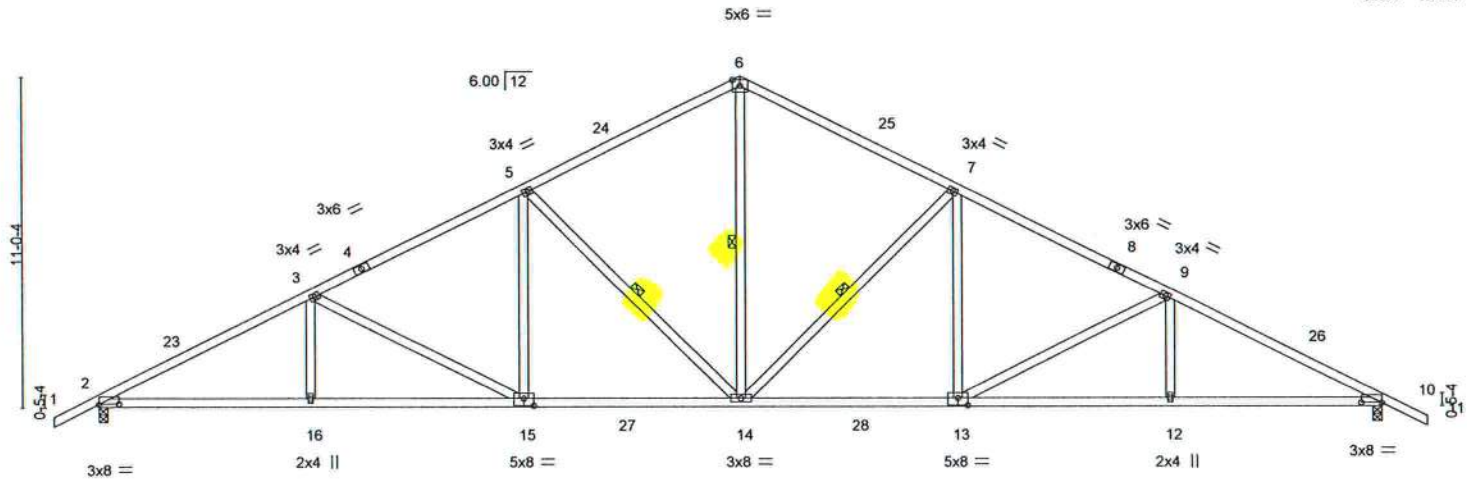
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:27 2021 Page 1

ID:RGwSI4cPREnm5p9yfgzNgAycgdx-luLk6gmmLmIQfAmwWSDmCBfHm676K5LEOjBczEuH



Scale = 1:7.5



	7-0-0	14-0-0	21-2-0	28-4-0	35-4-0	42-4-0
	7-0-0	7-0-0	7-2-0	7-2-0	7-0-0	7-0-0
Plate Offsets (X,Y)~	[2:0-8-0,0-0-1], [10:0-8-0,0-0-1], [13:0-4-0,0-3-0], [15:0-4-0,0-3-0]					

<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>2-0-0</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>in (loc)</b>	<b>l/defl</b>	<b>L/d</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.25	TC 0.61	Vert(LL)	-0.29 14-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.91	Vert(CT)	-0.49 14-15	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.67	Horz(CT)	0.18 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 236 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-8 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 5-7-4 oc bracing.  
WEBS 1 Row at midpt 6-14, 7-14, 5-14

#### REACTIONS.

(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=244(LC 12)  
Max Uplift 2=657(LC 12), 10=657(LC 13)  
Max Grav 2=1788(LC 2), 10=1788(LC 2)

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

TOP CHORD 2-3=-3241/1098, 3-5=-2681/956, 5-6=-2030/837, 6-7=-2030/837, 7-9=-2681/956,  
9-10=-3241/1099  
BOT CHORD 2-16=-1093/2839, 15-16=-1093/2839, 14-15=-771/2341, 13-14=-606/2341,  
12-13=-851/2839, 10-12=-851/2839  
WEBS 6-14=-479/1459, 7-14=-847/506, 7-13=-124/555, 9-13=-570/364, 9-12=0/268,  
5-14=-847/506, 5-15=-123/555, 3-15=-570/363, 3-16=0/268

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 2-8-13, Interior(1) 2-8-13 to 21-2-0, Exterior(2R) 21-2-0 to 25-4-13, Interior(1) 25-4-13 to 43-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=657, 10=657.



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

May 22,2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI® Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:29 2021 Page 1  
ID:RGWSt4cPREnm5p9yfgzNgAycgdx-FGTVXMn1sNY8v1K91xUhsdG\_n5A2b4W0oYtqFVzEuGy

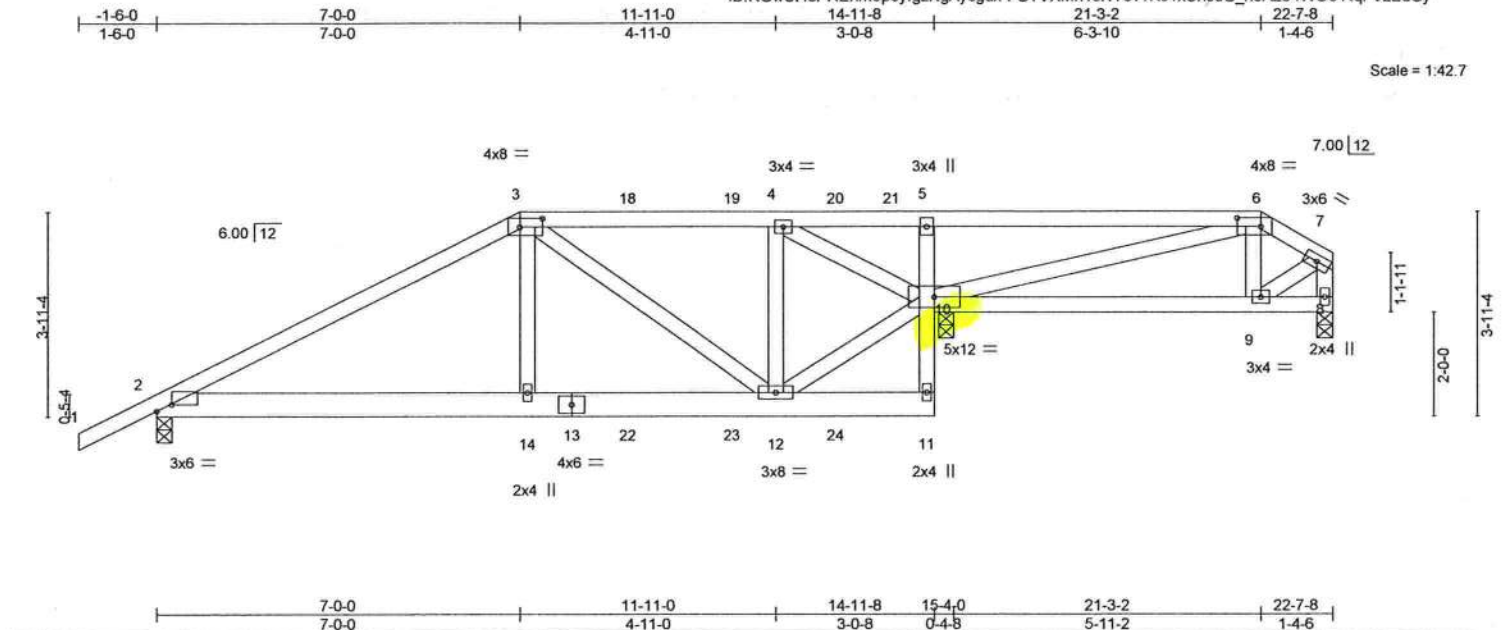


Plate Offsets (X,Y)-- [2:0-3-7,0-1-8], [3:0-5-4,0-2-0], [6:0-5-8,0-2-0]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.25		TC	0.61	Vert(LL)	0.06 14-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25		BC	0.43	Vert(CT)	-0.08 9-10	>999	180		
BCLL	0.0 *	Rep Stress Incr NO		WB	0.44	Horz(CT)	0.01 8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS						Weight: 130 lb	FT = 20%

**LUMBER-**  
**TOP CHORD** 2x4 SP No.2  
**BOT CHORD** 2x6 SP No.2 \*Except\*  
 5-11: 2x4 SP No.3, 8-10: 2x4 SP No.2  
**WEBS** 2x4 SP No.3

<b>BRACING- TOP CHORD</b>	Structural wood sheathing directly applied or 4-0-15 oc purlins, except end verticals.
<b>BOT CHORD</b>	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8, 10=0-3-8  
 Max Horz 2=186(LC 8)  
 Max Uplift 2=-645(LC 8), 8=-204(LC 23), 10=-1303(LC 5)  
 Max Grav 2=962(LC 1), 8=223(LC 20), 10=1700(LC 1)

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

TOP CHORD	2-3=-1495/1084, 3-4=-748/613, 7-8=-252/234
BOT CHORD	2-14=-1011/1265, 12-14=-1028/1288, 5-10=-404/319
WEBS	3-14=-418/660, 3-12=-667/538, 4-12=-69/259, 10-12=-702/893, 4-10=-1116/905, 6-10=-369/286, 7-9=-265/282

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; ENLFR (envelope) gable end zone; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=645, 8=204, 10=1303.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 129 lb down and 138 lb up at 7-0-0, 110 lb down and 138 lb up at 9-0-12, 110 lb down and 138 lb up at 11-0-12, and 110 lb down and 138 lb up at 13-0-12, and 110 lb down and 136 lb up at 14-10-12 on top chord, and 332 lb down and 399 lb up at 7-0-0, 86 lb down and 88 lb up at 9-0-12, 86 lb down and 88 lb up at 11-0-12, and 86 lb down and 88 lb up at 13-0-12, and 86 lb down and 88 lb up at 14-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) 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, 3-6=-54, 6-7=-54, 11-15=-20, 8-10=-20



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

May 22, 2021

Continued on page 2

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

Design valid for use only with MiteTek® 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24044015
2802407	T17	Hip Girder	1	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:29 2021 Page 2

ID:RGwSi4cPREnm5p9yfgzNgAycgdx-FGTVXMn1sNY8v1K91xUhdsG\_n5A2b4W0oYtqFVzEuGy

#### LOAD CASE(S) Standard

##### Concentrated Loads (lb)

Vert: 3=-110(B) 11=-63(B) 5=-110(B) 14=-332(B) 18=-110(B) 19=-110(B) 20=-110(B) 22=-63(B) 23=-63(B) 24=-63(B)



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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

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

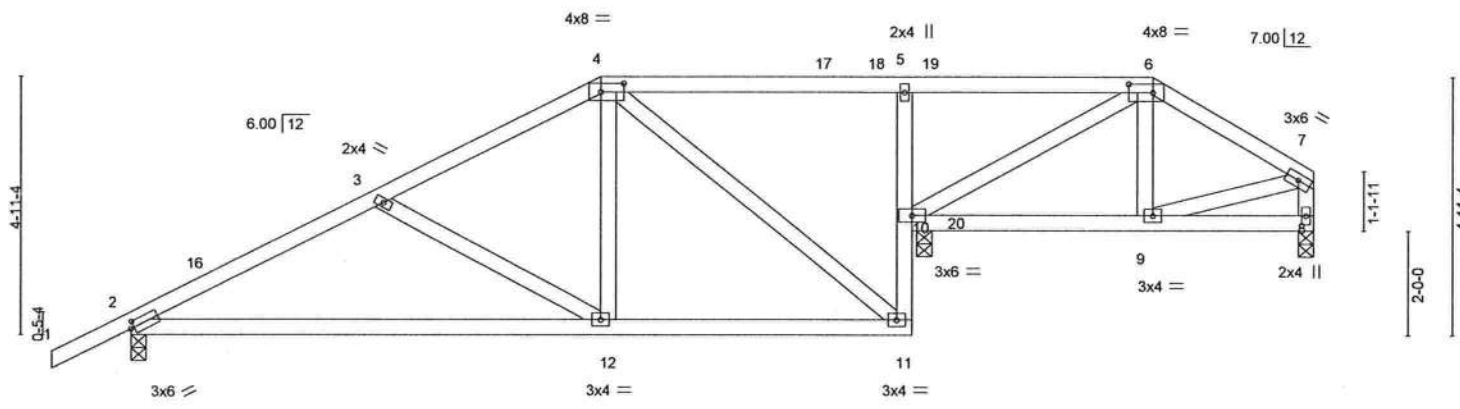


6904 Parke East Blvd.  
Tampa, FL 36610

Job 2802407	Truss T18	Truss Type Hip	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044016
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,						8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:30 2021 Page 1
Job Reference (optional)						ID:RGwSt4cPREnm5p9yfgzNgAycgdx-jT0tliofdhg?XAvLbf?wOqpDAVTKKVvX1CcNnxzEuGx

-1-6-0	4-10-0	9-0-0	14-11-8	19-6-9	22-7-8
1-6-0	4-10-0	4-2-0	5-11-8	4-7-1	3-0-15

Scale = 1:42.5



<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>									
--	--	--	--	--	--	--	--	--	--

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
5-11: 2x4 SP No.3  
WEBS 2x4 SP No.3

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8, 8=0-3-8  
Max Horz 2=208(LC 12)  
Max Uplift 2=284(LC 12), 10=467(LC 9), 8=156(LC 8)  
Max Grav 2=617(LC 23), 10=876(LC 1), 8=254(LC 24)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-778/360, 3-4=-517/229, 6-7=-253/407, 7-8=-231/339  
BOT CHORD 2-12=-428/669, 11-12=-203/420, 10-11=-159/381, 5-10=-337/258, 9-10=-317/188  
WEBS 3-12=-296/260, 4-12=-78/404, 4-11=-551/274, 6-10=-238/387, 6-9=-253/137, 7-9=-270/162

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 9-0-0, Exterior(2R) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 19-6-9, Exterior(2E) 19-6-9 to 22-5-12 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=284, 10=467, 8=156.



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

May 22,2021

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



6904 Parke East Blvd.  
Tampa, FL 33610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24044017
2802407	T19	Hip	1	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:31 2021 Page 1

ID:RGwSt4cPREnm5p9yfgzNgAycgdx-BfaFy2pHO7os8KUY9MX9x2MPAvsC3\_xhGsMwJNzEuGw



Scale = 1:41.7

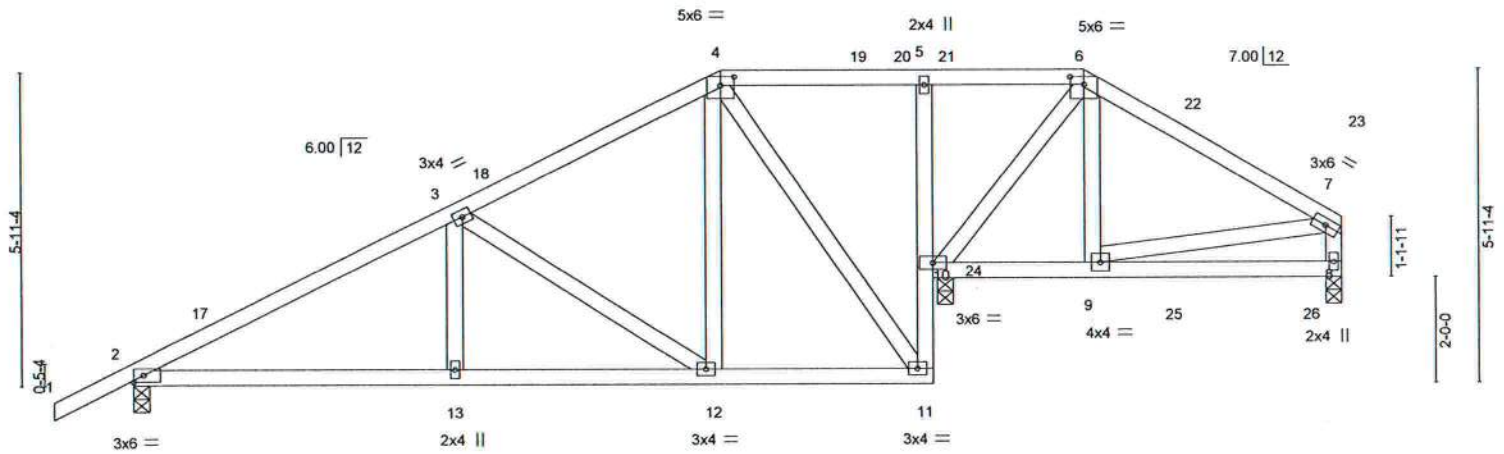


Plate Offsets (X,Y)-- [4:0-3-0,0-2-0], [6:0-3-0,0-1-12]

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.30	Vert(LL)	0.04 13-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.32	Vert(CT)	-0.07 13-16	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.00 2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014		Matrix-MS					Weight: 130 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
WEBS 5-11: 2x4 SP No.3  
2x4 SP No.3

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 9-1-5 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 10=0-3-8, 8=0-3-8  
Max Horz 2=229(LC 12)  
Max Uplift 2=-286(LC 12), 10=-388(LC 9), 8=-158(LC 8)  
Max Grav 2=624(LC 23), 10=855(LC 1), 8=269(LC 24)

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

TOP CHORD 2-3=-804/327, 3-4=-378/199, 6-7=-234/340, 7-8=-226/279  
BOT CHORD 2-13=-405/664, 12-13=-405/664, 11-12=-138/266, 10-11=-210/443  
WEBS 3-12=-463/314, 4-12=-139/363, 4-11=-494/264, 6-10=-246/356, 6-9=-299/163

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 17-10-0, Exterior(2R) 17-10-0 to 22-0-15, Interior(1) 22-0-15 to 22-5-12 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=286, 10=388, 8=158.



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

May 22,2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24044018
2802407	T20	Hip	1	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:32 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-fr8d9Oqv9lwjmU3kj42OTFuYrIBgoPYqVW5UrqzEuGv

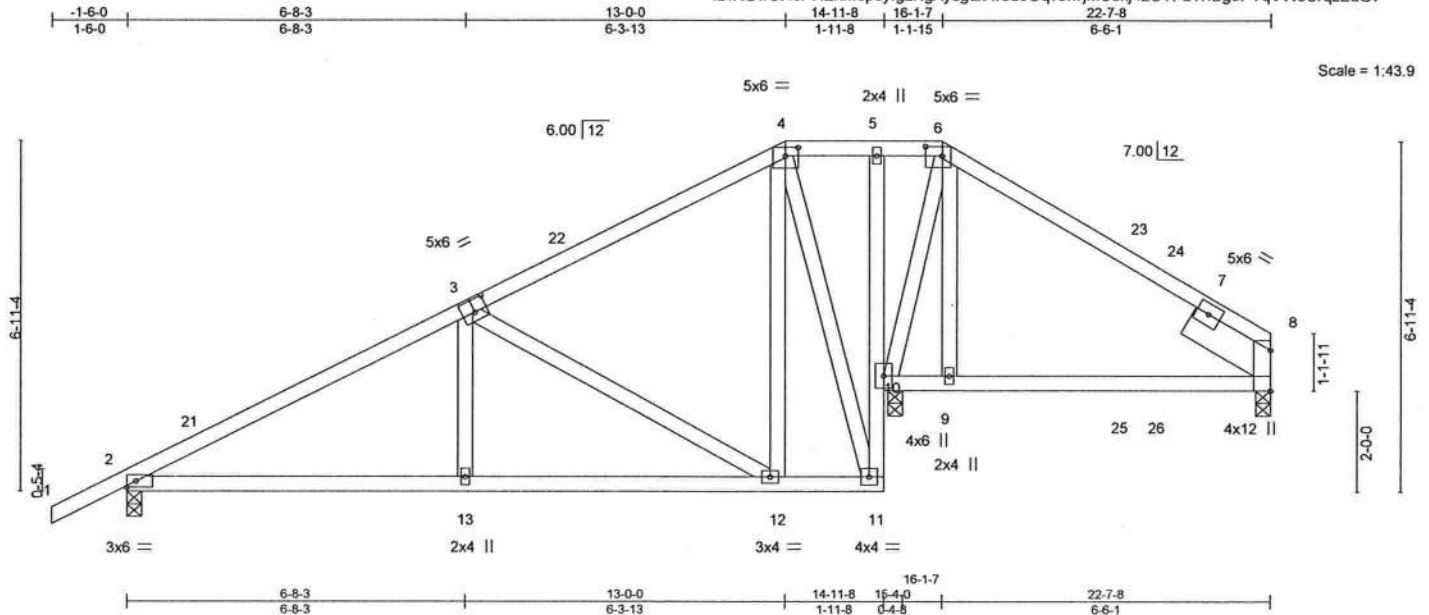


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [4:0-3-0,0-2-0], [6:0-4-0,0-2-4]

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 0.43	Vert(LL)	0.11 9-16	>873	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.44	Vert(CT)	-0.09 13-20	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	-0.03 10	n/a	n/a		
BCDL 10.0	Code FBC2020/TP12014		Matrix-MS					Weight: 137 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
5-11: 2x4 SP No.3  
WEBS 2x4 SP No.3  
SLIDER Right 2x8 SP 2400F 2.0E -1 1-11-8

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-9-2 oc bracing.

#### REACTIONS.

(size) 8=0-3-8, 2=0-3-8, 10=0-3-8  
Max Horz 2=248(LC 12)  
Max Uplift 8=-224(LC 13), 2=-299(LC 12), 10=-298(LC 9)  
Max Grav 8=333(LC 24), 2=654(LC 1), 10=773(LC 1)

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

TOP CHORD 2-3=-844/393, 3-4=-302/274, 4-5=-106/255, 5-6=-109/264, 6-8=-242/434  
BOT CHORD 2-13=-429/693, 12-13=-430/688, 10-11=-282/520, 9-10=-261/171, 8-9=-279/178  
WEBS 3-13=0/280, 3-12=-575/387, 4-12=-144/391, 4-11=-528/275, 6-10=-407/633,  
6-9=-562/275

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 13-0-0, Exterior(2E) 13-0-0 to 16-1-7, Exterior(2R) 16-1-7 to 20-4-5, Interior(1) 20-4-5 to 22-7-8 zone; porch right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=-224, 2=-299, 10=298.



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

May 22, 2021

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

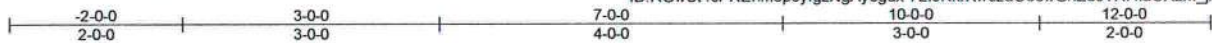
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610



Job 2802407	Truss T21	Truss Type HIP GIRDER	Qty 1	Ply 1	SIMQUE - LOT 57 PLL	T24044019
Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244,						8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:33 2021 Page 1
Job Reference (optional)						ID:RGwSt4cPREnm5p9yfgzNgAycgdx-72i0NkrXwc2aOeewGnZd0TRi4iaOXzM_jAr1OGzEuGu



Scale = 1:26.0

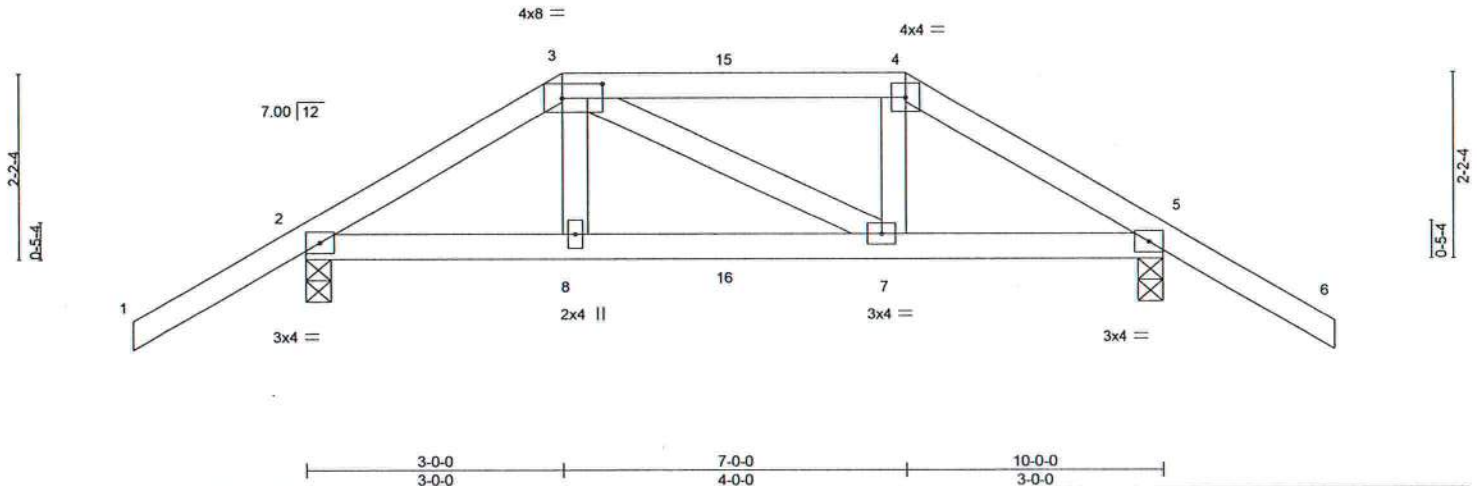


Plate Offsets (X,Y) - [3-0-5-8,0-2-0]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.27	Vert(LL)	0.03	7-8	>999
TCDL 7.0	Lumber DOL	1.25	BC 0.21	Vert(CT)	-0.02	7-8	>999
BCLL 0.0	Rep Stress Incr	NO	WB 0.06	Horz(CT)	-0.01	5	n/a
BCDL 10.0	Code	FBC2020/TPI2014	Matrix-MS				
						Weight: 49 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 8-11-0 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 5=0-3-8  
Max Horz 2=-94(LC 6)  
Max Uplift 2=-342(LC 5), 5=-343(LC 9)  
Max Grav 2=521(LC 19), 5=521(LC 20)

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

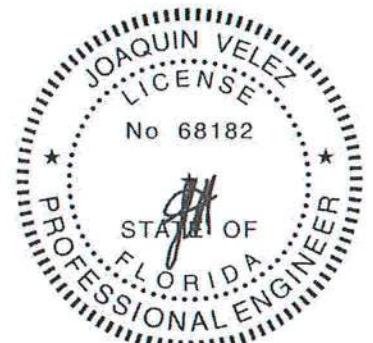
TOP CHORD 2-3=-554/489, 3-4=-454/441, 4-5=-554/488  
BOT CHORD 2-8=-428/519, 7-8=-433/526, 5-7=-406/504

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=342, 5=343.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 133 lb down and 143 lb up at 3-0-0, and 93 lb down and 49 lb up at 4-11-4, and 133 lb down and 143 lb up at 7-0-0 on top chord, and 144 lb down and 48 lb up at 3-0-0, and 53 lb down at 4-11-4, and 144 lb down and 48 lb up at 6-11-4 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

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 9-12=-20  
Concentrated Loads (lb)  
Vert: 3=-15(F) 4=-15(F) 8=-17(F) 7=-17(F) 15=-6(F) 16=-8(F)



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

May 22, 2021



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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd.  
Tampa, FL 33610

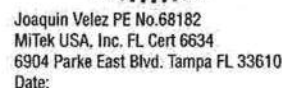
8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:34 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-bEGOa3r9hwAQ?oC7qV4sZg vB6umGPx7ypaawizEuGt



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

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDF=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 10-0-0 zone; cantilever right exposed ; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=202. 6=158.



May 22, 2021

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

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



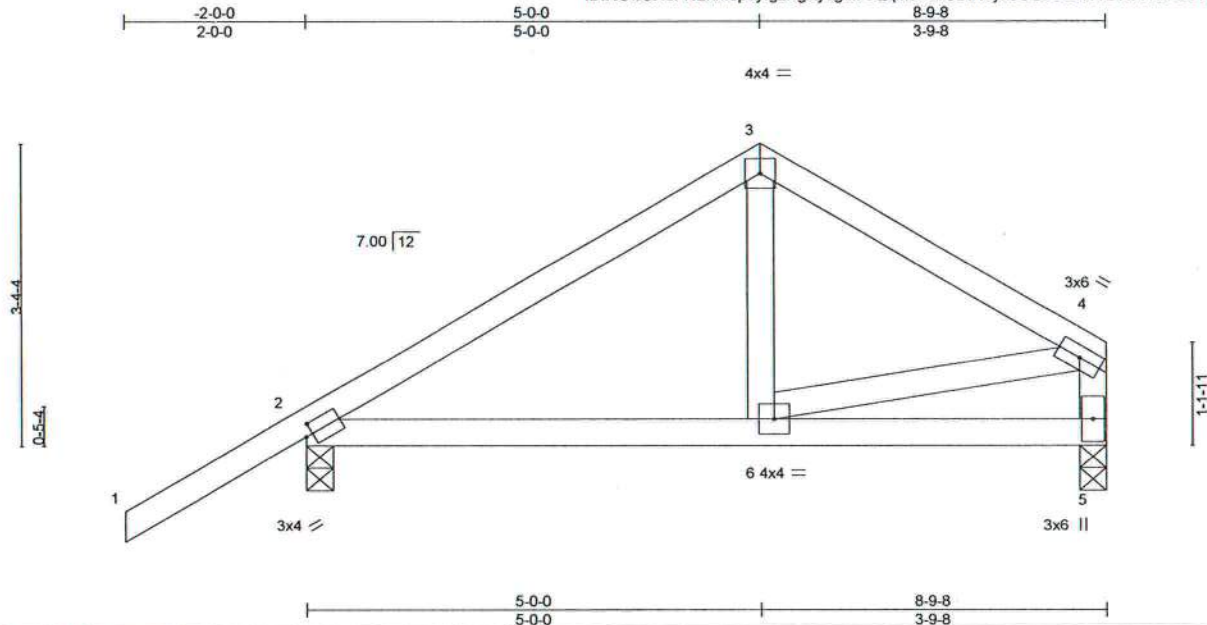
6904 Parke East Blvd.  
Tampa, FL 36610



Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 57 PLL	T24044021
2802407	T23	COMMON	2	1	Job Reference (optional)	

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

8.430 s Apr 20 2021 MiTek Industries, Inc. Wed May 19 15:55:35 2021 Page 1  
ID:RGwSt4cPREnm5p9yfgzNgAycgdx-3QqmoPsnSDIHdynJOCb55uW4GWFr?sFGBTK8S9zEuGs



Scale = 1:24.5

Plate Offsets (X,Y)-- [2-0-0-15,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.36	Vert(LL)	0.05	6-9	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.28	Vert(CT)	0.05	6-9	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.10	Horz(CT)	-0.00	2	n/a	n/a		
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS						Weight: 42 lb	FT = 20%

#### LUMBER-

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

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 8-4-7 oc bracing.

#### REACTIONS.

(size) 2=0-3-8, 5=0-3-8  
Max Horz 2=135(LC 12)  
Max Uplift 2=-202(LC 12), 5=-108(LC 13)  
Max Grav 2=440(LC 1), 5=307(LC 1)

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

TOP CHORD 2-3=-342/559, 3-4=-322/576, 4-5=-280/465  
BOT CHORD 2-6=-430/238  
WEBS 3-6=-324/155, 4-6=-365/199

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 1-0-0, Interior(1) 1-0-0 to 5-0-0, Exterior(2R) 5-0-0 to 8-0-0, Interior(1) 8-0-0 to 8-7-12 zone; cantilever left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project Engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=202, 5=108.



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

May 22,2021

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

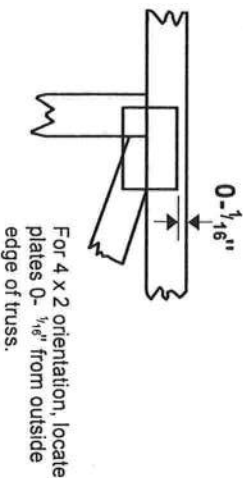
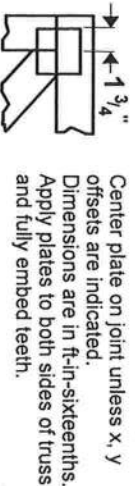
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**MiTek**

6904 Parke East Blvd.  
Tampa, FL 33610

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

4 X 4

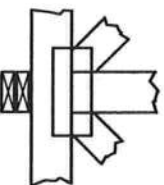
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## 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,

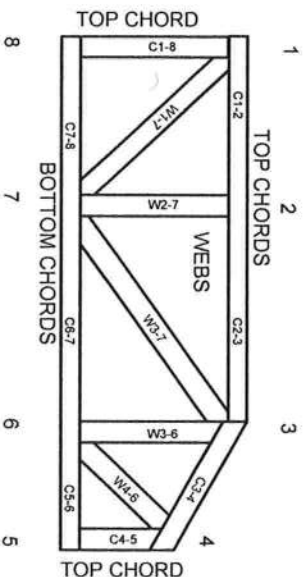
Guide to Good Practice for Handling,

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/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITek® All Rights Reserved



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

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor l bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

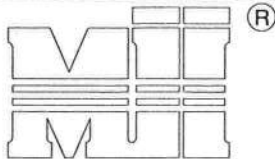


AUGUST 1, 2016

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

MII-T-BRACE 2

MiTek USA, Inc. Page 1 of 1



MiTek USA, Inc.

ENGINEERED BY  
**TRENCO**  
A MiTek Affiliate

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

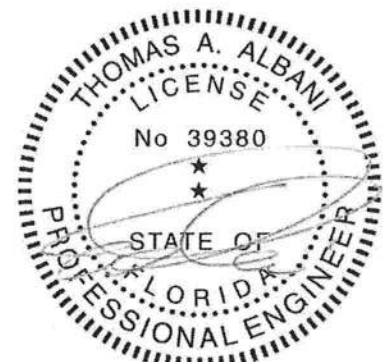
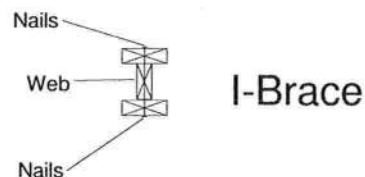
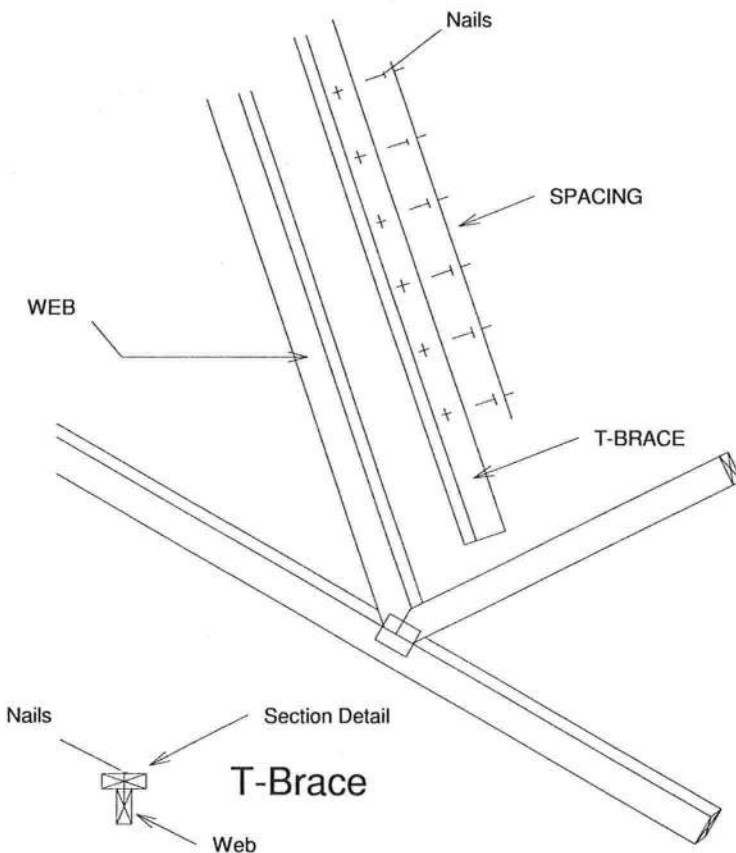
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

## 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

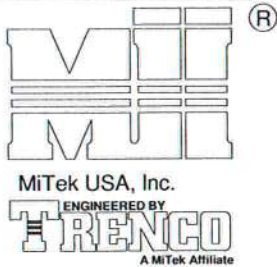
AUGUST 1, 2016

SCAB-BRACE DETAIL

MII-SCAB-BRACE

MiTek USA, Inc.

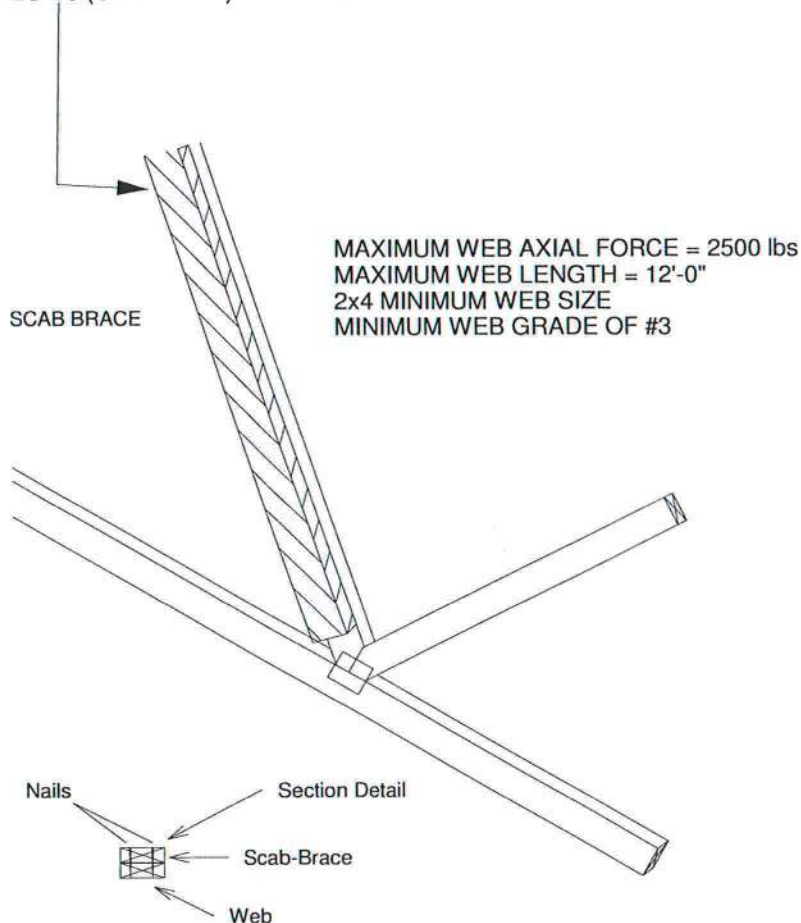
Page 1 of 1



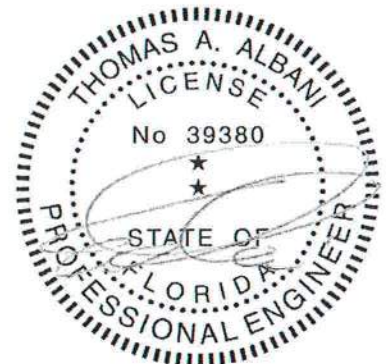
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.  
Scab must cover full length of web +/- 6".

\*\*\* 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.



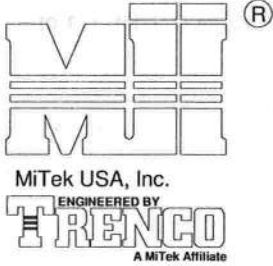
Scab-Brace must be same species grade (or better) as web member.



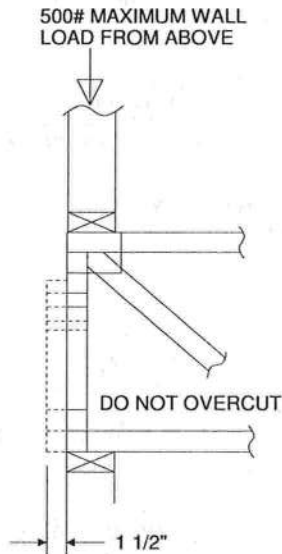
Thomas A. Albani PE No.39380  
MiTek USA, Inc. FL Cert 6634  
6904 Parke East Blvd. Tampa FL 33610  
Date:

February 12, 2018

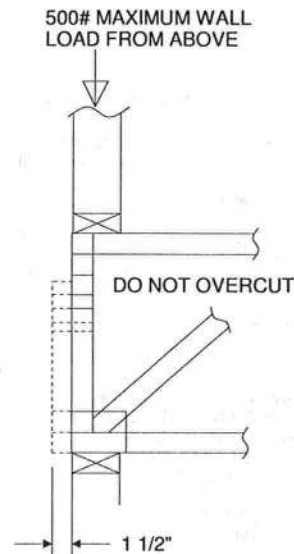




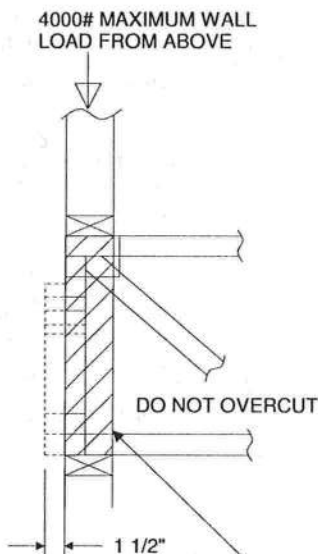
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS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



REFER TO INDIVIDUAL  
TRUSS DESIGN FOR  
PLATE SIZES AND  
LUMBER GRADES



TRUSSES BUILT  
WITH 4x2 MEMBERS



REFER TO INDIVIDUAL  
TRUSS DESIGN FOR  
PLATE SIZES AND  
LUMBER GRADES



TRUSSES BUILT  
WITH 4x2 MEMBERS

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



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

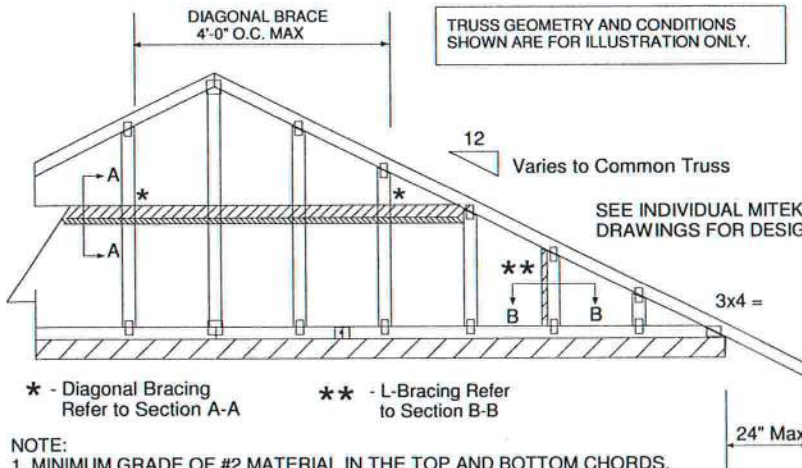
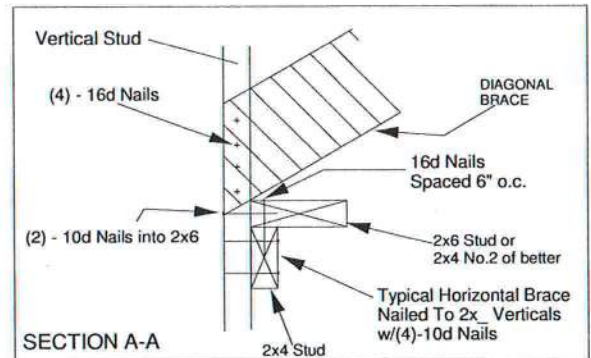
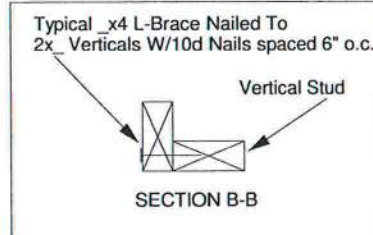
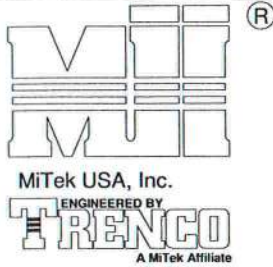
February 12, 2018

AUGUST 1, 2016

## Standard Gable End Detail

MII-GE130-D-SP

MiTek USA, Inc. Page 1 of 2

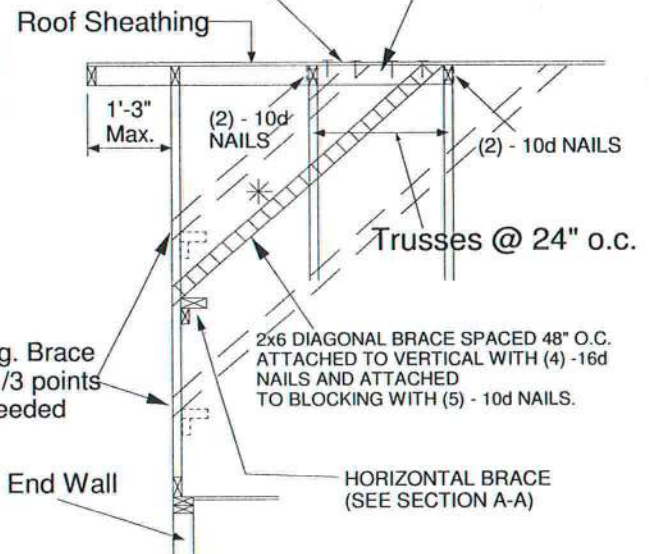


TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITTEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

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:

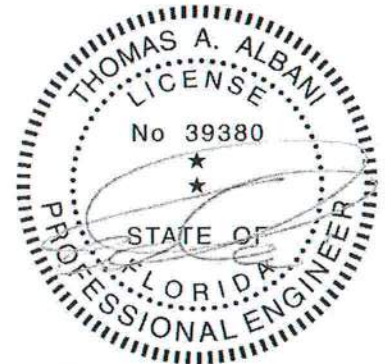
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF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



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

February 12, 2018



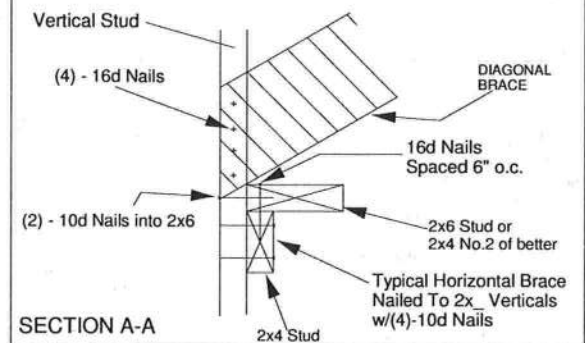


Typical  $\frac{1}{4}$ " L-Brace Nailed To  
2x Verticals W/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.



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.

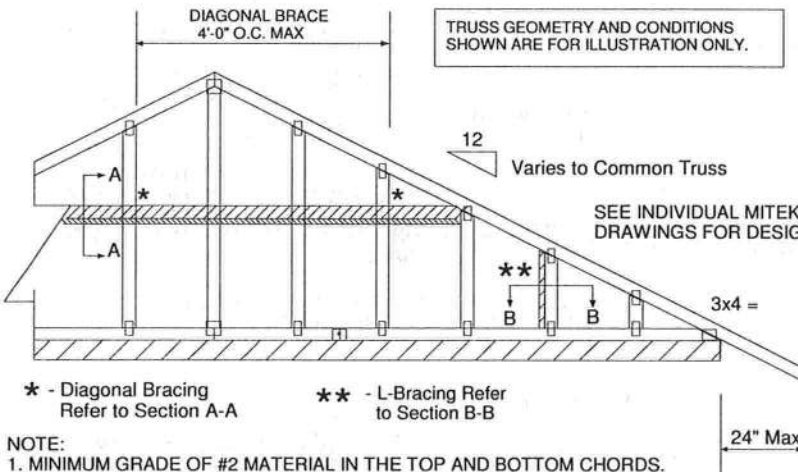
(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

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. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS  $L/240$ .
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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

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

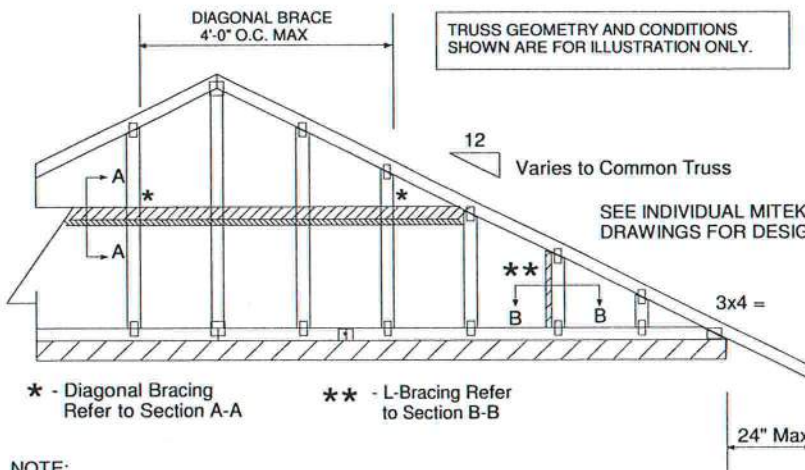
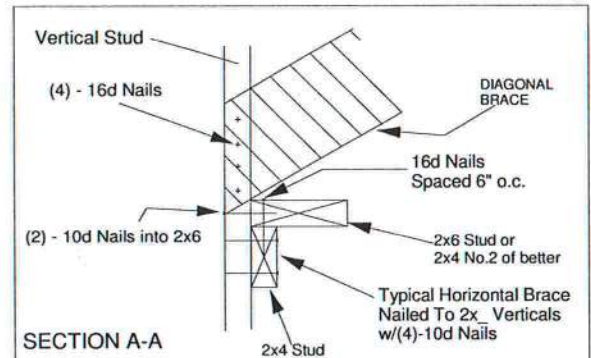
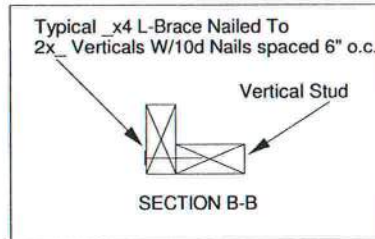
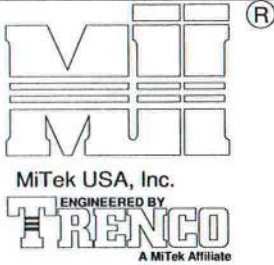
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH  
ASCE 7-10 160 MPH  
DURATION OF LOAD INCREASE : 1.60

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



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

February 12, 2018

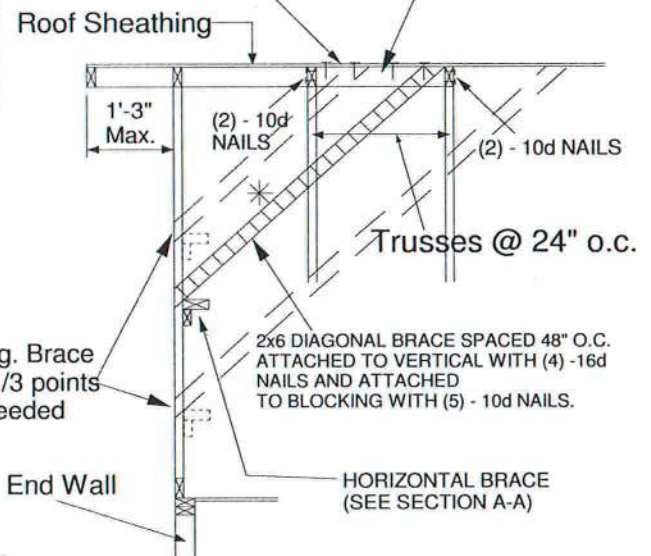


## NOTE:

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")

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



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 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 = 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

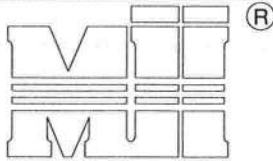
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



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

January 19, 2018





MiTek USA, Inc.

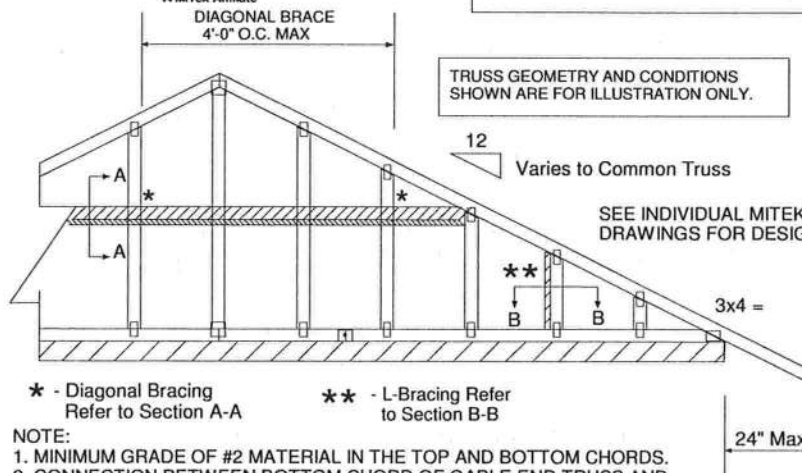
ENGINEERED BY  
**TRENCO**  
A MiTek AffiliateTypical 2x4 L-Brace Nailed To  
2x4 Verticals W/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

Varies to Common Truss

SEE INDIVIDUAL MITEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIA\* - Diagonal Bracing  
Refer to Section A-A\*\* - L-Bracing Refer  
to Section B-B

## NOTE:

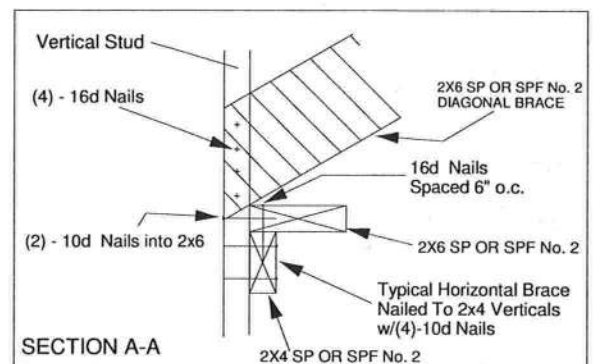
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF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

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

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

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

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



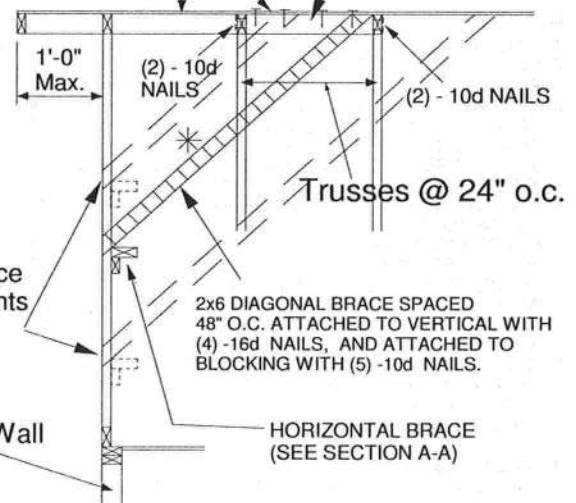
PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

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

Roof Sheathing

Diag. Brace  
at 1/3 points  
if needed

End Wall



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

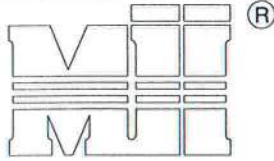
February 12, 2018

AUGUST 1, 2016

## Standard Gable End Detail

MII-GE180-D-SP

MiTek USA, Inc. Page 1 of 2



MiTek USA, Inc.

ENGINEERED BY  
**TRENCO**

A MiTek Affiliate

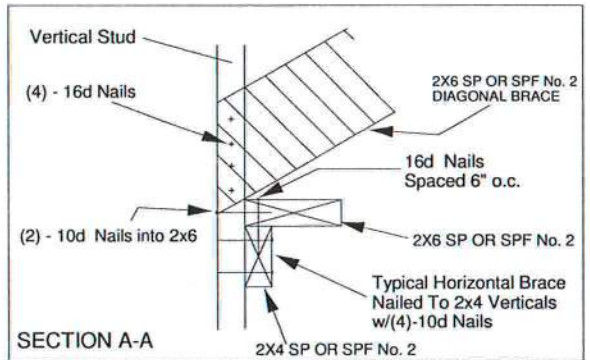
DIAGONAL BRACE

4'-0" O.C. MAX

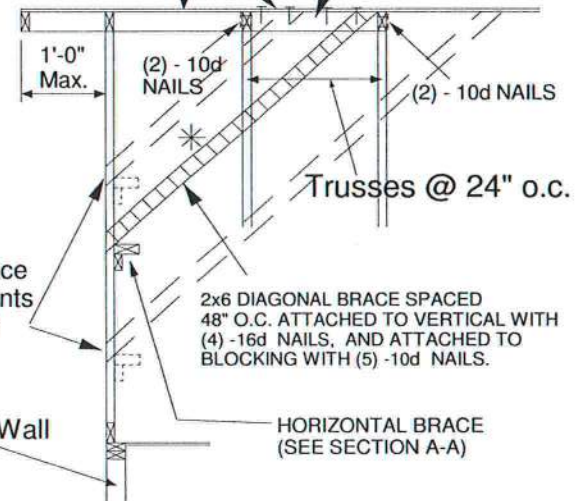
Typical 2x4 L-Brace Nailed To  
2x4 Verticals W/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.12  
Varies to Common TrussSEE INDIVIDUAL MITEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIAPROVIDE 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

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

## NOTE:

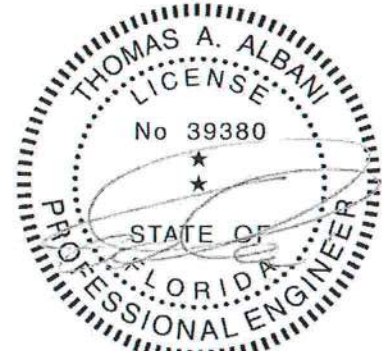
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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.	3-7-12	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

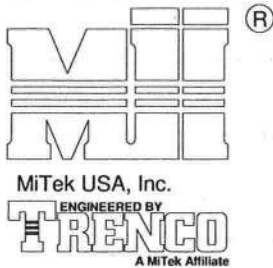
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.  
CONNECTION OF BRACING IS BASED ON MWFRS.



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

February 12, 2018

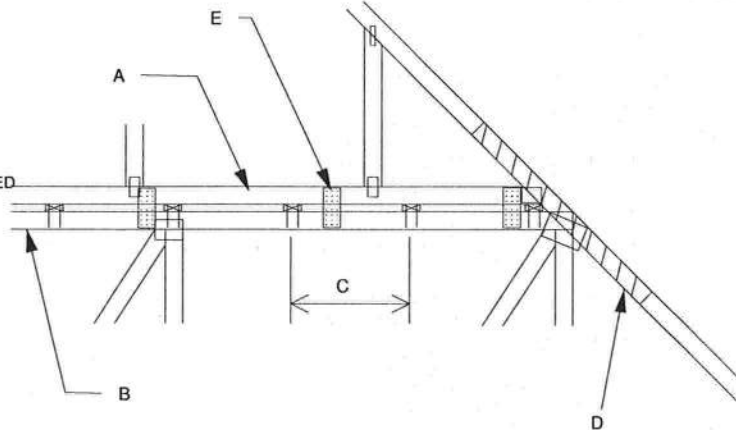




MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E  
MAX MEAN ROOF HEIGHT = 30 FEET  
MAX TRUSS SPACING = 24" O.C.  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-10  
DURATION OF LOAD INCREASE : 1.60

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

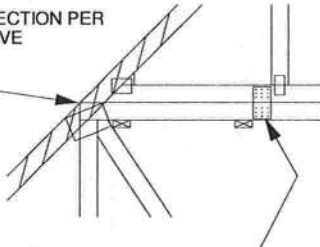
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.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



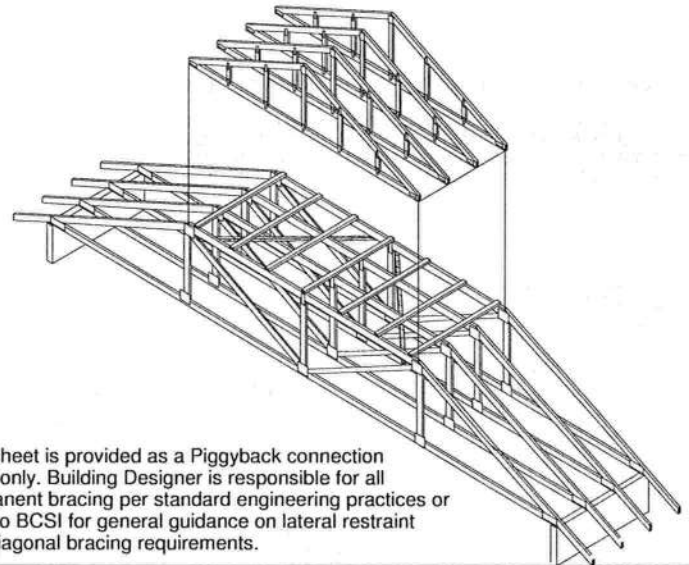
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

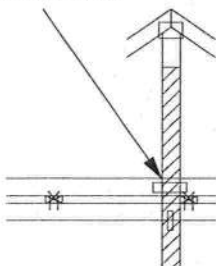


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



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



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

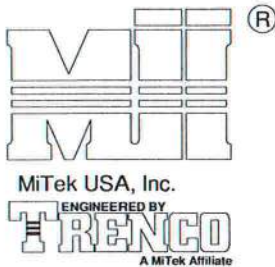
February 12, 2018

AUGUST 1, 2016

# STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT  
7-10

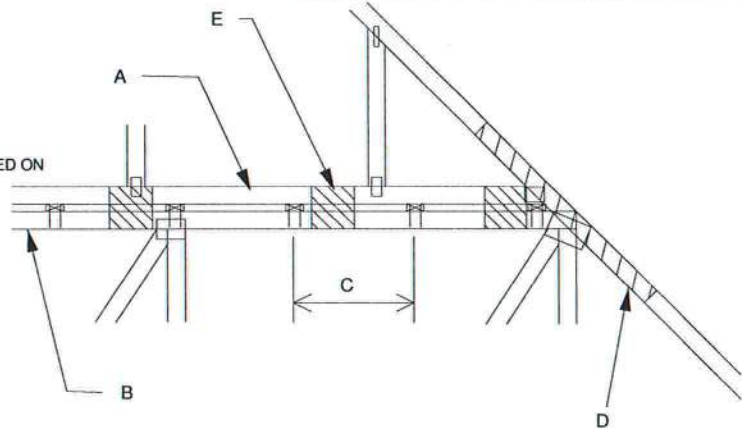
MiTek USA, Inc. Page 1 of 1



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  
TRANSFERING DRAG LOADS (SHEAR TRUSSES).  
ADDITIONAL CONSIDERATIONS BY BUILDING  
ENGINEER/DESIGNER ARE REQUIRED.

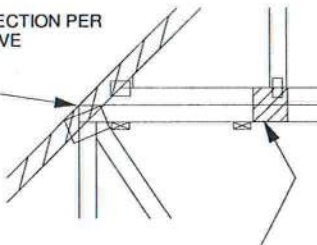
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. 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)



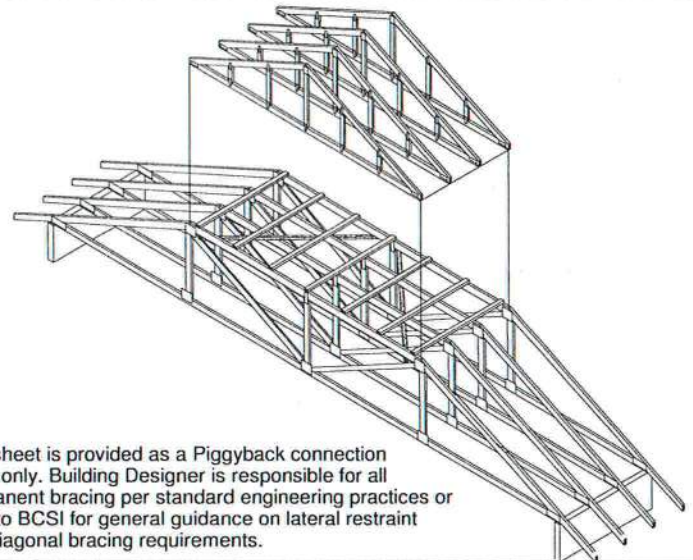
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

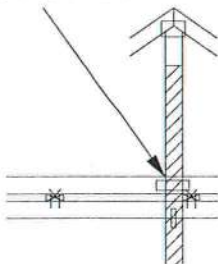


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



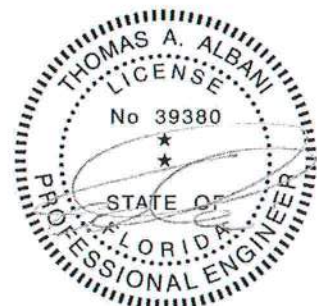
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO  
EXTEND THROUGH  
BOTTOM CHORD  
OF PIGGYBACK



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

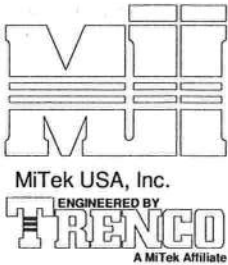
- 1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.
- 2) ATTACH 2 x 4'-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (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.



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

January 19, 2018



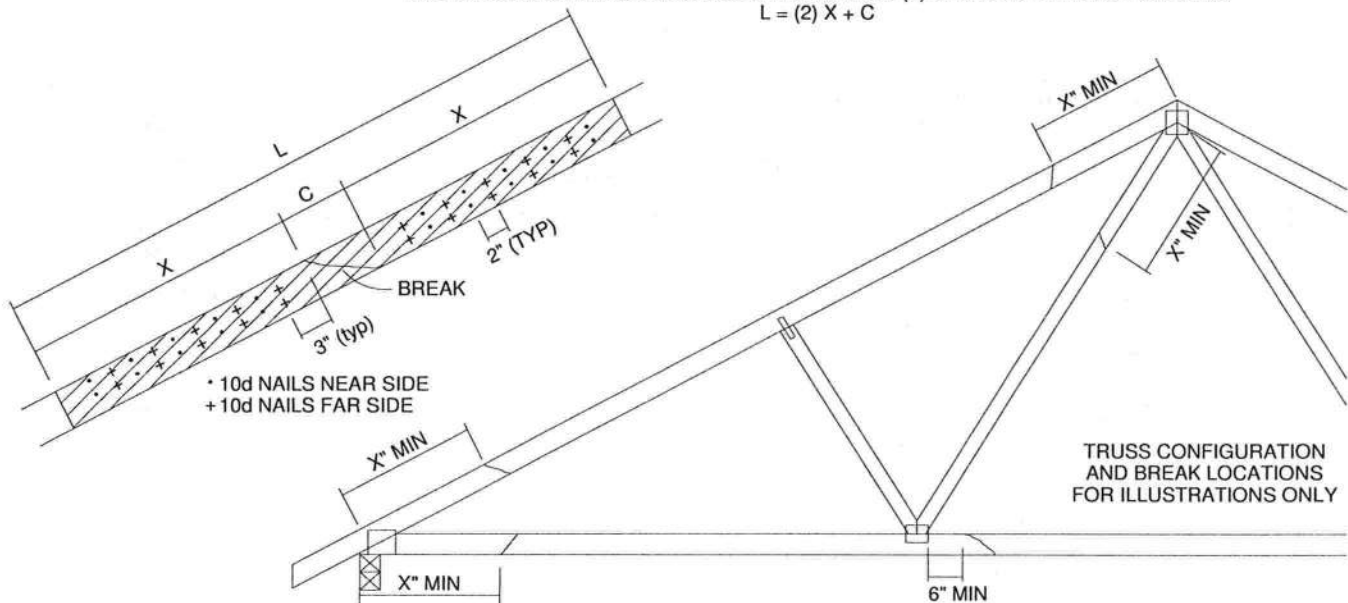


TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
			2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187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

\* DIVIDE EQUALLY FRONT AND BACK

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

THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)  
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:  
 $L = (2) X + C$

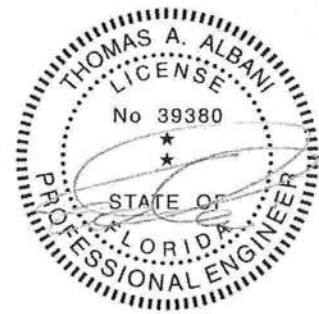


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

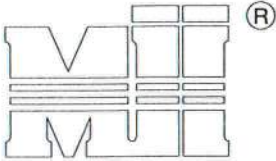
#### NOTES:

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



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

January 19, 2018



MiTek USA, Inc.

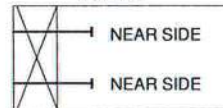
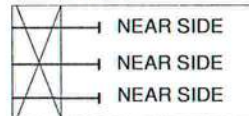
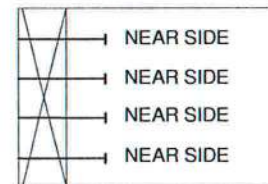
**ENGINEERED BY**  
**TRENCO**  
 A MiTek Affiliate

## 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

 SIDE VIEW  
 (2x3)  
 2 NAILS

 SIDE VIEW  
 (2x4)  
 3 NAILS

 SIDE VIEW  
 (2x6)  
 4 NAILS


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

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

## EXAMPLE:

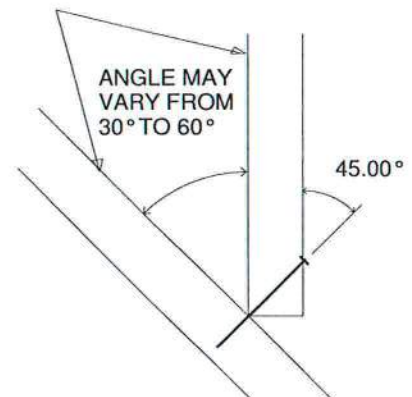
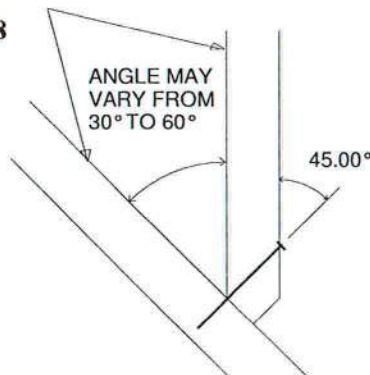
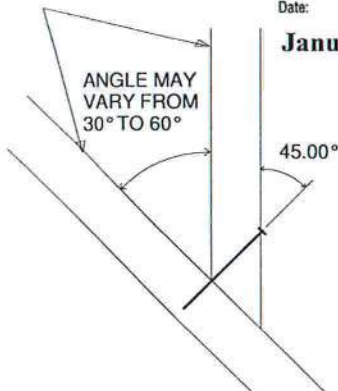
(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

For load duration increase of 1.15:

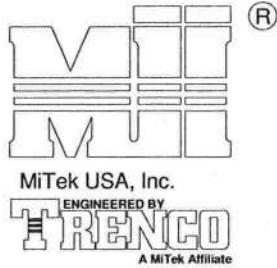
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity


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

January 19, 2018

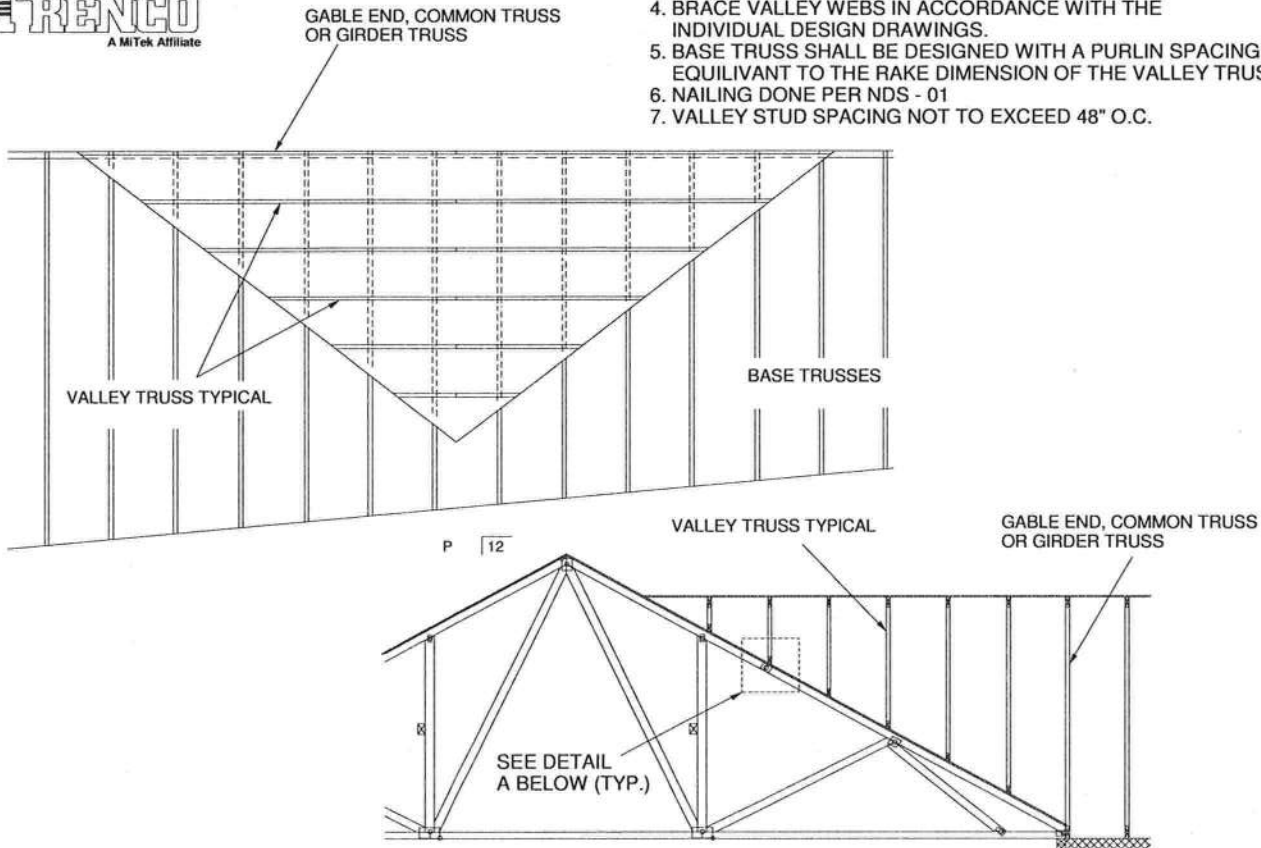






## GENERAL SPECIFICATIONS

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



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

ATTACH 2x4 CONTINUOUS NO.2 SP  
TO THE ROOF W/ TWO USP WS3 (1/4" X 3")  
WOOD SCREWS INTO EACH BASE TRUSS.

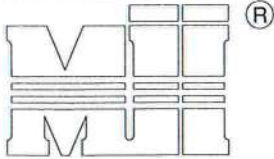
DETAIL A  
(NO SHEATHING)  
N.T.S.

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



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

January 19, 2018

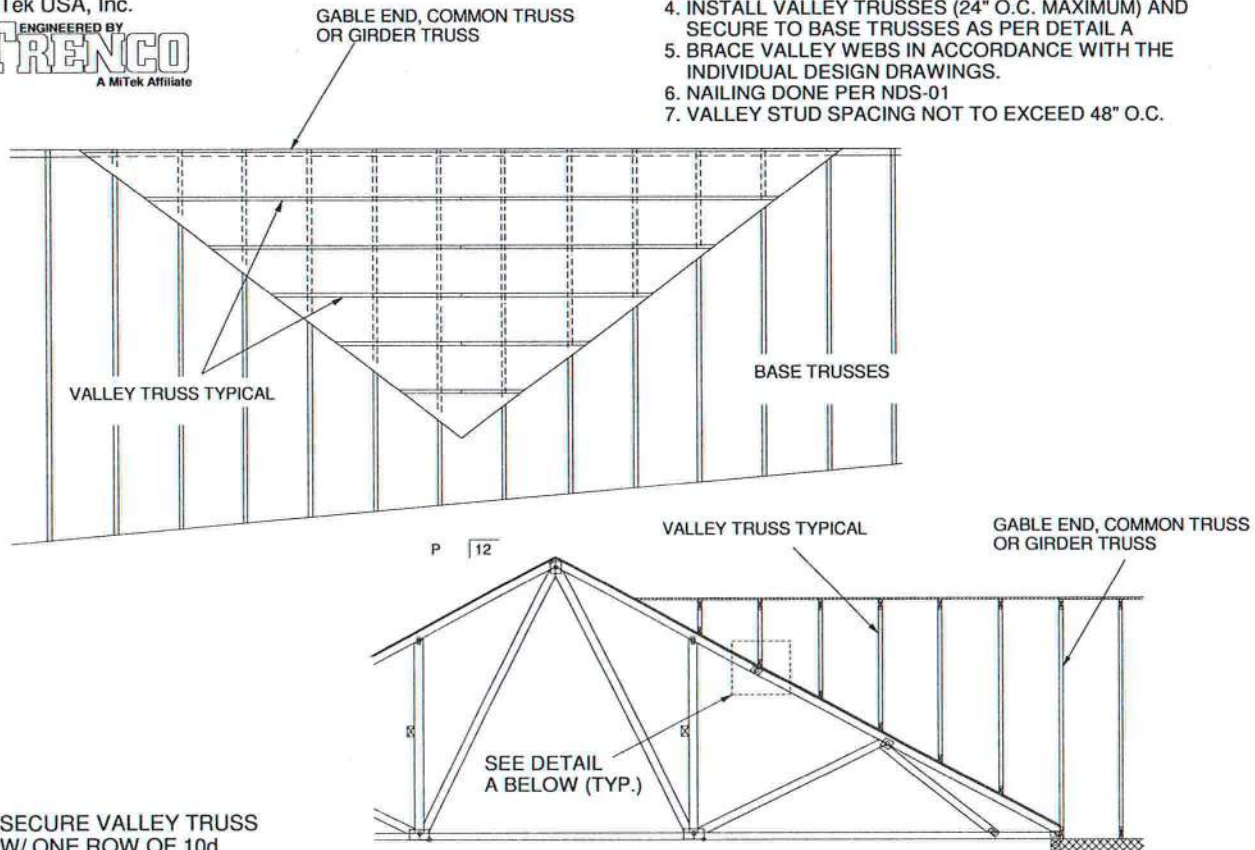


MiTek USA, Inc.

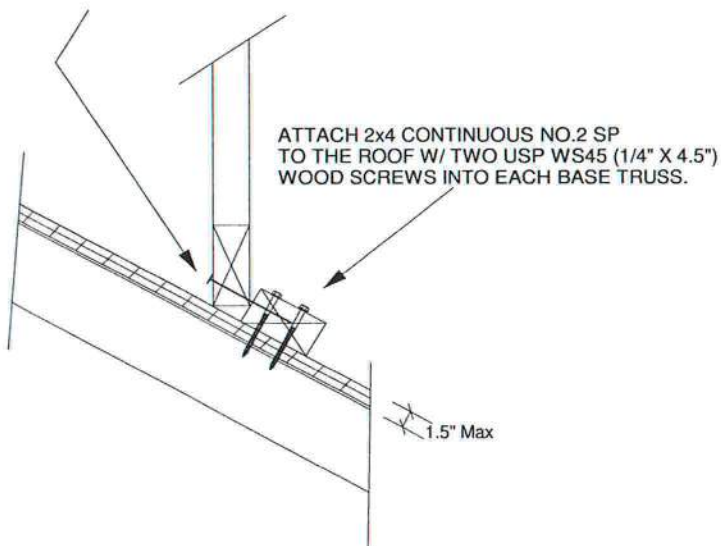
**ENGINEERED BY**  
**TRENCO**  
 A MiTek Affiliate

## GENERAL SPECIFICATIONS

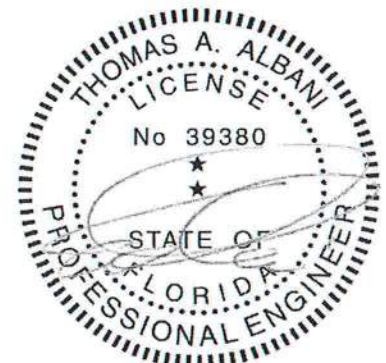
1. NAIL SIZE 10d (0.131" X 3")
2. WOOD SCREW = 4.5" WS45 USP OR EQUIVANT
3. INSTALL SHEATHING TO TOP CHORD OF BASE TRUSSES.
4. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE TO BASE TRUSSES AS PER DETAIL A
5. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
6. NAILING DONE PER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



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



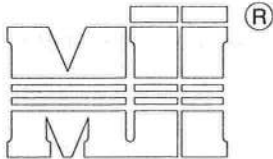
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH  
 WIND DESIGN PER ASCE 7-10 160 MPH  
 MAX MEAN ROOF HEIGHT = 30 FEET  
 ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12  
 CATEGORY II BUILDING  
 EXPOSURE C  
 WIND DURATION OF LOAD INCREASE : 1.60  
 MAX TOP CHORD TOTAL LOAD = 50 PSF  
 MAX SPACING =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



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

February 12, 2018



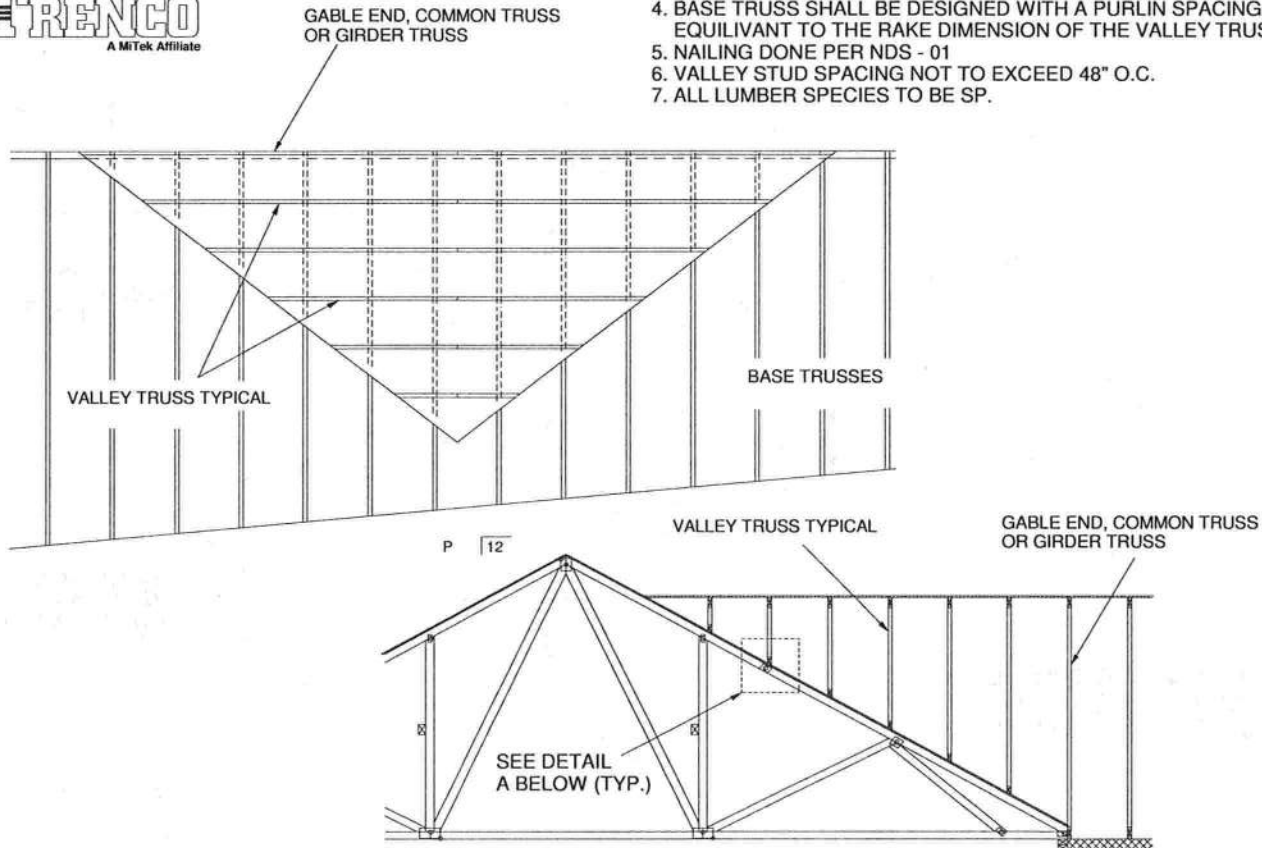


MiTek USA, Inc.

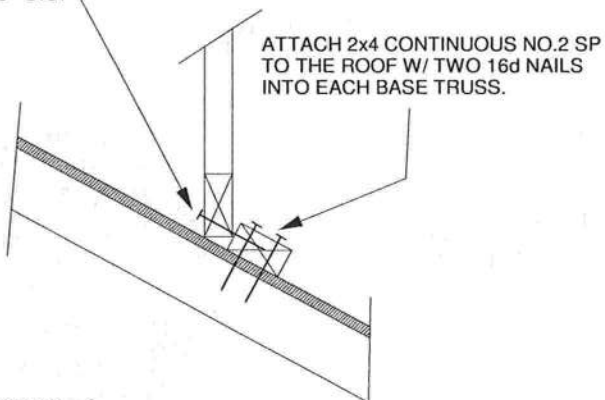
ENGINEERED BY  
**TRENCO**  
A MiTek Affiliate

## GENERAL SPECIFICATIONS

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



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



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

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

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



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

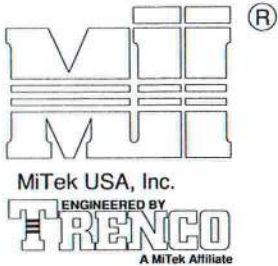
February 12, 2018

AUGUST 1, 2016

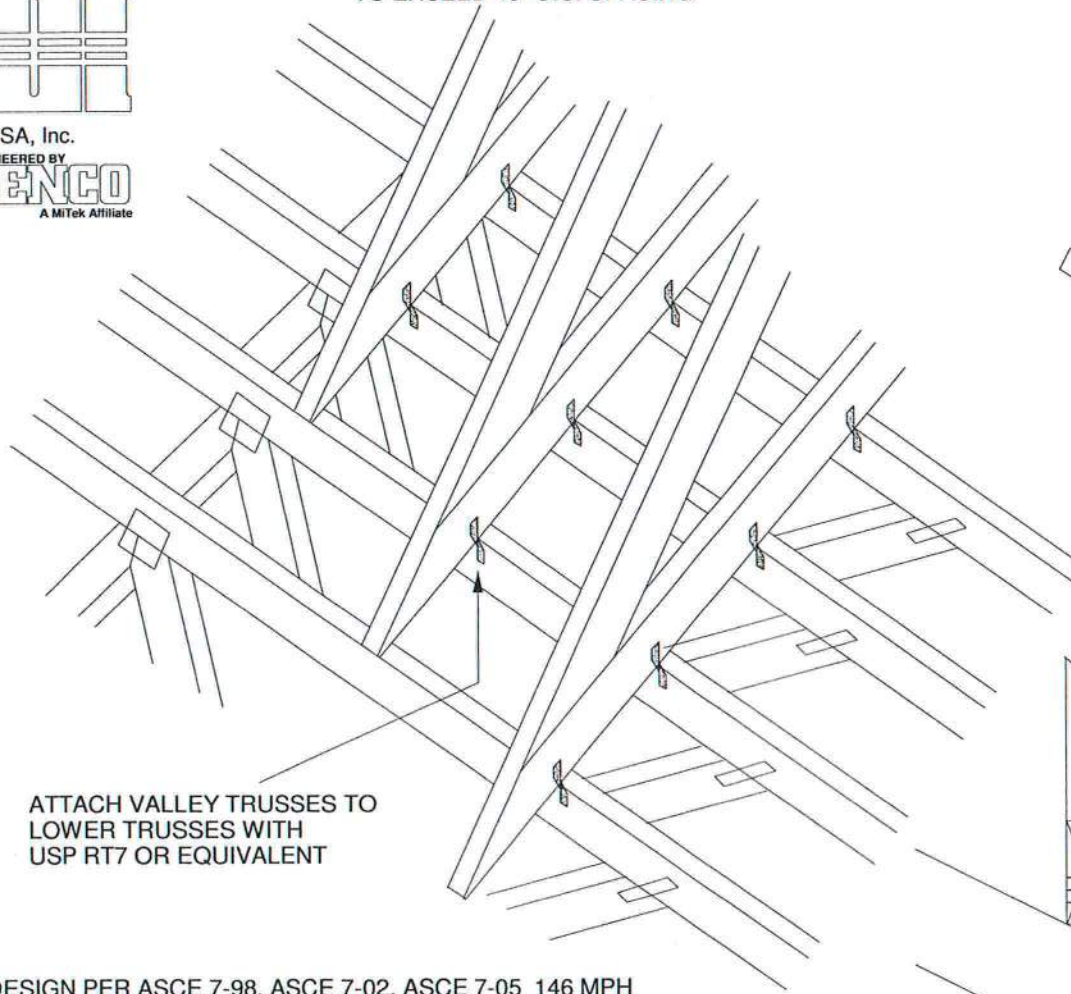
TRUSSED VALLEY SET DETAIL  
(HIGH WIND VELOCITY)

MII-VALLEY

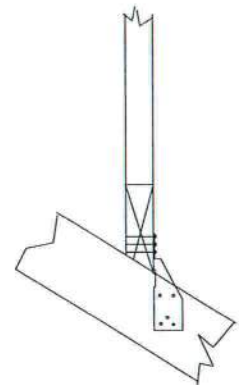
MiTek USA, Inc. Page 1 of 1



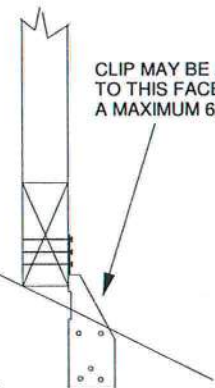
NOTE: VALLEY STUD SPACING NOT  
TO EXCEED 48" O.C. SPACING



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

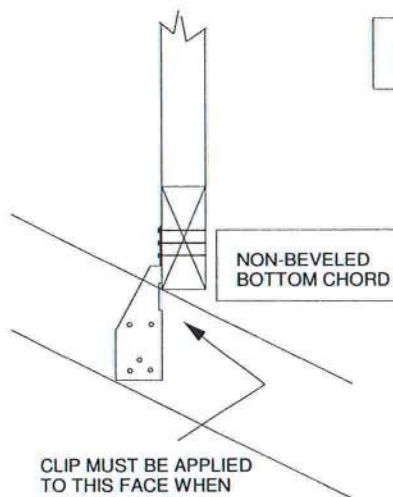
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH  
WIND DESIGN PER ASCE 7-10 160 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
WIND DURATION OF LOAD INCREASE : 1.6  
MAX TOP CHORD TOTAL LOAD = 50 PSF  
MAX SPACING = 24" O.C. (BASE AND VALLEY)

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

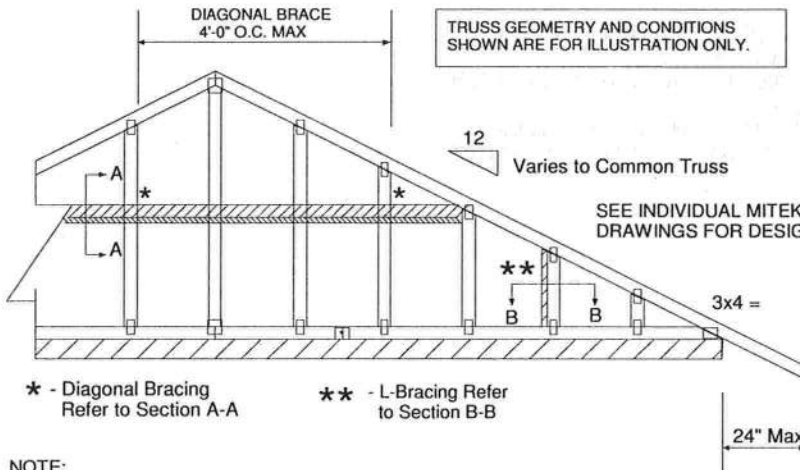
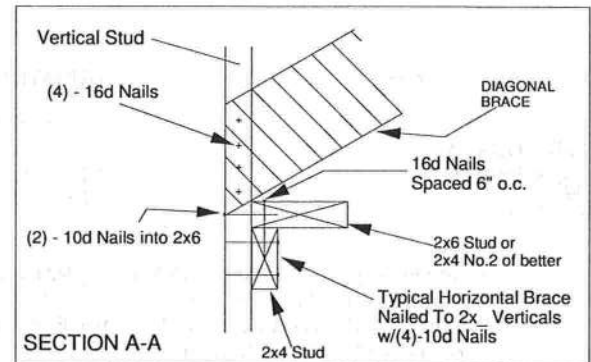
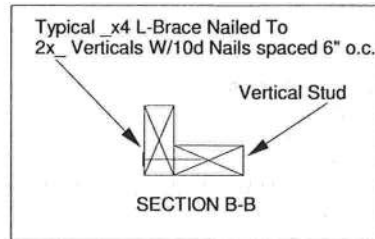
CLIP MUST BE APPLIED  
TO THIS FACE WHEN  
PITCH EXCEEDS 6/12.  
(MAXIMUM 12/12 PITCH)



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

January 19, 2018



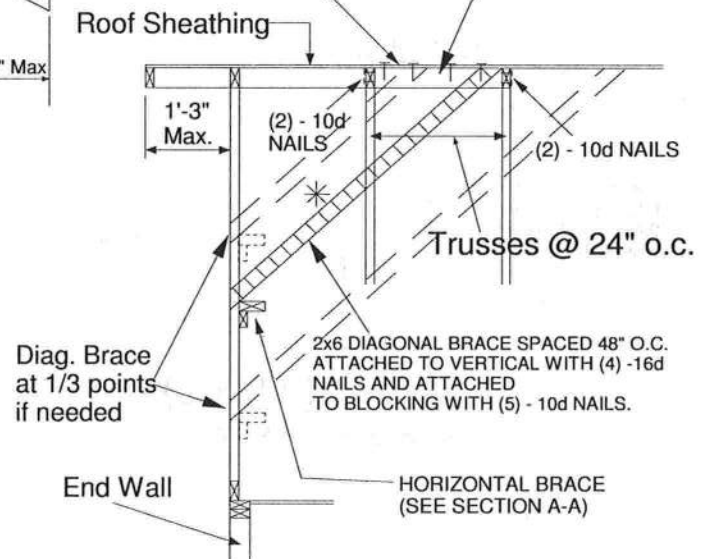


## NOTE:

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

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

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



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

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

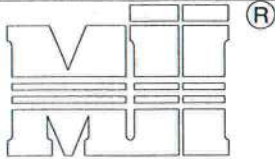
MAXIMUM WIND SPEED = 146 MPH  
MAX MEAN ROOF HEIGHT = 30 FEET  
CATEGORY II BUILDING  
EXPOSURE B or C  
ASCE 7-98, ASCE 7-02, ASCE 7-05  
DURATION OF LOAD INCREASE : 1.60

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



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

January 19, 2018



MiTek USA, Inc.

 ENGINEERED BY  
**TRENCO**  
 A MiTek Affiliate

## 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

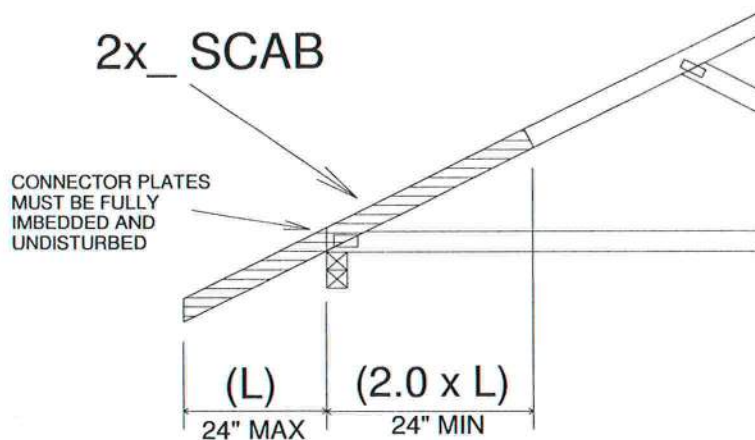
END BEARING CONDITION

MiTek USA, Inc.

Page 1 of 1

## 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.

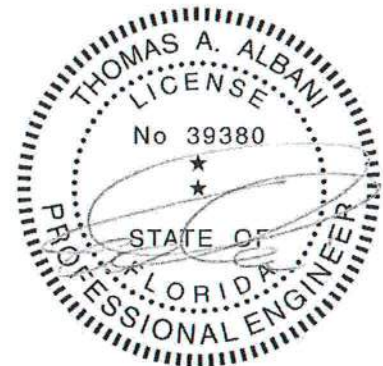


## IMPORTANT

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.

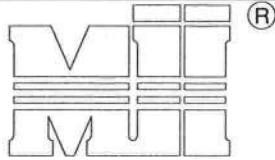
REFER TO INDIVIDUAL TRUSS DESIGN  
FOR PLATE SIZES AND LUMBER GRADES



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

February 12, 2018





MiTek USA, Inc.

 ENGINEERED BY  
**TRENCO**  
 A MiTek Affiliate

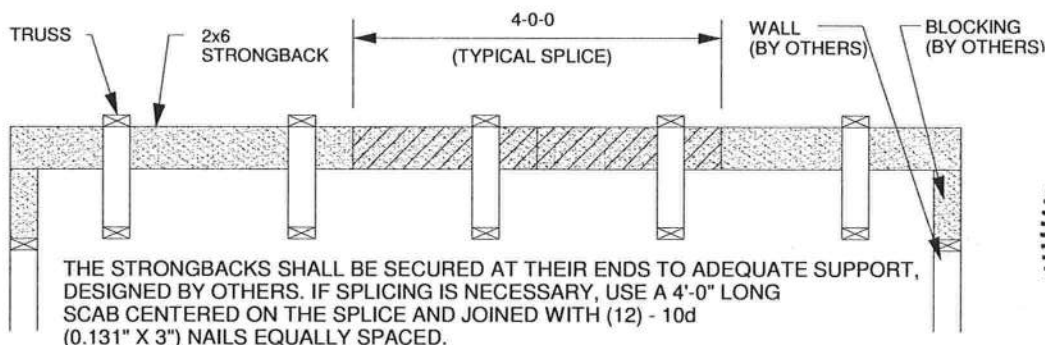
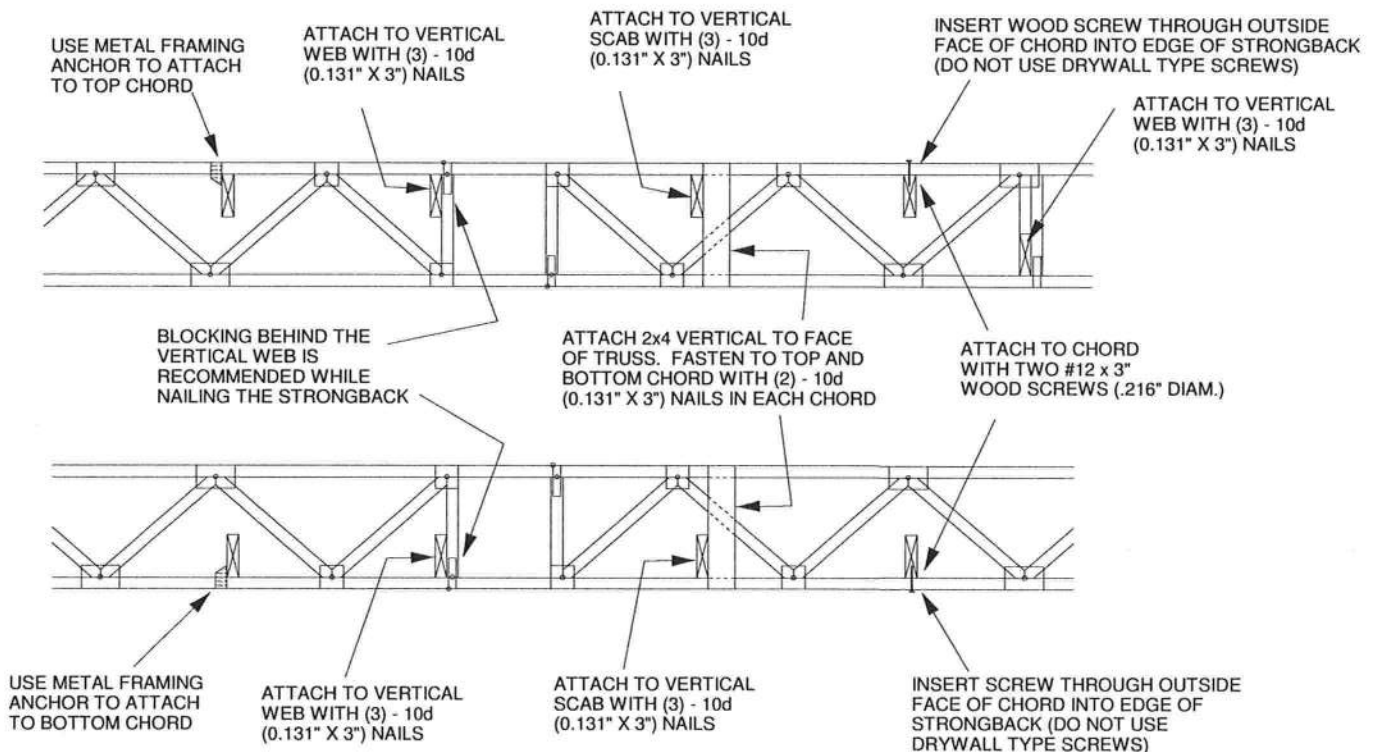
MiTek USA, Inc.

Page 1 of 1

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

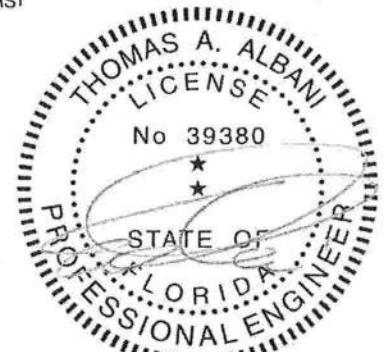
NOTE 1: 2X6 STRONGBACK ORIENTED VERTICALLY MAY BE POSITIONED DIRECTLY UNDER THE TOP CHORD OR DIRECTLY ABOVE THE BOTTOM CHORD. SECURELY FASTENED TO THE TRUSS USING ANY OF THE METHODS ILLUSTRATED BELOW.

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



**ALTERNATE METHOD OF SPLICING:**

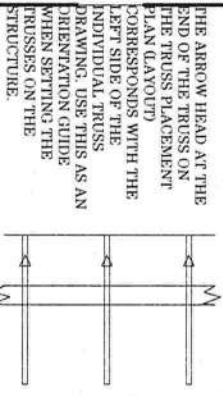
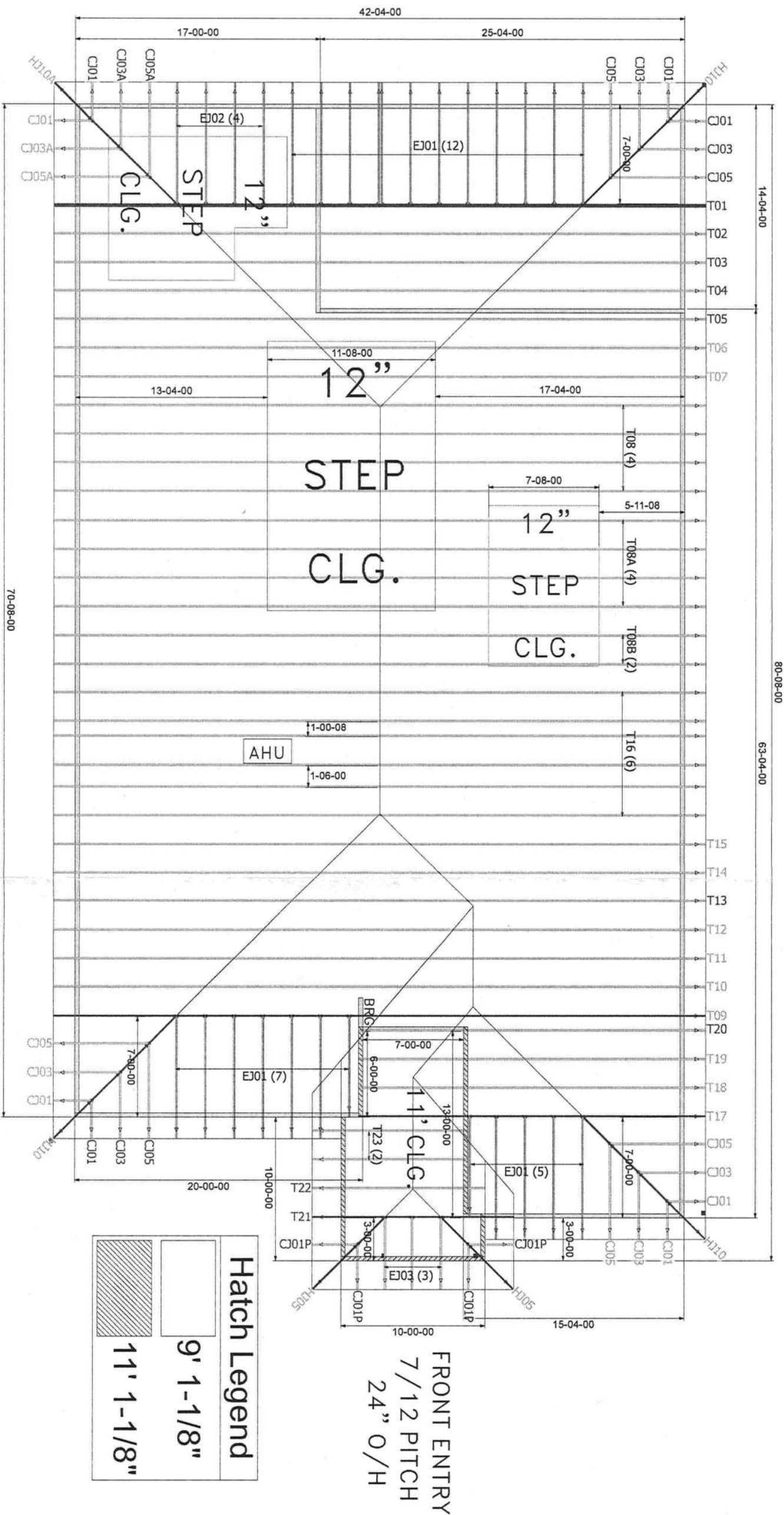
OVERLAP STRONGBACK MEMBERS A MINIMUM OF 4'-0" AND FASTEN WITH (12) - 10d (0.131" X 3") NAILS STAGGERED AND EQUALLY SPACED.  
 (TO BE USED ONLY WHEN STRONGBACK IS NOT ALIGNED WITH A VERTICAL)



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

**February 12, 2018**

6/12 PITCH - 18" O/H



General Notes:

- Per ANSI/TPI 1-2002 all "Truss to Wall" connections are the responsibility of the Building Designer, not the Truss Manufacturer.
- Use Manufacturer's specifications for all hanger connections unless noted otherwise.
- Trusses are to be 24" o.c. U.N.O.
- All hangers are to be Simpson or equivalent U.N.O. Use 10d x 1 1/2" Nails in hanger connections to single ply girders.
- Trusses are not designed to support brick U.N.O.
- Dimensions are Feet-Inches-Sixteenths

Notes:

No back charges will be accepted by Builders FirstSource unless approved in writing first.  
880-835-4541  
ACQ lumber is corrosive to truss plates. Any ACQ lumber that comes in contact with truss plates (i.e. sealed on tails) must have an approved barrier applied first.  
Refer to BCSB1 Summary Sheet-Guide for handling, installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders FirstSource.

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, etc...., so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Gable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing requirements.

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.



**Lake City**  
PHONE: 386-755-6894  
FAX: 386-755-7973  
**Jacksonville**  
PHONE: 904-772-6100  
FAX: 904-772-1973  
**Tallahassee**  
PHONE: 850-576-5177

**Builder:**  
**AARON SIMQUE HOMES**  
**Legal Address:**  
**Lot 57 Preserve**

Model:	2281	Drawn By:	KLH	Original Ref #:	2802407
Date:	5-19-21	Floor 1 Job#:	N/A	Floor 2 Job#:	2802407
				Roof Job #:	2802407