

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

RE: 2806869 - SIMQUE HOMES - LOT 146 PLL

MiTek USA, Inc.

6904 Parke East Blvd. Tampa, FL 33610-4115

Site Information:

Customer Info: Aaron Simque Homes Project Name: Spec Hse Model: Ivy

Subdivision: The Preserve at Laurel Lake

Lot/Block: 146 Address: TBD, TBD

State: FL

City: Columbia Cty

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

Name:

License #:

Address:

City:

State:

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

Design Code: FBC2020/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: ASCE 7-16

Wind Speed: 130 mph

Roof Load: 37.0 psf

T24082565

T24082566 T24082567

T24082569 T24082570

Floor Load: N/A psf

This package includes 33 individual, Truss Design Drawings and 0 Additional Drawings. With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

7 T24082556 EJ5 5/25/21 29 T24082578 T17 8 T24082557 EJ5B 5/25/21 30 T24082579 T17G 9 T24082558 EJ6 5/25/21 31 T24082580 T18 10 T24082559 EJ7 5/25/21 32 T24082581 T19 11 T24082560 HJ7 5/25/21 33 T24082582 T20 12 T24082561 HJ10 5/25/21 13 T24082562 PB1 5/25/21 14 T24082563 PB2 5/25/21	12	T24082557 T24082558 T24082559 T24082560 T24082561 T24082562	EJ5B EJ6 EJ7 HJ7 HJ10 PB1	5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21	31 32	T24082580 T24082581	T18 T19	5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21 5/25/21	
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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

TO1G

T02G T03

My license renewal date for the state of Florida is February 28, 2023.

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



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

May 25,2021

Truss Type Qty SIMQUE HOMES - LOT 146 PLL Job Truss T24082550 CJ1 2806869 Jack-Open Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:28 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:cExzFHCxHzHNjPCINbH0FZzN74p-UnZx1HeJgPKnT4\_o7rBeCZZz6PpXpczkeTeoA6zDwWT Scale = 1:9.4 7.00 12 2 6-7-0

1-0-0

Plate Offsets (X,Y) [2:0-0-0,0-0-4]												
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.23	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.06	Vert(CT)	0.00	7	>999	180	00000000	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MP	10000000000000000000000000000000000000					Weight: 6 lb	FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD

3x4 =

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

REACTIONS.

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=64(LC 12)

Max Uplift 3=-5(LC 1), 2=-103(LC 12), 4=-25(LC 19) Max Grav 3=7(LC 16), 2=179(LC 1), 4=26(LC 16)

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

### NOTES- (7)

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(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
- 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.
- 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 5 lb uplift at joint 3, 103 lb uplift at joint 2 and 25 lb uplift at joint 4.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021



SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Qty Ply T24082551 C.13 Jack-Open 3 2806869 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:29 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville FI - 32244 ID:cExzFHCxHzHNjPCINbH0FZzN74p-y\_7JFdfxRiTe5DZ\_gYjtlm68Ep6ZY3Dus7OLjYzDwWS 3-0-0 -1-6-0 1-6-0 Scale = 1:15.3 3 7.00 12 0-5-8 9 Plate Offsets (X,Y)-- [2:0-0-0,0-0-4] LOADING (psf) SPACING-CSI. DEFL Vdef **PLATES** GRIP 244/190 20.0 Plate Grip DOL 1.25 TC 0.20 Vert(LL) 0.01 4-7 >999 240 MT20 TCLL 180 TCDL 7.0 Lumber DOL 1.25 BC 0.13 Vert(CT) -0.01>999 WB -0.00 BCLL 0.0 Rep Stress Incr YES 0.00 Horz(CT) 3 n/a n/a FT = 20% BCDL 10.0 Code FBC2020/TPI2014 Matrix-MP Weight: 12 lb LUMBER-BRACING-TOP CHORD 2x4 SP No.2 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.

BOT CHORD

2x4 SP No.2

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=120(LC 12) Max Uplift 3=-63(LC 12), 2=-88(LC 12), 4=-26(LC 9) Max Grav 3=67(LC 19), 2=210(LC 1), 4=51(LC 3)

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

NOTES-

REACTIONS.

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(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.
- \* 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 3, 88 lb uplift at joint 2 and 26 lb uplift at joint 4.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021



Job Truss Type Qty SIMQUE HOMES - LOT 146 PLL T24082552 2806869 СЈЗА Jack-Open Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, inc. Sat May 22 14:11:29 2021 Page 1 ID:cExzFHCxHzHNjPCINbH0FZzN74p-y\_7JFdfxRiTe5DZ\_gYjtlm69zp6wY3Dus7OLjYzDwWS Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. Scale = 1:14.0 7.00 12 0-5-8 3 3-0-0 LOADING (psf) SPACING-2-0-0 CSI DEFL (loc) I/defl L/d PLATES GRIP TCLL 20,0 Plate Grip DOL 1.25 TC 0.02 0.16 Vert(LL) 244/190 3-6 >999 240 MT20 TCDL 7.0 Lumber DOL 1.25 BC 0.18 Vert(CT) -0.01 3-6 >999 180 BCII 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.00 n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-MP Weight: 10 lb FT = 20%

LUMBER-

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

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

REACTIONS.

(size) 1=0-3-8, 2=Mechanical, 3=Mechanical

Max Horz 1=83(LC 12)

Max Uplift 1=-37(LC 9), 2=-70(LC 12), 3=-30(LC 9)

Max Grav 1=109(LC 1), 2=76(LC 19), 3=54(LC 3)

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

# NOTES- (7)

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(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
- 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 37 lb uplift at joint 1, 70 lb uplift at joint 2 and 30 lb uplift at joint 3.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

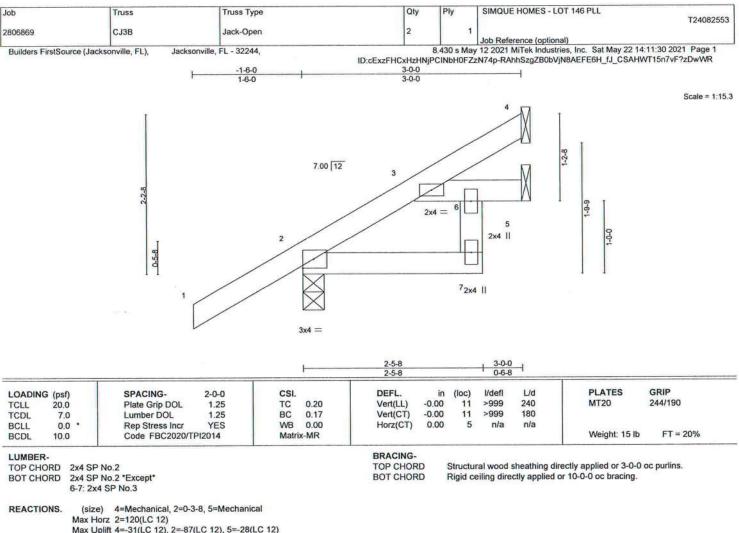
May 25,2021

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 in 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 properly damage. For general guidance regarding the fabrication, storage, delivery, crection 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





Max Uplift 4=-31(LC 12), 2=-87(LC 12), 5=-28(LC 12)

Max Grav 4=43(LC 19), 2=216(LC 1), 5=72(LC 3)

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

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-8, Interior(1) 1-6-8 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.
- 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.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 31 lb uplift at joint 4, 87 lb uplift at joint 2 and 28 lb uplift at joint 5.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021

MARNING - 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 MTek® 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 we hand/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent occlapse 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-99 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Qty SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Ply T24082554 2806869 CJ5 Jack-Open 3 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:31 2021 Page 1 Builders FirstSource (Jacksonville, FL), FL - 32244 ID:cExzFHCxHzHNjPCINbH0FZzN74p-vME3fJhByKjMKXjNozILqBBRPcj50ziBKRtSnRzDwWQ 5-0-0 5-0-0 Scale = 1:21.0 7.00 12 0.5-8 Plate Offsets (X,Y)--[2:0-0-4,0-0-0] (psf) LOADING SPACING-2-0-0 CSI DEFL. l/defl PLATES GRIP L/d Plate Grip DOL TCLL 20.0 1.25 TC 0.42 Vert(LL) 0.10 4-7 >574 240 MT20 244/190 TCDL Lumber DOL 1.25 BC 0.45 7.0 Vert(CT) 0.09 180 4-7 >642 0.0 BCLL Rep Stress Incr YES WB 0.00 -0.01 Horz(CT)

BRACING-

TOP CHORD

**BOT CHORD** 

n/a

n/a

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

Weight: 19 lb

FT = 20%

LUMBER-

REACTIONS.

BCDL

TOP CHORD 2x4 SP No.2 BOT CHORD

10.0

2x4 SP No.2

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Code FBC2020/TPI2014

Max Horz 2=177(LC 12)

Max Uplift 3=-114(LC 12), 2=-99(LC 12), 4=-47(LC 9)

Max Grav 3=124(LC 19), 2=276(LC 1), 4=89(LC 3)

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

1) Wind: ASCÉ 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(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

Matrix-MP

- 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.
- \*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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 114 lb uplift at joint 3, 99 lb uplift at joint 2 and 47 lb uplift at joint 4.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021

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



SIMQUE HOMES - LOT 146 PLL Qty Job Truss Truss Type Ply T24082555 2806869 CJ5A Jack-Open 1 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:31 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, ID:cExzFHCxHzHNjPCINbH0FZzN74p-vME3fJhByKjMKXjNozlLqBBR?cjd0ziBKRtSnRzDwWQ Scale = 1:20.0 2 7.00 12 0-5-8 10 3 3x4 = DEFL. PLATES GRIP SPACING-I/defl L/d LOADING (psf) 2-0-0 CSI (loc) 20.0 Plate Grip DOL 1.25 TC 0.44 Vert(LL) 0.11 3-6 >530 240 MT20 244/190 TCLL Lumber DOL 1.25 BC 0.48 Vert(CT) 0.10 3-6 >598 180 TCDL 7.0 BCLL 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) -0.01 2 n/a n/a Weight: 16 lb FT = 20% Code FBC2020/TPI2014 BCDL 10.0 Matrix-MP LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 5-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. **BOT CHORD** 2x4 SP No.2 **BOT CHORD** REACTIONS. 1=0-3-8, 2=Mechanical, 3=Mechanical (size)

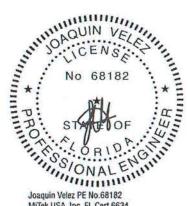
Max Horz 1=140(LC 12)

Max Uplift 1=-64(LC 9), 2=-119(LC 12), 3=-49(LC 9) Max Grav 1=183(LC 1), 2=130(LC 19), 3=91(LC 3)

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

### NOTES- (7

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 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.
- Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 1, 119 lb uplift at joint 2 and 49 lb uplift at joint 3.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021

WARNING - Verity 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 property 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 

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



Qty Job Truss Truss Type Ply SIMQUE HOMES - LOT 146 PLL T24082556 2806869 EJ5 JACK-OPEN Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:32 2021 Page 1 Jacksonville, FL - 32244, Builders FirstSource (Jacksonville, FL), ID:cExzFHCxHzHNjPCINbH0FZzN74p-NZoStfipjdrDyhlZMgGaNPkeO07SIPbKZ5c?JtzDwWP -1-6-0 4-9-8 Scale = 1:20.4 7.00 12 2-3-1 2-10-2 1-0-0 0-5-8 2x4 || 3x4 LOADING (psf) SPACING-2-0-0 CSI. DEFL l/defl L/d PLATES GRIP in (loc) TCLL 20.0 Plate Grip DOL 1.25 TC 0.27 Vert(LL) 0.04 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.25 Vert(CT) -0.06>999 180 WB BCIL 00 Rep Stress Incr YES 0.02 Horz(CT) 0.03 5 n/a n/a Code FBC2020/TPI2014 FT = 20% BCDL 10.0 Matrix-MP Weight: 21 lb

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

BOT CHORD

2x4 SP No.3 WEBS

> 4=Mechanical, 2=0-3-8, 5=Mechanical (size)

Max Horz 2=171(LC 12)

Max Uplift 4=-86(LC 12), 2=-95(LC 12), 5=-26(LC 12)

Max Grav 4=111(LC 19), 2=278(LC 1), 5=86(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=18ft; Cat. II; Exp C; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-8, Interior(1) 1-6-8 to 4-8-12 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 86 lb uplift at joint 4, 95 lb uplift at joint 2 and 26 lb uplift at joint 5.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 4-9-8 oc purlins.

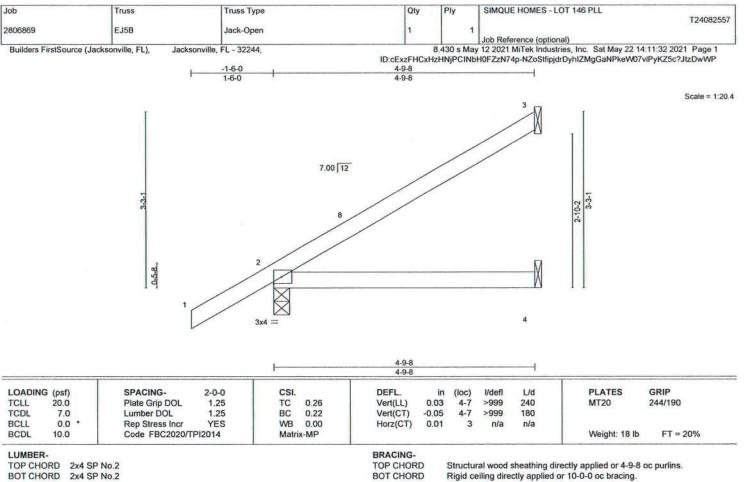
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

May 25,2021

MARNING - 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





REACTIONS.

2X4 SP No.2

(size) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=171(LC 12)

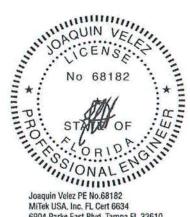
Max Uplift 3=-109(LC 12), 2=-98(LC 12), 4=-5(LC 12)

Max Grav 3=124(LC 19), 2=269(LC 1), 4=85(LC 3)

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

NOTES- (7

- Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-8-12 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.
- 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 109 lb uplift at joint 3, 98 lb uplift at joint 2 and 5 lb uplift at joint 4.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



6904 Parke East Blvd. Tampa FL 33610 Date: May 25 2021

May 25,2021



Qty SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Ply T24082558 2806869 EJ6 Monopitch 5 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:33 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, ID:cExzFHCxHzHNjPCINbH0FZzN74p-rlMq4?iSUxz4artlvOnpvcHqeQSQUpuUnlMZsKzDwWO 6-3-8 Scale = 1:24.8

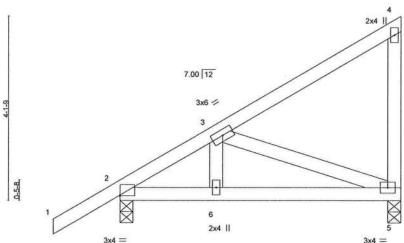


Plate Offsets (X,Y)-[2:0-0-0,0-0-4] LOADING (psf) SPACING-2-0-0 CSI DEFL. PLATES GRIP Plate Grip DOL TCLL 20.0 1.25 TC 0.24 Vert(LL) 0.04 5-6 >999 240 MT20 244/190 TCDL 1.25 BC 7.0 Lumber DOL 0.04 0.27 Vert(CT) 5-6 >999 180 0.0 BCLL Rep Stress Incr WB 0.21 YES -0.00 Horz(CT) n/a n/a BCDL Code FBC2020/TPI2014 10.0 Weight: 36 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

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

2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 5=0-3-8 Max Horz 2=211(LC 12)

Max Uplift 2=-108(LC 12), 5=-152(LC 12)

Max Grav 2=318(LC 1), 5=218(LC 1)

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

2-3=-309/527

2-6=-675/254, 5-6=-675/254 **BOT CHORD** 

WEBS

3-6=-310/147, 3-5=-269/715

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-1-12 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 108 lb uplift at joint 2 and 152 lb uplift at
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 6-7-9 oc bracing.

except end verticals.

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

May 25,2021

MARNING - 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 MTek® 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-39 and BCSI Building Composafety Information

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



SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Qtv Ply T24082559 2806869 EJ7 Jack-Open 9 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:34 2021 Page 1 ID:cExzFHCxHzHNjPCINbH0FZzN74p-JxwCILj4FF5xC7SxT5I2SqpsDqn0DJSd0P56OmzDwWN Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, Scale = 1:26.6 7.00 12 4-1-9 0-5-B 3x4 / Plate Offsets (X,Y)-[2:0-1-1,0-1-8] LOADING (psf) SPACING-CSI. DEFL. I/defl L/d **PLATES** GRIP 2-0-0 (loc) TCLL 20.0 Plate Grip DOL 1.25 TC 0.83 Vert(LL) 0.31 4-7 >268 240 244/190 TCDL Lumber DOL 1.25 BC 0.37 Vert(CT) 0.27 >305 180 7.0 BCLL 00 Rep Stress Incr YES WR 0.00 Horz(CT) -0.02 3 n/a n/a FT = 20% Code FBC2020/TPI2014 Weight: 25 lb BCDL 10.0 Matrix-MS BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins. BOT CHORD 2x4 SP M 31 **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=225(LC 12)

Max Uplift 3=-144(LC 12), 2=-118(LC 12), 4=-70(LC 9) Max Grav 3=176(LC 19), 2=346(LC 1), 4=131(LC 3)

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

# NOTES- (7

- Wind: ASCÉ 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(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
- 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 144 lb uplift at joint 3, 118 lb uplift at joint 2 and 70 lb uplift at joint 4.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021

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 systems, see \*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job Truss Truss Type Qty Ply SIMQUE HOMES - LOT 146 PLL T24082560 DIAGONAL HIP GIRDER 2806869 HJ7 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:36 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:cExzFHCxHzHNjPCINbH0FZzN74p-FK2yj0lKnsLeRlbKbWLWXFvG7dL2hDywTjaDSezDwWL Scale = 1:20.0 0-4-6 4.95 12 4x6 || 17 0-5-3 16 3x4 || Plate Offsets (X,Y)--[6:0-3-0,0-0-8] LOADING Vdefl PLATES (loc) 5-6 TCLL 20.0 Plate Grip DOL 1.25 TC 0.54 Vert(LL) 0.17 >473 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.78 Vert(CT) -0.195-6 >418 180 BCLL 0.0 WB 0.00 Rep Stress Incr NO Horz(CT) 0.06 5 n/a n/a BCDL Code FBC2020/TPI2014 Matrix-MR FT = 20% 10.0 Weight; 27 lb LUMBER-BRACING-TOP CHORD 2x4 SP No 2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. 2x4 SP No.2 \*Except\* **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing. 6-7: 2x4 SP No.3

REACTIONS.

(size) 4=Mechanical, 2=0-4-15, 5=Mechanical

Max Horz 2=171(LC 8) Max Uplift 4=-123(LC 8), 2=-252(LC 8), 5=-72(LC 8) Max Grav 4=149(LC 1), 2=414(LC 1), 5=139(LC 3)

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

TOP CHORD 3-9=-427/164

2-7=-230/287, 3-6=-287/230 **BOT CHORD** 

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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.
- \* 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 4, 252 lb uplift at joint 2 and 72 lb uplift at joint 5.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 28 lb up at 4-3-11, 86 lb down and 28 lb up at 4-3-11, and 72 lb down and 76 lb up at 1-5-12, and 72 lb down and 76 lb up at 1-5-12 on top chord, and 25 lb down and 54 lb up at 1-5-12, 25 lb down and 54 lb up at 1-5-12, and 59 lb down and 42 lb up at 4-3-11, and 59 lb down and 42 lb up at 4-3-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

# LOAD CASE(S) Standard

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

Vert: 1-4=-54, 7-8=-20, 6-11=-20, 5-6=-20

Concentrated Loads (lb) Vert: 17=-62(F=-31, B=-31)

No 68182

P. STAVE OF

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Joaquin Velez PE No.68182 ORQUIN VELE

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

May 25,2021

MARNING - 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 anage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see Ansi/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



SIMQUE HOMES - LOT 146 PLL Truss Type Ply Qty Job Truss T24082561 2 2806869 **HJ10** Diagonal Hip Girder Job Reference (optional) 8 430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:35 2021, Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, ID:cExzFHCxHzHNjPCINbH0FZzN74p-n8UaVhki0YDnp8081ppH\_1M3YD1wygmmF3rgwCzDwWM 9-10-13 4.95 12 3x4 = 3 4-6-3 0-5-3 15 6 7 3x4 = 52x4 11 3x4 = 9-10-13 Plate Offsets (X,Y)-[2:0-1-13,0-1-8] LOADING (psf) **PLATES** GRIP 2-0-0 CSI. I/defl 1.25 TCLL 20.0 Plate Grip DOL TC 0.66 Vert(LL) 0.13 6-7 >932 240 MT20 244/190 TCDL 7.0 Lumber DOL 1 25 BC 0.65 Vert(CT) -0.136-7 >876 180 BCLL 0.0 Rep Stress Incr NO WB 0.44 Horz(CT) -0.015 n/a n/a Code FBC2020/TPI2014 Matrix-MS Weight: 45 lb FT = 20% BCDL 10.0 LUMBER-BRACING-TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. TOP CHORD 2x4 SP No.2 BOT CHORD Rigid ceiling directly applied or 6-8-0 oc bracing.

WEBS REACTIONS.

BOT CHORD 2x4 SP No.2

2x4 SP No.3

4=Mechanical, 2=0-4-15, 5=Mechanical

Max Horz 2=226(LC 8) Max Uplift 4=-140(LC 8), 2=-425(LC 4), 5=-284(LC 5) Max Grav 4=158(LC 1), 2=538(LC 1), 5=304(LC 1)

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

TOP CHORD 2-3=-745/584

**BOT CHORD** 2-7=-656/660, 6-7=-656/660 3-7=-145/286, 3-6=-702/698 WEBS

NOTES-

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) 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 140 lb uplift at joint 4, 425 lb uplift at joint 2 and 284 lb uplift at joint 5.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 103 lb down and 71 lb up at 4-3-11, 103 lb down and 62 lb up at 4-3-11, 134 lb down and 128 lb up at 7-1-10, 135 lb down and 122 lb up at 7-1-10, and 72 lb down and 76 lb up at 1-5-12, and 72 lb down and 76 lb up at 1-5-12 on top chord, and 58 lb down and 54 lb up at 1-5-12, 58 lb down and 54 lb up at 1-5-12, 23 lb down and 39 lb up at 4-3-11, 20 lb down and 34 lb up at 4-3-11, and 44 lb down and 65 lb up at 7-1-10, and 42 lb down and 62 lb up at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf) Vert: 1-4=-54, 5-8=-20



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

May 25,2021

Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL T2408	2561
2806869	HJ10	Diagonal Hip Girder	2	1		2501
					Job Reference (optional)	

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:35 2021 Page 2 ID:cExzFHCxHzHNjPCINbH0FZzN74p-n8UaVhki0YDnp8081ppH\_1M3YD1wygmmF3rgwCzDwVM

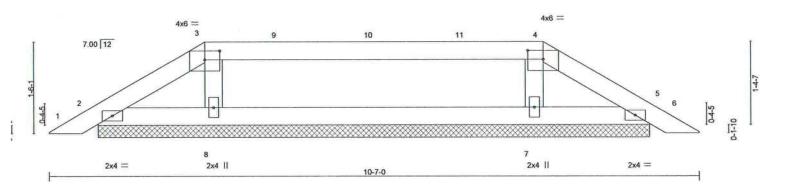
LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-2(B) 7=-12(F=-2, B=-10) 12=-80(F=-37, B=-43) 15=-64(F=-28, B=-35)



Scale = 1:18.1



						10-7-14						· · · · · · · · · · · · · · · · · · ·
Plate Off	sets (X,Y)-	[3:0-3-0,0-1-12], [4:0-3-0	0-1-12]			_						
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	-0.00	5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.16	Vert(CT)	-0.00	6	n/r	120	99V35-939	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	5	n/a	n/a	20.000 20.000	
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-S	70000000000000000000000000000000000000					Weight: 33 lb	FT = 20%

10-7-14

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-11-9.

(lb) - Max Horz 2=-42(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 5 except 8=-123(LC 9), 7=-114(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 8=302(LC 23), 7=302(LC 24)

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

# NOTES- (10)

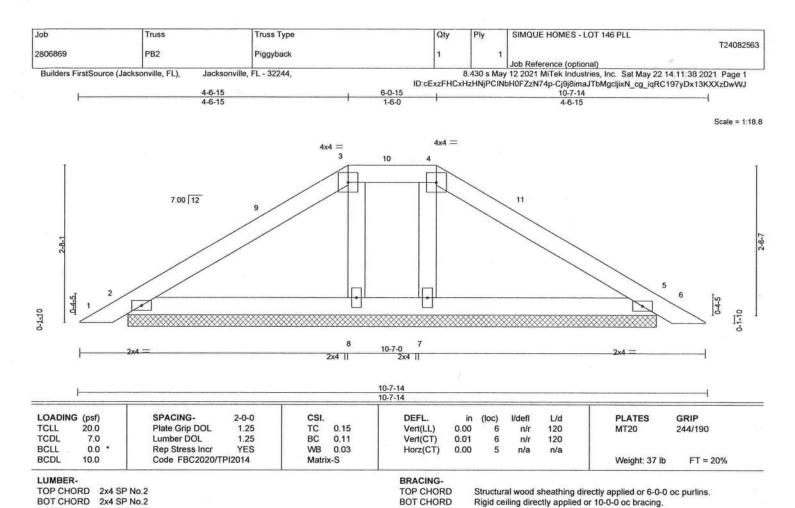
- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 2-6-15, Exterior(2R) 2-6-15 to 6-9-13, Interior(1) 6-9-13 to 8-0-15, Exterior(2E) 8-0-15 to 10-4-3 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) Gable requires continuous bottom chord bearing.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5 except (jt=lb) 8=123, 7=114.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021





2x4 SP No.3 REACTIONS. All bearings 8-11-9.

Max Horz 2=78(LC 11) (lb) -

Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 7 except 8=-108(LC 12)

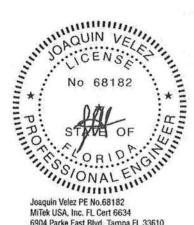
All reactions 250 lb or less at joint(s) 2, 5, 8, 7

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

WEBS

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 4-6-15, Exterior(2E) 4-6-15 to 10-4-3 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.
- Provide adequate drainage to prevent water ponding.
- 5) Gable requires continuous bottom chord bearing.
- 6) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 5, 7 except (it=lb) 8=108
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER 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 anage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MO 20601



SIMQUE HOMES - LOT 146 PLL Qty Job Truss Truss Type Ply T24082564 PB3 **PIGGYBACK** 13 2806869 Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:38 2021 Page 1 ID:cExzFHCxHzHNjPCINbH0FZzN74p-Cj9j8imaJTbMgcljixN\_cg\_hfRAk97gDx13KXXzDwWJ Jacksonville, FL - 32244, Builders FirstSource (Jacksonville, FL), 4x4 = 7.00 12 0-1-10 6-7-0 2x4 II 10-7-14 10-7-14 PLATES DEFL L∕d LOADING (psf) SPACING-2-0-0 CSI. in (loc) I/defl MT20 244/190 TC 0.22 Vert(LL) 0.01 n/r 120 Plate Grip DOL 1.25 TCLL 20.0 1.25 BC 0.19 Vert(CT) 0.01 n/r 120 Lumber DOL 7.0 TCDL WB 0.05 Horz(CT) 0.00 n/a n/a 0.0 Rep Stress Incr BCLL Weight: 35 lb FT = 20% Code FBC2020/TPI2014 Matrix-S BCDL BRACING-LUMBER-TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins. TOP CHORD 2x4 SP No.2 2x4 SP No.2 **BOT CHORD BOT CHORD** Rigid ceiling directly applied or 10-0-0 oc bracing.

OTHERS 2x4 SP No.3

REACTIONS.

(size) 2=8-11-9, 4=8-11-9, 6=8-11-9

Max Horz 2=-91(LC 10)

Max Uplift 2=-92(LC 12), 4=-104(LC 13), 6=-96(LC 12) Max Grav 2=187(LC 1), 4=190(LC 20), 6=348(LC 1)

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

Unbalanced roof live loads have been considered for this design.

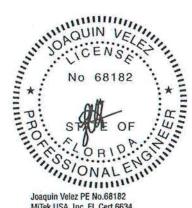
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 5-3-15, Exterior(2R) 5-3-15 to 8-3-15, Interior(1) 8-3-15 to 10-4-3 zone; C-C for members and forces & MWFRS for reactions shown; Lumber 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.

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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 4=104

7) na

- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021

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



SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Qty Ply T24082565 2806869 T01 Common Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:39 2021 Page 1 Jacksonville, FL - 32244, Builders FirstSource (Jacksonville, FL), ID:cExzFHCxHzHNjPCINbH0FZzN74p-gvj5L2nC4njDImKvGeuD9tXmBrRUuYhMAhpt3zzDwWI -1-6-0 1-6-0 16-4-0 14-10-0 7-5-0 Scale: 3/8"=1" 4x6 = 3 7.00 12 0-5-8 6 2x4 || 3x6 = 3x6 = 14-10-0 Plate Offsets (X,Y)-[2:0-0-0,0-0-0] LOADING SPACING-2-0-0 CSI DEFL PLATES I/defl GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.62 Vert(LL) 0.11 6-9 >999 240 MT20 244/190 1 25 BC TCDL 70 Lumber DOL 0.54 Vert(CT) -0.156-9 >999 180

Horz(CT)

BRACING-

TOP CHORD

**BOT CHORD** 

0.01

n/a

n/a

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 5-9-11 oc purlins.

Weight: 59 lb

FT = 20%

LUMBER-

BCLL

BCDL

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

0.0

10.0

2x4 SP No.3 WEBS

REACTIONS.

(size) 2=0-3-8, 4=0-3-8

Max Horz 2=-162(LC 10) Max Uplift 2=-253(LC 12), 4=-253(LC 13)

Max Grav 2=630(LC 1), 4=630(LC 1)

Rep Stress Incr

Code FBC2020/TPI2014

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-693/275, 3-4=-693/275

**BOT CHORD** 

2-6=-119/521, 4-6=-119/521

3-6=-6/338

NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 7-5-0, Exterior(2R) 7-5-0 to 10-5-0, Interior(1) 10-5-0 to 16-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

0.13

WB

Matrix-MS

- 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.

YES

- \* 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=253, 4=253,
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

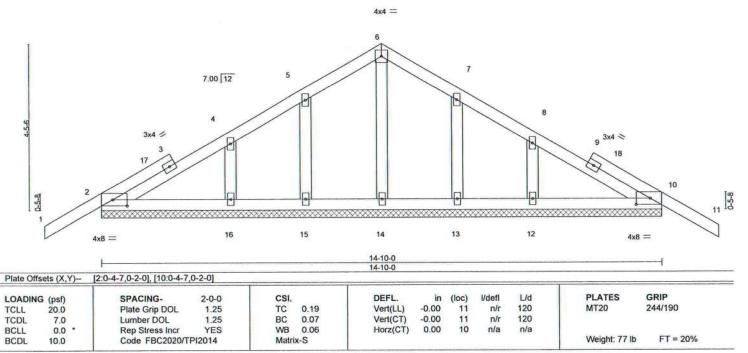
May 25,2021

MARNING - 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL	T24082566
2806869	T01G	Common Supported Gable	1	1		12-1002000
Builders FirstSource (Jac	ksonville, FL),	Jacksonville, FL - 32244,			Job Reference (optional) y 12 2021 MiTek Industries, Inc. Sat May 22 14:1 ZN74p-85HTYOorr5r4wwv5qMPSh532gEu4d13V	
-1-6-0		7-5-0	-1		14-10-0	16-4-0
1-6-0	1	7-5-0	0.		7-5-0	1-6-0

Scale = 1:29.5



LUMBER-

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

2x4 SP No.3 OTHERS

BRACING-

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 14-10-0.

(lb) -

Max Horz 2=-151(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 13 except 16=-130(LC 12), 12=-134(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

### NOTES-(11)

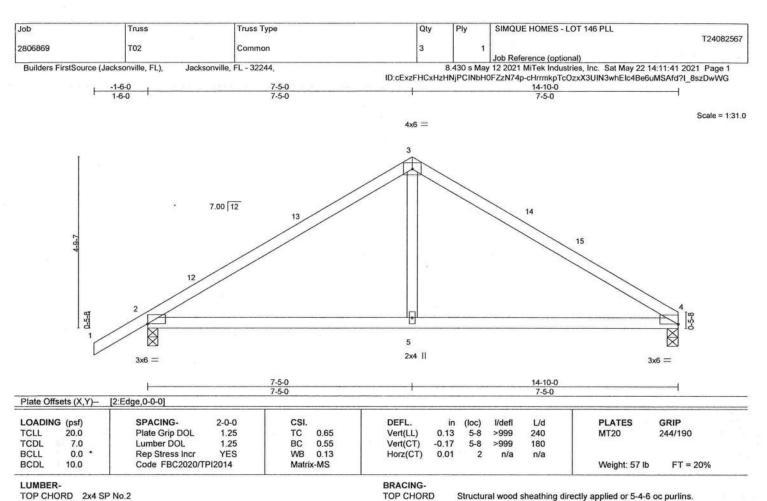
- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 7-5-0, Corner(3R) 7-5-0 to 10-5-0, Exterior(2N) 10-5-0 to 16-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 13 except (jt=lb) 16=130, 12=134.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

May 25,2021





**BOT CHORD** 

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

2x4 SP No.3

REACTIONS.

(size) 4=0-3-8, 2=0-3-8

Max Horz 2=153(LC 9)

Max Uplift 4=-200(LC 13), 2=-254(LC 12)

Max Grav 4=545(LC 1), 2=634(LC 1)

FORCES. (ib) - Max. Comp./Max. Ten. - All forces 250 (ib) or less except when shown. TOP CHORD 2-3=-703/283, 3-4=-702/288

2-5=-140/524, 4-5=-140/524

**BOT CHORD** WEBS

3-5=-15/339

### NOTES-

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 7-5-0, Exterior(2R) 7-5-0 to 10-5-0, Interior(1) 10-5-0 to 14-10-0 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.

4) 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.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except ((t=lb) 4=200, 2=254.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 5-4-6 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

May 25,2021

MARNING - 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 MITEMS 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 properly anage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 
ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL	70.1000500
TOOG	Common Supported Gable	1	1		T24082568
1020	Common Supported Sable			Job Reference (optional)	
onville, FL), Jacksonville	, FL - 32244,				
		ID:cExzFHCxHzHN	<b>JPCINHHOF</b>	ZzN74p-4UPEz4p5Ni5o9D3UxnRwnW8NX2a65	
	10-4-0	4		20-8-0	22-2-0
Mr.	10-4-0			10-4-0	1-6-0
	T02G	T02G Common Supported Gable conville, FL), Jacksonville, FL - 32244, 10-4-0	T02G Common Supported Gable 1  conville, FL), Jacksonville, FL - 32244, ID:cExzFHCxHzHN  10-4-0	T02G Common Supported Gable 1 1 1 Sonville, FL), Jacksonville, FL - 32244, B.430 s May ID:cExzFHCxHzHNjPCINbH0F	T02G Common Supported Gable 1 1 1 Job Reference (optional)  Sonville, FL), Jacksonville, FL - 32244, 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:  ID:cExzFHCxHzHNjPCINbH0FZzN74p-4UPEz4p5Ni5o9D3UxnRwnW8NX2a65

Scale = 1:41.9

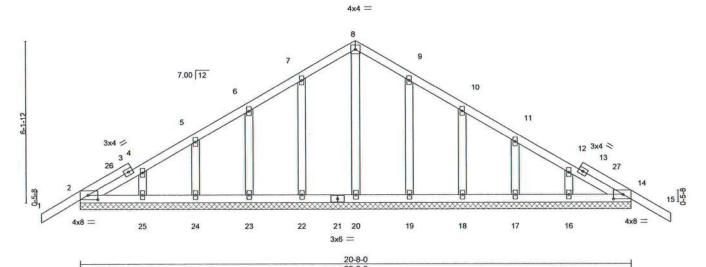


Plate Offsets (X,Y)-[2:0-4-7,0-2-0], [14:0-4-7,0-2-0] SPACING-DEFL **PLATES** GRIP LOADING (psf) 244/190 20.0 Plate Grip DOL 1.25 TC 0.17 Vert(LL) -0.01 15 120 MT20 TCLL n/r TCDL 7.0 Lumber DOL 1.25 BC 0.04 Vert(CT) -0.01 15 n/r 120 0.0 WB 0.08 BCLL Rep Stress Incr YES Horz(CT) 0.00 14 n/a n/a Code FBC2020/TPI2014 Matrix-S Weight: 117 lb FT = 20% BCDL 10.0

LUMBER-

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

2x4 SP No.3

BRACING-

TOP CHORD **BOT CHORD**  Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 20-8-0.

(lb) -Max Horz 2=-204(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 25, 16 except 22=-105(LC 12), 23=-101(LC 12),

24=-106(LC 12), 19=-103(LC 13), 18=-102(LC 13), 17=-106(LC 13)

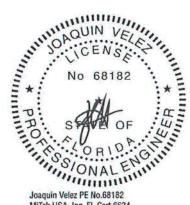
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 20, 22, 23, 24, 25, 19, 18, 17, 16

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

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 10-4-0, Corner(3R) 10-4-0 to 13-4-0, Exterior(2N) 13-4-0 to 22-2-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry
- Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

  4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) \* 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.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 25, 16 except (jt=lb) 22=105, 23=101, 24=106, 19=103, 18=102, 17=106.
- 11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



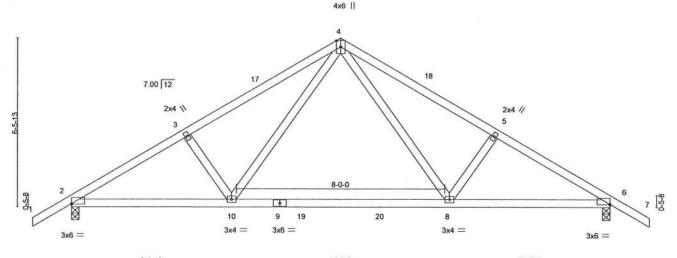
Joaquin Velez PE No.68182 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd, Tampa FL 33610 Date:

May 25,2021



	MES - LOT 146 PLL	SIMQUE HOMES	Ply	Qty		Truss Type	uss	Trus	lob
T2408256			1	1		Common	13	тоз	2806869
	(optional)	Job Reference (or				Common		100	2000003
22 14:11:43 2021 Page 1	Industries, Inc. Sat May	12 2021 MiTek Inc	3.430 s May	1		e, FL - 32244,	lle, FL), Jacksonville,	ource (Jacksonville	Builders FirstSource (
SpEqJKy4In5CkzDwWE	:BQqj70DfnNegVUz9JjhS	DFZzN74p-YgzcBQ	INJPCINHH	FHCxHzł	ID				
22-2-0	20-8-0		16-2-10			10-4-0	4-5-6	-1-6-0	-1-6
1-6-0	4-5-6		5-10-10			5-10-10	4-5-6	1-6-0	1-6-

Scale = 1:42.6



		6-1-13			14-6-3 8-4-5						0-8-0 1-13	
Plate Offs	ets (X,Y)-	[2:0-0-0,0-0-4], [6:0-0-0,0									1-10	
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.24	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.49	Vert(CT)	-0.45	8-10	>557	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MS	1					Weight: 102 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x4 SP No.3

(size) 2=0-3-8, 6=0-3-8 Max Horz 2=-215(LC 10)

Max Uplift 2=-409(LC 12), 6=-409(LC 13) Max Grav 2=1146(LC 19), 6=1146(LC 20)

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

TOP CHORD 2-3=-1769/606, 3-4=-1663/616, 4-5=-1664/616, 5-6=-1770/606

**BOT CHORD** 2-10=-565/1624, 8-10=-237/988, 6-8=-420/1463

**WEBS** 4-8=-319/868, 5-8=-269/269, 4-10=-318/868, 3-10=-269/269

# NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 22-2-0 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 BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=409, 6=409.

In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25 Uniform Loads (plf)

Vert: 1-4=-54, 4-7=-54, 10-11=-20, 8-10=-60(F=-40), 8-14=-20



Structural wood sheathing directly applied or 3-9-14 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

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

May 25,2021



SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Qty Ply T24082570 T04 2806869 Common Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:44 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. ID:cExzFHCxHzHNjPCINbH0FZzN74p-0sX\_OmrLuJMWOXCs3CUOsxEdis9UZmL5JyWekBzDwWD 16-2-10 5-10-10 20-8-0 4-5-6 10-4-0 5-10-10 Scale = 1:41.8 4x6 || 7.00 12 2x4 \\ 2x4 // 8-0-0 8 18 3x4 = 3x6 = 3x4 = 3x6 = 3x6 = 14-6-3 Plate Offsets (X,Y)--[2:Edge,0-0-0] LOADING (psf) SPACING-2-0-0 DEFL **V**defI L/d **PLATES** GRIP 244/190 20.0 Plate Grip DOL 1.25 TC 0.57 Vert(LL) -0.247-9 >999 240 MT20 TCLL BC -0.44>561 180 TCDI 70 Lumber DOL 1.25 0.49 Vert(CT) 7-9 0.36 WB Horz(CT) 0.03 6 BCLL 0.0 Rep Stress Incr NO n/a n/a Weight: 100 lb FT = 20% BCDL 10.0 Code FBC2020/TPI2014 Matrix-MS LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 3-9-13 oc purlins. 2x4 SP M 31 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. BOT CHORD

2x4 SP No.3 WEBS

REACTIONS. (size) 6=0-3-8, 2=0-3-8

Max Horz 2=206(LC 11)

Max Uplift 6=-357(LC 13), 2=-410(LC 12) Max Grav 6=1066(LC 20), 2=1148(LC 19)

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

TOP CHORD 2-3=-1772/608, 3-4=-1666/617, 4-5=-1681/629, 5-6=-1787/620

**BOT CHORD** 2-9=-585/1612, 7-9=-257/977, 6-7=-472/1489

4-7=-332/884, 5-7=-277/276, 4-9=-318/867, 3-9=-269/269

NOTES-

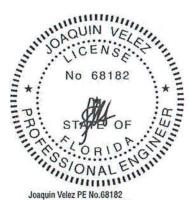
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 10-4-0, Exterior(2R) 10-4-0 to 13-4-0, Interior(1) 13-4-0 to 20-8-0 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.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Vert: 1-4=-54, 4-6=-54, 9-13=-20, 7-9=-60(F=-40), 7-10=-20



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

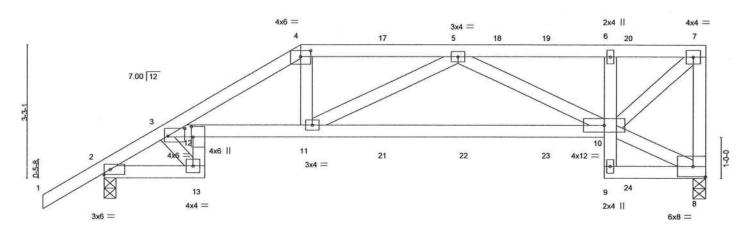
May 25,2021

MARNING - 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 MTTek® 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 buckling of individual trus web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent oclapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*
\*\*NSITIP1\*\* Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



SIMQUE HOMES - LOT 146 PLL Job Truss Truss Type Qty Ply T24082571 2806869 T05 Half Hip Girder Job Reference (optional) 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:45 2021 Page 1 Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, ID:cExzFHCxHzHNjPCINbH0FZzN74p-V35Mc5szfdUN0hn3cv?dO8mm2FRflCDFYcGCHdzDwWC 12-2-0 14-8-0

Scale = 1:27.1



	ř	2-5-8	4-9-8	1		12-2-0			12,2-8 14	8-0
		2-5-8	2-4-0			7-4-8			0-0-8 2-	5-8
Plate Off	sets (X,Y)	[3:0-5-1,0-2-4], [4:0-3-0,0	-1-12], [12:0-3-0,	0-0-8]						****
LOADIN	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC 0.6	66 Vert(LL)	0.19 11-12	>894	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.7	5 Vert(CT)	-0.23 10-11	>755	180	200000000	
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.4	5 Horz(CT)	0.13 8	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix-MS	3				Weight: 80 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2

**BOT CHORD** 2x4 SP No.2 \*Except\*

3-10: 2x4 SP M 31, 6-9: 2x4 SP No.3

WEBS 2x4 SP No.3

REACTIONS. (size) 8=0-3-8, 2=0-3-8

Max Horz 2=174(LC 8)

Max Uplift 8=-535(LC 5), 2=-529(LC 8) Max Grav 8=873(LC 1), 2=921(LC 1)

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

TOP CHORD 3-15=-1245/714, 3-4=-2018/1224, 4-5=-1783/1143, 5-6=-930/562, 6-7=-875/538,

7-8=-845/528

2-13--670/975, 12-13--623/928, 3-12--979/1528, 11-12--1121/1737, 10-11--1061/1632 4-11--299/615, 5-11--94/286, 5-10--795/594, 7-10--721/1169, 3-13--1185/819 **BOT CHORD** 

WEBS

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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) 8=535, 2=529.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 251 lb down and 221 lb up at 4-9-8, 117 lb down and 87 lb up at 6-10-4, 117 lb down and 85 lb up at 8-10-4, and 117 lb down and 87 lb up at 10-10-4, and 122 lb down and 109 lb up at 12-10-4 on top chord, and 176 lb down and 137 lb up at 4-9-8, 61 lb down and 43 lb up at 6-10-4, 61 lb down and 43 lb up at 8-10-4, and 61 lb down and 43 lb up at 10-10-4, and 50 lb down and 20 lb up at 12-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

## LOAD CASE(S) Standard

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



Structural wood sheathing directly applied or 3-3-1 oc purlins,

Rigid ceiling directly applied or 6-0-0 oc bracing.

except end verticals.

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

May 25,2021

Continued on page 2

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL	1082571
2806869	Т05	Half Hip Girder	1	1	Job Reference (optional)	002071

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:45 2021 Page 2 ID:cExzFHCxHzHNjPCINbH0FZzN74p-V35Mc5szfdUN0hn3cv?dO8mm2FRflCDFYcGCHdzDwWC

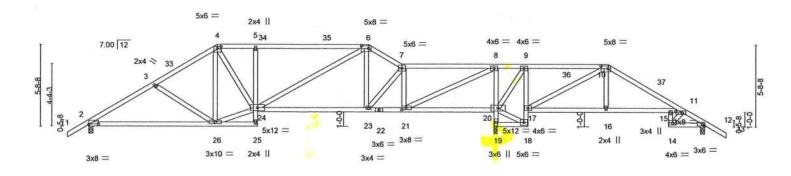
LOAD CASE(S) Standard Uniform Loads (plf) Vert: 1-4=-54, 4-7=-54, 13-14=-20, 10-12=-20, 8-9=-20

Concentrated Loads (lb)

Vert: 4=-116(F) 11=-151(F) 5=-44(F) 17=-44(F) 19=-44(F) 20=-54(F) 21=-51(F) 22=-51(F) 23=-51(F) 24=-34(F)



Job		Truss			Truss	Гуре		Qty	Ply	SIMQUI	E HOMES - LOT 1	146 PLL			
2806869		T06			ROOF	SPECIAL		1	1					T24082	5/2
										Job Refe	erence (optional)				
Builders FirstSou	urce (Jackso	onville, l	FL),	Jacksonville,	FL - 322	244,		8	3.430 s May	12 2021	MiTek Industries,	Inc. Sat May 22	14:11:46 2	2021 Page 1	
							ID:cE	xzFHCxHzHN	NJPCIN6HO	FZzN74p	-zFekpRsbQxcEer	MFAdWsxMJxM	f101ZIOnG	?lp3zDwWB	
1-1-6-01	4-7-12	- 1	9-0-0	11-9-4	L.	19-6-0	21-10-0	28-2-12	, 3	0-7-8	36-2-0	40-4-8	42-10-0	44-4-0	
1-6-0	4-7-12		4-4-4	2.9.4		7-8-12	2-4-0	6-4-12	1 2	4.12	5.6.8	4.2.9	2.5.9	1.6.0	



	-	9-0-0	11-9-4	19-6-0 7-8-12			3-2-12 -4-12	28,4-2	2-3-6	36-2-0 5-6-8		1-4-8 2-8	42-10-0 2-5-8
Plate Off	sets (X,Y)	[2:0-8-0,0-0-4], [4:0-3-0,0	-1-12], [6:0-6-		0-6-0,0-2-4], [								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLAT	TES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	0.16	15-16	>999	240	MT20	)	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.87	Vert(CT)	-0.29	23-24	>999	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.07	12	n/a	n/a			
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-MS						Weig	ht: 245 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

2x4 SP No.2 \*Except\* 5-25,8-19,9-18: 2x4 SP No.3, 14-15: 2x4 SP M 31

WEBS 2x4 SP No.3

> 2=0-3-8, 19=0-2-12, 12=0-3-8 (size)

Max Horz 2=-191(LC 10)

Max Uplift 2=-376(LC 12), 19=-643(LC 13), 12=-258(LC 13) Max Grav 2=1034(LC 1), 19=1871(LC 1), 12=434(LC 24)

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

TOP CHORD 2-3=-1514/595, 3-4=-1283/524, 4-5=-1405/618, 5-6=-1437/632, 6-7=-1240/563,

7-8=-1004/511, 8-9=-135/869, 9-10=-10/404, 10-11=-364/243, 11-12=-454/298 **BOT CHORD** 

2-26=-512/1262, 5-24=-386/297, 23-24=-432/1059, 21-23=-461/1043, 20-21=-835/330, 19-20=-1780/616, 8-20=-1140/471, 9-17=-142/524, 16-17=-52/288, 15-16=-51/279,

14-15=-114/288, 12-14=-182/348

3-26=-302/255, 24-26=-373/1092, 4-24=-349/698, 6-24=-205/469, 7-21=-817/312, WEBS

8-21=-655/2038, 10-17=-766/248, 10-16=-13/295, 9-20=-904/358, 18-20=-370/188,

11-14=-348/170

### NOTES-(9)

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 12-0-0, Interior(1) 12-0-0 to 19-6-0, Exterior(2E) 19-6-0 to 21-10-0, Interior(1) 21-10-0 to 36-2-0, Exterior(2R) 36-2-0 to 39-2-0, Interior(1) 39-2-0 to 44-4-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

- 4) Provide adequate drainage to prevent water ponding.5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \*This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

- 7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 19.
   8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=376, 19=643, 12=258.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 3-3-12 oc purlins. Rigid ceiling directly applied or 4-0-1 oc bracing. Except:

10-0-0 oc bracing: 15-16

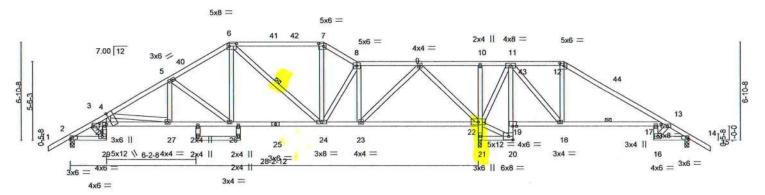
Joaquin Velez PE No.68182 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

May 25,2021

MARNING - 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 MiTex® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property amage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANS/ITP11 Quality Criteria, DSB-89 and BCSI Building Compo Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LO	T 146 PLL	
2806869	T07	ROOF SPECIAL	1	1			T24082573
2000009	107	ROOF SPECIAL			Job Reference (optiona	I)	
Builders FirstSource (Jacks	onville, FL), Jacksonville	FL - 32244,					22 14:11:48 2021 Page 1
			ID:cExzFHCxHzHI	IJPCIN6HOF.	ZzN74p-vemVE7usyYsx	t8WeI1YK0nOHt7	PYVQHhEaUstyzDwW9
1-1-6-0, 2-5-8	6-10-8   8-9-12   11-0-0	17-6-0 , 19-10-0 ,	24-2-2 1 28	2-12   3	0-7-8 , 34-2-0 ,	40-4-8	42-10-0 44-4-0
1-6-0 2-5-8	4-5-0 1-11-4 2-2-4	6-6-0 2-4-0	4-4-2 4-	0-10 2	4-12 3-6-8	6-2-8	2-5-8 1-6-0



	2-5-8	1 6-10-8   8-8-0   4-5-0   1-9-8	3-1-4	17-6-0 5-8-12	19-10-0	28-2-12 8-4-12		28-4-2		34-2-0	1	40-4-8 6-2-8	42-10-0 2-5-8
Plate Of	sets (X,Y)-	[3:0-5-1,0-2-4], [6:0-6-0,0					:0-7-12,E						
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d		PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.69	Vert(LL)	0.28 1	7-18	>618	240		MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.38 1	7-18	>451	180			
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.13	14	n/a	n/a			
BCDL	10.0	Code FBC2020/Ti	PI2014	Matrix	c-MS							Weight: 266 lb	FT = 20%

BOT CHORD

WEBS

**BOT CHORD** 2x4 SP No.2 \*Except\*

28-29,31-32: 2x4 SP No.3, 16-17: 2x4 SP M 31

WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 21=0-2-12, 14=0-3-8

Max Horz 2=-228(LC 10) Max Uplift 2=-380(LC 12), 21=-734(LC 13), 14=-212(LC 13)

Max Grav 2=961(LC 1), 21=2081(LC 1), 14=331(LC 20)

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

3-35=-1314/493, 3-4=-3317/1314, 4-5=-1649/632, 5-6=-1149/510, 6-7=-756/444,

7-8=-884/475, 8-9=-687/421, 9-10=-208/1105, 10-11=-207/1108, 12-13=-57/316,

13-14=-326/261

2-29=-455/1033, 28-29=-411/970, 3-28=-1101/2610, 27-28=-1142/2660, 26-27=-586/1400,

24-26=-428/951, 23-24=-434/709, 22-23=-361/146, 21-22=-1929/678, 18-19=-708/333,

13-17=-324/238, 14-16=-170/255 8-23=-636/262, 9-23=-306/1087, 9-22=-1454/509, 20-22=-653/353, 11-22=-1074/439, 11-18=-293/792, 12-18=-439/217, 6-26=-172/474, 5-27=-102/345, 6-24=-314/136,

5-26=-626/359, 4-28=-337/943, 4-27=-1291/635, 3-29=-1210/530

### NOTES-

BOT CHORD

WEBS

1) Unbalanced roof live loads have been considered for this design

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-5-10, Interior(1) 1-5-10 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 17-6-0, Exterior(2E) 17-6-0 to 19-10-0, Interior(1) 19-10-0 to 34-2-0, Exterior(2R) 34-2-0 to 37-2-0, Interior(1) 37-2-0 to 44-4-0 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

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.

Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.

- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=380, 21=734, 14=212.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

6-24

6-0-0 oc bracing: 17-18 7-9-0 oc bracing: 26-27

1 Row at midpt

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

May 25,2021

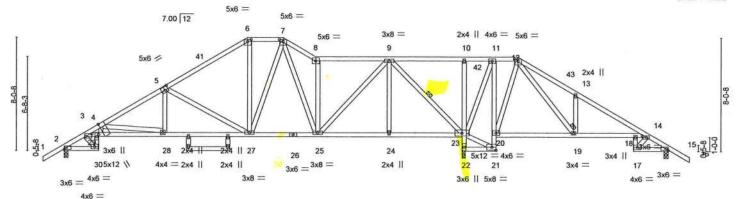
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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 Comp Safety Information

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



Job	Trus	ss		Truss Ty	pe			Qty	Ply	SIM	QUE HON	MES - LOT 146	6 PLL		
2806869	Т08	3		Roof Spe	cial			1		1					T24082574
	12000				1007100					Job	Reference	(optional)			
Builders FirstSource	(Jacksonville	e, FL),	Jacksonville,	FL - 3224	4,				8.430 s N	lay 12 2	021 MiTek	Industries, Inc	c. Sat May 22	14:11:51	2021 Page 1
							ID:cExxl	<b>HCxHzHN</b>	<b>PCINbHO</b>	FZzN74	p-JDSds9	wkFTEWkcFD:	zA61eP0rhgR	Dirm7wYjV	WWDwW6
r-1-6-0 <sub>1</sub> 2	2-5-8	7-1-10	1 13-0-0	) ,	15-6-0	17-10-0	23-0-6	28-2	2-12	30-7-8	32-2-0,	36-3-4	40-4-8	, 42-10-0	44-4-0,
1-6-0 2	2-5-8	4-8-2	5-10-6	3	2-6-0	2-4-0	5-2-6	5-2	2-6	2-4-12	1-6-8	4-1-4	4-1-4	2-5-8	1-6-0



								30-7-8			
	2-5-		11-9-4 13	-0-Q 17-10-0	23-0-6	28-2-12	28+4	2 1	36-3-4	40-4-8	42-10-0
ent or comment of the second	2-5-	8 4-8-2 1-6-6	3-1-4 1-2	2-12 4-10-0	5-2-6	5-2-6	0-1-	6 2-3-6	5-7-12	4-1-4	2-5-8
Plate Offse	ets (X,Y)-	[3:0-5-1,0-2-4], [5:0-3-0,0	)-3-0], [6:0-3-	0,0-1-12], [7:0-	3-0.0-1-12], [12:0-3-	0.0-1-12], [14:0-3	-12.0-1-	81. [29:0-	7-12.Edgel		
	- The state of the				1				T		
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	0.46	Vert(LL) 0.17	28-29	>999	240	MT20	244/190
CDL	7.0	Lumber DOL	1.25	BC	0.93	Vert(CT) -0.26	28-29	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT) 0.13	22	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix	c-MS	noncommunitation and a second				Weight: 292 lb	FT = 20%

LUMBER-

WEBS

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2 \*Except\*

29-30,32-33: 2x4 SP No.3, 17-18: 2x4 SP M 31

2x4 SP No.3

BRACING-

TOP CHORD **BOT CHORD** 

WEBS

JOINTS

Structural wood sheathing directly applied or 3-0-1 oc purlins. Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

6-0-0 oc bracing: 19-20, 18-19

7-8-0 oc bracing: 27-28

1 Row at midpt 1 Brace at Jt(s): 19

9-23

REACTIONS. (size) 2=0-3-8, 22=0-2-12, 15=0-3-8

Max Horz 2=-264(LC 10)

Max Uplift 2=-400(LC 12), 22=-713(LC 13), 15=-238(LC 13)

Max Grav 2=967(LC 1), 22=2063(LC 1), 15=371(LC 20)

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. RD 3-36=-1326/505, 3-4=-3320/1429, 4-5=-1653/666, 5-6=-999/476, 6-7=-788/472, FORCES. TOP CHORD

7-8=-916/580, 8-9=-742/458, 9-10=-77/833, 10-11=-78/835, 11-12=-42/532,

12-13=-313/383, 14-15=-353/259 2-30=-506/1119, 29-30=-461/1053, 3-29=-1202/2725, 28-29=-1240/2779, **BOT CHORD** 

27-28=-593/1458, 25-27=-318/713, 24-25=-275/180, 23-24=-275/180, 22-23=-1926/658,

11-20=-264/770, 19-20=-363/204, 15-17=-147/258

6-27=-100/276, 8-25=-634/399, 9-25=-257/822, 21-23=-528/291, 11-23=-943/349,

4-29=-397/1026, 13-19=-361/312, 12-20=-601/229, 12-19=-385/673, 7-27=-138/311,

7-25=-269/198, 9-23=-1439/456, 5-28=-85/399, 4-28=-1343/656, 5-27=-789/453,

3-30=-1310/592, 14-17=-252/141

## NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
  2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-5-10, Interior(1) 1-5-10 to 13-0-0, Exterior(2E) 13-0-0 to 17-10-0, Interior(1) 17-10-0 to 32-2-0, Exterior(2R) 32-2-0 to 35-2-0, Interior(1) 35-2-0 to 44-4-0 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.
- \* 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 at joint(s) 22.

  8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 2=400, 22=713, 15=238. 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

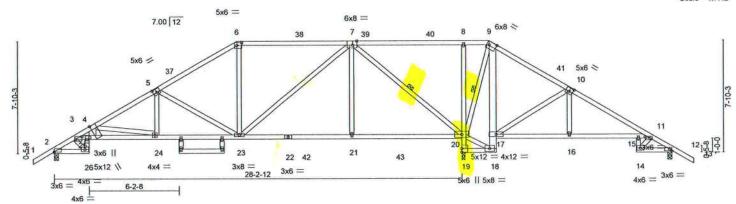
May 25,2021

🛦 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 MTTek® 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 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

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



ob Truss			Truss Type			Qty	Ply	1	SIMQUE HOMES - LOT	146 PLL		T2408257
2806869	T09		Hip			1		1	ob Reference (optional)			
Builders FirstSource (Jack	conville FL\	Jacksonville,	FI - 32244				8 430 s N		2 2021 MiTek Industries,	Inc. Sat May 2	2 14:11:53 2	2021 Page 1
Builders I listodurce (sack	Sorivino, i Lj.	Jackson Ville,	L JEETI,		ID:cExzFHC:				74p-GbZOHqy_n4UEzw(			
1-1-6-01 2-5-8 1	7-1-10	12-8-0	1	20-7-2		3-2-12		30-2-		40-4-8	42-10-0	44-4-0
1-6-0 2-5-8	4-8-2	5-6-6		7-11-2	1 7	-7-10		1-11-	4 5-6-6	4-8-2	2-5-8	1-6-0



	2-5-8	7-1-10   8-8-0 4-8-2   1-6-6		12-8-0	20-7-2 7-11-2		28-2-12 7-7-10	28-4-5	30-7-8 2-3-6	35-8-6 5-0-14		42-10-0 2-5-8
Plate Off	sets (X,Y)-	[2:0-0-0,0-0-4], [3:0-5-				4], [7:0-3-8,Edge	], [9:0-6-0,0-2	-12], [10	:0-3-0,0-3	3-0], [11:0-4-0,	0-1-8], [25:0-8-0,Edge	1
LOADIN	G (psf)	SPACING-	2-0-	-0	CSI.	DEI	FL. ir	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.2	25	TC 0.81	Ver	t(LL) -0.17	24-25	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.2	25	BC 0.95	Ver	t(CT) -0.28	24-25	>999	180		
BCLL BCDL	10.0	Rep Stress Inco			WB 0.93 Matrix-MS	Hor	z(CT) 0.14	19	n/a	n/a	Weight: 276 lb	FT = 20%

BRACING-TOP CHORD

WEBS

**BOT CHORD** 

LUMBER-

WEBS

2x4 SP No.2 TOP CHORD BOT CHORD

2x4 SP No.2 \*Except\*

25-26,28-29,8-19: 2x4 SP No.3, 9-18: 2x6 SP No.2

14-15: 2x4 SP M 31 2x4 SP No.3 \*Except\*

4-25: 2x6 SP No.2

REACTIONS. (size) 2=0-3-8, 19=0-2-12 (req. 0-2-14), 12=0-3-8

Max Horz 2=-258(LC 10) Max Uplift 2=-452(LC 12), 19=-662(LC 13), 12=-219(LC 13) Max Grav 2=1037(LC 25), 19=2443(LC 2), 12=323(LC 20)

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

3-32=-1463/590, 3-4=-3693/1629, 4-5=-1783/792, 5-6=-1123/544, 6-7=-918/535, 7-8=-113/960, 8-9=-113/961, 9-10=-129/877, 10-11=-198/476 2-26=-574/1259, 25-26=-511/1171, 3-25=-1342/3010, 24-25=-1383/3037, TOP CHORD

**BOT CHORD** 

23-24=-694/1574, 21-23=-414/521, 20-21=-415/517, 19-20=-2294/609, 8-20=-334/256,

9-17=-273/643, 16-17=-344/175, 15-16=-348/174, 11-15=-345/173

7-21=0/452, 7-20=-1750/601, 18-20=-660/375, 9-20=-1189/353, 6-23=-38/263, 3-26=-1429/649, 5-24=-107/463, 4-25=-444/1217, 4-24=-1491/701, 5-23=-864/439,

7-23=-248/706, 10-16=0/256, 10-17=-671/357

## NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
  2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-5-10, Interior(1) 1-5-10 to 12-8-0, Exterior(2R) 12-8-0 to 16-10-15, Interior(1) 16-10-15 to 30-2-0, Exterior(2R) 30-2-0 to 34-4-15, Interior(1) 34-4-15 to 44-4-0 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) All plates are 2x4 MT20 unless otherwise indicated.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* 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.
- 8) WARNING: Required bearing size at joint(s) 19 greater than input bearing size.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=452, 19=662, 12=219.
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 2-10-0 oc purlins.

7-20, 9-20

Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

7-1-0 oc bracing: 23-24

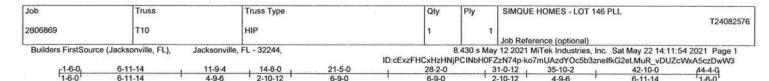
1 Row at midpt

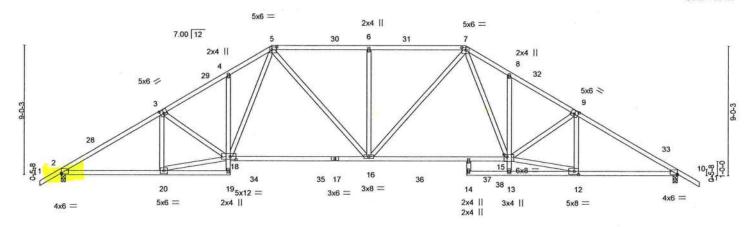
Joaquin Velez PE No.68182 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

May 25,2021

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		6-11-14	1-9-4	21-5	5-0	28-	2-12	1	31-0-12	35-10-2	42-10-0	1	
		6-11-14 4	-9-6	9-7-	12	6-9	3-12	- 1	2-10-0	4-9-6	6-11-14		
Plate Off	sets (X,Y)-	[2:0-0-0,0-0-8], [3:0-3-0,	0-3-0], [5:0-4	4-0,0-2-4], [7:0-3-	8,0-2-0], [9:0	0-3-0,0-3-0], [10:0	-0-0,0-0	)-8], [12	0-3-8,0-2	-8], [15:0-2-8,0	-2-0], [18:0-4-12,0-2	-8]	
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	10000000
TCLL	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	-0.46	16-18	>999	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.99	Vert(CT)	-0.80	16-18	>644	180			
BCLL	0.0	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.19	10	n/a	n/a			
BCDL	10.0	Code FBC2020/7	TPI2014	Matrix	c-MS	100000000000000000000000000000000000000					Weight: 270 lb	FT = 20%	

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2

2x4 SP No.2 \*Except\* **BOT CHORD** 

4-19,8-13: 2x4 SP No.3, 15-17: 2x4 SP M 31

WEBS 2x4 SP No.3 \*Except\* 18-20,12-15: 2x4 SP No 2

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-294(LC 10) Max Uplift 2=-648(LC 12), 10=-641(LC 13) Max Grav 2=1866(LC 2), 10=1913(LC 2)

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

TOP CHORD 2-3=-3038/971, 3-4=-3115/1042, 4-5=-3103/1143, 5-6=-2676/851, 6-7=-2676/851,

7-8=-3246/1086, 8-9=-3260/983, 9-10=-3123/959 BOT CHORD

2-20=-885/2583, 16-18=-615/2290, 15-16=-433/2356, 10-12=-676/2629, 13-15=0/253 3-20=-374/209, 18-20=-863/2671, 5-18=-433/1131, 5-16=-298/685, 6-16=-418/316, WEBS

9-12=-432/157, 9-15=-167/256, 12-15=-635/2816, 7-16=-313/585, 7-15=-391/1269

NOTES-

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 14-8-0, Exterior(2R) 14-8-0 to 18-10-15, Interior(1) 18-10-15 to 28-2-0, Exterior(2R) 28-2-0 to 32-4-15, Interior(1) 32-4-15 to 44-4-0 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.
- \* 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=648, 10=641.
- 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 2-11-2 oc purlins.

Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

10-0-0 oc bracing: 13-15

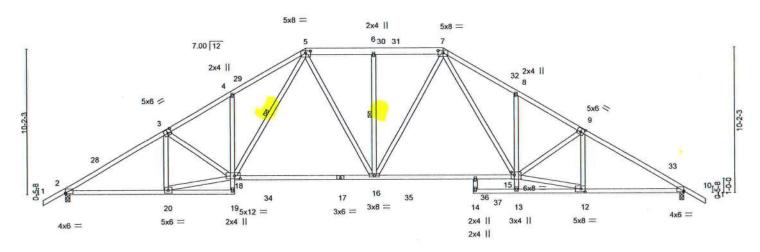
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May 25,2021

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Job	Truss		Truss Type			Qty	Ply	SIMQUE	HOMES - LOT 1	46 PLL	T04000577
2806869	T11		HIP			1	1				T24082577
2000003	1		1					Job Refer	rence (optional)		
Builders FirstSource (	Jacksonville, FL),	Jacksonville,	FL - 32244,							nc. Sat May 22 14:11	
					ID:cExzFh	CxHzHN	PCINDH	DFZzN74p-C	_h8iWzFJikyDDY	_C0AzoFBWWHpRea	0jrAhjd2zDwW2
r1-6-0	6-11-14	11-9-4	16-8-0	21-5-0	26-2	0 12	28-2-12	31-0-12	35-10-2	42-10-0	44-4-0
1-6-0	6-11-14	4-9-6	4-10-12	4-9-0	4-9-	0 '	2-0-12	2-10-0	4-9-6	6-11-14	1-6-0



	3	6-11-14 , 11	-9-4	21-5	6-0	28-2	2-12		31-0-12	35-10-2	42-10-0	
		6-11-14 4	9-6	9-7-	12	6-9	-12	,	2-10-0	4-9-6	6-11-14	
Plate Offse	ets (X,Y)-	[2:0-0-0,0-0-8], [3:0-3-0,	0-3-0], [5:0-4-0,	,0-1-11], [7:0-4	1-0,0-1-11], [9	9:0-3-0,0-3-0], [10	0:0-0-0,0	],[8-0-0	12:0-3-8,0	0-2-8], [15:0-2-8	3,0-2-4], [18:0-4-12,0	-2-8]
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	0.53	Vert(LL)	-0.41	15-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.85	Vert(CT)	-0.70	15-16	>739	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.18	10	n/a	n/a		
BCDL	10.0	Code FBC2020/7	PI2014	Matrix	-MS						Weight: 285 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

BOT CHORD

Structural wood sheathing directly applied or 2-10-10 oc purlins.

5-18, 6-16

Rigid ceiling directly applied or 6-0-0 oc bracing. Except:

10-0-0 oc bracing: 13-15

1 Row at midpt

LUMBER-

WEBS

2x4 SP No.2 \*Except\* TOP CHORD

5-7: 2x6 SP No.2

**BOT CHORD** 2x4 SP No.2 \*Except\*

4-19,8-13: 2x4 SP No.3, 17-18,15-17: 2x4 SP M 31

WEBS

2x4 SP No.3 \*Except\* 18-20,12-15: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-330(LC 10) Max Uplift 2=-643(LC 12), 10=-636(LC 13)

Max Grav 2=1877(LC 19), 10=1921(LC 20)

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

2-3=-3046/961, 3-4=-3124/1036, 4-5=-3142/1191, 5-6=-2345/778, 6-7=-2345/777, 7-8=-3277/1130, 8-9=-3260/973, 9-10=-3125/949 TOP CHORD

2-20=-897/2706, 4-18=-288/260, 16-18=-530/2123, 15-16=-402/2161, 10-12=-666/2630, BOT CHORD

8-15=-288/261

3-20=-377/208, 18-20=-862/2772, 5-18=-549/1280, 5-16=-247/582, 6-16=-314/231, 7-16=-260/502, 7-15=-503/1415, 9-12=-425/152, 9-15=-137/256, 12-15=-614/2796

NOTES-(8)

1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 16-8-0, Exterior(2R) 16-8-0 to 20-10-15, Interior(1) 20-10-15 to 26-2-0, Exterior(2R) 26-2-0 to 30-4-15, Interior(1) 30-4-15 to 44-4-0 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.

 Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=643, 10=636.

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



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

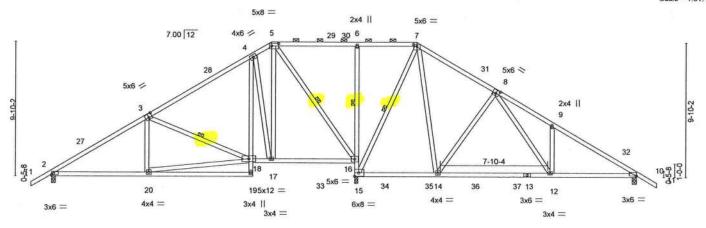
May 25,2021

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



Job	Truss	Truss Ty	ре		Qty	Ply	SIMQUE I	HOMES - LOT 14	6 PLL	
2806869	T17	PIGGYB	ACK BASE		6	1				T24082578
Builders FirstSource (	Indiana illa ELV	Jackson illa El 2224						ence (optional)		
		Jacksonville, FL - 3224	4,	ID:c						:11:57 2021 Page 1 N60JUAqiwzDwW0
r1-6-0	6-11-14	14-9-4	16-1-1	22-2-12	26-8-15	1 32	2-6-0	36-8-3	42-10-0	44-4-Q
1-6-0	6-11-14	7-9-6	1-3-13	6-1-11	4-6-3	5	-9-1	4-2-3	6-1-13	1-6-0

Scale = 1:81.1



	1	6-11-14	14-9-4	16-1-1	22-2-12	22-4-2 26-8-	15 28-2-2		36-8-3	42-10-0	
		6-11-14	7-9-6	1-3-13	6-1-11	0-1-6 4-4-1	13 1-5-3		8-6-1	6-1-13	
Plate Offs	ets (X,Y)-	[3:0-3-0,0-3-4], [5:0-6-0,0	1-2-4], [7:0-3-0,0	-1-12], [8:0-3-0	,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.	61	Vert(LL)	-0.22 12-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.	95	Vert(CT)	-0.42 12-14	>586	180	0.0000000000000000000000000000000000000	
BCLL	0.0 *	Rep Stress Incr	NO	WB 0.	83	Horz(CT)	0.04 15	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix-M	s					Weight: 290 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

**BOT CHORD** 2x4 SP No.2 \*Except\*

4-19,6-15: 2x4 SP No.3, 13-15: 2x4 SP M 31 WEBS

2x4 SP No.3

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-4-15 oc purlins,

2-0-0 oc purlins (10-0-0 max.): 5-7. **BOT CHORD** 

Rigid ceiling directly applied or 4-1-14 oc bracing. Except: 1 Row at midpt 6-16

WEBS

1 Row at midpt

3-18, 5-16, 7-15

REACTIONS.

(size) 2=0-3-8, 15=0-2-12, 10=0-3-8

Max Horz 2=-320(LC 10)
Max Uplift 2=-402(LC 12), 15=-597(LC 12), 10=-531(LC 13)
Max Grav 2=908(LC 19), 15=2173(LC 2), 10=1111(LC 20)

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

TOP CHORD 2-3=-1156/513, 3-4=-573/382, 4-5=-413/457, 5-6=-45/448, 6-7=-46/446, 7-8=-638/565,

8-9=-1627/923, 9-10=-1620/773

5-3-102/192, 5-10-102/173 2-20-515/1151, 4-18-172/375, 17-18-176/497, 16-17-137/374, 15-16-1154/462, 6-16-345/261, 12-14-314/791, 10-12-525/1304 **BOT CHORD** 

3-20=0/264, 18-20=-499/963, 3-18=-696/363, 4-17=-698/473, 5-17=-445/1035, 5-16=-1058/358, 7-15=-1161/356, 8-14=-706/435, 8-12=-380/924, 9-12=-270/262, 7-14=-416/1167

## (11)

WEBS

1) Unbalanced roof live loads have been considered for this design.

- 17) Orbital Control (1974) The Considered for all steepings of the Considered for all steepings) and the Control of the Con
- to the use of this truss component.
- 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 at joint(s) 15
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=402, 15=597, 10=531.

  9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

  10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

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

No 68182

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No 68182

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No 68182

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

May 25,2021

# COARLEASE (SpeStandard

MARNING - 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANS/ITPI Quality Criteria, DSB-89 and BCSI Building Compon Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20501



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL T2408257
2806869	T17	PIGGYBACK BASE	6	1	Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

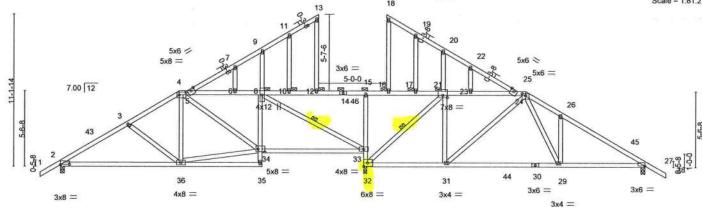
8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:57 2021 Page 2 ID:cExzFHCxHzHNjPCINbH0FZzN74p-8Mpu7C?VqJ\_gSXiMJQDRugGqq5UK6W60JUAqiwzDwW0

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-5=-54, 5-7=-54, 7-11=-54, 19-21=-20, 16-18=-20, 14-15=-20, 12-14=-60(F=-40), 12-24=-20



Job Truss Type SIMQUE HOMES - LOT 146 PLL Truss Qtv Plv T24082579 2806869 T17G PIGGYBACK BASE Job Reference (optional) Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244. 8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:58 2021 Page 1 ID:cExzFHCxHzHNjPCINbH0FZzN74p-cZNHKY07bd6X4hHZt8kgQup0TVtgr019X8vOENzDwW? 28-2-2 23-11-0 26-0-12 28-0-12 30-0-12 1-8-4 2-1-12 2-0-0 1-10-10 14-9-4 | 16-9-4 | 18-11-0 | 22-2-12 2-0-0 2-0-0 2-1-12 3-3-12 0-1-6 Scale = 1:81.2 18 20 5x6 / 22



		8-8-9	, 14	-9-4 1	6-1-1	22-2-12	22-4-2	26-8-15	28-2-2	2	36-8-3	42-10-0	
		8-8-9	6-0	0-11 1	-3-13	6-1-11	0-1-6	4-4-13	1-5-3		8-6-1	6-1-13	
Plate Offse	ets (X,Y)	[2:0-8-0,0-0-4], [4:0-6-0,0	-2-4], [21:0-4-0	,0-2-0], [25:	0-3-0,0-1	-12], [34:0-6	-0,0-2-8]						
LOADING	(psf)	SPACING-	2-0-0	CSI.			EFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.55	\	/ert(LL)	-0.20	29-31	>999	240	MT20	244/190
CDL	7.0	Lumber DOL	1.25	BC	0.75	\ \	/ert(CT)	-0.39	29-31	>628	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.66	l F	lorz(CT)	0.03	27	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matr	ix-MS						1207225	Weight: 315 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

except

1 Row at midpt

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.2

**BOT CHORD** 2x4 SP No.2 \*Except\*

8-35,15-32: 2x4 SP No.3, 30-32,27-30: 2x4 SP M 31

WEBS 2x4 SP No.3

(size) 2=0-3-8, 32=0-2-12, 27=0-3-8

Max Horz 2=358(LC 11)
Max Uplift 2=-369(LC 12), 32=-793(LC 12), 27=-459(LC 13)

Max Grav 2=973(LC 19), 32=2029(LC 19), 27=1136(LC 20)

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

TOP CHORD

2-3=-1264/487, 3-4=-1065/416, 25-26=-1686/791, 26-27=-1682/642, 4-5=-979/568, 5-6=-1093/888, 6-8=-1093/888, 8-10=-52/461, 10-12=-52/461, 12-15=-52/461,

15-16=-72/465, 16-17=-72/465, 17-21=-72/465, 21-23=-1049/906, 23-24=-1049/906, 24-25=-938/591, 5-7=-309/152, 22-24=-301/146

**BOT CHORD** 2-36=-543/1311, 8-34=0/342, 33-34=-534/1190, 32-33=-1138/588, 15-33=-367/255,

31-32=-306/864, 29-31=-250/974, 27-29=-413/1356

WEBS 4-36=-44/284, 34-36=-313/1084, 8-33=-1663/754, 21-32=-1545/605, 25-29=-370/870, 26-29=-264/272, 3-36=-290/235, 21-31=-51/650, 8-9=-286/288

### NOTES-(12)

1) Unbalanced roof live loads have been considered for this design.

- 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 18-9-4, Exterior(2R) 8-8-9 to 12-9-4, Interior(1) 12-9-4 to 34-1-7, Exterior(2R) 24-0-12 to 28-0-12, Interior(1) 28-0-12 to 44-4-0 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) All plates are 2x4 MT20 unless otherwise indicated.
- 6) 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.
- 8) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 32.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb)
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 12) This manufactured product is designed as an individual building component. The suitability and use of this component for any Continued and the responsibility of the building designer per ANSI TPI 1 as referenced by the building code

No 68182

No 68182

No 68182

No 68182

Joaquin Velez PE No.68182 ENGIN

Structural wood sheathing directly applied or 4-3-15 oc purlins,

8-33, 21-32

2-0-0 oc purlins (5-10-15 max.): 4-25.

1 Brace at Jt(s): 8, 21, 12, 16, 10, 17

Rigid ceiling directly applied or 4-2-6 oc bracing.

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

May 25,2021

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REPRETURE. PAGE MITTAGEN STATES, OF STATES BY STATES AND THIS AND INCLUDED MITER REPRETURE. PAGE MITTAGEN STATES, OF STATES BY STATES AND THE STATES.

Design valid for use only with MITEK® connectors. This design is based only upon 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 properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANS/ITP11 Quality Criteria, DSB-89 and BCSI Building Composately Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL	T24082579
2806869	T17G	PIGGYBACK BASE	1	1	Job Reference (optional)	*

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:11:58 2021 Page 2 ID:cExzFHCxHzHNjPCINbH0FZzN74p-cZNHKY07bd6X4hHZt8kgQup0TVtgr019X8vOENzDwW?

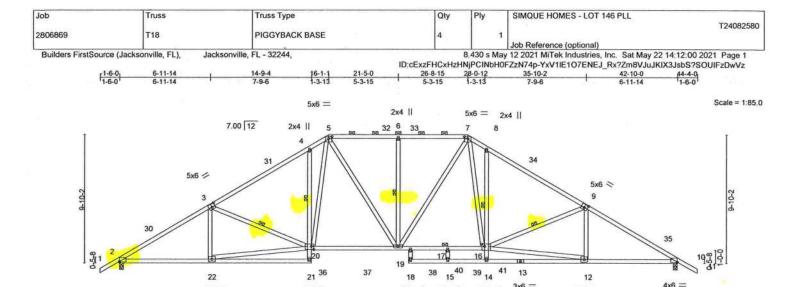
LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4-54, 35-37-20, 33-34-20, 31-32-20, 29-31-60(F-40), 29-40-20, 25-28-54, 4-5-54, 12-16-54, 24-25-54, 5-13-54, 18-24-54





18

2x4 ||

3x8 = 2x4 || 2x4 ||

6x8 =

11

3x4 ||

5x8 =

	H	6-11-14 6-11-14	14-9-4 7-9-6		21-5-0 6-7-12	23-2-12 25-2-12 0-9-12 3-0-0	28-0-12		35-10 7-9-	A A COLOR	42-10-0 6-11-14	ł
Plate Offs	ets (X,Y)-	[2:0-0-0,0-0-8], [3:0-3-0,0	-3-0], [5:0-3-0,0	-1-12], [7:0-	3-0,0-1-12],	[9:0-3-0,0-3-0], [10	0,0-0-0	],[8-0-	16:0-2-8,	0-2-4], [20:0-	2-4,0-3-0]	
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	0.72	Vert(LL)	-0.54	18	>945	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.89	Vert(CT)	-0.96	18	>537	180	11/2/75	
BCLL	0.0	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.18	10	n/a	n/a	N 2	
BCDL 10.0		Code FBC2020/TPI2014		Matrix	k-MS	The second second					Weight: 300 lb	FT = 20%

BOT CHORD 2x4 SP No.2 \*Except\*

4-21,8-14: 2x4 SP No.3, 16-20: 2x4 SP M 31

2x4 SP No.3 \*Except\* WEBS

4x6 =

20-22,12-16: 2x4 SP No.2

3-20, 6-19, 9-16

12

5x6 =

4x6 =

2-0-0 oc purlins (3-6-5 max.): 5-7.

**BOT CHORD** Rigid ceiling directly applied or 6-0-0 oc bracing. Except: 1 Row at midot 4-20

6-0-0 oc bracing: 8-14

3x6 =

3x4 II

10-0-0 oc bracing: 17-19

WEBS 1 Row at midpt **JOINTS** 1 Brace at Jt(s): 17

REACTIONS. (size) 2=0-3-8 10=0-3-8

Max Horz 2=-320(LC 10)

Max Uplift 2=-641(LC 12), 10=-639(LC 13) Max Grav 2=1893(LC 2), 10=1926(LC 2)

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

22

5x6 =

TOP CHORD 2-3=-3117/967, 3-4=-2851/909, 4-5=-2833/1084, 5-6=-2478/791, 6-7=-2478/791,

7-8=-2943/1039, 8-9=-2958/865, 9-10=-3171/965

2-22=-905/2743, 4-20=-415/347, 19-20=-542/2228, 17-19=-399/2296, 16-17=-399/2296, 8-16=-416/345, 10-12=-687/2674
20-22=-889/2598, 3-20=-402/290, 5-20=-545/1161, 5-19=-255/575, 6-19=-326/247, **BOT CHORD** 

7-19=-268/445, 7-16=-508/1309, 12-16=-637/2656, 9-16=-387/329

NOTES-

WEBS

1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; 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 16-1-1, Exterior(2R) 16-1-1 to 20-4-0, Interior(1) 20-4-0 to 26-8-15, Exterior(2R) 26-8-15 to 30-11-13, Interior(1) 30-11-13 to 44-4-0 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.
- \*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=641, 10=639.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord. 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

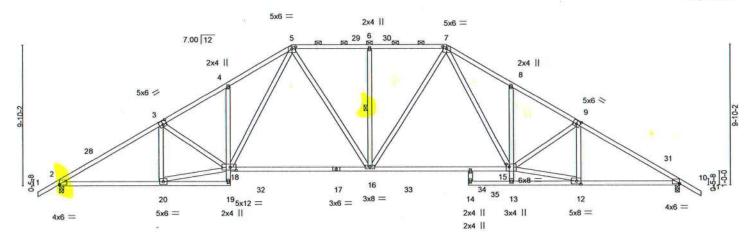
May 25,2021

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146	PLL	
2806869	T10	PIGGYBACK BASE	5	- 4			T24082581
2000009	T19	FIGGIBACK BASE	3	350	Job Reference (optional)		
Builders FirstSource (Jack	sonville, FL), Jacksonville	, FL - 32244,			12 2021 MiTek Industries, Inc		
			ID:cExzFHCxHzHN	IJPCIN6H0F	ZzN74p-182Pya20uYV5x808	SYGHN2WRX1iq_2J	nbD682qizDwVy
r1-6-0, 6-	11-14 , 11-9-4	16-1-1 21-5-0	26-8-15	31-0-	-12 35-10-2	42-10-0	A4-4-Q
	11-14 4-9-6	4-3-13 5-3-15	5-3-15	4-3-	13 4-9-6	6-11-14	1-6-0

Scale = 1:77.1



	T	6-11-14	1-9-4	21-	5-0	28-2	2-12	1.5	31-0-12	35-10-2	42-10-0	1
		6-11-14	1-9-6	9-7	-12	6-9	-12		2-10-0	4-9-6	6-11-14	
Plate Offse	ets (X,Y)-	[2:0-0-0,0-0-8], [3:0-3-0,	0-3-0], [5:0-3-	-0,0-1-12], [7:0-	3-0,0-1-12], [9	9:0-3-0,0-3-0], [10	0,0-0-0	-0-8], [	12:0-3-8,0	)-2-8], [15:0-2-8	3,0-2-4], [18:0-4-12,0	-2-8]
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	0.53	Vert(LL)	-0.47	16-18	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.80	16-18	>643	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.93	Horz(CT)	0.19	10	n/a	n/a		
BCDL	10.0	Code FBC2020/	TPI2014	Matri	x-MS						Weight: 275 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-TOP CHORD

2x4 SP No.2 **BOT CHORD** 

2x4 SP No.2 \*Except\*

4-19,8-13: 2x4 SP No.3, 15-17: 2x4 SP M 31 2x4 SP No.3 \*Except\*

**WEBS** 

18-20,12-15: 2x4 SP No.2

REACTIONS. (size) 2=0-3-8, 10=0-3-8

Max Horz 2=-320(LC 10) Max Uplift 2=-644(LC 12), 10=-637(LC 13)

Max Grav 2=1872(LC 2), 10=1917(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-3049/963, 3-4=-3129/1038, 4-5=-3144/1181, 5-6=-2425/792, 6-7=-2425/792,

7-8=-3278/1118, 8-9=-3264/975, 9-10=-3128/951

2-20=-895/2676, 4-18=-283/243, 16-18=-553/2169, 15-16=-409/2213, 8-15=-281/242, **BOT CHORD** 

10-12=-668/2633

3-20=-373/209, 18-20=-866/2754, 5-18=-523/1250, 5-16=-253/593, 6-16=-325/250,

7-16=-266/510, 7-15=-474/1379, 12-15=-619/2800, 9-15=-145/256, 9-12=-427/153

WEBS

- 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=18ft; 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 16-1-1, Exterior(2R) 16-1-1 to 20-4-0, Interior(1) 20-4-0 to 26-8-15, Exterior(2R) 26-8-15 to 31-3-6, Interior(1) 31-3-6 to 44-4-0 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=644, 10=637.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Structural wood sheathing directly applied or 2-10-13 oc purlins,

Rigid ceiling directly applied or 2-2-0 oc bracing. Except:

6-16

2-0-0 oc purlins (3-6-14 max.): 5-7.

10-0-0 oc bracing: 13-15

1 Row at midpt

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

May 25,2021

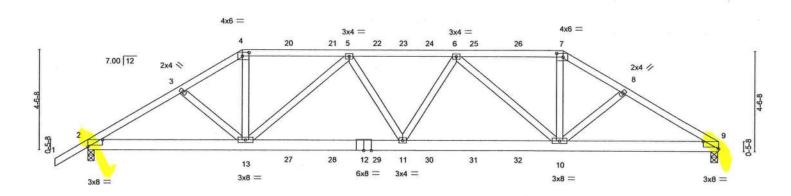
ameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss		Truss Type	Qty	Ply	SIMQUE HO	OMES - LOT 146 PLL		10.00	
2806869	T20		Hip Girder	1	1	T2408258				
			part parties			Job Referen	ce (optional)			
Builders FirstSource	e (Jacksonville, FL),	Jacksonville	, FL - 32244,				ek Industries, Inc. Sat			
				ID:cExzFHC	XHZHNJPCIN	bH0FZzN74p	<ul><li>-VKcnAv3efrdyZlbK6_</li></ul>	ocakzfP6B_nlKISm	tbM8zDwVx	
-1-6-0	4-3-9	7-0-0	11-10-0	16-8-0	. 2	1-6-0	24-2-7	28-6-0		
1-6-0	4-3-9	2-8-7	4-10-0	4-10-0	4	-10-0	2-8-7	4-3-9		

Scale = 1:50.2



		7-0-0		14-3	-0	1		21-6-0			28-5-8	28-6-0
	7-0-0		7-3-	-3-0 7-3-0			6-11-8	0-0-8				
Plate Offsets (X,Y) [2:0-8-0,Edge], [4:0-3-8,0-2-0], [7:0-3-8,0-2-0], [9:0-8-0,8				0,Edge]								
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.75	Vert(LL)	0.35	11-13	>967	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.35	11-13	>982	180	077-28170-792	
BCLL	0.0	Rep Stress Incr	NO	WB	0.96	Horz(CT)	-0.11	9	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix	-MS	A CONTROL OF					Weight: 168 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2 \*Except\*

4-7: 2x4 SP M 31

**BOT CHORD** 2x6 SP No.2

2x4 SP No.3 WEBS

REACTIONS.

(size) 9=0-3-8, 2=0-3-8

Max Horz 2=146(LC 5)

Max Uplift 9=-1713(LC 4), 2=-1733(LC 5) Max Grav 9=2192(LC 1), 2=2277(LC 1)

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

TOP CHORD 2-3=-3959/3154, 3-4=-3813/3151, 4-5=-3321/2785, 5-6=-4395/3644, 6-7=-3331/2789,

7-8=-3825/3156, 8-9=-3974/3160

**BOT CHORD** 

2-13=-2796/3362, 11-13=-3562/4255, 10-11=-3531/4258, 9-10=-2675/3377 4-13=-1200/1466, 5-13=-1285/1105, 5-11=-254/418, 6-11=-252/416, 6-10=-1281/1103, WEBS

7-10=-1204/1474

### NOTES-(10)

Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 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) 9=1713, 2=1733.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 235 lb down and 295 lb up at 7-0-0, 148 lb down and 144 lb up at 9-0-12, 148 lb down and 144 lb up at 13-0-12, 148 lb down and 133 lb up at 14-3-0, 148 lb down and 144 lb up at 15-5-4, 148 lb down and 144 lb up at 17-5-4, and 148 lb down and 144 lb up at 19-5-4, and 235 lb down and 295 lb up at 21-6-0 on top chord, and 343 lb down and 404 lb up at 7-0-0, 91 lb down and 90 lb up at 9-0-12, 91 lb down and 90 lb up at 11-0-12, 91 lb down and 90 lb up at 13-0-12, 91 lb down and 90 lb up at 14-3-0, 91 lb down and 90 lb up at 15-5-4, 91 lb down and 90 lb up at 15-5-4, and 91 lb down and 90 lb up at 19-5-4, and 343 lb down and 404 lb up at 21-5-4 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).
- 10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

No 68182

No 68182

No 68182

A CONTROL OF C

Structural wood sheathing directly applied or 2-9-5 oc purlins.

Rigid ceiling directly applied or 3-9-13 oc bracing.

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

May 25,2021

### COARD CASE (SheStandard

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIII-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 hits 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, crection and bracing of trusses and truss systems, see 

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



Job	Truss	Truss Type	Qty	Ply	SIMQUE HOMES - LOT 146 PLL T24082582
2806869	T20	Hip Girder	1	1	Job Reference (optional)

Builders FirstSource (Jacksonville, FL),

Jacksonville, FL - 32244,

8.430 s May 12 2021 MiTek Industries, Inc. Sat May 22 14:12:03 2021 Page 2 ID: c ExzFHCxHzHNjPCINbH0FZzN74p-zWAANF4GQ9lpAS9WghKr7xWq9WXDWCauhQd8uazDwVw

LOAD CASE(S) Standard

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

Uniform Loads (plf) Vert: 1-4=-54, 4-7=-54, 7-9=-54, 14-17=-20

Concentrated Loads (lb)

Vert: 4=-188(B) 7=-188(B) 13=-343(B) 11=-68(B) 10=-343(B) 20=-106(B) 21=-106(B) 22=-106(B) 23=-106(B) 24=-106(B) 25=-106(B) 25=-106(B) 27=-68(B) 28=-68(B) 29=-68(B) 30=-68(B) 31=-68(B) 32=-68(B)

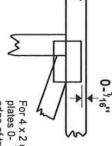


## Symbols

# PLATE LOCATION AND ORIENTATION



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



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

œ

0

G

required direction of slots in connector plates This symbol indicates the

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

### PLATE SIZE

4 × 4

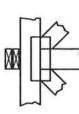
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

## LATERAL BRACING LOCATION



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

### BEARING



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

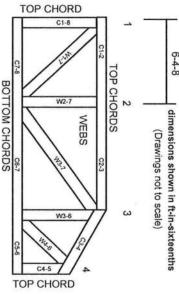
## Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89: BCSI:

Guide to Good Practice for Handling, Connected Wood Trusses. Building Component Safety Information Design Standard for Bracing. Installing & Bracing of Metal Plate

# Numbering System



ICC-ES Reports:

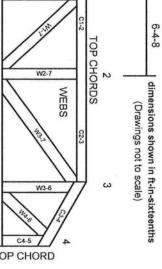
ESR-1311, ESR-1352, ESR1988 ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the

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



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



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

truss unless otherwise shown.

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# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

ç,

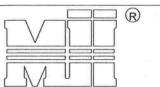
- designer, erection supervisor, property owner and all other interested parties. Provide copies of this truss design to the building
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication
- 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.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing. or less, if no ceiling is installed, unless otherwise noted
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.



AUGUST 1, 2016

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

MII-T-BRACE 2



MiTek USA, Inc.

Web

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.

MiTek USA, Inc. Page 1 of 1 T23949105

	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)

	22 22 22	ce Size -Ply Truss
		Continuous ateral 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

	Nails	
	111 1/+/-1	
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	SPACING
WEB	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
		+
		T-BRACE
	The state of the s	
Nails	Section Detail	
\	Jection Betain	
	T-Brace	
DE	Web	J
Nails —		

I-Brace

		ce Size -Ply Truss
		Continuous ateral 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.



Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

May 17,2021

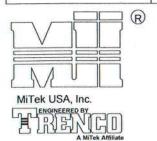


### **APRIL 9, 2020**

### WEB BRACING RECOMMENDATIONS

### MII-WEBBRACE-2





							12394	3100	
			MAXIMU	TRUSS	WEB FOR	CE (lbs.)			
BRACE BAY SIZE	24"O.C.	TRUSS SF	ACING	48"O.C.TRUSS SPACING			72" O.C. TRUSS SPACING BRACING MATERIAL TYPE		
	BRACING MATERIAL TYPE			BRAC	ING MATERI	AL TYPE			
	А	В	С	Α	В	С	В	С	
10'-0"	1886	1886	2829						
12'-0"	1572	1572	2358	3143	3143	4715	4715	7074	
14'-0"	1347	1347	2021						
16'-0"	1179	1179	1768	2358	2358	3536			
18'-0"	1048	1048	1572				3143	4715	
20'-0"	943	943	1414	1886	1886	2829			

### **GENERAL NOTES**

1. DIAGONAL BRACING AND BLOCKING IS REQUIRED TO TRANSFER THE CUMULATIVE LATERAL
BRACE FORCE INTO THE ROOF AND/OR CEILING DIAPHRAGM. THE DIAPHRAGM IS AND ANY
BLOCKING TO BE DESIGNED BY A QUALIFIED PROFESSIONAL.

2. TABULATED VALUES ARE BASED ON LATERAL BRACE CARRYING 2% OF THE WEB FORCE

WITH A DOL = 1.15.

3. DIAGONAL BRACING MATERIAL MUST BE SAME SIZE AND GRADE OR BETTER, AS THE LATERAL BRACE MATERIAL, AND SHALL BE INSTALLED IN SUCH A MANNER THAT IT INTERSECTS WEB MEMBERS AT APPROX. 45 DEGREES AND SHALL BE NAILED AT EACH END AND EACH INTERMEDIATE TRUSS WITH 2 - (0.131"x 3") FOR 2x3 and 2x4 BRACES, AND 3- (0.131"x3") FOR INTERMEDIATE TRUSS WITH 2 - (0.131"x 3") FOR 2x3 and 2x4 BRACES, AND 3- (0.131"x 3") FOR 2x6 BRACES.

4. CONNECT LATERAL BRACE TO EACH TRUSS WITH 2 - (0.131"x 3") NAILS FOR 2x3 AND 2x4 LATERAL BRACES AND 3- (0.131"x 3") FOR 2x6 LATERAL BRACES.

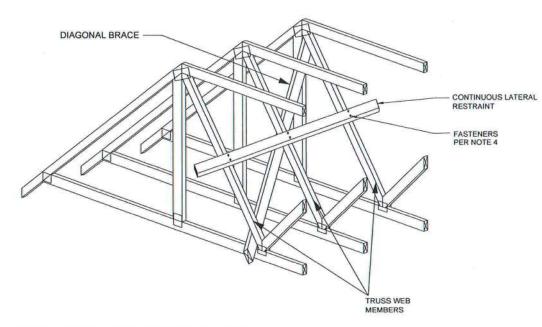
5. LATERAL BRACE SHOULD BE CONTINUOUS AND SHOULD OVERLAP AT LEAST ONE TRUSS SPACE FOR CONTINUITY.

5. FOR ADDITIONAL GUIDANCE REGARDING DESIGN AND INSTALLATION OF BRACING, CONSULT DSB-89 TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES AND BCSI 1
GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL
PLATE CONNECTED WOOD TRUSSES, PRODUCED BY STRUCTURAL BUILDING COMPONENT ASSOCIATION. www.sbcindustry.com
7. REFER TO SPECIFIC MITENTRENCO TRUSS DESIGN DRAWING FOR WEB MEMBER FORCE.
8. BAY SIZE SHALL BE MEASURED IN BETWEEN THE CENTERS OF PAIRS OF DIAGONALS.

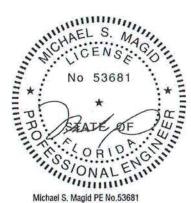
### TYPE BRACING MATERIALS 2 X 3 #3, STD, CONST (SPF, DF, HF, OR SP) A 2 X 4 #3, STD, CONST (SPF, DF, HF, OR SP) B C 2 X 6 #3 OR BETTER (SPF, DF, HF, OR SP)

### FOR STABILIZERS:

FOR A SPACING OF 24" O.C. ONLY, MITEK "STABILIZER" TRUSS BRACING SYSTEMS CAN BE SUBSTITUTED FOR TYPE A, B AND C BRACING MATERIAL. DIAGONAL BRACING FOR STABILIZERS ARE TO BE FROVIDED A TBAY SIZE INDICATED ABOVE. WHERE DIAPPHRACING BRACING IS REQUIRED AT PITCH BREAKS, STABILIZERS MAY BE REPLACED WITH WOOD BLOCKING. SEE "STABILIZER" TRUSS BRACING INSTALLATION GUIDE AND PRODUCT SPECIFICATION.



This information is provided to assist in the requirement for permanent bracing of the individual truss web members. Additional bracing may still be required for the stability of the overall roof system. The method shown here is just one method that can be used to provide stability against web buckling. Engineering seal, if any, is supporting the web force chart only.



Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

May 17,2021

MARNING - 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 MTER® 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 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 ocliapse 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/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suile 203 Waldorf, MD 20601



6904 Parke East Blvd Tampa, FL 36610

AUGUST 1, 2016

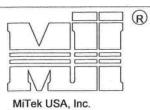
### SCAB-BRACE DETAIL

### MII-SCAB-BRACE

MiTek USA, Inc.

Page 1 of 1

T23949107

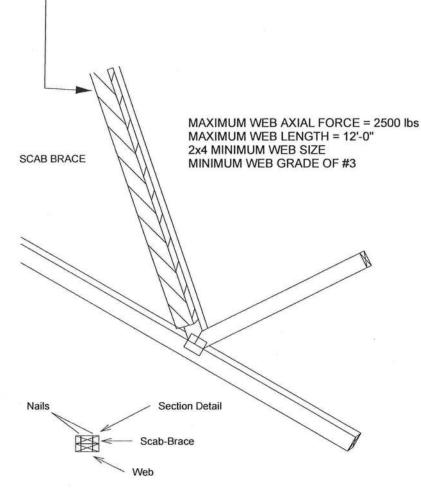


Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.

Scab must cover full length of web +/- 6".

\*\*\* THIS DETAIL IS NOT APLICABLE 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.

No 53681

\*
PROPERTY OF THE STATE OF THE STA

Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

May 17,2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. \$/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 his 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



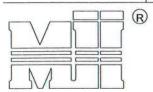
6904 Parke East Blvd. Tampa, FL 36610

### **AUGUST 1, 2016**

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

MII-REP05

MiTek USA, Inc. Page 1 of 1 T23949108



MiTek USA, Inc. ENGINEERED BY

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.

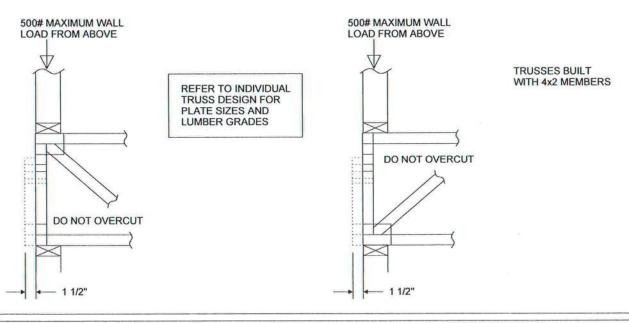
ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.

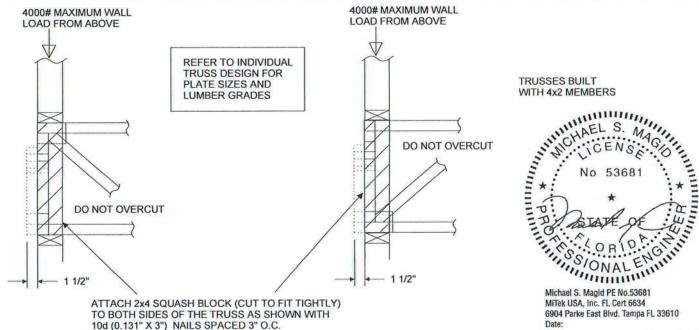
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.

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.





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



May 17,2021

Standard Gable End Detail MII-GE130-D-SP APRIL 12, 2019 R T23949109 MiTek USA, Inc. Typical \_x4 L-Brace Nailed To Verticals W/10d Nails spaced 6" o.c. Vertical Stud Vertical Stud (4) - 16d Nails MiTek USA, Inc. 別割 SECTION B-B (2) - 10d Nails into 2x6 DIAGONAL BRACE 4'-0" O.C. MAX TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY. Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails SECTION A-A PROVIDE 2x4 BLOCKING BETWEEN THE FIRST Varies to Common Truss TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. SEE INDIVIDUAL MITEK ENGINEERING ATTACH DIAGONAL BRACE TO BLOCKING WITH DRAWINGS FOR DESIGN CRITERIA (5) - 10d NAILS. \*\* (4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK 3x4 = Roof Sheathing \* - Diagonal Bracing L-Bracing Refer \*\* Refer to Section A-A

24" Max

Diag. Brace

at 1/3 points

End Wall

if needed

1'-3"

Max.

- 10d

NAILS'

NOTE

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.

to Section B-B

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.
"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.

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)
GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES

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	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS		
and Grade		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

ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH ASCE 7-10, ASCE 7-16 160 MPH PURATION OF LOAD INCREASE: 1.80

T-7.10, ASCE 7-16 160 MPH

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

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE FAGE 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 ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20501



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

HORIZONTAL BRACE

TO BLOCKING WITH (5) - 10d NAILS.

Michael S. Magld PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

May 17,2021

Page 1 of 2

DIAGONAL BRACE

16d Nails

Spaced 6" o.c.

2x6 Stud or

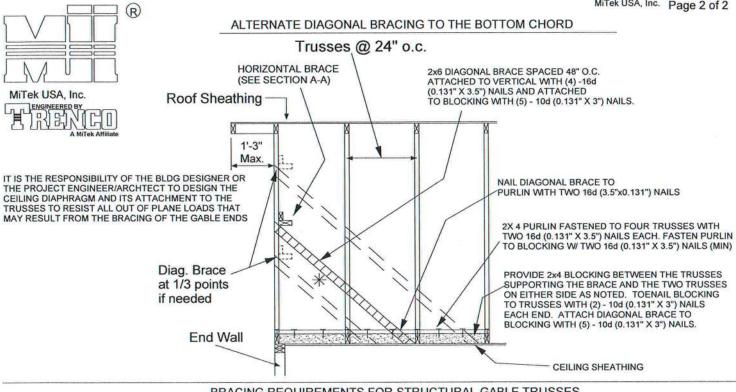
2x4 No.2 of better

(2) - 10d NAILS

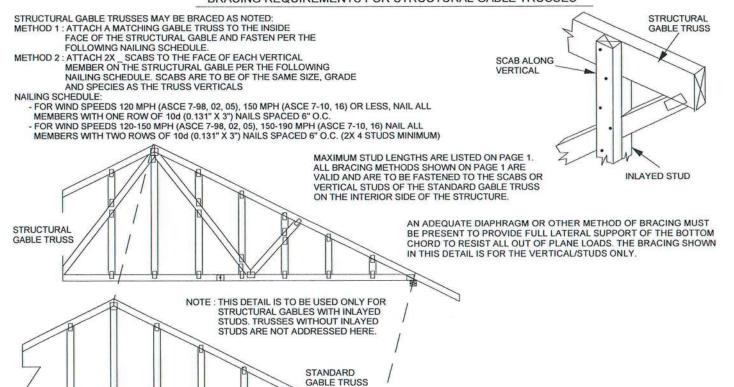
Trusses @ 24" o.c.



MiTek USA, Inc. Page 2 of 2

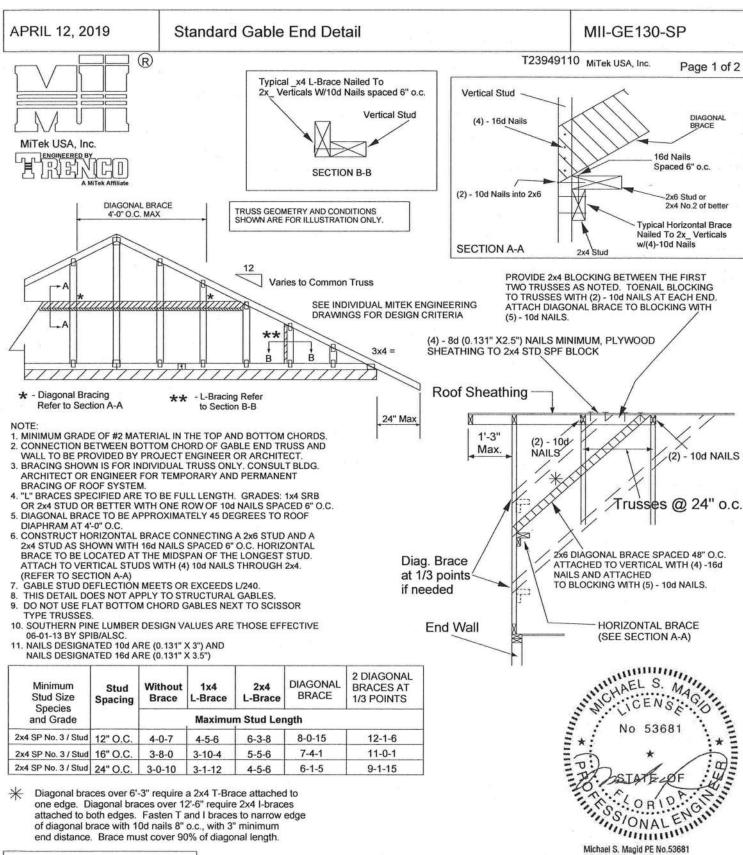


### BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES



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





Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	BRACES AT 1/3 POINTS
			Maximu	m Stud Ler	ngth	
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, ASCE 7-16 160 MPH DURATION OF LOAD INCREASE: 1.60

7-10. ASCE 7-16. 160 MPH STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
ION OF LOAD INCREASE: 1.60 CONNECTION OF BRACING IS BASED ON MWFRS.
WARNING-Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REPERENCE PAGE MIT-7473 TeV. ST19/2020 BEFORE USE. Design valid for use only with MTEk® 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/TP11 Quality Criteria, DSB-39 and BCSI Building Comp Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd. Tampa, FL 36610

Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634

6904 Parke East Blvd. Tampa FL 33610

May 17,2021

APRIL 12, 2019

### Standard Gable End Detail

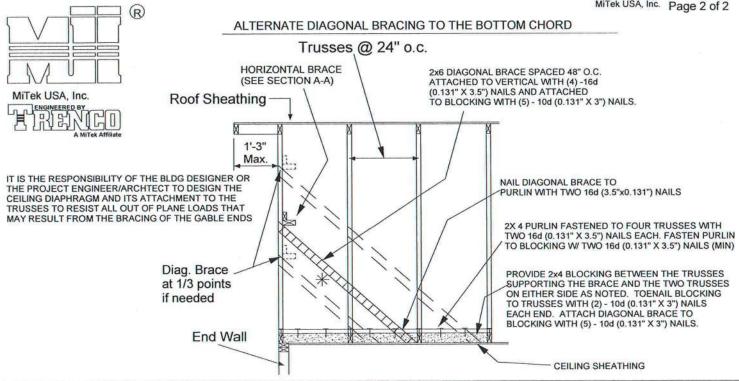
MII-SHEET 2

MiTek USA, Inc. Page 2 of 2

STRUCTURAL

**GABLE TRUSS** 

**INLAYED STUD** 



### BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES

STRUCTURAL GABLE TRUSSES MAY BE BRACED AS NOTED: METHOD 1: ATTACH A MATCHING GABLE TRUSS TO THE INSIDE FACE OF THE STRUCTURAL GABLE AND FASTEN PER THE

FOLLOWING NAILING SCHEDULE.

METHOD 2: ATTACH 2X \_ SCABS TO THE FACE OF EACH VERTICAL

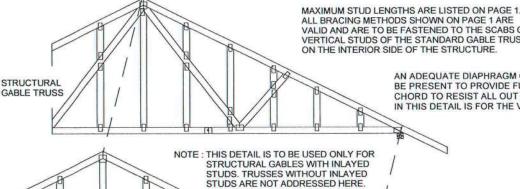
MEMBER ON THE STRUCTURAL GABLE PER THE FOLLOWING

NAILING SCHEDULE. SCABS ARE TO BE OF THE SAME SIZE, GRADE

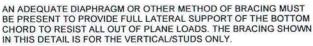
AND SPECIES AS THE TRUSS VERTICALS

NAILING SCHEDULE:

LING SCHEDULE:
- FOR WIND SPEEDS 120 MPH (ASCE 7-98, 02, 05), 150 MPH (ASCE 7-10, 16) OR LESS, NAIL ALL
MEMBERS WITH ONE ROW OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
- FOR WIND SPEEDS 120-150 MPH (ASCE 7-98, 02, 05), 150-190 MPH (ASCE 7-10, 16) NAIL ALL
MEMBERS WITH TWO ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C. (2X 4 STUDS MINIMUM)



ALL BRACING METHODS SHOWN ON PAGE 1 ARE VALID AND ARE TO BE FASTENED TO THE SCABS OR VERTICAL STUDS OF THE STANDARD GABLE TRUSS ON THE INTERIOR SIDE OF THE STRUCTURE.



SCAB ALONG VERTICAL

GABLE TRUSS

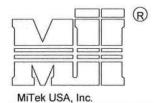
STANDARD

MARNING - 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 MTFek® 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/TPH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

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





MiTek USA, Inc. 6904 Parke East Blvd. Tampa, FL 33610-4115 T23949111

May 17, 2021

TO WHOM IT MAY CONCERN:

RE: MiTek 20/20 drawings showing continuous lateral bracing or "T" bracing on interior webs and chords.

Truss design drawings designed using MiTek 20/20 software show the bracing to be located on a side of the member needing to be braced. The actual side of the member where the brace is to be located does not change the design. If the brace cannot physically be placed on the side of the member as the drawings show, then place the brace on the member at the same location except attach it to the opposite edge.

If we can be of any further assistance in this matter, please feel free to contact our office.

Sincerely,

Michael Magid, PE

Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

May 17,2021



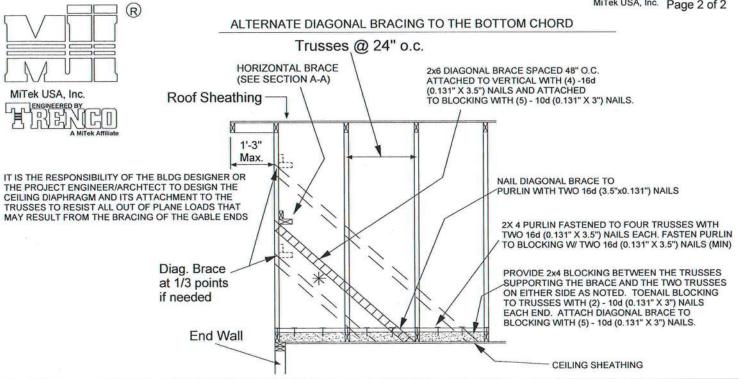
6904 Parke East Blvd

APRIL 12, 2019

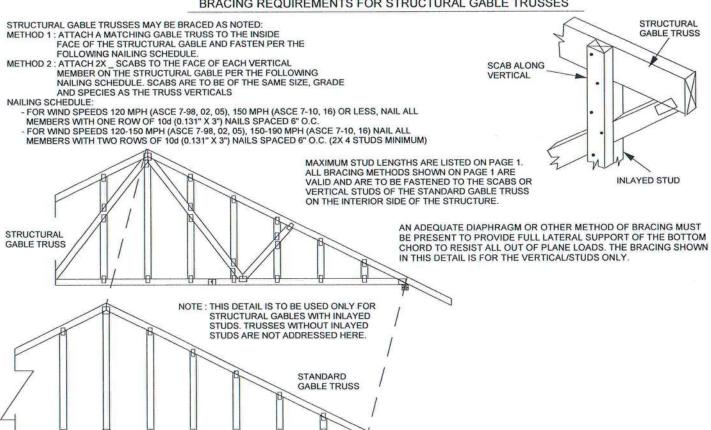
### Standard Gable End Detail

MII-SHEET 2

MiTek USA, Inc. Page 2 of 2



### BRACING REQUIREMENTS FOR STRUCTURAL GABLE TRUSSES



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\*\*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



APRIL 12, 2019 Standard Gable End Detail R Typical 2x4 L-Brace Nailed To 2x4 Verticals W/10d Nails spaced 6" o.c. Vertical Stud MiTek USA, Inc. SECTION B-B DIAGONAL BRACE 4'-0" O.C. MAX TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY Varies to Common Truss SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA 3x4 =

- L-Bracing Refer

to Section B-B

1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS. 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.

"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

ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT

CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 AND A

THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR

10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE

GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

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.

MII-GE170-D-SP

T23949112 MiTek USA, Inc. Page 1 of 2 Vertical Stud 2X6 SP OR SPF No. 2 DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c.

(2) - 10d Nails into 2x6 2X6 SP OR SPF No. 2 Typical Horizontal Brace Nailed To 2x4 Verticals w/(4)-10d Nails

2X4 SP OR SPF No. 2

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

24" Max

Roof Sheathing

SECTION A-A

1'-0" Max NAILS (2) - 10d NAILS

Diag. Brace at 1/3 points if needed

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

Trusses @ 24" o.c.

HORIZONTAL BRACE (SEE SECTION A-A)

End Wall

NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

Diagonal Bracing

NOTE

Refer to Section A-A

BRACING OF ROOF SYSTEM.

DIAPHRAM AT 4'-0" O.C.

(REFER TO SECTION A-A)

06-01-13 BY SPIB/ALSC.

TYPE TRUSSES.

Minimum Stud Size	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS			
Species and Grade		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, ASCE 7-16 170 MPH **DURATION OF LOAD INCREASE: 1.60** 

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.

NO 53681

NO 53681

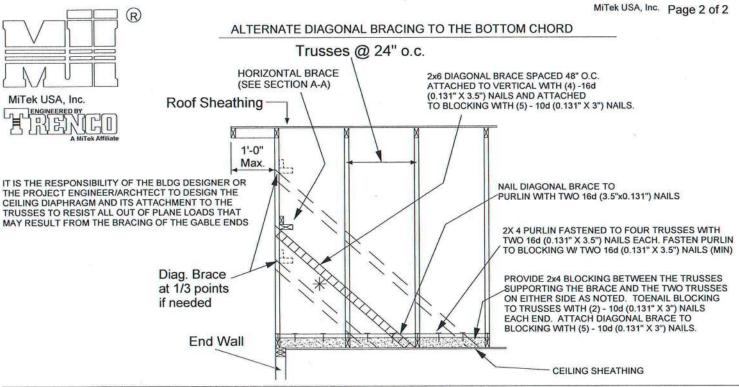
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Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

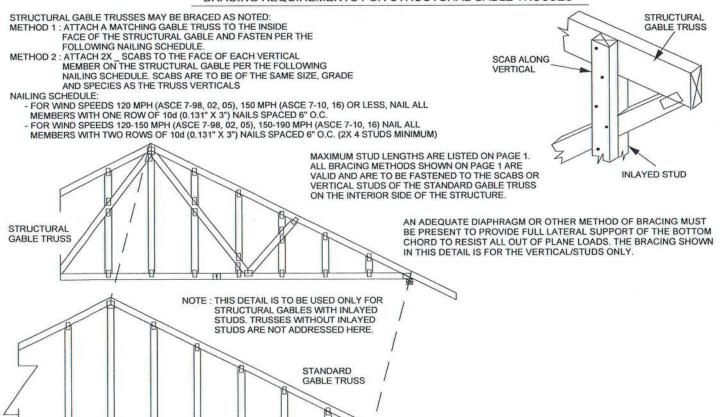
May 17,2021

MARNING - 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 ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20501









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MII-GE180-D-SP APRIL 12, 2019 Standard Gable End Detail R T23949113 MiTek USA, Inc. Page 1 of 2 Typical 2x4 L-Brace Nailed To 2x4 Verticals W/10d Nails spaced 6" o.c. Vertical Stud Vertical Stud 2X6 SP OR SPF No. 2 DIAGONAL BRACE (4) - 16d Nails MiTek USA, Inc. TEK U.S. ... 16d Nails Spaced 6" o.c. SECTION B-B DIAGONAL BRACE (2) - 10d Nails into 2x6 2X6 SP OR SPF No. 2 4'-0" O.C. MAX TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY. Typical Horizontal Brace Nailed To 2x4 Verticals w/(4)-10d Nails SECTION A-A 2X4 SP OR SPF No. 2 Varies to Common Truss PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA ATTACH DIAGONAL BRACE TO BLOCKING WITH \*\* (5) - 10d NAILS 3y4 = (4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK - Diagonal Bracing - L-Bracing Refer Refer to Section A-A to Section B-B Roof Sheathing 24" Max 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. 1'-0" (2) - 10d Max. NAILS ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT (2) - 10d NAILS BRACING OF ROOF SYSTEM. "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 Trusses @ 24" o.c. 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. Diag. Brace ATTACH TO VERTICAL GABLE STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A) at 1/3 points 2x6 DIAGONAL BRACE SPACED GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240. 48" O.C. ATTACHED TO VERTICAL WITH if needed THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR (4) -16d NAILS, AND ATTACHED TO BLOCKING WITH (5) -10d NAILS. TYPE TRUSSES SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC. HORIZONTAL BRACE NAILS DESIGNATED 10d ARE (0.131" X 3") AND End Wall (SEE SECTION A-A) NAILS DESIGNATED 16d ARE (0.131" X 3.5") 

Minimum Stud Size Species	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS			
and Grade	*	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, ASCE 7-16 180 MPH

STUD DESIGN IS BASED ON COMPONENTS AND CLADDING

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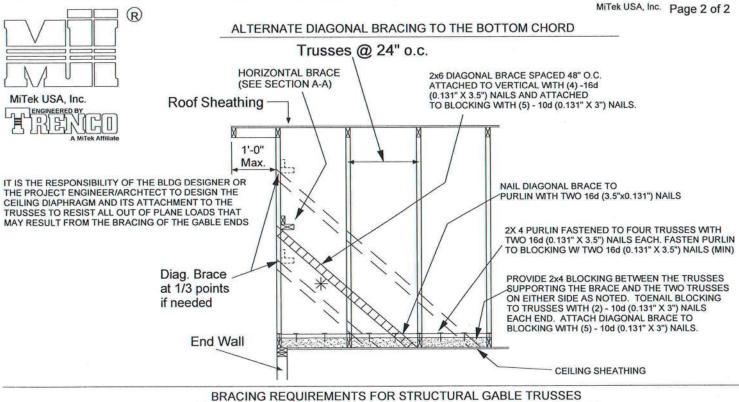
6904 Parke East Blvd. Tampa, FL 36610

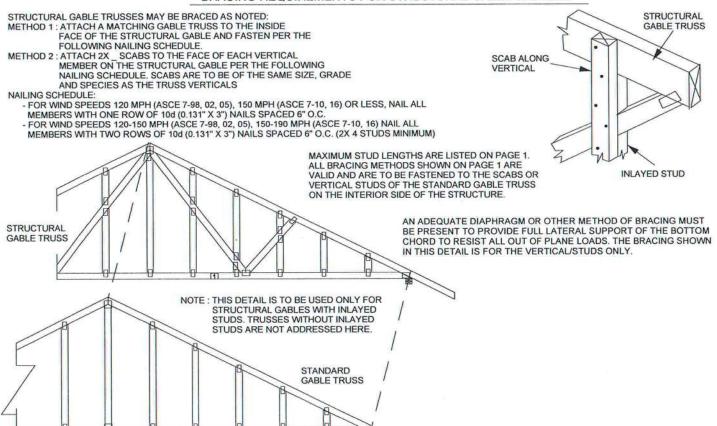
Michael S. Magid PE No.53681

6904 Parke East Blvd. Tampa FL 33610

May 17,2021

MiTek USA, Inc. FL Cert 6634





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January 8, 2019

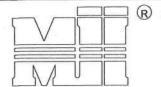
### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-7-16

T23949114

MiTek USA, Inc.

Page 1 of 1



MiTek USA, Inc.



A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.

- PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
SHALL BE CONNECTED TO EACH PURLIN
WITH (2) (0.131" X 3.5") TOE-NAILED.
- BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- 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.
- 2 X X 4"0" SCAB, SIZE TO MATCH TOP CHORD OF

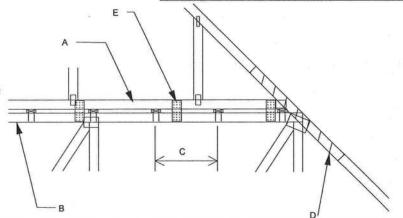
PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:

1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR 2. WIND SPEED OF 116 MPH TO 180 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

FOR WIND SPEEDS BETWEEN 116 AND 180 MPH, ATTACH MITEK NP37 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" NAIL EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)

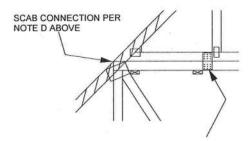
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C **ENCLOSED BUILDING** LOADING = 5 PSF TCDL ASCE 7-10, ASCE 7-16 DURATION OF LOAD INCREASE: 1.60 DETAIL IS NOT APPLICABLE FOR TRUSSES

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

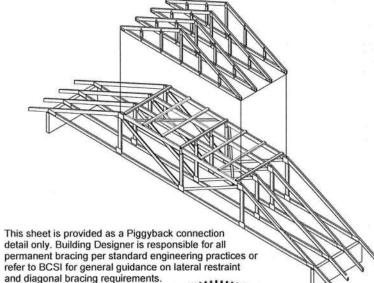


### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

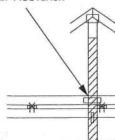
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



FOR ALL WIND SPEEDS, ATTACH MITEK NP37 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" NAIL EDGE DISTANCE.



VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL

AS SHOWN IN DETAIL.

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) 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

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Michael S. Magid PE No.53681 MiTek USA, Inc.,FL Cert 6634 6904 Parke East Blvd, Tampa FL 33610



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### **JANUARY 8, 2019**

### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT 7 - 16

T23949115

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E

MiTek USA, Inc.

Page 1 of 1

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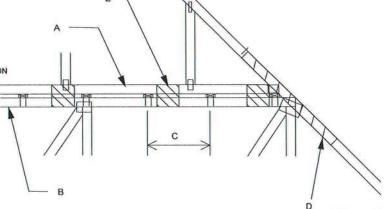
MiTek USA, Inc.

ENGINEERED BY

A - PIGGBACK 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 \_ 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 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

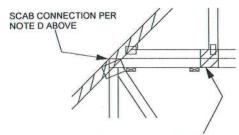
 WIND SPEED OF 116 MPH TO 180 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
 FOR WIND SPEED IN THE RANGE 116 MPH - 180 MPH OR WIND SPEED IN THE NANGE THOMPH - 180 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



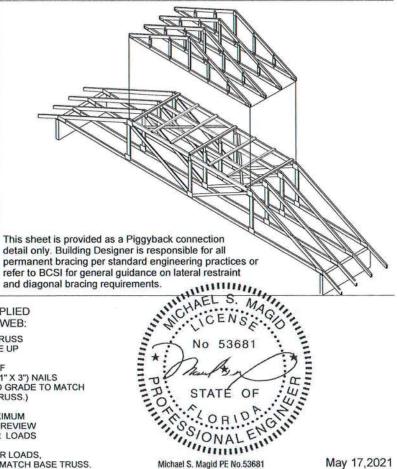


### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

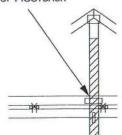
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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)



VERTICAL WEB TO EXTEND THROUGH **BOTTOM CHORD** OF PIGGYBACK



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

VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP AS SHOWN IN DETAIL.

AS SHOWN IN DETAIL.

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)

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. CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.

Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd, Tampa FL, 33610 May 17,2021

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ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20801



**AUGUST 1, 2016** 

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

### MII-REP01A1

T23949116

R

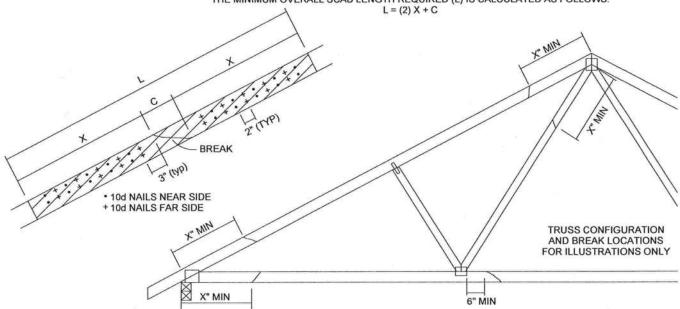
MiTek USA, Inc. 13/18

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

\* DIVIDE EQUALLY FRONT AND BACK

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

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



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

- THIS REPAIR DETAIL IS TO BE USED ONLY FOR THE APPLICATION SHOWN. THIS REPAIR DOES 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. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.

  THE END DISTANCE, EDGE DISTANCE AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.

- UNUSUAL SPLITTING OF THE WOOD.
  WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.
  THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x\_ ORIENTATION ONLY.
  THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.

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Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd-Tampa FL-33610

May 17,2021

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6904 Parke East Blvd Tampa, FL 36610

### LATERAL TOE-NAIL DETAIL

MII-TOENAIL SP

SIDE VIEW

**NEAR SIDE** 

**NEAR SIDE** 

NEAR SIDE **NEAR SIDE** 

(2x6) 4 NAILS

MiTek USA, Inc.

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

SIDE VIEW (2x3) 2 NAILS

SIDE VIEW

**NEAR SIDE** 

**NEAR SIDE** 

**NEAR SIDE** 

(2x4) 3 NAILS

NEAR SIDE NEAR SIDE Page 1 of 1

T23949117



MiTek USA, Inc. ENGINEERED BY CO 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.

	TOE-NAIL SINGLE SHEAR VALUES PER NDS 2018 (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.

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

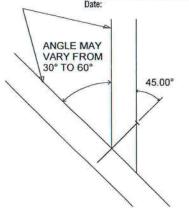
For load duration increase of 1.15:

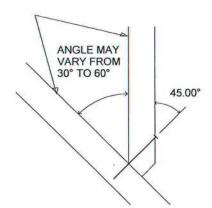
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

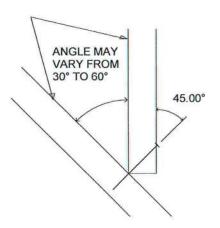


May 17,2021

Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610







MARNING - 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 

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



TRUSSED VALLEY SET DETAIL MII-VALLEY HIGH WIND1 APRIL 12, 2019 R MiTek USA, Inc. Page 1 of 1 **GENERAL SPECIFICATIONS** T23949118 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 MiTek USA, Inc. 4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE ENGINEERED BY INDIVIDUAL DESIGN DRAWINGS. GABLE END, COMMON TRUSS OR GIRDER TRUSS 5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT 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.

NO 53681

NO 53681

BASE TRUSSES

May 17,2021

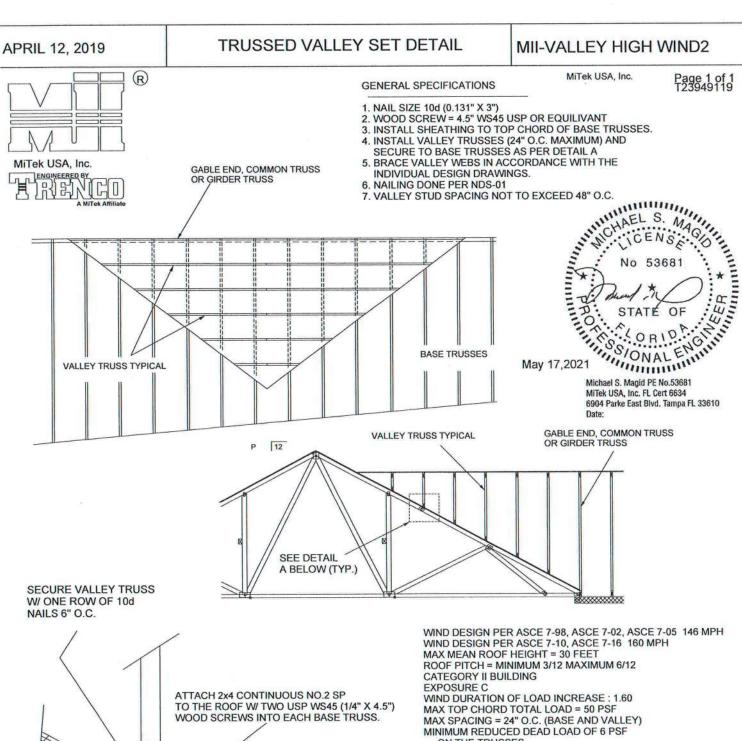
Michael S. Magid PE No.53681 6. NAILING DONE PER NDS - 01 VALLEY TRUSS TYPICAL Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 VALLEY TRUSS TYPICAL GABLE END, COMMON TRUSS OR GIRDER TRUSS 12 SEE DETAIL A BELOW (TYP.) SECURE VALLEY TRUSS W/ ONE ROW OF 10d WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH NAILS 6" O.C. MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12 CATEGORY II BUILDING ATTACH 2x4 CONTINUOUS NO.2 SP EXPOSURE C TO THE ROOF W/ TWO USP WS3 (1/4" X 3") WIND DURATION OF LOAD INCREASE: 1.60 WOOD SCREWS INTO EACH BASE TRUSS. 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

**DETAIL A** 

N.T.S.

(NO SHEATHING)





WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 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



TRUSSED VALLEY SET DETAIL MII-VALLEY SP APRIL 12, 2019 R MiTek USA, Inc. Page 1 of 1 T23949120 **GENERAL SPECIFICATIONS**  NAIL SIZE 16d (0.131" X 3.5")
 INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A 3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS. MiTek USA, Inc. 4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING ENGINEERED ! EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING. GABLE END, COMMON TRUSS 5. NAILING DONE PER NDS - 01 OR GIRDER TRUSS 6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C. 7. ALL LUMBER SPECIES TO BE SP. BASE TRUSSES VALLEY TRUSS TYPICAL May 17,2021 Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 GABLE END, COMMON TRUSS OR GIRDER TRUSS VALLEY TRUSS TYPICAL 12 P SEE DETAIL A BELOW (TYP.) SECURE VALLEY TRUSS W/ ONE ROW OF 16d NAILS 6" O.C. WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 150 MPH MAX MEAN ROOF HEIGHT = 30 FEET ATTACH 2x4 CONTINUOUS NO.2 SP ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12 TO THE ROOF W/ TWO 16d NAILS CATEGORY II BUILDING INTO EACH BASE TRUSS.

THE PROPERTY OF THE PARTY OF TH A THERMAN **DETAIL A** (MAXIMUM 1" SHEATHING) N.T.S.

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

MARNING - 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 MTek® 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 property 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/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



TRUSSED VALLEY SET DETAIL MII-VALLEY APRIL 12, 2019 (HIGH WIND VELOCITY) MiTek USA, Inc. NOTE: VALLEY STUD SPACING NOT R Page 1 of 1 TO EXCEED 48" O.C. SPACING T23949121 MiTek USA, Inc. ENGINEERED BY CO 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 ATTACH VALLEY TRUSSES TO LOWER TRUSSES WITH **USP RT7 OR EQUIVALENT** WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH WIND DESIGN PER ASCE 7-10, ASCE 7-16 160 MPH MAX MEAN ROOF HEIGHT = 30 FEET CATEGORY II BUILDING NON-BEVELED 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 NON-BEVELED 2'-10" ON AFFECTED TOP CHORDS. **BOTTOM CHORD** NOTES: - SHEATHING APPLIED AFTER INSTALLATION OF VALLEY TRUSSES - THIS DETAIL IS NOT APPLICABLE FOR SPF-S SPECIES LUMBER. CLIP MUST BE APPLIED TO THIS FACE WHEN PITCH EXCEEDS 6/12 (MAXIMUM 12/12 PITCH) May 17,2021

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 bucking 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 flurss systems, see \*\*AMSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd. Tampa, FL 36610 **OCTOBER 5, 2016** 

### REPLACE BROKEN OVERHANG

MII-REP13B

MiTek USA, Inc.

Page 1 of 1

T23949122

(R)

MiTek USA, Inc.

TRUSS CRITERIA:

LOADING: 40-10-0-10 **DURATION FACTOR: 1.15** SPACING: 24" O.C. TOP CHORD: 2x4 OR 2x6 PITCH: 4/12 - 12/12

HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL

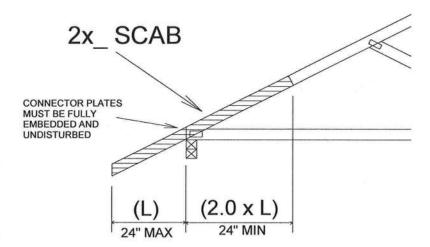
**END BEARING CONDITION** 

NOTES:

1. ATTACH 2x\_ SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.

2. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.

3. WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.



### **IMPORTANT**

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

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



Michael S. Magid PE No.53681 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

May 17,2021

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE MARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITER 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 amage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPH 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

**AUGUST 1, 2016** 

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### LATERAL BRACING RECOMMENDATIONS

MII-STRGBCK

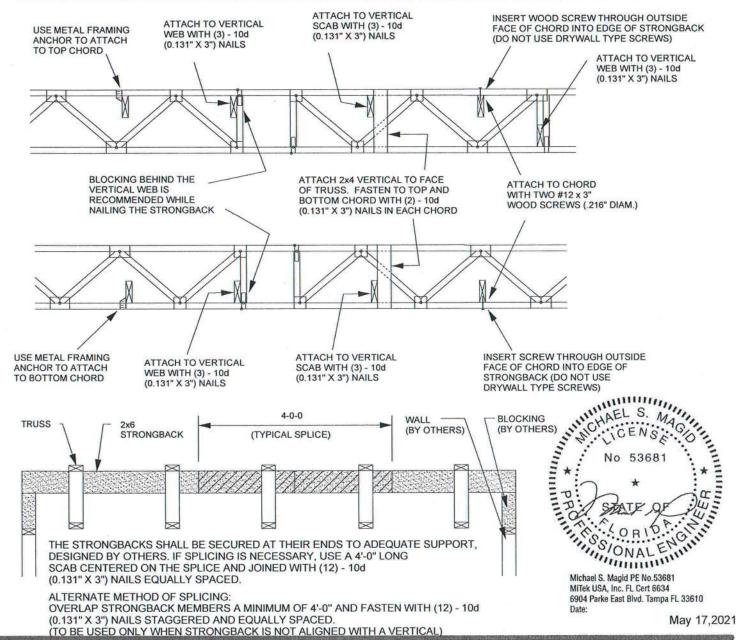
MiTek USA, Inc. T23949123 Page 1 of 1



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.



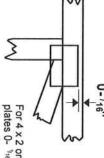


## Symbols

# PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- 1/18" from outside edge of truss.

11

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

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

### PLATE SIZE

4 × 4

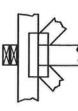
width measured perpendicular the length parallel to slots. to slots. Second dimension is The first dimension is the plate

## LATERAL BRACING LOCATION



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

### BEARING



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

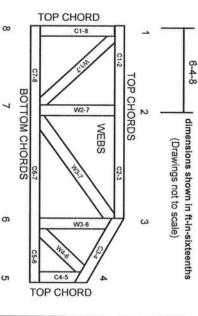
## Industry Standards:

ANSI/TPI1: DSB-89

National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing.

Installing & Bracing of Metal Plate Building Component Safety Information, Guide to Good Practice for Handling, Connected Wood Trusses.

# Numbering System



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

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

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

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

# General Safety Notes

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

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.

2

Never exceed the design loading shown and never stack materials on inadequately braced trusses.

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Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.

4

- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.

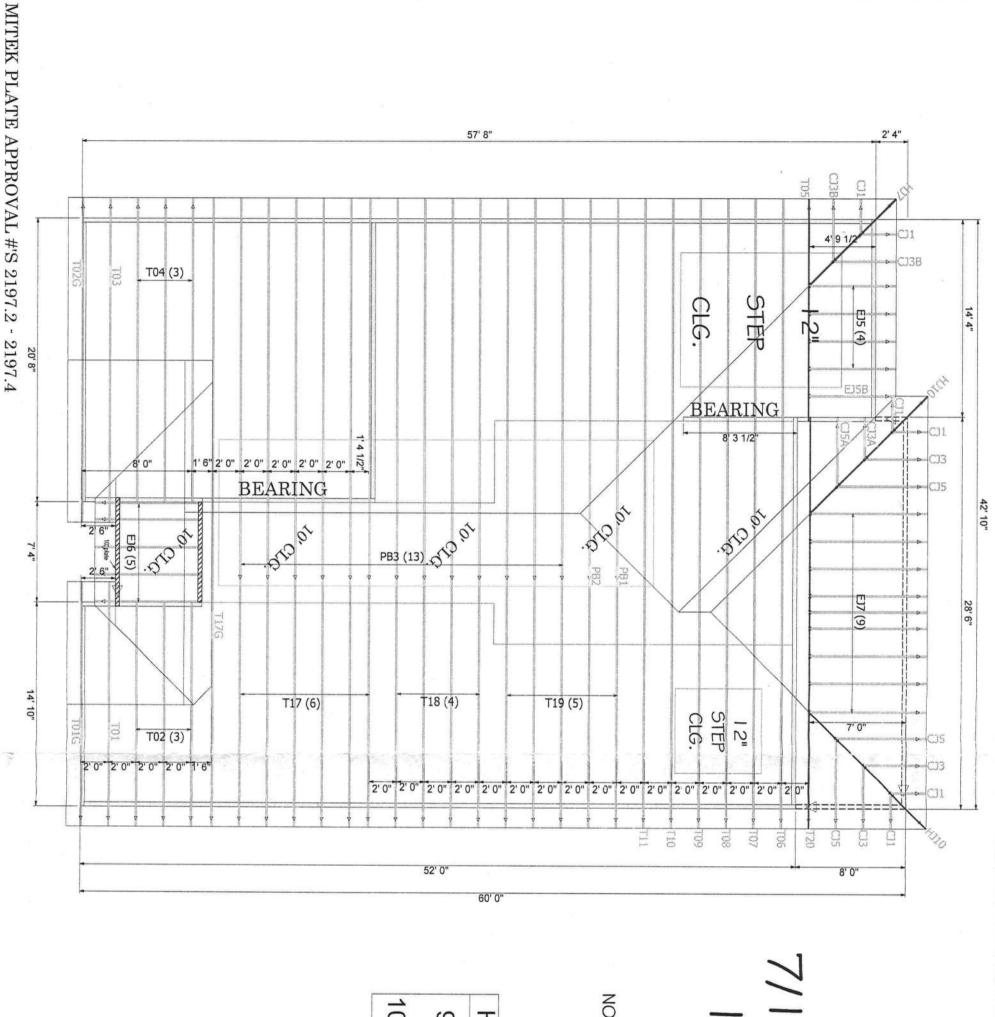
6 5

Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.

7

- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication
- use with fire retardant, preservative treated, or green lumber. Unless expressly noted, this design is not applicable for
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise
- Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.

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2197.4

Lot 146 The Preserve at

Laurel Lake

Aaron Simque Homes

PHONE: 850-576-5177

Tallahassee

Lake City PHONE: 386-755-6894

FIRSTSOURCE

FAX: 386-755-7973

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

Jacksonville

5-22-21

KLH

2806869 Roof Job #: 2806869

# 7/12 PIT

NOTE BEARING ADDED

10' 1-1/8" 9' 1-1/8" Hatch Legend

Per ANS/ITP1 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. U.N.O.

All hangers are to be Simpson or equivalent U.N.O.

Use 10d x 112" Naits in hanger connections to single ply THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT) CORRESPONDS WITH THE LEFT SIDE OF THE NIDVIDIOLAL TRUSS DRAWING, USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE TRUSSES ON THE STRUCTURE. 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. This truss placement plan was not created by an engineer, but rather by the Builders FirstSource staff and 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. 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. It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect..., so the trusses do not interfere with these type of items. It is the responsibility of the Contractor to ensure of 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. ACQ lumber is corrisive to truss plates. Any ACQ lumb that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first. No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4541 Sable end trusses require continuous bottom chord bearing. Refer to local codes for wall framing Refer to BCSI-B1 Summary Sheet-Guide for handling. Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation. Trusses are not designed to support brick U.N.O. Dimensions are Feet Inches Sixteenths ral Notes: Builders

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