



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

RE: 2292651 - MARTIN EXT - SPEC HSE

MiTek USA, Inc.

6904 Parke East Blvd. Tampa, FL 33610-4115

Site Information:

Customer Info: Martin Exteriors Project Name: Spec Hse Model: Custom

Lot/Block: N/A

Subdivision: N/A

Address: 374 SW Nightshade Drive, N/A

N/A

City: Columbia Cty

State: FL

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

Name:

License #:

Address:

City:

State:

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

Design Code: FBC2017/TPI2014

Design Program: MiTek 20/20 8.2

Wind Code: ASCE 7-10 Roof Load: 37.0 psf Wind Speed: 130 mph Floor Load: N/A psf

This package includes 36 individual, Truss Design Drawings and 0 Additional Drawings.

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

							_
No. 1 2 3	Seal# T20618199 T20618200 T20618201	Truss Name CJ01 CJ03 CJ05	Date 7/2/20 7/2/20 7/2/20	No. 23 24 25	Seal# T20618221 T20618222 T20618223	Truss Name T11 T12 T13	Date 7/2/20 7/2/20 7/2/20
4 5 6 7 8 9 10 11 12 13 14 15 16	T20618202 T20618203 T20618204 T20618205 T20618206 T20618207 T20618209 T20618210 T20618211 T20618212 T20618213	EJ01 EJ02 EJ03 HJ05 HJ10 PB01 PB02 PB03 T01 T01G T02 T03	7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20	26 27 28 29 30 31 32 33 34 35 36	T20618224 T20618225 T20618226 T20618227 T20618228 T20618230 T20618231 T20618231 T20618233 T20618233	T14 T15 T16 T17 T18 T19 T20 T21 T22 T22G TG01	7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20 7/2/20
17	T20618214 T20618215	T04 T05	7/2/20 7/2/20				



The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource-Jacksonville.

Truss Design Engineer's Name: ORegan, Philip

My license renewal date for the state of Florida is February 28, 2021.

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



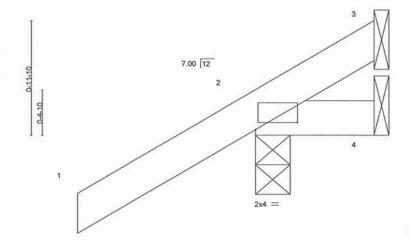
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

July 2,2020

Job	Truss	Truss Type	Qty	Ply	MARTIN EXT - SPEC HSE	T20618199
2292651	CJ01	Jack-Open	6	1		120010195
					Job Reference (optional)	
Builders FirstSource,	Jacksonville, FL - 32244,		ID:KiGkVD		ar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16 Pn?12Pzbi4X-ipREVL4i3fb4KvrXo0vXYI8yplhF999	
		1.6.0	.b.iqokvb	1.0.0	The Lag is spirited a motority moory morphin out	THO OTHER

ID:KjGkVDouK1eiguE1Pn?12P; -1-6-0 1-0-0 1-6-0 1-0-0

Scale = 1:9.4



1-0-0

-11-1-000000000000000000000000000000000		A STATE OF THE STA	000000000000000000000000000000000000000				0.00	700 - 200007	2010223	200400		ACCOUNT OF THE PARTY
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	0.17	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matri	x-MP	072.03					Weight: 6 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 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=-6(LC 1), 2=-108(LC 12), 4=-19(LC 1)
Max Gray 3=10(LC 16), 2=179(LC 1), 4=28(LC 16)

Max Grav 3=10(LC 16), 2=179(LC 1), 4=28(LC 16)

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

# NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=108.



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

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

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

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



MARTIN EXT - SPEC HSE Job Truss Truss Type Qty T20618200 2292651 CJ03 Jack-Open Job Reference (optional) Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16:45 2020 Page 1 ID: KjGkVDouK1eiguE1Pn?12Pzbj4X-A??djh5Kqzjxy3QjLjRm5yh7Y80NucOh9sbxDMz0PbW-1-6-0 1-6-0 Scale = 1:15.3 0-4-15 7.00 12 0-4-10 2x4 = Plate Offsets (X,Y)-- [2:0-1-12,Edge] LOADING (psf) SPACING-2-0-0 CSI. DEFL PLATES GRIP (loc) I/defl L/d 240 244/190 TCLL 20.0 Plate Grip DOL 1.25 TC 0.17 Vert(LL) -0.01 4-7 >999 MT20 TCDL 0.11 -0.01 7.0 Lumber DOL 1.25 BC Vert(CT) >999 180 BCLL 0.0 Rep Stress Incr YES WB 0.00 Horz(CT) 0.00 n/a n/a BCDL 10.0 Code FBC2017/TPI2014 Weight: 12 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) 3=Mechanical, 2=0-3-8, 4=Mechanical

Max Horz 2=120(LC 12)

Max Uplift 3=-60(LC 12), 2=-91(LC 12)

Max Grav 3=69(LC 19), 2=210(LC 1), 4=50(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020



MARTIN EXT - SPEC HSE Qty Ply Job Truss Truss Type T20618201 2292651 CJ05 Jack-Open Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16:45 2020 Page 1 Jacksonville, FL - 32244. Builders FirstSource ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-A??djh5Kqzjxy3QjLjRm5yh4y8ztucOh9sbxDMz0PbW 5-0-0 Scale = 1:21.0 7.00 12 2-10-11 0-4-10 3x4 LOADING (psf) SPACING-2-0-0 CSI. DEFL. in (loc) I/defl L/d PLATES GRIP 20.0 Plate Grip DOL 1.25 TC 0.34 Vert(LL) 0.04 4-7 >999 240 MT20 244/190 TCLL -0.07 TCDL 7.0 Lumber DOL 1.25 BC 0.27 Vert(CT) >905 180 0.00 0.0 Rep Stress Incr YES WB Horz(CT) 0.00 3 n/a BCLL n/a Code FBC2017/TPI2014 Weight: 19 lb FT = 20% BCDL 10.0 Matrix-MP

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 5-0-0 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=177(LC 12)

Max Uplift 3=-111(LC 12), 2=-102(LC 12), 4=-6(LC 12) Max Grav 3=129(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.

# NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 3=111, 2=102.



Philip J. O'Regan PE No.58126 MITek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

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

Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, crection 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 Type	Qty	Ply	MARTIN EXT - SPEC HSE	
2292651	EJ01	JACK-PARTIAL	30	1		T20618202
	interes.	Bosto A Cartona	7.77	1	Job Reference (optional)	
D. O.L. Charles	Lake City EL DOOFE			0.040	Ann 4 2020 MiTale Industrian Inc. Thus had 2	00:04:00 0000 D 4

Builders FirstSource, Lake City, FL 32055

8.240 s Apr 4 2020 MiTek Industries, Inc. Thu Jul 2 06:31:33 2020 Page 1 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-FNVJiVXcGbAmN6IV0fszD\_zqq6GEkUjeLYNhzz0CBu 7-0-0

1-6-0 7-0-0 1-6-0 7-0-0

Scale = 1:26.5

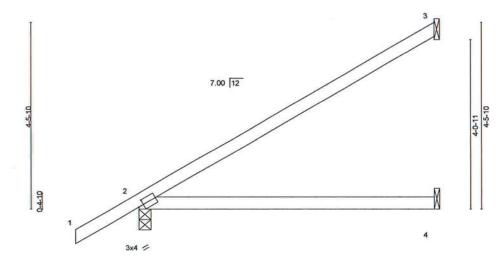


Plate Off	sets (X,Y)- [	2:0-1-8,0-1-8]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L∕d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.68	Vert(LL)	0.15	4-7	>541	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.52	Vert(CT)	-0.24	4-7	>346	180	BANGETON)	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matri	x-MS						Weight: 25 lb	FT = 20%

LUMBER-

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

TOP CHORD Structural wood BOT CHORD Rigid ceiling dire

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

REACTIONS.

(lb/size) 3=163/Mechanical, 2=346/0-3-8, 4=84/Mechanical Max Horz 2=233(LC 12) Max Uplift 3=-161(LC 12), 2=-117(LC 12), 4=-10(LC 12)

Max Grav 3=186(LC 19), 2=346(LC 1), 4=126(LC 3)

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

# NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 3, 117 lb uplift at joint 2 and 10 lb uplift at joint 4.

LOAD CASE(S) Standard



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020



Qty MARTIN EXT - SPEC HSE Job Truss Truss Type Ply T20618203 2292651 EJ02 Jack-Open Job Reference (optional) Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16:47 2020 Page 1 Builders FirstSource. ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-6N7N7N7bMazfBNZ6T8TEANmT2yirMWu\_dA42IEz0PbU 1-6-0 Scale = 1:15.3 7.00 12 0-4-10

3-0-0

Plate Off	sets (X,Y)- [	2:0-1-12,Edge]										
LOADING	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	0.17	Vert(LL)	-0.01	4-7	>999	240	MT20	244/190
CDL	7.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matri	x-MP						Weight: 12 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

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

Max Horz 2=120(LC 12)

Max Uplift 3=-60(LC 12), 2=-91(LC 12)

Max Grav 3=69(LC 19), 2=210(LC 1), 4=50(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2.



Structural wood sheathing directly applied or 3-0-0 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 Date:

July 2,2020



Job	Truss	Truss Type	Qty	Ply	MARTIN EXT - SPEC HSE T2061820
2292651	EJ03	JACK-OPEN GIRDER	1	1	12001020
TO PERSONALLY	225* 177				Job Reference (optional)

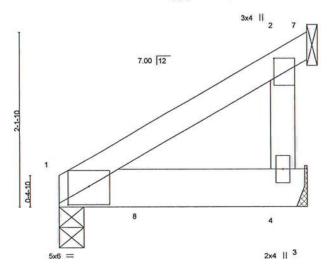
Builders FirstSource, Lake City, FL 32055

8.240 s Apr 4 2020 MiTek Industries, Inc. Thu Jul 2 06:32:03 2020 Page 1 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-60BrcytLYUNvM\_P3GJCuAYDCWwJaGlu8X0pzlEz0CBQ

Structural wood sheathing directly applied or 3-0-0 oc purlins.

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

Scale = 1:13.5



OADIN	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	0.28	Vert(LL)	-0.01	4-6	>999	240	MT20	244/190
CDL	7.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	-0.03	4-6	>999	180	(000000000)	
BCLL	0.0	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matri	x-MP	10000000000000000000000000000000000000					Weight: 14 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x6 SP No.2

WEBS 2x4 SP No.3

REACTIONS. (lb/size) 1=814/0-3-8, 2=100/Mechanical, 4=466/Mechanical

Max Horz 1=85(LC 8)

Max Uplift 1=-164(LC 8), 2=-80(LC 8), 4=-90(LC 8)

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

### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 164 lb uplift at joint 1, 80 lb uplift at joint 2 and 90 lb uplift at joint 4.
- 7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1165 lb down and 245 lb up at 1-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-54, 1-3=-20

Concentrated Loads (lb)

Vert: 8=-1165(F)



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

ANSI/TPI 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 MARTIN EXT - SPEC HSE T20618205 DIAGONAL HIP GIRDER 2292651 **HJ05** Job Reference (optional) Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16:49 2020 Page 1 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-2mF7Y28ruBDMQhjUaZViFornUmMmqQOH4UZ8M7z0PbS Scale = 1:14.9 4.95 12 0-4-10 LOADING (psf) SPACING-2-0-0 CSI DEFL. in I/defl L/d PLATES GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.30 Vert(LL) -0.03 4-7 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.21 Vert(CT) -0.04 >999 180 BCLL 0.0 Rep Stress Incr NO WB 0.00 Horz(CT) 0.00 n/a n/a BCDL 10.0 Code FBC2017/TPI2014 Matrix-MP Weight: 17 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 4-2-3 oc purlins.

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

REACTIONS.

(size) 3=Mechanical, 2=0-4-9, 4=Mechanical

Max Horz 2=119(LC 26)

Max Uplift 3=-81(LC 8), 2=-187(LC 4), 4=-8(LC 8) Max Grav 3=84(LC 1), 2=296(LC 1), 4=71(LC 3)

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

#### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \*This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=187.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 76 lb up at 1-6-1, and 86 lb down and 76 lb up at 1-6-1 on top chord, and 27 lb down and 45 lb up at 1-6-1, and 27 lb down and 45 lb up at 1-6-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

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

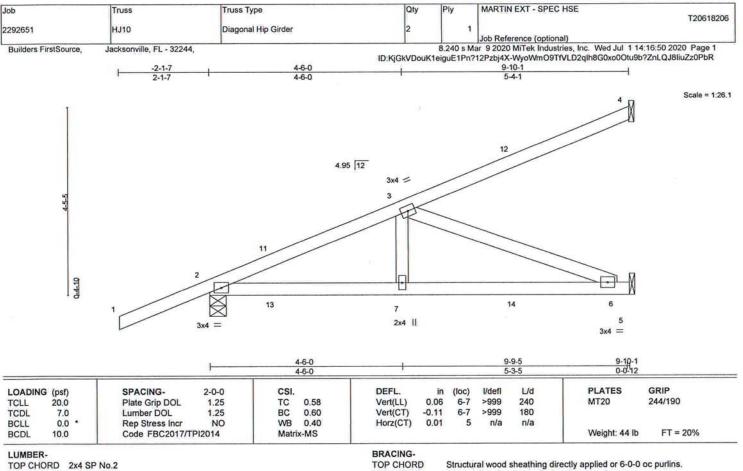
Vert: 1-3=-54, 4-5=-20



Philip J. O'Regan PE No.58126 MITek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020





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

Rigid ceiling directly applied or 8-8-11 oc bracing.

REACTIONS.

(size) 4=Mechanical, 2=0-4-9, 5=Mechanical

Max Horz 2=233(LC 8)

Max Uplift 4=-148(LC 8), 2=-293(LC 4), 5=-164(LC 8) Max Grav 4=149(LC 1), 2=527(LC 1), 5=311(LC 35)

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

TOP CHORD 2-3=-810/338

**BOT CHORD** 2-7=-449/653, 6-7=-449/653

WEBS 3-7=0/283, 3-6=-699/481

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=148, 2=293, 5=164.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 76 lb up at 1-6-1, 86 lb down and 76 lb up at 1-6-1, 107 lb down and 50 lb up at 4-4-0, 107 lb down and 50 lb up at 4-4-0, and 142 lb down and 111 ib up at 7-1-15, and 142 ib down and 111 ib up at 7-1-15 on top chord, and 27 ib down and 45 ib up at 1-6-1, 27 ib down and 45 lb up at 1-6-1, 27 lb down at 4-4-0, 27 lb down at 4-4-0, and 50 lb down and 21 lb up at 7-1-15, and 50 lb down and 21 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

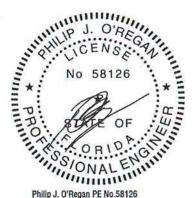
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 7=-5(F=-3, B=-3) 12=-73(F=-36, B=-36) 14=-59(F=-29, B=-29)



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with 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 designs. 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/TH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



6904 Parke East Blvd. Tampa, FL 36610

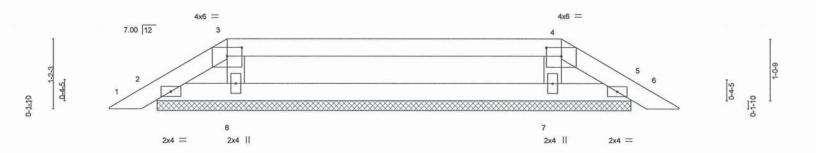
Job Truss Truss Type Qty Ply MARTIN EXT - SPEC HSE T20618207 2292651 PB01 Piggyback Job Reference (optional) Jacksonville, FL - 32244, Builders FirstSource 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16:52 2020 Page 1

ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-TLwGB4AjB6cxH8S3Gh3PtRTHNzOA1m?jmSnpzSz0PbP

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

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

Scale = 1:18.7



	1					9-8-0						-1
Plate Offs	ets (X,Y)-	[3:0-3-0,0-1-12], [4:0-3-0,	0-1-121			9-8-0						
i idio olio	010 (71,17	leid d'aja i izgijina d'aj		T		1					T	
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	0.32	Vert(LL)	-0.00	5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	-0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TI	PI2014	Matri	x-S	20.02					Weight: 28 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

2x4 SP No.3 WEBS

REACTIONS. All bearings 7-11-11.

(lb) - Max Horz 2=25(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 5, 8, 7

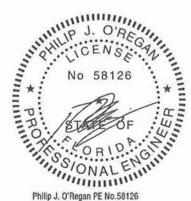
Max Grav All reactions 250 lb or less at joint(s) 2, 5 except 8=313(LC 1), 7=313(LC 1)

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

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) Gable requires continuous bottom chord bearing.
- 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) 2, 5, 8, 7.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

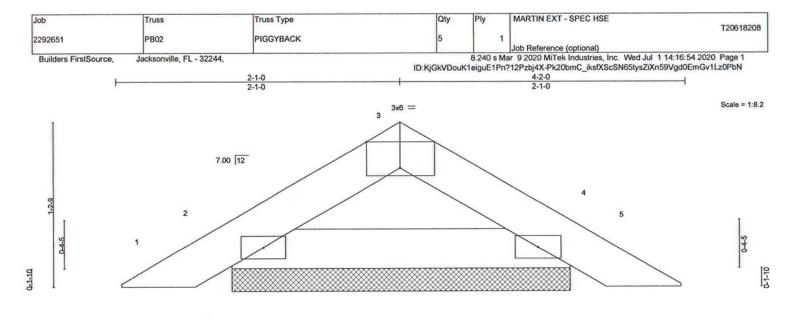


Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





4-2-0

					4-2-0						
sets (X,Y)-	[3:0-3-0,Edge]										
G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
20.0	Plate Grip DOL	1.25	TC	0.03	Vert(LL)	0.00	4	n/r	120	MT20	244/190
7.0	Lumber DOL	1.25	BC	0.07	Vert(CT)	0.00	4	n/r	120		
0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
10.0	Code FBC2017/T	PI2014	Matri	x-P	1000					Weight: 11 lb	FT = 20%
	9 (psf) 20.0 7.0 0.0	G (psf) SPACING- 20.0 Plate Grip DOL 7.0 Lumber DOL 0.0 Rep Stress Incr	G (psf) SPACING- 2-0-0 20.0 Plate Grip DOL 1.25 7.0 Lumber DOL 1.25 0.0 Rep Stress Incr YES	G (psf) SPACING- 2-0-0 CSI. 20.0 Plate Grip DOL 1.25 TC 7.0 Lumber DOL 1.25 BC 0.0 Rep Stress Incr YES WB	G (psf) SPACING- 2-0-0 CSI. 20.0 Plate Grip DOL 1.25 TC 0.03 7.0 Lumber DOL 1.25 BC 0.07 0.0 Rep Stress Incr YES WB 0.00	sets (X,Y)         [3:0-3-0,Edge]           G (psf)         SPACING-         2-0-0         CSI.         DEFL.           20.0         Plate Grip DOL         1.25         TC         0.03         Vert(LL)           7.0         Lumber DOL         1.25         BC         0.07         Vert(CT)           0.0         Rep Stress Incr         YES         WB         0.00         Horz(CT)	sets (X,Y)-         [3:0-3-0,Edge]           G (psf)         SPACING-         2-0-0         CSI.         DEFL.         in           20.0         Plate Grip DOL         1.25         TC         0.03         Vert(LL)         0.00           7.0         Lumber DOL         1.25         BC         0.07         Vert(CT)         0.00           0.0         Rep Stress Incr         YES         WB         0.00         Horz(CT)         0.00	sets (X,Y)-         [3:0-3-0,Edge]           G (psf)         SPACING-         2-0-0         CSI.         DEFL.         in (loc)           20.0         Plate Grip DOL         1.25         TC         0.03         Vert(LL)         0.00         4           7.0         Lumber DOL         1.25         BC         0.07         Vert(CT)         0.00         4           0.0         Rep Stress Incr         YES         WB         0.00         Horz(CT)         0.00         4	sets (X,Y)-         [3:0-3-0,Edge]           G (psf)         SPACING-         2-0-0         CSI.         DEFL.         in (loc)         l/defl           20.0         Plate Grip DOL         1.25         TC         0.03         Vert(LL)         0.00         4         n/r           7.0         Lumber DOL         1.25         BC         0.07         Vert(CT)         0.00         4         n/r           0.0         *         Rep Stress Incr         YES         WB         0.00         Horz(CT)         0.00         4         n/a	Sets (X,Y)-         [3:0-3-0,Edge]           G (psf)         SPACING-         2-0-0         CSI.         DEFL.         in (loc)         l/defl         L/d           20.0         Plate Grip DOL         1.25         TC         0.03         Vert(LL)         0.00         4         n/r         120           7.0         Lumber DOL         1.25         BC         0.07         Vert(CT)         0.00         4         n/r         120           0.0         Rep Stress Incr         YES         WB         0.00         Horz(CT)         0.00         4         n/a         n/a	Sets (X,Y)-   [3:0-3-0,Edge]     SPACING- 2-0-0   CSI.   DEFL.   in (loc)   l/defl   L/d   PLATES

**BRACING-**

TOP CHORD

**BOT CHORD** 

2x4 =

Structural wood sheathing directly applied or 4-2-0 oc purlins.

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

LUMBER-

TOP CHORD 2x4 SP No.2

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

REACTIONS. (size) 2=2-5-11, 4=2-5-11

Max Horz 2=-26(LC 10) Max Uplift 2=-30(LC 12), 4=-30(LC 13)

Max Grav 2=121(LC 1), 4=121(LC 1)

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

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

2x4 =

- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

🔈 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

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



MARTIN EXT - SPEC HSE Ply Job Truss Truss Type Qty T20618209 2292651 PB03 Piggyback Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:16:55 2020 Page 1 Jacksonville, FL - 32244. Builders FirstSource. ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-twcPp6DcT1\_W8cBexqc6V35tIASFE7l9SP0Tanz0PbM Scale = 1:8.3 4x4 = 3 7.00 12 4 2 5 0-1-10 0-1-10 6 2x4 II 2x4 = 2x4 = 4-2-0 LOADING (psf) SPACING-CSI. DEFL PLATES 2-0-0 GRIP in (loc) I/defl 1 /d Plate Grip DOL 0.02 TCLL 20.0 1.25 TC Vert(LL) 0.00 244/190 n/r 120 MT20 BC TCDL 7.0 1.25 0.02 0.00 120 Lumber DOL Vert(CT) n/r Rep Stress Incr BCLL 0.0 YES WB 0.01 Horz(CT) 0.00 n/a n/a Code FBC2017/TPI2014 BCDL 10.0 Matrix-P Weight: 11 lb FT = 20%BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

REACTIONS.

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

WEBS 2x4 SP No.3

(size) 2=2-5-11, 4=2-5-11, 6=2-5-11

Max Horz 2=-26(LC 10)

Max Uplift 2=-28(LC 12), 4=-30(LC 13), 6=-4(LC 12)

Max Grav 2=82(LC 1), 4=82(LC 1), 6=78(LC 1)

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

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

2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Gable requires continuous bottom chord bearing.

- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 6.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



Structural wood sheathing directly applied or 4-2-0 oc purlins.

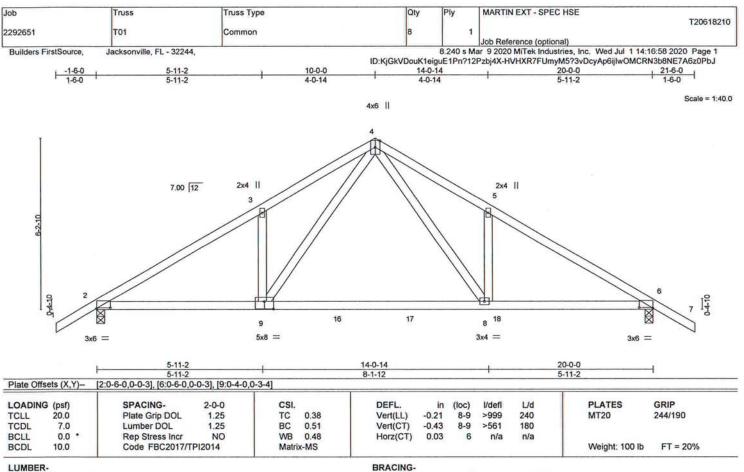
Rigid ceiling directly applied or 10-0-0 oc bracing.

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

July 2,2020

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TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2 2x4 SP M 31

BOT CHORD 2x4 SP No.3 WEBS

REACTIONS.

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

Max Horz 2=209(LC 11) Max Uplift 2=-438(LC 12), 6=-443(LC 13) Max Grav 2=1069(LC 19), 6=1080(LC 20)

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

TOP CHORD 2-3=-1691/699, 3-4=-1751/846, 4-5=-1782/861, 5-6=-1715/708

2-9=-547/1527, 8-9=-273/973, 6-8=-481/1417 **BOT CHORD** 

WEBS 4-8=-497/1011, 5-8=-329/293, 4-9=-477/976, 3-9=-326/290

# NOTES-

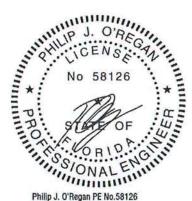
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=438, 6=443,
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Vert: 1-4=-54, 4-7=-54, 9-10=-20, 9-18=-80(F=-60), 13-18=-20



Structural wood sheathing directly applied or 4-3-7 oc purlins.

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

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

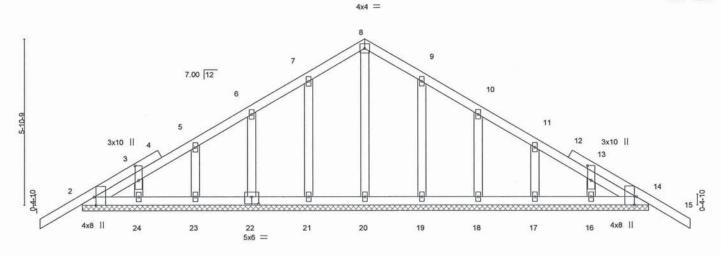
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Job	Truss	Truss Type	Qty	Ply	MARTIN EXT - SPEC HSE	
2292651	T01G	Common Supported Gable				T20618211
2292051	1016	Common Supported Gable	1	1	Job Reference (optional)	
Builders FirstSource	, Lake City, FL 32055				Apr 4 2020 MiTek Industries, Inc. Thu Jul 2	
			ID:KjGkVDoul	(1eiguE1Pn	?12Pzbj4X-6qm7JPUKX9og_qotlWcslJqxml	UtpjLOeGSg91mz0CAd

Scale = 1:39.3

1-6-0



			12.00		terne -	20-0-0			NUMBER OF STREET		1		
Plate Offs	sets (X,Y)	[2:0-3-8,Edge], [3:0-6-4,0	-1-8], [13:0-6-4	,0-1-8], [14:0	-3-8,Edge], [	[22:0-3-0,0-3-0]							
OADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defi	L/d		PLATES	GRIP
CLL	20.0	Plate Grip DOL	1.25	TC	0.14	Vert(LL)	-0.01	15	n/r	120		MT20	244/190
CDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.01	15	n/r	120			
CLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	14	n/a	n/a			
CDL	10.0	Code FBC2017/T	PI2014	Matri	c-S	\$2.357						Weight: 114 lb	FT = 20%

20-0-0

LUMBER-

TOP CHORD 2x4 SP No.2

1-6-0

BOT CHORD 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.

10-0-0

REACTIONS. All bearings 20-0-0.

(lb) -Max Horz 2=-198(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 23, 24, 17, 16 except 21=-105(LC 12), 22=-103(LC 12),

19=-103(LC 13), 18=-103(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 14, 20, 21, 22, 23, 24, 19, 18, 17, 16

10-0-0

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

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 23, 24, 17, 16 except (jt=lb) 21=105, 22=103, 19=103, 18=103.

LOAD CASE(S) Standard

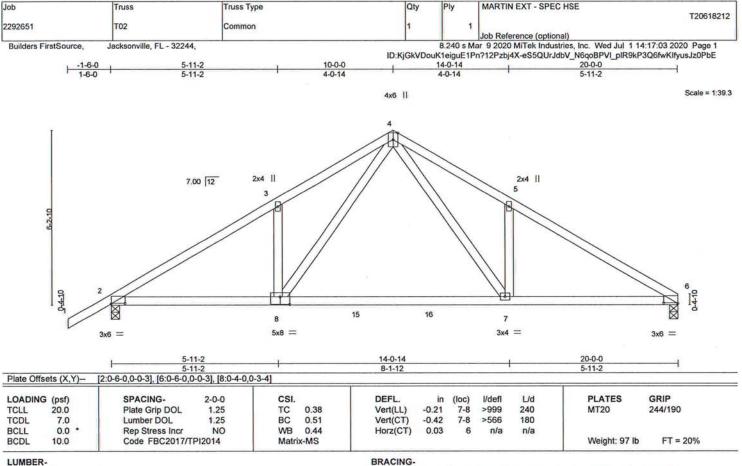


Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

MARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTe& connectors. This design is based only upon 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 
ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

**BOT CHORD** 

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

WEBS 2x4 SP No.3

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

Max Horz 2=160(LC 11)

Max Uplift 6=-216(LC 13), 2=-245(LC 12) Max Grav 6=980(LC 1), 2=1065(LC 1)

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

2-3=-1679/701, 3-4=-1745/849, 4-5=-1752/868, 5-6=-1697/712 TOP CHORD

2-8=-510/1474, 7-8=-262/935, 6-7=-521/1398 BOT CHORD

4-7=-457/979, 5-7=-327/276, 4-8=-432/951, 3-8=-327/268 WEBS

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=216, 2=245.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

# LOAD CASE(S) Standard

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

Vert: 1-4=-54, 4-6=-54, 8-12=-20, 7-8=-80(F=-60), 7-9=-20



Structural wood sheathing directly applied or 4-3-6 oc purlins.

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

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

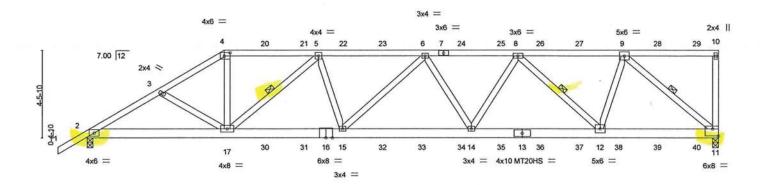
July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIL-7473 rev. 10/03/2015 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 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 <a href="MSITPF1 Quality Criteria">MSITPF1 Quality Criteria</a>, 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	MARTIN EXT - SPEC HSE		
2292651		тоз	Half Hip Girder		1	1		Š	T20618213
2202001		100	Trail Trip Cirder				Job Reference (optional)		
Builders FirstSor	urce, J	acksonville, FL - 32244,				8.240 s M	ar 9 2020 MiTek Industries, Inc. \	Ned Jul 1 14:17:05 2020 F	Page 1
				ID:KjG	kVDouK1eigu	E1Pn?12P	zbj4X-arCBvWLt76E5L8xZWwoSv	AWMcCeJaSydmzR?wCzt	OPbC
1-1-6-0	3-9-12	7-0-0	11-9-7	17-2-10	, 21	-11-5	27-4-9	32-2-0	
1-6-0	3-9-12	3-2-4	4-9-7	5-5-3	4	8-12	5-5-4	4-9-7	

Scale = 1:56.7



	-	7-0-0		3-0-2		19-6-15	- 1-		26-1-		32-2-0	
		7-0-0	' 6	3-0-2	'	6-6-14	,		6-6-1	3	6-0-3	
Plate Offs	ets (X,Y)-	[4:0-3-8,0-2-0], [11:Edge,	0-4-4]									
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defi	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.93	Vert(LL)	0.26 14	4-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.93	Vert(CT)	-0.46 14	4-15	>835	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.86	Horz(CT)	0.11	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TI	PI2014	Matrix	-MS	100.00					Weight: 203 lb	FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No.2

2x6 SP M 26 \*Except\* **BOT CHORD** 

2-16: 2x6 SP No.2

WEBS 2x4 SP No.3

REACTIONS.

(size) 11=0-3-8, 2=0-3-8 Max Horz 2=163(LC 27)

Max Uplift 11=-1103(LC 5), 2=-851(LC 8)

Max Grav 11=2734(LC 1), 2=2391(LC 1)

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

TOP CHORD 2-3=-4274/1612, 3-4=-4112/1601, 4-5=-3581/1424, 5-6=-4912/1917, 6-8=-4816/1860,

8-9=-3051/1167, 10-11=-356/221

**BOT CHORD** 2-17=-1449/3651, 15-17=-1898/4774, 14-15=-2001/5053, 12-14=-1729/4380,

11-12=-1011/2561

WEBS 4-17=-598/1684, 5-17=-1633/672, 5-15=-91/561, 6-14=-474/282, 8-14=-261/871,

8-12=-1854/785, 9-12=-542/1703, 9-11=-3377/1331

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 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)
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 131 lb down and 115 lb up at 7-0-0, 136 lb down and 111 lb up at 9-0-12, 136 lb down and 111 lb up at 11-0-12, 136 lb down and 111 lb up at 13-0-12, 136 lb down and 111 lb up at 15-0-12, 136 lb down and 111 lb up at 17-0-12, 136 lb down and 111 lb up at 19-1-0, 136 lb down and 111 lb up at 21-1-3, 136 lb down and 111 lb up at 23-1-3, 136 lb down and 111 lb up at 25-1-3, 136 lb down and 111 lb up at 27-1-3, 136 lb down and 111 lb up at 29-1-3, and 135 lb down and 111 lb up at 31-1-3, and 146 lb down and 107 lb up at 32-0-4 on top chord, and 343 lb down and 212 lb up at 7-0-0, 86 lb down and 20 lb up at 9-0-12, 86 lb down and 20 lb up at 11-0-12, 86 lb down and 20 lb up at 13-0-12, 86 lb down and 20 lb up at 15-0-12, 86 lb down and 20 lb up at 17-0-12, 86 lb down and 20 lb up at 19-1-0, 86 lb down and 20 lb up at 21-1-3, 86 lb down and 20 lb up at 25-1-3, 86 lb down and 20 lb up at 25-1-3, 86 lb down and 20 lb up at 27-1-3, and 86 lb down and 20 lb up at 29-1-3, and 88 lb down and 20 lb up at 31-1-3 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).

# No 58126 No 58126 No 58126 No 58126 Phillp J. O'REG O'REGAN

Structural wood sheathing directly applied or 1-9-4 oc purlins,

5-17, 8-12, 9-11

Rigid ceiling directly applied or 5-4-13 oc bracing.

except end verticals.

1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

#### Continued on page 2 LOAD CASE(S) Standard

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent bucking of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and 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 uccliapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSUTPI1 Quality Criteria, DSB-89 and BCSI Building Composafety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	MARTIN EXT - SPEC HSE
2292651	тоз	Half Hip Girder	1	1	T20618213
2232031	100	Train rip Girder			Job Reference (optional)

Builders FirstSource,

Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:05 2020 Page 2 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-arCBvWLt76E5L8xZVwoSvAWMcCeJaSydmzR?wCz0PbC

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-10=-54, 2-11=-20

Concentrated Loads (lb)

Vert: 4=-109(F) 10=-139(F) 17=-336(F) 15=-64(F) 6=-109(F) 9=-109(F) 20=-109(F) 21=-109(F) 22=-109(F) 23=-109(F) 24=-109(F) 25=-109(F) 26=-109(F) 27=-109(F) 28=-109(F) 29=-112(F) 30=-64(F) 31=-64(F) 32=-64(F) 33=-64(F) 34=-64(F) 35=-64(F) 36=-64(F) 37=-64(F) 38=-64(F) 39=-64(F) 40=-65(F)



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

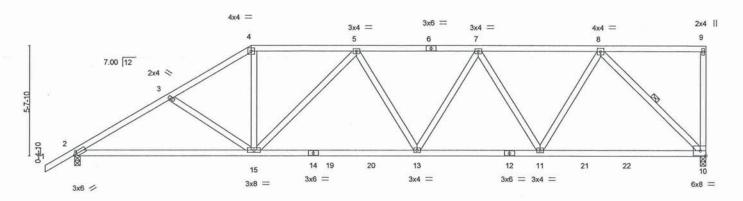
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

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



Job	Truss		Truss Type	Qty	Ply	MARTIN EXT - SPEC HSE		
2292651	T04		Half Hip	1	1	L.		T20618214
	2.500					Job Reference (optional)		
Builders FirstSource,	Jacksonv	ille, FL - 32244,			8,240 s Ma	ar 9 2020 MiTek Industries, I	nc. Wed Jul 1 14:17:06 202	20 Page 1
				ID:KjGkVDouK	1eiguE1Pn?	12Pzbj4X-21mZ7sLVuQMyz	IWI4dJhRO2fjc09J?Vn_dAY	Tez0PbB
1-1-6-0	4-11-4	9-0-0	14-4-8	20-7-0	1	26-9-8	32-2-0	100000000000000000000000000000000000000
1-6-0	4-11-4	4-0-12	5-4-8	6-2-9		6-2-8	5-4-8	

Scale = 1:56.7



	9-0-0			17-5-8			23-8-9			32-2-0		
	9-0-0			8-5-8			6-3-2			8-5-7		
Plate Offse	ets (X,Y)- [	2:0-1-8,0-1-8]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	-0.17 13-15	>999	240	MT20	244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.33 13-15	>999	180			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.08 10	n/a	n/a			
BCDL	10.0	Code FBC2017/T	PI2014	Matrix	-MS	9. 92				Weight: 179 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No.2

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

REACTIONS.

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

Max Horz 2=202(LC 12)

Max Uplift 10=-309(LC 9), 2=-236(LC 9)

Max Grav 10=1183(LC 1), 2=1268(LC 1)

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

TOP CHORD 2-3=-1970/894, 3-4=-1751/812, 4-5=-1473/752, 5-7=-1751/863, 7-8=-1363/655

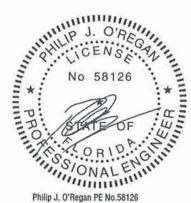
BOT CHORD 2-15=-935/1667, 13-15=-914/1768, 11-13=-835/1656, 10-11=-506/984

WEBS 3-15=-342/227, 4-15=-237/627, 5-15=-422/234, 7-11=-579/356, 8-11=-298/759,

8-10=-1385/720

# NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=309, 2=236.



Structural wood sheathing directly applied or 3-11-12 oc purlins,

8-10

Rigid ceiling directly applied or 6-1-5 oc bracing.

except end verticals

1 Row at midpt

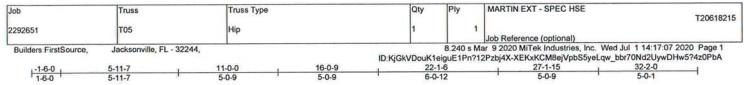
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

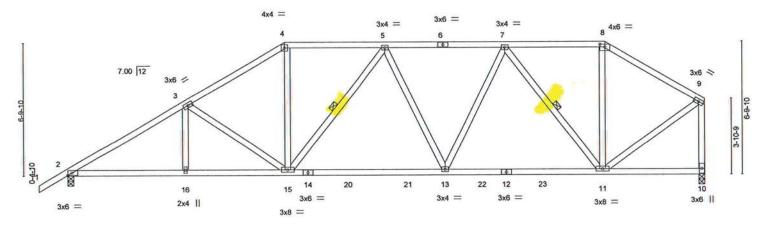
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MIN-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \_\_ANSI/PT/1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





Scale = 1:56.5



	-	5-11-7 5-11-7	11-0-0 5-0-9	1	19-1-0 8-1-0			1-15	32-2-	
Plate Offs	ets (X,Y)-	[8:0-3-0,0-1-12]								
LOADING TCLL TCDL	(psf) 20.0 7.0	SPACING- Plate Grip DOL Lumber DOL	2-0-0 1.25 1.25	CSI. TC 0.35 BC 0.75	DEFL. Vert(LL) Vert(CT)	in (loc) -0.13 13-15 -0.26 13-15	l/defl >999 >999	L/d 240 180	PLATES MT20	GRIP 244/190
BCLL BCDL	0.0 *	Rep Stress Incr Code FBC2017/T	YES PI2014	WB 0.38 Matrix-MS	Horz(CT)	0.06 10	n/a	n/a	Weight: 192 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-TOP CHORD

2x4 SP No.2

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

REACTIONS.

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

Max Horz 2=180(LC 12)

Max Uplift 2=-242(LC 12), 10=-188(LC 8) Max Grav 2=1268(LC 1), 10=1183(LC 1)

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

TOP CHORD 2-3=-1987/877, 3-4=-1611/790, 4-5=-1334/737, 5-7=-1402/754, 7-8=-787/468,

8-9=-972/474, 9-10=-1145/559

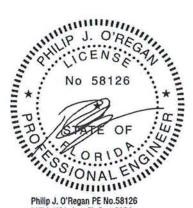
BOT CHORD 2-16=-831/1656, 15-16=-831/1656, 13-15=-687/1468, 11-13=-583/1258 WEBS 3-15=-510/278, 4-15=-223/556, 5-15=-321/181, 7-13=-95/406, 7-11=-811/409,

8-11=-53/291, 9-11=-399/947

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=242, 10=188.



Structural wood sheathing directly applied or 3-10-12 oc purlins,

5-15, 7-11

Rigid ceiling directly applied or 6-5-2 oc bracing.

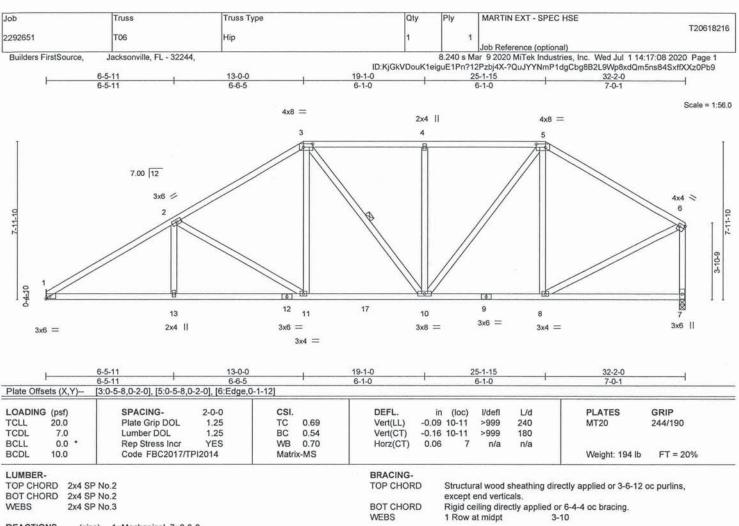
except end verticals.

1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020





REACTIONS.

(size) 1=Mechanical, 7=0-3-8

Max Horz 1=185(LC 9)

Max Uplift 1=-225(LC 12), 7=-184(LC 13) Max Grav 1=1185(LC 1), 7=1185(LC 1)

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown. TOP CHORD 1-2=-1999/875, 2-3=-1497/740, 3-4=-1220/714, 4-5=-1220/714, 5-6=-1096/532,

6-7=-1120/559

**BOT CHORD** 1-13=-827/1667, 11-13=-827/1667, 10-11=-523/1214, 8-10=-351/860

2-13=0/273, 2-11=-628/354, 3-11=-135/481, 4-10=-370/263, 5-10=-287/635,

5-8=-289/216, 6-8=-368/930

# NOTES-

**WEBS** 

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

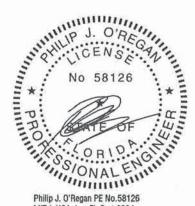
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.

6) Refer to girder(s) for truss to truss connections.

7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=225, 7=184.



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

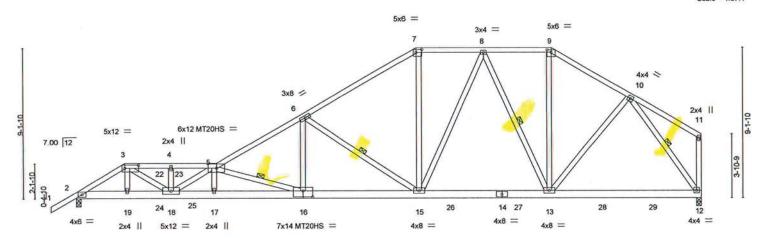
July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent ucliapse 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/P11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Truss Type Qty MARTIN EXT - SPEC HSE Job Truss Ply T20618217 2292651 T07 Roof Special Girder Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:10 2020 Page 1 Builders FirstSource, Jacksonville, FL - 32244 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-xp04yEO0xetOSvqXJTNdcEDFdDR5FiyMvF8mcPz0Pb7 20-6-0 6-10-0 24-7-0 4-1-0 28-7-15 33-3-7 4-7-8 37-8-0

Scale = 1:67.1



	3-0-	0 , 5-9-0 , 8-6-0	1 13-8	-0 1 20-6	-0	28-7-15		37-8-0	
	3-0-	0 2-9-0 2-9-0	5-2	0 6-10	-0	8-1-15		9-0-1	
Plate Off:	sets (X,Y)-	[3:0-10-0,0-2-4], [7:0-4-0,	,0-2-4], [9:0-3-0	,0-1-12], [16:0-7-0,0-4-8]					
LOADING	G (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc) I/de	efi L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC 0.79	Vert(LL)	-0.31 16-17 >99	99 240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.57	Vert(CT)	-0.57 16-17 >78	180	MT20HS	187/143
BCLL BCDL	0.0 *	Rep Stress Incr Code FBC2017/T	NO PI2014	WB 0.94 Matrix-MS	Horz(CT)	0.09 12 n	la n/a	Weight: 272 lb	FT = 20%

BRACING-

WEBS

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x6 SP No.2 \*Except\* 2-16: 2x6 SP M 26

2-16: 2x6 SP M 26

WEBS 2x4 SP No.3

REACTIONS.

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

Max Horz 2=229(LC 24)

Max Uplift 2=-498(LC 8), 12=-251(LC 9) Max Grav 2=1926(LC 1), 12=1462(LC 1)

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

TOP CHORD 2-3=-3439/869, 3-4=-5024/1235, 4-5=-5024/1235, 5-6=-3465/762, 6-7=-1981/443,

7-8=-1631/433, 8-9=-1181/291, 9-10=-1430/313 BOT CHORD 2-19=-892/2931, 18-19=-894/2952, 17-18=-1560/6204, 16-17=-1564/6207,

15-16=-737/2970, 13-15=-259/1454, 12-13=-160/903

WEBS 3-19=-32/269, 3-18=-554/2459, 5-16=-3420/873, 6-16=-258/1301, 6-15=-1633/504,

7-15=-103/671, 8-15=-154/484, 8-13=-720/229, 9-13=-97/496, 10-13=-114/487,

10-12=-1549/280, 5-18=-1497/432

# NOTES-

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

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 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=498, 12=251.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 76 lb down and 66 lb up at 3-0-0, and 76 lb down and 62 lb up at 5-0-12, and 87 lb down and 62 lb up at 5-5-4 on top chord, and 92 lb down and 19 lb up at 3-0-0, and 30 lb down at 5-0-12, and 446 lb down and 103 lb up at 5-5-4 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).

# LOAD CASE(S) Standard

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



Structural wood sheathing directly applied, except end verticals.

5-16, 6-15, 8-13, 10-12

Rigid ceiling directly applied or 7-11-9 oc bracing.

1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

# Continued on page 2



Job	Truss	Truss Type	Qty	Ply	MARTIN EXT - SPEC HSE
000054	707	0-10-10-1-			T20618217
2292651	Т07	Roof Special Girder	1	31	Job Reference (optional)

Builders FirstSource,

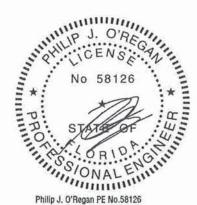
Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:10 2020 Page 2 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-xp04yE00xetOSvqXJTNdcEDFdDR5FiyMvF8mcPz0Pb7

# LOAD CASE(S) Standard

Uniform Loads (plf) Vert: 1-3=-54, 3-5=-54, 5-7=-54, 7-9=-54, 9-11=-54, 2-12=-20

Concentrated Loads (lb) Vert: 3=-6(F) 19=-19(F) 22=-6(F) 23=-46(F) 24=-8(F) 25=-446(F)



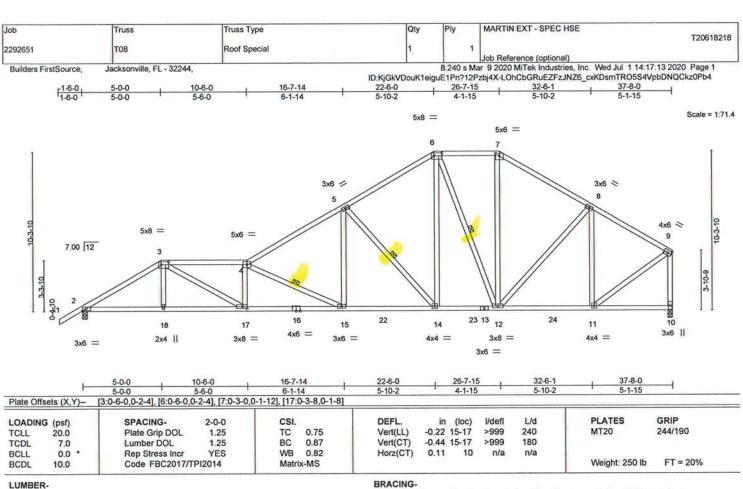
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

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

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent 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 truss systems, see \*\*AMSI/PTI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

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

2x4 SP No.3 WEBS

REACTIONS. (size) 2=0-3-8, 10=0-3-8 Max Horz 2=258(LC 9)

Max Uplift 2=-336(LC 12), 10=-236(LC 13) Max Grav 2=1471(LC 1), 10=1387(LC 1)

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

TOP CHORD

2-3=-2402/1042, 3-4=-3465/1568, 4-5=-2374/1081, 5-6=-1534/814, 6-7=-1138/687, 7-8=-1343/724, 8-9=-1154/537, 9-10=-1343/623

2-18=-979/2015, 17-18=-978/2020, 15-17=-1616/3499, 14-15=-881/2029,

**BOT CHORD** 

12-14=-473/1276, 11-12=-400/949

3-17=-717/1658, 4-17=-710/393, 4-15=-1679/818, 5-15=-324/875, 5-14=-1140/615, WEBS

6-14=-424/995, 6-12=-532/209, 7-12=-177/456, 8-12=-108/281, 8-11=-563/326,

9-11=-484/1155

#### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=336, 10=236.



Structural wood sheathing directly applied or 2-2-0 oc purlins,

4-15, 5-14, 6-12

Rigid ceiling directly applied or 4-7-13 oc bracing.

except end verticals.

1 Row at midpt

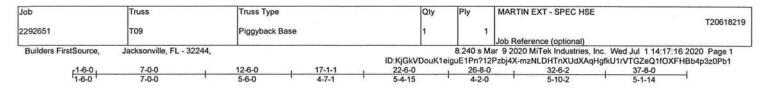
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

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





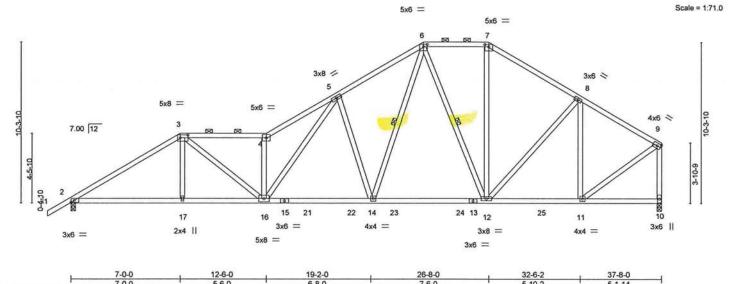


Plate Offs	sets (X,Y)-	[3:0-6-0,0-2-4], [6:0-3-0,0	)-1-12], [7:0-3-0	),0-1-12]		·						
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	-0.22	14-16	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.79	Vert(CT)	-0.41	14-16	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matri	x-MS					17000-1	Weight: 246 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

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

REACTIONS.

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

Max Horz 2=258(LC 9)

Max Uplift 2=-336(LC 12), 10=-236(LC 13)

Max Grav 2=1471(LC 1), 10=1387(LC 1)

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

TOP CHORD 2-3=-2326/1009, 3-4=-2753/1284, 4-5=-3304/1589, 5-6=-1968/1038, 6-7=-1133/687,

7-8=-1350/724, 8-9=-1152/539, 9-10=-1341/625

**BOT CHORD** 

2-17=-919/1950, 16-17=-919/1956, 14-16=-848/1993, 12-14=-478/1297, 11-12=-401/955 3-17=0/261, 3-16=-438/1084, 4-16=-1862/960, 5-16=-784/1599, 5-14=-989/622, WEBS

6-14=-581/1280, 6-12=-504/223, 7-12=-176/477, 8-12=-105/286, 8-11=-570/323,

9-11=-486/1165

#### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=336, 10=236.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

6-14, 6-12

2-0-0 oc purlins (2-9-15 max.): 3-4, 6-7.

1 Row at midpt

Rigid ceiling directly applied or 5-10-15 oc bracing.

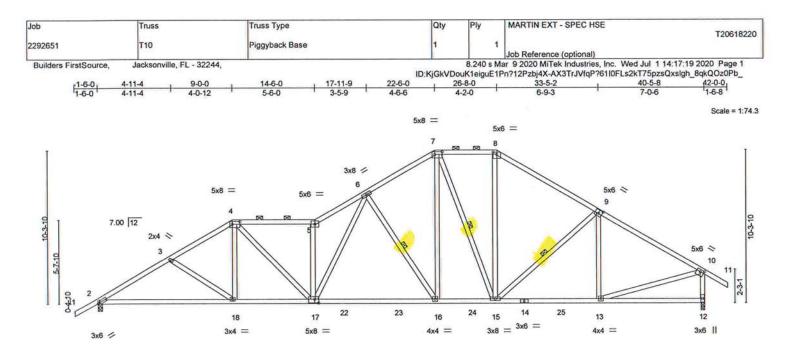
Philip J. O'Regan PE No.58126 MITek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

July 2,2020

🞪 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent 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

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	4	9-0-0	14-6-	0 1	22-6-0	1	26-8-0	)	3	33-5-2	40-5-8	
		9-0-0	5-6-1	0 1	8-0-0		4-2-0	1		6-9-3	7-0-6	
Plate Offse	ets (X,Y)-	[2:0-1-8,0-1-8], [4:0-6-0,0	-2-4], [7:0-6-0,0	)-2-4], [8:0-3	3-0,0-1-12], [9:0-	3-0,0-3-0], [10:	0-3-0,0-	1-12], [	17:0-3-4,	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	0.68	Vert(LL)	-0.29	16-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	- BC	0.91	Vert(CT)	-0.55	16-17	>876	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.97	Horz(CT)	0.10	12	n/a	n/a	Oracle Anna Service Anna Marie Co.	
BCDL	10.0	Code FBC2017/TI	PI2014	Matr	ix-MS						Weight: 269 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

1 Row at midpt

WEBS

LUMBER-

REACTIONS.

2x4 SP No.2

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

WEBS 2x4 SP No.3

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

Max Horz 2=299(LC 11)

Max Uplift 2=-356(LC 12), 12=-300(LC 13) Max Grav 2=1572(LC 1), 12=1583(LC 1)

FORCES. (ib) - Max. Comp./Max. Ten. - All forces 250 (ib) or less except when shown. TOP CHORD 2-3=-2564/1161, 3-4=-2338/1084, 4-5=-2594/1262, 5-6=-3048/1517, 6-7=-1778/962,

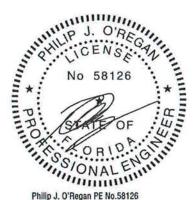
7-8=-1389/831, 8-9=-1670/880, 9-10=-1770/817, 10-12=-1520/773 2-18=-983/2216, 17-18=-804/1988, 16-17=-797/2052, 15-16=-484/1532, 13-15=-562/1450 3-18=-332/217, 4-18=-79/353, 4-17=-391/922, 5-17=-1722/915, 6-17=-669/1375, **BOT CHORD** WEBS

6-16=-1005/595, 7-16=-462/1093, 7-15=-470/144, 8-15=-230/577, 9-15=-278/190,

9-13=-259/204, 10-13=-543/1443

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-2-10 oc purlins,

except end verticals, and 2-0-0 oc purlins (2-10-4 max.): 4-5, 7-8. Rigid ceiling directly applied or 5-11-8 oc bracing.

6-16, 7-15, 9-15

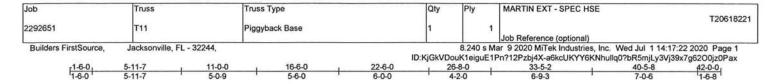
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

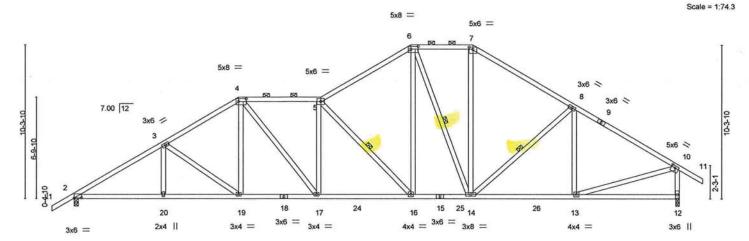
July 2,2020

MARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 

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	1	5-11-7	1-0-0	16-6-0	- 1	22-6-0	26-8-0	) 1		33-5-2	40-5-8	317
		5-11-7	5-0-9	5-6-0		6-0-0	4-2-0	- 1		6-9-3	7-0-6	1
Plate Offse	ets (X,Y)-	[2:0-6-0,0-0-3], [4:0-6-0,0	0-2-4], [6:0-6-0	),0-2-4], [7:0-3	-0,0-1-12], [1	10:0-3-0,0-1-12]						
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.63	Vert(LL)	-0.16	16-17	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.33	16-17	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.10	12	n/a	n/a		
BCDL	10.0	Code FBC2017/1	PI2014	Matri	x-MS	180 6					Weight: 269 lb	FT = 20%

TOP CHORD

BOT CHORD

WEBS

LUMBER-

TOP CHORD 2x4 SP No.2

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

REACTIONS.

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

Max Horz 2=299(LC 11)

Max Uplift 2=-356(LC 12), 12=-300(LC 13)

Max Grav 2=1572(LC 1), 12=1583(LC 1)

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

2-3=-2578/1131, 3-4=-2202/1052, 4-5=-2236/1140, 5-6=-1789/944, 6-7=-1381/832, TOP CHORD

7-8=-1670/882, 8-10=-1768/817, 10-12=-1519/774

**BOT CHORD** 2-20=-946/2191, 19-20=-946/2191, 17-19=-728/1842, 16-17=-909/2244, 14-16=-491/1487,

13-14=-563/1451

3-19=-508/267, 4-19=-123/382, 4-17=-280/667, 5-17=-360/255, 5-16=-1122/618,

6-16=-418/941, 6-14=-459/160, 7-14=-245/575, 8-14=-281/192, 8-13=-259/203,

10-13=-540/1438

# NOTES-

**WEBS** 

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-3-7 oc purlins,

Rigid ceiling directly applied or 6-0-8 oc bracing.

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (3-4-6 max.): 4-5, 6-7.

5-16, 6-14, 8-14

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

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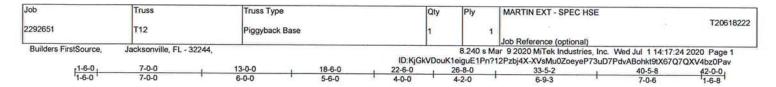
ANSI/TPI1 Quality Criteria, DSB-99 and BCSI Building Composarety Information

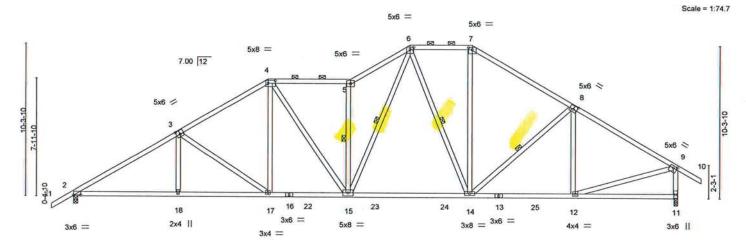
ANSI/TPI1 Quality Criteria, DSB-99 and BCSI Building Composarety Information

ANSI/TPI1 Quality Criteria, DSB-99 and BCSI Building Composarety Information

ANSI/TPI1 Quality Criteria, DSB-99 and BCSI Building Composarety Information







	_	7-0-0	13-0-0	18-6-0	26-8-0	33-5-2	40-5-8	- 4
	- 2	7-0-0	6-0-0	5-6-0	8-2-0	6-9-3	7-0-6	
Plate Offsets	(X,Y)-	[2:0-6-0,0-0-3], [3:0-3-0,0	-3-0], [4:0-6-0,0-	2-4], [6:0-3-0,0-1-12], [7	:0-3-0,0-1-12], [8:0-3-0,0-3-0],			
TCDL	osf) 0.0 7.0 0.0	SPACING- Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.25 1.25 YES	CSI. TC 0.62 BC 0.79 WB 0.64	DEFL. in (loc Vert(LL) -0.26 14-15 Vert(CT) -0.47 14-15 Horz(CT) 0.10 1	>999 240	PLATES MT20	GRIP 244/190
BCDL 10	0.0	Code FBC2017/T	PI2014	Matrix-MS	20.5		Weight: 265 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

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

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

> (size) 2=0-3-8, 11=0-3-0 Max Horz 2=299(LC 11)

Max Uplift 2=-356(LC 12), 11=-300(LC 13)

Max Grav 2=1572(LC 1), 11=1583(LC 1)

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

TOP CHORD

REACTIONS.

2-3=-2545/1115, 3-4=-2078/1015, 4-5=-1964/1036, 5-6=-2347/1289, 6-7=-1378/833,

7-8=-1677/881, 8-9=-1767/820, 9-11=-1517/776

BOT CHORD WEBS

2-18=-917/2228, 17-18=-917/2226, 15-17=-649/1786, 14-15=-493/1499, 12-14=-565/1448

3-18=0/279, 3-17=-614/329, 4-17=-156/447, 4-15=-171/481, 5-15=-1401/830, 6-15=-699/1353, 6-14=-405/165, 7-14=-231/589, 8-14=-271/193, 8-12=-271/201,

9-12=-547/1443

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.

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



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

Rigid ceiling directly applied or 6-0-5 oc bracing.

1 Row at midpt

except end verticals, and 2-0-0 oc purlins (3-6-12 max.): 4-5, 6-7.

5-15, 6-15, 6-14, 8-14

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

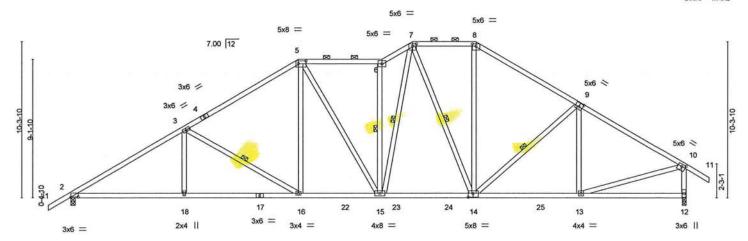
🔼 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly 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



MARTIN EXT - SPEC HSE Job Truss Truss Type Qty Ply T20618223 2292651 T13 Piggyback Base Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:27 2020 Page 1 Jacksonville, FL - 32244, Builders FirstSource, ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-x4YVX2cgxt0z\_WdopYBcopQ9p4CYkUDtpOm9hwz0Pas 20-6-0 5-6-0 22-6-0 33-5-2 6-9-3 26-8-0 40-5-8

Scale = 1:73.2



	1	7-0-9	13-0-0		20-0-0		20-0-0		1	33-3-2	40-5-6	
	1.0	7-5-9	7-6-7		5-6-0		6-2-0			6-9-3	7-0-6	1
Plate Offse	ts (X,Y)-	[2:0-6-0,0-0-3], [5:0-6-0,0	-2-4], [7:0-3-0,0	)-1-12], [8:0-	3-0,0-1-12], [9:	0-3-0,0-3-0], [10	0:0-3-0,0	-1-12],	[14:0-3-1	2,0-3-0]		
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defi	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.82	Vert(LL)	-0.16	14-15	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.29	16-18	>999	180	ALCOHOLD .	
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.10	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TI	PI2014	Matri	x-MS	550000000000					Weight: 272 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

REACTIONS.

**BOT CHORD** 

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

WEBS 2x4 SP No.3

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

Max Horz 2=299(LC 11) Max Uplift 2=-356(LC 12), 12=-300(LC 13) Max Grav 2=1572(LC 1), 12=1583(LC 1)

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

TOP CHORD 2-3=-2542/1114, 3-5=-1965/967, 5-6=-1696/957, 6-7=-2008/1155, 7-8=-1367/836,

8-9=-1672/883, 9-10=-1769/821, 10-12=-1518/776

2-18=-915/2208, 16-18=-915/2208, 15-16=-571/1647, 14-15=-493/1476, 13-14=-565/1449 3-18=0/320, 3-16=-736/400, 5-16=-159/516, 5-15=-147/280, 6-15=-1175/712,

**WEBS** 

7-15=-624/1167, 7-14=-421/157, 8-14=-229/566, 9-14=-280/190, 9-13=-264/204,

10-13=-547/1441

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \*This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=356, 12=300
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied, except end verticals, and

3-16, 6-15, 7-15, 7-14, 9-14

2-0-0 oc purlins (3-10-14 max.): 5-6, 7-8.

1 Row at midpt

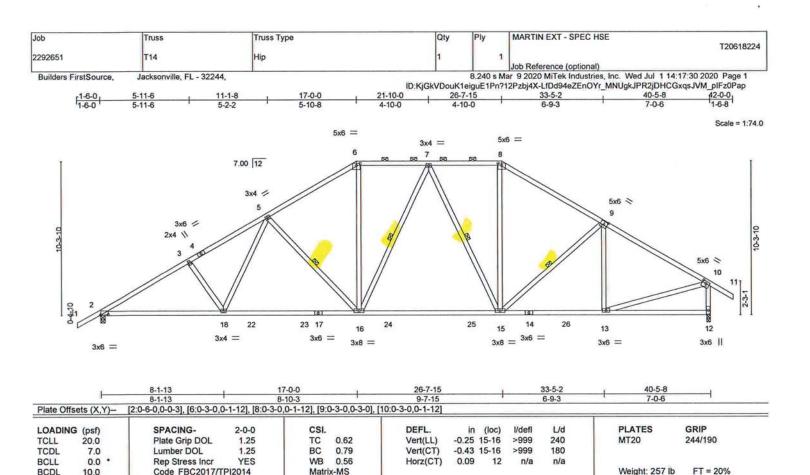
Rigid ceiling directly applied or 6-0-7 oc bracing.

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

July 2,2020

🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with 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 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/TH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20801





BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

2x4 SP No.2

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

14-17: 2x4 SP M 31

WEBS

2x4 SP No.3

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

Max Horz 2=299(LC 11)

Max Uplift 2=-322(LC 12), 12=-300(LC 13) Max Grav 2=1578(LC 19), 12=1583(LC 1)

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

TOP CHORD 2-3=-2573/1127, 3-5=-2438/1137, 5-6=-1833/945, 6-7=-1529/881, 7-8=-1399/835,

8-9=-1697/883, 9-10=-1767/823, 10-12=-1517/778 2-18=-942/2347, 16-18=-740/1991, 15-16=-505/1515, 13-15=-568/1459 **BOT CHORD** 

WEBS 3-18=-319/240, 5-18=-170/503, 5-16=-639/386, 6-16=-275/671, 7-15=-404/201,

8-15=-227/579, 9-15=-273/193, 9-13=-272/200, 10-13=-550/1458

# NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; end vertical right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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=322, 12=300.
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Structural wood sheathing directly applied or 3-3-13 oc purlins,

5-16, 7-16, 7-15, 9-15

except end verticals, and 2-0-0 oc purlins (4-7-11 max.): 6-8.

Rigid ceiling directly applied or 6-0-10 oc bracing.

1 Row at midpt

Philip J. O'Regan PE No.58126 MITek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

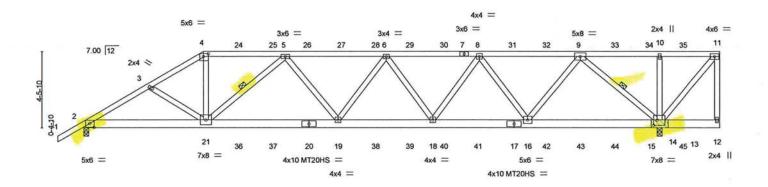
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ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job		Trus	S		Truss Type			Qty	Ply	MARTIN EXT - S	SPEC HSE		
													T20618225
2292651		T15			Half Hip Girder			1	1				
										Job Reference (o	optional)		
Builders FirstS	ource,	Jackso	nville, FL -	32244,			277-33543		8.240 s Ma	r 9 2020 MiTek I	ndustries, Inc. Wed J	Jul 1 14:17:32 202	0 Page 1
							ID:Kj	<b>GkVDouK</b>	1eiguE1Pn	?12Pzbj4X-I2LOa	alfpmPeG4IWlb5nnVs	74?5?APfFczgTw	M8z0Pan
1-1-6-0	3-11-6	7	7-0-0	11-9-7	7	17-8-4	23-1-	11	1	29-0-9	33-8-4	37-2-0	1
1-6-0	3-11-6		3-0-10	4-9-7		5-10-14	5-5-	7	1	5-10-14	4-7-11	3-5-12	

Scale = 1:65.1



		7-0-0	14-10-7		-	20-5-1	25-11-9		33-8		
Dista Office	1- /V V/	7-0-0	7-10-7	0.2.401		5-6-10	5-6-8		7-8-	11 0-1-12	3-4-0
Plate Offse	is (X,Y)-	[2:0-3-0,0-2-11], [4:0-3-8,	,0-2-0], [14:0-2-8	,0-3-12]							
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	0.26 18-19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.38	Vert(CT)	-0.45 19-21	>907	180	MT20HS	187/143
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.10 14	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matrix	K-MS					Weight: 237 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

TOP CHORD 2x4 SP M 31 \*Except\*

1-4: 2x4 SP No.2

BOT CHORD 2x6 SP M 26

WEBS 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 14=(0-3-8 + bearing block) (req. 0-4-0)

Max Horz 2=163(LC 27)

Max Uplift 2=-885(LC 8), 14=-1332(LC 5) Max Grav 2=2488(LC 1), 14=3414(LC 1)

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

TOP CHORD 2-3=-4474/1684, 3-4=-4317/1674, 4-5=-3763/1486, 5-6=-5387/2083, 6-8=-5130/1989,

8-9=-3693/1403

BOT CHORD 2-21=-1511/3819, 19-21=-2013/5019, 18-19=-2159/5465, 16-18=-1827/4635,

14-16=-964/2404

WEBS 4-21=-642/1801, 5-21=-1716/740, 5-19=-144/652, 6-18=-602/306, 8-18=-293/894,

8-16=-1662/748, 9-16=-730/2141, 9-14=-3471/1415, 10-14=-463/270, 11-14=-317/157

#### NOTES-

- 1) 2x6 SP M 26 bearing block 12" long at jt. 14 attached to front face with 3 rows of 10d (0.131"x3") nails spaced 3" o.c. 12 Total fasteners. Bearing is assumed to be SP No.2.
- 2) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=885, 14=1332.



Structural wood sheathing directly applied or 2-7-1 oc purlins,

5-21, 9-14

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

except end verticals.

1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

Continued on page 2



Job	Truss	Truss Type	Qty	Ply .	MARTIN EXT - SPEC HSE T20618225
2292651	T15	Half Hip Girder	1	1	Job Reference (optional)

Builders FirstSource,

Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:32 2020 Page 2 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-I2LOalfpmPeG4IWb5nnVs74?5?APfFczgTwM8z0Pan

#### NOTES-

- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 131 lb down and 115 lb up at 7-0-0, 136 lb down and 111 lb up at 19-0-12, 136 lb down and 111 lb up at 11-0-12, 136 lb down and 111 lb up at 15-0-12, 136 lb down and 111 lb up at 15-0-12, 136 lb down and 111 lb up at 19-0-12, 136 lb down and 111 lb up at 19-0-12, 136 lb down and 111 lb up at 27-0-12, 136 lb down and 111 lb up at 27-0-12, 136 lb down and 111 lb up at 27-0-12, 136 lb down and 111 lb up at 27-0-12, 136 lb down and 111 lb up at 27-0-12, 136 lb down and 111 lb up at 33-0-12, and 136 lb down and 111 lb up at 35-0-12, and 141 lb down and 108 lb up at 37-0-4 on top chord, and 343 lb down and 212 lb up at 7-0-0, 86 lb down and 20 lb up at 9-0-12, 86 lb down and 20 lb up at 11-0-12, 86 lb down and 20 lb up at 13-0-12, 86 lb down and 20 lb up at 15-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 27-0-12, 86 lb down and 20 lb up at 37-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-11=-54, 2-12=-20

Concentrated Loads (lb)

Vert: 4=-109(B) 11=-130(B) 12=-72(B) 20=-64(B) 21=-336(B) 19=-64(B) 8=-109(B) 9=-109(B) 17=-64(B) 15=-64(B) 24=-109(B) 25=-109(B) 26=-109(B) 27=-109(B) 28=-109(B) 30=-109(B) 30=-109(B) 31=-109(B) 32=-109(B) 33=-109(B) 35=-109(B) 35=-109(B) 36=-64(B) 37=-64(B) 38=-64(B) 39=-64(B) 40=-64(B) 41=-64(B) 42=-64(B) 43=-64(B) 44=-64(B) 45=-64(B) 45=-64



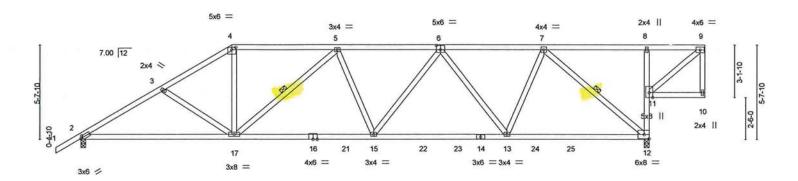
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020



	EXT - SPEC HSE	MARTIN E	Qty		ре	Trus		Truss		Job
T20618		1	1			Half		T16		2292651
	ence (optional)	Job Refere	2			. 100000		1000		
ul 1 14:17:34 2020 Page	MiTek Industries, Inc. Wed J	0 s Mar 9 2020 N	8	542.642			le, FL - 32244,	Jacksonvil	ource,	Builders FirstSo
DRXvZjseavQ y1R0z0Pa	EQT8?Rh3l0u_Kbf8jWpFal-	JE1Pn?12Pzbj4X-	SkVDouK16	ID:Kj						
37-2-0	33-8-4	7-6-11	-1	21-5-0	3-5	1	9-0-0		4-11-4	<sub>1</sub> -1-6-0
3-5-12	6-1-9	5-1-11		6-1-11	-5		4-0-12		4-11-4	1-6-0

Scale = 1:66.2



	T	9-0-0	1	17-5-7		25-4	-9	1	33-8-4	33-10-0 37-	2-0
		9-0-0	,	8-5-6		7-11	-2	1	8-3-11	0-1-12 3-	4-0
Plate Offse	ets (X,Y)-	[2:0-1-8,0-1-8], [4:0-3-0,0	-1-12], [6:0-3-0	,0-3-0]							
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.40	Vert(LL)	-0.17 12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.35 12-13	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.09 12	n/a	n/a		
BCDL	10.0	Code FBC2017/T	PI2014	Matrix	c-MS					Weight: 206 lb	FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

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

WEBS 2x4 SP No.3

REACTIONS.

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

Max Horz 2=202(LC 12) Max Uplift 2=-249(LC 9), 12=-393(LC 9)

Max Grav 2=1317(LC 1), 12=1504(LC 1)

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

2-3=-2075/940, 3-4=-1848/861, 4-5=-1559/796, 5-6=-1923/947, 6-7=-1411/674 **BOT CHORD** 2-17=-975/1747, 15-17=-991/1936, 13-15=-903/1788, 12-13=-571/1130

**WEBS** 3-17=-338/222, 4-17=-239/646, 5-17=-576/261, 6-15=-75/251, 6-13=-632/384,

7-13=-272/779, 7-12=-1556/777, 11-12=-414/243, 8-11=-312/229

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* 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=249, 12=393.



Structural wood sheathing directly applied or 3-10-1 oc purlins,

5-17, 7-12

Rigid ceiling directly applied or 5-11-4 oc bracing.

except end verticals.

1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

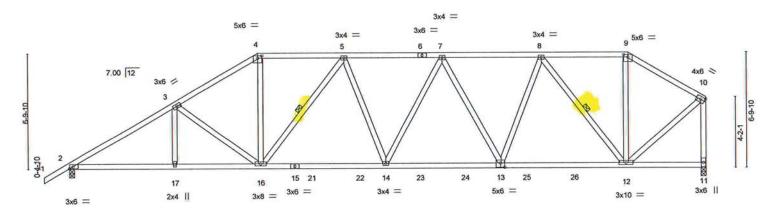
MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guildance 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 20501



Qty MARTIN EXT - SPEC HSE Ply Truss Type Job Truss T20618227 T17 Hip 2292651 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:36 2020 Page 1 Builders FirstSource, Jacksonville, FL - 32244, ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-ApavQ7jKpd8iZvpWqxrjfilnBiGoKZSBulR8Vvz0Paj 37-2-0 4-10-8 5-0-11

Scale = 1:65.1



	6-1-8	11-0-0	18-5-7	25-2-8	32-7-15	37-2-0
0	6-1-8	4-10-8	7-5-7	6-9-0	7-5-7	4-6-1
Plate Offsets (X,Y	- [4:0-3-0,0-1-12	], [9:0-3-0,0-1-12], [13:0	)-3-0,0-3-0]			
LOADING (psf) TCLL 20.0 TCDL 7.0 BCLL 0.0 BCDL 10.0	SPACIN Plate Gr Lumber Rep Stre	ip DOL 1.25 DOL 1.25	CSI. TC 0.39 BC 0.72 WB 0.48 Matrix-MS	DEFL. in (loc) Vert(LL) -0.17 14-16 Vert(CT) -0.32 14-16 Horz(CT) 0.10 11	l/defl L/d >999 240 >999 180 n/a n/a	PLATES GRIP MT20 244/190 Weight: 228 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WEBS

LUMBER-

REACTIONS.

2x4 SP No.2 TOP CHORD

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

(size) 2=0-3-8, 11=0-3-8

Max Horz 2=187(LC 12)

Max Uplift 2=-263(LC 12), 11=-252(LC 8) Max Grav 2=1452(LC 1), 11=1368(LC 1)

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

2-3=-2337/1043, 3-4=-1970/965, 4-5=-1650/887, 5-7=-1943/1017, 7-8=-1704/893, 8-9=-849/492, 9-10=-1035/507, 10-11=-1336/648 TOP CHORD

2-17=-984/1954, 16-17=-984/1954, 14-16=-914/1923, 13-14=-899/1898, 12-13=-701/1490 **BOT CHORD** WEBS

3-16=-505/273, 4-16=-313/741, 5-16=-542/241, 7-13=-460/271, 8-13=-213/645,

8-12=-1084/542, 9-12=-73/336, 10-12=-482/1105

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=263, 11=252.



Structural wood sheathing directly applied or 3-6-2 oc purlins,

5-16. 8-12

Rigid ceiling directly applied or 5-10-13 oc bracing.

except end verticals.

1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

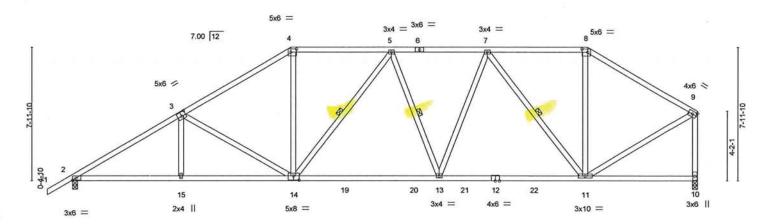
July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly 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



Job	Truss	Truss Type		Qty	Ply	MARTIN EXT - SPEC HSE	
2292651	T18	Hip		1	1		T20618228
		7.50				Job Reference (optional)	
Builders FirstSource,	Jacksonville, FL - 32244,			· · · · · · · · · · · · · · · · · · ·	8.240 s M	ar 9 2020 MiTek Industries, Ir	nc. Wed Jul 1 14:17:37 2020 Page 1
				ID:KjGkVDou	K1eiguE1Pr	n?12Pzbj4X-e?8HdTjyaxGZB	3OjOeMyCwrvk6Zf3zML6yBh2Lz0Pai
<sub>1</sub> -1-6-0 ,	6-5-11	13-0-0	18-11-12	24-8-	3	30-7-15	37-2-0
1-6-0	6-5-11	6-6-5	5-11-12	5-8-	7	5-11-12	6-6-1

Scale = 1:66.2



	-	6-5-11	13-0-0	-		-10-0	-1-		30-7-		37-2-0	
Plate Offs	sets (X,Y)-	6-5-11 [3:0-3-0,0-3-0], [4:0-4-0,0	6-6-5 1-2-4], [8:0-4-0,	0-2-4], [14:0-		10-0			8-10-	0	6-6-1	
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.20	13-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.94	Vert(CT)	-0.37	13-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TI	PI2014	Matrix	c-MS	100					Weight: 224 lb	FT = 20%

TOP CHORD

**BOT CHORD** 

WEBS

LUMBER-

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

2x4 SP No.3 WEBS

REACTIONS.

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

Max Horz 2=201(LC 12)

Max Uplift 2=-277(LC 12), 10=-206(LC 8) Max Grav 2=1452(LC 1), 10=1368(LC 1)

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

TOP CHORD 2-3=-2338/1033, 3-4=-1859/906, 4-5=-1532/854, 5-7=-1643/876, 7-8=-981/585,

8-9=-1217/590, 9-10=-1314/645

**BOT CHORD** 2-15=-975/1957, 14-15=-975/1958, 13-14=-759/1665, 11-13=-670/1492 WEBS

3-15=0/252, 3-14=-626/342, 4-14=-224/622, 5-14=-352/200, 7-13=-100/455,

7-11=-874/423, 8-11=-61/364, 9-11=-457/1115

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=277, 10=206.



Structural wood sheathing directly applied or 3-6-4 oc purlins,

5-14, 5-13, 7-11

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

except end verticals.

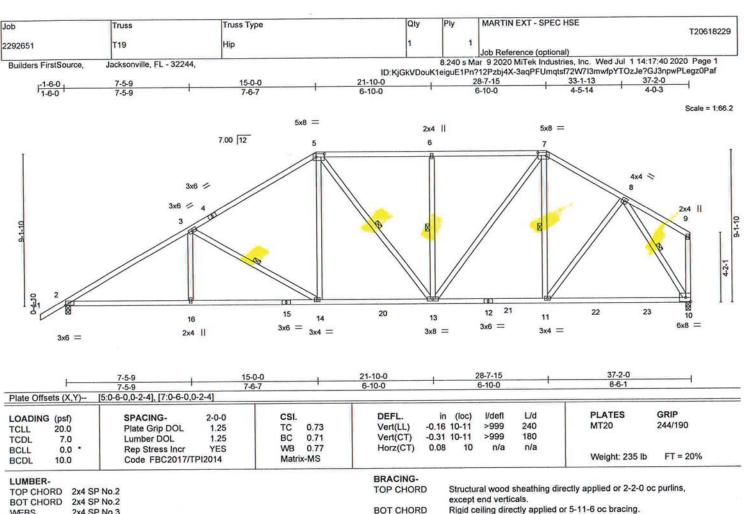
1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 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





WEBS

1 Row at midpt

2x4 SP No.3

REACTIONS.

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

Max Horz 2=229(LC 9)

Max Uplift 2=-290(LC 12), 10=-216(LC 13) Max Grav 2=1452(LC 1), 10=1397(LC 2)

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

2-3=-2309/1007, 3-5=-1732/856, 5-6=-1424/831, 6-7=-1424/831, 7-8=-1280/675 TOP CHORD 2-16=-939/1939, 14-16=-939/1939, 13-14=-593/1403, 11-13=-406/1058, 10-11=-348/760 **BOT CHORD** 

3-16=0/316, 3-14=-738/402, 5-14=-154/558, 6-13=-426/312, 7-13=-328/696, WEBS

8-11=-126/524, 8-10=-1398/663

#### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.

4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=290, 10=216.



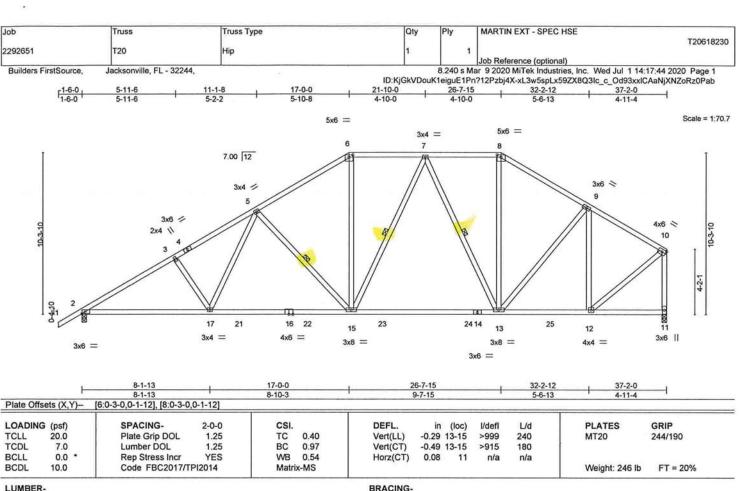
3-14, 5-13, 6-13, 7-11, 8-10

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

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TOP CHORD

**BOT CHORD** 

**WEBS** 

LUMBER-

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

2x4 SP No.3 WEBS

REACTIONS.

(size) 2=0-3-8, 11=0-3-8

Max Horz 2=258(LC 9)

Max Uplift 2=-300(LC 12), 11=-231(LC 13)

Max Grav 2=1469(LC 19), 11=1376(LC 2)

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

2-3=-2362/1010, 3-5=-2227/1020, 5-6=-1599/823, 6-7=-1326/775, 7-8=-1086/666, TOP CHORD 8-9=-1320/703, 9-10=-1075/507, 10-11=-1329/625

2-17=-957/2128, 15-17=-754/1768, 13-15=-491/1258, 12-13=-377/891 **BOT CHORD** WEBS

3-17=-321/242, 5-17=-171/509, 5-15=-641/386, 6-15=-214/554, 7-15=-71/282,

7-13=-501/242, 8-13=-162/433, 9-13=-119/346, 9-12=-615/336, 10-12=-479/1138

# NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=300, 11=231.



Structural wood sheathing directly applied or 3-6-0 oc purlins,

5-15, 7-15, 7-13

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

except end verticals.

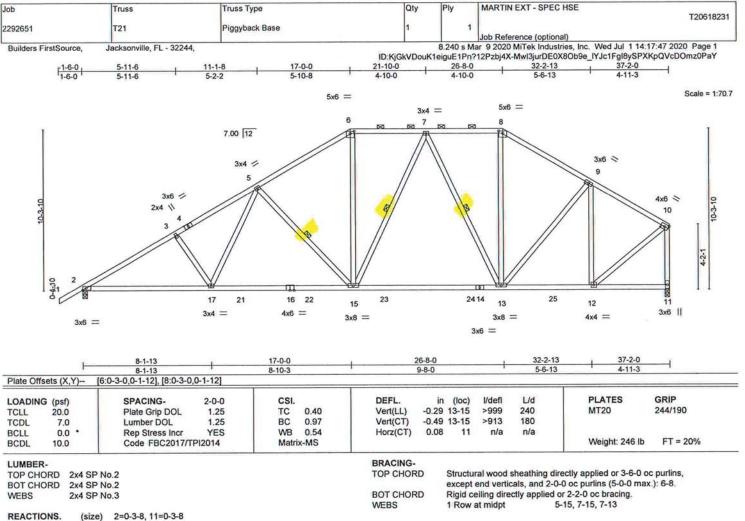
1 Row at midpt

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

July 2,2020

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REACTIONS.

Max Horz 2=258(LC 9)

Max Uplift 2=-300(LC 12), 11=-231(LC 13) Max Grav 2=1469(LC 19), 11=1376(LC 2)

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

2-3=-2362/1010, 3-5=-2227/1020, 5-6=-1599/823, 6-7=-1326/775, 7-8=-1086/666, TOP CHORD

8-9=-1320/703, 9-10=-1075/507, 10-11=-1329/625

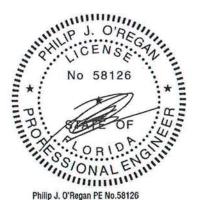
2-17=-957/2128, 15-17=-754/1768, 13-15=-491/1259, 12-13=-377/891 **BOT CHORD** 3-17=-321/241, 5-17=-171/509, 5-15=-640/386, 6-15=-214/555, 7-15=-71/282, WEBS

7-13=-501/242, 8-13=-162/433, 9-13=-119/346, 9-12=-616/336, 10-12=-479/1138

### NOTES-

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

- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl. GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)
- 7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

July 2,2020

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with 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/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



MARTIN EXT - SPEC HSE Job Truss Truss Type Qty T20618232 2292651 T22 Common Job Reference (optional) Builders FirstSource. Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:49 2020 Page 1 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-IJtp8ZtUldnsdvJ059anhSK0YyoPtRP6tp5KTez0PaW 4-10-2 11-4-0 4-8-14 1-9-0 Scale = 1:37.0 4x6 || 2x4 || 7.00 12 2x4 \ 3 7 3x6 = 6x8 = 11-4-0 7-0-9 Plate Offsets (X,Y)-[2:0-6-0,0-0-7] LOADING (psf) SPACING-2-0-0 CSI. DEFL. I/defl L/d **PLATES** GRIP Plate Grip DOL TCLL 20.0 1.25 TC 0.35 Vert(LL) 0.13 7-10 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1 25 BC 0.37 Vert(CT) -0.117-10 >999 180 BCLL 0.0 Rep Stress Incr YES WB 0.50 Horz(CT) -0.01 6 n/a n/a Code FBC2017/TPI2014 BCDL 10.0 Matrix-MS Weight: 68 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

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

WEBS 2x4 SP No.2

REACTIONS.

(size) 2=0-3-8, 6=Mechanical, 6=Mechanical

Max Horz 2=283(LC 12)

Max Uplift 2=-186(LC 12), 6=-213(LC 12)

Max Grav 2=500(LC 1), 6=409(LC 1), 6=409(LC 1)

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

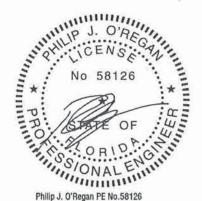
TOP CHORD 2-3=-513/510, 3-4=-368/483

BOT CHORD 2-7=-614/466

WEBS 3-7=-330/309, 4-7=-678/375, 4-6=-382/512

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=186, 6=213.



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

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

except end verticals.

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020

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MARTIN EXT - SPEC HSE Job Truss Truss Type Qty T20618233 GABLE T22G 2292651 Job Reference (optional) 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:51 2020 Page 1 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-Eh\_aZFukHE1ZsCTPDacFmtQLUIVpLMsPK7aQXXz0PaU Jacksonville, FL - 32244, Builders FirstSource, 9-7-0 11-4-0 Scale = 1:37.0 5x6 || 4x6 II 5 7.00 12 3×4 / 3 8 5x8 / 3x4 = 6x8 Plate Offsets (X,Y)-- [2:0-4-1,0-1-12], [5:0-0-12,0-2-8] PLATES GRIP I/defl L/d SPACING-2-0-0 CSI. DEFL in (loc) LOADING (psf) 240 MT20 244/190 20.0 Plate Grip DOL 1.25 TC 0.39 Vert(LL) 0.09 8-20 >999 TCLL Lumber DOL 1.25 BC 0.31 Vert(CT) 0.08 8-20 >999 180 7.0 TCDL WB 0.44 Horz(CT) -0.01 n/a Rep Stress Incr YES BCLL 0.0 Code FBC2017/TPI2014 Matrix-MS Weight: 89 lb FT = 20%BCDL 10.0

> BRACING-TOP CHORD

> **BOT CHORD**

LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

REACTIONS.

(size) 2=0-3-8, 7=0-3-8

Max Horz 2=266(LC 12)

Max Uplift 2=-196(LC 12), 7=-204(LC 12)

Max Grav 2=504(LC 1), 7=402(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-4=-525/546, 4-5=-379/492

BOT CHORD 2-8=-663/503

WEBS 4-8=-352/344, 5-8=-658/363, 5-7=-369/488

### NOTES-

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 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) except (jt=lb) 2=196, 7=204.



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

Rigid ceiling directly applied or 6-9-8 oc bracing.

Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

July 2,2020



Job Truss Truss Type Qty Ply MARTIN EXT - SPEC HSE T20618234 TG01 FLAT GIRDER 2292651 Job Reference (optional) Builders FirstSource, Jacksonville, FL - 32244, 8.240 s Mar 9 2020 MiTek Industries, Inc. Wed Jul 1 14:17:53 2020 Page 1 ID:KjGkVDouK1eiguE1Pn?12Pzbj4X-A46K\_xw\_psHH6WcoK?fjrlVkSZB3pJhhoR3XcQz0PaS Scale = 1:25.0 2x4 || 3x4 = 1 3x4 = 2 3 7 8 5 3v8 = 11 2x4 || 2x4 3-1-12 6-3-8 3-1-12 3-1-12 LOADING (psf) SPACING-2-0-0 CSI. DEFL in l/defi L/d **PLATES** GRIP (loc) TCLL 20.0 Plate Grip DOL 1.25 TC 0.23 Vert(LL) -0.01 5-6 >999 240 MT20 244/190 TCDL 7.0 Lumber DOL 1.25 BC 0.19 Vert(CT) -0.01 5-6 >999 180 BCLL 0.0 Rep Stress Incr NO WB 0.23 Horz(CT) -0.004 n/a n/a BCDL 10.0 Code FBC2017/TPI2014 Matrix-MP Weight: 51 lb FT = 20%BRACING-LUMBER-Structural wood sheathing directly applied or 6-0-0 oc purlins, TOP CHORD 2x4 SP No.2 TOP CHORD 2x6 SP No.2 BOT CHORD except end verticals.

BOT CHORD

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

WEBS 2x4 SP No.3

REACTIONS.

(size) 6=0-3-8, 4=0-3-8

Max Horz 6=-131(LC 4) Max Uplift 6=-387(LC 4), 4=-375(LC 5)

Max Grav 6=642(LC 1), 4=619(LC 1)

Wax 6144 0-042(E0 1), 4-010(E0 1)

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

TOP CHORD 1-6=-526/318, 1-2=-381/211, 2-3=-381/211, 3-4=-526/318

WEBS 1-5=-373/598, 3-5=-373/598

### NOTES-

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ff; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); end vertical left and right exposed; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=387, 4=375.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 409 lb down and 213 lb up at 2-0-12, and 409 lb down and 213 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

### LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 4-6=-20

Concentrated Loads (lb)

Vert: 7=-409(B) 8=-409(B)



Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

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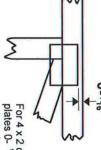


### Symbols

## PLATE LOCATION AND ORIENTATION



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



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

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

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

### PLATE SIZE



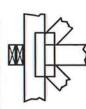
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### BEARING



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

### Industry Standards: ANSI/TPI1: National C

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

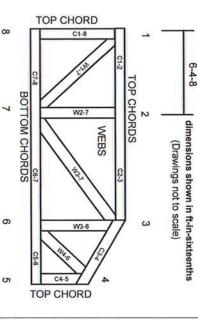
DSB-89: Design Standard for Bracing.

BCSI: Building Component Safety Information

Guide to Good Practice for Handling,

Guide to Good Practice for Handling, Installing & Bracing of Metal Plate 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

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

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

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

# **General Safety Notes**

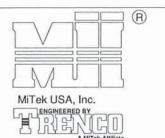
# Failure to Follow Could Cause Property Damage or Personal Injury

- 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.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- 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.
- 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 specified.
- 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 environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- 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.

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

MII-T-BRACE 2

MiTek USA, Inc. Page 1 of 1



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

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

Nailing Pattern							
T-Brace size	Nail Size	Nail Spacing					
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.					

Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)

Nails	
WEB SPACING	
T-BRAC	CE
Nails Section Detail  T-Brace  Web	>

Nails —	
Web	I-Brace
Nails	

	Brace Size for One-Ply Truss					
	Specified Continuous Rows of Lateral Bracing					
Web Size	1	2				
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace				
2x6	2x6 T-Brace	2x6 I-Brace				
2x8	2x8 T-Brace	2x8 I-Brace				

9	Brace Size for Two-Ply Truss					
	Specified Continuous Rows of Lateral Bracing					
Web Size	1	2				
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace				
2x6	2x6 T-Brace	2x6 I-Brace				
2x8	2x8 T-Brace	2x8 I-Brace				

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



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

### SCAB-BRACE DETAIL

### MII-SCAB-BRACE

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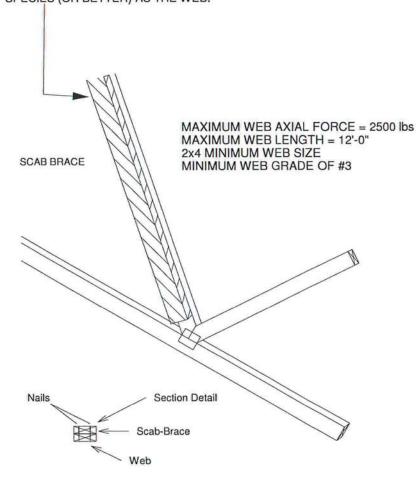
Page 1 of 1



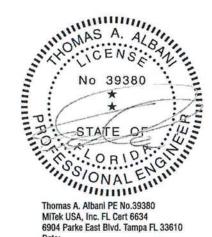
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical. Scab must cover full length of web +/- 6".

\*\*\* THIS DETAIL IS NOT 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.



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

MII-REP05

MiTek USA, Inc. Page 1 of 1



(40

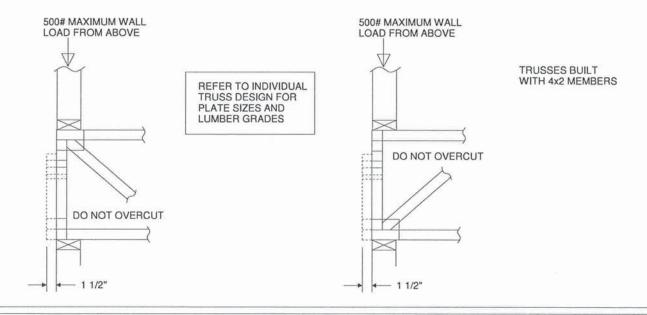
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS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

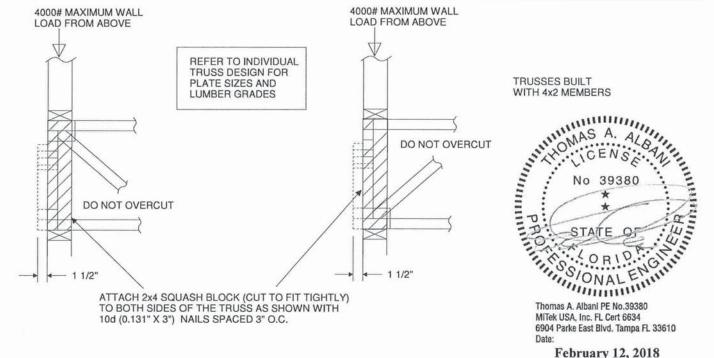
2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE APPLYING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.

3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE

SUCH AS TO AVOID SPLITTING OF THE WOOD.

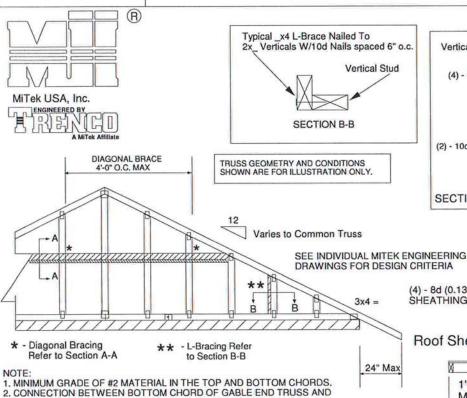
4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.
5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X\_ORIENTATION ONLY.
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.





### Standard Gable End Detail

MII-GE130-D-SP



Page 1 of 2 MiTek USA, Inc. Vertical Stud DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails SECTION A-A

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

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

(2) - 10d

NAILS

Roof Sheathing

1'-3"

Max.

Diag. Brace

at 1/3 points

End Wall

if needed

- WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.

  3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG.
  ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
- 4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB

OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C. 5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C. 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A

2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4.

(REFER TO SECTION A-A)
GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

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

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

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

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



(2) - 10d NAILS

Trusses @ 24" o.c.

2x6 DIAGONAL BRACE SPACED 48" O.C.

ATTACHED TO VERTICAL WITH (4) -16d

HORIZONTAL BRACE

(SEE SECTION A-A)

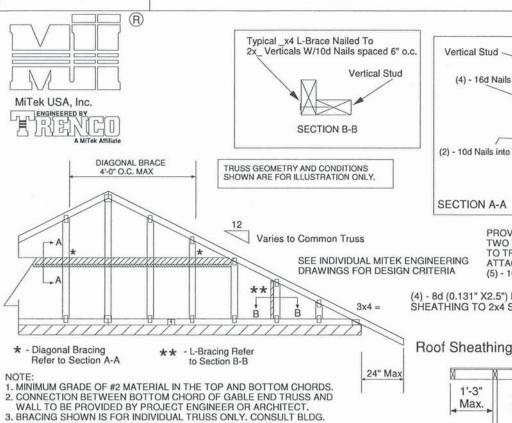
TO BLOCKING WITH (5) - 10d NAILS.

NAILS AND ATTACHED

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

### Standard Gable End Detail

### MII-GE130-SP



MiTek USA, Inc. Page 1 of 2 Vertical Stud DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better Typical Horizontal Brace Nailed To 2x\_Verticals w/(4)-10d Nails

2x4 Stud

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" X2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

(2) - 10d

NAILS

SECTION A-A

1'-3"

Max.

End Wall

ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.

4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C

 DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
 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.

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

C.	
Diag. Brac at 1/3 poin if needed	
End W	la

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

(2) - 10d NAILS

Trusses @ 24" o.c.

HORIZONTAL BRACE (SEE SECTION A-A)

Minimum Stud Size	Stud Spacing	Without Brace	1x4 L-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.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6		
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1		
2x4 SP No. 3 / Stud	24" O.C.	3-0-10	3-1-12	4-5-6	6-1-5	9-1-15		

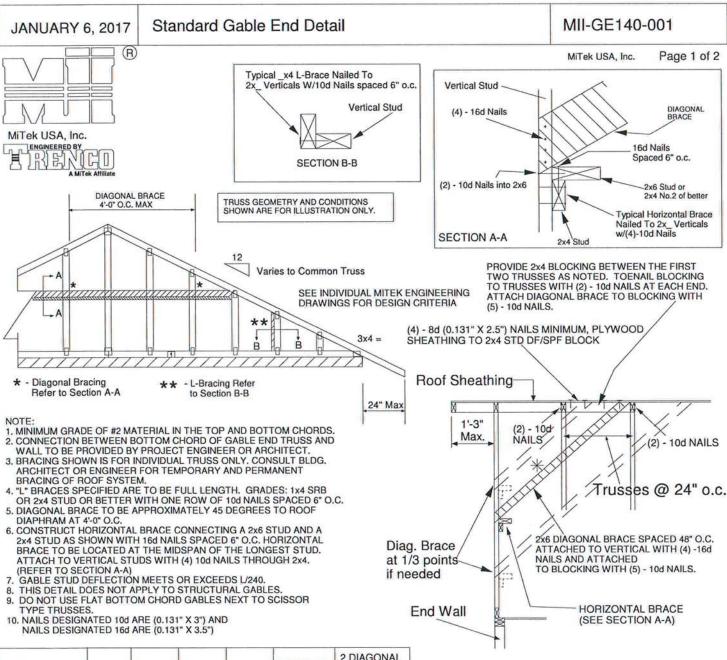
Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

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

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



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Minimum Stud Size	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	BRACES AT 1/3 POINTS
Species and Grade	Maximum Stud Length					
2x4 DF/SPF Std/Stud	12" O.C.	3-10-1	3-11-7	5-7-2	7-8-2	11-6-4
2x4 DF/SPF Std/Stud	16" O.C.	3-3-14	3-5-1	4-10-2	6-7-13	9-11-11
2x4 DF/SPF Std/Stud	24" O.C.	2-8-9	2-9-8	3-11-7	5-5-2	8-1-12

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

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

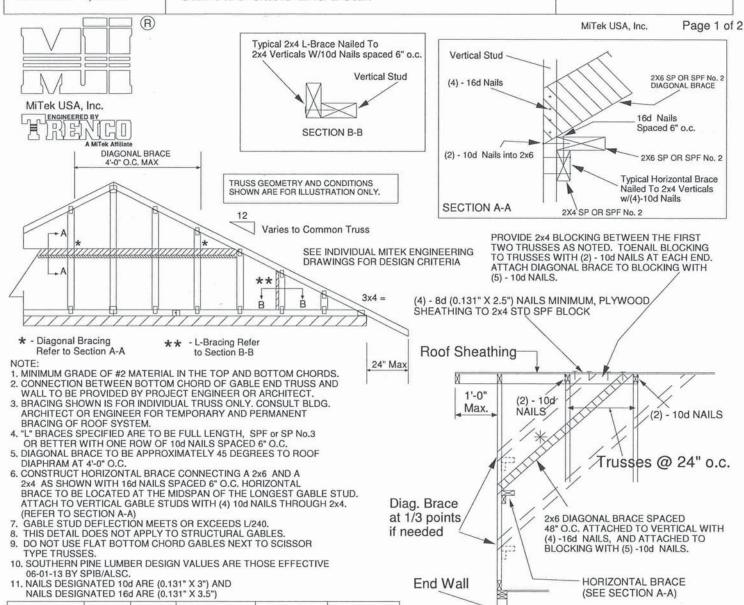
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.



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

### Standard Gable End Detail

### MII-GE170-D-SP



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

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

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

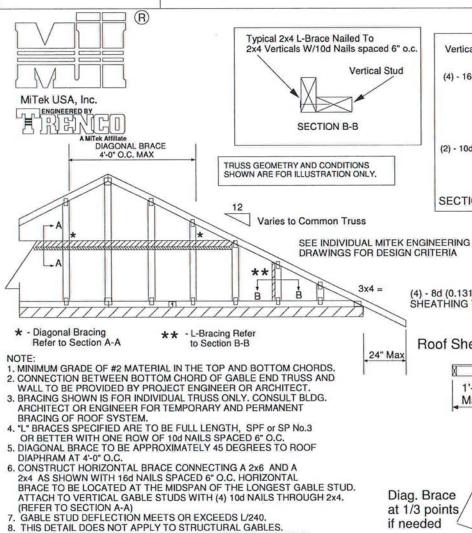
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.



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### Standard Gable End Detail

### MII-GE180-D-SP



Diag. Brace at 1/3 points if needed End Wall

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 SECTION A-A 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

Roof Sheathing

1'-0" - 10d Max. NAILS (2) - 10d NAILS Trusses @ 24" o.c.

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

> HORIZONTAL BRACE (SEE SECTION A-A)

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

DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR

10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE

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

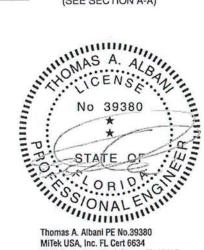
NAILS DESIGNATED 16d ARE (0.131" X 3.5")

MAX MEAN ROOF HEIGHT = 30 FEET EXPOSURE D ASCE 7-10 180 MPH **DURATION OF LOAD INCREASE: 1.60** 

TYPE TRUSSES.

06-01-13 BY SPIB/ALSC.

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



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MiTek USA, Inc. Page 1 of 1

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MiTek USA, Inc.

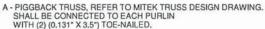
ENGINEERED BY

MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING

EXPOSURE B or C **ASCE 7-10** 

DURATION OF LOAD INCREASE: 1.60

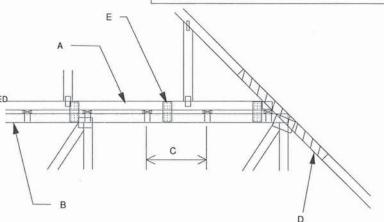
DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.



A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
SHALL BE CONNECTED TO EACH PURLIN
WITH (2) (0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.
CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
D - 2 X \_ X 4"-0" SCAB, SIZE TO MATCH TOP CHORD OF
PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED.
ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C.
SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING
IS CONTINUIOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:

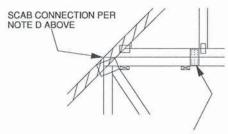
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR 2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft. E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH

MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)

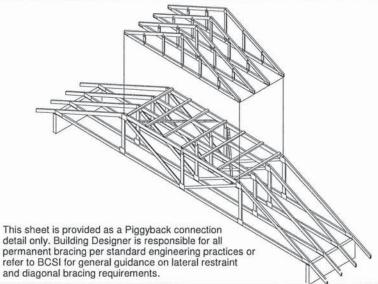


### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

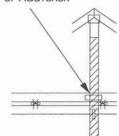
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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



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



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

1) VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS MUST MATCH IN SIZE, GRADE, AND MUST LINE UP

AS SHOWN IN DETAIL.

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.

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.

No 39380

STATE OF HISTORY

OR 10 GHISTORY

Thomas A, Albani PE No. 39380

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

### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

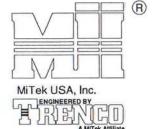
MII-PIGGY-ALT 7 - 10

MiTek USA, Inc. Page 1 of 1

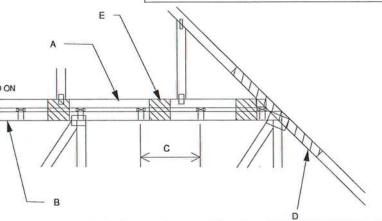
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C **ASCE 7-10** 

**DURATION OF LOAD INCREASE: 1.60** 

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

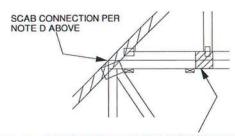


- A PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
  SHALL BE CONNECTED TO EACH PURLIN
  WITH (2) 0(0.131" X 3.5") TOE-NAILED.
  B BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
  C PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
  UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.
  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 CONTINUIOUS 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 2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM
- 2. WIND SPEED OF 116 MPH OF 160 MPH WITH A MAXI PIGGYBACK SPAN OF 12 ft. E FOR WIND SPEED IN THE RANGE 126 MPH 160 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL 12 NAILS)



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

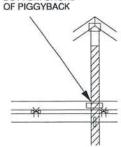
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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

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

VERTICAL WEB TO EXTEND THROUGH **BOTTOM CHORD** 



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

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

  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.)
- 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.
  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.



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

### MII-REP01A1

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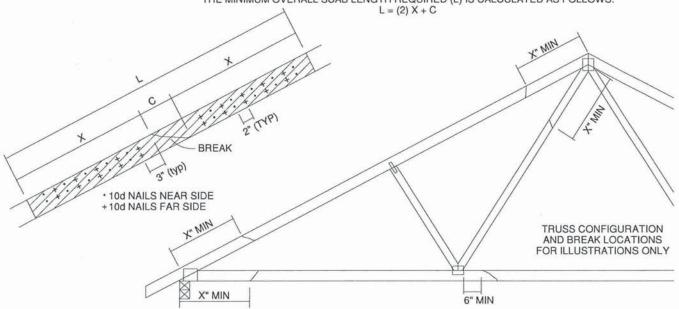


	JMBER OF			MAX	IMUM FO	RCE (lbs)	15% LOA	D DURAT	ION	
OF BREAK *		X INCHES	S	P	Г	)F	s	PF	Н	IF
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187
38	57	42"	3169	4754	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 NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS WILL BE CAPABLE OF SUPPORTING THE LOADS INDICATED.
  2. ALL MEMBERS MUST BE RETURNED TO THEIR ORIGINAL POSITIONS BEFORE 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.
  WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED TO AVOID

- LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.

  5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x\_ ORIENTATION ONLY.

  6. THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



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

### LATERAL TOE-NAIL DETAIL

MII-TOENAIL SP

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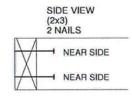
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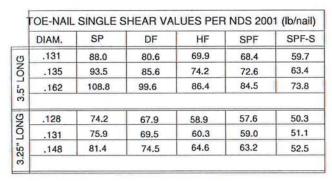
NOTES:

- 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.
- THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID UNUSUAL SPLITTING OF THE WOOD.
- ALLOWABLE VALUE SHALL BE THE LESSER VALUE OF THE TWO SPECIES FOR MEMBERS OF DIFFERENT SPECIES.

### THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY





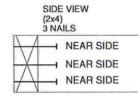
VALUES SHOWN ARE CAPACITY PER TOE-NAIL. APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

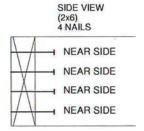
### FYAMPI F.

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

For load duration increase of 1.15:

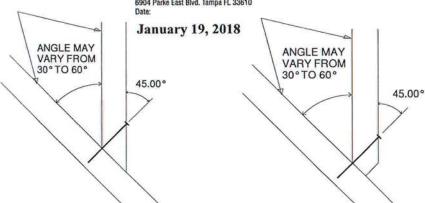
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

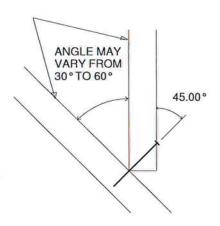






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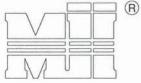


### TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND1

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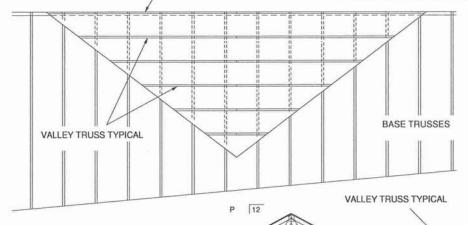
MiTek USA, Inc.

ENGINEERED BY

GABLE END, COMMON TRUSS OR GIRDER TRUSS

### **GENERAL SPECIFICATIONS**

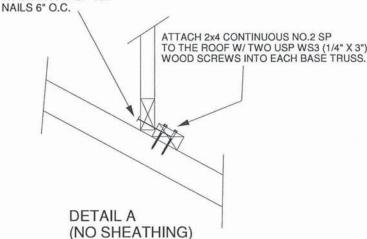
- 1. NAIL SIZE 10d (0.131" X 3")
  2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT DO NOT USE DRYWALL OR DECKING TYPE SCREW
- 3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- 4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
- 5. BASE TRUSS SHALL BE DESIGNED WITH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



SEE DETAIL A BELOW (TYP.)

GABLE END, COMMON TRUSS OR GIRDER TRUSS

SECURE VALLEY TRUSS W/ ONE ROW OF 10d



N.T.S.

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

MINIMUM REDUCED DEAD LOAD OF 6 PSF ON THE TRUSSES

No 39380

STATE OF THE STATE OF

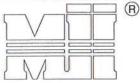
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### TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND2

MiTek USA, Inc.

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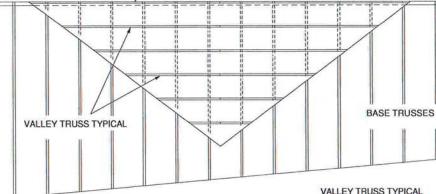


MiTek USA, Inc. Tek USA, ENGINEERED BY

GABLE END, COMMON TRUSS OR GIRDER TRUSS

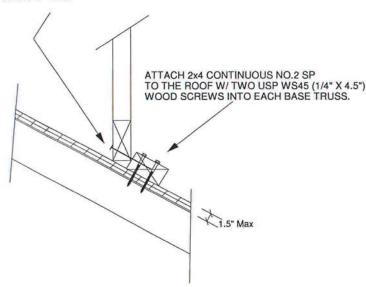
### **GENERAL SPECIFICATIONS**

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



GABLE END, COMMON TRUSS OR GIRDER TRUSS VALLEY TRUSS TYPICAL 12 SEE DETAIL A BELOW (TYP.)

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



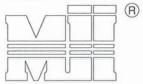
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH WIND DESIGN PER ASCE 7-10 160 MPH MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12 CATEGORY II BUILDING **EXPOSURE C** WIND DURATION OF LOAD INCREASE: 1.60 MAX TOP CHORD TOTAL LOAD = 50 PSF MAX SPACING = 24" O.C. (BASE AND VALLEY)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



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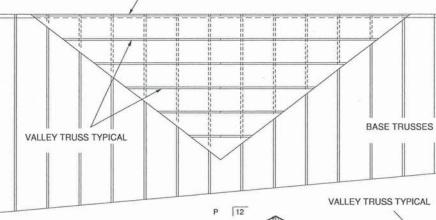
MiTek USA, Inc.

ENGINEERED BY

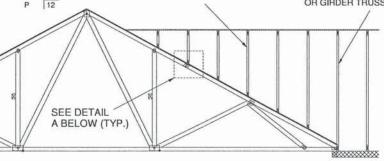
GABLE END, COMMON TRUSS OR GIRDER TRUSS

### **GENERAL SPECIFICATIONS**

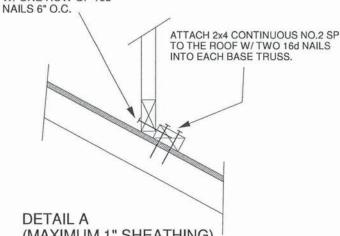
- 1. NAIL SIZE 16d (0.131" X 3.5")
  2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- 3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
- 4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
- 5.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



GABLE END, COMMON TRUSS OR GIRDER TRUSS



SECURE VALLEY TRUSS W/ ONE ROW OF 16d



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

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

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STATE O

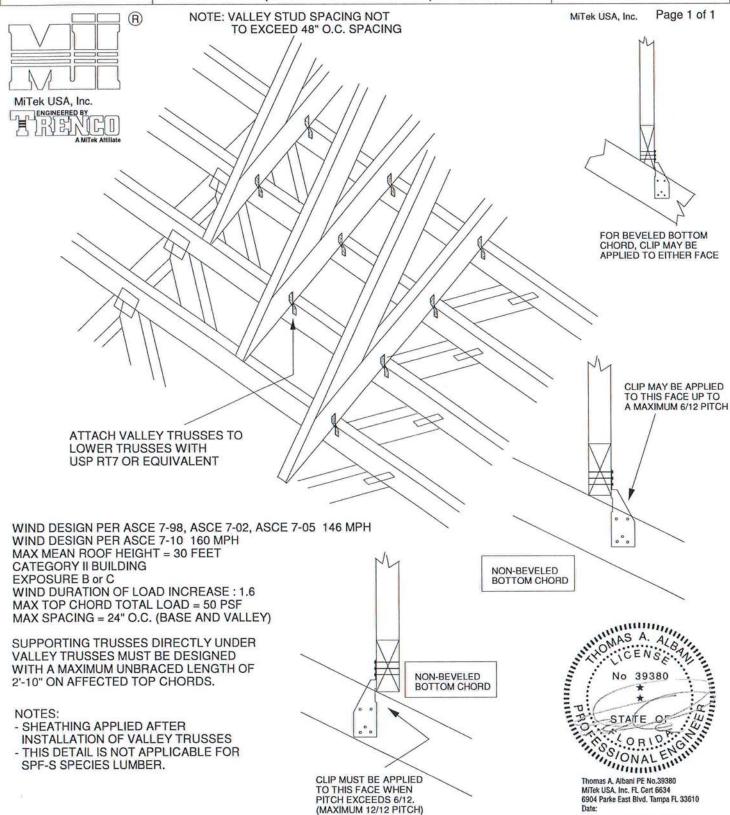
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Thomas A. Albani PE No.38 No 39380

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### TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)

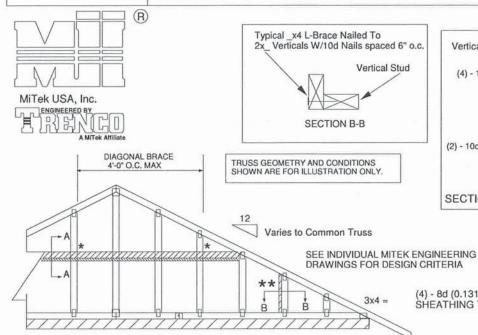
MII-VALLEY





### Standard Gable End Detail

### MII-GE146-001



L-Bracing Refer

to Section B-B

Page 1 of 2 MiTek USA, Inc. DIAGONAL BRACE

16d Nails

Spaced 6" o.c.

2x6 Stud or

Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails

2x4 No.2 of better

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

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

(2) - 10d

Vertical Stud

(4) - 16d Nails

(2) - 10d Nails into 2x6

SECTION A-A

Roof Sheathing

1'-3'

Max.

24" Max

- Diagonal Bracing

Refer to Section A-A

- 1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS. 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND
- WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.

  3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG.
- ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT
- BRACING OF ROOF SYSTEM.

  4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES:
  2x4 No 3/STUD SP OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.

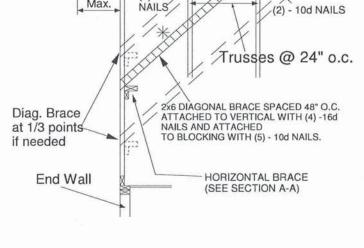
  5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF
- DIAPHRAM AT 4'-0" O.C.
- 6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
- GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES
- 9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
- 10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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

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

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

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





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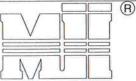
**OCTOBER 5, 2016** 

### REPLACE BROKEN OVERHANG

MII-REP13B

MiTek USA, Inc.

Page 1 of 1



MiTek USA, Inc. ENGINEERED BY TRUSS CRITERIA:

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

HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL

**END BEARING CONDITION** 

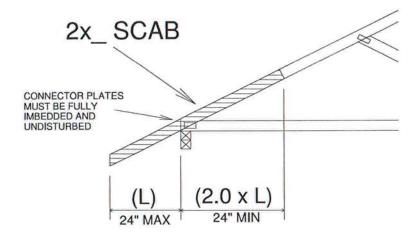
NOTES:

1. ATTACH 2x\_ SCAB (MINIMUM NO.2 GRADE SPF, HF, SP, DF) TO ONE FACE OF

TRUSS WITH TWO ROWS OF 10d (0.131" X 3") SPACED 6" O.C.

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

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



### **IMPORTANT**

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

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



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### LATERAL BRACING RECOMMENDATIONS

MII-STRGBCK

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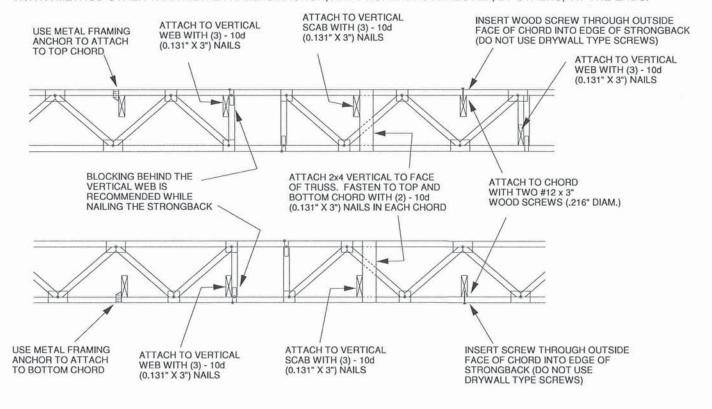
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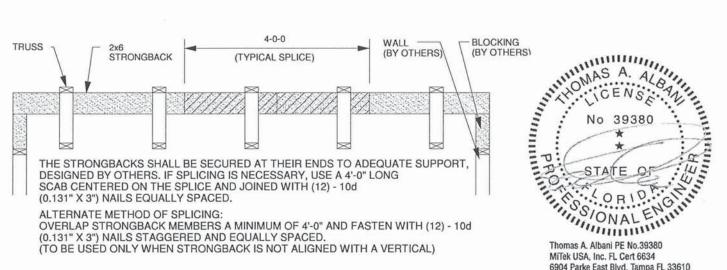


TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS. 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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

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





6904 Parke East Blvd. Tampa FL 33610 February 12, 2018

MiTek USA, Inc. FL Cert 6634

