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

RE: 1740941 - SIMQUE RES.

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

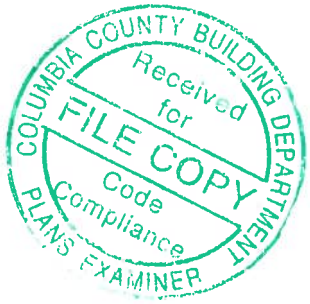
Site Information:
Customer Info: Aaron Simque Project Name: Simque Res. Model: Custom
Lot/Block: 4 Subdivision: West Paces
Address: N/A, N/A
City: Columbia Cty State: FL

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

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):
Design Code: FBC2017/TPI2014 Design Program: MiTek 20/20 8.2
Wind Code: ASCE 7-10 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

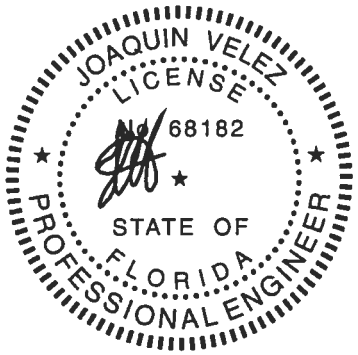
This package includes 23 individual, Truss Design Drawings and 0 Additional Drawings.
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T17168526	T01	5/28/19	23	T17168548	T16G	5/28/19
2	T17168527	T01G	5/28/19				
3	T17168528	T02	5/28/19				
4	T17168529	T03	5/28/19				
5	T17168530	T04	5/28/19				
6	T17168531	T04G	5/28/19				
7	T17168532	T05	5/28/19				
8	T17168533	T06	5/28/19				
9	T17168534	T07	5/28/19				
10	T17168535	T08	5/28/19				
11	T17168536	T09	5/28/19				
12	T17168537	T09G	5/28/19				
13	T17168538	T10	5/28/19				
14	T17168539	T10G	5/28/19				
15	T17168540	T11	5/28/19				
16	T17168541	T12	5/28/19				
17	T17168542	T12G	5/28/19				
18	T17168543	T13	5/28/19				
19	T17168544	T14	5/28/19				
20	T17168545	T14G	5/28/19				
21	T17168546	T15	5/28/19				
22	T17168547	T16	5/28/19				



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

Truss Design Engineer's Name: Velez, Joaquin
My license renewal date for the state of Florida is February 28, 2021.



Joaquin Velez PE No.68182
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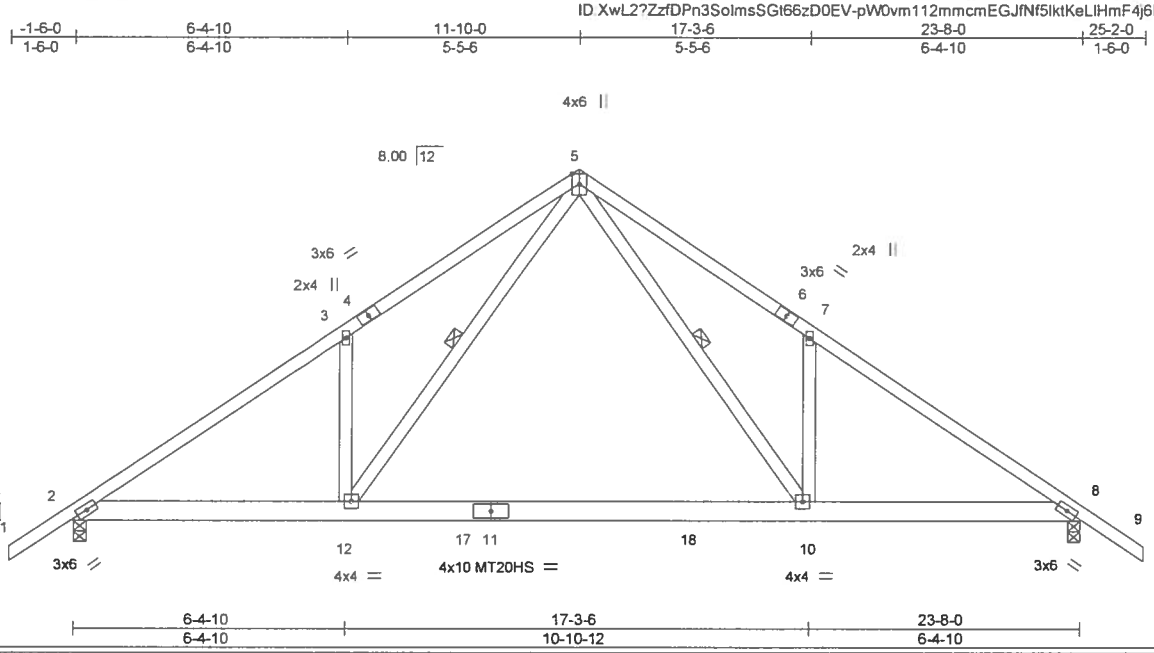
6904 Parke East Blvd. Tampa FL 33610
Date:
May 28,2019

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.

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168526
1740941	T01	Common	16	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:56:59 2019 Page 1
ID:XwL2?ZzfDPn3SolmsSGt66zD0EV-pW0vm112mmcmEGJfNf5IktKeLIHmF4j6FNOCajzC_oo



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	0.50	Vert(LL)	-0.21	10-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.42	10-12	>679	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 143 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

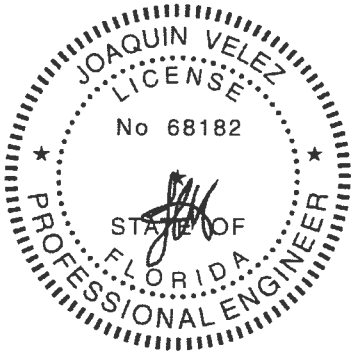
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10, 5-12

REACTIONS. (lb/size) 2=1283/0-3-8, 8=1283/0-3-8
Max Horz 2=-286(LC 10)
Max Uplift 2=-543(LC 12), 8=-543(LC 13)
Max Grav 2=1316(LC 19), 8=1316(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2099/870, 3-5=-2167/1093, 5-7=-2168/1093, 7-8=-2099/870
BOT CHORD 2-12=-676/1861, 10-12=-293/1088, 8-10=-564/1693
WEBS 5-10=-673/1360, 7-10=-415/388, 5-12=-673/1360, 3-12=-415/388

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=21ft; 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) All plates are MT20 plates unless otherwise indicated.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=543, 8=543.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 5-9=-54, 2-12=-20, 10-12=-80(F=-60), 8-10=-20



Joaquin Velez PE No.68182
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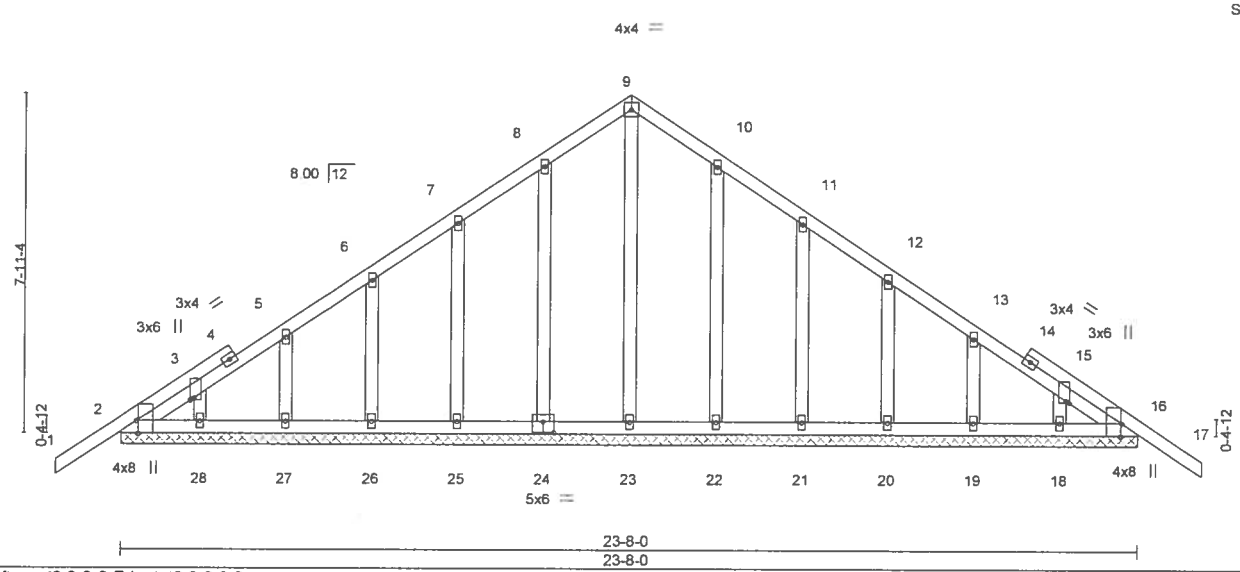
6904 Parke East Blvd. Tampa FL 33610
Date:
May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168527
1740941	T01G	Common Supported Gable	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:00 2019 Page 1
ID:XwL2?ZzfDPn3SolmsSGt66zD0EV-HiaHzN2gX4kdsQurxMc?G5tuK9iN_aZGU18m79zC_on

-1-6-0 | 11-10-0 | 23-8-0 | 25-2-0
1-6-0 | 11-10-0 | 11-10-0 | 1-6-0

Scale = 1:51.9



23-8-0
23-8-0

Plate Offsets (X,Y)— [2:0-3-8,Edge], [3:0-0-9,0-1-0], [15:0-0-9,0-1-0], [16:0-3-8,Edge], [24:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	-0.01	17	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.05	Vert(CT)	-0.01	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	16	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 152 lb	FT = 20%

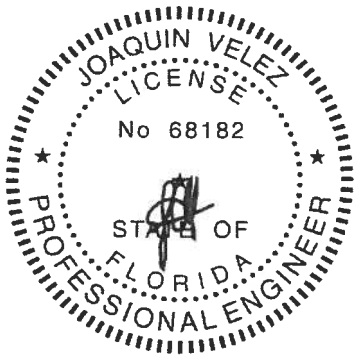
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 23-8-0.
(lb) - Max Horz 2=-275(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 28, 18 except 24=-117(LC 12), 25=-118(LC 12), 26=-118(LC 12), 27=-106(LC 12), 22=-113(LC 13), 21=-120(LC 13), 20=-117(LC 13), 19=-111(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 23, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18

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=21ft; 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.
4) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 28, 18 except (jt=lb) 24=117, 25=118, 26=118, 27=106, 22=113, 21=120, 20=117, 19=111.



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES
1740941	T02	Common	8	1	T17168528

Builders FirstSource, Jacksonville, FL - 32244,

Job Reference (optional)

8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:01 2019 Page 1
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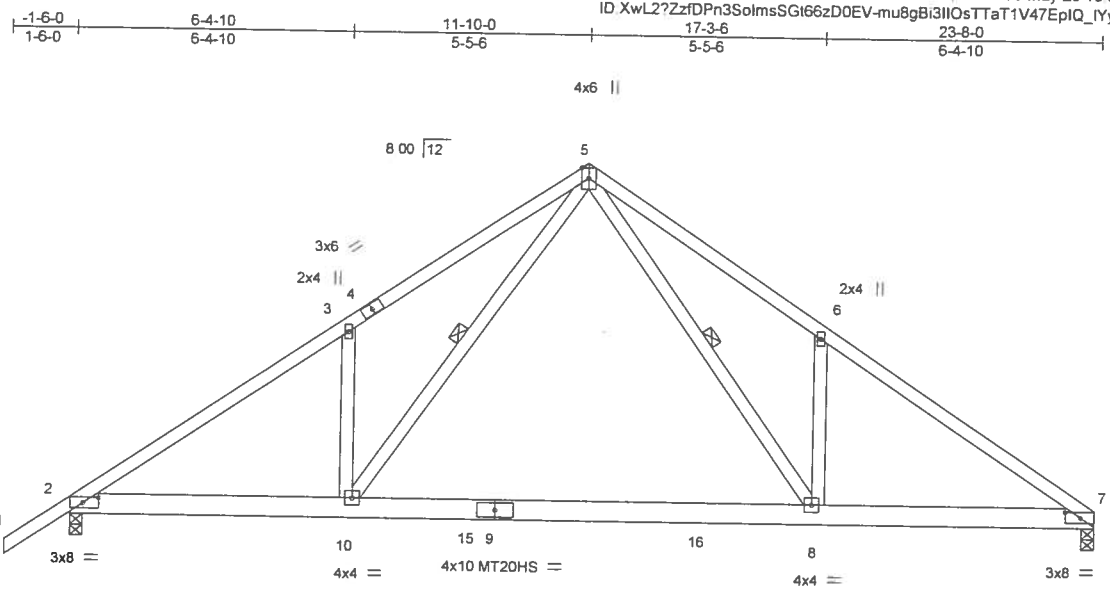


Scale = 1:51.4

Plate Offsets (X,Y)– [2:0-4-5,0-1-8], [7:0-4-5,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.21	8-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.42	8-10	>681	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 140 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

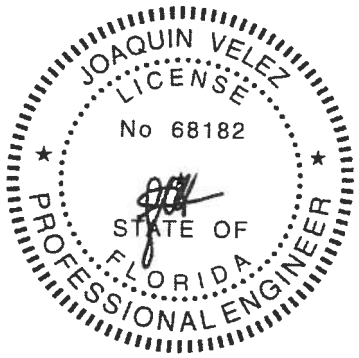
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-8, 5-10

REACTIONS. (lb/size) 7=1200/0-3-8, 2=1286/0-3-8
Max Horz 2=275(LC 9)
Max Uplift 7=-489(LC 13), 2=-545(LC 12)
Max Grav 7=1236(LC 20), 2=1318(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2101/876, 3-5=-2172/1100, 5-6=-2180/1112, 6-7=-2115/887
BOT CHORD 2-10=-699/1847, 8-10=-316/1074, 7-8=-619/1683
WEBS 5-8=-689/1377, 6-8=-414/390, 5-10=-673/1360, 3-10=-415/388

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=21ft; 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) All plates are MT20 plates unless otherwise indicated.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=489, 2=545.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 5-7=-54, 2-10=-20, 8-10=-80(F=-60), 7-8=-20



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Date:
May 28,2019

MiTek
6904 Parke East Blvd
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168529
1740941	T03	Common	8	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:02 2019 Page 1
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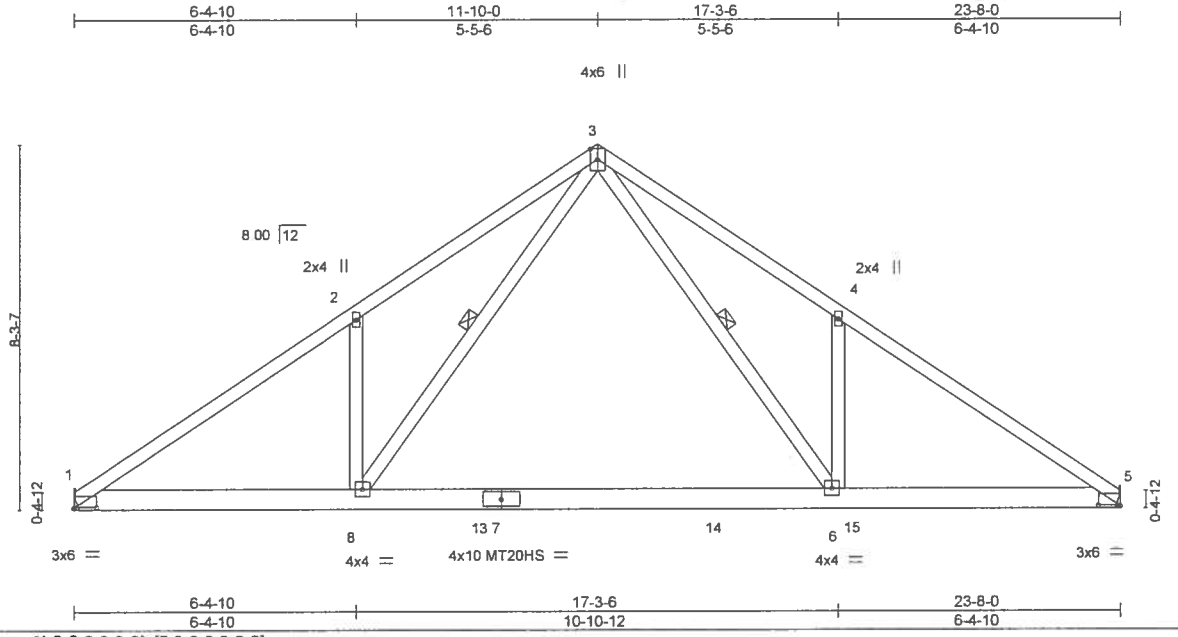


Plate Offsets (X,Y)— [1:0-6-0,0-0-3], [5:0-6-0,0-0-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.50	Vert(LL)	-0.21	6-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.42	6-8	>681	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.45	Horz(CT)	0.02	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 137 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3

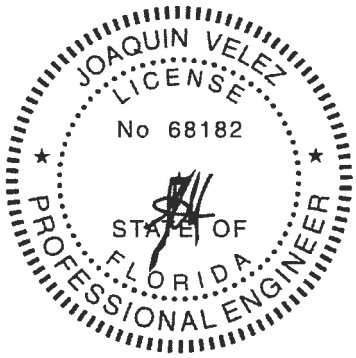
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-7-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 3-6, 3-8

REACTIONS. (lb/size) 1=1208/Mechanical, 5=1217/Mechanical
Max Horz 1=254(LC 11)
Max Uplift 1=-493(LC 12), 5=-497(LC 13)
Max Grav 1=1242(LC 19), 5=1252(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2127/894, 2-3=-2191/1119, 3-4=-2208/1126, 4-5=-2143/902
BOT CHORD 1-8=-716/1869, 6-8=-325/1086, 5-6=-631/1708
WEBS 3-6=-700/1401, 4-6=-414/390, 3-8=-688/1376, 2-8=-414/390

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=21ft; 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) All plates are MT20 plates unless otherwise indicated.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=493, 5=497.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-5=-54, 1-8=-20, 8-15=-80(F=-60), 5-15=-20



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168530
1740941	T04	Common	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:03 2019 Page 1
ID:XwL2?ZzfDPn3SoImsSGt66zD0EV-iHGQcO4Zq?6BjtdQcUAiujVFcMbBByJiA?MQjUzC_ok

-1-6-0 | 7-10-0 | 15-8-0 | 17-2-0
1-6-0 | 7-10-0 | 7-10-0 | 1-6-0

Scale = 1:36.3

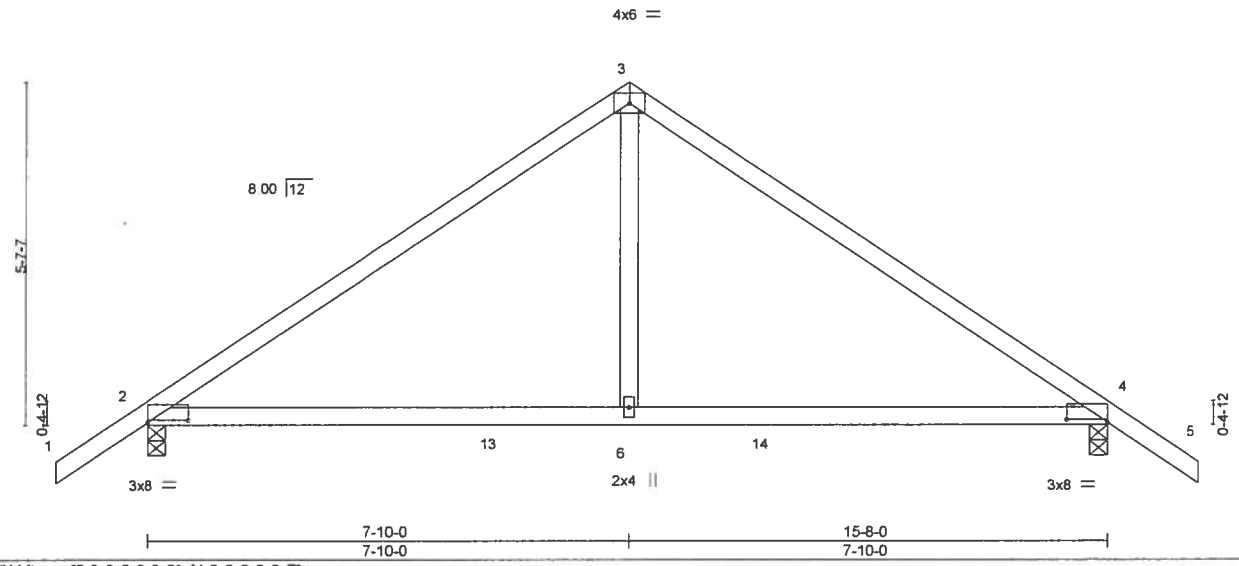


Plate Offsets (X,Y)– [2:0-8-0,0-0-8], [4:0-8-0,0-0-7]

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	0.74	Vert(LL)	0.17	6-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.20	6-12	>931	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 65 lb	FT = 20%

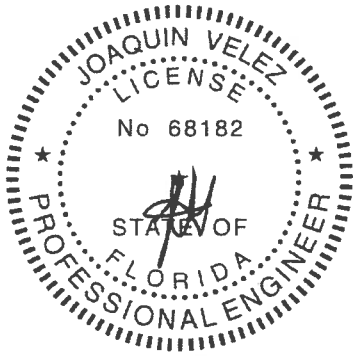
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=661/0-3-8, 4=661/0-3-8
Max Horz 2=-200(LC 10)
Max Uplift 2=-273(LC 12), 4=-273(LC 13)
Max Grav 2=686(LC 19), 4=686(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-759/304, 3-4=-758/304
BOT CHORD 2-6=-108/607, 4-6=-108/607
WEBS 3-6=-27/365

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=21ft; 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=273, 4=273.



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Date:
May 28,2019

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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	
1740941	T04G	Common Supported Gable	1	1	Job Reference (optional)	T17168531

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:04 2019 Page 1
ID:XwL2?ZzfDPn3SoImsSGt66zD0EV-ATqopk5BbIE2K1CcAChxQx2ZHm4RwRsrPf6zGwzC_oj

-1-6-0 | 7-10-0 | 15-8-0 | 17-2-0
1-6-0 | 7-10-0 | 7-10-0 | 1-6-0

Scale = 1:33.8

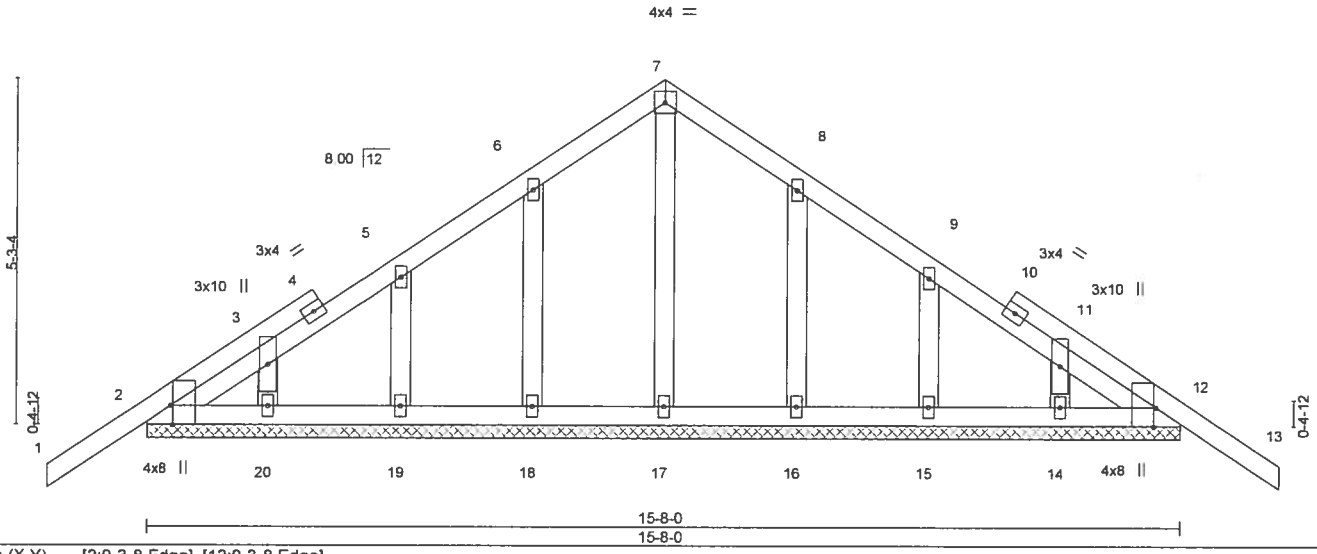


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [12:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.16	Vert(LL)	-0.01	13	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.01	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 90 lb	FT = 20%

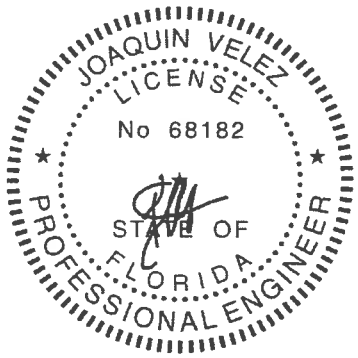
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 15-8-0.
(lb) - Max Horz 2=-189(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 12, 20, 14 except 18=-123(LC 12), 19=-112(LC 12), 16=-120(LC 13), 15=-116(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 12, 17, 18, 19, 20, 16, 15, 14

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=21ft; 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.
4) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12, 20, 14 except (jt=lb) 18=123, 19=112, 16=120, 15=116.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 12.



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Date:
May 28,2019

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

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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168532
1740941	T05	Common Girder	1	2	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:05 2019 Page 1
ID:XwL2?ZzfDPn3SoImsSGt66zD0EV-efNA046pMcMvyBnpkvCAz8ahLALCffO?dJrXoMzC_oi

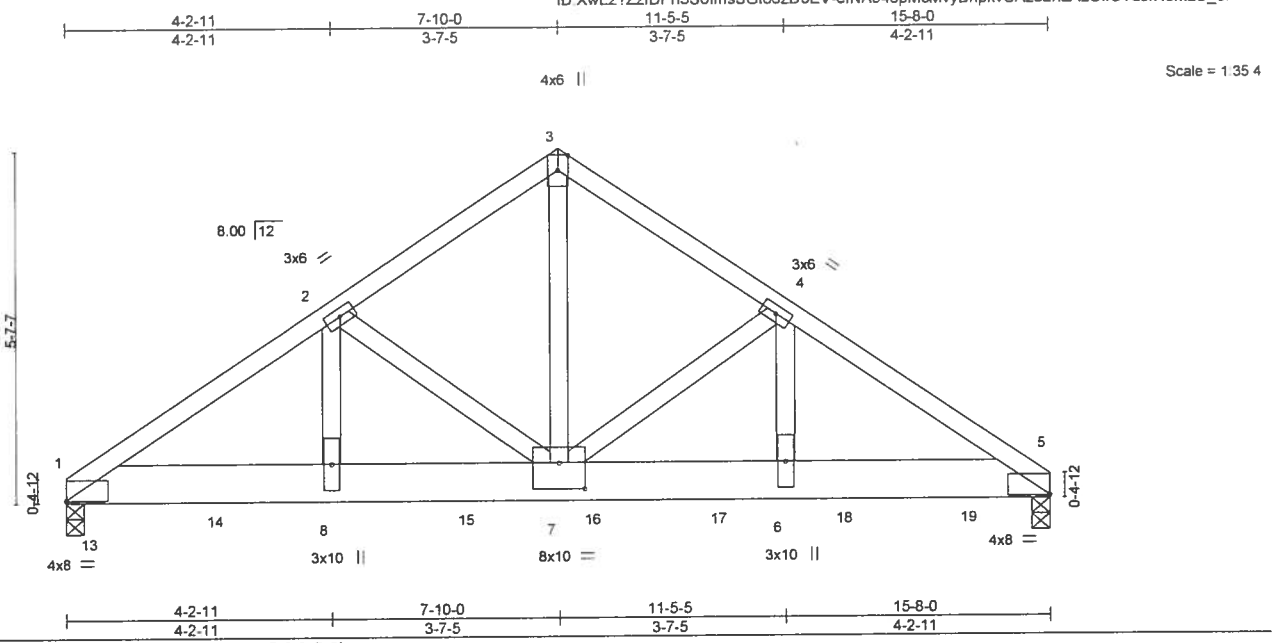


Plate Offsets (X,Y)-- [1:Edge,0-0-2], [5:Edge,0-0-2], [7:0-5-0,0-5-0]

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	0.34	Vert(LL)	0.08	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.32	Vert(CT)	-0.14	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 206 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3

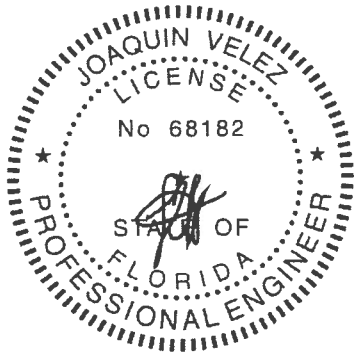
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=5593/0-3-8, 5=5075/0-3-8
Max Horz 1=168(LC 7)
Max Uplift 1=-2320(LC 8), 5=-2106(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-7166/2970, 2-3=-4973/2106, 3-4=-4973/2109, 4-5=-7175/2971
BOT CHORD 1-8=-2502/5940, 7-8=-2502/5940, 6-7=-2402/5948, 5-6=-2402/5948
WEBS 3-7=-2203/5244, 4-7=-2328/1091, 4-6=-990/2436, 2-7=-2319/1087, 2-8=-986/2426

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-4-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf, BCDL=3.0psf, h=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=2320, 5=2106.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1193 lb down and 507 lb up at 0-5-4, 1188 lb down and 513 lb up at 2-5-4, 1188 lb down and 513 lb up at 4-5-4, 1188 lb down and 513 lb up at 6-5-4, 1188 lb down and 513 lb up at 8-5-4, 1188 lb down and 513 lb up at 10-5-4, and 1188 lb down and 513 lb up at 12-5-4, and 1188 lb down and 513 lb up at 14-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-5=-54, 1-5=-20



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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 8=-1188(B) 13=-1193(B) 14=-1188(B) 15=-1188(B) 16=-1188(B) 17=-1188(B) 18=-1188(B) 19=-1188(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168533
1740941	T06	Roof Special Girder	1	2	Job Reference (optional)	

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ID:XwL2?ZzfDPn3SoImsSGt66zD0EV-a2VxRm73uDcdBVwBrKEe2Zf?uz?j7axH5dKdsFzC_og

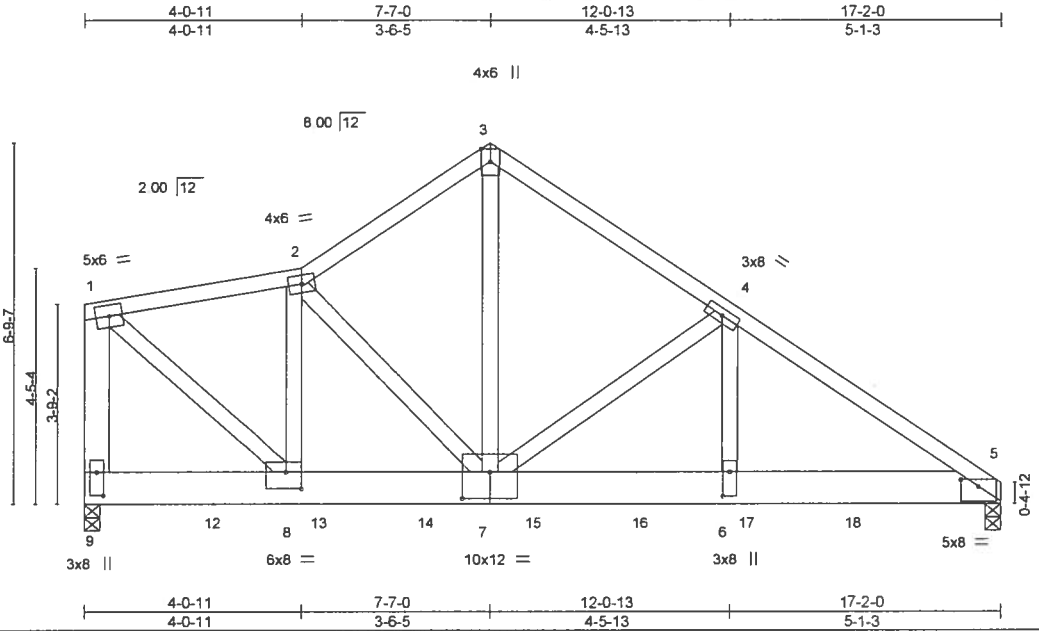

Plate Offsets (X,Y)-- [5:0-4-0,0-1-9], [6:0-5-8,0-1-8], [7:0-6-0,0-6-0], [8:0-3-8,0-3-12], [9:0-5-4,0-1-8]

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.46	Vert(LL) 0.09 6-7 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.39	Vert(CT) -0.15 6-7 >999 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.93	Horz(CT) 0.03 5 n/a n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS		Weight: 259 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
1-9: 2x6 SP No.2, 1-8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-1-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 5=5798/0-3-8, 9=6207/0-3-8 (req. 0-3-11)
Max Horz 9=-237(LC 9)
Max Uplift 5=-2404(LC 9), 9=-2575(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4191/1744, 2-3=-4656/1998, 3-4=-4711/1983, 4-5=-7691/3179, 1-9=-4459/1868
BOT CHORD 8-9=-189/278, 7-8=-1685/4173, 6-7=-2549/6374, 5-6=-2549/6374
WEBS 2-8=-1659/729, 2-7=-508/276, 3-7=-2052/4883, 4-7=-3128/1454, 4-6=-1324/3259, 1-8=-2249/5415

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
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) WARNING: Required bearing size at joint(s) 9 greater than input bearing size.
8) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=2404, 9=2575.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1205 lb down and 509 lb up at 0-2-12, 1197 lb down and 517 lb up at 2-5-4, 1197 lb down and 517 lb up at 4-5-4, 1197 lb down and 517 lb up at 6-5-4, 1197 lb down and 517 lb up at 8-5-4, 1197 lb down and 517 lb up at 10-5-4, 1197 lb down and 517 lb up at 12-5-4, and 1180 lb down and 509 lb up at 14-5-4, and 1183 lb down and 506 lb up at 16-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Tampa, FL 36610

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-2=-54, 2-3=-54, 3-5=-54, 5-9=-20

Concentrated Loads (lb)

Vert: 9=-1205(F) 11=-1183(F) 12=-1197(F) 13=-1197(F) 14=-1197(F) 15=-1197(F) 16=-1197(F) 17=-1197(F) 18=-1180(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES. T17168534
1740941	T07	Roof Special	4	1	Job Reference (optional)

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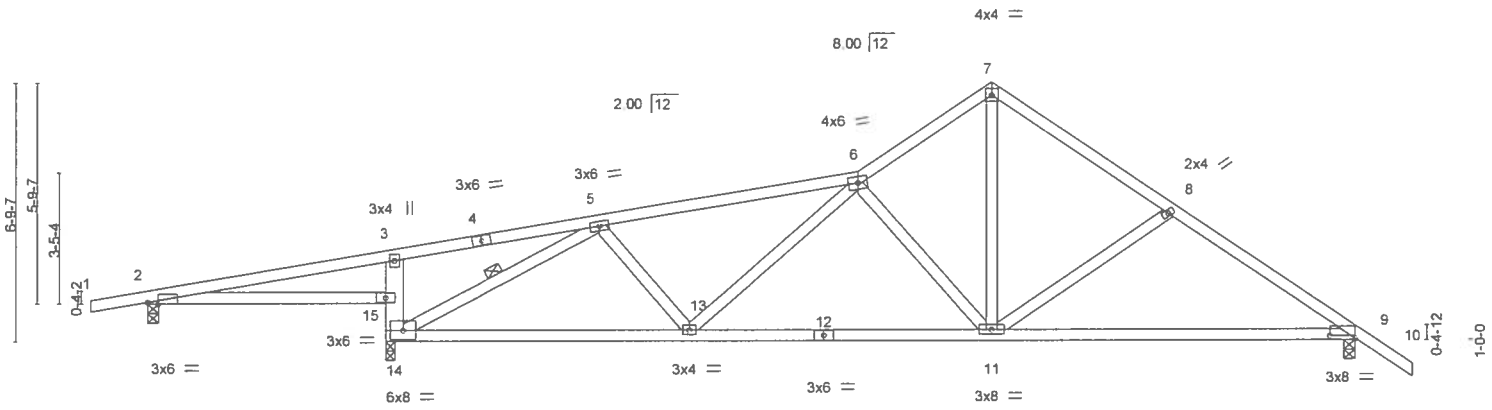
ID:XwL27ZzfDPn3SoImsSGt66zD0EV-2E3Jf68ifXkUpeVOP2ltbnC9ENGDs9oRJH4BPhzC_of

-1-6-0	6-2-8	11-9-14	18-6-11	22-1-0	26-8-15	31-8-0	33-2-0
1-6-0	6-2-8	5-7-6	6-8-13	3-6-5	4-7-15	4-11-1	1-6-0

Scale = 1:58.3



6-2-8	6-4-0	14-2-1	22-1-0	31-8-0
6-2-8	0-1-8	7-10-1	7-10-15	9-7-0

Plate Offsets (X,Y)— [2:0-3-5,Edge], [9:0-8-0,0-0-11]

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	0.55	Vert(LL)	0.09	15-18	>865	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.75	Vert(CT)	-0.36	11-21	>841	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 156 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-14: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-14

REACTIONS. (lb/size) 2=242/0-3-8, 14=1268/0-3-0, 9=995/0-3-8
Max Horz 2=214(LC 11)
Max Uplift 2=-258(LC 8), 14=-568(LC 12), 9=-390(LC 13)
Max Grav 2=252(LC 23), 14=1268(LC 1), 9=995(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-144/250, 5-6=-1390/758, 6-7=-1072/608, 7-8=-1099/592, 8-9=-1319/669
BOT CHORD 2-15=-273/190, 14-15=-424/453, 3-15=-336/303, 13-14=-557/1208, 11-13=-554/1352, 9-11=-429/1068
WEBS 5-14=-1576/835, 5-13=0/321, 6-11=-780/535, 7-11=-503/926, 8-11=-370/290

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=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=258, 14=568, 9=390.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES T17168535
1740941	T08	Roof Special	3	1	Job Reference (optional)

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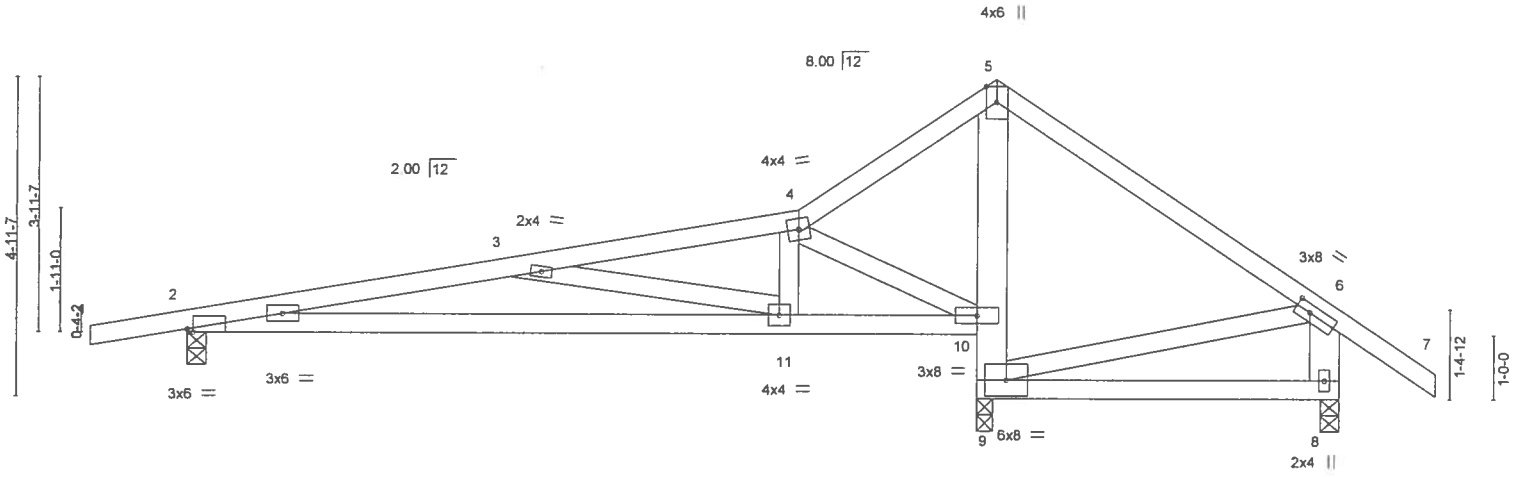
ID:XwL2?ZzfDPn3SoImsSGI66zD0EV-2E3Jf68ifXkUpeVOP2ltbnC59NJ7sByRJH4BPhzC_of

-1-6-0 | 5-5-8 | 9-5-6 | 12-6-0 | 17-10-0 | 19-4-0
1-6-0 | 5-5-8 | 3-11-14 | 3-0-10 | 5-4-0 | 1-6-0

Scale = 1:34.5



9-5-6 | 12-2-8 | 12-4-0 | 17-10-0
9-5-6 | 2-9-2 | 0-1-8 | 5-6-0

Plate Offsets (X,Y)— [2:0-1-1,Edge], [6:0-2-12,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.81	Vert(LL)	0.30	11-14	>499	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.57	Vert(CT)	0.26	11-14	>584	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 94 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
5-9: 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
6-8: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-5-3 oc bracing.

REACTIONS. (lb/size) 2=431/0-3-8, 9=1025/0-3-0, 8=22/0-3-8
Max Horz 2=176(LC 11)
Max Uplift 2=-378(LC 8), 9=-510(LC 8), 8=-158(LC 23)
Max Grav 2=432(LC 23), 9=1025(LC 1), 8=223(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-905/1251, 3-4=-184/324, 4-5=-563/505, 5-6=-434/418
BOT CHORD 2-11=-1178/892, 9-10=-894/1106, 5-10=-652/692
WEBS 3-11=-826/1027, 4-11=-623/381, 4-10=-499/863, 6-9=-400/541

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=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical right exposed; porch left 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=378, 9=510, 8=158.

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Date:
May 28,2019

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168536
1740941	T09	ROOF SPECIAL	9	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:09 2019 Page 1
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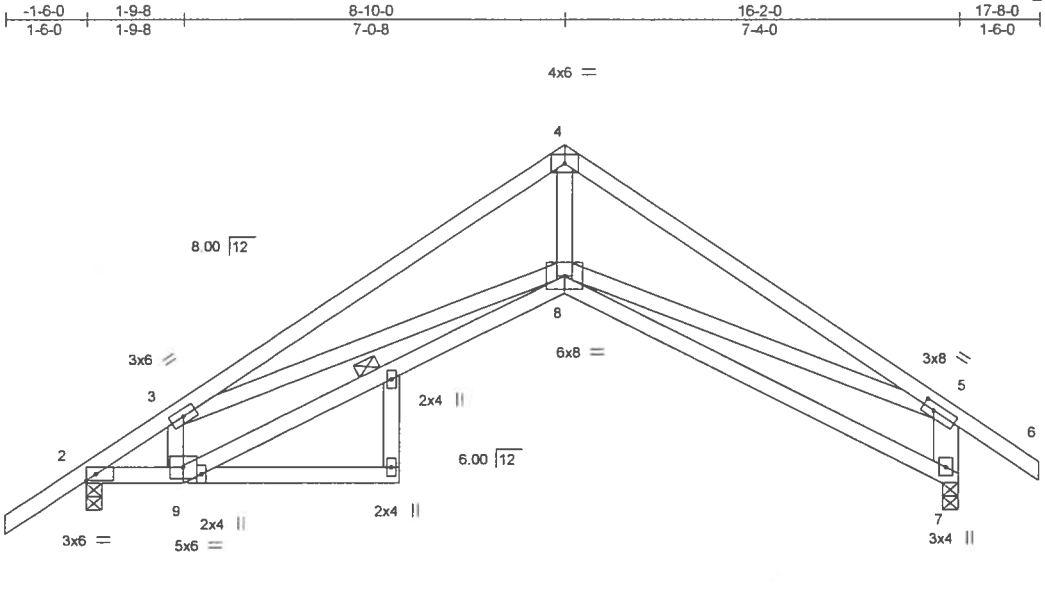

Plate Offsets (X,Y)— [5:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.62	Vert(LL)	-0.11	8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.61	Vert(CT)	-0.24	8-9	>813	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.11	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 99 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
9-10: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
5-7: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-7-12 oc bracing. Except:
7-11-0 oc bracing: 8-9

REACTIONS. (lb/size) 2=669/0-3-8, 7=684/0-3-8
Max Horz 2=246(LC 11)
Max Uplift 2=-282(LC 12), 7=-271(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1126/490, 3-4=-1310/366, 4-5=-1344/382, 5-7=-717/466
BOT CHORD 2-9=-542/1063, 8-9=-563/1154, 7-8=-225/464
WEBS 3-9=-503/388, 3-8=-287/362, 4-8=-173/1057, 5-8=-233/1004

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=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=282, 7=271.

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168537
1740941	T09G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:10 2019 Page 1
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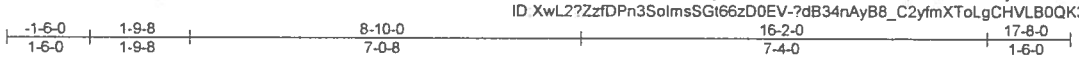

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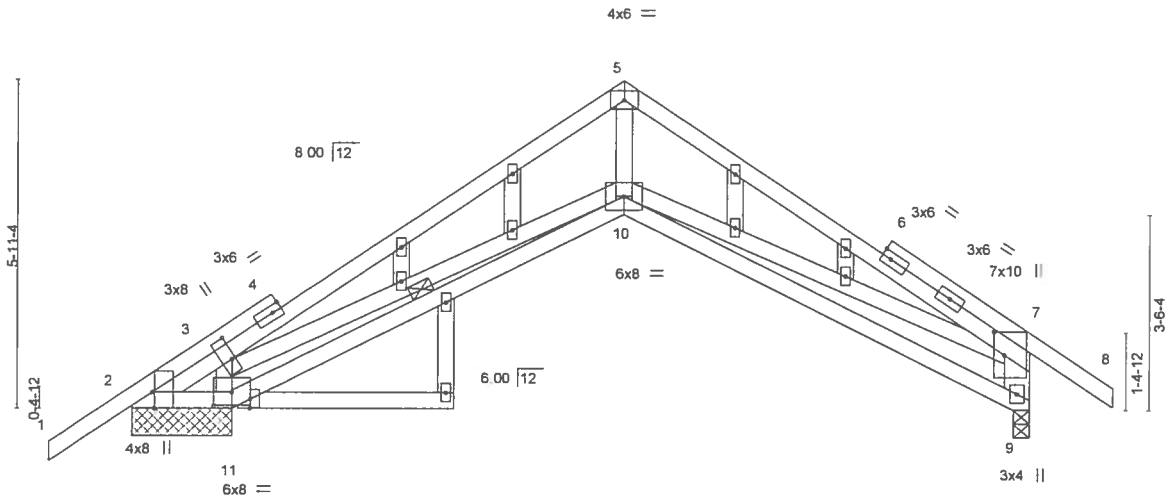


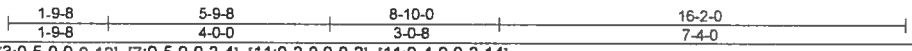


Plate Offsets (X,Y)— [2:0-3-8,Edge], [3:0-5-0,0-0-12], [7:0-5-0,0-2-4], [11:0-2-0,0-0-2], [11:0-4-0,0-2-14]

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	0.58	Vert(LL)	-0.10	9-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.21	9-10	>812	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.11	9	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 112 lb	FT = 20%

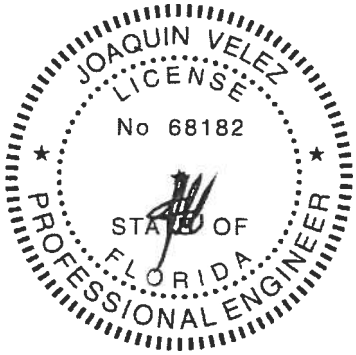
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
11-20: 2x4 SP No.3
WEBS 2x4 SP No.3 *Except*
7-9: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-6-4 oc bracing. Except:
6-0-0 oc bracing: 10-11

REACTIONS. (lb/size) 2=-182/1-9-8, 11=959/1-9-8, 9=576/0-3-8, 2=-182/1-9-8
Max Horz 2=230(LC 11)
Max Uplift 2=-288(LC 19), 11=-587(LC 12), 9=-242(LC 13), 2=-182(LC 1)
Max Grav 2=236(LC 12), 11=1040(LC 19), 9=576(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-5=-1041/158, 5-7=-1049/161, 7-9=-721/473
BOT CHORD 10-11=-326/256, 9-10=-382/739
WEBS 3-11=-1031/699, 3-10=-185/1096, 5-10=0/750, 7-10=-170/561

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=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone 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) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=288, 11=587, 9=242, 2=288.



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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES T17168538
1740941	T10	SCISSORS	8	1	Job Reference (optional)

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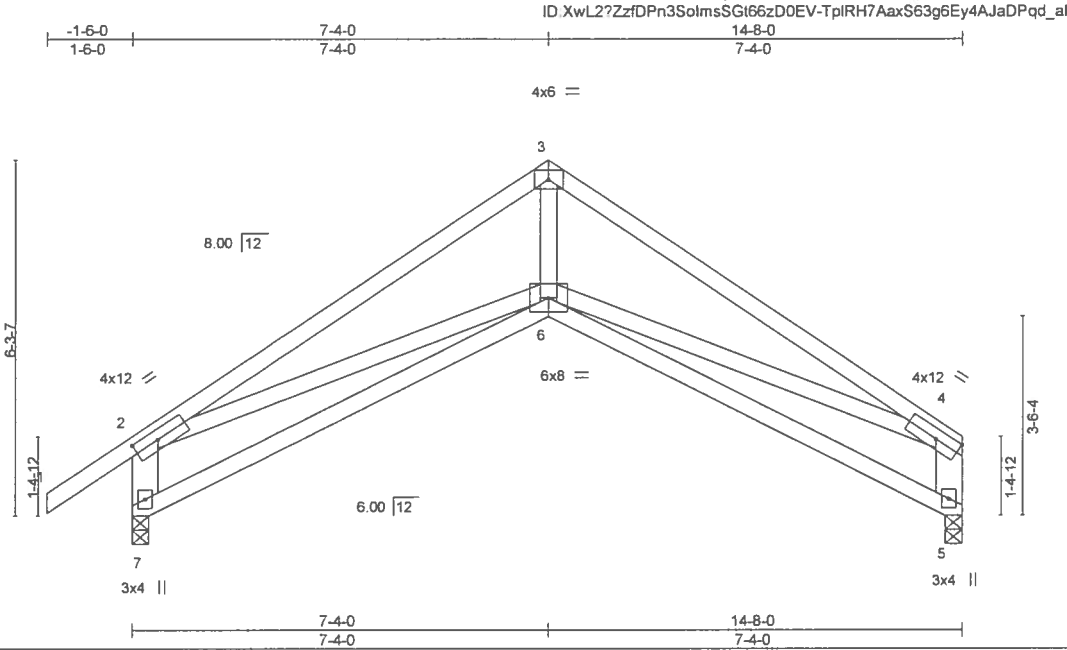


Plate Offsets (X,Y)-- [2:0-5-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.71	Vert(LL)	-0.09	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.20	6-7	>862	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 84 lb	FT = 20%

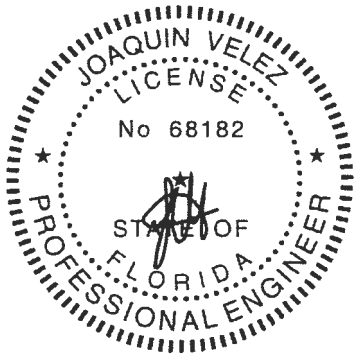
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-7,4-5: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-7-15 oc bracing.

REACTIONS. (lb/size) 7=625/0-3-8, 5=520/0-3-8
Max Horz 7=235(LC 9)
Max Uplift 7=-254(LC 12), 5=-192(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1106/447, 3-4=-1110/438, 2-7=-711/453, 4-5=-570/338
BOT CHORD 6-7=-369/480, 5-6=-173/292
WEBS 3-6=-202/806, 2-6=-23/649, 4-6=-221/808

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=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 7, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=254, 5=192.



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May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168539
1740941	T10G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:12 2019 Page 1
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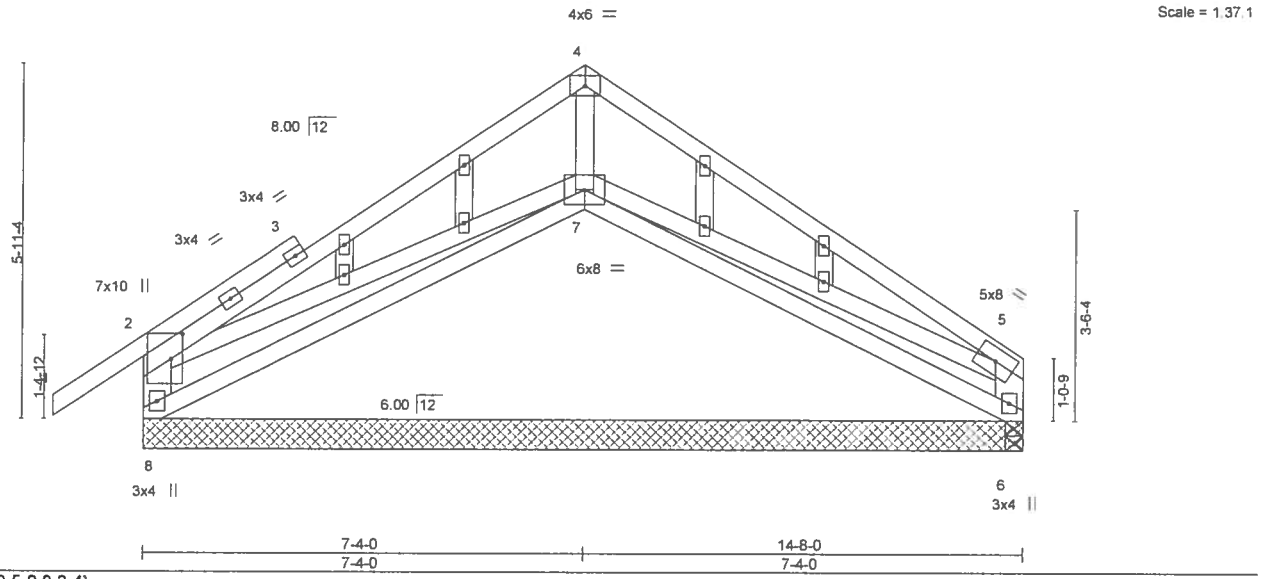

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Plate Offsets (X,Y)— [2:0-5-0,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	-0.08	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.42	Vert(CT)	-0.16	6-7	>520	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-S							Weight: 93 lb	FT = 20%

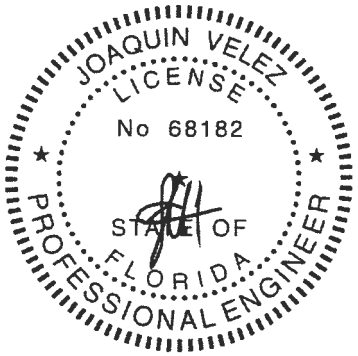
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
2-8,5-6: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-7-10 oc bracing.

REACTIONS. All bearings 14-8-0.
(lb) - Max Horz 8=215(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) except 8=-185(LC 12), 6=-166(LC 13), 7=-143(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 8=357(LC 1), 6=289(LC 20), 6=252(LC 1), 7=553(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-524/451, 5-6=-367/283
BOT CHORD 7-8=-466/602, 6-7=-222/353
WEBS 4-7=-281/159, 2-7=-462/474, 5-7=-311/254

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=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 185 lb uplift at joint 8, 166 lb uplift at joint 6 and 143 lb uplift at joint 7.



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May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES. T17168540
1740941	T11	Monopitch	18	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:12 2019 Page 1
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1-6-0 | 6-8-0 | 5-6-0

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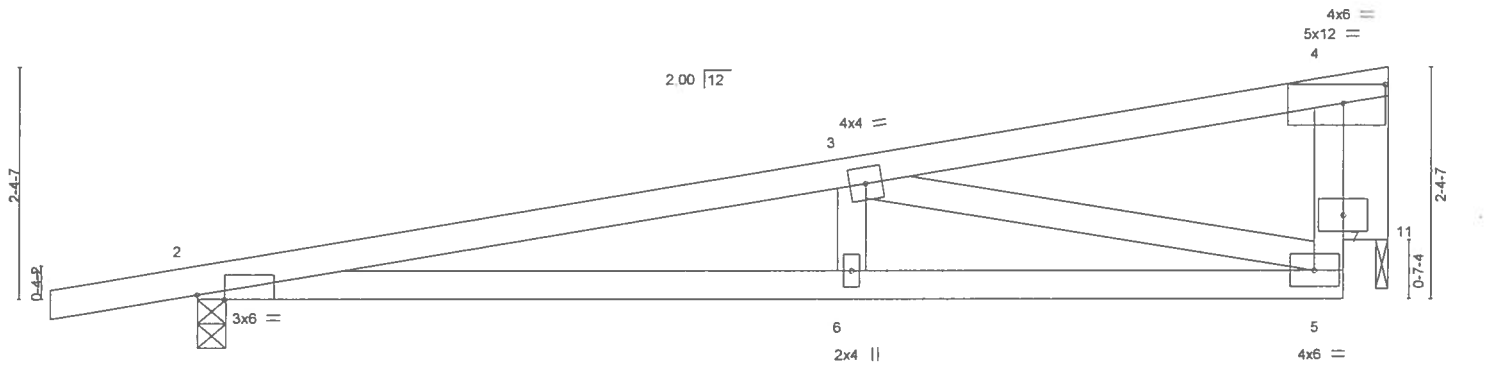


6-8-0 | 12-2-0
6-8-0 | 5-6-0

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.70	Vert(LL)	0.22	6-10	>649	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	0.19	6-10	>767	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	-0.02	11	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 52 lb	FT = 20%

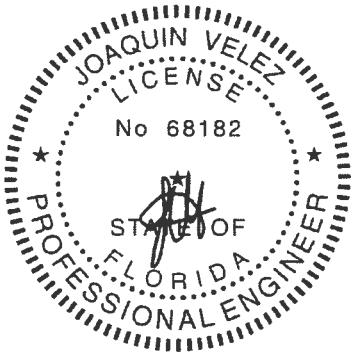
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-13 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-5-14 oc bracing.

REACTIONS. (lb/size) 2=533/0-3-8, 11=404/0-1-8
Max Horz 2=114(LC 8)
Max Uplift 2=-446(LC 8), 11=-333(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1326/1979, 5-7=-553/315, 4-7=-553/315
BOT CHORD 2-6=-2034/1295, 5-6=-2034/1295
WEBS 3-6=-374/242, 3-5=-1174/1849, 4-11=-440/679

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 446 lb uplift at joint 2 and 333 lb uplift at joint 11.



Joaquin Velez PE No.68182
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Date:
May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	
1740941	T12	Monopitch	4	1	Job Reference (optional)	T17168541

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:13 2019 Page 1
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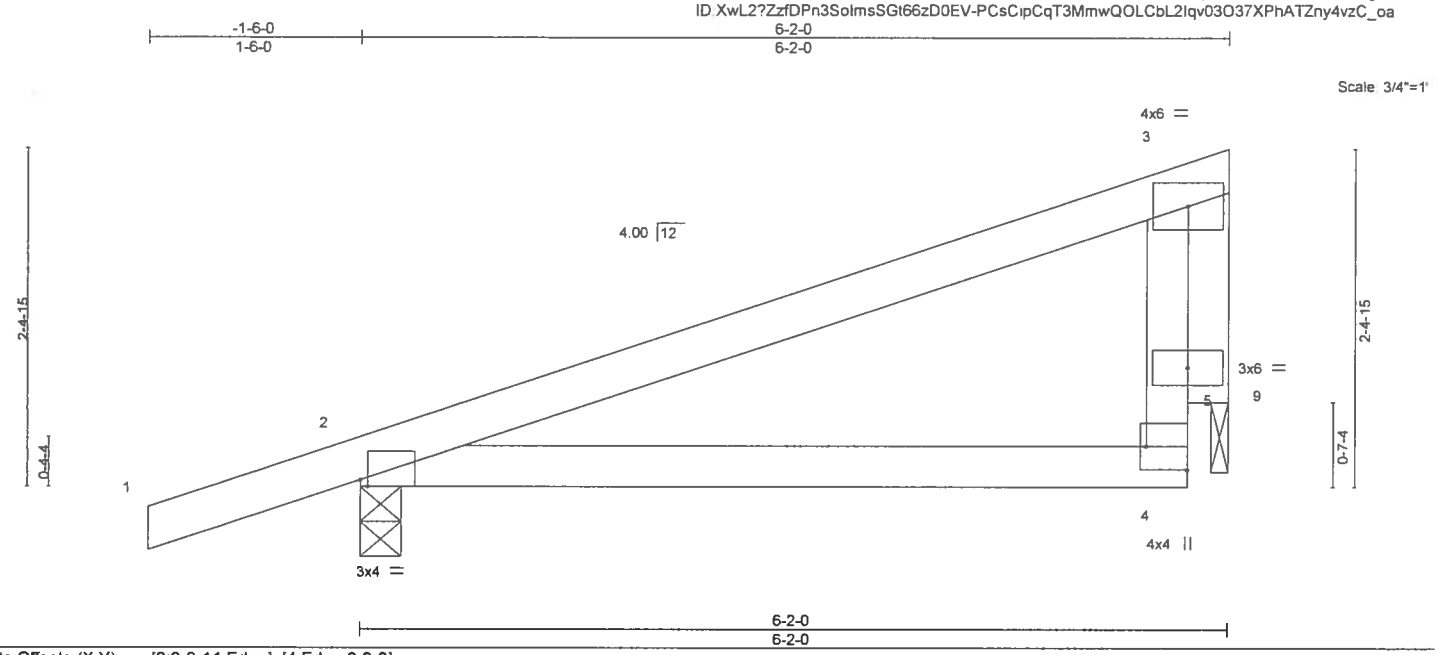


Plate Offsets (X,Y)-- [2:0-0-11,Edge], [4:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.54	Vert(LL)	0.07	4-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.32	Vert(CT)	0.06	4-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR							Weight: 26 lb	FT = 20%

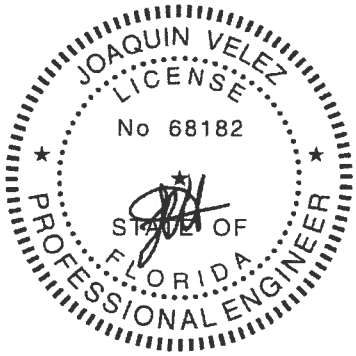
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-10-15 oc bracing.

REACTIONS. (lb/size) 2=316/0-3-8, 9=189/0-1-8
Max Horz 2=129(LC 8)
Max Uplift 2=-266(LC 8), 9=-165(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-4=-299/158

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 2 and 165 lb uplift at joint 9.



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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168542
1740941	T12G	GABLE	2	1	Job Reference (optional)	

Builders FirstSource, Lake City, FL 32055 8.240 s Apr 19 2019 MiTek Industries, Inc. Tue May 28 12:37:18 2019 Page 1
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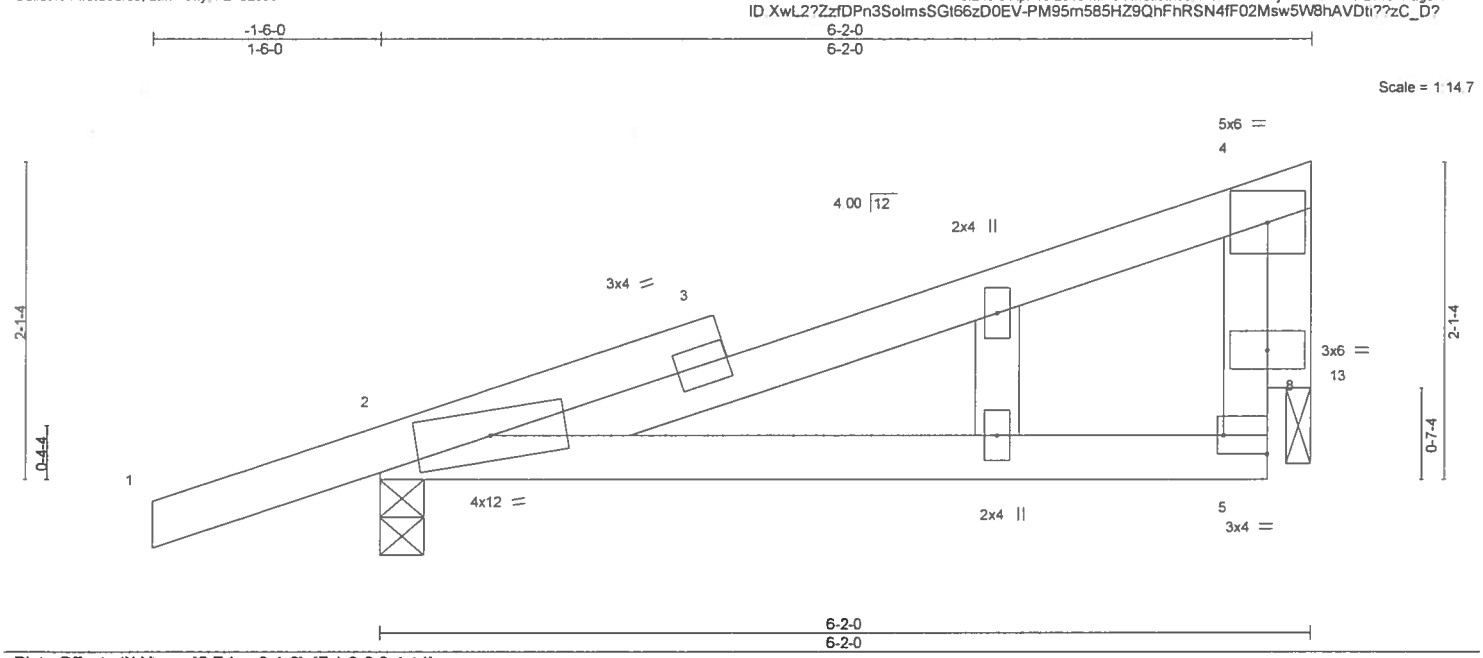


Plate Offsets (X,Y)— [5:Edge,0-1-8], [7:1-8-9,0-4-14]

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	0.40	Vert(LL)	0.05	5-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.24	Vert(CT)	0.04	5-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.36	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR							Weight: 28 lb	FT = 20%

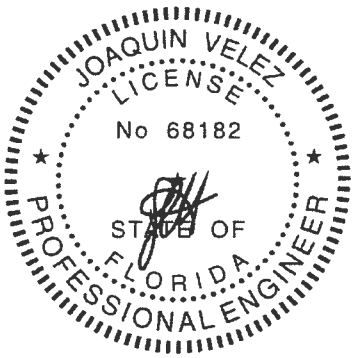
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Sheathed or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=320/0-3-8, 13=182/0-2-0
Max Horz 2=115(LC 8)
Max Uplift 2=-276(LC 8), 13=-154(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-5=-307/163

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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. 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.
3) Gable studs spaced at 2-0-0 oc.
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) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 276 lb uplift at joint 2 and 154 lb uplift at joint 13.



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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES
1740941	T13	Monopitch	2	1	T17168543
					Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:14 2019 Page 1
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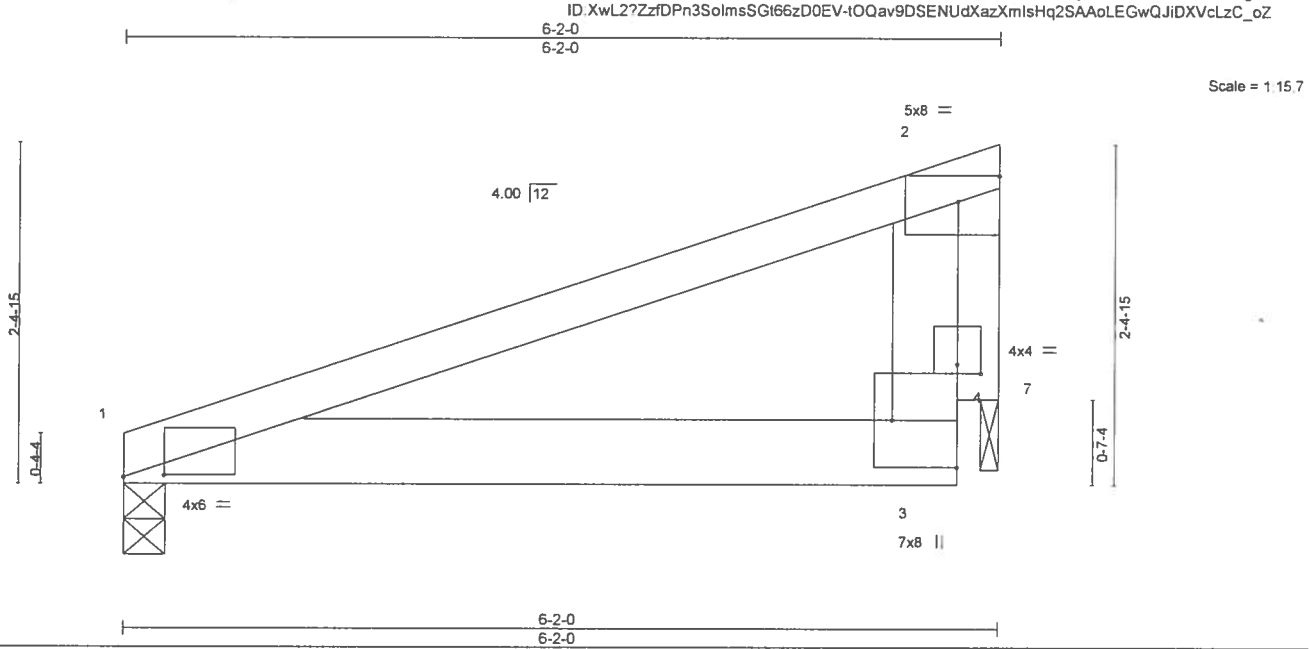


Plate Offsets (X,Y)-- [1:0-3-7,0-0-3], [2:Edge,0-2-3], [3:Edge,0-5-8], [4:0-2-0,0-0-12]

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	0.59	Vert(LL)	0.06	3-6	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.59	Vert(CT)	-0.08	3-6	>960	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.18	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MR							Weight: 29 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x6 SP No.2
OTHERS 2x4 SP No.3

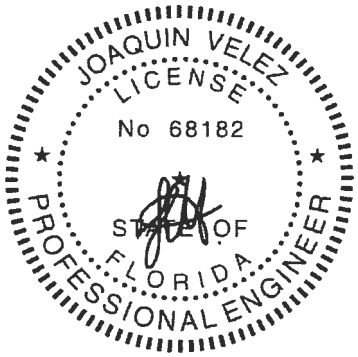
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=674/0-3-8, 7=580/0-1-8
Max Horz 1=98(LC 4)
Max Uplift 1=-410(LC 4), 7=-380(LC 4)
Max Grav 1=717(LC 18), 7=611(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-594/319, 3-4=-347/650, 2-4=-294/618
BOT CHORD 1-3=-348/548
WEBS 2-7=-611/347

NOTES-
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=21ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 410 lb uplift at joint 1 and 380 lb uplift at joint 7.
8) Girder carries tie-in span(s): 10-0-0 from 0-0-0 to 5-10-8
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=-168(F=-148)



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May 28,2019

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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168544
1740941	T14	Scissor	6	1	Job Reference (optional)	

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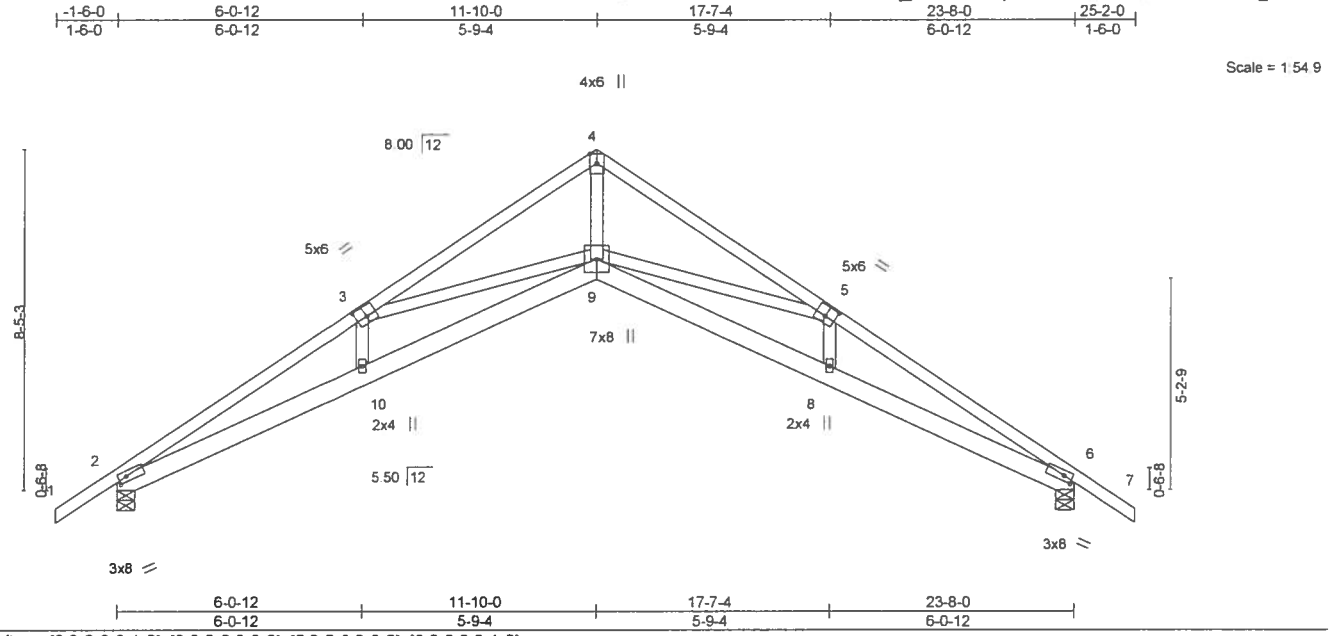


Plate Offsets (X,Y)— [2:0-2-8,0-1-8], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-2-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.26	8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.82	Vert(CT)	-0.49	8-9	>579	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.84	Horz(CT)	0.50	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 134 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-9-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-10-5 oc bracing.

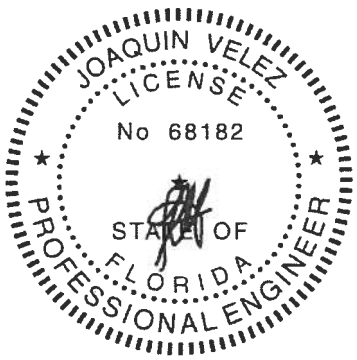
REACTIONS. (lb/size) 2=957/0-5-8, 6=957/0-5-8
Max Horz 2=-286(LC 10)
Max Uplift 2=-382(LC 12), 6=-382(LC 13)

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

TOP CHORD	2-3=-2948/1157, 3-4=-2358/679, 4-5=-2358/719, 5-6=-2894/1079
BOT CHORD	2-10=-1084/2792, 9-10=-1111/2870, 8-9=-836/2610, 6-8=-812/2532
WEBS	4-9=-594/2247, 5-9=-751/688, 3-9=-778/608

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=21ft; 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.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 382 lb uplift at joint 2 and 382 lb uplift at joint 6.



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Date:
May 28,2019

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

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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168545
1740941	T14G	GABLE	2	1	Job Reference (optional)	

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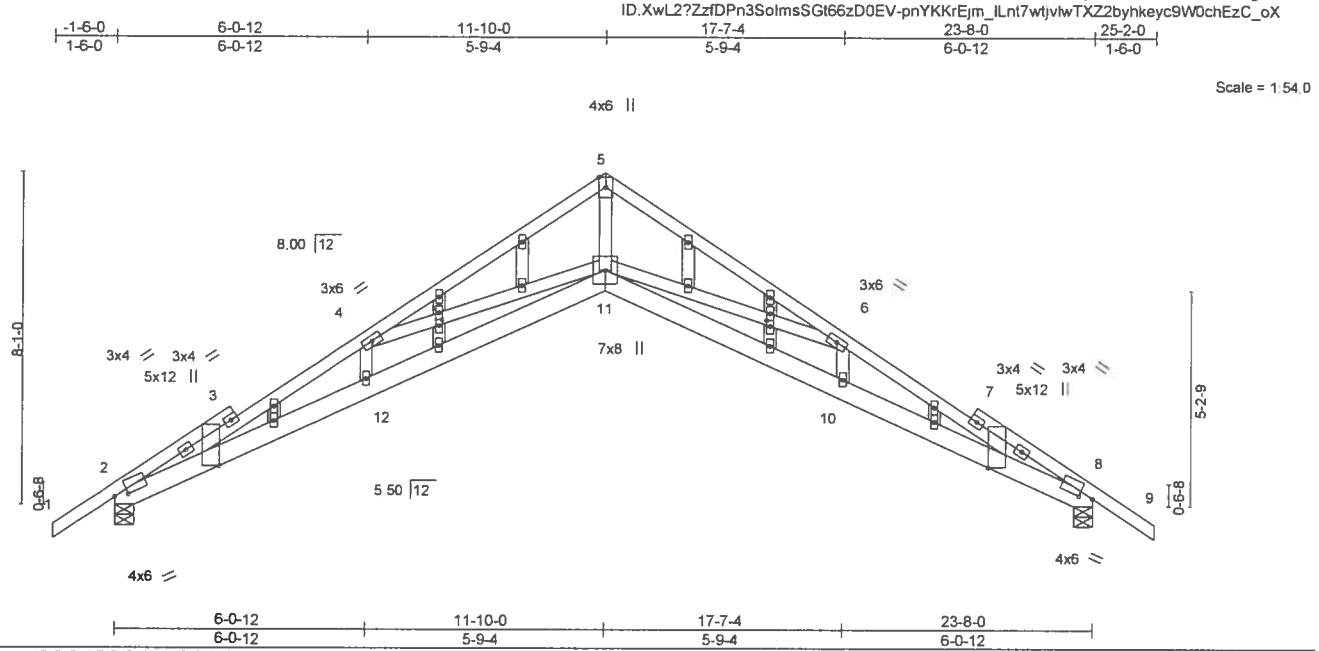

Plate Offsets (X,Y)-- [2:0-3-15,0-0-14], [2:0-9-0,Edge], [8:0-3-15,0-0-14], [8:0-9-0,Edge], [15:0-1-11,0-1-0], [24:0-1-11,0-1-0]

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	0.43	Vert(LL)	0.38	11-12	>730	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.91	Vert(CT)	-0.70	10-11	>395	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.68	8	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 150 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP M 31
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (lb/size) 2=952/0-5-8, 8=952/0-5-8
Max Horz 2=275(LC 11)
Max Uplift 2=-387(LC 12), 8=-387(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-3249/1286, 4-5=-2604/733, 5-6=-2604/774, 6-8=-3229/1194
BOT CHORD 2-12=-1220/3160, 11-12=-1263/3273, 10-11=-981/3035, 8-10=-941/2937
WEBS 5-11=-648/2514, 6-11=-933/767, 4-11=-963/692

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=21ft; 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.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 2, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 387 lb uplift at joint 2 and 387 lb uplift at joint 8.

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Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168546
1740941	T15	Scissor	2	1	Job Reference (optional)	

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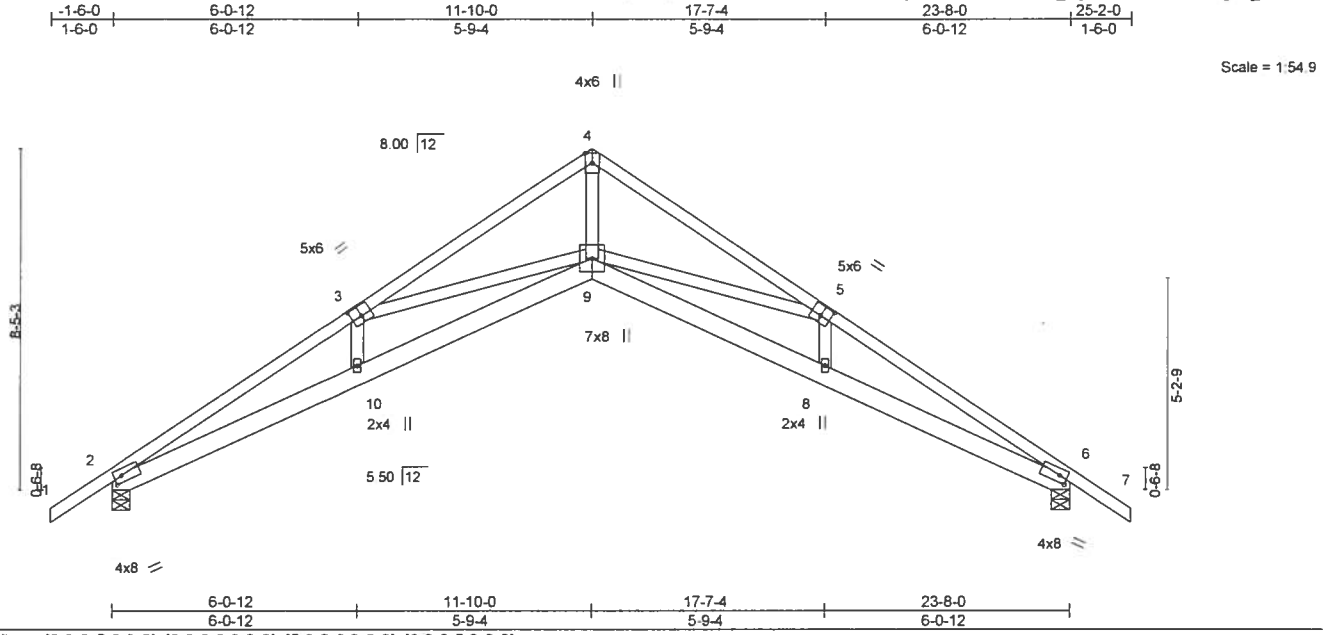


Plate Offsets (X,Y)— [2:0-2-5,0-2-0], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-2-5,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.76	Vert(LL)	0.32	9-10	>882	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.57	8-9	>502	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.55	6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 134 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP M 31 *Except* 1-3,5-7: 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3 *Except* 4-9: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-4-4 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-8-13 oc bracing.

REACTIONS. (lb/size) 2=1312/0-5-8, 6=1312/0-5-8
Max Horz 2=-286(LC 10)
Max Uplift 2=-554(LC 12), 6=-554(LC 13)

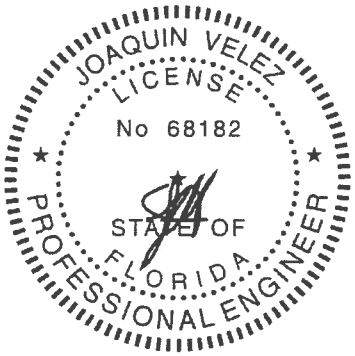
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4117/1696, 3-4=-3292/1132, 4-5=-3322/1172, 5-6=-4009/1576
BOT CHORD 2-10=-1568/3870, 9-10=-1611/3985, 8-9=-1295/3674, 6-8=-1256/3560
WEBS 4-9=-1092/3324, 5-9=-892/758, 3-9=-919/677

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=21ft; 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.
5) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
6) Bearing at joint(s) 2, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 554 lb uplift at joint 2 and 554 lb uplift at joint 6.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-7=-54, 9-11=-50(F=-30), 9-14=-50(F=-30)



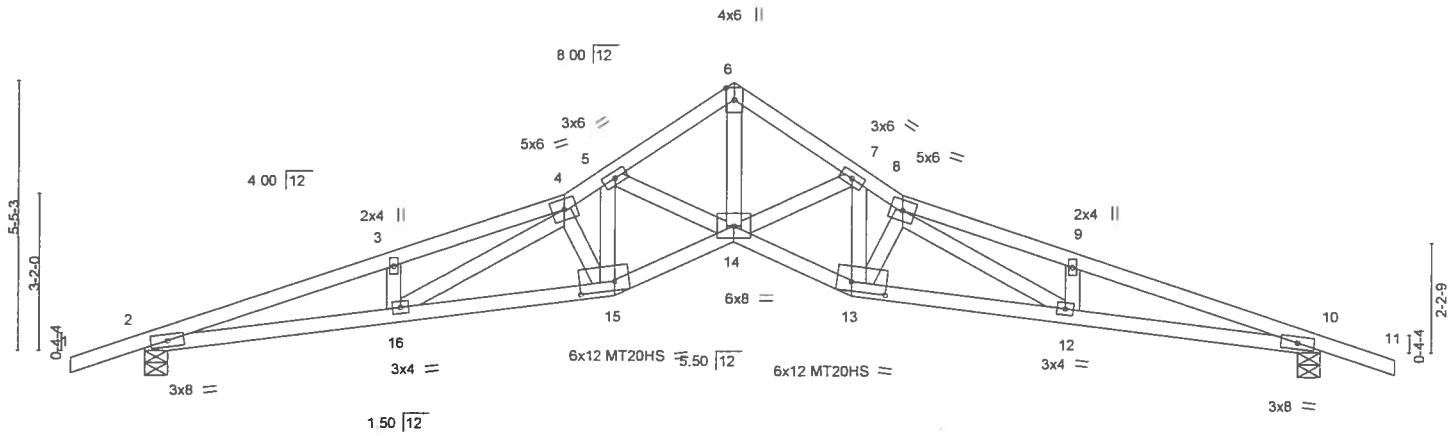
Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
May 28,2019

Job	Truss	Truss Type	Qty	Ply	SIMQUE RES. T17168547
1740941	T16	Roof Special	9	1	Job Reference (optional)

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:19 2019 Page 1
ID:XwL2?ZzfDPn3SolmsSGt66zD0EV-EMETysHb3v7weLrVYsSSX591Ap?qx2H2rUEGlYzC_oU

-1-6-0	5-0-0	8-5-3	9-5-8	11-10-0	14-2-8	15-2-13	18-8-0	23-8-0	25-2-0
1-6-0	5-0-0	3-5-3	1-0-5	2-4-8	2-4-8	1-0-5	3-5-3	5-0-0	1-6-0

Scale = 1:44.9



5-0-0	9-5-8	11-10-0	14-2-8	18-8-0	23-8-0
5-0-0	4-5-8	2-4-8	2-4-8	4-5-8	5-0-0

Plate Offsets (X,Y)— [13:0-8-8,0-2-4], [15:0-8-8,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.57	Vert(LL)	0.37	14	>766	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.81	Vert(CT)	-0.64	14	>444	180	MT20HS	187/143
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.27	10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 117 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
2-15,10-13: 2x4 SP M 31
WEBS 2x4 SP No.3 *Except*
6-14: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-5-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-10-14 oc bracing.

REACTIONS. (lb/size) 2=1312/0-5-8, 10=1312/0-5-8
Max Horz 2=121(LC 12)
Max Uplift 2=-573(LC 12), 10=-573(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-4315/2211, 3-4=-4284/2278, 4-5=-3483/1803, 5-6=-3034/1505, 6-7=-3034/1505, 7-8=-3483/1807, 8-9=-4284/2289, 9-10=-4315/2221
BOT CHORD 2-16=-2005/4086, 15-16=-1682/3564, 14-15=-1468/3230, 13-14=-1472/3230, 12-13=-1689/3564, 10-12=-2035/4086
WEBS 6-14=-1556/3171, 7-14=-487/370, 7-13=-258/380, 8-13=-1221/693, 8-12=-419/702, 5-14=-487/375, 5-15=-260/380, 4-15=-1221/690, 4-16=-421/702

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=21ft; 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) All plates are MT20 plates unless otherwise indicated.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
7) Bearing at joint(s) 2, 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 573 lb uplift at joint 2 and 573 lb uplift at joint 10.
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: 1-4=-54, 4-6=-54, 6-8=-54, 8-11=-54, 15-17=-50(F=-30), 14-15=-50(F=-30), 13-14=-50(F=-30), 13-20=-50(F=-30)

JOAQUIN VELEZ LICENSE No 68182 STATE OF FLORIDA PROFESSIONAL ENGINEER

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Date:
May 28,2019

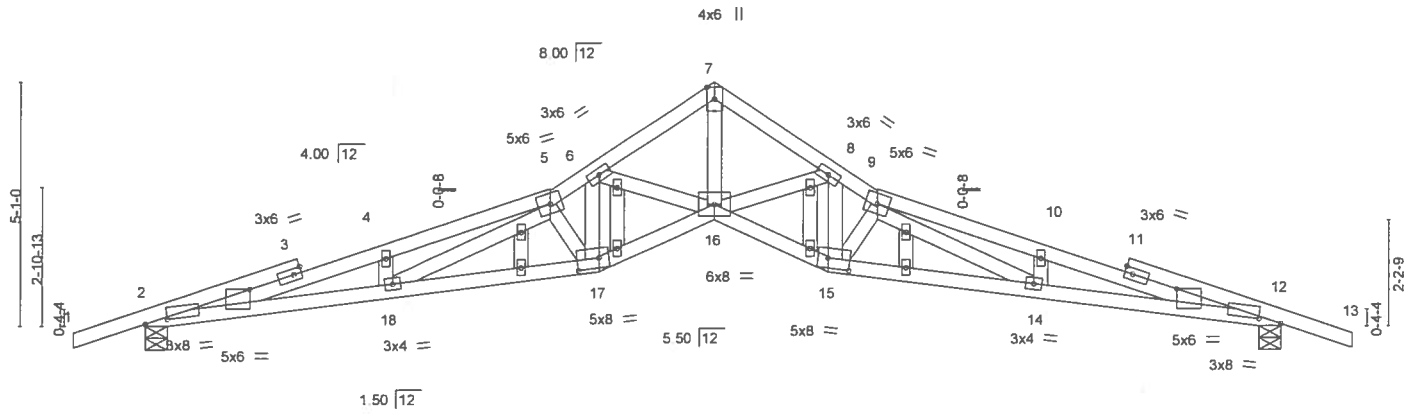
Job	Truss	Truss Type	Qty	Ply	SIMQUE RES	T17168548
1740941	T16G	GABLE	2	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244, 8.240 s May 13 2019 MiTek Industries, Inc. Tue May 28 10:57:20 2019 Page 1

ID:XwL2?ZzfDPn3SoImsSGt66zD0EV-iYnrACHDqDFnFVQh6Zzh4Ji9GDO2gSMC48_pq?zC_oT

-1-6-0	5-0-0	8-5-3	9-5-8	11-10-0	14-2-8	15-2-13	18-8-0	23-8-0	25-2-0
1-6-0	5-0-0	3-5-3	1-0-5	2-4-8	2-4-8	1-0-5	3-5-3	5-0-0	1-6-0

Scale = 1:46.4



5-0-0	9-5-8	11-10-0	14-2-8	18-8-0	23-8-0
5-0-0	4-5-8	2-4-8	2-4-8	4-5-8	5-0-0

Plate Offsets (X,Y)— [2:0-5-9,0-0-8], [2:2-2-0,Edge], [12:0-5-9,0-0-8], [12:2-2-0,Edge], [15:0-5-8,0-2-8], [17:0-5-8,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.74	Vert(LL)	0.39	17-18	>713	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.72	16	>389	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.92	Horz(CT)	0.27	12	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							Weight: 126 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 2-5,9-12: 2x4 SP M 31
BOT CHORD	2x4 SP M 31 *Except* 16-17,15-16: 2x4 SP No.2
WEBS	2x4 SP No.3
OTHERS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-8 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 5-8-8 oc bracing.

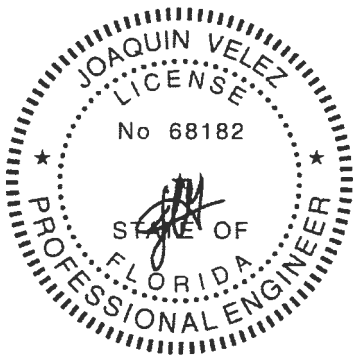
REACTIONS. (lb/size) 2=952/0-5-8, 12=952/0-5-8
Max Horz 2=-113(LC 13)
Max Uplift 2=-404(LC 12), 12=-404(LC 13)

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

TOP CHORD	2-4=-3424/1692, 4-5=-3492/1783, 5-6=-2754/1356, 6-7=-2345/1083, 7-8=-2345/1083, 8-9=-2754/1363, 9-10=-3492/1797, 10-12=-3424/1706
BOT CHORD	2-18=-1546/3322, 17-18=-1302/2925, 16-17=-1080/2562, 15-16=-1088/2562, 14-15=-1314/2925, 12-14=-1582/3322
WEBS	7-16=-1089/2410, 8-16=-429/336, 8-15=-189/263, 9-15=-987/549, 9-14=-323/550, 10-14=-328/258, 6-16=-429/343, 6-17=-192/263, 5-17=-987/545, 5-18=-326/550, 4-18=-328/258

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=21ft; 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.
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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
9) Bearing at joint(s) 2, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 404 lb uplift at joint 2 and 404 lb uplift at joint 12.



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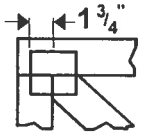
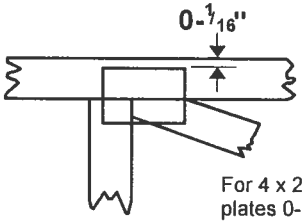
May 28,2019

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

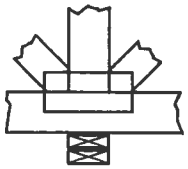
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

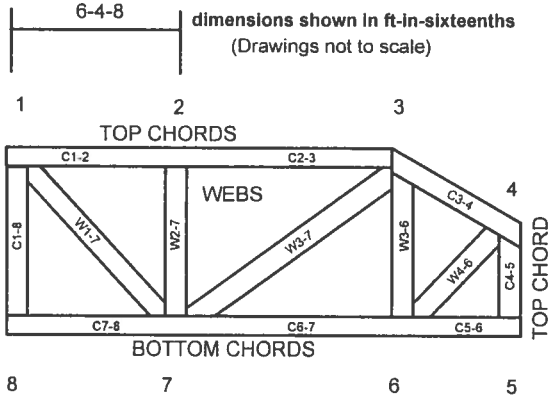


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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.

MiTek®

MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

AUGUST 1, 2016	T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY	MII-T-BRACE 2

MiTek USA, Inc.

ENGINEERED BY TRENCO A MiTek Affiliate

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

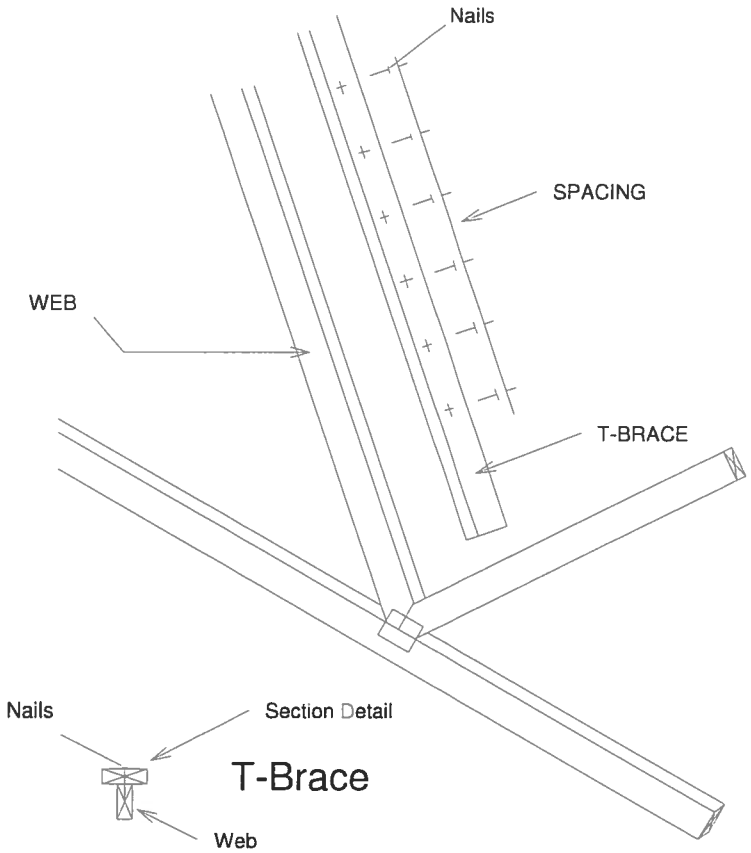
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

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

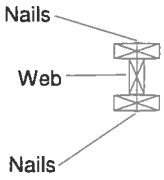
	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

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

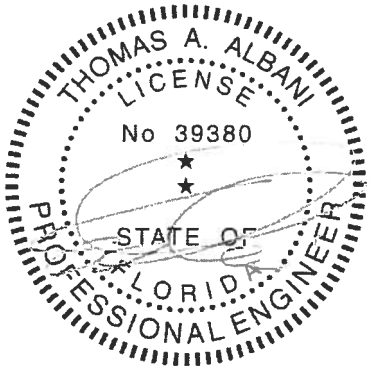
T-Brace / I-Brace must be same species and grade (or better) as web member.



T-Brace



I-Brace



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Date:

February 12, 2018

AUGUST 1, 2016	SCAB-BRACE DETAIL	MII-SCAB-BRACE

MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

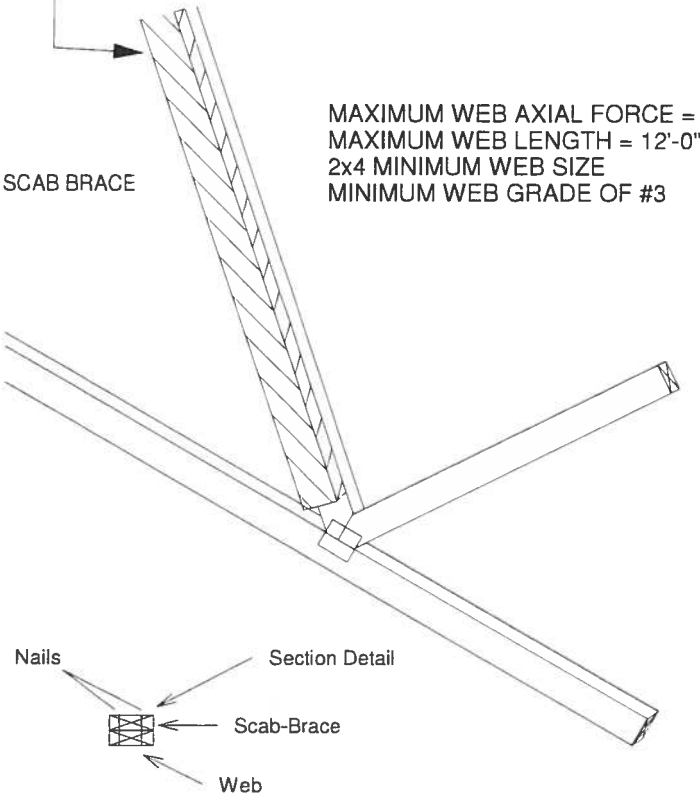
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

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

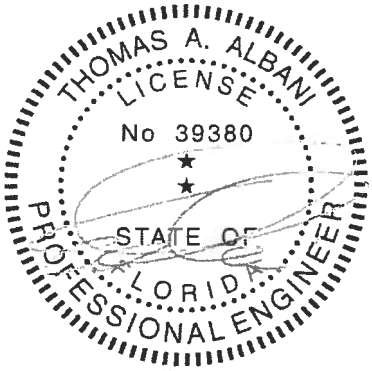
APPLY 2x___ SCAB TO ONE FACE OF WEB WITH
2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
SCAB MUST BE THE SAME GRADE, SIZE AND
SPECIES (OR BETTER) AS THE WEB.

SCAB BRACE

MAXIMUM WEB AXIAL FORCE = 2500 lbs
MAXIMUM WEB LENGTH = 12'-0"
2x4 MINIMUM WEB SIZE
MINIMUM WEB GRADE OF #3



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



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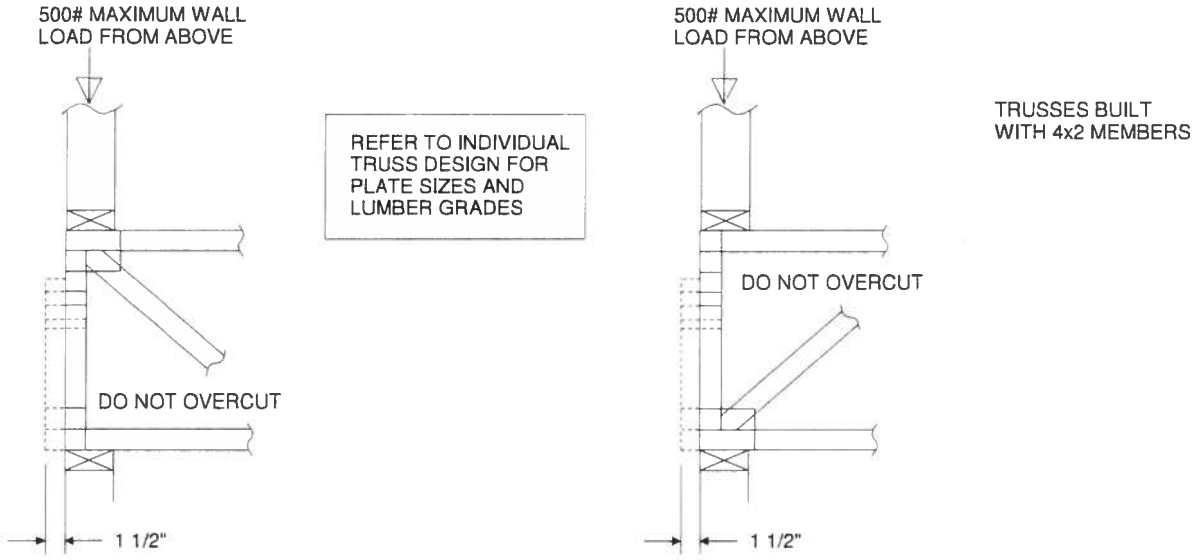
Date:

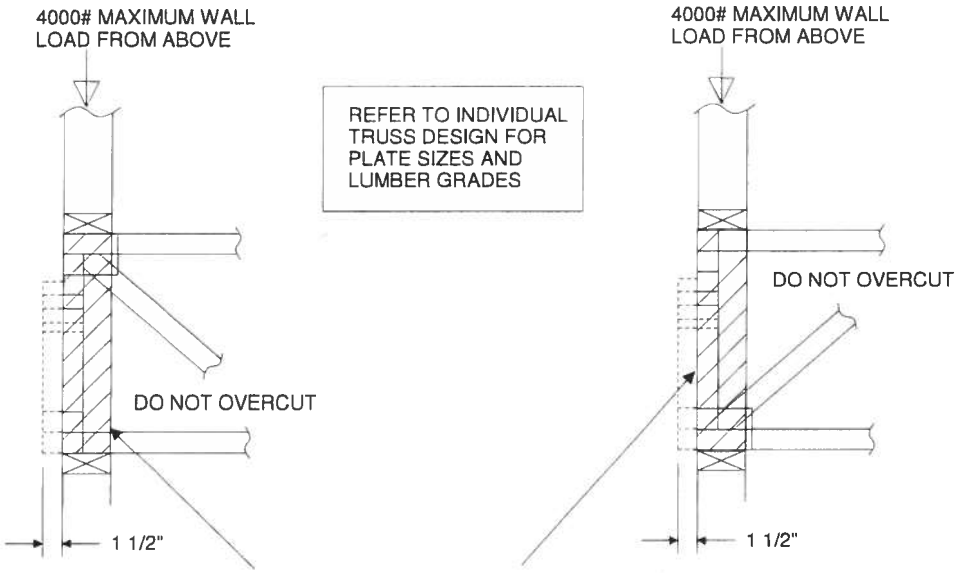
February 12, 2018

AUGUST 1, 2016	STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)	MII-REP05

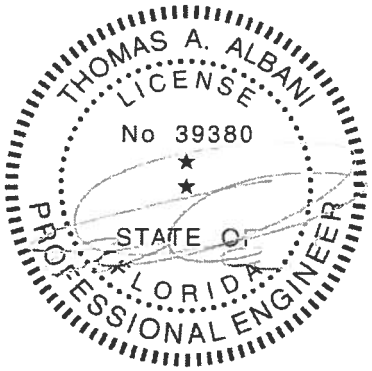
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.





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



Thomas A. Albani PE No.39380
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6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-D-SP

MiTek USA, Inc. Page 1 of 2

MiTek USA, Inc.
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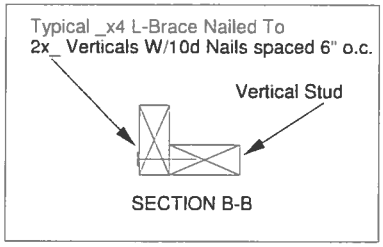
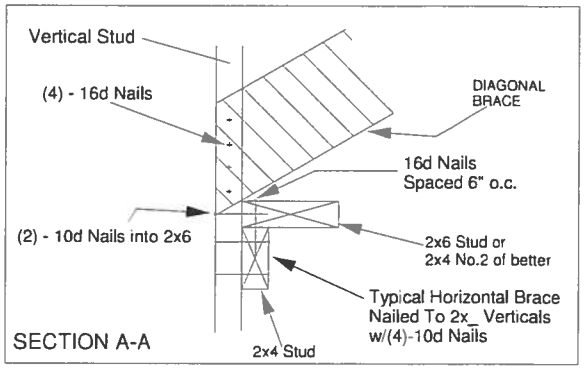
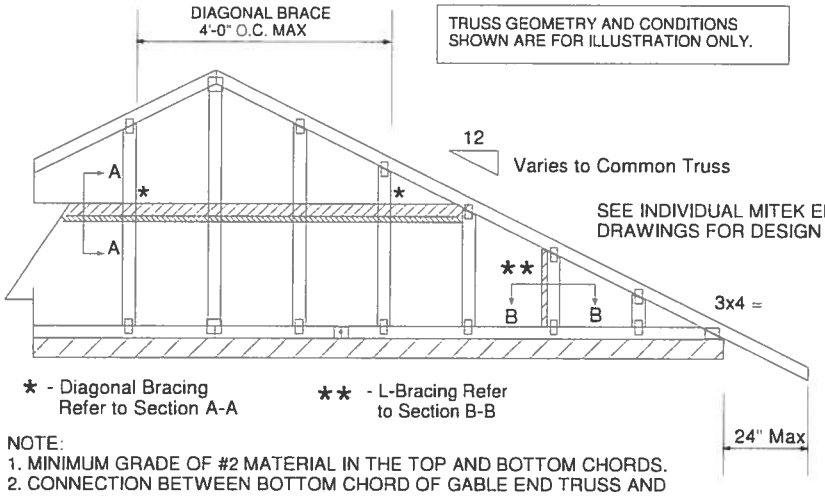






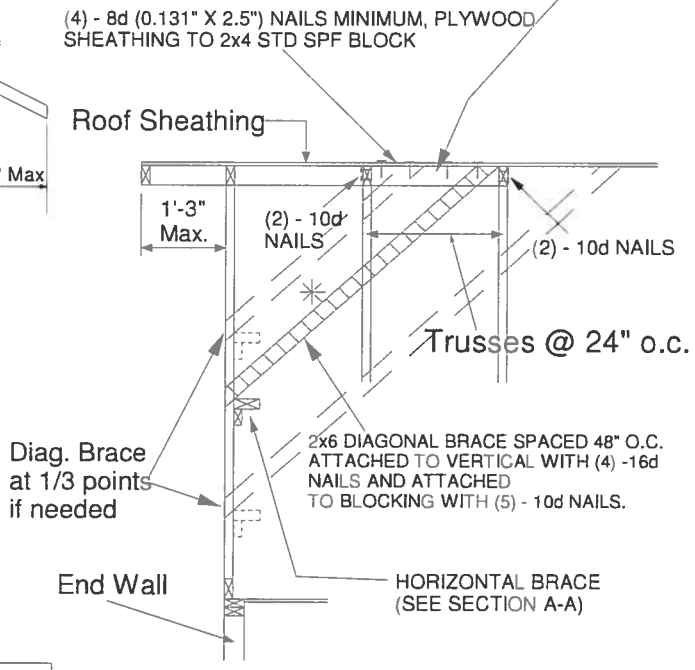
TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

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

* - Diagonal Bracing Refer to Section A-A

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



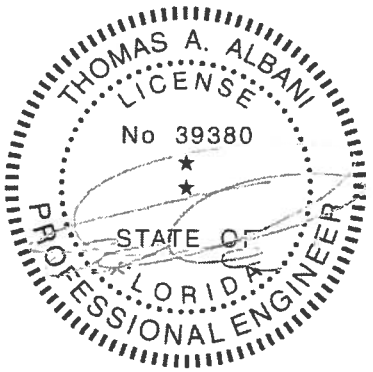
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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Date:
February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-SP

MiTek USA, Inc.
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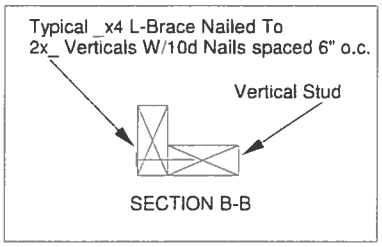
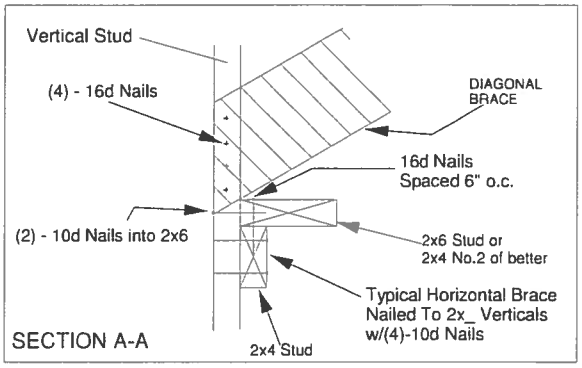
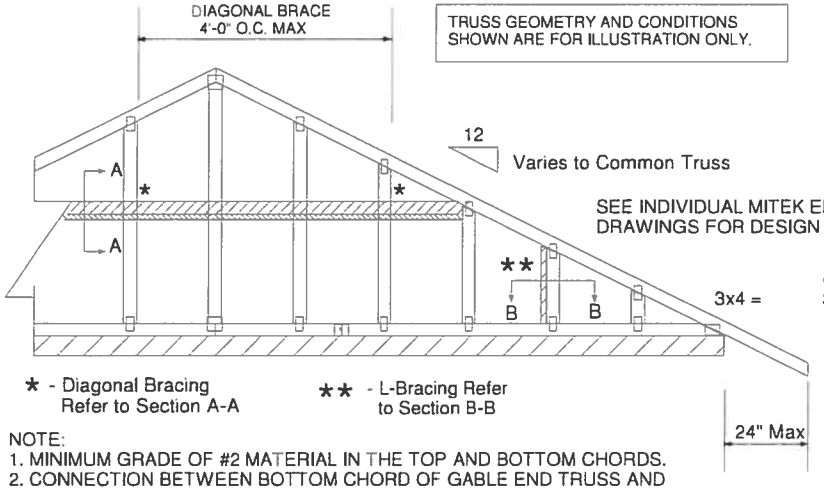






TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

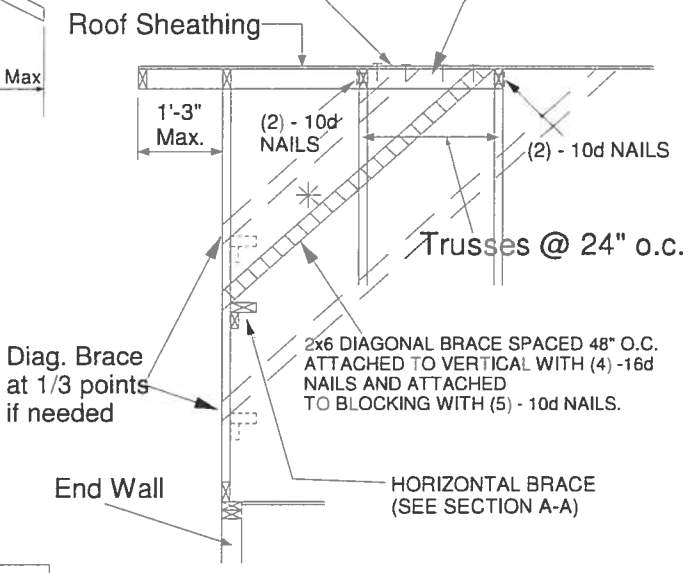
SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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



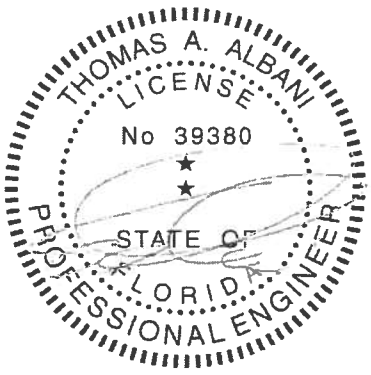
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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

JANUARY 6, 2017	Standard Gable End Detail	MII-GE140-001

MiTek USA, Inc. Page 1 of 2

MiTek USA, Inc.
ENGINEERED BY TRENCO
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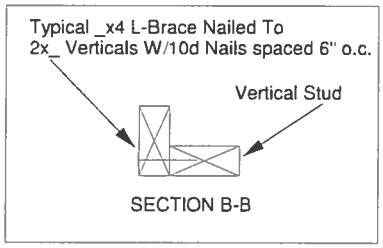
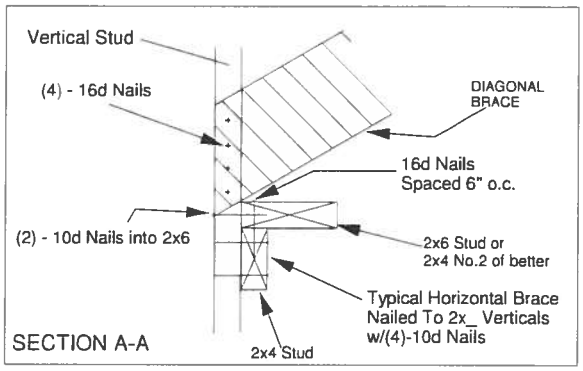
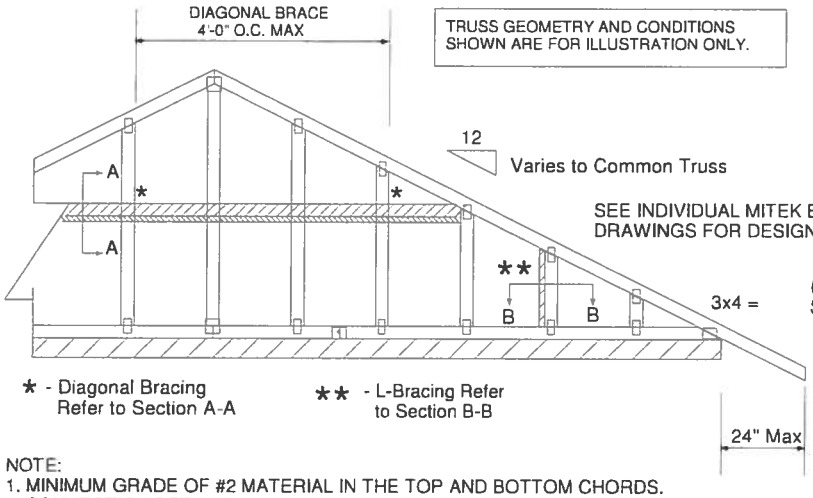
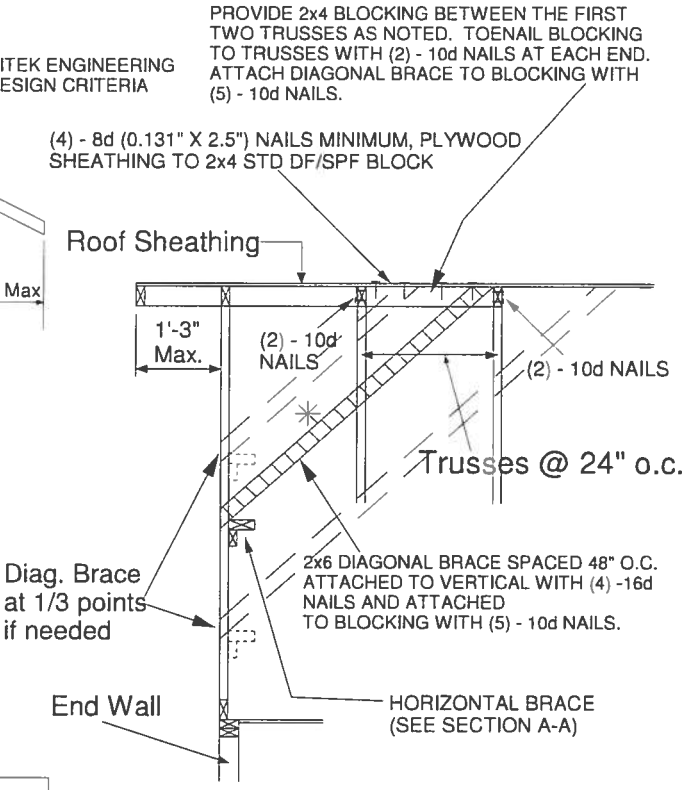








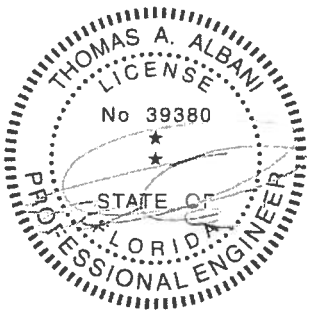
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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

January 19, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE170-D-SP

MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
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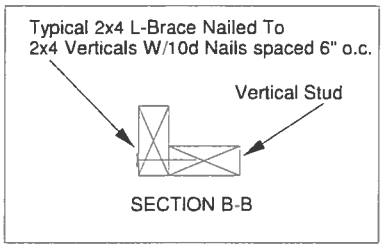
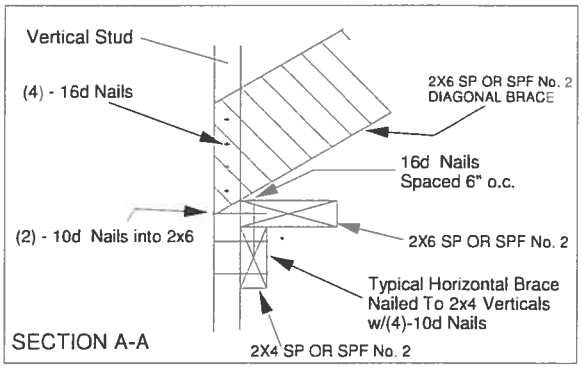
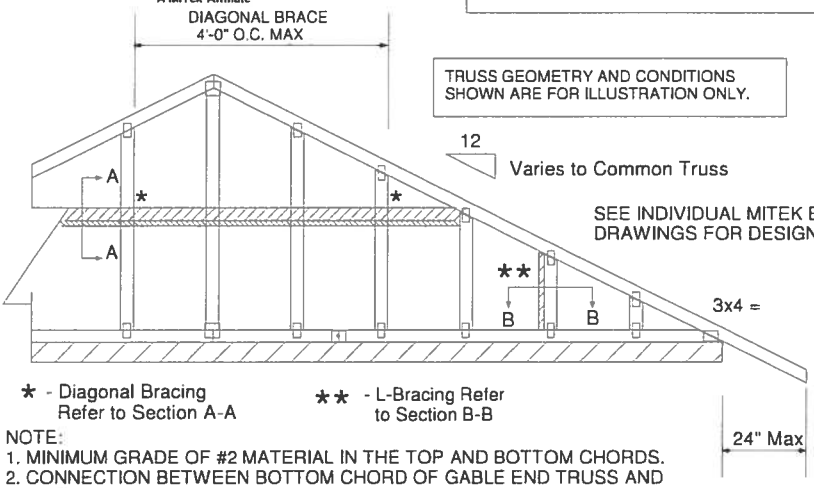




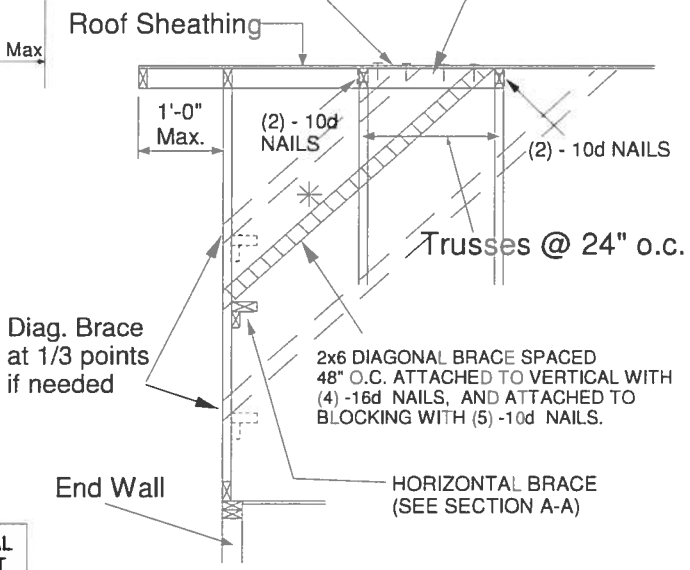


* - Diagonal Bracing Refer to Section A-A

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

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

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



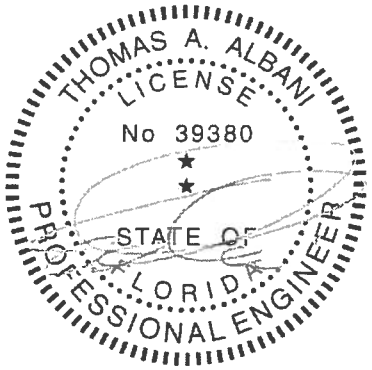
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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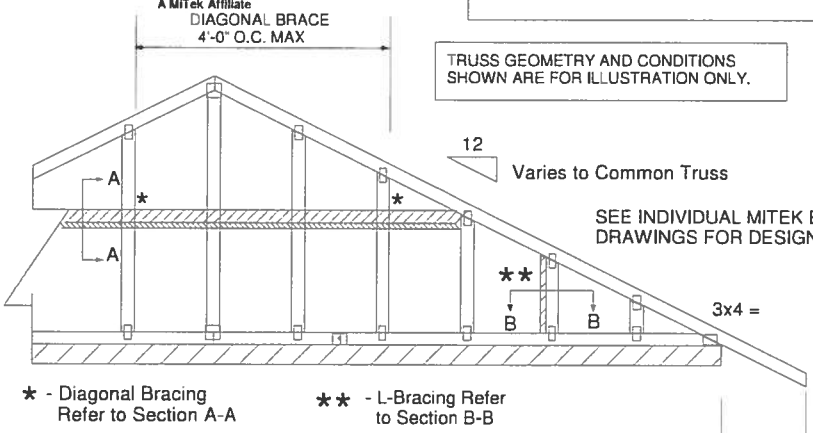
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE180-D-SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

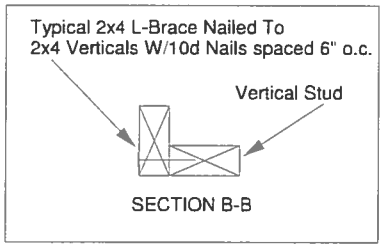


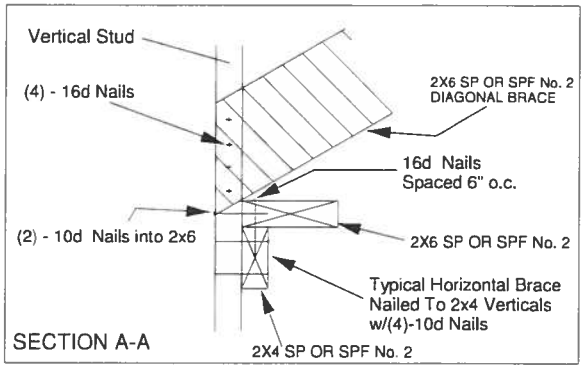
TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

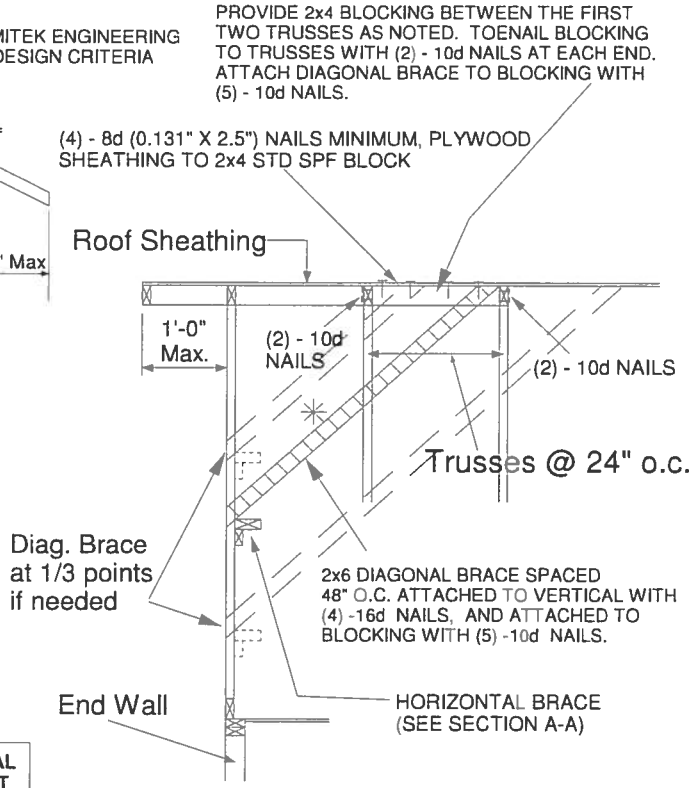
SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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







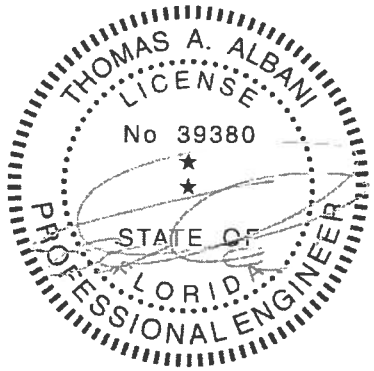
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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February 12, 2018

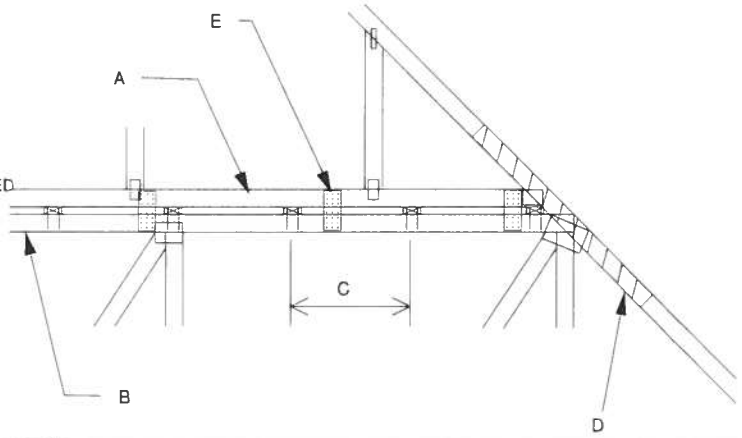
AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-7-10

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

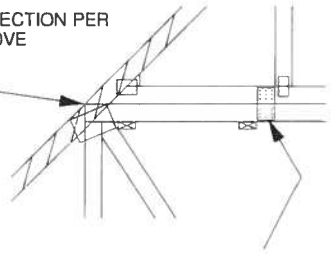
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT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



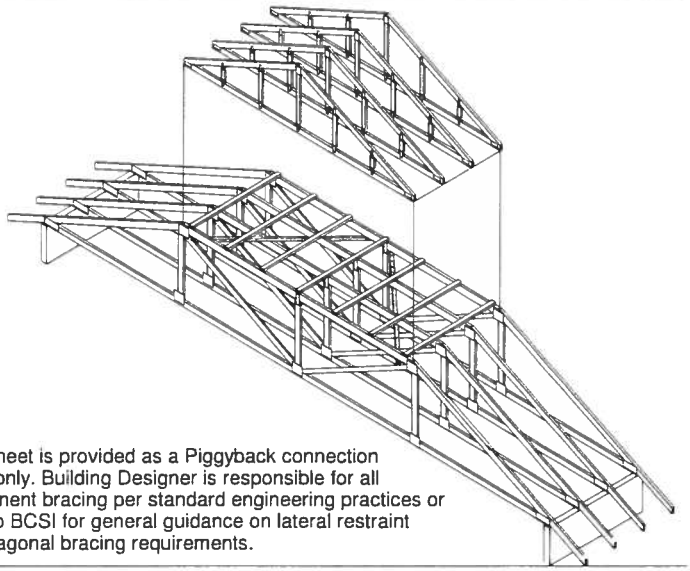
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

SCAB CONNECTION PER NOTE D ABOVE

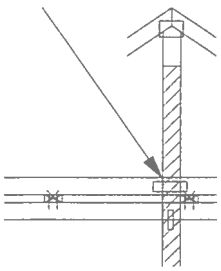


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



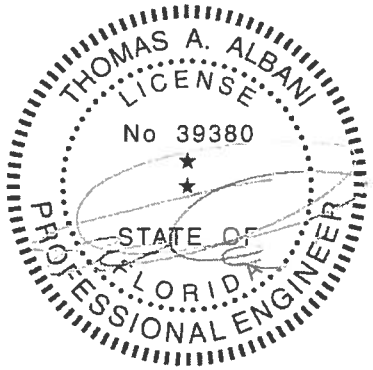
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

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



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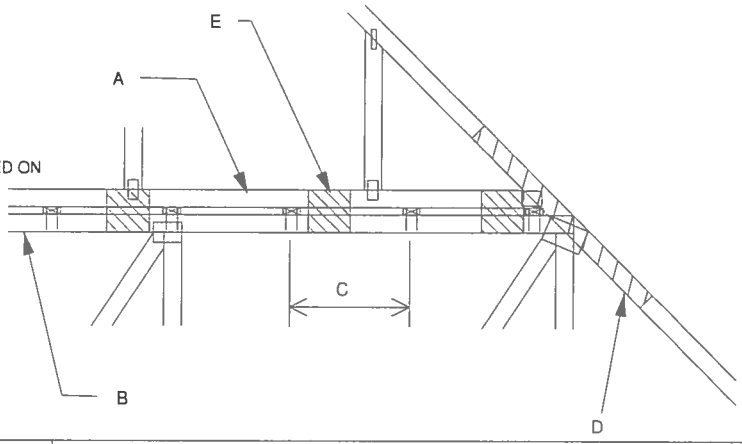
AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-ALT 7-10

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

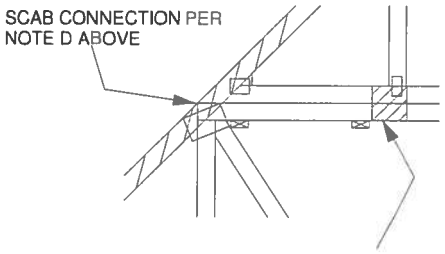
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT 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 CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

E - FOR WIND SPEED IN THE RANGE 126 MPH - 160 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)

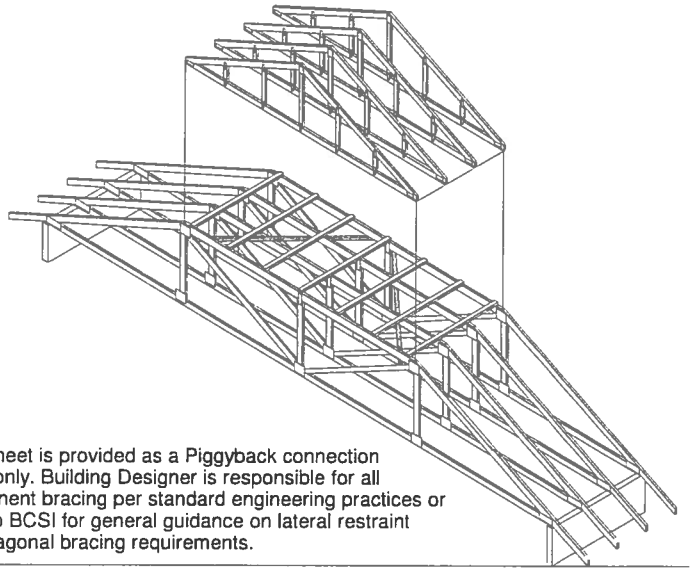


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

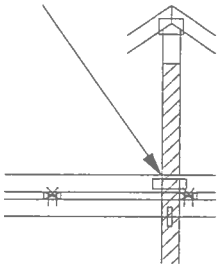


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



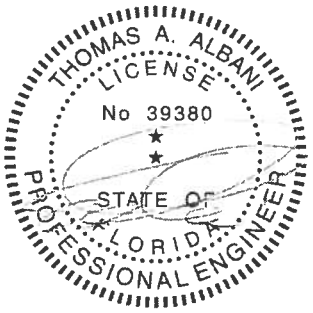
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

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



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January 19, 2018

AUGUST 1, 2016	STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES	MII-REP01A1

MiTek USA, Inc.
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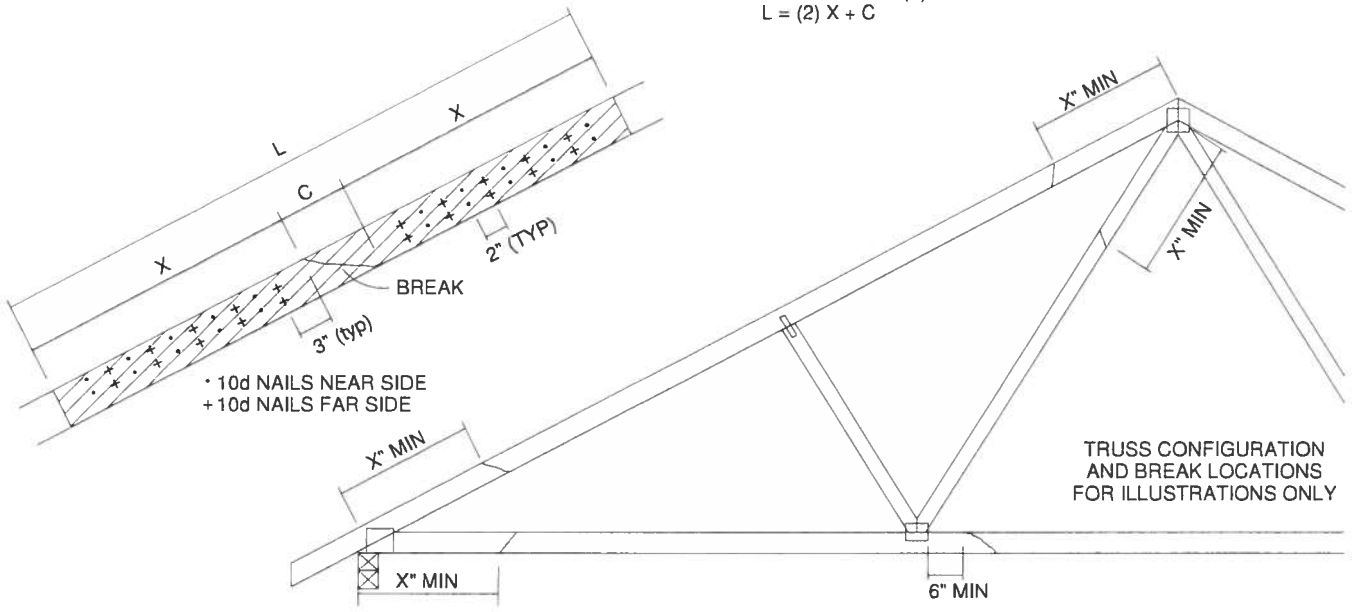
A MiTek Affiliate

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

* DIVIDE EQUALLY FRONT AND BACK

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

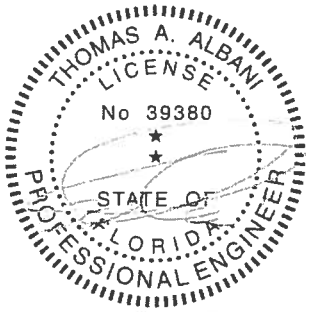
THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:
L = (2) X + C



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

DO NOT USE REPAIR FOR JOINT SPLICES

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



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AUGUST 1, 2016	LATERAL TOE-NAIL DETAIL	MII-TOENAIL_SP

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A MiTek Affiliate

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

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)

	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

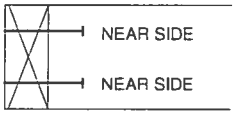
VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

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

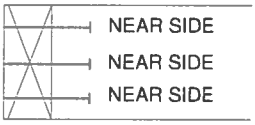
For load duration increase of 1.15:
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

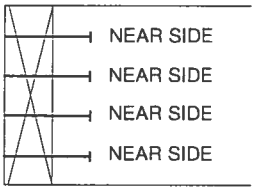
SIDE VIEW
(2x3)
2 NAILS

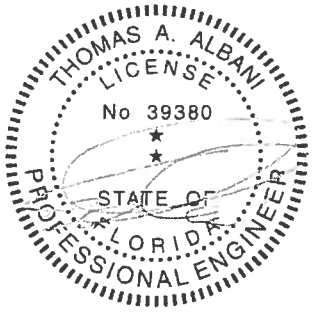


SIDE VIEW
(2x4)
3 NAILS



SIDE VIEW
(2x6)
4 NAILS





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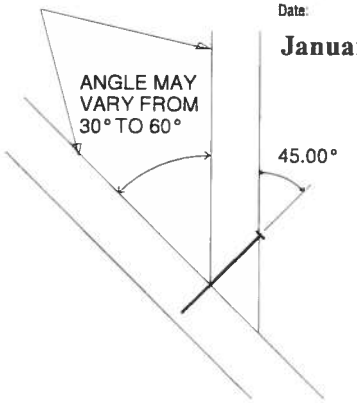
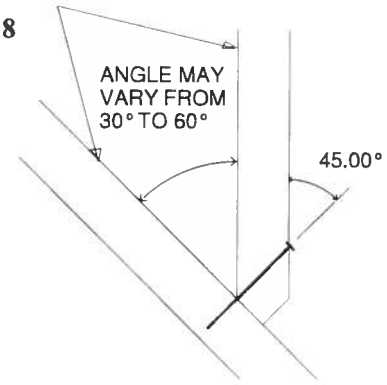
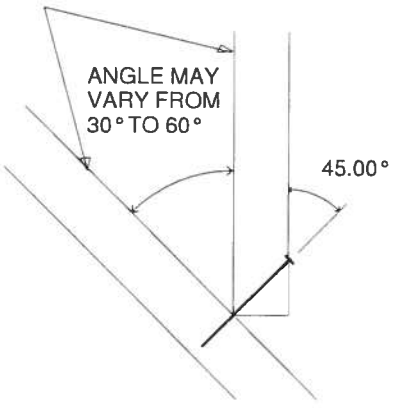




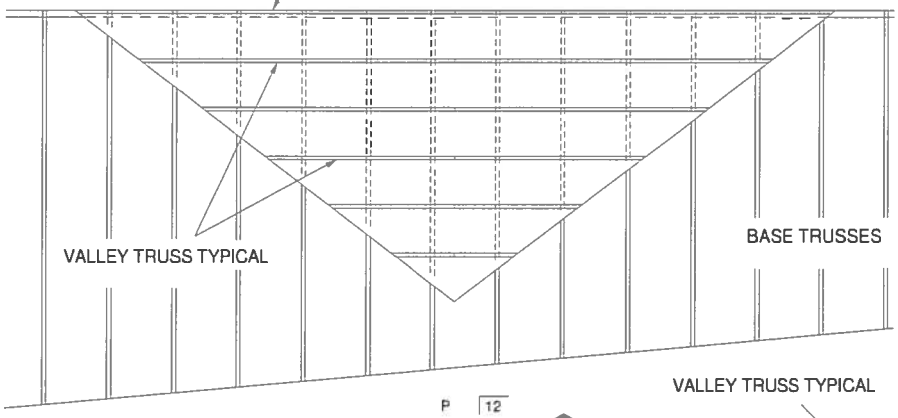


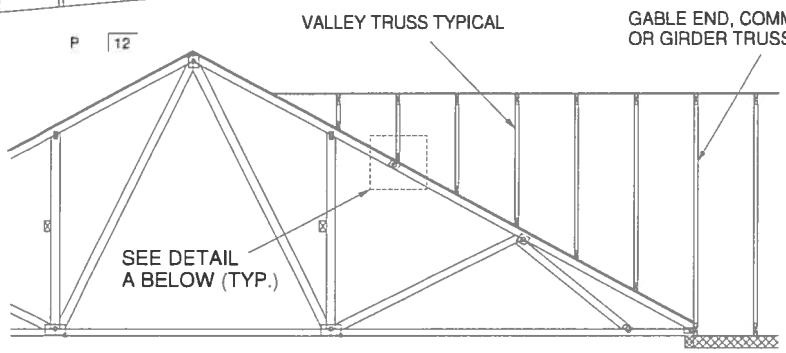
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND1

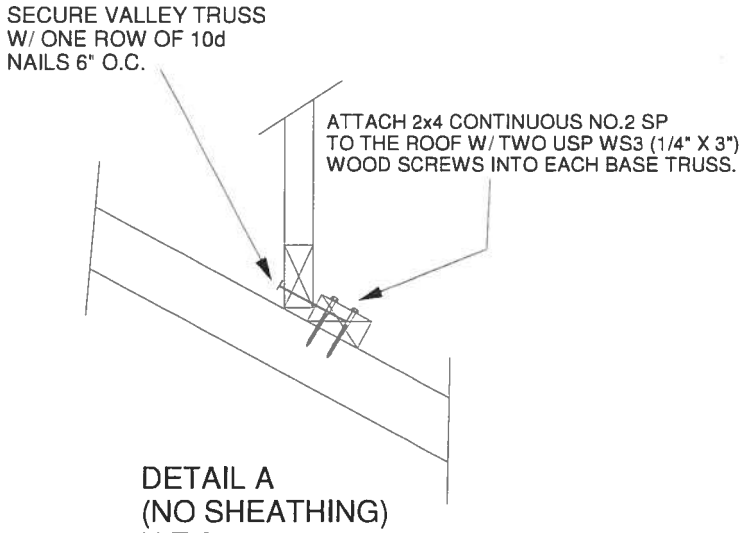
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

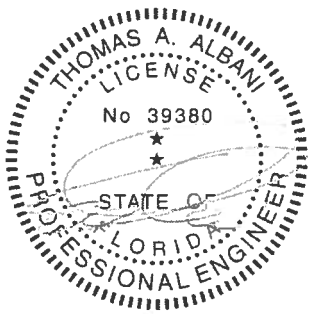






DETAIL A
(NO SHEATHING)
N.T.S.

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



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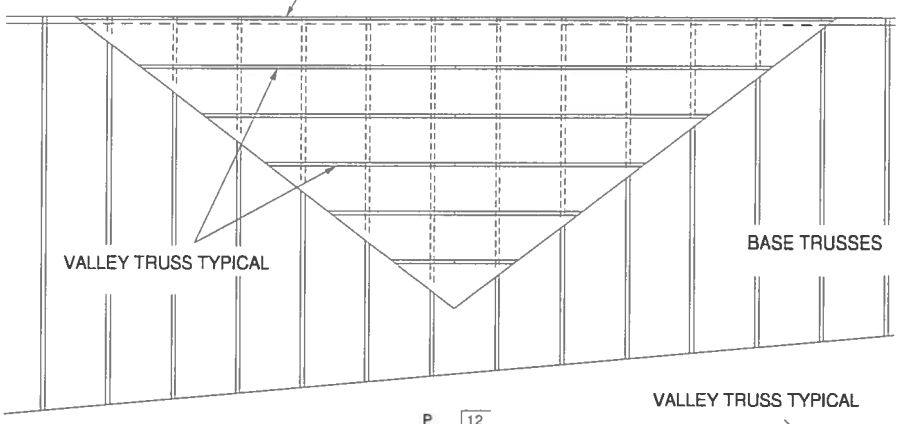
January 19, 2018

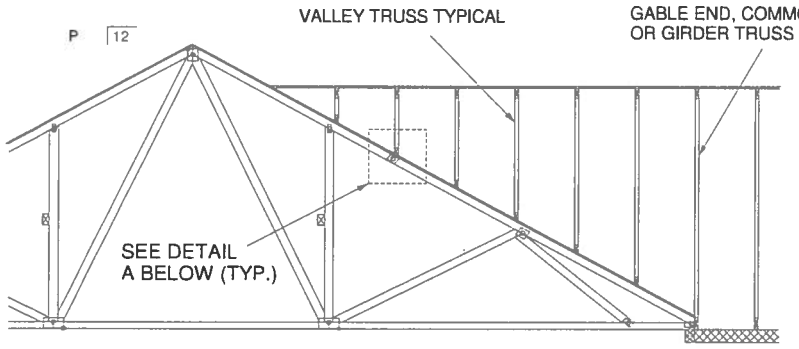
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND2

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

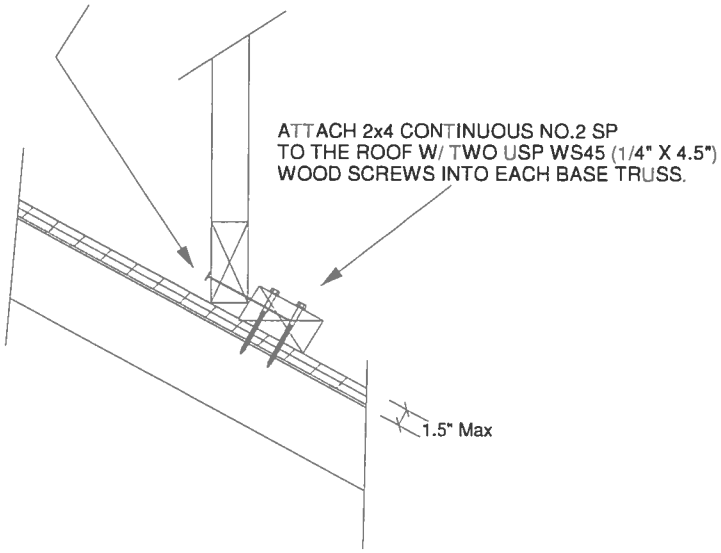
GENERAL SPECIFICATIONS

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

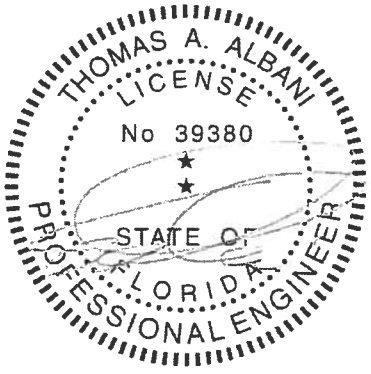




SECURE VALLEY TRUSS
W/ ONE ROW OF 10d
NAILS 6" O.C.



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



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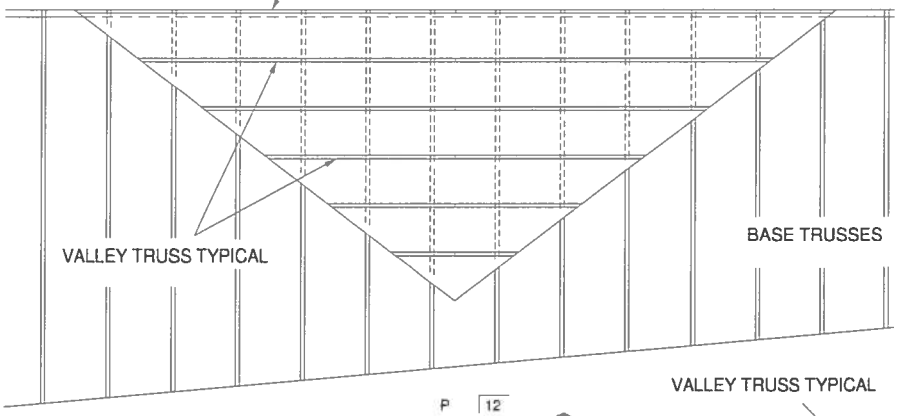
February 12, 2018

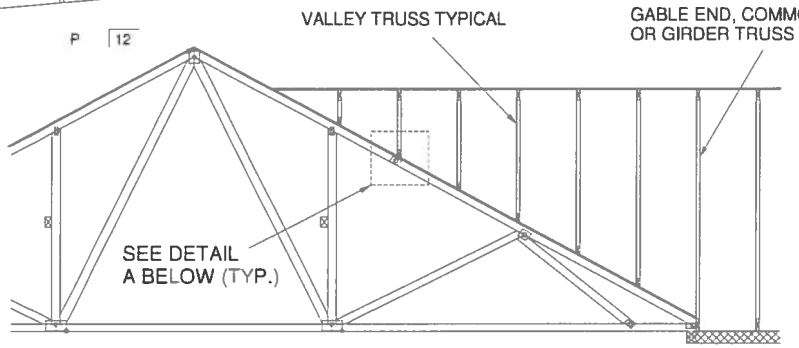
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY SP

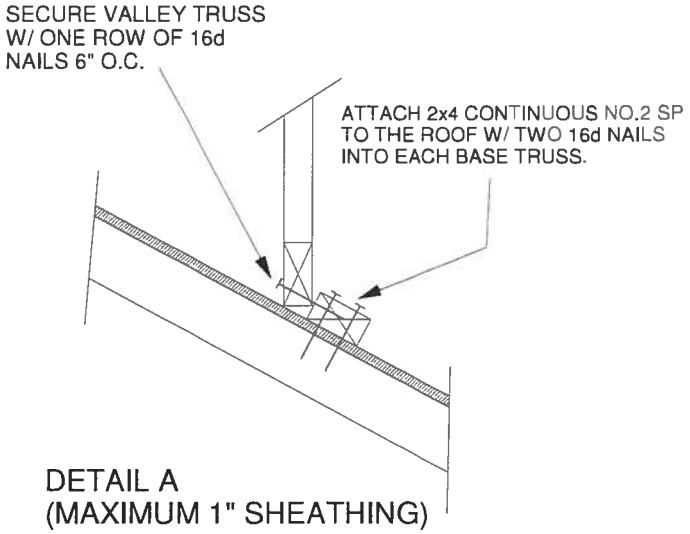
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING 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.

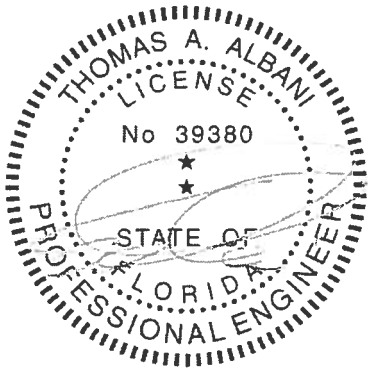






DETAIL A
(MAXIMUM 1" SHEATHING)
N.T.S.

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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AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)	MII-VALLEY

MiTek USA, Inc.

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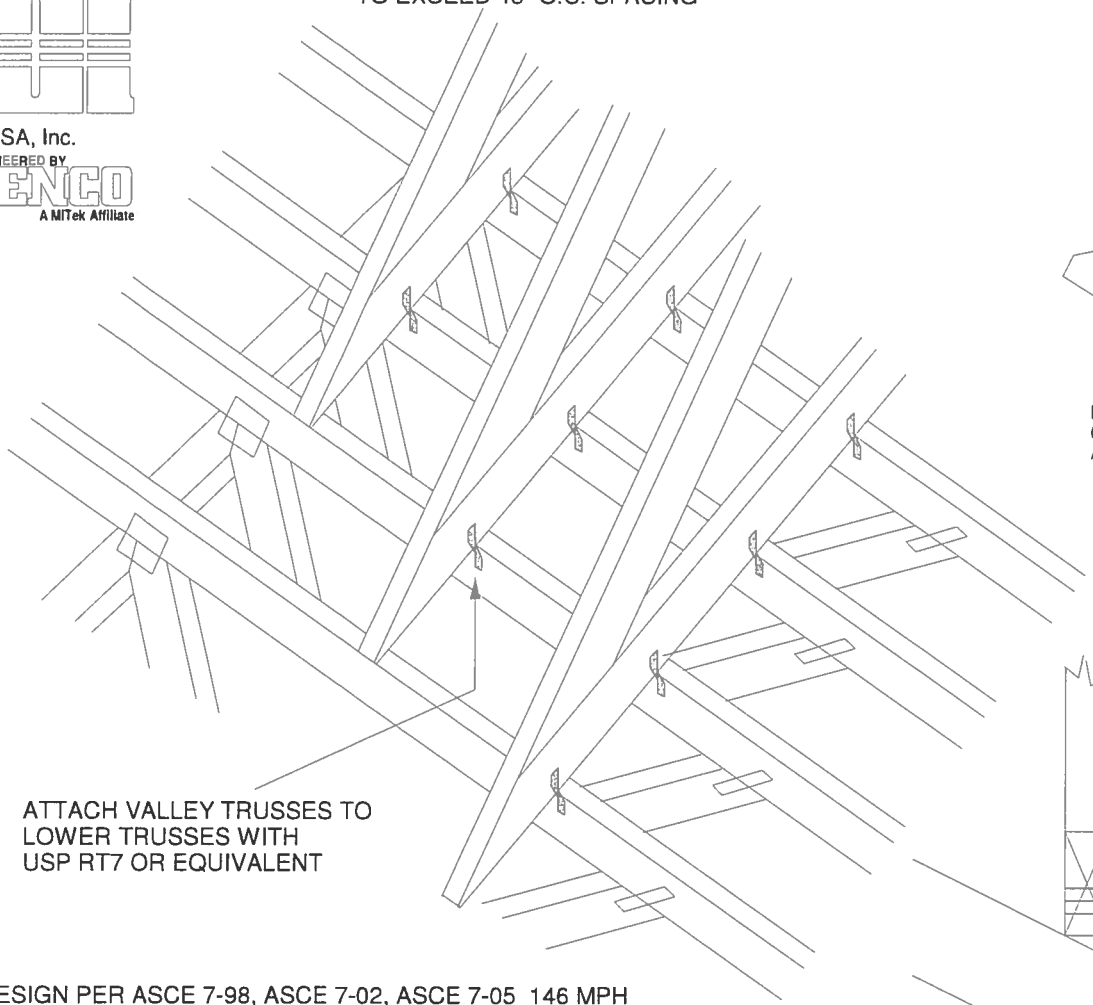
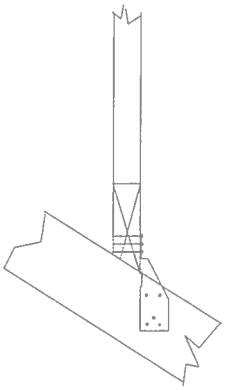
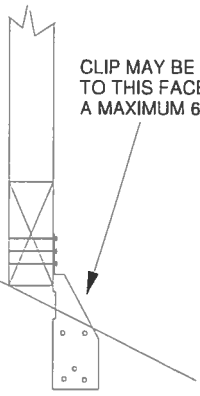
NOTE: VALLEY STUD SPACING NOT TO EXCEED 48" O.C. SPACING



ATTACH VALLEY TRUSSES TO LOWER TRUSSES WITH USP RT7 OR EQUIVALENT



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



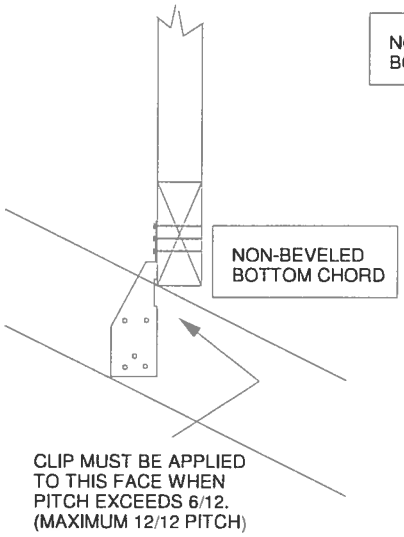
CLIP MAY BE APPLIED TO THIS FACE UP TO A MAXIMUM 6/12 PITCH

NON-BEVELED BOTTOM CHORD

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

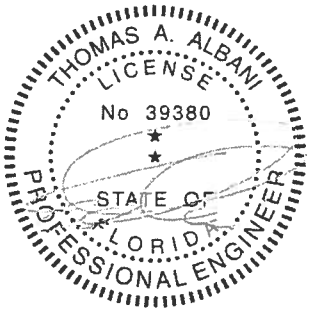
SUPPORTING TRUSSES DIRECTLY UNDER VALLEY TRUSSES MUST BE DESIGNED WITH A MAXIMUM UNBRACED LENGTH OF 2'-10" ON AFFECTED TOP CHORDS.

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



NON-BEVELED BOTTOM CHORD

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



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AUGUST 1, 2016	Standard Gable End Detail	MII-GE146-001

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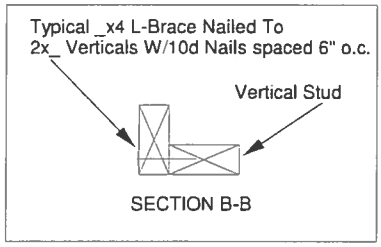
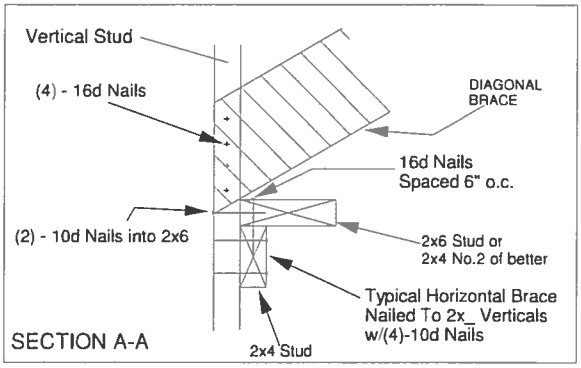
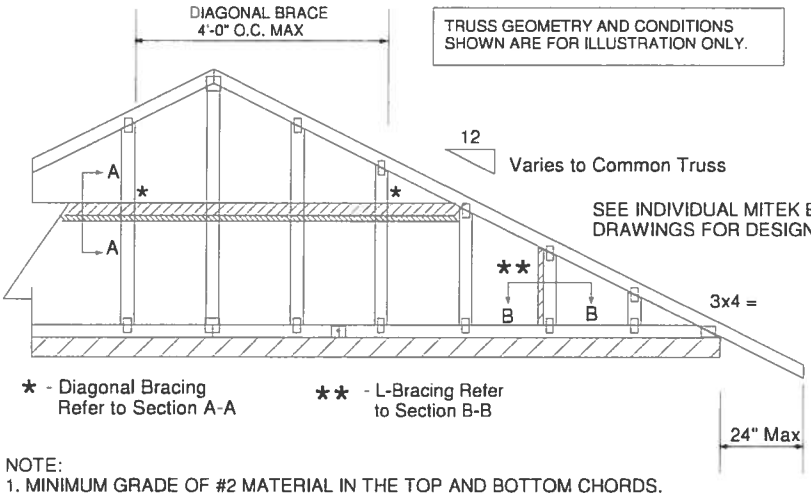
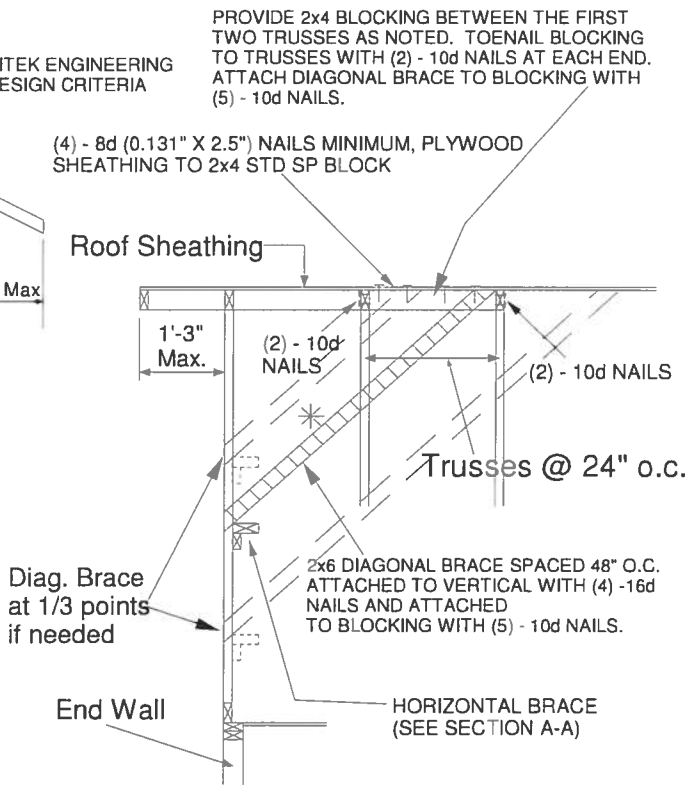






TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA



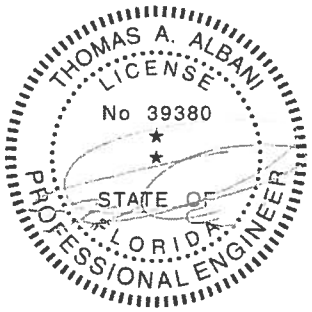
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

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



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OCTOBER 5, 2016	REPLACE BROKEN OVERHANG	MII-REP13B

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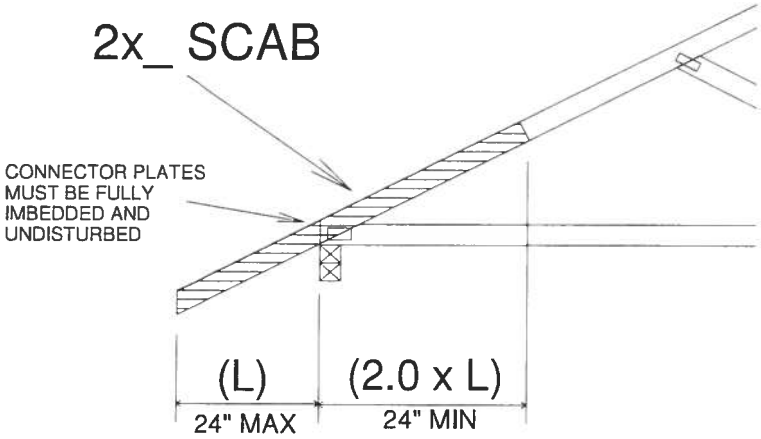
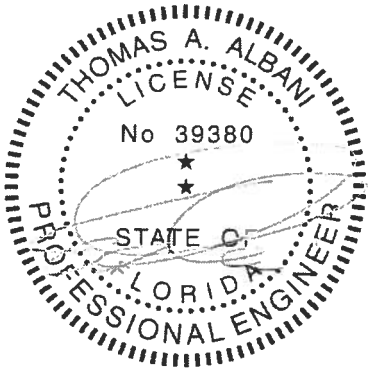
TRUSS CRITERIA:
LOADING: 40-10-0-10
DURATION FACTOR: 1.15
SPACING: 24" O.C.
TOP CHORD: 2x4 OR 2x6
PITCH: 4/12 - 12/12
HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL
END BEARING CONDITION

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



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

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



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AUGUST 1, 2016	LATERAL BRACING RECOMMENDATIONS	MII-STRGBCK

MiTek USA, Inc. Page 1 of 1

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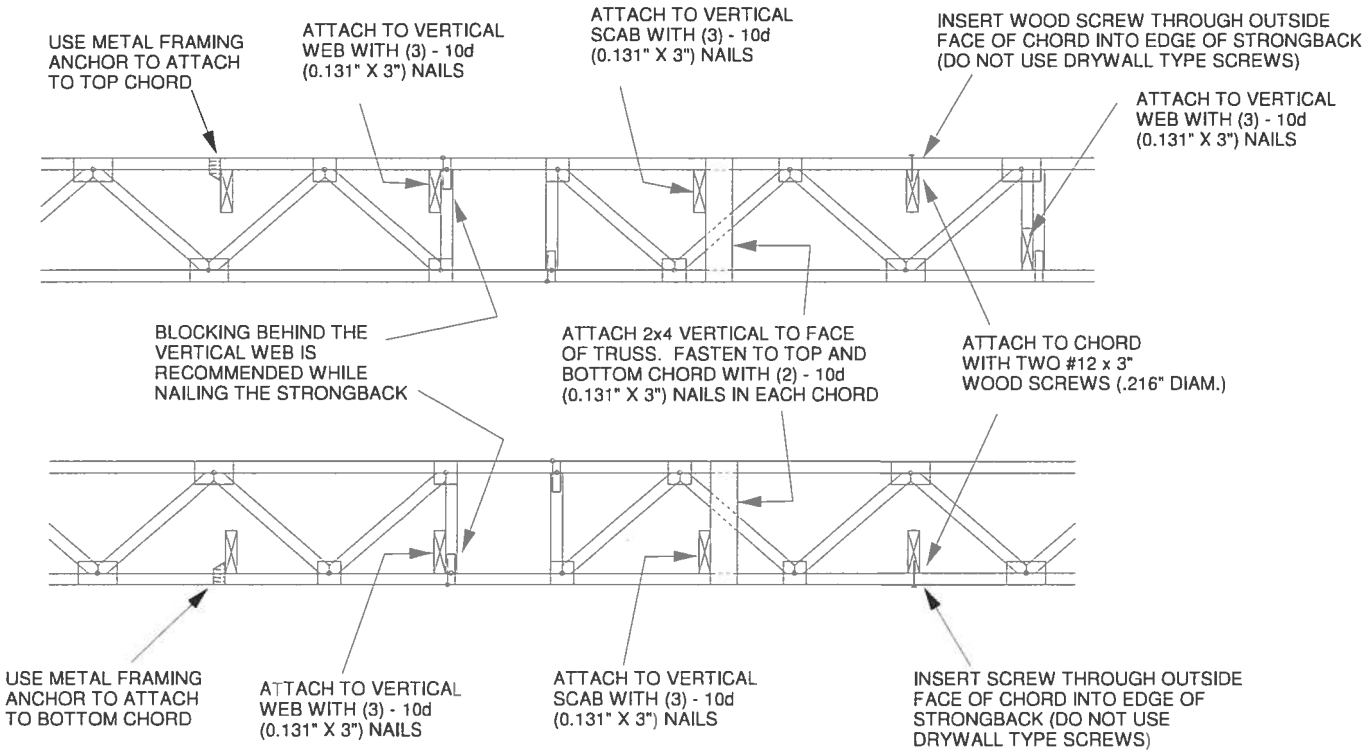
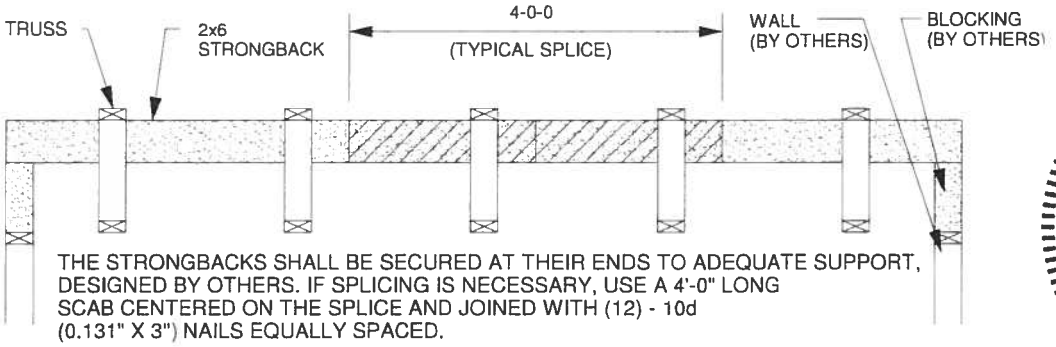
TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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.

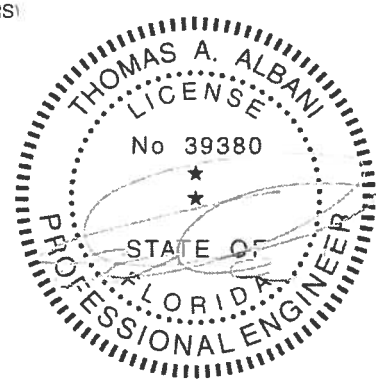
NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.





THE STRONGBACKS SHALL BE SECURED AT THEIR ENDS TO ADEQUATE SUPPORT, DESIGNED BY OTHERS. IF SPLICING IS NECESSARY, USE A 4'-0" LONG SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d (0.131" X 3") NAILS EQUALLY SPACED.

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



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