



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

RE: 2374839 - HTH - SPEC HSE SPARR LN

MiTek USA, Inc.

6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:

Customer Info: Home Town Homes Project Name: Spec Hse Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: TBD Sparr Lane, 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 24 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	T20450282	CJ01	6/12/20	23	T20450304	T15	6/12/20
2	T20450283	CJ02	6/12/20	24	T20450305	TG01	6/12/20
3	T20450284	CJ03	6/12/20				
4	T20450285	CJ04	6/12/20				
5	T20450286	EJ01	6/12/20				
6	T20450287	EJ02	6/12/20				
7	T20450288	HJ01	6/12/20				
8	T20450289	HJ02	6/12/20				
9	T20450290	T01	6/12/20				
10	T20450291	T02	6/12/20				
11	T20450292	T03	6/12/20				
12	T20450293	T04	6/12/20				
13	T20450294	T05	6/12/20				
14	T20450295	T06	6/12/20				
15	T20450296	T07	6/12/20				
16	T20450297	T08	6/12/20				
17	T20450298	T09	6/12/20				
18	T20450299	T10	6/12/20				
19	T20450300	T11	6/12/20				
20	T20450301	T12	6/12/20				
21	T20450302	T13	6/12/20				
22	T20450303	T14	6/12/20				



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

Truss Design Engineer's Name: Velez, Joaquin

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

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



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

June 12, 2020

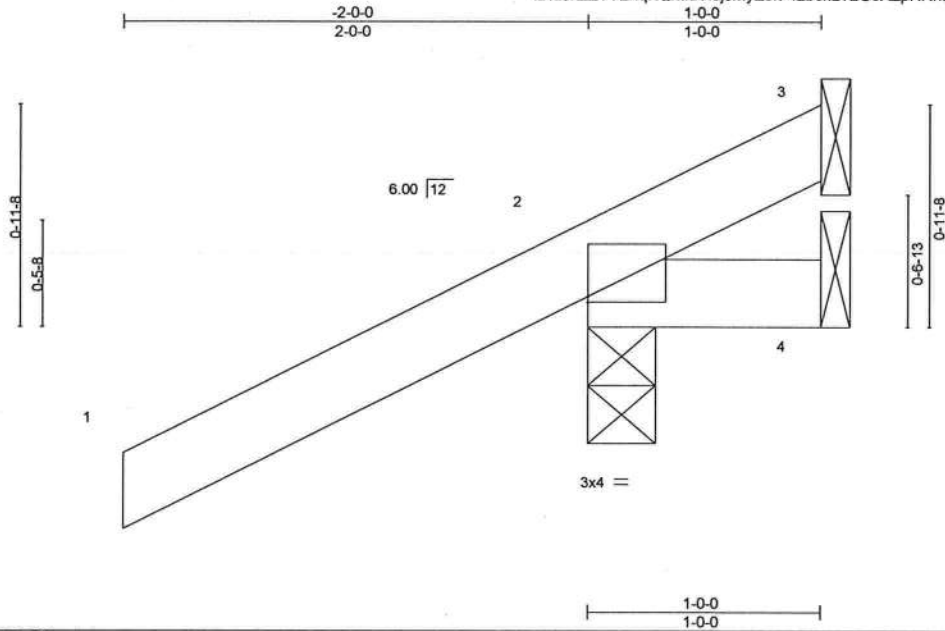
Velez, Joaquin

1 of 1

Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450282
2374839	CJ01	Jack-Open	14	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8,240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:31:58 2020 Page 1
ID:uJkZZVTEhQKQntlaVi8JMyZ6ft-42bcfzT2GeXZpRRnS3C8zsyYof04DIGCAjHkPz74Wl



Scale = 1:9.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.25	Vert(LL)	0.00	7	>999	240	
TCDL 7.0	Lumber DOL	1.25	BC 0.07	Vert(CT)	0.00	7	>999	180	
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.00	2	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						
								Weight: 7 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=52(LC 12)
Max Uplift 3=-28(LC 1), 2=-115(LC 12), 4=-45(LC 1)
Max Grav 3=17(LC 16), 2=254(LC 1), 4=31(LC 16)

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

NOTES- (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (it=lb) 2=115.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Date:

June 12,2020

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

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

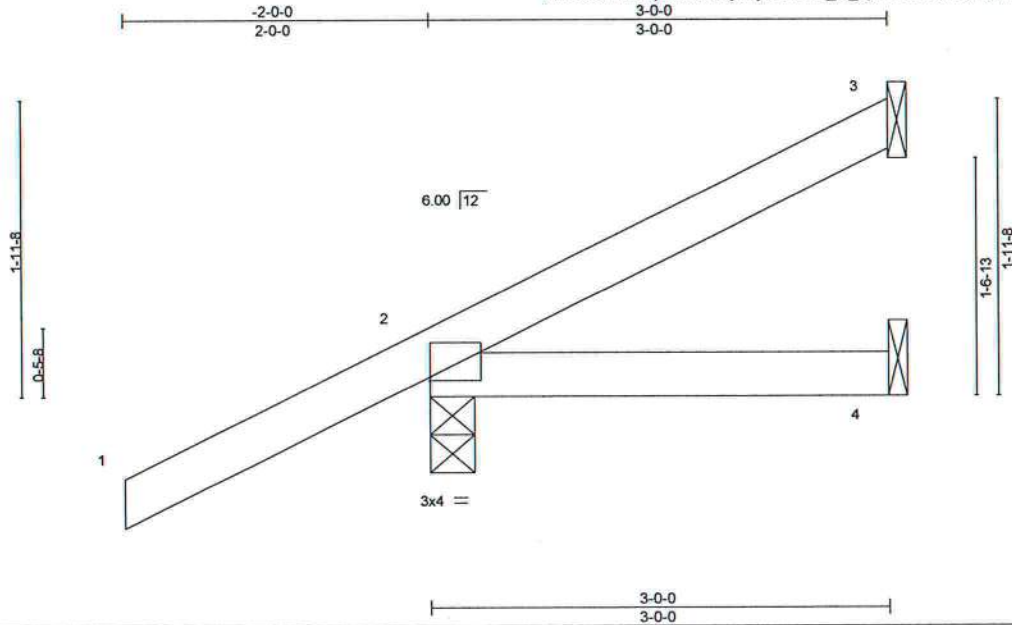


6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450283
2374839	CJ02	Jack-Open	12	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:31:59 2020 Page 1
ID:uJkZZVTEhQKQntlaV8jJMyZ6ft-ZE9_te_6pZnOBz0eLAaRgAP6IC?4pg?PRqSqGsz74Wk



Scale = 1:14.6

Plate Offsets (X,Y)-- [2:0-0-0,0-0-5]							PLATES	GRIP
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in	(loc)	I/defl	L/d	
TCLL 20.0	Plate Grip DOL 1.25	TC 0.25	Vert(LL)	-0.00	4-7	>999	240	MT20
TCDL 7.0	Lumber DOL 1.25	BC 0.07	Vert(CT)	-0.01	4-7	>999	180	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a	
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MP						Weight: 13 lb FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 3=39(LC 12), 2=89(LC 12), 4=17(LC 9)
Max Grav 3=53(LC 1), 2=253(LC 1), 4=48(LC 3)

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

NOTES- (6)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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June 12,2020

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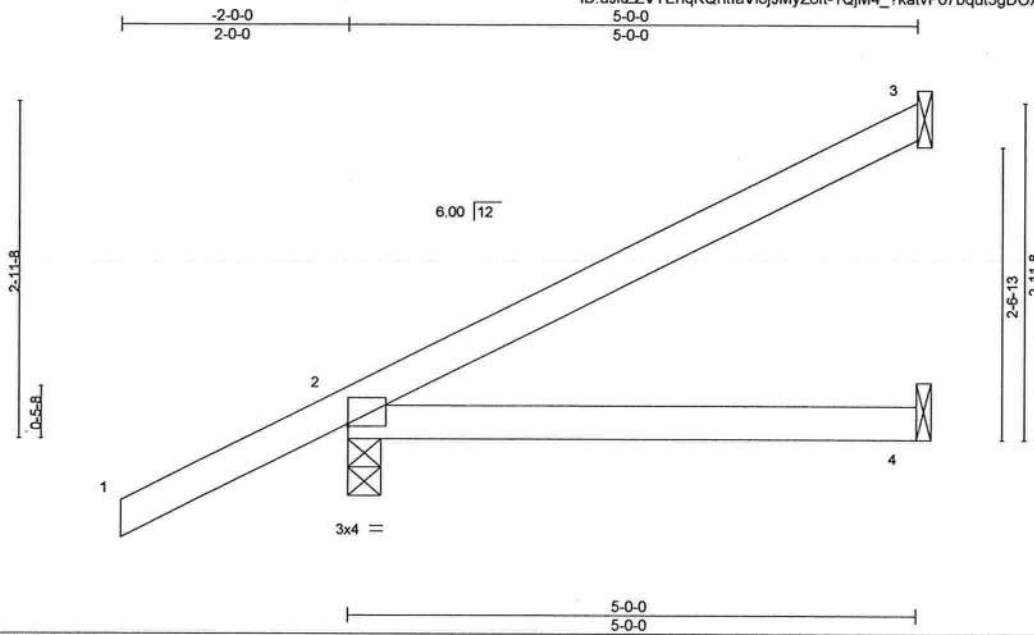
MiTek

6904 Parke East Blvd.
Tampa, FL 36610

Job 2374639	Truss CJ03	Truss Type Jack-Open	Qty 12	Ply 1	HTH - SPEC HSE SPARR LN	T20450284
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:00 2020 Page 1
ID:uJkZZVTEhqKQntlaVi8jMyZ6ft-1QjM4_?katvFo7bqt5gDOxGCbl7Y7FYfUCOpiz74Wj



Scale = 1:19.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.30	Vert(LL)	0.06	4-7	>925	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.27	Vert(CT)	-0.05	4-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=128(LC 12)
Max Uplift 3=-77(LC 12), 2=-95(LC 12), 4=-33(LC 9)
Max Grav 3=109(LC 1), 2=313(LC 1), 4=87(LC 3)

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

NOTES- (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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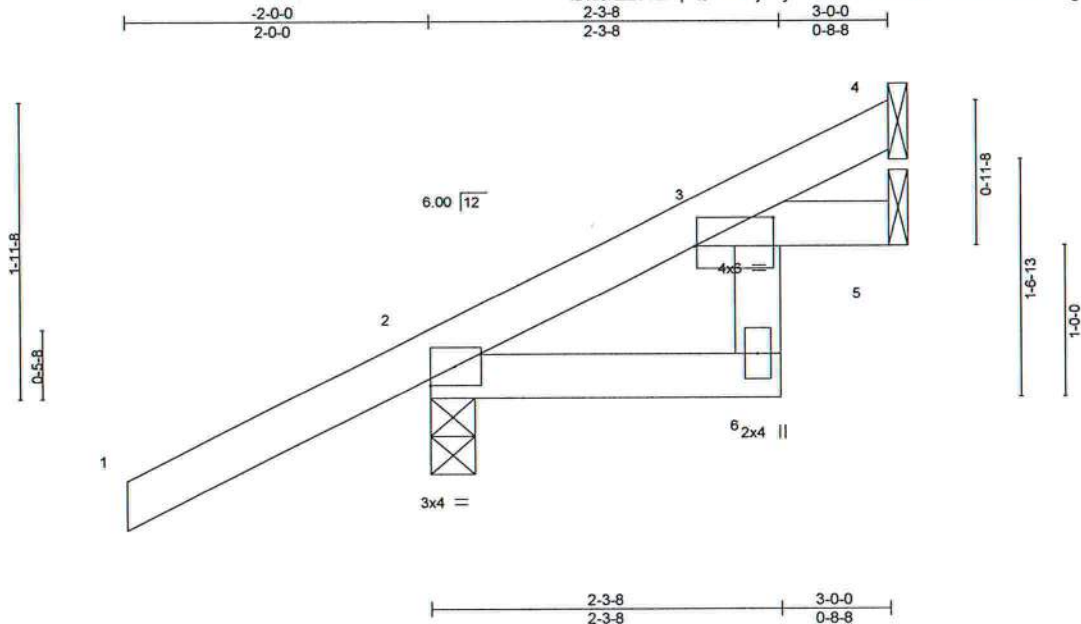
6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss CJ04	Truss Type Jack-Open	Qty 2	Ply 1	HTH - SPEC HSE SPARR LN T20450285
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:01 2020 Page 1

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Scale = 1:14.6

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

LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	2-0-0	TC 0.25	Vert(LL)	-0.00	6	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.07	Vert(CT)	-0.01	6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MR						Weight: 15 lb	FT = 20%

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

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

REACTIONS. (size) 4=Mechanical, 2=0-3-8, 5=Mechanical
Max Horz 2=90(LC 12)
Max Uplift 4=-23(LC 12), 2=-88(LC 12), 5=-8(LC 12)
Max Grav 4=42(LC 1), 2=255(LC 1), 5=44(LC 3)

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

NOTES- (6)
1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2, 5.
6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Date:

June 12,2020

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MiTek

6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss EJ01	Truss Type Jack-Partial	Qty 14	Ply 1	HTH - SPEC HSE SPARR LN	T20450286
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:02 2020 Page 1
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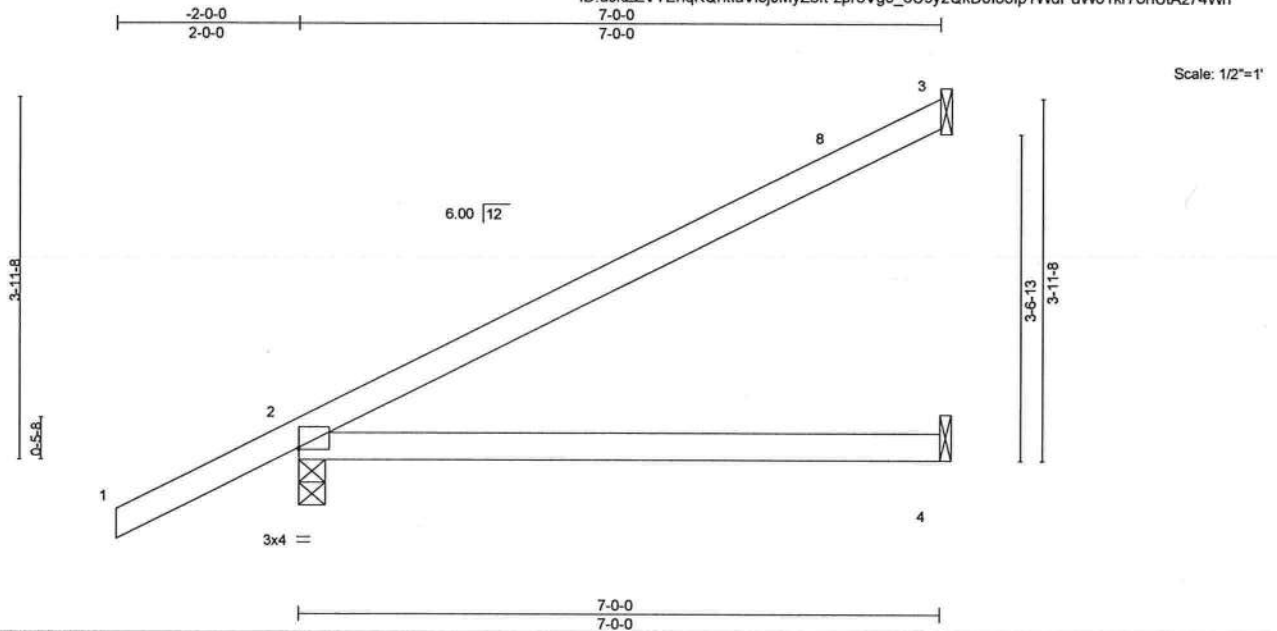


Plate Offsets (X,Y)~		[2-0-0-0,0-0-5]	
LOADING (psf)	SPACING-	2-0-0	CSI.
TCLL 20.0	Plate Grip DOL	1.25	TC 0.69
TCDL 7.0	Lumber DOL	1.25	BC 0.59
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00
BCDL 10.0	Code	FBC2017/TPI2014	Matrix-MS
			DEFL.
			in (loc) l/defl L/d
			Vert(LL) 0.27 4-7 >311 240
			Vert(CT) 0.22 4-7 >370 180
			Horz(CT) -0.02 3 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 26 lb FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=162(LC 12)
Max Uplift 3=-100(LC 12), 2=-108(LC 12), 4=-47(LC 9)
Max Grav 3=161(LC 1), 2=380(LC 1), 4=125(LC 3)

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

NOTES- (6)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=108.
- 6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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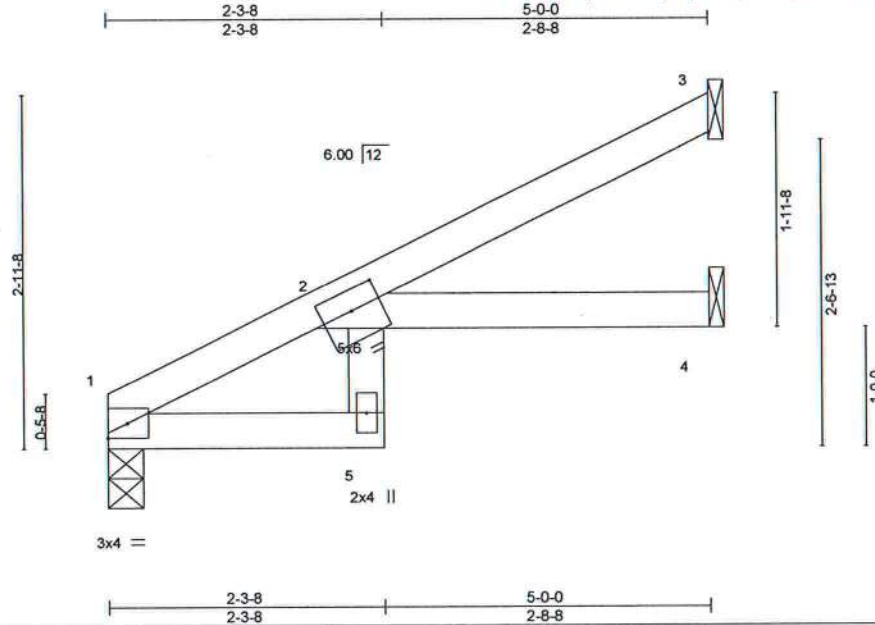
MiTek

6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450287
2374839	EJ02	Jack-Open	3	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8,240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:02 2020 Page 1
ID:uJkZZVTEhqKQntlaVi8jJMyZ6ft-zpr6Vg0_6U9y2QkD0I88lp1aWPzu01kr7ohUtAz74Wh



Scale = 1:18.5

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.44	Vert(LL)	0.06	5	>912	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.31	Vert(CT)	-0.09	5	>657	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.05	4	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MR						Weight: 18 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. (size) 1=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 1=95(LC 12)
Max Uplift 1=-32(LC 12), 3=-67(LC 12), 4=-19(LC 12)
Max Grav 1=185(LC 1), 3=108(LC 1), 4=85(LC 3)

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

NOTES- (6)

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



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

June 12, 2020

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6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss HJ01	Truss Type Diagonal Hip Girder	Qty 6	Ply 1	HTH - SPEC HSE SPARR LN	T20450288
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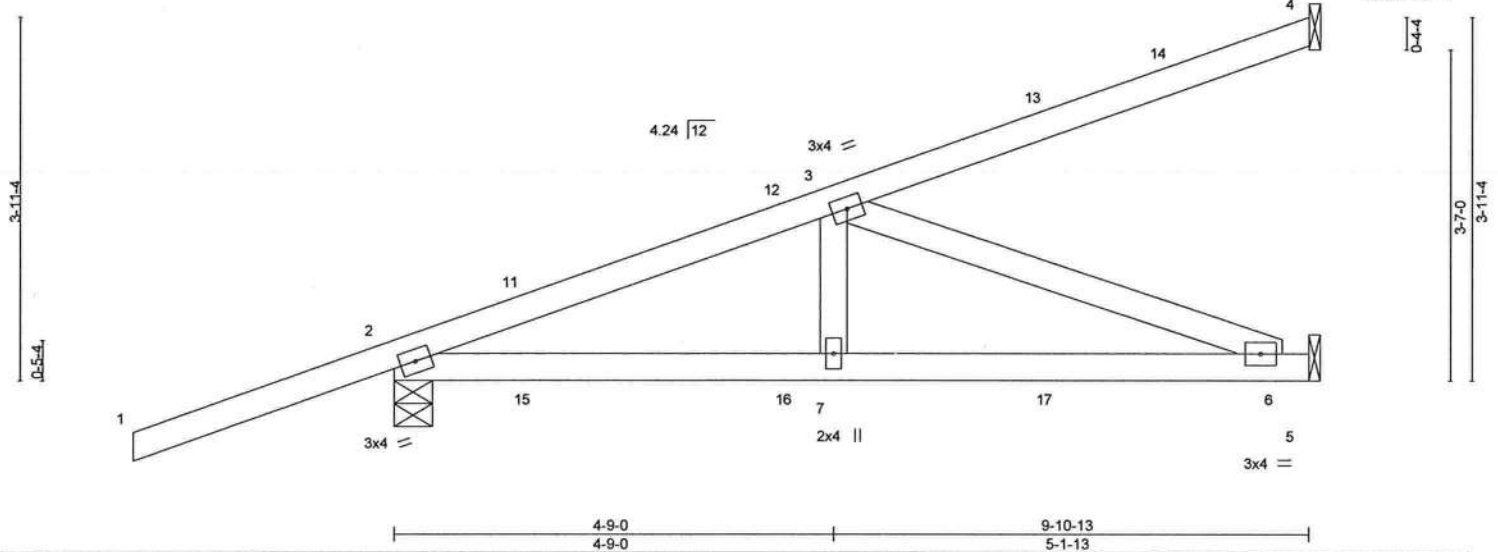
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:04 2020 Page 1

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-2-9-15	4-9-0	9-10-13
2-9-15	4-9-0	5-1-13

Scale: 1/2"=1'



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.56	Vert(LL) 0.08	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.59	Vert(CT) -0.11	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.31	Horz(CT) -0.01	4	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS						
							Weight: 45 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-10-3 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-15, 5=Mechanical
Max Horz 2=180(LC 4)
Max Uplift 4=-89(LC 4), 2=-328(LC 4), 5=-184(LC 5)
Max Grav 4=145(LC 1), 2=464(LC 1), 5=270(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-593/367
BOT CHORD 2-7=-410/534, 6-7=-410/534
WEBS 3-6=-570/438

NOTES- (8)

- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=328, 5=184.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 104 lb up at 1-5-12, 63 lb down and 104 lb up at 1-5-12, 22 lb down and 40 lb up at 4-3-11, 22 lb down and 40 lb up at 4-3-11, and 44 lb down and 87 lb up at 7-1-10, and 44 lb down and 87 lb up at 7-1-10 on top chord, and 49 lb down and 73 lb up at 1-5-12, 49 lb down and 73 lb up at 1-5-12, 45 lb down and 24 lb up at 4-3-11, 45 lb down and 24 lb up at 4-3-11, and 39 lb down and 47 lb up at 7-1-10, and 39 lb down and 47 lb up at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 11=51(F=26, B=26) 13=-66(F=33, B=33) 15=68(F=34, B=34) 16=7(F=3, B=3) 17=-46(F=23, B=23)



Joaquin Velez PE No.68182
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Date:

June 12, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-1473 rev. 10/03/2015 BEFORE USE.

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



6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450289
2374839	HJ02	Diagonal Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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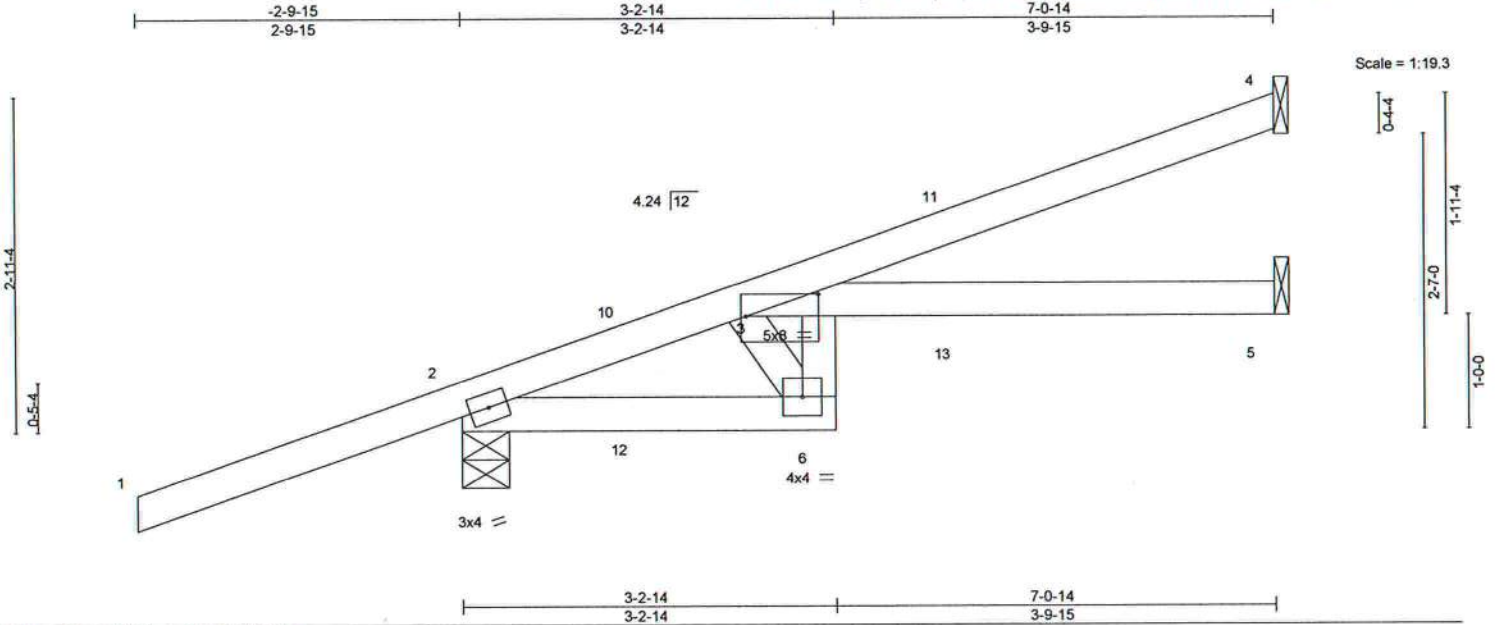


Plate Offsets (X,Y)--		[3:0-7-8,0-2-5]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.66	Vert(LL)	-0.20	6	>417	240	MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC 0.43	Vert(CT)	-0.26	6	>327	180			
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.00	Horz(CT)	0.10	5	n/a	n/a			
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MR								
									Weight: 30 lb	FT = 20%	

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

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

REACTIONS. (size) 4=Mechanical, 2=0-4-15, 5=Mechanical
Max Horz 2=147(LC 22)
Max Uplift 4=-79(LC 8), 2=-201(LC 4), 5=-21(LC 8)
Max Grav 4=133(LC 1), 2=359(LC 1), 5=108(LC 3)

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

- NOTES-** (8)
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5 except (jt=lb) 2=201.
 - 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 63 lb down and 104 lb up at 1-5-12, 63 lb down and 104 lb up at 1-5-12, and 71 lb down and 23 lb up at 4-3-11, and 71 lb down and 23 lb up at 4-3-11 on top chord, and 23 lb down and 73 lb up at 1-5-12, 23 lb down and 73 lb up at 1-5-12, and 25 lb down and 16 lb up at 4-3-11, and 25 lb down and 16 lb up at 4-3-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
 - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 6-7=-20, 3-5=-20
Concentrated Loads (lb)
Vert: 10=51(F=26, B=26) 12=68(F=34, B=34) 13=-18(F=-9, B=-9)



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

June 12,2020

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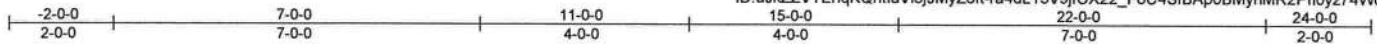
6904 Parke East Blvd.
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Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450290
2374839	T01	Hip Girder	1	1		

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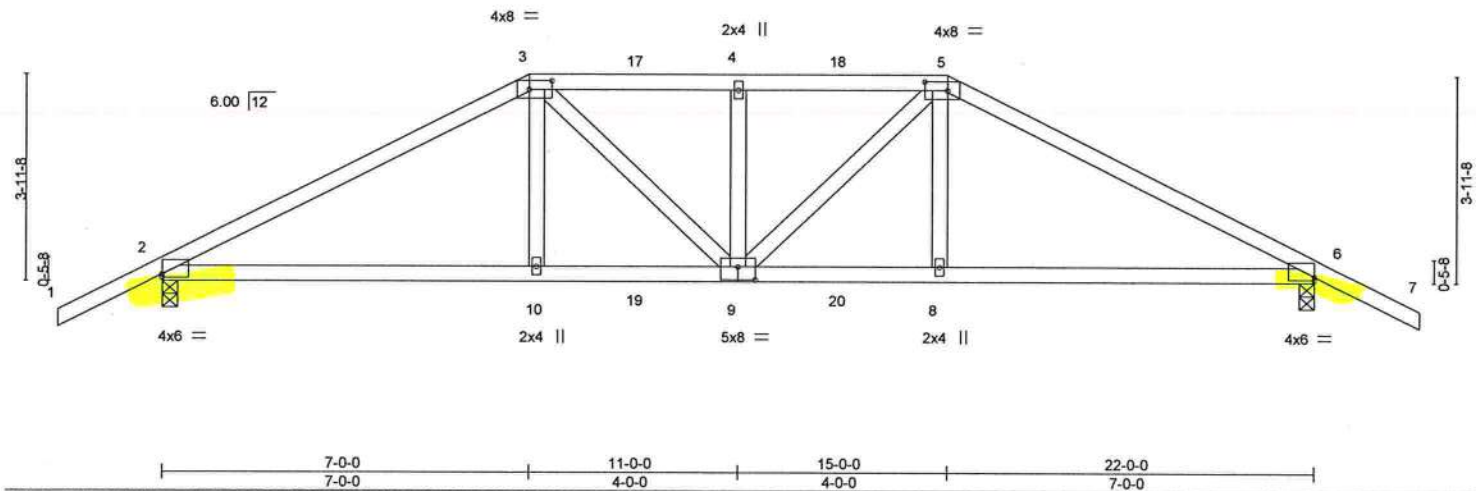


Plate Offsets (X,Y)--		[2-0-0-0,0-0-13], [3-0-5-4,0-2-0], [5-0-5-4,0-2-0], [6-0-0-0,0-0-13], [9-0-4-0,0-3-0]	
LOADING (psf)	SPACING-	CSI.	DEFL.
TCCL 20.0	Plate Grip DOL 1.25	TC 0.81	in (loc) l/defl L/d
TCDL 7.0	Lumber DOL 1.25	BC 0.92	Vert(LL) 0.18 8-9 >999 240
BCLL 0.0 *	Rep Stress Incr NO	WB 0.22	Vert(CT) -0.22 8-9 >999 180
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS	Horz(CT) 0.08 6 n/a n/a
			PLATES GRIP
			MT20 244/190
			Weight: 105 lb FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 5-0-7 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=-75(LC 9)
Max Uplift 2=-842(LC 8), 6=-842(LC 9)
Max Grav 2=1638(LC 1), 6=1638(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2807/1529, 3-4=-2801/1605, 4-5=-2801/1605, 5-6=-2807/1530
BOT CHORD 2-10=-1318/2425, 9-10=-1326/2441, 8-9=-1275/2441, 6-8=-1266/2425
WEBS 3-10=-223/557, 3-9=-355/568, 4-9=-483/305, 5-9=-355/568, 5-8=-223/557

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=842, 6=842.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down and 196 lb up at 7-0-0, 107 lb down and 103 lb up at 9-0-12, 107 lb down and 95 lb up at 11-0-0, and 107 lb down and 103 lb up at 12-11-4, and 223 lb down and 196 lb up at 15-0-0 on top chord, and 299 lb down and 285 lb up at 7-0-0, 85 lb down and 67 lb up at 9-0-12, 85 lb down and 67 lb up at 11-0-0, and 85 lb down and 67 lb up at 12-11-4, and 299 lb down and 285 lb up at 14-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-54, 3-5=-54, 5-7=-54, 11-14=-20

Concentrated Loads (lb)

Vert: 3=-176(B) 5=-176(B) 10=-289(B) 9=-60(B) 4=-107(B) 8=-289(B) 17=-107(B) 18=-107(B) 19=-60(B) 20=-60(B)



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

June 12,2020

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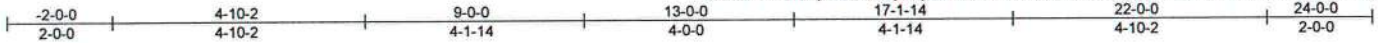
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Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450291
2374839	T02	Hip	1	1	Job Reference (optional)	

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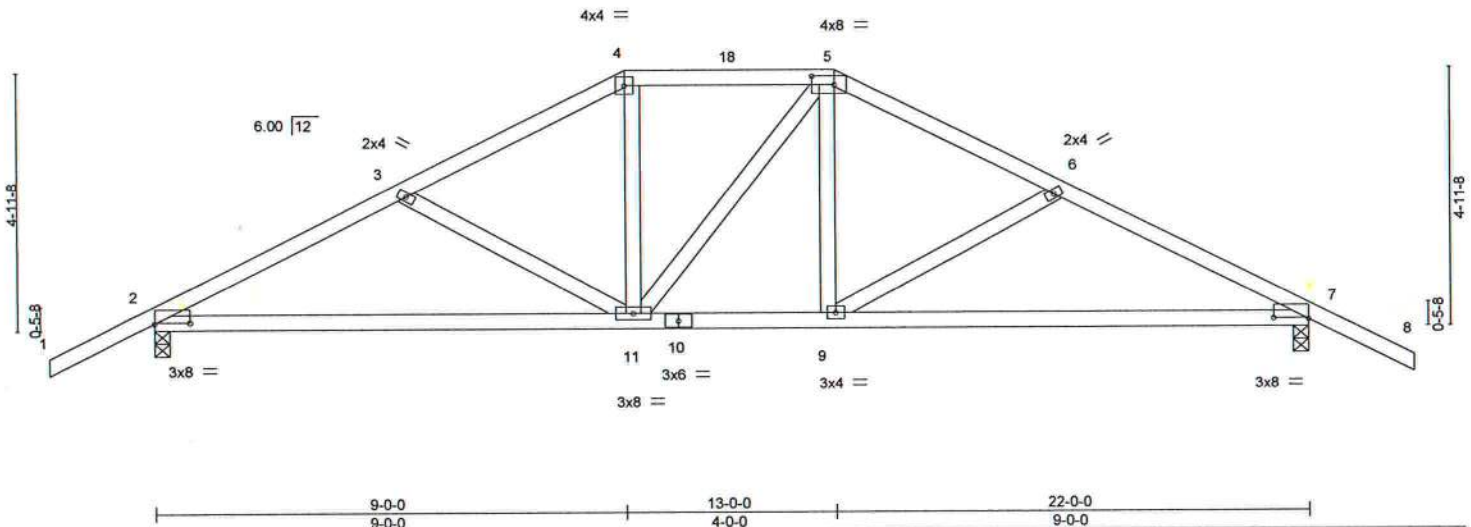


Plate Offsets (X,Y) - [2-0-8-0,0-0-3], [5-0-5-4,0-2-0], [7-0-8-0,0-0-3]

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 0.32	Vert(LL)	-0.15	9-17	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.69	Vert(CT)	-0.31	9-17	>853	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.14	Horz(CT)	0.04	7	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 111 lb	FT = 20%

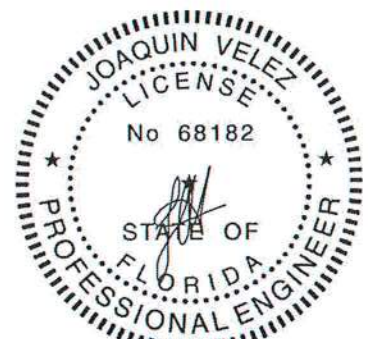
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-7-10 oc bracing.

REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=92(LC 16)
Max Uplift 2=-264(LC 12), 7=-264(LC 13)
Max Grav 2=922(LC 1), 7=922(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1348/525, 3-4=-1092/427, 4-5=-933/420, 5-6=-1091/427, 6-7=-1348/524
BOT CHORD 2-11=-346/1159, 9-11=-190/932, 7-9=-366/1159
WEBS 3-11=-273/203, 4-11=-57/309, 5-9=-63/309, 6-9=-273/203

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=264, 7=264.
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

June 12,2020

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6904 Parke East Blvd.
Tampa, FL 36610

Job 2374839	Truss T03	Truss Type Common	Qty 3	Ply 1	HTH - SPEC HSE SPARR LN	T20450292
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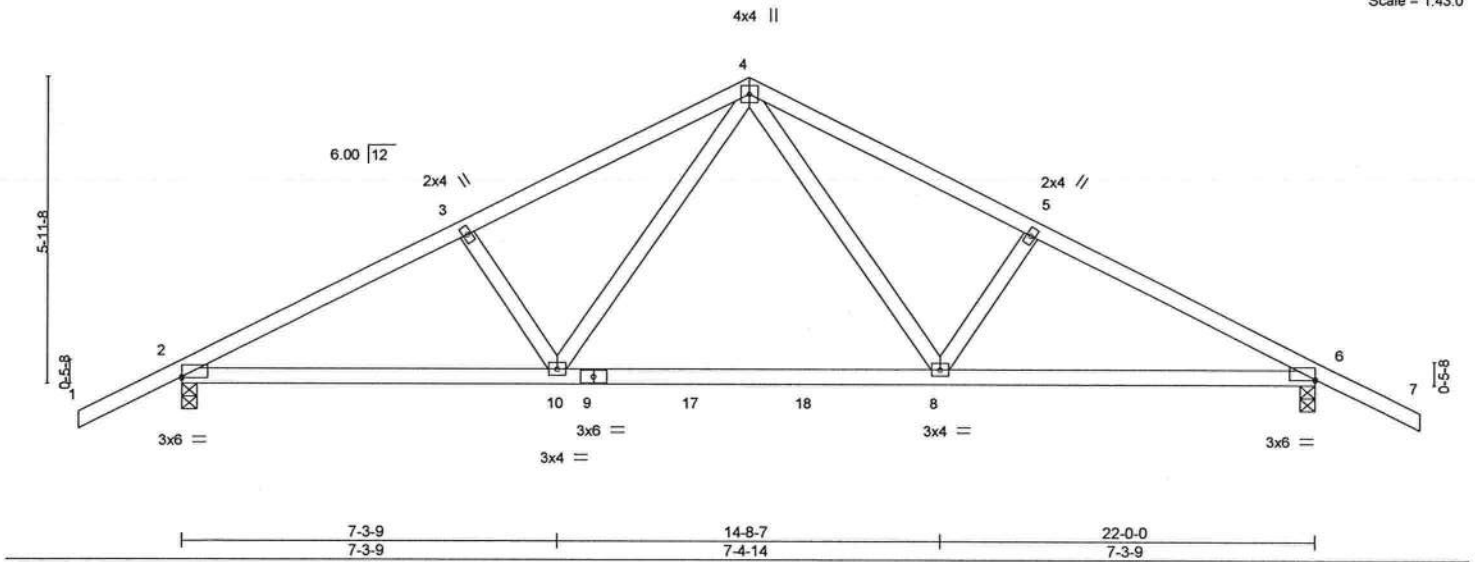
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Job Reference (optional)

-2-0-0 2-0-0	5-6-6 5-6-6	11-0-0 5-5-10	16-5-10 5-5-10	22-0-0 5-6-6	24-0-0 2-0-0
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Scale = 1:43.0



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCCL	20.0	Plate Grip DOL	1.25	TC	0.49	Vert(LL)	-0.21 8-10 >999 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.92	Vert(CT)	-0.40 8-10 >655 180				
BCCL	0.0 *	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.04 6 n/a n/a				
BCDL	10.0	Code	FBC2017/TPI2014	Matrix-MS							
								Weight: 105 lb		FT = 20%	

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2 *Except*
 6-9: 2x4 SP M 31
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-10-12 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 8-0-6 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=109(LC 12)
 Max Uplift 2=-333(LC 12), 6=-333(LC 13)
 Max Grav 2=1144(LC 1), 6=1144(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1866/716, 3-4=-1716/714, 4-5=-1728/717, 5-6=-1878/720
 BOT CHORD 2-10=-514/1606, 8-10=-266/1093, 6-8=-534/1616
 WEBS 4-8=-277/730, 5-8=-255/214, 4-10=-271/711, 3-10=-254/214

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=333, 6=333.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

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



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

June 12, 2020

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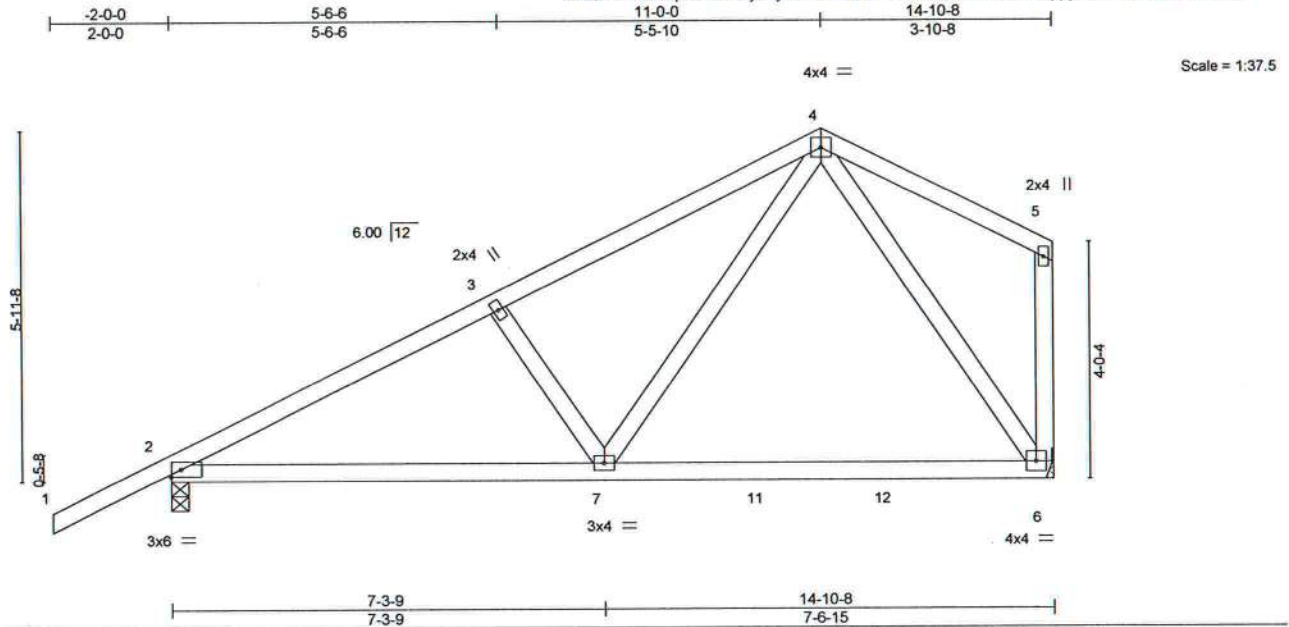


6904 Parke East Blvd.
 Tampa, FL 33610

Job 2374839	Truss T04	Truss Type Common	Qty 2	Ply 1	HTH - SPEC HSE SPARR LN Job Reference (optional)	T20450293
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:09 2020 Page 1
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.30	Vert(LL)	-0.10	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.53	Vert(CT)	-0.17	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.39	Horz(CT)	0.01	6	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 80 lb	FT = 20%

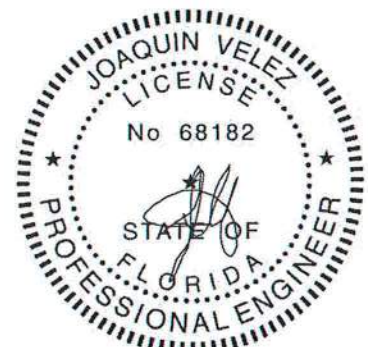
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 9-10-1 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=Mechanical
Max Horz 2=205(LC 12)
Max Uplift 2=195(LC 12), 6=149(LC 12)
Max Grav 2=660(LC 1), 6=538(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-813/296, 3-4=-658/291
BOT CHORD 2-7=-358/676, 6-7=-121/263
WEBS 3-7=-288/247, 4-7=-188/480, 4-6=-447/215

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=195, 6=149.
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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June 12,2020

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6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss T05	Truss Type Roof Special Girder	Qty 1	Ply 2	HTH - SPEC HSE SPARR LN	T20450294
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:11 2020 Page 1

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-2-0-0	5-8-11	11-0-0	15-3-8	17-0-0	21-0-0	23-8-8	26-0-0
2-0-0	5-8-11	5-3-5	4-3-8	1-8-8	4-0-0	2-8-8	2-3-8

Scale: 1/4"=1'

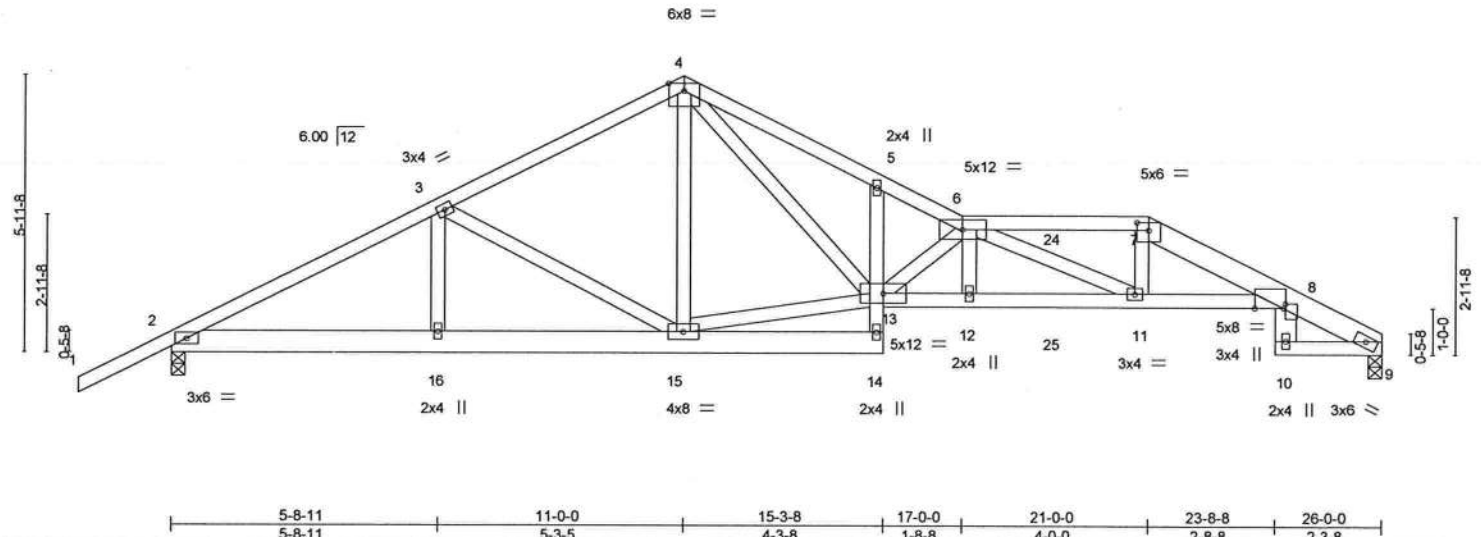


Plate Offsets (X,Y)-- [7:0-3-0,0-2-0], [8:0-7-8,0-0-0], [8:0-1-3,0-0-8]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.47	Vert(LL)	-0.21 12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	-0.38 12-13	>820	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.70	Horz(CT)	0.19 9	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 313 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 *Except* 7-9: 2x6 SP M 26	TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins.
BOT CHORD 2x6 SP No.2 *Except* 5-14: 2x4 SP No.3, 8-13: 2x4 SP M 31, 9-10: 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS.	(size) 9=0-3-8, 2=0-3-8
	Max Horz 2=125(LC 31)
	Max Uplift 9=562(LC 9), 2=442(LC 8)
	Max Grav 9=1630(LC 1), 2=1417(LC 1)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2443/720, 3-4=-2079/665, 4-5=-4758/1610, 5-6=-4819/1559, 6-7=-4464/1575, 7-8=-4639/1605, 8-19=-906/332
BOT CHORD	2-16=-668/2132, 15-16=-668/2132, 14-15=-118/406, 13-14=-180/618, 12-13=-1949/6146, 11-12=-1949/6153, 8-11=-1447/4356, 8-10=-100/316
WEBS	3-15=-399/231, 13-15=-388/1425, 4-13=-1291/3651, 6-13=-2451/889, 6-11=-1840/530, 7-11=-351/1247

- NOTES- (10)
- 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: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=562, 2=442.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 94 lb down and 71 lb up at 17-0-0, and 94 lb down and 71 lb up at 18-11-4, and 207 lb down and 153 lb up at 21-0-0 on top chord, and 576 lb down and 203 lb up at 15-1-12, 56 lb down and 36 lb up at 16-11-4, and 56 lb down and 36 lb up at 18-11-4, and 123 lb down and 71 lb up at 20-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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June 12,2020

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6904 Parke East Blvd.
Tampa, FL 36610

Job 2374839	Truss T05	Truss Type Roof Special Girder	Qty 1	Ply 2	HTH - SPEC HSE SPARR LN Job Reference (optional)	T20450294
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:11 2020 Page 2
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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, 6-7=-54, 7-8=-54, 8-19=-54, 14-21=-20, 8-13=-20, 9-10=-20

Concentrated Loads (lb)

Vert: 6=-54(B) 7=-111(B) 14=-576(B) 12=-56(B) 11=-112(B) 24=-54(B) 25=-56(B)

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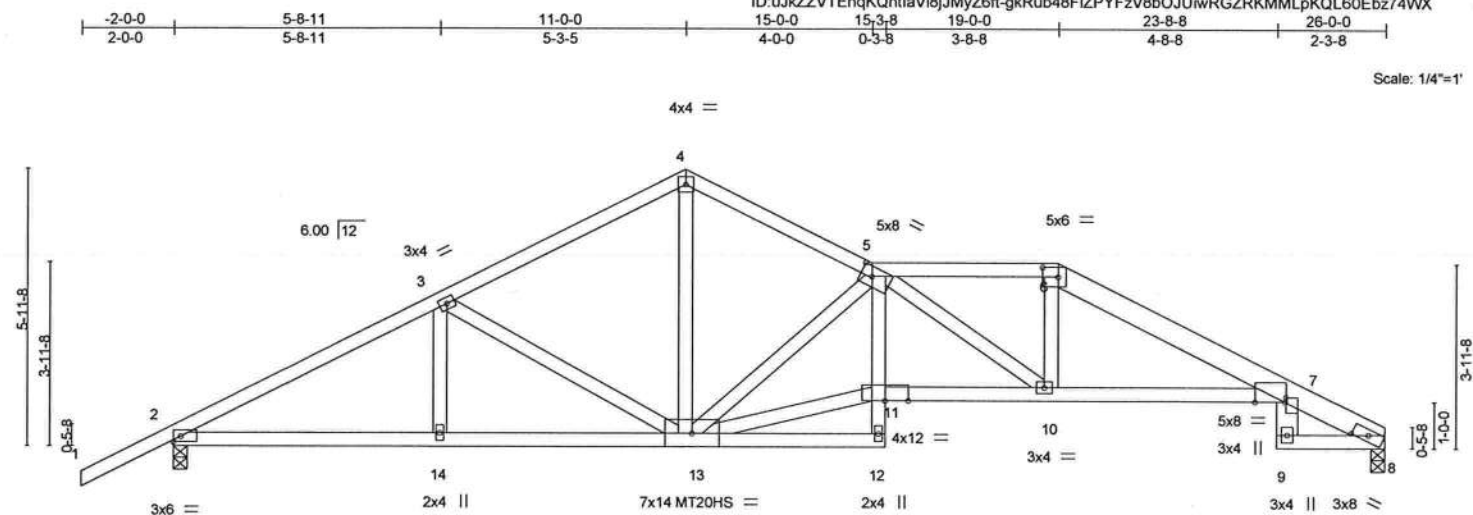
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8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:12 2020 Page 1

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:12 2020 Page 1
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		5-8-11		11-0-0		15-3-8		19-0-0		23-8-8		26-0-0	
		5-8-11		5-3-5		4-3-8		3-8-8		4-8-8		2-3-8	
Plate Offsets (X,Y)=-		[5-0-3-0,0-2-8]		[6-0-4-0,0-2-8]		[7-0-1-3,0-0-4]		[7-0-7-12,0-0-0]		[8-0-4-2,0-1-8]			
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	0.47	Vert(LL)	-0.21 7-10	>999	240	MT20	244/190		
TCDL	7.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.40 7-10	>777	180	MT20HS	187/143		
BCLL	0.0	Rep Stress Incr	YES	WB	0.86	Horz(CT)	0.24 8	n/a	n/a				
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 142 lb FT = 20%			

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
6-8: 2x6 SP M 26
BOT CHORD 2x4 SP No.2 *Except*
5-12: 2x4 SP No.3, 7-11: 2x4 SP M 31, 7-9: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-1-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 8-5-15 oc bracing.

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=125(LC 16)
Max Uplift 8=-261(LC 13), 2=-284(LC 12)
Max Grav 8=959(LC 1), 2=1069(LC 1)

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

TOP CHORD	2-3=-1671/624, 3-4=-1261/529, 4-5=-1270/551, 5-6=-1919/752, 6-7=-2080/747, 7-17=-525/214
BOT CHORD	2-14=-484/1433, 13-14=-484/1433, 5-11=-139/542, 10-11=-728/2240, 7-10=-595/1893
WEBS	3-13=-439/232, 4-13=-318/829, 5-13=-1498/584, 11-13=-672/2053, 5-10=-390/154, 6-10=-115/464

- NOTES- (8)**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.
 - 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=261, 2=284.
 - 8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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June 12.2020

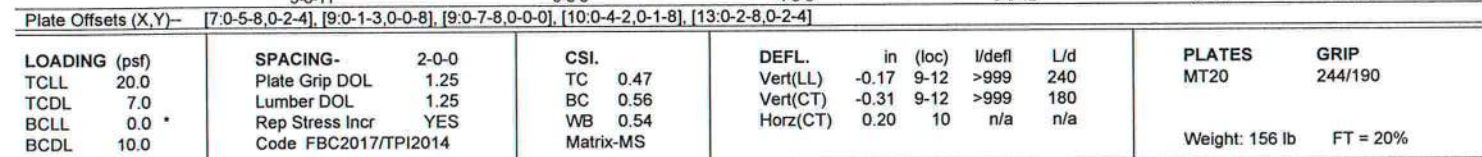
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BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-4-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 8-6-2 oc bracing.
JOINTS	1 Brace at Jt(s): 12

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

TOP CHORD	2-3=-1671/622, 3-4=-1262/527, 4-5=-1234/558, 5-6=-1611/665, 6-7=-1625/668, 7-8=-2711/1075, 8-9=-2490/901, 9-19=-525/214
BOT CHORD	2-16=-483/1433, 15-16=-483/1433, 12-13=-442/1505, 9-12=-777/2335
WEBS	3-15=-436/233, 4-15=-340/852, 5-15=-958/385, 13-15=-410/1407, 5-13=-90/358, 7-13=-72/267, 7-12=-497/1230, 8-12=-687/354

NOTES- (7)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDF=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=261, 2=284.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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8 240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:15 2020 Page 1

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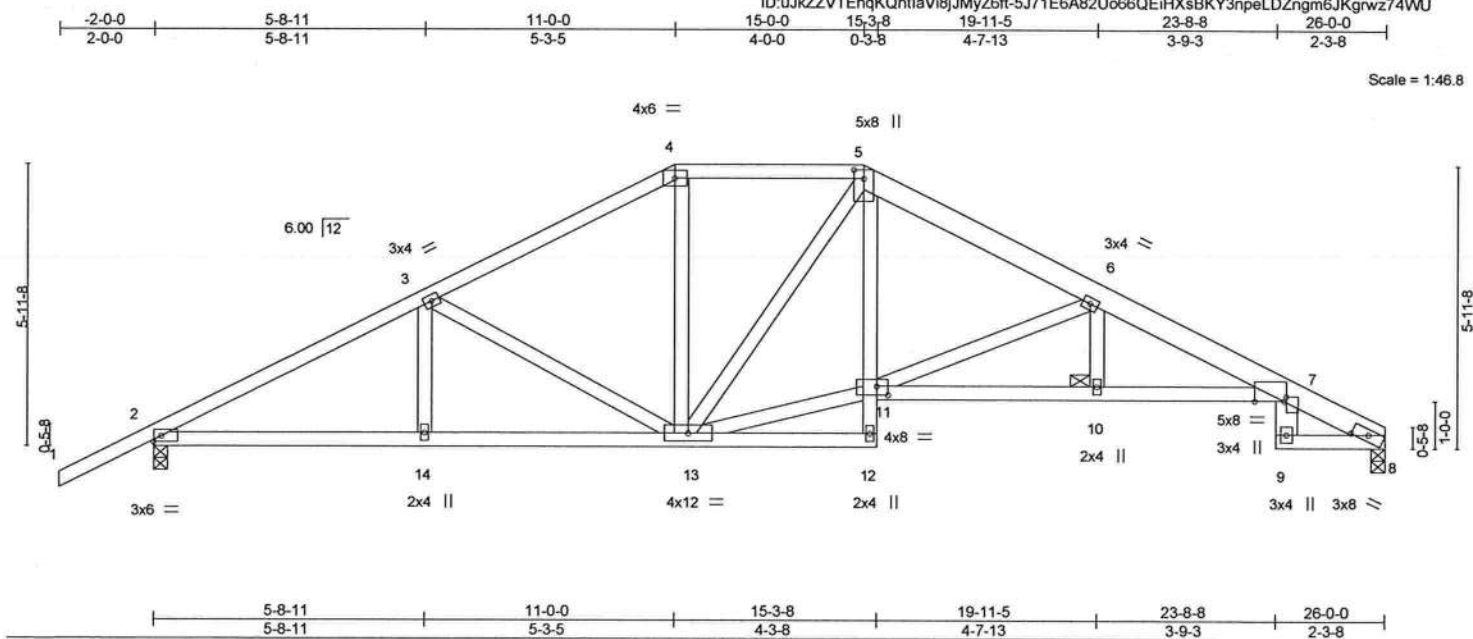


Plate Offsets (X,Y)-- [5:0-2-4,0-2-8], [7:0-1-3,0-0-8], [7:0-7-8,0-0-0], [8:0-4-2,0-1-8], [11:0-2-12,0-2-4]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES		GRIP	
TCLL 20.0		Plate Grip DOL 1.25		TC 0.47		Vert(LL) -0.17 7-10 >999 240		MT20		244/190	
TCDL 7.0		Lumber DOL 1.25		BC 0.55		Vert(CT) -0.32 7-10 >979 180					
BCLL 0.0 *		Rep Stress Incr YES		WB 0.53		Horz(CT) 0.20 8 n/a n/a					
BCDL 10.0		Code FBC2017/TP12014		Matrix-MS							
								Weight: 151 lb		FT = 20%	

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
 5-8: 2x6 SP M 26
BOT CHORD 2x4 SP No.2 *Except*
 5-12: 2x4 SP No.3, 7-11: 2x4 SP M 31, 7-9: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING- TOP CHORD	Structural wood sheathing directly applied or 4-4-1 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 8-6-4 oc bracing.
JOINTS	1 Brace at Jt(s): 10

REACTIONS. (size) 8=0-3-8, 2=0-3-8
Max Horz 2=125(LC 16)
Max Uplift 8=-228(LC 13), 2=-283(LC 12)
Max Grav 8=959(LC 1), 2=1069(LC 1)

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

TOP CHORD 2-3=-1672/620, 3-4=-1254/521, 4-5=-1082/514, 5-6=-1559/612, 6-7=-2406/886,
7-17=-525/215

BOT CHORD 2-14=-481/1434, 13-14=-481/1434, 5-11=-236/785, 10-11=-759/2249, 7-10=-759/2249

WEBS 3-13=-433/237, 4-13=-89/334, 5-13=-427/108, 11-13=-322/1257, 6-11=-1017/450,
6-10=-11/281

NOTES- (7)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDD=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=228, 2=283.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Joaquin Velez PE No.68182
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Date:

June 12, 2020

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Tampa, FL 36610

Job 2374839	Truss T09	Truss Type Common	Qty 1	Ply 1	HTH - SPEC HSE SPARR LN	T20450298
Builders FirstSource, Jacksonville, FL - 32244,						8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:16 2020 Page 1
ID:uJkZZVTEhqKQntiaVi8jMyZ6ft-ZVhPRSBmpowzjapvqEQQsmczG2emIl3vLz4ENMz74WT						Job Reference (optional)

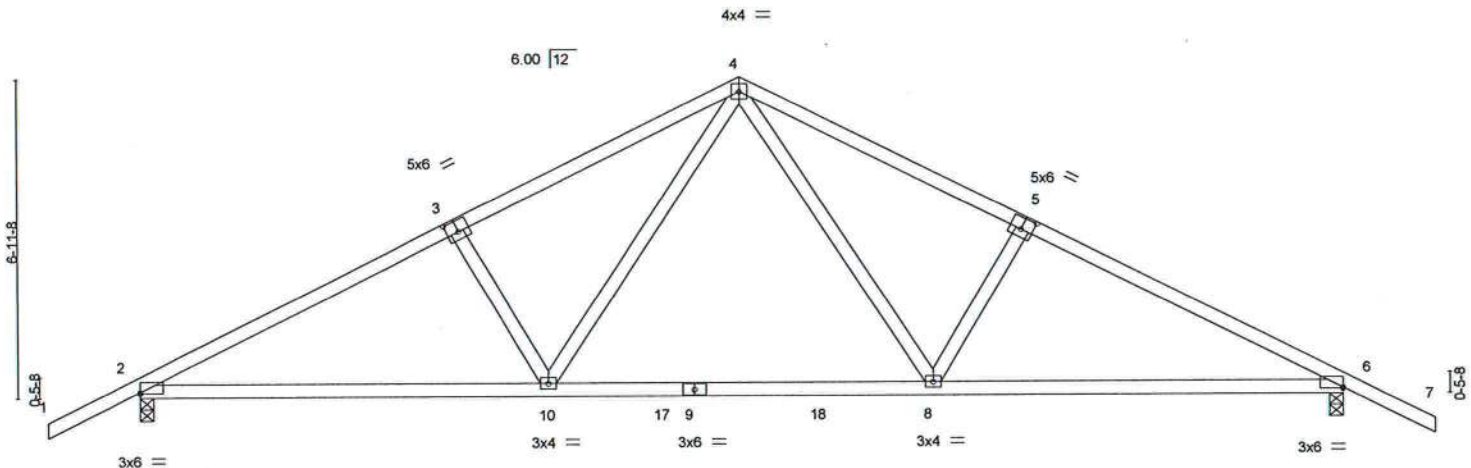
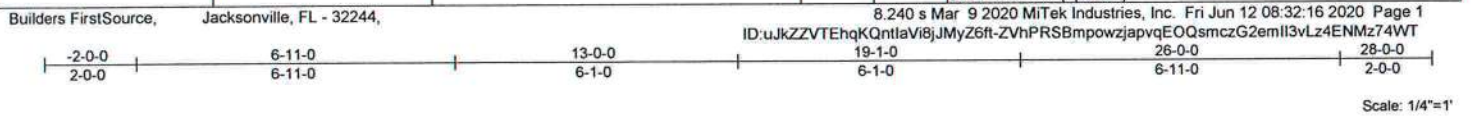


Plate Offsets (X,Y)--		[2:0-0-0,0-0-5], [3:0-3-0,0-3-0], [5:0-3-0,0-3-0], [6:0-0-0,0-0-5]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.25
TCDL 7.0	Lumber DOL	1.25
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	FBC2017/TPI2014
	CSI.	TC 0.43
		BC 0.72
		WB 0.27
		Matrix-MS
	DEFL.	in (loc) l/defl L/d
	Vert(LL)	-0.21 8-10 >999 240
	Vert(CT)	-0.31 8-10 >999 180
	Horz(CT)	0.05 6 n/a n/a
	PLATES	GRIP
	MT20	244/190
	Weight: 123 lb	FT = 20%

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-2-14 oc purlins. Rigid ceiling directly applied or 8-11-5 oc bracing.
BOT CHORD	2x4 SP No.2	BOT CHORD	
WEBS	2x4 SP No.3		

REACTIONS.		(size) 2=0-3-8, 6=0-3-8
	Max Horz	2=125(LC 12)
	Max Uplift	2=298(LC 12), 6=298(LC 13)
	Max Grav	2=1070(LC 1), 6=1070(LC 1)

FORCES.		(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=1614/621, 3-4=1443/634, 4-5=1443/634, 5-6=1614/621	
BOT CHORD	2-10=419/1376, 8-10=184/929, 6-8=432/1376	
WEBS	4-8=223/560, 5-8=343/271, 4-10=223/560, 3-10=343/271	

- NOTES-** (6)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=298, 6=298.
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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June 12,2020

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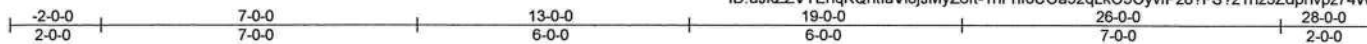
6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss T10	Truss Type Hip Girder	Qty 1	Ply 1	HTH - SPEC HSE SPARR LN	T20450299
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Builders FirstSource, Jacksonville, FL - 32244,

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ID: uJkZZVTEhQKQntlaViBjMyZ6ft-1hFnoCOa52qLkO5OyvfPz8?FS?z1hz3Zdpnvz74WS



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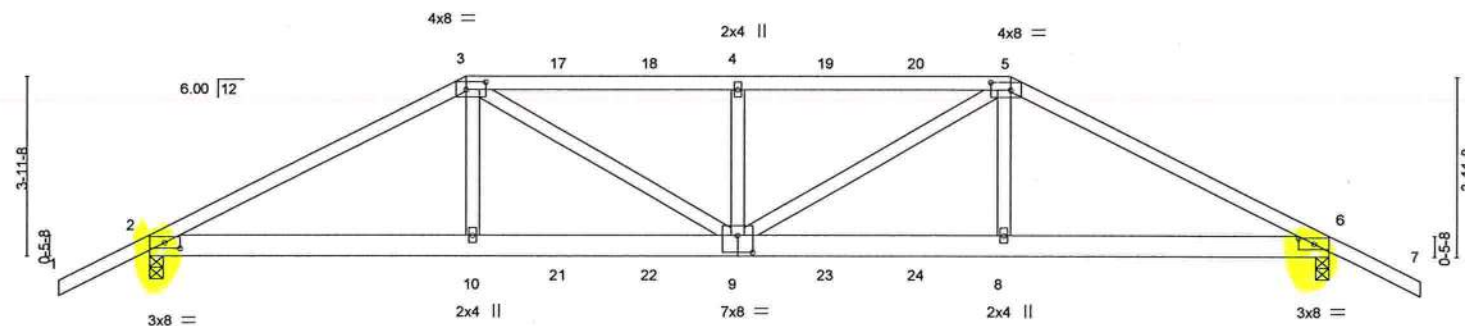


Plate Offsets (X,Y)-	[2:0-4-1,0-1-8], [3:0-5-4,0-2-0], [5:0-5-4,0-2-0], [6:0-4-1,0-1-8], [9:0-4-0,0-4-8]
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LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25		TC 0.99	Vert(LL) 0.22	8-9	>999	240		MT20	244/190
TCDL 7.0	Lumber DOL 1.25		BC 0.66	Vert(CT) -0.30	8-9	>999	180			
BCLL 0.0 *	Rep Stress Incr NO		WB 0.54	Horz(CT) 0.08	6	n/a	n/a			
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS							
									Weight: 142 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
 3-5: 2x4 SP M 31
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 5-7-10 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=75(LC 8)
 Max Uplift 2=-1009(LC 8), 6=-1009(LC 9)
 Max Grav 2=1953(LC 1), 6=1953(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3568/1938, 3-4=-3998/2224, 4-5=-3998/2224, 5-6=-3568/1939
BOT CHORD 2-10=-1684/3115, 9-10=-1695/3135, 8-9=-1625/3135, 6-8=-1615/3115
WEBS 3-10=-265/643, 3-9=-628/1084, 4-9=-746/457, 5-9=-628/1084, 5-8=-265/643

- NOTES-** (9)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
 - Provide adequate drainage to prevent water ponding.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=1009, 6=1009.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down and 196 lb up at 7-0-0, 107 lb down and 103 lb up at 9-0-12, 107 lb down and 103 lb up at 11-0-12, 107 lb down and 95 lb up at 13-0-0, 107 lb down and 103 lb up at 14-11-4, and 107 lb down and 103 lb up at 16-11-4, and 223 lb down and 196 lb up at 19-0-0 on top chord, and 299 lb down and 285 lb up at 7-0-0, 85 lb down and 67 lb up at 9-0-12, 85 lb down and 67 lb up at 11-0-12, 85 lb down and 67 lb up at 13-0-0, 85 lb down and 67 lb up at 14-11-4, and 85 lb down and 67 lb up at 16-11-4, and 299 lb down and 285 lb up at 18-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
 Uniform Loads (plf)
 Vert: 1-3=-54, 3-5=-54, 5-7=-54, 11-14=-20

Continued on page 2



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Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450299
2374839	T10	Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 3=-176(F) 5=-176(F) 10=-289(F) 9=-60(F) 4=-107(F) 8=-289(F) 17=-107(F) 18=-107(F) 19=-107(F) 20=-107(F) 21=-60(F) 22=-60(F) 23=-60(F) 24=-60(F)

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Tampa, FL 36610

Job 2374839	Truss T11	Truss Type Hip	Qty 1	Ply 1	HTH - SPEC HSE SPARR LN	T20450300
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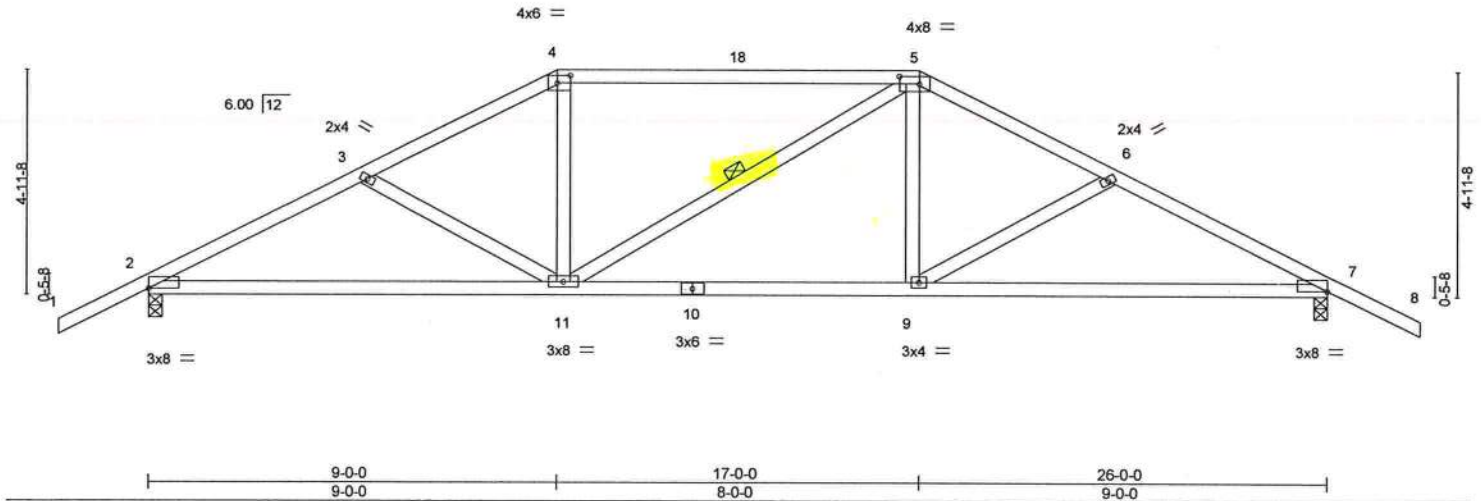
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:18 2020 Page 1

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-2-0-0	4-10-2	9-0-0	17-0-0	21-1-14	26-0-0	28-0-0
2-0-0	4-10-2	4-1-14	8-0-0	4-1-14	4-10-2	2-0-0

Scale = 1:48.9



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.37	Vert(LL)	-0.14 9-17 >999 240	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	-0.28 9-17 >999 180				
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.05 7 n/a n/a				
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							
										Weight: 128 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2 *Except*
4-5: 2x4 SP M 31
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-5-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-8-2 oc bracing.
WEBS 1 Row at midpt 5-11

REACTIONS.

(size) 2=0-3-8, 7=0-3-8
Max Horz 2=92(LC 12)
Max Uplift 2=-305(LC 12), 7=-305(LC 13)
Max Grav 2=1070(LC 1), 7=1070(LC 1)

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

TOP CHORD 2-3=-1655/626, 3-4=-1427/541, 4-5=-1244/527, 5-6=-1426/541, 6-7=-1655/626
BOT CHORD 2-11=-433/1427, 9-11=-298/1244, 7-9=-454/1427
WEBS 4-11=-34/383, 5-9=-37/383

NOTES- (7)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; 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
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=305, 7=305.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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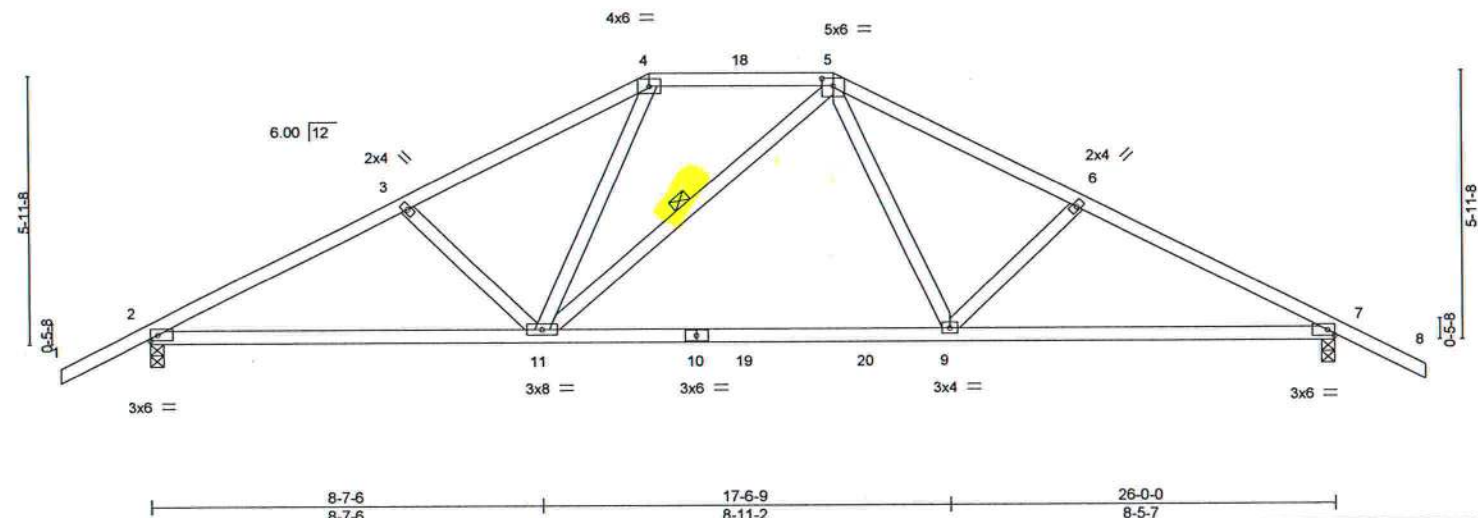


Plate Offsets (X,Y)--- [5.0-3-0.0-2-0]		CSI.		DEFL.		in (loc)		l/defl		L/d		PLATES		GRIP	
LOADING (psf)		2-0-0													
TCLL 20.0		Plate Grip DOL 1.25	TC 0.34	Vert(LL) -0.20	9-11	>999	240					MT20	244/190		
TCDL 7.0		Lumber DOL 1.25	BC 0.74	Vert(CT) -0.35	9-11	>893	180								
BCLL 0.0 *		Rep Stress Incr YES	WB 0.18	Horz(CT) 0.05	7	n/a	n/a								
BCDL 10.0		Code FBC2017/TPI2014	Matrix-MS												
												Weight: 130 lb	FT = 20%		

BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 4-4-15 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 8-8-7 oc bracing.
WEBS	1 Row at midpt 5-11

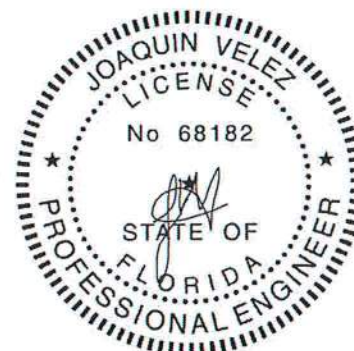
REACTIONS. (size) 2=0-3-8, 7=0-3-8
Max Horz 2=109(LC 16)
Max Uplift 2=-302(LC 12), 7=-302(LC 13)
Max Grav 2=1070(LC 1), 7=1070(LC 1)

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

TOP CHORD	2-3=-1660/633, 3-4=-1441/576, 4-5=-1063/512, 5-6=-1447/580, 6-7=-1662/633
BOT CHORD	2-11=-440/1428, 9-11=-239/1061, 7-9=-457/1421
WEBS	3-11=-290/238, 4-11=-118/458, 5-9=-125/461, 6-9=-288/237

NOTES- (7)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDD=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCp=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=302, 7=302.
- 7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Tampa, FL 36610

Job 2374839	Truss T13	Truss Type Scissor	Qty 1	Ply 1	HTH - SPEC HSE SPARR LN	T20450302
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Builders FirstSource, Jacksonville, FL - 32244,

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ID:uJkZZVTEhKQntlaVi8JMyZ6f-RGwwHqEHs0QPCB6g34SM1cmbgfyUE2EVGb2RW8z74WP

Job Reference (optional)

-2-0-0	6-9-9	13-0-0	19-2-7	26-0-0	28-0-0
2-0-0	6-9-9	6-2-7	6-2-7	6-9-9	2-0-0

Scale = 1:52.7

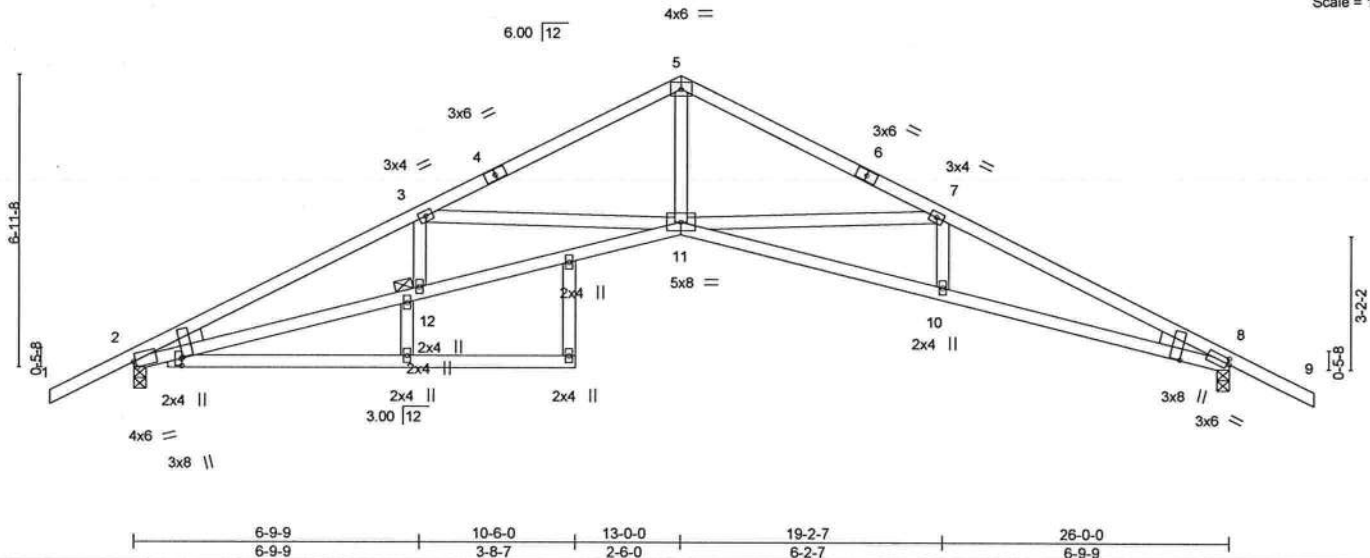


Plate Offsets (X,Y)-- [2-0-0-9,Edge], [2-0-2-0,0-0-3], [2-0-2-2,1-2-0], [8-0-0-12,0-1-8], [8-0-2-2,1-2-0]

LOADING (psf)	SPACING-	CSL	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.66	Vert(LL)	-0.24 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.93	Vert(CT)	-0.47 10-11	>663	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.57	Horz(CT)	0.31 8	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS						
							Weight: 141 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
 2-13: 2x4 SP No.3
WEBS 2x4 SP No.3
WEDGE
 Left: 2x4 SP No.3, Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-7-4 oc bracing.
JOINTS 1 Brace at Jt(s): 12

REACTIONS. (size) 2=0-3-8, 8=0-3-8
 Max Horz 2=125(LC 12)
 Max Uplift 2=297(LC 12), 8=297(LC 13)
 Max Grav 2=1070(LC 1), 8=1070(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2880/981, 3-5=-2108/683, 5-7=-2108/684, 7-8=-2880/1007
BOT CHORD 2-12=-768/2602, 11-12=-774/2613, 10-11=-800/2613, 8-10=-797/2602
WEBS 5-11=-400/1483, 7-11=-764/421, 3-11=-764/425

NOTES- (7)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=297, 8=297.
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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

June 12,2020

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

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



6904 Parke East Blvd.
 Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HTH - SPEC HSE SPARR LN	T20450303
2374839	T14	Scissor	9	1	Job Reference (optional)	

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Scale: 1/4"=1'

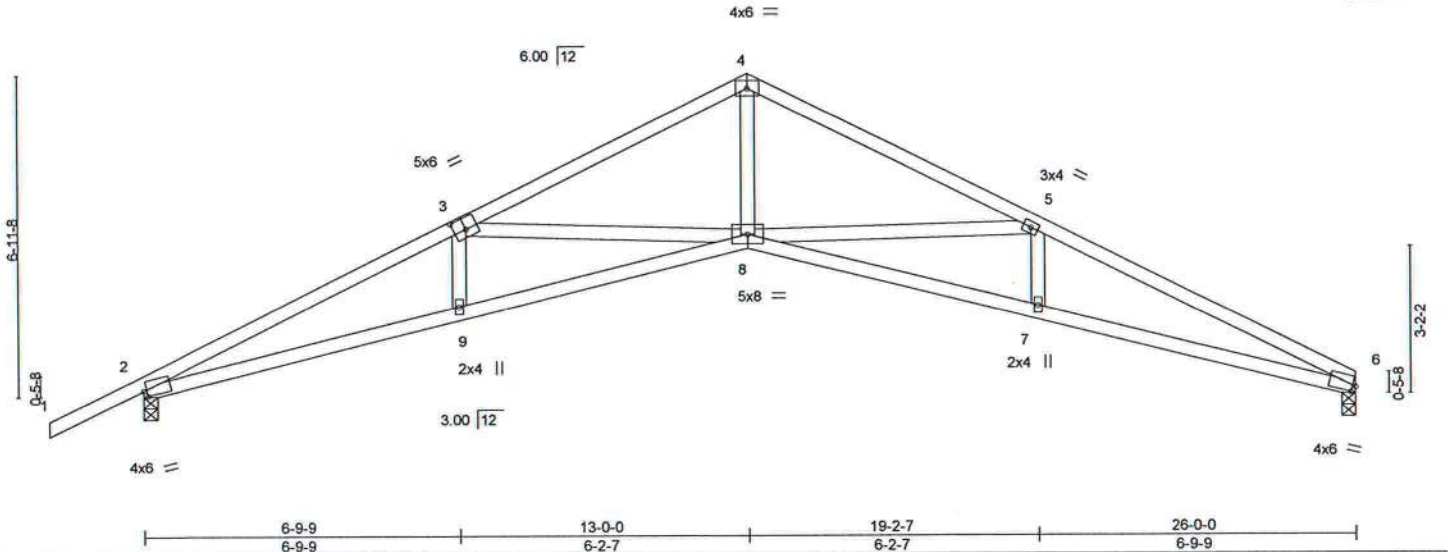


Plate Offsets (X,Y)--		[2-0-0-13,0-1-8], [3-0-3-0,0-3-0], [6-0-0-13,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.67	Vert(LL)	-0.28 8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.96	Vert(CT)	-0.54 8-9	>579	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.35 6	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 114 lb	FT = 20%

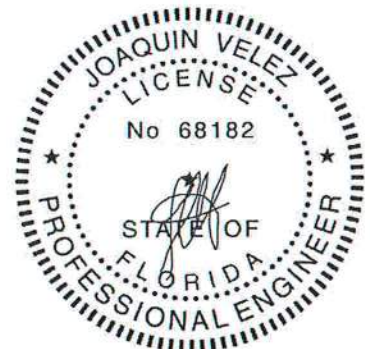
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=142(LC 16)
Max Uplift 6=246(LC 13), 2=298(LC 12)
Max Grav 6=958(LC 1), 2=1074(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2900/1048, 3-4=-2125/746, 4-5=-2127/745, 5-6=-2947/1079
BOT CHORD 2-9=-873/2591, 8-9=-881/2603, 7-8=-911/2654, 6-7=-908/2641
WEBS 4-8=-462/1502, 5-8=-790/438, 3-8=-740/409

- NOTES-** (7)
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=246, 2=298.
 - This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



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Date:

June 12,2020

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

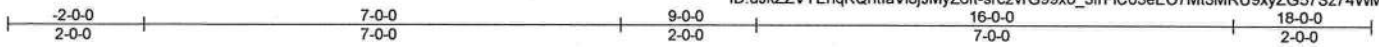


6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss T15	Truss Type Hip Girder	Qty 1	Ply 1	HTH - SPEC HSE-SPARR LN	T20450304
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8.240 s Mar-9 2020 MiTek Industries, Inc. Fri Jun 12 08:32:23 2020 Page 1



Scale = 1:32.6

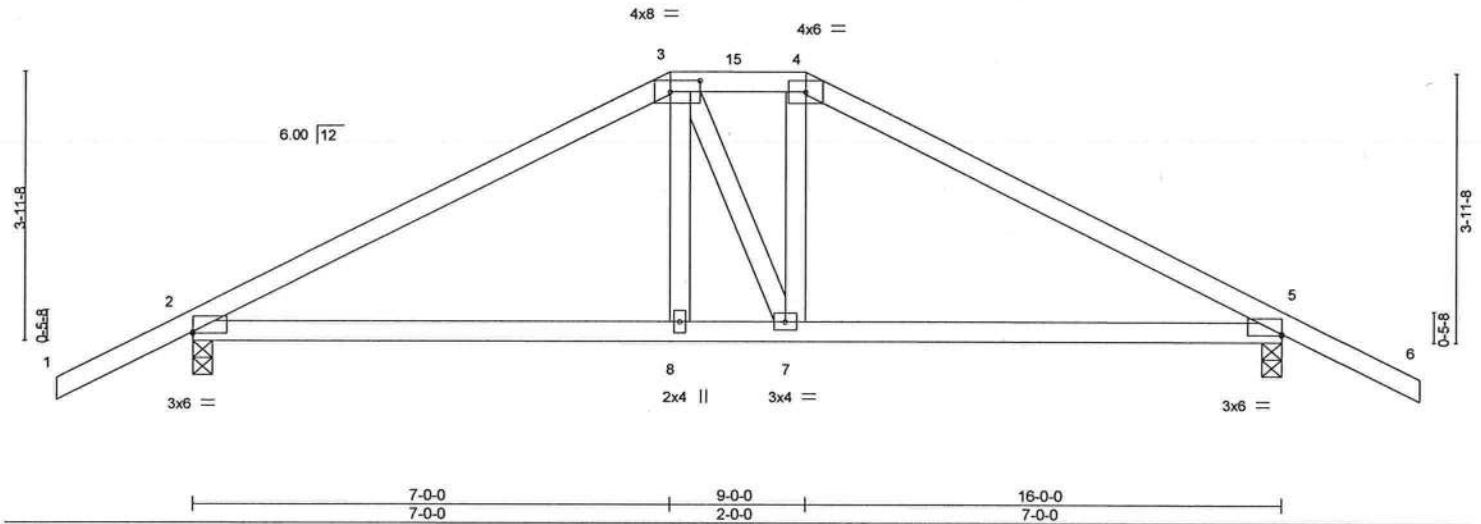


Plate Offsets (X,Y)~ [2-0-0-0,0-0-5], [3-0-5-4,0-2-0], [5-0-0-0,0-0-5]

LOADING (psf)	SPACING-	CSL	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.63	Vert(LL) 0.10	8-11	>999	240		MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.60	Vert(CT) -0.14	8-11	>999	180			
BCLL 0.0	Rep Stress Incr NO	WB 0.18	Horz(CT) 0.04	5	n/a	n/a			
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS							
								Weight: 73 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 3-6-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-2-15 oc bracing.

REACTIONS. (size) 2=0-3-8, 5=0-3-8
Max Horz 2=-75(LC 13)
Max Uplift 2=-590(LC 8), 5=-590(LC 9)
Max Grav 2=1165(LC 1), 5=1165(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1800/1015, 3-4=-1545/944, 4-5=-1802/1016
BOT CHORD 2-8=-868/1528, 7-8=-879/1543, 5-7=-843/1530
WEBS 3-8=-274/464, 4-7=-284/468

NOTES- (9)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCCL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpj=0.18; MWFRS (envelope) gable end zone; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=590, 5=590.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 223 lb down and 192 lb up at 7-0-0, and 223 lb down and 192 lb up at 9-0-0 on top chord, and 299 lb down and 285 lb up at 7-0-0, and 299 lb down and 285 lb up at 8-11-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

- Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-4=-54, 4-6=-54, 9-12=-20
Concentrated Loads (lb)
Vert: 3=-176(F) 4=-176(F) 8=-289(F) 7=-289(F)



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Date:

June 12,2020

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

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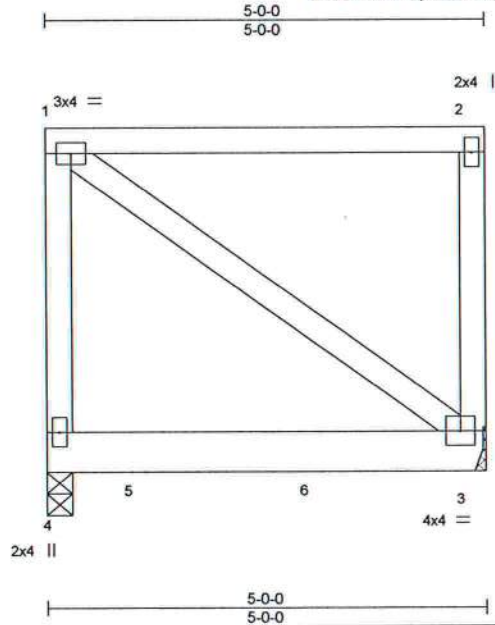
6904 Parke East Blvd.
Tampa, FL 33610

Job 2374839	Truss TG01	Truss Type Flat Girder	Qty 1	Ply 1	HTH - SPEC HSE SPARR LN T20450305
Job Reference (optional)					

Builders FirstSource, Jacksonville, FL - 32244,

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Scale = 1:25.4

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 0.41	Vert(LL)	-0.06 3-4	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.91	Vert(CT)	-0.11 3-4	>532	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.00	Horz(CT)	-0.00 3	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MP						
									Weight: 37 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 5-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-10-8 oc bracing.

REACTIONS. (size) 4=0-3-8, 3=Mechanical
Max Uplift 4=240(LC 4), 3=183(LC 4)
Max Grav 4=789(LC 1), 3=596(LC 1)

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

NOTES- (9)

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Provide adequate drainage to prevent water ponding.
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=240, 3=183.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 518 lb down and 168 lb up at 1-0-12, and 518 lb down and 169 lb up at 3-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
- 9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=54, 3-4=20
Concentrated Loads (lb)
Vert: 5=518(F) 6=518(F)



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

June 12, 2020

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

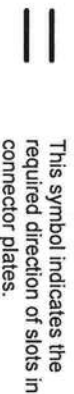
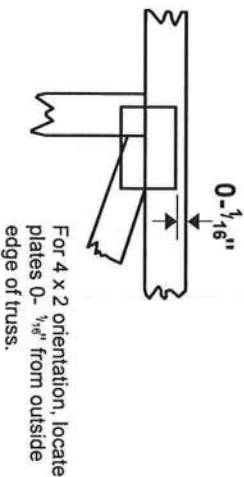
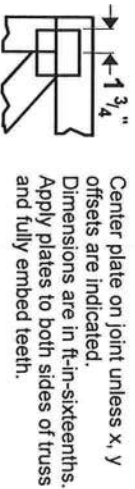
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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

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Tampa, FL 33610

Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

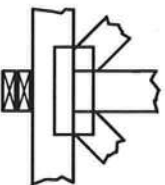
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



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

Industry Standards:

ANSI/TP11: National Design Specification for Metal

Plate Connected Wood Truss Construction.

DSB-89: Design Standard for Bracing.

BCSI: Building Component Safety Information,

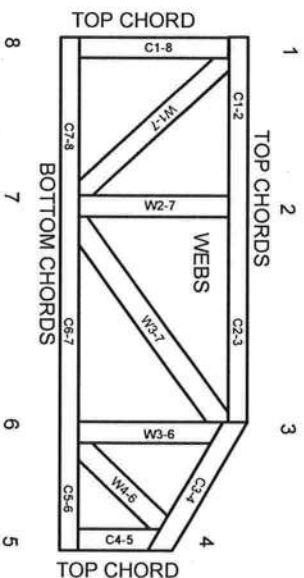
Guide to Good Practice for Handling,

Installing & Bracing of Metal Plate

Connected Wood Trusses.

Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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



General Safety Notes

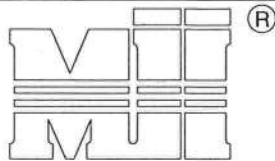
Failure to Follow Could Cause Property Damage or Personal Injury

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

AUGUST 1, 2016

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

MII-T-BRACE 2



MiTek USA, Inc.



MiTek USA, Inc. Page 1 of 1

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

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

Nailing Pattern

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

Brace Size for One-Ply Truss

Specified Continuous Rows of Lateral Bracing

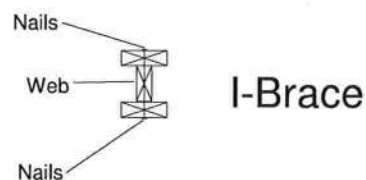
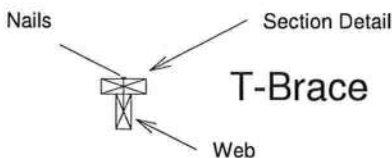
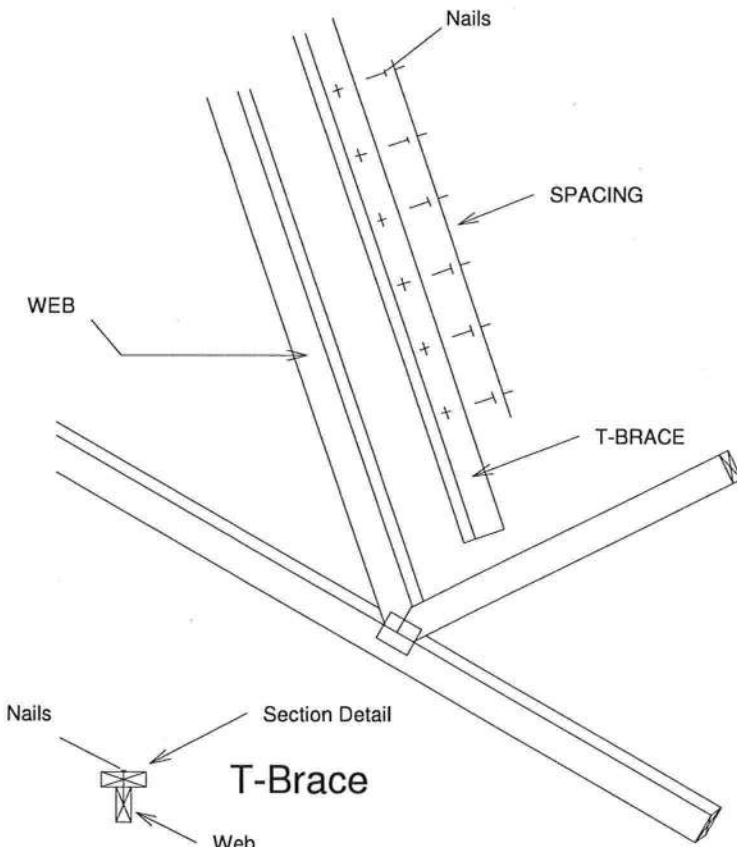
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

Brace Size for Two-Ply Truss

Specified Continuous Rows of Lateral Bracing

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

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



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

February 12, 2018

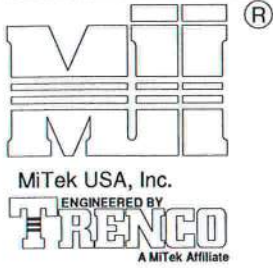
AUGUST 1, 2016

SCAB-BRACE DETAIL

MII-SCAB-BRACE

MiTek USA, Inc.

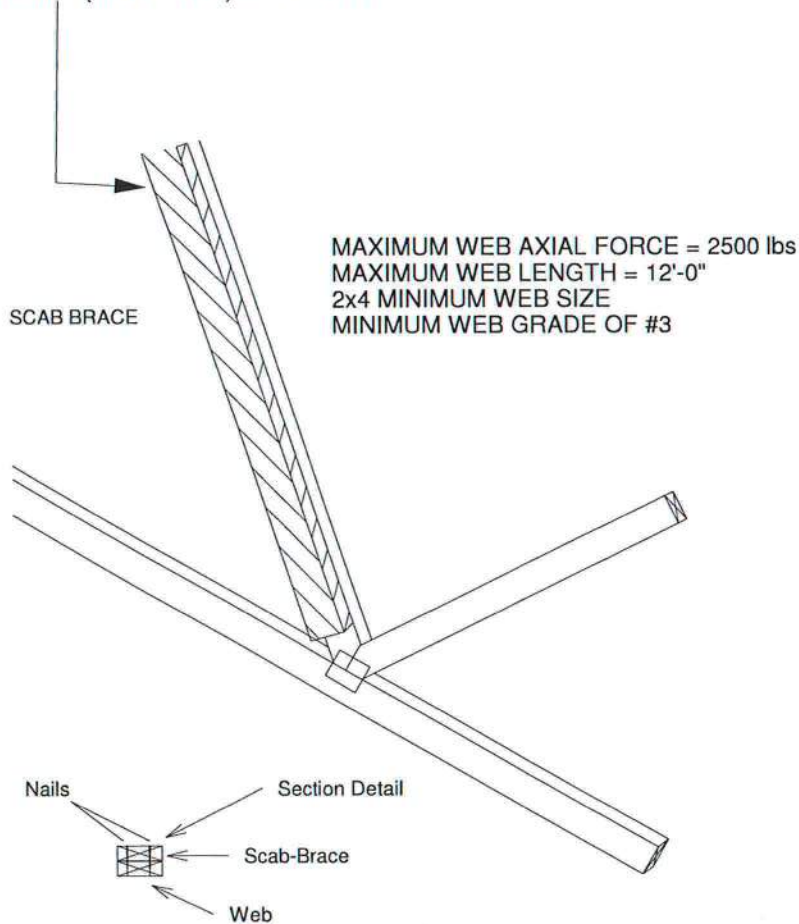
Page 1 of 1



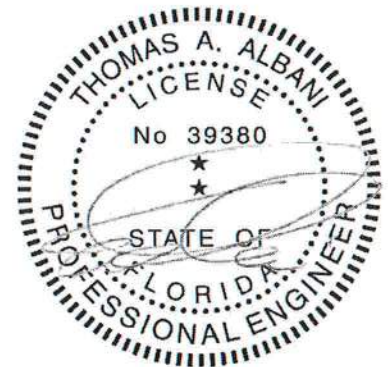
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

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

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

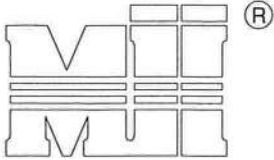


Scab-Brace must be same species grade (or better) as web member.



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

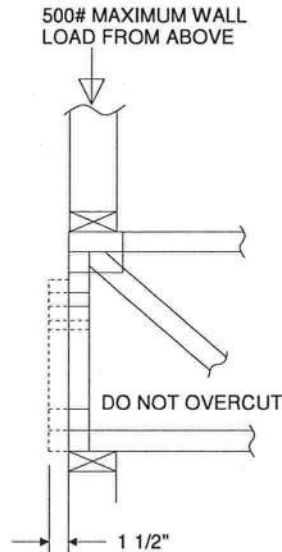
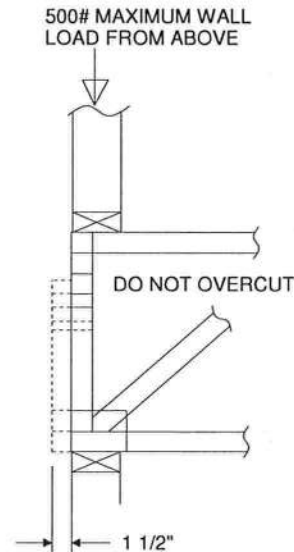
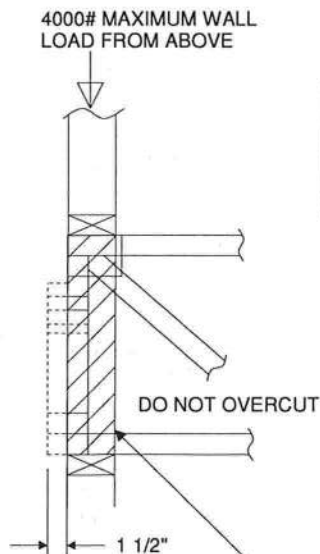
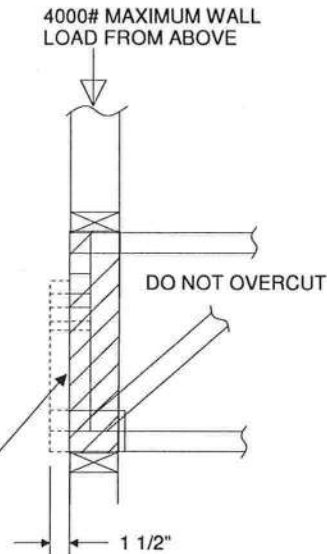
February 12, 2018



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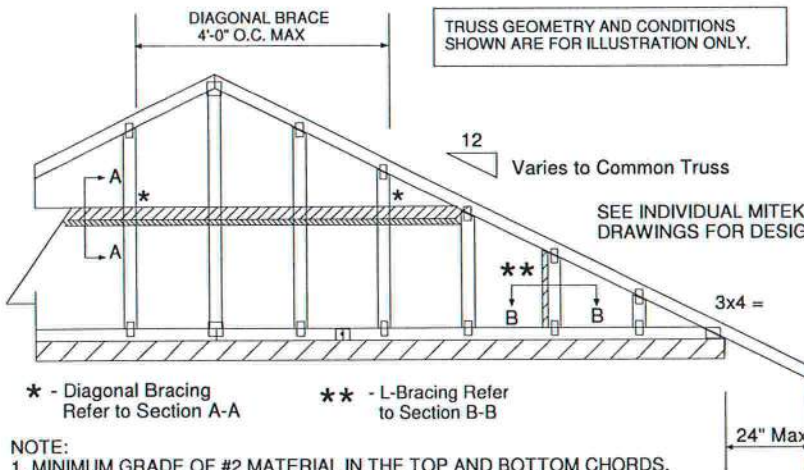
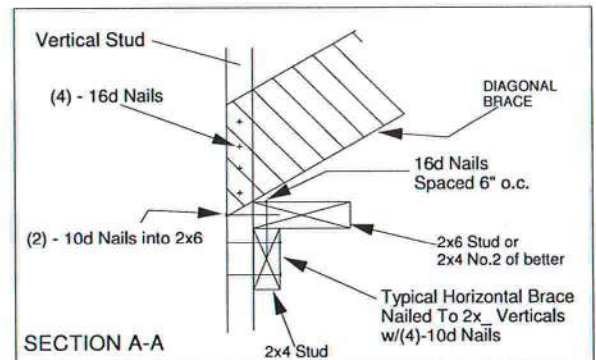
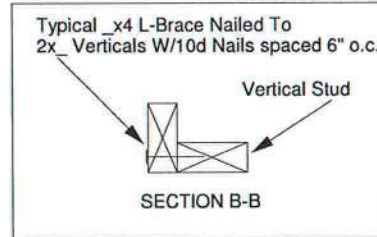
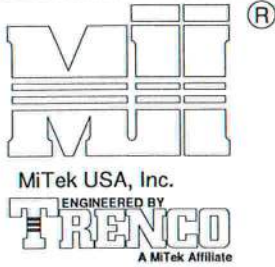
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS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


 REFER TO INDIVIDUAL
 TRUSS DESIGN FOR
 PLATE SIZES AND
 LUMBER GRADES

 TRUSSES BUILT
 WITH 4x2 MEMBERS

 REFER TO INDIVIDUAL
 TRUSS DESIGN FOR
 PLATE SIZES AND
 LUMBER GRADES

 TRUSSES BUILT
 WITH 4x2 MEMBERS

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

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

February 12, 2018



NOTE:

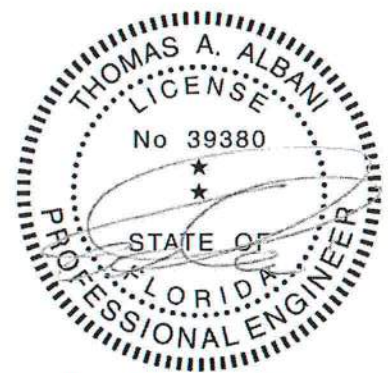
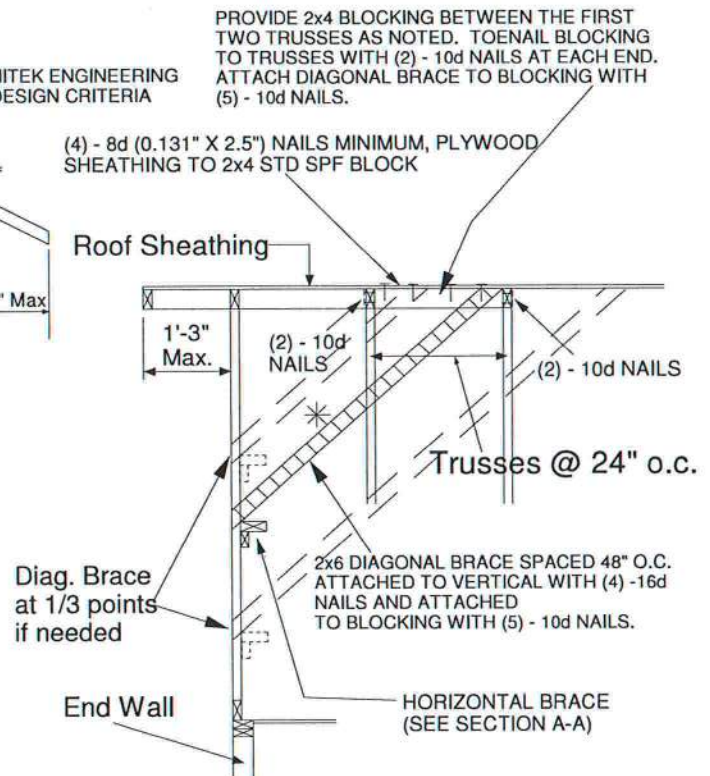
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF 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 l-braces attached to both edges. Fasten T and l braces to narrow edge of diagonal brace with 10d nails 8" o.c., with 3" minimum end distance. Brace must cover 90% of diagonal length.

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

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



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

February 12, 2018

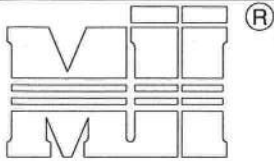
AUGUST 1, 2016

Standard Gable End Detail

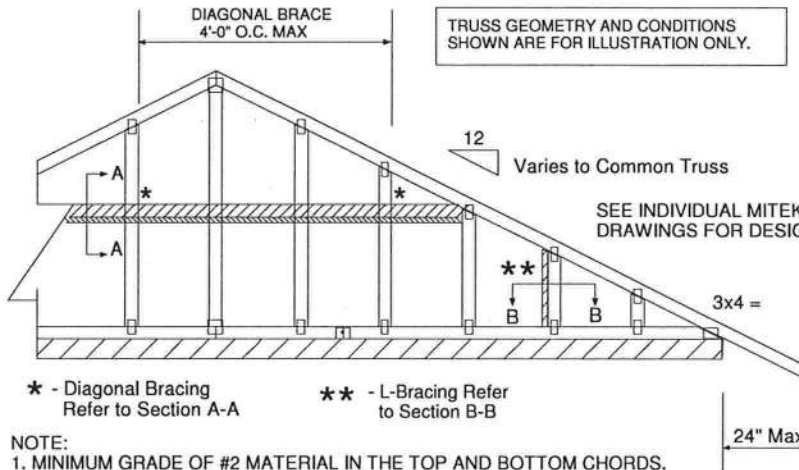
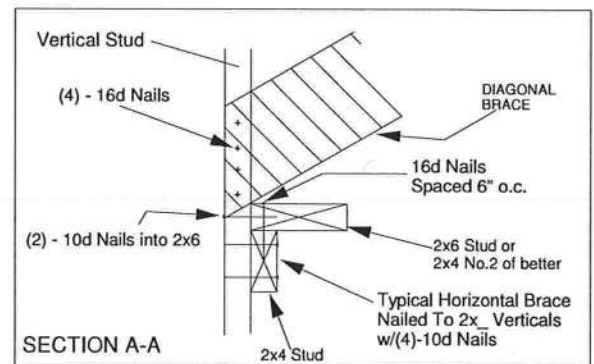
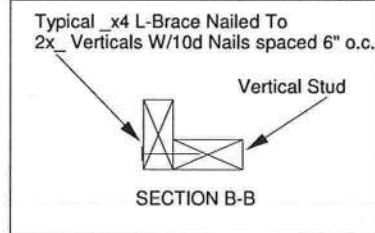
MII-GE130-SP

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Page 1 of 2



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 * - Diagonal Bracing
 Refer to Section A-A

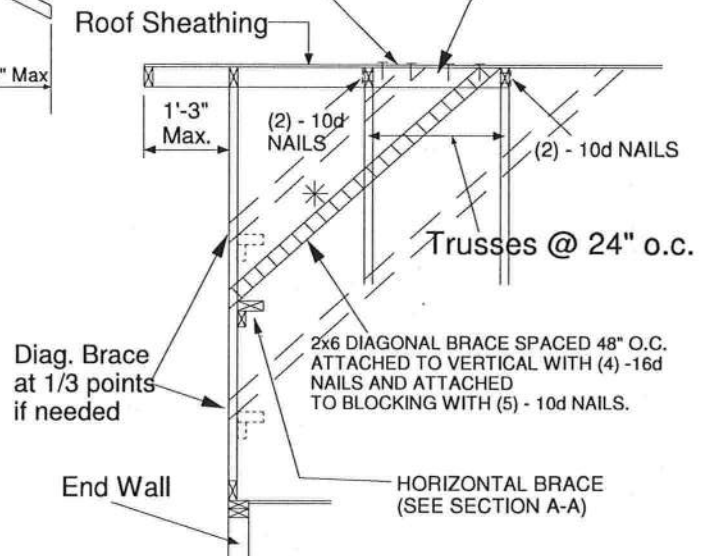
 ** - L-Bracing Refer
 to Section B-B

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")

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



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

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

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

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

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

February 12, 2018

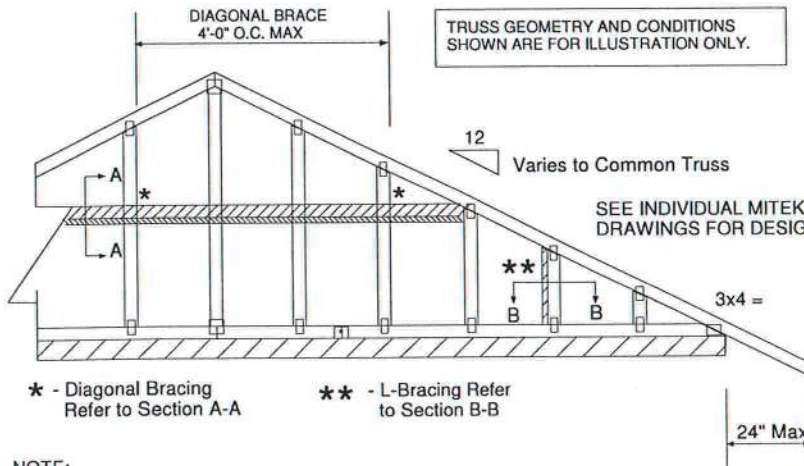
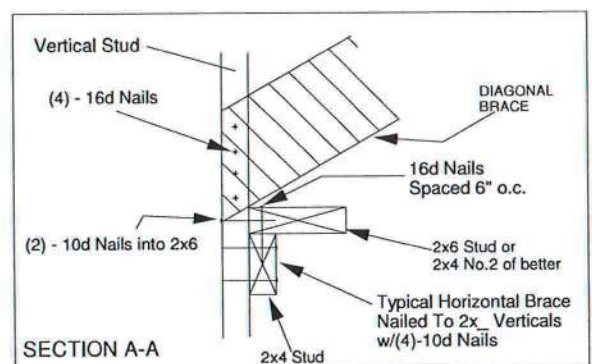
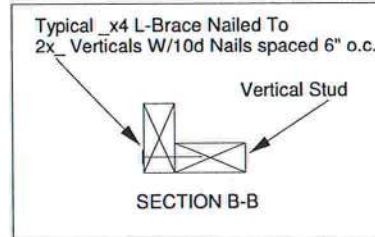
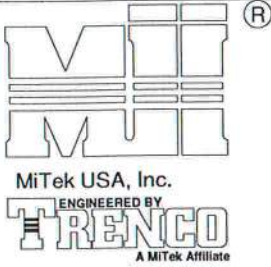
JANUARY 6, 2017

Standard Gable End Detail

MII-GE140-001

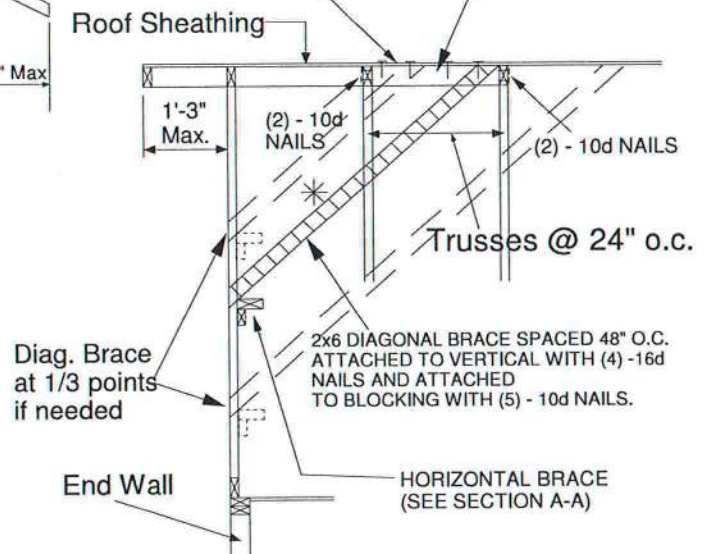
MiTek USA, Inc.

Page 1 of 2



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

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



NOTE:

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

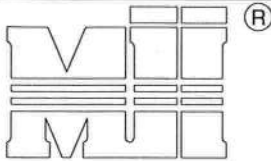
MAXIMUM WIND SPEED = 140 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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:

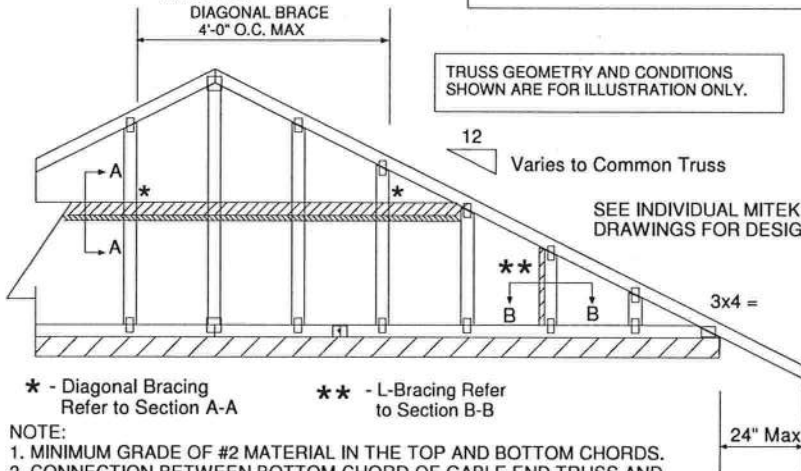
January 19, 2018



MiTek USA, Inc.

ENGINEERED BY
TRENICO

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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, 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.

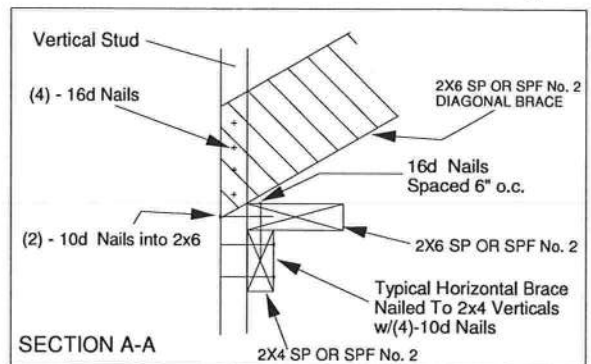
MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10 170 MPH
DURATION OF LOAD INCREASE : 1.60

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

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

Vertical Stud

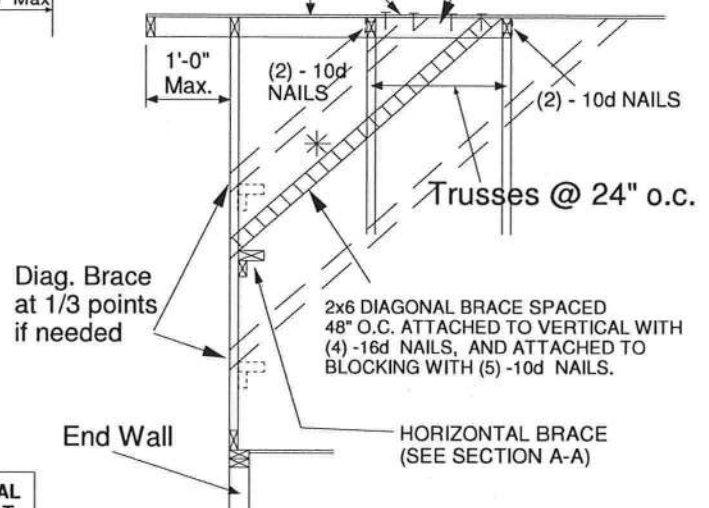
SECTION B-B



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

Roof Sheathing



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

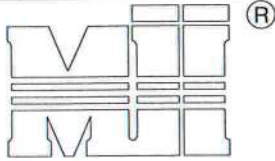
February 12, 2018

AUGUST 1, 2016

Standard Gable End Detail

MII-GE180-D-SP

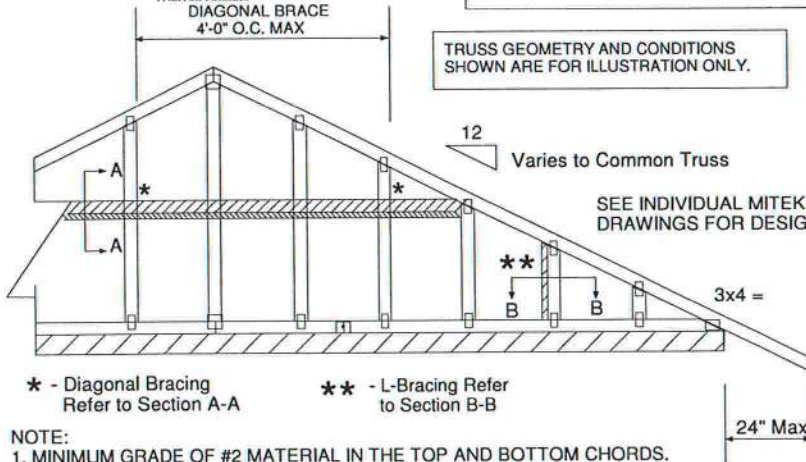
MiTek USA, Inc. Page 1 of 2



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DIAGONAL BRACE
4'-0" O.C. MAX* - Diagonal Bracing
Refer to Section A-A** - L-Bracing Refer
to Section B-B

NOTE:

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

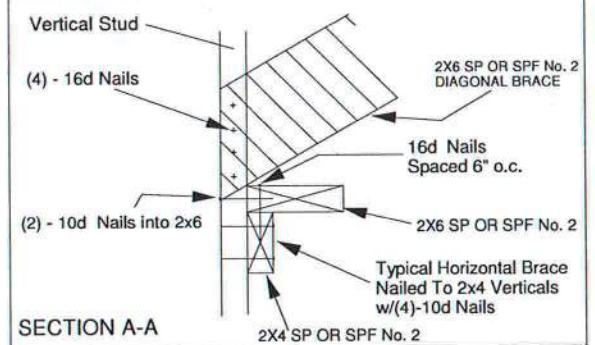
Typical 2x4 L-Brace Nailed To
2x4 Verticals W/10d Nails spaced 6" o.c.

Vertical Stud

SECTION B-B

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

24" Max

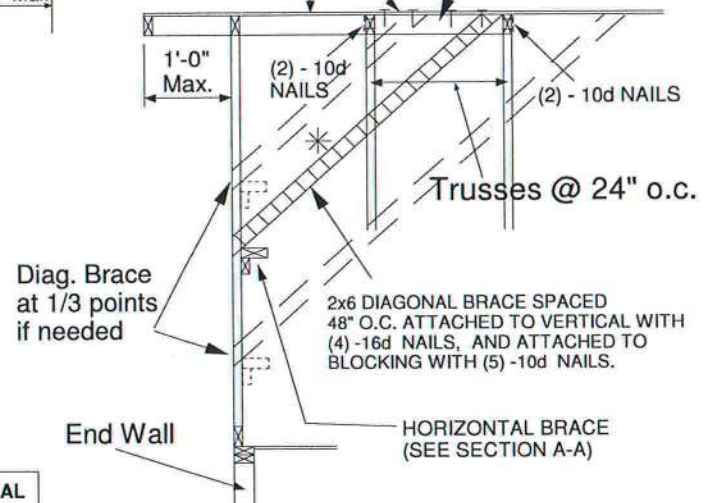


SECTION A-A

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

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

Roof Sheathing



Diag. Brace
at 1/3 points
if needed

End Wall

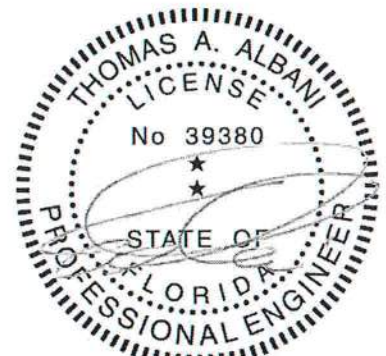
HORIZONTAL BRACE
(SEE SECTION A-A)

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.

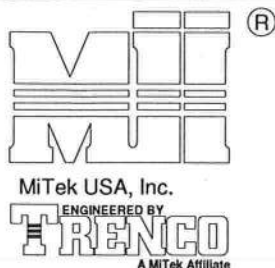
MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10 180 MPH
DURATION OF LOAD INCREASE : 1.60

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



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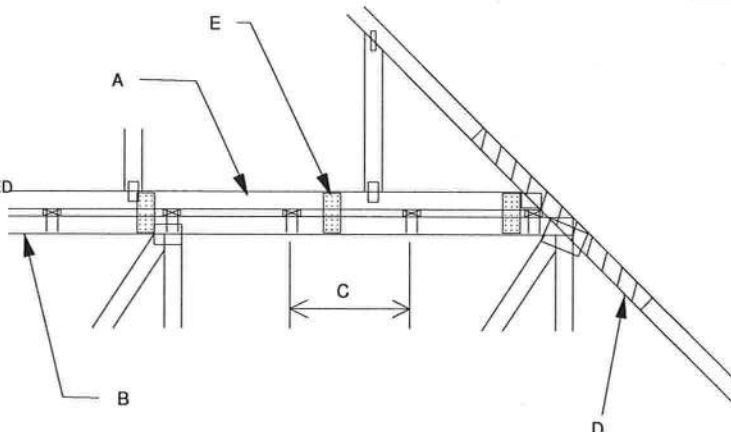
February 12, 2018



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

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

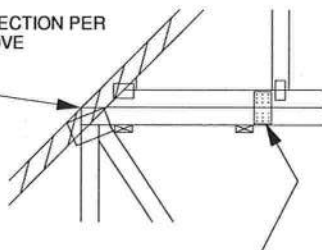
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X ____ X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
 2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



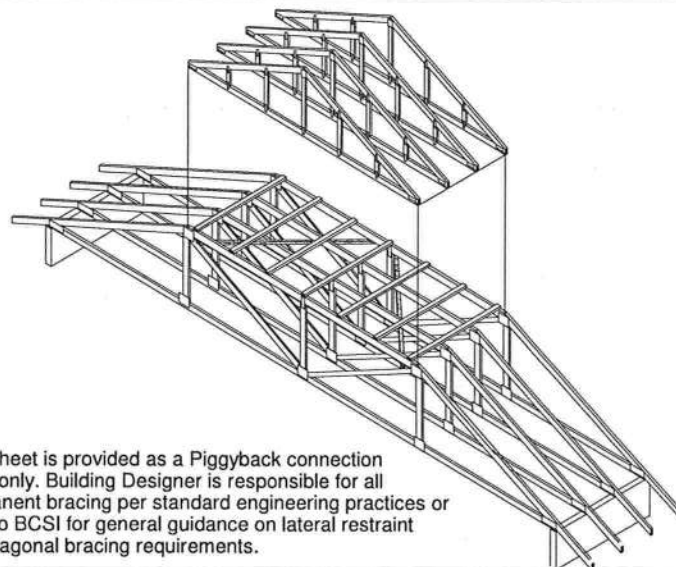
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

SCAB CONNECTION PER
NOTE D ABOVE

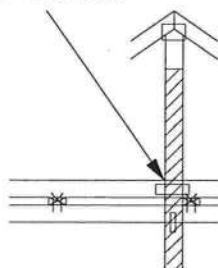


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



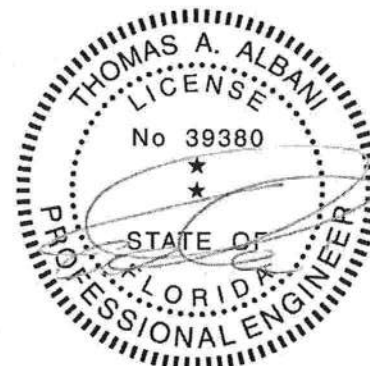
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO
EXTEND THROUGH
BOTTOM CHORD
OF PIGGYBACK



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

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



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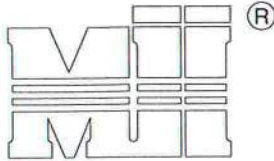
February 12, 2018

AUGUST 1, 2016

STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT
7-10

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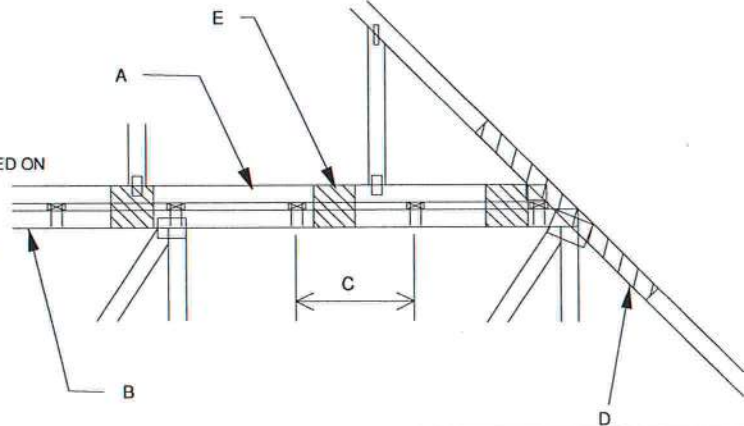
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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24" O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-10
DURATION OF LOAD INCREASE : 1.60

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

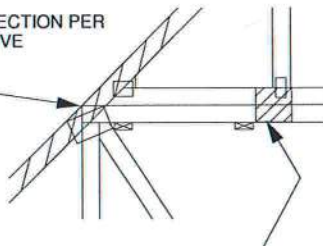
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X $\frac{1}{2}$ " X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
 2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.
- E - FOR WIND SPEED IN THE RANGE 126 MPH - 160 MPH ADD 9" x 9" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 48" O.C. OR LESS. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



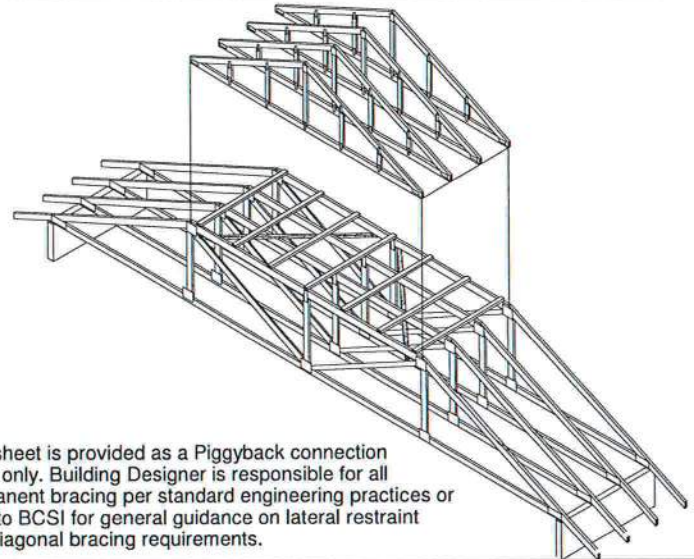
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

SCAB CONNECTION PER
NOTE D ABOVE

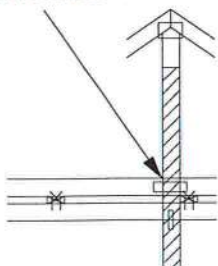


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



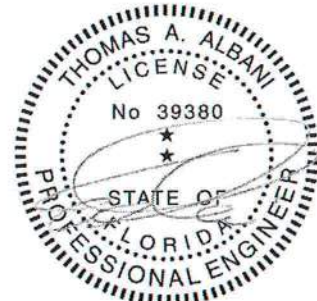
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

VERTICAL WEB TO
EXTEND THROUGH
BOTTOM CHORD
OF PIGGYBACK



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

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



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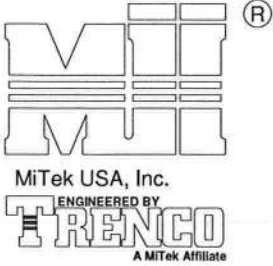
January 19, 2018

AUGUST 1, 2016

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

MII-REP01A1

MiTek USA, Inc. Page 1 of 1



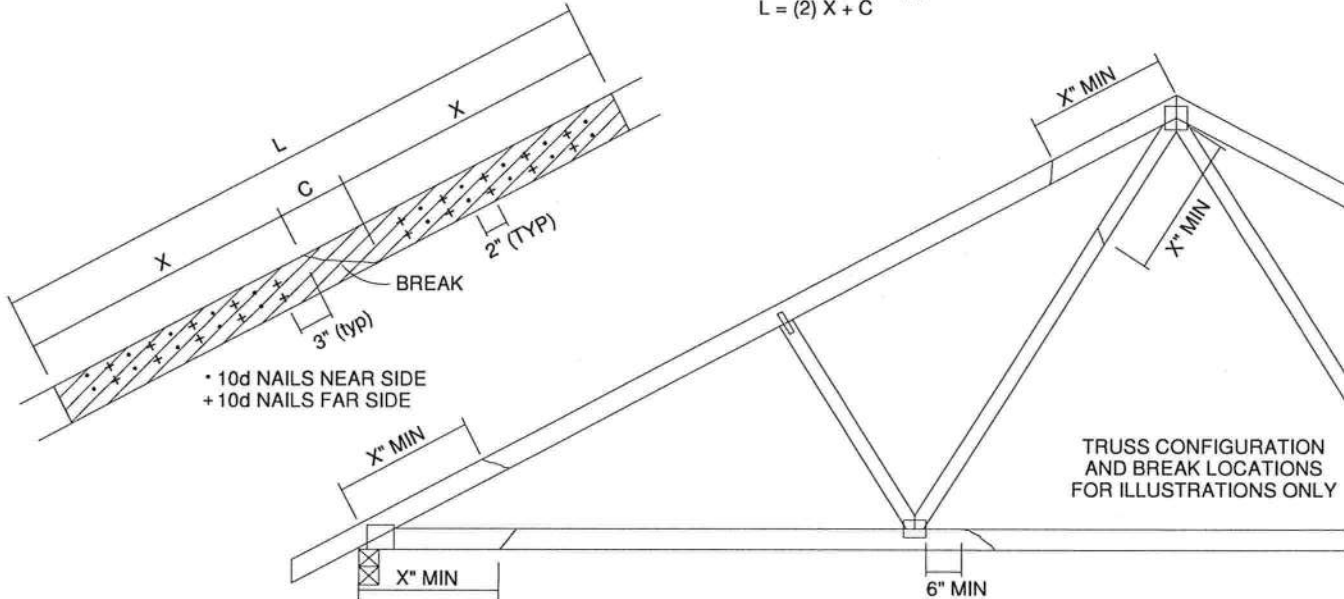
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125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

* DIVIDE EQUALLY FRONT AND BACK

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

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

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

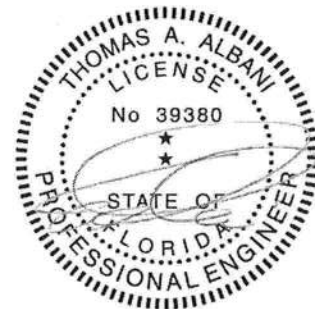


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

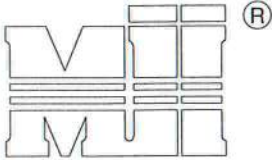
NOTES:

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



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January 19, 2018



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NOTES:

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

 THIS DETAIL APPLICABLE TO THE
 THREE END DETAILS SHOWN BELOW

 VIEWS SHOWN ARE FOR
 ILLUSTRATION PURPOSES ONLY

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

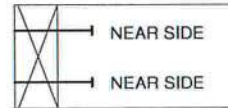
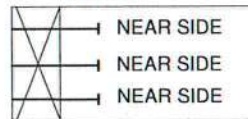
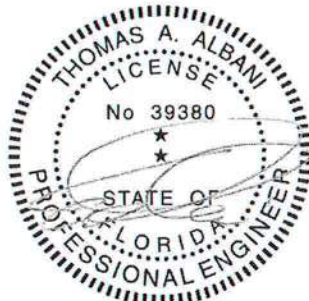
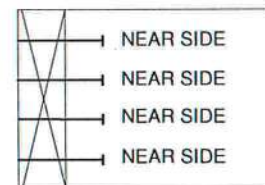
 VALUES SHOWN ARE CAPACITY PER TOE-NAIL.
 APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

EXAMPLE:

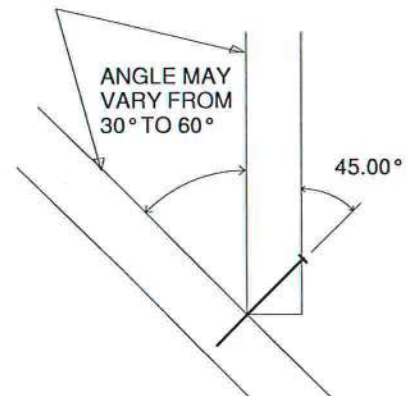
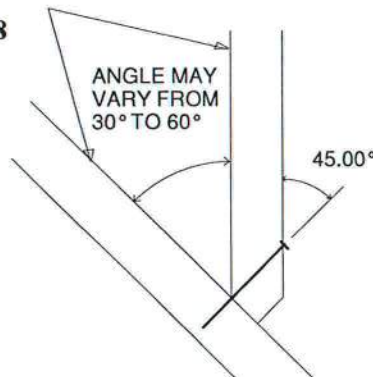
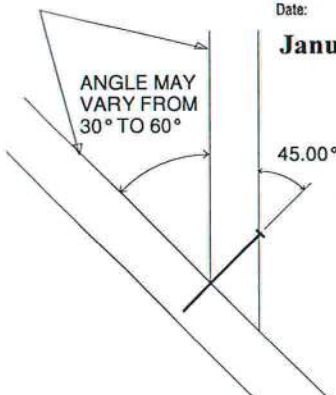
(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

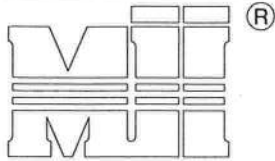
For load duration increase of 1.15:

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

 SIDE VIEW
 (2x3)
 2 NAILS

 SIDE VIEW
 (2x4)
 3 NAILS

 SIDE VIEW
 (2x6)
 4 NAILS

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January 19, 2018

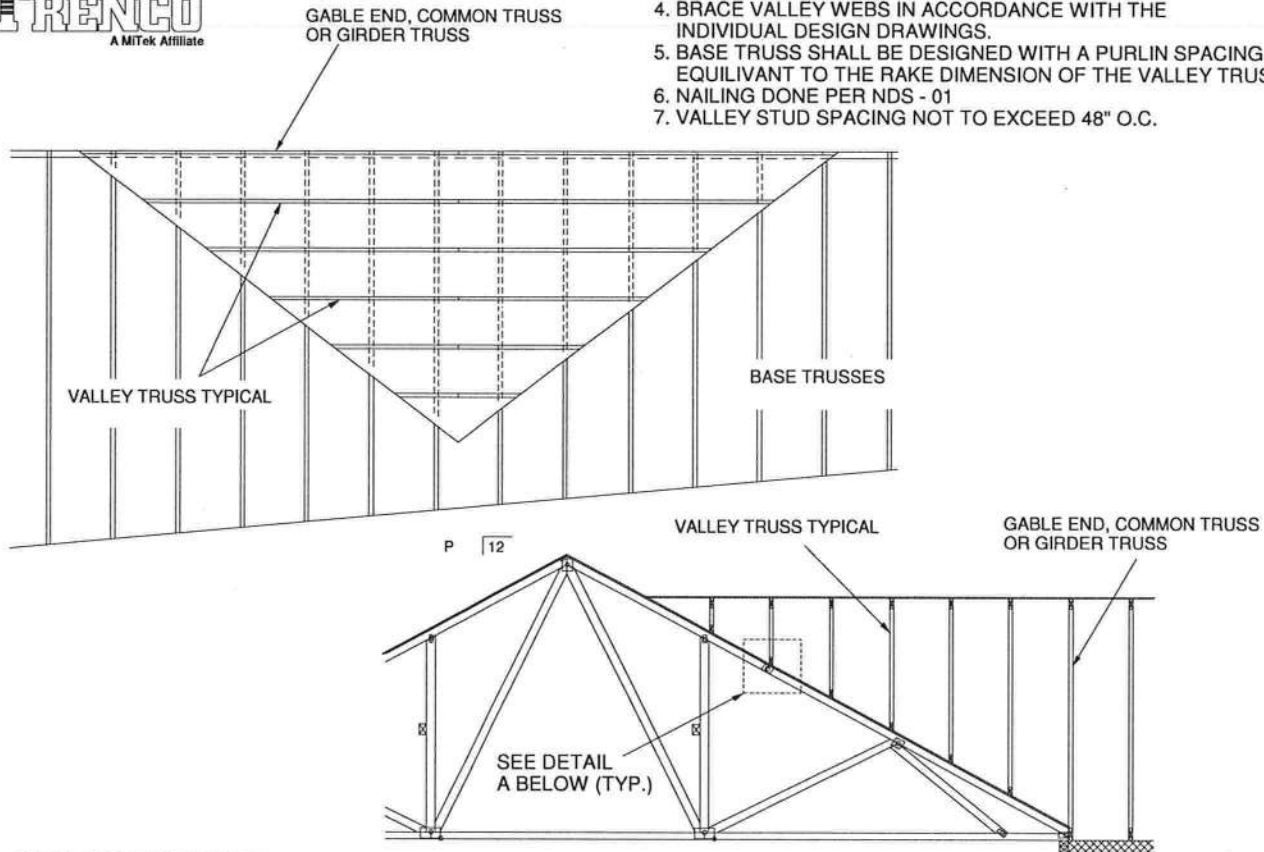




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GENERAL SPECIFICATIONS

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



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

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

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

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



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Date:

January 19, 2018

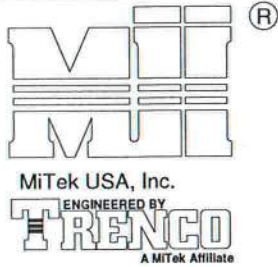
AUGUST 1, 2016

TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND2

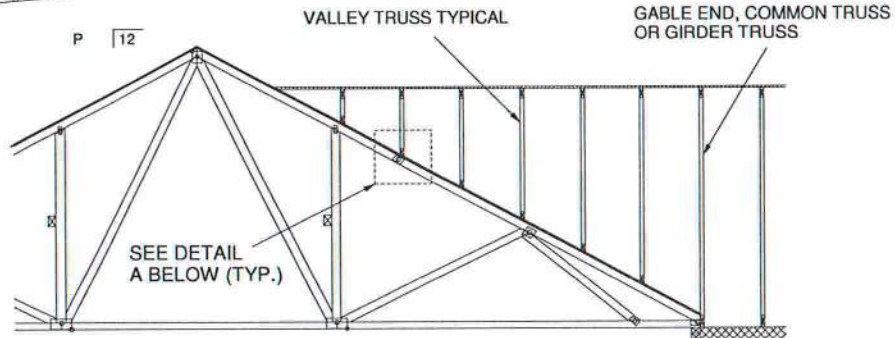
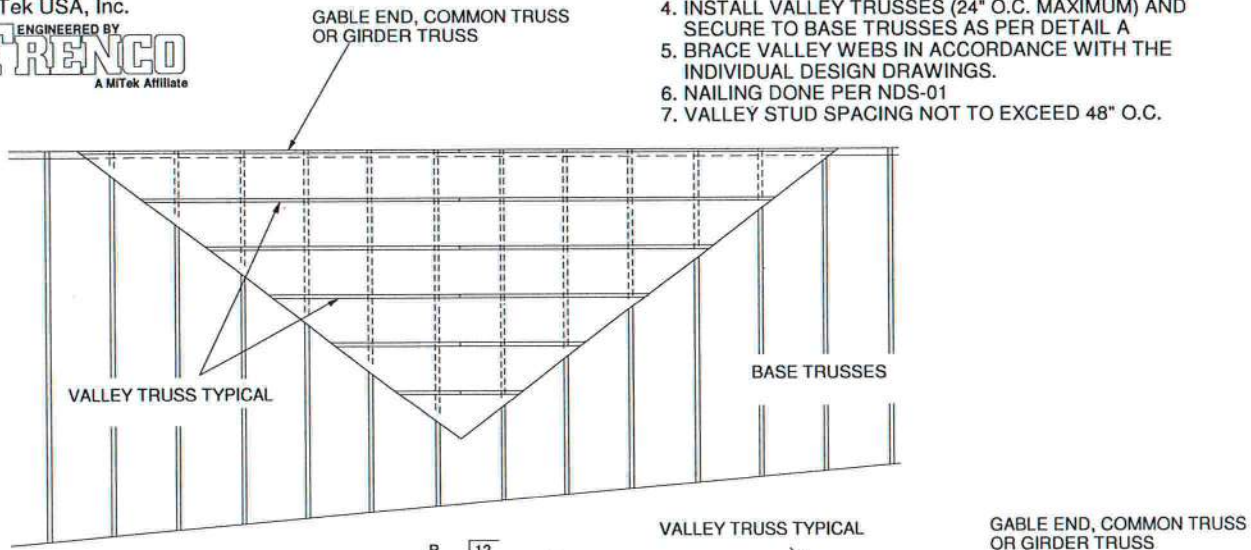
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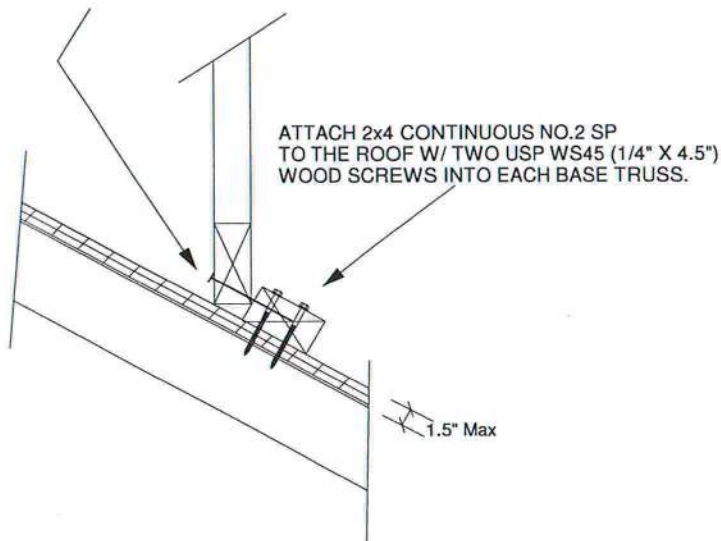


GENERAL SPECIFICATIONS

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



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

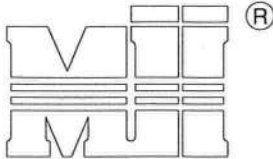


WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)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



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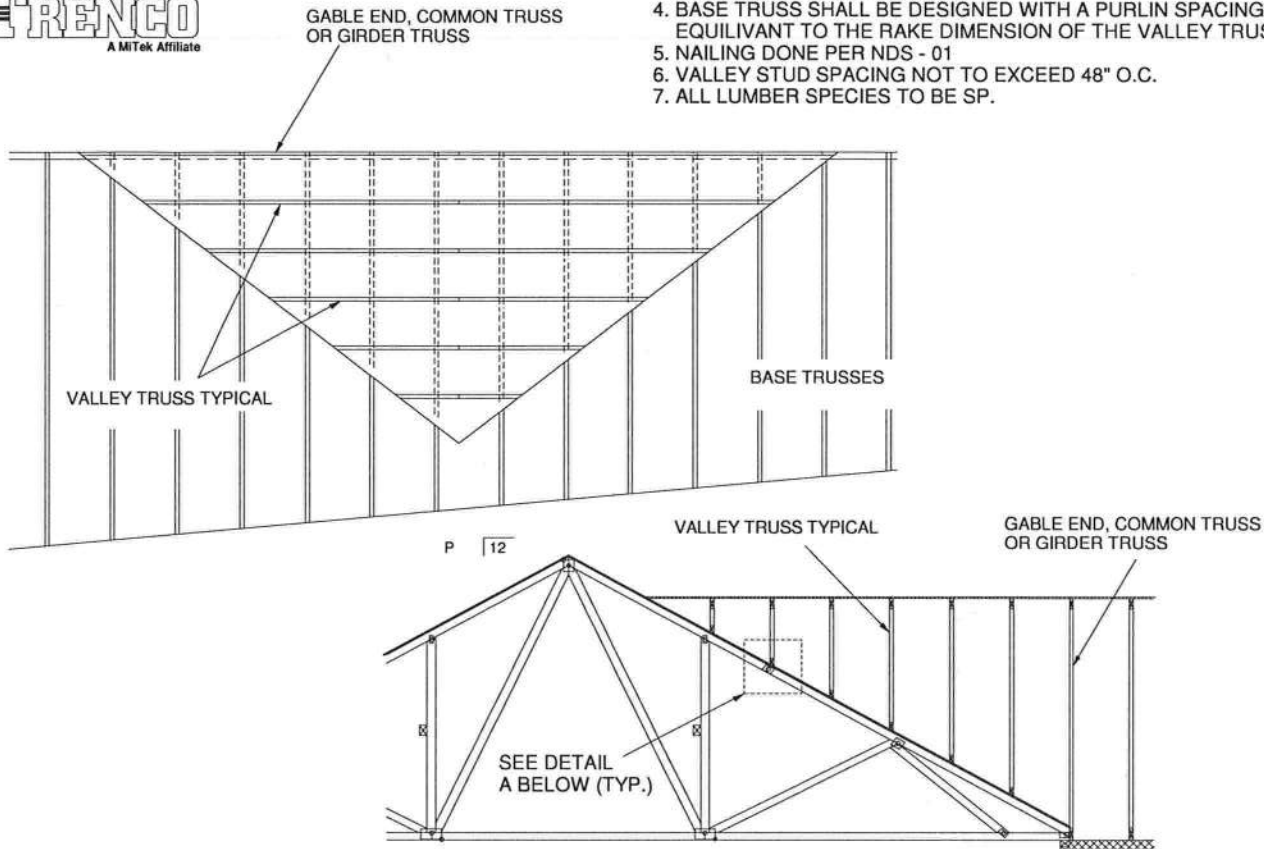
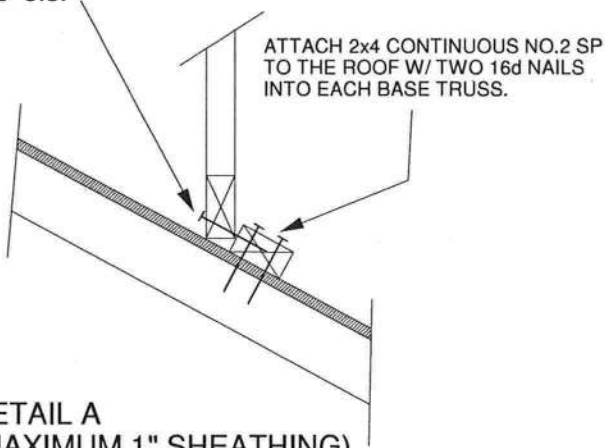


MiTek USA, Inc.

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 EQUIVARIANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.


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

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

 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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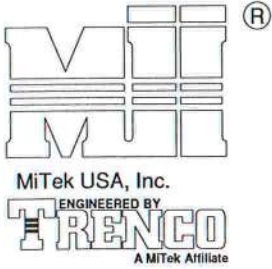
February 12, 2018

AUGUST 1, 2016

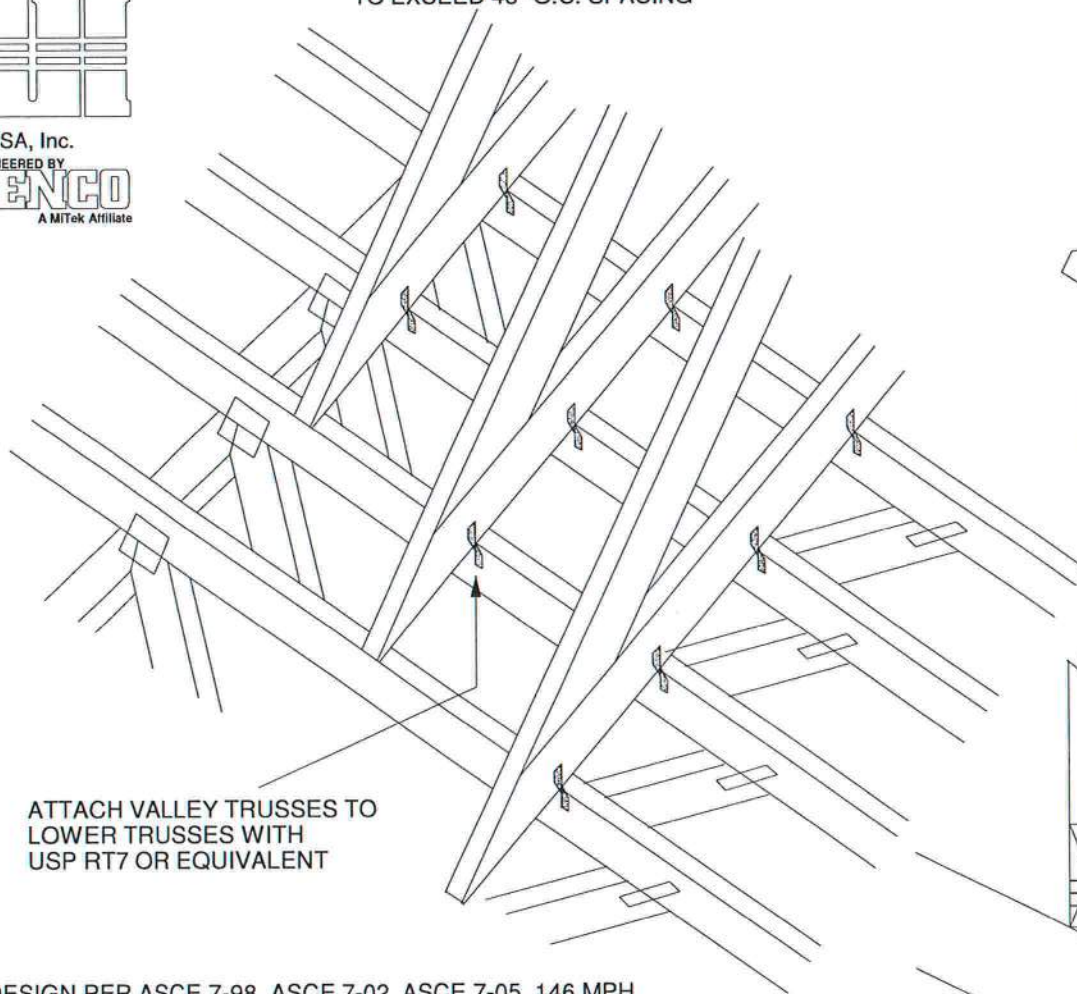
TRUSSED VALLEY SET DETAIL
(HIGH WIND VELOCITY)

MII-VALLEY

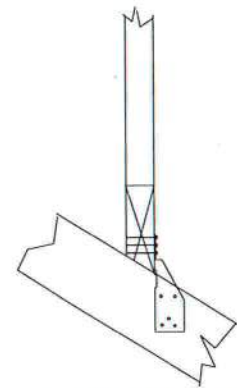
MiTek USA, Inc. Page 1 of 1



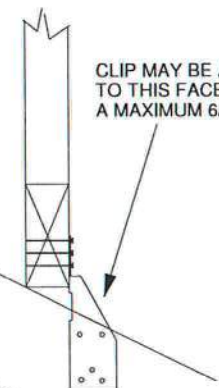
NOTE: VALLEY STUD SPACING NOT
TO EXCEED 48" O.C. SPACING



ATTACH VALLEY TRUSSES TO
LOWER TRUSSES WITH
USP RT7 OR EQUIVALENT



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



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

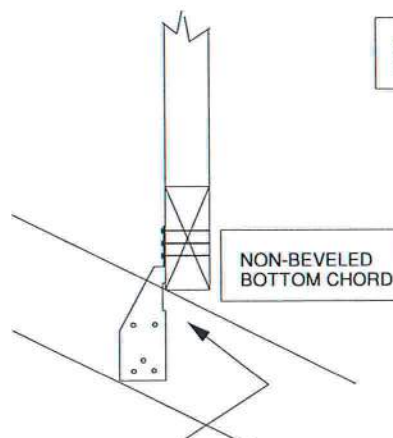
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
WIND DURATION OF LOAD INCREASE : 1.6
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)

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

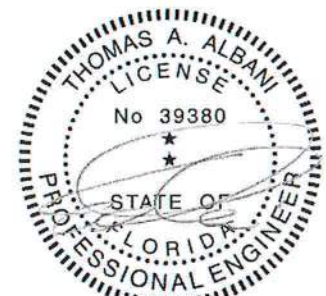
NOTES:

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

NON-BEVELED
BOTTOM CHORD

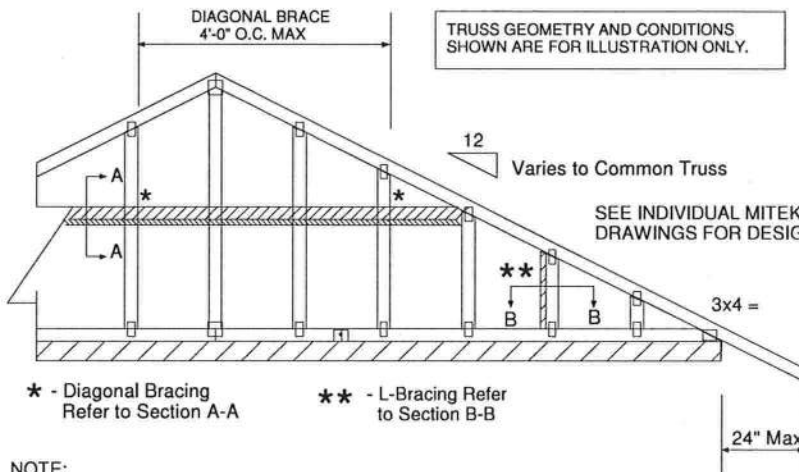
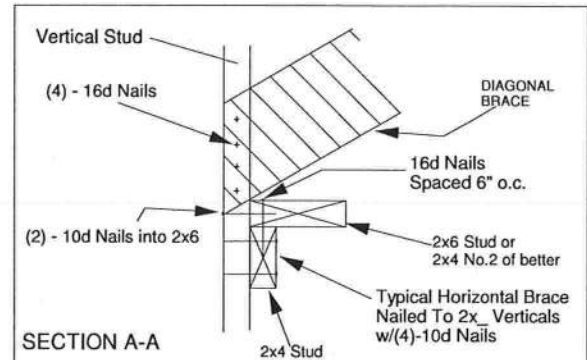
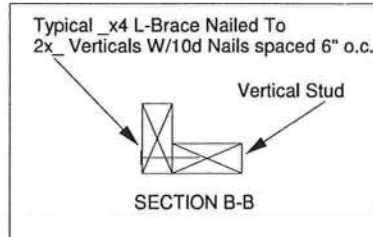


CLIP MUST BE APPLIED
TO THIS FACE WHEN
PITCH EXCEEDS 6/12.
(MAXIMUM 12/12 PITCH)



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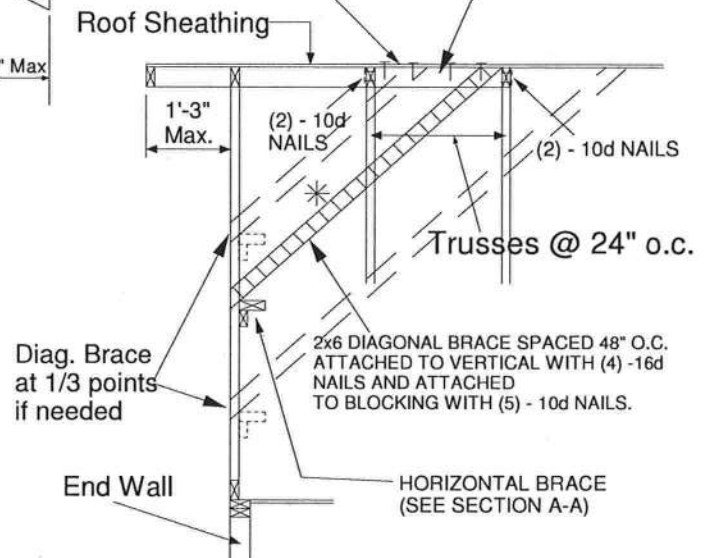


NOTE:

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: 2x4 No 3/STUD SP OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.
5. DIAGONAL BRACE TO BE APPROXIMATELY 45 DEGREES TO ROOF DIAPHRAM AT 4'-0" O.C.
6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)
7. GABLE STUD DEFLECTION MEETS OR EXCEEDS $L/240$.
8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
10. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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

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



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

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

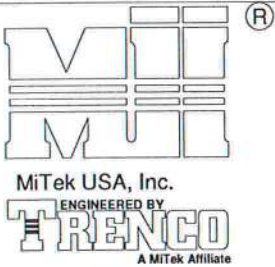
MAXIMUM WIND SPEED = 146 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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



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TRUSS CRITERIA:

LOADING: 40-10-0-10

DURATION FACTOR: 1.15

SPACING: 24" O.C.

TOP CHORD: 2x4 OR 2x6

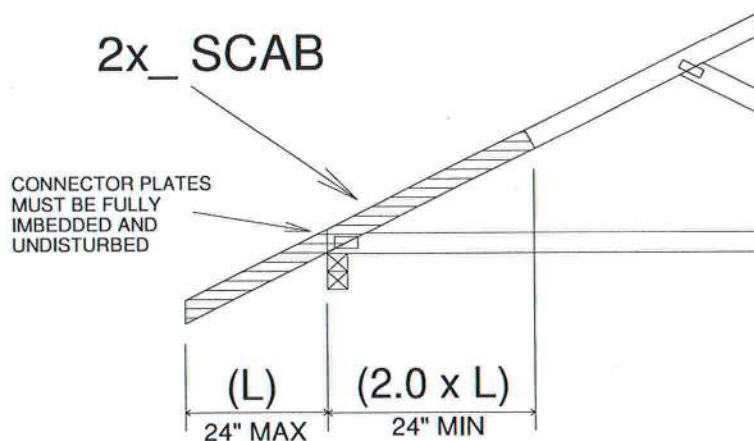
PITCH: 4/12 - 12/12

HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL

END BEARING CONDITION

NOTES:

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

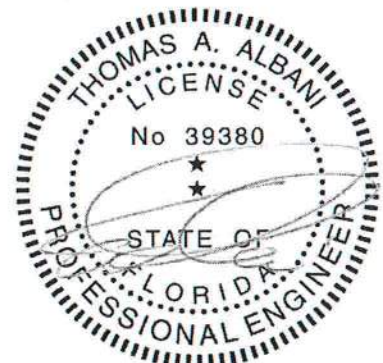


IMPORTANT

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

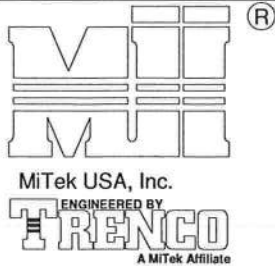
Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN
FOR PLATE SIZES AND LUMBER GRADES



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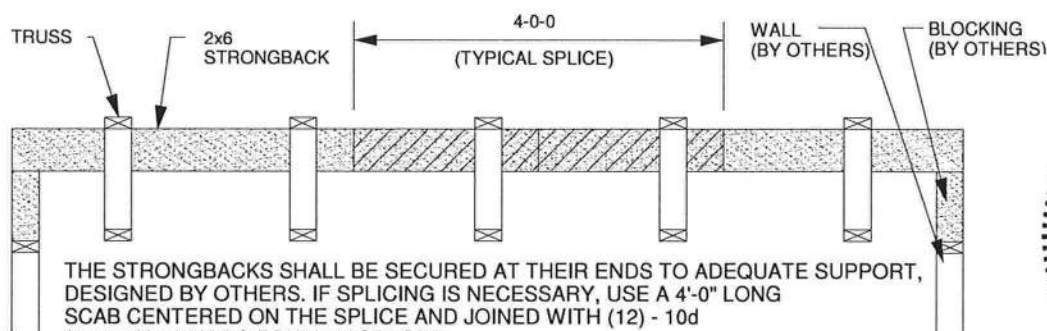
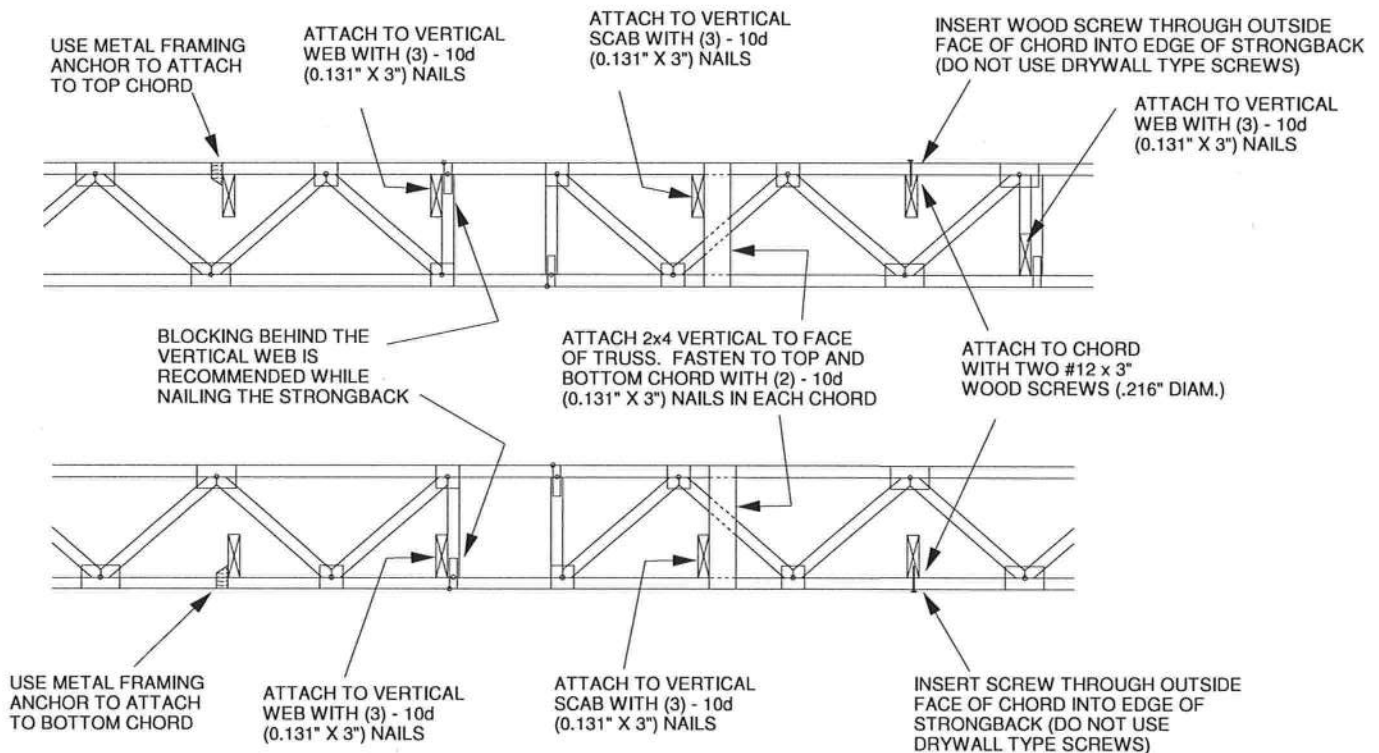
February 12, 2018



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

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

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



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



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