



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

RE: 2391382 - HOUSECRAFT - DAWSON RES.

MiTek USA, Inc.

6904 Parke East Blvd.
Tampa, FL 33610-4115

Site Information:

Customer Info: House Craft Homes Project Name: Dawson Res. Model: Custom
Lot/Block: N/A Subdivision: N/A
Address: Parcel # 05-7S-16-04138-112, N/A
City: Columbia Cty State: FL

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

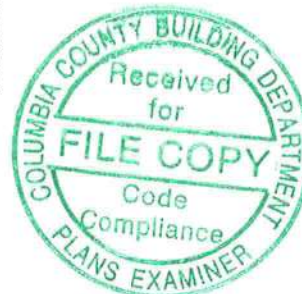
Name: License #:
Address:
City: State:

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 29 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	T20645057	CJ01	7/6/20	23	T20645079	T14	7/6/20
2	T20645058	CJ03	7/6/20	24	T20645080	T15	7/6/20
3	T20645059	CJ03A	7/6/20	25	T20645081	T16	7/6/20
4	T20645060	CJ05	7/6/20	26	T20645082	T17	7/6/20
5	T20645061	CJ05A	7/6/20	27	T20645083	T18	7/6/20
6	T20645062	EJ01	7/6/20	28	T20645084	T19	7/6/20
7	T20645063	EJ02	7/6/20	29	T20645085	T19G	7/6/20
8	T20645064	HJ10	7/6/20				
9	T20645065	HJ10A	7/6/20				
10	T20645066	T01	7/6/20				
11	T20645067	T02	7/6/20				
12	T20645068	T03	7/6/20				
13	T20645069	T04	7/6/20				
14	T20645070	T05	7/6/20				
15	T20645071	T06	7/6/20				
16	T20645072	T07	7/6/20				
17	T20645073	T08	7/6/20				
18	T20645074	T09	7/6/20				
19	T20645075	T10	7/6/20				
20	T20645076	T11	7/6/20				
21	T20645077	T12	7/6/20				
22	T20645078	T13	7/6/20				



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:

July 6, 2020

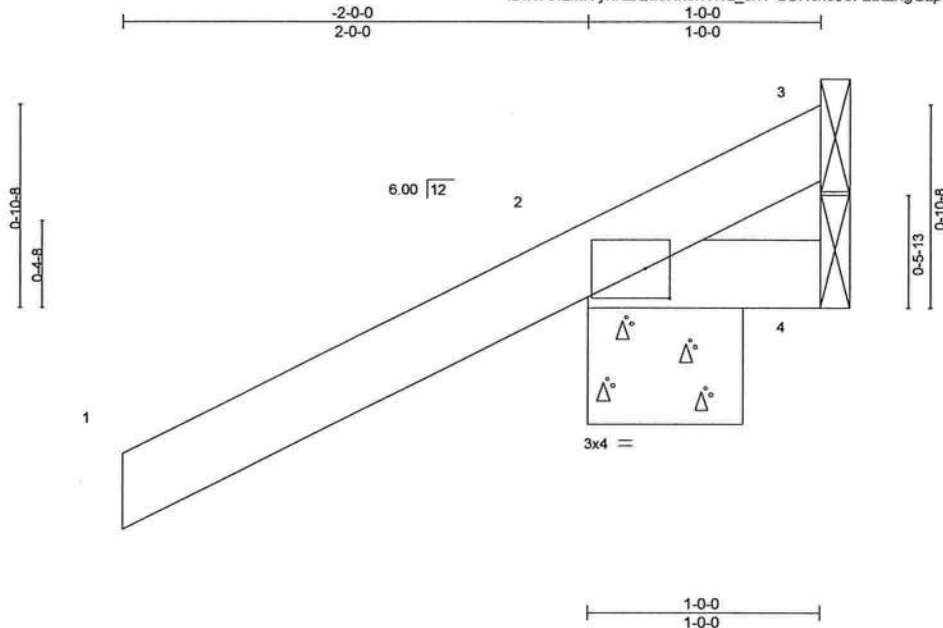
Velez, Joaquin

1 of 1

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645057
2391382	CJ01	Jack-Open	10	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:12 2020 Page 1
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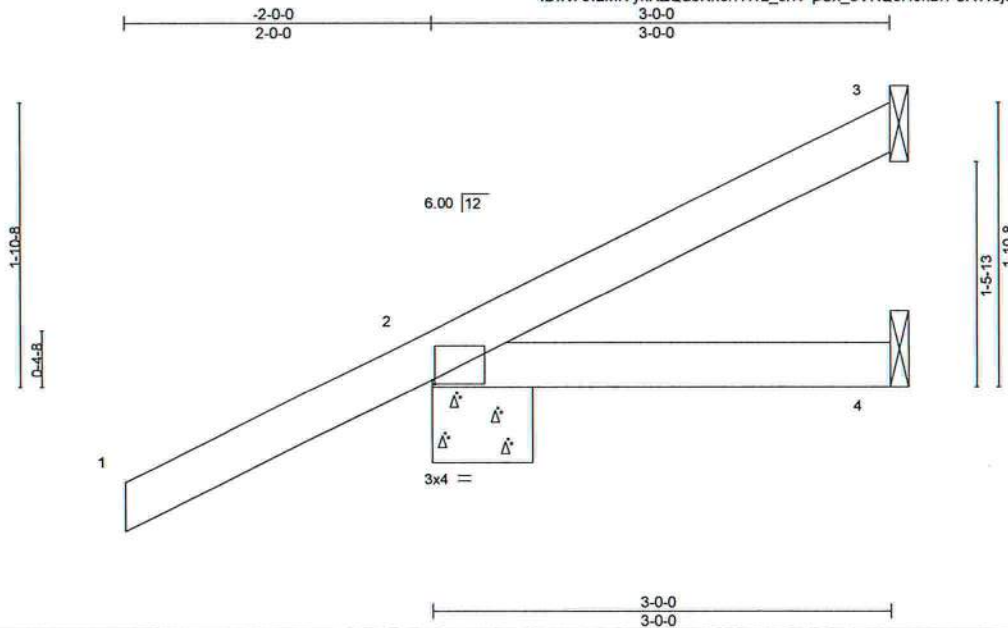
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Plate Offsets (X,Y)– [2:0-1-4,0-1-9]											
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL 1.25		TC	0.32	Vert(LL)	0.00 7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL 1.25		BC	0.07	Vert(CT)	0.00 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%

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645058
2391382	CJ03	Jack-Open	8	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:13 2020 Page 1
ID:N79ILMIYykRZQaeNxonYfvz_shY-pSx_8VKQ0H0kBrFSXW3jczWrNi7JbxsxStaRKoz_m9u



Scale = 1:14.6

Plate Offsets (X,Y)--		[2:0-0-3,0-0-5]									
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 0.32		Vert(LL)	-0.00 4-7	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.07		Vert(CT)	-0.01 4-7	>999	180		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.00		Horz(CT)	0.00 3	n/a	n/a		
BCDL 10.0		Code FBC2017/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=0-8-0, 4=Mechanical
Max Horz 2=113(LC 12)
Max Uplift 3=48(LC 12), 2=126(LC 12)
Max Grav 3=52(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-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 48 lb uplift at joint 3 and 126 lb uplift at joint 2.



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Date:

July 6,2020

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

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

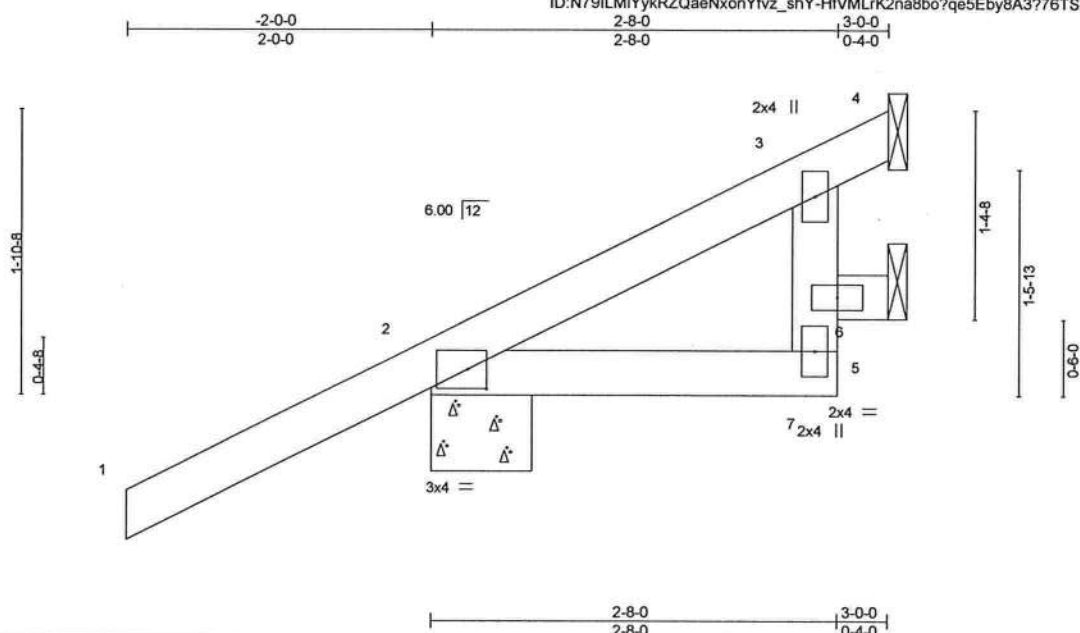
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Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645059
2391382	CJ03A	Jack-Open	2	1	Job Reference (optional)	

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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:14 2020 Page 1
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Scale = 1:14.6

Plate Offsets (X,Y)~		[2:0-1-8,0-1-9]													
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP				
TCLL 20.0		Plate Grip DOL	1.25	TC 0.32		Vert(LL)	-0.00 10	>999	240	MT20	244/190				
TCDL 7.0		Lumber DOL	1.25	BC 0.08		Vert(CT)	-0.00 10	>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-MR											
										Weight: 15 lb	FT = 20%				

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-7: 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 10-0-0 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-8-0, 5=Mechanical
Max Horz 2=113(LC 12)
Max Uplift 4=-14(LC 12), 2=-126(LC 12), 5=-27(LC 12)
Max Grav 4=25(LC 1), 2=253(LC 1), 5=51(LC 3)

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

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 14 lb uplift at joint 4, 126 lb uplift at joint 2 and 27 lb uplift at joint 5.



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Date:

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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:14 2020 Page 1
ID:N79ILMIYyKRZQaeNxonYfvz_shY-HfVMLrK2na8bo?qe5Eby8A3?776R6K064hXK?sEz_m9t



REACTIONS. (size) 3=Mechanical, 2=0-8-0, 4=Mechanical
Max Horiz 2=162(LC 12)
Max Uplift 3=-98(LC 12), 2=-137(LC 12), 4=-1(LC 12)
Max Grav 3=108(LC 1), 2=313(LC 1), 4=87(LC 3)

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCdL=3.0psf; h=18ft; Cat. II; Exp C; Encl., 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
- 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 98 lb uplift at joint 3, 137 lb uplift at joint 2 and 1 lb uplift at joint 4.



July 6, 2020

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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:15 2020 Page 1
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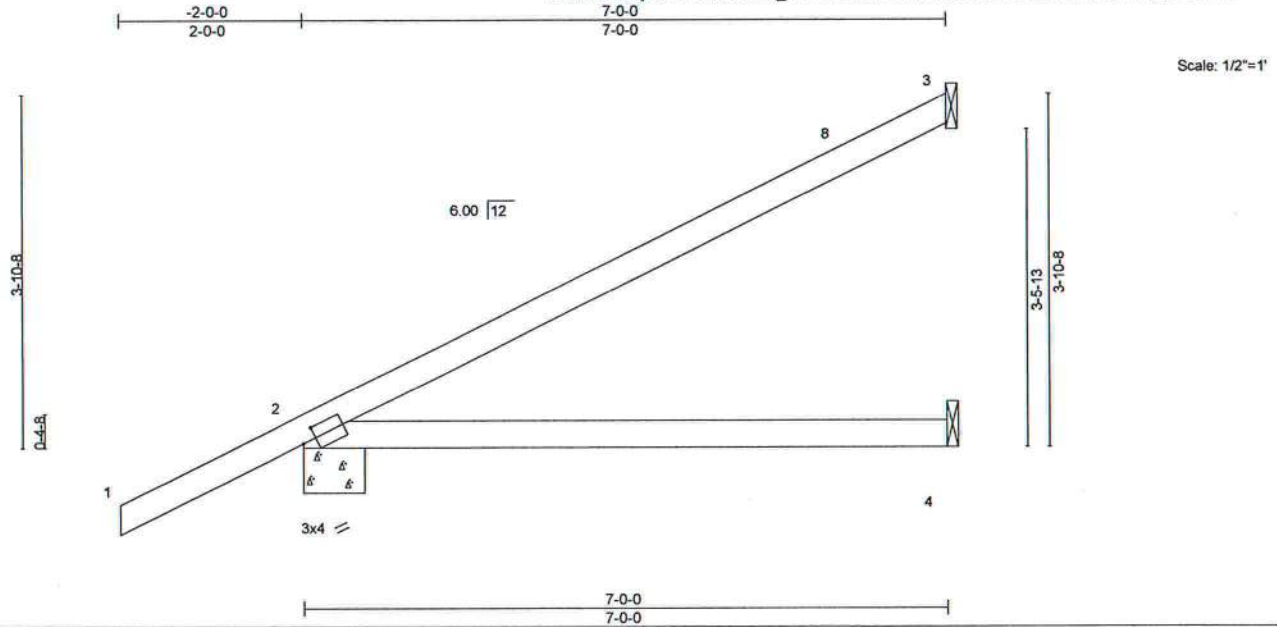


Plate Offsets (X,Y)– [2:0-1-13,0-1-8]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc) l/defl L/d		PLATES	GRIP
TCLL 20.0		Plate Grip DOL 1.25		TC 0.67		Vert(LL) 0.12 4-7 >666 240		MT20	244/190
TCDL 7.0		Lumber DOL 1.25		BC 0.51		Vert(CT) -0.21 4-7 >393 180			
BCLL 0.0 *		Rep Stress Incr YES		WB 0.00		Horz(CT) 0.01 3 n/a n/a			
BCDL 10.0		Code FBC2017/TP12014		Matrix-MS				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=0-8-0, 4=Mechanical
Max Horz 2=204(LC 12)
Max Uplift 3=130(LC 12), 2=156(LC 12), 4=5(LC 12)
Max Grav 3=160(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-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 130 lb uplift at joint 3, 156 lb uplift at joint 2 and 5 lb uplift at joint 4.



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Date:

July 6, 2020

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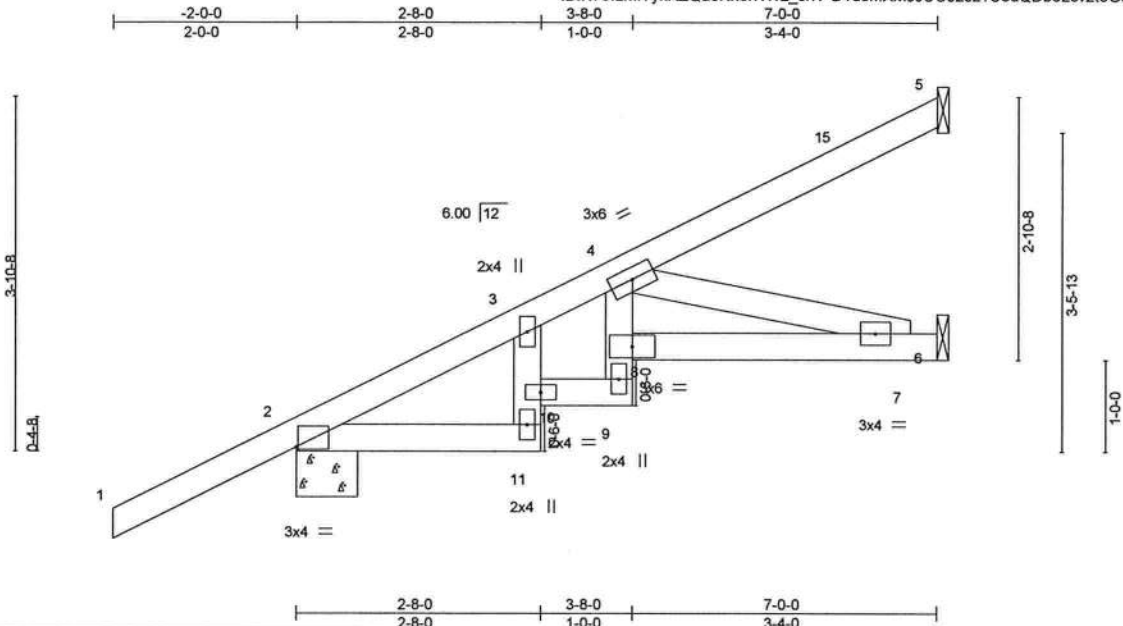
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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645063
2391382	EJ02	Jack-Partial	4	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:16 2020 Page 1

ID: N79ILMIYykRZQaeNxonYfvz_shY-D1d6mXMJJCOJ2Jz1CedQDb8Lcv2toG8N8qp5x7z_m9r



Scale: 1/2"=1'

Plate Offsets (X,Y) - [2-0-0-3,0-0-5]		2-8-0		3-8-0		7-0-0		3-4-0	
LOADING (psf)	SPACING-	2-0-0	CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.32	Vert(LL)	0.02 8	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.47	Vert(CT)	-0.03 7-8	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.02 6	n/a	n/a		
BCDL 10.0	Code FBC2017/TP12014		Matrix-MS						
								Weight: 33 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-11,4-9: 2x4 SP No.3
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-2-4 oc bracing: 7-8.

REACTIONS. (size) 5=Mechanical, 2=0-8-0, 6=Mechanical
Max Horz 2=204(LC 12)
Max Uplift 5=60(LC 12), 2=156(LC 12), 6=74(LC 12)
Max Grav 5=79(LC 1), 2=380(LC 1), 6=162(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-321/79, 3-4=-378/207
BOT CHORD 2-11=-240/299, 9-10=-329/349, 7-8=-516/522
WEBS 4-7=-540/533

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 60 lb uplift at joint 5, 156 lb uplift at joint 2 and 74 lb uplift at joint 6.



Joaquin Velez PE No.68182
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Date:

July 6, 2020

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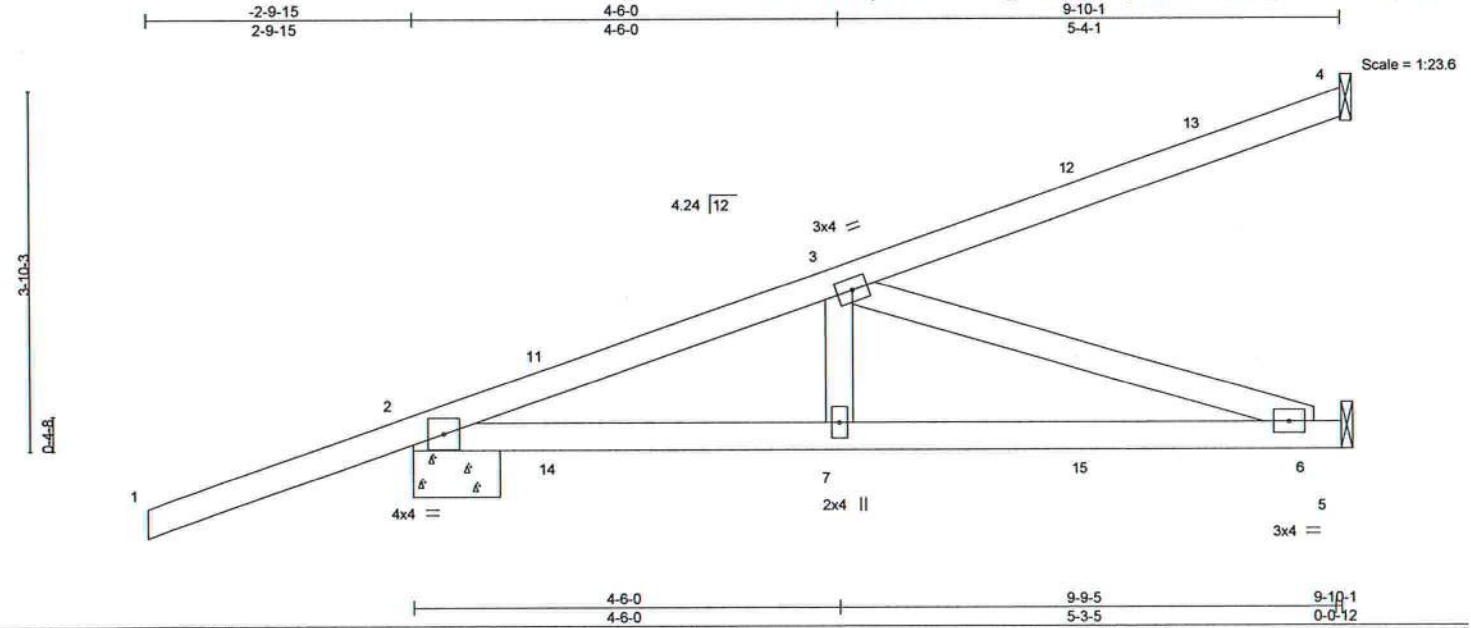


6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645064
2391382	HJ10	Diagonal Hip Girder	4	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:18 2020 Page 1
ID: N79ILMIYkRZQaeNxonYfvz_shY-9QitBCOZrpe1Hc7PK3fuJ0Ed_jiAG7igc8IC??z_m9p



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.59	Vert(LL)	0.06	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.61	Vert(CT)	-0.12	6-7	>967	180		
BCLL 0.0	Rep Stress Incr	NO	WB 0.35	Horz(CT)	0.01	5	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 44 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 9-9-15 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-10-15, 5=Mechanical
Max Horz 2=226(LC 4)
Max Uplift 4=123(LC 4), 2=266(LC 4), 5=102(LC 8)
Max Grav 4=150(LC 1), 2=463(LC 1), 5=266(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-628/272
BOT CHORD 2-7=-322/573, 6-7=-322/573
WEBS 3-6=-603/339

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 123 lb uplift at joint 4, 266 lb uplift at joint 2 and 102 lb uplift at joint 5.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 103 lb up at 1-6-1, 86 lb down and 103 lb up at 1-6-1, 26 lb down and 46 lb up at 4-4-0, 26 lb down and 46 lb up at 4-4-0, and 50 lb down and 106 lb up at 7-1-15, and 50 lb down and 106 lb up at 7-1-15 on top chord, and 36 lb down and 74 lb up at 1-6-1, 36 lb down and 74 lb up at 1-6-1, 28 lb down and 2 lb up at 4-4-0, 28 lb down and 2 lb up at 4-4-0, and 44 lb down and 15 lb up at 7-1-15, and 44 lb down and 15 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 7=5(F=2, B=2) 11=50(F=25, B=25) 12=64(F=32, B=32) 14=70(F=35, B=35) 15=-49(F=-24, B=-24)



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

July 6, 2020

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MiTek
6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645065
2391382	HJ10A	Diagonal Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:19 2020 Page 1

ID: N79ILMIYkRZQaeNxonYfvz_shY-dclFPYOBc7nuvmdtA7rEmpD7zT?Wpqo1mYRz_m9o



Scale: 1/2"=1'

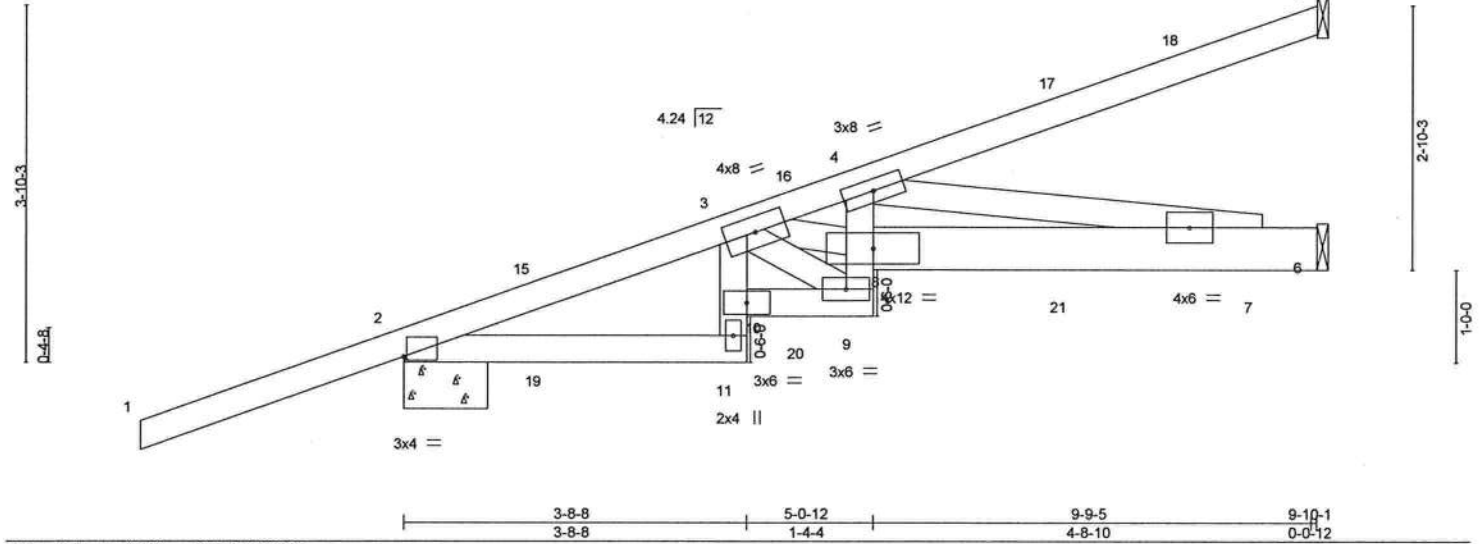


Plate Offsets (X,Y)-		[2-0-0-6,0-0-8]									
LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.25	TC 0.56	Vert(LL)	0.09	8	>999	240	MT20	244/190	
TCDL 7.0	Lumber DOL	1.25	BC 0.92	Vert(CT)	-0.12	7-8	>999	180			
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.58	Horz(CT)	0.04	6	n/a	n/a			
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS								
									Weight: 51 lb	FT = 20%	

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
3-11,4-9: 2x4 SP No.3, 6-8: 2x6 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-10-15, 6=Mechanical
Max Horz 2=226(LC 4)
Max Uplift 5=-81(LC 8), 2=-304(LC 4), 6=-173(LC 8)
Max Grav 5=122(LC 1), 2=491(LC 1), 6=311(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-585/237, 3-4=-1169/678
BOT CHORD 2-11=-319/515, 9-10=-493/771, 8-9=-228/352, 4-8=-206/374, 7-8=-915/1385
WEBS 3-9=-421/249, 3-8=-467/705, 4-7=-1404/928

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 5, 304 lb uplift at joint 2 and 173 lb uplift at joint 6.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 103 lb up at 1-6-1, 86 lb down and 103 lb up at 1-6-1, 12 lb down and 12 lb up at 4-4-0, 12 lb down and 12 lb up at 4-4-0, and 42 lb down and 65 lb up at 7-1-15, and 42 lb down and 65 lb up at 7-1-15 on top chord, and 36 lb down and 74 lb up at 1-6-1, 36 lb down and 74 lb up at 1-6-1, 47 lb down and 37 lb up at 4-4-0, 47 lb down and 37 lb up at 4-4-0, and 52 lb down and 56 lb up at 7-1-15, and 52 lb down and 56 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-5=-54, 11-12=-20, 9-10=-20, 6-8=-20
Concentrated Loads (lb)
Vert: 15=50(F=25, B=25) 17=-25(F=-12, B=-12) 19=70(F=35, B=35) 20=-38(F=-19, B=-19) 21=-104(F=-52, B=-52)



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

July 6,2020

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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645066
2391382	T01	Hip Girder	1	1	Job Reference (optional)	

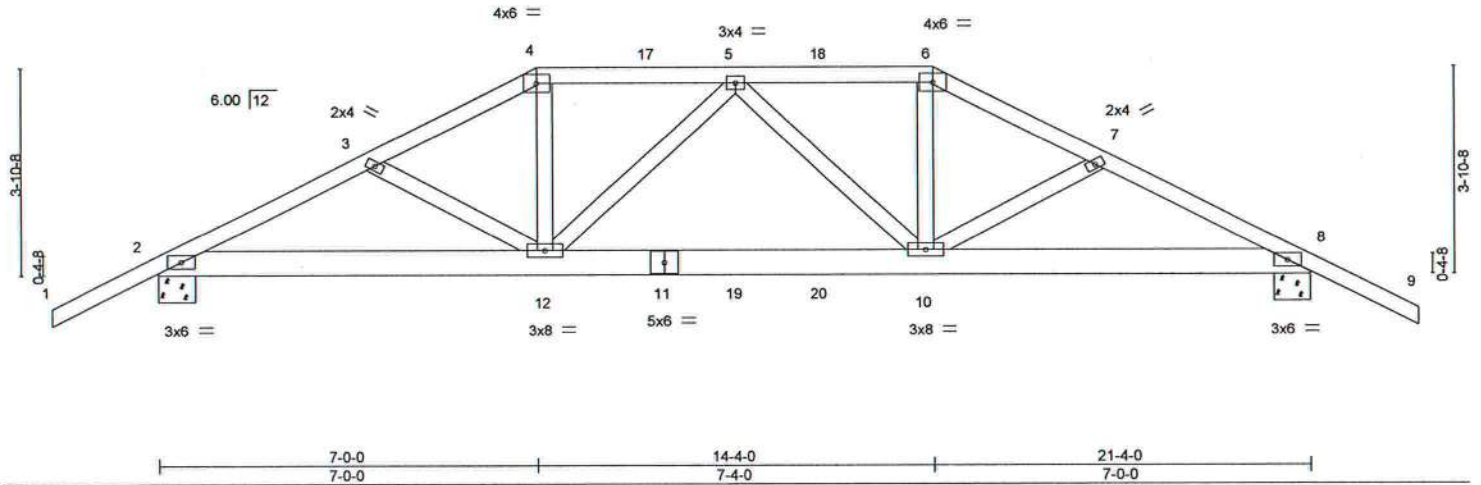
Builders FirstSource, Jacksonville, FL - 32244,

8/24/20 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:20 2020 Page 1

ID: N79ILMiykRZQaeNxonYfvz_shY-6psdcuPpNQvWwHoRUiMORJOSWM1k1Kz3SnJ4uz_m9n

-2-0-0	3-11-15	7-0-0	10-8-0	14-4-0	17-4-1	21-4-0	23-4-0
2-0-0	3-11-15	3-0-1	3-8-0	3-8-0	3-0-1	3-11-15	2-0-0

Scale = 1:41.3



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 0.40	Vert(LL)	0.15 10-12	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.71	Vert(CT)	-0.23 10-12	>999	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.34	Horz(CT)	0.06 8	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 124 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-3-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-4-14 oc bracing.

REACTIONS. (size) 2=0-8-0, 8=0-8-0
Max Horz 2=95(LC 8)
Max Uplift 2=785(LC 8), 8=798(LC 9)
Max Grav 2=1561(LC 1), 8=1588(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2889/1446, 3-4=-2716/1366, 4-5=-2438/1270, 5-6=-2490/1293, 6-7=-2775/1395,
7-8=-2949/1475
BOT CHORD 2-12=-1281/2548, 10-12=-1331/2699, 8-10=-1213/2601
WEBS 4-12=-367/886, 5-12=-423/338, 5-10=-338/260, 6-10=-314/839

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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 785 lb uplift at joint 2 and 798 lb uplift at joint 8.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 130 lb up at 7-0-0, 106 lb down and 130 lb up at 9-0-12, 106 lb down and 119 lb up at 10-8-0, and 106 lb down and 130 lb up at 12-3-4, and 227 lb down and 253 lb up at 14-4-0 on top chord, and 294 lb down and 155 lb up at 7-0-0, 85 lb down and 25 lb up at 9-0-12, 85 lb down and 25 lb up at 10-8-0, and 85 lb down and 25 lb up at 12-3-4, and 294 lb down and 155 lb up at 14-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
 - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-4=-54, 4-6=-54, 6-9=-54, 2-8=-20

Concentrated Loads (lb)

Vert: 4=-106(B) 6=-180(B) 11=-61(B) 12=-284(B) 5=-106(B) 10=-284(B) 17=-106(B) 18=-106(B) 19=-61(B) 20=-61(B)



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

July 6, 2020

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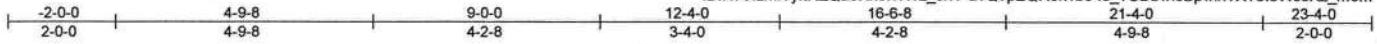
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Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645067
2391382	T02	Hip	1	1	Job Reference (optional)	

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ID: N79ILMIYykRZQaeNxonYfvz_shY-a?Q?pEQR8k1b84s_?CDbwfsBpwinTXt6I6WscKz_m9m



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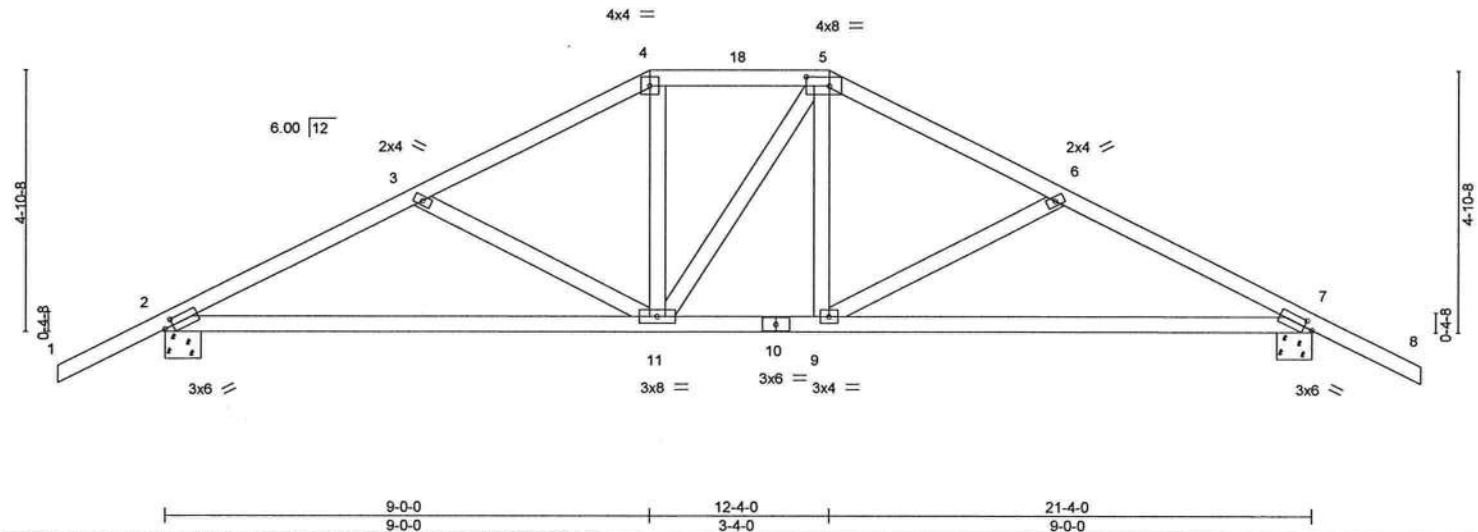


Plate Offsets (X,Y)--		[2-0-1-15,0-1-8], [5-0-5-4,0-2-0], [7-0-1-15,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.25	TC 0.42		Vert(LL)	-0.15 9-17	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.68		Vert(CT)	-0.31 9-17	>815	180		
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.15		Horz(CT)	0.04 7	n/a	n/a		
BCDL 10.0		Code FBC2017/TPI2014		Matrix-MS						Weight: 108 lb	FT = 20%

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

REACTIONS. (size) 2=0-8-0, 7=0-8-0
 Max Horz 2=116(LC 12)
 Max Uplift 2=368(LC 12), 7=368(LC 13)
 Max Grav 2=897(LC 1), 7=897(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1326/717, 3-4=-1061/569, 4-5=-902/558, 5-6=-1060/568, 6-7=-1325/717
 BOT CHORD 2-11=-491/1160, 9-11=-269/901, 7-9=-516/1160
 WEBS 3-11=-303/283, 4-11=-93/306, 5-9=-101/306, 6-9=-304/283

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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 368 lb uplift at joint 2 and 368 lb uplift at joint 7.



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

July 6, 2020

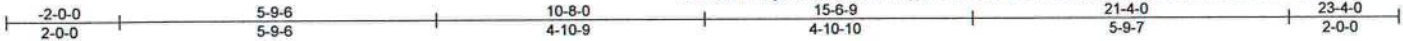
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
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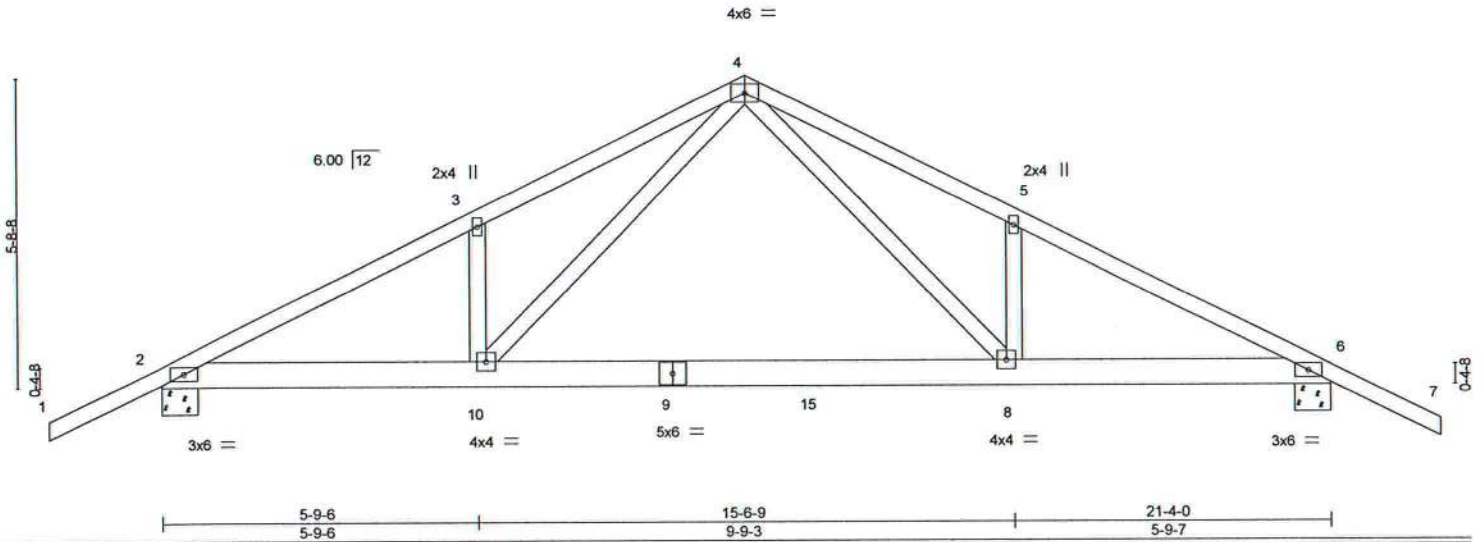
Job 2391382	Truss T03	Truss Type Common	Qty 13	Ply 1	HOUSECRAFT - DAWSON RES. Job Reference (optional)	T20645068
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Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:22 2020 Page 1
ID: N79ILMIYkRZQaeNxonYfvz_shY-2B_N1aR3v29SmERBZvkqTsOMbK70CtYGXmGQ9mz_m9l



Scale = 1:40.6



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 0.42	Vert(LL)	0.23	8-10	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.87	Vert(CT)	-0.39	8-10	>656	180		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.61	Horz(CT)	0.04	6	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 120 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 7-10-1 oc bracing.

REACTIONS. (size) 2=0-8-0, 6=0-8-0
Max Horz 2=-133(LC 13)
Max Uplift 2=-500(LC 12), 6=-500(LC 13)
Max Grav 2=1190(LC 1), 6=1190(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2180/1106, 3-4=-2177/1259, 4-5=-2177/1259, 5-6=-2180/1107
BOT CHORD 2-10=-823/1894, 8-10=-422/1143, 6-8=-847/1894
WEBS 4-8=-628/1119, 5-8=-269/301, 4-10=-628/1119, 3-10=-269/301

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 500 lb uplift at joint 2 and 500 lb uplift at joint 6.
- 6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 4-7=-54, 2-10=-20, 8-10=-80(F=-60), 6-8=-20



Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
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July 6, 2020

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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645069
2391382	T04	Common Girder	1	2	Job Reference (optional)	

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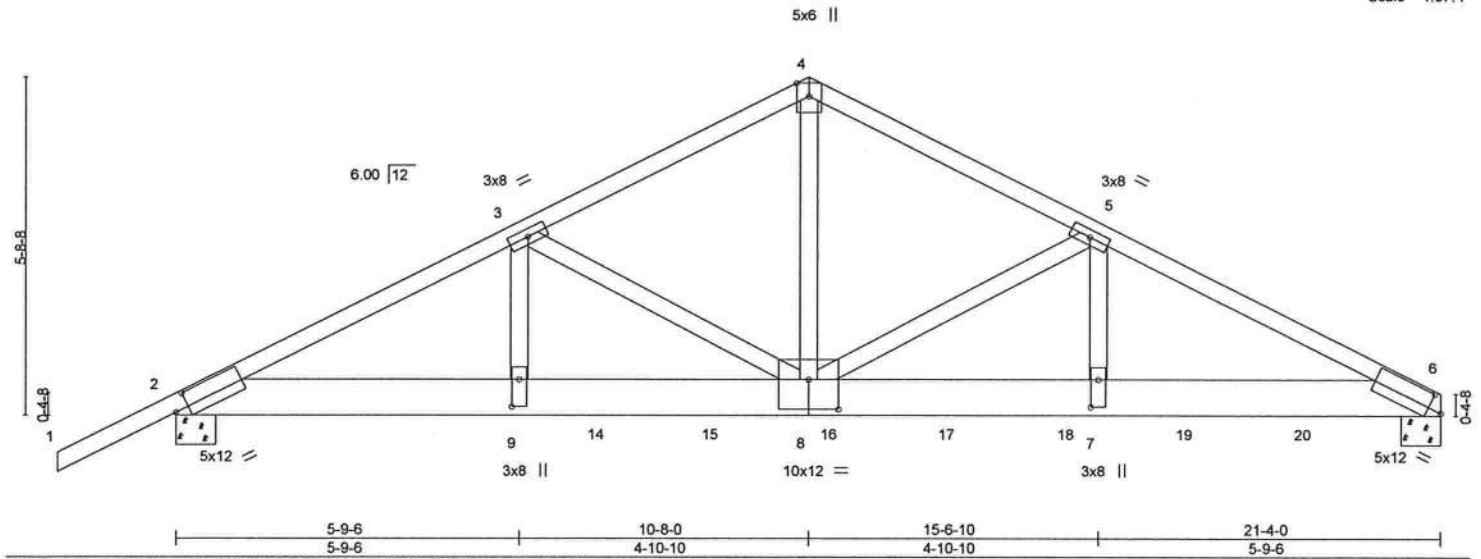


Plate Offsets (X,Y)-		[2-0-2-12,0-3-0], [6-0-2-12,0-3-0], [7-0-5-8,0-1-8], [8-0-6-0,0-6-0], [9-0-5-8,0-1-8]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.25
TCDL 7.0	Lumber DOL	1.25
BCLL 0.0	Rep Stress Incr	NO
BCDL 10.0	Code FBC2017/TPI2014	
	CSI.	
	TC 0.92	
	BC 0.57	
	WB 0.80	
	Matrix-MS	
	DEFL.	
	in (loc)	l/defl
	Vert(LL) 0.22	8-9 >999
	Vert(CT) -0.34	8-9 >750
	Horz(CT) 0.07	6 n/a
		L/d
		240
		180
		n/a
	PLATES	GRIP
	MT20	244/190
	Weight: 269 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
4-8: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-6-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-8-0, 2=0-8-0
Max Horz 2=154(LC 27)
Max Uplift 6=2601(LC 9), 2=2255(LC 8)
Max Grav 6=6307(LC 1), 2=4990(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-10822/4867, 3-4=-8322/3639, 4-5=-8339/3638, 5-6=-11948/4963
BOT CHORD 2-9=-4374/9625, 8-9=-4374/9625, 7-8=-4357/10663, 6-7=-4357/10663
WEBS 4-8=-3091/7126, 5-8=-3763/1536, 5-7=-1147/3201, 3-8=-2567/1429, 3-9=-1074/2145

NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2601 lb uplift at joint 6 and 2255 lb uplift at joint 2.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2504 lb down and 1355 lb up at 7-1-9, 1180 lb down and 562 lb up at 9-0-12, 1185 lb down and 483 lb up at 11-0-12, 1185 lb down and 479 lb up at 13-0-12, 1185 lb down and 474 lb up at 15-0-12, and 1185 lb down and 471 lb up at 17-0-12, and 1185 lb down and 471 lb up at 19-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Continued on page 2



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

July 6, 2020



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6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645069
2391382	T04	Common Girder	1	2	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:24 2020 Page 2
ID:N79ILMIYykRZQaeNxonYfvz_shY-_a68SGSKQfPA?XbZgKmIYHUaC8mCgk0Y_4lXDfz_m9j

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 14=-2504(F) 15=-1180(F) 16=-1185(F) 17=-1185(F) 18=-1185(F) 19=-1185(F) 20=-1185(F)

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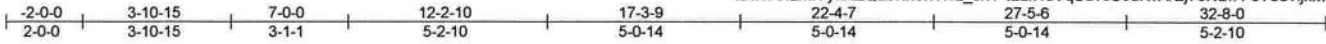
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645070
2391382	T05	Half Hip Girder	1	2	Job Reference (optional)	

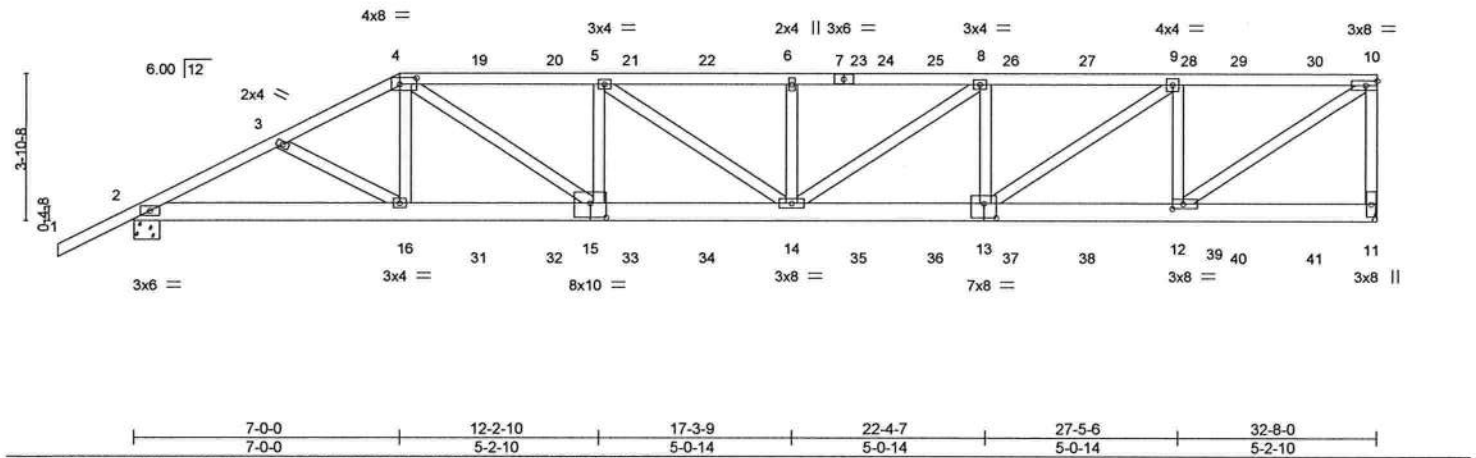
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:28 2020 Page 1

ID: N79ILMIYyKqRZQaeNxonYfvz_shY-ILfHdVqUuvU9uKvArEj7eNBI7FcY68vijkMQz_m9f



Scale = 1:58.4



LOADING (psf)		SPACING-		CSI.		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	0.26 14	MT20		244/190	
TCDL	7.0	Lumber DOL	1.25	BC	0.56	Vert(CT)	-0.36 14-15				
BCLL	0.0	Rep Stress Incr	NO	WB	0.73	Horz(CT)	0.06 11				
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS							
								Weight: 411 lb		FT = 20%	

LUMBER-		BRACING-	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-9-15 oc purlins, except end verticals.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 9-4-8 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS.	
(size)	11=Mechanical, 2=0-8-0
Max Horz	2=213(LC 8)
Max Uplift	11=1335(LC 5), 2=1214(LC 8)
Max Grav	11=2524(LC 1), 2=2386(LC 1)

FORCES.	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD	2-3=-4701/2396, 3-4=-4544/2329, 4-5=-5593/2923, 5-6=-5975/3142, 6-8=-5975/3142, 8-9=-5194/2745, 9-10=-3223/1705, 10-11=-2407/1324
BOT CHORD	2-16=-2247/4165, 15-16=-2130/4065, 14-15=-2960/5644, 13-14=-2738/5182, 12-13=-1705/3223
WEBS	4-16=-169/652, 4-15=-1061/1906, 5-15=-839/605, 5-14=-244/443, 6-14=-531/421, 8-14=-556/963, 8-13=-1087/707, 9-13=-1260/2388, 9-12=-1931/1176, 10-12=-2037/3858

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
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 C; 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1335 lb uplift at joint 11 and 1214 lb uplift at joint 2.



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

July 6, 2020

Continued on page 2



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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645070
2391382	T05	Half Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:28 2020 Page 2
ID: N79ILMIYkRZQaeNxonYfvz_shY-ILLLfHdVqUuvcU9uKvArEj7eNB17FcY68vijkMQz_m9f

NOTES-

- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 125 lb down and 130 lb up at 7-0-0, 106 lb down and 130 lb up at 9-0-12, 106 lb down and 130 lb up at 11-0-12, 106 lb down and 130 lb up at 13-0-12, 106 lb down and 130 lb up at 15-0-12, 106 lb down and 130 lb up at 17-0-12, 106 lb down and 127 lb up at 19-0-12, 106 lb down and 130 lb up at 21-0-12, 106 lb down and 130 lb up at 23-0-12, 106 lb down and 130 lb up at 25-0-12, 106 lb down and 130 lb up at 27-0-12, and 106 lb down and 130 lb up at 29-0-12, and 106 lb down and 130 lb up at 31-0-12 on top chord, and 294 lb down and 155 lb up at 7-0-0, 85 lb down and 25 lb up at 9-0-12, 85 lb down and 25 lb up at 11-0-12, 85 lb down and 25 lb up at 13-0-12, 85 lb down and 25 lb up at 15-0-12, 85 lb down and 25 lb up at 17-0-12, 85 lb down and 25 lb up at 19-0-12, 85 lb down and 25 lb up at 21-0-12, 85 lb down and 25 lb up at 23-0-12, 85 lb down and 25 lb up at 25-0-12, 85 lb down and 25 lb up at 27-0-12, and 85 lb down and 25 lb up at 29-0-12, and 85 lb down and 25 lb up at 31-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

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

Concentrated Loads (lb)

Vert: 4=-106(B) 16=-284(B) 6=-106(B) 14=-61(B) 19=-106(B) 20=-106(B) 21=-106(B) 22=-106(B) 23=-106(B) 25=-106(B) 26=-106(B) 27=-106(B) 28=-106(B) 29=-106(B) 30=-106(B) 31=-61(B) 32=-61(B) 33=-61(B) 34=-61(B) 35=-61(B) 36=-61(B) 37=-61(B) 38=-61(B) 39=-61(B) 40=-61(B) 41=-61(B)



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6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645071
2391382	T06	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:29 2020 Page 1

ID: N791LMYyKqRZQaeNxonYfvz_shY-LXv1VzWSFB1T6JTXTiMTFLBQ39PRL?kH8MSHusz_m9e



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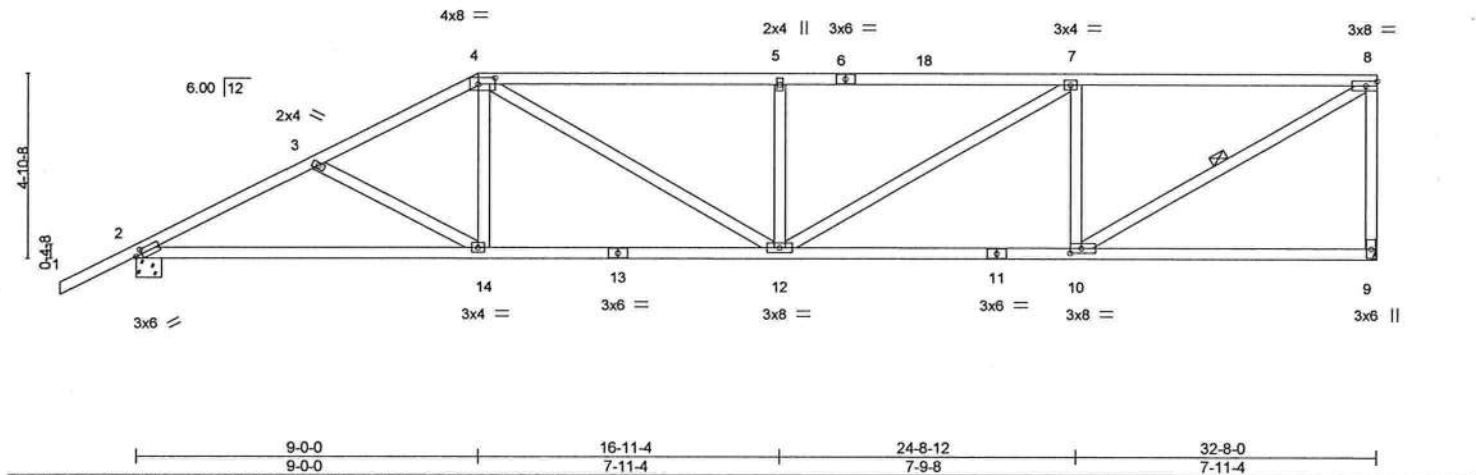


Plate Offsets (X,Y)--		[2-0-1-15,0-1-8], [4-0-5-4,0-2-0], [10-0-3-8,0-1-8]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.25	TC 0.98		Vert(LL)	0.17 12	>999	240	MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.82		Vert(CT)	-0.32 14-17	>999	180		
BCLL 0.0		Rep Stress Incr	YES	WB 0.71		Horz(CT)	0.07 9	n/a	n/a		
BCDL 10.0		Code FBC2017/TPI2014		Matrix-MS						Weight: 173 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-6-2 oc bracing.
WEBS 1 Row at midpt 8-10

REACTIONS.

(size) 9=Mechanical, 2=0-8-0
Max Horz 2=261(LC 12)
Max Uplift 9=542(LC 9), 2=566(LC 12)
Max Grav 9=1200(LC 1), 2=1315(LC 1)

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

TOP CHORD 2-3=-2237/1106, 3-4=-1992/975, 4-5=-2204/1129, 5-7=-2204/1129, 7-8=-1639/819,
8-9=-1129/613
BOT CHORD 2-14=-1151/1958, 12-14=-928/1746, 10-12=-819/1639
WEBS 3-14=-250/254, 4-14=-65/405, 4-12=-348/627, 5-12=-451/342, 7-12=-410/655,
7-10=-778/526, 8-10=-931/1862

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Provide adequate drainage to prevent water ponding.
- 4) This truss has been designed for a 10.0 psf ponding 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) Refer to girder(s) for truss to truss connections.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 542 lb uplift at joint 9 and 566 lb uplift at joint 2.



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

July 6,2020



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6904 Parke East Blvd.
Tampa, FL 33610

Job 2391382	Truss T07	Truss Type Hip	Qty 1	Ply 1	HOUSECRAFT - DAWSON RES. T20645072
Job Reference (optional)					

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:30 2020 Page 1

ID: N79ILMIYykRZQaeNxonYfvz_shY-pkTPIJX50V9KjS2j1btioYjRYPm4YbRM0CrRjz_m9d



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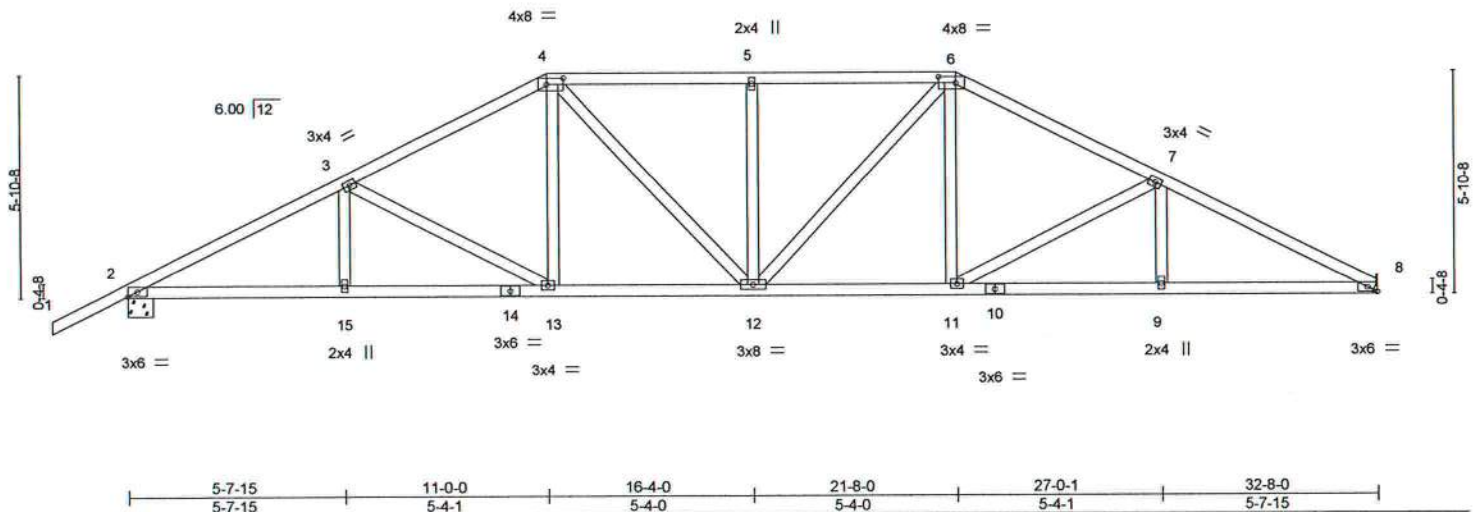


Plate Offsets (X,Y) - [4:0-5-4,0-2-0], [6:0-5-4,0-2-0], [8:0-2-15,Edge]							
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d
TCLL 20.0	Plate Grip DOL	1.25	TC 0.43	Vert(LL)	-0.12 12	>999	240
TCDL 7.0	Lumber DOL	1.25	BC 0.56	Vert(CT)	-0.23 11-12	>999	180
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.09 8	n/a	n/a
BCDL 10.0	Code	FBC2017/TPI2014	Matrix-MS				
				PLATES		GRIP	
				MT20		244/190	
				Weight: 175 lb		FT = 20%	

LUMBER-

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

BRACING-

TOP CHORD
BOT CHORD

Structural wood sheathing directly applied or 3-7-12 oc purlins.
Rigid ceiling directly applied or 5-11-2 oc bracing.

REACTIONS.

(size) 8=Mechanical, 2=0-8-0
Max Horz 2=158(LC 12)
Max Uplift 8=463(LC 13), 2=533(LC 12)
Max Grav 8=1205(LC 1), 2=1320(LC 1)

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

TOP CHORD 2-3=-2266/1147, 3-4=-1840/992, 4-5=-1791/1046, 5-6=-1791/1046, 6-7=-1847/998,
7-8=-2299/1177
BOT CHORD 2-15=-938/1973, 13-15=-938/1973, 12-13=-650/1590, 11-12=-654/1596, 9-11=-968/2007,
8-9=-968/2007
WEBS 3-13=-446/330, 4-13=-125/373, 4-12=-200/399, 5-12=-325/246, 6-12=-197/393,
6-11=-136/376, 7-11=-479/359

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 463 lb uplift at joint 8 and 533 lb uplift at joint 2.



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

July 6, 2020

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6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645073
2391382	T08	Hip	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:31 2020 Page 1

ID: N79ILMIYkRZQaeNxonYfvz_shY-Hw1rwfYjnpHBLcdvalOxKmGqWy7apyTabgxOzIz_m9c

-2-0-0	6-10-2	13-0-0	19-8-0	25-9-14	32-8-0
2-0-0	6-10-2	6-1-14	6-8-0	6-1-14	6-10-2

Scale = 1:58.6

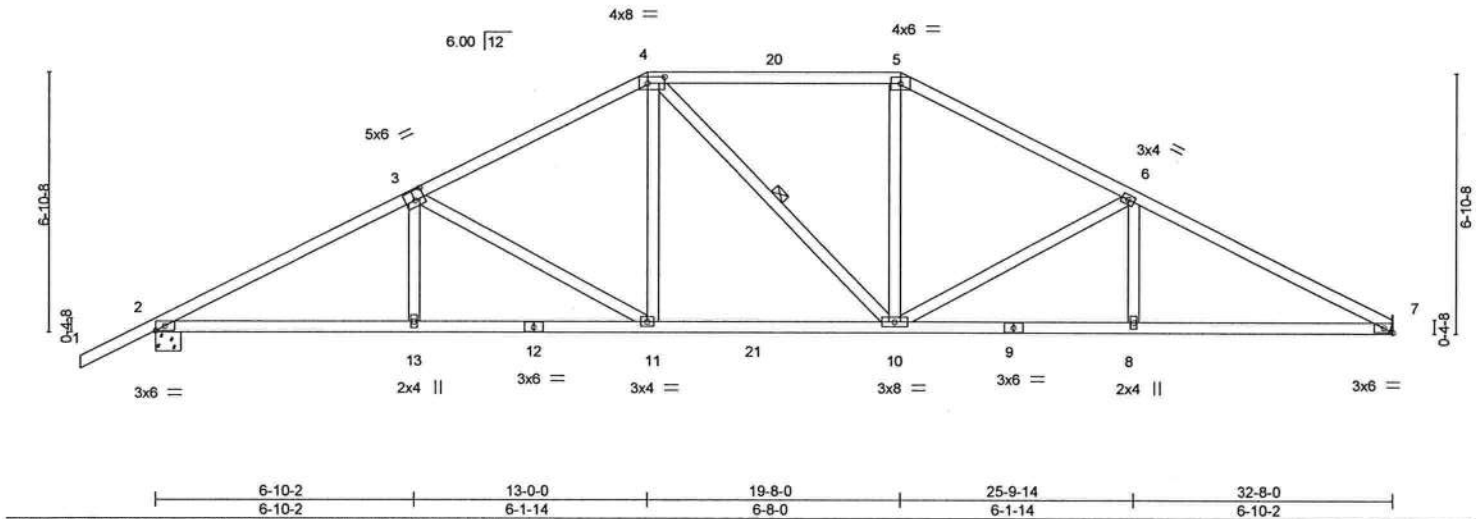


Plate Offsets (X,Y)--		[3:0-3-0,0-3-0], [4:0-5-4,0-2-0], [7:0-2-15,Edge]									
LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL. in (loc)		l/defl L/d		PLATES GRIP	
TCLL	20.0	Plate Grip DOL	1.25	TC	0.66	Vert(LL)	-0.12 10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.65	Vert(CT)	-0.24 10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.09 7	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 167 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 3-4-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-10-9 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. (size) 7=Mechanical, 2=0-8-0
Max Horz 2=179(LC 12)
Max Uplift 7=-459(LC 13), 2=-529(LC 12)
Max Grav 7=1205(LC 1), 2=1320(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2224/1143, 3-4=-1701/950, 4-5=-1458/919, 5-6=-1704/953, 6-7=-2248/1164
BOT CHORD 2-13=-919/1926, 11-13=-918/1927, 10-11=-568/1456, 8-10=-940/1950, 7-8=-940/1950
WEBS 3-13=0/267, 3-11=-550/404, 4-11=-156/448, 5-10=-163/450, 6-10=-575/429, 6-8=0/270

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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, 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 459 lb uplift at joint 7 and 529 lb uplift at joint 2.



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

July 6, 2020

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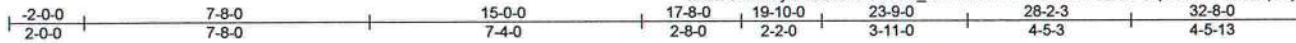
6904 Parke East Blvd.
Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645074
2391382	T09	Hip	1	1	Job Reference (optional)	

Builders FirstSource, Jacksonville, FL - 32244,

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ID: N79ILMIYkRZQaeNxonYfvz_shY-I6b97?YLY6P1zmC680vAtzpwJMT?YMLkqKhyVBz_m9b



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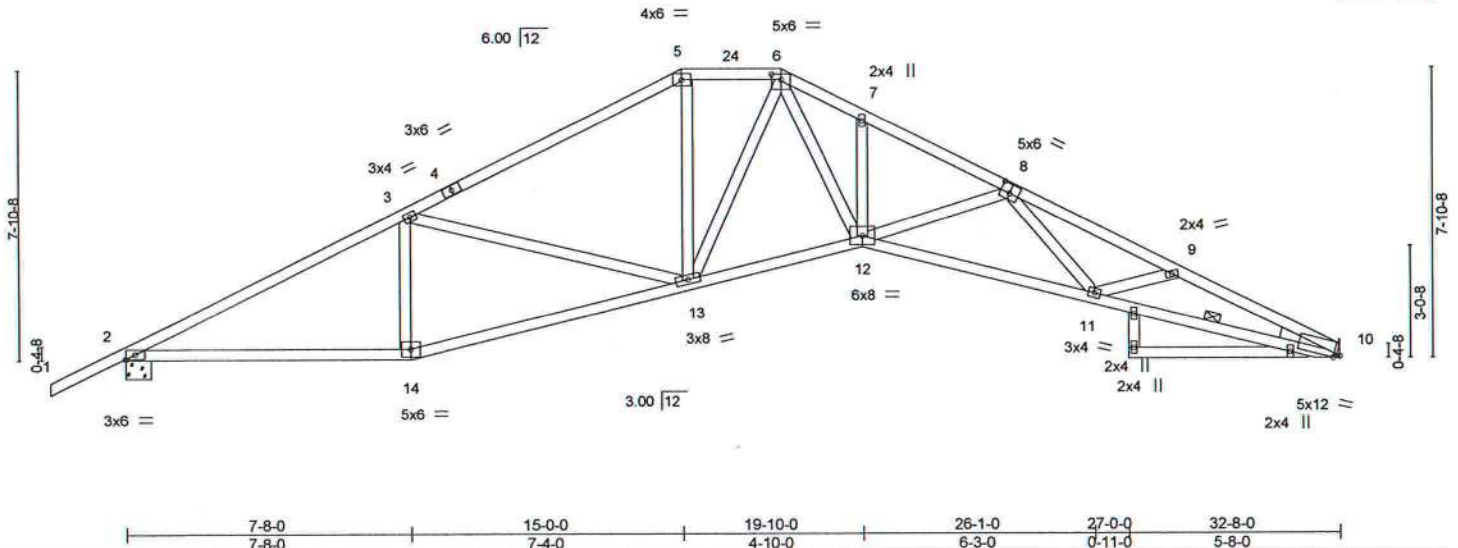


Plate Offsets (X,Y) --		[6:0-3-0,0-1-12], [8:0-3-0,0-3-0], [10:0-1-14,0-1-0]									
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.98	Vert(LL)	-0.31 11-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	-0.59 11-12	>662	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.30 10	n/a	n/a		
BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS						Weight: 178 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
10-12: 2x4 SP M 31, 15-16: 2x4 SP No.3
WEBS 2x4 SP No.3
WEDGE
Right: 2x4 SP No.3

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

REACTIONS. (size) 2=0-8-0, 10=Mechanical
Max Horz 2=200(LC 12)
Max Uplift 2=524(LC 12), 10=454(LC 13)
Max Grav 2=1320(LC 1), 10=1205(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2192/1155, 3-5=-2033/1072, 5-6=-1741/1042, 6-7=-3087/1676, 7-8=-3121/1585,
8-9=-3690/1888, 9-10=-3855/2024
BOT CHORD 2-14=-923/1896, 13-14=-946/1961, 12-13=-730/1990, 11-12=-1543/3303,
10-11=-1769/3462
WEBS 3-14=-323/263, 3-13=-261/290, 5-13=-229/582, 6-13=-523/187, 6-12=-946/1885,
8-12=-499/401, 8-11=-71/288

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 524 lb uplift at joint 2 and 454 lb uplift at joint 10.



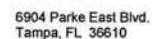
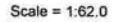
Joaquin Velez PE No.68182
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

July 6, 2020

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Tampa, FL 33610

T20645075

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645076
2391382	T11	Roof Special	1	1	Job Reference (optional)	

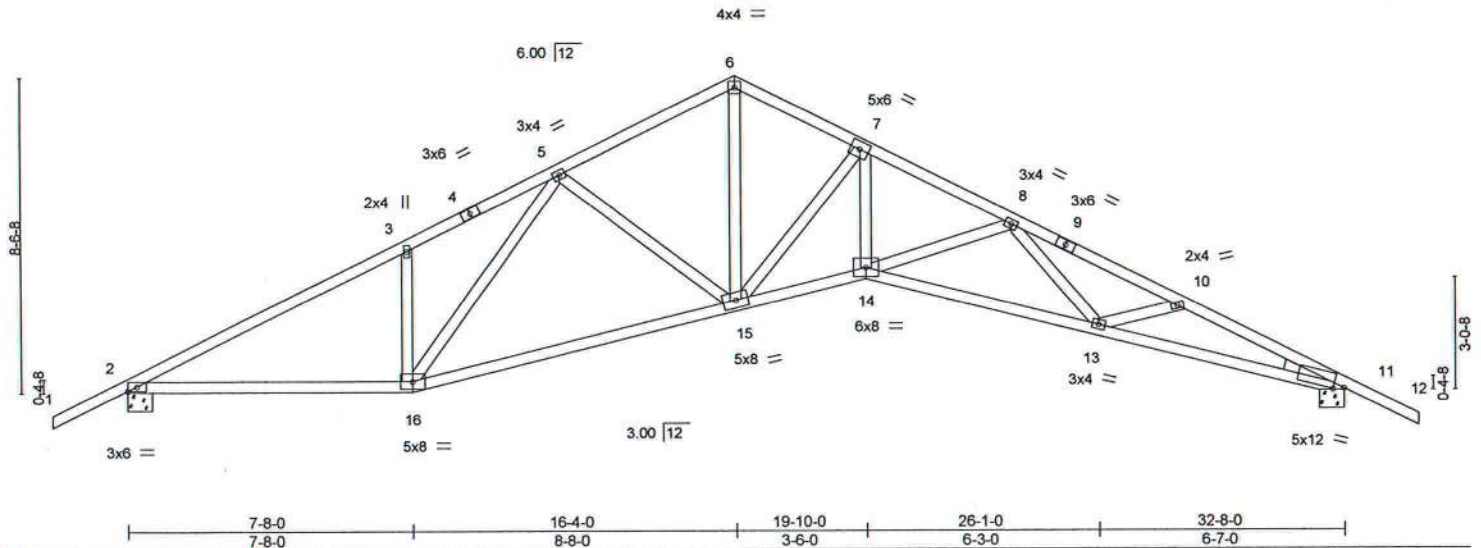
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:34 2020 Page 1

ID: N79ILMIYkRZQaeNxonYfvz_shY-hVwYhab4klC4MUGQyeyOuL_A5d0CV1HeA2a4z_m9Z

-2-0-0	7-8-0	11-7-10	16-4-0	19-10-0	23-9-0	28-2-3	32-8-0	34-8-0
2-0-0	7-8-0	3-11-10	4-8-6	3-6-0	3-11-0	4-5-3	4-5-13	2-0-0

Scale = 1:59.7



Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645077
2391382	T12	Roof Special	3	1	Job Reference (optional)	

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8,240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:35 2020 Page 1

ID: N79ILMIYykRZQaeNxonYfvz_shY-AhGII0bDr1ocqEwhp8T1VcRVozSEIIMAWIvc6Wz_m9Y

-2-0-0	7-8-0	11-7-10	16-4-0	19-10-0	23-9-0	28-2-3	32-8-0	34-8-0
2-0-0	7-8-0	3-11-10	4-8-6	3-6-0	3-11-0	4-5-3	4-5-13	2-0-0

Scale = 1:59.7

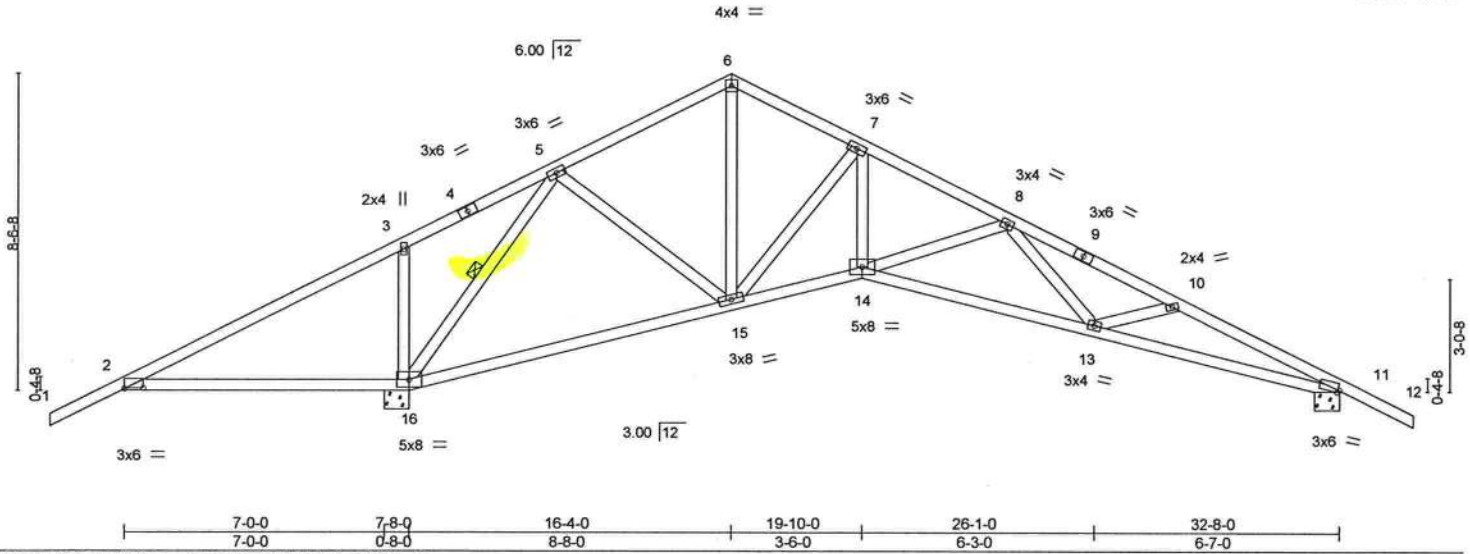


Plate Offsets (X,Y) - [2:0-6-0,0-0-4], [11:0-0-9,Edge]		LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.		PLATES		GRIP	
		TCLL	20.0	Plate Grip DOL		TC	0.71	in (loc)		MT20		244/190	
		TCDL	7.0	Lumber DOL		BC	0.79	Vert(LL)					
		BCLL	0.0	Rep Stress Incr		WB	0.64	Vert(CT)					
		BCDL	10.0	Code FBC2017/TPI2014		Matrix-MS		Horz(CT)		Weight: 171 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 3-1-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-11-12 oc bracing.
WEBS 1 Row at midpt 5-16

REACTIONS. (size) 16=0-8-0, 11=0-8-0
Max Horz 16=193(LC 12)
Max Uplift 16=-679(LC 12), 11=-414(LC 13)
Max Grav 16=1720(LC 1), 11=928(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1029/882, 3-5=-833/829, 5-6=-670/287, 6-7=-699/276, 7-8=-1479/462,
8-10=-2163/778, 10-11=-2378/928
BOT CHORD 2-16=-701/1087, 15-16=-107/585, 14-15=-104/1316, 13-14=-453/1810, 11-13=-734/2119
WEBS 3-16=-372/429, 5-16=-1431/906, 5-15=-291/591, 6-15=-134/455, 7-15=-1092/403,
7-14=-250/1005, 8-14=-505/415, 8-13=-132/391, 10-13=-154/274

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;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) 11 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 679 lb uplift at joint 16 and 414 lb uplift at joint 11.



Joaquin Velez PE No.68182
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Date:

July 6, 2020

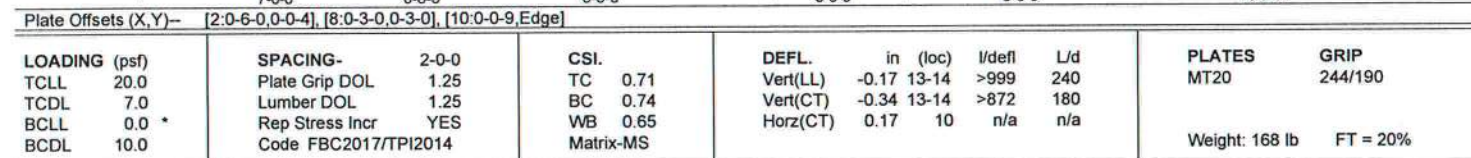
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ID:N79ILMIYkRZQaeNxonYfvz_shY-euqgzMcsBwTRNVtNr_61pzgYzpFUBSjlyf9eyz_m9X

-2-0-0	7-8-0	11-7-10	16-4-0	19-10-0	23-9-0	28-2-3	32-8-0
2-0-0	7-8-0	3-11-10	4-8-6	3-6-0	3-11-0	4-5-3	4-5-13



REACTIONS. (size) 14=0-8-0, 10=0-8-0
Max Horz 14=213(LC 12)
Max Uplift 14=-681(LC 12), 10=-344(LC 13)
Max Grav 14=1725(LC 1), 10=815(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1029/882, 3-5=-833/829, 5-6=-677/309, 6-7=-706/298, 7-8=-1496/516,
8-9=-2222/865, 9-10=-2455/1052
BOT CHORD 2-14=-701/1087, 13-14=-106/524, 12-13=-198/1331, 11-12=-557/1843, 10-11=-892/2199
WEBS 3-14=-372/430, 5-14=-1437/928, 5-13=-304/594, 6-13=-154/462, 7-13=-1107/465,
7-12=-300/1017, 8-12=-522/428, 8-11=-155/397, 9-11=-179/291

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCPi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 681 lb uplift at joint 14 and 344 lb uplift at joint 10.
-



July 6, 2020

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



6904 Parke East Blvd.
Tampa, FL 36610

6904 Parke East Blvd.
Tampa, FL 36610

Job 2391382	Truss T14	Truss Type Hip Girder	Qty 1	Ply 2	HOUSECRAFT - DAWSON RES. T20645079
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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:40 2020 Page 2
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NOTES-

- 9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 44 lb down and 59 lb up at 7-0-0, 33 lb down and 59 lb up at 9-0-12, 33 lb down and 59 lb up at 11-0-12, 33 lb down and 59 lb up at 13-0-12, 106 lb down and 130 lb up at 15-0-12, 106 lb down and 119 lb up at 16-4-0, 106 lb down and 130 lb up at 17-7-4, 106 lb down and 130 lb up at 19-7-4, 106 lb down and 130 lb up at 21-7-4, and 106 lb down and 130 lb up at 23-7-4, and 227 lb down and 253 lb up at 25-8-0 on top chord, and 424 lb down and 295 lb up at 7-0-0, 142 lb down and 94 lb up at 9-0-12, 142 lb down and 94 lb up at 11-0-12, 142 lb down and 94 lb up at 13-0-12, 85 lb down and 25 lb up at 15-0-12, 85 lb down and 25 lb up at 16-4-0, 85 lb down and 25 lb up at 17-7-4, 85 lb down and 25 lb up at 19-7-4, 85 lb down and 25 lb up at 21-7-4, and 85 lb down and 25 lb up at 23-7-4, and 294 lb down and 155 lb up at 25-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 2-28=-54, 2-3=-54, 3-8=-54, 8-11=-54, 1-20=-20, 2-17=-20, 10-16=-20

Concentrated Loads (lb)

Vert: 3=-25(F) 8=-180(F) 19=-424(F) 7=-106(F) 14=-61(F) 12=-284(F) 32=-25(F) 33=-25(F) 34=-25(F) 35=-106(F) 36=-106(F) 37=-106(F) 38=-106(F) 39=-106(F) 40=-142(F) 41=-142(F) 42=-142(F) 43=-61(F) 44=-61(F) 45=-61(F) 46=-61(F) 47=-61(F)



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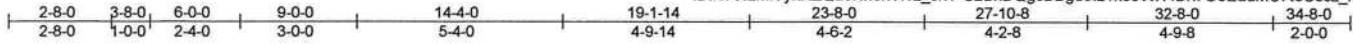
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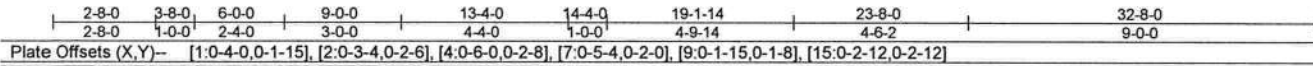
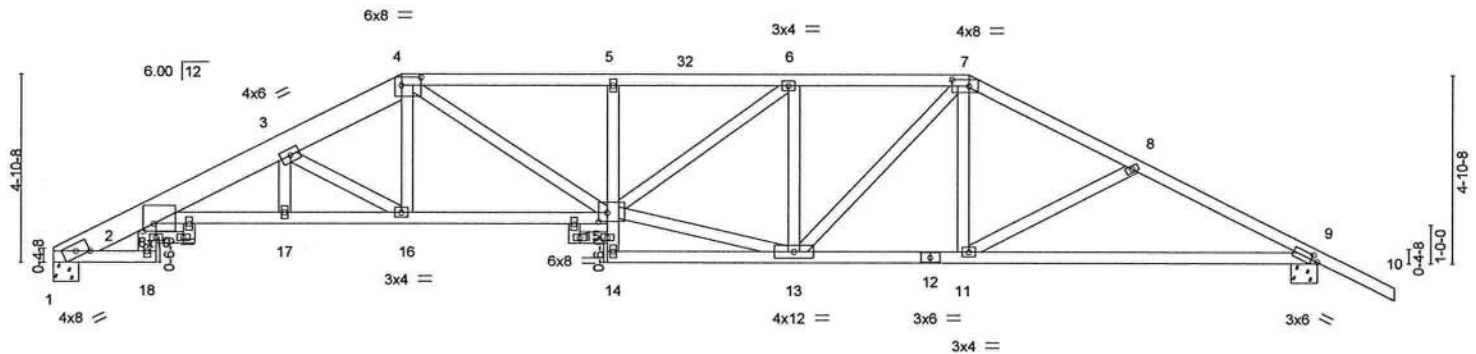
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Scale = 1:57.4



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.45	Vert(LL) -0.23 15-16	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.96	Vert(CT) -0.44 15-16	>898	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.75	Horz(CT) 0.23 9	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014	Matrix-MS				Weight: 196 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.2 *Except* 1-4: 2x8 SP 2400F 2.0E
BOT CHORD	2x4 SP No.2 *Except* 2-18: 2x6 SP No.2, 5-14,19-20,22-23: 2x4 SP No.3
WEBS	2x4 SP No.3

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-3-2 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing. Except: 10-0-0 oc bracing: 14-15

REACTIONS.

(size) 1=0-8-0, 9=0-8-0
 Max Horz 1=-136(LC 17)
 Max Uplift 1=-456(LC 12), 9=-533(LC 13)
 Max Grav 1=1204(LC 1), 9=1308(LC 1)

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

TOP CHORD 2-28=-599/401, 2-3=-3129/1529, 3-4=-2471/1247, 4-5=-2678/1400, 5-6=-2645/1386,
6-7=-2064/1140, 7-8=-1963/1011, 8-9=-2226/1153
BOT CHORD 2-17=-1315/2970, 16-17=-1315/2970, 15-16=-849/2151, 5-15=-284/220, 11-13=-665/1712,
9-11=-904/1951
WEBS 3-16=-985/557, 4-16=-263/617, 4-15=-346/716, 13-15=-805/1963, 6-15=-340/743,
6-13=-717/381, 7-13=-301/574, 7-11=-80/367, 8-11=-281/272

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., Gcpl=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 2x4 MT20 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 456 lb uplift at joint 1 and 533 lb uplift at joint 9.



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

July 6, 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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



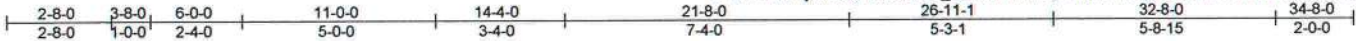
6904 Parke East Blvd.
Tampa, FL 36610

Job 2391382	Truss T16	Truss Type HIP	Qty 1	Ply 1	HOUSECRAFT - DAWSON RES. Job Reference (optional)	T20645081
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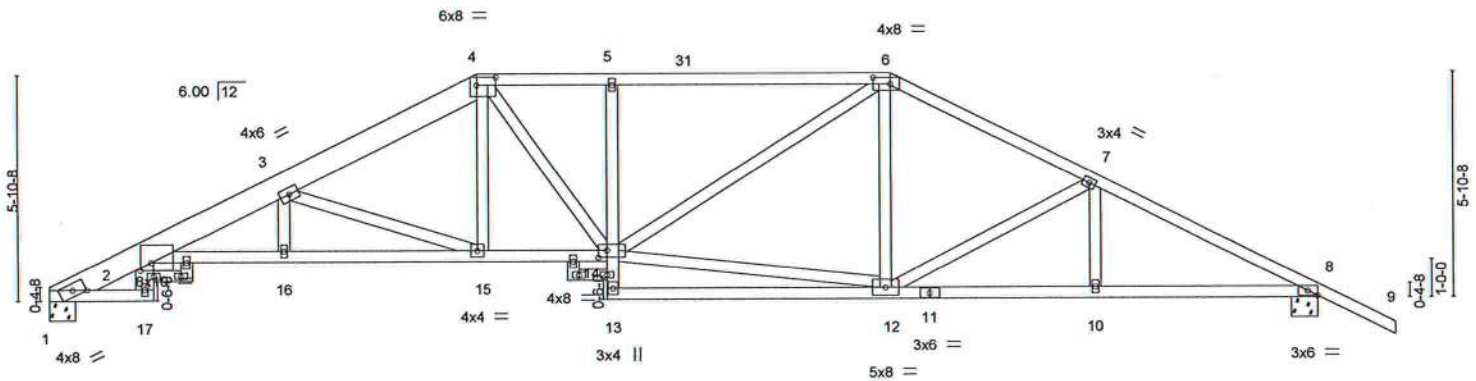
Builders FirstSource, Jacksonville, FL - 32244,

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:43 2020 Page 1

ID: N79ILMIYkRZQaeNxonYfvz_shY-xEIKRihFyVoUnSYDHpcplmtTo8GdMvLMXr1O2z_m9Q



Scale = 1:57.4



2-8-0	3-8-0	6-0-0	11-0-0	13-4-0	14-4-0	21-8-0	26-11-1	32-8-0
2-8-0	1-0-0	2-4-0	5-0-0	2-4-0	1-0-0	7-4-0	5-3-1	5-8-15

Plate Offsets (X,Y)-- [1:0-4-0,0-1-15], [2:0-3-4,0-2-6], [4:0-6-0,0-2-8], [6:0-5-4,0-2-0], [8:0-2-15,Edge], [14:0-2-8,0-2-4]									
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.73	Vert(LL)	-0.20 14-15	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.97	Vert(CT)	-0.38 12-13	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.66	Horz(CT)	0.23 8	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 204 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2 *Except*
 1-4: 2x8 SP 2400F 2.0E
BOT CHORD 2x4 SP No.2 *Except*
 2-17: 2x6 SP No.2, 5-13,18-19,21-22: 2x4 SP No.3
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing. Except:
 10-0-0 oc bracing: 13-14

REACTIONS. (size) 1=0-8-0, 8=0-8-0
 Max Horz 1=158(LC 17)
 Max Uplift 1=453(LC 12), 8=530(LC 13)
 Max Grav 1=1204(LC 1), 8=1308(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-27=599/405, 2-3=3120/1555, 3-4=2160/1110, 4-5=2097/1167, 5-6=2099/1173,
 6-7=1830/983, 7-8=2230/1131
BOT CHORD 2-16=1342/2957, 15-16=1342/2957, 14-15=701/1875, 5-14=360/271, 10-12=875/1939,
 8-10=875/1939
WEBS 3-15=1170/690, 4-15=222/525, 4-14=248/460, 12-14=573/1444, 6-14=315/693,
 6-12=49/283, 7-12=419/323

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- 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 453 lb uplift at joint 1 and 530 lb uplift at joint 8.



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

July 6,2020

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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, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



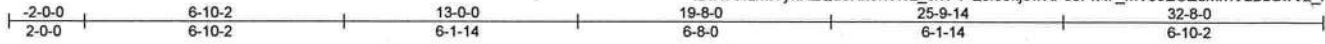
6904 Parke East Blvd.
 Tampa, FL 33610

Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645082
2391382	T17	Hip	1	1	Job Reference (optional)	

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ID: N79ILMIYykRZQaeNxonYfvz_shY-PQJie5itjowKpC6PrX7_MVJ3ECZdMrhVaBbawVz_m9P



Scale = 1:58.6

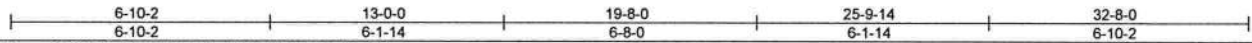
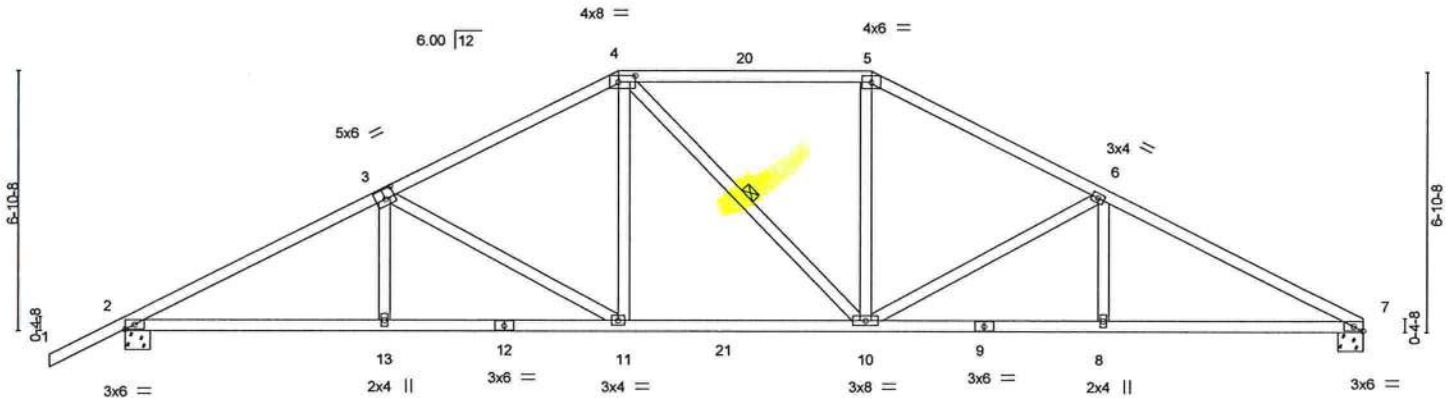


Plate Offsets (X,Y) - [3:0-3-0,0-3-0], [4:0-5-4,0-2-0], [7:0-2-15,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC 0.66	Vert(LL)	-0.12 10-11	>999	240	MT20	244/190
TCDL 7.0	Lumber DOL	1.25	BC 0.65	Vert(CT)	-0.24 10-11	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.57	Horz(CT)	0.09 7	n/a	n/a		
BCDL 10.0	Code FBC2017/TPI2014		Matrix-MS					Weight: 167 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 3-4-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-10-9 oc bracing.
WEBS 1 Row at midpt 4-10

REACTIONS. (size) 7=0-8-0, 2=0-8-0
Max Horz 2=179(LC 12)
Max Uplift 7=459(LC 13), 2=529(LC 12)
Max Grav 7=1205(LC 1), 2=1320(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=2224/1143, 3-4=1701/950, 4-5=1458/919, 5-6=1704/953, 6-7=2248/1164
BOT CHORD 2-13=919/1926, 11-13=918/1927, 10-11=568/1456, 8-10=940/1950, 7-8=940/1950
WEBS 3-13=0/267, 3-11=550/404, 4-11=156/448, 5-10=163/450, 6-10=575/429, 6-8=0/270

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) 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, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 459 lb uplift at joint 7 and 529 lb uplift at joint 2.



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Date:

July 6, 2020

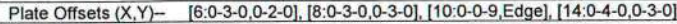
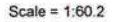
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-99 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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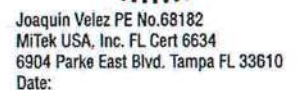
T20645083

8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:45 2020 Page 1
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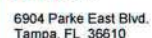
BRACING-	
TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 5-4-6 oc bracing.

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCp=-0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-F 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) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 361 lb uplift at joint 2, 539 lb uplift at joint 14, 323 lb uplift at joint 10, 108 lb uplift at joint 15 and 361 lb uplift at joint 2.



July 6, 2020

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Job	Truss	Truss Type	Qty	Ply	HOUSECRAFT - DAWSON RES.	T20645084
2391382	T19	Common	3	1	Job Reference (optional)	

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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:46 2020 Page 1

ID: N79ILMIYyKZQaeNxonYfvz_shY-LpRS3nj7FQA2ewGozy9SRwOT2?Nlqs2o2V4h?Nz_m9N



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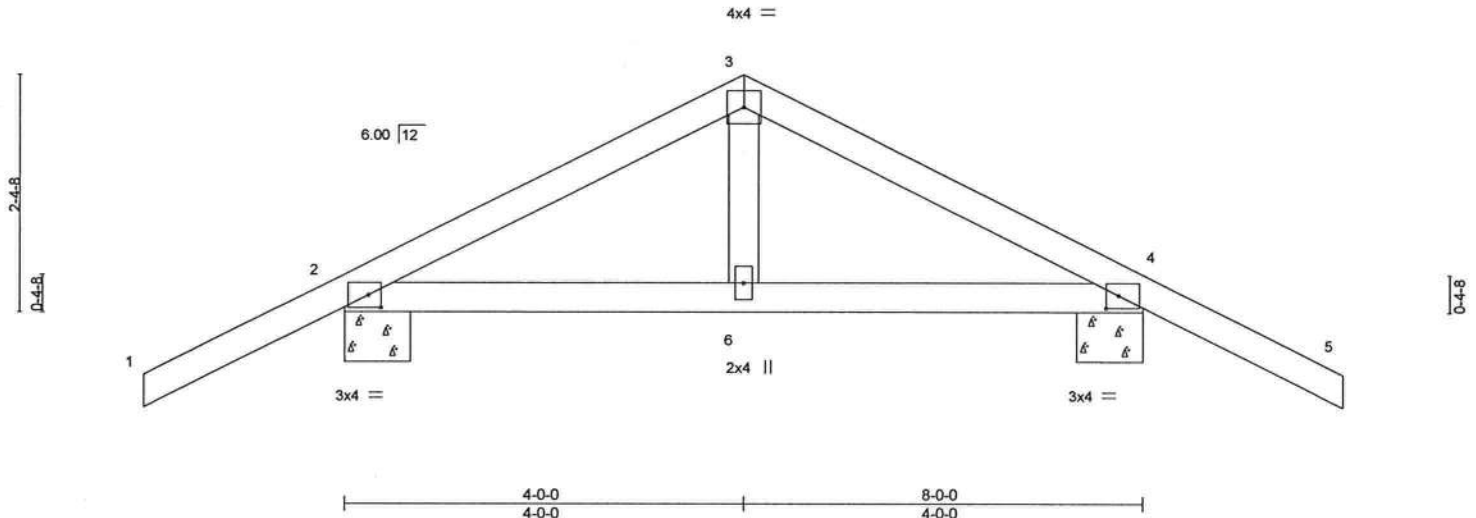


Plate Offsets (X,Y) -		[2-0-1-8,0-1-9], [4-0-1-8,0-1-9]											
LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d		PLATES	GRIP
TCLL 20.0		Plate Grip DOL	1.25	TC 0.32		Vert(LL)	0.02	6-12	>999	240		MT20	244/190
TCDL 7.0		Lumber DOL	1.25	BC 0.16		Vert(CT)	-0.01	6-9	>999	180			
BCLL 0.0 *		Rep Stress Incr	YES	WB 0.06		Horz(CT)	0.00	4	n/a	n/a			
BCDL 10.0		Code FBC2017/TPI2014		Matrix-MS								Weight: 35 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 10-0-0 oc bracing.

REACTIONS. (size) 2=0-8-0, 4=0-8-0
Max Horz 2=63(LC 12)
Max Uplift 2=183(LC 12), 4=183(LC 13)
Max Grav 2=404(LC 1), 4=404(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-337/512, 3-4=-337/512
BOT CHORD 2-6=-316/262, 4-6=-316/262

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 183 lb uplift at joint 2 and 183 lb uplift at joint 4.



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8.240 s Mar 9 2020 MiTek Industries, Inc. Mon Jul 6 14:14:47 EX20 Page 1
ID:N79ILMIYyKZRZQaeNxonYfvz_shY-p??qH7kl0JvG4r_Wfhh_8xfepGZJYxG9pEXqz_m9M

The diagram illustrates a roof truss system with the following components and specifications:

- 1:** Left roof slope.
- 2:** Left roof slope.
- 3:** Left roof slope.
- 4:** Central vertical support.
- 5:** Right roof slope.
- 6:** Right roof slope.
- 7:** Right roof slope.
- 8:** Central vertical support.

Material specifications and dimensions are indicated by numbers and text:

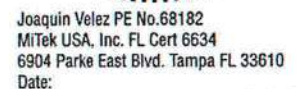
- 4x4 =** (at the top center)
- 6.00** (dimension for the left roof slope)
- 12** (dimension for the left roof slope)
- 4x4 //** (material specification for the left roof slope)
- 4x4 //** (material specification for the right roof slope)
- 4x8 =** (material specification for the left roof slope)
- 2x4 //** (material specification for the central vertical support)
- 4x8 =** (material specification for the right roof slope)
- 0-4-8** (dimension for the right roof slope)
- 4-0-0** (dimension for the left roof slope)
- 8-0-0** (dimension for the right roof slope)

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

REACTIONS. (size) 2=0-8-0, 6=0-8-0
Max Horz 2=56(LC 12)
Max Uplift 2=-189(LC 12), 6=-189(LC 13)
Max Grav 2=404(LC 1), 6=404(LC 1)

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCdL=4.2psf; BCdL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCp1=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 189 lb uplift at joint 2 and 189 lb uplift at joint 6.



July 6, 2020

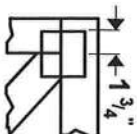
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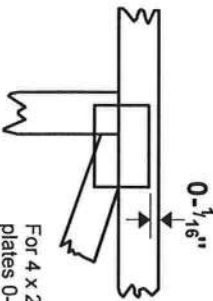
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Symbols

PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.



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

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

PLATE SIZE

4 X 4

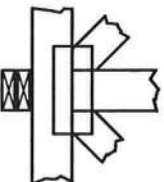
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or 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/TP1: National Design Specification for Metal

Plate Connected Wood Truss Construction.

DSB-89: Design Standard for Bracing.

BCSI: Building Component Safety Information,

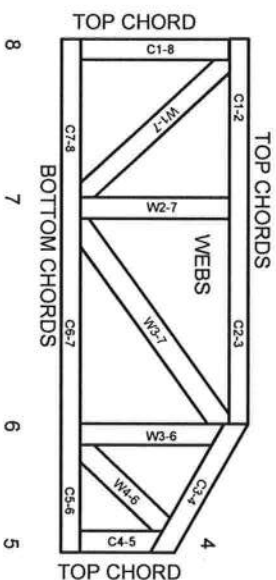
Guide to Good Practice for Handling,

Installing & Bracing of Metal Plate

Connected Wood Trusses.

Numbering System

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



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988

ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

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



General Safety Notes

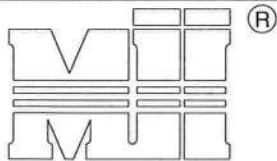
Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor 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 wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

AUGUST 1, 2016

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

MII-T-BRACE 2



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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

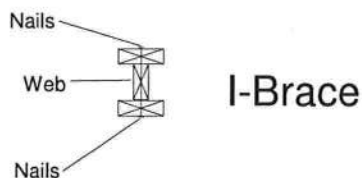
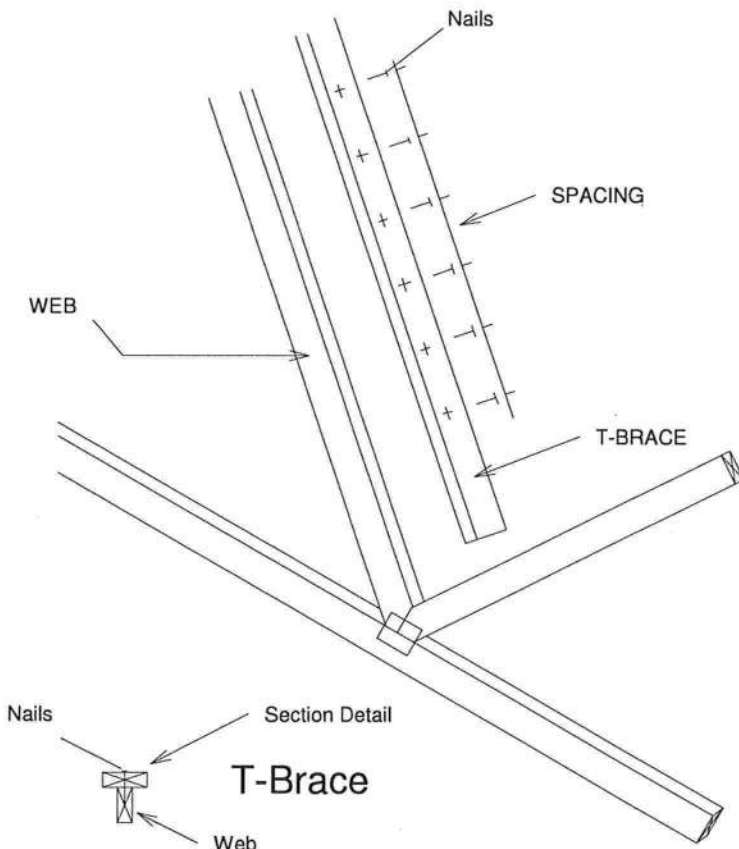
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

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.



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Date:

February 12, 2018

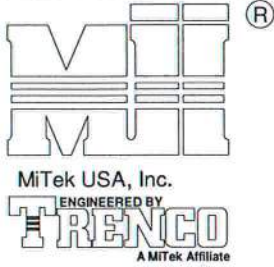
AUGUST 1, 2016

SCAB-BRACE DETAIL

MII-SCAB-BRACE

MiTek USA, Inc.

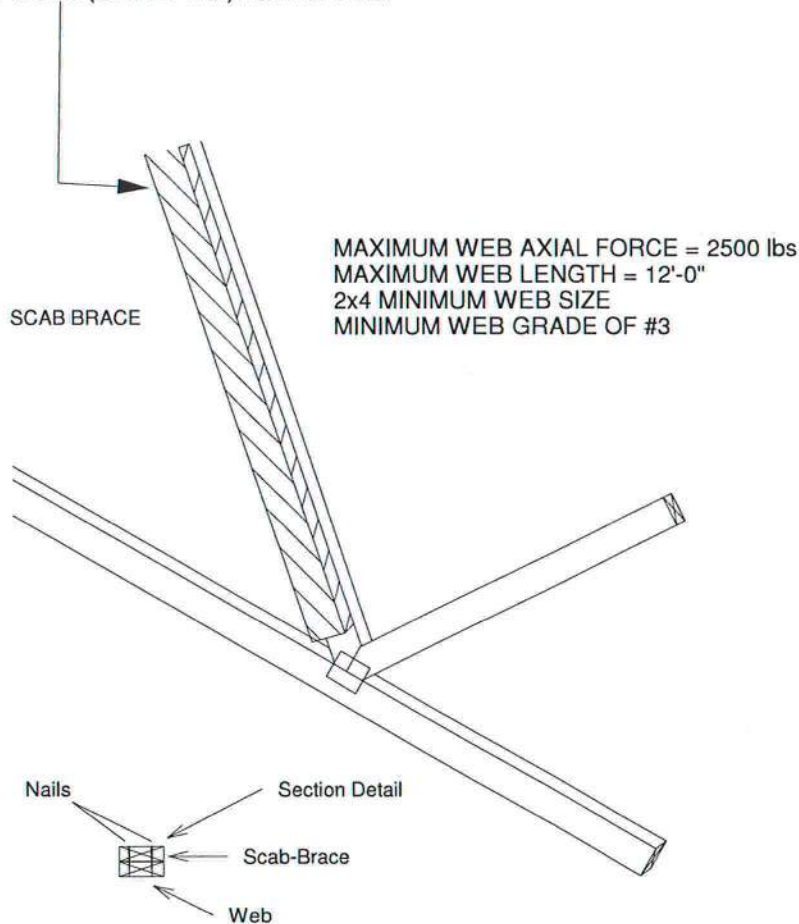
Page 1 of 1



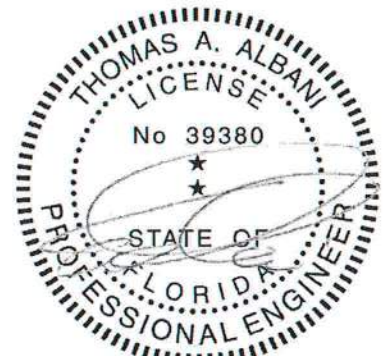
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

*** 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.



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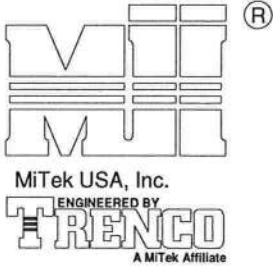
February 12, 2018

AUGUST 1, 2016

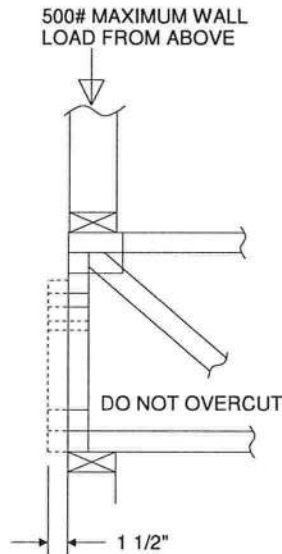
STANDARD REPAIR TO REMOVE END
VERTICAL (RIBBON NOTCH VERTICAL)

MII-REP05

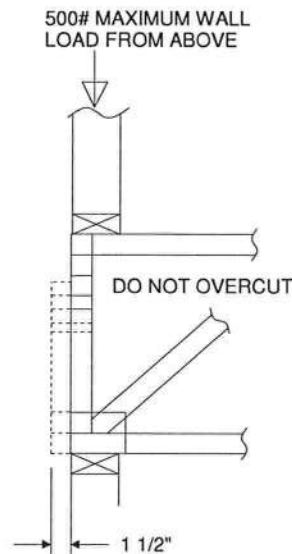
MiTek USA, Inc. Page 1 of 1



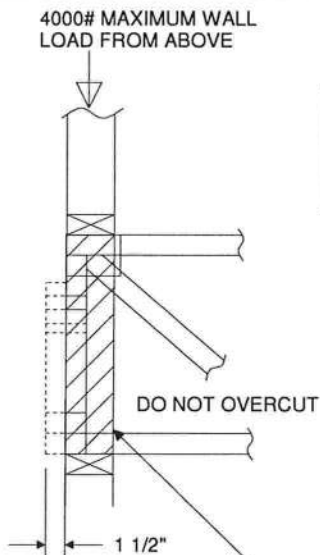
1. THIS IS A SPECIFIC REPAIR DETAIL TO BE USED ONLY FOR ITS ORIGINAL INTENTION. THIS REPAIR DOES NOT IMPLY THAT THE REMAINING PORTION OF THE TRUSS IS UNDAMAGED. THE ENTIRE TRUSS SHALL BE INSPECTED TO VERIFY THAT NO FURTHER REPAIRS ARE REQUIRED. WHEN THE REQUIRED REPAIRS ARE PROPERLY APPLIED, THE TRUSS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



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Date:

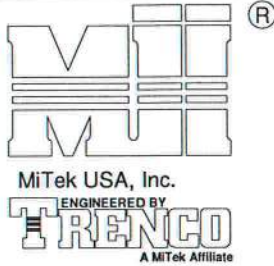
February 12, 2018

AUGUST 1, 2016

Standard Gable End Detail

MII-GE130-D-SP

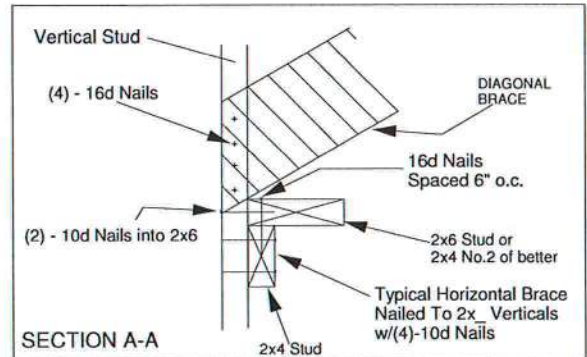
MiTek USA, Inc. Page 1 of 2



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

Vertical Stud

SECTION B-B

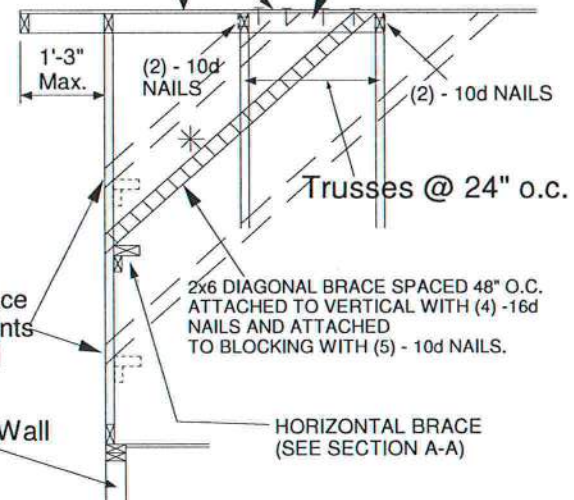


SECTION A-A

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.

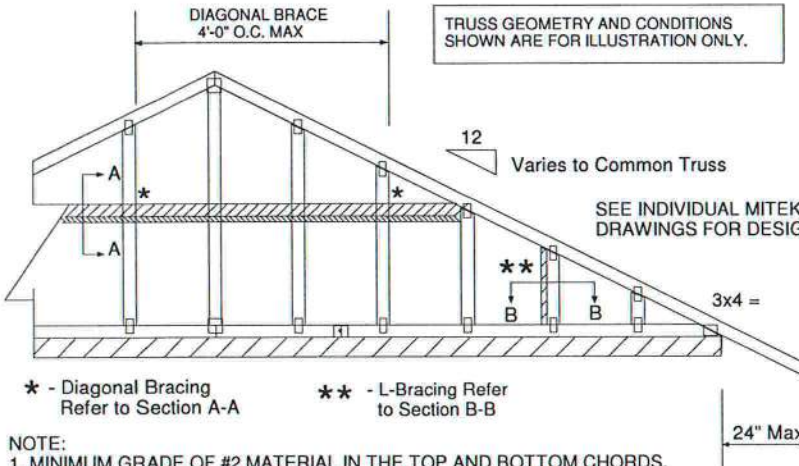
(4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing



Diag. Brace at 1/3 points if needed

End Wall



* - Diagonal Bracing Refer to Section A-A

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

NOTE:

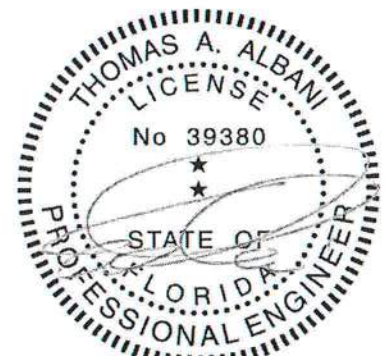
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF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

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

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

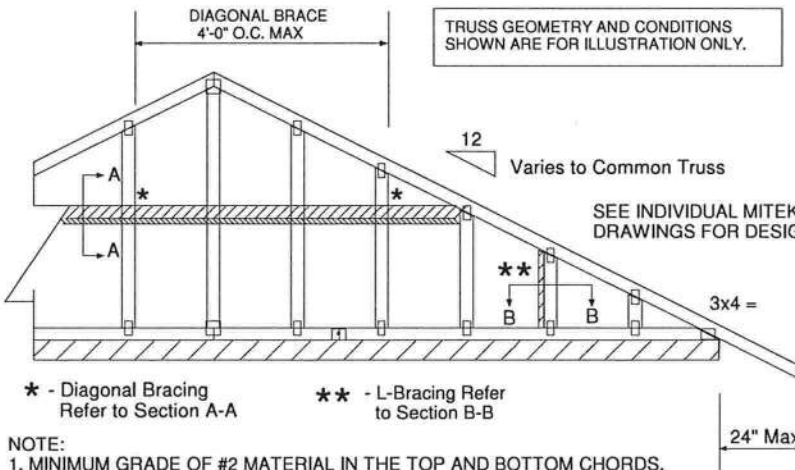
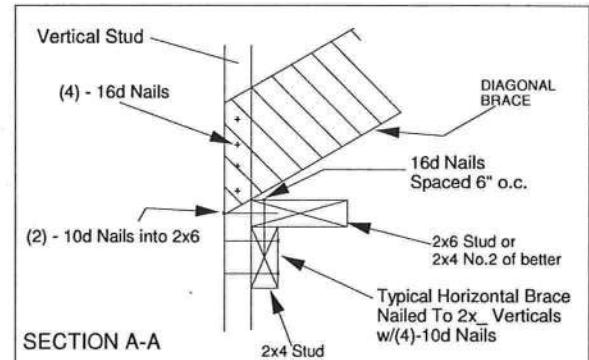
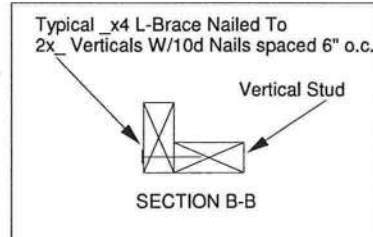
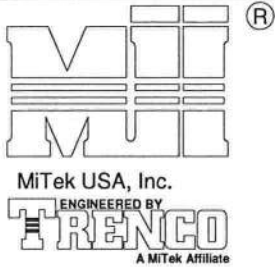
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE D
ASCE 7-98, ASCE 7-02, ASCE 7-05 130 MPH
ASCE 7-10 160 MPH
DURATION OF LOAD INCREASE : 1.60

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



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Date:

February 12, 2018

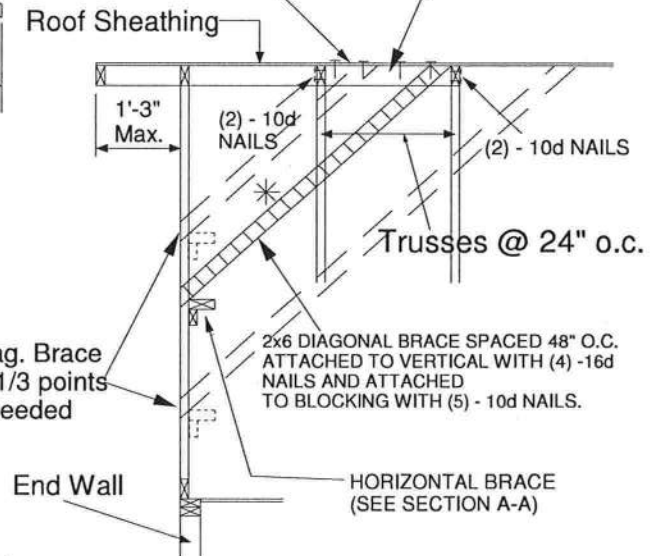


NOTE:

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.



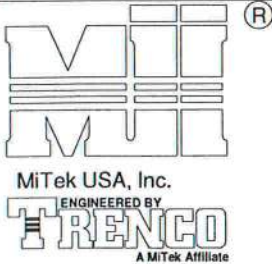
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

February 12, 2018

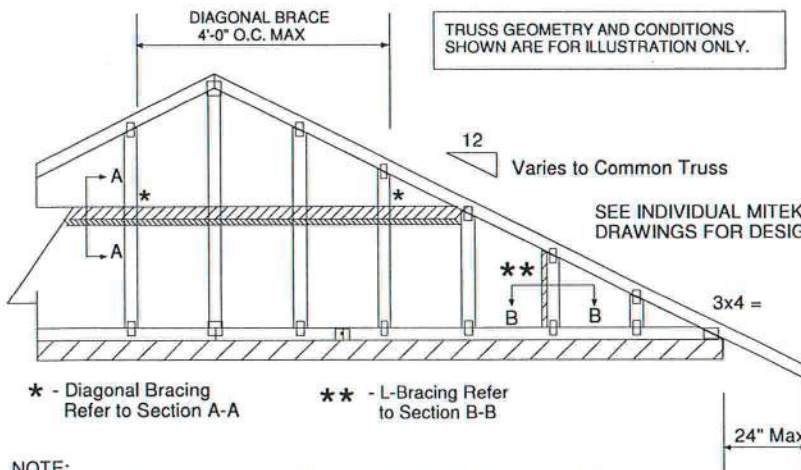
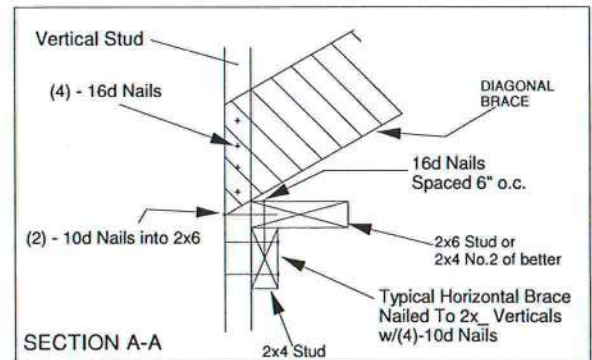
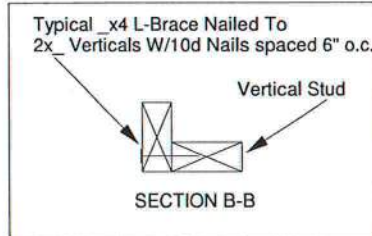
JANUARY 6, 2017

Standard Gable End Detail

MII-GE140-001



MiTek USA, Inc. Page 1 of 2

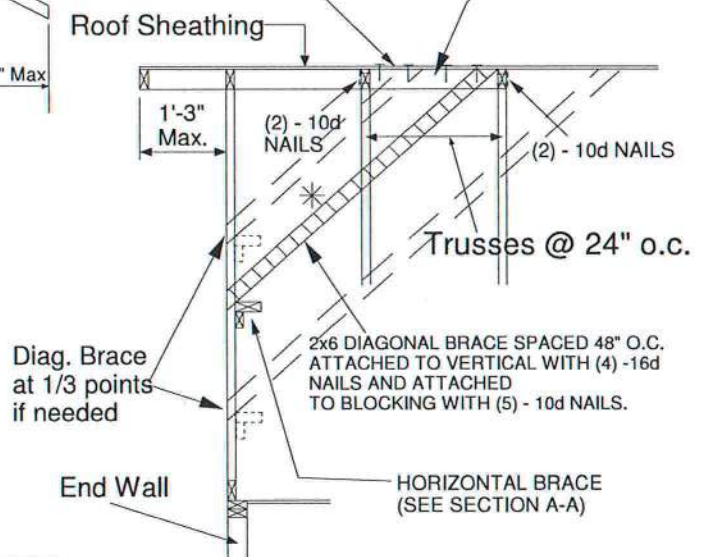


NOTE:

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

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

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



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

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

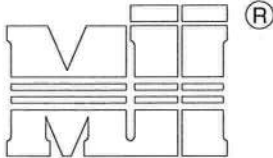
MAXIMUM WIND SPEED = 140 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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



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Date:

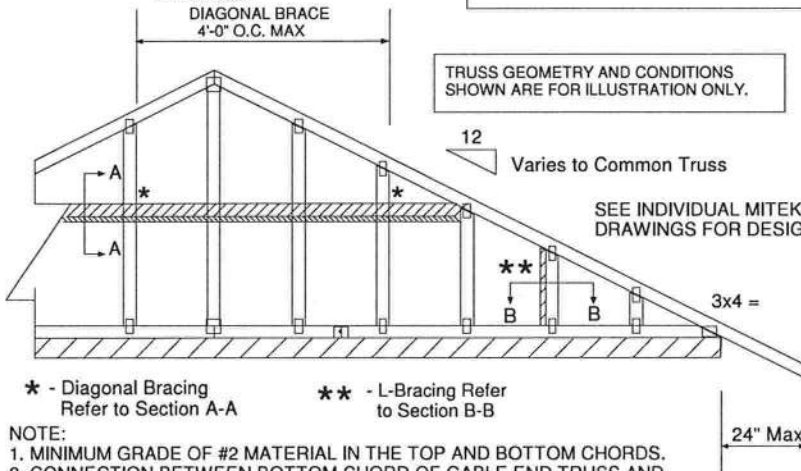
January 19, 2018



MiTek USA, Inc.

ENGINEERED BY
TRENCO

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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, 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

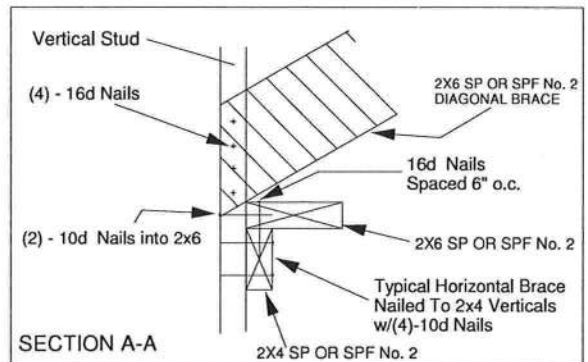
TRUSS GEOMETRY AND CONDITIONS
SHOWN ARE FOR ILLUSTRATION ONLY.

Varies to Common Truss

SEE INDIVIDUAL MITTEK ENGINEERING
DRAWINGS FOR DESIGN CRITERIA

3x4 =

24" Max



SECTION A-A

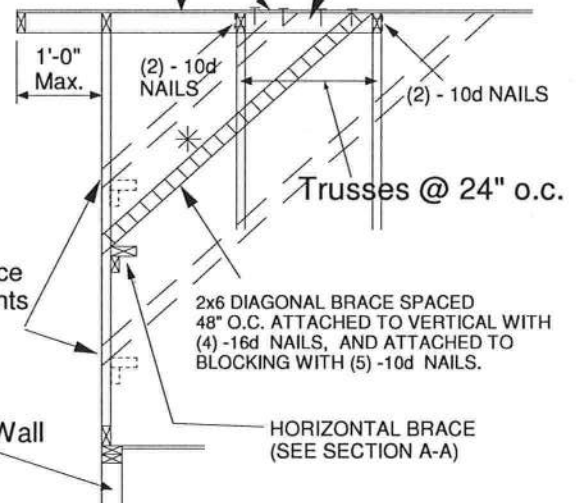
PROVIDE 2x4 BLOCKING BETWEEN THE FIRST
TWO TRUSSES AS NOTED. TOENAIL BLOCKING
TO TRUSSES WITH (2) - 10d NAILS AT EACH END.
ATTACH DIAGONAL BRACE TO BLOCKING WITH
(5) - 10d NAILS.

(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



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Date:

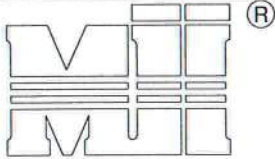
February 12, 2018

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. MAXTypical 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

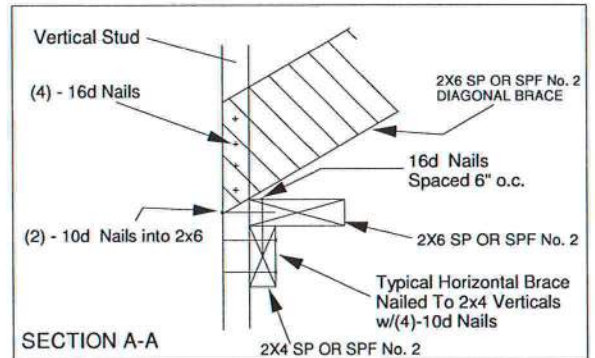
3x4 =

24" 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")



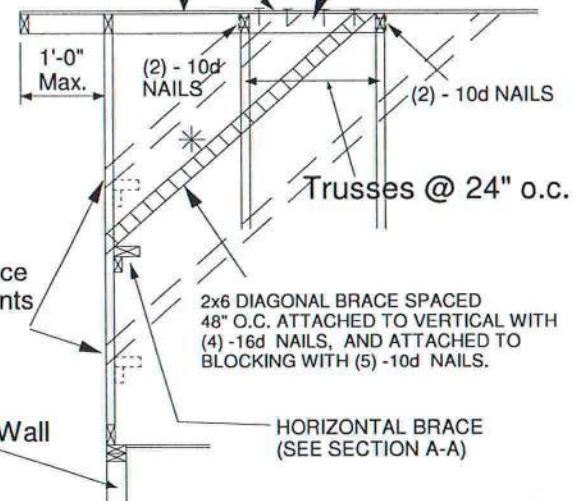
PROVIDE 2x4 BLOCKING BETWEEN THE FIRST TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH (5) - 10d NAILS.

(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

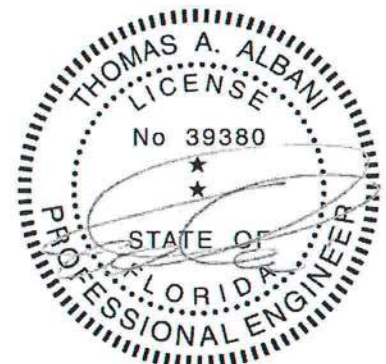
HORIZONTAL BRACE
(SEE SECTION A-A)

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.

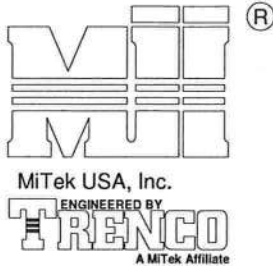
MAX MEAN ROOF HEIGHT = 30 FEET
EXPOSURE D
ASCE 7-10 180 MPH
DURATION OF LOAD INCREASE : 1.60

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



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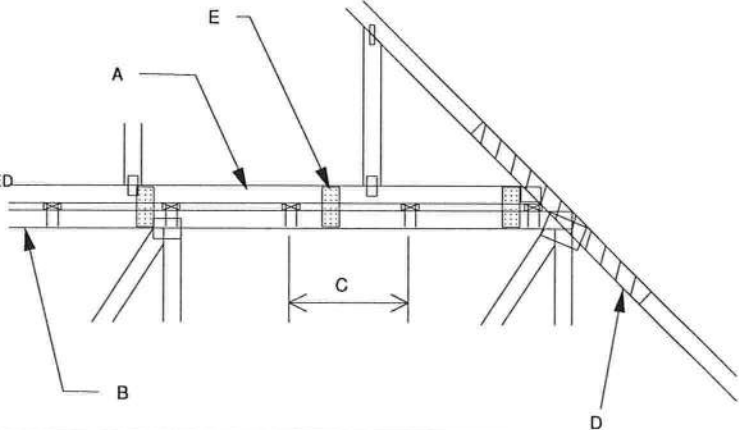
February 12, 2018



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.

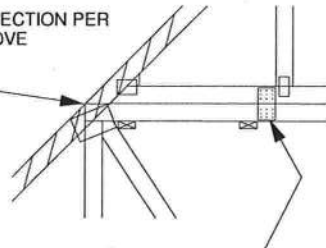
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- D - 2 X $\frac{1}{2}$ 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 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)



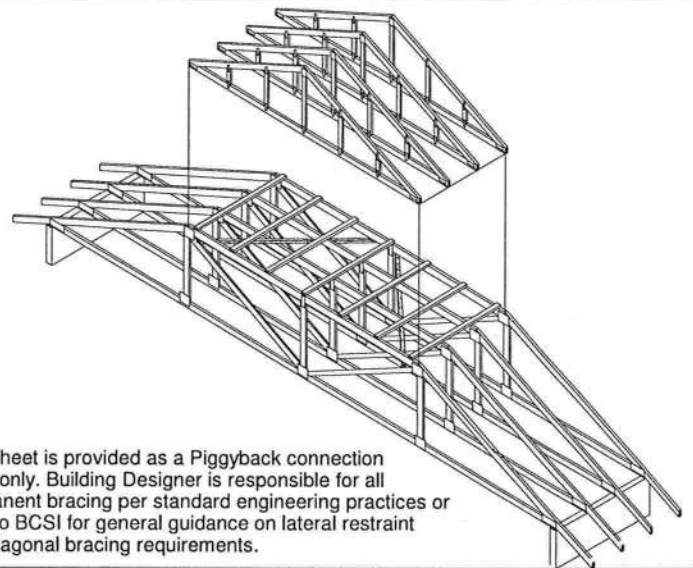
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

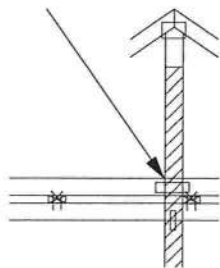


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



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 $\frac{1}{2}$ 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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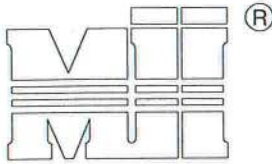
February 12, 2018

AUGUST 1, 2016

STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT
7-10

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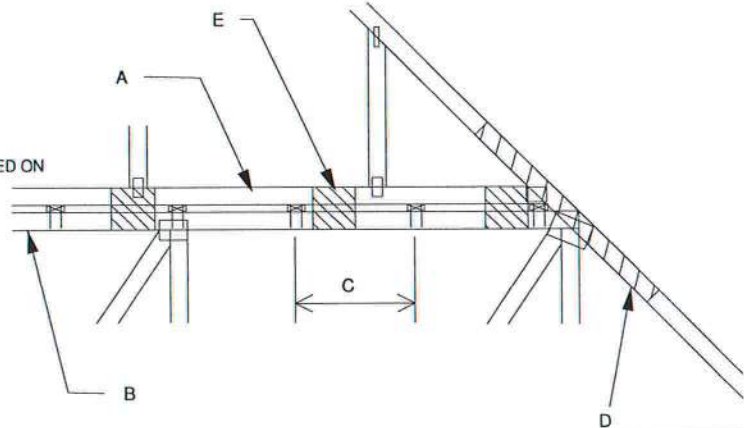


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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E
MAX MEAN ROOF HEIGHT = 30 FEET
MAX TRUSS SPACING = 24" O.C.
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-10
DURATION OF LOAD INCREASE : 1.60

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

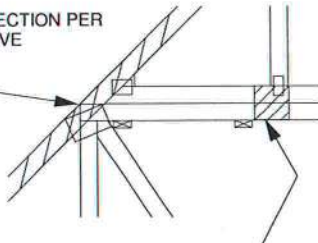
- A - PIGGYBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
SHALL BE CONNECTED TO EACH PURLIN
WITH (2) 0(0.131" X 3.5") TOE-NAILED.
- B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
- C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.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



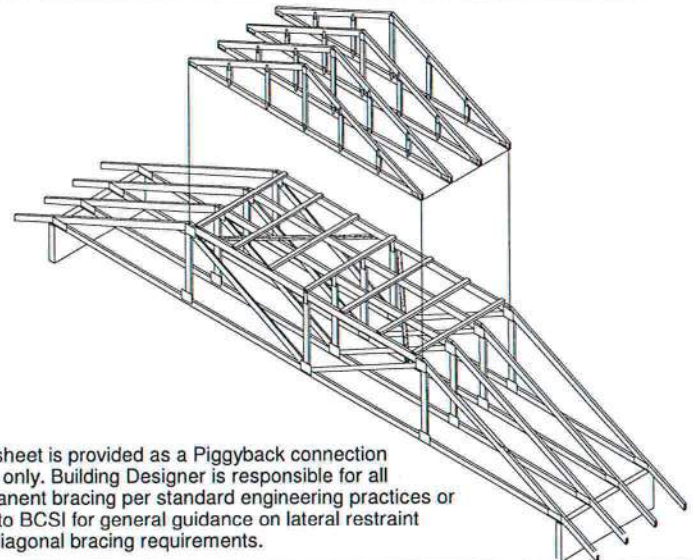
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

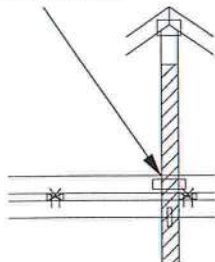


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C.
ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD
FROM EACH SIDE (TOTAL - 12 NAILS)



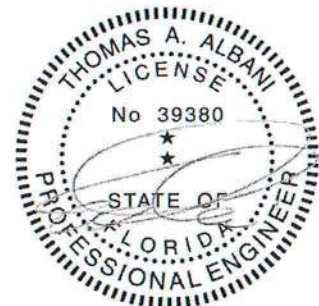
This sheet is provided as a Piggyback connection
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refer to BCSI for general guidance on lateral restraint
and diagonal bracing requirements.

VERTICAL WEB TO
EXTEND THROUGH
BOTTOM CHORD
OF PIGGYBACK



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

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



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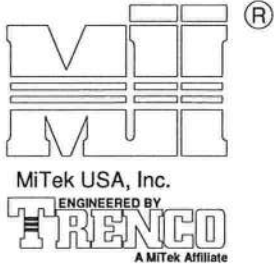
January 19, 2018

AUGUST 1, 2016

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

MII-REP01A1

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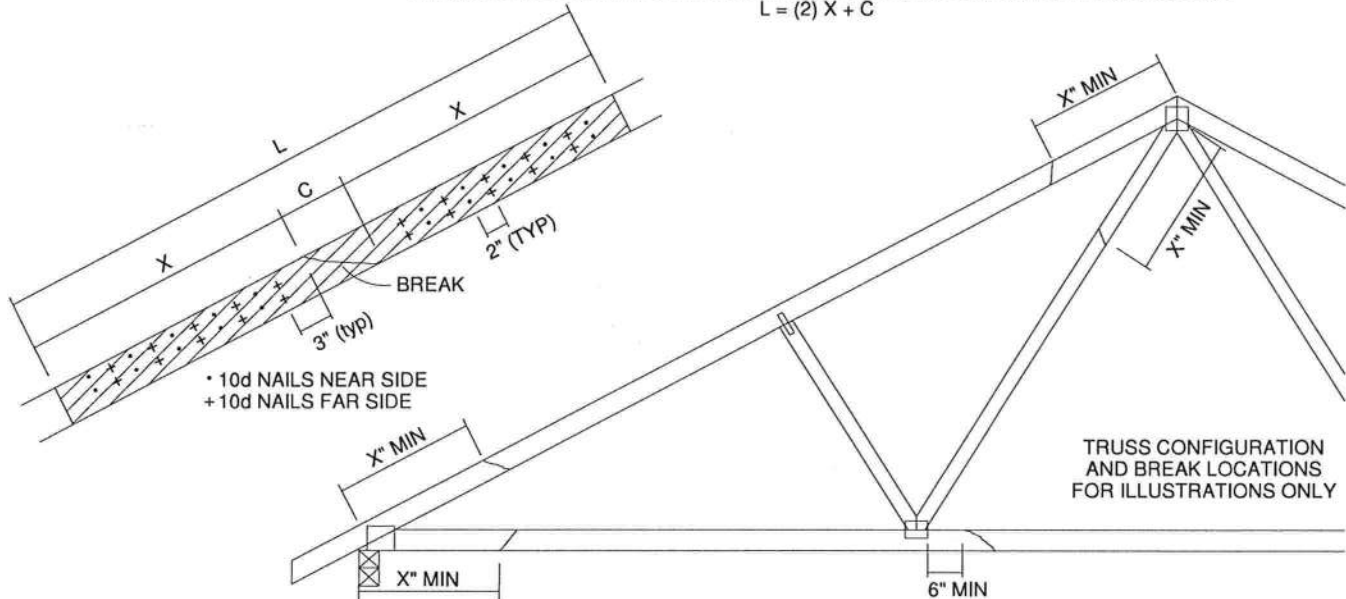
TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *		X INCHES	MAXIMUM FORCE (lbs) 15% LOAD DURATION							
			SP		DF		SPF		HF	
			2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	3187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

* DIVIDE EQUALLY FRONT AND BACK

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

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

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

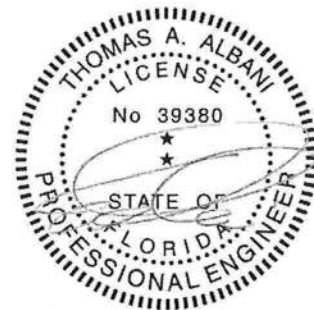


THE LOCATION OF THE BREAK MUST BE GREATER THAN OR EQUAL TO THE REQUIRED X DIMENSION FROM ANY PERIMETER BREAK OR HEEL JOINT AND A MINIMUM OF 6" FROM ANY INTERIOR JOINT (SEE SKETCH ABOVE)

DO NOT USE REPAIR FOR JOINT SPLICES

NOTES:

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



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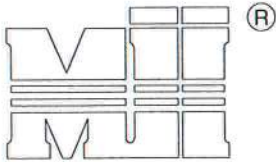
January 19, 2018

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LATERAL TOE-NAIL DETAIL

MII-TOENAIL_SP

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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.

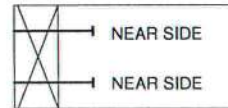
THIS DETAIL APPLICABLE TO THE
THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR
ILLUSTRATION PURPOSES ONLY

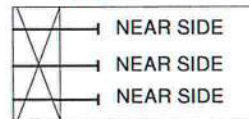
TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)

	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

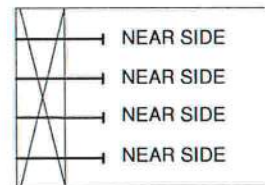
SIDE VIEW
(2x3)
2 NAILS



SIDE VIEW
(2x4)
3 NAILS



SIDE VIEW
(2x6)
4 NAILS



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

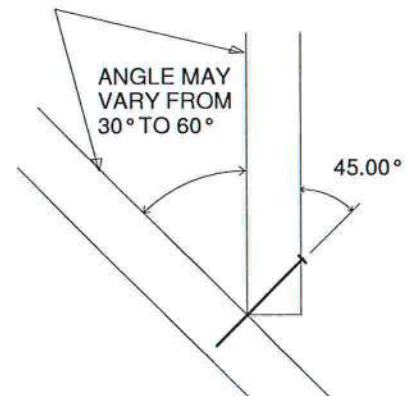
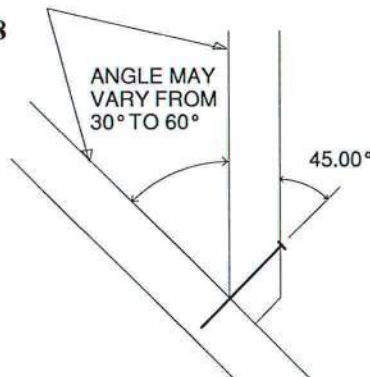
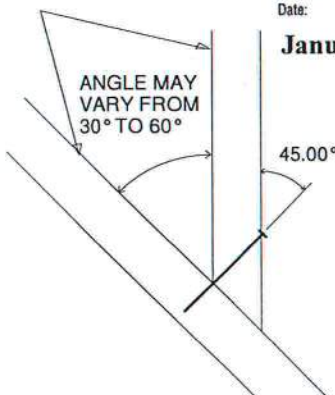
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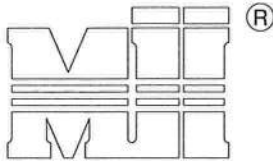
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity



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Date:

January 19, 2018

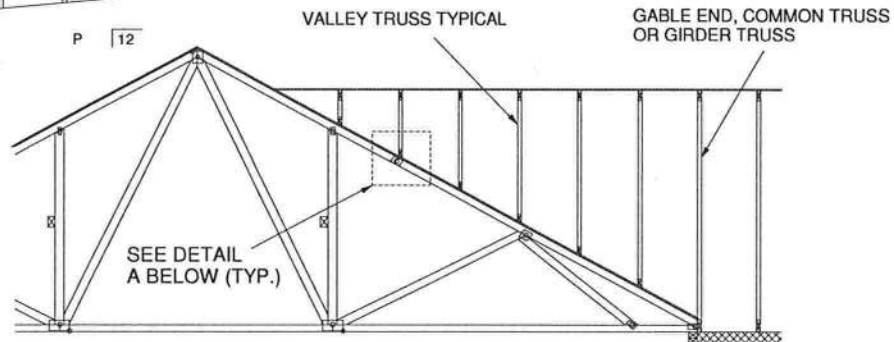
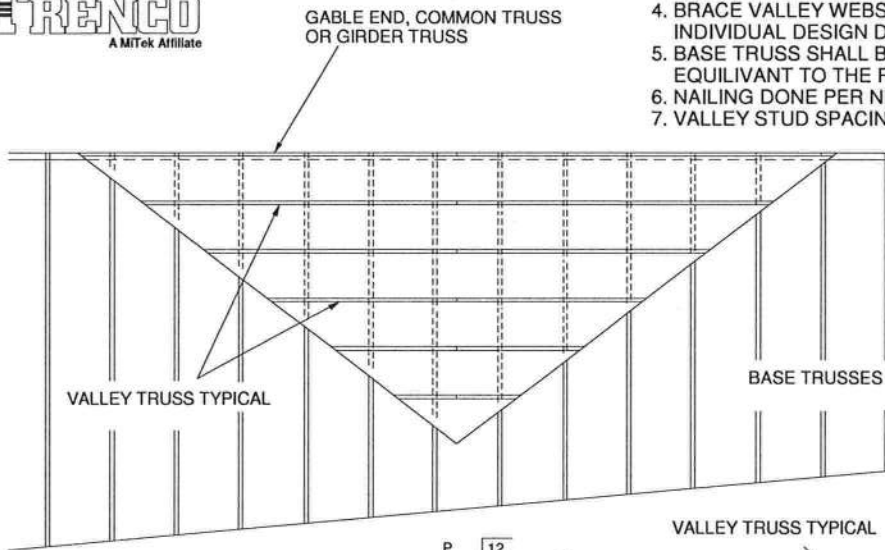




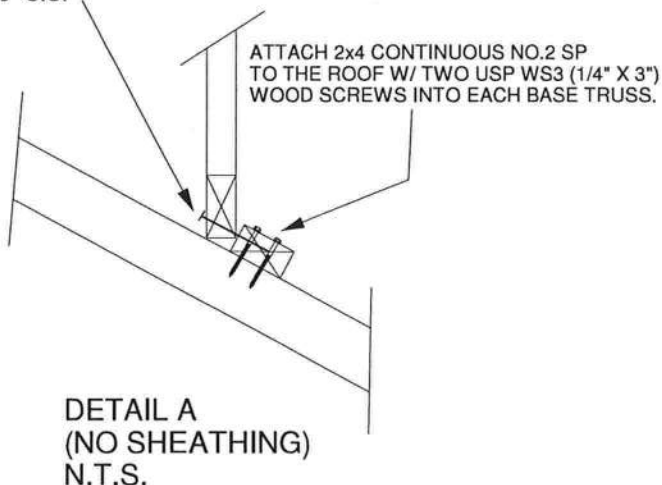
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GENERAL SPECIFICATIONS

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 EQUIVARIANT 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.



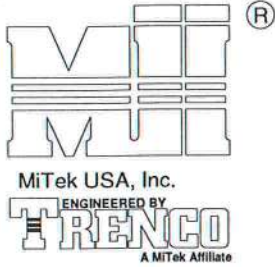
DETAIL A
(NO SHEATHING)
N.T.S.

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 LOAD OF 6 PSF
ON THE TRUSSES



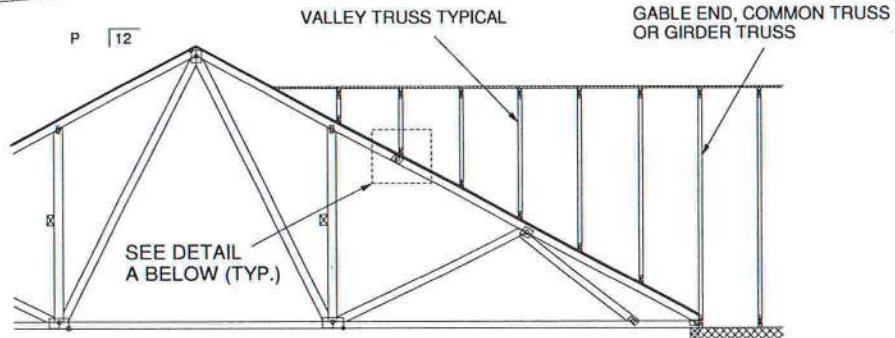
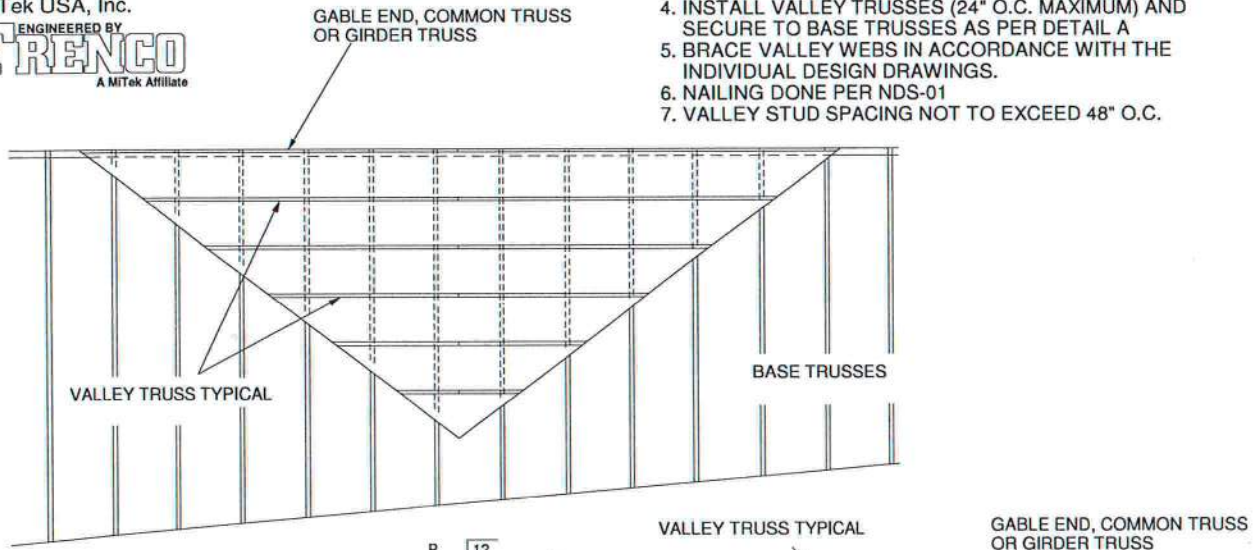
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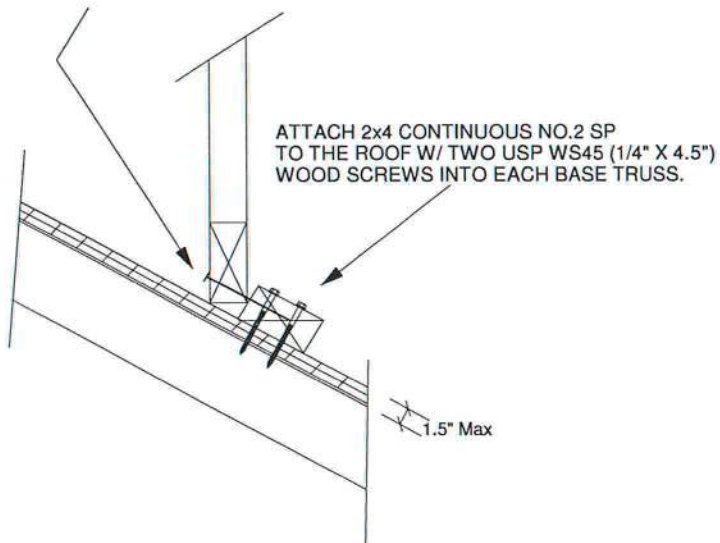


GENERAL SPECIFICATIONS

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.

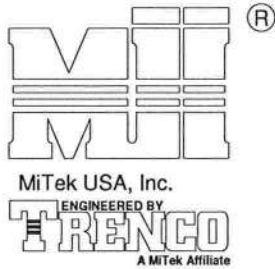


WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH
WIND DESIGN PER ASCE 7-10 160 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12
CATEGORY II BUILDING
EXPOSURE C
WIND DURATION OF LOAD INCREASE : 1.60
MAX TOP CHORD TOTAL LOAD = 50 PSF
MAX SPACING = 24" O.C. (BASE AND VALLEY)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



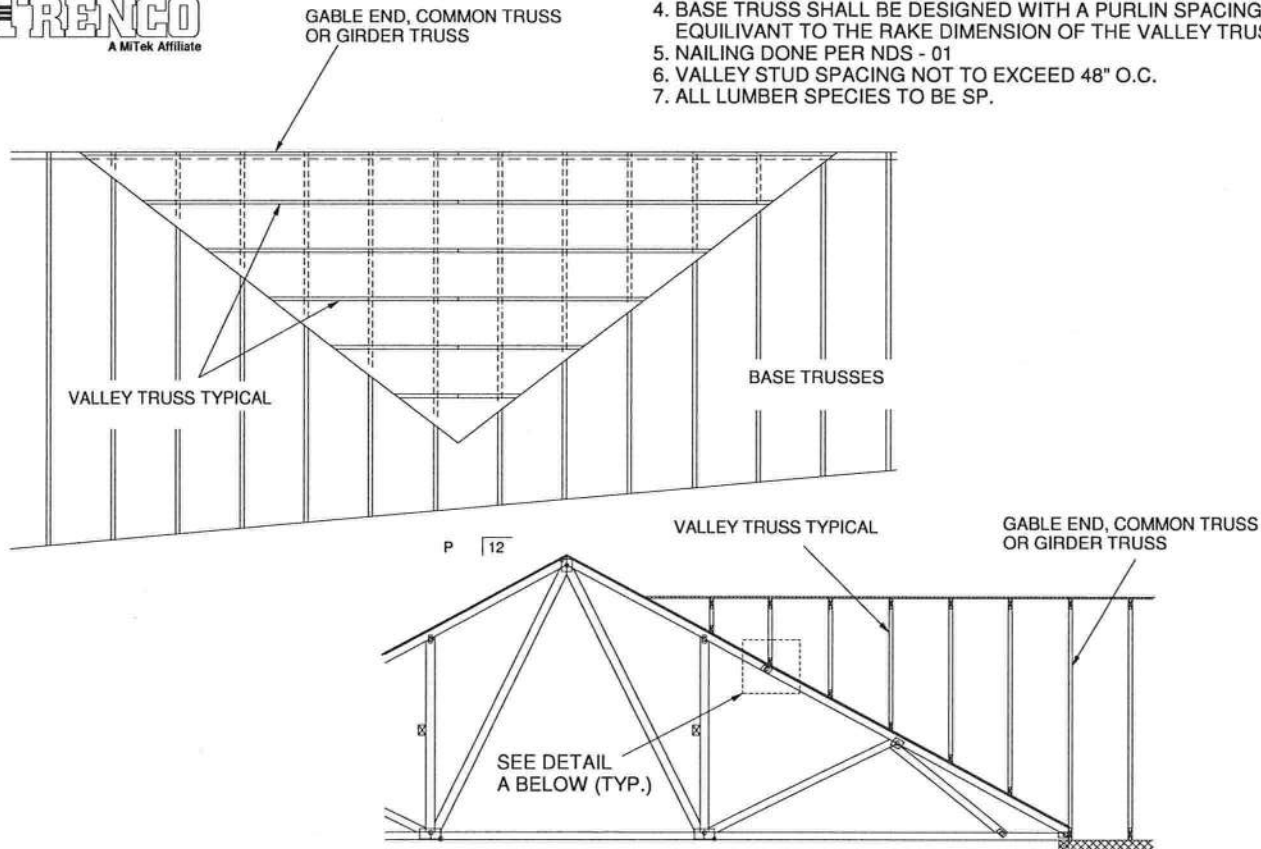
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February 12, 2018



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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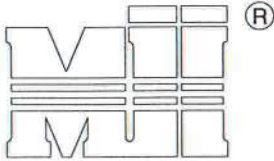
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AUGUST 1, 2016

TRUSSED VALLEY SET DETAIL
(HIGH WIND VELOCITY)

MII-VALLEY

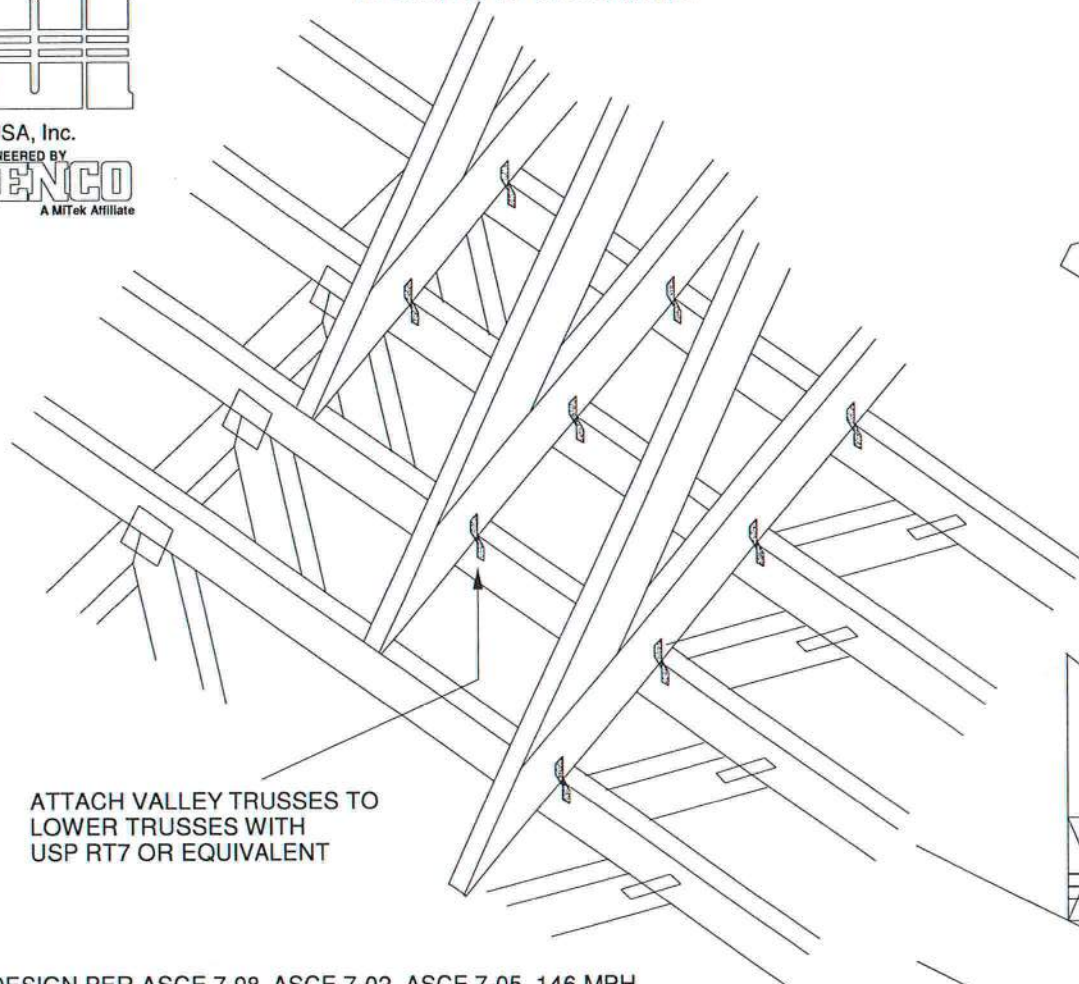
MiTek USA, Inc. Page 1 of 1



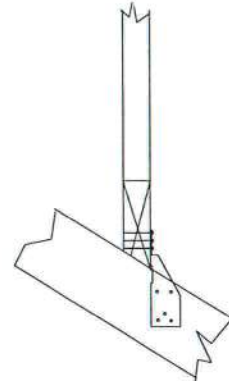
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NOTE: VALLEY STUD SPACING NOT
TO EXCEED 48" O.C. SPACING



ATTACH VALLEY TRUSSES TO
LOWER TRUSSES WITH
USP RT7 OR EQUIVALENT



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



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

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

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

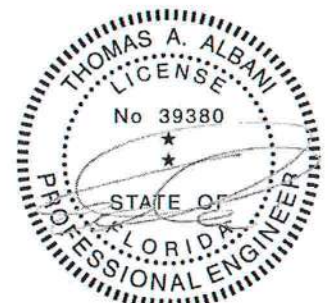
NOTES:

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

NON-BEVELED
BOTTOM CHORD

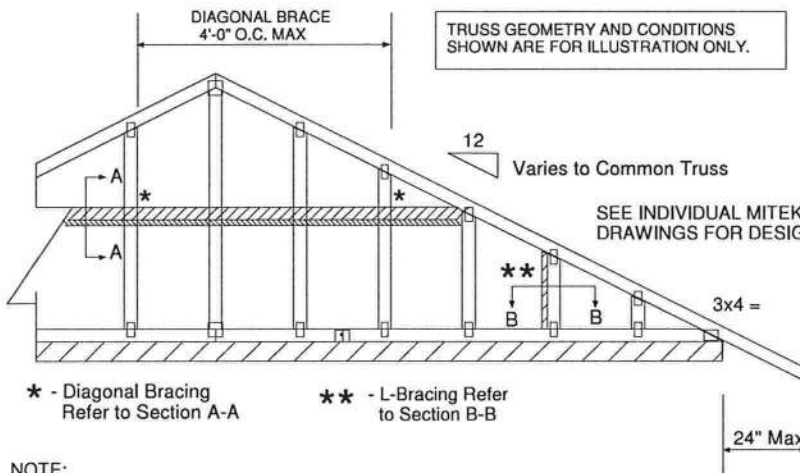
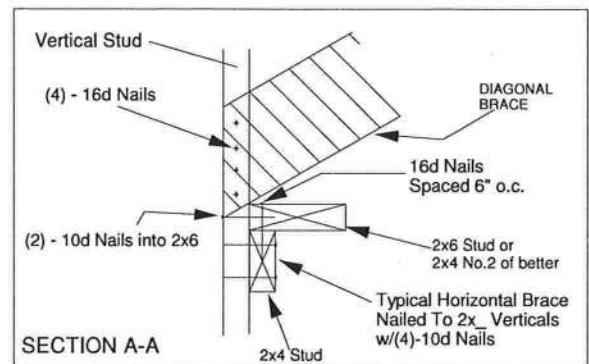
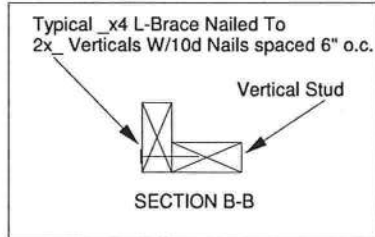
NON-BEVELED
BOTTOM CHORD

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



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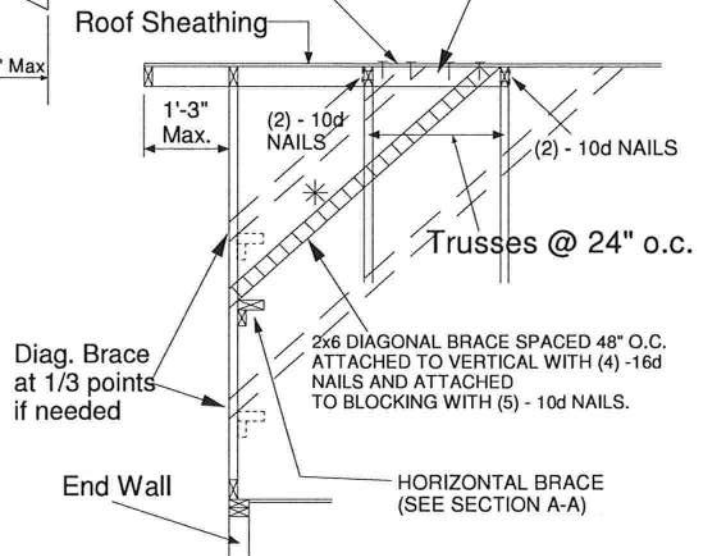


NOTE:

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

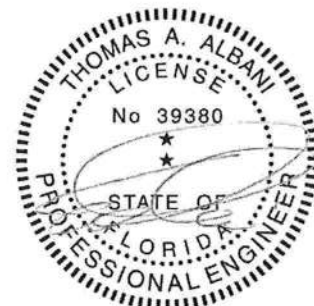


Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No 3/Stud	12" O.C.	3-11-3	6-8-0	7-2-14	11-9-10
2x4 SP No 3/Stud	16" O.C.	3-6-14	5-9-5	7-1-13	10-8-11
2x4 SP No 3/Stud	24" O.C.	3-1-8	4-8-9	6-2-15	9-4-7

- * 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.

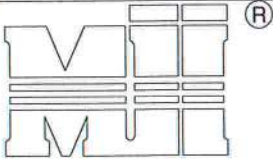
MAXIMUM WIND SPEED = 146 MPH
MAX MEAN ROOF HEIGHT = 30 FEET
CATEGORY II BUILDING
EXPOSURE B or C
ASCE 7-98, ASCE 7-02, ASCE 7-05
DURATION OF LOAD INCREASE : 1.60

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

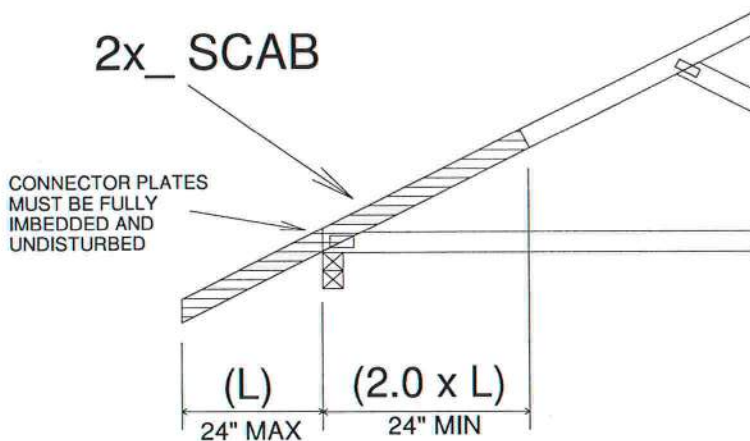
PITCH: 4/12 - 12/12

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.

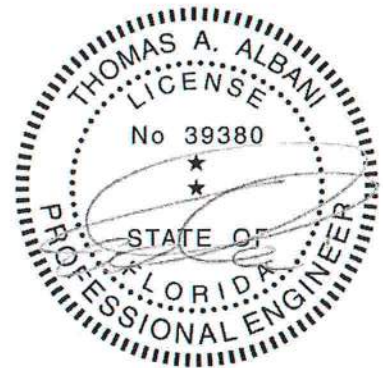


IMPORTANT

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.

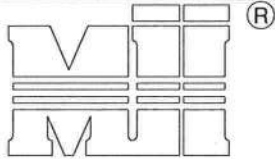
Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN
FOR PLATE SIZES AND LUMBER GRADES



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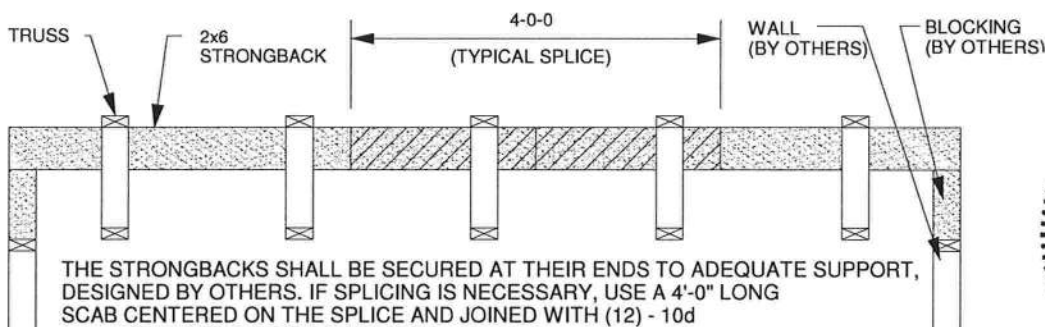
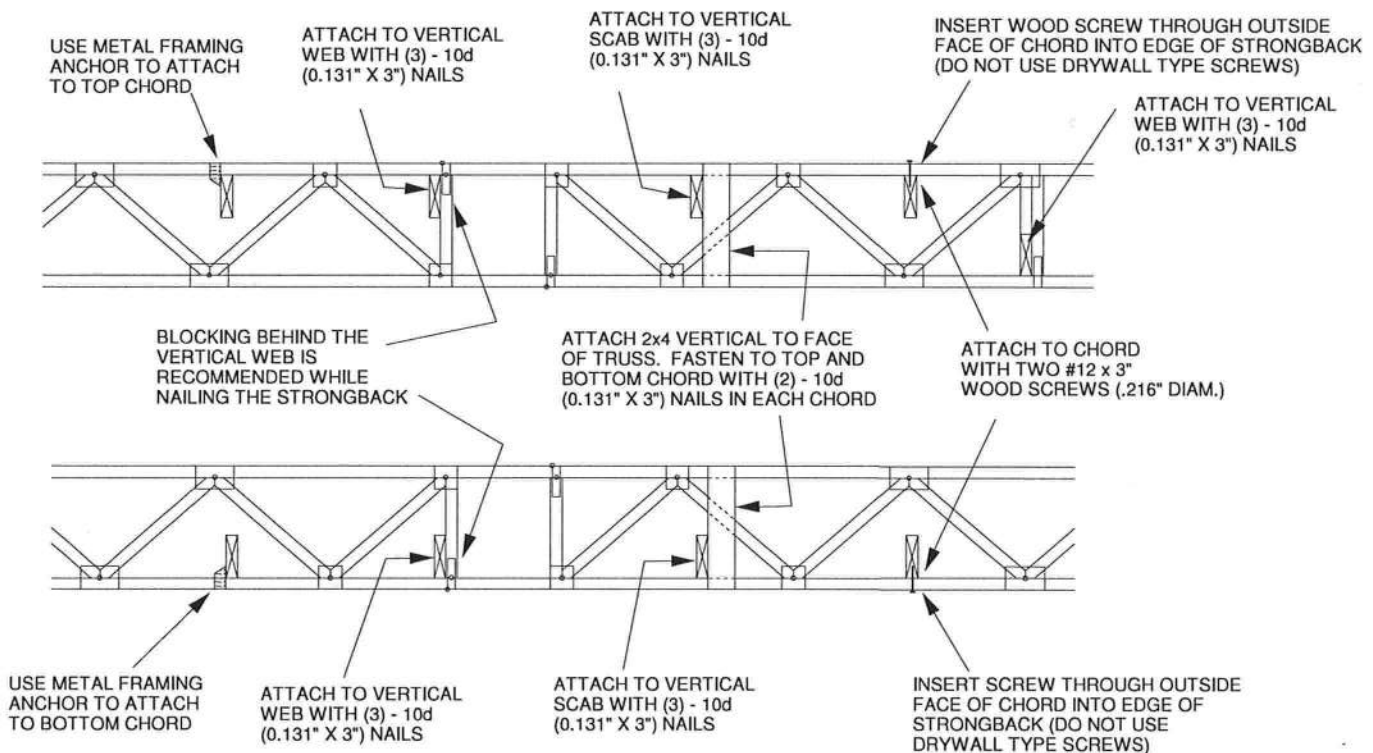
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TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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

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



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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