

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

RE: 2652828 - WOODMAN PARK - WINNETTE RES.

MiTek USA, Inc.

Site Information:

6904 Parke East Blvd.

Customer Info: Woodman Park Bldrs. Project Name: Winnette Res. Model: Custom

Lot/Block: N/A

Subdivision: N/A

Address: 719 Happy Jack Drive, N/A

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: FBC2020/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: N/A

City: Columbia Cty

Wind Speed: 130 mph

Roof Load: 37.0 psf

Floor Load: N/A psf

This package includes 8 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
1	T23020752	T01	3/1/21
2	T23020753	T01G	3/1/21
3	T23020754	T02	3/1/21
4	T23020755	T02G	3/1/21
5	T23020756	T03	3/1/21
2 3 4 5 6 7	T23020757	T04	3/1/21
7	T23020758	T05	3/1/21
8	T23020759	T06	3/1/21



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: Lee, Julius

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

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design 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.



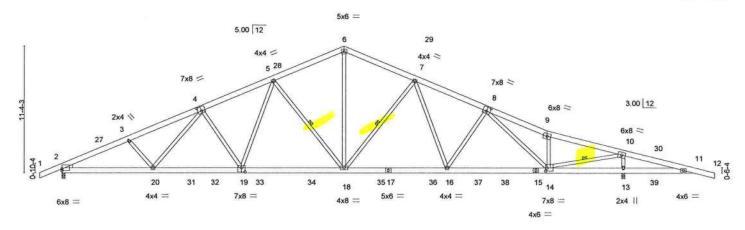
Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

March 1,2021

	, "

Job	Truss		Truss Type			Qty	Ply	WOODMAN PARK - WIN	NETTE RES.			
2652828	T01		Roof Special			6	1	Job Reference (option	nal\			
Builders FirstSource, La	ke City, FL 32055							430 s Nov 30 2020 MiTek I lejzh?75-JkK8SfDuZyy	ndustries, Inc. Mor			
-2-0-0,	6-0-0	12-6-0	, 18-10-8	25-2-4	31-6-2	- 1	37-10-15	43-4-8	50-2-12	7	56-4-8	58-4-8
2-0-0	6-0-0	6-6-0	6-4-8	6-3-12	6-3-14		6-4-13	5-5-9	6-10-4		6-1-12	2-0-0

Scale = 1:99.2



	1	8-1-12	16-0-0	25-	2-4	34-4-11		1	43-4	.8	50-2-12	56-4-8
		8-1-12	7-10-4	9-	2-4	9-2-7		L	8-11-	13	6-10-4	6-1-12
Plate Offs	ets (X,Y)-	[2:0-0-0,0-1-14], [4:0-4-0	,0-4-8], [8:0-4-0	,0-4-8], [14:0	-1-8,0-3-4], [	19:0-4-0,0-4-8]						
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	0.64	Vert(LL)	-0.31	18-19	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.52	18-19	>999	180	Sounder	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.95	Horz(CT)	0.12	13	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matri	r-MS						Weight: 414 I	b FT = 20%

TOP CHORD

**BOT CHORD** 

**WEBS** 

Sheathed or 2-11-9 oc purlins.

6-0-0 oc bracing: 13-14,11-13.

1 Row at midpt

Installation guide.

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

5-18, 7-18, 10-14

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

TOP CHORD 2x6 SP No.2 BOT CHORD

2x6 SP No.2 \*Except\*

2-19: 2x6 SP M 26

WEBS 2x4 SP No.3 \*Except\* 10-14: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.3

REACTIONS. (lb/size) 2=1925/0-3-8 (min. 0-2-8), 13=2462/0-3-8 (min. 0-3-3)

Max Horz 2=170(LC 16)

Max Uplift 2=-432(LC 12), 13=-629(LC 9) Max Grav 2=2133(LC 2), 13=2703(LC 2)

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

TOP CHORD 2-27=-4068/882, 3-27=-3983/899, 3-4=-3941/883, 4-5=-3541/850, 5-28=-2645/683,

6-28=-2592/702, 6-29=-2592/692, 7-29=-2646/674, 7-8=-3409/748, 8-9=-3508/627,

9-10=-3360/532, 10-30=-1145/1036, 11-30=-1153/1003

2-20=-796/3663, 20-31=-667/3464, 31-32=-667/3464, 19-32=-667/3464, 19-33=-484/2938 **BOT CHORD** 

33-34=-484/2938, 18-34=-484/2938, 18-35=-440/2873, 17-35=-440/2873, 17-36=-440/2873,

16-36=-440/2873, 16-37=-493/3243, 37-38=-493/3243, 15-38=-493/3243, 14-15=-493/3243, 13-14=-955/1158, 13-39=-955/1158, 11-39=-955/1158

4-20=-54/288, 4-19=-492/235, 5-19=-162/839, 5-18=-911/330, 6-18=-361/1715,

7-18=-806/296, 7-16=-111/685, 8-16=-313/187, 8-14=-98/328, 9-14=-710/240,

10-14=-1375/4201, 10-13=-2379/909

### NOTES-

WEBS

- 1) Unbalanced roof live loads have been considered for this design.
  2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 432 lb uplift at joint 2 and 629 lb uplift at joint 13.

### LOAD CASE(S) Standard



Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

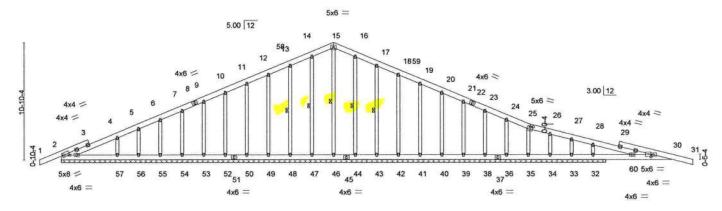
March 1,2021



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Job	Truss	Truss Type	Qty	Ply	WOODMAN PARK - WINNETTE	RES.	
2652828	T01G	GABLE	1	1	i l		
					Job Reference (optional)		
Builders FirstSource, La	ke City, FL 32055				.430 s Nov 30 2020 MiTek Industri X8Oejzh?75-jJ?G4hGmstK?5		
-2-0	0-0,	25-2-4	1	43-4-8	1	56-4-8	58-4-8
2.0	2.0	25.2.4		18_2_4		13.0.0	2-0-0

Scale = 1:102.5



						56-4-8						1
						56-4-8						
Plate Offse	ets (X,Y)-	[2:0-5-15,Edge], [25:0-3-0	0,0-0-8], [30:0-2	2-4,0-2-0], [30	):0-2-4,0-2-1	1						
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	0.83	Vert(LL)	-0.11	30-31	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.20	30-31	n/r	120	10.00 × 10.00	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	-0.05	32	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix	c-S	SHADOW ALXA IDAI					Weight: 475 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2 **OTHERS** 2x4 SP No.3 **BRACING-**

TOP CHORD **BOT CHORD** WEBS

Sheathed or 7-0-6 oc purlins.

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

15-46, 14-47, 13-48, 16-44, 17-43

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide

REACTIONS. All bearings 50-4-8.

(lb) -Max Horz 2=161(LC 16)

Max Uplift All uplift 100 lb or less at joint(s) 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 44, 43, 42, 41, 40, 39, 38, 36 except 2=-269(LC 24), 46=-238(LC 9), 35=-166(LC 1), 34=-222(LC 9), 33=-972(LC 1), 32=-682(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 2, 48, 49, 50, 52, 53, 54, 55, 56, 43, 42, 41, 40, 39, 38, 36, 35 except 46=788(LC 1), 47=264(LC 1), 57=322(LC 23), 44=264(LC 1), 34=487(LC 1), 33=541(LC 9), 32=1355(LC 1)

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

TOP CHORD

2-3=-858/1041, 3-4=-848/1091, 4-5=-806/1058, 5-6=-781/1070, 6-7=-751/1068, 7-8=-722/1049, 8-9=-718/1069, 9-10=-692/1069, 10-11=-663/1069, 11-12=-634/1068,

12-58=-598/1046, 13-58=-595/1069, 13-14=-555/1081, 14-15=-484/1037, 15-16=-475/1038,

16-17=-525/1082, 17-59=-559/1071, 18-59=-562/1033, 18-19=-598/1069,

19-20=-627/1070, 20-21=-656/1070, 21-22=-682/1071, 22-23=-686/1049, 23-24=-709/1061, 24-25=-754/1086, 25-26=-727/1003, 26-27=-774/1051, 27-28=-699/914, 28-29=-808/1063,

29-30=-810/1021

2-57=-968/803, 56-57=-968/803, 55-56=-968/803, 54-55=-968/803, 53-54=-968/803,

52-53=-968/803, 51-52=-968/803, 50-51=-968/803, 49-50=-968/803, 48-49=-968/803, 47-48=-968/803, 46-47=-968/803, 45-46=-968/803, 44-45=-968/803, 43-44=-968/803,

42-43=-968/803, 41-42=-968/803, 40-41=-968/803, 39-40=-968/803, 38-39=-968/803, 37-38=-968/803, 36-37=-968/803, 35-36=-968/803, 34-35=-980/812, 33-34=-980/812,

32-33=-980/812, 32-60=-980/812, 30-60=-980/812

15-46=-748/371, 26-34=-300/183, 27-33=-331/460, 28-32=-724/446

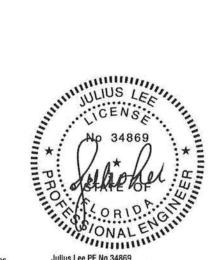
### WEBS

**BOT CHORD** 

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -2-0-0 to 3-7-10, Exterior(2N) 3-7-10 to 25-2-4, Corner(3R) 25-2-4 to 30-9-14, Exterior(2N) 30-9-14 to 58-4-8 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

Continued on page 2



Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

March 1,2021



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Job	Truss	Truss Type	Qty	Ply	WOODMAN PARK - WINNETTE RES.
2652828	T01G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

Run: 8.420 s Nov 10 2020 Print: 8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Mar 1 15:23:03 2021 Page 2 ID:I6cHoKCOPy60Oihh9X8Oejzh?75-jJ?G4hGmstK?5qCPhWD2sgYk\_SGIOjn1M\_frdlzfGFM

### NOTES-

5) All plates are 2x4 MT20 unless otherwise indicated.

6) Gable studs spaced at 2-0-0 oc.

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

- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 48, 49, 50, 52, 53, 54, 55, 56, 57, 44, 43, 42, 41, 40, 39, 38, 36 except (it=lb) 2=269, 46=238, 35=166, 34=222, 33=972, 32=682.

  10) Non Standard bearing condition. Review required.

LOAD CASE(S) Standard

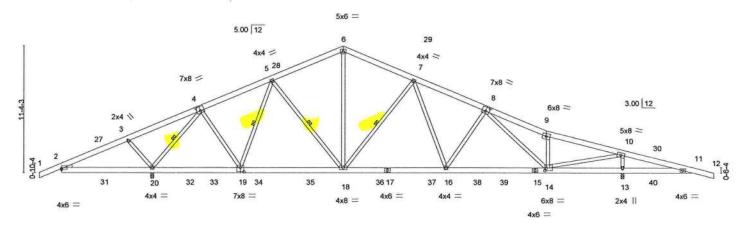




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Job	Truss		Truss Type		C	Qty Ply	WO	ODMAN PARK - WI	NETTE RES.		
2652828	т02		Roof Special		2		1 Job	Reference (optio	nal)		
Builders FirstSource, Lake	e City, FL 32055								Industries, Inc. Mon Ma BSsj_nbEDkHOu5		
1-2-0-0	6-0-0	12-6-0	18-10-8	25-2-4	31-6-2	37-10	-15	43-4-8	50-2-12	56-4-8	58-4-8
2-0-0	6-0-0	6-6-0	6-4-8	6-3-12	6-3-14	6-4-	13	5-5-9	6-10-4	6-1-12	2-0-0

Scale = 1:99.2



		8-1-12	16-0-0	25-2-4	34-4-1	1 .	43-4	-8	50-2-12	56-4-8
		8-1-12	7-10-4	9-2-4	9-2-7		8-11	-13	6-10-4	6-1-12
Plate Offse	ets (X,Y)-	[2:0-0-0,0-0-14], [4:0-4-0,	,0-4-8], [8:0-4-0	,0-4-8], [14:0-1-8,0	-12], [19:0-4-0,0-4-8]					
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 0.49	Vert(LL)	-0.19 14-1	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC 0.63	Vert(CT)	-0.32 14-1	>999	180	ESTRETARESCO.	
BCLL	0.0	Rep Stress Incr	YES	WB 0.89	Horz(CT)	0.05 1	3 n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix-MS	3-30 (0) (2008.01) (0.00)				Weight: 414 lb	FT = 20%

**BRACING-**

WEBS

TOP CHORD

**BOT CHORD** 

Sheathed or 4-4-8 oc purlins.

1 Row at midpt

Installation guide

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

4-20, 5-19, 5-18, 7-18

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

LUMBER-

WEBS

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

2x6 SP No.2 2x4 SP No.3 \*Except\* 10-14: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.3 REACTIONS.

20=2298/0-3-8 (min. 0-3-0), 13=2090/0-3-8 (min. 0-2-11) (lb/size)

Max Horz 20=170(LC 16) Max Uplift 20=-515(LC 12), 13=-585(LC 9) Max Grav 20=2546(LC 2), 13=2290(LC 2)

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

TOP CHORD 2-27=-773/664, 3-27=-757/748, 3-4=-839/999, 4-5=-1347/282, 5-28=-1618/368,
6-28=-1561/386, 6-29=-1561/370, 7-29=-1617/351, 7-8=-2402/502, 8-9=-2600/525,

9-10=-2494/435, 10-30=-1157/1054, 11-30=-1165/1004

**BOT CHORD** 

2-31=-613/765, 20-31=-613/765, 20-32=-96/695, 32-33=-96/695, 19-33=-96/695, 19-34=-166/1366, 34-35=-166/1366, 18-35=-166/1366, 18-36=-168/1937, 17-36=-168/1937, 17-37=-168/1937, 16-37=-168/1937, 16-38=-310/2332, 38-39=-310/2332,

15-39=-310/2332, 14-15=-310/2332, 13-14=-974/1170, 13-40=-974/1170, 11-40=-974/1170 3-20=-399/289, 4-20=-2431/891, 4-19=-302/996, 5-19=-581/373, 6-18=-176/938,

7-18=-824/299, 7-16=-114/700, 8-16=-330/191, 8-14=-9/294, 9-14=-582/226,

10-14=-1106/3376, 10-13=-1981/779

WEBS

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 20=515, 13=585.

LOAD CASE(S) Standard



6904 Parke East Blvd. Tampa FL 33610

March 1,2021

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

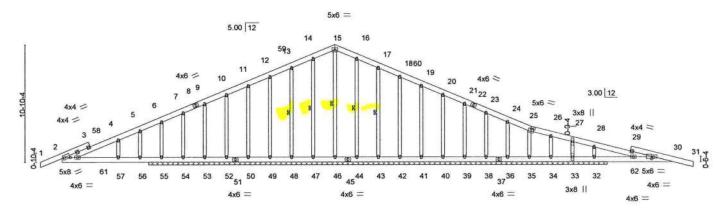


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Truss Type Qty WOODMAN PARK - WINNETTE RES. Job Truss GABLE T02G 2652828 | ' | Job Reference (optional)

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Mar 1 15:24:34 2021 Page 1
ID:I6cHoKCOPy60Oihh9X8Oejzh?75-Yp?gAoMsQqo4WpguW7LO2sqMy8HbCtDQHeBAJXzfGDx Builders FirstSource, Lake City, FL 32055 43-4-8 13-0-0

Scale = 1:102.5



		1				56-4-8						
						56-4-8						1
Plate Offse	ets (X,Y)	[2:0-5-15,Edge], [25:0-3-0	0,0-0-8], [30:0-2	2-4,0-2-0], [30	):0-2-4,0-2-1	1						
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	0.51	Vert(LL)	-0.19	30-31	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.78	Vert(CT)	-0.27	30-31	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	-0.04	32	n/a	n/a		
BCDL	10.0	Code FBC2020/T	PI2014	Matrix	c-S						Weight: 473 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 \*Except\* 25-30: 2x6 SP M 26

**BOT CHORD** 2x6 SP No.2 **OTHERS** 2x4 SP No.3

BRACING-

TOP CHORD BOT CHORD WEBS

Sheathed or 6-11-2 oc purlins.

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

1 Row at midpt 15-46, 14-47, 13-48, 16-44, 17-43

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS. All bearings 42-4-8.

(lb) - Max Horz 55=161(LC 12)

Max Uplift All uplift 100 lb or less at joint(s) 47, 48, 49, 50, 52, 53, 44, 43, 42,

41, 40, 39, 38 except 46=-123(LC 8), 54=-484(LC 23), 55=-355(LC 8), 36=-102(LC 9), 35=-176(LC 24), 34=-334(LC 9), 33=-1491(LC 24), 32=-1047(LC 9)

All reactions 250 lb or less at joint(s) 48, 49, 50, 52, 54, 43, 42, 41, 40. Max Grav

39, 38, 35 except 46=797(LC 1), 47=265(LC 1), 53=278(LC 23), 55=1010(LC 23), 44=265(LC 1), 36=275(LC 24), 34=649(LC 24), 33=896(LC 9), 32=1895(LC 24)

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

2-3=-1024/1040, 3-58=-1013/1058, 4-58=-1010/1079, 4-5=-1036/1109, 5-6=-1005/1131, TOP CHORD

6-7=-864/1028, 7-8=-909/1061, 8-9=-905/1089, 9-10=-872/1082, 10-11=-842/1082,

11-12=-812/1081, 12-59=-784/1045, 13-59=-781/1083, 13-14=-763/1095, 14-15=-704/1050,

15-16=-707/1050, 16-17=-774/1095, 17-60=-799/1083, 18-60=-803/1045, 18-19=-834/1081, 19-20=-863/1082, 20-21=-893/1082, 21-22=-918/1083, 22-23=-922/1061,

23-24=-949/1074, 24-25=-983/1095, 25-26=-957/1015, 26-27=-991/1061, 27-28=-943/957,

28-29=-1027/1077, 29-30=-1030/1023 **BOT CHORD** 

2-61=-980/1020, 57-61=-980/1020, 56-57=-980/1020, 55-56=-980/1020, 54-55=-980/1021,

53-54=-980/1021, 52-53=-980/1021, 51-52=-980/1021, 50-51=-980/1021, 49-50=-980/1021, 48-49=-980/1021, 47-48=-980/1021, 46-47=-980/1021, 45-46=-980/1021,

44-45=-980/1021, 43-44=-980/1021, 42-43=-980/1021, 41-42=-980/1021, 40-41=-980/1021,

39-40=-980/1021, 38-39=-980/1021, 37-38=-980/1021, 36-37=-980/1021, 35-36=-980/1021, 34-35=-990/1030, 33-34=-990/1030, 32-33=-990/1030, 32-62=-990/1030,

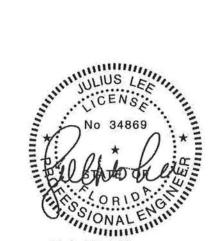
WEBS 15-46=-757/502, 6-55=-465/351, 26-34=-420/268, 27-33=-602/828, 28-32=-1118/712

### NOTES-

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

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.



Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

March 1,2021

Continued on page 2

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. WARNING - Verny design parameters and vertices on this AND INCLUDED MILES REPERENCE - AGE MILES 486. SHEAD REPORTS 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/for chord members only. Additional temporary and permanent bracing is always required for stability and to prevent ucallapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TH1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



		*	i

Job	Truss	Truss Type	Qty	Ply	WOODMAN PARK - WINNETTE RES.
2652828	T02G	GABLE	1	1	Job Reference (optional)

Builders FirstSource, Lake City, FL 32055

8.430 s Nov 30 2020 MiTek Industries, Inc. Mon Mar 1 15:24:35 2021 Page 2 ID:16cHoKCOPy60Oihh9X8Oejzh?75-10Z2O8NUB8wx7zE44rsda4MXiYdqxKTaWlxjrzzfGDw

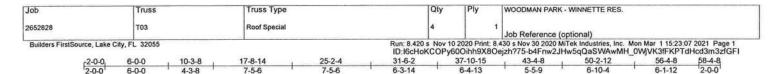
### NOTES-

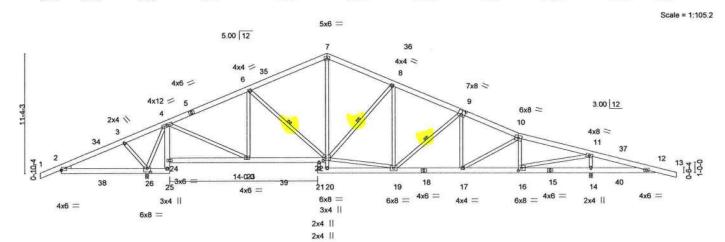
- 4) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 48, 49, 50, 52, 53, 44, 43, 42, 41, 40, 39, 38 except (jt=lb) 46=123, 54=484, 55=355, 36=102, 35=176, 34=334, 33=1491, 32=1047.
- 10) Non Standard bearing condition. Review required.
- 11) This truss has large uplift reaction(s) from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.

LOAD CASE(S) Standard



	¥	,





	70	8-1-12	10-3-8	17-8-14	24	-3-8	25-0-8	31-6-2	37-1	0-15	43-	4-8	50-2-12	, 5	6-4-8
	1	8-1-12	2-1-12	7-5-6	6-8	5-10	0-9-0	6-5-10	6-4	-13	5-	5-9	6-10-4	6	-1-12
Plate Offse	ets (X,Y)	[2:0-0-0,0-0-14], [9	9:0-4-0,0-	4-8], [16:0-3-8	,0-3-0], [22:0	0-2-12,	,0-3-0], [2	26:0-4-0,0-4-0]							
LOADING	(psf)	SPACING-		2-0-0	CSI.			DEFL.	in	(loc)	I/defl	L/d	PL	ATES	GRIP
TCLL	20.0	Plate Grip I	DOL	1.25	TC	0.48		Vert(LL)	-0.14	17-19	>999	240	MT	20	244/190
TCDL	7.0	Lumber DC	DL	1.25	BC	0.53		Vert(CT)	-0.26	17-19	>999	180			
BCLL	0.0	Rep Stress	Incr	YES	WB	0.94		Horz(CT)	0.06	14	n/a	n/a			
BCDL	10.0	Code FBC	2020/TPI	2014	Matrix	-MS							We	eight: 438	b FT = 20%

BRACING-TOP CHORD

WEBS

**BOT CHORD** 

Sheathed or 4-6-15 oc purlins.

10-0-0 oc bracing: 20-22

1 Row at midpt

Installation guide.

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

6-22, 8-22, 9-19

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

LUMBER-

TOP CHORD 2x6 SP No.2

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

7-20: 2x4 SP No.3

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

11-16: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.3

REACTIONS. (lb/size) 26=2309/0-3-8 (min. 0-2-15), 14=2097/0-3-8 (min. 0-2-10)

Max Horz 26=170(LC 16)

Max Uplift 26=-512(LC 12), 14=-583(LC 9) Max Grav 26=2478(LC 2), 14=2230(LC 2)

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

2-34=-746/677, 3-34=-732/755, 3-4=-794/936, 4-5=-1686/268, 5-6=-1621/290,

6-35=-1682/358, 7-35=-1614/380, 7-36=-1610/366, 8-36=-1666/347, 8-9=-2070/452,

9-10=-2462/508, 10-11=-2312/428, 11-37=-1157/1048, 12-37=-1165/998

BOT CHORD 2-38=-625/750, 26-38=-625/750, 25-26=-229/721, 24-25=-206/378, 4-24=-118/380, 23-24=-200/812, 23-39=-188/1496, 22-39=-188/1496, 7-22=-168/956, 18-19=-301/2254,

17-18=-301/2254, 16-17=-317/2222, 15-16=-969/1170, 14-15=-969/1170, 14-40=-969/1170,

12-40=-969/1170

3-26=-331/221, 4-26=-1943/414, 4-23=-714/1629, 6-23=-461/375, 19-22=-145/1716,

8-22=-598/268, 8-19=-54/317, 9-19=-522/187, 9-17=0/258, 10-16=-642/342,

11-16=-1092/3193, 11-14=-1897/776

### NOTES-

WEBS

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 26=512, 14=583.

### LOAD CASE(S) Standard



Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

March 1,2021

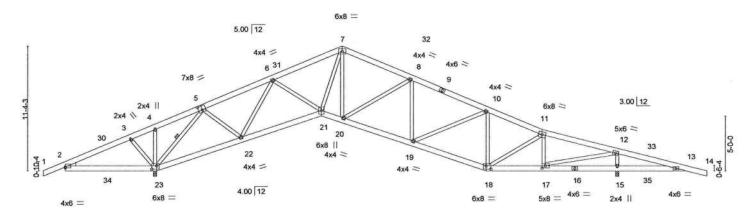
🛦 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITEKS connectors. This known into the connectors was a constructed by the connectors of the connectors. This known is connectors and individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and property incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TP11 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	T	russ		Truss Type			Qty	Ply	WOODMAN PARK - V	VINNETTE RES.		
2652828	T	04		Roof Special			5	1	Job Reference (opt	ional)		
Builders FirstSource, La	ke City, FL	32055							430 s Nov 30 2020 MiTe ejzh?75-4Gp97OJvgl			
r2-0-0 <sub>1</sub>	6-0-0	, 8-3-8	12-6-0	18-10-8	25-2-4	31-6-2	1	38-3-8	43-4-8	50-2-12	56-4-8	58-4-8
2-0-0	6-0-0	2-3-8	4-2-8	6-4-8	6-3-12	6-3-14	70	6-9-6	5-1-0	6-10-4	6-1-12	2-0-0

Scale = 1:100.8



	1	8-1-12	8-3-8	16-0-0	23-3-8	25-2-4	31-6-2	38	8-3-8	- 1	43-4-8	50-2-12	56-4-8
	1	8-1-12	0-1-12	7-8-8	7-3-8	1-10-12	6-3-14	6	-9-6		5-1-0	6-10-4	6-1-12
Plate Offse	ets (X,Y)	[2:0-0-0,0-0-1	4], [5:0-4	-0,0-4-8], [17:0	-3-8,0-2-8], [18	0-5-4,0-3-8], [	23:0-5-4,0-3-8]						
LOADING	(psf)	SPAC	ING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate 0	Grip DOL	1.25	TC	0.48	Vert(LL)	-0.16	19	>999	240	MT20	244/190
TCDL	7.0	Lumbe	er DOL	1.25	BC	0.41	Vert(CT)	-0.31	19-20	>999	180		
BCLL	0.0 *	Rep St	tress Incr	YES	WB	0.87	Horz(CT)	0.17	15	n/a	n/a		
BCDL	10.0	Code	FBC2020	D/TPI2014	Matri	x-MS						Weight: 410	lb FT = 20%

BRACING-

WEBS

TOP CHORD

**BOT CHORD** 

Sheathed or 4-6-0 oc purlins.

Installation guide.

Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt 5-23

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2 WEBS 2x4 SP No.3 \*Except\*

12-17: 2x4 SP No.2

WEDGE

Left: 2x4 SP No.3

REACTIONS. (lb/size) 23=2306/0-3-8 (min. 0-2-12), 15=2082/0-3-8 (min. 0-2-7)

Max Horz 23=170(LC 16)

Max Uplift 23=-517(LC 12), 15=-584(LC 9)

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

TOP CHORD 2-30=-801/711, 3-30=-785/794, 3-4=-884/941, 4-5=-884/990, 5-6=-1620/299,

6-31=-2590/406, 7-31=-2518/425, 7-32=-2140/382, 8-32=-2212/363, 8-9=-2444/518,

9-10=-2531/507, 10-11=-2215/516, 11-12=-2041/429, 12-33=-1156/1048, 13-33=-1164/998 2-34=-657/787, 23-34=-657/787, 22-23=-115/625, 21-22=-302/2074, 20-21=-158/2076,

BOT CHORD 2-34=-657/787, 23-34=-657/787, 22-23=-115/625, 21-22=-302/2074, 20-21=-158/2076, 19-20=-242/2415, 18-19=-332/2135, 17-18=-318/1952, 16-17=-968/1170, 15-16=-968/1170,

15-35=-968/1170, 13-35=-968/1170

3-23=-325/321, 5-23=-2409/696, 5-22=-233/1131, 6-22=-1139/390, 6-21=-74/476,

7-21=-179/1134, 7-20=-205/457, 8-20=-429/290, 10-19=-5/292, 10-18=-575/182,

11-17=-637/341, 12-17=-1087/2965, 12-15=-1850/775

### NOTES-

WEBS

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=517, 15=584.

LOAD CASE(S) Standard



Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

March 1,2021

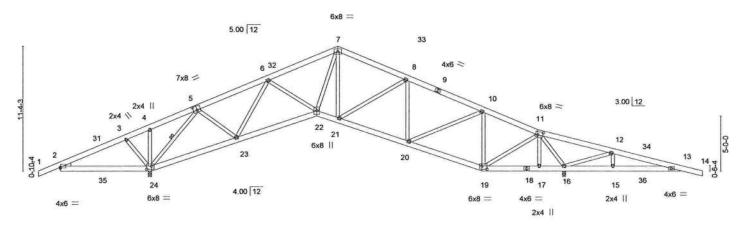
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

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



Job	Ti	russ		Truss Type			Qty	Ply	WOODMAN PARK - V	VINNETTE RES.		
2652828	т	05		Roof Special			4	1				
Builders FirstSource, La	ke City, FL 3	32055							Job Reference (opt 430 s Nov 30 2020 MiTe	ek Industries, Inc. Mon		
						ID:	6cHoKCOI	2y60Oihh9	X80ejzh?75-YTNYL	.kKXRj48plgZ1nKS	5xoqjtOToMRwl	v6AryzfGFG
-2-0-0	6-0-0	8-3-8	12-6-0	18-10-8	25-2-4	31-6-2	= 10	38-3-8	43-4-8	50-2-12	56-4-8	58-4-8
2-0-0	6-0-0	2-3-8	4-2-8	6-4-8	6-3-12	6-3-14	7	6-9-6	5-1-0	6-10-4	6-1-12	2-0-0

Scale = 1:100.8



	1	8-1-12	8-3-8	16-0-0	23-3-	8 25-2-4	31-6-2	, 3	8-3-8	1	43-4-8	45-9-4	50-2-12	56-4-8
		8-1-12	0-1-12	7-8-8	7-3-	3 1-10-12	6-3-14		6-9-6		5-1-0	2-4-12	4-5-8	6-1-12
Plate Offse	ets (X,Y)-	[2:0-0-0,0-	0-14], [5:0-4	1-0,0-4-8], [11:	0-5-8,0-3-8], [1	9:0-5-8,0-3-8],	[24:0-5-4,0-3-8]							
LOADING	(psf)	SP	ACING-	2-0-0	cs		DEFL.	in	(loc)	l/defi	L/d		PLATES	GRIP
TCLL	20.0	Pla	te Grip DOL	1.25	TC	0.55	Vert(LL)	-0.09	22	>999	240		MT20	244/190
TCDL	7.0	Lun	nber DOL	1.25	BC	0.35	Vert(CT)	-0.18	22-23	>999	180			
BCLL	0.0 *	Rep	Stress Inc	YES	WB	0.72	Horz(CT)	0.11	16	n/a	n/a			
BCDL	10.0	Cod	de FBC202	D/TPI2014	Mat	rix-MS							Weight: 412 II	FT = 20%

BRACING-

WEBS

TOP CHORD

**BOT CHORD** 

Sheathed or 5-1-13 oc purlins.

1 Row at midpt

Installation guide.

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

5-24

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

LUMBER-

TOP CHORD 2x6 SP No.2 BOT CHORD 2x6 SP No.2

2x4 SP No.3 WEBS

WEDGE

Left: 2x4 SP No.3

REACTIONS. (lb/size) 24=2059/0-3-8 (min. 0-2-7), 16=2329/0-3-8 (min. 0-2-12)

Max Horz 24=170(LC 16)

Max Uplift 24=-493(LC 12), 16=-731(LC 9)

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

TOP CHORD 2-31=-801/711, 3-31=-785/794, 3-4=-885/941, 4-5=-888/994, 5-6=-1160/255,

6-32=-1799/330, 7-32=-1727/348, 7-33=-1440/314, 8-33=-1514/296, 8-9=-1403/275,

9-10=-1490/263, 10-11=-757/171, 11-12=-2002/2085, 12-34=-1195/1219,

13-34=-1203/1169

**BOT CHORD** 2-35=-656/786, 24-35=-656/786, 23-24=-90/739, 22-23=-246/1490, 21-22=-92/1396,

20-21=-117/1403, 19-20=-67/792, 18-19=-699/1418, 17-18=-699/1418, 16-17=-700/1422,

15-16=-1134/1209, 15-36=-1134/1209, 13-36=-1134/1209

3-24=-329/325, 5-24=-2014/513, 5-23=-123/892, 6-23=-853/258, 6-22=0/266, 7-22=-152/858, 8-20=-404/209, 10-20=-234/759, 10-19=-911/357, 11-19=-970/1519,

11-16=-2305/1068, 12-16=-904/891, 12-15=-273/206

### NOTES-

**WEBS** 

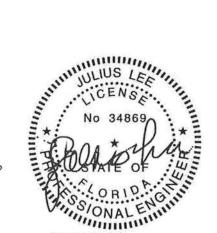
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

4) All plates are 4x4 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 100 lb uplift at joint(s) except (jt=lb) 24=493, 16=731.

LOAD CASE(S) Standard



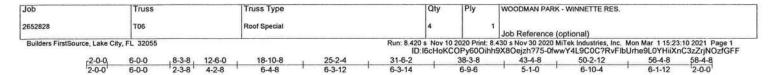
Julius Lee PE No.34869 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610

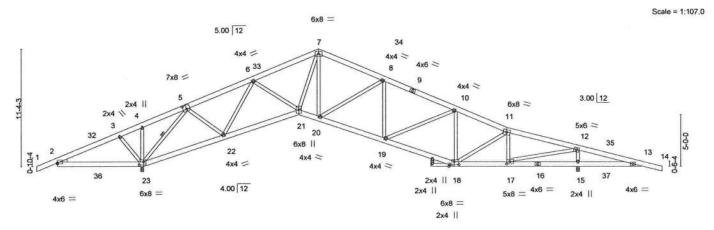
March 1,2021

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters and only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20801



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	8-1-12 8-3-8	16-0-0	23-3-8	25-2-4	31-6-2	36-0-8	38-3	-8, 43	4-8	50-2-12	, 56-	4-8
	8-1-12 0-1-12	7-8-8	7-3-8	1-10-12	6-3-14	4-6-6	2-3	0 5-	1-0	6-10-4	6-1	-12
Plate Offsets (X,Y)	[2:0-0-0,0-0-14], [5:0-4-0	,0-4-8], [17:0-3	-8,0-2-8], [18:0	-5-4,0-3-8], [2:	3:0-5-4,0-3-8]							
LOADING (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	P	LATES	GRIP
TCLL 20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	-0.16	19	>999	240	M	T20	244/190
TCDL 7.0	Lumber DOL	1.25	BC	0.41	Vert(CT)	-0.31	19-20	>999	180			
BCLL 0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.17	15	n/a	n/a			
BCDL 10.0	Code FBC2020/T	PI2014	Matrix-	MS	68 (0)					l v	Veight: 414 II	FT = 20%

TOP CHORD

**BOT CHORD** 

WEBS

Sheathed or 4-6-0 oc purlins.

1 Row at midpt

Installation guide.

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

5-23

MiTek recommends that Stabilizers and required cross bracing

be installed during truss erection, in accordance with Stabilizer

LUMBER-

TOP CHORD 2x6 SP No.2

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

18-24: 2x4 SP No.3

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

12-17: 2x4 SP No.2

WEDGE Left: 2x4 SP No.3

**BOT CHORD** 

REACTIONS. (lb/size) 23=2306/0-3-8 (min. 0-2-12), 15=2082/0-3-8 (min. 0-2-7)

Max Horz 23=170(LC 16)

Max Uplift 23=-517(LC 12), 15=-584(LC 9)

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

TOP CHORD 2-32=-801/711, 3-32=-785/794, 3-4=-884/941, 4-5=-884/990, 5-6=-1620/299,

6-33=-2590/406, 7-33=-2518/425, 7-34=-2140/382, 8-34=-2212/363, 8-9=-2445/518,

9-10=-2531/507, 10-11=-2215/516, 11-12=-2041/429, 12-35=-1156/1048, 13-35=-1164/998 2-36=-657/787, 23-36=-657/787, 22-23=-115/625, 21-22=-302/2074, 20-21=-158/2076,

19-20=-242/2415, 18-19=-332/2135, 17-18=-318/1952, 16-17=-968/1170, 15-16=-968/1170,

15-37=-968/1170, 13-37=-968/1170

WEBS 3-23=-325/321, 5-23=-2409/696, 5-22=-233/1131, 6-22=-1139/390, 6-21=-74/476,

7-21=-179/1134, 7-20=-205/457, 8-20=-429/290, 10-19=-5/292, 10-18=-575/182,

11-17=-637/341, 12-17=-1087/2965, 12-15=-1850/775

### NOTES-

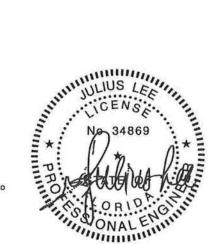
1) Unbalanced roof live loads have been considered for this design.

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp B; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-7-10, Interior(1) 3-7-10 to 25-2-4, Exterior(2R) 25-2-4 to 30-9-14, Interior(1) 30-9-14 to 58-4-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.

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

- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 23=517, 15=584.

LOAD CASE(S) Standard



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

March 1,2021

MARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters shown, and is for an individual building component, not building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly anage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP11 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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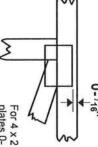
## Symbols

# PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated.

Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



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

I

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

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

### PLATE SIZE



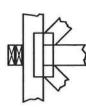
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

### BEARING



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

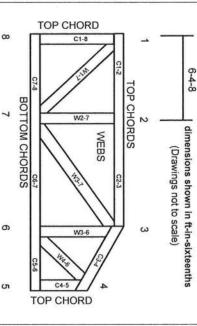
## Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction. DSB-89: Design Standard for Bracing.

DSB-89 BCSI:

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

# Numbering System



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

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

## PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

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

### ر

# General Safety Notes

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

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

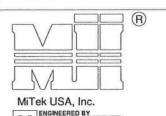
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### T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY

MII-T-BRACE 2

MiTek USA, Inc. Page 1 of 1

Brace Size



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.

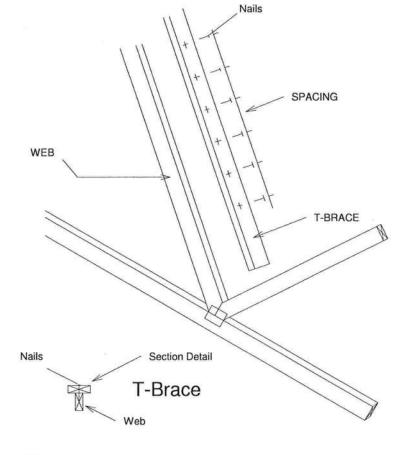
1	Nailing Pattern	
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d (0.131" X 3")	6" o.c.

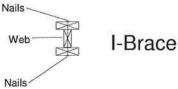
Note: Nail along entire length of T-Brace / I-Brace (On Two-Ply's Nail to Both Plies)

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

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







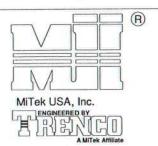
Thomas A. Albani PE No.39380 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

### SCAB-BRACE DETAIL

### MII-SCAB-BRACE

MiTek USA, Inc.

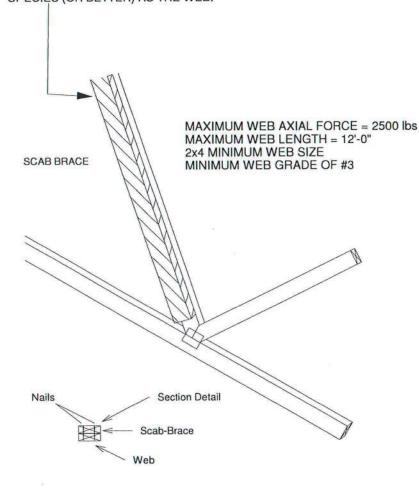
Page 1 of 1



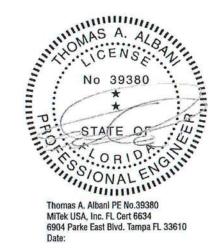
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical. Scab must cover full length of web +/- 6".

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

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



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



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

### 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.

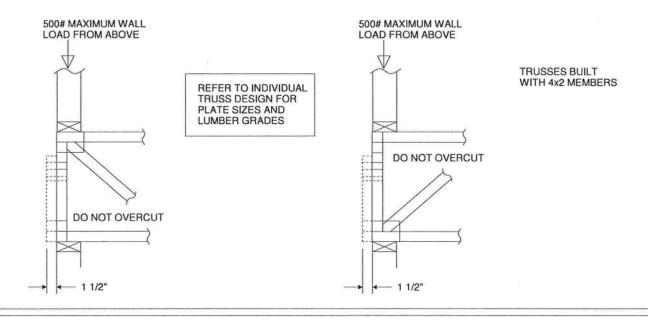
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE

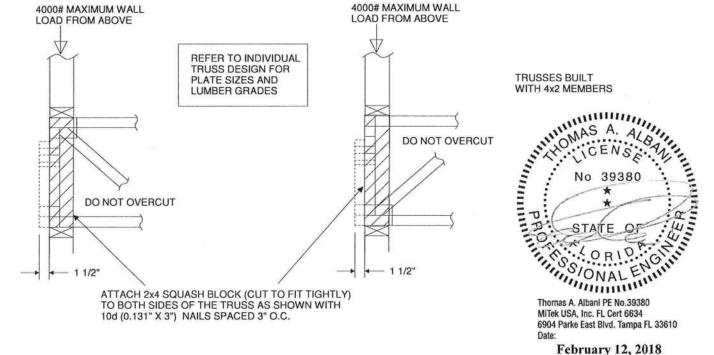
3. THE END ISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.

4. LUMBER MUST BE CUT CLEANLY AND ACCURATELY AND THE REMAINING WOOD MUST BE UNDAMAGED.

5. THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 4X\_ORIENTATION ONLY.

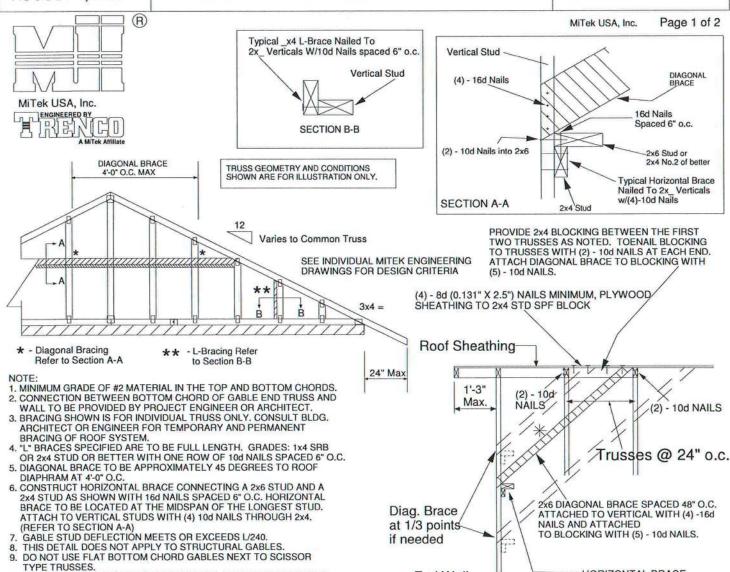
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.





### Standard Gable End Detail

### MII-GE130-D-SP



End Wall

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

10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE

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

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")

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



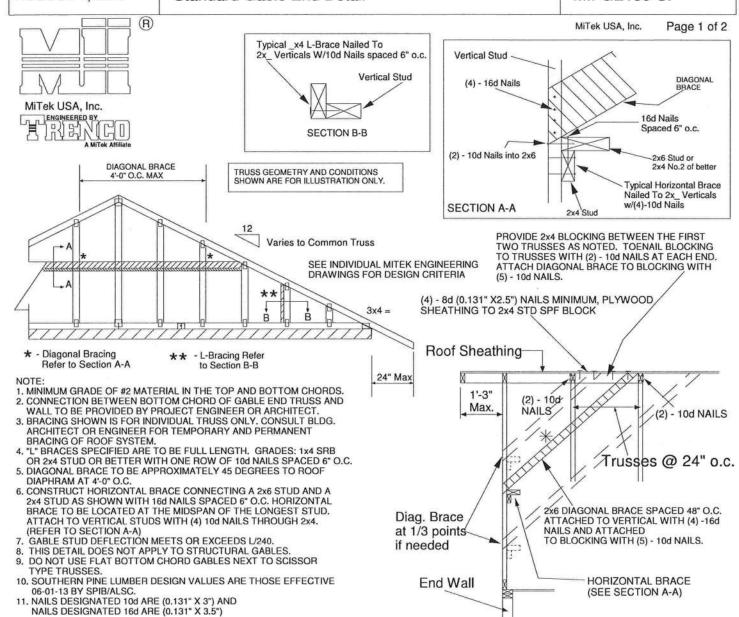
HORIZONTAL BRACE

(SEE SECTION A-A)

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

### Standard Gable End Detail

### MII-GE130-SP



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

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

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

Standard Gable End Detail MII-GE140-001 **JANUARY 6, 2017** R MiTek USA, Inc. Typical \_x4 L-Brace Nailed To 2x\_ Verticals W/10d Nails spaced 6" o.c. Vertical Stud Vertical Stud (4) - 16d Nails MiTek USA, Inc. ENGINEERED BY T NEW 16d Nails Spaced 6" o.c. SECTION B-B (2) - 10d Nails into 2x6 DIAGONAL BRACE 4'-0" O.C. MAX TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY. Typical Horizontal Brace Nailed To 2x\_ Verticals w/(4)-10d Nails SECTION A-A PROVIDE 2x4 BLOCKING BETWEEN THE FIRST Varies to Common Truss TWO TRUSSES AS NOTED. TOENAIL BLOCKING TO TRUSSES WITH (2) - 10d NAILS AT EACH END. ATTACH DIAGONAL BRACE TO BLOCKING WITH SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA (5) - 10d NAILS. (4) - 8d (0.131" X 2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD DF/SPF BLOCK 3x4 = Roof Sheathing - Diagonal Bracing - L-Bracing Refer Refer to Section A-A to Section B-B 24" Max 1'-3" 1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS. 2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND (2) - 10dMax. NAILS WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.

Diag. Brace

at 1/3 points

End Wall

if needed

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

4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. GRADES: 1x4 SRB

OR 2x4 STUD OR BETTER WITH ONE ROW OF 10d NAILS SPACED 6" O.C.

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

6. CONSTRUCT HORIZONTAL BRACE CONNECTING A 2x6 STUD AND A 2x4 STUD AS SHOWN WITH 16d NAILS SPACED 6" O.C. HORIZONTAL BRACE TO BE LOCATED AT THE MIDSPAN OF THE LONGEST STUD. ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4. (REFER TO SECTION A-A)

GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

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

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

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



2x6 DIAGONAL BRACE SPACED 48" O.C.

ATTACHED TO VERTICAL WITH (4) -16d

HORIZONTAL BRACE

(SEE SECTION A-A)

TO BLOCKING WITH (5) - 10d NAILS.

NAILS AND ATTACHED

Page 1 of 2

DIAGONAL

2x6 Stud or

2x4 No.2 of better

(2) - 10d NAILS

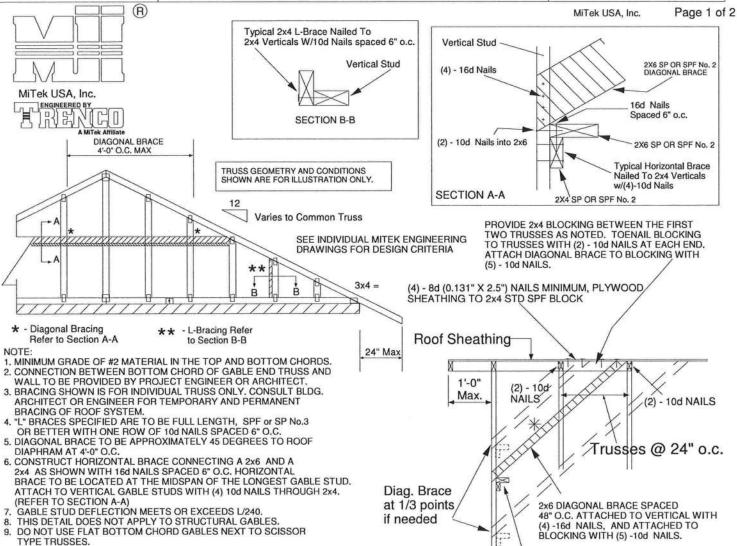
Trusses @ 24" o.c.

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

January 19, 2018

### Standard Gable End Detail

### MII-GE170-D-SP



End Wall

 SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.

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

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

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

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

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



HORIZONTAL BRACE

(SEE SECTION A-A)

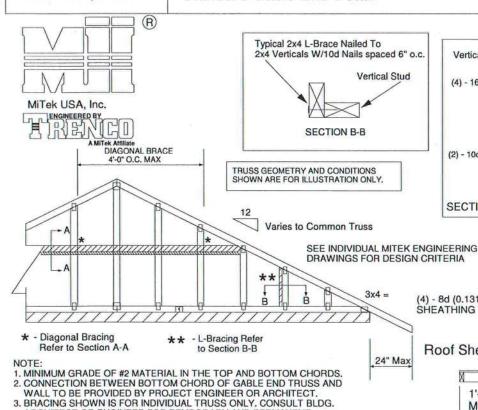
Thomas A. Albani PE No.39380 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

### Standard Gable End Detail

### MII-GE180-D-SP

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MiTek USA, Inc.



Vertical Stud 2X6 SP OR SPF No. 2 DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2X6 SP OR SPF No. 2 Typical Horizontal Brace Nailed To 2x4 Verticals w/(4)-10d Nails

> 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

2X4 SP OR SPF No. 2

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

Diag. Brace

at 1/3 points

End Wall

if needed

Roof Sheathing

Max.

SECTION A-A

1'-0" (2) - 10d

NAILS

(2) - 10d NAILS

2x6 DIAGONAL BRACE SPACED

BLOCKING WITH (5) -10d NAILS.

48" O.C. ATTACHED TO VERTICAL WITH

HORIZONTAL BRACE

(SEE SECTION A-A)

(4) -16d NAILS, AND ATTACHED TO

Trusses @ 24" o.c.

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

ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT

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.

THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.

9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR

10. SOUTHERN F 06-01-13 BY S 11. NAILS DESIG NAILS DESIG	PINE LUMB SPIB/ALSC. NATED 100	HARE (0.131	' X 3") AND	OSE EFFECTIVE	
Minimum Stud Size Species	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
and Grade	1876881		Maximum St	ud 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

	The state of the s		~	7.77	1
2x4 SP No. 3 / Stud	16" O.C.	3-2-8	4-8-1	6-2-1	
2x4 SP No. 3 / Stud	24" O.C.	2-7-7	3-9-12	5-2-13	
2x4 SP No. 2	12" O.C.	3-10-0	5-4-11	6-2-1	Г
2x4 SP No. 2	16" O.C.	3-5-13	4-8-1	6-2-1	Г
2x4 SP No. 2	24" O.C.	3-0-8	3-9-12	6-1-1	T
one edge.	Diagonal be both edges	races over 1 s. Fasten T	a 2x4 T-Brace 2'-6" require 2x and I braces to	4 I-braces narrow edge	

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.

7-10-4 11-6-1 10-5-7 9-1-9



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MiTek USA, Inc. Page 1 of 1

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

**ASCE 7-10 DURATION OF LOAD INCREASE: 1.60** 

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



(R)

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

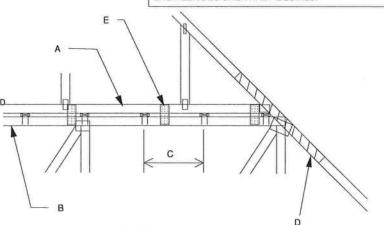
DIRECTIONS AND:

1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR

2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM
PIGGYBACK SPAN OF 12 ft.

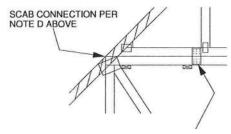
E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH
MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT
72° O.C. W/ (4) (0.131° X 1.5") NAILS PER MEMBER. STAGGER NAILS
FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE.

(MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)

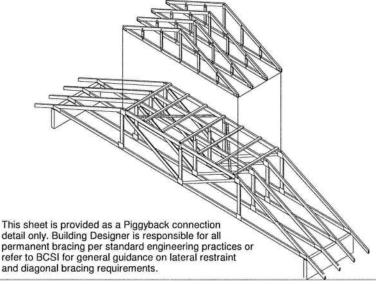


### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

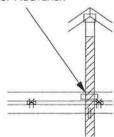
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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



VERTICAL WEB TO EXTEND THROUGH OF PIGGYBACK



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

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

AS SHOWN IN DETAIL.

ATTACH 2 x \_\_\_ x 4\*-0\* SCAB TO EACH FACE OF
TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131\* X 3\*) NAILS
SPACED 4\* O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH
VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)

(MINIMON 2.44)
THIS CONNECTION IS ONLY VALID FOR A MAXIMUM
CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.

FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS.

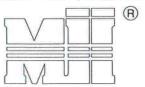
NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS. CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



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### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT



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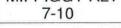
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
SHALL BE CONNECTED TO EACH PURLIN
WITH (2) 0(0.131\* X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.
CONNECT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

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 - 64 (0.113" X 2") NAILS INTO EACH CHORD FROM
EACH SIDE (TOTAL - 12 NAILS)

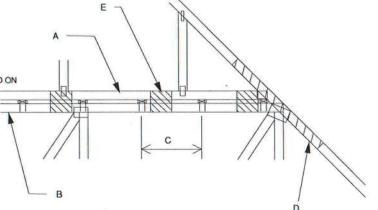


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MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING **EXPOSURE B or C** 

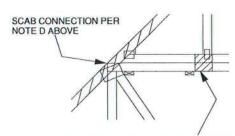
**DURATION OF LOAD INCREASE: 1.60** 

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

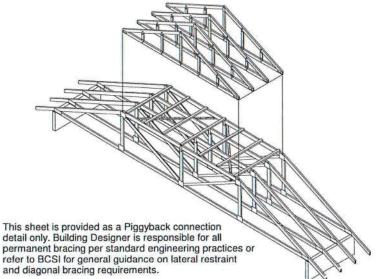


### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS

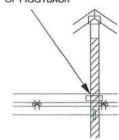
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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



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



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

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

ATTACH 2 x \_ x 4-0" SCAB TO EACH FACE OF TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS SPACED 4" O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.)

(MINIMUM 2X4)
THIS CONNECTION IS ONLY VALID FOR A MAXIMUM
CONCENTRATED LOAD OF 4000 LBS (@1.15). REVIEW
BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS GREATER THAN 4000 LBS.

FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS, NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS. CONCENTRATED LOAD MUST BE APPLIED TO BOTH THE PIGGYBACK AND THE BASE TRUSS DESIGN.



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January 19, 2018

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

### MII-REP01A1

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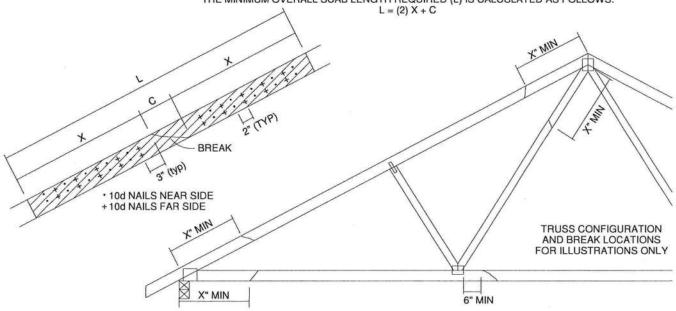


TOTAL NUMBER OF			MAXIMUM FORCE (Ibs) 15% LOAD DURATION							
NAILS EACH SIDE OF BREAK *		X INCHES	SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125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

### \* DIVIDE EQUALLY FRONT AND BACK

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

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



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

### DO NOT USE REPAIR FOR JOINT SPLICES

### NOTES:

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

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

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

  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

### LATERAL TOE-NAIL DETAIL

MII-TOENAIL\_SP

MiTek USA, Inc.

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B

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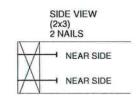
MiTek USA, Inc.

NOTES:

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

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

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY



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

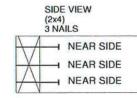
VALUES SHOWN ARE CAPACITY PER TOE-NAIL. APPLICABLE DURATION OF LOAD INCREASES MAY BE APPLIED.

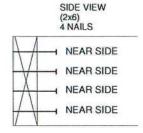
### EXAMPLE:

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

For load duration increase of 1.15:

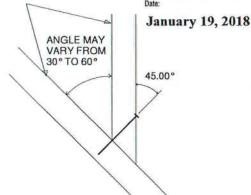
3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

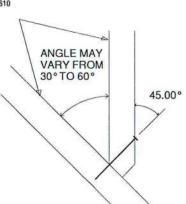


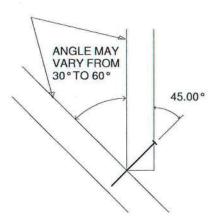




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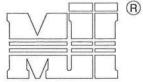


### TRUSSED VALLEY SET DETAIL

### MII-VALLEY HIGH WIND1

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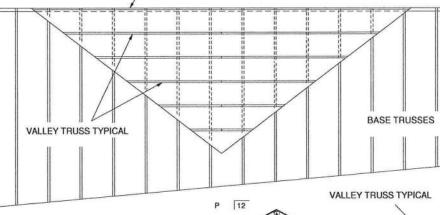
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ENGINEERED BY

GABLE END, COMMON TRUSS OR GIRDER TRUSS

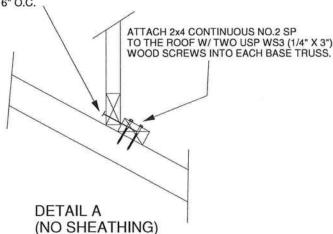
### GENERAL SPECIFICATIONS

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



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

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



N.T.S.

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

ON THE TRUSSES



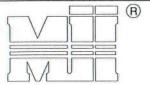
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January 19, 2018

### TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND2

MiTek USA, Inc.



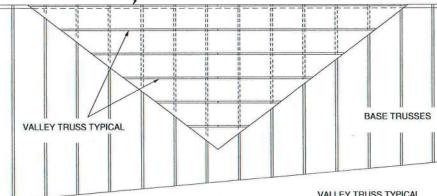
MiTek USA, Inc.

ENGINEERED BY

GABLE END, COMMON TRUSS OR GIRDER TRUSS

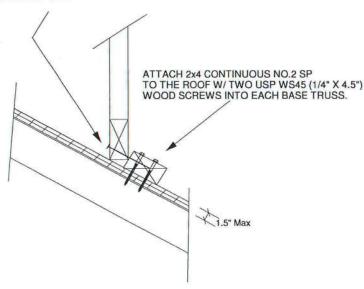
### **GENERAL SPECIFICATIONS**

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



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

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



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



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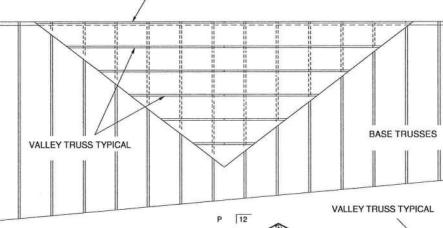
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### **GENERAL SPECIFICATIONS**

- NAIL SIZE 16d (0.131" X 3.5")
   INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- 3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE
- INDIVIDUAL DESIGN DRAWINGS.

  4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
- 5. NAILING DONE PER NDS 01
- 6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
- 7. ALL LUMBER SPECIES TO BE SP.



GABLE END, COMMON TRUSS OR GIRDER TRUSS

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

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

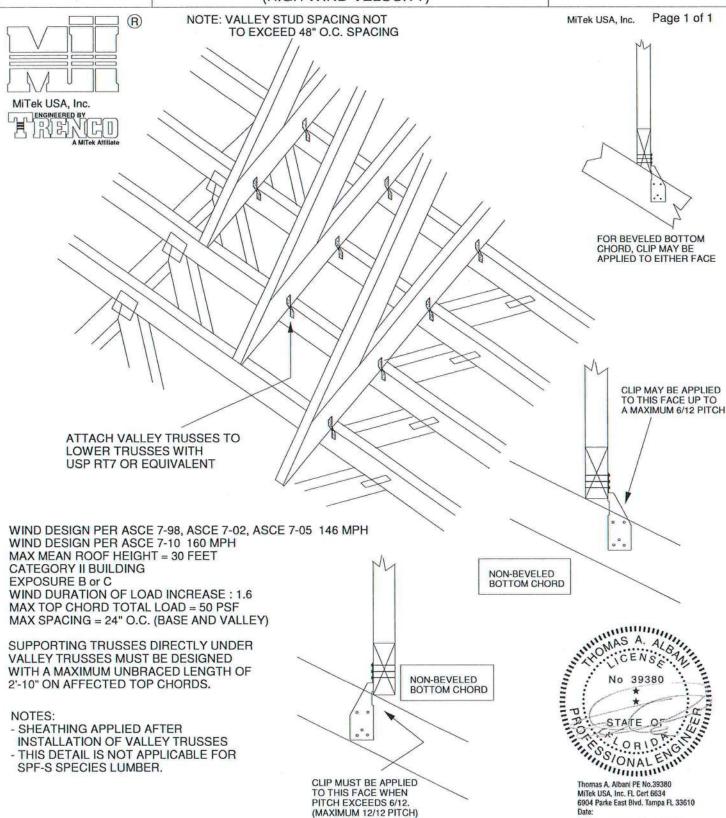


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### TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)

MII-VALLEY

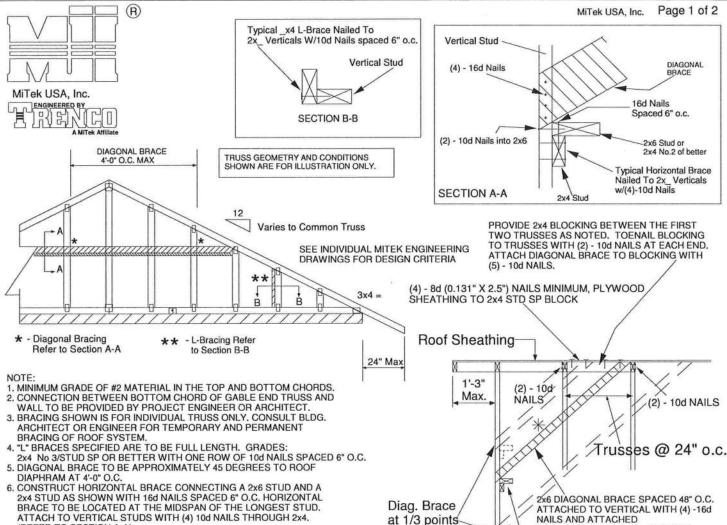
January 19, 2018





### Standard Gable End Detail

### MII-GE146-001



if needed

End Wall

	EXT O TOD NO OFFICIAL TOTAL TO TAKE OF MOLD O O.O. HOTELOTTINE
	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.
-	THE DETAIL DOCK NOT ADDIVIDED CONTINUE CARLES

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

TYPE TRUSSES.

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

Minimum Stud Size Species	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS		
and Grade		Maximum Stud Length					
2x4 SP No 3/Stud	12" O.C.	3-11-3	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.



TO BLOCKING WITH (5) - 10d NAILS.

HORIZONTAL BRACE

(SEE SECTION A-A)

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January 19, 2018

**OCTOBER 5, 2016** 

### REPLACE BROKEN OVERHANG

MII-REP13B

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TRUSS CRITERIA:

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

HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL

**END BEARING CONDITION** 

NOTES:

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

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

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

WHEN NAILING THE SCABS, THE USE OF A BACKUP WEIGHT IS RECOMMENDED.

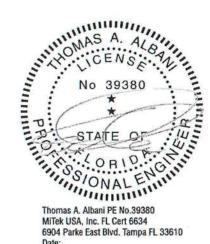
TO AVOID LOOSENING OF THE CONNECTOR PLATES AT THE JOINTS OR SPLICES.

SCAB CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED  $(2.0 \times L)$ 24" MAX

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

Trusses not fitting these criteria should be examined individually.

REFER TO INDIVIDUAL TRUSS DESIGN FOR PLATE SIZES AND LUMBER GRADES



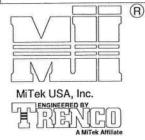
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### LATERAL BRACING RECOMMENDATIONS

MII-STRGBCK

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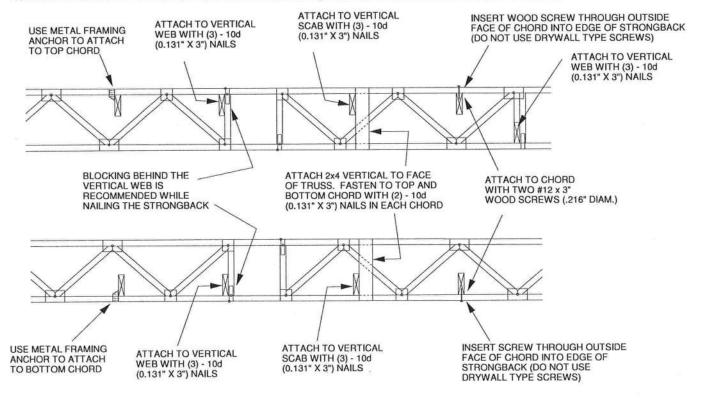
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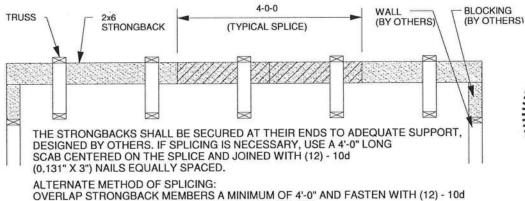


TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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

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





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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