

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

RE: 3129099 - GIEBEIG - SAULS RES.

MiTek USA, Inc.

6904 Parke East Blvd. Tampa, FL 33610-4115

Site Information:

Customer Info: GIEBEIG CONST. Project Name: Sauls Res. Model: Custom

Subdivision: N/A

Lot/Block: N/A

Address: 10640 SW CR 240, 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: FBC2020/TPI2014

Design Program: MiTek 20/20 8.4

Wind Code: ASCE 7-16

Wind Speed: 130 mph

Roof Load: 37.0 psf

Floor Load: N/A psf

This package includes 6 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	T27306215	PB01	4/1/22
2 3 4	T27306216	PB01G	4/1/22
3	T27306217	T01	4/1/22
4	T27306218	T01G	4/1/22
5	T27306219	T02	4/1/22
6	T27306220	T02G	4/1/22



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-Lake City, FL.

Truss Design Engineer's Name: ORegan, Philip

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.



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

April 1,2022

GIEBEIG - SAULS RES. Job Truss Type Qty Truss Ply T27306215 **PB01** Piggyback 26 3129099 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:05 2022 Page 1 Builders FirstSource (Lake City,FL), Lake City, FL - 32055, ID:YPmxjjoROp4_h6tHh_ArnIzVUvx-NumgFqvPXJJoRApwjBwVbU2rlyXSrloO8E8o4IzVRT8 4-0-0 4-0-0 4x4 = 3 7.00 12 0-4-5 15 0-1-10 6 2x4 = 2x4 || 2x4 = 8-0-0 8-0-0 LOADING (psf) SPACING-CSI. DEFL PLATES GRIP 2-0-0 (loc) I/defi L/d 244/190 TCLL 20.0 Plate Grip DOL 1.25 TC 0.20 Vert(LL) 0.00 120 MT20 n/r 7.0 BC TCDL Lumber DOL 1.25 0.01 120 0.10 Vert(CT) 5 n/r 0.0 WB Rep Stress Incr 0.04 0.00 BCLL YES Horz(CT) n/a n/a Code FBC2020/TPI2014 FT = 20% BCDL 10.0 Matrix-P Weight: 25 lb LUMBER-BRACING-TOP CHORD 2x4 SP No.2 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

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

2x4 SP No.3 **OTHERS**

BOT CHORD

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

REACTIONS.

(size) 2=6-3-11, 4=6-3-11, 6=6-3-11

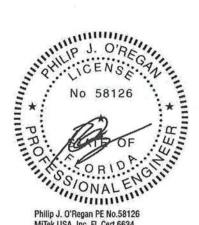
Max Horz 2=-69(LC 10)

Max Uplift 2=-84(LC 12), 4=-93(LC 13), 6=-47(LC 12) Max Grav 2=153(LC 1), 4=153(LC 20), 6=220(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-11 to 3-3-11, Interior(1) 3-3-11 to 4-0-0, Exterior(2R) 4-0-0 to 7-1-13, Interior(1) 7-1-13 to 7-8-5 zone; 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) Gable requires continuous bottom chord bearing.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 84 lb uplift at joint 2, 93 lb uplift at joint 4 and 47 lb uplift at joint 6.
- 8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

April 1,2022

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 MITEKO 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 designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Practing individual temporary and permanent bracing is always required for stability and to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see 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



GIEBEIG - SAULS RES. Truss Type Qty .lob Truss Ply T27306216 PB01G GABLE 3129099 Job Reference (optional) Lake City, FL - 32055, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:06 2022 Page 1 Builders FirstSource (Lake City,FL), ID:YPmxjjoROp4_h6tHh_ArnIzVUvx-s5K2SAv1IdRf3K07HuSk7hb12MtDaC9YNutMckzVRT7 4x4 = 3 7.00 12 0-4-5 0-1-10 6 2x4 || 2x4 = 2x4 = 6-10-2 LOADING (psf) SPACING-CSI DEFL. I/defl **PLATES** GRIP 2-0-0 (loc) L/d 0.00 MT20 244/190 20.0 Plate Grip DOL 1.25 TC 0.14 Vert(LL) 5 n/r 120 TCLL BC 120 Lumber DOL 1.25 0.07 Vert(CT) 0.00 TCDL 7.0 5 n/r WB Rep Stress Incr 0.03 Horz(CT) 0.00 BCLL 0.0 YES n/a n/a Code FBC2020/TPI2014 Weight: 21 lb FT = 20% Matrix-P BCDL 10.0 LUMBER-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.

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

OTHERS 2x4 SP No.3

(size) 2=5-1-13, 4=5-1-13, 6=5-1-13

Max Horz 2=-58(LC 10)

Max Uplift 2=-73(LC 12), 4=-80(LC 13), 6=-37(LC 12)

Max Grav 2=131(LC 1), 4=131(LC 20), 6=178(LC 1)

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

REACTIONS.

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) 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) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 2, 80 lb uplift at joint 4 and 37 lb uplift at joint 6.
- 10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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

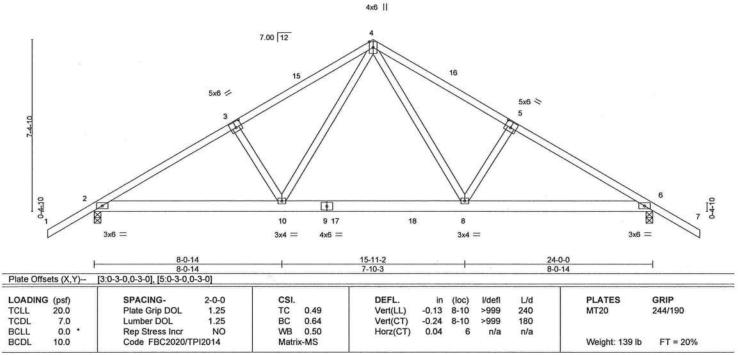
April 1,2022

A 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 design is based only upon parameters and roperly design 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 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 uclings 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



GIEBEIG - SAULS RES. Qty Truss Type Job Truss Ply T27306217 Common 3129099 T01 Job Reference (optional) 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:07 2022 Page 1 ID:YPmxjjoROp4_h6tl+h_krnlzVUvx-KHuRgVwf3wZWhUzJqczzgv87Fm5YJY4hbYdv8AzVRT6 Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 24-0-0 5-11-0 6-1-0

Scale: 1/4"=1"



BRACING-

TOP CHORD

BOT CHORD

LUMBER-

REACTIONS.

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

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

Max Horz 2=260(LC 11)

Max Uplift 2=-521(LC 12), 6=-521(LC 13) Max Grav 2=1391(LC 19), 6=1391(LC 20)

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

TOP CHORD 2-3=-2112/750, 3-4=-1993/775, 4-5=-1993/774, 5-6=-2111/749

BOT CHORD 2-10=-673/1943, 8-10=-313/1261, 6-8=-504/1756

WEBS 4-8=-411/1041, 5-8=-340/314, 4-10=-411/1041, 3-10=-340/314

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 0-8-7, Interior(1) 0-8-7 to 12-0-0, Exterior(2R) 12-0-0 to 15-0-0, Interior(1) 15-0-0 to 26-0-0 zone; 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, with BCDL = 10.0psf.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 521 lb uplift at joint 2 and 521 lb uplift at joint 6.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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

Vert: 1-4=-54, 4-7=-54, 2-10=-20, 8-10=-80(F=-60), 6-8=-20



Structural wood sheathing directly applied or 3-8-8 oc purlins.

Rigid ceiling directly applied or 8-11-5 oc bracing.

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

April 1,2022

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 in the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

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



,

Scale: 1/4"=1"

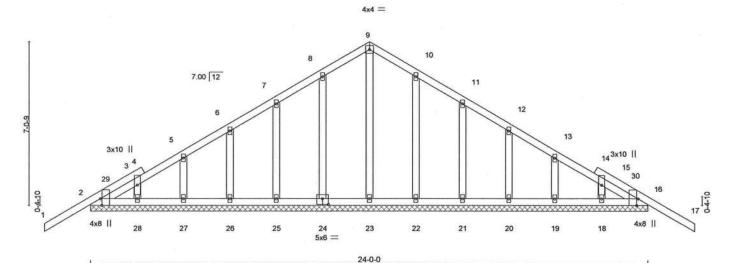


Plate Offsets (X,Y)-[2:0-3-8,Edge], [16:0-3-8,Edge], [24:0-3-0,0-3-0] LOADING (psf) SPACING-CSI. DEFL **PLATES** I/defl GRIP TCLL 20.0 Plate Grip DOL 1.25 TC 0.31 Vert(LL) -0.02 17 120 MT20 244/190 n/r TCDL Lumber DOL 1.25 BC 0.06 Vert(CT) -0.03 17 120 7.0 n/r BCLL 0.0 Rep Stress Incr YES WB 0.13 Horz(CT) 0.01 16 n/a n/a BCDL 10.0 Code FBC2020/TPI2014 Matrix-S Weight: 145 lb FT = 20%

LUMBER-

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

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

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

REACTIONS. All bearings 24-0-0.

(lb) - Max Horz 2=249(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 28, 18 except 24=-106(LC 12), 25=-106(LC 12), 26=-105(LC 12), 27=-103(LC 12), 22=-103(LC 13), 21=-107(LC 13), 20=-104(LC 13), 19=-106(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 16, 23, 24, 25, 26, 27, 28, 22, 21, 20, 19, 18

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

NOTES

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

- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=20ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -2-0-0 to 1-0-0, Exterior(2N) 1-0-0 to 12-0-0, Corner(3R) 12-0-0 to 15-0-0, Exterior(2N) 15-0-0 to 26-0-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate or pip 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.
- 5) All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 7) Gable studs spaced at 2-0-0 oc.
- 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 28, 18 except (jt=lb) 24=106, 25=106, 26=105, 27=103, 22=103, 21=107, 20=104, 19=106.



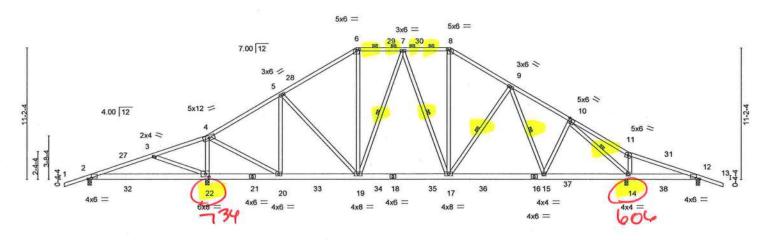
Philip J. O'Regan PE No.58126 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

April 1,2022



GIEBEIG - SAULS RES. Job Truss Truss Type Qty Ply T27306219 3129099 T02 Piggyback Base 26 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:10 2022 Page 1 ID:YPmxjjoROp4_h6tHh_ArnIzVUvx-ksZZIXyYLry5YxiuWkWgIXmdqz8XWtH7HWrZIVzVRT3 30-10-5 4-0-0 36-0-0 41-0-0 46-0-0 52-0-0 5-8-0 4-0-0 5-0-0

Scale = 1:94.2



	t .	10-0-0	10-1-12	16-5-0	1 22	-10-5	30-10-5		3	8-10-0		45-10-4	46,0-0	52-0-0	- 3
		10-0-0	0-1-12	6-3-4	1 6	-5-5	8-0-0		7	-11-11		7-0-4	0-1-12	6-0-0	- 3
Plate Off	sets (X,Y)	[2:0-3-7,0-0-11], [6:0	0-3-0,0-1-	12], [8:0-3-0	,0-1-12], [1	0:0-2-8,0-3-	0], [12:0-3-6,0-0-11], [22:0-	3-8,0-3	-0]					
LOADIN	G (psf)	SPACING-	2-	-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	Р	LATES	GR	IP
TCLL	20.0	Plate Grip DC	DL 1	1.25	TC	0.54	Vert(LL)	0.22	22-24	>560	240	l N	T20	244	1/190
CDL	7.0	Lumber DOL	1	1.25	BC	0.49	Vert(CT)	0.20	22-24	>621	180	1			
BCLL	0.0 *	Rep Stress In	icr Y	/ES	WB	0.60	Horz(CT)	0.04	12	n/a	n/a	1			
BCDL	10.0	Code FBC20	20/TPI20	14	Matri	x-MS	2. (4)					V	Veight: 368	3 lb F	T = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

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

BRACING-TOP CHORD

Structural wood sheathing directly applied or 4-5-10 oc purlins,

except

2-0-0 oc purlins (5-3-13 max.): 6-8.

BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. 1 Row at midpt

WEBS

7-19, 7-17, 9-17, 9-15, 10-14

REACTIONS.

All bearings 0-3-8.

(lb) - Max Horz 2=-247(LC 13)

Max Uplift All uplift 100 lb or less at joint(s) except 2=-391(LC 8), 22=-734(LC 12), 14=-606(LC 13),

12=-296(LC 9)

Max Grav All reactions 250 lb or less at joint(s) except 2=365(LC 23), 22=2106(LC 2), 14=1730(LC 2), 12=308(LC 24)

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

TOP CHORD 2-3=-126/300, 3-4=-272/441, 4-5=-1168/454, 5-6=-1335/714, 6-7=-1087/696,

7-8=-1198/750, 8-9=-1445/784, 9-10=-1647/765

BOT CHORD 20-22=-444/452, 19-20=-249/1138, 17-19=-175/1173, 15-17=-335/1343, 14-15=-355/1333

3-22=-428/483, 4-22=-1612/749, 4-20=-627/1576, 5-20=-559/461, 5-19=-189/266,

6-19=-143/442, 7-19=-349/260, 8-17=-201/511, 9-17=-416/325, 10-15=-61/287,

10-14=-1762/691, 11-14=-269/247

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 C; Encl. GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -2-0-0 to 3-2-6, Interior(1) 3-2-6 to 22-10-5, Exterior(2R) 22-10-5 to 28-0-11, Interior(1) 28-0-11 to 30-10-5, Exterior(2R) 30-10-5 to 36-0-0, Interior(1) 36-0-0 to 54-0-0 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) 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) Provide adequate drainage to prevent water ponding.

- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 391 lb uplift at joint 2, 734 lb uplift at joint 22, 606 lb uplift at joint 14 and 296 lb uplift at joint 12.
- 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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April 1,2022

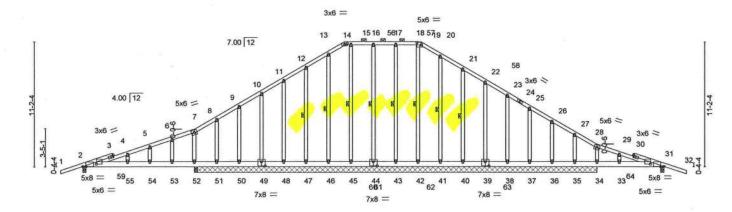
🛦 WARNING - Verity design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITEKS connectors. This knot included mitted the reference of Age min-147 rev. 5/19/20/60 erectors obe. Design valid for use only with MITEKS 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



6904 Parke East Blvd. Tampa, FL 36610

GIEBEIG - SAULS RES. Job Truss Truss Type Qty Ply T27306220 3129099 T02G Piggyback Base Supported Gable 2 Job Reference (optional) Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:12 2022 Page 1 ID:YPmxjjoROp4_h6tHh_ArnIzVUvx-gEhKjD_otTCpnFsGd9Y8Nyr0fnmP_u3QlqKgqOzVRT1 30-3-6 6-10-2 10-0-0 46-0-0 52-0-0 15-8-10 6-0-0

Scale = 1:99.2



		10-0-0	T.				52-0	-0				3
		10-0-0					42-0	-0				
Plate Offs	sets (X,Y)-	[2:0-3-5,0-0-3], [2:1-2-9,0	-2-10], [14:0-3	-0,0-1-12], [1	9:0-4-8,0-2-	8], [31:0-3-5,0-0-3],	[31:1-2-9	,0-2-1	0], [39:0	-4-0,0-4-8], [[44:0-4-0,0-4-8], [49:0-4	-0,0-4-8]
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.32	Vert(LL)	0.24 54	-55	>484	240	MT20	244/190
CDL	7.0	Lumber DOL	1.25	BC	0.72	Vert(CT)	0.21 54	-55	>573	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	31	n/a	n/a	142	
BCDL	10.0	Code FBC2020/T	PI2014	Matri	x-S	20.00					Weight: 415 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2

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

2x4 SP No.3 **OTHERS**

BRACING-

WEBS

TOP CHORD **BOT CHORD**

2-0-0 oc purlins (10-0-0 max.): 14-19. Rigid ceiling directly applied or 6-0-0 oc bracing.

Structural wood sheathing directly applied or 8-4-7 oc purlins, except

1 Row at midpt

16-44, 15-45, 13-46, 12-47, 17-43, 18-42, 20-41, 21-40

REACTIONS.

All bearings 36-0-0 except (jt=length) 2=0-3-8, 31=0-3-8.

(lb) - Max Horz 52=263(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 45, 46, 49, 42, 41, 35 except

2=-377(LC 8), 31=-305(LC 9), 44=-127(LC 8), 47=-113(LC 12), 48=-108(LC 12), 50=-179(LC 9), 51=-374(LC 23), 52=-744(LC 8), 43=-125(LC 9), 40=-112(LC 13), 39=-103(LC 13), 38=-106(LC 13), 37=-101(LC 13), 36=-117(LC 13), 34=-294(LC

Max Grav All reactions 250 lb or less at joint(s) 44, 45, 46, 47, 48, 49, 43, 42,

41, 40, 39, 38, 37, 36, 35 except 2=402(LC 23), 31=312(LC 24), 50=286(LC 23), 51=444(LC 8), 52=887(LC 23), 52=886(LC 1), 34=387(LC 24)

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

TOP CHORD

2-4=-396/137, 4-5=-375/124, 5-6=-358/148, 6-7=-315/165, 12-13=-58/255, 13-14=-78/269, 14-15=-70/253, 15-16=-70/253, 16-17=-70/253, 17-18=-70/253

18-19=-70/253, 19-20=-77/264, 26-27=-269/163, 27-28=-321/183, 28-29=-354/159,

29-31=-377/140

BOT CHORD

2-55=-144/436, 54-55=-144/436, 53-54=-144/436, 52-53=-144/436, 51-52=-145/413, 50-51=-145/413, 49-50=-145/413, 48-49=-145/413, 47-48=-145/413, 46-47=-145/413, 45-46=-145/413, 44-45=-145/413, 43-44=-145/413, 42-43=-145/413, 41-42=-145/413,

40-41=-145/413, 39-40=-145/413, 38-39=-145/413, 37-38=-145/413, 36-37=-145/413,

35-36=-145/413, 34-35=-145/413, 33-34=-145/413, 31-33=-145/413

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 C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -2-0-0 to 3-2-6, Exterior(2N) 3-2-6 to 23-5-4, Corner(3R) 23-5-4 to 28-7-10, Exterior(2N) 28-7-10 to 30-3-6, Corner(3R) 30-3-6 to 35-5-12, Exterior(2N) 35-5-12 to 54-0-0 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) 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.
- 5) Provide adequate drainage to prevent water ponding.
- 6) All plates are 2x4 MT20 unless otherwise indicated.

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

Continued on page 2



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

April 1,2022

🛦 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 and exploration and 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 ANS/ITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	GIEBEIG - SAULS RES.	
3129099.	T02G	Piggyback Base Supported Gable	2	1	T2	27306220
01120001		, ,53,523, 235, 255,			Job Reference (optional)	
Builders FirstSource (Lak	e City,FL). Lake City, FL -	32055.	- 1	8.430 s Aug	16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:13 2022 P	age 2

8.430 s Aug 16 2021 MiTek Industries, Inc. Thu Mar 31 10:48:13 2022 Page 2 ID:YPmxjjoROp4_h6tHh_ArnIzVUvx-8RFiwZ?QemKfPPQTBt4NvANBOB6ejLIa_U4DMqzVRT0

9) * 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

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 45, 46, 49, 42, 41, 35 except (jt=lb) 2=377, 31=305, 44=127, 47=113, 48=108, 50=179, 51=374, 52=744, 43=125, 40=112, 39=103, 38=106, 37=101, 36=117, 34=294.

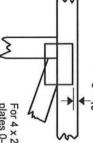
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Symbols

PLATE LOCATION AND ORIENTATION



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



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

œ

O

G

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

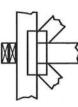
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

LATERAL BRACING LOCATION



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

BEARING



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

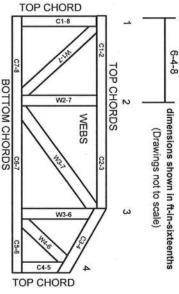
Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction

DSB-89

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

Numbering System



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

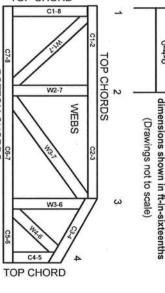
PRODUCT CODE APPROVALS

ICC-ES Reports

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

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





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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- Truss bracing must be designed by an engineer. For may require bracing, or alternative Tor I bracing should be considered. wide truss spacing, individual lateral braces themselves
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.

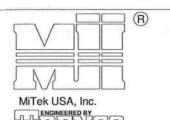
ω

- Provide copies of this truss design to the building all other interested parties. designer, erection supervisor, property owner and
- Cut members to bear tightly against each other
- joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1. Place plates on each face of truss at each
- 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
- 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.
- 18. Use of green or treated lumber may pose unacceptable project engineer before use. environmental, health or performance risks. Consult with
- 19. Review all portions of this design (front, back, words is not sufficient and pictures) before use. Reviewing pictures alone
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
- 21. The design does not take into account any dynamic or other loads other than those expressly stated.

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

MII-T-BRACE 2

MiTek USA, Inc. Page 1 of 1



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

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

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)

Nails	
	SPACING
WEB	
	T-BRACE
Nails Section Detail T-Brace	
Web	

Nails	
Web	I-Brace
Nails	

	Brace Size 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.



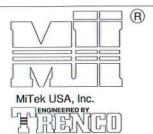
Thomas A. Albani PE No.39380 MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

SCAB-BRACE DETAIL

MII-SCAB-BRACE

MiTek USA, Inc.

Page 1 of 1

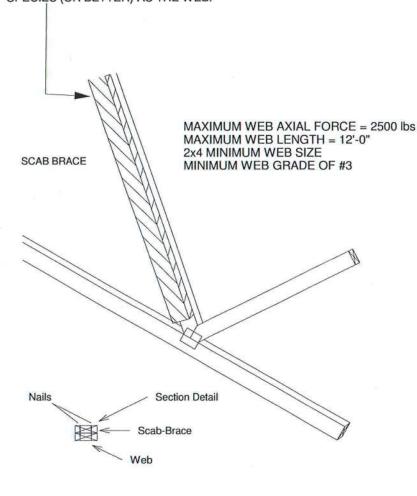


Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.

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.

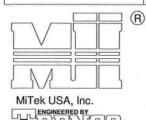


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STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)

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.

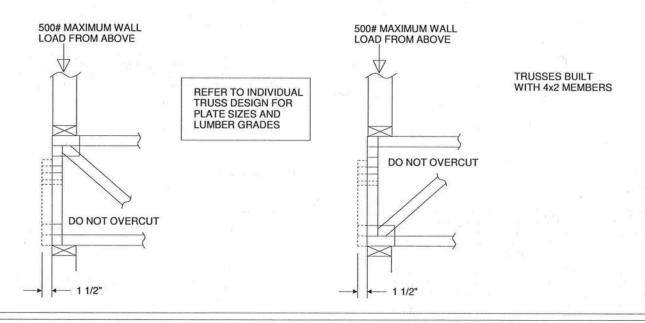
AFFLING REPAIR AND HELD IN PLACE DURING APPLICATION OF REPAIR.

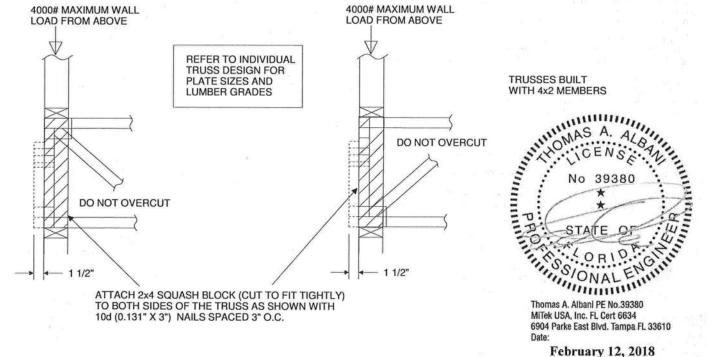
3. THE END DISTANCE, EDGE DISTANCE, AND SPACING OF NAILS SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD.

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

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

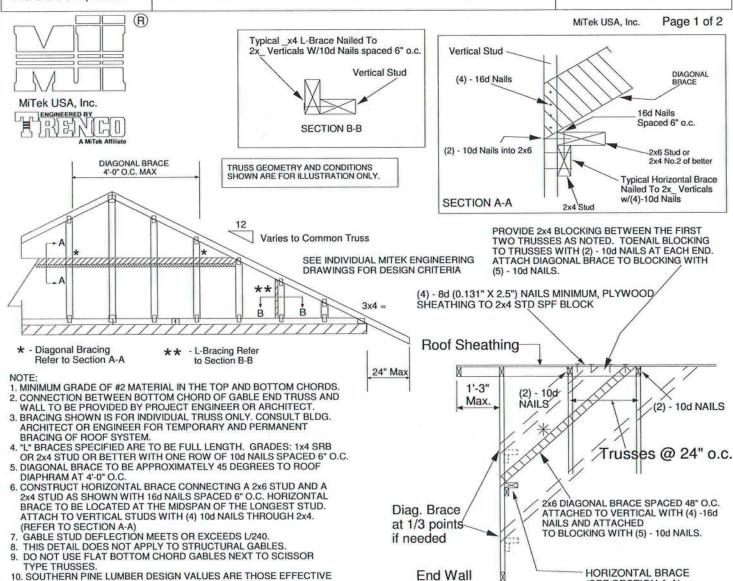
6. CONNECTOR PLATES MUST BE FULLY IMBEDDED AND UNDISTURBED.





Standard Gable End Detail

MII-GE130-D-SP -



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			Maximu	aximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7		
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13		
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1		

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

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

06-01-13 BY SPIB/ALSC.

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.



(SEE SECTION A-A)

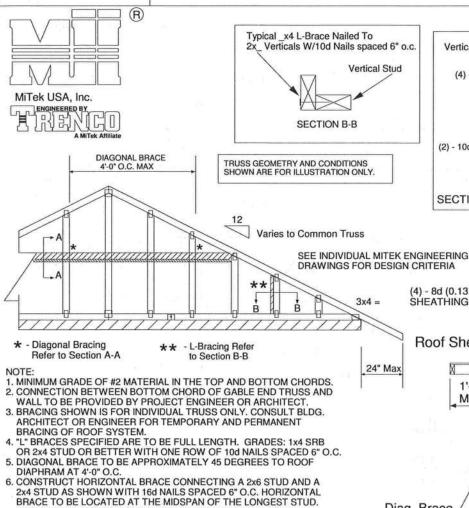
MiTek USA, Inc. FL Cert 6634 6904 Parke East Blvd. Tampa FL 33610 Date:

Standard Gable End Detail

MII-GE130-SP

Page 1 of 2

MiTek USA, Inc.



Vertical Stud DIAGONAL BRACE (4) - 16d Nails 16d Nails Spaced 6" o.c. (2) - 10d Nails into 2x6 2x6 Stud or 2x4 No.2 of better Typical Horizontal Brace Nailed To 2x_ Verticals w/(4)-10d Nails **SECTION A-A**

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

(4) - 8d (0.131" X2.5") NAILS MINIMUM, PLYWOOD SHEATHING TO 2x4 STD SPF BLOCK

Roof Sheathing

1'-3" (2) - 10d Max. NAILS (2) - 10d NAILS Trusses @ 24" o.c.

2x6 DIAGONAL BRACE SPACED 48" O.C.

ATTACHED TO VERTICAL WITH (4) -16d

Diag. Brace at 1/3 points if needed

NAILS AND ATTACHED TO BLOCKING WITH (5) - 10d NAILS.

End Wall

HORIZONTAL BRACE (SEE SECTION A-A)

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

(REFER TO SECTION A-A)

06-01-13 BY SPIB/ALSC.

TYPE TRUSSES.

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		140	Maximu	n 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.

ATTACH TO VERTICAL STUDS WITH (4) 10d NAILS THROUGH 2x4.

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

10. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE

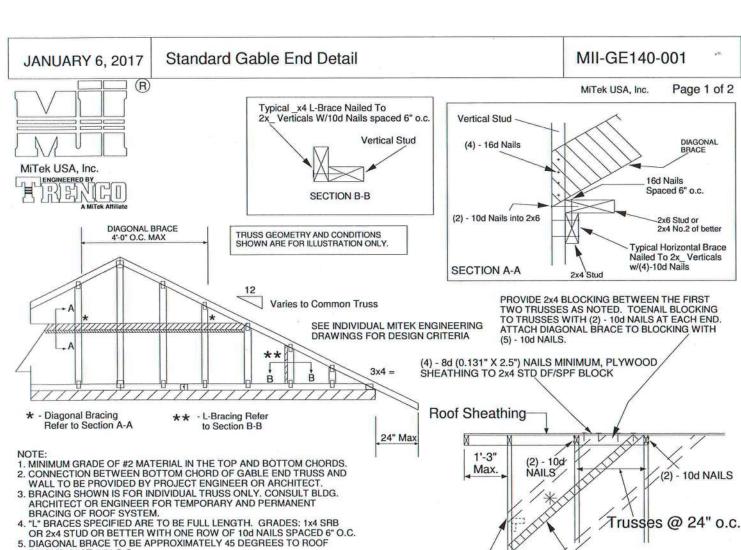
GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

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



Diag. Brace

at 1/3 points

End Wall

if needed

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	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 Lei	ngth	
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.



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

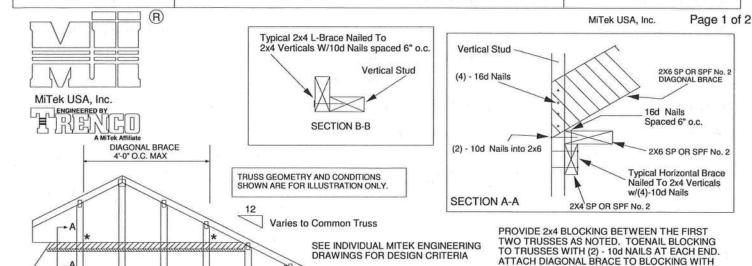
DIAGONAL BRACE

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

January 19, 2018

Standard Gable End Detail

MII-GE170-D-SP



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.

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

"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

5. DIAGONAL BRACE TO BE AND A
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)

GABLE STUD DEFLECTION MEETS OR EXCEEDS L/240.

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

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

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 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.

1'-0" - 10d Max. NAILS (2) - 10d NAILS Trusses @ 24" o.c. Diag. Brace at 1/3 points 2x6 DIAGONAL BRACE SPACED 48" O.C. ATTACHED TO VERTICAL WITH if needed (4) -16d NAILS, AND ATTACHED TO BLOCKING WITH (5) -10d NAILS. End Wall

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

Roof Sheathing

No 39380

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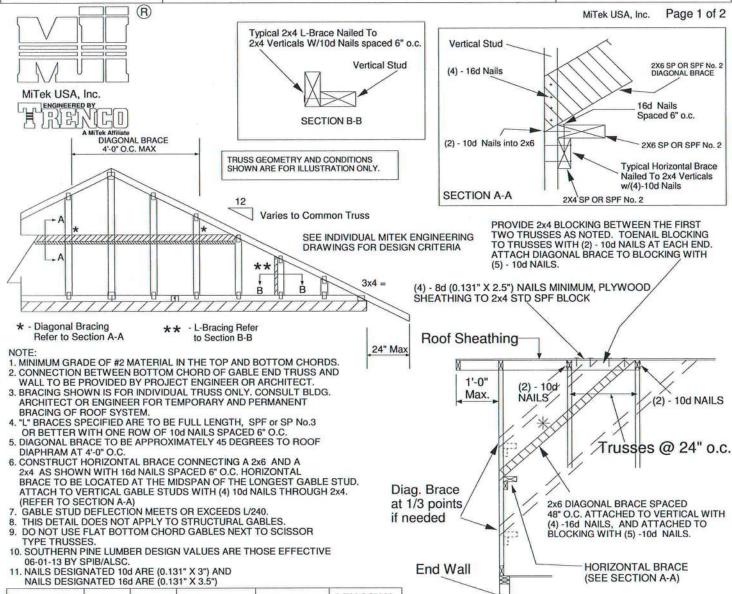
WAS A. Albani PE No.

USA, Inc. FL Cert

te East Blvd

Standard Gable End Detail

MII-GE180-D-SP



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.	3-7-12	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

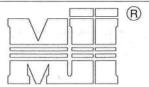
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.

No 39380

STATE OF WARREN OF THE SOLUTION OF T

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

MiTek USA, Inc. Page 1 of 1



MiTek USA, Inc.

加盟 3 MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C **ASCE 7-10 DURATION OF LOAD INCREASE: 1.60**

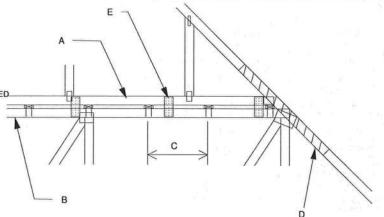
DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) (0.131° X.3.5") TOE-NAILED. B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.

B - BASE THUSS, HEFER 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. DIRECTIONS AND:

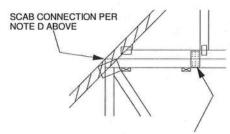
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR 2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM

PIGGYBACK SPAN OF 12 It. E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3/8 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)

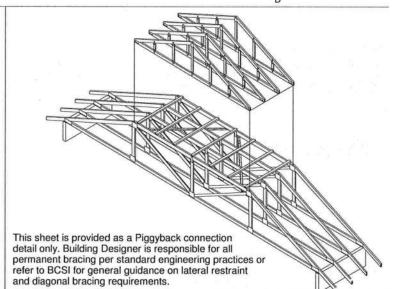


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

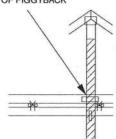
REPLACE TOF NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-On PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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



VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

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

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.

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.

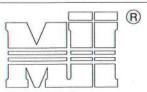


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STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

MII-PIGGY-ALT 7-10

MiTek USA, Inc. Page 1 of 1



MiTek USA, Inc.

ENGINEERED BY

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

DURATION OF LOAD INCREASE: 1.60

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

A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED. B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.

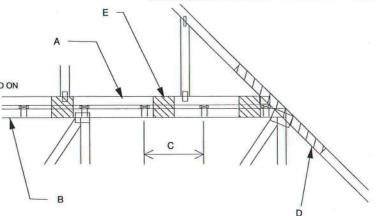
- BASE TRUSS, REFER TO MITEK TRUSS DESIGN DHAWING.
- PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C.
UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING.
CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
- 2 X __ X 4"-0" SCAB, SIZE TO MATCH TOP CHORD OF
PIGGYBACK TRUSS, MIN GRADE #2, 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:

DIRECTIONS AND.

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

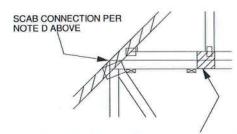
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM

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

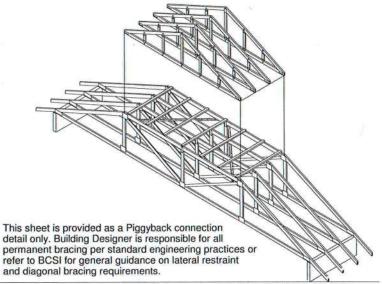


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

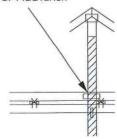
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH PLYWOOD GUSSETS AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING.



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



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



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

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

AS SHOWN IN DETAIL.

ATTACH 2 x x 4-0° SCAB TO EACH FACE OF

TRUSS ASSEMBLY WITH 2 ROWS OF 10d (0.131" X 3") NAILS

SPACED 4° O.C. FROM EACH FACE. (SIZE AND GRADE TO MATCH

VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS.) (MINIMUM 2X4)

(MINIMINION 24)
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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Page 1 of 1

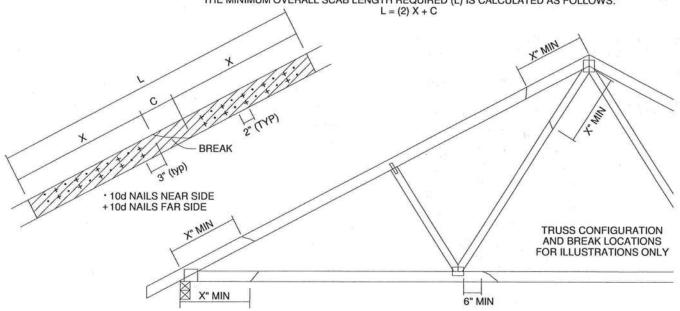


TOTAL NUMBER OF NAILS EACH SIDE OF BREAK *			MAXIMUM FORCE (lbs) 15% LOAD DURATION							
		X INCHES	SP		DF		SPF		HF	
2x4	2x6		2x4	2x6	2x4	2x6	2x4	2x6	2x4	2x6
20	30	24"	1706	2559	1561	2342	1320	1980	1352	2028
26	39	30"	2194	3291	2007	3011	1697	2546	1738	2608
32	48	36"	2681	4022	2454	3681	2074	3111	2125	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

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

 THIS REPAIR IS TO BE USED FOR SINGLE PLY TRUSSES IN THE 2x_ORIENTATION ONLY.
- THIS REPAIR IS LIMITED TO TRUSSES WITH NO MORE THAN THREE BROKEN MEMBERS.



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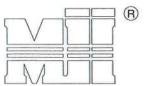
January 19, 2018

LATERAL TOE-NAIL DETAIL

MII-TOENAIL SP .

MiTek USA, Inc.

Page 1 of 1



MiTek USA, Inc. ENGINEERED BY

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

ILLUSTRATION PURPOSES ONLY

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

3.25"

(2x3) 2 NAILS **NEAR SIDE** NEAR SIDE

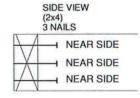
SIDE VIEW

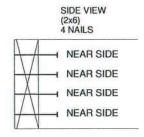
VIEWS SHOWN ARE FOR

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

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

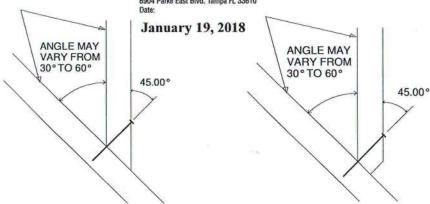
For load duration increase of 1.15: 3 (nails) X 84.5 (lb/nail) X 1.15 (DOL) = 291.5 lb Maximum Capacity

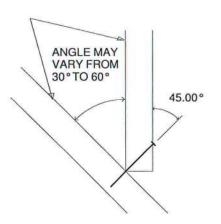






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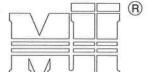


TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND1

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Page 1 of 1

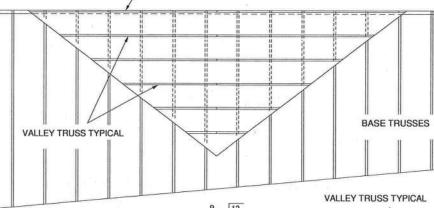


MiTek USA, Inc.

GABLE END, COMMON TRUSS OR GIRDER TRUSS

GENERAL SPECIFICATIONS

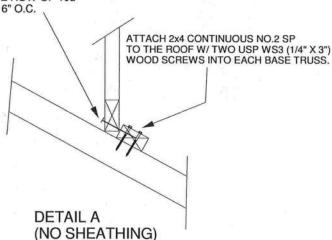
- 1. NAIL SIZE 10d (0.131" X 3") 2. WOOD SCREW = 3" WS3 USP OR EQUIVALENT DO NOT USE DRYWALL OR DECKING TYPE SCREW
- 3. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- 4. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
 5. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN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



GABLE END, COMMON TRUSS OR GIRDER TRUSS 12 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 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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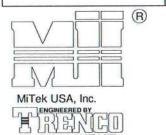
January 19, 2018

TRUSSED VALLEY SET DETAIL

MII-VALLEY HIGH WIND2 5

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Page 1 of 1



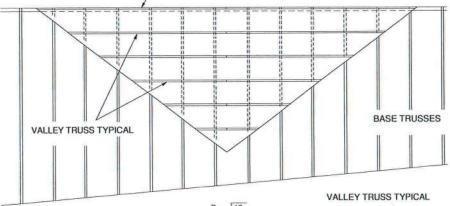
GENERAL SPECIFICATIONS

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.

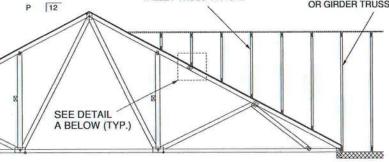
6. NAILING DONE PER NDS-01

7. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.

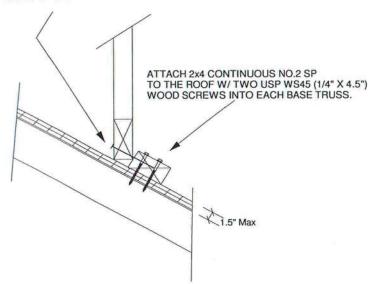


GABLE END, COMMON TRUSS OR GIRDER TRUSS

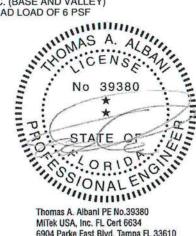
GABLE END, COMMON TRUSS OR GIRDER TRUSS



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



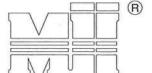
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 146 MPH WIND DESIGN PER ASCE 7-10 160 MPH MAX MEAN ROOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 6/12 CATEGORY II BUILDING **EXPOSURE C** WIND DURATION OF LOAD INCREASE: 1.60 MAX TOP CHORD TOTAL LOAD = 50 PSF MAX SPACING = 24" O.C. (BASE AND VALLEY)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



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Page 1 of 1

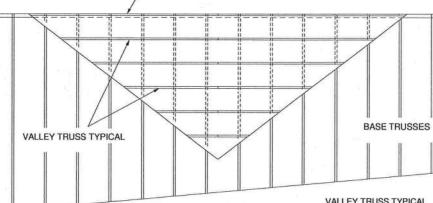


MiTek USA, Inc.

GABLE END, COMMON TRUSS OR GIRDER TRUSS

GENERAL SPECIFICATIONS

- 1. NAIL SIZE 16d (0.131" X 3.5")
- 2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
- 3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
 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 VALLEY TRUSS TYPICAL OR GIRDER TRUSS 12 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.

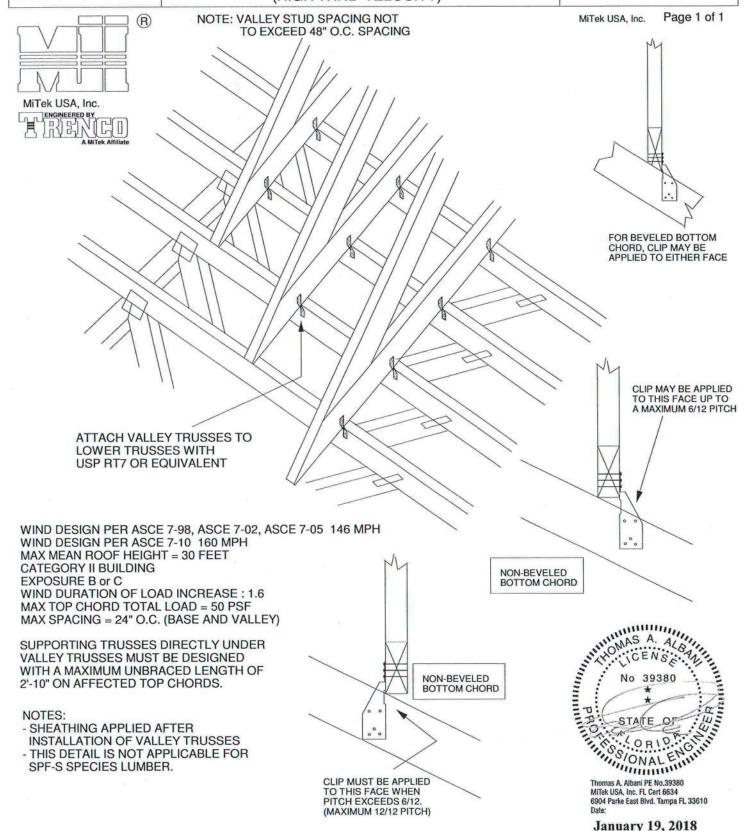
WIND DESIGN PER ASCE 7-98, ASCE 7-02, ASCE 7-05 120 MPH WIND DESIGN PER ASCE 7-10 150 MPH MAX MEAN ROOF HEIGHT = 30 FEET MAX MEAN HOOF HEIGHT = 30 FEET ROOF PITCH = MINIMUM 3/12 MAXIMUM 10/12 CATEGORY II BUILDING EXPOSURE C OR B WIND DURATION OF LOAD INCREASE : 1.60 MAX TOP CHORD TOTAL LOAD = 60 PSF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



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

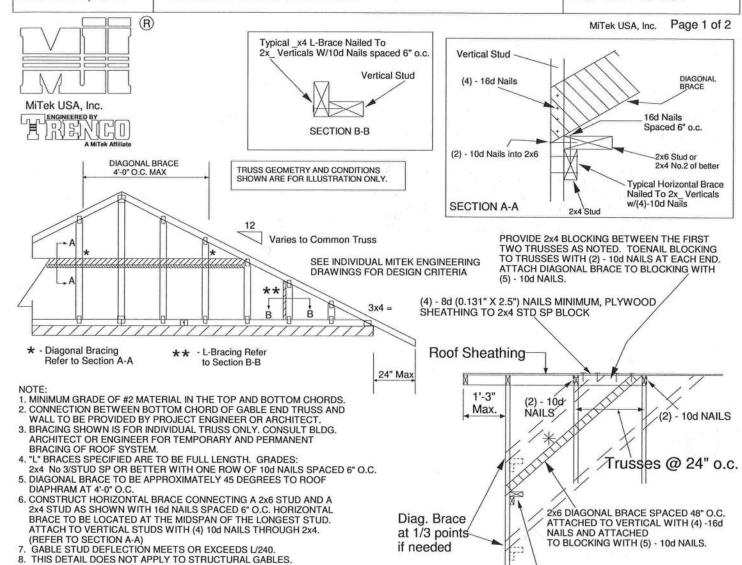
TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)

MII-VALLEY



Standard Gable End Detail

MII-GE146-001



End Wall

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	

DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR

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

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

TYPE TRUSSES.

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 Blyd. Tampa FL 33610 Date:

January 19, 2018

OCTOBER 5, 2016

REPLACE BROKEN OVERHANG

MII-REP13B

MiTek USA, Inc.

Page 1 of 1

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MiTek USA, Inc.

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

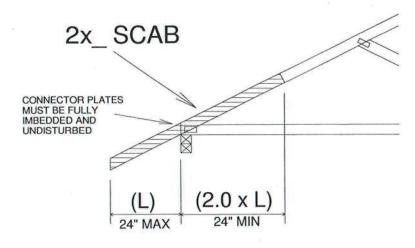
NOTES:

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.

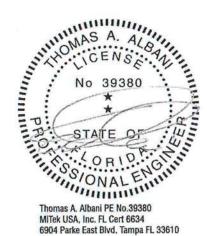


IMPORTANT

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



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

LATERAL BRACING RECOMMENDATIONS

MII-STRGBCK

February 12, 2018

MiTek USA, Inc.

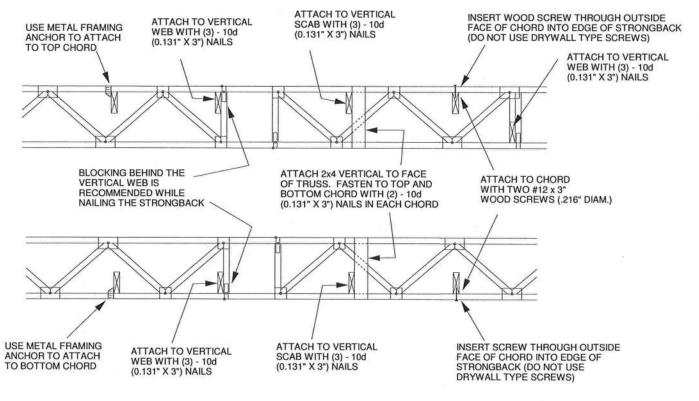
Page 1 of 1

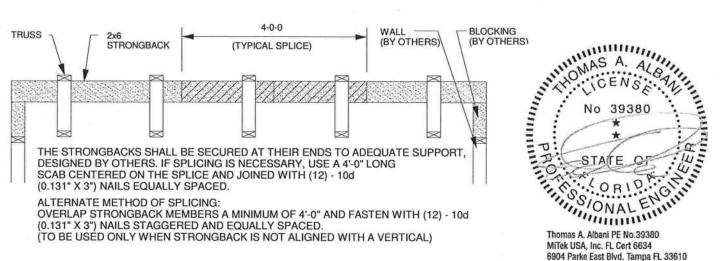


TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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.





MITEK PLATE APPROVAL #'S 2197.2-2197.4, BOISE EWP PRODUCT #'S LVL FL1644-R2, BCI JOISTS FL1392-R2 52-00-00 24-00-00 T01G ALL FLAT CEILINGS 12-00-00 10-00-00 PB01G 7/12 PITCH 54-00-00 PB01G T02G 6-00-00 36-00-00 10-00-00 Per ANSI/TP1 1-2002 all "Truss to Wall" connections are the responsibility of the Building Designer, not the Truse Manufacturer. Use Manufacturer's specifications for all hanger connections unless noted otherwise. Trusses are to be 24° o.c. U.N.O. All hangers are to be 54 mpson or equivalent U.N.O. Use 10d x 1 12" Nails in hanger connections to single ply indectors. Floor 1 Job# N/A 3-31-22 Custom egal Address: ACQ lumber is corrisive to truss plates. Any ACQ lumb that comes in contact with truss plates (i.e. scabbed on tails) must have an approved barrier applied first. Trusses are not designed to support brick U.N.O. Dimensions are Feet-Inches-Sixteenths ral Notes:

3

THE ARROW HEAD AT THE END OF THE TRUSS ON THE TRUSS ON THE TRUSS PLACEMENT PLAN (LAYOUT)
CORRESPONDS WITH THE LEFT SIDE OF THE NUNVIDUAL TRUSS PRAWING, USE THIS AS AN ORIENTATION GUIDE WHEN SETTING THE FRUSSES ON THE TRUSSES ON THE STRUCTURE.

No back charges will be accepted by Builders FirstSource unless approved in writing first. 850-835-4541

Refer to BCSI-B1 Summary Sheet-Guide for handling. Installing and Bracing of Metal Plate Connected Wood Truss prior to and during truss installation.

It is the responsibility of the Contractor to ensure of the proper orientation of the truss placement plans as to the construction documents and field conditions of the structure orientation. If a reversed or flipped layout is required, it will be supplied at no extra cost by Builders required, it will be supplied at no extra cost by Builders

It is the responsibility of the Contractor to make sure the placement of trusses are adjusted for plumbing drops, can lights, ect.... so the trusses do not interfere with these type of items.

All common framed roof or floor systems must be designed as to NOT impose any loads on the floor trusses below. The floor trusses have not been designed to carry any additional loads from above.

This truss placement plan was not created by an engineer, but rather by the Buildere First-Source staff and is solely to be used as an installation guide and does not require a seal. Complete truss engineering and analysis can be found on the truss design drawings which may be sealed by the truss design engineer.

Sable end trusses require continuous bottom chord searing. Refer to local codes for wall framing

Although all attempts have been made to do so, trusses may not be designed symmetrically. Please refer to the individual truss drawings and truss placement plans for proper orientation and placement.

FIRSTSOURCE Builders

Lake City PHONE: 386-755-6894 FAX: 386-755-7973

Jacksonville PHONE: 904-772-6100 FAX: 904-772-1973

Tallahassee PHONE: 850-576-5177

GIEBIEG CONST.

Sauls Res.

KLH
Floor 2 Job#:
N/A 3129099 Roof Job #:

3129099

riginal Ref#:

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