73

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

RE: 2733605 - GIEBEIG CONST. - LOT 9 CW

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

Site Information:
Customer Info: Gioebeig Const. Project Name: Spec Hse Model: 1676
Lot/Block: 9 Subdivision: Crosswinds
Address: TBD, TBD
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: N/A Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: N/A psf

This package includes 21 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	T23368913	CJ01	3/29/21
2	T23368914	CJ03	3/29/21
3	T23368915	CJ05	3/29/21
4	T23368916	EJ01	3/29/21
5	T23368917	EJ02	3/29/21
6	T23368918	HJ08	3/29/21
7	T23368919	HJ10	3/29/21
8	T23368920	PB01	3/29/21
9	T23368921	PB02	3/29/21
10	T23368922	PB03	3/29/21
11	T23368923	PB04	3/29/21
12	T23368924	T01	3/29/21
13	T23368925	T01G	3/29/21
14	T23368926	T02	3/29/21
15	T23368927	T03	3/29/21
16	T23368928	T04	3/29/21
17	T23368929	T05	3/29/21
18	T23368930	T06	3/29/21
19	T23368931	T07	3/29/21
20	T23368932	T08	3/29/21
21	T23368933	V01	3/29/21

COLUMBIA COUNTY BUILDING DEPARTMENT
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Code Compliance
PLANS EXAMINER

COLUMBIA COUNTY BUILDING DEPARTMENT
REVIEWED FOR
FIELD COPY
CODE COMPLIANCE
PLANS EXAMINER

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

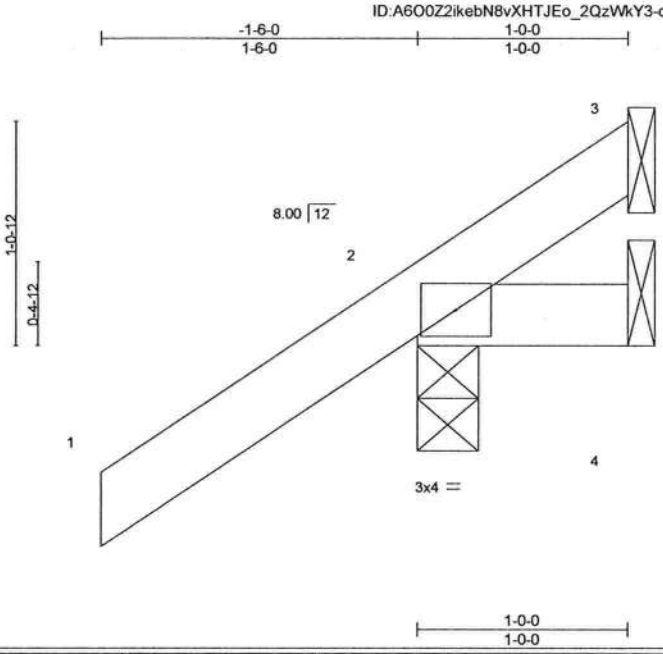
PHILIP J. O'REGAN
LICENSE
No. 58126
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: March 29,2021

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

Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	T23368913
2733605	CJ01	Jack-Open	6	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:40 2021 Page 1
ID:A6O0Z2ikebN8vXHTJEo_2QzWkY3-cpG17OfTzmgWoqltfHVdN1y9B?jwTzqiSvZC8rzW9Mj



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.19	Vert(LL)	0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 6 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=52(LC 12)
Max Uplift 3=-5(LC 1), 2=-69(LC 12), 4=-23(LC 19)
Max Grav 3=7(LC 16), 2=179(LC 1), 4=21(LC 16)

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

NOTES-
1) 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) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

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March 29,2021

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	
2733605	CJ05	Jack-Open	6	1	Job Reference (optional)	T23368915

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:42 2021 Page 1
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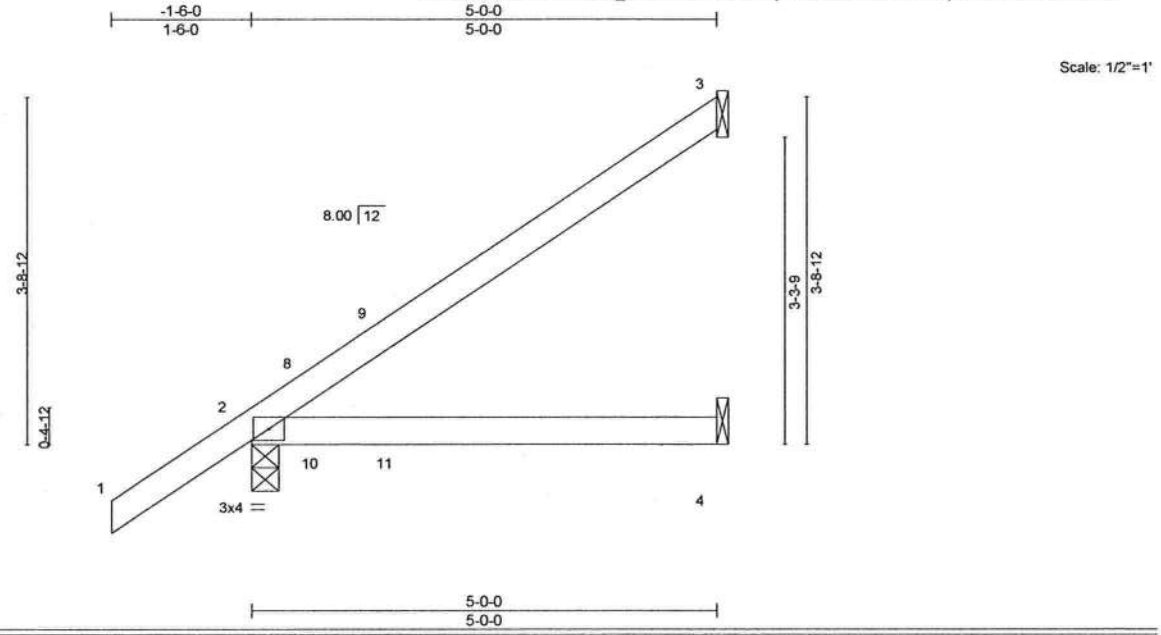

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.34	Vert(LL)	0.08	4-7	>713	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.35	Vert(CT)	0.07	4-7	>824	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 19 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=143(LC 12)
Max Uplift 3=-81(LC 12), 2=-49(LC 12), 4=-29(LC 9)
Max Grav 3=116(LC 19), 2=276(LC 1), 4=89(LC 3)

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

NOTES-
1) 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 4-11-4 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

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March 29,2021

Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW
2733605	EJ02	Monopitch	8	1	T23368917
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:43 2021 Page 1
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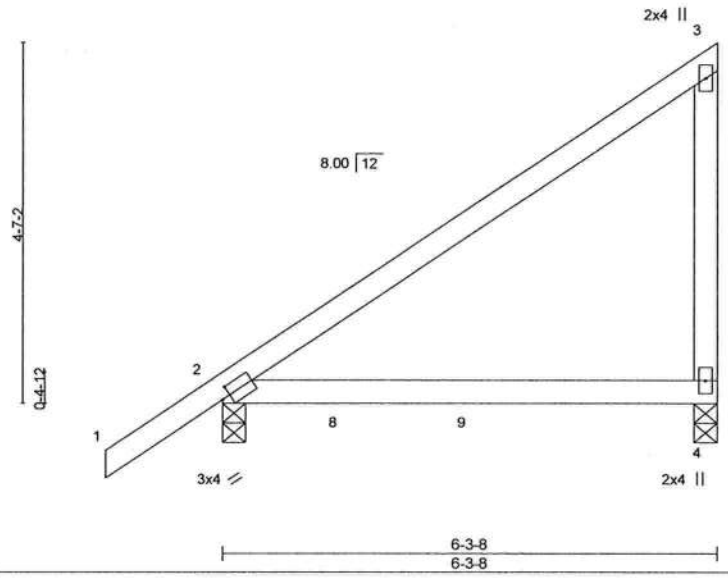

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Plate Offsets (X,Y)-- [2:0-1-5,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.56	Vert(LL)	0.21	4-7	>348	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	0.18	4-7	>401	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 29 lb	FT = 20%

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

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

REACTIONS. (size) 4=0-3-8, 2=0-3-8
Max Horz 2=170(LC 12)
Max Uplift 4=-104(LC 12), 2=-50(LC 12)
Max Grav 4=218(LC 1), 2=318(LC 1)

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

NOTES-
1) 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) -1-6-0 to 1-6-0, Interior(1) 1-6-0 to 6-1-12 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=104.

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Date:
March 29,2021

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	T23368919
2733605	HJ10	Diagonal Hip Girder	2	1	Job Reference (optional)	

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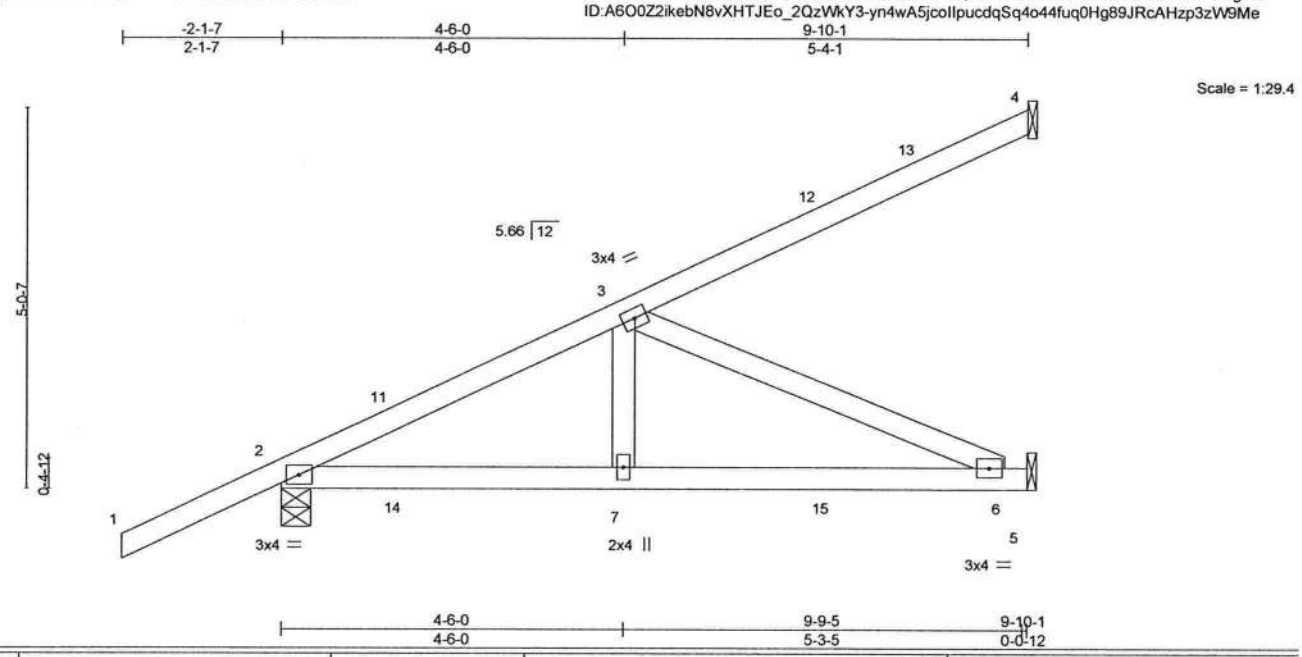

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.58	Vert(LL) 0.07 6-7 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.58	Vert(CT) -0.11 6-7 >999 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.37	Horz(CT) 0.01 5 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 45 lb FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-0-6 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical
Max Horz 2=182(LC 8)
Max Uplift 4=-94(LC 8), 2=-244(LC 8), 5=-191(LC 5)
Max Grav 4=148(LC 1), 2=526(LC 1), 5=300(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-647/328
BOT CHORD 2-7=-387/553, 6-7=-387/553
WEBS 3-7=-94/285, 3-6=-604/423

NOTES-
1) 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; porch left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=244, 5=191.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 60 lb down and 73 lb up at 1-6-1, 60 lb down and 73 lb up at 1-6-1, 76 lb down and 46 lb up at 4-4-0, 76 lb down and 46 lb up at 4-4-0, and 104 lb down and 92 lb up at 7-1-15, and 104 lb down and 92 lb up at 7-1-15 on top chord, and 44 lb down and 50 lb up at 1-6-1, 44 lb down and 50 lb up at 1-6-1, 19 lb down and 24 lb up at 4-4-0, 19 lb down and 24 lb up at 4-4-0, and 41 lb down and 44 lb up at 7-1-15, and 41 lb down and 44 lb up at 7-1-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 7=-4(F=-2, B=-2) 12=-73(F=-36, B=-36) 15=-59(F=-29, B=-29)

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Date:
March 29,2021

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	T23368921
2733605	PB02	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:47 2021 Page 1
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4-0-0 | 5-8-0 | 4-0-0

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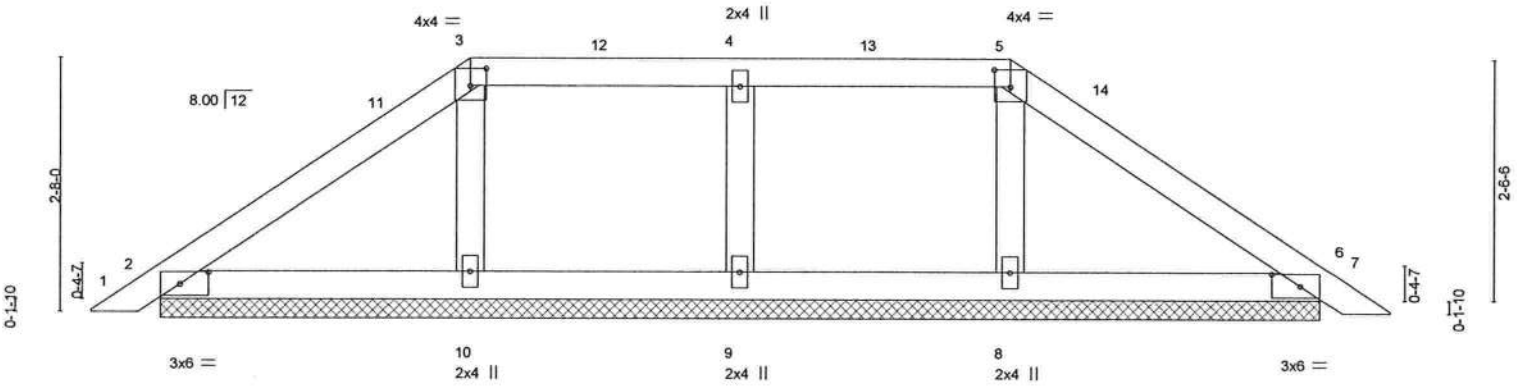

13-8-0
13-8-0

Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [3:0-2-0,0-2-3], [5:0-2-0,0-2-3], [6:0-3-9,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.10	Vert(LL)	0.00	7	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.08	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 49 lb	FT = 20%

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

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

REACTIONS. All bearings 12-1-12.
(lb) - Max Horz 2=55(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6, 9, 8, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 8, 10

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 B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 4-0-0, Exterior(2R) 4-0-0 to 8-2-15, Interior(1) 8-2-15 to 9-8-0, Exterior(2E) 9-8-0 to 13-4-11 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) Provide adequate drainage to prevent water ponding.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 4-0-0 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6, 9, 8, 10.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Date:
March 29,2021

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Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	
2733605	PB04	Piggyback	11	1	Job Reference (optional)	T23368923

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:48 2021 Page 1
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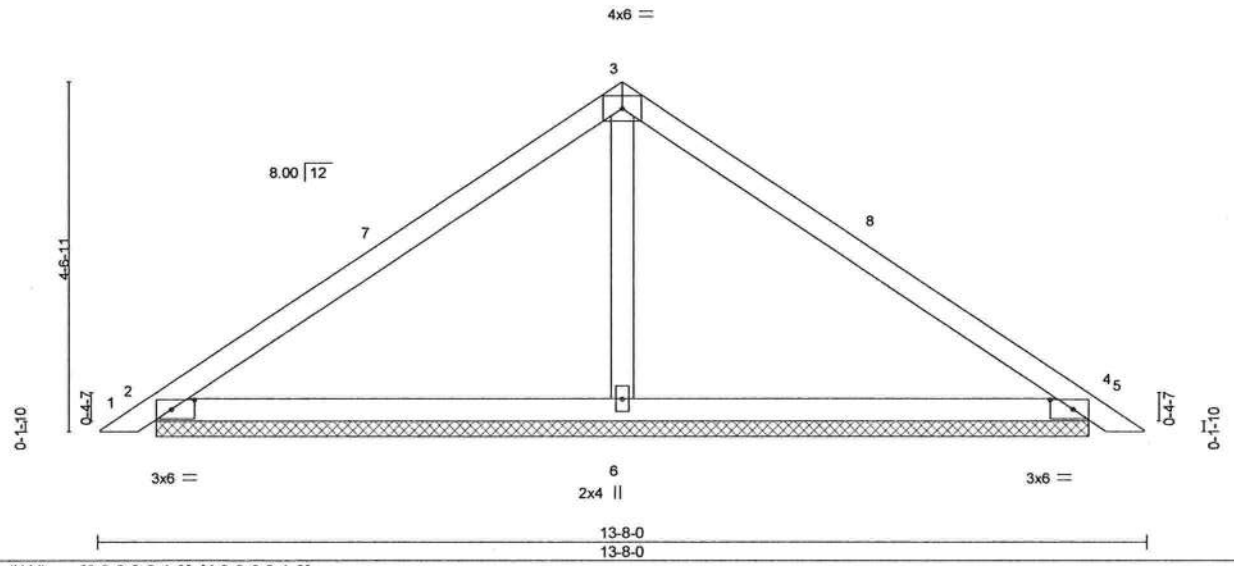
6-10-0 / 6-10-0 | 13-8-0 / 6-10-0

Scale = 1:28.9



13-8-0 / 13-8-0

Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [4:0-3-9,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	0.02	5	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.36	Vert(CT)	0.03	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 48 lb	FT = 20%

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

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

REACTIONS. (size) 2=12-1-12, 4=12-1-12, 6=12-1-12
Max Horz 2=-96(LC 10)
Max Uplift 2=-68(LC 12), 4=-81(LC 13), 6=-62(LC 12)
Max Grav 2=246(LC 1), 4=246(LC 1), 6=459(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-6=-275/107

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) 0-3-5 to 3-3-5, Interior(1) 3-3-5 to 6-10-0, Exterior(2R) 6-10-0 to 9-10-0, Interior(1) 9-10-0 to 13-4-11 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 100 lb uplift at joint(s) 2, 4, 6.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	T23368925
2733605	T01G	Common Supported Gable	1	1	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:50 2021 Page 1
ID:A6O0Z2ikebN8vXHTJEo_2QzWkY3-JltpDpnkcrw5?NWoFNgzn8MsZ17JpUeAIS?kUGzW9MZ

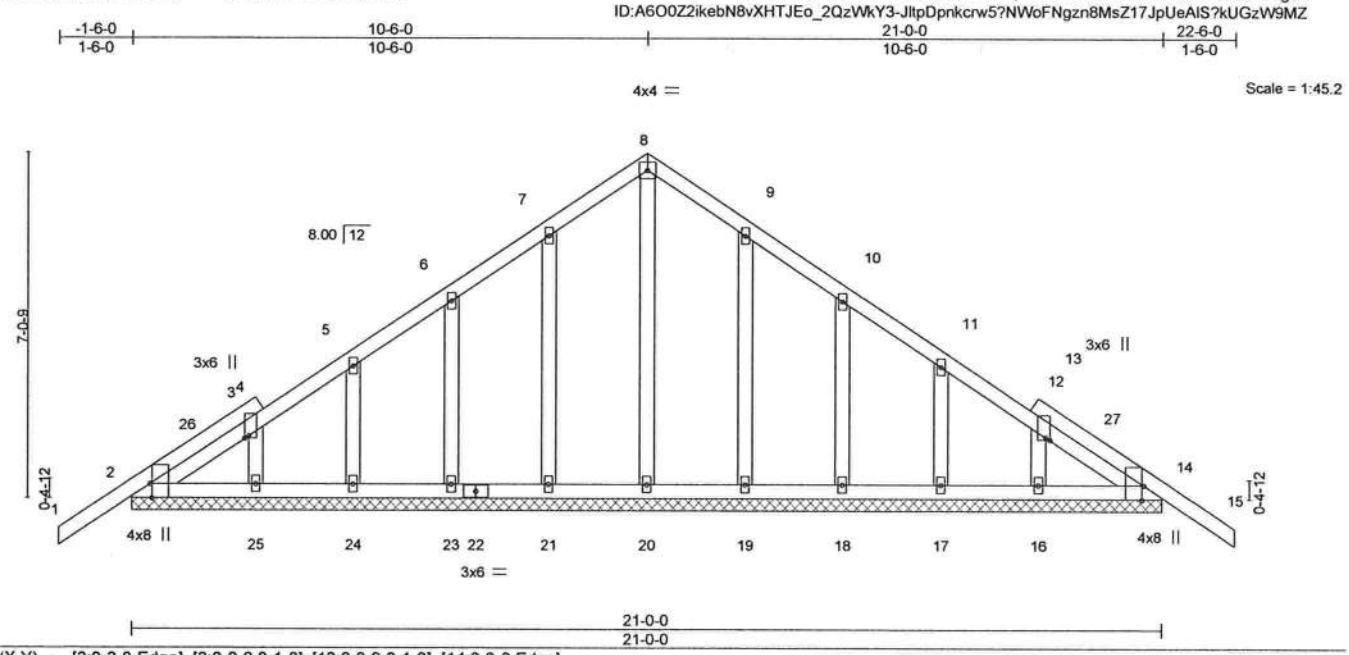

Plate Offsets (X,Y)-- [2:0-3-8,Edge], [3:0-0-9,0-1-0], [13:0-0-9,0-1-0], [14:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.13	Vert(LL)	-0.01	15	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.01	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 130 lb	FT = 20%

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

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

REACTIONS. All bearings 21-0-0.
(lb) - Max Horz 2=-169(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 21, 23, 24, 25, 19, 18, 17, 16
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 20, 21, 23, 24, 25, 19, 18, 17, 16

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 B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-6-0 to 1-6-0, Exterior(2N) 1-6-0 to 10-6-0, Corner(3R) 10-6-0 to 13-6-0, Exterior(2N) 13-6-0 to 22-6-0 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) All plates are 2x4 MT20 unless otherwise indicated.
6) 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 21, 23, 24, 25, 19, 18, 17, 16.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 14.

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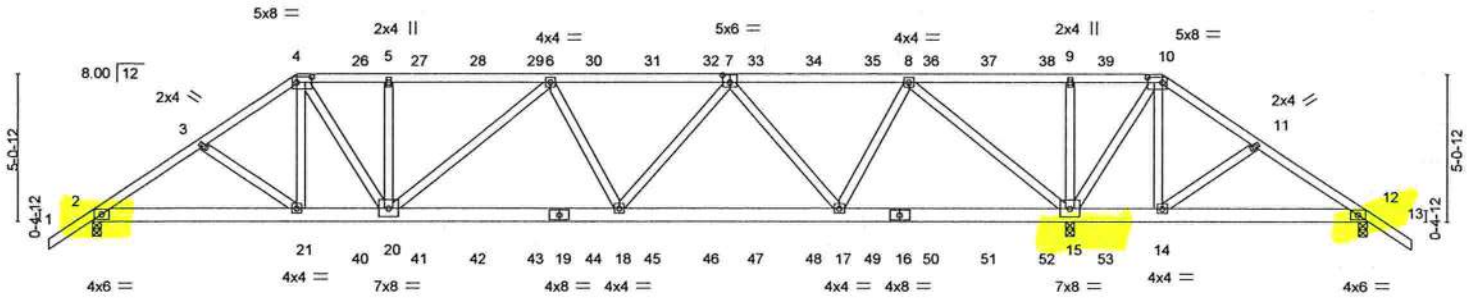
Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	T23368927
2733605	T03	Hip Girder	1	2	Job Reference (optional)	

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:57 2021 Page 1
ID:A6O0Z2ikebN8vXHTJEo_2QzWkY3-c5oShCs7z_p6KSY89LIcZc9_OsO6yS4CM2BbEMzW9MS

1-6-0	3-9-11	7-0-0	10-1-12	15-8-6	21-10-0	27-11-10	33-6-4	36-8-0	39-10-5	43-8-0	45-2-0
1-6-0	3-9-11	3-2-5	3-1-12	5-6-10	6-1-10	6-1-10	5-6-10	3-1-12	3-2-5	3-9-11	1-6-0

Scale = 1:76.0



7-0-0	10-1-12	18-0-11	25-7-6	33-6-4	36-8-0	43-8-0
7-0-0	3-1-12	7-10-15	7-6-11	7-10-15	3-1-12	7-0-0

Plate Offsets (X,Y)-- [4:0-6-4,0-2-4], [7:0-3-0,0-3-0], [10:0-6-4,0-2-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.48	Vert(LL)	0.14	18-20	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.54	Vert(CT)	-0.22	18-20	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.89	Horz(CT)	0.04	15	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 563 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 14-15,12-14.

REACTIONS. (size) 2=0-3-8, 15=0-3-8, 12=0-3-8
Max Horz 2=-126(LC 25)
Max Uplift 2=-944(LC 8), 15=-2432(LC 5), 12=-839(LC 19)
Max Grav 2=2153(LC 19), 15=5263(LC 1), 12=462(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3447/1585, 3-4=-3301/1556, 4-5=-3426/1646, 5-6=-3426/1646, 6-7=-3518/1637, 7-8=-1561/742, 8-9=-1161/2558, 9-10=-1161/2558, 10-11=-783/1776, 11-12=-808/1723
BOT CHORD 2-21=-1317/2840, 20-21=-1265/2712, 18-20=-1693/3625, 17-18=-1265/2700, 15-17=-234/471, 14-15=-1456/701, 12-14=-1407/667
WEBS 4-21=-296/578, 4-20=-638/1317, 5-20=-284/169, 6-20=-302/175, 7-18=-600/1310, 7-17=-1820/874, 8-17=-1078/2431, 8-15=-3931/1823, 9-15=-330/191, 10-15=-2015/969, 10-14=-293/514

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; 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; porch right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
6) Provide adequate drainage to prevent water ponding.
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) except (jt=lb) 2=944, 15=2432, 12=839.

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Continued on page 2

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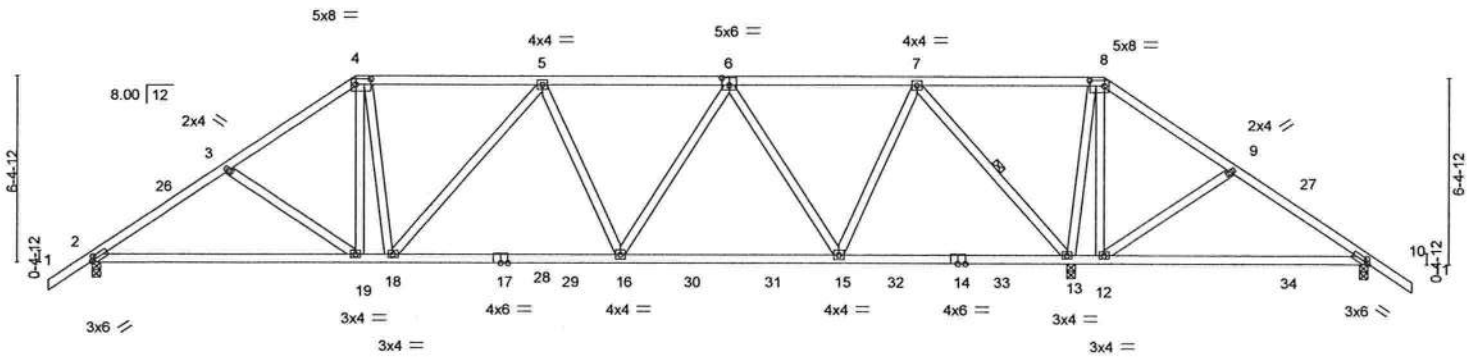
Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW
2733605	T04	Hip	1	1	T23368928
					Job Reference (optional)

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:34:59 2021 Page 1
ID:A6O0Z2ikebN8vXHTJEo_2QzWkY3-YTwD6uuOVc3qaliWGmK5e1EHjf02QMCVqMgilFzW9MQ

1-6-0	4-8-3	9-0-0	15-5-0	21-10-0	28-3-0	34-8-0	38-11-13	43-8-0	45-2-0
1-6-0	4-8-3	4-3-13	6-5-0	6-5-0	6-5-0	6-5-0	4-3-13	4-8-3	1-6-0

Scale = 1:76.0



9-0-0	10-1-12	18-1-1	25-6-15	33-6-4	34-8-0	43-8-0
9-0-0	1-1-12	7-11-5	7-5-15	7-11-5	1-1-12	9-0-0

Plate Offsets (X,Y)-- [2:0-1-5,0-1-8], [4:0-6-4,0-2-4], [6:0-3-0,0-3-0], [8:0-6-4,0-2-4], [10:0-1-5,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.61	Vert(LL)	0.23	12-25	>536	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	0.18	12-25	>668	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.85	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 254 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 5-9-9 oc bracing.
WEBS 1 Row at midpt 7-13

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 10=0-3-8
Max Horz 2=-155(LC 10)
Max Uplift 2=-296(LC 12), 13=-504(LC 9), 10=-280(LC 23)
Max Grav 2=1271(LC 25), 13=2521(LC 2), 10=104(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1780/421, 3-4=-1605/380, 4-5=-1350/362, 5-6=-1449/334, 6-7=-735/208, 7-8=-194/895, 8-9=-187/900, 9-10=-224/785
BOT CHORD 2-19=-361/1465, 18-19=-287/1291, 16-18=-375/1504, 15-16=-304/1174, 13-15=-108/285, 12-13=-702/233, 10-12=-609/178
WEBS 3-19=-290/166, 4-19=-51/378, 4-18=-138/357, 5-18=-308/196, 6-16=-113/531, 6-15=-847/248, 7-15=-179/1128, 7-13=-1771/454, 8-13=-1032/659, 8-12=-637/343, 9-12=-295/223

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) -1-6-0 to 2-10-6, Interior(1) 2-10-6 to 9-0-0, Exterior(2R) 9-0-0 to 15-5-0, Interior(1) 15-5-0 to 34-8-0, Exterior(2R) 34-8-0 to 40-10-2, Interior(1) 40-10-2 to 45-2-0 zone; porch 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 100 lb uplift at joint(s) except (jt=lb) 2=296, 13=504, 10=280.

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Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	
2733605	T06	Hip	1	1	Job Reference (optional)	T23368930

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:35:02 2021 Page 1
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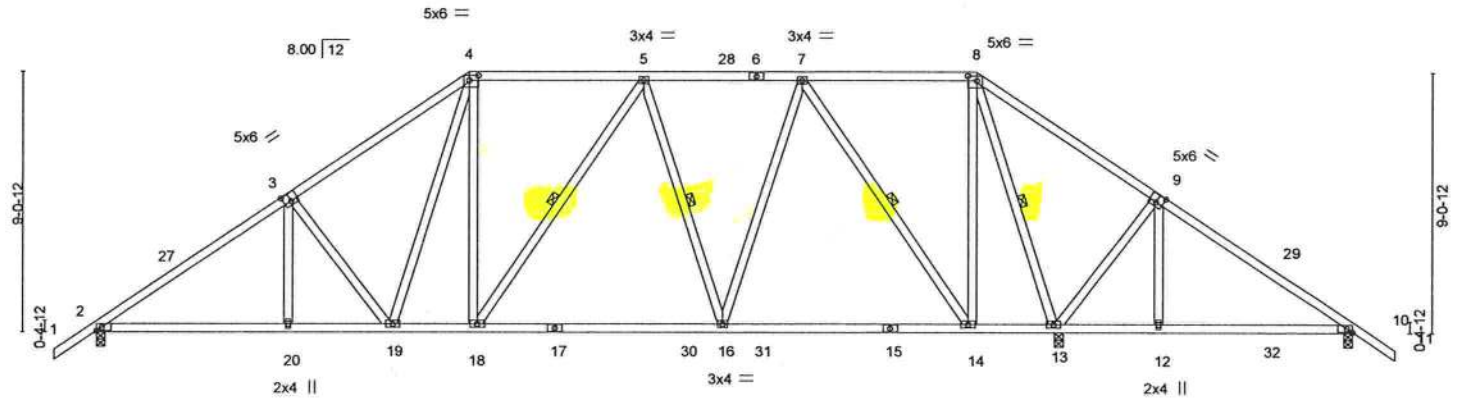
1-6-0	6-8-3	13-0-0	19-0-14	24-7-2	30-8-0	36-11-13	43-8-0	45-2-0
1-6-0	6-8-3	6-3-13	6-0-14	5-6-5	6-0-14	6-3-13	6-8-3	1-6-0

Scale = 1:77.3



6-8-3	10-1-12	13-0-0	21-10-0	30-8-0	33-6-4	36-11-13	43-8-0
6-8-3	3-5-9	2-10-4	8-10-0	8-10-0	2-10-4	3-5-9	6-8-3

Plate Offsets (X,Y)-- [3:0-3-0,0-3-4], [4:0-3-12,0-2-0], [8:0-3-12,0-2-0], [9:0-3-0,0-3-4], [10:0-2-3,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.51	Vert(LL)	-0.20	16-18	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.97	Vert(CT)	-0.34	16-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.80	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 281 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS 1 Row at midpt 5-18, 5-16, 7-14, 8-13

REACTIONS. (size) 2=0-3-8, 13=0-3-8, 10=0-3-8
Max Horz 2=-214(LC 10)
Max Uplift 2=-306(LC 12), 13=-340(LC 13), 10=-114(LC 13)
Max Grav 2=1368(LC 2), 13=2088(LC 2), 10=313(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1970/416, 3-4=-1654/439, 4-5=-1198/364, 5-7=-1095/279, 8-9=-79/483
BOT CHORD 2-20=-373/1643, 19-20=-373/1643, 18-19=-256/1193, 16-18=-272/1184, 14-16=-208/876, 13-14=-42/268
WEBS 3-20=0/253, 3-19=-550/228, 4-19=-175/434, 4-18=-99/367, 5-16=-362/196, 7-16=-138/733, 7-14=-1169/290, 8-14=-192/1244, 8-13=-1780/279, 9-13=-497/378, 9-12=-221/260

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) -1-6-0 to 2-10-6, Interior(1) 2-10-6 to 13-0-0, Exterior(2R) 13-0-0 to 19-0-14, Interior(1) 19-0-14 to 30-8-0, Exterior(2R) 30-8-0 to 36-11-9, Interior(1) 36-11-9 to 45-2-0 zone; porch 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) All plates are 3x6 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=306, 13=340, 10=114.

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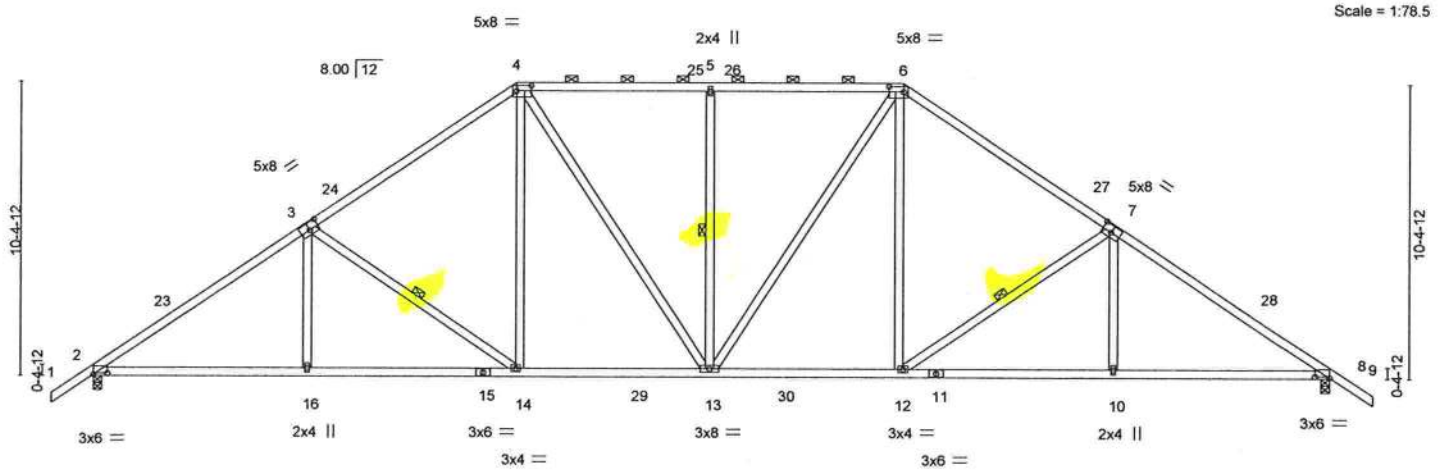
Job	Truss	Truss Type	Qty	Ply	GIEBEIG CONST. - LOT 9 CW	
2733605	T08	Piggyback Base	14	1	Job Reference (optional)	T23368932

Builders FirstSource (Jacksonville, FL), Jacksonville, FL - 32244, 8.430 s Mar 22 2021 MiTek Industries, Inc. Mon Mar 29 06:35:05 2021 Page 1
ID:A6O0Z2ikebN8vXHTJEo_2QzWkY3-NdHUNxz94SpzIg9gd1RVtIUFn43Yp93NCI70WvzW9MK

1-6-0	7-7-2	15-0-0	21-10-0	28-8-0	36-0-14	43-8-0	45-2-0
1-6-0	7-7-2	7-4-14	6-10-0	6-10-0	7-4-14	7-7-2	1-6-0

Scale = 1:78.5



7-7-2	15-0-0	21-10-0	28-8-0	36-0-14	43-8-0
7-7-2	7-4-14	6-10-0	6-10-0	7-4-14	7-7-2

Plate Offsets (X,Y)-- [2:0-6-0,0-0-7], [3:0-4-0,0-3-0], [4:0-6-4,0-2-4], [6:0-6-4,0-2-4], [7:0-4-0,0-3-0], [8:0-6-0,0-0-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.83	Vert(LL)	-0.20	12-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.83	Vert(CT)	-0.34	12-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.14	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 264 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-8-5 max.): 4-6.
BOT CHORD Rigid ceiling directly applied or 8-4-8 oc bracing.
WEBS 1 Row at midpt 3-14, 5-13, 7-12

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-243(LC 10)
Max Uplift 2=-371(LC 12), 8=-371(LC 13)
Max Grav 2=1852(LC 2), 8=1852(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2799/523, 3-4=-2252/472, 4-5=-1998/436, 5-6=-1998/436, 6-7=-2252/472, 7-8=-2799/523
BOT CHORD 2-16=-472/2313, 14-16=-472/2313, 13-14=-253/1795, 12-13=-142/1795, 10-12=-308/2265, 8-10=-308/2265
WEBS 3-16=0/316, 3-14=-692/276, 4-14=-109/679, 4-13=-205/463, 5-13=-418/209, 6-13=-205/463, 6-12=-109/679, 7-12=-693/276, 7-10=0/316

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) -1-6-0 to 2-10-6, Interior(1) 2-10-6 to 15-0-0, Exterior(2R) 15-0-0 to 21-2-2, Interior(1) 21-2-2 to 28-8-0, Exterior(2R) 28-8-0 to 34-10-2, Interior(1) 34-10-2 to 45-2-0 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) 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 100 lb uplift at joint(s) except (jt=lb) 2=371, 8=371.
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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AUGUST 1, 2016	STANDARD REPAIR DETAIL FOR BROKEN CHORDS, WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES	MII-REP01A1

MiTek USA, Inc.
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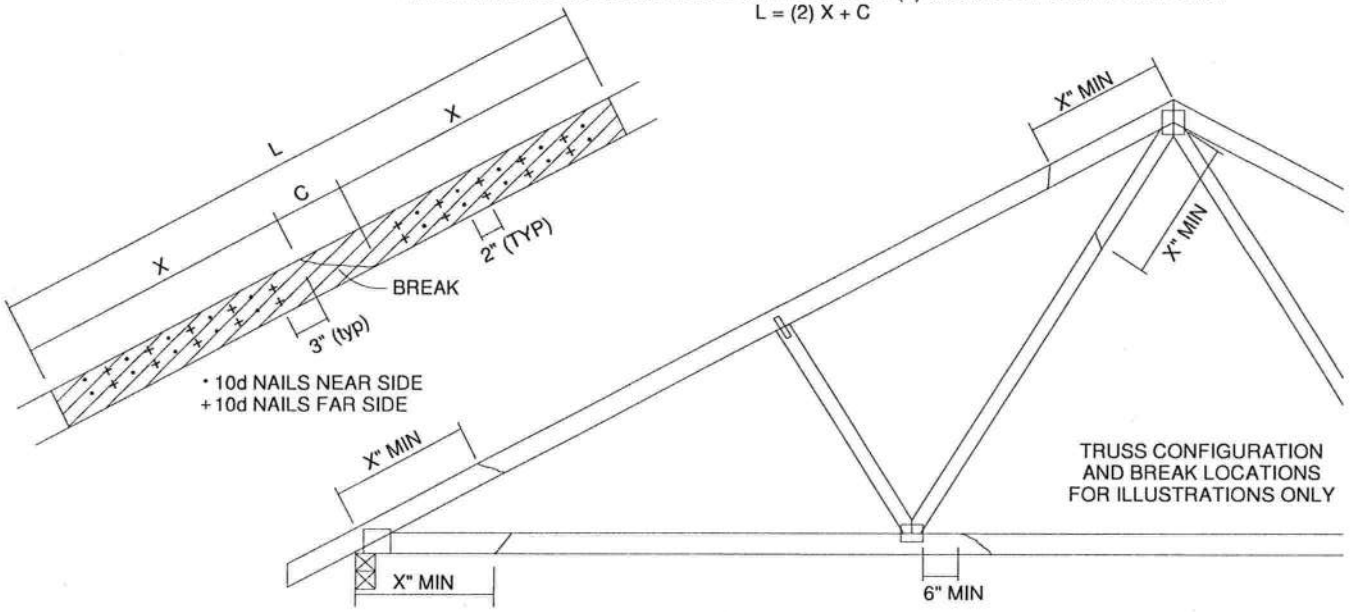
A MiTek Affiliate

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

* DIVIDE EQUALLY FRONT AND BACK

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

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



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

DO NOT USE REPAIR FOR JOINT SPLICES

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

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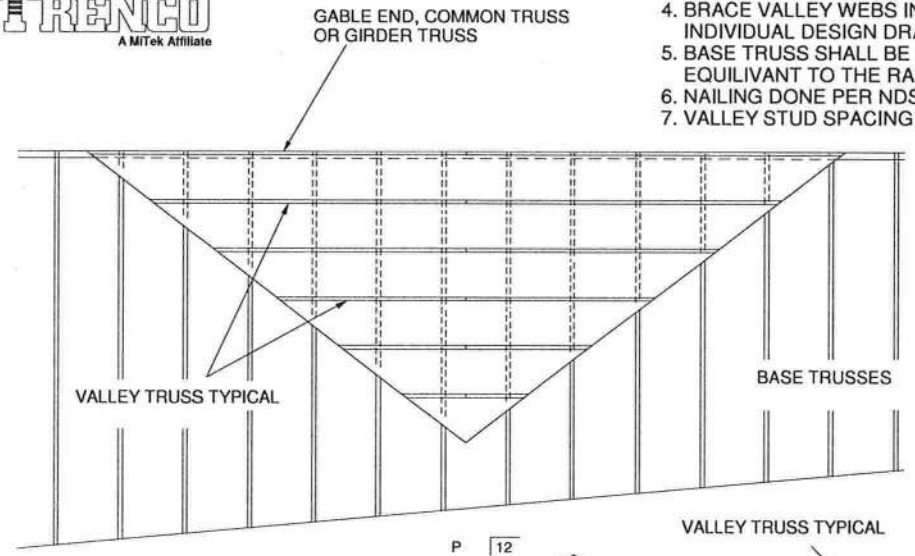
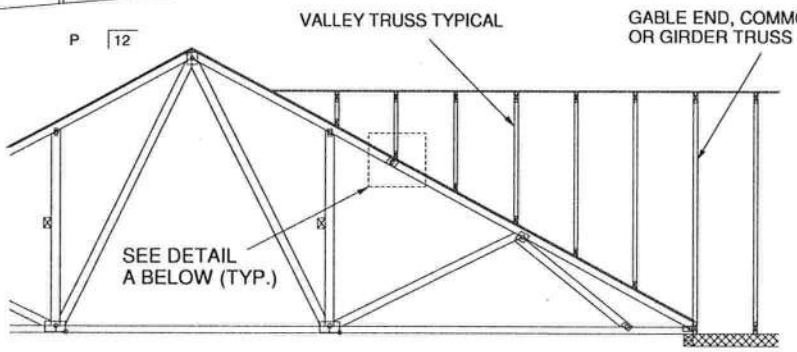
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND1

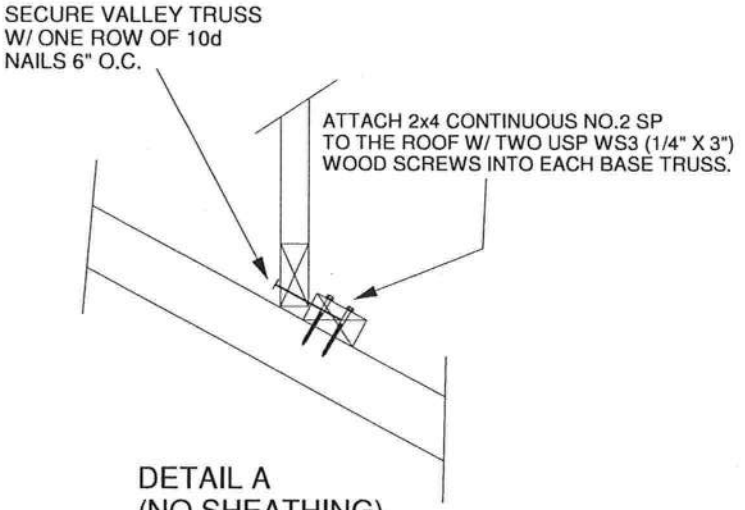
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

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







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

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

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

MiTek USA, Inc.

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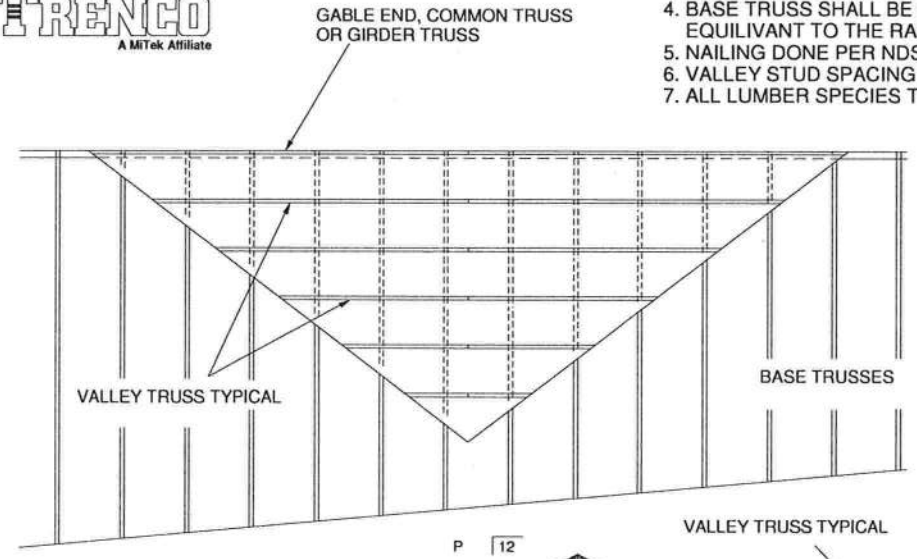
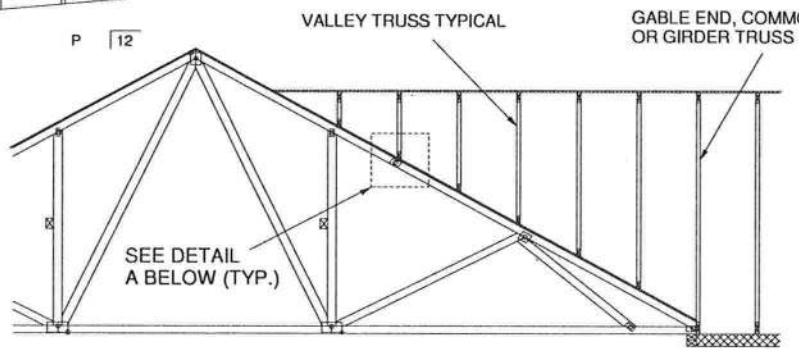
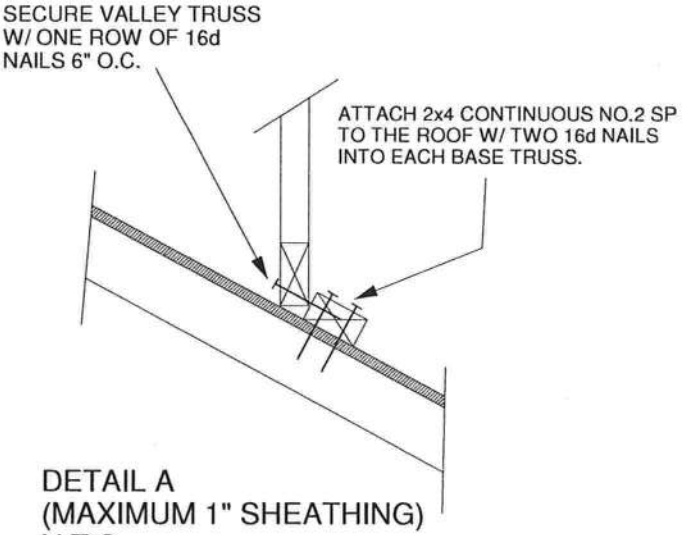
GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING EQUILIVANT TO THE RAKE DIMENSION OF THE VALLEY TRUSS SPACING.
5. NAILING DONE PER NDS - 01
6. VALLEY STUD SPACING NOT TO EXCEED 48" O.C.
7. ALL LUMBER SPECIES TO BE SP.







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

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

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

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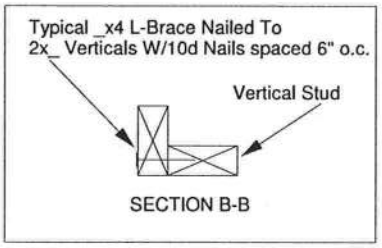
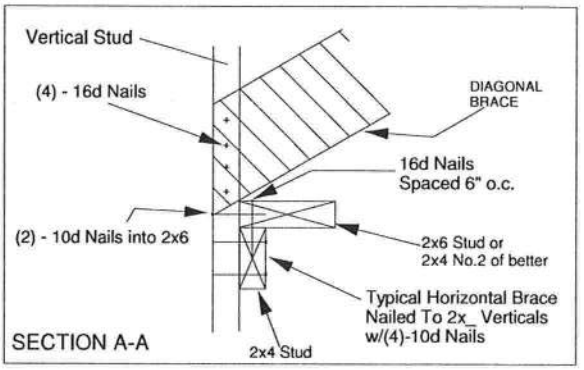
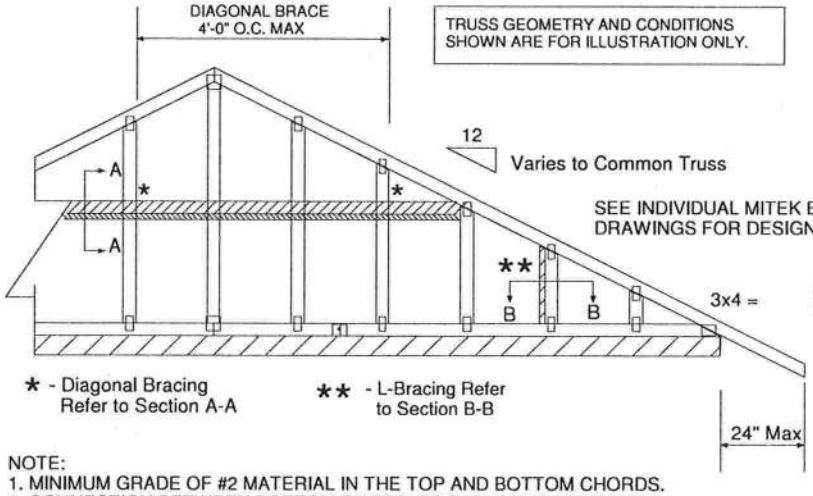
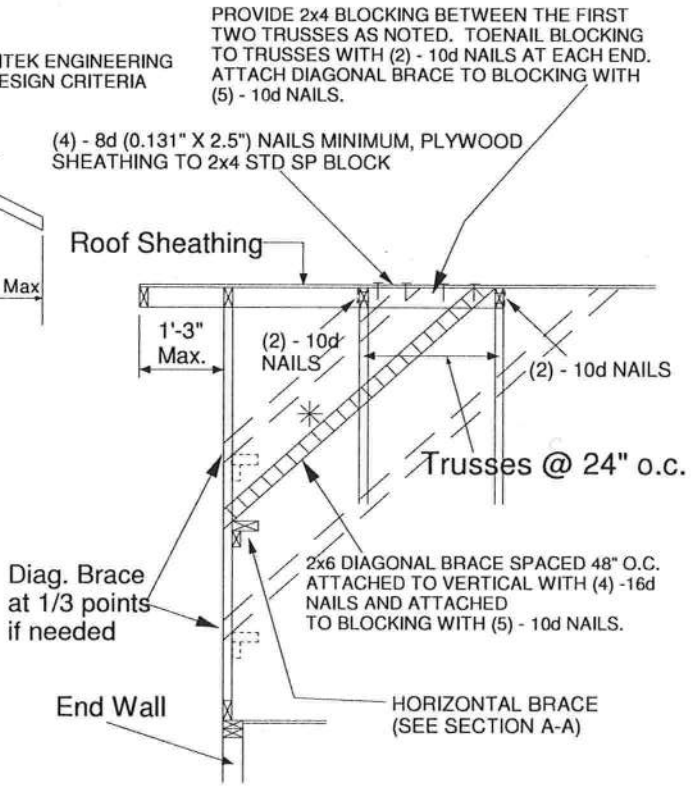






TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.



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

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

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

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

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

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AUGUST 1, 2016	LATERAL BRACING RECOMMENDATIONS	MII-STRGBCK

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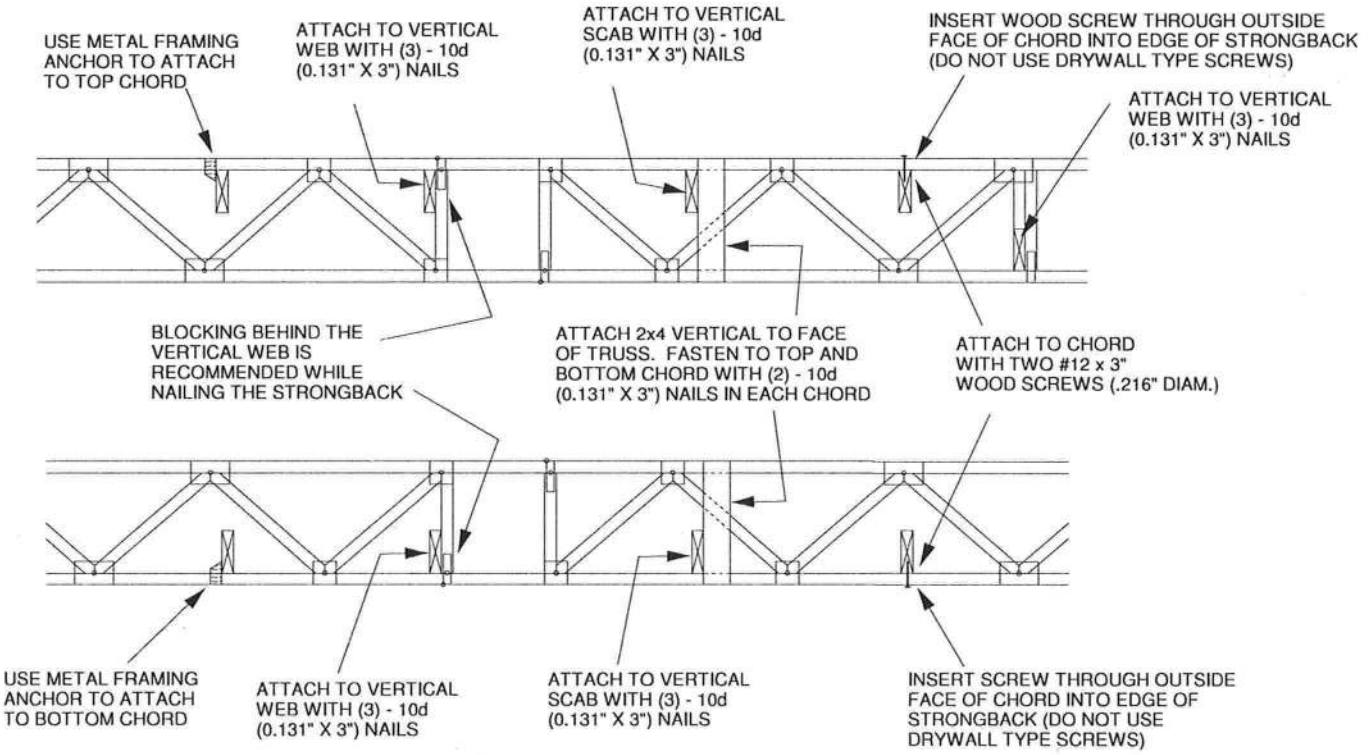
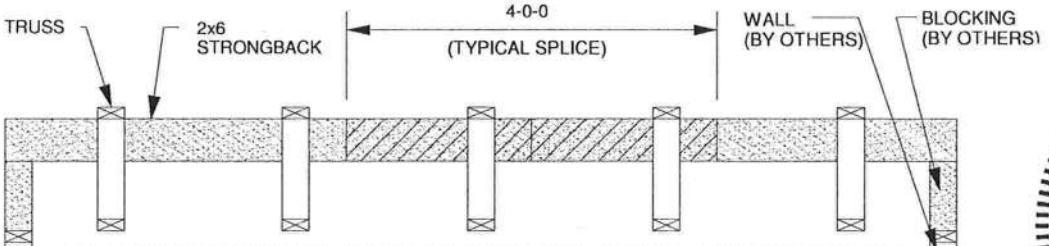
TO MINIMIZE VIBRATION COMMON TO ALL SHALLOW FRAMING SYSTEMS, 2x6 "STRONGBACK" IS RECOMMENDED, LOCATED EVERY 8 TO 10 FEET ALONG A FLOOR TRUSS.

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

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





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

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

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

MiTek USA, Inc. Page 1 of 1

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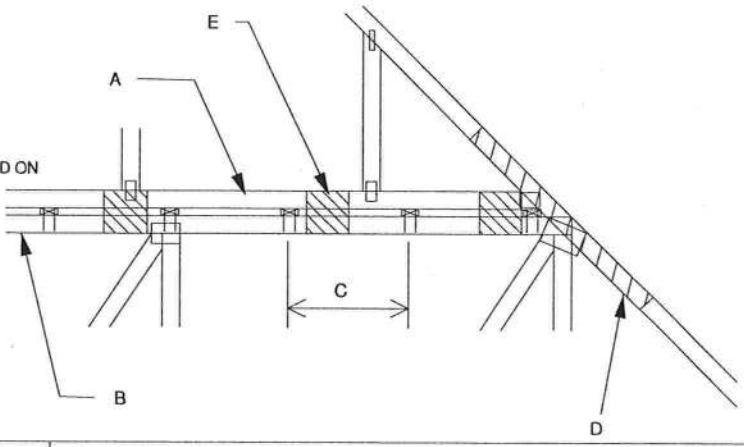
MAXIMUM WIND SPEED = REFER TO NOTES D AND OR E MAX MEAN ROOF HEIGHT = 30 FEET MAX TRUSS SPACING = 24 " O.C. CATEGORY II BUILDING EXPOSURE B or C ASCE 7-10 DURATION OF LOAD INCREASE : 1.60
DETAIL IS NOT APPLICABLE FOR TRUSSES TRANSFERING DRAG LOADS (SHEAR TRUSSES). ADDITIONAL CONSIDERATIONS BY BUILDING ENGINEER/DESIGNER ARE REQUIRED.

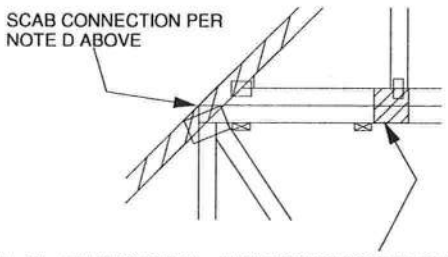
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT TO BASE TRUSS WITH (2) (0.131" X 3.5") NAILS EACH.
D - 2 X__ X 4'-0" SCAB, SIZE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, MIN GRADE #2, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF (0.131" X 3") NAILS @ 4" O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT. IN BOTH DIRECTIONS AND:
1. WIND SPEED OF 115 MPH OR LESS FOR ANY PIGGYBACK SPAN, OR
2. WIND SPEED OF 116 MPH TO 160 MPH WITH A MAXIMUM PIGGYBACK SPAN OF 12 ft.

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

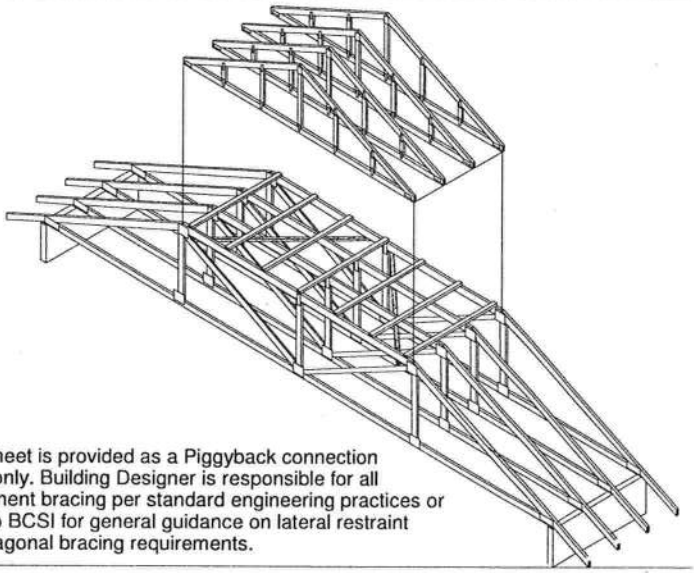


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

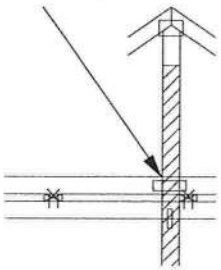


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



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

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

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

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

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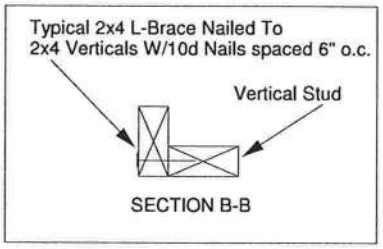
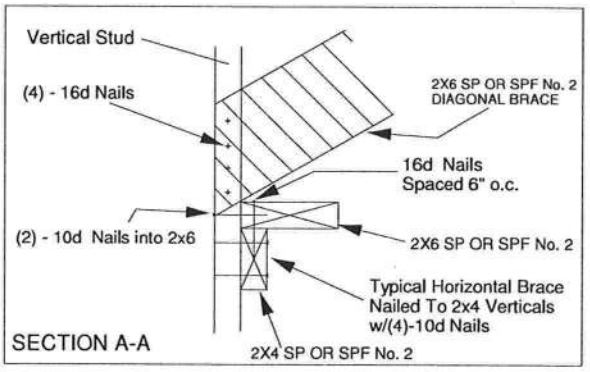
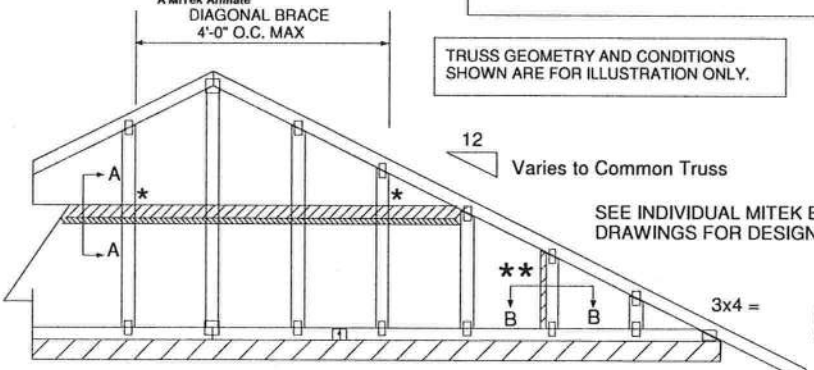
A MiTek Affiliate







TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

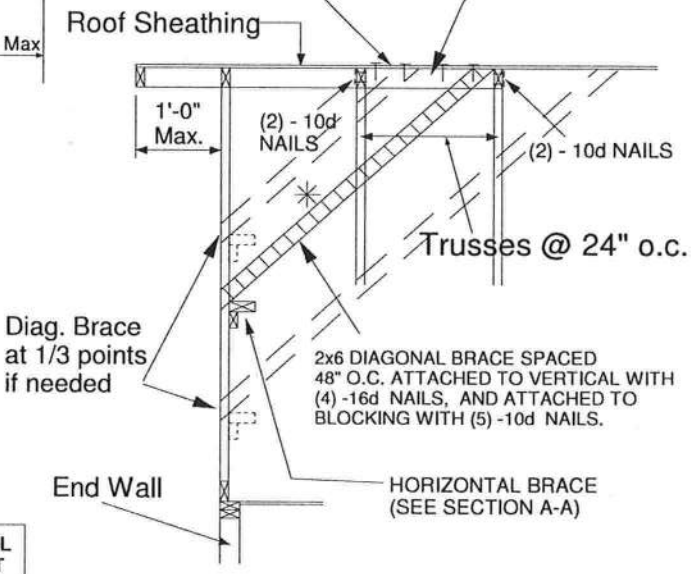
* - Diagonal Bracing Refer to Section A-A

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

24" Max

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

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



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

Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length			
2x4 SP No. 3 / Stud	12" O.C.	3-7-12	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

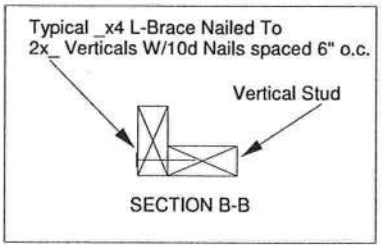
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.

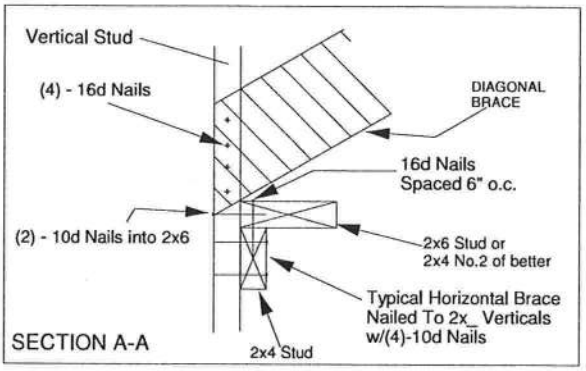
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

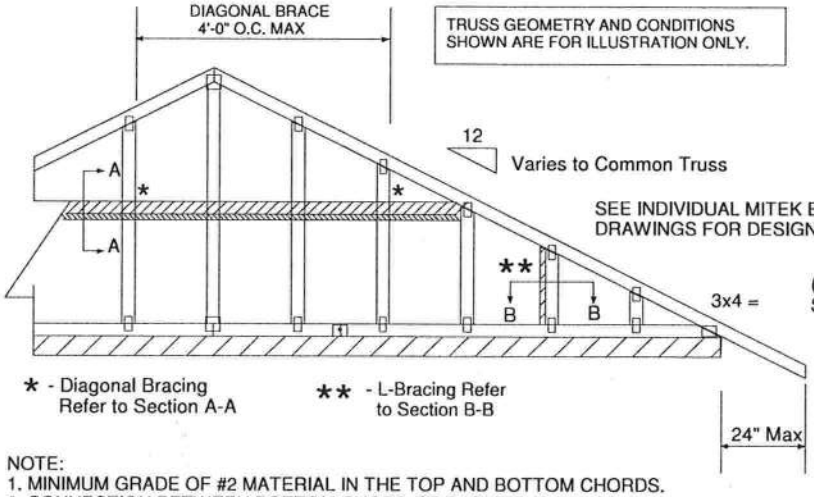
JANUARY 6, 2017	Standard Gable End Detail	MII-GE140-001

MiTek USA, Inc. Page 1 of 2

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate





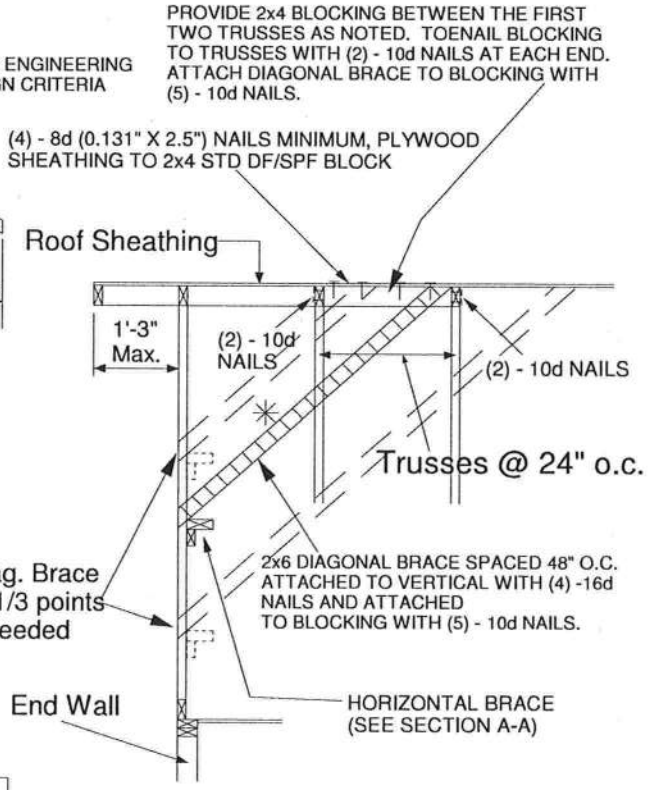


TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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



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

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

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

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

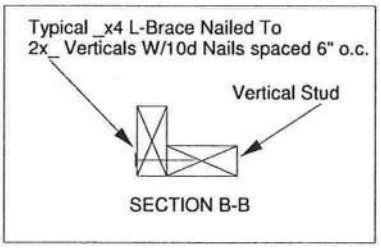
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.

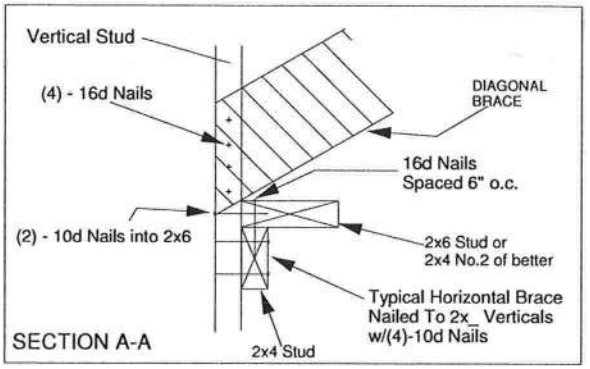
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:

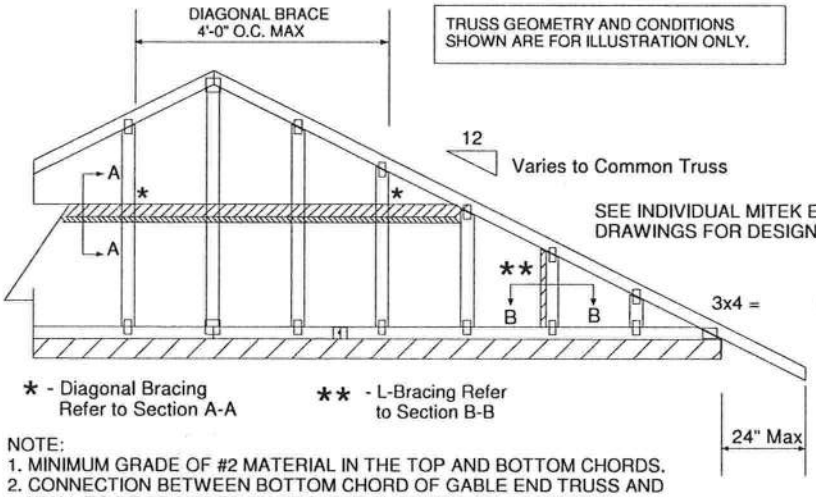
January 19, 2018

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

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate





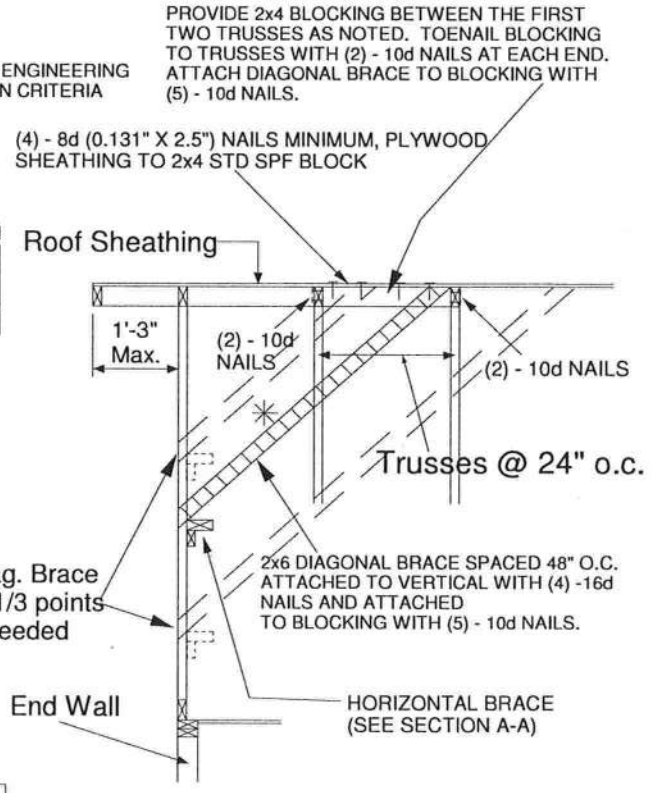


TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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



NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF ROOF SYSTEM.
4. "L" BRACES SPECIFIED ARE TO BE FULL LENGTH. 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)
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8. THIS DETAIL DOES NOT APPLY TO STRUCTURAL GABLES.
9. DO NOT USE FLAT BOTTOM CHORD GABLES NEXT TO SCISSOR TYPE TRUSSES.
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Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	3-9-13	4-1-1	5-9-6	7-1-3	11-5-7
2x4 SP No. 3 / Stud	16" O.C.	3-5-4	3-6-8	5-0-2	6-10-8	10-3-13
2x4 SP No. 3 / Stud	24" O.C.	2-9-11	2-10-11	4-1-1	5-7-6	8-5-1

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

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

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

Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

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

MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

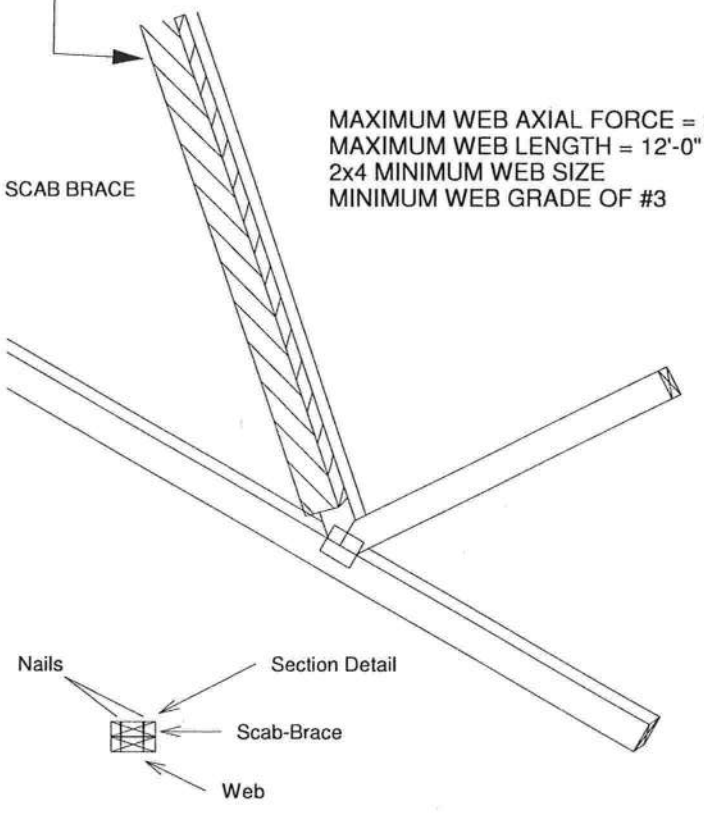
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

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

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

SCAB BRACE

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



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

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6904 Parke East Blvd. Tampa FL 33610
Date:

February 12, 2018