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

RE: 2845647 - SIMQUE - LOT 34 PRESERVE

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

Site Information:
Customer Info: Aaron Simque Homes Project Name: Custom Model: Bristol Modified
Lot/Block: 34 Subdivision: Preserve at Laurel Lakes
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: ASCE 7-16 Wind Speed: 130 mph
Roof Load: 37.0 psf Floor Load: 55.0 psf

This package includes 56 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.

COLUMBIA COUNTY BUILDING DEPARTMENT
Received for FILE COPY
Code Compliance
PLANS EXAMINER

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	T24526136	CJ01A	6/30/21	23	T24526158	T05	6/30/21
2	T24526137	CJ01T	6/30/21	24	T24526159	T05D	6/30/21
3	T24526138	CJ02A	6/30/21	25	T24526160	T06	6/30/21
4	T24526139	CJ02T	6/30/21	26	T24526161	T07	6/30/21
5	T24526140	CJ03A	6/30/21	27	T24526162	T07G	6/30/21
6	T24526141	CJ03T	6/30/21	28	T24526163	T08	6/30/21
7	T24526142	EJ01	6/30/21	29	T24526164	T09	6/30/21
8	T24526143	EJ02	6/30/21	30	T24526165	T10	6/30/21
9	T24526144	HJ01A	6/30/21	31	T24526166	T11	6/30/21
10	T24526145	HJ01T	6/30/21	32	T24526167	T12	6/30/21
11	T24526146	PB01	6/30/21	33	T24526168	T12D	6/30/21
12	T24526147	PB01G	6/30/21	34	T24526169	T14	6/30/21
13	T24526148	PB04	6/30/21	35	T24526170	T15	6/30/21
14	T24526149	PB04G	6/30/21	36	T24526171	T16	6/30/21
15	T24526150	T01	6/30/21	37	T24526172	T17	6/30/21
16	T24526151	T01G	6/30/21	38	T24526173	T18	6/30/21
17	T24526152	T02	6/30/21	39	T24526174	T18G	6/30/21
18	T24526153	T03	6/30/21	40	T24526175	T19	6/30/21
19	T24526154	T03G	6/30/21	41	T24526176	T20	6/30/21
20	T24526155	T04	6/30/21	42	T24526177	T21	6/30/21
21	T24526156	T04D	6/30/21	43	T24526178	T22	6/30/21
22	T24526157	T04G	6/30/21	44	T24526179	T23	6/30/21

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

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: June 30,2021

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.

RE: 2845647 - SIMQUE - LOT 34 PRESERVE

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

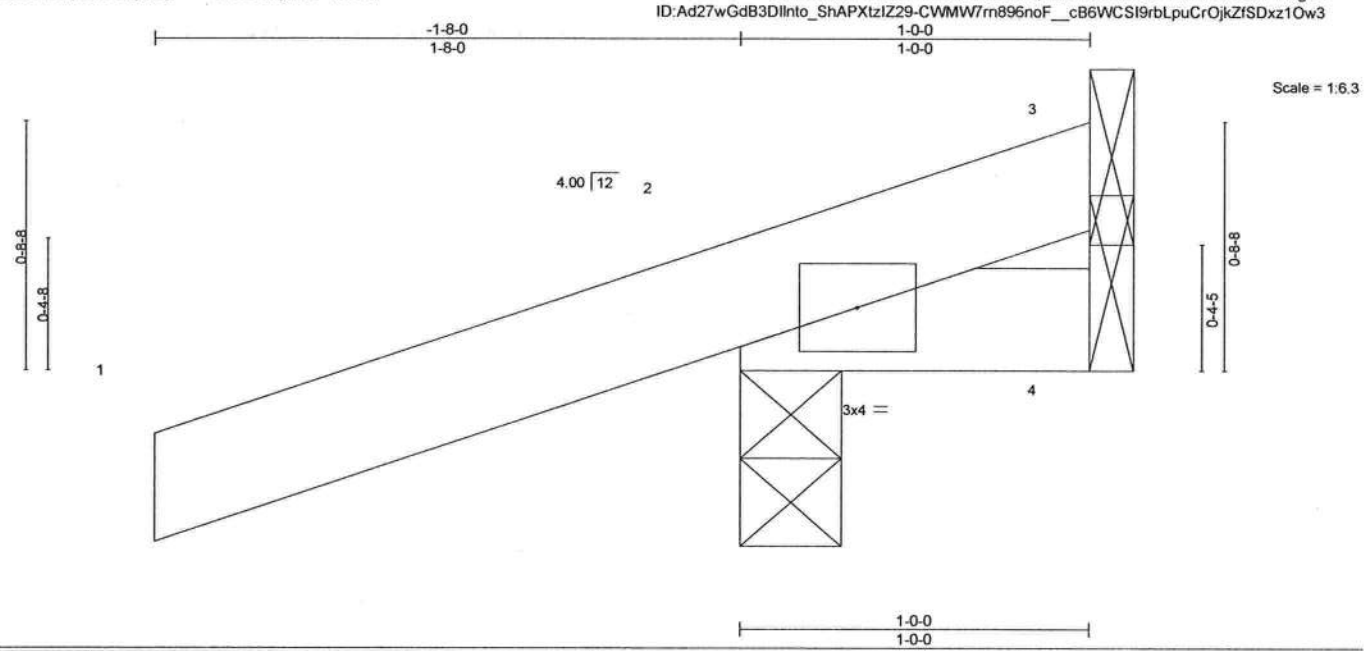
Site Information:

Customer Info: Aaron Simque Homes Project Name: Custom Model: Bristol Modified
Lot/Block: 34 Subdivision: Preserve at Laurel Lakes
Address: TBD, TBD
City: Columbia Cty State: FL

No.	Seal#	Truss Name	Date
45	T24526180	T24	6/30/21
46	T24526181	T25	6/30/21
47	T24526182	T26	6/30/21
48	T24526183	T26G	6/30/21
49	T24526184	TG01	6/30/21
50	T24526185	TG02	6/30/21
51	T24526186	TG03	6/30/21
52	T24526187	TG04	6/30/21
53	T24526188	TG05	6/30/21
54	T24526189	TG06	6/30/21
55	T24526190	TG07	6/30/21
56	T24526191	TG08	6/30/21

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526136
2845647	CJ01A	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:02 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-CWMW7rn896noF__cB6WCSI9rbLpuCrOjkZfSDxz1Ow3



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	0.16	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	5	>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=38(LC 8)
Max Uplift 3=-12(LC 1), 2=-140(LC 8), 4=-27(LC 1)
Max Grav 3=14(LC 8), 2=202(LC 1), 4=25(LC 8)

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

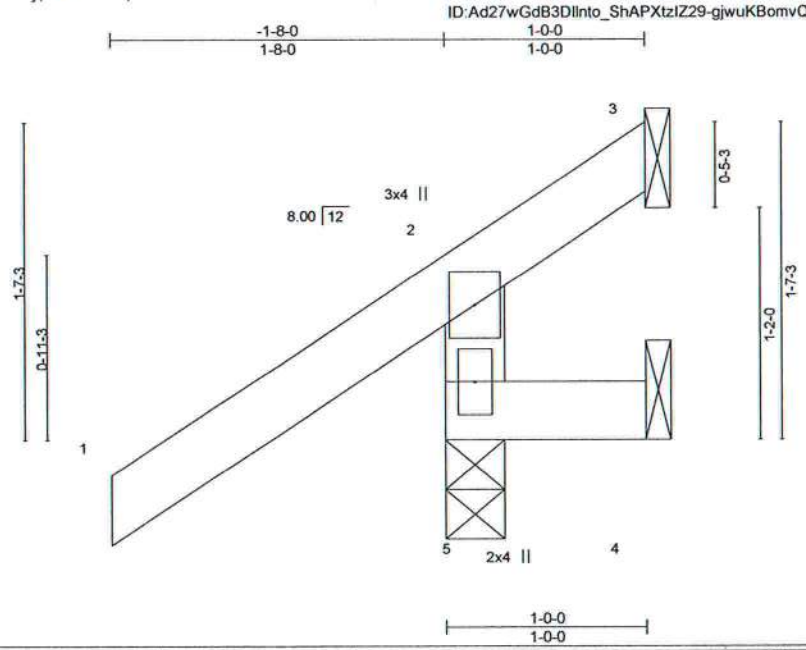
NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate 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, 4 except (jt=lb) 2=140.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526137
2845647	CJ01T	JACK-OPEN TRUSS	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:03 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-gjwuKBomvQvft8Zolp2R_Vh_Al9rxIetyDO0lNz1Ow2



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	0.29	Vert(LL)	0.00	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 7 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 1-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=48(LC 12)
Max Uplift 5=-67(LC 12), 3=-57(LC 1), 4=-18(LC 1)
Max Grav 5=234(LC 1), 3=17(LC 16), 4=9(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-200/252

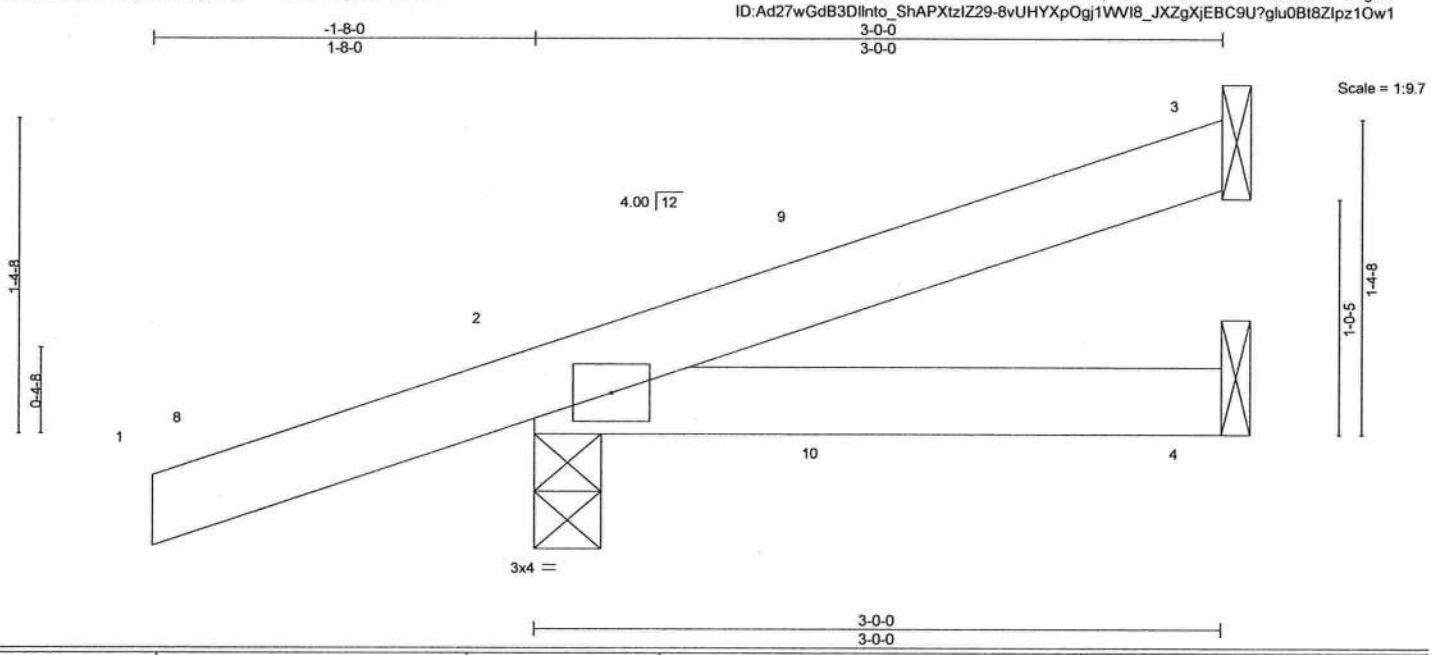
NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; end vertical left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate 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) 5, 3, 4.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526138
2845647	CJ02A	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:04 2021 Page 1
ID:Ad27wGdB3Dlnto_ShAPXtzIZ29-8vUHYXpOgj1WVI8_JXZgXjEBC9U?glu0Bt8Zlpz1Ow1



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	0.15	Vert(LL)	0.01	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.01	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 12 lb	FT = 20%

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

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

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=61(LC 8)
Max Uplift 3=-30(LC 8), 2=-133(LC 8), 4=-16(LC 9)
Max Grav 3=56(LC 1), 2=224(LC 1), 4=48(LC 3)

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

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 2-11-4 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, 4 except (jt=lb) 2=133.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526139
2845647	CJ02T	JACK-OPEN TRUSS	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:05 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-c51fltp0R19N6SiAsE4v4wnL_ZqXPC79QXt6qFz1Ow0

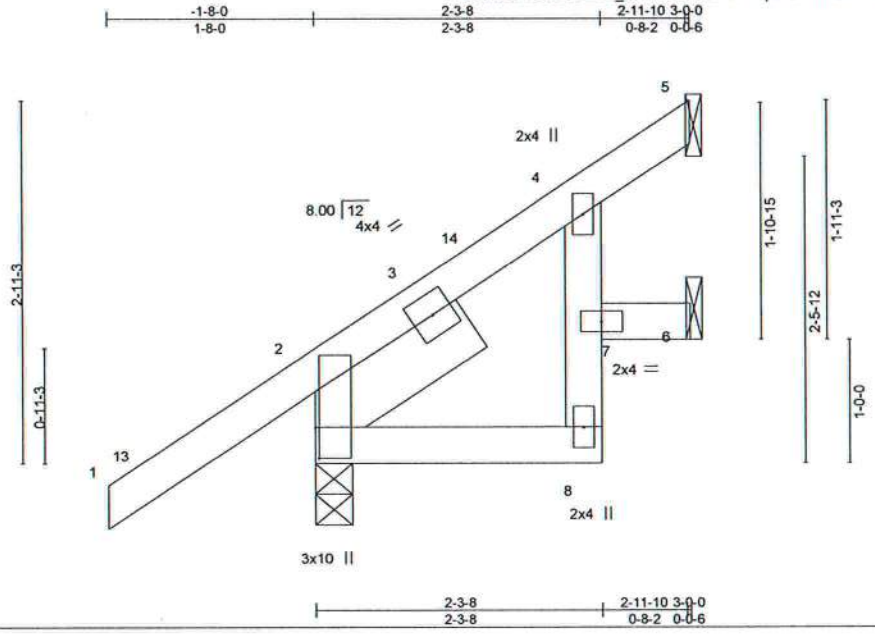


Plate Offsets (X,Y)-- [2:0-3-0,0-0-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.21	Vert(LL)	-0.00	7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.00	8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 19 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-8: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=103(LC 12)
Max Uplift 5=-27(LC 12), 2=-39(LC 12), 6=-32(LC 12)
Max Grav 5=44(LC 19), 2=224(LC 1), 6=50(LC 19)

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

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 2-11-4 zone; end vertical left 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) 5, 2, 6.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

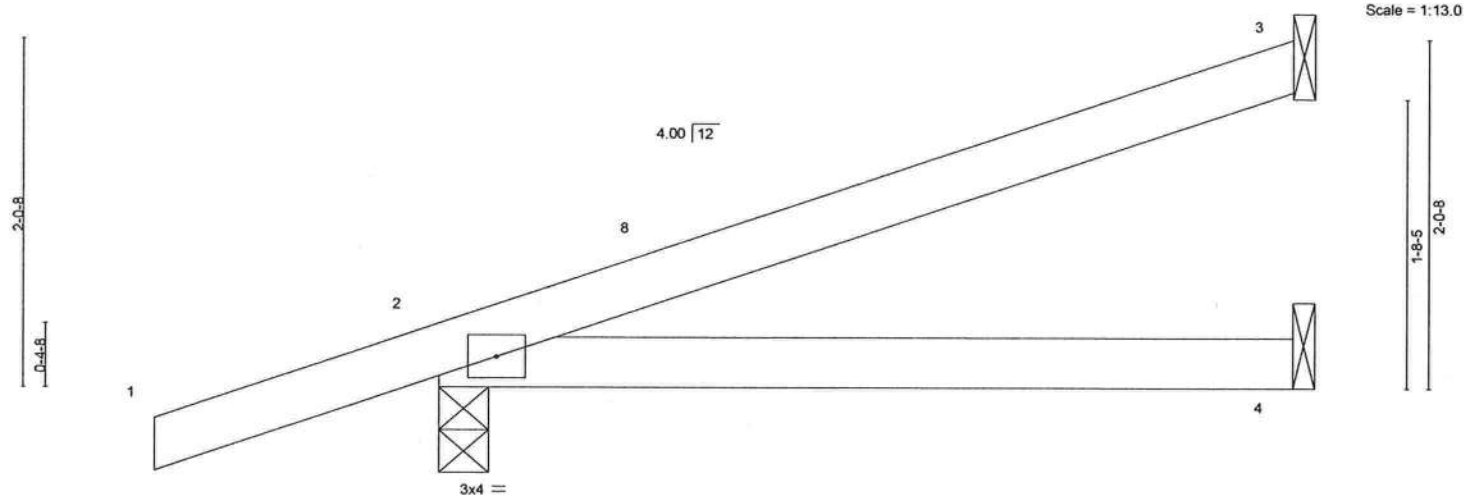
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526140
2845647	CJ03A	Jack-Open	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:06 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-4Hb1yDqeCLHEkbHNQyb8c8JUty7i8fNJfBdgMiz1Ow?

-1-8-0 / 1-8-0 | 5-0-0 / 5-0-0

Scale = 1:13.0



5-0-0 / 5-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.27	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.23	Vert(CT)	-0.05	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 18 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=84(LC 8)
Max Uplift 3=-57(LC 12), 2=-118(LC 8)
Max Grav 3=111(LC 1), 2=288(LC 1), 4=86(LC 3)

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

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 4-11-4 zone; porch 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 except (jt=lb) 2=118.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	
2845647	CJ03T	JACK-OPEN TRUSS	4	1	Job Reference (optional)	T24526141

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:07 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-YU9PAZrHzeP5MlsZ_f6N9LsgfMSLt6dStrMDv8z1Ow_

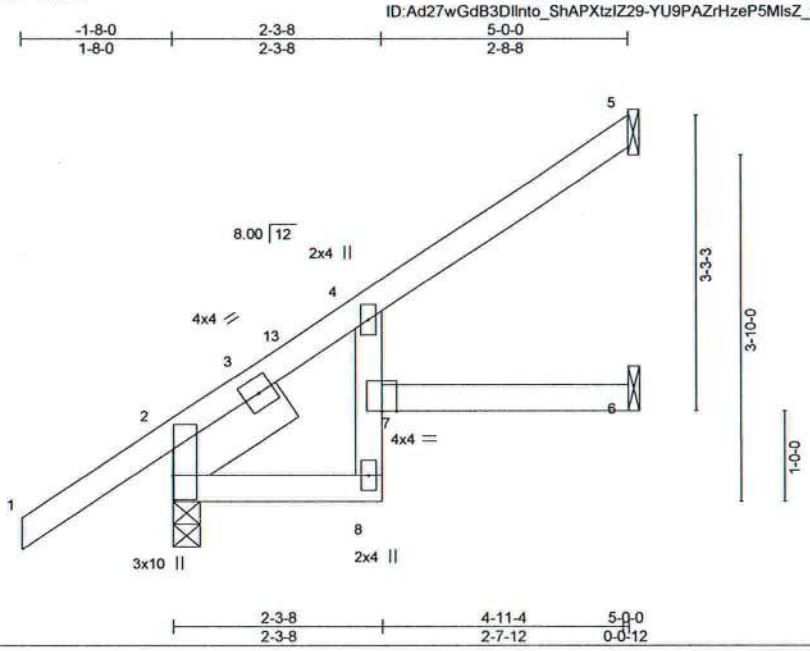


Plate Offsets (X,Y)-- [2:0-3-4,0-0-2]

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	0.20	Vert(LL)	0.04	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.26	Vert(CT)	-0.04	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MR							Weight: 26 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-8: 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

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) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=150(LC 12)
Max Uplift 5=-73(LC 12), 2=-41(LC 12), 6=-27(LC 12)
Max Grav 5=106(LC 19), 2=288(LC 1), 6=84(LC 3)

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

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 4-11-4 zone; end vertical left 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) 5, 2, 6.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526142
2845647	EJ01	Jack-Partial	5	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:07 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-YU9PAZrHzeP5MlsZ_f6N9LsYOMLZt6dStrMDv8z1Ow_

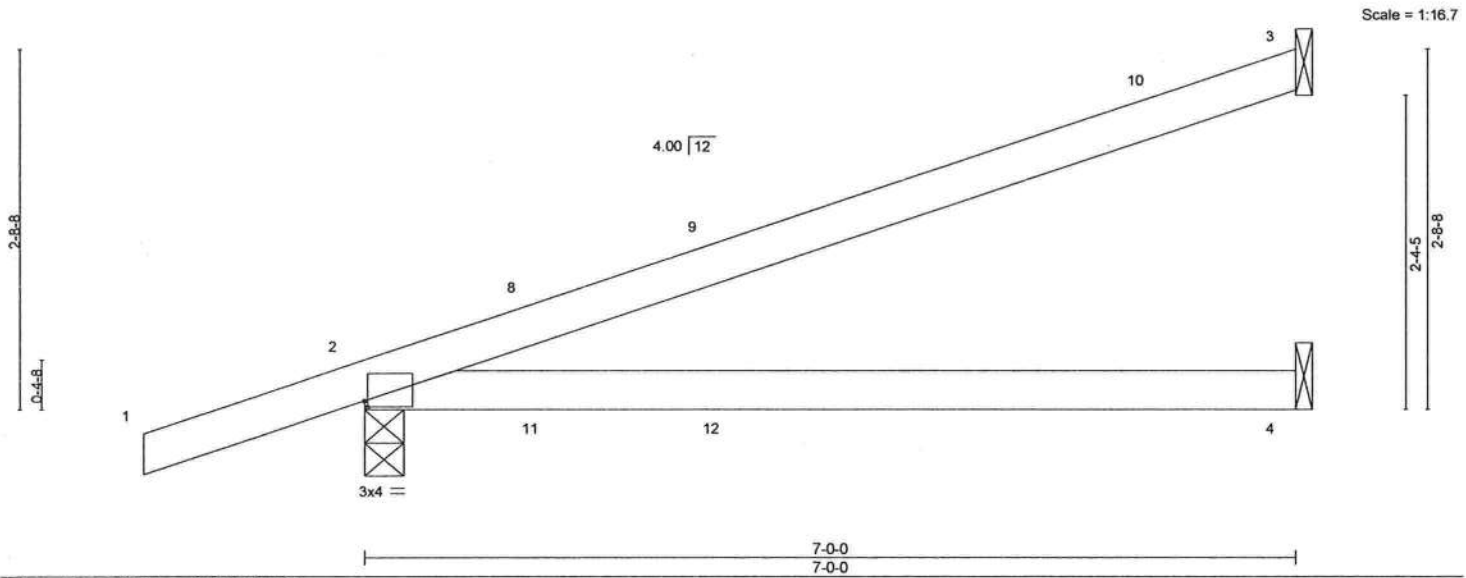


Plate Offsets (X,Y)-- [2:0-0-5,0-0-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.73	Vert(LL)	0.33	4-7	>254	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.76	Vert(CT)	0.28	4-7	>294	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 24 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-8-4 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-8, 4=Mechanical
Max Horz 2=108(LC 8)
Max Uplift 3=-92(LC 8), 2=-190(LC 8), 4=-45(LC 8)
Max Grav 3=162(LC 1), 2=357(LC 1), 4=124(LC 3)

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

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 6-11-4 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, 4 except (jt=lb) 2=190.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526143
2845647	EJ02	JACK-PARTIAL TRUSS	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:08 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-0gjnNvsvkyXyzvRlYNdchZPqmmhMcWsc6V6nQaz1Ovz

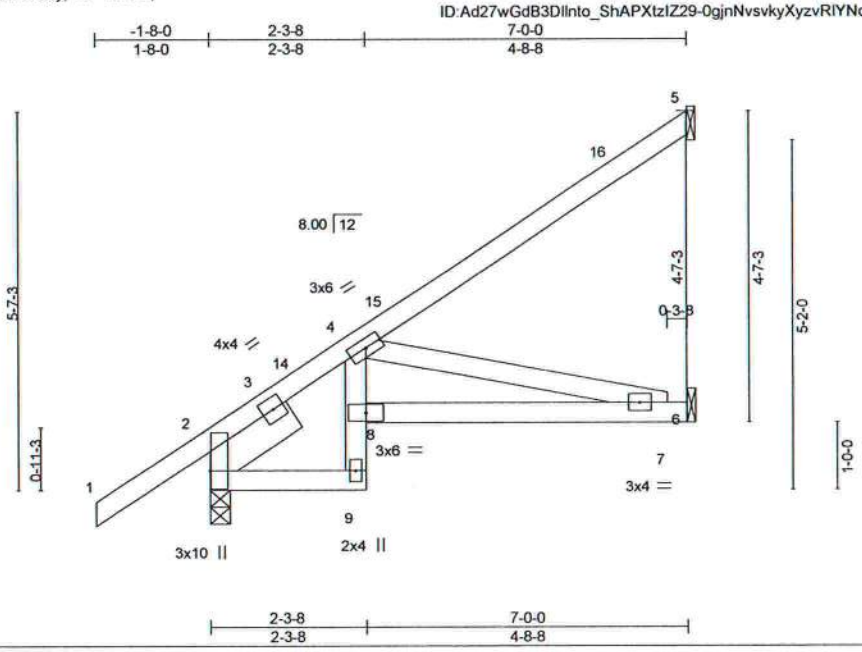


Plate Offsets (X,Y)-- [2:0-3-4,0-0-2]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.30	Vert(LL)	-0.04	7-8	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.73	Vert(CT)	-0.08	7-8	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 39 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
4-9: 2x4 SP No.3
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

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

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=Mechanical
Max Horz 2=190(LC 12)
Max Uplift 5=-76(LC 12), 2=-48(LC 12), 6=-47(LC 12)
Max Grav 5=124(LC 19), 2=357(LC 1), 6=150(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 7-8=-377/423
WEBS 4-7=-434/387

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 6-11-4 zone; end vertical left 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) 5, 2, 6.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

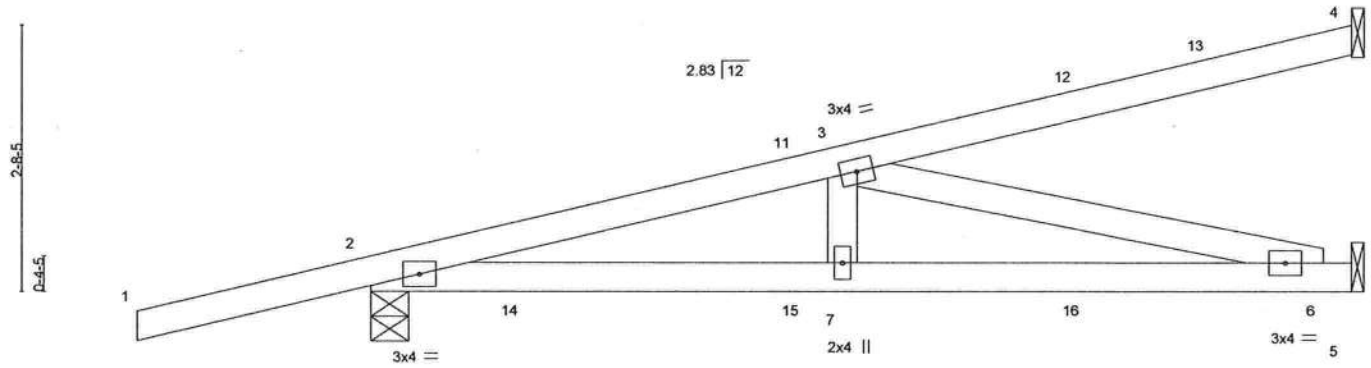
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526144
2845647	HJ01A	Diagonal Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:09 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-UsHAbFsXVGfpb30y548rEmxxkA39LvLIL9rKy1z1Ovy

-2-4-5 / 2-4-5 | 4-9-0 / 4-9-0 | 9-10-13 / 5-1-13

Scale = 1:22.4



4-9-0 / 4-9-0 | 9-10-13 / 5-1-13

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	0.55	Vert(LL)	0.06	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.63	Vert(CT)	-0.12	6-7	>970	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 42 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 5-8-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-10-6 oc bracing.

REACTIONS. (size) 4=Mechanical, 2=0-4-9, 5=Mechanical
Max Horz 2=105(LC 22)
Max Uplift 4=-65(LC 4), 2=-264(LC 4), 5=-122(LC 4)
Max Grav 4=145(LC 1), 2=495(LC 1), 5=288(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-986/394
BOT CHORD 2-7=-430/940, 6-7=-430/940
WEBS 3-7=-44/257, 3-6=-968/443

NOTES- (9)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; 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=264, 5=122.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 21 lb down and 36 lb up at 4-3-11, 21 lb down and 36 lb up at 4-3-11, and 42 lb down and 68 lb up at 7-1-10, and 42 lb down and 68 lb up at 7-1-10 on top chord, and 33 lb down and 40 lb up at 1-5-12, 33 lb down and 40 lb up at 1-5-12, 18 lb down and 23 lb up at 4-3-11, 18 lb down and 23 lb up at 4-3-11, and 39 lb down at 7-1-10, and 39 lb down at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-4=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 12=-69(F=-34, B=-34) 14=58(F=29, B=29) 15=-5(F=-2, B=-2) 16=-57(F=-28, B=-28)

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

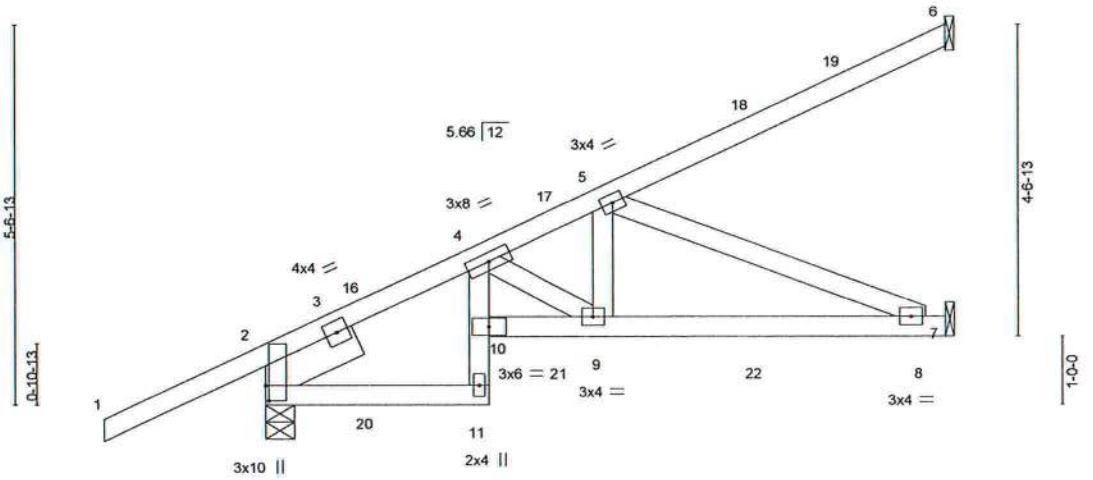
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	
2845647	HJ01T	DIAGONAL HIP GIRDER	2	1	Job Reference (optional)	T24526145

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:11 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-RFPw0wun1tvXqNAKDVBJJB1Kozl_ppP2oTKR1vz1Ovw

-2-4-5 / 2-4-5 | 3-2-14 / 3-2-14 | 4-11-0 / 1-8-2 | 9-10-13 / 4-11-13

Scale = 1:32.4



3-2-14 / 3-2-14 | 4-11-0 / 1-8-2 | 9-10-13 / 4-11-13

Plate Offsets (X,Y)-- [2:0-2-12,0-0-9]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	0.07	8-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.09	8-9	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.40	Horz(CT)	-0.04	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 54 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0

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

REACTIONS. (size) 6=Mechanical, 2=0-4-15, 7=Mechanical
Max Horz 2=191(LC 8)
Max Uplift 6=-77(LC 8), 2=-271(LC 8), 7=-201(LC 8)
Max Grav 6=122(LC 1), 2=511(LC 35), 7=345(LC 32)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-555/254, 4-5=-803/419
BOT CHORD 2-11=-314/376, 9-10=-526/661, 8-9=-502/724
WEBS 5-9=-173/281, 5-8=-782/542

NOTES- (9)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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) 6 except (jt=lb) 2=271, 7=201.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 61 lb down and 133 lb up at 1-5-12, 61 lb down and 133 lb up at 1-5-12, 68 lb down and 27 lb up at 4-3-11, 68 lb down and 27 lb up at 4-3-11, and 106 lb down and 82 lb up at 7-1-10, and 106 lb down and 82 lb up at 7-1-10 on top chord, and 10 lb down and 45 lb up at 1-5-12, 10 lb down and 45 lb up at 1-5-12, 41 lb down and 41 lb up at 4-3-11, 41 lb down and 41 lb up at 4-3-11, and 57 lb down and 43 lb up at 7-1-10, and 57 lb down and 43 lb up at 7-1-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-6=-54, 11-12=-20, 7-10=-20

Concentrated Loads (lb)

Vert: 16=68(F=34, B=34) 18=-43(F=-22, B=-22) 21=-30(F=-15, B=-15) 22=-82(F=-41, B=-41)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526146
2845647	PB01	GABLE	16	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:12 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-vRyIDGvPoB1OSWlXnCiYsPZZkNDOYLsB174_ZLz1Ovv

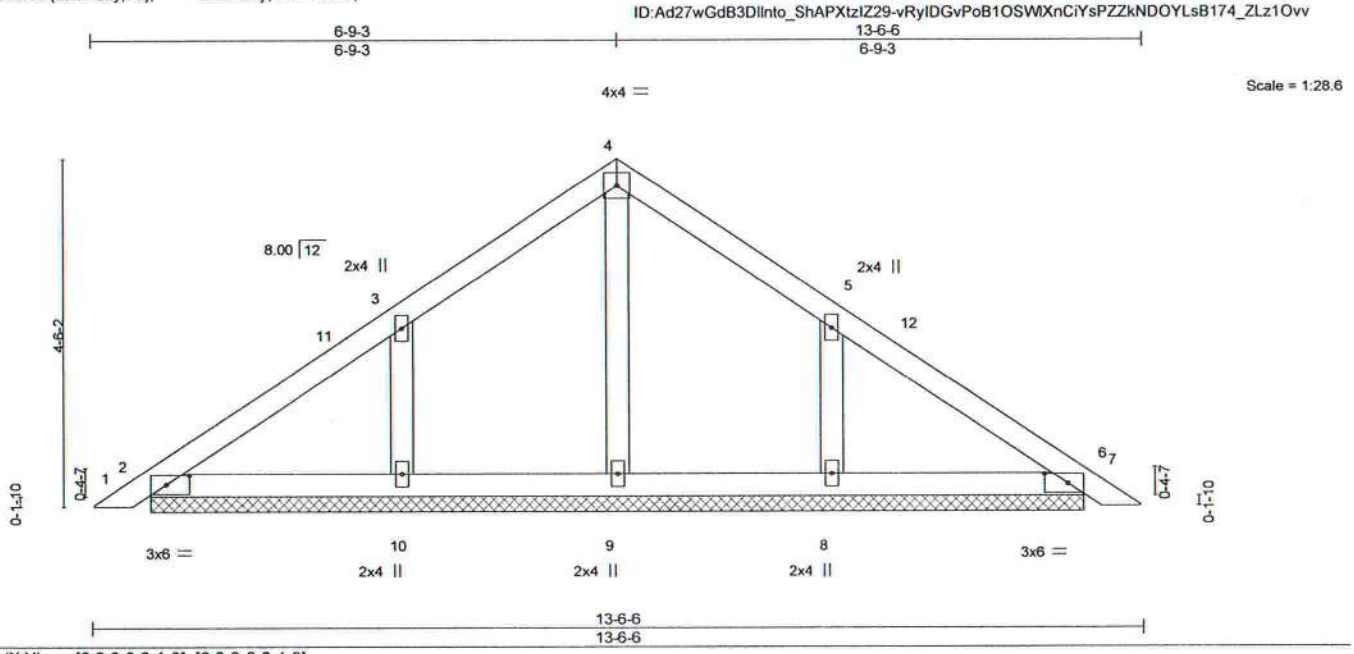


Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [6:0-3-9,0-1-8]

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	0.11	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	0.06	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 53 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 12-0-2.
(lb) - Max Horz 2=-98(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=-135(LC 13), 10=-135(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=280(LC 20), 10=281(LC 19)

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

NOTES- (11)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-3-5 to 3-3-5, Exterior(2N) 3-3-5 to 6-9-3, Corner(3R) 6-9-3 to 9-6-6, Exterior(2N) 9-6-6 to 13-3-1 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 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 8=135, 10=135.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

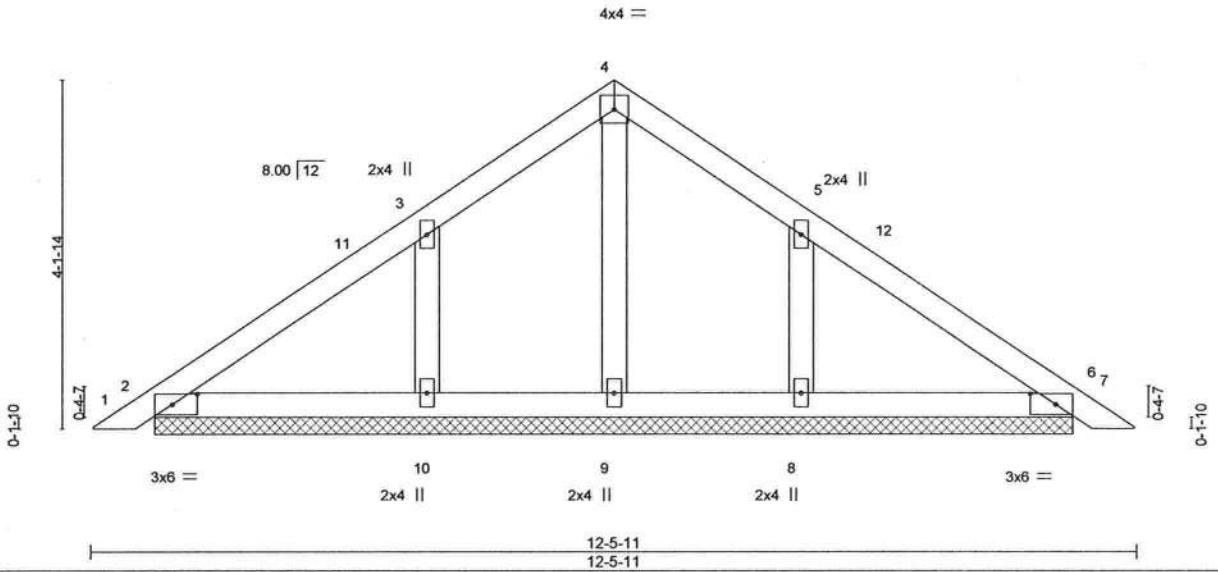
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526147
2845647	PB01G	GABLE	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:13 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-NeWgQcw1ZUAF4gKjKwDnOc6kbnYhHp7LGmpX5oz1Ovu

6-2-14 / 6-2-14 | 12-5-11 / 6-2-14

Scale = 1:26.4



12-5-11 / 12-5-11

Plate Offsets (X,Y)-- [2:0-3-9,0-1-8], [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	0.11	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	0.06	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 10-11-7.
(lb) - Max Horz 2=-90(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 8=-126(LC 13), 10=-127(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9 except 8=267(LC 20), 10=267(LC 19)

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

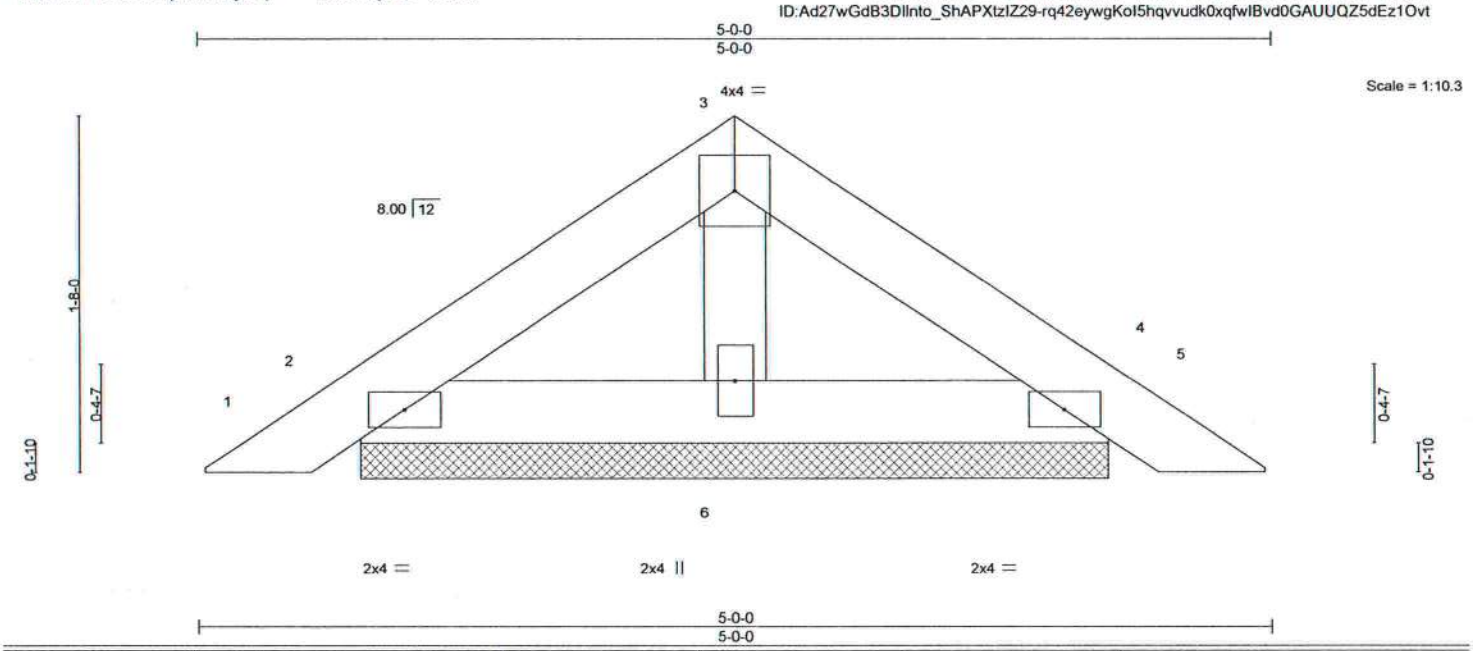
NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) 0-3-5 to 3-3-5, Exterior(2N) 3-3-5 to 6-2-13, Corner(3R) 6-2-13 to 9-2-14, Exterior(2N) 9-2-14 to 12-2-6 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 4-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 8=126, 10=127.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526148
2845647	PB04	GABLE	6	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:14 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-rq42eywgKoI5hqvvudk0xqfwIBvd0GAUUQZ5dEz1Ovt



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	0.05	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 15 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 5-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-5-12, 4=3-5-12, 6=3-5-12
Max Horz 2=-34(LC 10)
Max Uplift 2=-34(LC 12), 4=-39(LC 13), 6=-7(LC 12)
Max Grav 2=98(LC 1), 4=98(LC 1), 6=114(LC 1)

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

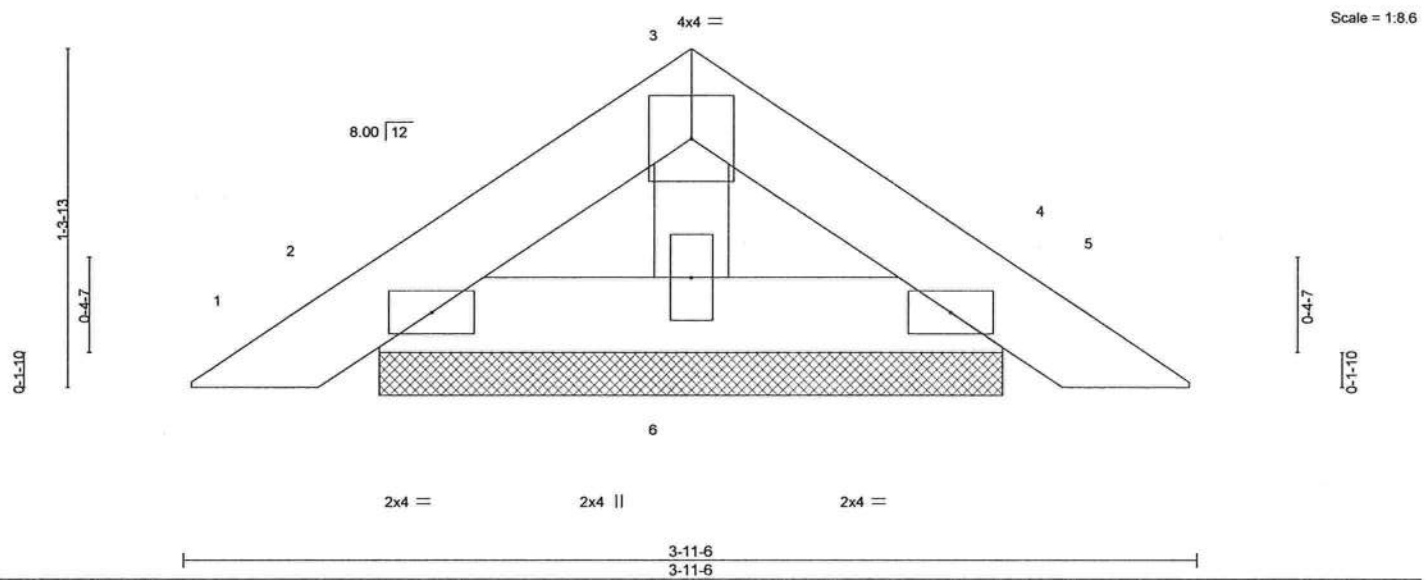
NOTES- (11)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone;C-C for members and forces & MWFRS 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 100 lb uplift at joint(s) 2, 4, 6.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526149
2845647	PB04G	PIGGYBACK TRUSS	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:15 2021 Page 1
ID:Ad27wGdB3Dlinto_ShAPXtzIZ29-J0eRrIxI56QyJ_T5SLFFU1B5QbF5ljUej4IeAgz1Ovs



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	0.02	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-P							Weight: 11 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 3-11-6 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=2-5-2, 4=2-5-2, 6=2-5-2
Max Horz 2=26(LC 11)
Max Uplift 2=-28(LC 12), 4=-32(LC 13), 6=-3(LC 12)
Max Grav 2=78(LC 1), 4=78(LC 1), 6=76(LC 1)

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

NOTES- (9)
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=22ft; Cat. II; Exp B; 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) 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.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526150
2845647	T01	COMMON TRUSS	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:16 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-nDCp3eywsPYpx82I02mU0FkAO_WkU?Knyk2Ci7z1Ovr

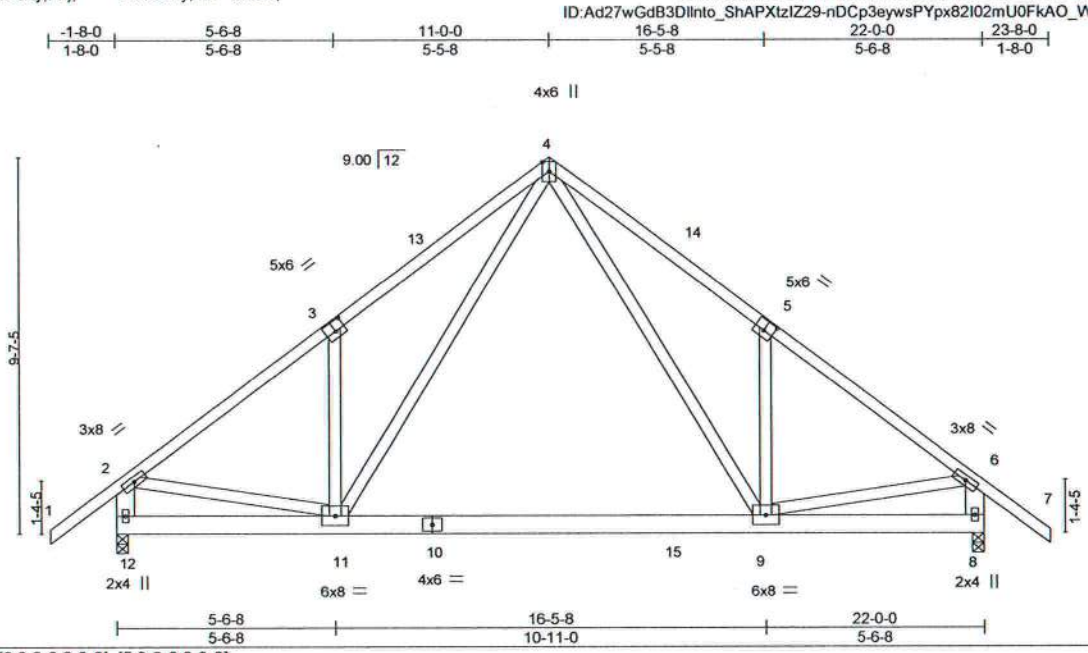


Plate Offsets (X,Y)-- [3:0-3-0,0-3-0], [5:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.39	Vert(LL)	-0.19	9-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.37	Vert(CT)	-0.36	9-11	>715	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.74	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 163 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=252(LC 11)
Max Uplift 12=-290(LC 12), 8=-290(LC 13)
Max Grav 12=1374(LC 19), 8=1335(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1648/326, 3-4=-1695/502, 4-5=-1632/502, 5-6=-1651/326, 2-12=-1438/339, 6-8=-1388/339
BOT CHORD 9-11=-81/863
WEBS 4-9=-342/1011, 5-9=-321/266, 4-11=-342/1054, 3-11=-321/266, 2-11=-177/1258, 6-9=-177/1321

NOTES- (8)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 23-8-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=290, 8=290.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-54, 4-6=-54, 6-7=-54, 11-12=-20, 9-11=-80(F=-60), 8-9=-20

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526151
2845647	T01G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:18 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-kbKZUKzAN1oXARCg7Tpy5gpZWoGIy3M4P2XIm?z1Ovp

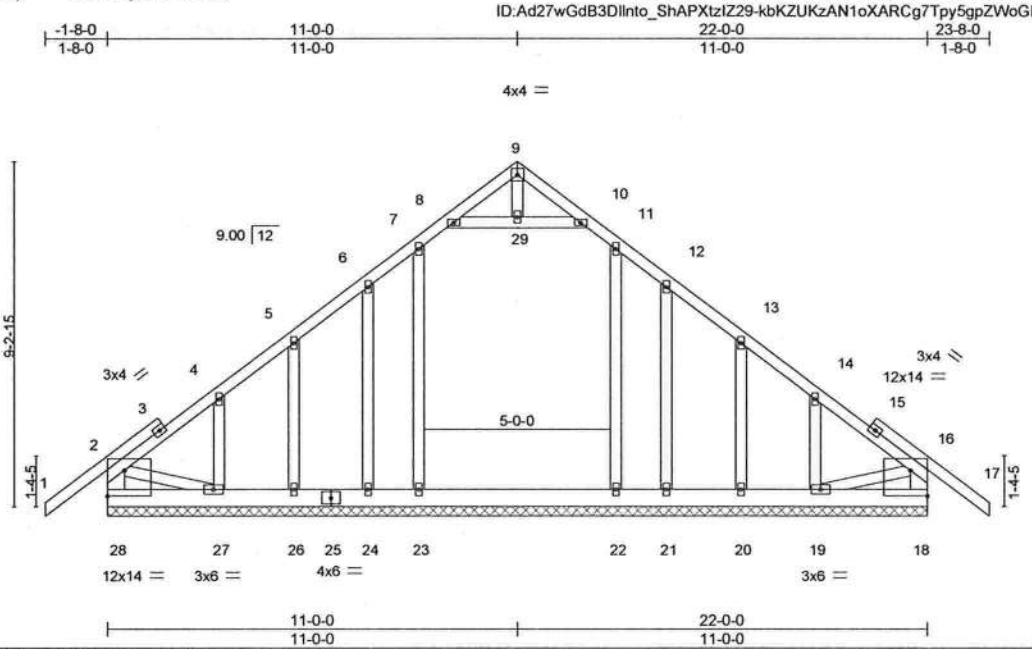


Plate Offsets (X,Y)-- [16:Edge,0-8-4], [28:Edge,0-8-4]

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	0.22	Vert(LL)	-0.01	17	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.11	Vert(CT)	-0.02	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 177 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-28,16-18: 2x6 SP No.2
OTHERS 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, Except: 6-0-0 oc bracing: 27-28,18-19.

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 28=207(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 28, 18, 23, 24, 26, 21, 20 except 27=-135(LC 12), 19=-129(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 24, 26, 27, 21, 20, 19 except 28=319(LC 1), 18=319(LC 1), 23=386(LC 19), 22=370(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-28=-291/83, 16-18=-291/88

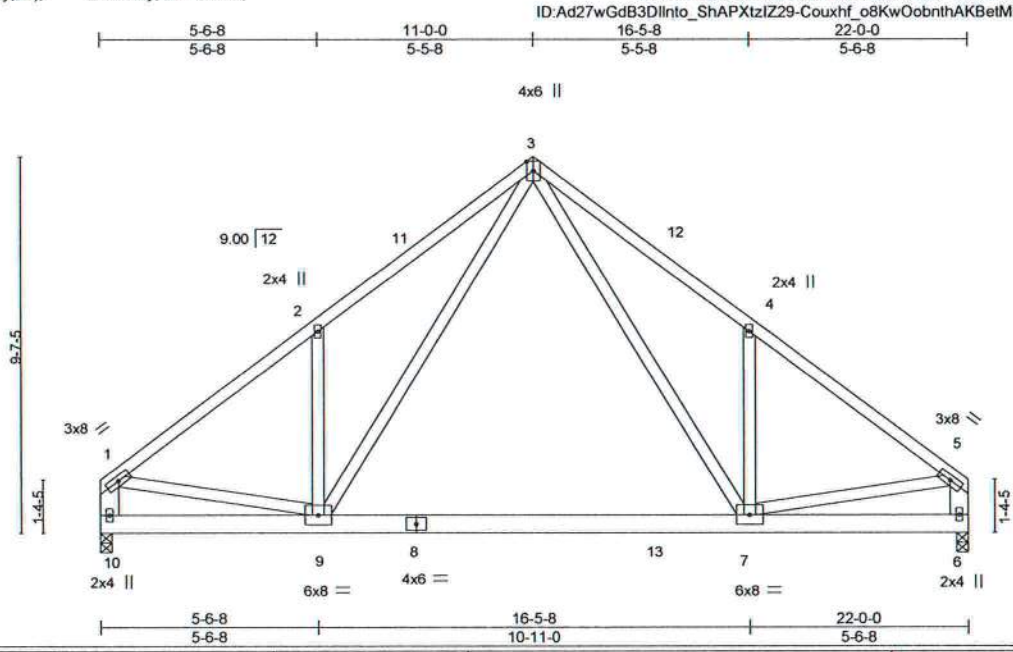
NOTES- (12)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 23-8-0 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 28, 18, 23, 24, 26, 21, 20 except (jt=lb) 27=135, 19=129.
12) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526152
2845647	T02	COMMON TRUSS	5	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:19 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-Couxhf_o8KwOobnthAKBetMi8CXRhMgDeiGsJSz1Ovo



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	0.36	Vert(LL)	-0.19	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.37	Vert(CT)	-0.36	7-9	>712	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 157 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP M 26
WEBS 2x4 SP No.3 *Except*
1-10,5-6: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 6=0-3-8
Max Horz 10=220(LC 9)
Max Uplift 10=-247(LC 12), 6=-247(LC 13)
Max Grav 10=1279(LC 19), 6=1255(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1662/326, 2-3=-1723/513, 3-4=-1660/512, 4-5=-1664/326, 1-10=-1342/277, 5-6=-1319/277
BOT CHORD 7-9=-103/855
WEBS 3-7=-353/1037, 4-7=-343/281, 3-9=-354/1080, 2-9=-343/282, 1-9=-190/1256, 5-7=-192/1317

NOTES- (8)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 21-9-4 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=247, 6=247.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-54, 3-5=-54, 9-10=-20, 7-9=-80(F=-60), 6-7=-20

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526153
2845647	T03	PIGGYBACK BASE TRUSS	6	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:20 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-g_RKu??Qve2FPIM3FurQB5voJcnQQx4NtM0Pruz1Ovn

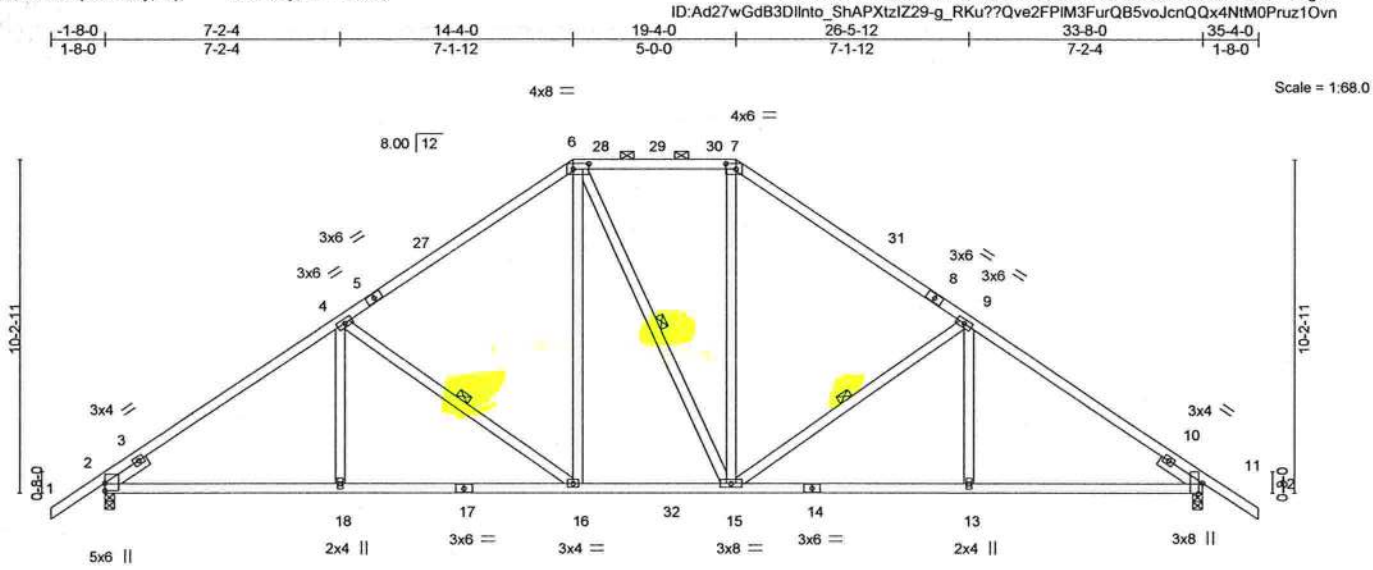


Plate Offsets (X,Y)-- [6:0-5-12,0-2-0], [7:0-3-12,0-2-0], [11:0-3-13,Edge]

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	0.65	Vert(LL)	-0.14	16-18	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.71	Vert(CT)	-0.27	16-18	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.08	11	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 204 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-6-0, Right 2x4 SP No.3 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-8-0 oc purlins, except 2-0-0 oc purlins (5-4-12 max.): 6-7.
BOT CHORD Rigid ceiling directly applied or 9-10-4 oc bracing.
WEBS 1 Row at midpt 4-16, 6-15, 9-15

REACTIONS. (size) 2=0-3-8, 11=0-3-8
Max Horz 2=242(LC 11)
Max Uplift 2=-304(LC 12), 11=-304(LC 13)
Max Grav 2=1449(LC 19), 11=1446(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1923/380, 4-6=-1471/339, 6-7=-1148/344, 7-9=-1467/339, 9-11=-1919/380
BOT CHORD 2-18=-349/1679, 16-18=-349/1679, 15-16=-136/1203, 13-15=-186/1535, 11-13=-186/1535
WEBS 4-18=0/282, 4-16=-592/263, 6-16=-114/578, 7-15=-106/550, 9-15=-592/263, 9-13=0/281

NOTES- (9)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 14-4-0, Exterior(2R) 14-4-0 to 18-6-15, Interior(1) 18-6-15 to 19-4-0, Exterior(2R) 19-4-0 to 23-6-15, Interior(1) 23-6-15 to 35-4-0 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=304, 11=304.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

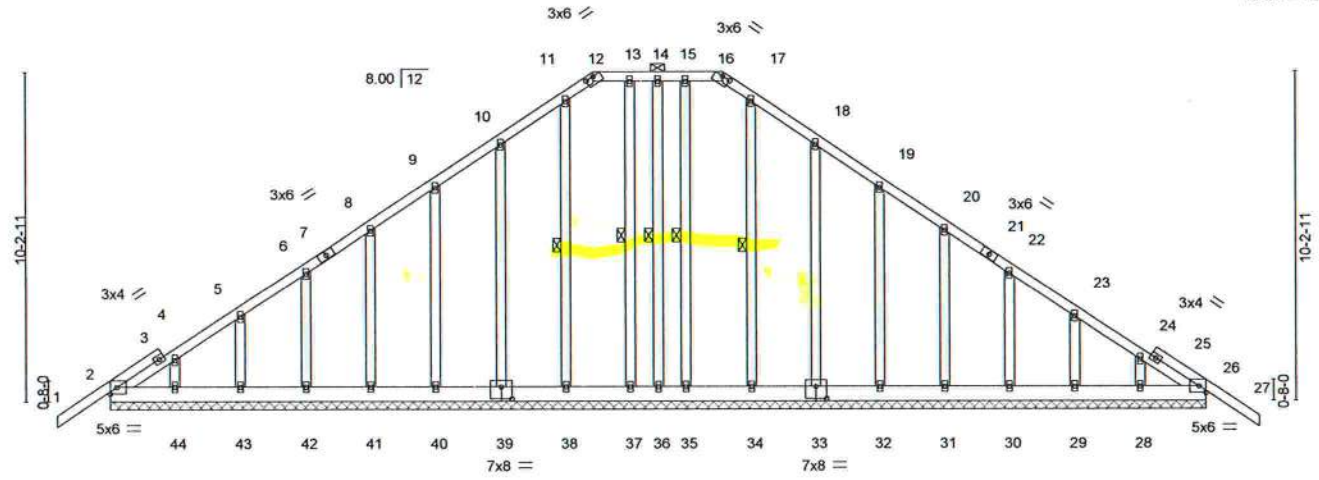
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526154
2845647	T03G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:23 2021 Page 1
ID:Ad27wGdB3DIinto_ShAPXtzIZ29-4Z7SX11JCZQqGD5ew0O7ojXQDp_cdJPpZKE3SDz1Ovk

-1-8-0 / 1-8-0 | 14-10-5 / 14-10-5 | 18-9-11 / 3-11-6 | 33-8-0 / 14-10-5 | 35-4-0 / 1-8-0

Scale = 1:68.5



33-8-0
33-8-0

Plate Offsets (X,Y)– [12:0-3-0,0-0-2], [16:0-3-0,0-0-2], [33:0-4-0,0-4-8], [39:0-4-0,0-4-8]

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	0.16	Vert(LL)	-0.01	27	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.04	Vert(CT)	-0.01	27	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 294 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 12-16.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 14-36, 17-34, 15-35, 11-38, 13-37

REACTIONS. All bearings 33-8-0.
(lb) - Max Horz 2=242(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 36, 28, 29, 30, 31, 32, 33, 34, 35, 44, 43, 42, 41, 40, 39, 38, 26, 37
Max Grav All reactions 250 lb or less at joint(s) 2, 36, 28, 29, 30, 31, 32, 33, 34, 35, 44, 43, 42, 41, 40, 39, 38, 26, 37

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

NOTES- (13)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 14-10-5, Corner(3R) 14-10-5 to 17-8-0, Exterior(2N) 17-8-0 to 18-9-11, Corner(3R) 18-9-11 to 21-8-0, Exterior(2N) 21-8-0 to 35-4-0 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) Provide adequate drainage to prevent water ponding.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 36, 28, 29, 30, 31, 32, 33, 34, 35, 44, 43, 42, 41, 40, 39, 38, 26, 37.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526155
2845647	T04	ATTIC TRUSS	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:26 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-V8pb934BVUoO7gpDb8yqQM8nZ0qlqU3FFITj3Yz1Ovh

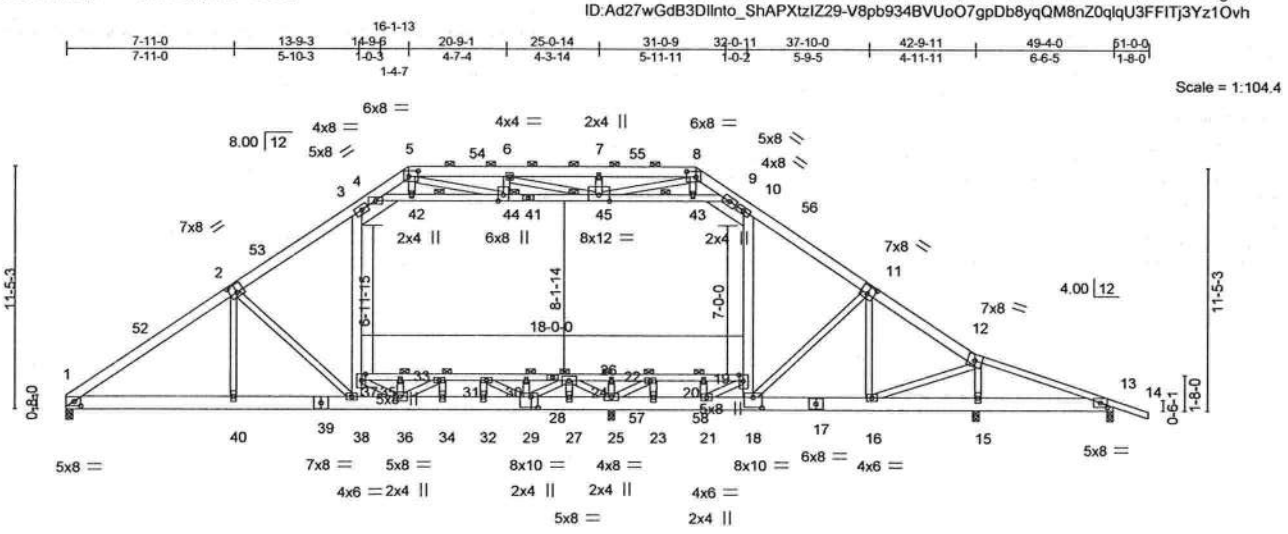


Plate Offsets (X,Y)-- [1:0-3-10,0-2-8], [2:0-4-0,0-4-8], [5:0-5-4,0-3-0], [8:0-5-4,0-3-0], [11:0-4-0,0-4-8], [13:0-4-0,0-2-10], [18:0-5-0,0-5-12], [19:Edge,0-2-4], [29:0-3-12,0-6-0], [37:Edge,0-2-4], [44:0-3-8,0-3-0], [45:0-6-0,0-3-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.28	38	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.52	38-40	>590	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.91	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.20	19-37	1093	360	Weight: 485 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
12-14: 2x4 SP No.2, 3-4,9-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except*
28-37,19-28: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
3-38,10-18: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-13 oc purlins, except
2-0-0 oc purlins (5-8-12 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-44, 9-45
JOINTS 1 Brace at Jt(s): 24, 22, 35, 33, 44, 45, 30, 26, 20

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 1=-265(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-141(LC 12), 15=-386(LC 8), 13=-325(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 1=1767(LC 2), 15=1477(LC 25), 25=1873(LC 18), 13=873(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2860/334, 2-3=-2332/324, 3-4=-1742/387, 4-5=-928/285, 5-6=-1591/556, 6-7=-1516/614, 7-8=-1516/614, 8-9=-760/342, 9-10=-1781/391, 10-11=-2158/354, 11-12=-2183/216, 12-13=-2130/432
BOT CHORD 1-40=-194/2459, 38-40=-194/2456, 36-38=-45/2148, 34-36=0/2998, 32-34=0/2998, 29-32=0/2998, 27-29=-164/897, 25-27=-164/897, 23-25=-139/544, 21-23=-139/544, 18-21=-52/1518, 16-18=-37/1828, 15-16=-316/2036, 13-15=-328/2007, 35-37=-1468/15, 33-35=-1468/15, 31-33=-1339/0, 30-31=-482/232, 26-30=-482/232, 24-26=-153/1971, 22-24=-153/1971, 20-22=-64/1432, 19-20=-64/1432
WEBS 2-40=-43/438, 2-38=-831/305, 3-37=0/794, 18-19=-95/1082, 10-19=-60/589, 12-16=-432/764, 12-15=-1235/505, 4-42=-1266/212, 42-44=-1255/213, 44-45=-894/257, 43-45=-1752/185, 9-43=-1768/184, 24-25=-278/17, 22-23=-85/250, 19-21=-1280/33, 35-36=-261/0, 36-37=0/1304, 33-34=-335/69, 11-16=-325/232, 5-44=-403/964, 8-45=-370/1123, 25-26=-1195/0, 22-25=-885/360, 33-36=-208/467, 26-27=-363/36, 26-29=0/1459, 31-32=-25/350, 29-31=-1109/0, 20-21=-284/93

NOTES- (13)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 19-1-13, Interior(1) 19-1-13 to 29-8-2, Exterior(2R) 29-8-2 to 32-8-2, Interior(1) 32-8-2 to 51-0-0 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.

Continued on page 2

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE T24526155
2845647	T04	ATTIC TRUSS	3	1	Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:26 2021 Page 2
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-V8pb934BVUoO7gpDb8yqQM8nZ0qlqU3FFITj3Yz1Ovh

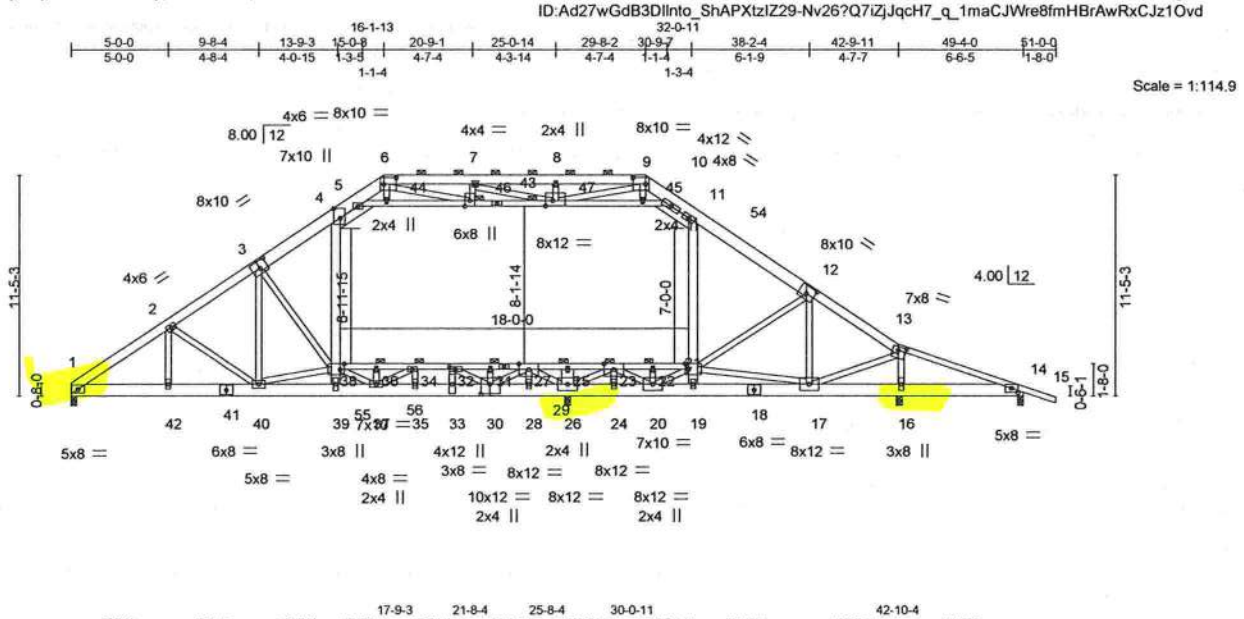
NOTES- (13)

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.
8) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-42, 42-44, 44-45, 43-45, 9-43; Wall dead load (5.0psf) on member(s).3-37, 10-19
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 35-37, 33-35, 31-33, 30-31, 26-30, 24-26, 22-24, 20-22, 19-20
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 141 lb uplift at joint 1, 386 lb uplift at joint 15 and 325 lb uplift at joint 13.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

MiTek®
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526156
2845647	T04D	ATTIC TRUSS	1	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:30 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-Nv26?Q7iZjJqcH7_q_1maCJWre8fmHBrAwRxCJz1Ovd



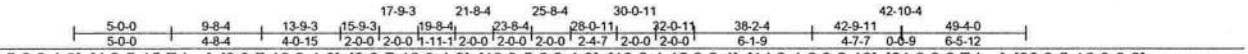


Plate Offsets (X,Y)-- [3:0-5-0,0-4-8], [4:0-5-15,Edge], [6:0-7-12,0-4-0], [9:0-7-12,0-4-0], [12:0-5-0,0-4-8], [13:0-4-12,0-2-4], [14:0-4-0,0-2-10], [21:0-2-0,Edge], [30:0-5-12,0-6-0], [32:0-3-8,0-1-8], [38:0-2-8,Edge], [46:0-3-8,0-3-0], [47:0-4-8,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.58	Vert(LL)	-0.24	37-39	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.35	37-39	>871	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS		Attic	0.13	21-38	1611	360	Weight: 1570 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
3-6,9-12: 2x8 SP 2400F 2.0E, 13-15: 2x4 SP No.2

BOT CHORD 2x8 SP 2400F 2.0E *Except*
29-38,21-29: 2x4 SP M 31

WEBS 2x4 SP No.3 *Except*
4-39,11-19: 2x6 SP No.2, 13-17,26-27,23-26: 2x4 SP No.2
25-26: 2x8 SP 2400F 2.0E
20-21,37-38,27-30,34-37,30-32,20-23: 2x4 SP M 31

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 28-30,26-28,24-26,20-24.

JOINTS 1 Brace at Jt(s): 25, 23, 22, 36, 34, 31, 46, 47

REACTIONS. All bearings 0-3-8 except (jt=length) 16=0-4-5 (input: 0-3-8), 26=0-6-9 (input: 0-3-8).
(lb) - Max Horz 1=-265(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-1340(LC 5), 16=-2950(LC 4), 14=-222(LC 5), 26=-3852(LC 4)
Max Grav All reactions 250 lb or less at joint(s) except 1=6223(LC 16), 16=10990(LC 17), 14=431(LC 1), 26=16723(LC 17)

SUPPLEMENTARY BEARING PLATES, SPECIAL ANCHORAGE, OR OTHER MEANS TO ALLOW FOR THE MINIMUM REQUIRED SUPPORT WIDTH (SUCH AS COLUMN CAPS, BEARING BLOCKS, ETC.) ARE THE RESPONSIBILITY OF THE TRUSS MANUFACTURER OR THE BUILDING DESIGNER.

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

TOP CHORD 1-2=-10386/2279, 2-3=-10576/2400, 3-4=-9175/2149, 4-5=-6020/1478, 5-6=-1456/412, 6-7=-1523/459, 7-8=-812/529, 8-9=-812/529, 9-10=-283/551, 10-11=-6329/1558, 11-12=-9446/2294, 12-13=-10365/2577, 13-14=-1019/265

BOT CHORD 1-42=-1977/8729, 40-42=-1977/8729, 39-40=-3062/13338, 37-39=-3000/13158, 35-37=-3218/14267, 33-35=-3218/14267, 30-33=-3218/14267, 28-30=-4033/1172, 26-28=-4033/1172, 24-26=-4945/1132, 20-24=-4945/1132, 19-20=-2179/7139, 17-19=-2232/7533, 16-17=-327/1581, 14-16=-172/954, 36-38=-8947/2018, 34-36=-8947/2018, 32-34=-6997/1553, 31-32=-329/757, 27-31=-325/747, 25-27=-4227/18496, 23-25=-4227/18496, 22-23=-983/4302, 21-22=-983/4302

WEBS 3-40=-363/1772, 3-38=-2903/642, 38-39=-767/2472, 4-38=-1348/5718, 19-21=-617/2381, 11-21=-374/1497, 12-21=-1776/634, 13-17=-2105/7917, 13-16=-9730/2562, 5-44=-5921/1388, 44-46=-5849/1374, 46-47=-6375/1287, 45-47=-8694/2047, 10-45=-8811/2071, 25-26=-1902/397, 23-24=-2374/511, 20-22=-1247/251, 20-21=-4615/1283, 36-37=-1055/200, 37-38=-927/3743, 34-35=-1914/419, 32-33=-771/3254, 30-31=-1028/207, 27-28=-2513/549, 12-17=-1343/278, 6-44=-87/477, 9-45=-155/772, 6-46=-569/425, 9-47=-473/1361, 7-47=-1301/314, 26-27=-8671/1953, 27-30=-2801/12317, 34-37=-546/2284, 30-32=-8875/2017, 38-40=-4527/1059, 17-21=-312/1462, 2-42=-331/123, 2-40=-206/472, 20-23=-2402/9474, 23-26=-7324/1958

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

NOTES- (17)

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc, 2x4 - 1 row at 0-4-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered 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=22ft; 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) All plates are 3x6 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0psf) on member(s).4-38, 11-21
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 36-38, 34-36, 32-34, 31-32, 27-31, 25-27, 23-25, 22-23, 21-22
12) WARNING: Required bearing size at joint(s) 16, 26 greater than input bearing size.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1340 lb uplift at joint 1, 2950 lb uplift at joint 16, 222 lb uplift at joint 14 and 3852 lb uplift at joint 26.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2029 lb down and 574 lb up at 32-11-4 on top chord, and 3072 lb down and 869 lb up at 13-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.
17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-5=-64, 5-6=-54, 6-9=-54, 9-10=-54, 10-11=-64, 13-15=-54, 48-55=-20, 16-55=-265(F=-245), 16-51=-20, 38-56=-40, 21-56=-285(F=-245), 5-10=-10
   Drag: 4-38=-10, 11-21=-10
   Concentrated Loads (lb)
   Vert: 39=-1702(F) 54=-1124
   Trapezoidal Loads (plf)
   Vert: 11=-201(F=-147)-to-13=-319(F=-265)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526157
2845647	T04G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:38 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-8RX7g9DjgAJiaWkWlgAevueynsy?ezk0?9NMUrz1OvV

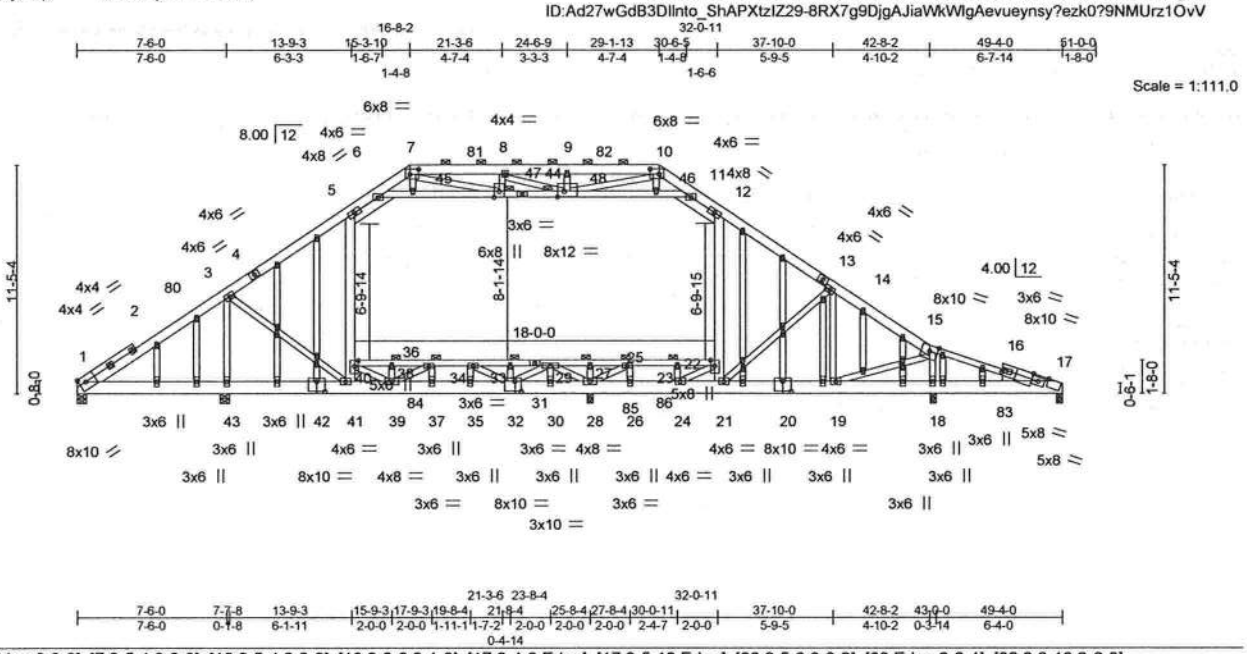


Plate Offsets (X,Y)-- [1:Edge,0-3-8], [7:0-5-4,0-3-0], [10:0-5-4,0-3-0], [16:0-2-0,0-1-8], [17:0-4-0,Edge], [17:0-5-12,Edge], [20:0-5-0,0-6-0], [22:Edge,0-2-4], [32:0-3-12,0-6-0], [40:Edge,0-2-4], [42:0-5-0,0-6-0], [47:0-3-8,0-3-0], [48:0-4-3,0-3-7], [55:0-1-10,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	-0.05	19-21	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.09	19-21	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.68	Horz(CT)	0.01	18	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	0.03	22-40	6554	360	Weight: 544 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except* 15-17,16-17,1-2: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except* 31-40,22-31: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 5-41,12-21: 2x6 SP No.2
OTHERS 2x4 SP No.3
WEDGE
Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (5-10-15 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 1-43,41-43,18-19,17-18.
JOINTS 1 Brace at Jt(s): 27, 25, 23, 38, 36, 33, 47, 48

REACTIONS. All bearings 0-3-8 except (jt=length) 1=0-5-8, 43=0-5-8.
(lb) - Max Horz 1=-254(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 17=-156(LC 9), 1=-234(LC 8), 43=-216(LC 12), 18=-291(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 17 except 1=501(LC 1), 43=1894(LC 20), 18=1708(LC 25), 28=1830(LC 18)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-719/512, 3-5=-1276/380, 5-6=-1139/424, 6-7=-816/293, 7-8=-1458/533, 8-9=-1434/523, 9-10=-1434/523, 10-11=-804/264, 11-12=-1135/414, 12-14=-1279/372, 14-15=-1189/254, 15-17=-248/422
BOT CHORD 1-43=-168/597, 41-43=-168/597, 39-41=-54/953, 37-39=-294/1777, 35-37=-294/1777, 32-35=-294/1777, 30-32=-228/416, 28-30=-228/416, 26-28=-51/537, 24-26=-51/537, 21-24=-75/1038, 19-21=-92/949, 18-19=-265/257, 17-18=-369/276, 38-40=-682/194, 36-38=-682/194, 34-36=-1033/241, 33-34=-485/252, 29-33=-485/252, 27-29=-437/1584, 25-27=-437/1584, 23-25=-118/506, 22-23=-118/506
WEBS 3-43=-1636/533, 3-41=-223/1106, 40-41=-559/166, 5-40=-256/234, 21-22=-52/264, 15-19=-262/1265, 15-18=-1402/379, 6-45=-668/264, 45-47=-659/265, 47-48=-521/624, 46-48=-598/259, 11-46=-608/259, 27-28=-262/86, 25-26=-98/403, 23-24=-254/97, 22-24=-665/163, 38-39=-274/106, 39-40=-227/815, 29-30=-297/94, 14-19=-398/192, 7-47=-312/897, 10-48=-319/871, 28-29=-1022/267, 25-28=-1269/373, 36-39=-411/72, 32-34=-649/219, 29-32=-307/1100

NOTES- (15)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 16-8-2, Exterior(2R) 16-8-2 to 19-8-2, Interior(1) 19-8-2 to 29-1-13, Exterior(2R) 29-1-13 to 32-1-11, Interior(1) 32-1-11 to 49-2-4 zone; porch right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

Continued on page 2

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: June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

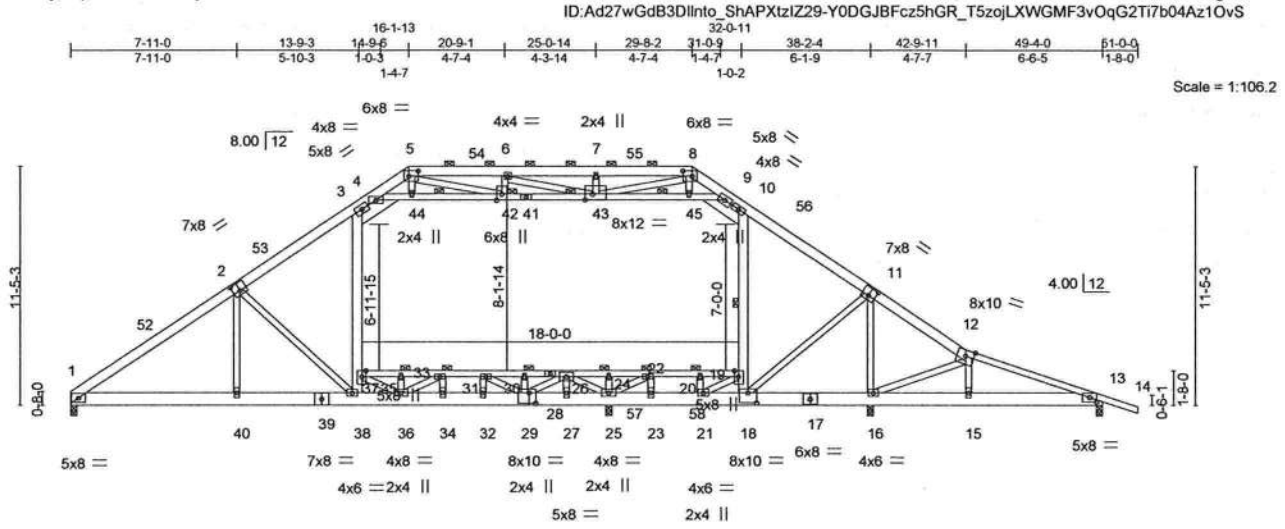
Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	T04G	GABLE	1	1	T24526157 Job Reference (optional)

NOTES- (15)

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.
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) Ceiling dead load (5.0 psf) on member(s). 5-6, 11-12, 6-45, 45-47, 47-48, 46-48, 11-46; Wall dead load (5.0psf) on member(s).5-40, 12-22
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 38-40, 36-38, 34-36, 33-34, 29-33, 27-29, 25-27, 23-25, 22-23
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 156 lb uplift at joint 17, 234 lb uplift at joint 1, 216 lb uplift at joint 43 and 291 lb uplift at joint 18.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.
15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526158
2845647	T05	ATTIC TRUSS	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:41 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-Y0DGJBFcz5hGR_T5zojLXWGMF3vOqG2Ti7b04Az1OvS



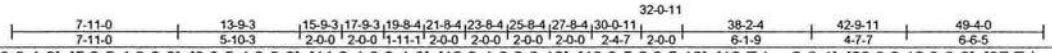


Plate Offsets (X,Y)-- [2:0-4-0,0-4-8], [5:0-5-4,0-3-0], [8:0-5-4,0-3-0], [11:0-4-0,0-4-8], [13:0-4-0,0-2-10], [18:0-5-0,0-5-12], [19:Edge,0-2-4], [29:0-3-12,0-6-0], [37:Edge,0-2-4], [42:0-3-8,0-3-0], [43:0-4-5,0-3-4]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.76	Vert(LL)	-0.24	38	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.90	Vert(CT)	-0.49	38-40	>633	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.15	19-37	1475	360	Weight: 484 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except*
12-14: 2x4 SP No.2, 3-4,9-10: 2x8 SP 2400F 2.0E
BOT CHORD 2x8 SP 2400F 2.0E *Except*
28-37,19-28: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
3-38,10-18: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-11-0 oc purlins, except
2-0-0 oc purlins (5-8-4 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 10-19, 4-42, 9-43
JOINTS 1 Brace at Jt(s): 24, 22, 35, 33, 30, 42, 43, 20

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 1=-265(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-136(LC 12), 16=-476(LC 8), 13=-329(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 1=1720(LC 20), 16=1016(LC 25), 25=2026(LC 18), 13=1287(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2777/321, 2-3=-2239/277, 3-4=-1677/341, 4-5=-917/276, 5-6=-1604/557, 6-7=-1516/606, 7-8=-1516/606, 8-9=-734/319, 9-10=-1716/354, 10-11=-2072/272, 11-12=-2368/232, 12-13=-3072/464
BOT CHORD 1-40=-186/2387, 38-40=-186/2384, 36-38=-30/2076, 34-36=0/2701, 32-34=0/2701, 29-32=0/2701, 27-29=-32/436, 25-27=-32/436, 23-25=-54/348, 21-23=-54/348, 18-21=0/1485, 16-18=-93/2005, 15-16=-346/2898, 13-15=-355/2897, 35-37=-1351/0, 33-35=-1351/0, 31-33=-1161/0, 30-31=-263/354, 26-30=-263/354, 24-26=-49/2392, 22-24=-49/2392, 20-22=-72/1563, 19-20=-72/1563
WEBS 2-40=-37/451, 2-38=-815/297, 3-37=0/747, 18-19=-108/1157, 10-19=-69/565, 11-18=-383/226, 11-16=-561/488, 12-16=-1113/591, 12-15=-336/184, 4-44=-1225/118, 42-44=-1214/120, 42-43=-880/368, 43-45=-1669/182, 9-45=-1684/181, 24-25=-277/19, 22-23=0/282, 19-21=-1502/62, 35-36=-264/0, 33-34=-402/75, 31-32=-39/403, 26-27=-414/15, 36-37=0/1185, 5-42=-378/930, 8-43=-358/1109, 25-26=-1198/0, 22-25=-992/180, 33-36=-217/578, 29-31=-1222/15, 26-29=0/1586, 20-21=-267/106

NOTES- (13)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 19-1-13, Interior(1) 19-1-13 to 29-8-2, Exterior(2R) 29-8-2 to 32-8-2, Interior(1) 32-8-2 to 51-0-0 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.

Continued on page 2

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526158
2845647	T05	ATTIC TRUSS	3	1	Job Reference (optional)	

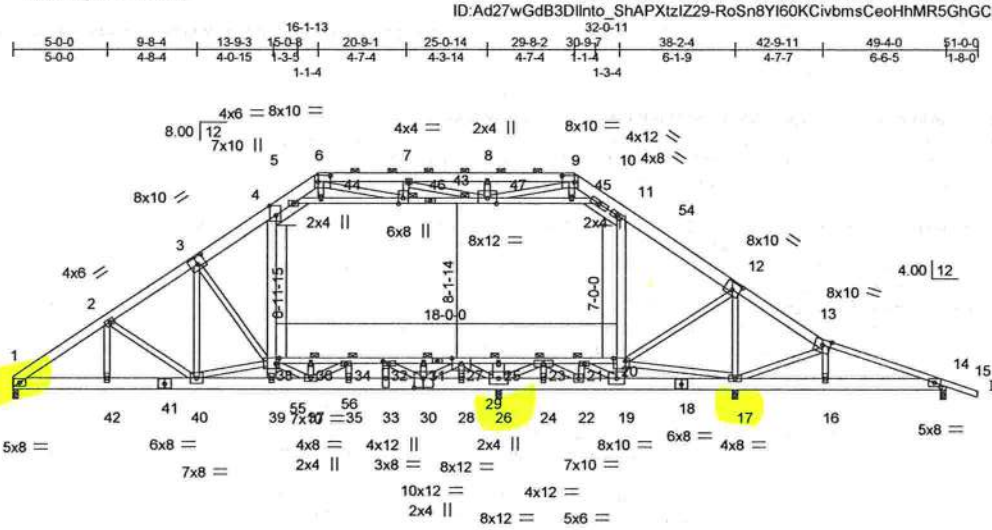
Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:41 2021 Page 2
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-Y0DGJBFcz5hGR_T5zojLXWGMF3vOqG2Ti7b04Az1OvS

NOTES- (13)

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.
8) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-44, 42-44, 42-43, 43-45, 9-45; Wall dead load (5.0psf) on member(s).3-37, 10-19
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 35-37, 33-35, 31-33, 30-31, 26-30, 24-26, 22-24, 20-22, 19-20
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 136 lb uplift at joint 1, 476 lb uplift at joint 16 and 329 lb uplift at joint 13.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526159
2845647	T05D	ATTIC TRUSS	1	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:45 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-RoSn8YI60KCivbmsCeoHhMR5GhGCm662clZEDxz1OvO



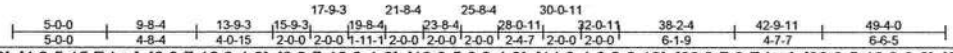


Plate Offsets (X,Y)-- [3:0-5-0,0-4-8], [4:0-5-15,Edge], [6:0-7-12,0-4-0], [9:0-7-12,0-4-0], [12:0-5-0,0-4-8], [14:0-4-0,0-2-10], [20:0-7-8,Edge], [30:0-5-12,0-6-0], [32:0-3-8,0-1-8], [38:0-2-0,Edge], [46:0-3-8,0-3-0], [47:0-6-0,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.57	Vert(LL)	-0.30	37-39	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.44	37-39	>708	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.16	20-38	1360	360	Weight: 1570 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
3-6,9-12: 2x8 SP 2400F 2.0E, 13-15: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
29-38,20-29: 2x4 SP M 31
WEBS 2x4 SP No.3 *Except*
4-39,11-19: 2x6 SP No.2, 25-26: 2x8 SP 2400F 2.0E
19-21,37-38,27-30,34-37,30-32,22-23: 2x4 SP M 31

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 25, 23, 21, 36, 34, 31, 46, 47

REACTIONS. All bearings 0-3-8 except (jt=length) 17=0-4-2 (input: 0-3-8), 26=0-6-2 (input: 0-3-8).
(lb) - Max Horz 1=-265(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-1269(LC 5), 17=-3017(LC 4), 14=-782(LC 5), 26=-3490(LC 5)
Max Grav All reactions 250 lb or less at joint(s) except 1=5961(LC 16), 17=10473(LC 17), 14=2482(LC 16), 26=15503(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-9926/2156, 2-3=-10135/2281, 3-4=-8212/1895, 4-5=-5219/1268, 5-6=-1782/503, 6-7=-1685/531, 7-8=-816/522, 8-9=-816/522, 9-10=-130/802, 10-11=-5627/1373, 11-12=-8279/1985, 12-13=-4536/1060, 13-14=-6734/1769
BOT CHORD 1-42=-1874/8343, 40-42=-1874/8343, 39-40=-3540/15182, 37-39=-3521/15166, 35-37=-3639/15924, 33-35=-3639/15924, 30-33=-3639/15924, 28-30=-2906/717, 26-28=-2906/717, 24-26=-6581/1561, 22-24=-6581/1561, 19-22=-1076/355, 17-19=-351/1196, 16-17=-1586/6355, 14-16=-1598/6375, 36-38=-11775/2753, 34-36=-11775/2753, 32-34=-9556/2212, 31-32=-1509/352, 27-31=-1524/355, 25-27=-3894/17140, 23-25=-3894/17140, 21-23=-1782/7444, 20-21=-1382/5636
WEBS 3-40=-568/2558, 3-38=-3716/853, 38-39=-679/2138, 4-38=-1260/5391, 19-20=-439/1578, 11-20=-150/642, 12-20=-761/2875, 13-17=-3125/972, 13-16=-188/377, 5-44=-4418/998, 44-46=-4364/988, 46-47=-5192/977, 45-47=-8150/1902, 10-45=-8261/1924, 25-26=-1857/385, 23-24=-2010/419, 21-22=-2716/581, 19-21=-475/2152, 36-37=-1023/190, 37-38=-933/3671, 34-35=-2066/461, 32-33=-848/3543, 30-31=-999/199, 27-28=-2332/500, 12-17=-6484/1795, 6-44=-55/356, 9-45=-145/733, 7-46=-12/290, 6-46=-884/222, 9-47=-572/1713, 7-47=-1583/387, 26-27=-9264/2114, 23-26=-4816/1155, 27-30=-2853/12512, 34-37=-633/2598, 30-32=-9498/2184, 38-40=-6820/1657, 17-20=-721/3031, 2-42=-343/126, 2-40=-218/509, 22-23=-1485/6500

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526159
2845647	T05D	ATTIC TRUSS	1	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:45 2021 Page 2
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-RoSn8YI60KCivbmsCeoHhMR5GhGCm662clZEDxz1OvO

NOTES- (17)

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
   Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
   Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc, 2x4 - 1 row at 0-4-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered 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=22ft; 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) All plates are 3x6 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-44, 44-46, 46-47, 45-47, 10-45; Wall dead load (5.0psf) on member(s).4-38, 11-20
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 36-38, 34-36, 32-34, 31-32, 27-31, 25-27, 23-25, 21-23, 20-21
12) WARNING: Required bearing size at joint(s) 17, 26 greater than input bearing size.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1269 lb uplift at joint 1, 3017 lb uplift at joint 17, 782 lb uplift at joint 14 and 3490 lb uplift at joint 26.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2029 lb down and 574 lb up at 32-11-4 on top chord, and 3072 lb down and 869 lb up at 13-10-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.
17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

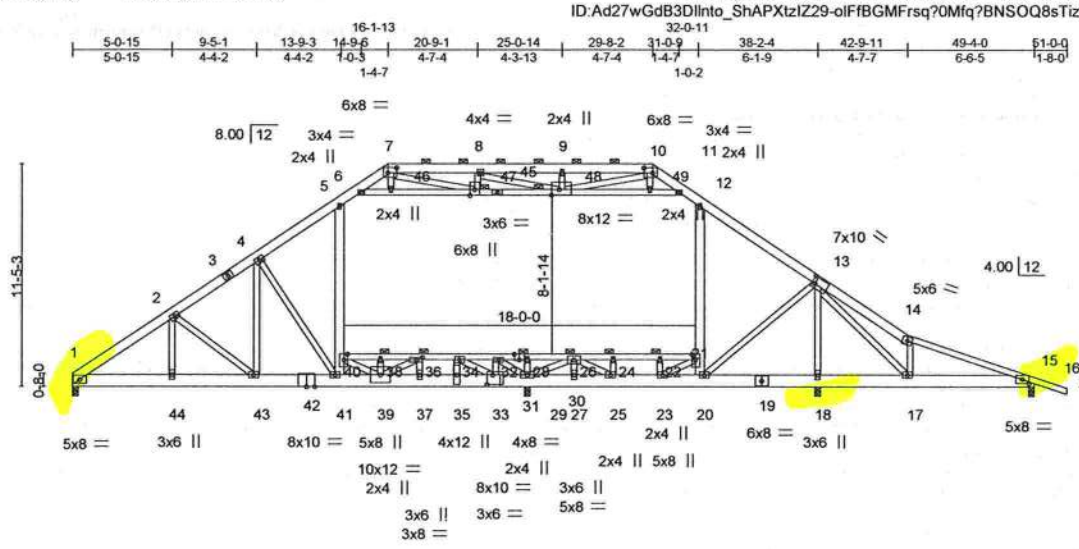
LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-4=-54, 4-5=-64, 5-6=-54, 6-9=-54, 9-10=-54, 10-11=-64, 13-15=-54, 48-55=-20, 16-55=-265(F=-245), 16-51=-20, 38-56=-40, 21-56=-285(F=-245), 20-21=-285(F=-245), 5-10=-10
   Drag: 4-38=-10, 11-20=-10
   Concentrated Loads (lb)
   Vert: 39=-1702(F) 54=-1124
   Trapezoidal Loads (plf)
   Vert: 11=-201(F=-147)-to-13=-319(F=-265)

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526160
2845647	T06	Attic Truss	1	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:50 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-oIFfBGMFrsq?0Mfq?BNSOQ8sTizsRLZnm1H?v9z1OvJ



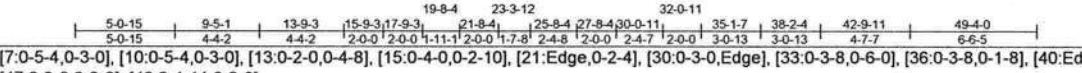


Plate Offsets (X,Y)-- [7:0-5-4,0-3-0], [10:0-5-4,0-3-0], [13:0-2-0,0-4-8], [15:0-4-0,0-2-10], [21:Edge,0-2-4], [30:0-3-0,Edge], [33:0-3-8,0-6-0], [36:0-3-8,0-1-8], [40:Edge,0-2-4], [47:0-3-8,0-3-0], [48:0-4-11,0-3-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.92	Vert(LL)	-0.27	41-43	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.53	41-43	>528	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.04	15	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	-0.18	21-40	1251	360	Weight: 1460 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.2 *Except* 14-16: 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except* 30-40,21-30: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 5-41,12-20: 2x6 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 7-10.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 29-33,27-29,25-27,23-25.
JOINTS 1 Brace at Jt(s): 47, 48, 28, 38, 36, 22, 24, 26

REACTIONS. All bearings 0-3-8.
(lb) - Max Horz 1=-265(LC 4)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-837(LC 8), 18=-2480(LC 20), 29=-452(LC 8), 15=-1033(LC 5)
Max Grav All reactions 250 lb or less at joint(s) except 1=3819(LC 2), 18=1539(LC 17), 29=4795(LC 2), 15=3297(LC 2)

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

TOP CHORD 1-2=-6257/1357, 2-4=-6519/1464, 4-5=-5434/1197, 5-6=-3581/802, 6-7=-1096/329, 7-8=-1512/646, 8-9=-1211/879, 9-10=-1211/879, 10-11=-651/591, 11-12=-3708/841, 12-13=-4809/1067, 13-14=-9850/2831, 14-15=-8581/2424
BOT CHORD 1-44=-1206/5132, 43-44=-1206/5132, 41-43=-1213/5452, 39-41=-1143/5321, 37-39=-343/3698, 35-37=-343/3698, 33-35=-343/3698, 29-33=-2029/717, 27-29=-3753/1104, 25-27=-3753/1104, 23-25=-446/920, 20-23=-596/3330, 18-20=-1563/6203, 17-18=-1566/6211, 15-17=-2217/8099, 38-40=-3929/712, 36-38=-3929/712, 34-36=-545/1295, 32-34=-1468/6057, 28-32=-1765/8471, 26-28=-1765/8471, 24-26=-1259/4411, 22-24=-1259/4411, 21-22=-1259/4411
WEBS 2-44=-441/191, 2-43=-299/503, 4-43=-515/1826, 4-41=-2282/743, 40-41=-562/1419, 5-40=-732/2894, 20-21=-1178/3996, 12-21=-537/1999, 13-20=-2981/1135, 13-17=-1045/3244, 14-17=-2752/800, 6-46=-3203/824, 46-47=-3183/823, 47-48=-2820/864, 48-49=-4495/1201, 11-49=-4526/1206, 13-18=-1356/2328, 7-47=-558/726, 8-48=-556/156, 10-48=-441/1340, 28-29=-389/0, 38-39=-261/0, 36-37=-2590/671, 34-35=-568/3023, 32-33=-281/1795, 22-23=-257/0, 24-25=-336/0, 26-27=-1810/344, 29-32=-3024/370, 26-29=-817/0, 21-23=-4268/1240, 39-40=-418/3070, 36-39=-1431/5191, 33-34=-6661/1122, 25-26=-700/3998

NOTES- (17)

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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.

Continued on page 2

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

NOTES- (17)

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=22ft; 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) All plates are 4x6 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 5-6, 11-12, 6-46, 46-47, 47-48, 48-49, 11-49; Wall dead load (5.0psf) on member(s).5-40, 12-21
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 38-40, 36-38, 34-36, 32-34, 28-32, 26-28, 24-26, 22-24, 21-22
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 837 lb uplift at joint 1, 2480 lb uplift at joint 18, 452 lb uplift at joint 29 and 1033 lb uplift at joint 15.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) This truss has large uplift reaction at jt. 18 from gravity load case(s). Proper connection is required to secure truss against upward movement at the bearings. Building designer must provide for uplift reactions indicated.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3690 lb down and 1183 lb up at 13-8-3, 489 lb down at 15-8-10, and 489 lb down at 17-8-10, and 489 lb down at 19-8-10 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.
17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-5=-54, 5-6=-64, 6-7=-54, 7-10=-54, 10-11=-54, 11-12=-64, 12-14=-54, 14-16=-54, 50-53=-20, 21-40=-40, 6-11=-10
   Drag: 5-40=-10, 12-21=-10
   Concentrated Loads (lb)
   Vert: 41=-3690(B) 39=-119(B) 37=-119(B) 35=-119(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526161
2845647	T07	ATTIC TRUSS	5	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:53 2021 Page 1
ID:Ad27wGdB3Dlinto_ShAPXtzIZ29-CKxoqHP78nCZtqNPgJx902mMrv21eiJES?VfWTz1OvG

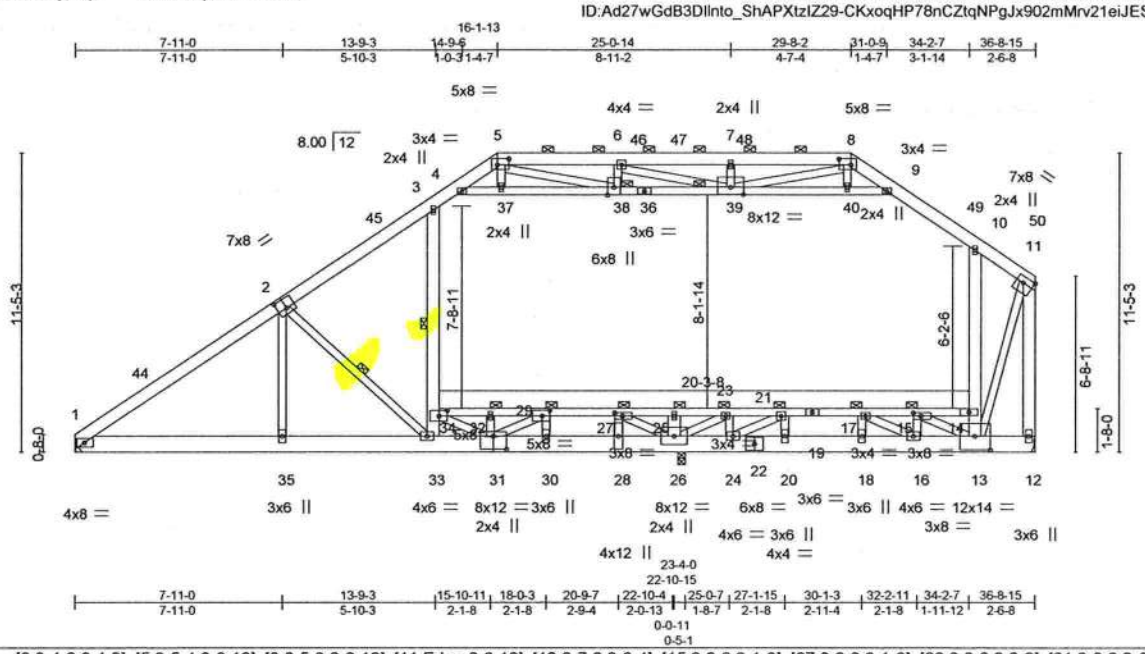


Plate Offsets (X,Y)-- [2:0-4-0,0-4-8], [5:0-5-4,0-2-12], [8:0-5-8,0-2-12], [11:Edge,0-2-12], [13:0-7-0,0-6-4], [15:0-3-8,0-1-8], [27:0-3-8,0-1-8], [29:0-3-8,0-2-8], [31:0-6-0,0-6-0], [34:0-3-12,0-2-8], [38:0-3-8,0-3-0], [39:0-6-0,0-3-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.92	Vert(LL)	-0.31	33-35	>896	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.63	33-35	>437	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.88	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS		Attic	0.18	14-34	1390	360	Weight: 399 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
19-34: 2x4 SP M 31, 14-19: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
3-33,10-13,11-12,25-26: 2x6 SP No.2
31-34,13-15,16-17,21-24,29-31: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-1 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-33, 3-34
JOINTS 1 Brace at Jt(s): 38, 39, 25, 15, 27, 23, 17, 32, 21, 29

REACTIONS. (size) 1=Mechanical, 12=Mechanical, 26=0-3-8
Max Horz 1=290(LC 12)
Max Uplift 1=-118(LC 12), 12=-76(LC 13)
Max Grav 1=1112(LC 1), 12=1242(LC 27), 26=2578(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1708/150, 2-3=-973/139, 3-4=-836/182, 4-5=-1100/303, 5-6=-1879/591, 6-7=-1854/632, 7-8=-1854/632, 8-9=-1040/376, 9-10=-935/189, 10-11=-576/14, 11-12=-1906/39
BOT CHORD 1-35=-301/1355, 33-35=-301/1350, 31-33=-145/1162, 30-31=-940/299, 28-30=-940/299, 26-28=-940/299, 24-26=-2853/626, 20-24=-1661/666, 18-20=-1661/666, 16-18=-1661/666, 13-16=-1142/493, 32-34=-1123/81, 29-32=-1098/85, 27-29=-332/1496, 25-27=-525/4239, 23-25=-525/4239, 21-23=-659/3433, 17-21=-699/2214, 15-17=-526/1696, 14-15=-78/445
WEBS 2-35=-97/635, 2-33=-960/348, 33-34=-557/100, 3-34=-312/209, 13-14=-867/193, 10-14=-846/268, 4-37=-267/432, 37-38=-264/436, 38-39=-576/1294, 39-40=-343/332, 9-40=-350/326, 11-13=-74/1816, 5-38=-409/992, 8-39=-352/1102, 25-26=-263/0, 31-34=0/656, 13-15=-512/1429, 26-27=-3162/223, 23-26=-1044/0, 16-17=-200/598, 31-32=-315/0, 15-16=-829/214, 17-18=-462/46, 27-28=-139/1174, 23-24=0/340, 20-21=-21/587, 21-24=-1847/0, 29-30=-1645/193, 29-31=-487/3032

NOTES- (13)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 20-4-11, Interior(1) 20-4-11 to 29-8-2, Exterior(2R) 29-8-2 to 33-11-1, Interior(1) 33-11-1 to 36-6-3 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.

Continued on page 2

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: June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	T07	ATTIC TRUSS	5	1	T24526161 Job Reference (optional)

NOTES- (13)

7) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-37, 37-38, 38-39, 39-40, 9-40; Wall dead load (5.0psf) on member(s).3-34, 10-14
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 29-32, 27-29, 25-27, 23-25, 21-23, 17-21, 15-17, 14-15
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 118 lb uplift at joint 1 and 76 lb uplift at joint 12.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526162
2845647	T07G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:56 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-cvdxSJR0Ria8kH6_MSUsegOwK6EZr4Rg8zkJ6oz1OvD

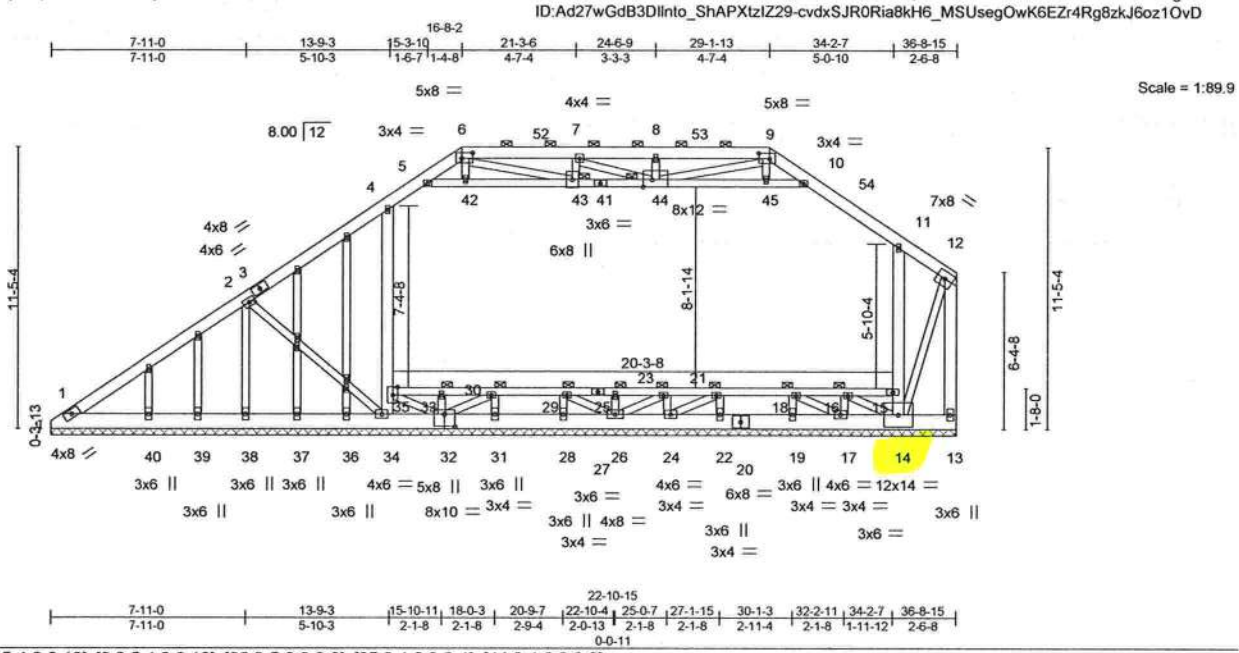


Plate Offsets (X,Y)-- [6:0-5-4,0-2-12], [9:0-5-4,0-2-12], [32:0-5-0,0-6-0], [35:0-4-0,0-2-4], [44:0-4-6,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.71	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 417 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
27-35,15-27: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
4-34,11-14,12-13: 2x6 SP No.2
OTHERS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-5-0 max.): 6-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 43, 44, 25, 23, 33, 16, 29, 21, 18, 30

REACTIONS. All bearings 36-8-15.
(lb) - Max Horz 1=286(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 40, 39 except 38=-158(LC 12), 34=-156(LC 12), 14=-895(LC 1), 13=-332(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 26, 24, 32, 40, 39, 37, 36, 28, 22, 17, 19, 31 except 1=484(LC 1), 38=587(LC 1), 34=472(LC 24), 14=401(LC 9), 13=1836(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-673/188, 2-4=-781/252, 4-5=-820/232, 5-6=-946/276, 6-7=-1672/515, 7-8=-1722/511, 8-9=-1722/511, 9-10=-1074/286, 10-11=-880/216, 11-12=-580/120, 12-13=-1777/329
BOT CHORD 1-40=-139/471, 39-40=-139/471, 38-39=-139/471, 37-38=-139/471, 36-37=-139/471, 34-36=-139/471, 32-34=-104/566, 31-32=-76/427, 28-31=-76/427, 26-28=-76/427, 24-26=-78/433, 22-24=-67/391, 19-22=-67/391, 17-19=-67/391, 14-17=-77/432
WEBS 2-38=-533/171, 34-35=-498/80, 4-35=-508/161, 14-15=-697/116, 11-15=-679/176, 5-42=-164/310, 42-43=-161/316, 43-44=-423/1160, 44-45=-114/402, 10-45=-117/397, 12-14=-297/1656, 6-43=-324/942, 9-44=-310/828

NOTES- (15)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-3 to 3-5-3, Interior(1) 3-5-3 to 16-8-2, Exterior(2R) 16-8-2 to 19-8-2, Interior(1) 19-8-2 to 29-1-13, Exterior(2R) 29-1-13 to 32-1-13, Interior(1) 32-1-13 to 36-6-3 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) All plates are 2x4 MT20 unless otherwise indicated.
7) Gable requires continuous bottom chord bearing.
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

Continued on page 2

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date: June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	T07G	GABLE	1	1	T24526162
					Job Reference (optional)

NOTES- (15)

10) * 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.
11) Ceiling dead load (5.0 psf) on member(s). 4-5, 10-11, 5-42, 42-43, 43-44, 44-45, 10-45; Wall dead load (5.0psf) on member(s).4-35, 11-15
12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 40, 39 except (jt=lb) 38=158, 34=156, 14=895, 13=332.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Attic room checked for L/360 deflection.
15) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526163
2845647	T08	Attic Truss	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:59 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-1UI34LTujdyjblrZ1a2ZGJ0OJK5Q2Qr6qxyzj7z1OvA

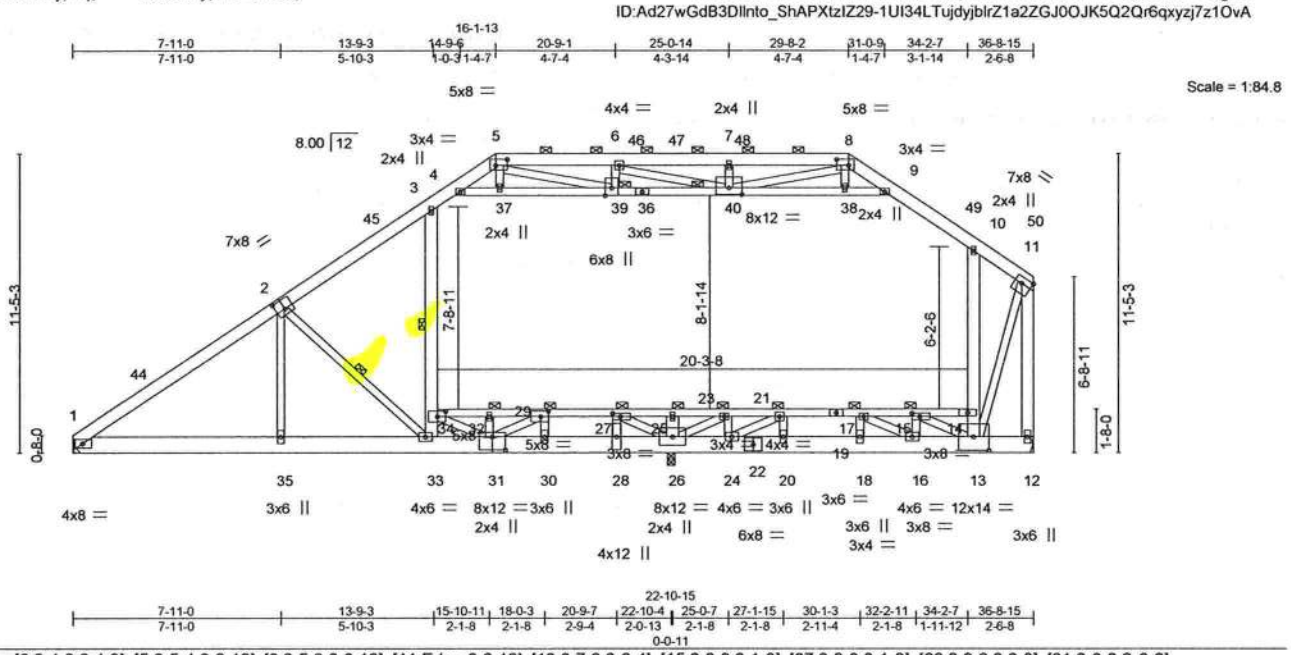


Plate Offsets (X,Y)– [2:0-4-0,0-4-8], [5:0-5-4,0-2-12], [8:0-5-8,0-2-12], [11:Edge,0-2-12], [13:0-7-0,0-6-4], [15:0-3-8,0-1-8], [27:0-3-8,0-1-8], [29:0-3-8,0-2-8], [31:0-6-0,0-6-0], [34:0-3-12,0-2-8], [39:0-3-8,0-3-0], [40:0-6-0,0-3-1]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.92	Vert(LL)	-0.31	33-35	>898	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.72	Vert(CT)	-0.63	33-35	>438	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.87	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	0.18	14-34	1399	360	Weight: 399 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
19-34: 2x4 SP M 31, 14-19: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
3-33,10-13,11-12,25-26: 2x6 SP No.2
31-34,21-24,13-15,16-17,29-31: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-2-1 max.): 5-8.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-33, 3-34
JOINTS 1 Brace at Jt(s): 39, 40, 25, 23, 27, 32, 21, 15, 17, 29

REACTIONS. (size) 1=Mechanical, 12=Mechanical, 26=0-3-8
Max Horz 1=290(LC 12)
Max Uplift 1=-117(LC 12), 12=-76(LC 13)
Max Grav 1=1112(LC 1), 12=1241(LC 27), 26=2579(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1707/150, 2-3=-973/139, 3-4=-836/182, 4-5=-1100/303, 5-6=-1878/590, 6-7=-1854/632, 7-8=-1854/632, 8-9=-1040/376, 9-10=-935/189, 10-11=-576/14, 11-12=-1907/39
BOT CHORD 1-35=-301/1354, 33-35=-300/1350, 31-33=-145/1161, 30-31=-950/302, 28-30=-950/302, 26-28=-950/302, 24-26=-2861/629, 20-24=-1677/670, 18-20=-1677/670, 16-18=-1677/670, 13-16=-1147/495, 32-34=-1116/79, 29-32=-1092/82, 27-29=-335/1504, 25-27=-529/4248, 23-25=-529/4248, 21-23=-662/3440, 17-21=-703/2230, 15-17=-528/1701, 14-15=-78/446
WEBS 2-35=-96/633, 2-33=-958/347, 33-34=-555/100, 3-34=-313/209, 13-14=-866/193, 10-14=-845/268, 4-37=-267/430, 37-39=-264/435, 39-40=-576/1293, 38-40=-343/332, 9-38=-350/326, 11-13=-74/1816, 5-39=-409/992, 8-40=-352/1102, 25-26=-262/0, 23-24=0/338, 26-27=-3163/223, 23-26=-1045/0, 27-28=-139/1174, 31-32=-315/0, 31-34=0/653, 20-21=-20/585, 21-24=-1840/0, 15-16=-832/214, 13-15=-514/1434, 17-18=-466/48, 16-17=-202/610, 29-30=-1646/193, 29-31=-488/3033

NOTES- (13)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 16-1-13, Exterior(2R) 16-1-13 to 20-4-11, Interior(1) 20-4-11 to 29-8-2, Exterior(2R) 29-8-2 to 33-11-1, Interior(1) 33-11-1 to 36-6-3 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.

Continued on page 2

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: June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	T08	Attic Truss	1	1	T24526163 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:14:59 2021 Page 2
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-1UI34LTujdyjblrZ1a2ZGJ0OJK5Q2Qr6qxyzj7z1OvA

NOTES- (13)

7) Ceiling dead load (5.0 psf) on member(s). 3-4, 9-10, 4-37, 37-39, 39-40, 38-40, 9-38; Wall dead load (5.0psf) on member(s).3-34, 10-14
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 32-34, 29-32, 27-29, 25-27, 23-25, 21-23, 17-21, 15-17, 14-15
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 1=117.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.
13) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526164
2845647	T09	ATTIC TRUSS	1	3	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:03 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-vFYawiWPnsT84M8KGQ6VQ9BBfxQD_FNilYwBsuz1Ov6

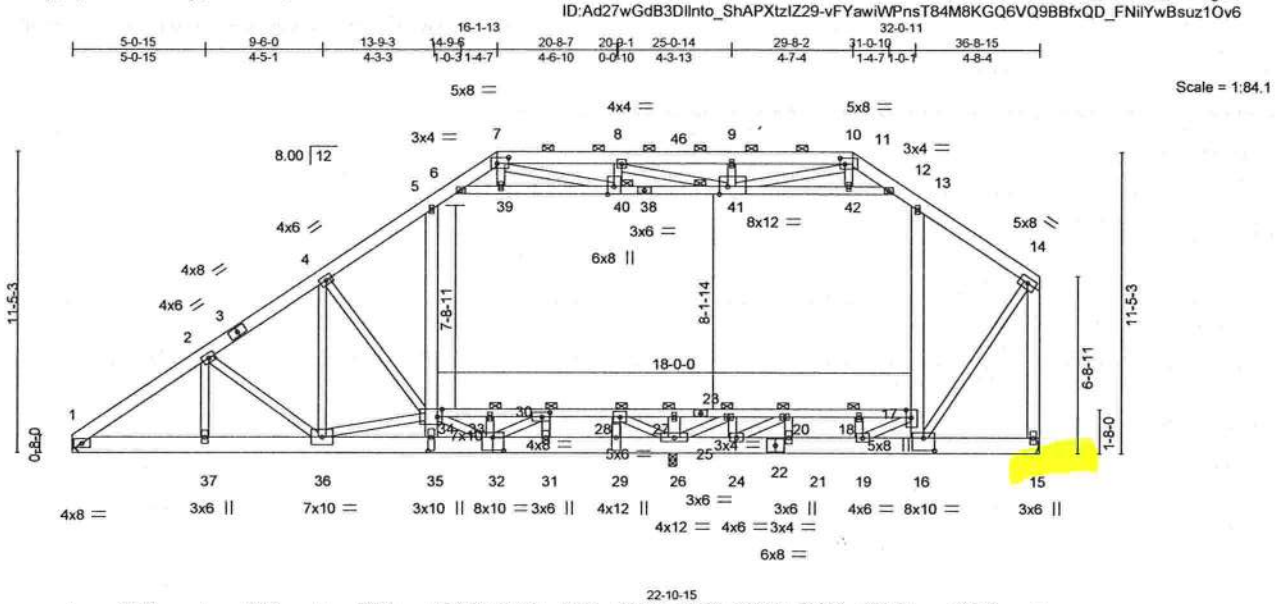


Plate Offsets (X,Y)-- [7:0-5-4,0-2-12], [11:0-2-4,0-2-12], [16:0-5-0,0-5-12], [17:Edge,0-2-4], [30:0-3-8,0-2-0], [32:0-5-0,0-6-0], [34:0-2-0,Edge], [35:0-6-4,0-1-8], [40:0-3-8,0-3-0], [41:0-3-13,0-3-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.21	35	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.40	35	>695	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.78	Horz(CT)	0.03	26	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS		Attic	0.12	17-34	1812	360	Weight: 1244 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E *Except*
25-34,17-25: 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-35,13-16,14-15,26-27: 2x6 SP No.2
17-19,32-34,26-28,23-26,20-24,30-32: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 7-11.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 40, 41, 27, 23, 20, 28, 33, 30, 18

REACTIONS. (size) 1=Mechanical, 15=Mechanical, 26=0-3-8
Max Horz 1=290(LC 28)
Max Uplift 1=-721(LC 8), 15=-1094(LC 9), 26=-658(LC 8)
Max Grav 1=3076(LC 1), 15=3893(LC 21), 26=5010(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4990/1168, 2-4=-5050/1234, 4-5=-2686/777, 5-6=-1942/569, 6-7=-1170/324, 7-8=-1734/595, 8-9=-1434/707, 9-10=-1434/707, 10-11=-508/501, 11-12=-636/445, 12-13=-2025/603, 13-14=-2334/659, 14-15=-4086/1111
BOT CHORD 1-37=-1182/4074, 36-37=-1182/4074, 35-36=-3354/12528, 32-35=-3350/12627, 31-32=-629/3517, 29-31=-629/3517, 26-29=-629/3517, 24-26=-3524/919, 21-24=-1129/453, 19-21=-1129/453, 16-19=-448/1589, 33-34=-8751/1958, 30-33=-8726/1961, 28-30=-1670/148, 27-28=-1361/6135, 23-27=-1361/6135, 20-23=-1399/5370, 18-20=-933/3044, 17-18=-933/3044
WEBS 2-37=-258/151, 2-36=-286/352, 4-36=-888/3305, 4-34=-3303/992, 34-35=-928/2226, 5-34=-506/1225, 16-17=-782/1838, 13-17=-500/662, 6-39=-1108/573, 39-40=-1098/575, 40-41=-1405/1054, 41-42=-1817/605, 12-42=-1818/605, 14-16=-847/3386, 23-24=-39/292, 20-21=-288/1089, 17-19=-2970/947, 28-29=-802/3711, 32-33=-312/0, 32-34=-3058/1055, 7-40=-485/726, 8-41=-341/186, 10-41=-398/1263, 26-28=-8915/1724, 23-26=-912/0, 20-24=-2789/537, 30-31=-4132/973, 30-32=-2118/8246, 34-36=-8825/2300, 18-19=-295/0

NOTES- (17)
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered 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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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.

Continued on page 2

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: June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	T09	ATTIC TRUSS	1	3	T24526164 Job Reference (optional)

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:04 2021 Page 2
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-NS6y72X1Y9b?hWjWq7ekzMjMPLISjhdr_CgkOLz1Ov5

NOTES- (17)

6) Provide adequate drainage to prevent water ponding.
7) All plates are 2x4 MT20 unless otherwise indicated.
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) Ceiling dead load (5.0 psf) on member(s). 5-6, 12-13, 6-39, 39-40, 40-41, 41-42, 12-42; Wall dead load (5.0psf) on member(s).5-34, 13-17
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 33-34, 30-33, 28-30, 27-28, 23-27, 20-23, 18-20, 17-18
12) Refer to girder(s) for truss to truss connections.
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=721, 15=1094, 26=658.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3725 lb down and 1195 lb up at 13-10-15, 489 lb down at 15-8-10, and 489 lb down at 17-8-10, and 3287 lb down and 1193 lb up at 32-1-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
16) Attic room checked for L/360 deflection.
17) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 1-5=-54, 5-6=-64, 6-7=-54, 7-11=-54, 11-12=-54, 12-13=-64, 13-14=-54, 15-43=-20, 17-34=-40, 6-12=-10
   Drag: 5-34=-10, 13-17=-10
   Concentrated Loads (lb)
   Vert: 35=-3725(F) 16=-3287(F) 32=-119(F) 31=-119(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526165
2845647	T10	Monopitch Truss	7	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:04 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-NS6y72X1Y9b?hWjWq7ekzMjMVLtqjqjr_CgkOLz1Ov5

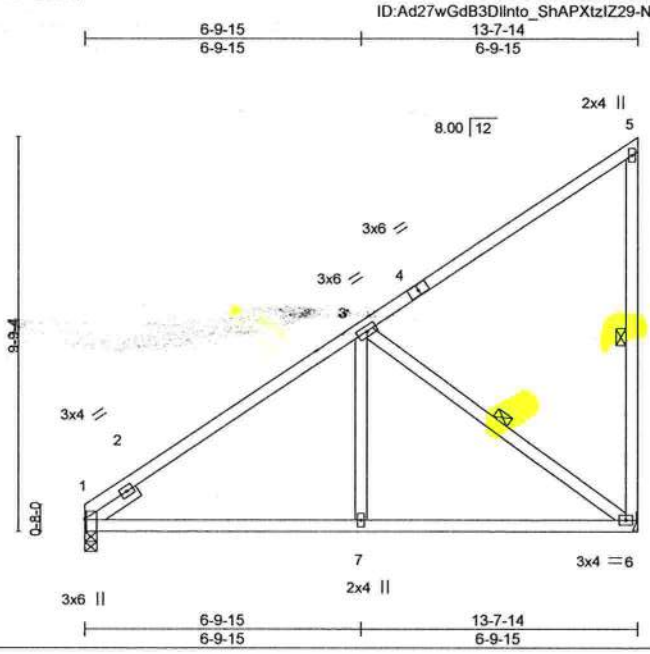


Plate Offsets (X,Y)-- [1:0-3-13,Edge]

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	0.50	Vert(LL)	0.06	7-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.45	Vert(CT)	-0.10	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	-0.02	1	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 80 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x4 SP No.3 1-6-0

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.
WEBS 1 Row at midpt 5-6, 3-6

REACTIONS. (size) 1=0-3-8, 6=Mechanical
Max Horz 1=319(LC 12)
Max Uplift 1=-27(LC 12), 6=-256(LC 12)
Max Grav 1=500(LC 1), 6=528(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-567/0
BOT CHORD 1-7=-225/445, 6-7=-225/445
WEBS 3-7=0/307, 3-6=-543/275

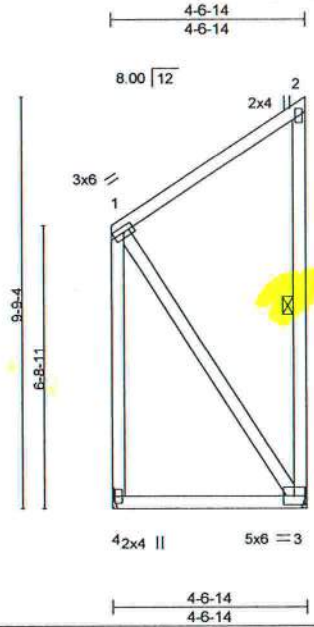
NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 13-6-2 zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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) 1 except (jt=lb) 6=256.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526166
2845647	T11	MONOPITCH TRUSS	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:05 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-refKLOYfJTjsJgliNr9zVaGaDlGZSI8?DsPlxnz1Ov4



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	0.31	Vert(LL)	-0.02	3-4	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.22	Vert(CT)	-0.04	3-4	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 49 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 4-6-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 2-3

REACTIONS. (size) 4=Mechanical, 3=Mechanical
Max Horz 4=101(LC 12)
Max Uplift 3=-232(LC 12)
Max Grav 4=196(LC 21), 3=208(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 1-3=-159/291

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-5-2 zone;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) except (jt=lb) 3=232.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526167
2845647	T12	QUEENPOST	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:06 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-KqDjYkZH4nrjxqtvxYgC2noj38VWBkZ8SW9rTDz1Ov3

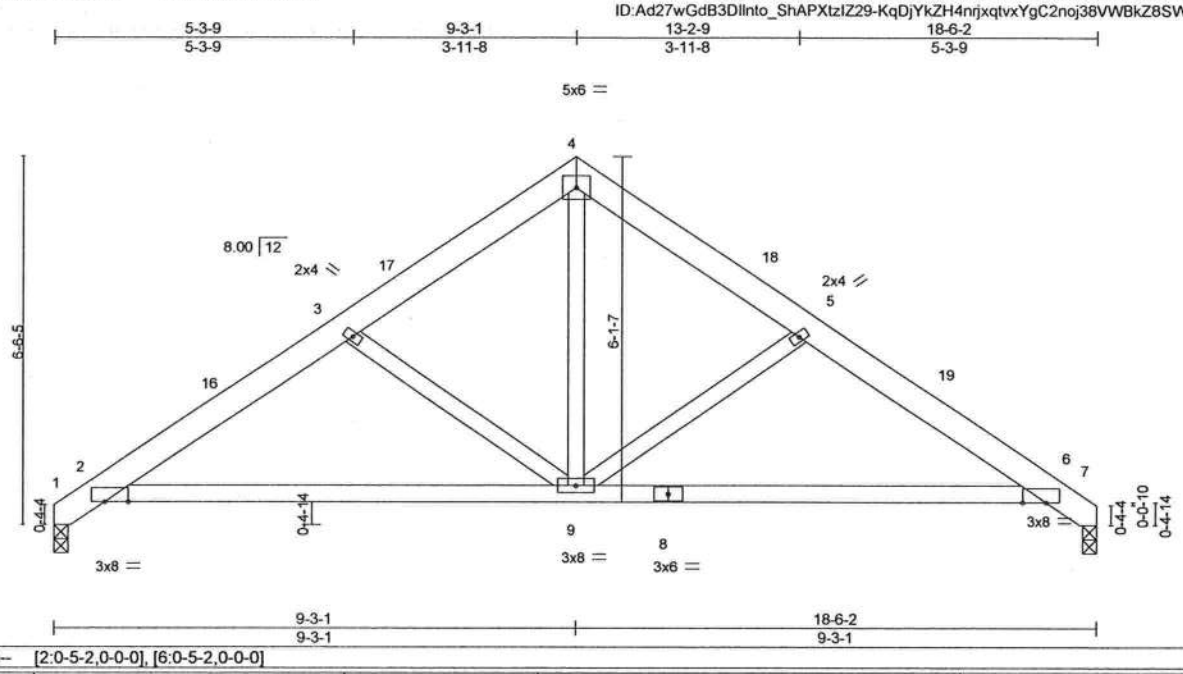


Plate Offsets (X,Y)-- [2:0-5-2,0-0-0], [6:0-5-2,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	-0.09	9-12	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.69	Vert(CT)	-0.19	9-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.07	7	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 100 lb	FT = 20%

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

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

REACTIONS. (size) 1=0-3-0, 7=0-3-0
Max Horz 1=-138(LC 8)
Max Uplift 1=-137(LC 12), 7=-140(LC 13)
Max Grav 1=689(LC 1), 7=679(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-408/139, 2-3=-1019/242, 3-4=-772/208, 4-5=-772/208, 5-6=-1018/243, 6-7=-373/85
BOT CHORD 2-9=-223/879, 6-9=-148/874
WEBS 3-9=-393/203, 4-9=-134/618, 5-9=-381/196

NOTES- (8)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-8 to 3-1-8, Interior(1) 3-1-8 to 9-3-1, Exterior(2R) 9-3-1 to 12-3-1, Interior(1) 12-3-1 to 18-4-10 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=137, 7=140.
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526168
2845647	T12D	Roof Special	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:07 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-o1n5m4Zvr4zaYzS5VGBRa?LumYsmw7kIgAuO?fz1Ov2

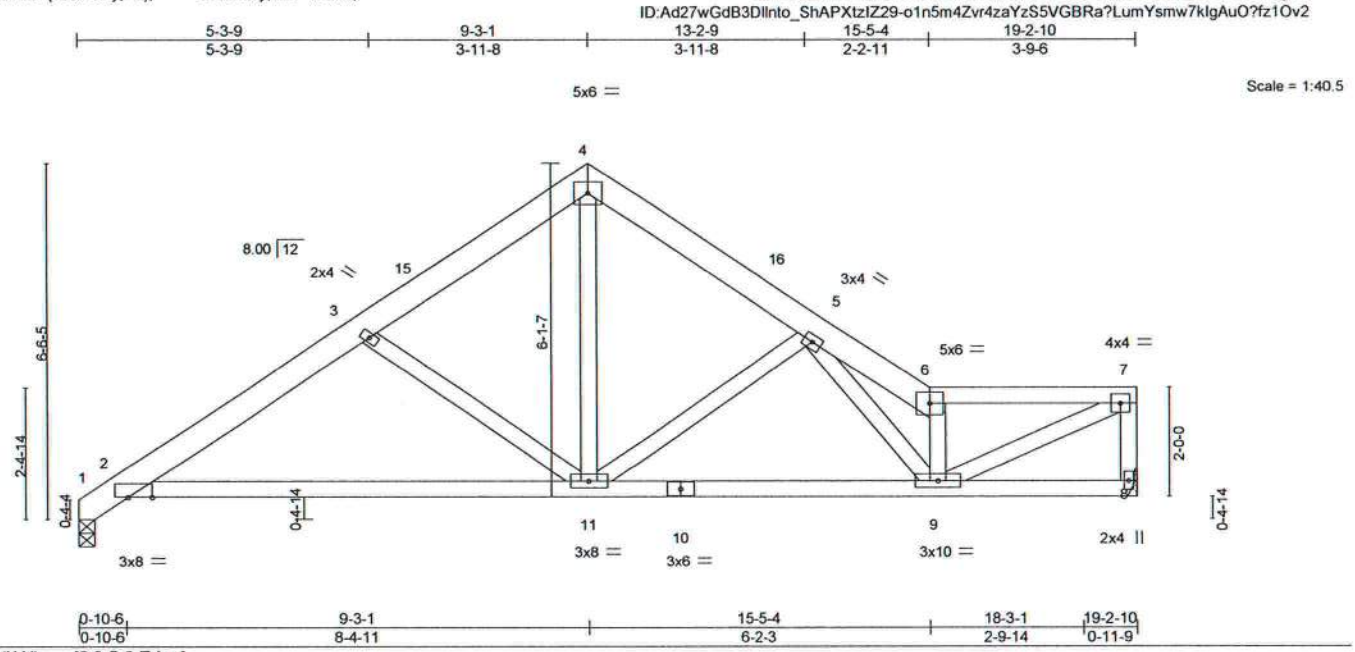


Plate Offsets (X,Y)-- [2:0-5-2,Edge]

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	0.44	Vert(LL)	-0.10	11-14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.62	Vert(CT)	-0.22	11-14	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
6-7: 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-1-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 8=Mechanical
Max Horz 1=135(LC 12)
Max Uplift 1=-138(LC 12), 8=-154(LC 13)
Max Grav 1=713(LC 1), 8=701(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-398/78, 2-3=-1060/239, 3-4=-814/206, 4-5=-797/204, 5-6=-1472/313, 6-7=-1171/232
BOT CHORD 2-11=-272/911, 9-11=-202/955
WEBS 3-11=-390/205, 4-11=-128/627, 5-11=-423/189, 7-8=-669/159, 6-9=-886/226, 7-9=-258/1304, 5-9=-97/490

NOTES- (10)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 9-3-1, Exterior(2R) 9-3-1 to 12-3-1, Interior(1) 12-3-1 to 19-0-14 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.
7) Refer to girder(s) for truss to truss connections.
8) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=138, 8=154.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526169
2845647	T14	HIP TRUSS	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:09 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-kPvrBmbANhDIoHcUcgDvgQQ7RMUWO4ia8UNV4Yz1Ov0

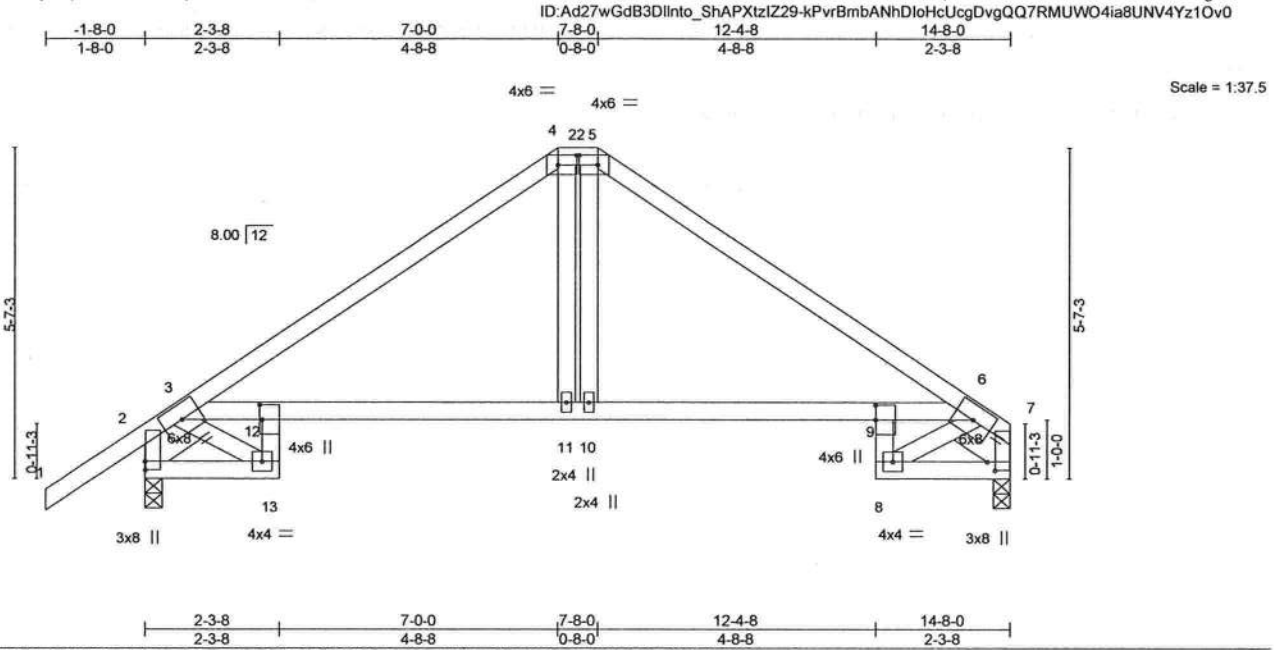


Plate Offsets (X,Y)-- [2:0-1-12,0-0-2], [4:0-3-12,0-2-0], [5:0-3-12,0-2-0], [7:0-1-12,0-1-10], [9:0-3-0,0-0-0], [12:0-3-0,0-0-8]

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	0.81	Vert(LL)	0.19	11-12	>931	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.86	Vert(CT)	-0.29	9-10	>610	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.16	7	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-MS							Weight: 80 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
12-13,8-9: 2x4 SP No.3, 3-6: 2x4 SP M 31
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-0-0, Right 2x6 SP No.2 1-0-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-3-11 oc bracing. Except:
9-8-0 oc bracing: 9-10

REACTIONS. (size) 7=0-3-8, 2=0-3-8
Max Horz 2=123(LC 24)
Max Uplift 7=-430(LC 9), 2=-469(LC 8)
Max Grav 7=1002(LC 1), 2=1102(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-19=-345/180, 3-4=-1637/783, 4-5=-1325/712, 5-6=-1635/804, 6-7=-322/158
BOT CHORD 2-13=-375/685, 12-13=-223/428, 3-12=-502/1120, 11-12=-610/1304, 10-11=-618/1325, 9-10=-605/1304, 6-9=-543/1132, 8-9=-194/432, 7-8=-332/686
WEBS 4-11=-370/717, 5-10=-386/710, 3-13=-596/331, 6-8=-602/290

NOTES- (10)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=430, 2=469.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 92 lb down and 86 lb up at 7-0-0, and 92 lb down and 86 lb up at 7-8-0 on top chord, and 407 lb down and 296 lb up at 7-0-0, and 407 lb down and 296 lb up at 7-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-54, 4-5=-54, 5-7=-54, 13-18=-20, 9-12=-20, 8-14=-20

Concentrated Loads (lb)

Vert: 4=-62(F) 5=-62(F) 11=-402(F) 10=-402(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526170
2845647	T15	SPECIAL TRUSS	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:10 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-CbTDO5co8?L9PRBgAOk8CdzQSmq77XekM873c_z1Ov?

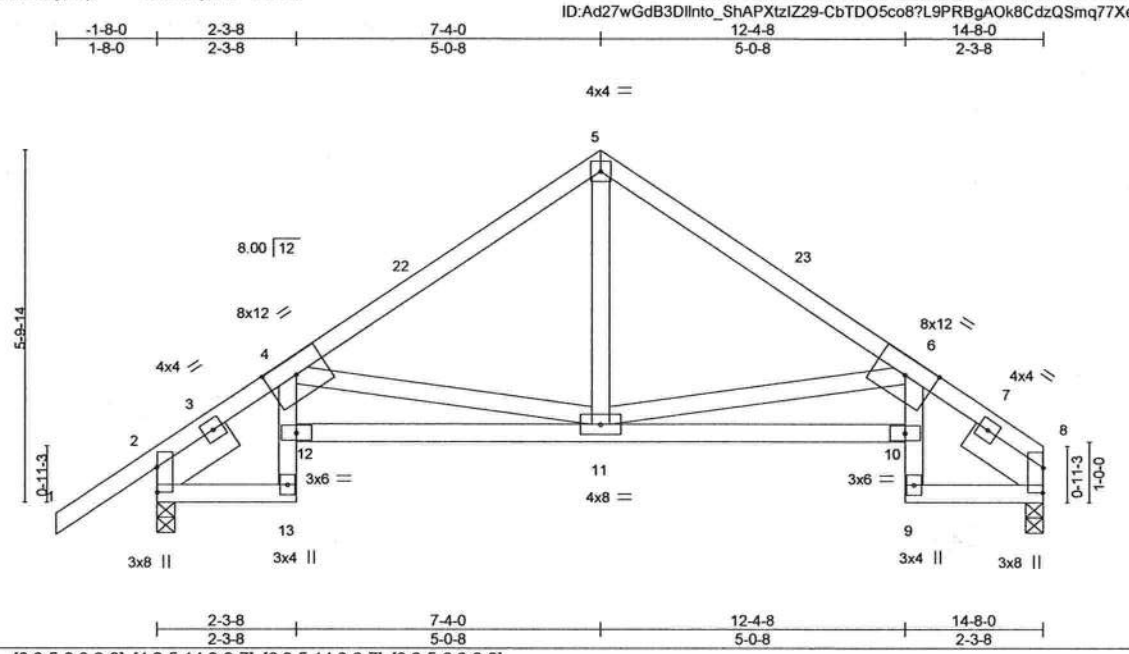


Plate Offsets (X,Y)— [2:0-5-0,0-0-2], [4:0-5-14,0-3-7], [6:0-5-14,0-3-7], [8:0-5-0,0-0-2]

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	0.28	Vert(LL)	-0.05	10-11	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.77	Vert(CT)	-0.11	10-11	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 85 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0, Right 2x6 SP No.2 1-6-0

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) 8=0-3-8, 2=0-3-8
Max Horz 2=127(LC 9)
Max Uplift 8=-110(LC 13), 2=-149(LC 12)
Max Grav 8=538(LC 1), 2=638(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-602/175, 4-5=-642/175, 5-6=-642/181, 6-8=-633/187
BOT CHORD 2-13=-150/464, 11-12=-336/1007, 10-11=-259/991, 8-9=-114/462
WEBS 5-11=-61/390, 6-11=-554/262, 4-11=-556/286

NOTES- (7)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 7-4-0, Exterior(2R) 7-4-0 to 10-4-0, Interior(1) 10-4-0 to 14-8-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=110, 2=149.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526171
2845647	T16	COMMON TRUSS	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:11 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-go1ccRcQvJT01blsk5GNlrWXy9Evs08tbosc8Rz1Ov_

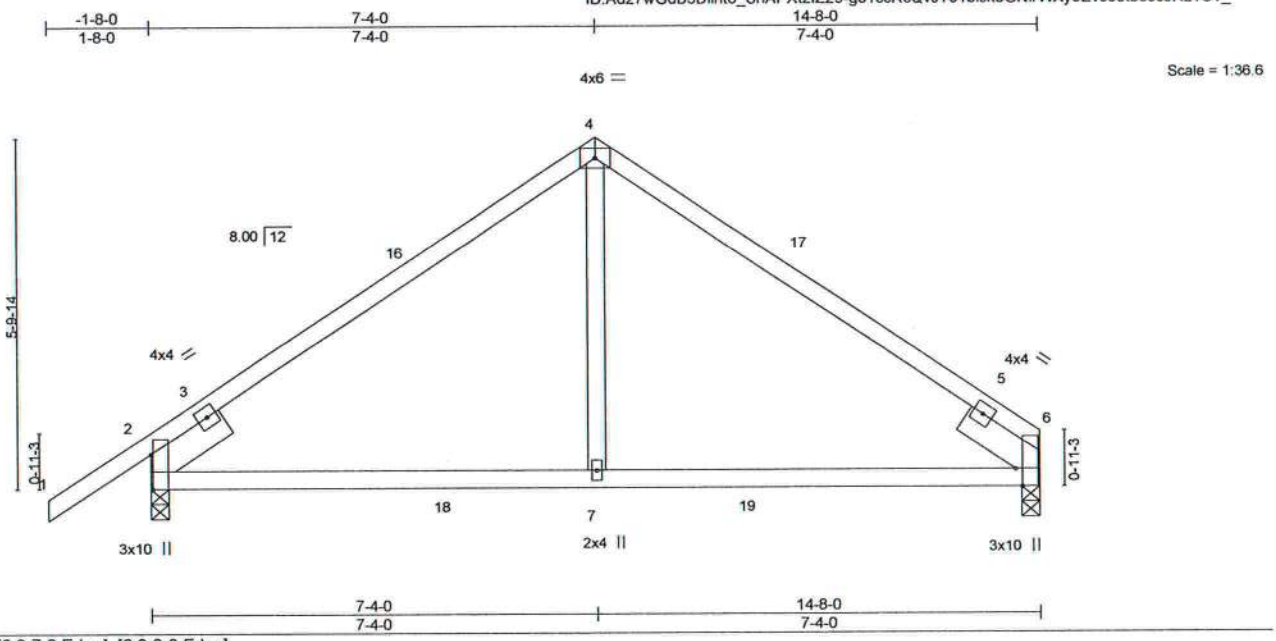


Plate Offsets (X,Y)-- [2:0-7-0,Edge], [6:0-3-8,Edge]

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	0.55	Vert(LL)	-0.09	7-10	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.55	Vert(CT)	-0.14	7-10	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 66 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
SLIDER Left 2x6 SP No.2 1-6-0, Right 2x6 SP No.2 1-6-0

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=127(LC 11)
Max Uplift 6=-110(LC 13), 2=-149(LC 12)
Max Grav 6=636(LC 20), 2=726(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-690/236, 4-6=-685/175
BOT CHORD 2-7=-60/527, 6-7=-60/527
WEBS 4-7=-5/392

NOTES- (7)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 7-4-0, Exterior(2R) 7-4-0 to 10-4-0, Interior(1) 10-4-0 to 14-8-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=110, 2=149.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526172
2845647	T17	Common Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:13 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-cA8M07egQwjkGuvFrWlrqGby?zzdKlIA36LjCJz1Ouy

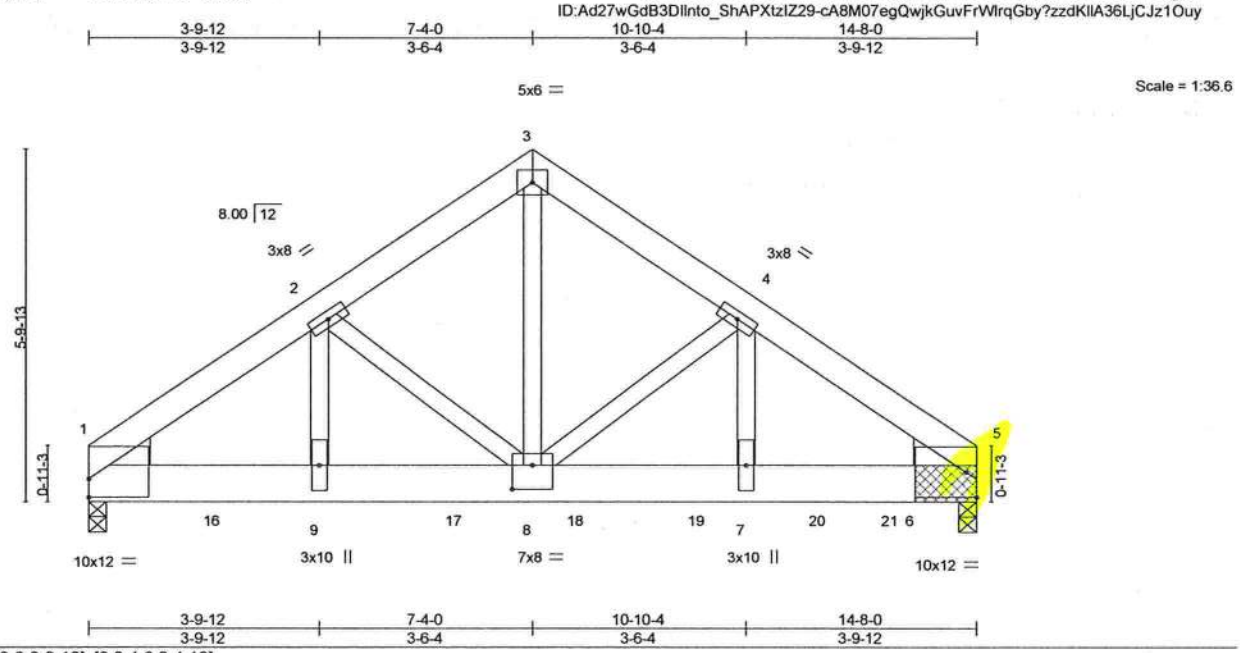


Plate Offsets (X,Y)-- [1:0-0-0,0-3-10], [8:0-4-0,0-4-12]

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 0.20	Vert(LL) -0.04 7-8 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.34	Vert(CT) -0.08 7-8 >999 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.85	Horz(CT) 0.01 5 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 247 lb FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3
WEDGE
Left: 2x6 SP No.2 , Right: 2x6 SP No.2

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

REACTIONS. (size) 1=0-3-8, 5=(0-3-8 + bearing block) (req. 0-3-13)
Max Horz 1=-111(LC 4)
Max Uplift 1=-567(LC 8), 5=-1124(LC 9)
Max Grav 1=4250(LC 1), 5=6443(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5590/752, 2-3=-4362/644, 3-4=-4370/646, 4-5=-6549/995
BOT CHORD 1-9=-639/4536, 8-9=-639/4536, 7-8=-786/5375, 5-7=-786/5375
WEBS 3-8=-617/4444, 4-8=-2270/506, 4-7=-436/2584, 2-8=-1184/230, 2-9=-146/1438

NOTES- (11)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-3-0 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) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 5 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.
4) Unbalanced roof live loads have been considered for this design.
5) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
6) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
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) 1=567, 5=1124.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1092 lb down and 138 lb up at 2-0-12, 1092 lb down and 138 lb up at 4-0-12, 1092 lb down and 138 lb up at 6-0-12, 1092 lb down and 138 lb up at 8-0-12, 1092 lb down and 138 lb up at 10-0-12, and 1092 lb down and 137 lb up at 12-0-12, and 3056 lb down and 741 lb up at 13-3-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-54, 3-5=-54, 10-13=-20
   Concentrated Loads (lb)
   Vert: 9=-1092(B) 16=-1092(B) 17=-1092(B) 18=-1092(B) 19=-1092(B) 20=-1092(B) 21=-3056(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526173
2845647	T18	Common	4	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:14 2021 Page 1
ID:Ad27wGdB3DIInto_ShAPXtzIZ29-5NikETfIBErbu2URPEp4NT88tNMV3PEJHm5Gklz1Oux

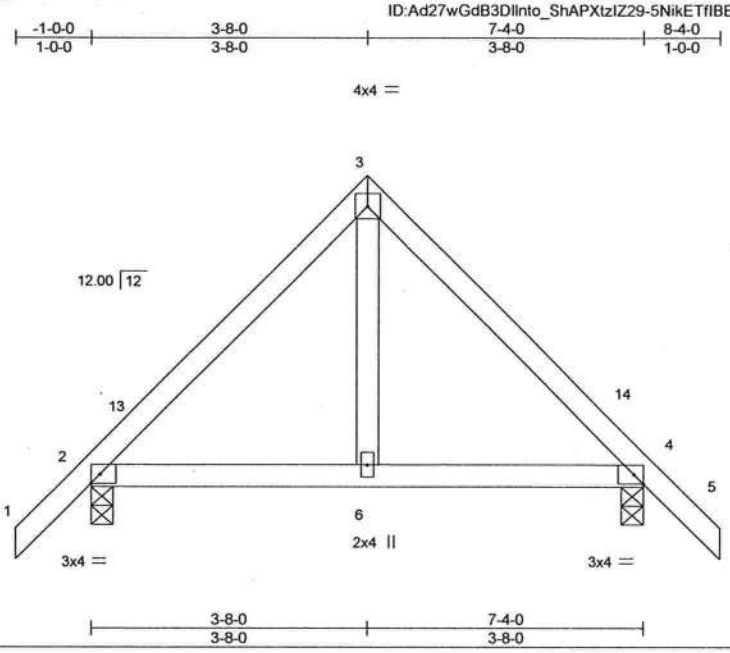


Plate Offsets (X,Y)-- [4:0-1-8,Edge]

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	0.19	Vert(LL)	0.01	6-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.17	Vert(CT)	-0.01	6-12	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 36 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 4=0-3-8
Max Horz 2=106(LC 11)
Max Uplift 2=-72(LC 12), 4=-72(LC 13)
Max Grav 2=325(LC 1), 4=325(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-270/159, 3-4=-270/159

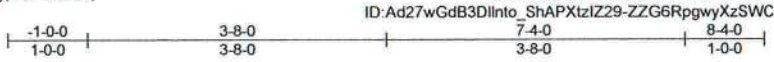
NOTES- (7)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 3-8-0, Exterior(2R) 3-8-0 to 6-8-0, Interior(1) 6-8-0 to 8-4-0 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

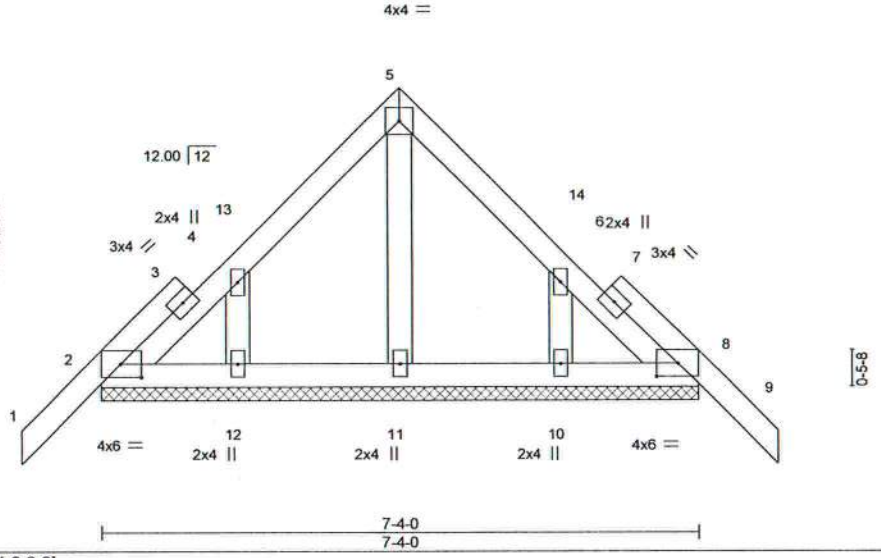
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526174
2845647	T18G	GABLE	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:15 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-ZZG6RpgwyXzSWC3dzxKJvhgKtnkroseTWQqpGCz1Ouw



Scale = 1:27.4



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:

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.11	Vert(LL)	-0.00	9	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.03	Vert(CT)	-0.00	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-S							Weight: 42 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 7-4-0.
(lb) - Max Horz 2=-96(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 8, 12, 10
Max Grav All reactions 250 lb or less at joint(s) 2, 8, 11, 12, 10

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

NOTES- (10)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-0-0 to 2-0-0, Exterior(2N) 2-0-0 to 3-8-0, Corner(3R) 3-8-0 to 6-8-0, Exterior(2N) 6-8-0 to 8-4-0 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) 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 100 lb uplift at joint(s) 2, 8, 12, 10.
10) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526175
2845647	T19	Common Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:16 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-1lqVf9gZjr6l7MeqXfrYSuDTsAwEX9Qcl4aNpez1Ouv

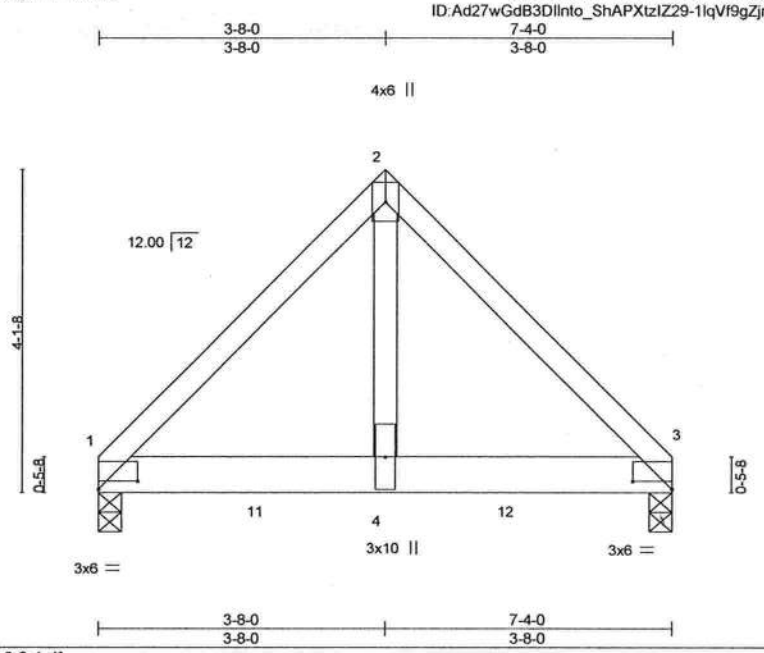


Plate Offsets (X,Y)-- [1:0-6-0,0-1-4], [3:0-6-0,0-1-4]

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	0.22	Vert(LL)	-0.02	4-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.60	Vert(CT)	-0.04	4-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.66	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 38 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 4-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=83(LC 26)
Max Uplift 1=-289(LC 9), 3=-289(LC 8)
Max Grav 1=1293(LC 1), 3=1293(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1412/356, 2-3=-1412/356
BOT CHORD 1-4=-208/974, 3-4=-208/974
WEBS 2-4=-405/1729

NOTES- (9)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=289, 3=289.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 681 lb down and 174 lb up at 2-0-12, and 681 lb down and 174 lb up at 3-8-0, and 681 lb down and 174 lb up at 5-3-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-3=-54, 5-8=-20
Concentrated Loads (lb)
Vert: 4=-681(B) 11=-681(B) 12=-681(B)

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526176
2845647	T20	Monopitch	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:17 2021 Page 1
ID:Ad27wGdB3DIInto_ShAPXtzIZ29-VyOtsVhBU9E9IWD04MMn_6mYiaFWGmymzkJwL4z1Ouu

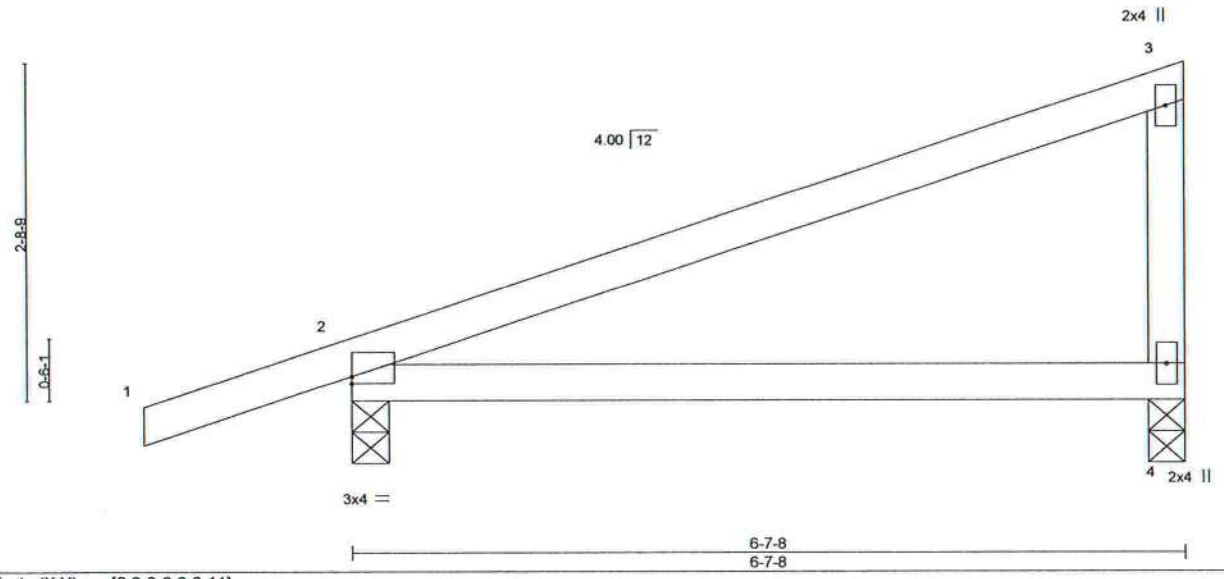


Plate Offsets (X,Y)-- [2:0-0-0,0-0-11]

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	0.60	Vert(LL)	0.25	4-7	>309	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.66	Vert(CT)	0.22	4-7	>355	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	2	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 26 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=103(LC 8)
Max Uplift 4=-129(LC 8), 2=-180(LC 8)
Max Grav 4=228(LC 1), 2=341(LC 1)

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

NOTES- (6)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 6-5-12 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) except (jt=lb) 4=129, 2=180.
6) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

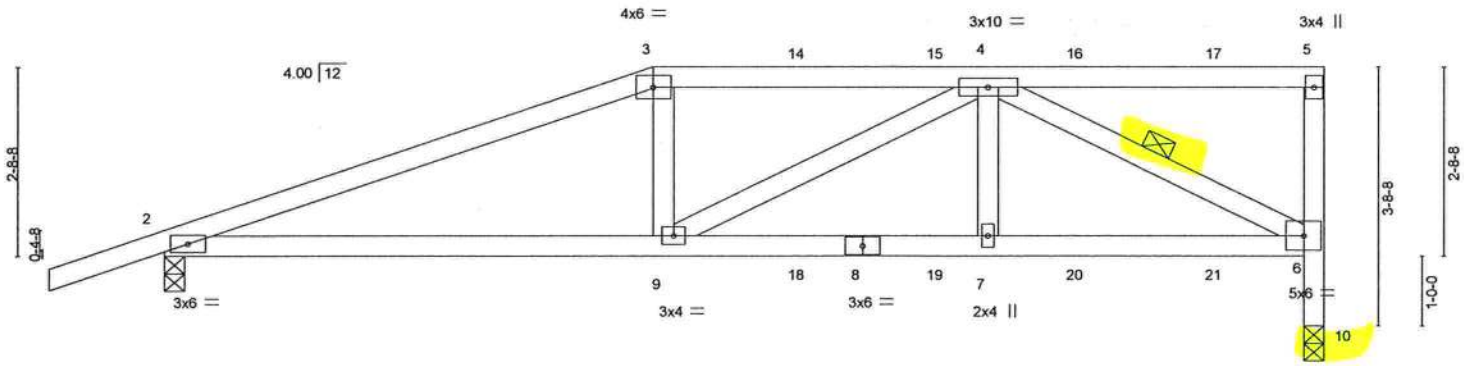
Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526177
2845647	T21	Half Hip Girder	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:18 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-z8yF4ripFSM0NgoCe3u0XJlf__ZZ?6ZvCO3UtXz1Out

-1-8-0 | 7-0-0 | 11-9-12 | 16-7-8
1-8-0 | 7-0-0 | 4-9-12 | 4-9-12

Scale: 3/8"=1'



7-0-0 | 11-9-12 | 16-7-8
7-0-0 | 4-9-12 | 4-9-12

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	0.89	Vert(LL)	0.14	9-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.80	Vert(CT)	-0.19	9-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.49	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 78 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 5-1-7 oc bracing.
WEBS 1 Row at midpt 4-6

VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=109(LC 4)
Max Uplift 2=-618(LC 4), 10=-714(LC 4)
Max Grav 2=1173(LC 1), 10=1325(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2610/1316, 3-4=-2439/1285, 6-10=-1325/714
BOT CHORD 2-9=-1277/2422, 7-9=-1089/2030, 6-7=-1089/2030
WEBS 3-9=-152/426, 4-9=-221/462, 4-7=-132/395, 4-6=-2214/1187

NOTES- (11)
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=22ft; 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
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.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=618, 10=714.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 224 lb down and 169 lb up at 7-0-0, 108 lb down and 98 lb up at 9-1-1, 108 lb down and 95 lb up at 11-1-1, and 108 lb down and 98 lb up at 13-1-1, and 108 lb down and 98 lb up at 15-1-1 on top chord, and 323 lb down and 221 lb up at 7-0-0, 84 lb down and 65 lb up at 9-1-1, 84 lb down and 65 lb up at 11-1-1, and 84 lb down and 65 lb up at 13-1-1, and 84 lb down and 65 lb up at 15-1-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE T24526177
2845647	T21	Half Hip Girder	1	1	Job Reference (optional)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-54, 3-5=-54, 6-11=-20
   Concentrated Loads (lb)
   Vert: 3=-177(F) 9=-323(F) 14=-108(F) 15=-108(F) 16=-108(F) 17=-108(F) 18=-64(F) 19=-64(F) 20=-64(F) 21=-64(F)

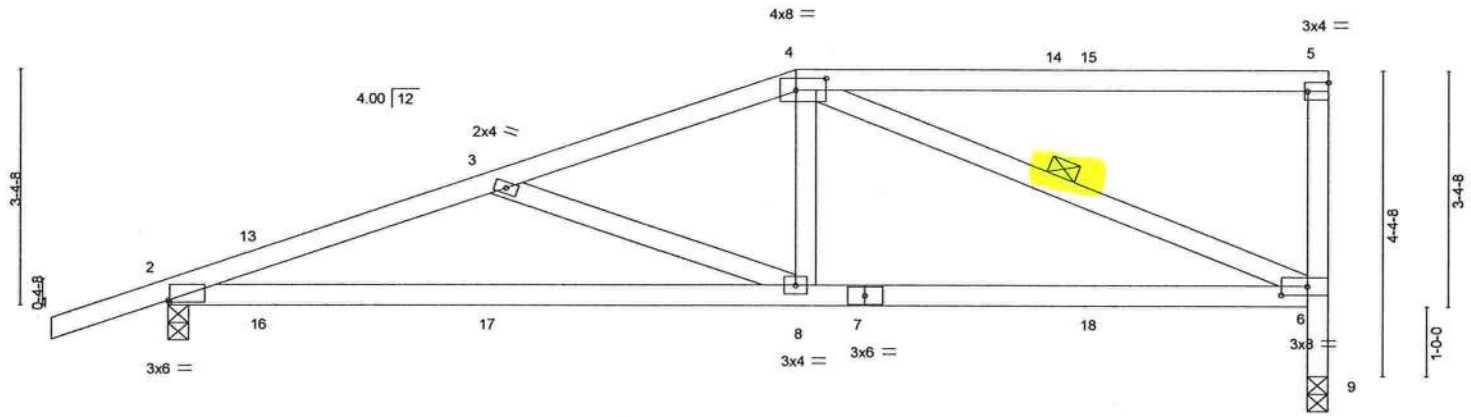
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526178
2845647	T22	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:21 2021 Page 1
ID:Ad27wGdB3DiInto_ShAPXtzIZ29-NjdOiskhYNkbE7WnJCRj9ywDtBdnCVZLuMH8Usz1Ouq

-1-8-0	4-10-1	9-0-0	16-7-8
1-8-0	4-10-1	4-1-15	7-7-8

Scale: 3/8"=1'



9-0-0	16-7-8
9-0-0	7-7-8

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

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	0.65	Vert(LL)	0.30	8-12	>654	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.70	Vert(CT)	0.26	8-12	>767	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.35	Horz(CT)	-0.04	9	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 81 lb	FT = 20%

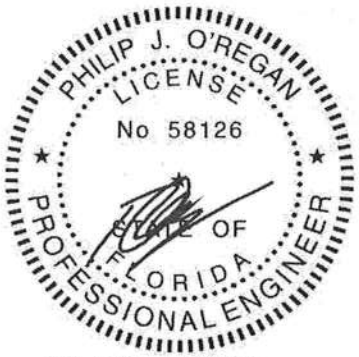
LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 3-11-5 oc bracing.
WEBS 1 Row at midpt 4-6
VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=133(LC 8)
Max Uplift 2=-369(LC 8), 9=-318(LC 8)
Max Grav 2=704(LC 1), 9=605(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1296/1432, 3-4=-946/1128, 6-9=-605/712
BOT CHORD 2-8=-1475/1211, 6-8=-1126/879
WEBS 3-8=-367/401, 4-8=-627/417, 4-6=-885/1162

NOTES- (9)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 9-0-0, Exterior(2R) 9-0-0 to 13-2-15, Interior(1) 13-2-15 to 16-5-12 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
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.
7) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=369, 9=318.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.



Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

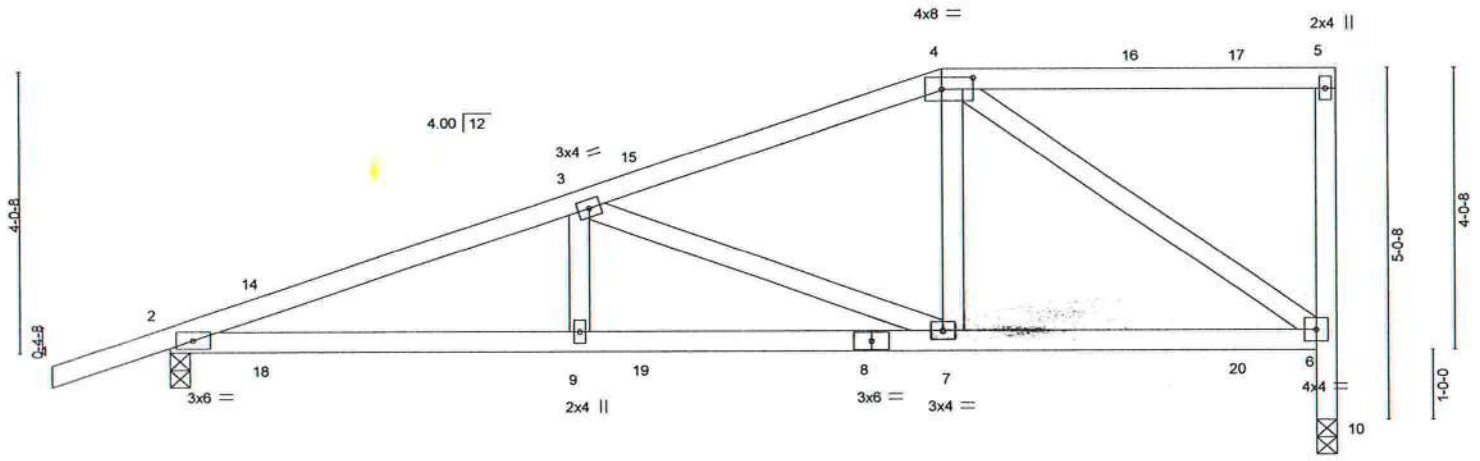
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526179
2845647	T23	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:23 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-K6l87Ymy4?_JTRgARdTBEN0ei?MAgKNeMfmFYkz1Ouo

-1-8-0 | 5-10-1 | 11-0-0 | 16-7-8
1-8-0 | 5-10-1 | 5-1-15 | 5-7-8

Scale = 1:31.7



5-10-1 | 11-0-0 | 16-7-8
5-10-1 | 5-1-15 | 5-7-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.38	Vert(LL)	0.10	7-9	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.39	Vert(CT)	-0.09	9-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.58	Horz(CT)	-0.04	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 84 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-7-15 oc bracing.
VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=156(LC 8)
Max Uplift 2=-365(LC 8), 10=-323(LC 8)
Max Grav 2=704(LC 1), 10=605(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1301/1455, 3-4=-692/775, 6-10=-605/732
BOT CHORD 2-9=-1491/1197, 7-9=-1491/1197, 6-7=-792/624
WEBS 3-7=-626/773, 4-7=-600/392, 4-6=-727/932, 3-9=-302/219

NOTES- (9)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 11-0-0, Exterior(2R) 11-0-0 to 15-2-15, Interior(1) 15-2-15 to 16-5-12 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
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.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=365, 10=323.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

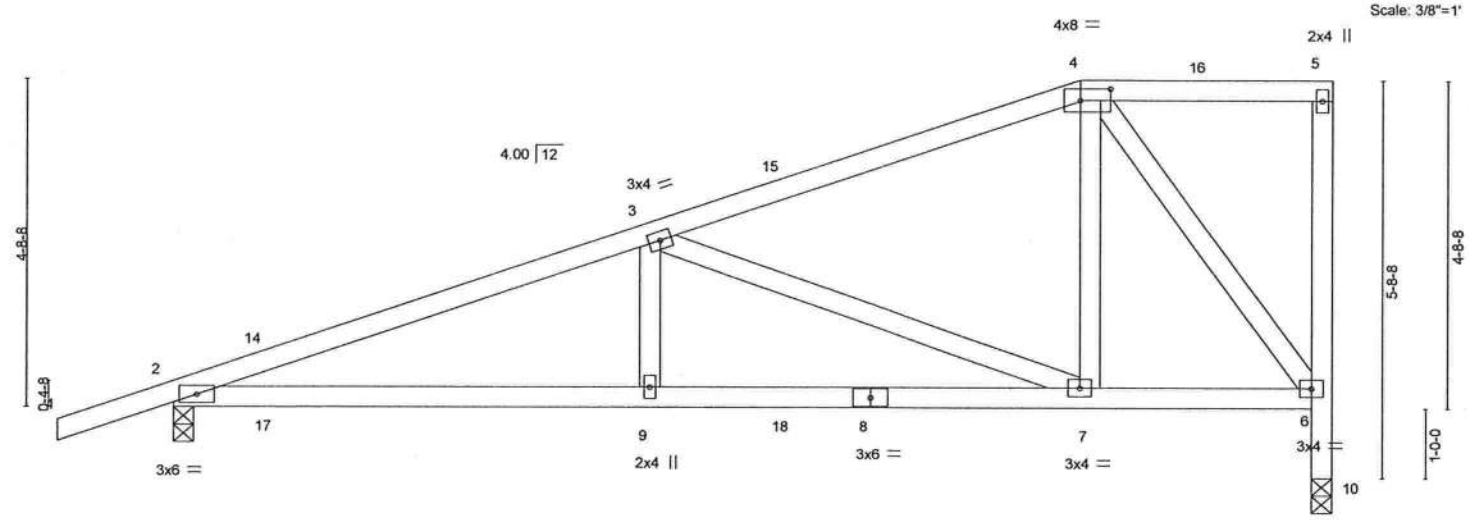
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526180
2845647	T24	Half Hip	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:27 2021 Page 1
ID:Ad27wGdB3Dlinto_ShAPXtzIZ29-Ct?fywpS7DUly2_xgSY7ODAlkcjfc7dEHHkShVz1Ouk

-1-8-0 / 1-8-0 | 6-10-1 / 6-10-1 | 13-0-0 / 6-1-15 | 16-7-8 / 3-7-8

Scale: 3/8"=1'



6-10-1 / 6-10-1 | 13-0-0 / 6-1-15 | 16-7-8 / 3-7-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.44	Vert(LL)	0.13	9-13	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.48	Vert(CT)	-0.12	9-13	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 87 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except*
5-10: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 4-8-8 oc bracing.
VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=180(LC 8)
Max Uplift 2=-359(LC 8), 10=-329(LC 8)
Max Grav 2=704(LC 1), 10=605(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1247/1326, 3-4=-471/489, 6-10=-605/731
BOT CHORD 2-9=-1387/1141, 7-9=-1387/1141, 6-7=-522/402
WEBS 3-9=-373/279, 3-7=-801/945, 4-7=-645/417, 4-6=-641/840

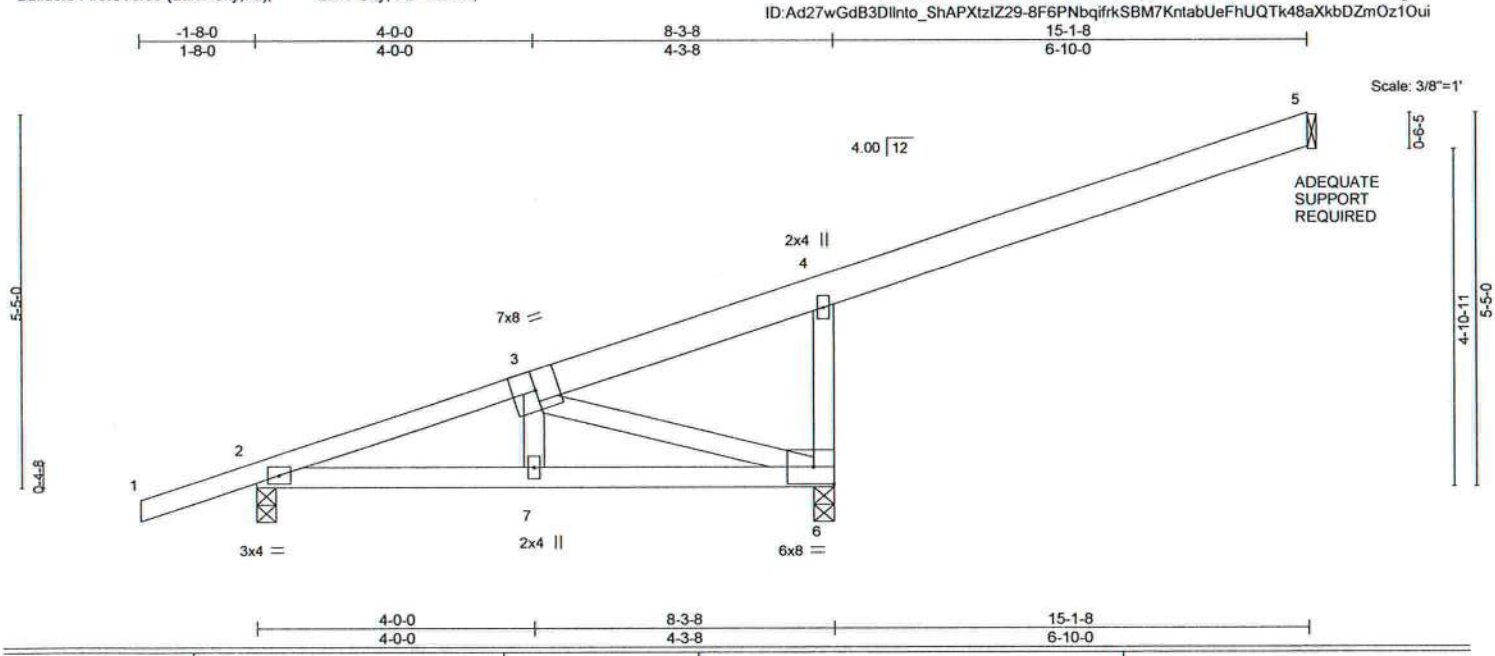
NOTES- (9)
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 13-0-0, Exterior(2E) 13-0-0 to 16-5-12 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
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.
7) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=359, 10=329.
9) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526181
2845647	T25	Monopitch	14	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:29 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-8F6PNbqifrkSBM7KntabUeFhUQTk48aXkbDZmOz1Oui



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	0.23	Vert(LL)	0.03	6-7	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.19	Vert(CT)	-0.02	6-7	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(CT)	-0.01	6	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-3: 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 6-11-5 oc bracing.

REACTIONS. (size) 5=Mechanical, 2=0-3-8, 6=0-3-8
Max Horz 2=201(LC 8)
Max Uplift 5=-86(LC 12), 2=-165(LC 8), 6=-309(LC 8)
Max Grav 5=149(LC 1), 2=369(LC 1), 6=549(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-408/464, 4-6=-388/400
BOT CHORD 2-7=-682/361, 6-7=-686/362
WEBS 3-6=-389/720, 3-7=-284/177

NOTES- (7)
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 15-0-12 zone; porch left 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) 5 except (jt=lb) 2=165, 6=309.
7) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

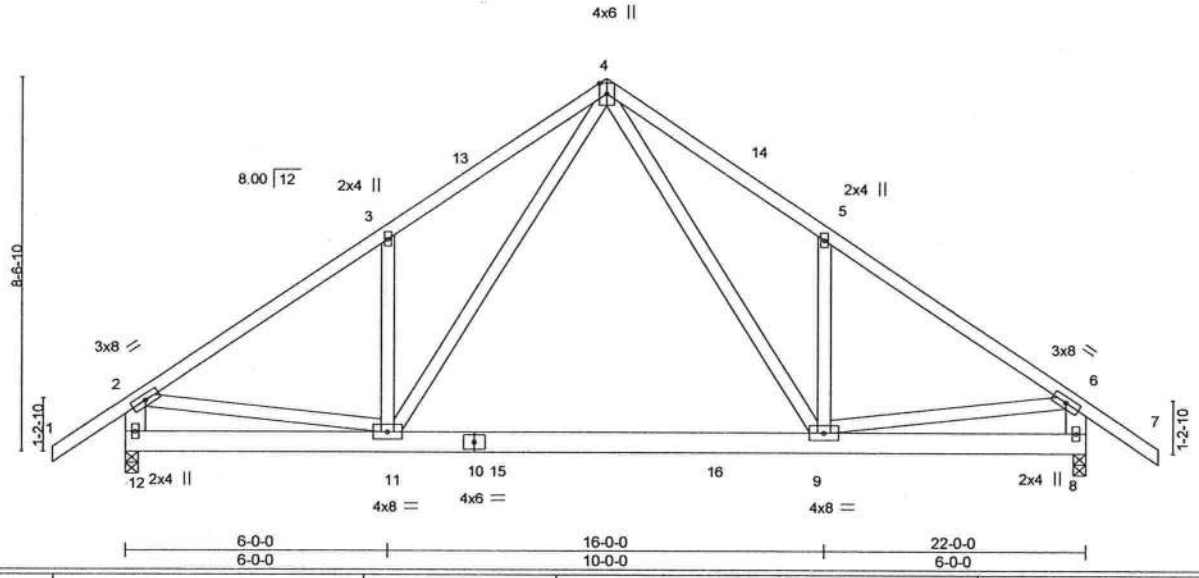
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	
2845647	T26	COMMON	7	1	Job Reference (optional)	T24526182

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:30 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-dSgnbxrLQ8sJpWiWLb5q0ropIqdlpWogzFz6Iqz1Ouh

-1-8-0	6-0-0	11-0-0	16-0-0	22-0-0	23-8-0
1-8-0	6-0-0	5-0-0	5-0-0	6-0-0	1-8-0

Scale = 1:50.7



6-0-0	16-0-0	22-0-0
6-0-0	10-0-0	6-0-0

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.25	TC 0.42	Vert(LL) -0.20 9-11 >999 240	MT20 244/190
TCDL 7.0	Lumber DOL 1.25	BC 0.90	Vert(CT) -0.37 9-11 >698 180	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.54	Horz(CT) 0.01 8 n/a n/a	
BCDL 10.0	Code FBC2020/TPI2014	Matrix-MS		Weight: 157 lb FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except*
2-12,6-8: 2x6 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 8=0-3-8
Max Horz 12=223(LC 11)
Max Uplift 12=-288(LC 12), 8=-288(LC 13)
Max Grav 12=1343(LC 19), 8=1307(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1688/331, 3-4=-1714/485, 4-5=-1653/485, 5-6=-1679/331, 2-12=-1358/330, 6-8=-1313/330
BOT CHORD 9-11=-104/938
WEBS 4-9=-312/968, 5-9=-311/241, 4-11=-313/1008, 3-11=-310/241, 2-11=-177/1261, 6-9=-178/1325

NOTES- (8)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) -1-8-0 to 1-4-0, Interior(1) 1-4-0 to 11-0-0, Exterior(2R) 11-0-0 to 14-0-0, Interior(1) 14-0-0 to 23-8-0 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=288, 8=288.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
8) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-2=-54, 2-4=-54, 4-6=-54, 6-7=-54, 11-12=-20, 9-11=-80(F=-60), 8-9=-20

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

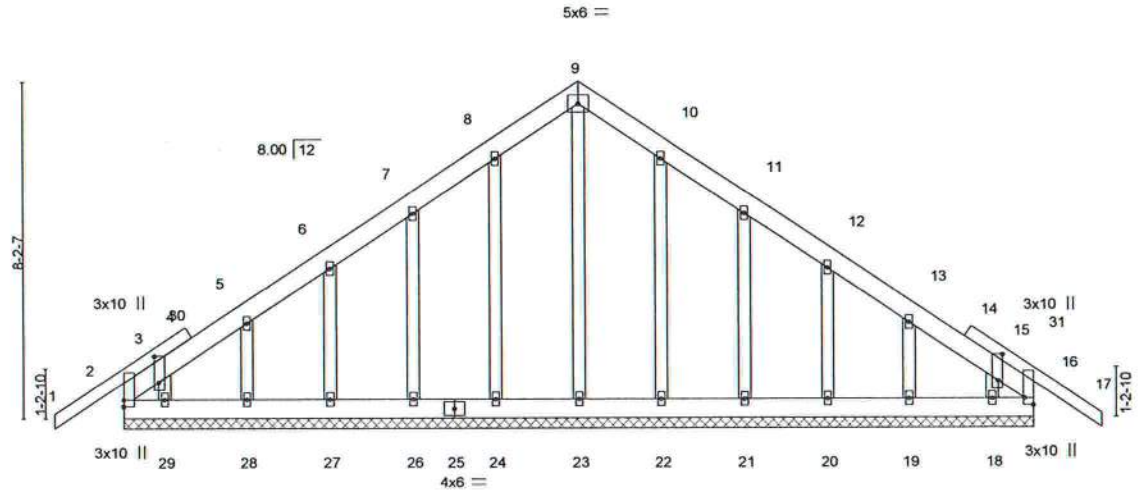
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526183
2845647	T26G	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:32 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-ZqoY0dtbym712psvT08I5GtDxdX?HXqzQZSDNjz1Ouf

-1-8-0 | 11-0-0 | 22-0-0 | 23-8-0
1-8-0 | 11-0-0 | 11-0-0 | 1-8-0

Scale = 1:53.8



22-0-0
22-0-0

Plate Offsets (X,Y)-- [3:0-7-11,0-1-4], [15:0-7-11,0-1-4], [16:Edge,0-2-8]

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	0.15	Vert(LL)	-0.01	17	n/r	120	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.02	Vert(CT)	-0.01	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	16	n/a	n/a		
BCDL	10.0	Code	FBC2020/TPI2014	Matrix-S							Weight: 186 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2 *Except*
1-4,14-17: 2x4 SP No.2
BOT CHORD 2x6 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 22-0-0.
(lb) - Max Horz 2=-181(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 24, 26, 27, 28, 22, 21, 20, 19, 18 except 29=-104(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 2, 16, 23, 24, 26, 27, 28, 29, 22, 21, 20, 19, 18

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

NOTES- (11)
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=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Corner(3E) -1-8-0 to 1-4-0, Exterior(2N) 1-4-0 to 11-0-0, Corner(3R) 11-0-0 to 14-0-0, Exterior(2N) 14-0-0 to 23-8-0 zone; end vertical 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) 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, 16, 24, 26, 27, 28, 22, 21, 20, 19, 18 except (jt=lb) 29=104.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526184
2845647	TG01	FLAT TRUSS	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:36 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-Rc12r_w50_dTXRAgirCEG62osErKD72ZLBQRWUz1Oub

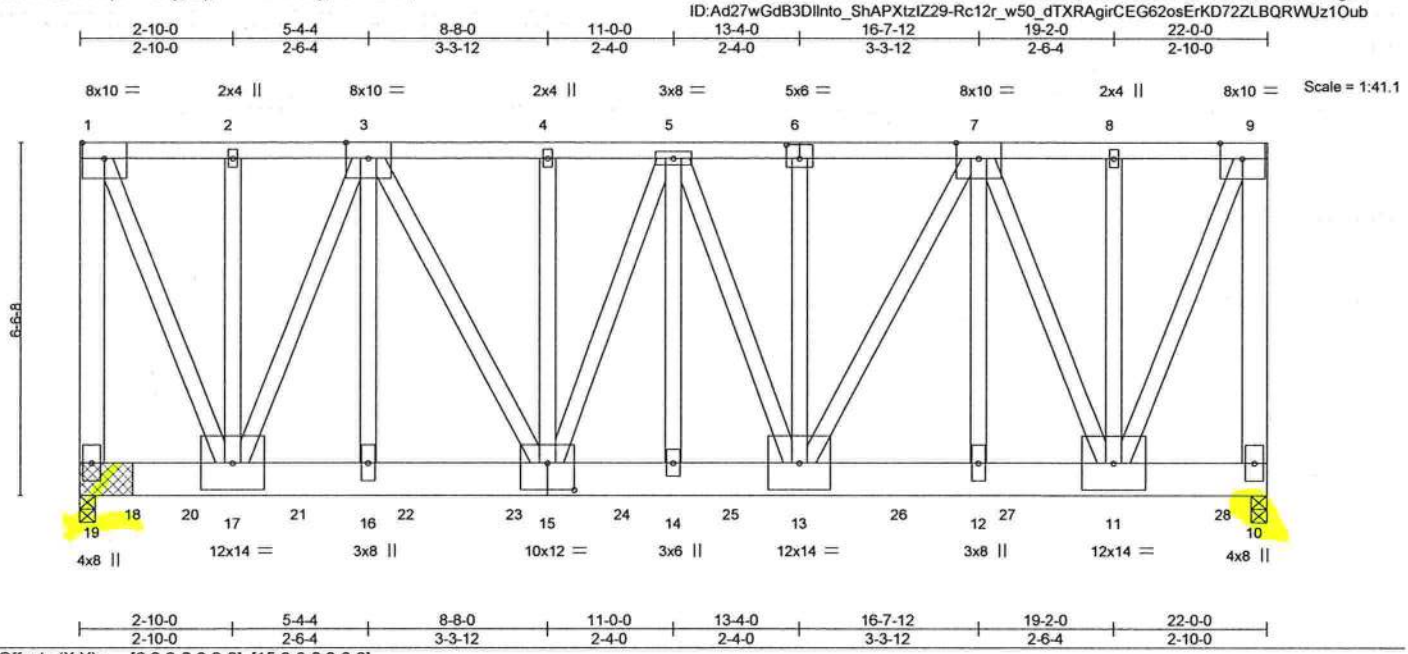


Plate Offsets (X,Y)-- [6:0-3-0,0-3-0], [15:0-6-0,0-6-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.60	Vert(LL)	-0.10	14	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.25	Vert(CT)	-0.19	14	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.02	10	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 530 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.3 *Except*
1-19,9-10: 2x6 SP No.2, 1-17,3-17,7-11,9-11: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-7-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 19=(0-3-8 + bearing block) (req. 0-4-4), 10=0-3-8
Max Uplift 19=-978(LC 4), 10=-968(LC 4)
Max Grav 19=7179(LC 2), 10=5687(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-19=-6655/925, 1-2=-2858/387, 2-3=-2858/387, 3-4=-6764/1041, 4-5=-6764/1041, 5-6=-6930/1268, 6-7=-6930/1268, 7-8=-2274/397, 8-9=-2274/397, 9-10=-5313/947
BOT CHORD 16-17=-717/4981, 15-16=-717/4981, 14-15=-1192/7096, 13-14=-1192/7096, 12-13=-806/4455, 11-12=-806/4455
WEBS 1-17=-963/7121, 3-17=-5554/861, 3-16=-112/1688, 3-15=-680/3732, 5-15=-1155/422, 5-14=-130/1161, 5-13=-555/92, 7-13=-968/5249, 7-12=-45/527, 7-11=-5706/1069, 9-11=-988/5667

NOTES- (11)
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-8-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 6-13 2x4 - 1 row at 0-6-0 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) 2x8 SP 2400F 2.0E bearing block 12" long at jt. 19 attached to each face with 4 rows of 10d (0.131"x3") nails spaced 3" o.c. 16 Total fasteners per block. Bearing is assumed to be SP No.2.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; 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) 19=978, 10=968.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	TG01	FLAT TRUSS	1	2	T24526184
					Job Reference (optional)

NOTES- (11)

10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1222 lb down and 96 lb up at 2-0-12, 1222 lb down and 96 lb up at 4-0-12, 1222 lb down and 96 lb up at 6-0-12, 1222 lb down and 96 lb up at 8-0-12, 1222 lb down and 96 lb up at 10-0-12, 1221 lb down and 96 lb up at 12-0-12, 3873 lb down and 1114 lb up at 13-3-3, 184 lb down at 15-2-5, 184 lb down at 17-2-5, and 184 lb down at 19-2-5, and 189 lb down at 21-2-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

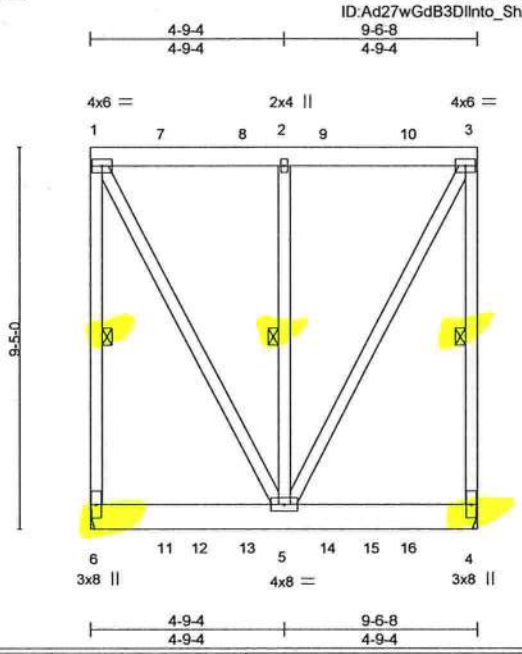
LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-9=-54, 10-19=-20
   Concentrated Loads (lb)
   Vert: 13=-3873(F) 11=-138(F) 20=-1087(F) 21=-1087(F) 22=-1087(F) 23=-1087(F) 24=-1087(F) 25=-1086(F) 26=-138(F) 27=-138(F) 28=-143(F)

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526185
2845647	TG02	FLAT TRUSS	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:37 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-vobR3KxknIlK9alsFZjToKbyGeD3yhHiar9_2wz1Oua



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	0.69	Vert(LL)	-0.03	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.09	Vert(CT)	-0.05	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 234 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
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.
WEBS 1 Row at midpt 1-6, 3-4, 2-5

REACTIONS. (size) 6=Mechanical, 4=Mechanical
Max Uplift 6=-1163(LC 4), 4=-1175(LC 4)
Max Grav 6=3710(LC 1), 4=3745(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-3222/971, 1-2=-1196/379, 2-3=-1196/379, 3-4=-3242/975
WEBS 1-5=-810/2554, 2-5=-3417/836, 3-5=-810/2553

NOTES- (11)
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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
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) 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1163, 4=1175.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 635 lb down and 137 lb up at 1-9-11, 635 lb down and 130 lb up at 3-9-11, and 635 lb down and 130 lb up at 5-9-11, and 635 lb down and 137 lb up at 7-9-11 on top chord, and 480 lb down and 276 lb up at 1-9-11, 480 lb down and 276 lb up at 3-9-11, and 480 lb down and 276 lb up at 5-9-11, and 480 lb down and 276 lb up at 7-9-11 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

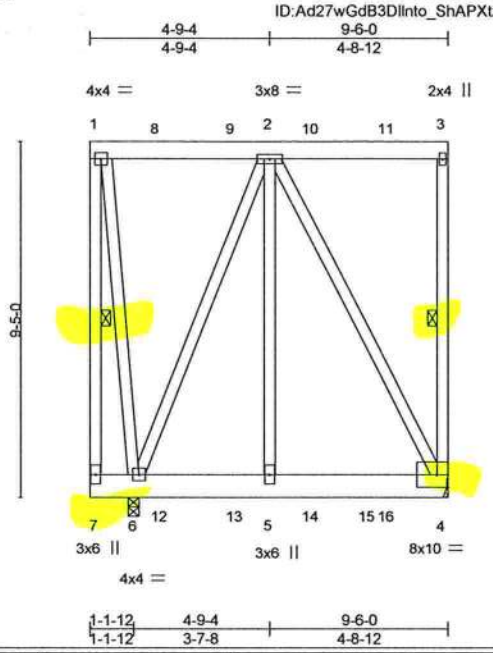
LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-304, 4-6=-20
   Concentrated Loads (lb)
   Vert: 7=-635 8=-635 9=-635 10=-635 11=-480(B) 13=-480(B) 14=-480(B) 16=-480(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526186
2845647	TG03	FLAT TRUSS	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:40 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-KNHZhMzc3D7v02TRxhHAQyDRHsFK9ya8GpOefFz1OuX

THIS TRUSS IS NOT SYMMETRIC.
PROPER ORIENTATION IS ESSENTIAL.



Scale = 1:58.7

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

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	0.77	Vert(LL)	-0.02	4-5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.12	Vert(CT)	-0.03	4-5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.90	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 257 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP 2400F 2.0E
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.
WEBS 1 Row at midpt 1-7, 3-4

REACTIONS. (size) 6=0-3-8, 4=Mechanical
Max Uplift 6=-1335(LC 4), 4=-1173(LC 4)
Max Grav 6=3648(LC 1), 4=3307(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-7=-566/240, 3-4=-913/246
BOT CHORD 5-6=-321/902, 4-5=-321/902
WEBS 1-6=-356/75, 2-6=-2484/849, 2-5=-541/735, 2-4=-1939/691

NOTES- (11)
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, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
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) 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) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=1335, 4=1173.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 625 lb down and 140 lb up at 1-9-3, 625 lb down and 133 lb up at 3-9-3, and 625 lb down and 133 lb up at 5-9-3, and 625 lb down and 140 lb up at 7-9-3 on top chord, and 172 lb down and 252 lb up at 1-9-3, 172 lb down and 252 lb up at 3-9-3, and 172 lb down and 252 lb up at 5-9-3, and 172 lb down and 252 lb up at 7-9-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard

June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

LOAD CASE(S) Standard

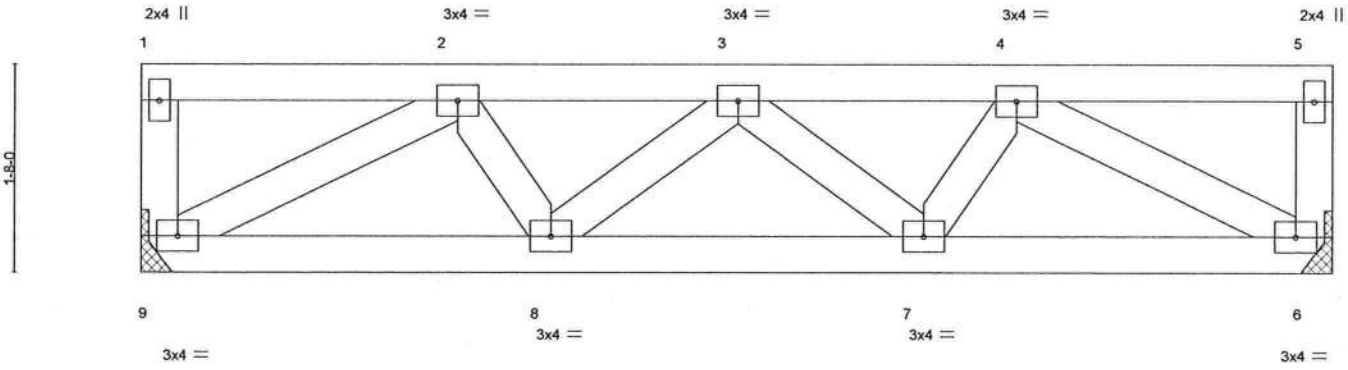
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-3=-304(F=-250), 5-7=-20, 4-5=-220(B=-200)
   Concentrated Loads (lb)
   Vert: 8=-625 9=-625 10=-625 11=-625 12=-138(F) 13=-138(F) 14=-138(F) 16=-138(F)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526187
2845647	TG04	FLOOR	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:44 2021 Page 1
ID:Ad27wGdB3DlInto_ShAPXtzIZ29-C8W4Xk077SdKUfnCAXL6aoNHbTZv5wZkBRMso0z1OuT

2-6-6	4-9-4	7-0-2	9-6-8
2-6-6	2-2-14	2-2-14	2-6-6

Scale = 1:17.7



3-3-5	6-3-3	9-6-8
3-3-5	2-11-13	3-3-5

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	-0.02	7-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.27	Vert(CT)	-0.03	7-8	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MS							Weight: 48 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) 9=Mechanical, 6=Mechanical
Max Grav 9=509(LC 1), 6=509(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-746/0, 3-4=-746/0
BOT CHORD 8-9=0/673, 7-8=0/864, 6-7=0/673
WEBS 2-9=-746/0, 4-6=-746/0

NOTES- (3)
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

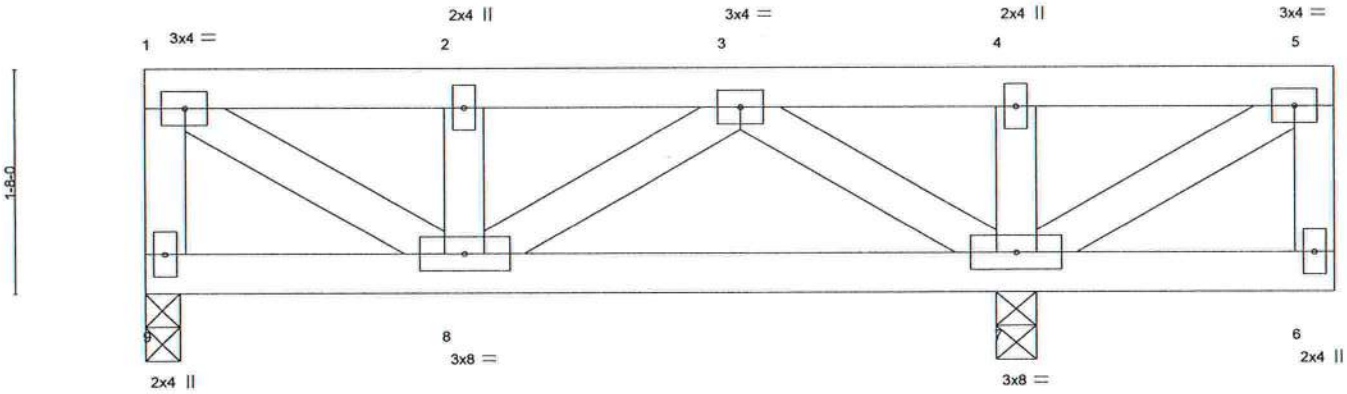
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526188
2845647	TG05	FLOOR	3	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:46 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-9XeqyP2Nf3t2kzxbHyObgDTcAGIgZrA1ekrysvz1OuR

2-4-3	4-4-8	6-4-13	8-9-0
2-4-3	2-0-5	2-0-5	2-4-3

Scale = 1:16.4



2-4-3	6-4-13	6-6-8	8-9-0
2-4-3	4-0-10	0-1-11	2-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	-0.01	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.01	7-8	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 9=0-3-0, 7=0-3-8
Max Grav 9=332(LC 3), 7=629(LC 1)

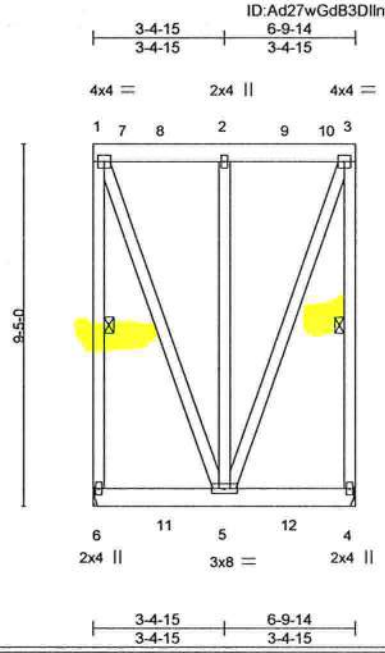
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-9=-316/0, 1-2=-360/0, 2-3=-360/0
BOT CHORD 7-8=-44/318
WEBS 1-8=0/399, 3-7=-434/0

NOTES- (3)
1) Unbalanced floor live loads have been considered for this design.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526189
2845647	TG06	Flat Girder	1	2	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:49 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-Z6KzaR4Fy_GdbQfAy4xIHs45cUHBm6TTKi3dTEz1OuO



Scale = 1:57.6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.25	TC	0.28	Vert(LL)	-0.01	5	>999	240	MT20	244/190
TCDL	7.0	Lumber DOL	1.25	BC	0.20	Vert(CT)	-0.03	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.54	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 193 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 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, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 1-6, 3-4

REACTIONS. (size) 6=Mechanical, 4=Mechanical
Max Uplift 6=-629(LC 4), 4=-629(LC 4)
Max Grav 6=1950(LC 1), 4=1950(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-6=-1703/532, 1-2=-496/162, 2-3=-496/162, 3-4=-1703/532
WEBS 1-5=-474/1449, 2-5=-1647/336, 3-5=-474/1449

NOTES- (11)
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, 2x6 - 2 rows staggered 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) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=22ft; Cat. II; Exp B; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
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) 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.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=629, 4=629.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 659 lb down and 127 lb up at 1-9-11, and 659 lb down and 127 lb up at 3-4-15, and 659 lb down and 127 lb up at 5-0-3 on top chord, and 480 lb down and 276 lb up at 1-9-11, and 480 lb down and 276 lb up at 3-4-15, and 480 lb down and 276 lb up at 5-0-3 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
11) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.25, Plate Increase=1.25

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Continued on page 2

MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE
2845647	TG06	Flat Girder	1	2	T24526189 Job Reference (optional)

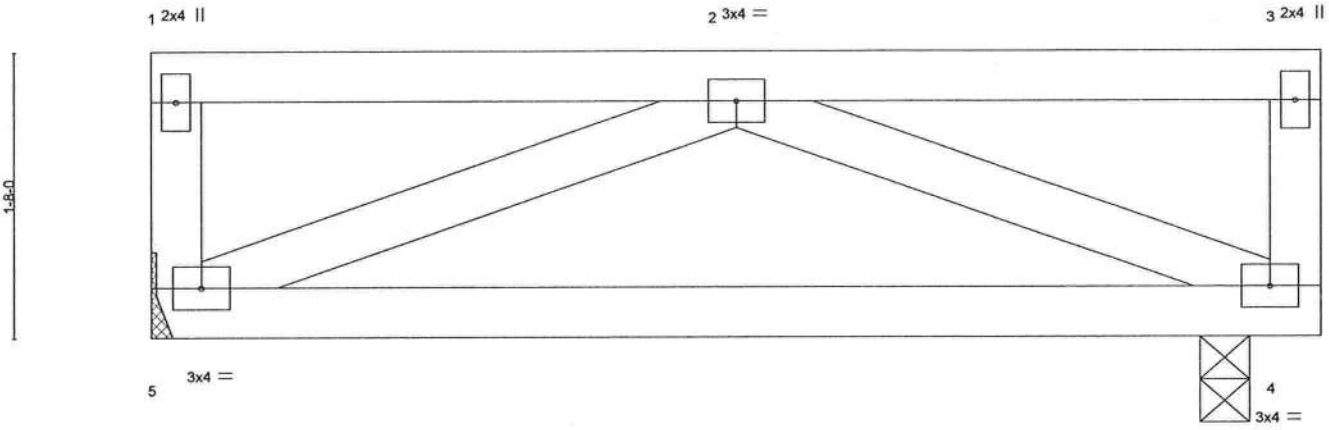
LOAD CASE(S) Standard
Uniform Loads (plf)
Vert: 1-3=-54, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-480(B) 2=-659 8=-659 9=-659 11=-480(B) 12=-480(B)

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526190
2845647	TG07	FLOOR	2	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:50 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-1ItLnn5ujIOUCaEMWoSXq3dGRuczVfZdZMpA0gz1OuN

3-4-15 (3-4-15) | 6-9-14 (3-4-15)

Scale = 1:12.9



6-4-15 (6-4-15) | 6-9-14 (0-4-15)

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.28	Vert(LL)	0.00	5	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 33 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 6-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 4=0-3-8
Max Grav 5=359(LC 1), 4=359(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 4-5=0/472
WEBS 2-5=-513/0, 2-4=-513/0

NOTES- (3)
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

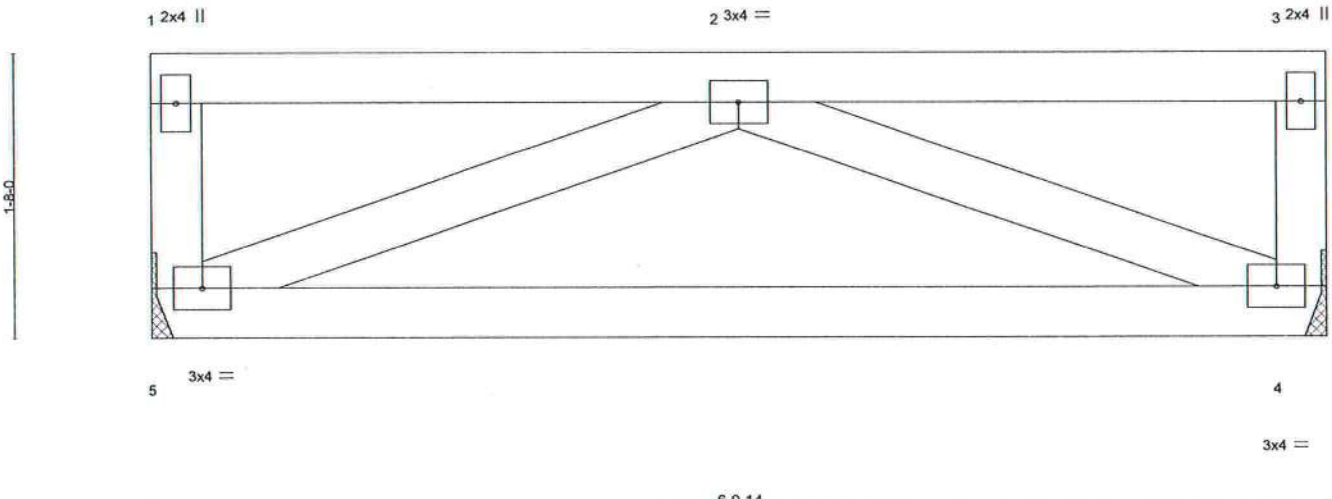
MiTek
6904 Parke East Blvd.
Tampa, FL 36610

Job	Truss	Truss Type	Qty	Ply	SIMQUE - LOT 34 PRESERVE	T24526191
2845647	TG08	FLOOR	12	1	Job Reference (optional)	

Builders FirstSource (Lake City,FL), Lake City, FL - 32055, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Jun 29 14:15:52 2021 Page 1
ID:Ad27wGdB3DIlnto_ShAPXtzIZ29-zh?6CT68FveCSuOleCV?vUicxhIRzZ3v0glH4Zz1OuL

3-4-15 / 3-4-15 | 6-9-14 / 3-4-15

Scale = 1:12.9



6-9-14 / 6-9-14

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.28	Vert(LL)	0.00	5	****	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	-0.05	4-5	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	4	n/a	n/a		
BCDL	5.0	Code FBC2020/TPI2014		Matrix-MP							Weight: 33 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 6-9-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 4=Mechanical
Max Grav 5=359(LC 1), 4=359(LC 1)

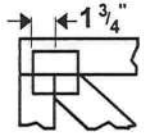
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 4-5=0/472
WEBS 2-5=-513/0, 2-4=-513/0

NOTES- (3)
1) Refer to girder(s) for truss to truss connections.
2) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
3) This manufactured product is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

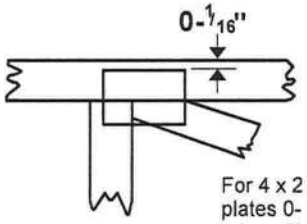
Philip J. O'Regan PE No.58126
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
June 30,2021

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

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

PLATE SIZE

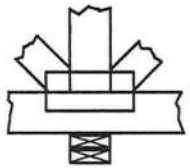
4 x 4

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

LATERAL BRACING LOCATION

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

BEARING

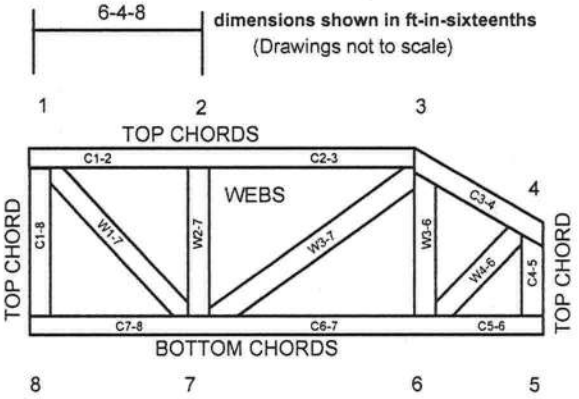


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

MiTek

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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

AUGUST 1, 2016	T-BRACE / I-BRACE DETAIL WITH 2X BRACE ONLY	MII-T-BRACE 2

MiTek USA, Inc.

ENGINEERED BY TRENCO A MiTek Affiliate

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

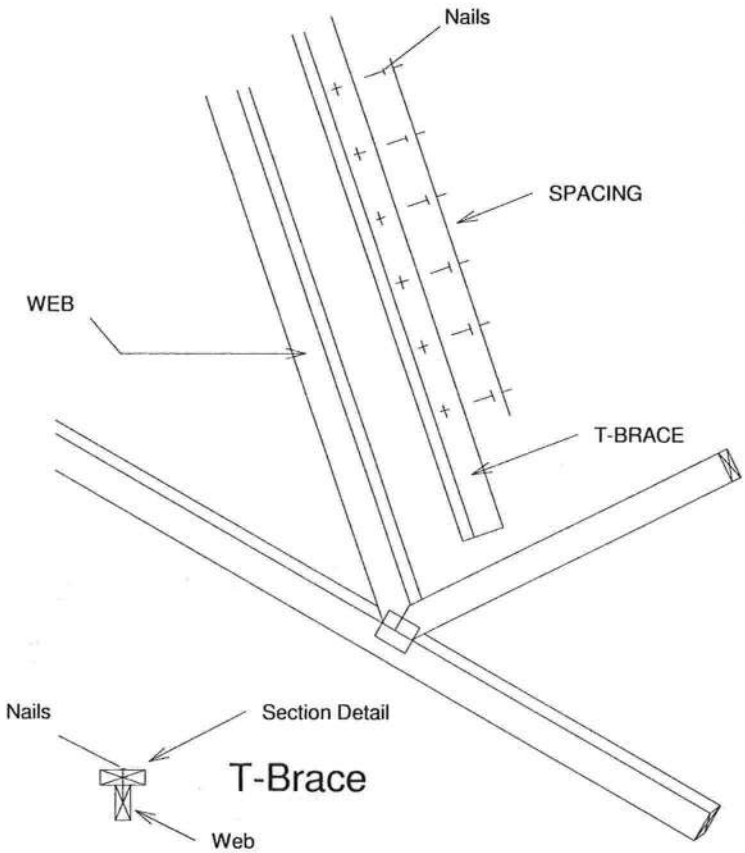
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

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

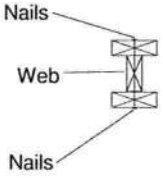
	Brace Size for One-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

	Brace Size for Two-Ply Truss	
	Specified Continuous Rows of Lateral Bracing	
Web Size	1	2
2x3 or 2x4	2x4 T-Brace	2x4 I-Brace
2x6	2x6 T-Brace	2x6 I-Brace
2x8	2x8 T-Brace	2x8 I-Brace

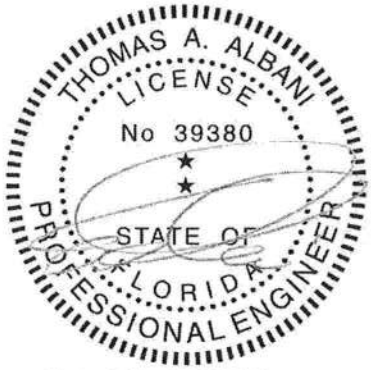
T-Brace / I-Brace must be same species and grade (or better) as web member.



T-Brace



I-Brace



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

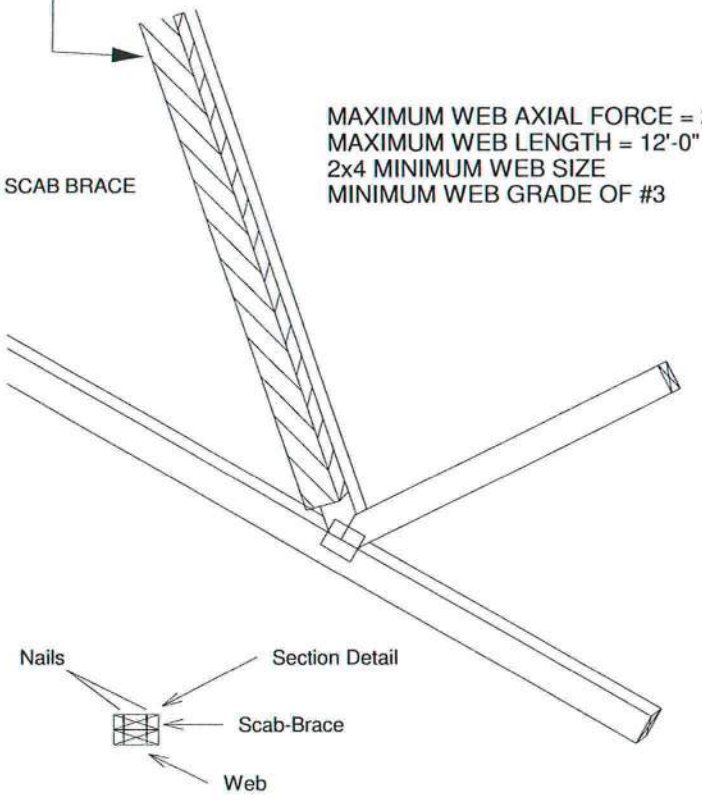
Note: Scab-Bracing to be used when continuous lateral bracing at midpoint (or T-Brace) is impractical.
Scab must cover full length of web +/- 6".

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

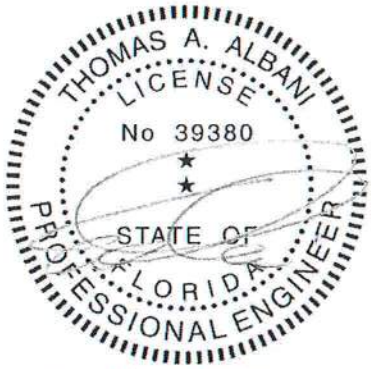
APPLY 2x___ SCAB TO ONE FACE OF WEB WITH
2 ROWS OF 10d (0.131" X 3") NAILS SPACED 6" O.C.
SCAB MUST BE THE SAME GRADE, SIZE AND
SPECIES (OR BETTER) AS THE WEB.

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.



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

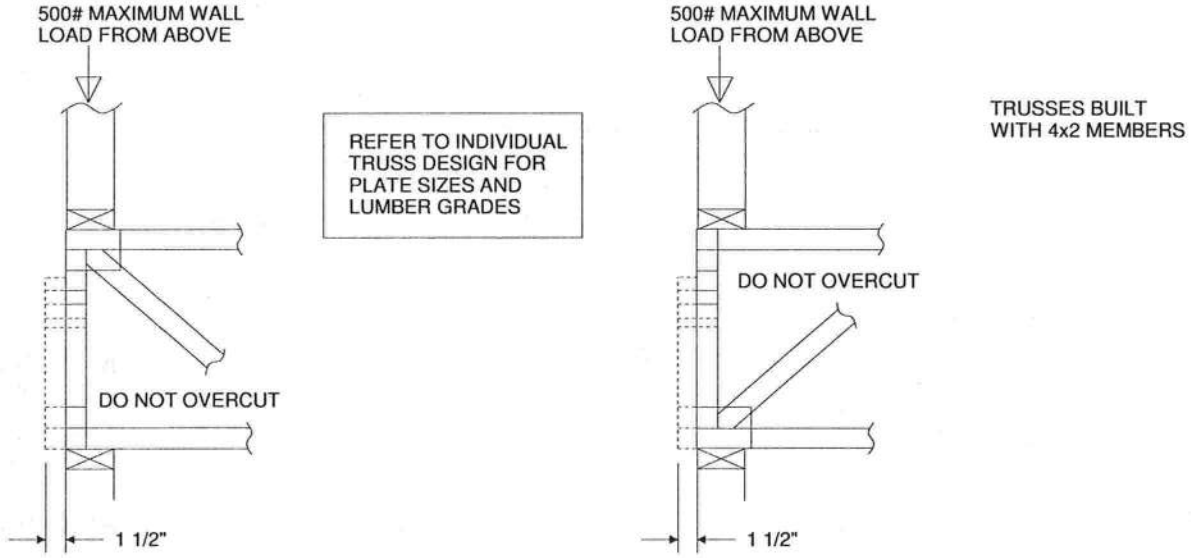
February 12, 2018

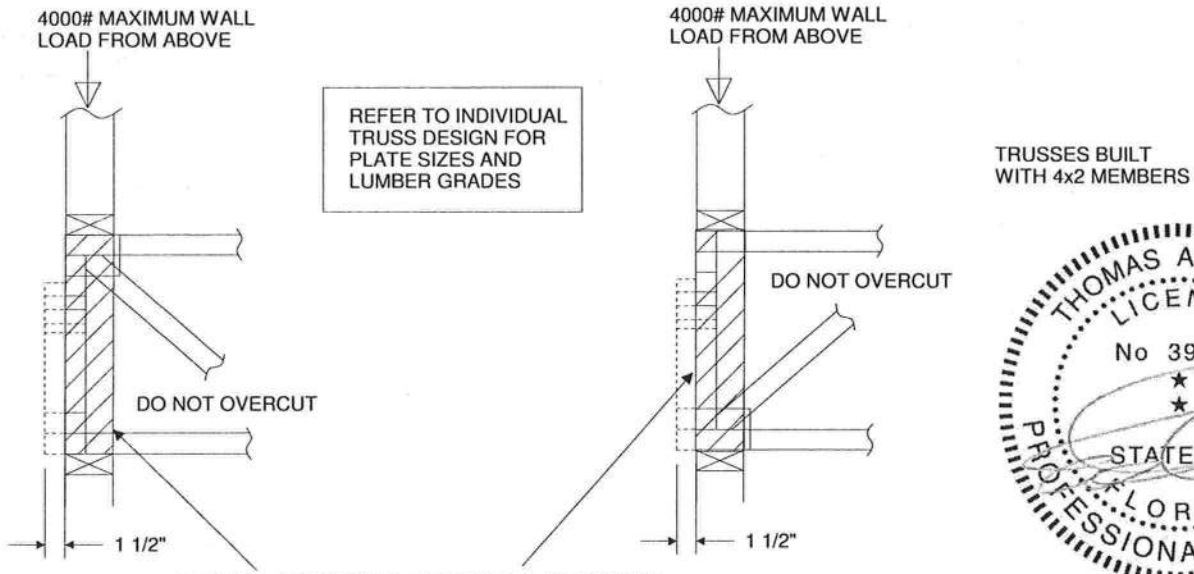
AUGUST 1, 2016	STANDARD REPAIR TO REMOVE END VERTICAL (RIBBON NOTCH VERTICAL)	MII-REP05

MiTek USA, Inc. Page 1 of 1

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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



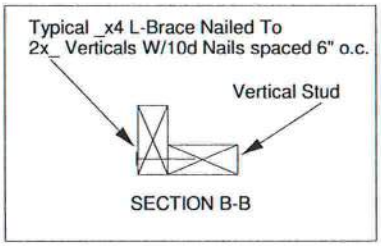


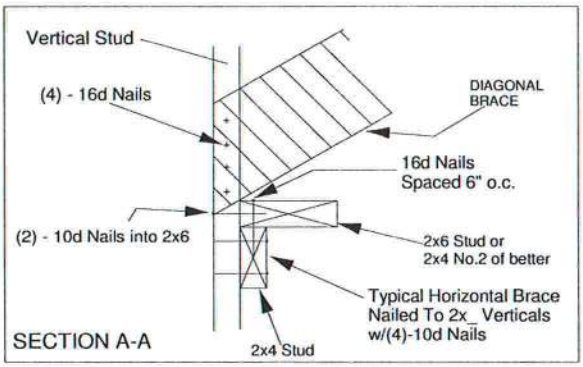
ATTACH 2x4 SQUASH BLOCK (CUT TO FIT TIGHTLY) TO BOTH SIDES OF THE TRUSS AS SHOWN WITH 10d (0.131" X 3") NAILS SPACED 3" O.C.

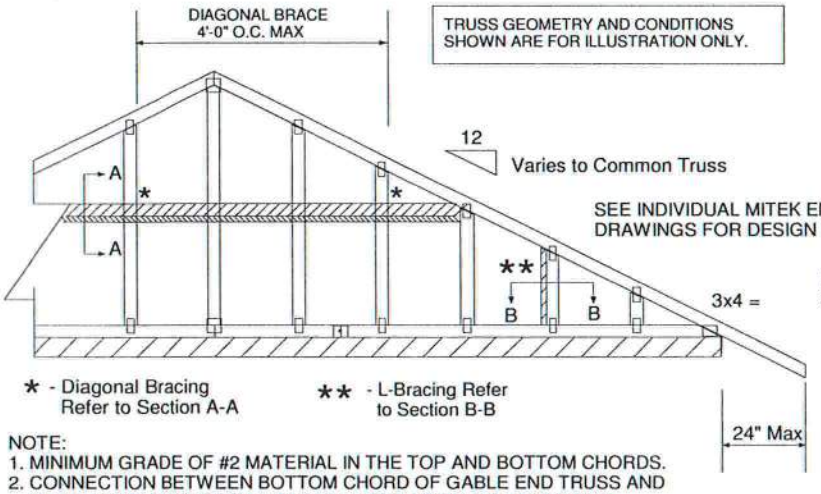
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

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

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate







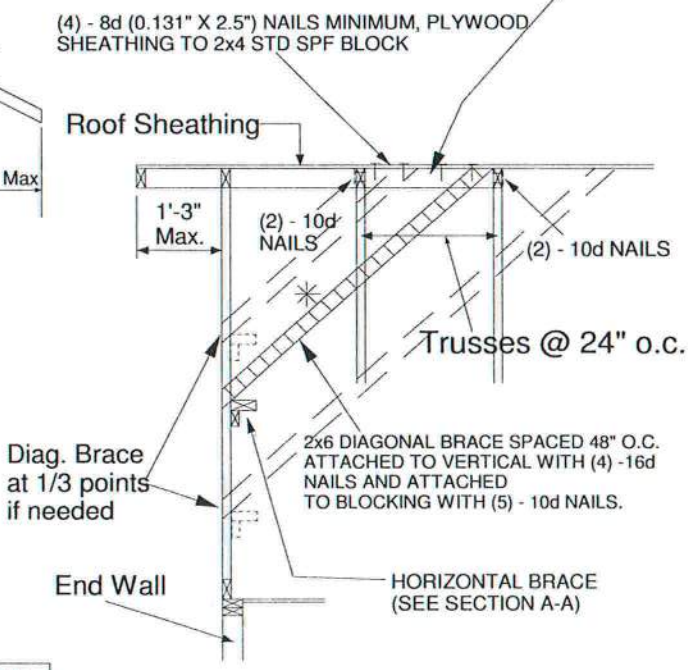
TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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.



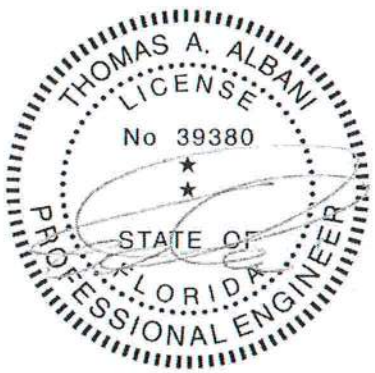
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

✳ Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 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.

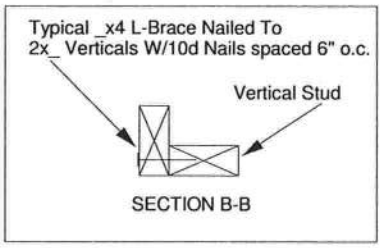


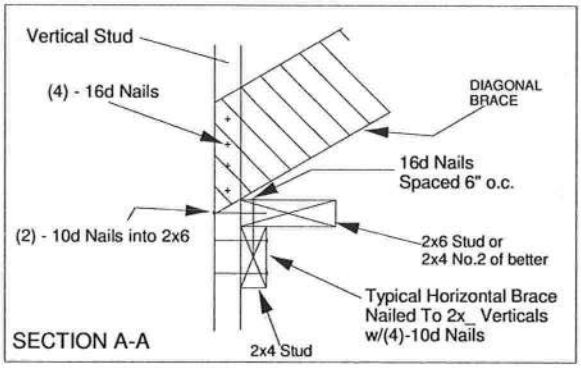
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

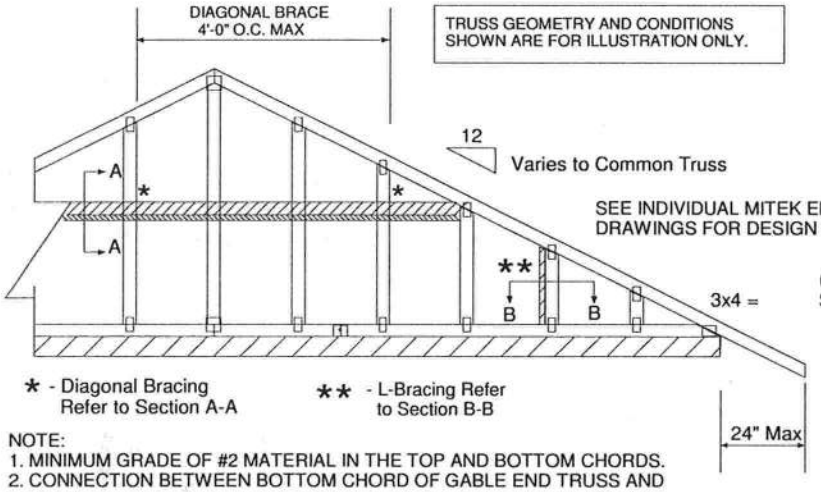
AUGUST 1, 2016	Standard Gable End Detail	MII-GE130-SP

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.

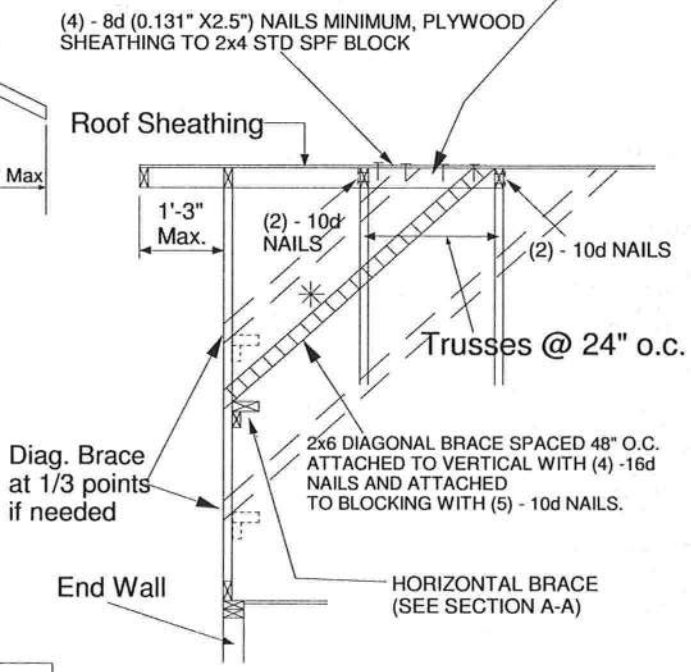
SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - 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. SOUTHERN PINE LUMBER DESIGN VALUES ARE THOSE EFFECTIVE 06-01-13 BY SPIB/ALSC.
11. NAILS DESIGNATED 10d ARE (0.131" X 3") AND NAILS DESIGNATED 16d ARE (0.131" X 3.5")

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

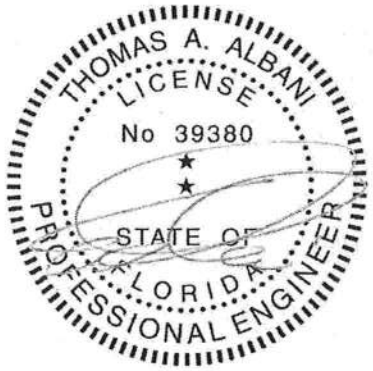


Minimum Stud Size Species and Grade	Stud Spacing	Without Brace	1x4 L-Brace	2x4 L-Brace	DIAGONAL BRACE	2 DIAGONAL BRACES AT 1/3 POINTS
		Maximum Stud Length				
2x4 SP No. 3 / Stud	12" O.C.	4-0-7	4-5-6	6-3-8	8-0-15	12-1-6
2x4 SP No. 3 / Stud	16" O.C.	3-8-0	3-10-4	5-5-6	7-4-1	11-0-1
2x4 SP No. 3 / Stud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

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

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

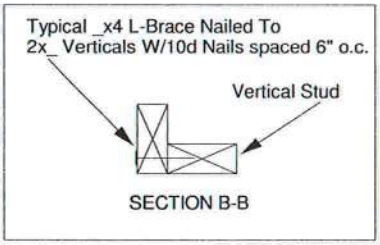
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
CONNECTION OF BRACING IS BASED ON MWFRS.

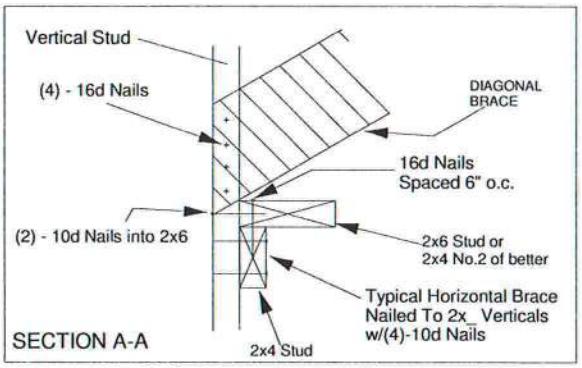


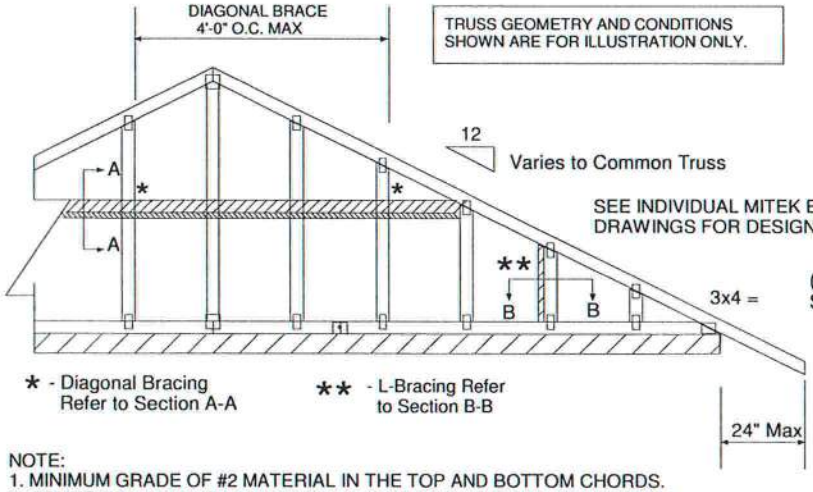
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

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

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate







TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

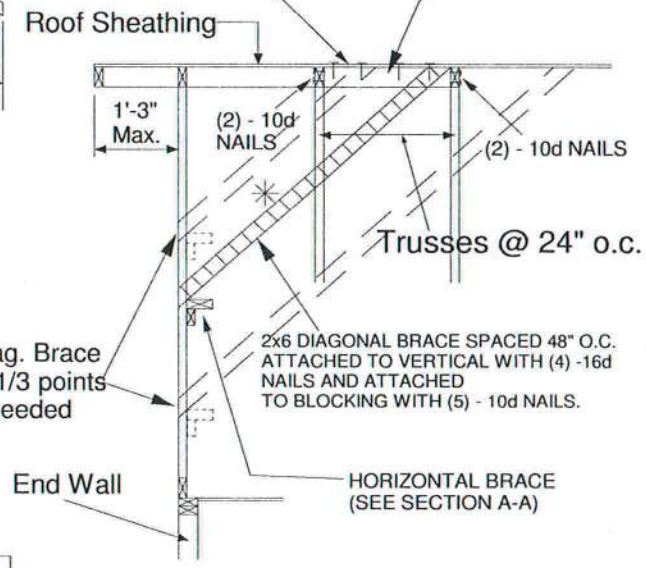
SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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

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



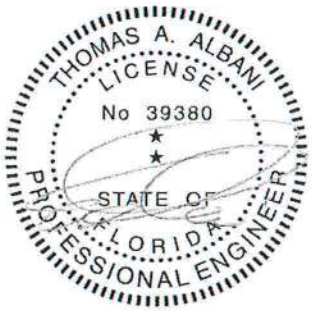
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF 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

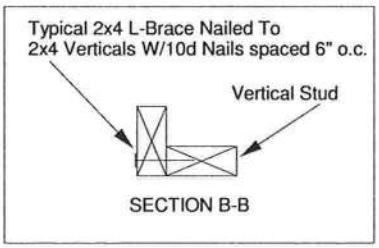
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING. CONNECTION OF BRACING IS BASED ON MWFRS.

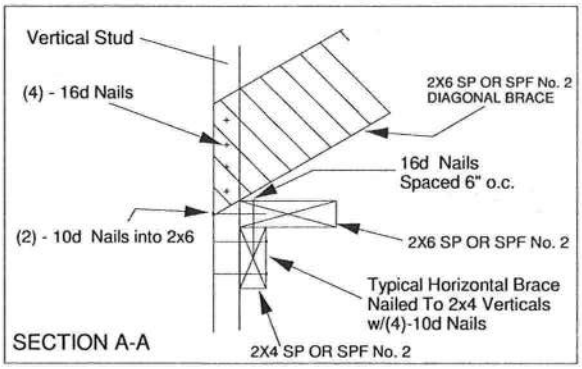


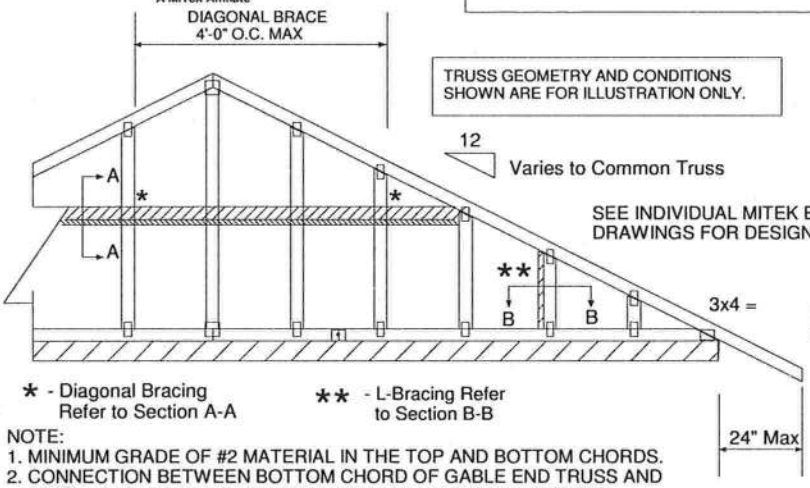
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
January 19, 2018

AUGUST 1, 2016	Standard Gable End Detail	MII-GE170-D-SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

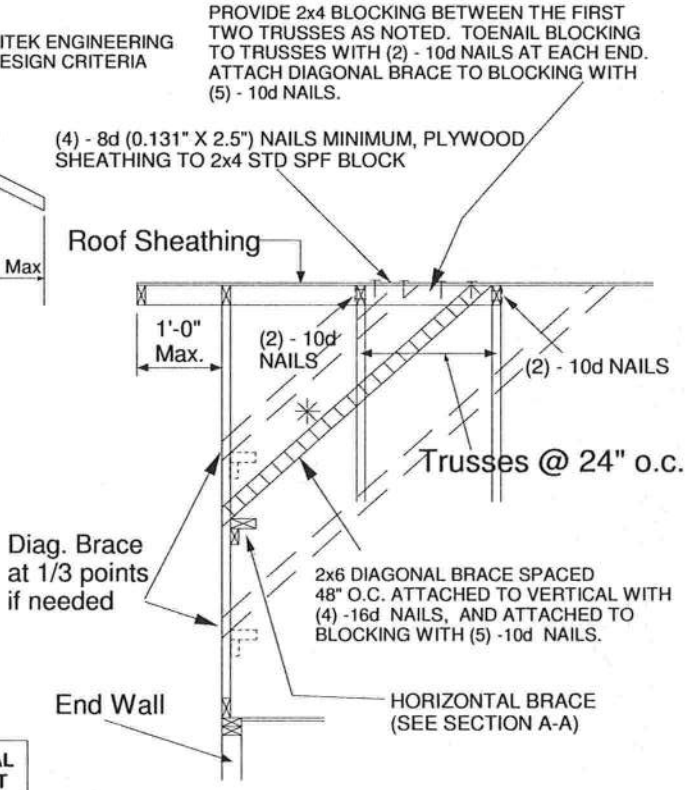






* - Diagonal Bracing Refer to Section A-A

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



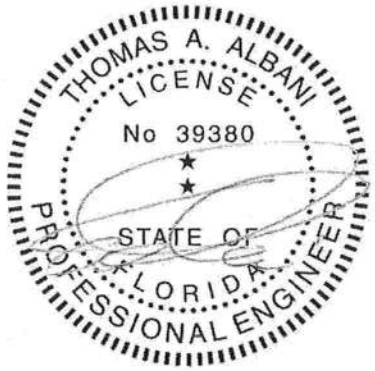
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF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

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

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

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

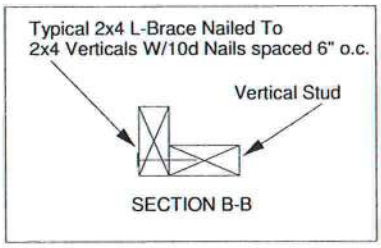
STUD DESIGN IS BASED ON COMPONENTS AND CLADDING.
CONNECTION OF BRACING IS BASED ON MWFRS.

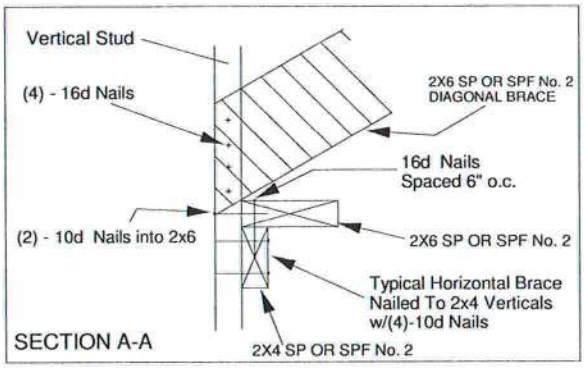


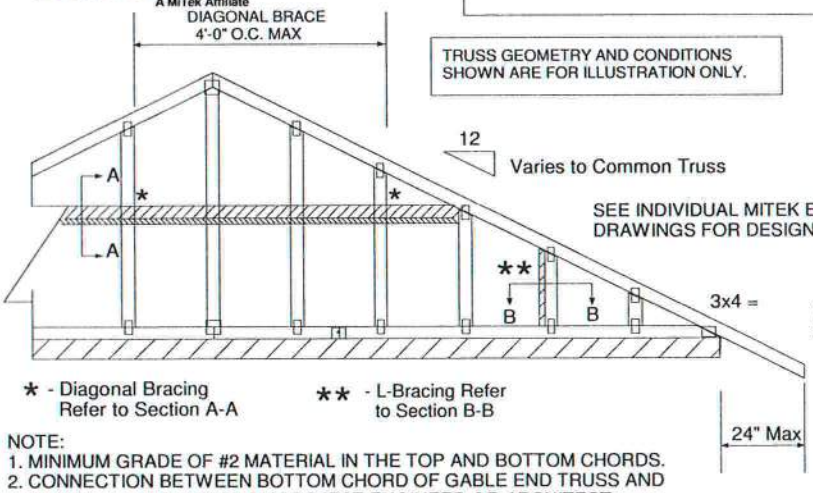
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

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

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate







TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

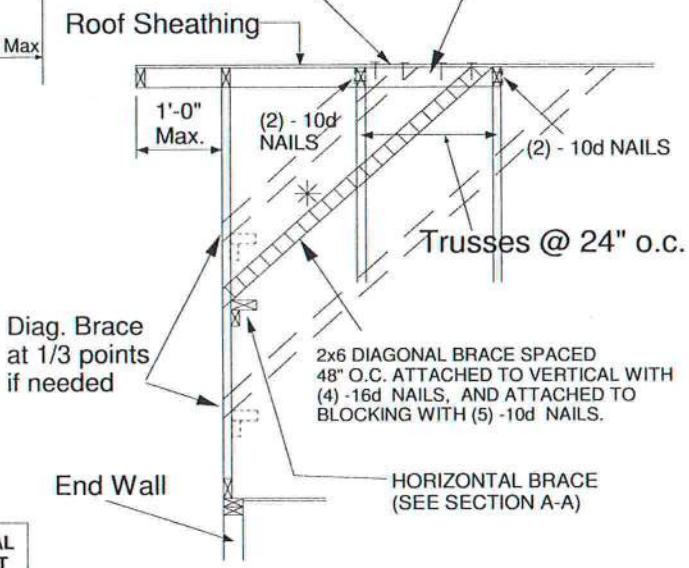
SEE INDIVIDUAL MITEK ENGINEERING DRAWINGS FOR DESIGN CRITERIA

* - Diagonal Bracing Refer to Section A-A

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

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



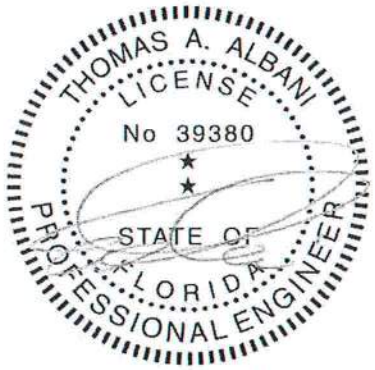
NOTE:
1. MINIMUM GRADE OF #2 MATERIAL IN THE TOP AND BOTTOM CHORDS.
2. CONNECTION BETWEEN BOTTOM CHORD OF GABLE END TRUSS AND WALL TO BE PROVIDED BY PROJECT ENGINEER OR ARCHITECT.
3. BRACING SHOWN IS FOR INDIVIDUAL TRUSS ONLY. CONSULT BLDG. ARCHITECT OR ENGINEER FOR TEMPORARY AND PERMANENT BRACING OF 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

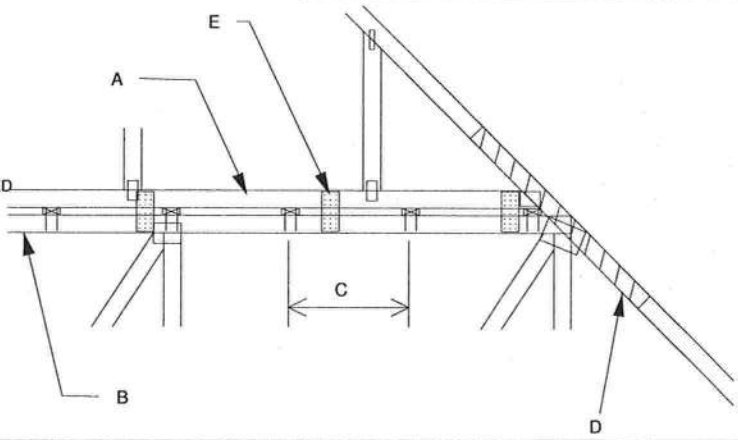
AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-7-10

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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

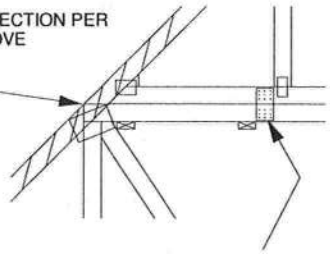
E - FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 72" O.C. W/ (4) (0.131" X 1.5") NAILS PER MEMBER. STAGGER NAILS FROM OPPOSING FACES. ENSURE 0.5" EDGE DISTANCE. (MIN. 2 PAIRS OF PLATES REQ. REGARDLESS OF SPAN)



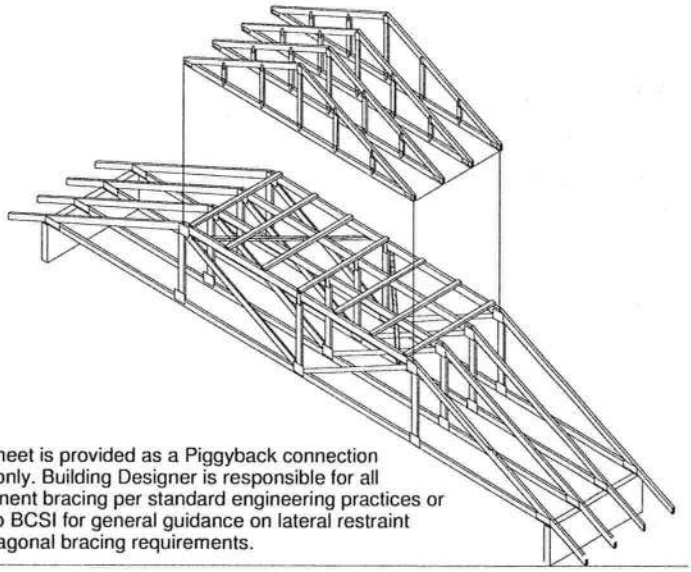
WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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

SCAB CONNECTION PER NOTE D ABOVE

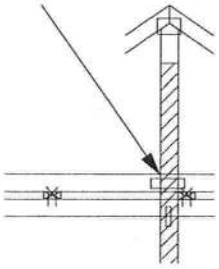


FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O.C. W/ (4) (0.131" X 1.5") PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0.5" EDGE DISTANCE.



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

VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

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

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

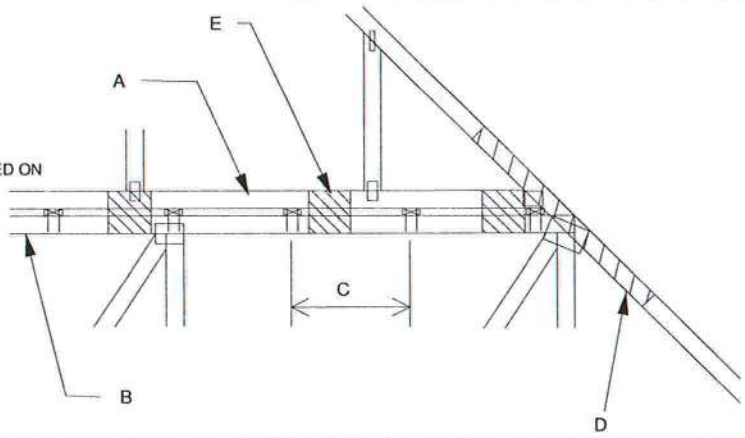
AUGUST 1, 2016	STANDARD PIGGYBACK TRUSS CONNECTION DETAIL	MII-PIGGY-ALT 7-10

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

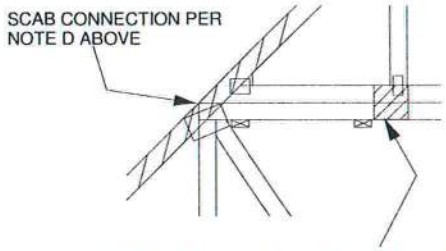
A - PIGGBACK TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING. SHALL BE CONNECTED TO EACH PURLIN WITH (2) 0(0.131" X 3.5") TOE-NAILED.
B - BASE TRUSS, REFER TO MITEK TRUSS DESIGN DRAWING.
C - PURLINS AT EACH BASE TRUSS JOINT AND A MAXIMUM 24" O.C. UNLESS SPECIFIED CLOSER ON MITEK TRUSS DESIGN DRAWING. CONNECT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

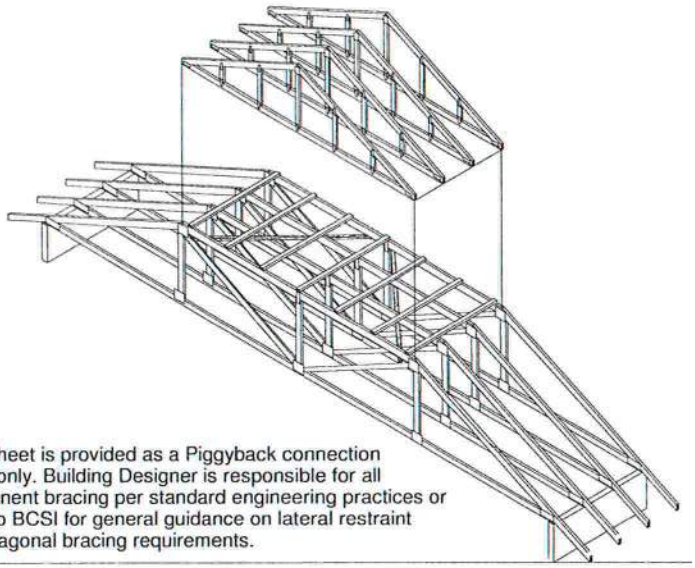


WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS:

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.

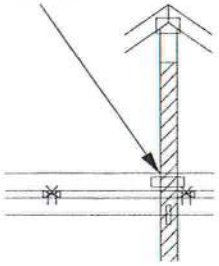


7" x 7" x 1/2" PLYWOOD (or 7/16" OSB) GUSSET EACH SIDE AT 24" O.C. ATTACH WITH 3 - 6d (0.113" X 2") NAILS INTO EACH CHORD FROM EACH SIDE (TOTAL - 12 NAILS)



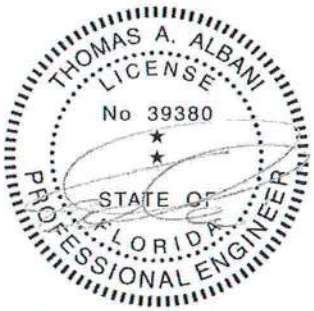
This sheet is provided as a Piggyback connection detail only. Building Designer is responsible for all permanent bracing per standard engineering practices or refer to BCSI for general guidance on lateral restraint and diagonal bracing requirements.

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.



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 REPAIR DETAIL FOR BROKEN CHORDS, WEBS AND DAMAGED OR MISSING CHORD SPLICE PLATES	MII-REP01A1

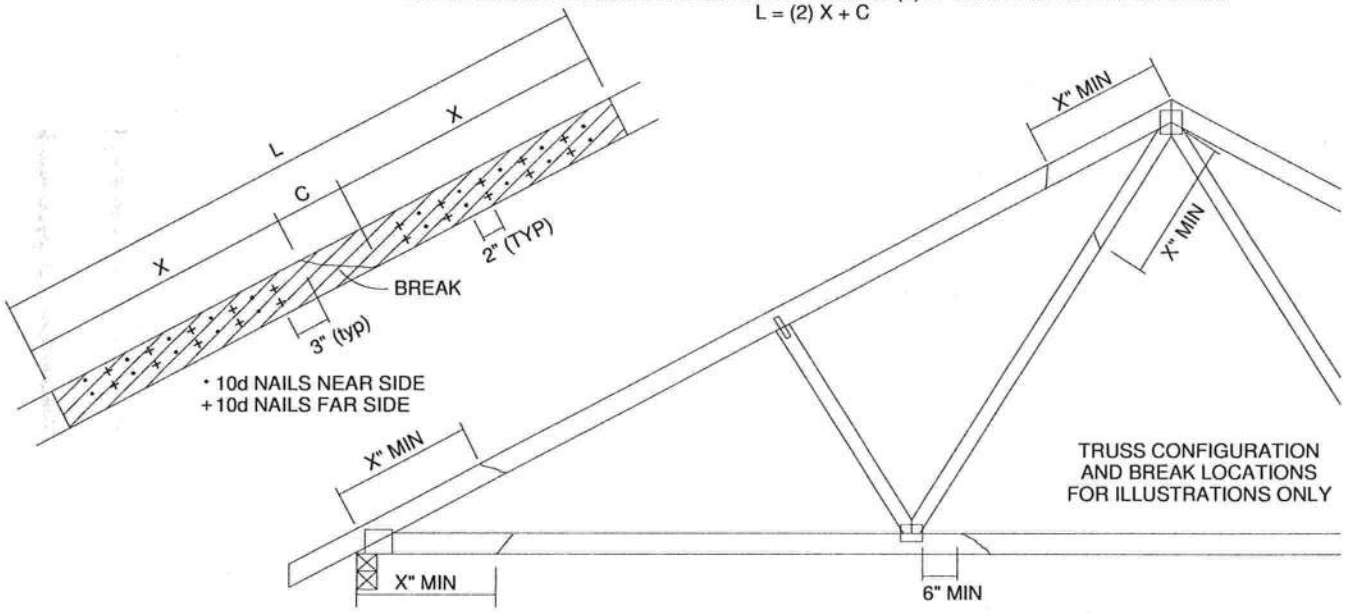
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

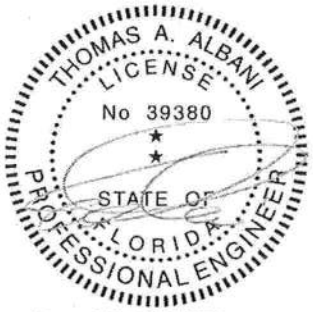
THE LENGTH OF THE BREAK (C) SHALL NOT EXCEED 12". (C=PLATE LENGTH FOR SPLICE REPAIRS)
THE MINIMUM OVERALL SCAB LENGTH REQUIRED (L) IS CALCULATED AS FOLLOWS:
L = (2) X + C



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.



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	LATERAL TOE-NAIL DETAIL	MII-TOENAIL_SP

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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

THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

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

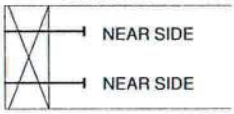
	DIAM.	SP	DF	HF	SPF	SPF-S
3.5" LONG	.131	88.0	80.6	69.9	68.4	59.7
	.135	93.5	85.6	74.2	72.6	63.4
	.162	108.8	99.6	86.4	84.5	73.8
3.25" LONG	.128	74.2	67.9	58.9	57.6	50.3
	.131	75.9	69.5	60.3	59.0	51.1
	.148	81.4	74.5	64.6	63.2	52.5

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

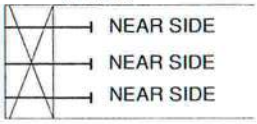
EXAMPLE:
(3) - 16d (0.162" X 3.5") NAILS WITH SPF SPECIES BOTTOM CHORD

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

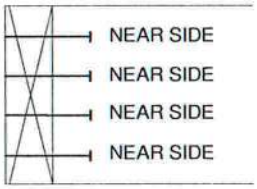
SIDE VIEW
(2x3)
2 NAILS



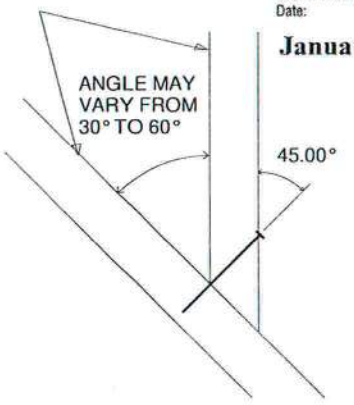
SIDE VIEW
(2x4)
3 NAILS

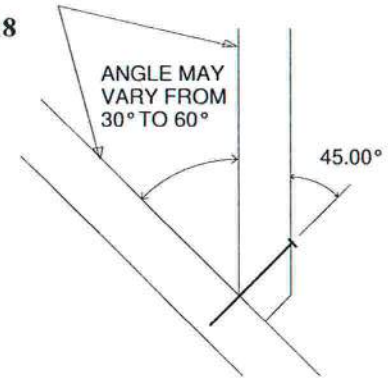


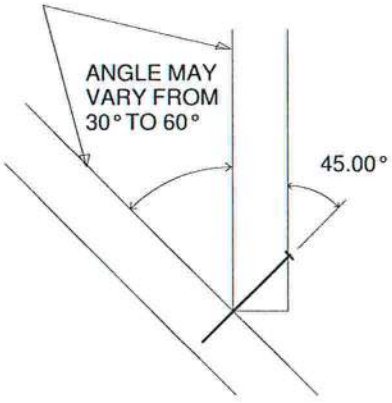
SIDE VIEW
(2x6)
4 NAILS



Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
January 19, 2018







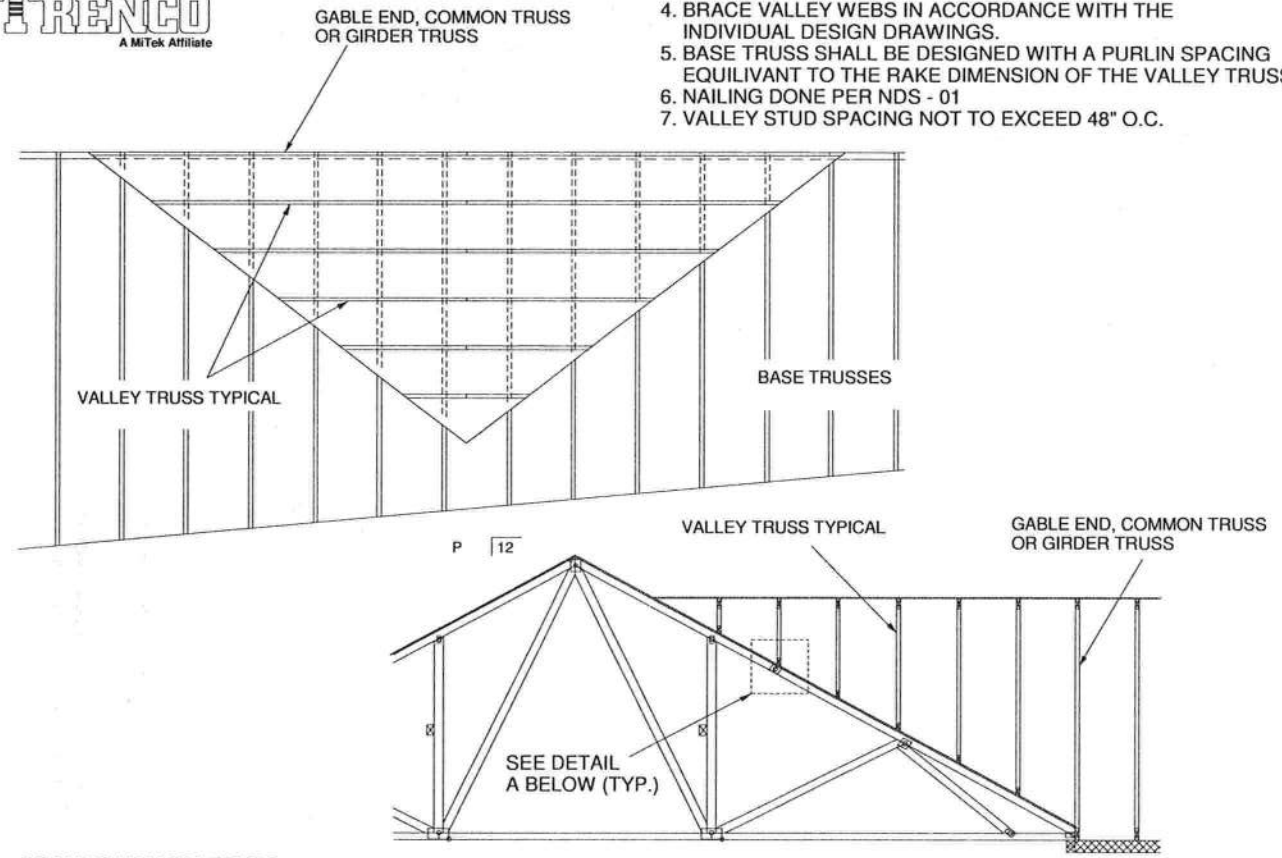
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND1

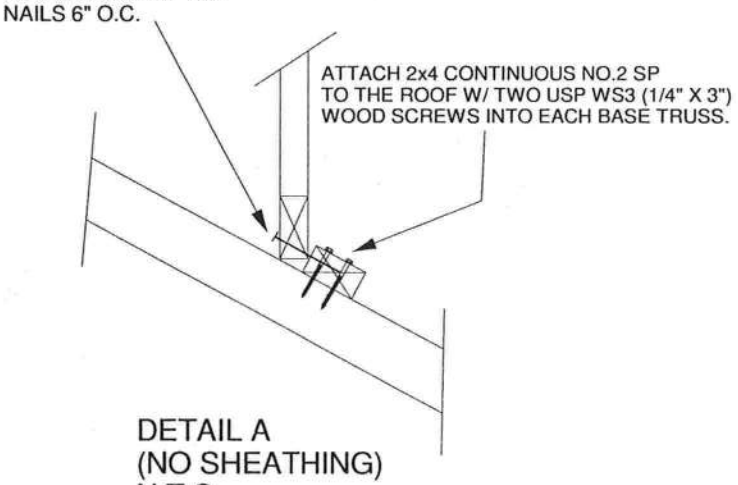
MiTek USA, Inc. Page 1 of 1

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

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

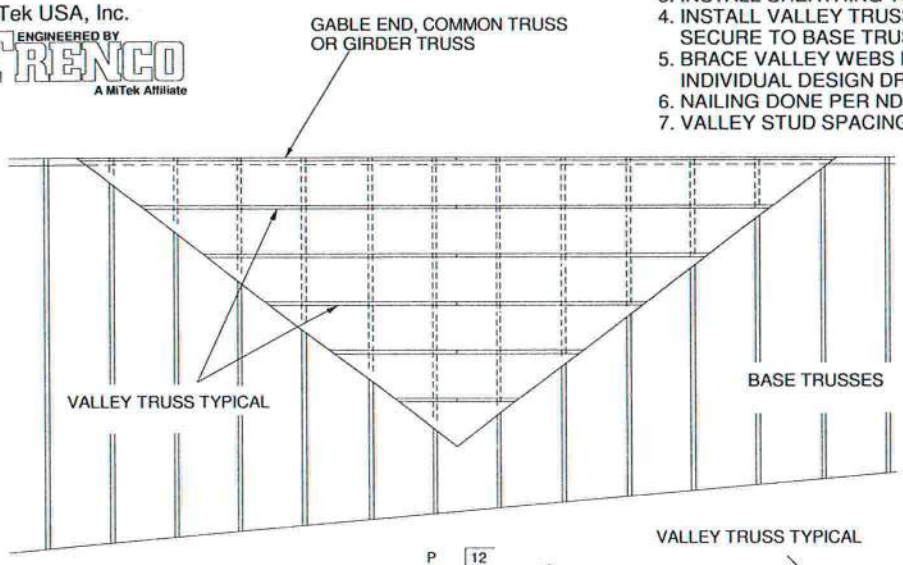
January 19, 2018

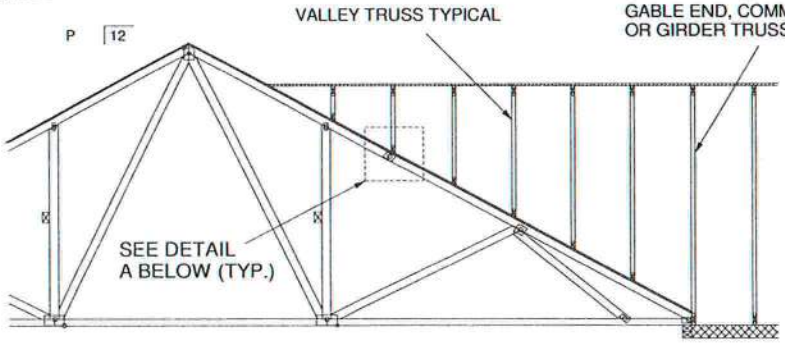
AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL	MII-VALLEY HIGH WIND2

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

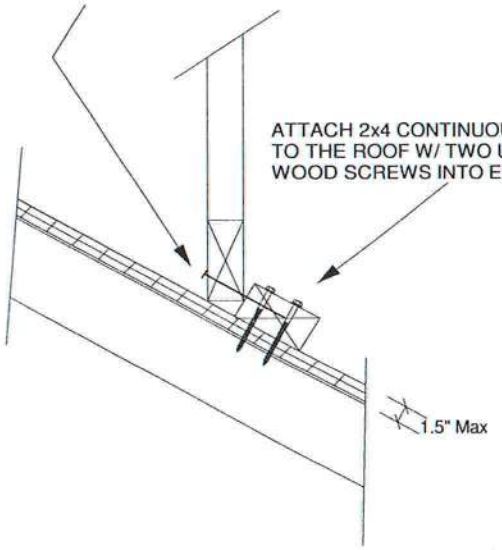
GENERAL SPECIFICATIONS

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.

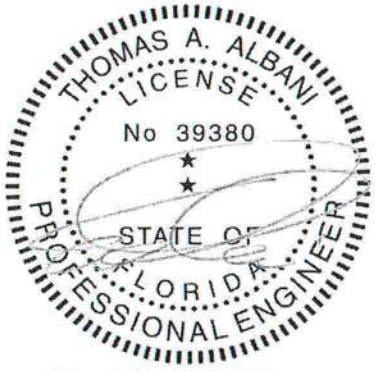




SECURE VALLEY TRUSS
W/ ONE ROW OF 10d
NAILS 6" O.C.



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



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	TRUSSED VALLEY SET DETAIL	MII-VALLEY SP

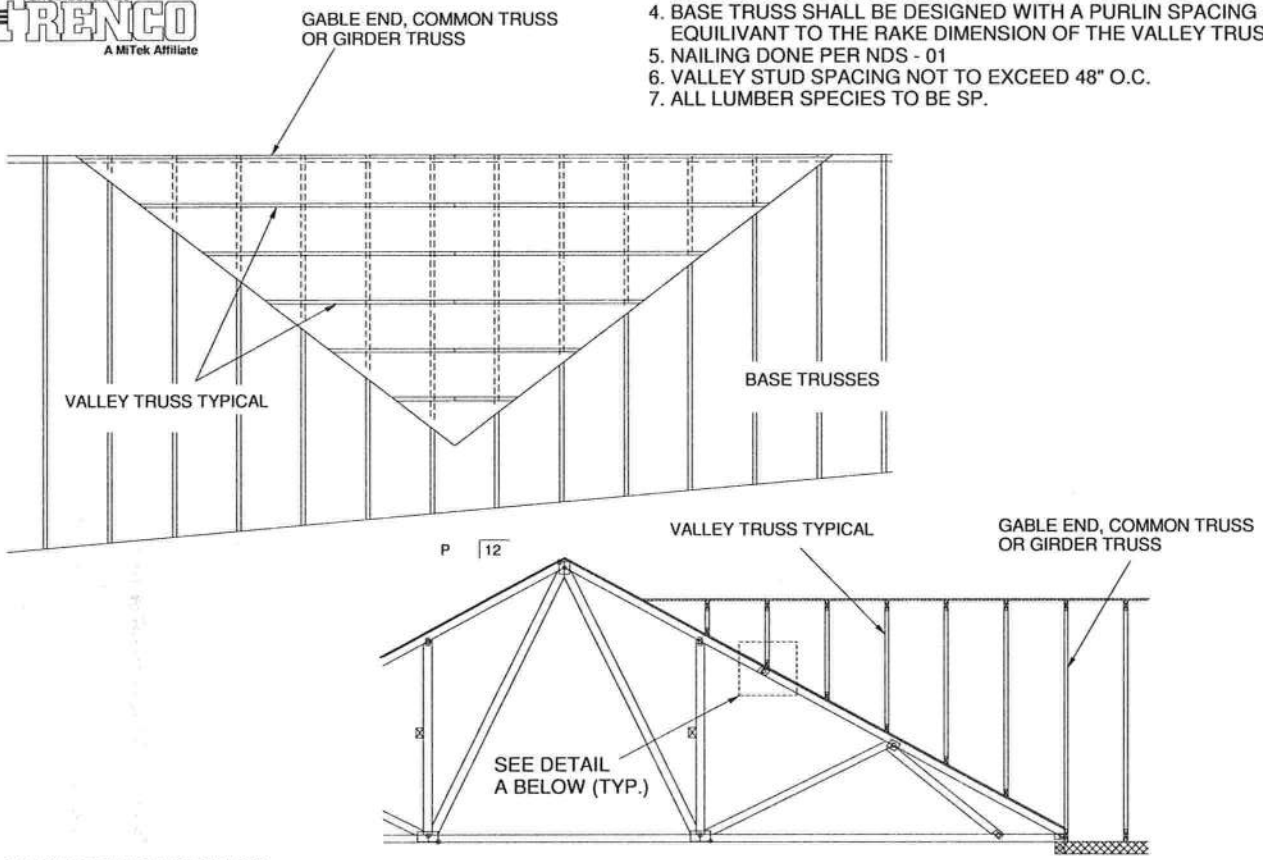
MiTek USA, Inc.

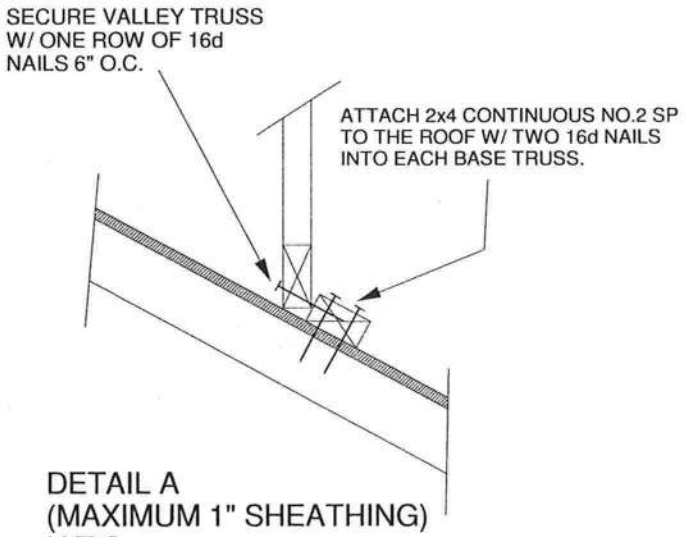
MiTek USA, Inc.

ENGINEERED BY TRENCO
A MiTek Affiliate

GENERAL SPECIFICATIONS

1. NAIL SIZE 16d (0.131" X 3.5")
2. INSTALL VALLEY TRUSSES (24" O.C. MAXIMUM) AND SECURE PER DETAIL A
3. BRACE VALLEY WEBS IN ACCORDANCE WITH THE INDIVIDUAL DESIGN DRAWINGS.
4. BASE TRUSS SHALL BE DESIGNED WITH A PURLIN SPACING 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

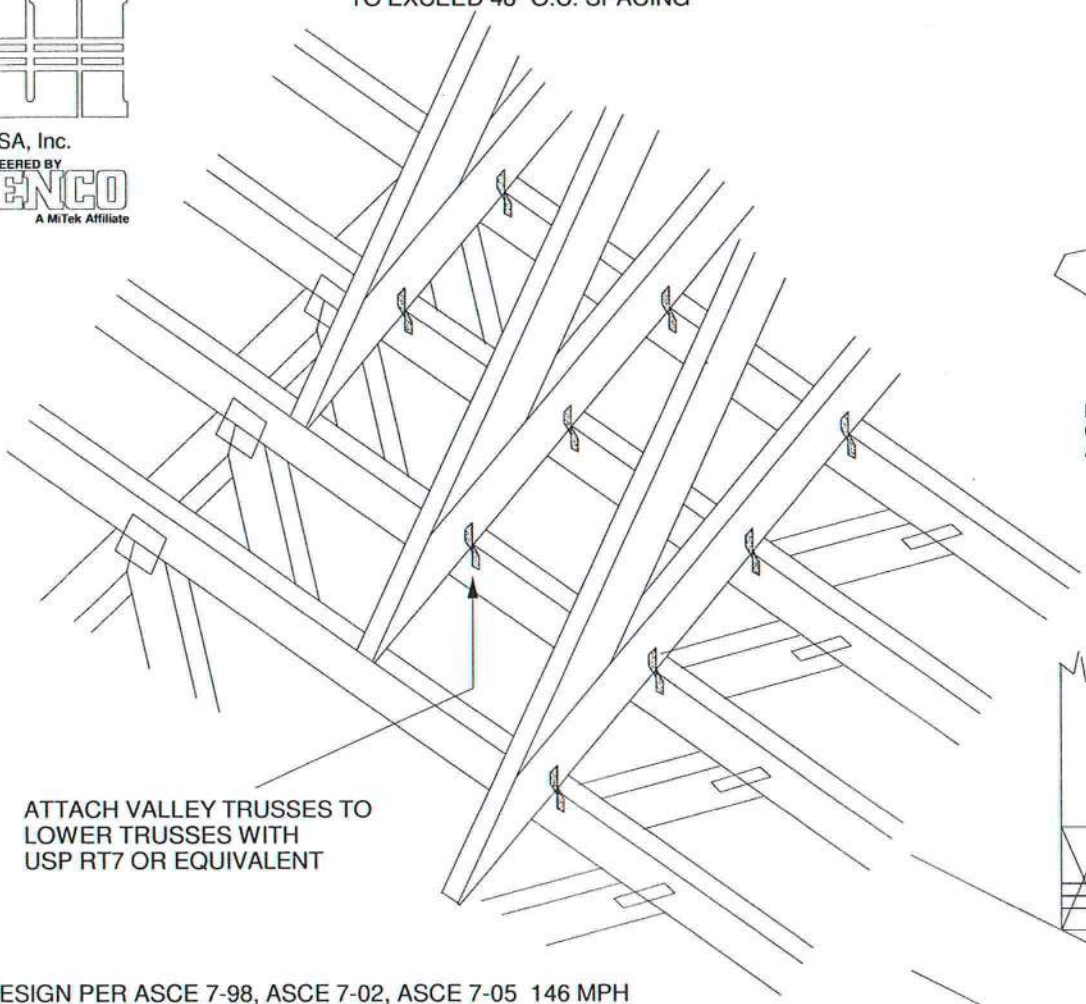
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
February 12, 2018

AUGUST 1, 2016	TRUSSED VALLEY SET DETAIL (HIGH WIND VELOCITY)	MII-VALLEY

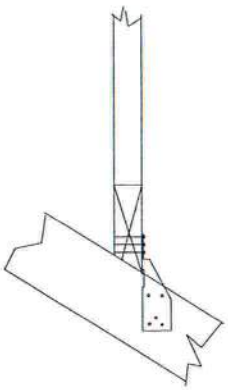
MiTek USA, Inc.

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

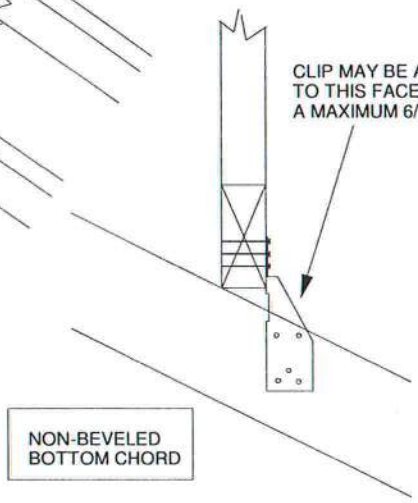
NOTE: VALLEY STUD SPACING NOT TO EXCEED 48" O.C. SPACING



ATTACH VALLEY TRUSSES TO LOWER TRUSSES WITH USP RT7 OR EQUIVALENT



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



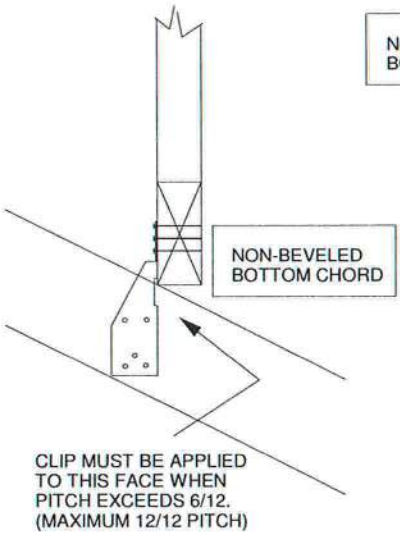
CLIP MAY BE APPLIED TO THIS FACE UP TO A MAXIMUM 6/12 PITCH

NON-BEVELED BOTTOM CHORD

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

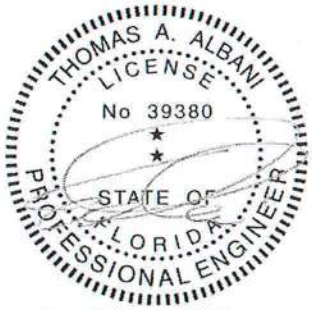
SUPPORTING TRUSSES DIRECTLY UNDER VALLEY TRUSSES MUST BE DESIGNED WITH A MAXIMUM UNBRACED LENGTH OF 2'-10" ON AFFECTED TOP CHORDS.

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



NON-BEVELED BOTTOM CHORD

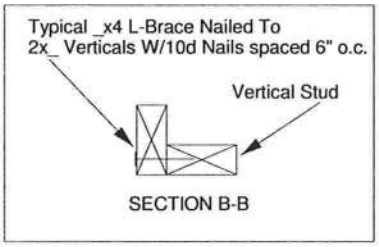
CLIP MUST BE APPLIED TO THIS FACE WHEN PITCH EXCEEDS 6/12. (MAXIMUM 12/12 PITCH)

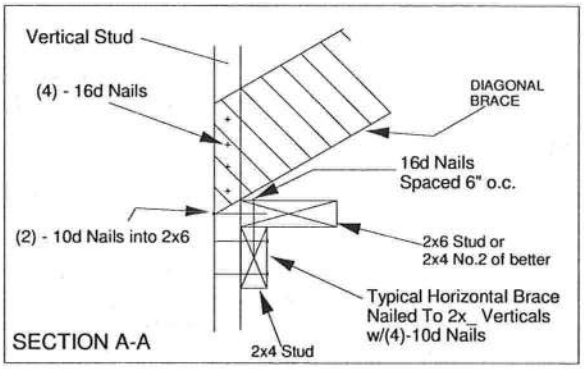


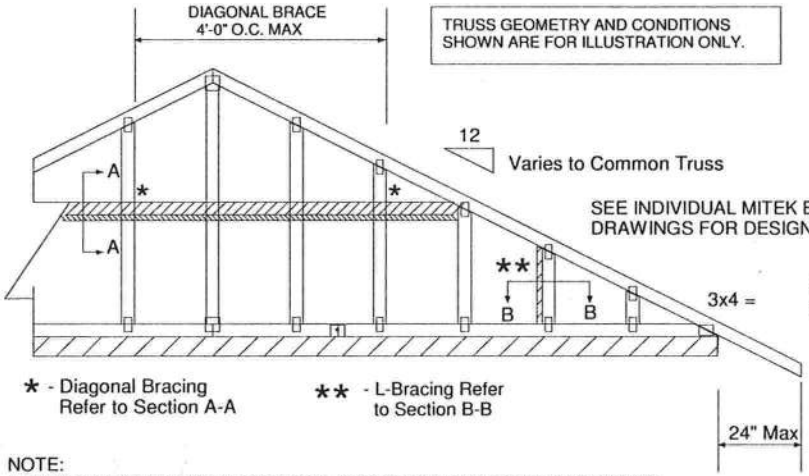
Thomas A. Albani PE No.39380
MiTek USA, Inc. FL Cert 6634
6904 Parke East Blvd. Tampa FL 33610
Date:
January 19, 2018

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

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

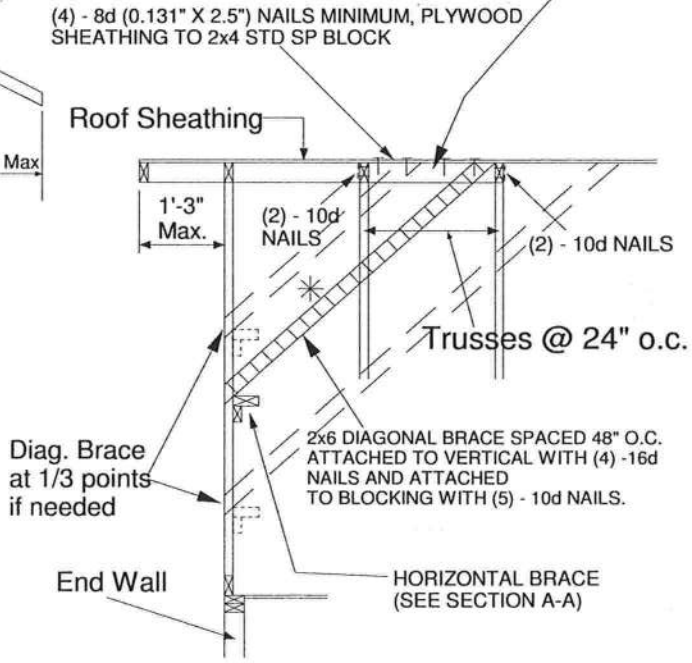






TRUSS GEOMETRY AND CONDITIONS SHOWN ARE FOR ILLUSTRATION ONLY.

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.



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.

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

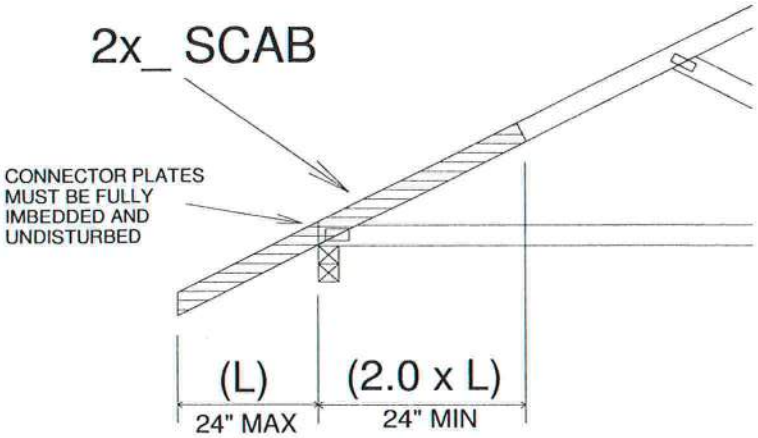
January 19, 2018

OCTOBER 5, 2016	REPLACE BROKEN OVERHANG	MII-REP13B

MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

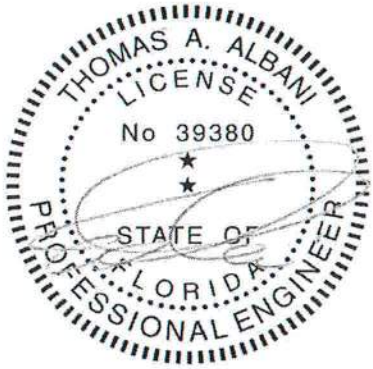
TRUSS CRITERIA:
LOADING: 40-10-0-10
DURATION FACTOR: 1.15
SPACING: 24" O.C.
TOP CHORD: 2x4 OR 2x6
PITCH: 4/12 - 12/12
HEEL HEIGHT: STANDARD HEEL UP TO 12" ENERGY HEEL
END BEARING CONDITION

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
Date:
February 12, 2018

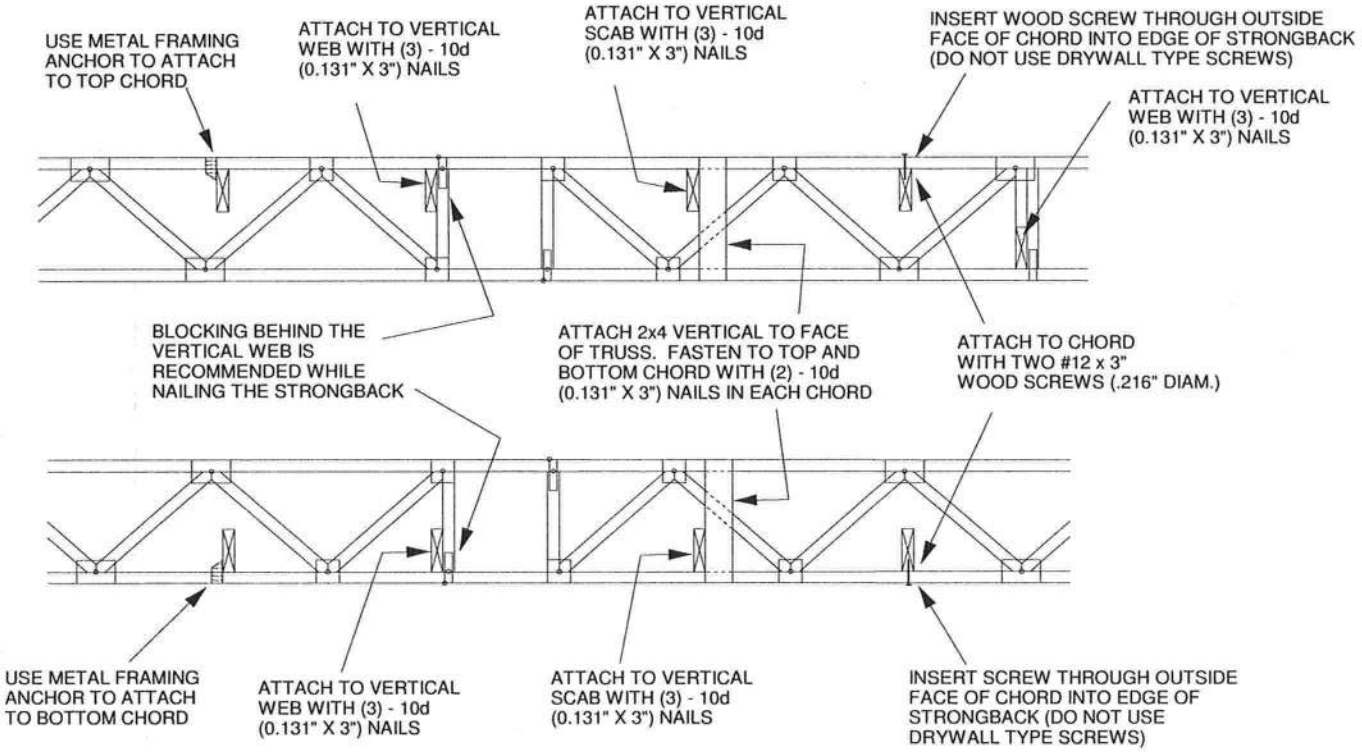
AUGUST 1, 2016	LATERAL BRACING RECOMMENDATIONS	MII-STRGBCK

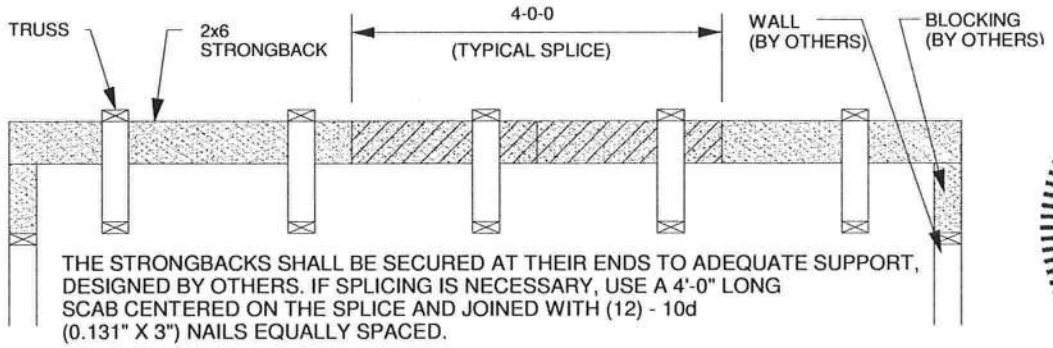
MiTek USA, Inc.
ENGINEERED BY TRENCO
A MiTek Affiliate

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.

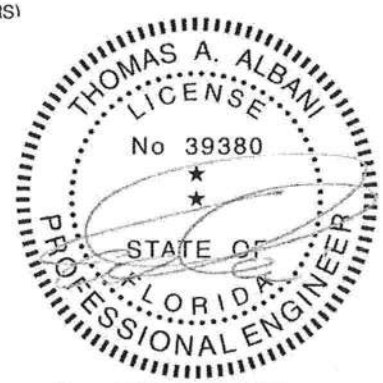
NOTE 2: STRONGBACK BRACING ALSO SATISFIES THE LATERAL BRACING REQUIREMENTS FOR THE BOTTOM CHORD OF THE TRUSS WHEN IT IS PLACED ON TOP OF THE BOTTOM CHORD, IS CONTINUOUS FROM END TO END, CONNECTED WITH A METHOD OTHER THAN METAL FRAMING ANCHOR, AND PROPERLY CONNECTED, BY OTHERS, AT THE ENDS.



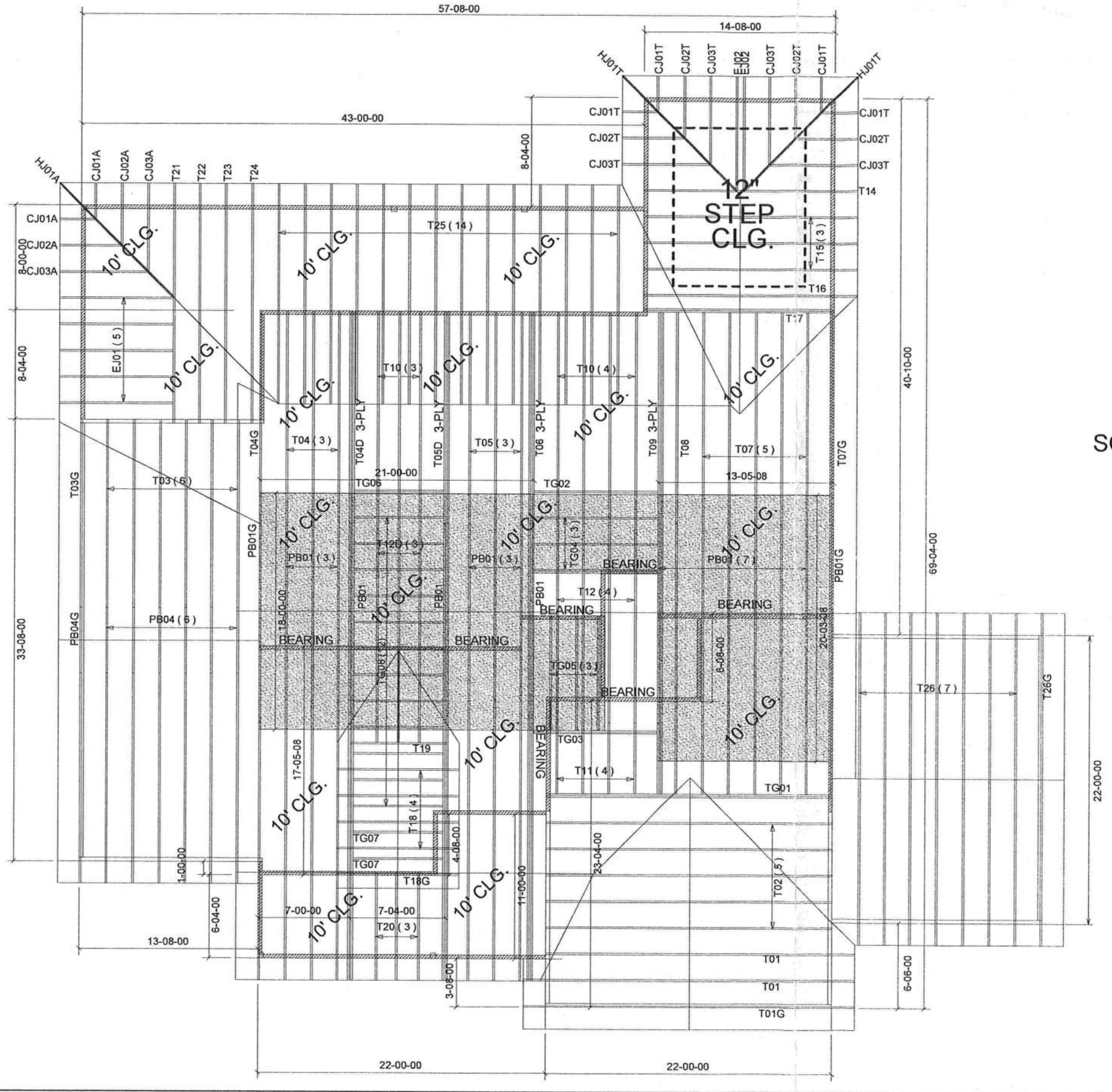


THE STRONGBACKS SHALL BE SECURED AT THEIR ENDS TO ADEQUATE SUPPORT, DESIGNED BY OTHERS. IF SPLICING IS NECESSARY, USE A 4'-0" LONG SCAB CENTERED ON THE SPLICE AND JOINED WITH (12) - 10d (0.131" X 3") NAILS EQUALLY SPACED.

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)



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



8/12 - 4/12 PITCH
20" O/H

SOME CEILINGS FRAMED DOWN BY BLDR.

BEARING HEIGHT SCHEDULE

	9' 1-1/8"
	10' 1-1/8"

NOTES:

1) REFER TO HIB 91 (RECOMMENDATIONS FOR HANDLING INSTALLATION AND TEMPORARY BRACING.) REFER TO ENGINEERED DRAWINGS FOR PERMANENT BRACING REQUIRED.
2) ALL TRUSSES (INCLUDING TRUSSES UNDER VALLEY FRAMING) MUST BE COMPLETELY DECKED OR REFER TO DETAIL V105 FOR ALTERNATE BRACING REQUIREMENTS.
3) ALL VALLEYS ARE TO BE CONVENTIONALLY FRAMED BY BUILDER.
4) ALL TRUSSES ARE DESIGNED FOR 2' o.c. MAXIMUM SPACING, UNLESS OTHERWISE NOTED.
5) ALL WALLS SHOWN ON PLACEMENT PLAN ARE CONSIDERED TO BE LOAD BEARING, UNLESS OTHERWISE NOTED.
6) SY42 TRUSSES MUST BE INSTALLED WITH THE TOP BEING UP.
7) BEAM/HEADER/LINTEL (HDR) TO BE FURNISHED BY BUILDER.

Builders FirstSource

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

Tampa
PHONE: 813-621-9851 FAX: 813-628-8956

Freeport
PHONE: 850-835-4541 FAX: 850-835-6835

BUILDER: AARON SIMQUE

LEGAL ADDRESS: LOT 34 PRESERVE LL

MODEL:	Revision:
BRISTOL	Rev. By:

DATE:	DRAWN BY:	Original Reference #:
6-29-21	KLH	2845647

1st Level Job #:	2nd Level Job #:	Real Job #:
		2845647

MITEK PLATE APPROVAL #'s 2197.2 - 2197.4, WEYERHAUSER PRODUCT #'s 1630.2 - 1630.10