

MiTek Industries, Inc.

Typical 1x4 L-Brace Nailed To  
2x Verticals W/10d Nails, 6" o.c.

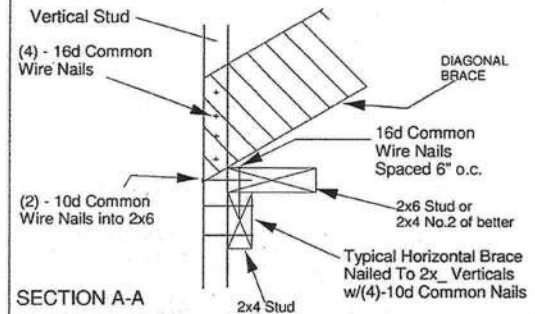
Vertical Stud

SECTION B-B

TRUSS GEOMETRY AND CONDITIONS  
SHOWN ARE FOR ILLUSTRATION ONLY.

Varies to Common Truss

SEE INDIVIDUAL MITTEK ENGINEERING  
DRAWINGS FOR DESIGN CRITERIA

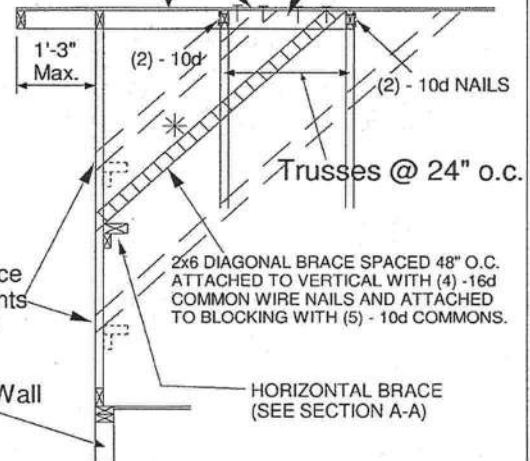


SECTION A-A

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

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

Roof Sheathing



Diag. Brace  
at 1/3 points  
if needed

End Wall

HORIZONTAL BRACE  
(SEE SECTION A-A)

\* - 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.

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 SPF Std/Stud	12" O.C.	4-0-7	4-3-2	6-0-4	8-0-15	12-1-6
2x4 SPF Std/Stud	16" O.C.	3-7-0	3-8-4	5-2-10	7-1-15	10-8-15
2x4 SPF Std/Stud	24" O.C.	2-11-1	3-0-2	4-3-2	5-10-3	8-9-4

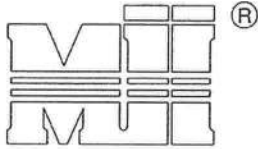
- \* Diagonal braces over 6'-3" require a 2x4 T-Brace attached to one edge. Diagonal braces over 12'-6" require 2x4 I-braces attached to both edges. Fasten T and I braces to narrow edge of web with 10d common wire nails 8in o.c., with 3in minimum end distance. Brace must cover 90% of diagonal length.

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.



1109 COASTAL BAY  
BOYNTON BC, FL 33435

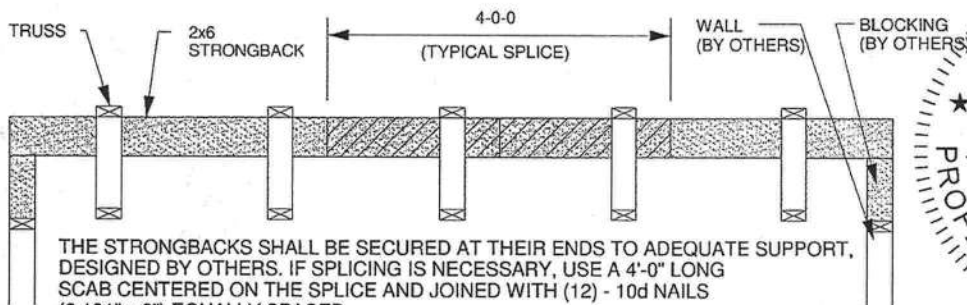
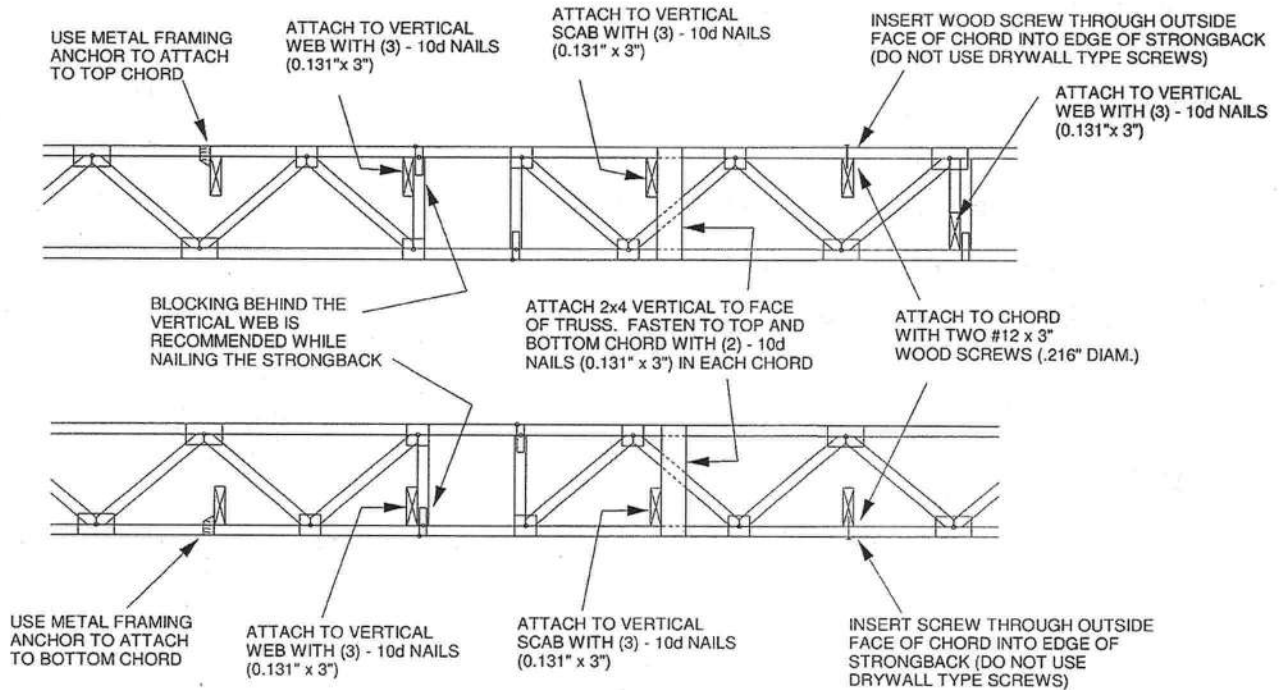


MiTek Industries, Inc.

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

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

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



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

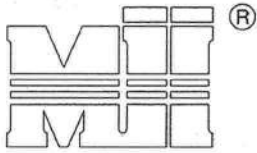


1109 COASTAL BAY  
BOYNTON BC, FL 33435

August 10, 2010

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

ST - T-BRACE 2



MiTek Industries, Inc.

MiTek Industries, Chesterfield, MO Page 1 of 1

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

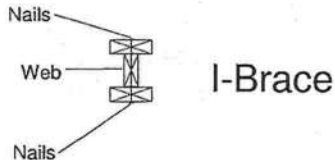
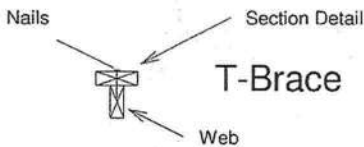
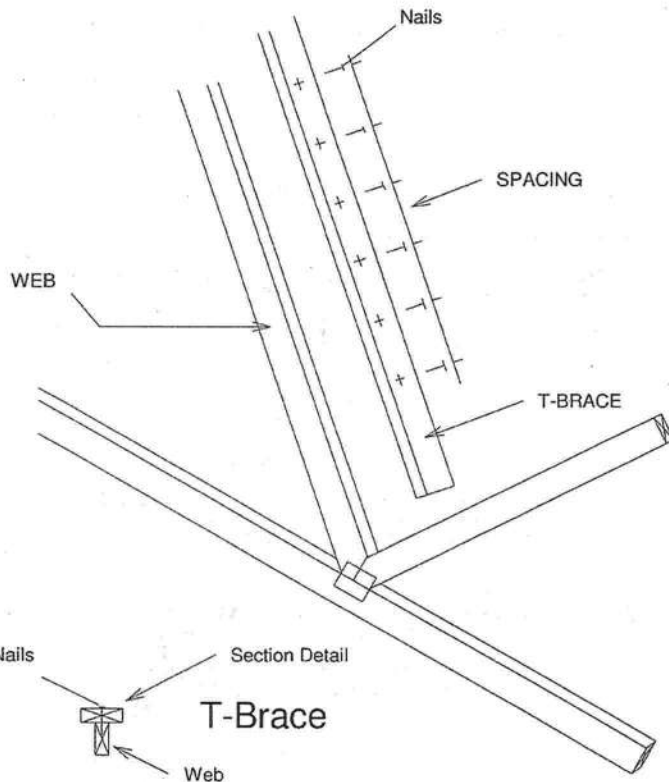
Note: This detail NOT to be used to convert T-Brace / I-Brace webs to continuous lateral braced webs.

Nailing Pattern		
T-Brace size	Nail Size	Nail Spacing
2x4 or 2x6 or 2x8	10d	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



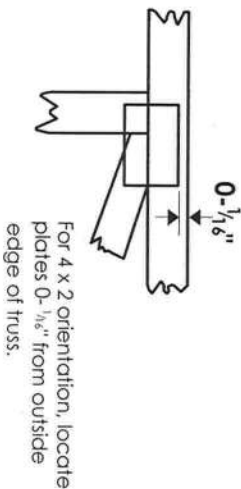
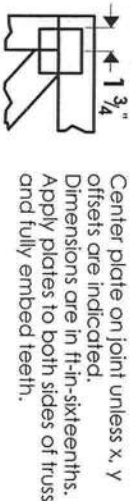
T-Brace / I-Brace must be same species and grade (or better) as web member.



1109 COASTAL BAY  
BOYNTON BC, FL 33435

# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

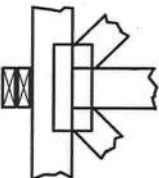
4 X 4

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

## LATERAL BRACING LOCATION



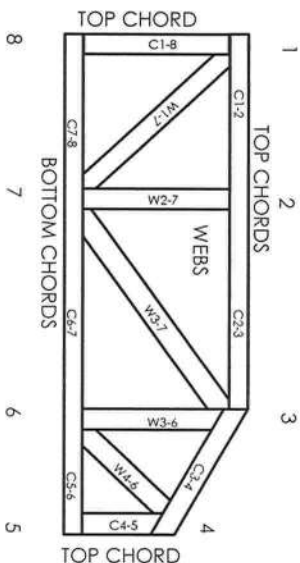
## BEARING



## Industry Standards:

ANSI/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCS11: 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, ER-5243, 9604B, 9730, 95-43, 96-31, 9667A, NER-487, NER-561, 95110, 84-32, 96-67, ER-3907, 9432A

© 2006 Mitek® All Rights Reserved

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



# 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 BCS11.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative T, I, or Eliminator 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 ware at joint locations are regulated by ANSI/TP11.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP11.
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 life 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 piling 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/TP11 Quality Criteria.

Job 463946	Truss T14	Truss Type Hip Truss	Qty 1	Ply 2	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:25 2013 Page 1 ID:LDuQlKe7UdHpVgx54zfFR2zsAGo-bEckCi9CiFsoeThkSkN0ZSQ3ImImyLXEJuptNUzs51y	I6332624
Builders FirstSource, Lake City, FL 32055 Scale = 1/2" = 1'-0"						

Plate Offsets (X, Y): [1:0-2-3,0-0-13], [2:0-6-4,0-2-4], [3:0-2-8,0-1-13], [4:0-8-8,0-0-14], [5:0-3-8,0-4-4]						
LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d
TCLL 20.0	Plates Increase 1.25	TC 0.58	Vert(LL) -0.07	6-8	>999	240
TCDL 7.0	Lumber Increase 1.25	BC 0.91	Vert(TL) -0.14	6-8	>999	180
BCLL 0.0	Rep Stress Incr NO	WB 0.51	Horz(TL) 0.03	4	n/a	n/a
BCDL 5.0	Code FBC2010/TP12007	(Matrix-M)				
						PLATES MT20 GRIP 244/190 Weight: 135 lb FT = 20%

<b>LUMBER</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SYP No.2 WEBS 2x4 SP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 4-9-15 oc purlins. BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
--------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------

**REACTIONS** (lb/size) 1=3563/0-3-8 (min. 0-2-8), 4=3453/0-3-8 (min. 0-2-7)  
 Max Horz 1=-80(LC 6)  
 Max Uplift 1=-1097(LC 8), 4=-1228(LC 9)  
 Max Grav 1=4227(LC 2), 4=4097(LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-5097/1351, 2-11=-4186/1198, 3-11=-4186/1198, 3-4=-5009/1359  
 BOT CHORD 1-12=-1098/4122, 12-13=-1098/4122, 6-13=-1098/4122, 6-14=-1123/4237, 5-14=-1123/4237,  
 5-15=-1081/4074, 4-15=-1081/4074  
 WEBS 2-6=-537/2500, 3-5=-547/2429

**NOTES** (12-14)  
 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
   Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
   Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.  
 3) Unbalanced roof live loads have been considered for this design.  
 4) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60  
 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.  
 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 1=1097, 4=1228.  
 10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  
 11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 40 lb down and 113 lb up at 4-8-15, and 40 lb down and 113 lb up at 6-6-0, and 40 lb down and 113 lb up at 8-3-1 on top chord, and 1041 lb down and 250 lb up at 0-4-12, 1041 lb down and 250 lb up at 2-4-12, 1041 lb down and 250 lb up at 4-4-12, 71 lb down at 4-8-15, 1041 lb down and 250 lb up at 6-4-12, 24 lb down at 6-6-0, 71 lb down at 8-2-4, 1040 lb down and 250 lb up at 8-4-12, and 1042 lb down and 251 lb up at 10-4-12, and 1039 lb down and 429 lb up at 12-4-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.  
 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.  
 13) Note: Visually graded lumber designation SPP, represents new lumber design values as per SPIB.  
 14) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435



January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with Mittek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and 8CSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oro Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



Job 463946	Truss T13	Truss Type COMMON TRUSS	Qty 2	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:21 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfFR2zsAGo-iTyDMK6if1MM9rOzDul4OcGSB8TS0WEeOGrfJzs520	I6332622
Builders FirstSource, Lake City, FL 32055						

<b>LOADING (psf)</b> TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	<b>SPACING</b> 2-0-0 Plates Increase 1.25 Lumber Increase 1.25 Rep Stress Incr YES Code FBC2010/TPI2007	<b>CSI</b> TC 0.33 BC 0.62 WB 0.53 (Matrix-M)	<b>DEFL</b> in (loc) l/defl L/d Vert(LL) -0.13 9-11 >999 240 Vert(TL) -0.23 9-11 >922 180 Horz(TL) 0.02 8 n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190 Weight: 113 lb FT = 20%
-------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------

**LUMBER**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

**REACTIONS** (lb/size) 11=560/0-3-8 (min. 0-1-8), 8=560/0-3-8 (min. 0-1-8)

Max Horz 11=248(LC 9)

Max Uplift 11=290(LC 12), 8=290(LC 13)

Max Grav 11=666(LC 2), 8=666(LC 2)

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

TOP CHORD 3-4=-714/337, 4-5=-714/337, 2-11=-366/247, 6-8=-366/247

BOT CHORD 10-11=-226/639, 9-10=-226/639, 8-9=-157/642

WEBS 4-9=-205/418, 3-11=-697/243, 5-8=-697/243

**NOTES** (8-10)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; End., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (j=lb) 11=290, 8=290.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.
- Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

**JULIUS S.K. LEE**

LICENSE

No. 34869

PROFESSIONAL ENGINEER

STATE OF FLORIDA

January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss T11G	Truss Type GABLE	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:19 2013 Page 1 ID:LDuQIKe7UdHpVgx54zIFR2zsAGo-m5qSxf4S7P6evYEa6TGcJBz8LoVYe4LwyMYAqzs522	I6332620
Builders FirstSource, Lake City, FL 32055						

Scale = 1/8" = 1'-0"

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.94	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.52	Vert(LL) -0.15 10-12 >999 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.44	Vert(TL) -0.24 10-12 >999 180		
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)	Horz(TL) 0.06 8 n/a n/a		
			Weight: 273 lb FT = 20%		

<b>LUMBER</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 *Except* W4: 2x4 SP No.2 OTHERS 2x4 SP No.3 WEDGE Left: 2x4 SYP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied, except end verticals. BOT CHORD Rigid ceiling directly applied or 7-3-12 oc bracing. WEBS 1 Row at midpt 3-12, 4-10 <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">           MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<b>REACTIONS</b> (lb/size) 2=1026/0-3-8 (min. 0-1-12), 8=953/0-3-8 (min. 0-1-9) Max Horz 2=335(LC 12) Max Uplift 2=480(LC 12), 8=369(LC 13) Max Grav 2=1141(LC 2), 8=1043(LC 2)	
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

<b>FORCES</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-1982/764, 3-4=-1533/685, 4-5=-1105/601, 5-6=-1333/642, 6-7=-1174/496, 7-8=-1312/547 BOT CHORD 2-14=-1112/2213, 13-14=-646/1597, 12-13=-646/1597, 12-34=-348/1075, 11-34=-348/1075, 10-11=-348/1075, 9-10=-334/889 WEBS 3-12=-645/404, 4-12=-180/553, 4-10=-298/170, 5-10=-110/311, 6-9=-505/230, 7-9=-375/1010	
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

<b>NOTES</b> (12-14) 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) 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) Provide adequate drainage to prevent water ponding. 5) All plates are 2x4 MT20 unless otherwise indicated. 6) Gable studs spaced at 2-0-0 oc. 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf. 9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=480, 8=369. 11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss. 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. 13) Note: Visually graded lumber designation SP, represents new lumber design values as per SPIB. 14) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435	
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

<b>LOAD CASE(S)</b> Standard	
------------------------------	--

January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss T10G	Truss Type GABLE	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve  Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:16 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfFR2zsAGo-MW9KJd2ZqUj424V7RLivhYYXV7k1LD1vE_8uZVzs525	I6332618
Builders FirstSource, Lake City, FL 32055						

6-3-1	11-6-12	15-2-0	22-10-0	25-1-8	30-8-8	33-0-0
6-3-1	5-3-11	3-7-4	7-8-0	2-3-8	5-7-0	2-3-8

Scale = 1/8" = 1'-0"

Plate Offsets (X, Y): [1-0-0-0, Edge], [5-0-6-15, Edge], [6-0-5-8, 0-1-12], [17-0-3-11, 0-2-8]	
------------------------------------------------------------------------------------------------	--

LOADING (psf)	SPACING	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase	1.25	TC 0.58	Vert(LL)	0.28 17-18	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase	1.25	BC 0.76	Vert(TL)	-0.47 17-18	>838	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.65	Horz(TL)	0.41 10	n/a	n/a		
BCDL 5.0	Code FBC2010/TPI2007		(Matrix-M)						
								Weight: 249 lb	FT = 20%

<b>LUMBER</b> TOP CHORD 2x4 SP No.2 *Except* T3: 2x4 SYP No.1 BOT CHORD 2x4 SP No.2 *Except* B4: 2x4 SP No.3 WEBS 2x4 SP No.3 OTHERS 2x4 SP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 2-7-10 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 4-11-10 oc bracing. WEBS 1 Row at midpt 4-16, 6-15 <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">           MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**REACTIONS** (lb/size) 1=885/Mechanical, 10=884/0-3-8 (min. 0-1-8)  
 Max Horz 1=290(LC 9)  
 Max Uplift 1=-419(LC 12), 10=-371(LC 13)  
 Max Grav 1=1049(LC 2), 10=1047(LC 2)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-3615/1544, 2-3=-2956/1279, 3-4=-2887/1295, 4-5=-1797/888, 5-6=-1513/788, 6-7=-1402/770, 7-8=-1378/647, 8-9=-738/325, 9-10=-1366/587  
 BOT CHORD 1-1=-696/1352, 1-18=-1384/3128, 17-18=-1388/3137, 16-17=-955/2376, 15-16=-318/890, 7-13=-324/267, 12-13=-313/726, 11-12=-805/362, 8-12=-790/385  
 WEBS 2-17=-651/427, 4-17=-756/1833, 4-16=-1782/822, 5-16=-270/659, 6-16=-289/662, 6-15=-591/254, 13-15=-282/879, 6-13=-317/600, 8-13=-141/318, 9-11=-470/1086

**NOTES** (12-15)  
 1) Unbalanced roof live loads have been considered for this design.  
 2) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCFL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl.; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60  
 3) 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) Provide adequate drainage to prevent water ponding.  
 5) All plates are 2x4 MT20 unless otherwise indicated.  
 6) Gable studs spaced at 2-0-0 oc.  
 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
 8) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
 9) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.  
 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=419, 10=371.  
 11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  
 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.  
 13) Note: Visually graded lumber designation SPP, represents new lumber design values as per SPIB.  
 14) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435  
 15) Use Simpson HTU26 to attach Truss to Carrying member

**LOAD CASE(S)** Standard



January 24, 2013

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**  
 Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
 1109 Coastal Bay Blvd.  
 Boynton, FL 33435



Job 463946	Truss T09	Truss Type Piggyback Base Truss	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve 16332616
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:13 2013 Page 1		
ID:LDuQlKe7UdHpVgx54zfFR2zsAGo-xxTBhb0hXZLVBdmRID9C4wx0Hwha8o2TY1vEzBzs528					

Plate Offsets (X, Y): [5.0-5.12, 0.2-0], [6.0-2.8, 0.1-13], [9.0-3.0, Edge], [11.0-5.0, 0.4-9], [12.0-6.2, 0.0-0], [17.0-5.4, 0.2-8]					
LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.81	Vert(LL) 0.32 19 >999 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.92	Vert(TL) -0.56 18-19 >706 180		
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)	Horz(TL) 0.52 12 n/a n/a		
				Weight: 217 lb FT = 20%	

**LUMBER**

TOP CHORD 2x4 SP No.2 \*Except\*  
T5: 2x6 SYP SS

BOT CHORD 2x4 SP No.2 \*Except\*  
B4: 2x4 SP No.3, B5: 2x4 SYP No.1, B6: 2x6 SYP No.2

WEBS 2x4 SP No.3

**REACTIONS** (lb/size) 1=888/Mechanical, 12=888/0-3-8 (min. 0-1-9)  
Max Horz 1=-253(LC 8)  
Max Uplift 1=-241(LC 12), 12=-238(LC 13)  
Max Grav 1=1052(LC 2), 12=1052(LC 2)

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

TOP CHORD 1-2=-3721/1414, 2-3=-3029/1117, 3-4=-2959/1140, 4-5=-3151/1325, 5-6=-1394/698,  
6-7=-1682/760, 7-8=-2175/955, 8-9=-2209/934, 9-10=-2292/920, 10-11=-2982/1171,  
11-12=-1088/429

BOT CHORD 1-20=-1127/3134, 19-20=-1127/3140, 18-19=-277/1283, 17-18=-426/1364, 14-15=-1028/2773,  
11-14=-1025/2764, 11-13=-116/317, 12-13=-272/700

WEBS 2-19=-684/407, 4-19=-437/289, 5-19=-840/2233, 5-18=-443/194, 6-18=-260/635, 7-18=-269/239,  
7-17=-953/325, 15-17=-396/1304, 7-15=-428/1123, 10-15=-1198/521

**NOTES** (10-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=241, 12=238.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.
- Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- Use Simpson HTU26 to attach Truss to Carrying member

**LOAD CASE(S)** Standard

**JULIUS S.K. LEE**

LICENSE

No. 34869

PROFESSIONAL ENGINEER

STATE OF FLORIDA

January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with Mittek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss T07	Truss Type Piggyback Base Truss	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve  Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:10 2013 Page 1 ID:LDuQlKe7UdHpVgx54zIFR2zsAGo-XMo33azoEezwK92s44bVSHJWWjyXTC1s3haMsZ52B
---------------	--------------	------------------------------------	----------	----------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Builders FirstSource, Lake City, FL 32055
Scale = 1/600

Plate Offsets (X, Y): [5.0-5.12, 0.2-0], [6.0-2.8, 0.1-1.3], [10.0-5.4, 0.0-6], [13.0-5.4, 0.2-8]					
LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	Plates Increase 2-0-0	TC 0.55	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.67	Vert(LL) 0.25 15 >999 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.87	Vert(TL) -0.47 15-16 >846 180		
BCDL 5.0	Code FBC2010/TP12007	(Matrix-M)	Horz(TL) 0.32 10 n/a n/a		
				Weight: 197 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 2-6-11 oc purlins.

BOT CHORD Rigid ceiling directly applied or 5-8-10 oc bracing.

WEBS 1 Row at midpt 5-14

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

**REACTIONS** (lb/size) 1=886/Mechanical, 10=962/0-3-8 (min. 0-1-11)

Max Horz 1=-269(LC 8)

Max Uplift 1=-240(LC 12), 10=-271(LC 13)

Max Grav 1=1050(LC 2), 10=1143(LC 2)

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

TOP CHORD 1-2=-3741/1367, 2-3=-3048/1067, 3-4=-2979/1089, 4-5=-3171/1274, 5-6=-1394/686, 6-7=-1686/749, 7-8=-1710/759, 8-9=-1770/743, 9-10=-2053/801

BOT CHORD 1-16=-1046/3177, 15-16=-1045/3182, 14-15=-219/1312, 13-14=-384/1387, 12-13=-542/1636, 10-12=-542/1636

WEBS 2-15=-687/412, 4-15=-436/288, 5-15=-788/2258, 5-14=-450/187, 6-14=-261/647, 7-14=-281/262, 9-13=-378/209

**NOTES** (9-12)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl.; GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=240, 10=271.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.
- Note: Visually graded lumber designation SPp, represents new lumber design values as per SP1B.
- Truss Design Engineer: Julius Lee, PE; Florida P.E. License No. 34869. Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435
- Use Simpson HTU26 to attach Truss to Carrying member

**LOAD CASE(S)** Standard



January 24, 2013

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss T06G	Truss Type Piggyback Base Truss	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve	I6332613
Builders FirstSource, Lake City, FL 32055		7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:09 2013 Page 1				
<div style="display: flex; justify-content: space-between;"> <span>ID: LDuQIKe7UdHpVgx54zfFR2zsAGo-39EgrEzAULr3j?TWN4Gv4mRIJWNCAttdPx1qPzs52C</span> <span>Scale: 3/16"=1'</span> </div>						
Plate Offsets (X,Y): [2:0-4-5,0-1-12] [22:0-4-5,0-1-12]						
<b>LOADING (psf)</b> TCCL 20.0 TCDL 7.0 BCLL 0.0 BCDL 5.0		<b>SPACING</b> 2-0-0 Plates Increase 1.25 Lumber Increase 1.25 Rep Stress Incr YES Code FBC2010/TPI2007		<b>CSI</b> TC 0.17 BC 0.06 WB 0.23 (Matrix)		<b>DEFL</b> in (loc) l/defl L/d Vert(LL) -0.01 23 n/r 120 Vert(TL) -0.01 23 n/r 120 Horz(TL) 0.01 22 n/a n/a
				<b>PLATES</b> MT20 <b>GRIP</b> 244/190 Weight: 241 lb FT = 20%		
<b>LUMBER</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 OTHERS 2x4 SP No.3			<b>BRACING</b> 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. WEBS 1 Row at midpt 12-32, 11-33, 13-31 <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">         MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.       </div>			
<b>REACTIONS</b> All bearings 33-0-0. (lb) - Max Horz 2=-341(LC 8) Max Uplift All uplift 100 lb or less at joint(s) 2, 32, 40, 31, 24, 22 except 33=-104(LC 12), 34=-117(LC 12), 36=-111(LC 12), 37=-112(LC 12), 38=-110(LC 12), 39=-120(LC 12), 30=-120(LC 13), 28=-110(LC 13), 27=-112(LC 13), 26=-110(LC 13), 25=-119(LC 13) Max Grav All reactions 250 lb or less at joint(s) 2, 33, 34, 36, 37, 38, 39, 40, 31, 30, 28, 27, 26, 25, 24, 22 except 32=277(LC 13)						
<b>FORCES</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-317/249, 3-4=-310/262, 4-5=-264/241, 10-11=-222/283, 11-12=-276/331, 12-13=-276/331, 13-14=-222/267 BOT CHORD 2-40=-186/276, 39-40=-186/276, 38-39=-186/276, 37-38=-186/276, 36-37=-186/276, 35-36=-186/276, 34-35=-186/276, 33-34=-186/276, 32-33=-186/276, 31-32=-186/276, 30-31=-186/276, 29-30=-186/276, 28-29=-186/276, 27-28=-186/276, 26-27=-186/276, 25-26=-186/276, 24-25=-186/276, 22-24=-186/276 WEBS 12-32=-273/185						
<b>NOTES</b> (12-14) 1) Unbalanced roof live loads have been considered for this design. 2) Wind: ASCE 7-10, 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) 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) All plates are 2x4 MT20 unless otherwise indicated. 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi. 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 32, 40, 31, 24, 22 except (jt=ib) 33=104, 34=117, 36=111, 37=112, 38=110, 39=120, 30=120, 28=110, 27=112, 26=110, 25=119. 11) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss. 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. 13) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB. 14) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435 Continued on page 2						



January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss T05G	Truss Type GABLE	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve 16332611
Builders FirstSource, Lake City, FL 32055			Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:05 2013 Page 1		

ID: L DuQIke7UdHpVgx54zIFR2zsAGo-AO\_A?swgQ6LdEO9uHX0KIEban?dGBxHinzpgez52G

Plate Offsets (X,Y): [2-0-2-0,0-1-8], [5-0-2-0,0-1-8], [7-0-2-0,0-1-8], [10-0-2-0,0-1-8]					
LOADING (psf)	SPACING	CSI	DEFL	in (loc)	L/d
TCLL 20.0	Plates Increase 1.25	TC 0.93	Vert(LL) -0.12	13-15	>999
TCDL 7.0	Lumber Increase 1.25	BC 0.62	Vert(TL) -0.26	13-15	>999
BCLL 0.0 *	Rep Stress Incr YES	WB 0.93	Horz(TL) 0.08	10	n/a
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)			
			PLATES GRIP MT20 244/190 MT18H 244/190 Weight: 212 lb FT = 20%		

**LUMBER**

TOP CHORD 2x4 SYP No.1 \*Except\*  
T1,T3: 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

WEDGE  
Left: 2x4 SYP No.3

**REACTIONS** (lb/size) 2=957/0-3-8 (min. 0-1-12), 10=891/0-3-8 (min. 0-1-10)  
 Max Horz 2=349(LC 11)  
 Max Uplift 2=495(LC 12), 10=445(LC 13)  
 Max Grav 2=1137(LC 2), 10=1056(LC 2)

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

TOP CHORD 2-3=-2055/786, 3-4=-1910/803, 4-5=-1473/630, 5-6=-1366/652, 6-7=-1366/653, 7-8=-1473/631,  
 8-9=-1911/805, 9-10=-2055/788

BOT CHORD 2-15=-717/1602, 14-15=-641/1602, 13-14=-641/1602, 12-13=-550/1602, 11-12=-550/1602,  
 10-11=-738/1602

WEBS 4-13=-787/492, 8-13=-788/496, 6-13=-395/888

**NOTES** (11-13)

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; End.; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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) All plates are MT20 plates unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (if=lb) 2=495, 10=445.
- 10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.
- 12) Note: Visually graded lumber designation SPP, represents new lumber design values as per SPIB.
- 13) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

**BRACING**

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied or 7-4-3 oc bracing.

WEBS 1 Row at midpt 4-13, 8-13

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

January 24, 2013

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITTEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with Mittek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss T03	Truss Type Half Hip Truss	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:02 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfFR2zsAGo-mpJ1Nrt7Bz3NxRjCPSd7bzBxUzY3vYrOpI94Jzs52	16332609
Builders FirstSource, Lake City, FL 32055						

LOADING (psf)	SPACING	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.40	Vert(LL) -0.19	13-15	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.64	Vert(TL) -0.34	10-11	>999	180		
BCLL 0.0	Rep Stress Incr YES	WB 0.59	Horz(TL) 0.08	10	n/a	n/a		
BCDL 5.0	Code FBC2010/TP12007	(Matrix-M)						
							Weight: 191 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-11-12 oc purlins, except end verticals.

BOT CHORD Rigid ceiling directly applied or 6-4-9 oc bracing.

WEBS 1 Row at midpt 5-15, 8-10

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

**REACTIONS** (lb/size) 10=1041/0-3-8 (min. 0-1-8), 2=1044/0-3-8 (min. 0-1-10)

Max Horz 2=231(LC 12)

Max Uplift 10=-319(LC 9), 2=-242(LC 9)

Max Grav 10=1044(LC 2), 2=1139(LC 2)

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

TOP CHORD 2-3=-1889/798, 3-4=-1715/784, 4-5=-1425/694, 5-6=-1711/805, 6-7=-1711/805, 7-8=-1341/615

BOT CHORD 2-15=-832/1813, 14-15=-852/1721, 14-19=-852/1721, 19-20=-852/1721, 13-20=-852/1721, 13-21=-781/1620, 21-25=-781/1620, 22-25=-781/1620, 12-22=-781/1620, 11-12=-781/1620, 11-23=-476/965, 23-24=-476/965, 24-26=-476/965, 10-26=-476/965

WEBS 3-15=-326/219, 4-15=-286/702, 5-15=-475/238, 7-11=-596/355, 8-11=-297/805, 8-10=-1426/711

**NOTES** (10-12)

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

2) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl.; GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Provide adequate drainage to prevent water ponding.

4) All plates are 3x4 MT20 unless otherwise indicated.

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

6) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 5.0psf.

7) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=319, 2=242.

9) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.

11) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.

12) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard



January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



Job 463946	Truss T02	Truss Type Half Hip Truss	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:30:01 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfFR2zsAGo-ldfAVs9MtrClns72hxObORxi4ewKN1io9?cXtzs52K	I6332608
Builders FirstSource, Lake City, FL 32055						

1-6-0      7-0-0      12-7-6      20-0-1      27-4-11      33-0-0

1-6-0      7-0-0      5-7-6      7-4-11      7-4-10      5-7-6

Scale = 1/8" = 1'-0"

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

LOADING (psf)	SPACING	CSI	DEFLL	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.71	Vert(LL) 0.20	10	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.61	Vert(TL) -0.36	10-12	>999	180		
BCLL 0.0	Rep Stress Incr NO	WB 0.93	Horz(TL) 0.10	8	n/a	n/a		
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)						

<b>LUMBER</b> TOP CHORD 2x4 SYP No.1 BOT CHORD 2x6 SYP No.2 WEBS 2x4 SP No.3	<b>BRACING</b> TOP CHORD Structural wood sheathing directly applied or 2-10-2 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 6-3-5 oc bracing. WEBS 1 Row at midpt 4-12, 6-8 <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">           MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.         </div>
---------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**REACTIONS** (lb/size) 8=1726/0-3-8 (min. 0-2-7), 2=1641/0-3-8 (min. 0-2-5)  
 Max Horz 2=186(LC 8)  
 Max Uplift 8=934(LC 5), 2=773(LC 8)  
 Max Grav 8=2044(LC 2), 2=1942(LC 2)

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

**TOP CHORD** 2-3=3102/1306, 3-15=2533/1137, 15-16=2533/1137, 4-16=2533/1137, 4-17=3489/1545, 17-18=3489/1545, 18-19=3489/1545, 19-20=3489/1545, 5-20=3489/1545, 5-21=2763/1206, 21-22=2763/1206, 22-23=2763/1206, 23-24=2763/1206, 6-24=2763/1206, 7-8=261/185

**BOT CHORD** 2-12=1122/2494, 12-27=1589/3418, 27-28=1589/3418, 28-29=1589/3418, 11-29=1589/3418, 11-30=1589/3418, 10-30=1589/3418, 10-31=1577/3430, 31-32=1577/3430, 32-33=1577/3430, 33-34=1577/3430, 9-34=1577/3430, 9-35=940/1990, 35-36=940/1990, 36-37=940/1990, 37-38=940/1990, 8-38=940/1990

**WEBS** 3-12=486/1244, 4-12=1232/661, 4-10=0/287, 5-10=0/281, 5-9=1054/587, 6-9=437/1270, 6-8=2586/1226

**NOTES** (11-13)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10, 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf, BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl.; GCpi=0.18; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- Provide adequate drainage to prevent water ponding.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=934, 2=773.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 86 lb down and 111 lb up at 7-0-0, 86 lb down and 111 lb up at 9-0-12, 86 lb down and 111 lb up at 11-0-12, 86 lb down and 111 lb up at 13-0-12, 86 lb down and 111 lb up at 15-0-12, 86 lb down and 111 lb up at 17-0-12, 86 lb down and 111 lb up at 19-0-12, 86 lb down and 111 lb up at 21-0-12, 86 lb down and 111 lb up at 23-0-12, 86 lb down and 111 lb up at 25-0-12, 86 lb down and 111 lb up at 27-0-12, 86 lb down and 111 lb up at 29-0-12, and 86 lb down and 111 lb up at 31-0-12, and 86 lb down and 111 lb up at 32-10-4 on top chord, and 329 lb down and 155 lb up at 7-0-0, 50 lb down at 9-0-12, 50 lb down at 11-0-12, 50 lb down at 13-0-12, 50 lb down at 15-0-12, 50 lb down at 17-0-12, 50 lb down at 19-0-12, 50 lb down at 21-0-12, 50 lb down at 23-0-12, 50 lb down at 25-0-12, 50 lb down at 27-0-12, 50 lb down at 29-0-12, and 50 lb down at 31-0-12, and 50 lb down at 32-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

Continued on page 2



January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult - **ANSI/TPI1 Quality Criteria, D58-87 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

A circular professional engineer seal for Julius S.K. Lee. The outer ring contains the text "JULIUS S.K. LEE" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No. 34869" is displayed. A large, stylized cursive signature, "Julius S.K. Lee", is written across the center of the seal, overlapping the license number and the inner text.

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**  
 Design valid for use only with MITEK connectors. This design is based only upon parameters shown, and is for an individual building component.  
 Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D88-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oroville Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss PB01G	Truss Type GABLE	Qty 2	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:29:56 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfR2zsAGo-xfm6np0XLCvf0z9G8LDuKjDV33TfJ7zetlrsqzs52P	I6332604
Builders FirstSource, Lake City, FL 32055						

<b>LOADING (psf)</b> TCLL 20.0 TCDL 7.0 BCLL 0.0 * BCDL 5.0	<b>SPACING</b> 2-0-0 Plates Increase 1.25 Lumber Increase 1.25 Rep Stress Incr YES Code FBC2010/TP12007	<b>CSI</b> TC 0.14 BC 0.11 WB 0.07 (Matrix-M)	<b>DEFL</b> in (loc) l/defl L/d Vert(LL) -0.01 16 >999 240 Vert(TL) -0.01 6-13 >999 180 Horz(TL) 0.00 5 n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 244/190 Weight: 27 lb FT = 20%
-------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------

**LUMBER**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

OTHERS 2x4 SP No.3

**REACTIONS** (lb/size) 1=56/0-3-8 (min. 0-2-15), 6=297/0-3-8 (min. 0-1-8), 5=52/0-3-8 (min. 0-2-14)

Max Horz 1=77(LC 9)

Max Uplift 1=28(LC 12), 6=145(LC 12), 5=51(LC 13)

Max Grav 1=90(LC 27), 6=351(LC 2), 5=86(LC 28)

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

BOT CHORD 2-6=-234/341, 4-6=-218/331

WEBS 3-6=-354/169

**NOTES** (12-14)

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 28 lb uplift at joint 1, 145 lb uplift at joint 6 and 51 lb uplift at joint 5.
- "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 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.
- Note: Visually graded lumber designation SPP, represents new lumber design values as per SPIB.
- Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869: Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

**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.

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

January 24, 2013

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE M11-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss HJ02	Truss Type Diagonal Hip Girder	Qty 2	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional)	I6332602
Builders FirstSource, Lake City, FL 32055		7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:29:54 2013 Page 1				
ID: LDuQIKe7UdHpVgx54zfFR2zsAGo-7Hq0i6nm0kyBQipn8JlloveoUGKICQngBZpkonzs52R						

Scale = 1/2" = 1'-0"

Plate Offsets (X,Y): [2 0-2-8,0-1-0]							
LOADING (psf)	SPACING	CSI	DEFL	in	(loc)	l/defl	L/d
TCLL 20.0	Plates Increase 1.25	TC 0.49	Vert(LL)	-0.05	4-7	>999	240
TCDL 7.0	Lumber Increase 1.25	BC 0.28	Vert(TL)	-0.08	4-7	>948	180
BCLL 0.0 *	Rep Stress Incr NO	WB 0.00	Horz(TL)	0.00	2	n/a	n/a
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)					
							PLATES MT20
							GRIP 244/190
							Weight: 25 lb FT = 20%

<b>LUMBER</b> TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2	<b>BRACING</b> TOP CHORD BOT CHORD
-----------------------------------------------------------------	------------------------------------------

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

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

**REACTIONS** (lb/size) 3=108/Mechanical, 2=277/0-4-15 (min 0-1-8), 4=32/Mechanical  
Max Horz 2=194(LC 8)  
Max Uplift 3=-142(LC 8), 2=-147(LC 8)  
Max Grav 3=132(LC 2), 2=340(LC 2), 4=76(LC 3)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-8=-367/252  
BOT CHORD 2-10=-465/550

**NOTES** (9-11)  
1) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60  
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.  
3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.  
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.  
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 3 and 147 lb uplift at joint 2.  
6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.  
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 32 lb down and 47 lb up at 1-5-12, 32 lb down and 47 lb up at 1-5-12, and 4 lb down and 71 lb up at 4-3-11, and 4 lb down and 71 lb up at 4-3-11 on top chord, and 24 lb up at 1-5-12, 24 lb up at 1-5-12, and 4 lb down and 3 lb up at 4-3-11, and 4 lb down and 3 lb up at 4-3-11 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.  
10) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.  
11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869. Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard  
1) Regular: Lumber Increase=1.25, Plate Increase=1.25  
Uniform Loads (plf)  
Vert: 1-3=-44, 4-5=-10  
Concentrated Loads (lb)  
Vert: 8=25(F=12, B=12) 9=-4(F=-2, B=-2) 10=22(F=11, B=11) 11=-7(F=-4, B=-4)



January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss HJ01	Truss Type Diagonal Hip Girder	Qty 1	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:29:54 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfR2zsAGo-?Hq0i6nm0kyBQipn8jJlovemwGHMCLVgBZpkonzs52R	I6332601
Builders FirstSource, Lake City, FL 32055						

Plate Offsets (X,Y): [2-0-2-8,0-1-0]									
LOADING (psf)	SPACING 2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plates Increase 1.25	TC 0.59	Vert(LL)	-0.05	6-7	>999	240	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.47	Vert(TL)	-0.10	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.34	Horz(TL)	0.01	5	n/a	n/a		
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)							
							Weight: 45 lb	FT = 20%	

**LUMBER**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEBS 2x4 SP No.3

**BRACING**

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

BOT CHORD Rigid ceiling directly applied or 9-2-0 oc bracing.

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

**REACTIONS** (lb/size) 4=234/Mechanical, 2=360/0-4-15 (min. 0-1-8), 5=242/Mechanical

Max Horz 2=267(LC 8)

Max Uplift 4=-261(LC 8), 2=-195(LC 8), 5=-152(LC 8)

Max Grav 4=286(LC 2), 2=438(LC 2), 5=308(LC 3)

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

TOP CHORD 2-11=-557/252, 11-12=-482/272, 3-12=-480/246

BOT CHORD 2-14=-410/480, 14-15=-410/480, 7-15=-410/480, 7-16=-410/480, 6-16=-410/480

WEBS 3-6=-530/453

**NOTES** (9-11)

- 1) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 261 lb uplift at joint 4, 195 lb uplift at joint 2 and 152 lb uplift at joint 5.
- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 32 lb down and 47 lb up at 1-5-12, 32 lb down and 47 lb up at 1-5-12, 4 lb down and 71 lb up at 4-3-11, 4 lb down and 71 lb up at 4-3-11, 45 lb down and 119 lb up at 7-1-10, and 45 lb down and 119 lb up at 7-1-10, and 140 lb down and 104 lb up at 9-10-1 on top chord, and 24 lb up at 1-5-12, 24 lb up at 1-5-12, 4 lb down and 3 lb up at 4-3-11, 4 lb down and 3 lb up at 4-3-11, 27 lb down at 7-1-10, and 27 lb down at 7-1-10, and 80 lb down at 9-10-1 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.
- 10) Note: Visually graded lumber designation SPp, represents new lumber design values as per SPIB.
- 11) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869. Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

1) Regular: Lumber Increase=1.25, Plate Increase=1.25

Uniform Loads (plf)

Vert: 1-4=-44, 5-8=-10

Continued on page 2



January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oonofrio Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435



Job 463946	Truss EJ01	Truss Type Jack-Partial Truss	Qty 14	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) ID:LDuQIke7UdHpVgx54zfR2zsAGo-2uiFHQIWU6iTAOgO1JHHjUZP9ScXkXINjFKdjuzs52T
Builders FirstSource, Lake City, FL 32055			7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:29:52 2013 Page 1		

Scale = 1/315

Plate Offsets (X, Y): [2-0-2-0-0-1-8]					
LOADING (psf)	SPACING	CSI	DEFL	in (loc)	PLATES GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.67	Vert(LL) -0.06	4-7 >999	MT20 244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.43	Vert(TL) -0.12	4-7 >718	
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Horz(TL) 0.01	2 n/a n/a	
BCDL 5.0	Code FBC2010/TPI2007	(Matrix-M)			Weight: 27 lb FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEDGE

Left: 2x4 SYP No.3

**REACTIONS** (lb/size) 3=115/Mechanical, 2=294/0-3-8 (min. 0-1-8), 4=32/Mechanical

Max Horz 2=183(LC 12)

Max Uplift 3=-104(LC 12), 2=-68(LC 12)

Max Grav 3=158(LC 21), 2=351(LC 2), 4=80(LC 3)

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

TOP CHORD 2-3=-1131/494

BOT CHORD 2-4=-1306/2274

**NOTES** (7-9)

1) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf; BCDL=3.0psf; h=18ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

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

3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.

5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 104 lb uplift at joint 3 and 68 lb uplift at joint 2.

6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.

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.

8) Note: Visually graded lumber designation SPP, represents new lumber design values as per SPIB.

9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 5-0-3 oc purlins.

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

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

January 24, 2013



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oroffo Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

Job 463946	Truss CJ02	Truss Type Jack-Open Truss	Qty 6	Ply 1	SIMQUE - LOT 125 The Preserve Job Reference (optional) 7.350 s Jul 31 2012 MiTek Industries, Inc. Thu Jan 24 16:29:51 2013 Page 1 ID:LDuQIKe7UdHpVgx54zfFR2zsAGo-ai8t34lujpadYE5CTbm2BH0L2Mo?42EUca4BSzs52U	I6332597
Builders FirstSource, Lake City, FL 32055						

Plate Offsets (X, Y): [2-0-1-9, Edge]					
LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL 20.0	Plates Increase 1.25	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 7.0	Lumber Increase 1.25	BC 0.08	Vert(LL) -0.00 4-7 >999 240		
BCLL 0.0	Rep Stress Incr YES	WB 0.00	Vert(TL) -0.01 4-7 >999 180		
BCDL 5.0	Code FBC2010/TP12007	(Matrix-M)	Horz(TL) 0.00 2 n/a n/a		
				Weight: 13 lb	FT = 20%

**LUMBER**

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

**REACTIONS** (lb/size) 3=46/Mechanical, 2=165/0-3-8 (min. 0-1-8), 4=14/Mechanical

Max Horz 2=137(LC 12)

Max Uplift 3=-64(LC 12), 2=-88(LC 12)

Max Grav 3=68(LC 21), 2=199(LC 2), 4=34(LC 3)

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

BOT CHORD 2-4=-87/436

**NOTES** (7-9)

- 1) Wind: ASCE 7-10; 130mph (3-second gust) Vasd=101mph; TCDL=4.2psf, BCDL=3.0psf, h=18ft; Cat. II; Exp C; End.; GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 3) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 64 lb uplift at joint 3 and 88 lb uplift at joint 2.
- 6) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
- 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.
- 8) Note: Visually graded lumber designation SPP, represents new lumber design values as per SPIB.
- 9) Truss Design Engineer: Julius Lee, PE: Florida P.E. License No. 34869; Address: 1109 Coastal Bay Blvd. Boynton Beach, FL 33435

**LOAD CASE(S)** Standard

**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.

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

January 24, 2013

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 BEFORE USE.**

Design valid for use only with MiTek connectors. This design is based only upon parameters shown, and is for an individual building component. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult **ANSI/TPI1 Quality Criteria, D58-89 and BCS11 Building Component Safety Information** available from Truss Plate Institute, 583 D'Oroffo Drive, Madison, WI 53719.

Julius Lee  
1109 Coastal Bay Blvd.  
Boynton, FL 33435

