#### JULIUS LEE PE.

RE: 566946 - MIKE ROBERTS - LOT 1 CC

Code COASTAL BAY BLVD, **BOYNTON BEACH, FL 33435** 

FILE COP

Site Information:

Project Customer Mike Roberts Project Name: 566946 Model Custom

Lot/Block: 1

Subdivision: Cannon Creek

Address:

City: Columbia Ctv

State FL

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name. Unknown at time of seal

License # Unknown at time of seal

Address Unknown at time of seal City. Unknown at time of seal

State Unknown at time of seal

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: FBC2010/TPI2007

Design Program: MiTek 20/20 7.3

Wind Code: ASCE 7-10 Wind Speed: 130 mph

Floor Load: N/A psf

Roof Load: 32.0 psf

16

18035491

18035492

This package includes 29 individual, dated 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 This document processed per section 16G15-23 003 of the Florida Board of Professionals Rules

In the event of changes from Builder or E.O.R. additional coversheets and drawings may accompany this coversheet. The latest approval dates supersede and replace the previous drawings.

Truss Name Date No Scott C--1# Truce Name Date

No.	Seal#	Truss Name	Date	No	Seal#	i russ ivame	Date
1	18035476	CJ01	4/7/014	18	18035493	T05	4/7/014
2	18035477	CJ02	4/7/014	19	18035494	T06	4/7/014
3	18035478	CJ03	4/7/014	20	18035495	T07	4/7/014
4	18035479	CJ04	4/7/014	21	18035496	T08	4/7/014
5	18035480	CJ05	4/7/014	22	18035497	T09	4/7/014
6	18035481	EJ01	4/7/014	23	18035498	T10	4/7/014
7	18035482	EJ02	4/7/014	24	18035499	T11	4/7/014
8	18035483	EJ03	4/7/014	25	18035500	T12	4/7/014
9	18035484	EJ04	4/7/014	26	18035501	T13	4/7/014
10	18035485	EJ05	4/7/014	27	18035502	T14	4/7/014
11	18035486	HJ01	4/7/014	28	18035503	T15	4/7/014
12	18035487	HJ02	4/7/014	29	18035504	T16	4/7/014
13	18035488	T01	4/7/014				
14	18035489	T01G	4/7/014				
15	18035490	T02	4/7/014				

The truss drawing(s) referenced above have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Builders FirstSource (Jax).

4/7/014

4/7/014

Truss Design Engineer's Name: Julius Lee

T03

T04

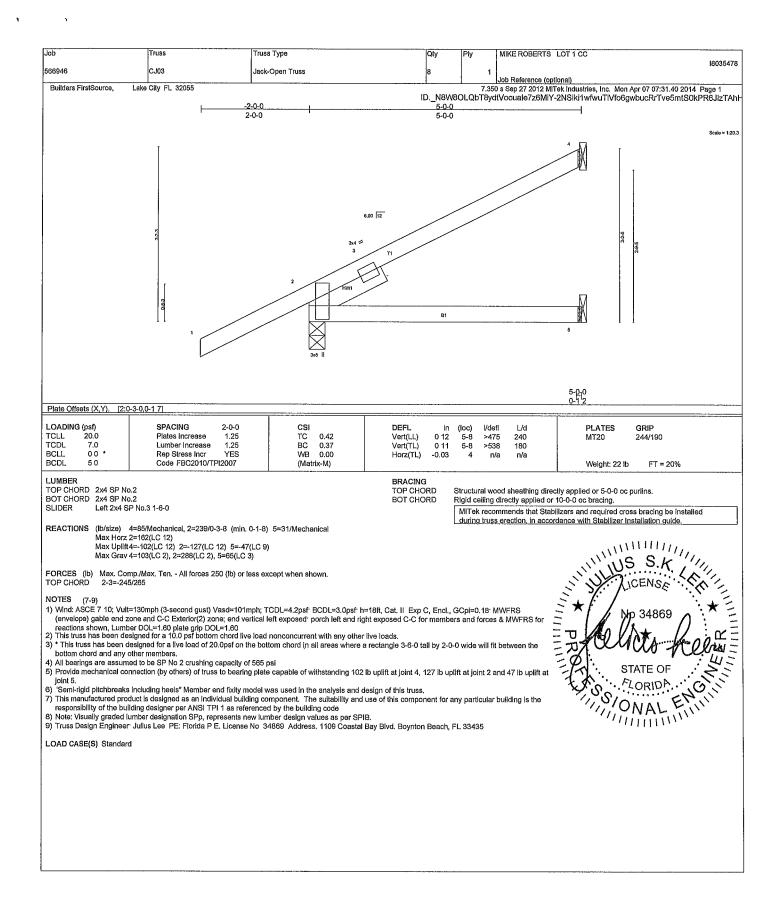
My license renewal date for the state of Florida is February 28, 2015.

NOTE: The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Chapter 2.



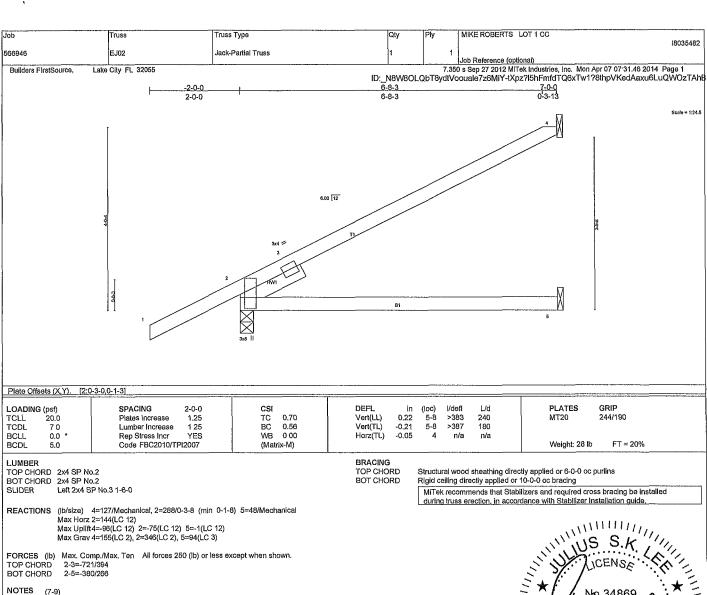
MIKE ROBERTS LOT 1 CC Joh Truss Truss Type Qtv 18035476 566946 CJ01 Jack-Open Truss Job Reference (optional)
7 350 s Sep 27 2012 MiTek Industries, Inc. Mon Apr 07 07 31 37 2014 Page 1 Lake City FL 32055 Builders FirstSource ID.\_N8W8OLQbT8ydtVoouale7z6MiY-dpmZ6g\_2N?Wuu1wDRXMuGzpMhihNZWia1RDSiQzTAhK -2-0-0 1-0-0 2-0-0 Scale = 1:9.9 6.00 12 Plate Offsets (X,Y). [2:0-0-12,0-1-8] LOADING (psf) GRIP SPACING DEFI 1/defi PLATES 0.00 >999 240 244/190 0.32 Vert(LL) MT20 20.0 1.25 TC TCLL Plates Increase TCDL 70 Lumber Increase 1.25 BC WB 0.05 Vert(TL) 0 00 >999 180 BCLL 00 Rep Stress Incr YES 0.00 Horz(TL) 0 00 n/a n/a Code FBC2010/TPI2007 Weight: 8 lb FT = 20% BRACING TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 Structural wood sheathing directly applied or 1-0-0 oc purlins Rigid celling directly applied or 10-0-0 oc bracing TOP CHORD BOT CHORD MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide REACTIONS (lb/size) 2=205/0-3-8 (min 0-1 8) 5=-52/Mechanical 3=-13/Mechanical Max Horz 2=67(LC 12) Max Uplift2=-146(LC 12) 5=-65(LC 2) 3=-17(LC 2)
Max Grav 2=250(LC 2) 5=44(LC 12) 3=13(LC 8) FORCES (lb) Max. Comp./Max, Ten. - All forces 250 (lb) or less except when shown. 1) Wind ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf BCDL=3.0psf h=18ft, Cat. II Exp C Encl , GCpl=0.18 MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left exposed 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) 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 U 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 146 lb uplift at joint 2 65 lb uplift at joint 5 and 17 lb uplift at 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



Joh Truss Truss Type MIKE ROBERTS LOT 1 CC 18035480 566946 CJ05 Jack-Open Truss Job Reference (optional) Builders FirstSource. Lake City FL 32055 7 350 s Sep 27 2012 MiTek Industries, Inc. Mon Apr 07 07:31.43 2014 Page 1 ID.\_N8W8OLQbT8ydtVoouale7z6MiY-Sy7qNj3pyrG2cyNMooTIWE3NA6ImzEBSQNgmw4zTAhE -2-0-0 2-0-0 6.00 12 2 Plate Offsets (X,Y). [2.0-0-12,0-1-8] LOADING (psf) SPACING 1.25 TC BC 0 00 TCLL 20.0 Plates Increase 0.32 Vert(LL) >999 240 MT20 244/190 TCDL 70 0 00 180 Lumber Increase 0.05 Vert(TL) >999 BCLL 00 Rep Stress Incr YES WB 0.00 Horz(TL) 0.00 Code FBC2010/TPI2007 (Matrix-M) FT = 20% Weight: 9 lb LUMBER BRACING TOP CHORD 2x4 SP No.2 BOT CHORD 2x6 SP No.2 Structural wood sheathing directly applied or 1-4-15 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing TOP CHORD BOT CHORD Jang be in Jallation guide. MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide REACTIONS (lb/size) 2=188/0-3-8 (min. 0-1-8) 5=-33/Mechanical 3=7/Mechanical Max Horz 2=77(LC 12) Max Uplift2=-127(LC 12), 5=-42(LC 2) 3=-20(LC 12) Max Grav 2=229(LC 2) 5=32(LC 16) 3=8(LC 2) FORCES (lb) - Max, Comp./Max, Ten. All forces 250 (lb) or less except when shown 1) Wind: ASCE 7 10; Vult=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; end vertical left exposed, 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) 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 127 ib uplift at joint 2, 42 lb uplift at joint 5 and 20 lb uplift at joint 3.

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



1) Wind: ASCE 7-10; Vult=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; end vertical left 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.

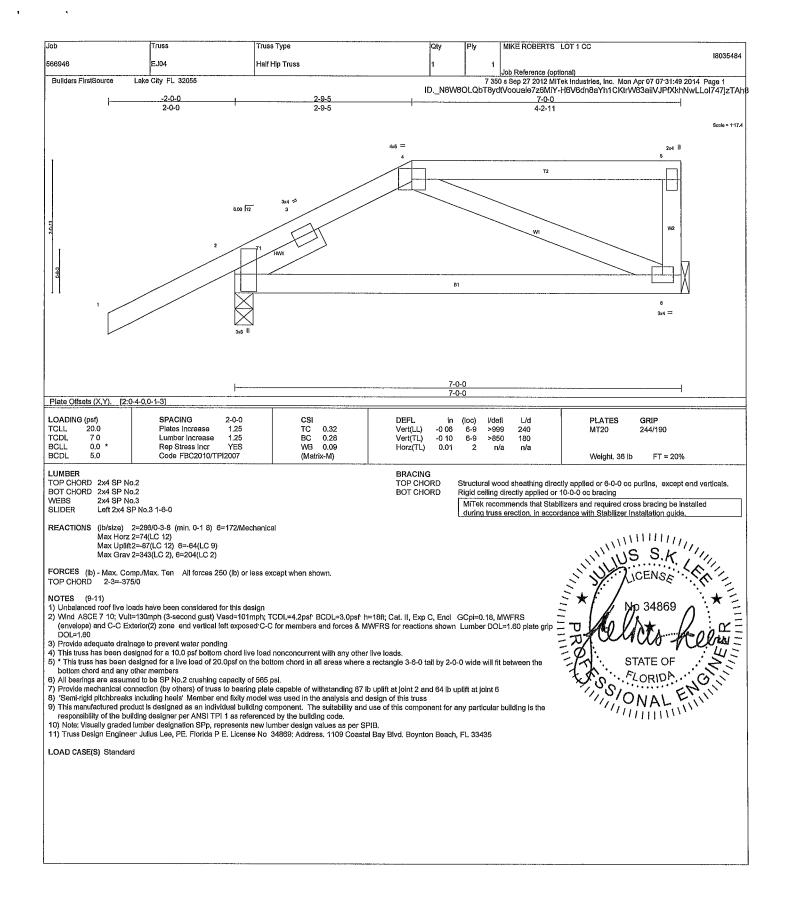
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psl.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 4, 75 lb uplift at joint 2 and 1 lb uplift at 6) Semi-rigid pitchbreaks including heals' Member end fixity model was used in the analysis and design of this truss.

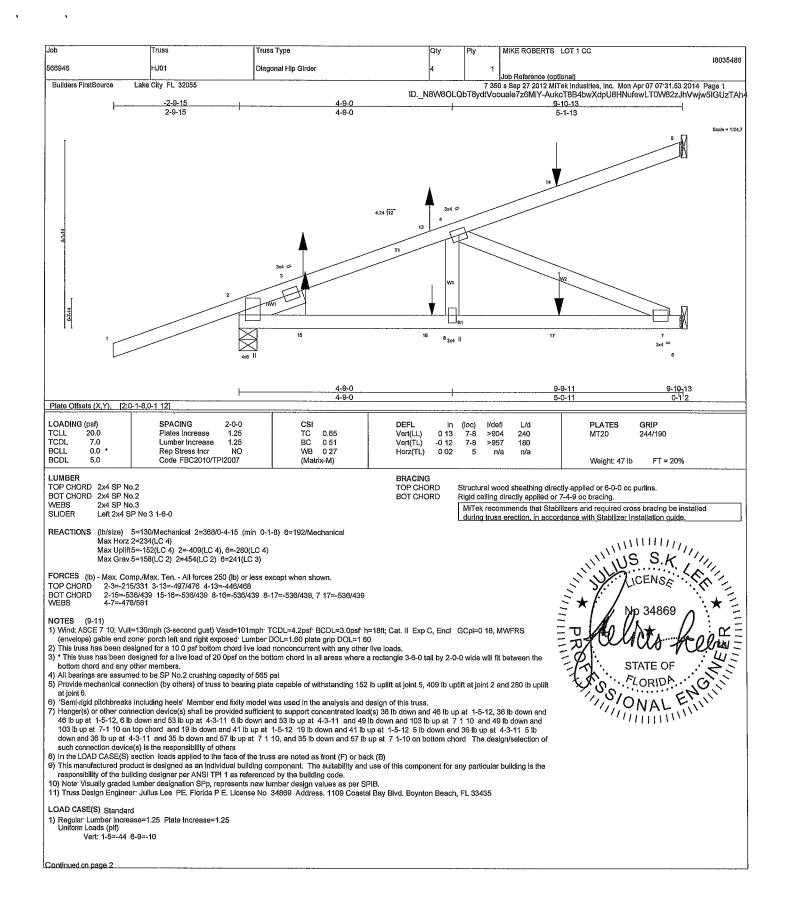
7) This manufactured product is designed as an individual building component. The sultability and use of this component for any particular building is the

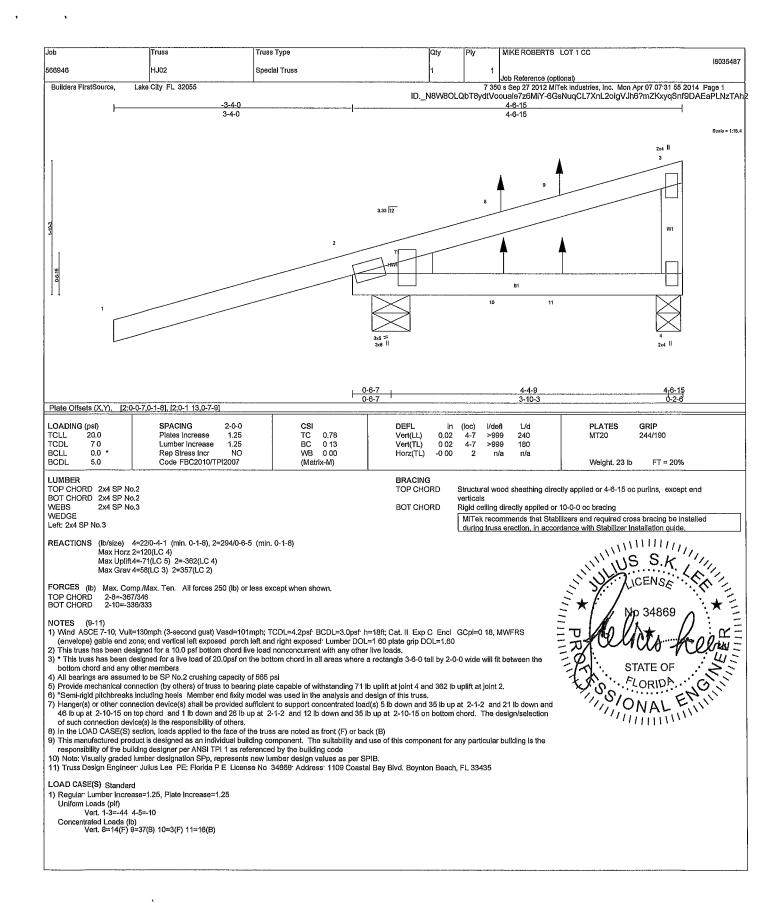
responsibility of the building designer per ANSI TPI 1 as referenced by the building code 8) Note Visually graded lumber designation SPp, represents new lumber design values as per SPIB.

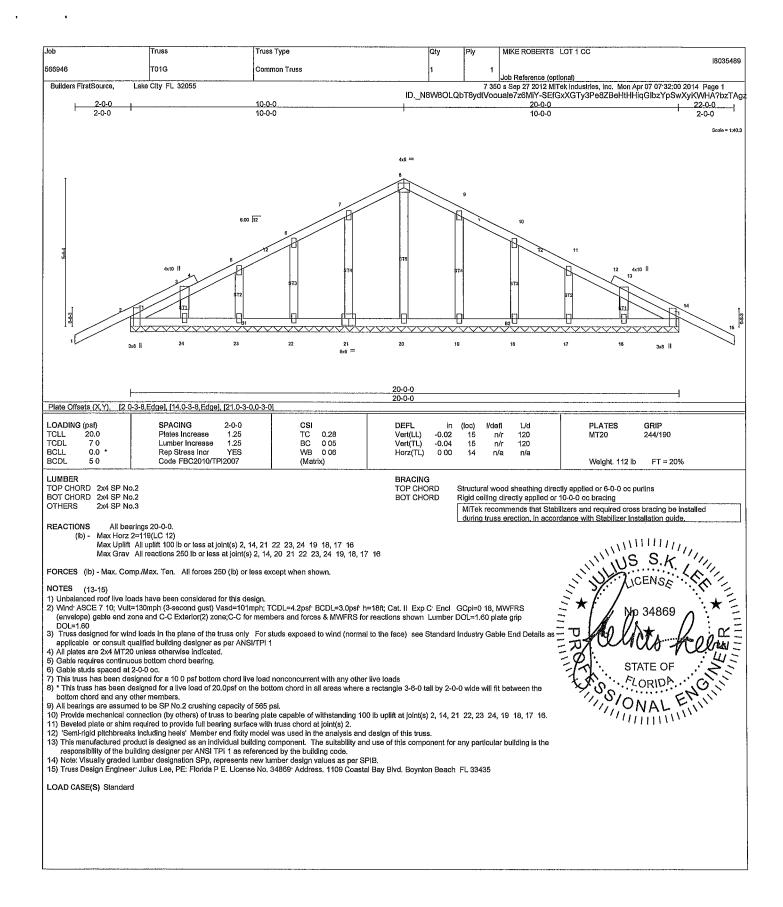
9) Truss Design Engineer Julius Lee PE: Florida PE License No. 34869 Address 1109 Coastal Bay Blvd Boynton Beach, FL 33435

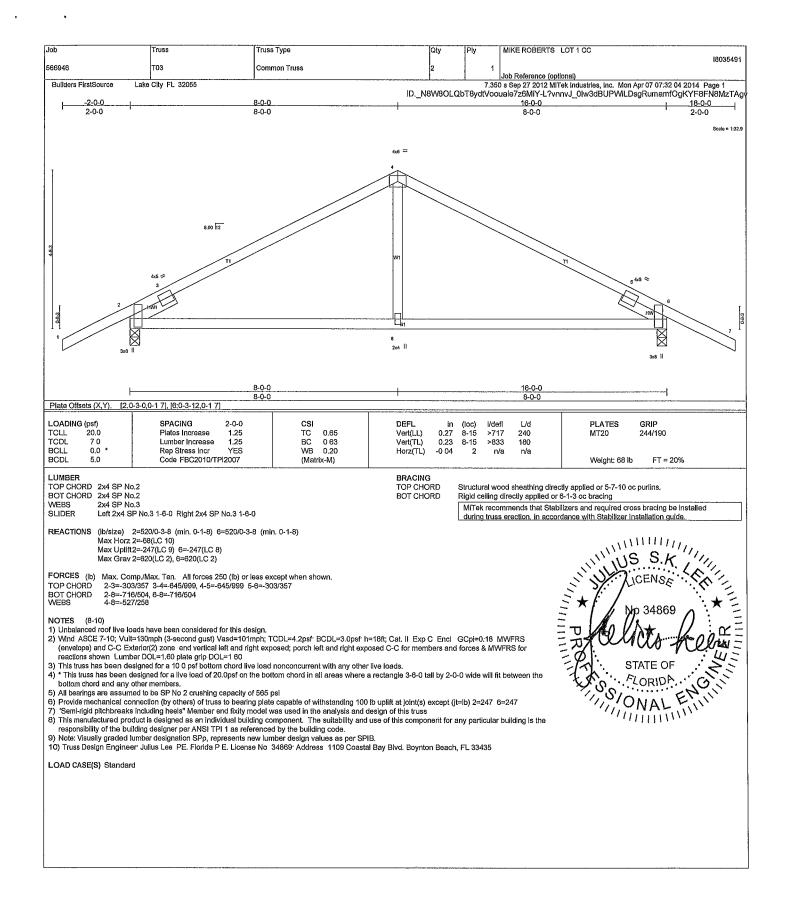
LOAD CASE(S) Standard





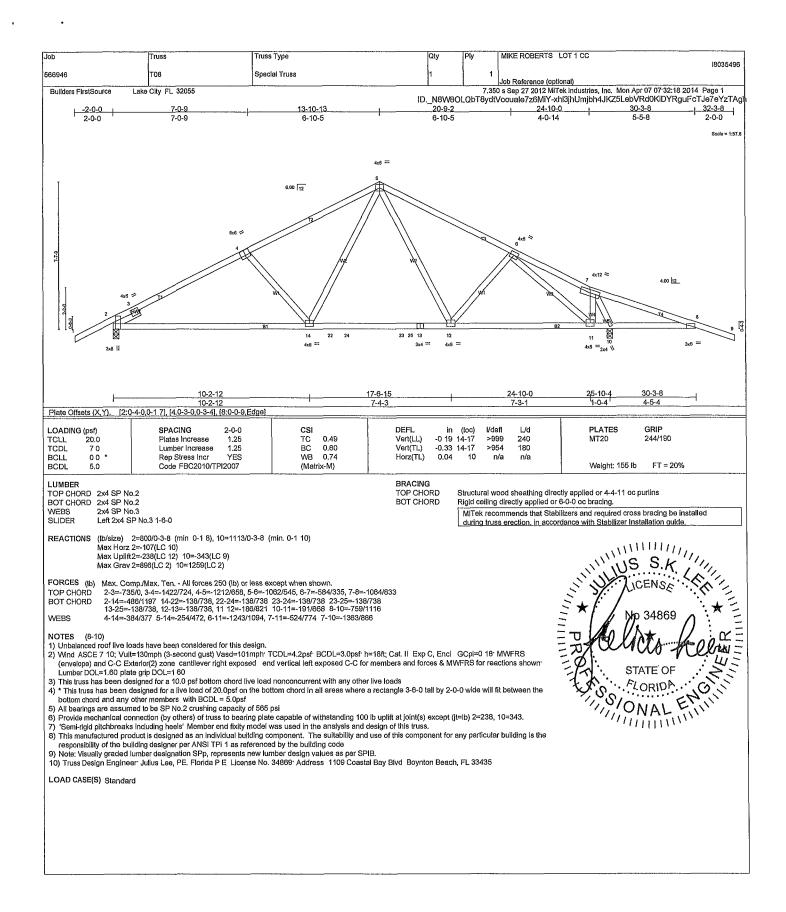


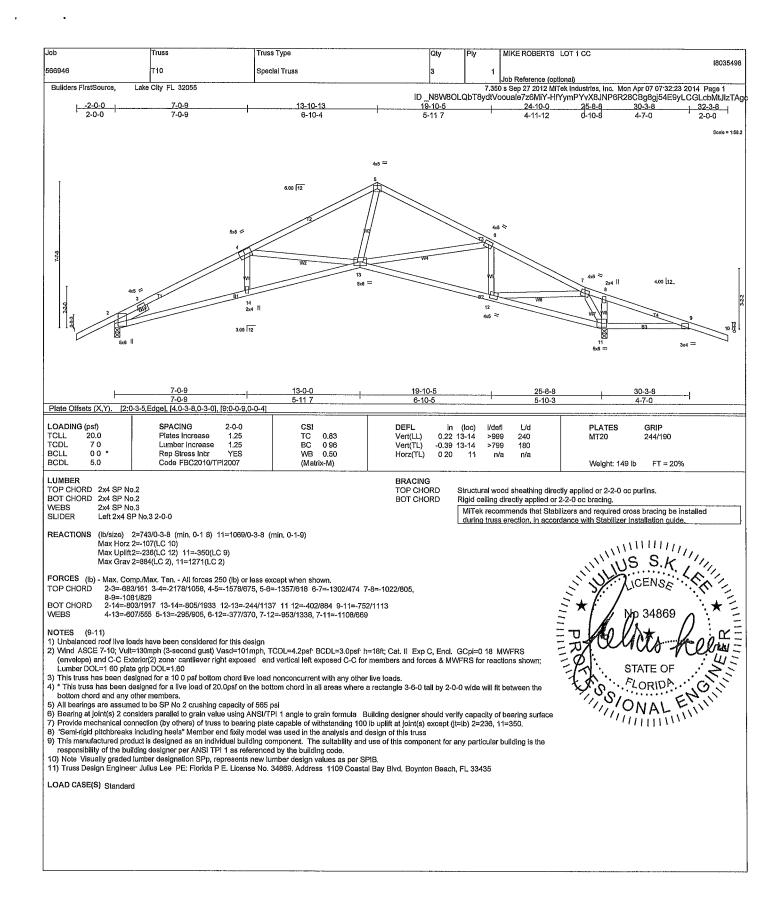




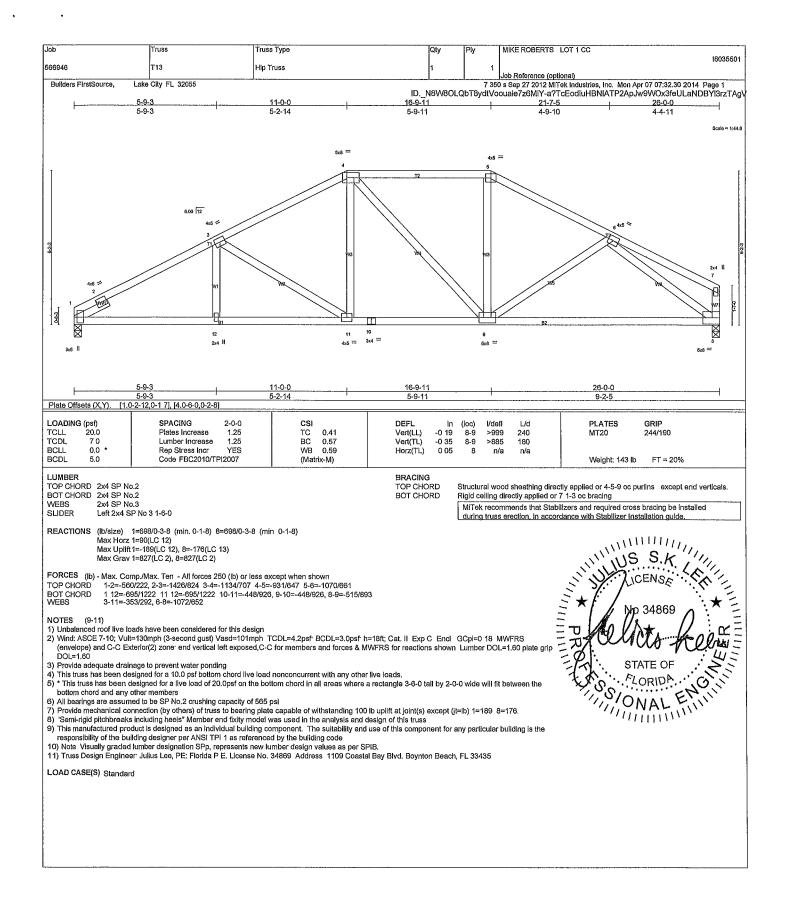
Job	Truss	Truss Type	Qty	Ply	MIKE ROBERTS LOT 1 CC	
566946	Т04	Hip Truss	1	1		18035492
Builders FirstSourc	e Lake City FL 32055			7.3	Job Reference (optional) 50 s Sep 27 2012 MiTek Industries, Inc. Mon Apr 07 C	07·32:08 2014 Page 2
TPi 1 as refere 12) Note Visually	rred product is designed as an indiv nced by the building code. graded lumber designation SPp, reg	idual building component. The suitability resents new lumber design values as per E. License No. 34869 Address, 1109 Coa	and use of this component for a	8ydtVoous any particul	ale7z6MiY-Dm8HcGMU3XQV6ooAlYQ91WbXI ar building is the responsibility of the building desig	MB4fKJ88AmDbH7zTAg
LOAD CASE(S) S 1) Regular Lumbe Uniform Loads ( Vert. 1-3	tandard r Increase=1 25, Plate Increase=1.2 olf) 5=-44, 3-6=-44, 6-7=-44 7-9=-44 8	5	atar bay biva. boyrion boadi,	1 6 00400		
Concentrated Lo Vert: 3= 34=-162	-83(F) 6=-83(F) 15=-220(F) 11=-16	2(F) 21=-83(F) 22=-83(F) 23=-83(F) 24=-1	83(F) 25=-83(F) 26=-83(F) 27=	-38(F) 28≕-	38(F) 29=-38(F) 30=-38(F) 31=-38(F) 32=-38(F) 33	3=-38(F)

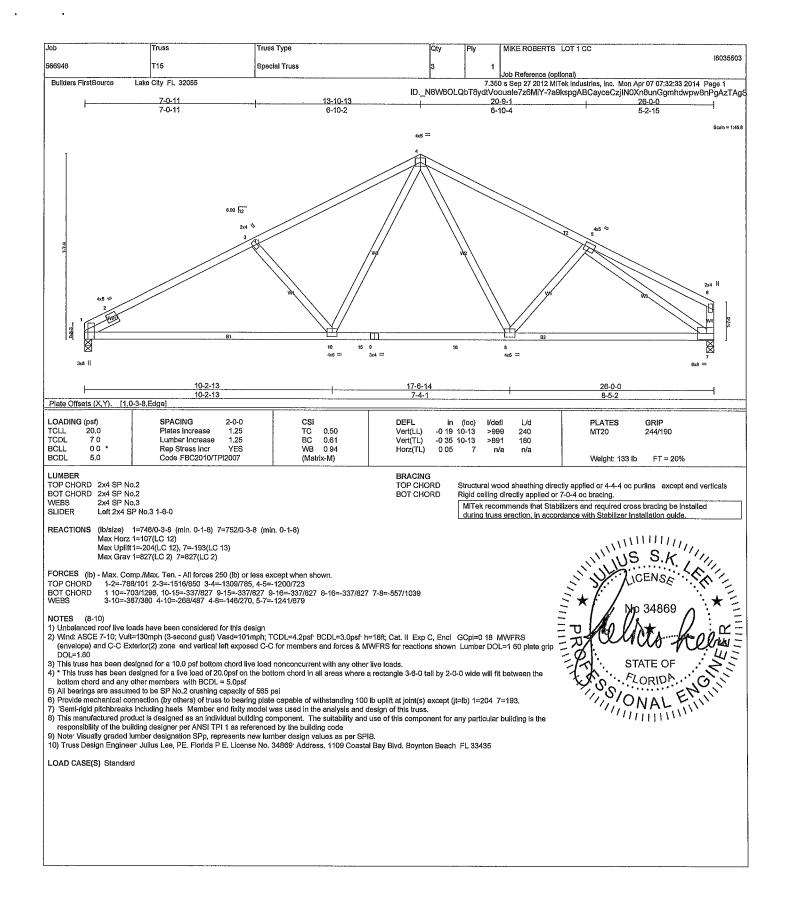
Job Truss Truss Type MIKE ROBERTS - LOT 1 CC 18035494 566946 T06 Hip Truss 1 Job Reference (optional) 7 350 s Sep 27 2012 MTek Industries Inc. Mon Apr 07 07:32:13 2014 Page 1
ID.\_N8W8OLQbT8ydtVoouale7z6MIY-akxAf\_Qdu32oCZg7Y50KkZIUICuh?hQtJ1xMyKzTAgrh Builders FirstSource Lake City FL 32055 5-10-1 2-0-0 2-0-0 30-3-8 32-3-8 11-0-0 24-10-0 5-10-14 5-1-2 5-9-11 3-0-15 2-0-0 6.00 12 4x12 = 4.00 12. 14 13 2x4 || 5x8 ≕ 5-10-14 24-10-0 5-10-14 8-0-6 1-0-4 Plate Offsets (X,Y) [2:0-4-0,0-1-3], [6:0-6-0,0-2-8] LOADING (psf) TCLL 20.0 TCDL 7.0 SPACING PLATES GRIP (loc) I/defl TC BC 0.44 0.44 20.0 Plates Increase 1.25 Vert(LL) -0.10 12-13 >999 240 MT20 244/190 70 1.25 -0.19 12-13 180 Lumber Increase >999 Vert(TL) BCLL 0.0 Rep Stress Incr YES WB 0.46 0.04 BCDL Code FBC2010/TPI2007 (Matrix-M) Weight: 164 lb FT = 20%.ross bracing be instructed in the state of LUMBER BRACING TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 Structural wood sheathing directly applied or 4-5-15 oc purlins. TOP CHORD BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. 2x4 SP No.3 MiTek recommends that Stabilizers and required cross bracing be installed SLIDER Left 2x4 SP No 3 1-6-0 during truss erection. In accordance with Stabilizer Installation guide REACTIONS (lb/size) 2=753/0-3-8 (min. 0-1 8), 11=1059/0-3-8 (min. 0-1-8) Max Horz 2=-88(LC 10) Max Uplift2=-224(LC 12) 11=-390(LC 9) Max Grav 2=896(LC 2) 11=1259(LC 2) FORCES (lb) - Max. Comp./Max. Ten - All forces 250 (lb) or less except when shown TOP CHORD 2-3=-458/45, 3-4=-1319/682, 4-5=-1046/592, 5-6=-910/586, 6-7=-945/505, 7-8=-594/267 8-9=-1062/835 2-16=-459/1109, 15-16=-459/1109 14-15=-161/742, 13-14=-161/742, 12-13=-95/641 11 12=-149/679, 9-11=-762/1114 BOT CHORD WEBS 4-15=-341/283, 7 12=-1062/1021 8-12=-505/761 8-11=-1350/862 1) Unbalanced roof live loads have been considered for this design
2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=101mph; TCDL=4.2psf BCDL=3.0psf h=18ft; Cat. II Exp C: Encl. GCpl=0.18 MWFRS (envelope) and C-C Exterior(2) zone; cantilever right exposed end vertical left exposed 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) 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) All bearings are assumed to be SP No.2 crushing capacity of 565 psi 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=224, 11=390 8) 'Semi-rigid pitchbreaks including heels' Member end fixity model was used in the analysis and design of this truss. 5) This manufactured product is designed as an individual building component. The sultability 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





lob	Truss	Truss Type	Qty	Ply	MIKE ROBERTS LOT 1 CC
566946	T11	Half Hip Truss	1	1	1803548
Builders FirstSource, Lake	City FL 32055	1	1	7.350	Job Reference (optional) 0 s Sep 27 2012 MiTek Industries, Inc. Mon Apr 07 07:32:26 2014 Page 2
TPI 1 as referenced by the 13) Note: Visually graded lumb	building code er designation SPp, represents r	ding component. The suitability and use of this comp new lumber design values as per SPIB.	onent for ar	(bT8ydtVo ny particula	ouale7z6MiY-iEE5OQanq3hyGZAdpKINIJLe3SBCYX_nJZaYw4zT/ r building is the responsibility of the building designer per ANSI
LOAD CASE(S) Standard  1) Regular: Lumber increase= Uniform Loads (plf) Vert: 1-4=-44 4-9=- Concentrated Loads (lb) Vert: 4=-83(B) 7=-8	1.25, Plate Increase=1.25 44 10-15=-10	9 No. 34869; Address. 1109 Čoastal Bay Blvd. Boynto			B(B) 26=-38(B) 27=-38(B) 28=-38(B) 29=-38(B) 30=-38(B)



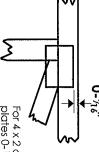


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# PLATE LOCATION AND ORIENTATION



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  $4 \times 2$  orientation, locate plates  $0^{-1}h_6$ ' from outside edge of truss

This symbol indicates fhe required direction of slots in connector plates

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

### PLATE SIZE

4 × 4

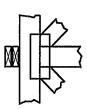
The first dimension is the plate width measured perpendicular to slots Second dimension is the length parallel to slots

# LATERAL BRACING LOCATION



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

### BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur

### Industry Standards: ANSI/TPII: Nationa

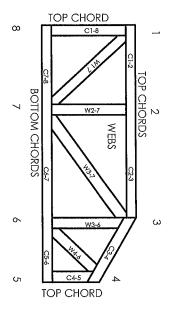
National Design Specification for Metal Plate Connected Wood Truss Construction. Design Standard for Bracing

BCSI1: Buil

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

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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

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Julius Lee PE 1109 Coastal Bay , Boynton Beach ,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 BCSII
- 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

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- 3 Never exceed the design loading shown and never stack materials on inadequately braced trusses
- Provide copies of this truss design to the building designer erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other

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- Place plates on each face of truss at each joint and embed fully Knots and wane at joint locations are regulated by ANSI/TPI 1
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1
- Unless otherwise noted moisture content of lumber shall not exceed 19% at time of fabrication

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- 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
- Plate type size orientation and location dimensions indicated are minimum plating requirements
- Lumber used shall be of the species and size and in all respects, equal to or better than that specified
- Top chords must be sheathed or purins 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

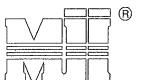
15 Connections not shown are the responsibility of others

- 16. Do not cut or after 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

#### 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

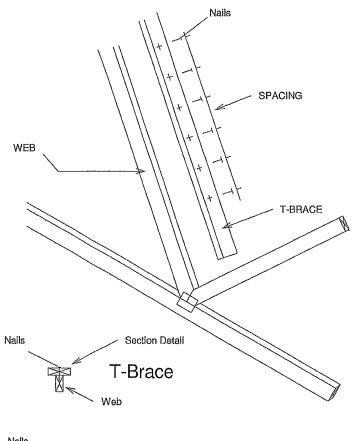
Note: T-Bracing / I-Bracing to be used when continuous lateral bracing is impractical. T-Brace / I-Brace must cover 90% of web length.

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-Brac				



Nalls	
Web —	I-Brace
Naile	

	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

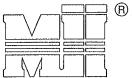
#### **JANUARY 1, 2009**

#### LATERAL TOE-NAIL DETAIL

ST-TOENAIL SP

MiTek Industries, Chesterfield, MO

Page 1 of 1



MiTek Industries, Inc.

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 DISEEPENT SPECIES
- FOR MEMBERS OF DIFFERENT SPECIES.

	TOE-NAIL SINGLE SHEAR VALUES PER NDS 2001 (lb/nail)							
	DIAM.	SYP	DF	HF	SPF	SPF-S		
ர	131	88:0	80 6	69 9	68.4	59 7		
LONG	135	93.5	85 6	74.2	72.6	63 4		
5" [	162	108.8	99 6	86.4	84.5	73.8		
က်								
.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		
ω,					.,			

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

(3) - 16d NAILS (162" diam. x 3 5") WITH SPF SPECIES BOTTOM CHORD

For load duration increase of 1.15

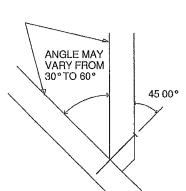
ANGLE MAY

VARY FROM

30° TO 60°

3 (nails) X 84 5 (lb/nail) X 1 15 (DOL) = 291 5 lb Maximum Capacity

45.00°



THIS DETAIL APPLICABLE TO THE THREE END DETAILS SHOWN BELOW

> VIEWS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY

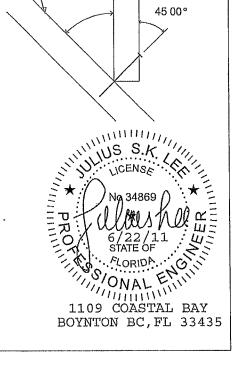
#### SIDE VIEW

ANGLE MAY

VARY FROM

30°TO 60°

3 NAILS NEAR SIDE A NEAR SIDE NEAR SIDE

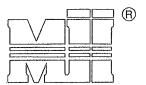


#### **FEBRUARY 14, 2012**

#### STANDARD PIGGYBACK TRUSS CONNECTION DETAIL

ST-PIGGY-7-10

MITek Industries, Chesterfield, MO

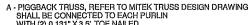


MITek Industries, Inc.

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 AND GRADE TO MATCH TOP CHORD OF PIGGYBACK TRUSS, ATTACHED TO ONE FACE, CENTERED ON INTERSECTION, WITH (2) ROWS OF 0.131" X 3" NAILS @ 4 O.C. SCAB MAY BE OMITTED PROVIDED THE TOP CHORD SHEATHING IS CONTINUOUS OVER INTERSECTION AT LEAST 1 FT IN BOTH DIRECTIONS AND DIRECTIONS AND

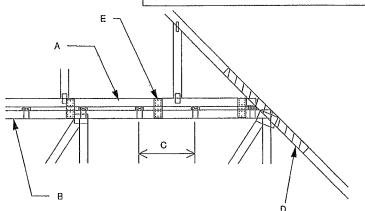
DIRECTIONS AND

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.

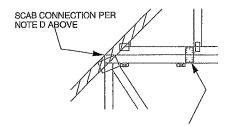
- FOR WIND SPEEDS BETWEEN 126 AND 160 MPH, ATTACH
MITEK 3X8 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT
72° O.C W (4) 0 131 X 1.5° PER MEMBER. STAGGER NAILS FROM
OPPOSING FACES ENSURE 0.5° EDGE DISTANCE.

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

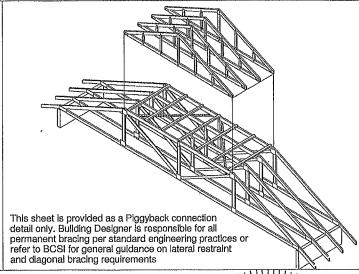


#### WHEN NO GAP BETWEEN PIGGYBACK AND BASE TRUSS EXISTS

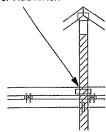
REPLACE TOE NAILING OF PIGGYBACK TRUSS TO PURLINS WITH Nail-ON PLATES AS SHOWN, AND INSTALL PURLINS TO BOTTOM EDGE OF BASE TRUSS TOP CHORD AT SPECIFIED SPACING SHOWN ON BASE TRUSS MITEK DESIGN DRAWING



FOR ALL WIND SPEEDS, ATTACH MITEK 3X6 20 GA Nail-On PLATES TO EACH FACE OF TRUSSES AT 48" O C W/ (4) 0.131" X 1 5" PER MEMBER. STAGGER NAILS FROM OPPOSING FACES ENSURE 0 5 EDGE DISTANCE.



VERTICAL WEB TO EXTEND THROUGH BOTTOM CHORD OF PIGGYBACK



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

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

AS SHOWN IN DETRIC.

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.)

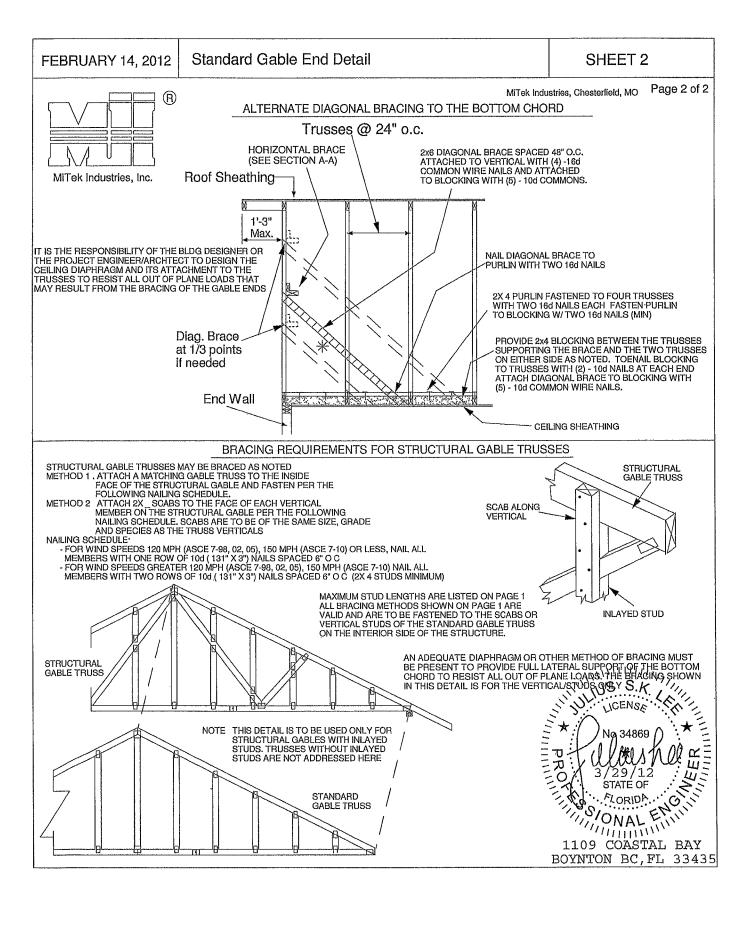
VERTICAL WEBS OF PIGGYBACK AND BASE TRUSS., (MINIMUM 2X4)
THIS CONNECTION IS ONLY VALID FOR A MAXIMUM
CONCENTRATED LOAD OF 4000 LBS (@1 15). REVIEW
BY A QUALIFIED ENGINEER IS REQUIRED FOR LOADS
GREATER THAN 4000 LBS
CARRESTED FOR LOADS
CARRESTED

GREATER THAN 4000 LBS
FOR PIGGYBACK TRUSSES CARRYING GIRDER LOADS,
NUMBER OF PLYS OF PIGGYBACK TRUSS TO MATCH BASE TRUSS.
CONCENTRATED LOAD MUST BE APPLIED TO BOTH
THE PIGGYBACK AND THE BASE TRUSS DESIGN

No 34869

No 348 ENG 1109 COASTAL BAY

BOYNTON BC, FL 33435



#### 6/12 - 4/12 PITCH =

