



Trussway Manufacturing Inc.  
 Engineering Department  
 9411 Alcorn St., Houston, TX 77093  
 (713) 691 6900  
 8850 Trussway Blvd., Orlando, FL 32824  
 (407) 857 2777

RE: 19874RF1 - 19874-Model 65C-DM

**Site Information:**

Project Customer: CC Devco Project Name: Model 65C  
 Lot/Block: Subdivision: Traditions  
 Address: ..  
 City: Naples State: FL

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

Name: Stephen R. Walsh License #: 33915  
 Address: P.O. Box 933  
 City: Boca Raton State: FL

**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: 170 mph Floor Load: N/A psf  
 Roof Load: 45.0 psf

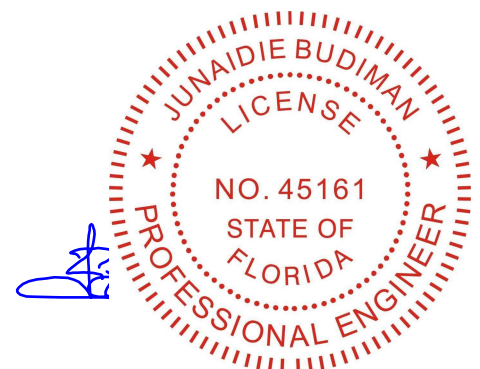
This package includes 2 individual, dated Truss Design Drawings and 0 Additional Drawings.  
 With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

No.	Seal#	Job ID#	Truss Name	Date
1	H2944898	19874RF1	J04	5/14/014
2	H2944899	19874RF1	J09	5/14/014

The truss drawing(s) referenced above have been prepared by Trussway Manufacturing, Inc. under my direct supervision based on the parameters provided by Trussway-Port St. Lucie.

Truss Design Engineer's Name: Budiman, Junaidie  
 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.



Junaidie Budiman, P.E.  
 Florida P.E. No. 45161  
 8850 Trussway Boulevard  
 Orlando, FL 32824

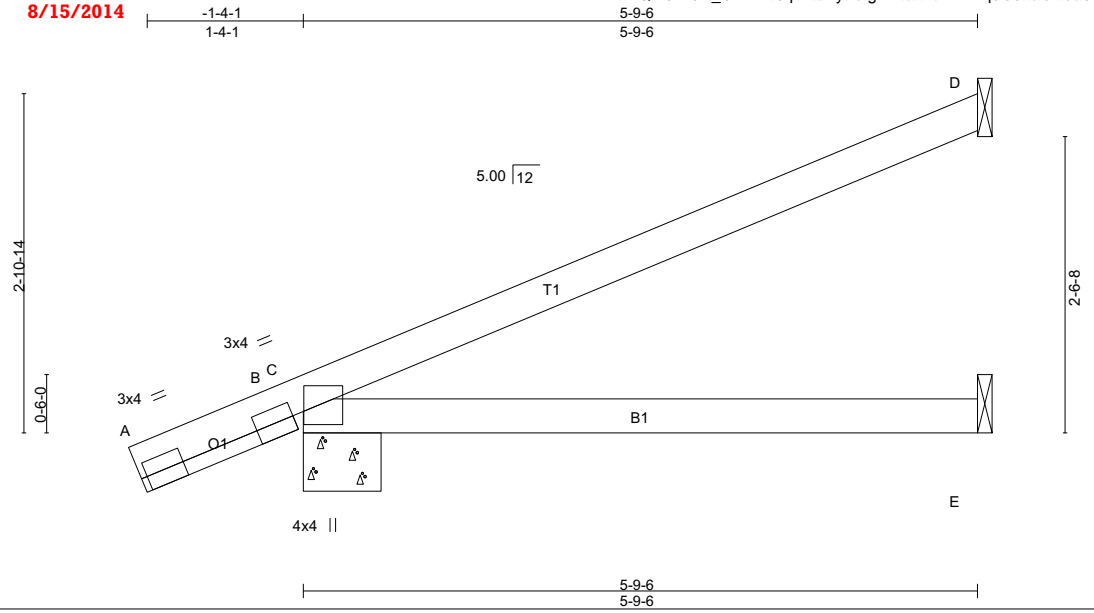
May 14, 2014

Build it!



Job 13674R1	Truss I04	Truss Type Jack-Open Truss	Qty 1	Ply 1	19874-Model 65C-DM	H2944898
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Trussway Manufacturing, Inc. Houston, TX 7.350 s Sep 27 2012 MiTek Industries, Inc. Wed May 14 14:07:46 2014 Page 1  
 Approved for Construction  
 PRBD20140720895 8/15/2014 ID:Qm8vx0ki\_C4K7krcqTxlBvyPulg-FzfarPbWWWVqdGJnaCviuaeZnp?NNU4GTO3AYA\_zGZJx



Scale = 1:19.7

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

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.62	Vert(LL) 0.11 E-H >635 240	MT20	244/190
TCDL 15.0	Lumber Increase 1.25	BC 0.42	Vert(TL) -0.18 E-H >377 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(TL) 0.02 D n/a n/a		
BCDL 10.0	Code FBC2010/TPI2007	(Matrix-M)		Weight: 21 lb	FT = 10%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 OTHERS 2x2 SP No.3

**BRACING**  
 TOP CHORD  
 Structural wood sheathing directly applied or 5-9-6 oc purlins.  
 BOT CHORD  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size)

D =	149/Mechanical
C =	323/0-8-0 (min. 0-1-8)
E =	69/Mechanical
Max Horz	
C =	269(LC 12)
Max Uplift	
D =	-225(LC 12)
C =	-252(LC 12)
E =	-11(LC 12)
Max Grav	
D =	173(LC 2)
C =	367(LC 2)
E =	109(LC 3)

- 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) Refer to girder(s) for truss to truss connections.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 225 lb uplift at joint D, 252 lb uplift at joint C and 11 lb uplift at joint E.
- 6) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
- 7) NOTE: Refer to the attached Trussway Notes, Appendices and T-1 sheet for more information.
- 8) NOTE: All truss and component designs utilize manufacturer published connector design values and rules-writing grading agency published lumber design values all in accordance with truss design software requirements and the applicable edition of ANSI/TPI 1. Where Southern Pine lumber is specified, Supplement No. 13 to the 2002 Standard Grading Rules for Southern Pine Lumber and its provisions and appendices shall apply.
- 9) NOTE: The design of this truss has accounted for the Section 903.3.1 (International Building Code (IBC)) and NFPA 13, NFPA 13R or NFPA 13D code compliance requirements for the 250-lb installer load plus water filled pipe (up to 50-lb) non-concurrent with other live loads.
- 10) NOTE: The seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD  
 A-B = 0/42      B-C = 0/41  
 C-D = -496/289  
 BOT CHORD  
 C-E = -224/223

**NOTES** (7-10)

1) Wind: ASCE 7-10; Vult=170mph (3-second gust)  
 Vasd=132mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Interior(1) zone; cantilever 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.

**LOAD CASE(S)**  
 Standard

**Junaidie Budiman, P.E.**  
 Florida P.E. No. 45161  
 8850 Trussway Boulevard  
 Orlando, FL 32824

May 14, 2014

**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, DSB-89 and BCSI1 Building Component Safety Information** available from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719.

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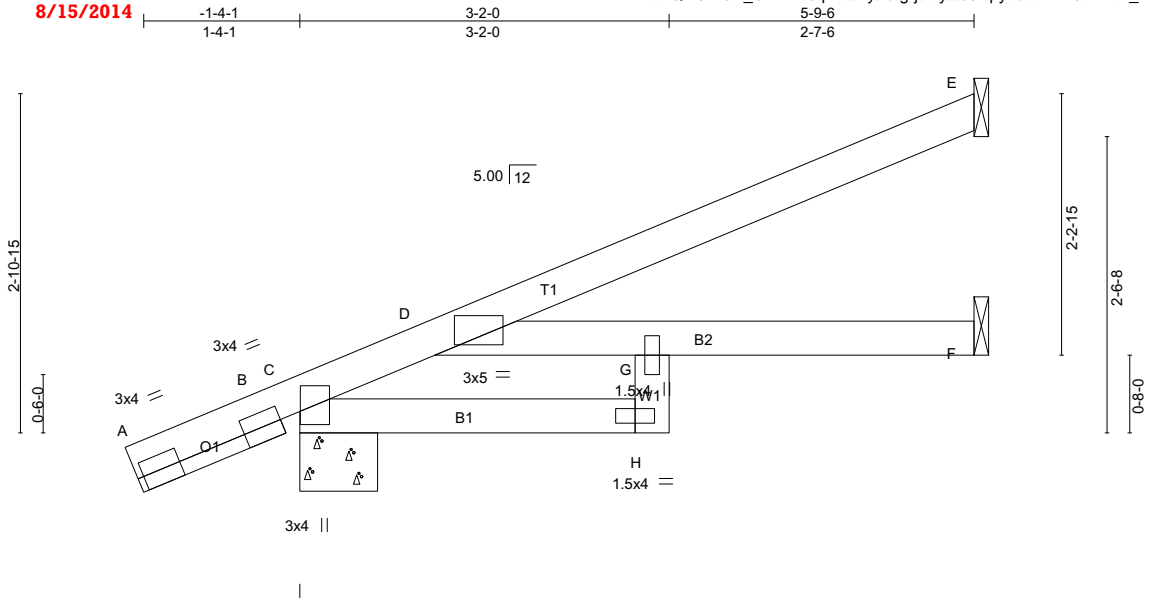
Build it!



Job 13674R1	Truss 100	Truss Type Jack-Open Truss	Qty 1	Ply 1	19874-Model 65C-DM	H2944899
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Trussway Manufacturing, Houston, TX  
 Approved for Construction  
 PRBD20140720895 8/15/2014

7.350 s Sep 27 2012 MiTek Industries, Inc. Wed May 14 14:07:47 2014 Page 1  
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Scale = 1:19.7

Plate Offsets (X,Y): [A:0-1-6,0-1-8], [D:0-7-0,0-1-1]

<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plates Increase 1.25	TC 0.50	Vert(LL) 0.08 G >904 240	MT20	244/190
TCDL 15.0	Lumber Increase 1.25	BC 0.30	Vert(TL) -0.12 H >566 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.03	Horz(TL) 0.04 F n/a n/a		
BCDL 10.0	Code FBC2010/TPI2007	(Matrix-M)		Weight: 25 lb	FT = 10%

**LUMBER**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3  
 OTHERS 2x2 SP No.3

**BRACING**  
 TOP CHORD  
 Structural wood sheathing directly applied or 4-10-15 oc purlins.  
 BOT CHORD  
 Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size)

E =	115/Mechanical
C =	399/0-8-0 (min. 0-1-8)
F =	64/Mechanical
Max Horz	
C =	269(LC 12)
Max Uplift	
E =	-164(LC 12)
C =	-290(LC 12)
F =	-14(LC 12)
Max Grav	
E =	132(LC 2)
C =	449(LC 2)
F =	97(LC 3)

**FORCES** (lb) - Maximum Compression/Maximum Tension

<b>TOP CHORD</b>	
A-B = 0/39	B-C = 0/40
C-D = -358/163	D-E = -1429/771
<b>BOT CHORD</b>	
C-H = -138/206	D-G = -1006/1688
F-G = 0/0	
<b>WEBS</b>	
G-H = -18/75	

- NOTES** (7-10)
- 1) Wind: ASCE 7-10; Vult=170mph (3-second gust) Vasd=132mph; TCDL=5.0psf; BCDL=5.0psf; h=25ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Interior(1) zone; cantilever 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) Refer to girder(s) for truss to truss connections.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 164 lb uplift at joint E, 290 lb uplift at joint C and 14 lb uplift at joint F.
  - 6) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.
  - 7) NOTE: Refer to the attached Trussway Notes, Appendices and T-1 sheet for more information.
  - 8) NOTE: All truss and component designs utilize manufacturer published connector design values and rules-writing grading agency published lumber design values all in accordance with truss design software requirements and the applicable edition of ANSI/TPI 1. Where Southern Pine lumber is specified, Supplement No. 13 to the 2002 Standard Grading Rules for Southern Pine Lumber and its provisions and appendices shall apply.
  - 9) NOTE: The design of this truss has accounted for the Section 903.3.1 (International Building Code (IBC)) and NFPA 13, NFPA 13R or NFPA 13D code compliance requirements for the 250-lb installer load plus water filled pipe (up to 50-lb) non-concurrent with other live loads.
  - 10) NOTE: The seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown.

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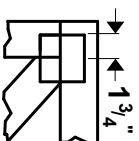
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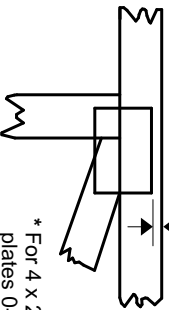


# Symbols

## PLATE LOCATION AND ORIENTATION



\* Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and securely seat.



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

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

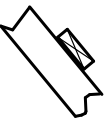
\* Plate location details available in **MITek 2020 software** or upon request.

## PLATE SIZE

4 X 4

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

## LATERAL BRACING



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/TP11: National Design Specification for Metal Plate Connected Wood Truss Construction.  
 DSI 8-8: Design Standard for Bracing.  
 BCS11: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

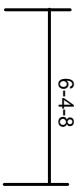


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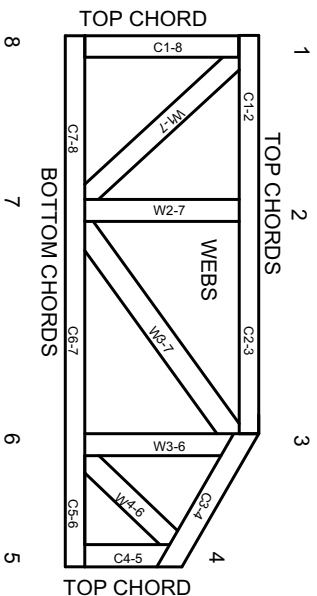
8/15/2014

PRBD20140720995

# Numbering System



dimensions shown in ft-in-sixteenths



**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.**

## CONNECTOR PLATE CODE APPROVALS

BOCA	96-31, 95-43, 96-20-1, 96-67, 84-32
ICBO	4922, 5243, 5363, 3907
SBCCI	9667, 9730, 9604B, 9511, 9432A



MITek Engineering Reference Sheet: MIL-7473



# 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. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
3. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
4. Cut members to bear tightly against each other.
5. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP11.
6. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP11.
7. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
8. Unless expressly noted, this design is not applicable for use with fire retardant or preservative treated lumber.
9. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
10. Plate type, size, orientation and location dimensions shown indicate minimum plating requirements.
11. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
12. Top chords must be sheathed or purlins provided at spacing shown on design.
13. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
14. Connections not shown are the responsibility of others.
15. Do not cut or alter truss member or plate without prior approval of a professional engineer.
16. Install and load vertically unless indicated otherwise.

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