

Harnett County

INSPECTOR: IVR

DATE 7/18/17

ADDRESS : 3334 BUFFALO LAKE RD
 CONTRACTOR : JSJ BUILDERS, INC.
 OWNER : SUTTON CRYSTAL S & DANNY L JR
 PARCEL : 03-9587-01- -0159- -04-
 APPL NUMBER: 17-50040768 CP NEW RESIDENTIAL (SFD)
 DIRECTIONS : T/S: 02/20/2017 11:03 AM JBROCK ----
 401 S TO 27 W L ONTO BUFFALO LAKE RD

SUBDIV: BUFFALO ESTATES
 PHONE : (910) 438-0796
 PHONE :

STRUCTURE: 000 000 54X53 4BDR SLAB W/ GARAGE & DECK

FLOOD ZONE : FLOOD ZONE X

BEDROOMS : 4000000.00

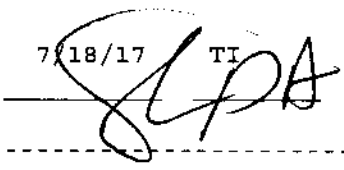
PROPOSED USE : SFD

SEPTIC - EXISTING? : NEW TANK

WATER SUPPLY : COUNTY

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
A814 01	3/31/17 3/31/17	SB AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 002952745 3334 BUFFALO LAKE RD SANFORD 27332 T/S: 03/31/2017 10:06 AM SBENNETT -----
B101 01	4/13/17 4/13/17	TSG AP	R*BLDG FOOTING / TEMP SVC POLE TIME: 17:00 VRU #: 002958312 T/S: 04/12/2017 11:29 AM JBROCK ----- T/S: 04/13/2017 03:38 PM DJOHNSON -----
B103 01	4/24/17 4/24/17	TSG DA	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 002963080 T/S: 04/21/2017 01:34 PM JBROCK ----- Found several areas in rear that do not have proper footing projection. Have engineer design a repair and verify other areas of foundation.
B103 02	5/12/17 5/12/17	TSG AP	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 002971182 T/S: 05/11/2017 08:04 AM JBROCK -----
P309 01	5/19/17 5/19/17	JH AP	R*PLUMB UNDER SLAB TIME: 17:00 VRU #: 002974764 T/S: 05/18/2017 11:50 AM JBROCK -----
B111 01	5/30/17 5/30/17	JLP DA	R*BLDG SLAB INSP/TEMP SVC POLE TIME: 17:00 VRU #: 002977155 T/S: 05/26/2017 08:15 AM JBROCK ----- T/S: 05/30/2017 04:02 PM JPERRY ----- Need Compaction letter for over 24" of fill under slab
B111 02	6/07/17 6/07/17	JLP AP	R*BLDG SLAB INSP/TEMP SVC POLE TIME: 17:00 VRU #: 002981132 T/S: 06/06/2017 10:18 AM JBROCK ----- jb has letter that goes with this inspection T/S: 06/07/2017 10:44 AM JPERRY -----
R425 01	7/18/17	TI	FOUR TRADE ROUGH IN TIME: 17:00 VRU #: 002998870 T/S: 07/17/2017 01:27 PM JBROCK -----



COMMENTS AND NOTES

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 1013138R
3338 Buffalo Lake Rd., Lee Co., NC

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by **Builders FirstSource (Albermarle,NC)**.

Pages or sheets covered by this seal: E10663603 thru E10663604

My license renewal date for the state of North Carolina is December 31, 2017.

North Carolina COA: C-0844

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



June 21, 2017

Strzyzewski, Marvin

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

Job 1013138R	Truss E01	Truss Type ATTIC	Qty 5	Ply 1	3338 Buffalo Lake Rd., Lee Co., NC	E 10863803
-----------------	--------------	---------------------	----------	----------	------------------------------------	------------

Builders FirstSource, Albemarle, NC 28001

Job Reference (optional)
7.840 * Apr 19 2016 Mittek Industries, Inc. Tue Jun 20 16:44:11 2017 Page 1
ID:0q8cflHobflgswJR?gdEpPycPwV-WyuuwN7dwF4vJEgU4FOFRR3rh1TzIzVzhUhY6oz4LRY

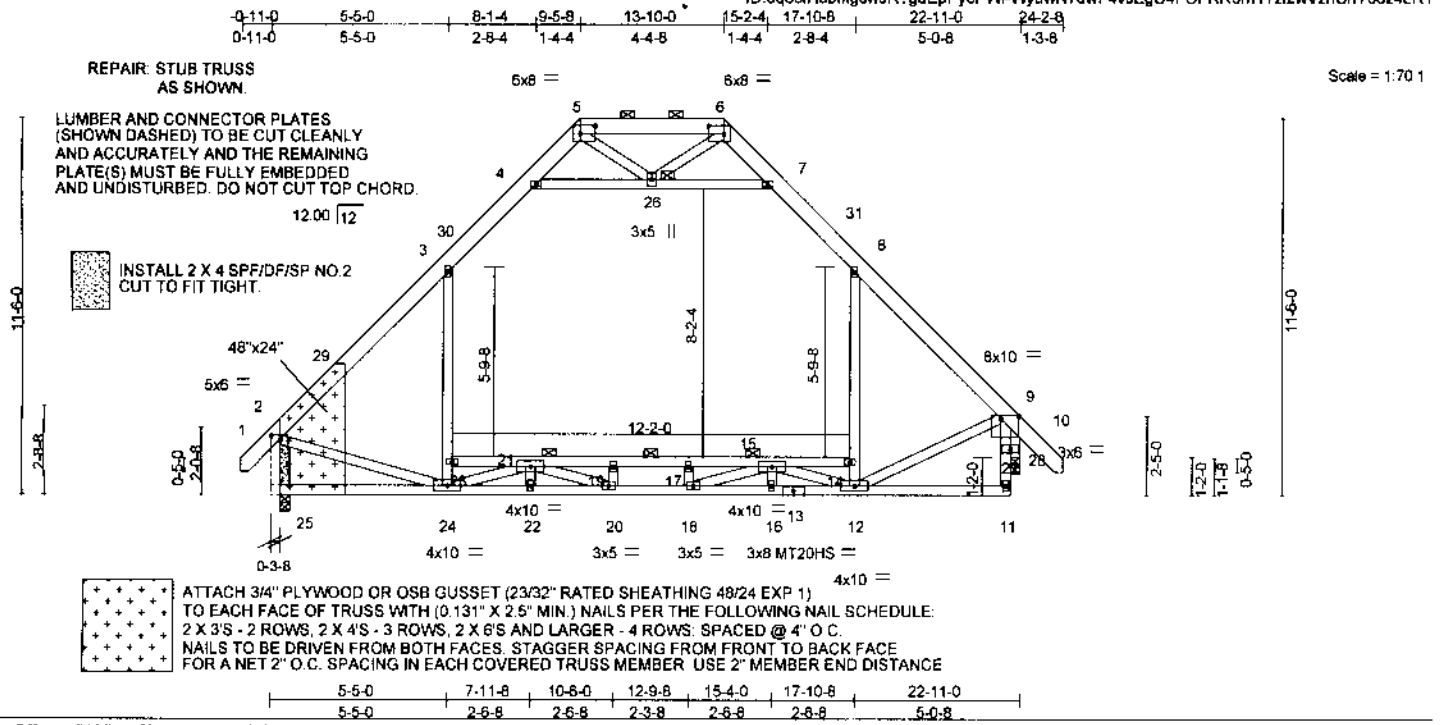
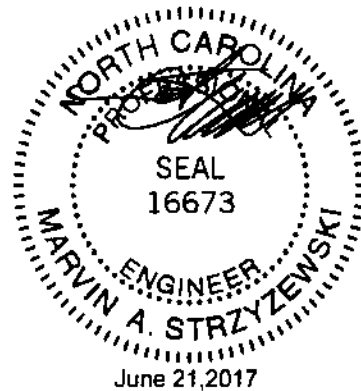


Plate Offsets (X,Y)--	[2,0-3-4,0-1-6]	[5,0-5-8,0-3-0]	[6,0-5-8,0-3-0]	[9,0-6-8,0-1-0]
-----------------------	-----------------	-----------------	-----------------	-----------------

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.96	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(LL) -0.22 17-19 >999 360	MT20HS	187/143
BCLL 0.0 *	Rep Stress Incr YES	WB 0.51	Vert(TL) -0.49 19 >559 240		
BCDL 10.0	Code IRC2009/TPI2007	(Matrix-M)	Horz(TL) 0.08 28 n/a n/a		
			Wind(LL) 0.23 24 >999 240	Weight: 209 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 5-6.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 3-8-0 oc bracing: 14-23
WEBS 2x4 SP No.3 *Except* 3-24,8-12,4-7,2-25,9-11: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 28
OTHERS 2x4 SP No.2	
REACTIONS (lb/size) 25=1266/0-3-8, 28=1295/0-3-8 Max Horz 25=-311(LC 10) Max Grav 25=1511(LC 2), 28=1548(LC 2)	
FORCES (lb) - Maximum Compression/Maximum Tension	
TOP CHORD 1-2=0/40, 2-29=-1643/0, 3-29=-1477/0, 3-30=-1077/96, 4-30=-986/126, 4-5=-157/217, 5-6=0/363, 6-7=-162/221, 7-31=-1001/124, 8-31=-1092/97, 8-9=-1608/0, 9-10=0/68, 2-25=-1683/0, 11-27=-19/80, 9-27=-19/80	
BOT CHORD 24-25=-284/424, 22-24=0/2618, 20-22=0/2618, 18-20=0/3363, 16-18=0/2384, 13-16=0/2384, 12-13=0/2384, 11-12=0/335, 21-23=-211/177, 19-21=-2598/0, 17-19=-2598/0, 15-17=-2598/0, 14-15=-162/226	
WEBS 23-24=0/507, 3-23=0/695, 12-14=0/480, 8-14=0/668, 4-26=-1473/78, 7-26=-1506/71, 2-24=0/868, 9-12=0/785, 5-26=-95/152, 6-26=-86/171, 17-18=-264/0, 19-20=-250/0, 21-22=-79/124, 21-24=-1829/0, 20-21=-30/931, 15-16=-119/110, 15-18=-18/1109, 12-15=-1805/0	

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCLL=6.0psf; BCDL=8.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-8-10 to 2-2-6, Interior(1) 2-2-6 to 8-5-8, Exterior(2) 8-5-8 to 13-10-0, Interior(1) 17-10-11 to 24-1-2 zone; cantilever left and right exposed; 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 basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - Ceiling dead load (5.0 psf) on member(s). 3-4, 7-8, 4-26, 7-26; Wall dead load (5.0psf) on member(s).3-23, 8-14
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 21-23, 19-21, 17-19, 15-17, 14-15
 - Bearing at joint(s) 28 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic room checked for L/360 deflection.



Job 101313BR	Truss E02	Truss Type ATTIC	Qty 3	Ply 1	3338 Buffalo Lake Rd., Lee Co., NC	E10663604
-----------------	--------------	---------------------	----------	----------	------------------------------------	-----------

Builders FirstSource, Albemarle, NC 28001
 Job Reference (optional)
 7.640 a Apr 19 2018 Mitak Industries, Inc Tue Jun 20 16 44:12 2017 Page 1
 ID:OqBcfHobflqswJR?gdEpPycPwM_-8SibTeY001Arq3Gp5mgzHNtes!7nMK6v8R5fEz4LRX

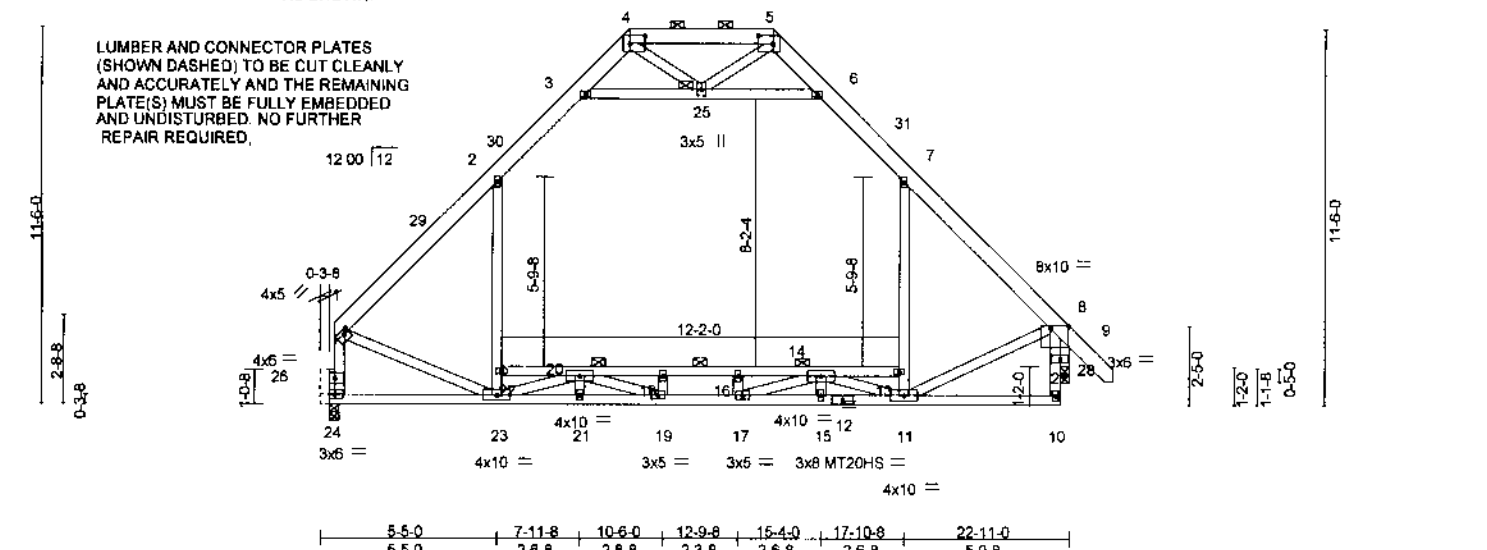
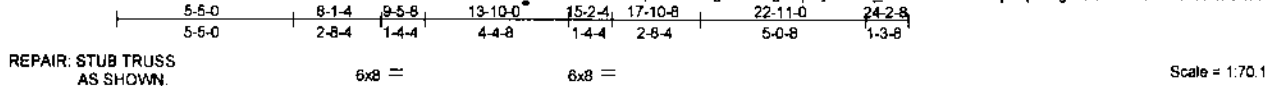


Plate Offsets (X,Y)- [1:0-1-12,0-1-8], [4:0-5-8,0-3-0], [5:0-5-8,0-3-0], [8:0-6-8,0-1-0]

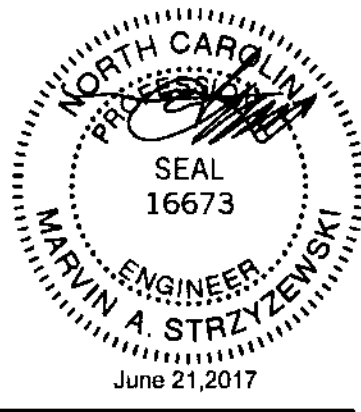
LOADING (psf)	SPACING-	CS.I.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.91	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.21 16-18 >999 360	MT20HS	187/143
BCLL 0.0 *	Lumber DOL 1.15	WB 0.47	Vert(TL) -0.46 16-18 >581 240		
BCDL 10.0	Rep Stress Incr YES	(Matrix-M)	Horz(TL) 0.07 28 n/a n/a		
	Code IRC2009/TPI2007		Wind(LL) 0.21 23 >999 240		
				Weight: 207 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 4-5.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:
WEBS 2x4 SP No.3 *Except* 2-23,7-11,3-6,1-24,8-10: 2x4 SP No.2	3-8-0 oc bracing: 13-22
OTHERS 2x6 SP No.2 *Except* 8-27: 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 25

REACTIONS. (lb/size) 24=1188/0-3-8, 28=1284/0-3-8
 Max Horz 24=301(LC 10)
 Max Gray 24=1450(LC 2), 28=1535(LC 2)

FORCES. (lb) - Maximum Compression/Maximum Tension
 TOP CHORD 1-29=-1592/0, 2-29=-1439/0, 2-30=-1064/98, 3-30=-972/125, 3-4=-1677/205, 4-5=0/344, 5-6=-171/207, 6-31=-980/125, 7-31=-1072/97, 7-8=-1585/0, 8-9=0/68, 24-26=-1640/0, 1-26=-1823/0, 10-27=-18/83, 8-27=-18/83
 BOT CHORD 23-24=-218/455, 21-23=0/2550, 19-21=0/2550, 17-19=0/3340, 15-17=0/2400, 12-15=0/2400, 11-12=0/2400, 10-11=0/339, 20-22=-199/179, 18-20=-2593/0, 16-18=-2593/0, 14-16=-2593/0, 13-14=-164/206
 WEBS 22-23=0/485, 2-22=0/673, 11-13=0/475, 7-13=0/663, 3-25=-1428/77, 6-25=-1446/68, 1-23=0/758, 8-11=0/763, 4-25=-83/156, 5-25=-87/167, 16-17=-259/0, 18-19=-259/0, 20-21=-83/118, 19-20=-23/975, 20-23=-1815/0, 14-15=-101/117, 14-17=-23/1061, 11-14=-1813/0

- NOTES-
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=8.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) interior zone and C-C Exterior(2) 0-7-4 to 3-7-4, Interior(1) 3-7-4 to 9-5-8, Exterior(2) 9-5-8 to 13-10-0, Interior(1) 17-10-11 to 24-1-2 zone; cantilever left and right exposed; 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 basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - 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.
 - Ceiling dead load (5.0 psf) on member(s). 2-3, 6-7, 3-25, 6-25; Wall dead load (5.0psf) on member(s) 2-22, 7-13
 - Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 20-22, 18-20, 16-18, 14-16, 13-14
 - Bearing at joint(s) 28 considers parallel to grain value using ANSITPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
 - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
 - Attic rafter checked for L/360 deflection.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MTEK REFERENCE PAGE MII-7473 rev. 10/03/2013 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, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-88 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A Mitek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 101313BR	Truss E02	Truss Type ATTIC	Qty 3	Ply 1	3338 Buffalo Lake Rd., Lee Co., NC E10663604 Job Reference (optional)
-----------------	--------------	---------------------	----------	----------	---

Builders FirstSource, Albemarle, NC 28001

7.640 s Apr 19 2016 MiTek Industries, Inc. Tue Jun 20 16:44:12 2017 Page 2
ID:0q8cflHobflgswJR?gdEpPycPVM-_BSibTeY001Arq3Gp5mgzHNteel7nMK6v8R5fEz4LRX

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2018 BEFORE USE.

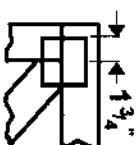
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TP1 Quality Criteria, DSB-88 and BCSI Building Component Safety information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Alliance

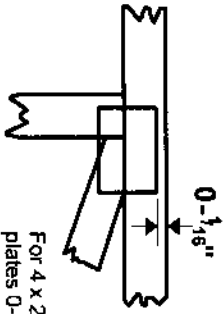
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

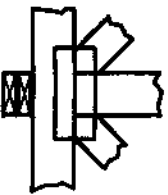
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

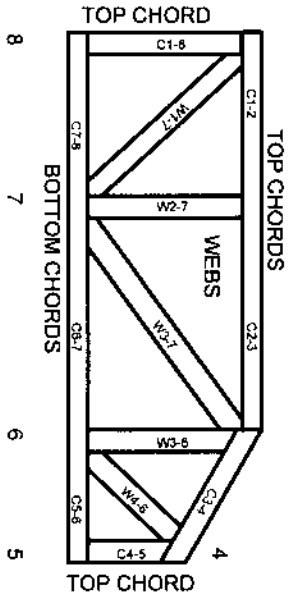
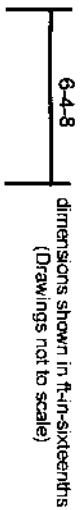


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

- ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.
- DSB-89: Design Standard for Bracing.
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

Lumber design values are in accordance with ANSI/TP1 section 6.3. These truss designs rely on lumber values established by others.

© 2012 MITek® All Rights Reserved



MITek Engineering Reference Sheet: MIL-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor-I bracing should be considered.
- Never exceed the design loading shown and never slack 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.
- Place plates on each face of truss at each joint and embed fully. Knots and ware at joint locations are regulated by ANSI/TP1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 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 purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TP1 Quality Criteria.