

-----  
ADDRESS . . : 81 FOLLY CT SUBDIV: SWEETWATER 71LOTS  
CONTRACTOR : ATLANTIC CONSTRUCTION PHONE : (910) 938-9053  
OWNER . . : DIVERSIFIELD INVESTORS INC PHONE :  
PARCEL . . : 01-0544- - -0004- -59-  
APPL NUMBER: 17-50041034 CP NEW RESIDENTIAL (SFD)  
DIRECTIONS : T/S: 03/27/2017 09:25 AM DJOHNSON --  
SWEETWATER LOT 51  
T/S: 03/27/2017 09:36 AM DJOHNSON --  
-----

**STRUCTURE: 000 000 53X40 3BD 2BA SLAB W/GARAGE**

FLOOD ZONE . . . . : FLOOD ZONE X  
# BEDROOMS . . . . . : 3.00 PROPOSED USE . . . . . : SFD  
SEPTIC - EXISTING? . . . . : NEW WATER SUPPLY . . . . . : COUNTY  
-----

**PERMIT: CPSF 00 CP \* SFD**

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
A814 01	10/06/17 10/06/17	SB AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 003034832 81 FOLLY CT LINDEN 28356 T/S: 10/06/2017 10:04 AM SBENNETT -----
B101 01	10/06/17 10/06/17	JH AP	R*BLDG FOOTING / TEMP SVC POLE TIME: 17:00 VRU #: 003034840 T/S: 10/05/2017 10:28 AM LLUCAS -----
B103 01	10/11/17 10/11/17	JH AP	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 003036720 T/S: 10/10/2017 08:17 AM LLUCAS -----
P309 01	10/18/17 10/18/17	JH AP	R*PLUMB UNDER SLAB TIME: 17:00 VRU #: 003040284 T/S: 10/17/2017 09:57 AM BPETRICH -----
B111 01	10/24/17 10/24/17	JH AP	R*BLDG SLAB INSP/TEMP SVC POLE TIME: 17:00 VRU #: 003042827 T/S: 10/23/2017 09:38 AM LLUCAS -----
R425 01	11/22/17 11/22/17	JH CA	FOUR TRADE ROUGH IN TIME: 17:00 VRU #: 003056710 T/S: 11/21/2017 09:09 AM BPETRICH ----- PER LEE -----
R425 02	11/28/17 11/28/17	TSG DA	FOUR TRADE ROUGH IN TIME: 17:00 VRU #: 003057791 T/S: 11/27/2017 08:07 AM LLUCAS ----- 1-ANCHOR BOLTS REQUIRED EACH SIDE OF GARAGE/HOUSE ENTRY DOOR AND REAR DOOR. 2-SEVERAL D01 CUT AND BROKEN IN MASTER BEDROOM 3-ANCHOR TOILET FLANGE IN MASTER BATH. 4-TEST IN MASTER SHOWER PAN. 5-HEAD TEST DOWN. 6-SEVERAL A02 TRUSS HAVE HAD THE HEELS CUT OFF. 7-RIGHT REAR GABLE END TRUSS HEEL CUT OFF. OK TO SIDE DO NOT INSULATE
B104 01	11/30/17 11/30/17	BP AP	R*FOUND & SETBACK VERIF SURVEY TIME: 17:00 VRU #: 003059946 T/S: 11/30/2017 10:45 AM BPETRICH ----- T/S: 11/30/2017 10:45 AM BPETRICH -----
R425 03	12/05/17 <i>12-517</i>	TI <i>ap JH</i>	FOUR TRADE ROUGH IN TIME: 17:00 VRU #: 003061959 T/S: 12/04/2017 12:56 PM LLUCAS ----- <i>Item #3</i>
----- COMMENTS AND NOTES -----			

**Trenco**  
818 Soundside Rd  
Edenton, NC 27932

Re: 1238306  
Atlantic Const.JAX. Christian Plan

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-Loris.

Pages or sheets covered by this seal: I31771114 thru I31771115

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

North Carolina COA: C-0844



November 30, 2017

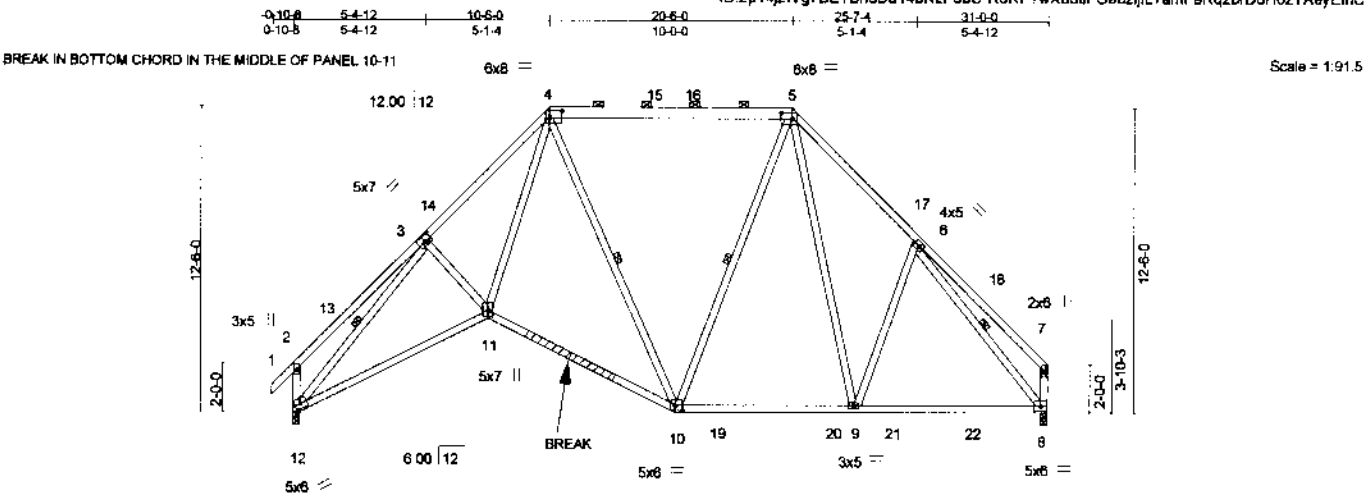
Komnick, Chad

**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job 1238306	Truss D01	Truss Type Piggyback Base	Qty 6	Ply 1	Atlantic Const. JAX. Christian Plan 2 UNITS YF	131771114 1 OF 2
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Builders FirstSource, Loris, SC 29569

7.640 s Aug 16 2017 MiTek Industries, Inc. Wed Nov 29 13:55:29 2017 Page 1  
ID:2p14j2IVg7BETBnuDa14bNzP6bU-R3RP?wXudtIFoebzjlL7amFaRq2brD0H0zYAeyElnc



**APPLY 2 X 4 X 4" SPF/DF/SP NO.2 SCAB(S) TO EACH FACE OF TRUSS CENTERED ON BREAK. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 ROWS SPACED @ 4" O.C. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 2" O.C SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.**

Plate Offsets (X,Y) -	(3:0-3:4,0-3:0), (4:0-6-1,0-3:0), (5:0-5-8,0-3:0), (10:0-4-0,0-2-8), (12:0-2-11,0-2-8)
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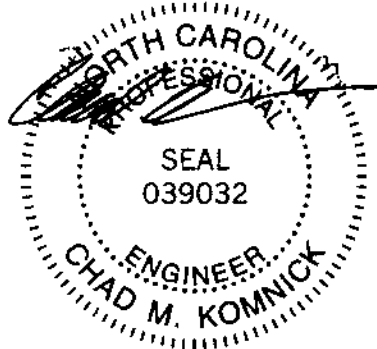
<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.84	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.72	Vert(LL) -0.15 10-11 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.81	Vert(TL) -0.43 10-11 >867 240		
BCDL 10.0	Rep Stress Incr YES	(Matrix-M)	Horz(TL) 0.19 8 n/a n/a		
	Code IRC2009/TP12007		Wind(LL) 0.10 11 >999 240		
				Weight: 234 lb	FT = 20%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.2 "Except" 4-5: 2x6 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-2-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-8 max.): 4-5.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-6-1 oc bracing.
WEBS 2x4 SP No.2 "Except" 3-11,4-11,6-9,3-12,6-8: 2x4 SP No.3	WEBS 1 Row at midpt 4-10, 5-10, 3-12, 6-8

**REACTIONS.** (lb/size) 12=1291/0-3-8, 8=1227/0-3-8  
Max Horz 12=481(LC 9)  
Max Uplift 12=357(LC 12), 8=295(LC 13)  
Max Grav 12=1291(LC 1), 8=1248(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-13=-486/385, 3-13=-427/412, 3-14=-2409/705, 4-14=-2315/745, 4-15=-1126/488,  
15-18=-1126/488, 5-16=-1126/488, 5-17=-1623/628, 6-17=-1721/588, 6-18=-274/286,  
7-18=-382/263, 2-12=-568/449, 7-8=-399/282  
BOT CHORD 11-12=-768/1703, 10-11=-482/1128, 10-19=-195/807, 19-20=-195/807, 9-20=-195/807,  
9-21=-213/1021, 21-22=-213/1021, 8-22=-213/1021  
WEBS 3-11=-198/324, 4-11=-571/1530, 4-10=-484/439, 5-9=-255/590, 6-9=-326/378,  
3-12=-2134/375, 6-8=-1491/266

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 120mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 10-6-0, Exterior(2) 10-6-0 to 24-8-15, Interior(1) 24-8-15 to 30-10-4 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.
  - 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, with BCDL = 10.0psf.
  - Bearing at joint(s) 12 considers parallel to grain value using ANSIT/PI 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) 12=357, 8=295.
  - "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.
  - This manufactured truss 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.



November 30, 2017

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 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 ANSIT/PI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

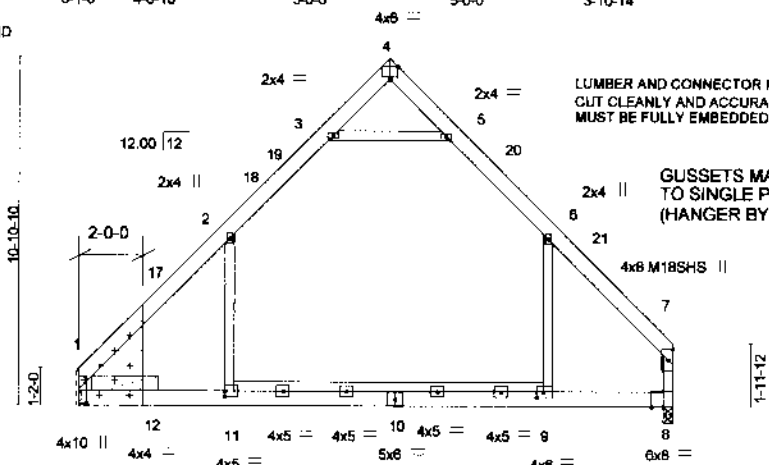
**TRENCO** ENGINEERING BY  
818 Soundside Road  
Edenton, NC 27932

Job 1238306	Truss A02	Truss Type Common	Qty 5	Ply 1	Atlantic Const. JAX. Christian Plan	131771115
Builders FirstSource, Loris, SC 29569					Job Reference (optional)	2 OF 2



STUB 1" FROM THE LEFT END

Scale = 1:69.8



ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/18 EXP 1) TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN) NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS. SPACED @ 4" O.C. NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

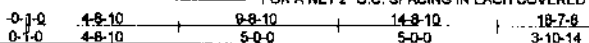


Plate Offsets (X,Y) - [1:0-5-10,0-3-0], [4:0-3-0,Edge], [8:0-4-8,0-0-0], [9:0-2-8,0-2-0], [11:0-0-0,0-2-0]

<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.83	in (loc) l/def L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.65	Vert(LL) -0.17 9-11 >999 360	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.33	Vert(TL) -0.36 9-11 >621 240		
BCDL 10.0	Rep Streas Incr YES	(Matrix-M)	Horz(TL) 0.06 1 n/a n/a		
	Code IRC2009/TPI2007		Wind(LL) 0.20 11 >999 240		
				Weight: 150 lb	FT = 20%

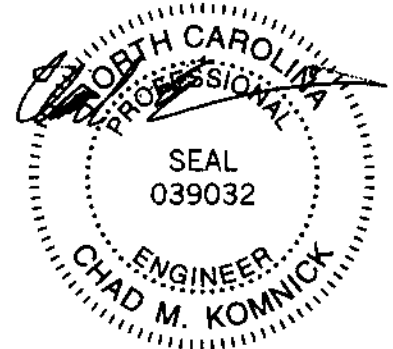
**LUMBER-**  
 TOP CHORD 2x6 SP No.2  
 BOT CHORD 2x6 SP No.2  
 WEBS 2x4 SP No.3 "Except"  
 7-8: 2x4 SP No.2  
 SLIDER Left 2x6 SP No.2 2-6-0

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-8-2 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-8-7 oc bracing.

**REACTIONS.** (lb/size) 1=739/Mechanical, 8=739/0-3-8  
 Max Horz 1=382(LC 11)  
 Max Uplift 1=195(LC 12), 8=189(LC 13)  
 Max Grav 1=814(LC 22), 8=841(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-17=-1095/209, 2-17=-958/220, 2-18=-755/272, 18-19=-710/286, 3-19=-662/294,  
 5-20=-886/295, 6-20=-781/287, 6-21=-991/204, 7-21=-1110/196, 7-8=-1018/226  
 BOT CHORD 1-12=-505/877, 11-12=-107/583, 10-11=-107/584, 9-10=-107/584, 8-9=-107/583  
 WEBS 2-11=-64/370, 6-9=-54/387, 3-5=-1104/496

- NOTES-** (11)
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-05; 120mph; TC DL=8.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-1-0 to 3-1-0, Interior(1) 3-1-0 to 9-9-10, Exterior(2) 9-9-10 to 12-9-10 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.
  - All plates are MT20 plates 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Bearing at joint(s) 8 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 195 lb uplift at joint 1 and 189 lb uplift at joint 8.
  - "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
  - This manufactured truss 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.

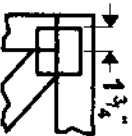


**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/03/2015 BEFORE USE.**  
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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/TPI1 Quality Criteria, Q58-89 and BCS1 Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

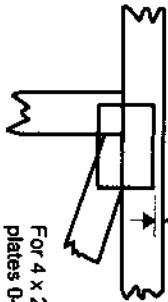
ENGINEERING BY  
**TRENCO**  
 A KVA-PARTNER  
 818 Soundside Road  
 Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless X, Y offsets are indicated. Dimensions are in 1/16-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

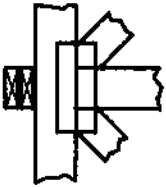
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING

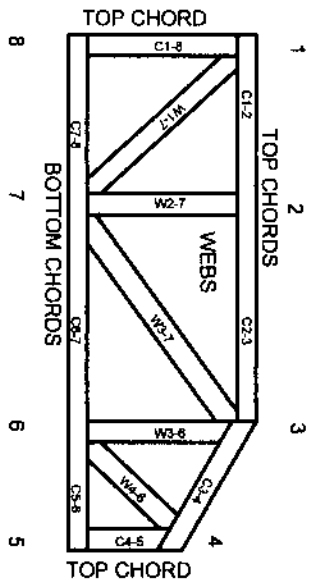
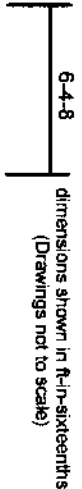


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## 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.

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Mitek Engineering Reference Street: MIL-7473 rev. 10/03/2015

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Top L 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 warps at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in record with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum pisting 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 stretched 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 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/TP1 1 Quality Criteria.

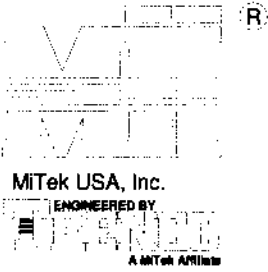
AUGUST 1, 2016

# OVERHANG REMOVAL DETAIL

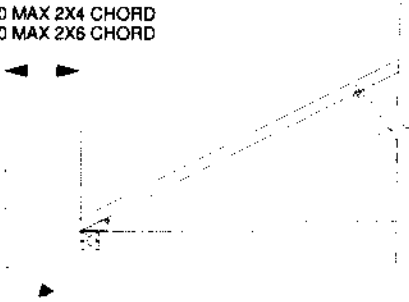
MII - REMOVE OVERHANG

MiTek USA, Inc.

Page 1 of 1

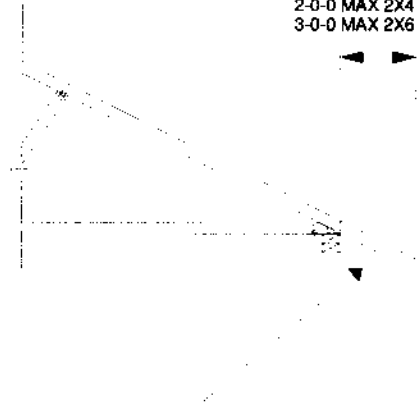


2-0-0 MAX 2X4 CHORD  
3-0-0 MAX 2X6 CHORD



MAIN BODY OF TRUSS

2-0-0 MAX 2X4 CHORD  
3-0-0 MAX 2X6 CHORD



OVERHANG MAY BE REMOVED  
PROVIDED PLATES ARE NOT DAMAGED.

## NOTES:

- 1) FOR LUMBER SIZE AND GRADE, AND FOR PLATES TYPE AND SIZE AT EACH JOINT REFER TO MAIN TRUSS ENGINEERING DESIGN.
- 2) LOADING: SEE MAIN TRUSS ENGINEERING DESIGN.