



Trenco

818 Soundside Rd Edenton, NC 27932

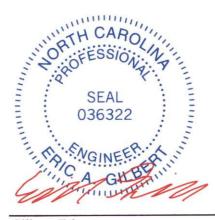
Re: J1018-4625 Watkins Job

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: E12282501 thru E12282502

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844



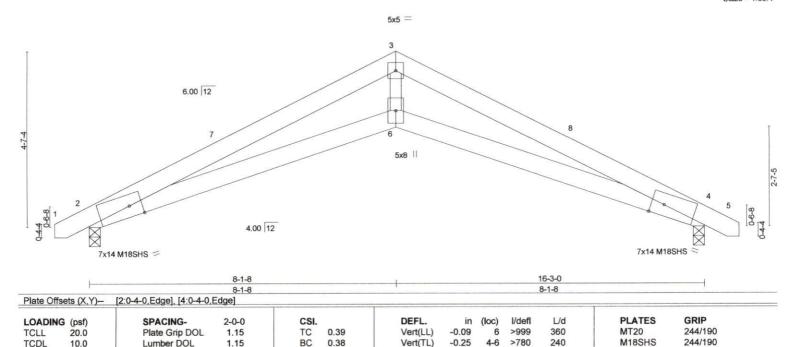
October 5,2018

Gilbert, Eric

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.

Watkins Job Job Truss Truss Type Qty Ph E12282501 .11018-4625 SCISSORS 1 A1 Job Reference (optional) 8.130 s Mar 11 2018 MiTek Industries, Inc. Thu Oct 4 15:25:14 2018 Page 1 Fayetteville, NC 28309 Comtech, Inc., ID:P0ebdEWpi?hno9GCK7TcUnyWloc-gYLCrDEqGaTTiUU8j8QtLVJF1Y9e2LdbNepKehyWlbJ 17-2-0 -0-11-0 8-1-8 16-3-0 0-11-0 8-1-8 8-1-8 0-11-0

Scale = 1:30.4



Horz(TL)

Wind(LL)

BRACING-

TOP CHORD

BOT CHORD

4-6

4-6 >817

n/a

n/a

240

Structural wood sheathing directly applied or 4-9-6 oc purlins.

Rigid ceiling directly applied or 5-0-14 oc bracing.

0.20

0.23

LUMBER-

TCDL

BCLL

BCDL

TOP CHORD 2x6 SP No.1 2x6 SP No.1 **BOT CHORD**

10.0

10.0

0.0

2x4 SP No.3 WEBS

(lb/size) 2=693/0-3-8, 4=693/0-3-8 REACTIONS.

Max Horz 2=60(LC 7)

Max Uplift 2=-271(LC 7), 4=-271(LC 8)

Lumber DOL

Rep Stress Incr

Code IRC2009/TPI2007

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

TOP CHORD 2-3=-2141/2287, 3-4=-2134/2267

BOT CHORD 2-6=-1911/1926, 4-6=-1902/1918

3-6=-1782/1384 WEBS

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 8-1-8, Exterior(2) 8-1-8 to 12-6-5 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.57

- 3) All plates are MT20 plates unless otherwise indicated.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

1.15

YES

- 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 6) Bearing at joint(s) 2, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (it=lb) 2=271, 4=271.



FT = 20%

Weight: 90 lb

🛕 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-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, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Q	ty	Ply	Watkins Job		E12282502
J1018-4625	A1GE	GABLE	1		1	Job Reference (option	al)	£12202302
	Fayetteville, NC 28309		ID:P0eb			ar 11 2018 MiTek Indust K7TcUnyWloc-8kva2ZE	tries, Inc. Thu Oct 4	YyaMnvLlclYuB7yWbl
-0-11-0		8-1-8				16-3-0 8-1-8		17-2-0 0-11-0
INST. SPEC BY TI	ICC CODES (IRC/IBC), TPI 1 AND BOTTOM CHORD GABLE TRUSS ALLED ADJACENT TO SCISSOR T JAL. OUT OF PLANE WALL BRACI HE ENGINEER OF RECORD.	RUSSES UNLESS	5x5 =		2x4			Scale = 1:30.4
47-4 1 26-8 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3x4 =	10 2x4 4.00 12	5x8	8 2x4			6	3x4 =
<u></u>	T	8-1-8 8-1-8				16-3-0 8-1-8		
TCLL 20.0 TCDL 10.0 BCLL 0.0 *	Plate Grip DOL Lumber DOL	2-0-0 CSI. 1.15 TC 0.15 1.15 BC 0.10 YES WB 0.10	Vert(LL) Vert(TL) Horz(TL)	0.01 0.01 0.00	7 7	l/defl L/d n/r 120 n/r 120 n/a n/a	PLATES MT20	GRIP 244/190

LUMBER-

BCDL

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 OTHERS 2x4 SP No.3

10.0

BRACING-

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

Weight: 92 lb

FT = 20%

Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 16-3-0.

(lb) - Max Horz 2=68(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 2 except 9=-177(LC 1), 6=-122(LC 8), 10=-221(LC 7), 8=-219(LC 8)

Matrix-S

Max Grav All reactions 250 lb or less at joint(s) 2, 9, 6 except 10=540(LC 1), 8=539(LC 1)

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

Code IRC2009/TPI2007

WEBS

3-10=-378/320, 5-8=-378/320

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) zone; porch left and right exposed; 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.
- Gable requires continuous bottom chord bearing.
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=177, 6=122, 10=221, 8=219.
- 9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 10, 8.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-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 property 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

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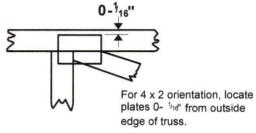
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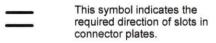
Symbols

PLATE LOCATION AND ORIENTATION



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





* 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:

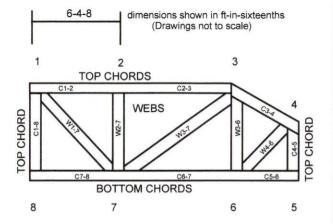
ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

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/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, 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/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-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 Tor I 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.
- 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.
- 7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 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 plating requirements.
- 12. Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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/TPI 1 Quality Criteria.