

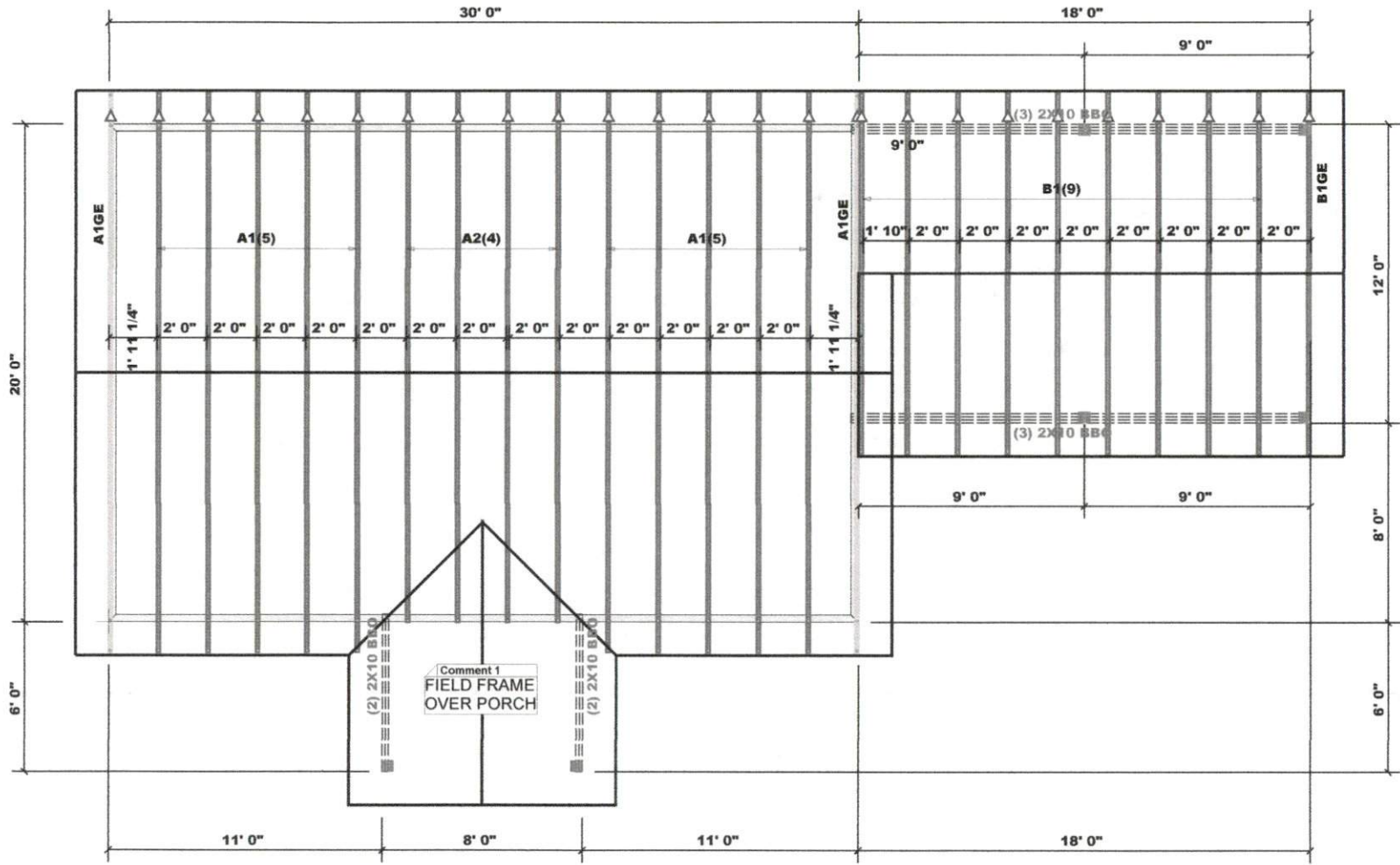
Roofing trussline runs that are equal to 1500lb are allowed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum trussline size and number of roof studs required to support trusses greater than 10ft but not greater than 1500lb. A registered design professional shall be retained to design the support system for any trussline that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all trusslines that exceed 1500lb.

Signature: Bob Lewis
 Bob Lewis

LOAD CHART FOR JACK STUDS

TABLE OF TRUSS REACTS TO BE SUPPORTED BY JACK STUDS

TRUSS REACT (LBS)	NO. OF JACK STUDS	SPACING (IN)	NO. OF JACK STUDS	SPACING (IN)
1700	1	2550	1	3400
3400	2	5100	2	6800
5100	3	7650	3	10200
6800	4	10200	4	13600
8500	5	12750	5	17000
10200	6	15300	6	
11900	7			
13600	8			
15300	9			

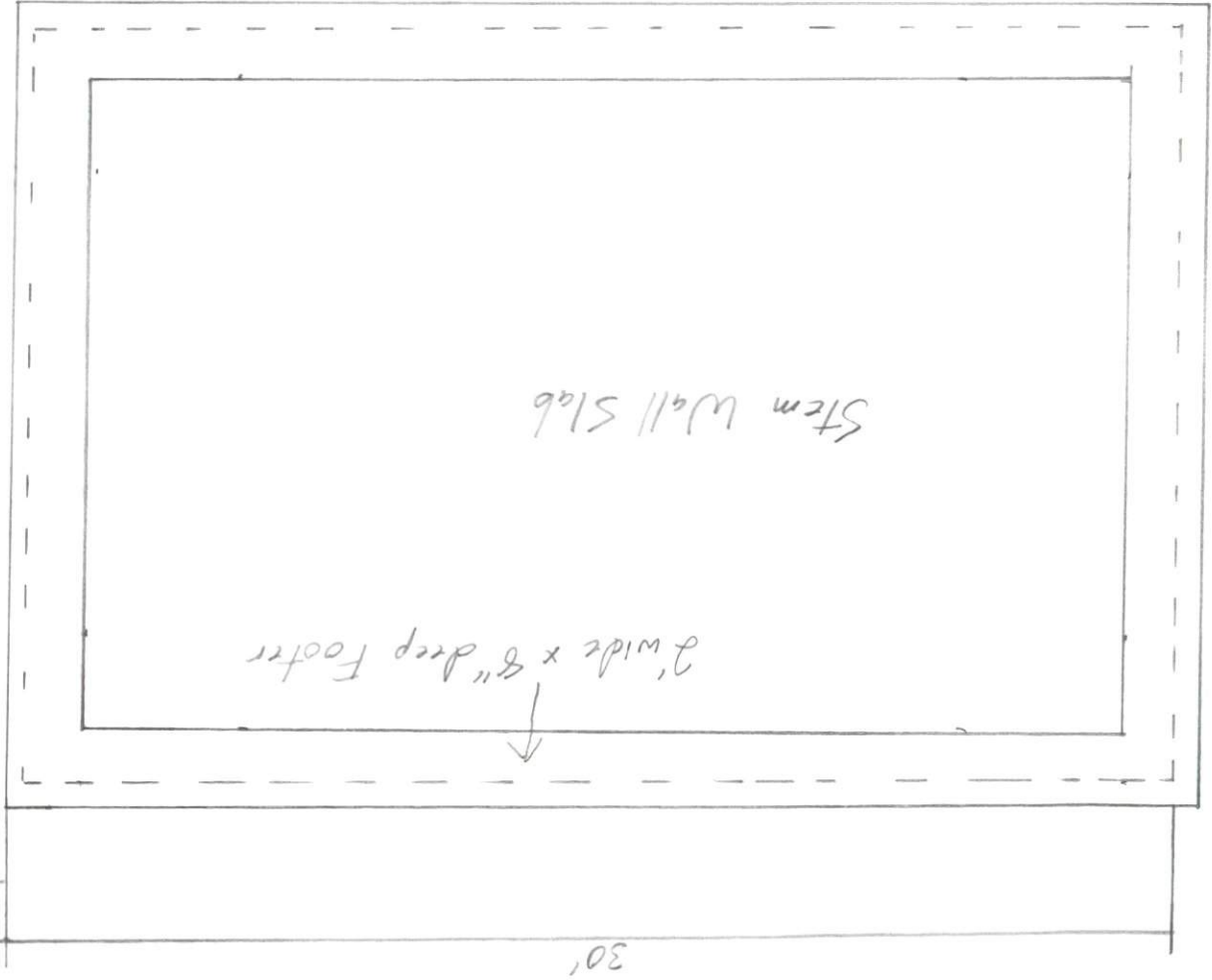
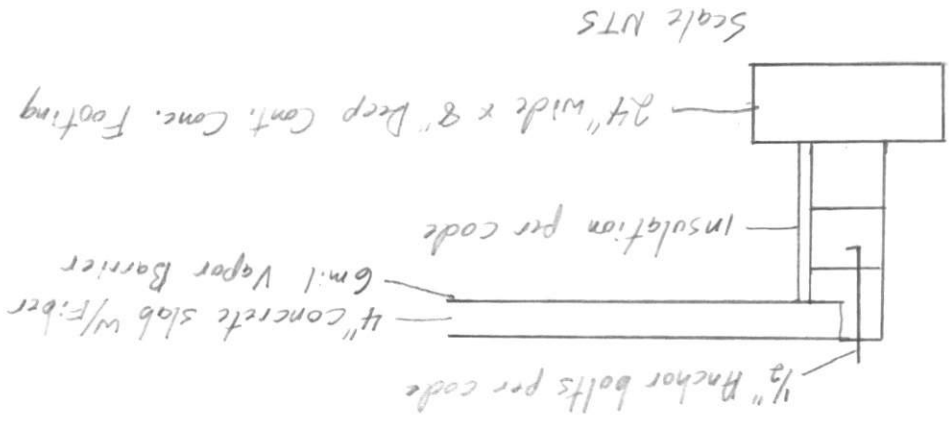
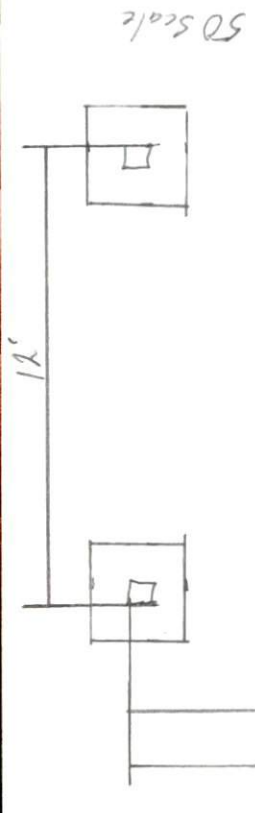


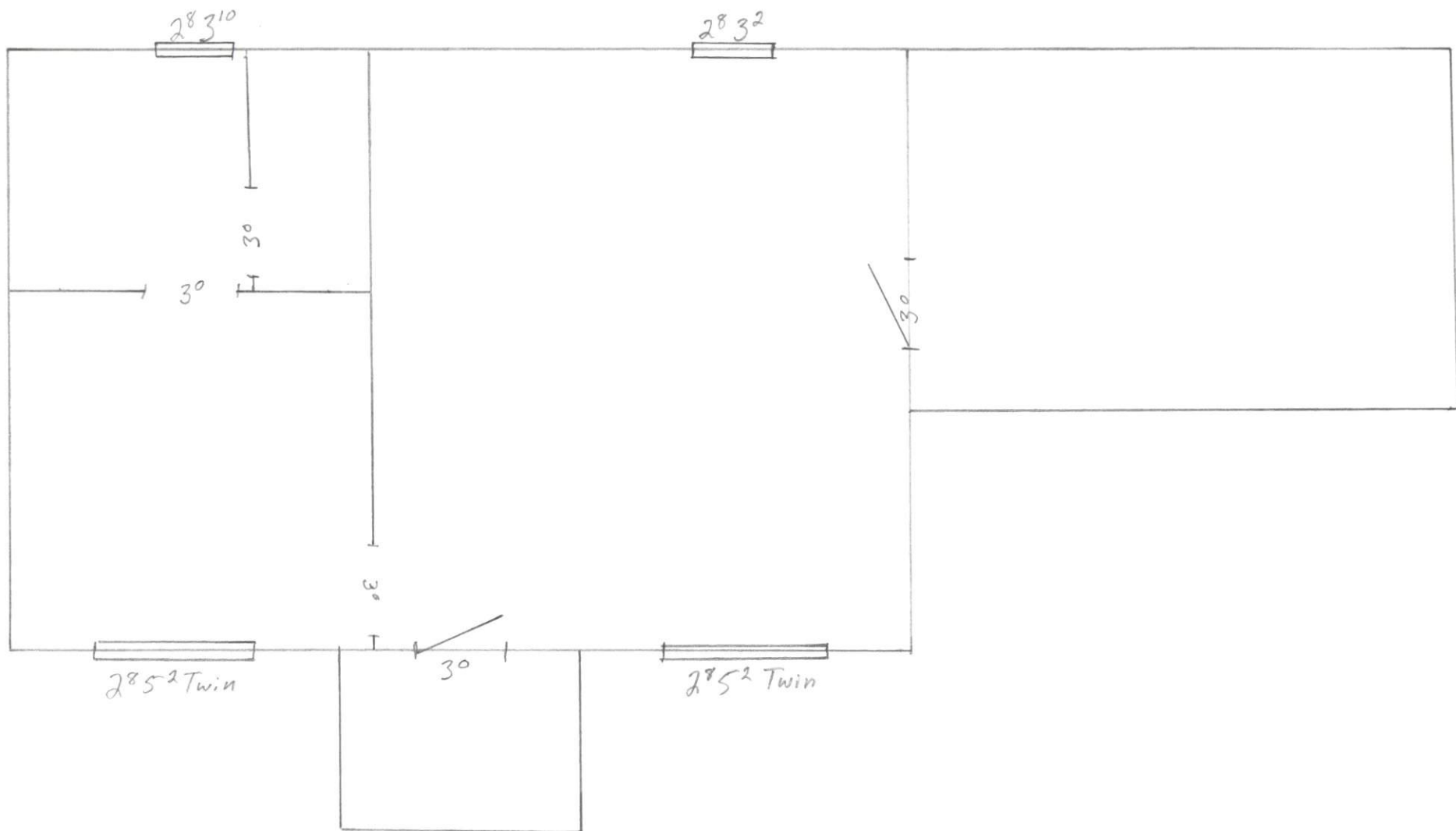
Truss Placement Plan
 SCALE: NTS

▲ = Indicates Left End of Truss
 (Reference Engineered Truss Drawing)
 DO NOT Erect Truss Backwards

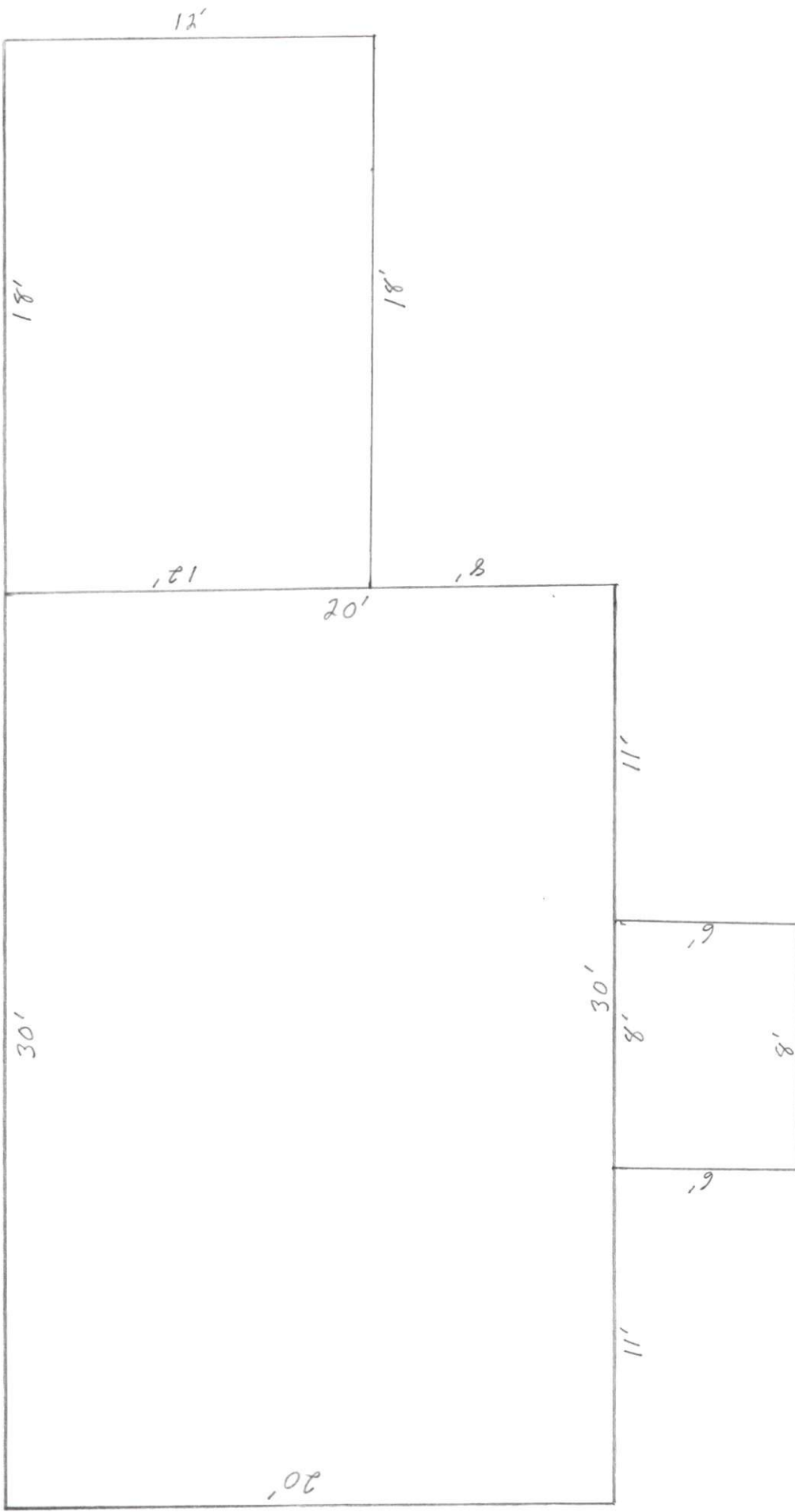
BUILDER	THOMAS PROP. OF HARNETT CO	CITY / CO.	BROADWAY / HARNETT
JOB NAME	1169 LAWRENCE RD	ADDRESS	1169 LAWRENCE RD
PLAN	HANDBLOWN PLAN	MODEL	ROOF
SEAL DATE	NONE	DATE REV.	05/28/19
QUOTE #	Quote #	DRAWN BY	Bob Lewis
JOB #	J0519-2500	SALES REP.	Bob Lewis

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. The indicated design shows for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult IRC R601 and IRC R602 provided with the truss delivery package or online @ thibaulttruss.com





Scale 50



50 scale

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0519-2500
1169 LAWRENCE RD

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: E13098798 thru E13098802

My license renewal date for the state of North Carolina is December 31, 2019.

North Carolina COA: C-0844



May 29, 2019

Gilbert, Eric

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 MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or 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 design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	1169 LAWRENCE RD	E13098798
J0519-2500	A1	Common	10	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue May 28 14:11:34 2019 Page 1
 ID:IKJlul4F5cFll1wBaXe25Tzq7?H-1qAAAt1?Hp919AdxKrnH_Q9NsX0rrDMYzVh1VsWzBxyN



Scale = 1:35.9

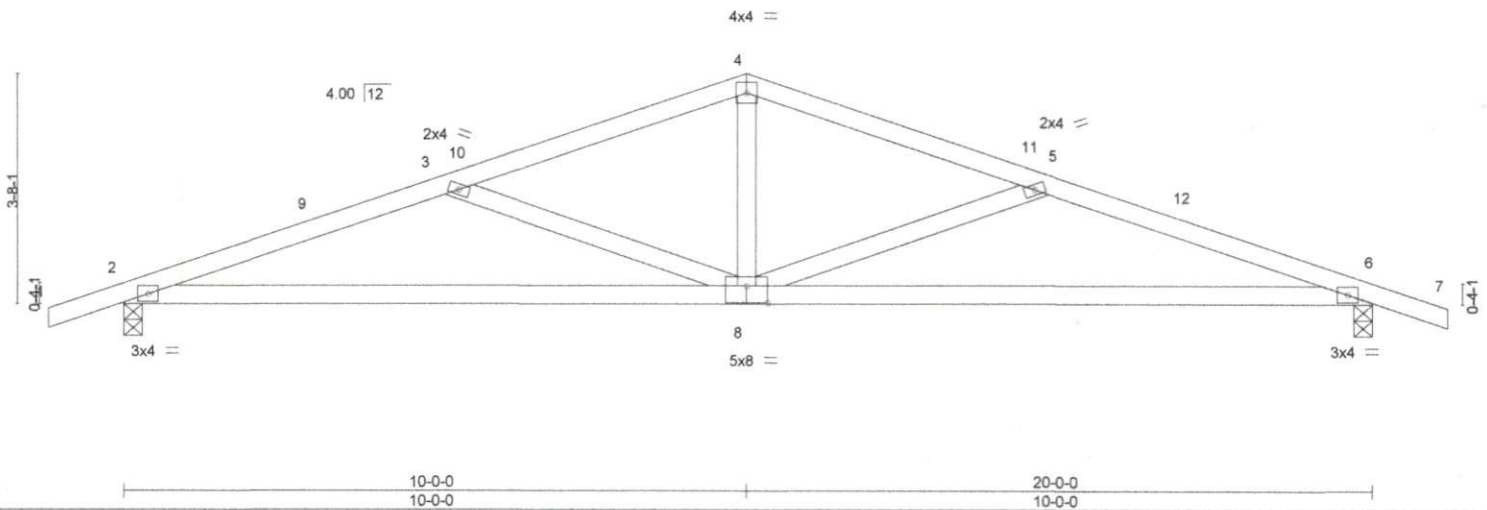


Plate Offsets (X, Y)-- [8-0-4-0,0-3-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.27	Vert(LL)	-0.19	2-8	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.40	2-8	>594		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.24	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.05	8	>999	Weight: 84 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-4-7 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 9-8-11 oc bracing.

REACTIONS.

(lb/size) 6=870/0-3-8, 2=870/0-3-8
 Max Horz 2=-45(LC 17)
 Max Uplift 6=-112(LC 9), 2=-112(LC 8)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1779/477, 3-4=-1330/297, 4-5=-1330/297, 5-6=-1779/477
 BOT CHORD 2-8=-385/1648, 6-8=-398/1648
 WEBS 4-8=-31/578, 5-8=-483/269, 3-8=-483/269

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * 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.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=112, 2=112.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7413 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.

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

Job J0519-2500	Truss A1GE	Truss Type Common Supported Gable	Qty 2	Ply 1	1169 LAWRENCE RD Job Reference (optional)	E13098799
-------------------	---------------	--------------------------------------	----------	----------	--	-----------

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue May 28 14:11:35 2019 Page 1
 ID:IKjju4F5cFl1wBaXe25Tzq7?H-V0kY4e1d27HunJC7uTpDzMw4gPMCys1j8xm2OyzBxyM
 20-0-0 21-2-8
 10-0-0 10-0-0 1-2-8

Scale = 1:35.9

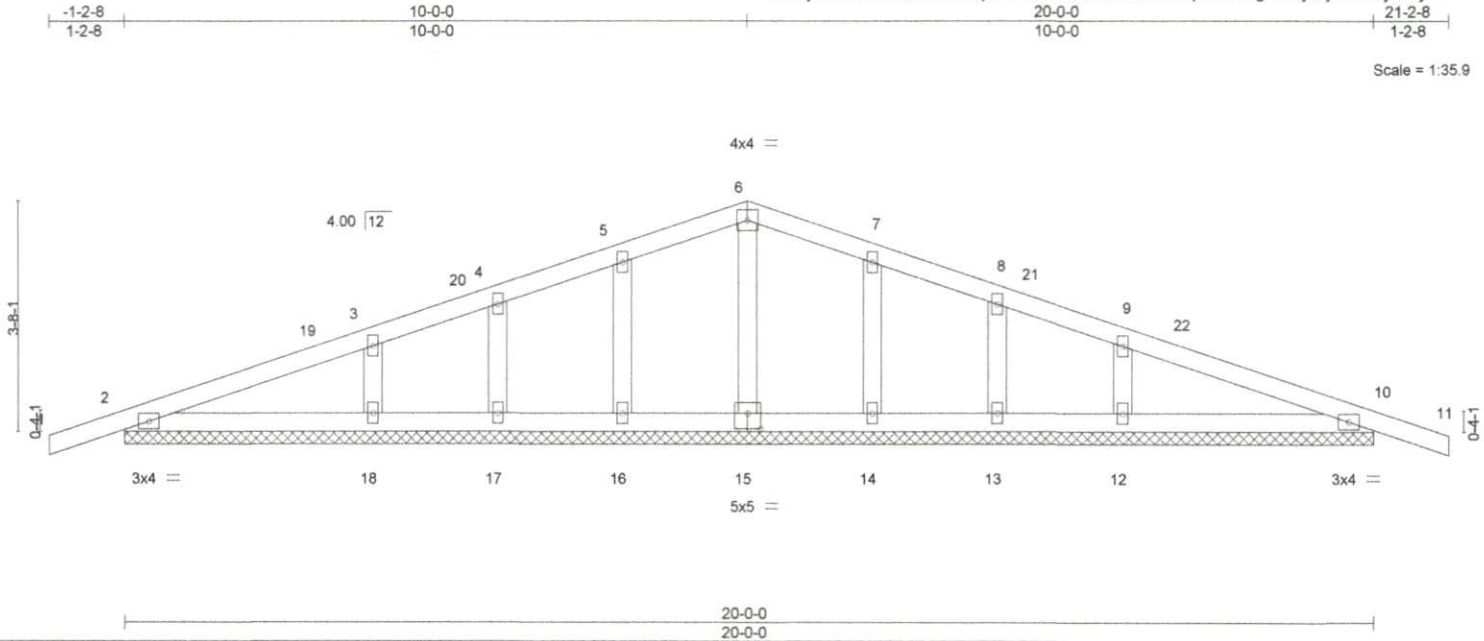


Plate Offsets (X,Y)-- [15-0-2-8,0-3-0]		20-0-0		20-0-0					
LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.12	Vert(LL)	0.00	11	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	0.01	11	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 86 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 20-0-0.
 (lb) - Max Horz 2=-76(LC 13)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 14, 13 except 18=-103(LC 12), 12=-102(LC 13), 10=-107(LC 9)
 Max Grav All reactions 250 lb or less at joint(s) 2, 15, 16, 17, 14, 13, 10 except 18=303(LC 23), 12=303(LC 24)

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

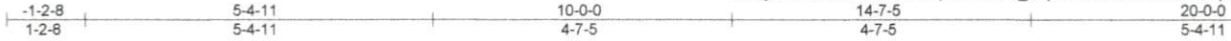
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) -1-2-8 to 3-2-5, Exterior(2) 3-2-5 to 10-0-0, Corner(3) 10-0-0 to 14-4-13 zone; 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.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Gable studs spaced at 2-0-0 oc.
 - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 8) * 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.
 - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 17, 14, 13 except (jt=lb) 18=103, 12=102, 10=107.



Job J0519-2500	Truss A2	Truss Type Common	Qty 4	Ply 1	1169 LAWRENCE RD E13098800
-------------------	-------------	----------------------	----------	----------	-------------------------------

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue May 28 14:11:36 2019 Page 1
ID:IKIjuI4F5cFll1wBaXe25Tzq77H-zClwI_2FpRpKPTnJSBKSvaSBvpX7hGJsNbWbxOzBxYL



Scale = 1:34.6

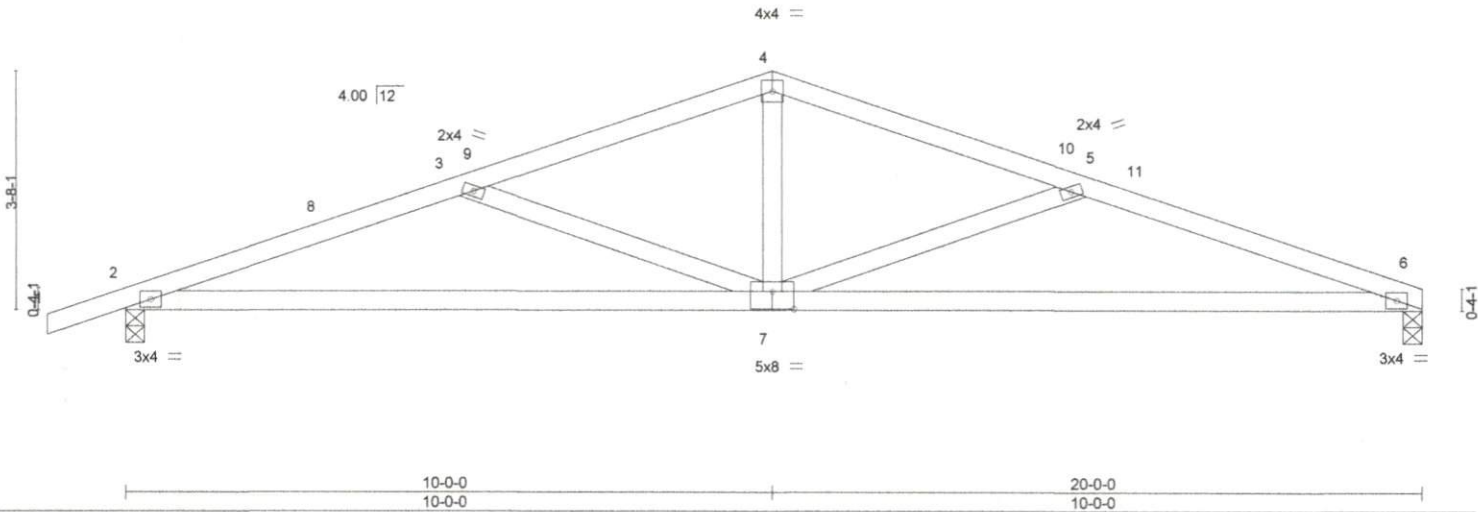


Plate Offsets (X,Y)-- [7:0-4-0,0-3-4]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.34	Vert(LL)	-0.19	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.81	Vert(CT)	-0.42	6-7	>565		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.25	Horz(CT)	0.05	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.06	6-7	>999	Weight: 82 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-2-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-3-11 oc bracing.

REACTIONS.

(lb/size) 6=786/0-3-8, 2=872/0-3-8
Max Horz 2=50(LC 16)
Max Uplift 6=62(LC 9), 2=113(LC 8)

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

TOP CHORD 2-3=-1788/501, 3-4=-1339/309, 4-5=-1340/322, 5-6=-1803/517
BOT CHORD 2-7=-431/1657, 6-7=-435/1673
WEBS 4-7=-52/581, 5-7=-500/279, 3-7=-483/270

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13 zone; 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 2=113.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7413 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 ANSITP11 Quality Criteria, DSB-89 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	Truss	Truss Type	Qty	Ply	1169 LAWRENCE RD	E13098801
J0519-2500	B1	Common	9	1		
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue May 28 14:11:38 2019 Page 1
 ID:IKJui4F5cFII1wBaXe25Tzq7?H-RPslVK3tZkXb0dMW0urh2n?MYD_NQIs0cFF9TqzBxyK



Scale = 1:23.1

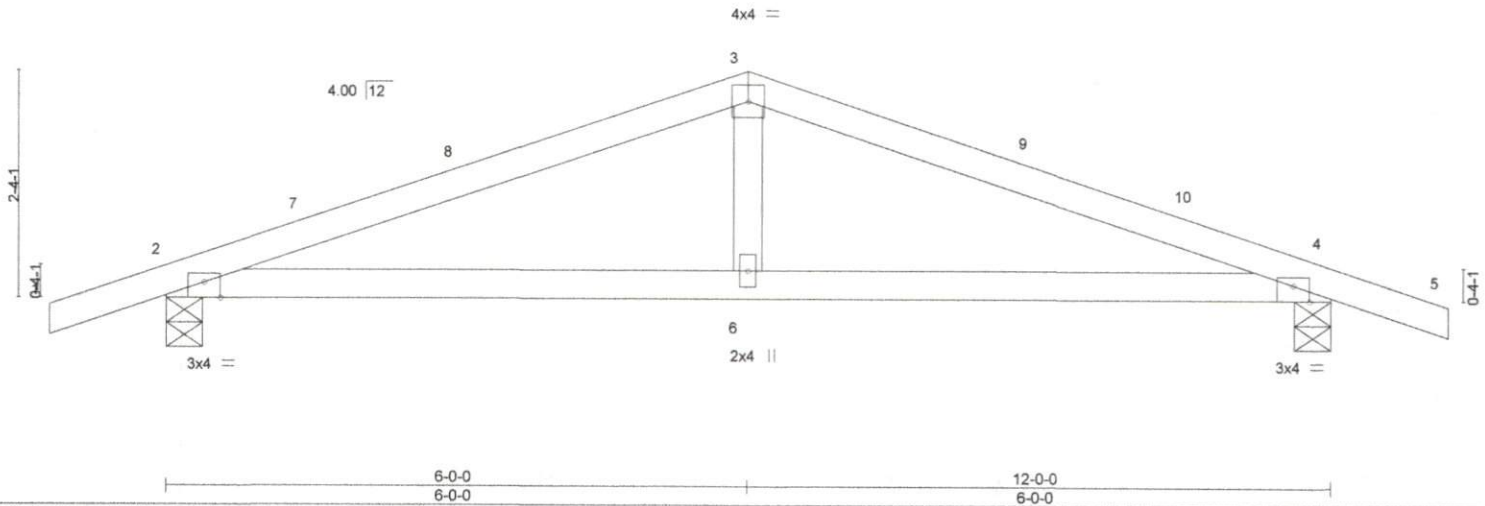


Plate Offsets (X,Y)-- [2:0-2-0,Edge], [4:0-2-0,Edge]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.35	Vert(LL)	0.08	4-6	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.29	Vert(CT)	-0.07	2-6	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.11	Horz(CT)	0.01	4	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 43 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-10-11 oc bracing.

REACTIONS.

(lb/size) 2=549/0-4-8, 4=549/0-4-8
 Max Horz 2=-29(LC 17)
 Max Uplift 2=-219(LC 8), 4=-219(LC 9)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-830/899, 3-4=-830/899
 BOT CHORD 2-6=-764/730, 4-6=-764/730
 WEBS 3-6=-350/277

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13 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
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=219, 4=219.



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.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1169 LAWRENCE RD	E13098802
J0519-2500	B1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Tue May 28 14:11:39 2019 Page 1
 ID:IKJlU4F5cFl1wBaXe25Tzq77H-Nnz3w0575MnJGxWu7Jt97C4i81gwufNI3ZkGXzBxyl



Scale = 1:23.1

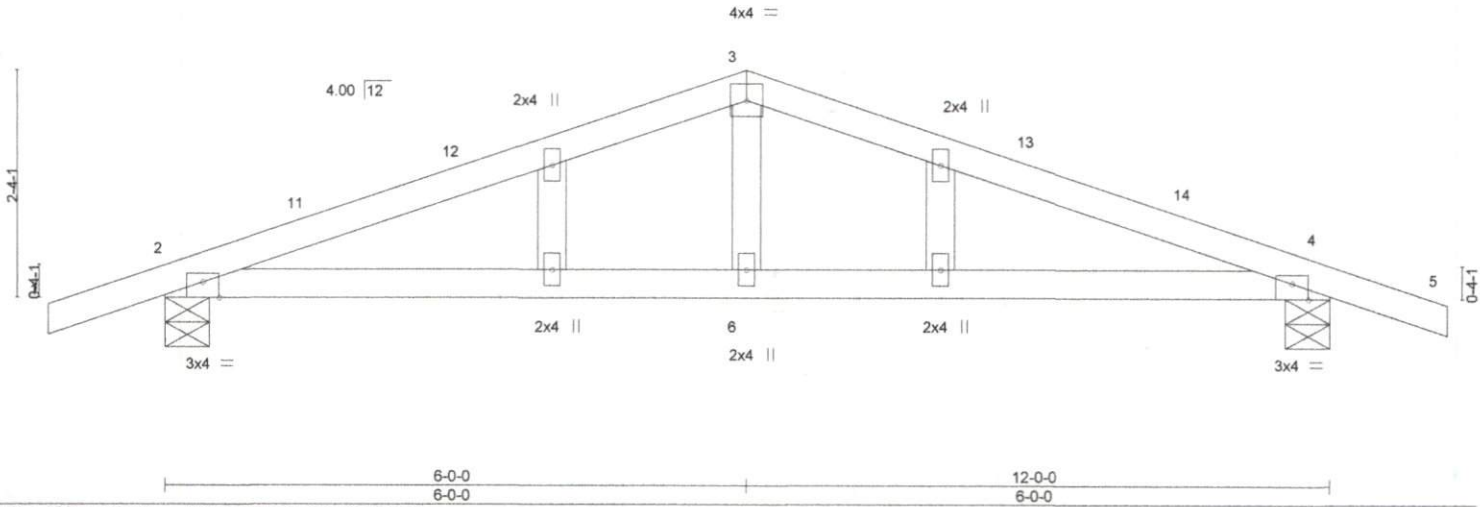


Plate Offsets (X,Y)-- [2:0-2-0,Edge], [4:0-2-0,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.34	Vert(LL) 0.08	4-6	>999	240	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT) -0.06	2-6	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.10	Horz(CT) 0.01	4	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 47 lb	FT = 20%
	Code IRC2015/TPI2014							

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-11-8 oc bracing.

REACTIONS.

(lb/size) 2=548/0-5-8, 4=548/0-5-8
 Max Horz 2=49(LC 13)
 Max Uplift 2=312(LC 8), 4=312(LC 9)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-817/885, 3-4=-817/885
 BOT CHORD 2-6=-750/717, 4-6=-750/717
 WEBS 3-6=-346/275

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13 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
- 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 studs spaced at 2-0-0 oc.
- 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 with a clearance greater than 6-0-0 between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=312, 4=312.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7413 rev. 10/03/2015 BEFORE USE.

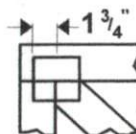
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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.



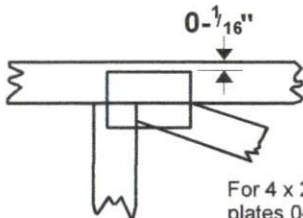
818 Soundside Road
 Edenton, NC 27932

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

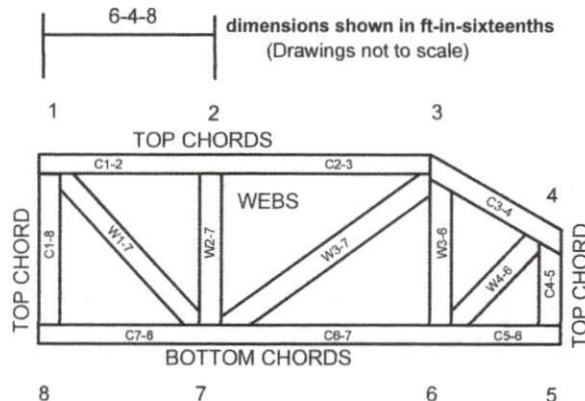


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

- ANSI/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.

© 2012 MiTek® All Rights Reserved



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.
6. 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 specified.
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.

Reaction Summary of Order



REQ. QUOTE DATE	//	ORDER #	J0519-2500
ORDER DATE	05/28/19	QUOTE #	
DELIVERY DATE	//	CUSTOMER ACCT #	0000006995
DATE OF INVOICE	//	CUSTOMER PO #	
ORDERED BY	Steve Thomas	INVOICE #	
COUNTY	HARNETT	TERMS	
SUPERINTENDANT	Steve Thomas	SALES REP	Bob Lewis
JOBSITE PHONE #	(919) 906-4069	SALES AREA	Bob Lewis

Thomas Properties of Harnett PO Box 875 Broadway, NC 27505 (919) 258-9327/9064069	JOB NAME: 1169 LAWRENCE RD MODEL: ROOF TAG: HANDDRAWN PLAN DELIVERY INSTRUCTIONS:	LOT # SUBDIV: JOB CATEGORY: Residential - Roof
	THOMAS PROP. OF 1169 LAWRENCE RD BROADWAY, NC	SPECIAL INSTRUCTIONS:

BUILDING DEPARTMENT Roof Order	OVERHANG INFO END CUT RETURN PLUMB NO	HEEL HEIGHT 00-04-05 GABLE STUDS 24 IN. OC	REQ. LAYOUTS	REQ. ENGINEERING	QUOTE BL 05/28/19 LAYOUT BL 05/28/19 CUTTING BL 05/28/19
	JOBSITE 1 JOBSITE 1				

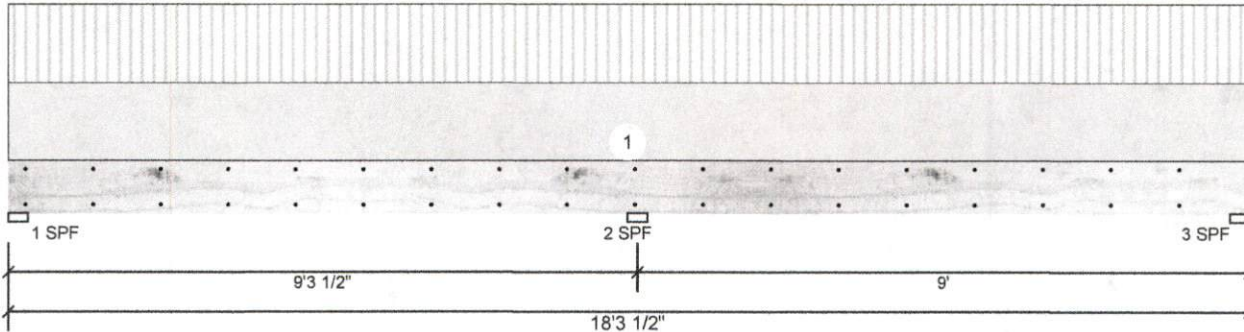
ROOF TRUSSES **LOADING INFORMATION** TCDL-TCDL-BCLL-BCDL STRESS INCR. 1.15
 20.0,10.0,0.0,10.0 **ROOF TRUSS SPACING:** 24.0 IN. O.C. (TYP.)

PROFILE	QTY	PITCH		TYPE ID	BASE O/A	LUMBER		OVERHANG		REACTIONS
		TOP	BOT			TOP	BOT	LEFT	RIGHT	
	10	4.00	0.00	COMMON A1	20-00-00 20-00-00	2 X 4	2 X 4	01-02-08	01-02-08	Joint 2 Joint 6 869.6 lbs. 869.6 lbs. -112.3 lbs. -112.3 lbs.
	2	4.00	0.00	COMMON A1GE	20-00-00 20-00-00	2 X 4	2 X 4	01-02-08	01-02-08	Joint 2 Joint 10 Joint 12 Joint 13 Joint 14 219.6 lbs. 219.6 lbs. 303.5 lbs. 98.1 lbs. 184.5 lbs. -97.2 lbs. -106.8 lbs. -102.4 lbs. -41.9 lbs. -64.2 lbs.
	4	4.00	0.00	COMMON A2	20-00-00 20-00-00	2 X 4	2 X 4	01-02-08		Joint 2 Joint 6 872.4 lbs. 785.5 lbs. -112.6 lbs. -61.5 lbs.
	9	4.00	0.00	COMMON B1	12-00-00 12-00-00	2 X 4	2 X 4	01-02-08	01-02-08	Joint 2 Joint 4 548.8 lbs. 548.8 lbs. -219.1 lbs. -219.1 lbs.
	1	4.00	0.00	GABLE B1GE	12-00-00 12-00-00	2 X 4	2 X 4	01-02-08	01-02-08	Joint 2 Joint 4 547.9 lbs. 547.9 lbs. -312.2 lbs. -312.2 lbs.



(3) 2X10 BBO SP #2 2.000" X 10.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	Yes
Deck:	Not Checked

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	513	513	0	0	0
2	1561	1561	0	0	0
3	487	487	0	0	0

Bearings

Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
1 - SPF	3.500"	16% 513 / 586	1099 L_	D+L
2 - SPF	3.500"	47% 1561 / 1561	3122 LL	D+L
3 - SPF	3.500"	16% 487 / 571	1058 _L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-2785 ft-lb	9'3 1/2"	4920 ft-lb	0.566 (57%)	D+L	LL
Unbraced	-2785 ft-lb	9'3 1/2"	4842 ft-lb	0.575 (58%)	D+L	LL
Pos Moment	1911 ft-lb	3'11 1/16"	4920 ft-lb	0.388 (39%)	D+L	L_
Unbraced	1911 ft-lb	3'11 1/16"	4432 ft-lb	0.431 (43%)	D+L	L_
Shear	1360 lb	8'6 1/4"	4856 lb	0.280 (28%)	D+L	LL
LL Defl inch	0.036 (L/3047)	4'6 1/16"	0.227 (L/480)	0.160 (16%)	L	L_
TL Defl inch	0.058 (L/1885)	4'3 15/16"	0.453 (L/240)	0.130 (13%)	D+L	L_

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	140 PLF	140 PLF	0 PLF	0 PLF	0 PLF	ROOF B1

Manufacturer Info

Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS



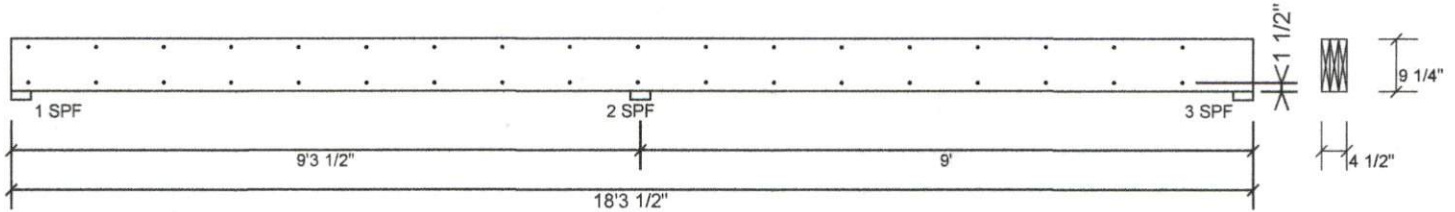
This design is valid until 10/18/2021





(3) 2X10 BBO SP #2 2.000" X 10.000" 3-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	202.6 PLF
Yield Limit per Fastener	101.3 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS
	

This design is valid until 10/18/2021

