



**ROOF & FLOOR TRUSSES & BEAMS**

Reilly Road Industrial Park  
 Fayetteville, N.C. 28309  
 Phone: (910) 864-8787  
 Fax: (910) 864-4444

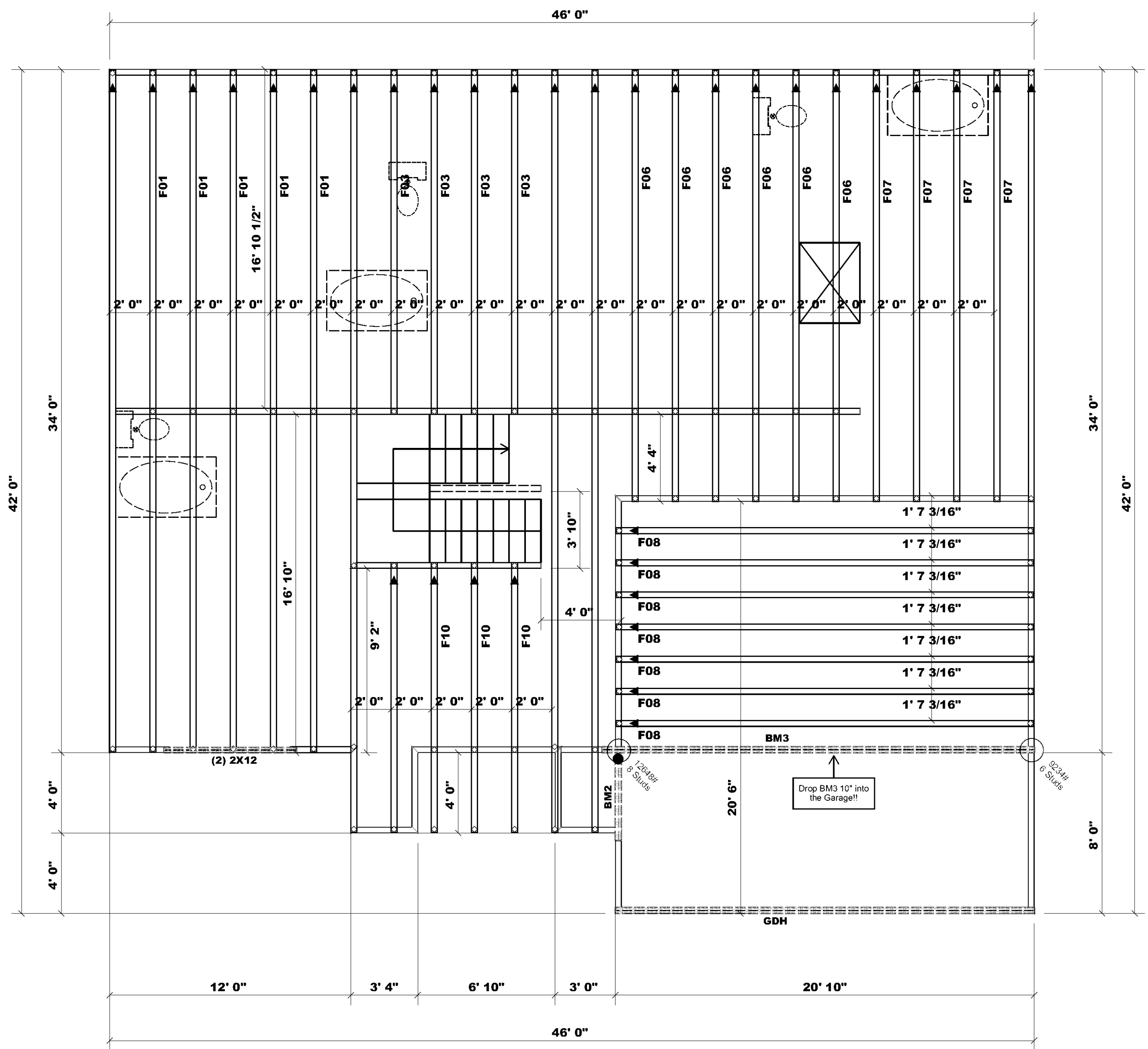
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature: \_\_\_\_\_  
 Neil Baggett

**LOAD CHART FOR JACK STUDS**

(BASED ON TABLES R502.5(1) & (2))  
 NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/STROUD

END REACTION (UP TO)	REQ'D STUDS FOR (3)PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3)PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3)PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				



**All Walls Shown Are Considered Load Bearing**

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	THD410	USP	1	Varies	16d/3-1/2"	10d/3"

**▲ = Indicates Left End of Truss (Reference Engineered Truss Drawing)**  
**Do Not Erect Trusses Backwards**

Products				
PlotID	Length	Product	Plies	Net Qty
GDH	21' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
BM2	5' 0"	1-3/4"x 14" LVL Kerto-S	2	2
BM3	22' 0"	1-3/4"x 23-7/8" LVL Kerto-S	2	2

Hatch Legend


[Pattern]	Padded HVAC
[Pattern]	Tray Ceiling
[Pattern]	2nd Floor Walls @ 8' 1 1/2"
[Pattern]	Flush Beam
[Pattern]	Drop Beam

**Truss Placement Plan**  
 SCALE: 1/4" = 1'

BUILDER	Mohler Homes	Harnett
JOB NAME	Lot 22 Quail Glen	Site Address
PLAN	Hickory 3000	Floor
SEAL DATE	N/A	DATE REV.
QUOTE #	B0119-0149	DRAWN BY
JOB #	J0119-0149	SALESMAN

**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. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system 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 BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

# Reaction Summary of Order






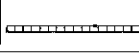


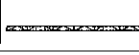


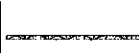

















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 Reilly Road Industrial Park P.O. Box 40408  
 Fayetteville, N.C. 28309 (910) 864-TRUS  
 Cary Office: (919) 816-0105

REQ. QUOTE DATE	/ /	ORDER #	J0119-0149
ORDER DATE	01/16/19	QUOTE #	B0119-0149
DELIVERY DATE	/ /	CUSTOMER ACCT #	0000007229
DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY	Lorraine Mohler	INVOICE #	
COUNTY	Harnett	TERMS	
SUPERINTENDANT	Lorraine Mohler	SALES REP	Neil Baggett
JOBSITE PHONE #	(910) 303- 1507	SALES AREA	Neil Baggett

<b>Mohler Homes, Inc.</b> 2148 Rim Road STE 101 Fayetteville, NC 28314 (910) 221-9901	<b>JOB NAME:</b> Lot 22 Quail Glen <b>MODEL:</b> Floor <b>TAG:</b> Hickory 3000 <b>DELIVERY INSTRUCTIONS:</b>	<b>LOT #</b> 22 <b>SUBDIV:</b> Quail Glen <b>JOB CATEGORY:</b> Residential - Floor
	<b>Mohler Homes, Inc.</b> Harnett County, NC	<b>SPECIAL INSTRUCTIONS:</b>
<b>PLAN SEAL DATE:</b> N/A		

<b>BUILDING DEPARTMENT</b>	<b>OVERHANG INFO</b>	<b>HEEL HEIGHT</b>	00-04-05	<b>REQ. LAYOUTS</b>	<b>REQ. ENGINEERING</b>	<b>QUOTE</b>	NB	01/15/19
Floor Order	END CUT	RETURN				LAYOUT	NB	01/15/19
	PLUMB	NO	<b>GABLE STUDS</b>	16 IN. OC	JOBSITE	1	JOBSITE	1
						<b>CUTTING</b>	NB	01/10/19

<b>FLOOR TRUSSES</b>	<b>LOADING INFORMATION</b>	TCLL-TCDL-BCLL-BCDL	STRESS INCR.	<b>FLOOR TRUSS SPACING:</b> 24.0 IN. O.C. (TYP.)
		40.0,10.0,0.0,5.0	1.00	

FLOOR PROFILE	QTY PLY	DEPTH ID	BASE SPAN	O/A SPAN	END TYPE		INT BEARING		REACTIONS				
					LEFT	RIGHT	SIZE	LOCATION					
	1	01-02-00 ET1	33-11-00	33-11-00					Joint 30 28.1 lbs.	Joint 31 127.2 lbs.	Joint 32 151.1 lbs.	Joint 33 145.5 lbs.	Joint 34 147.0 lbs.
	1	01-02-00 ET2	21-05-08	21-05-08					Joint 19 62.8 lbs.	Joint 20 152.0 lbs.	Joint 21 145.5 lbs.	Joint 22 147.0 lbs.	Joint 23 146.6 lbs.
	5	01-02-00 F01	33-11-00	33-11-00					Joint 18 810.4 lbs.	Joint 24 2182.9 lbs.	Joint 30 817.7 lbs.		
									147.7 lbs.	1385.5 lbs.	143.8 lbs.		
	1	01-02-00 F02	37-11-00	37-11-00					Joint 22 43.9 lbs.	Joint 23 178.2 lbs.	Joint 24 72.8 lbs.	Joint 25 596.2 lbs.	Joint 28 962.3 lbs.
									10.6 lbs.	50.8 lbs.	-1.9 lbs.	106.6 lbs.	568.6 lbs.
	4	01-02-00 F03	17-01-08	17-01-08					Joint 10 921.9 lbs.	Joint 16 921.9 lbs.			
									468.6 lbs.	468.6 lbs.			
	1	01-02-00 F04	37-11-00	37-11-00					Joint 24 1678.8 lbs.	Joint 30 2089.0 lbs.	Joint 36 822.0 lbs.		
									1004.9 lbs.	1255.5 lbs.	149.4 lbs.		
	1	01-02-00 F05	37-11-00	37-11-00					Joint 21 152.6 lbs.	Joint 24 1347.6 lbs.	Joint 30 2125.1 lbs.	Joint 36 815.4 lbs.	
									-185.4 lbs.	439.0 lbs.	1325.4 lbs.	148.1 lbs.	
	6	01-02-00 F06	21-05-08	21-05-08					Joint 13 179.7 lbs.	Joint 16 1411.3 lbs.	Joint 22 870.3 lbs.		
									-125.8 lbs.	561.1 lbs.	236.3 lbs.		
	4	01-02-00 F07	21-05-08	21-05-08					Joint 16 1160.2 lbs.	Joint 26 1160.2 lbs.			
									540.8 lbs.	595.1 lbs.			

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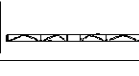
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COUNTY	Harnett	TERMS	
SUPERINTENDANT	Lorraine Mohler	SALES REP	Neil Baggett
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	<b>Mohler Homes, Inc.</b> <b>Harnett County, NC</b>	<b>SPECIAL INSTRUCTIONS:</b>

<b>BUILDING DEPARTMENT</b>	<b>OVERHANG INFO</b>	<b>HEEL HEIGHT</b>	00-04-05	<b>REQ. LAYOUTS</b>	<b>REQ. ENGINEERING</b>	<b>QUOTE</b>	NB	01/15/19	
Floor Order	<b>END CUT</b>	<b>RETURN</b>				<b>LAYOUT</b>	NB	01/15/19	
	PLUMB	NO	<b>GABLE STUDS</b>	16 IN. OC	JOBSITE 1	JOBSITE 1	<b>CUTTING</b>	NB	01/10/19

<b>FLOOR TRUSSES</b>		<b>LOADING INFORMATION</b>	TCLL-TCDL-BCLL-BCDL	STRESS INCR.	<b>FLOOR TRUSS SPACING: 24.0 IN. O.C. (TYP.)</b>			
			40.0,10.0,0.0,5.0	1.00				
FLOOR PROFILE	QTY PLY	DEPTH ID	BASE SPAN	O/A SPAN	END TYPE	INT BEARING	REACTIONS	
					LEFT	RIGHT	SIZE	LOCATION

	7	01-02-00 F08	20-09-00	20-09-00					Joint 12 896.4 lbs. 443.0 lbs.	Joint 18 896.4 lbs. 443.0 lbs.
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	1	01-02-00 F09	13-05-00	13-05-00					Joint 8 717.9 lbs. 360.5 lbs.	Joint 12 717.9 lbs. 389.7 lbs.
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	3	01-02-00 F10	13-05-00	13-05-00					Joint 13 1459.6 lbs. 1026.1 lbs.	Joint 16 343.4 lbs. -86.0 lbs.
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## ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	21-00-00		GDH
2	LVL Beams (Sized)	LVL, 1-3/4" x 14" (S)	05-00-00		BM2
2	LVL Beams (Sized)	LVL, 1-3/4" x 24" (S)	24-00-00		24" LVL is <<ONLY>> sold in 20, 24, 28 or 48 foot lengths!!! (sm) BM3
1	Hangers, USP	THD410			SIMPSON (HHUS410)

View Notes

SFD1812-0035

Type (Asc)



REVIEWS

BUILDING

Brad Sutton

Per the notes on the floor framing layout, an engineer must design the foundation for point loads exceeding 15,000#. BM3 garage beam load is 17,321#. Provide engineers design.

1/27/2019 10:04:03 AM

Close



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Signature: \_\_\_\_\_  
Neil Baggett

### LOAD CHART FOR JACK STUDS

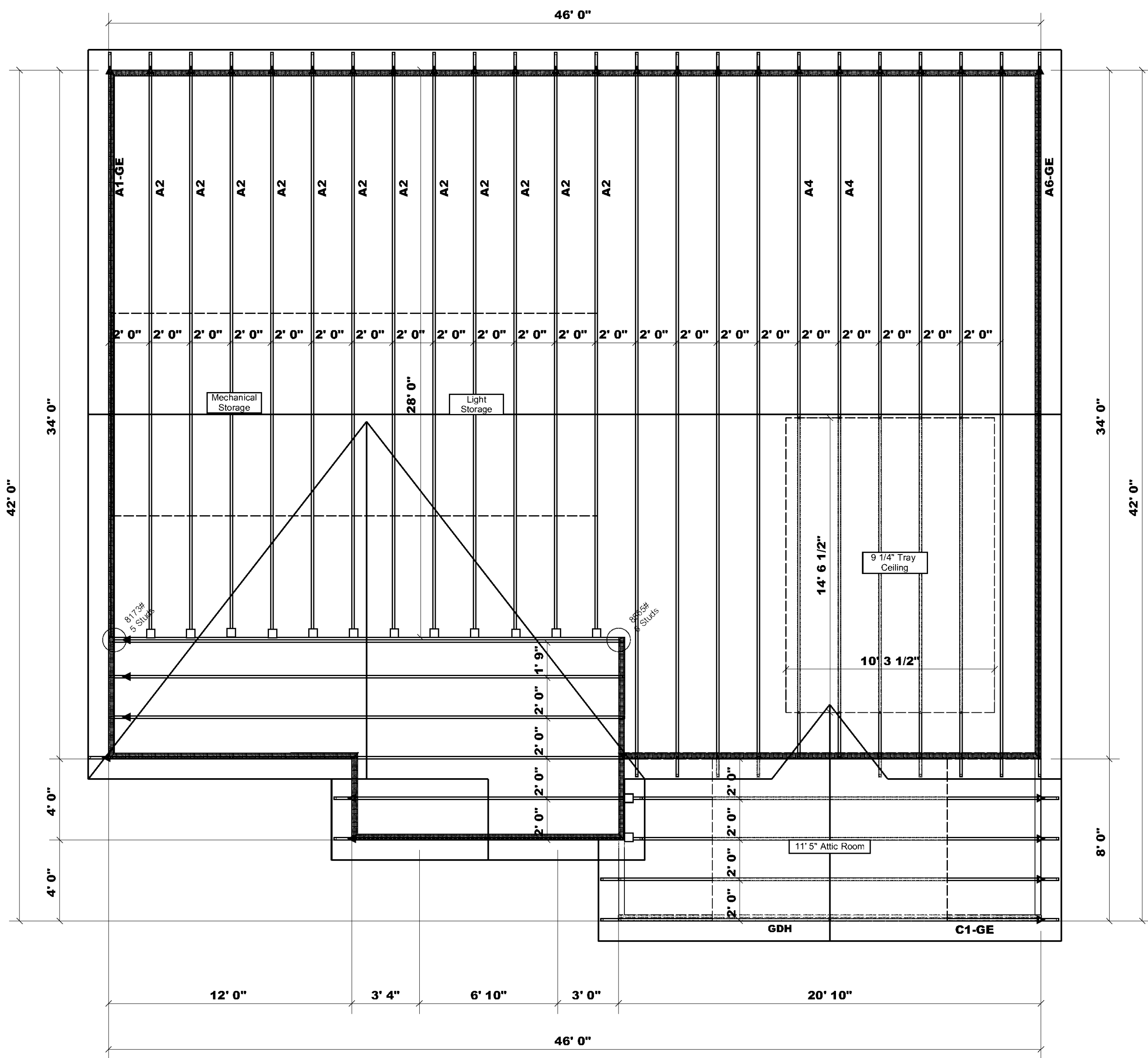
(BASED ON TABLES R502.5(1) & (2))  
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (1) 1" HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) 1" HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (1) 1" HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
□	HUS26	USP	14	Varies	16d/3-1/2"	16d/3-1/2"

▲ = Indicates Left End of Truss  
(Reference Engineered Truss Drawing)  
Do Not Erect Trusses Backwards

All Walls Shown Are Considered Load Bearing




Hatch Legend	
□	Padded HVAC
□	Tray Ceiling
■	2nd Floor Walls @ 8' 1 1/2"
□	Flush Beam
□	Drop Beam

Truss Placement Plan  
SCALE: 1/4" = 1'

BUILDER	Mohler Homes	COUNTY	Harnett
JOB NAME	Lot 22 Quail Glen	ADDRESS	Site Address
PLAN	Hickory 3000	MODEL	Roof
SEAL DATE	N/A	DATE REV.	1/30/2019
QUOTE #	B0119-0148	DRAWN BY	Neil Baggett
JOB #	J0119-0148	SALESMAN	Neil Baggett

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# Reaction Summary of Order



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 Fayetteville, N.C. 28309 (910) 864-TRUS  
 Cary Office: (919) 816-0105

REQ. QUOTE DATE	/ /	ORDER #	J0119-0148
ORDER DATE	01/16/19	QUOTE #	B0119-0148
DELIVERY DATE	/ /	CUSTOMER ACCT #	0000007229
DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY	Lorraine Mohler	INVOICE #	
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	<b>Mohler Homes, Inc.</b> Harnett County, NC	<b>SPECIAL INSTRUCTIONS:</b>

<b>BUILDING DEPARTMENT</b>	<b>OVERHANG INFO</b>	<b>HEEL HEIGHT</b>	00-04-05	<b>REQ. LAYOUTS</b>	<b>REQ. ENGINEERING</b>	<b>QUOTE</b>	NB	01/15/19
Roof Order	END CUT	RETURN				LAYOUT	NB	01/15/19
	PLUMB	NO	<b>GABLE STUDS</b>	16 IN. OC	JOBSITE	1	JOBSITE	1
						<b>CUTTING</b>	NB	01/10/19

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

PROFILE	QTY	PITCH		TYPE ID	BASE O/A	LUMBER		OVERHANG		REACTIONS				
		TOP	BOT			TOP	BOT	LEFT	RIGHT	Joint 2	Joint 8	Joint 18	Joint 19	Joint 20
	1	7.00	0.00	GABLE A1-GE	28-00-00 28-00-00	2 X 6	2 X 6	00-10-08		Joint 2	Joint 18	Joint 19	Joint 20	Joint 21
										189.3 lbs.	48.4 lbs.	128.2 lbs.	174.1 lbs.	199.1 lbs.
										-59.2 lbs.	-21.7 lbs.	-59.5 lbs.	-43.2 lbs.	-40.1 lbs.
	12	7.00	0.00	COMMON A2	28-00-00 28-00-00	2 X 6	2 X 6	00-10-08		Joint 2	Joint 8			
										1221.1 lbs.	1196.5 lbs.			
										-78.8 lbs.	-38.6 lbs.			
	5	7.00	0.00	COMMON A3	34-00-00 34-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2	Joint 8			
										1474.1 lbs.	1474.1 lbs.			
										-88.9 lbs.	-88.9 lbs.			
	2	7.00	0.00	ROOF A4	34-00-00 34-00-00	2 X 6	2 X 6	00-10-08		Joint 2	Joint 9			
										1402.5 lbs.	1364.0 lbs.			
										-88.5 lbs.	-66.7 lbs.			
	3	7.00	0.00	ROOF A5	34-00-00 34-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2	Joint 9			
										1401.8 lbs.	1417.4 lbs.			
										-88.4 lbs.	-79.1 lbs.			
	1	7.00	0.00	GABLE A6-GE	34-00-00 34-00-00	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2	Joint 20	Joint 22	Joint 23	Joint 24
										197.3 lbs.	163.6 lbs.	257.0 lbs.	147.6 lbs.	179.9 lbs.
										-55.8 lbs.	1.9 lbs.	-116.3 lbs.	-67.6 lbs.	-78.8 lbs.
	1	9.00	0.00	GABLE B1-GE	13-05-08 13-05-08	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2	Joint 8			
										580.4 lbs.	580.4 lbs.			
										-37.1 lbs.	-37.1 lbs.			
	1	9.00	0.00	COMMON B2	13-05-08 13-05-08	2 X 6	2 X 6	00-10-08	00-10-08	Joint 2	Joint 4			
										580.4 lbs.	580.4 lbs.			
										-37.1 lbs.	-37.1 lbs.			
	1	9.00	0.00	GABLE B3-GE	25-05-08 25-05-08	2 X 6	2 X 6	01-00-00		Joint 2	Joint 14	Joint 17	Joint 18	Joint 19
										232.0 lbs.	590.7 lbs.	617.3 lbs.	124.9 lbs.	237.0 lbs.
										-31.6 lbs.	-25.2 lbs.	48.9 lbs.	-103.7 lbs.	-56.4 lbs.
	2	9.00	0.00	COMMON B4	25-05-08 25-05-08	2 X 6	2 X 6			Joint 1	Joint 7			
										1052.5 lbs.	1052.5 lbs.			
										-47.7 lbs.	-47.7 lbs.			
	1 2 Ply	9.00	0.00	COMMON B5	25-05-08 25-05-08	2 X 6	2 X 8			Joint 1	Joint 7			
										7590.2 lbs.	7951.0 lbs.			
										-343.6 lbs.	-359.5 lbs.			

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SOLD TO	<b>Mohler Homes, Inc.</b> 2148 Rim Road STE 101 Fayetteville, NC 28314 (910) 221-9901	<b>JOB NAME:</b> Lot 22 Quail Glen <b>LOT # 22</b> <b>SUBDIV:</b> Quail Glen <b>MODEL:</b> Roof <b>TAG:</b> Hickory 3000 <b>JOB CATEGORY:</b> Residential - Roof
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	PLUMB	NO	<b>GABLE STUDS</b>	16 IN. OC	JOBSITE	1	<b>CUTTING</b>	NB	01/10/19

<b>ROOF TRUSSES</b>		<b>LOADING INFORMATION</b>		TCLL-TCDL-BCLL-BCDL	STRESS INCR.	<b>ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)</b>					
				20.0,10.0,0.0,10.0	1.15						
PROFILE	QTY	PITCH		TYPE ID	BASE O/A	LUMBER		OVERHANG		REACTIONS	
	PLY	TOP	BOT			TOP	BOT	LEFT	RIGHT		
	1	9.00	0.00	ATTIC C1-GE	20-10-00 20-09-00	2 X 6	2 X 10	00-11-00	00-11-00	Joint 10 1441.5 lbs. 167.6 lbs.	Joint 14 1441.5 lbs. 167.6 lbs.
	1	9.00	0.00	ATTIC C2	20-10-00 20-09-00	2 X 6	2 X 10	00-11-00	00-11-00	Joint 10 1441.5 lbs. 167.6 lbs.	Joint 14 1441.5 lbs. 167.6 lbs.
	2	9.00	0.00	ATTIC C3	20-06-08 20-05-08	2 X 6	2 X 10	00-11-00		Joint 9 1389.7 lbs. 177.1 lbs.	Joint 13 1423.9 lbs. 167.2 lbs.

<b>ITEMS</b>					
QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
14	Hangers, USP	HUS 26			SIMPSON (HUS26)

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: J0119-0149  
Mohler/Lot 22 Quail Glen/Harnett

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: E12651719 thru E12651730

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

North Carolina COA: C-0844



January 30, 2019

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.



Job	Truss	Truss Type	Qty	Ply	Mohler/Lot 22 Quail Glen/Harnett	E12651719
J0119-0149	ET1	GABLE	1	1	Job Reference (optional)	

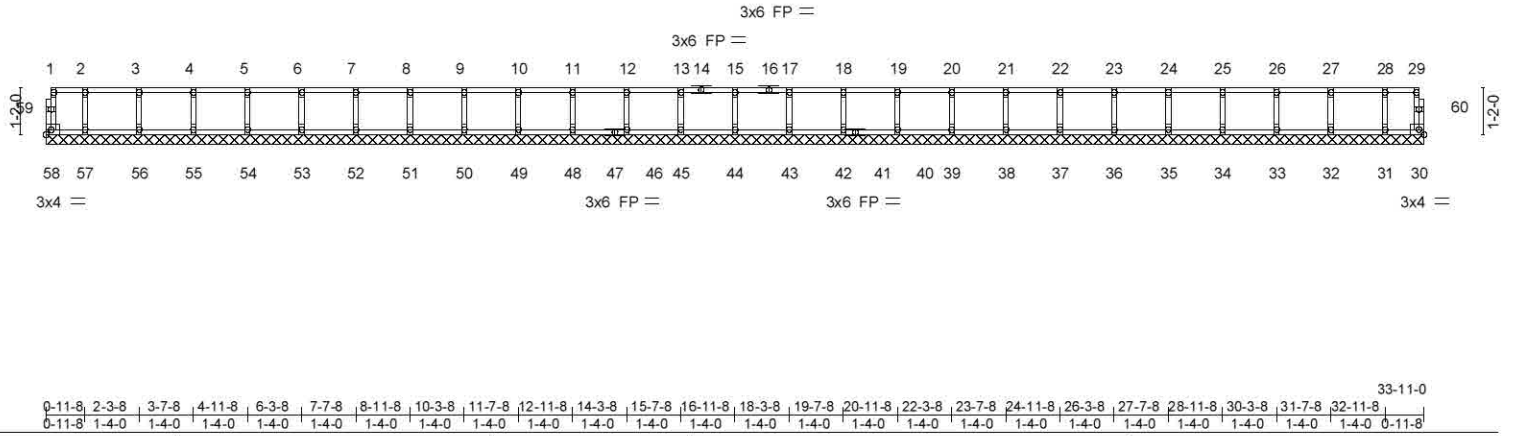
Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:01 2019 Page 1  
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0-1-8

0-1-8

Scale = 1:56.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.06	Vert(LL) n/a - n/a 999	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.01	Vert(CT) n/a - n/a 999		
BCLL 0.0	Rep Stress Incr YES	WB 0.03	Horz(CT) 0.00 30 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R		Weight: 140 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

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

**REACTIONS.** All bearings 33-11-0.  
(b) - Max Grav All reactions 250 lb or less at joint(s) 58, 30, 44, 45, 46, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 43, 42, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31

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

- NOTES-**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Plates checked for a plus or minus 1 degree rotation about its center.
  - 3) Gable requires continuous bottom chord bearing.
  - 4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 5) Gable studs spaced at 1-4-0 oc.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 30, 2019

**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 J0119-0149	Truss ET2	Truss Type Floor Supported Gable	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651720
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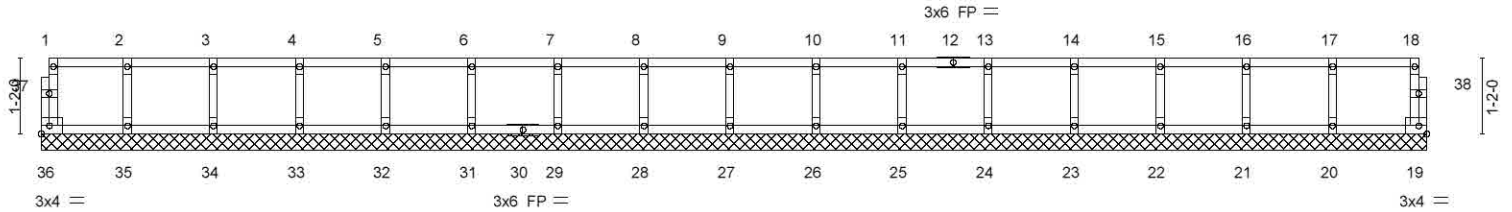
Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:02 2019 Page 1  
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0-1/8

0-1/8

Scale = 1:35.7



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.01	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.00	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 5.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 19 n/a n/a	Weight: 89 lb	FT = 20%F, 11%E
	Code IRC2015/TPI2014				

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

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

**REACTIONS.** All bearings 21-5-8.  
(b) - Max Grav All reactions 250 lb or less at joint(s) 36, 19, 35, 34, 33, 32, 31, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20

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

- NOTES-**
- All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 30, 2019

**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 J0119-0149	Truss F01	Truss Type Floor	Qty 5	Ply 1	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651721
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:03 2019 Page 1  
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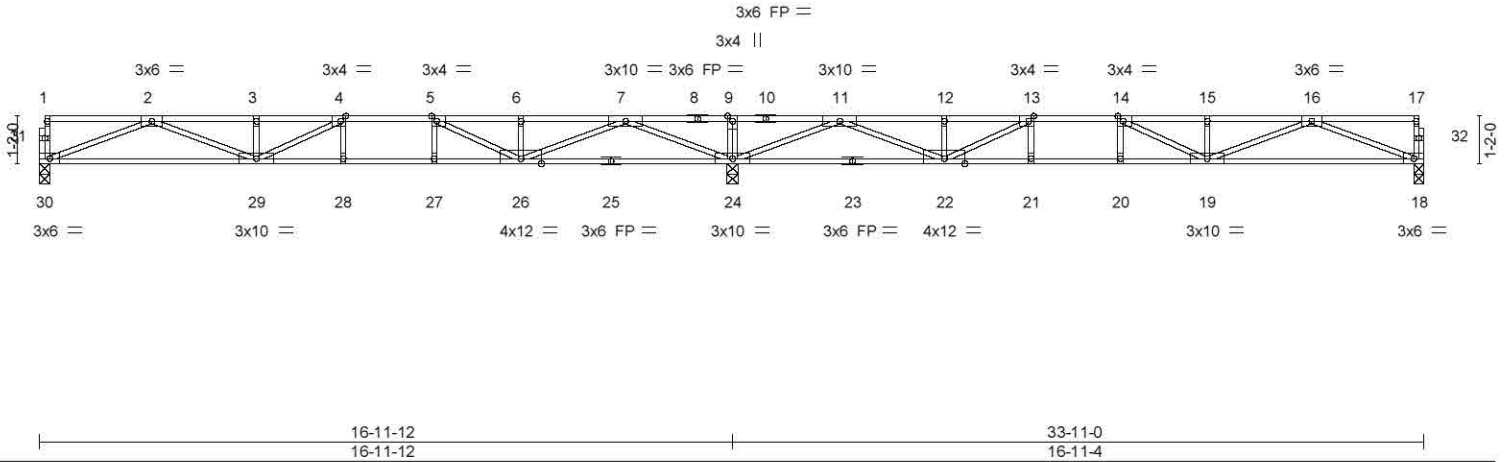
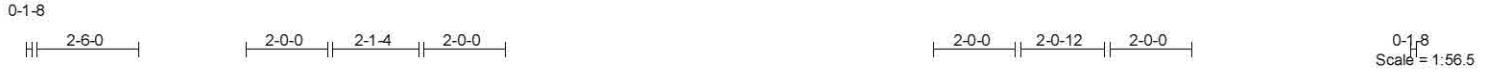


Plate Offsets (X,Y) -	[4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [14:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.77	Vert(LL) -0.25 19-20 >805 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.99	Vert(CT) -0.34 19-20 >593 360		
BCLL 0.0	Rep Stress Incr YES	WB 0.82	Horz(CT) 0.06 18 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 164 lb	FT = 20%F, 11%E

**LUMBER-**

TOP CHORD 2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat) \*Except\*  
 25-30: 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.3(flat)

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

**REACTIONS.**

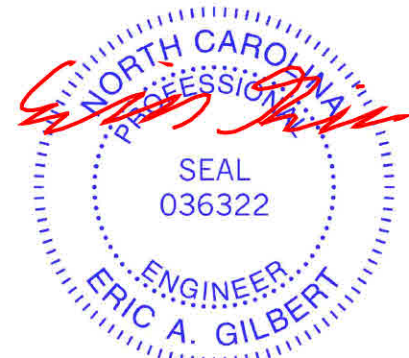
(lb/size) 30=755/0-3-0, 24=2183/0-3-8, 18=753/0-3-0  
 Max Grav 30=818(LC 3), 24=2183(LC 1), 18=810(LC 4)

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

TOP CHORD 2-3=-2746/0, 3-4=-2746/0, 4-5=-2874/0, 5-6=-2059/333, 6-7=-2059/333, 7-9=0/2552, 9-11=0/2552, 11-12=-1997/282, 12-13=-1997/282, 13-14=-2818/0, 14-15=-2714/0, 15-16=-2714/0  
 BOT CHORD 29-30=0/1752, 28-29=0/2874, 27-28=0/2874, 26-27=0/2874, 24-26=-939/608, 22-24=-874/539, 21-22=0/2818, 20-21=0/2818, 19-20=0/2818, 18-19=0/1732  
 WEBS 9-24=-281/0, 2-30=-1878/0, 2-29=0/1073, 3-29=-309/0, 7-24=-2480/0, 7-26=0/1726, 5-26=-1288/0, 4-29=-234/405, 11-24=-2477/0, 11-22=0/1720, 16-18=-1857/0, 16-19=0/1059, 15-19=-319/0, 14-19=-229/400, 13-22=-1267/0

**NOTES-**

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 1.5x3 MT20 unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



January 30, 2019

**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 J0119-0149	Truss F02	Truss Type GABLE	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651722
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:04 2019 Page 1  
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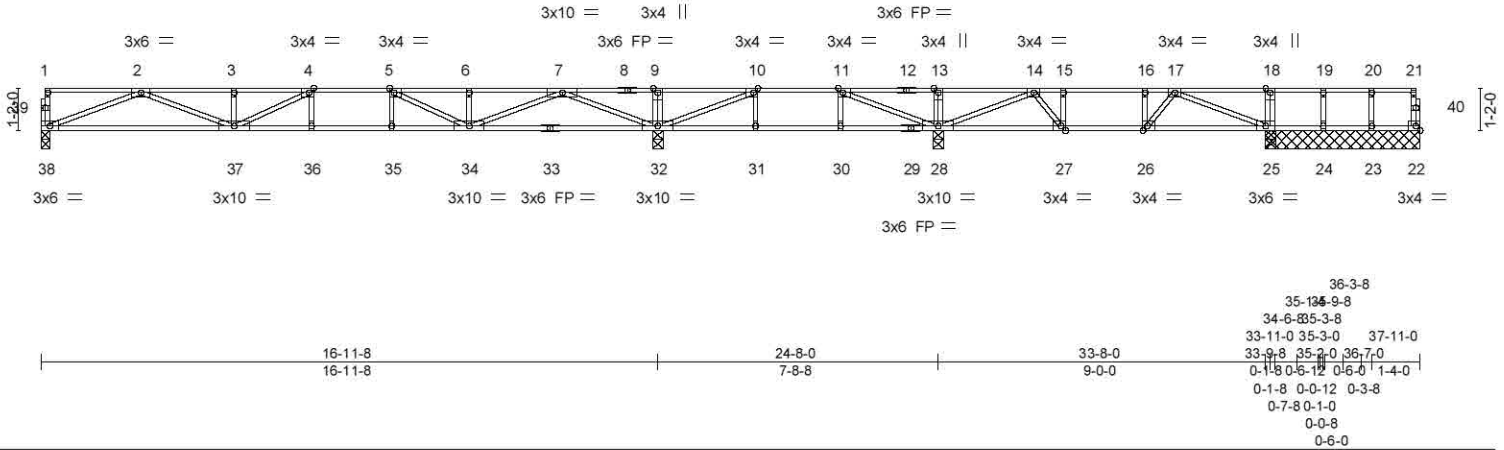
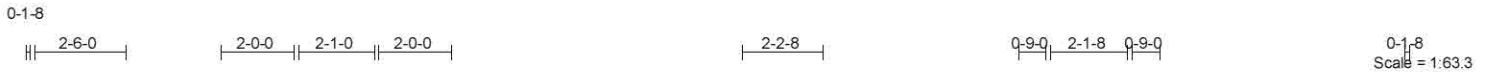


Plate Offsets (X,Y) - [4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [26:0-1-8,Edge], [27:0-1-8,Edge]

LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.58	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.79	Vert(LL) -0.25 36-37 >799 480		
BCLL 0.0	Rep Stress Incr YES	WB 0.74	Vert(CT) -0.35 36-37 >585 360		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.05 32 n/a n/a		
				Weight: 181 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	
OTHERS 2x4 SP No.3(flat)	

**REACTIONS.** All bearings 4-3-0 except (jt=length) 38=0-3-0, 32=0-3-8, 28=0-3-8.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 24  
Max Grav All reactions 250 lb or less at joint(s) 22, 24, 23 except 38=838(LC 5), 32=1512(LC 3), 25=596(LC 4), 25=559(LC 1), 28=962(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2844/0, 3-4=-2844/0, 4-5=-3036/0, 5-6=-2301/0, 6-7=-2301/0, 7-9=0/1360, 9-10=0/1360, 10-11=-316/859, 11-13=0/821, 13-14=0/821, 14-15=-766/123, 15-16=-766/123, 16-17=-766/123  
BOT CHORD 37-38=0/1801, 36-37=0/3036, 35-36=0/3036, 34-35=0/3036, 32-34=0/893, 31-32=-859/316, 30-31=-859/316, 28-30=-859/316, 27-28=-328/545, 26-27=-123/766, 25-26=-20/716  
WEBS 9-32=-259/0, 13-28=-326/0, 18-25=-255/0, 2-38=-1930/0, 2-37=0/1126, 3-37=-257/0, 7-32=-2324/0, 7-34=0/1547, 5-34=-844/0, 10-32=-1036/0, 11-28=-677/138, 14-28=-1159/0, 17-25=-768/22, 14-27=0/490, 15-27=-323/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24.
  - 6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 7) CAUTION, Do not erect truss backwards.



January 30, 2019

Job J0119-0149	Truss F03	Truss Type Floor	Qty 4	Ply 1	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651723
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:05 2019 Page 1  
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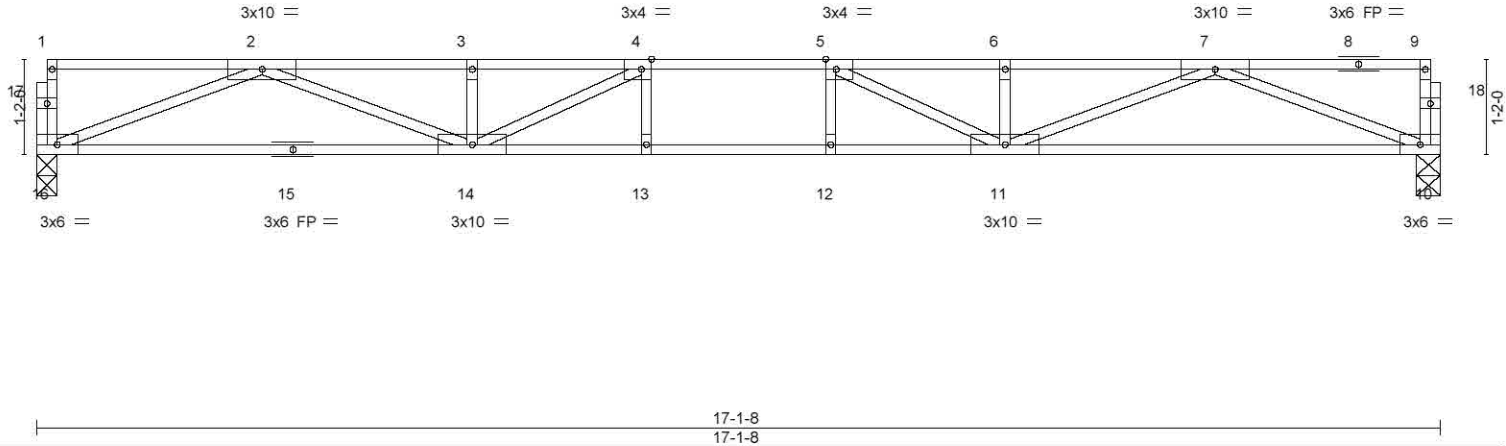


Plate Offsets (X,Y) - [4:0-1-8,Edge], [5:0-1-8,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	TC 0.49	Vert(LL)	-0.27	12-13	>759	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.86	Vert(CT)	-0.37	12-13	>547		
BCLL 0.0	Rep Stress Incr YES	WB 0.63	Horz(CT)	0.06	10	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 83 lb	FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (lb/size) 16=922/0-3-0, 10=922/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3244/0, 3-4=-3244/0, 4-5=-3711/0, 5-6=-3244/0, 6-7=-3244/0  
BOT CHORD 14-16=0/2011, 13-14=0/3711, 12-13=0/3711, 11-12=0/3711, 10-11=0/2011  
WEBS 2-16=-2157/0, 2-14=0/1331, 3-14=-273/22, 7-10=-2157/0, 7-11=0/1331, 6-11=-273/22, 5-11=-826/0, 4-14=-826/0

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 3) Plates checked for a plus or minus 1 degree rotation about its center.
  - 4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 30, 2019





Job J0119-0149	Truss F06	Truss Type Floor	Qty 6	Ply 1	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651726
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:09 2019 Page 1  
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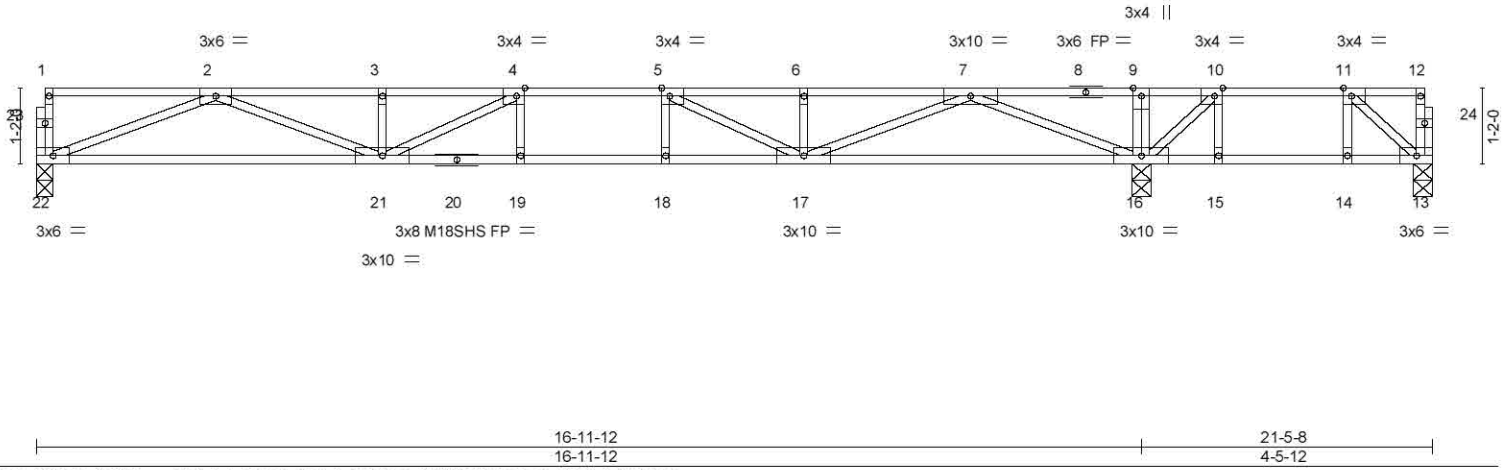
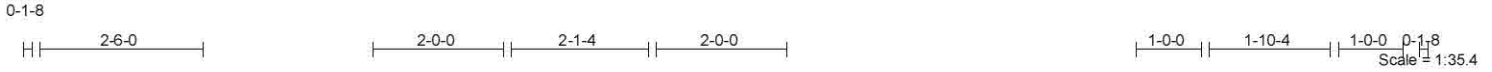


Plate Offsets (X,Y) -	[4:0-1-8,Edge], [5:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge]				
<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL.</b> in (loc) l/defl L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.64	Vert(LL) -0.25 19 >792 480	MT20	244/190
TCDL 10.0	Lumber DOL 1.00	BC 0.89	Vert(CT) -0.35 19 >578 360	M18SHS	244/190
BCLL 0.0	Rep Stress Incr YES	WB 0.69	Horz(CT) 0.05 16 n/a n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			
				Weight: 106 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 SP No.1(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1(flat)	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 22=867/0-3-0, 16=1411/0-3-8, 13=42/0-3-8  
Max Uplift 13=-126(LC 3)  
Max Grav 22=870(LC 10), 16=1411(LC 1), 13=180(LC 4)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2999/0, 3-4=-2999/0, 4-5=-3297/0, 5-6=-2662/0, 6-7=-2662/0, 7-9=0/807, 9-10=0/802, 10-11=-112/338  
BOT CHORD 21-22=0/1882, 19-21=0/3297, 18-19=0/3297, 17-18=0/3297, 16-17=0/1323, 15-16=-338/112, 14-15=-338/112, 13-14=-338/112  
WEBS 2-22=-2018/0, 2-21=0/1206, 3-21=-283/1, 7-16=-2219/0, 7-17=0/1459, 6-17=-258/30, 5-17=-927/0, 4-21=-638/50, 10-16=-767/0, 11-13=-144/457

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 13.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - CAUTION, Do not erect truss backwards.



January 30, 2019



Job J0119-0149	Truss F07	Truss Type FLOOR	Qty 4	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651727
					Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:10 2019 Page 1  
ID:S5MG8EgBIVMxfeJ50K9uoEzw9E3-nt?due9Vj3hJbplVIA?tdx\_zaoZgtHXb2q\_YOzq9a?

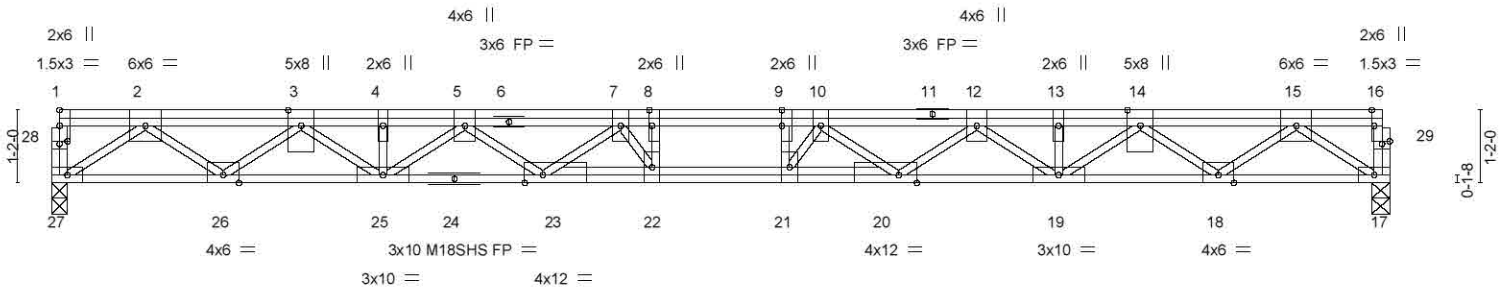
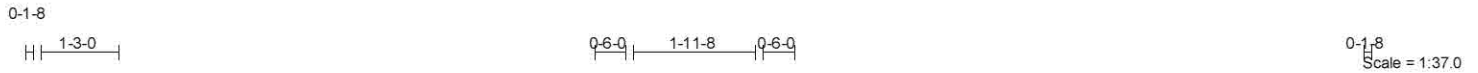


Plate Offsets (X,Y) -	[8:0-3-0,Edge], [9:0-3-0,0-0-0], [16:0-3-0,Edge], [20:0-3-8,Edge], [23:0-3-8,Edge], [28:0-1-8,0-0-8], [29:0-1-8,0-0-8]
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LOADING (psf)	SPACING	CSI	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.17	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.00	BC 0.71	Vert(LL) -0.37 21-22 >695 480	M18SHS	244/190
BCLL 0.0	Lumber DOL 1.00	WB 0.68	Vert(CT) -0.50 21-22 >505 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.09 17 n/a n/a		
	Code IRC2015/TPI2014			Weight: 145 lb	FT = 20%F, 11%E

LUMBER-	BRACING-
TOP CHORD 2x4 SP 2400F 2.0E(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3(flat)	

**REACTIONS.** (lb/size) 27=1160/0-3-0, 17=1160/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2678/0, 3-4=-4608/0, 4-5=-4608/0, 5-7=-6142/0, 7-8=-6609/0, 8-9=-6609/0, 9-10=-6609/0, 10-12=-6218/0, 12-13=-4650/0, 13-14=-4650/0, 14-15=-2668/0  
BOT CHORD 26-27=0/1551, 25-26=0/3741, 23-25=0/5415, 22-23=0/6540, 21-22=0/6609, 20-21=0/6555, 19-20=0/5476, 18-19=0/3757, 17-18=0/1546  
WEBS 2-27=-1900/0, 2-26=0/1433, 3-26=-1349/0, 3-25=0/1082, 15-17=-1894/0, 15-18=0/1426, 14-18=-1382/0, 14-19=0/1114, 12-19=-1029/0, 12-20=0/877, 5-25=-1006/0, 5-23=0/859, 7-23=-606/0, 10-20=-559/0, 10-21=-365/635, 9-21=-424/186, 7-22=-340/651, 8-22=-399/212

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 3x6 MT20 unless otherwise indicated.
  - Plates checked for a plus or minus 1 degree rotation about its center.
  - Required 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 30, 2019

**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 J0119-0149	Truss F08	Truss Type FLOOR	Qty 7	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651728
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:10 2019 Page 1  
ID:S5MG8EgBIVMxfeJ50K9uoEzw9E3-nt?due9Vj3hJbplVA?tdXxa4ygsnXb2q\_YOzq9a?



Plate Offsets (X,Y) - [14:0-1-8,Edge], [15:0-1-8,Edge]		20-9-0		20-9-0	
<b>LOADING</b> (psf)	<b>SPACING</b> 1-7-3	<b>CSI</b>	<b>DEFL.</b> in (loc)	<b>L/d</b>	<b>PLATES</b>
TCLL 40.0	Plate Grip DOL 1.00	TC 0.36	Vert(LL) -0.36 14-15 >683	480	MT20
TCDL 10.0	Lumber DOL 1.00	BC 0.46	Vert(CT) -0.49 14-15 >497	360	M18SHS
BCLL 0.0	Rep Stress Incr YES	WB 0.71	Horz(CT) 0.07 12 n/a	n/a	
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S			Weight: 101 lb FT = 20%F, 11%E

LUMBER-		BRACING-	
TOP CHORD	2x4 SP 2400F 2.0E(flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP 2400F 2.0E(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		

**REACTIONS.** (lb/size) 18=896/0-3-0, 12=896/0-3-0

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-3395/0, 3-4=-3395/0, 4-5=-4392/0, 5-6=-4392/0, 6-7=-4392/0, 7-9=-3395/0, 9-10=-3395/0  
 BOT CHORD 17-18=0/2005, 15-17=0/4174, 14-15=0/4392, 13-14=0/4174, 12-13=0/2005  
 WEBS 2-18=-2151/0, 2-17=0/1501, 10-12=-2151/0, 10-13=0/1501, 7-13=-840/0, 4-17=-840/0, 4-15=-113/596, 5-15=-264/26, 7-14=-113/596, 6-14=-264/26

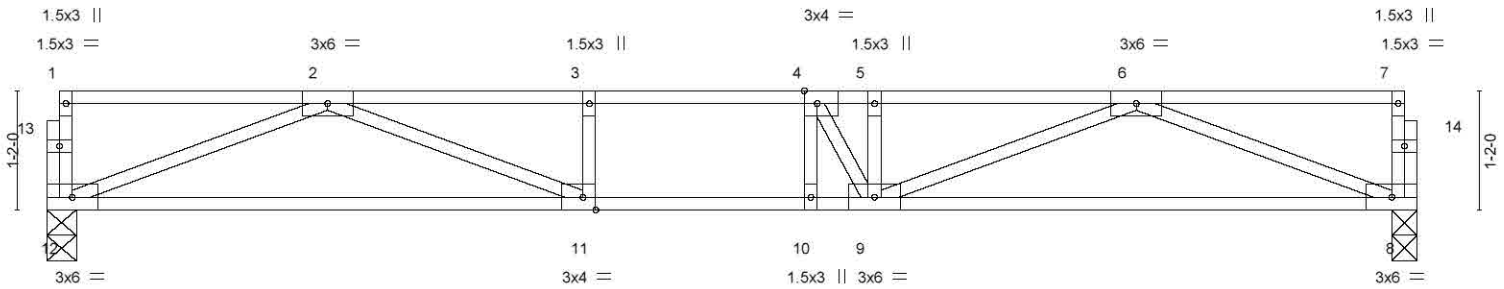
- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 3) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 4) Plates checked for a plus or minus 1 degree rotation about its center.
  - 5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



Job J0119-0149	Truss F09	Truss Type Floor	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651729
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:59:11 2019 Page 1  
ID:S5MG8EgBIVMxfEJ50K9uoEzw9E3-F4Y75\_A7UMpADyKiRuW69q36U\_NjPOJgqiaX5rzq9a\_



	6-8-8	8-0-8	13-5-0
	6-8-8	1-4-0	5-4-8
Plate Offsets (X,Y) -	[4:0-1-8,Edge], [11:0-1-8,Edge]		
<b>LOADING</b> (psf)	<b>SPACING</b> 2-0-0	<b>CSI</b>	<b>DEFL.</b> in (loc) l/defl L/d
TCLL 40.0	Plate Grip DOL 1.00	TC 0.38	Vert(LL) -0.13 10 >999 480
TCDL 10.0	Lumber DOL 1.00	BC 0.68	Vert(CT) -0.20 11-12 >788 360
BCLL 0.0	Rep Stress Incr YES	WB 0.44	Horz(CT) 0.03 8 n/a n/a
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S	
			<b>PLATES</b> MT20
			<b>GRIP</b> 244/190
			Weight: 66 lb FT = 20%F, 11%E

**LUMBER-**  
TOP CHORD 2x4 SP No.1(flat)  
BOT CHORD 2x4 SP No.1(flat)  
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (lb/size) 12=718/0-3-8, 8=718/0-3-0

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2248/0, 3-4=-2248/0, 4-5=-2231/0, 5-6=-2231/0  
BOT CHORD 11-12=0/1499, 10-11=0/2248, 9-10=0/2248, 8-9=0/1504  
WEBS 2-12=-1607/0, 6-8=-1611/0, 6-9=0/785, 2-11=0/869, 5-9=-275/132, 4-9=-453/302

**NOTES-**  
1) Unbalanced floor live loads have been considered for this design.  
2) Plates checked for a plus or minus 1 degree rotation about its center.  
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails.  
Strongbacks to be attached to walls at their outer ends or restrained by other means.



January 30, 2019

**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.

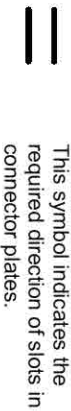
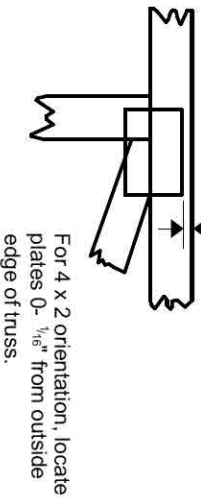
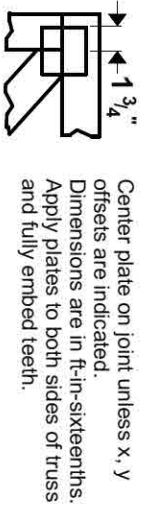


818 Soundside Road  
Edenton, NC 27932



# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

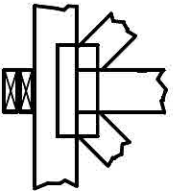
**4 X 4**

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

## LATERAL BRACING LOCATION



## BEARING

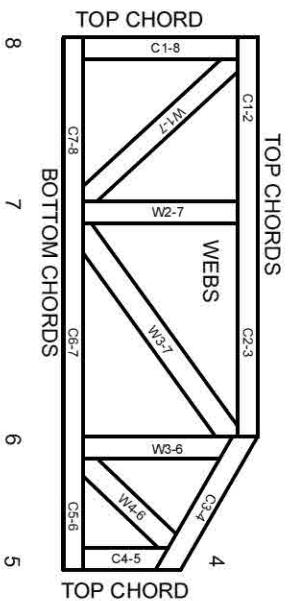


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, 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  
ESR-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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MiTrak Engineering Reference Sheet: 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 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord 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 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/TP1 1 Quality Criteria.

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: J0119-0148  
Mohler/Lot 22 Quail Glen/Harnett

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: E12651705 thru E12651718

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

North Carolina COA: C-0844



January 30, 2019

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.

Job J0119-0148	Truss A1-GE	Truss Type GABLE	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651705
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:28 2019 Page 1  
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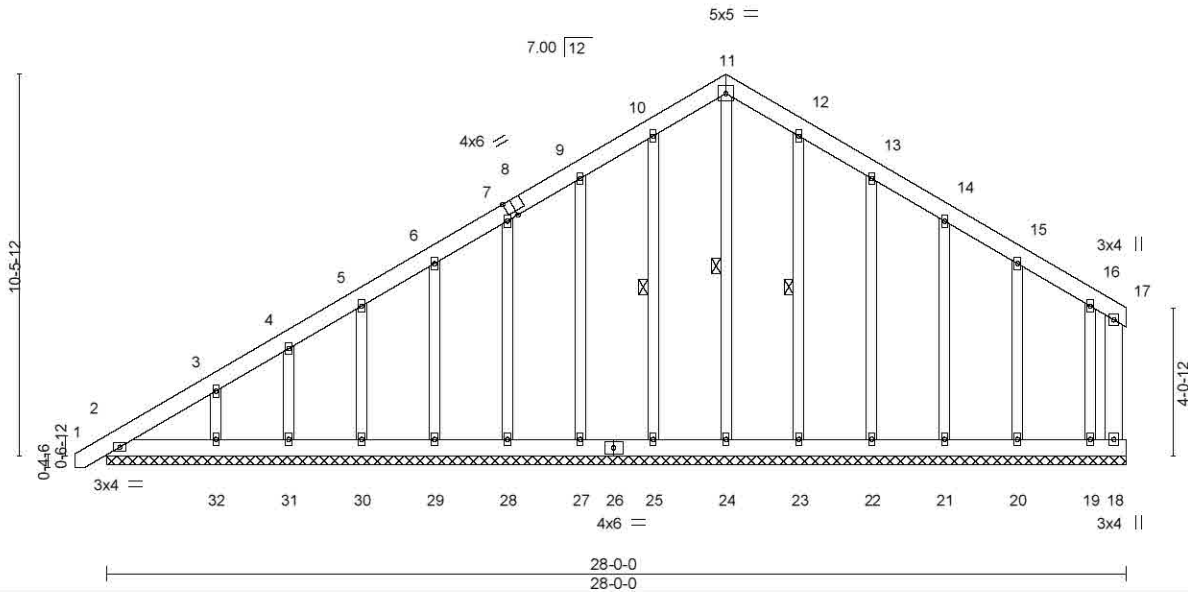


Plate Offsets (X,Y) - [8:0-2-11,Edge]

<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	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.02	Vert(CT)	0.00	1	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.00	18	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 263 lb	FT = 20%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
WEBS 1 Row at midpt 11-24, 10-25, 12-23

**REACTIONS.**

All bearings 28-0-0.  
(lb) - Max Horz 2=241(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 18, 25, 27, 28, 29, 30, 31, 32, 23, 22, 21, 20, 19  
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 24, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19 except 32=252(LC 19)

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

TOP CHORD 2-3=-256/233, 10-11=-233/273, 11-12=-233/273

**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 Corner(3) 0-8-13 to 3-8-0, Exterior(2) 3-8-0 to 17-0-0, Corner(3) 17-0-0 to 21-4-13 zone; 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.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 18, 25, 27, 28, 29, 30, 31, 32, 23, 22, 21, 20, 19.



January 30, 2019

**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.



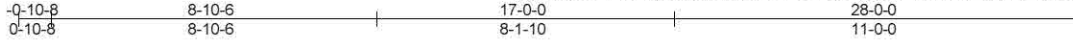
818 Soundside Road  
Edenton, NC 27932

Job J0119-0148	Truss A2	Truss Type COMMON	Qty 12	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651706
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:29 2019 Page 1

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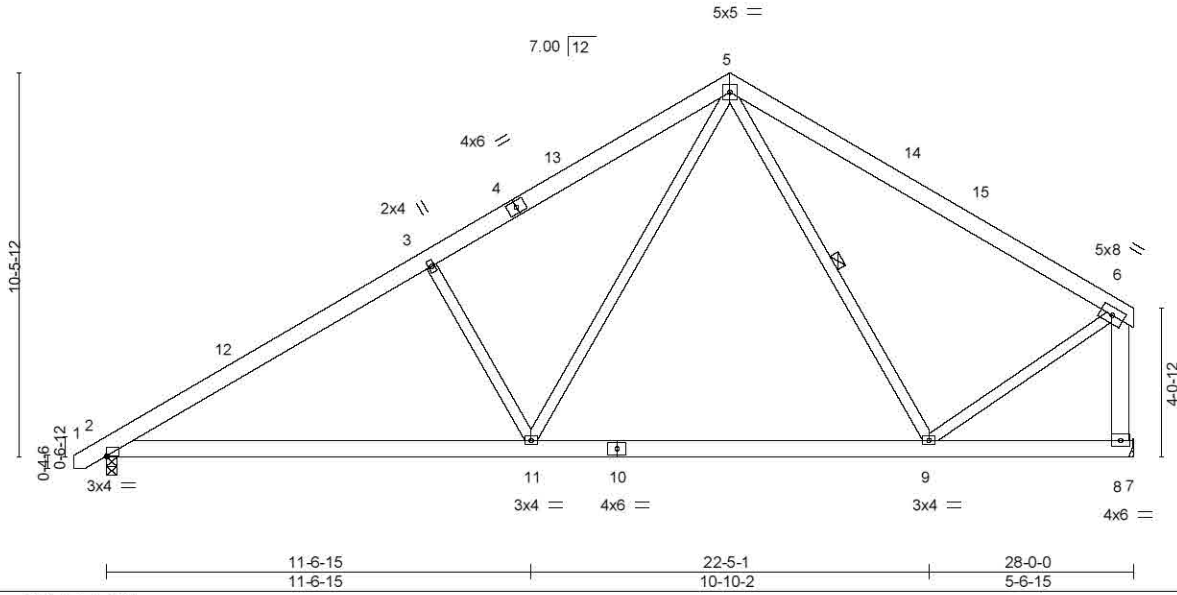


Plate Offsets (X,Y) - [2:0-0-2,0-0-2]

<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	Plate Grip DOL	1.15	TC 0.56	Vert(LL)	-0.18	9-11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.45	Vert(CT)	-0.25	9-11	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.35	Horz(CT)	0.02	8	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S	Wind(LL)	0.04	2-11	>999		
								Weight: 202 lb	FT = 20%

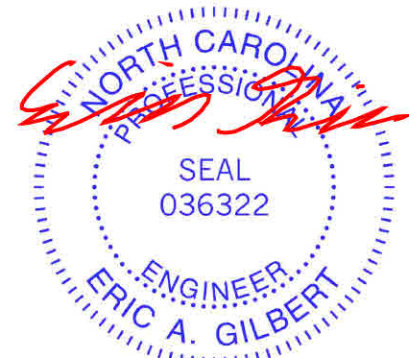
**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.3 \*Except\*  
 5-11,5-9: 2x4 SP No.2, 6-8: 2x6 SP No.1

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-6-5 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 WEBS 1 Row at midpt 5-9

**REACTIONS.** (lb/size) 2=1154/0-3-8, 8=1106/Mechanical  
 Max Horz 2=241(LC 9)  
 Max Uplift 2=-79(LC 12), 8=-39(LC 13)  
 Max Grav 2=1221(LC 19), 8=1197(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1799/328, 3-5=-1595/388, 5-6=-1022/232, 6-8=-1206/242  
 BOT CHORD 2-11=-305/1590, 9-11=-97/868  
 WEBS 3-11=-543/298, 5-11=-138/1002, 6-9=0/908

- 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) -0-8-13 to 3-8-0, Interior(1) 3-8-0 to 17-0-0, Exterior(2) 17-0-0 to 21-4-13 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, with BCDL = 10.0psf.
  - Refer to girder(s) for truss to truss connections.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



January 30, 2019

**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 J0119-0148	Truss A3	Truss Type COMMON	Qty 5	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651707
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:30 2019 Page 1  
ID:S5MG8EgBIVMxfEJ50K9uoEzw9E3-yBaVzgp8mf\_ofipXnHU?Bf5ZSQ3JtTeOq8s8jzq9ad

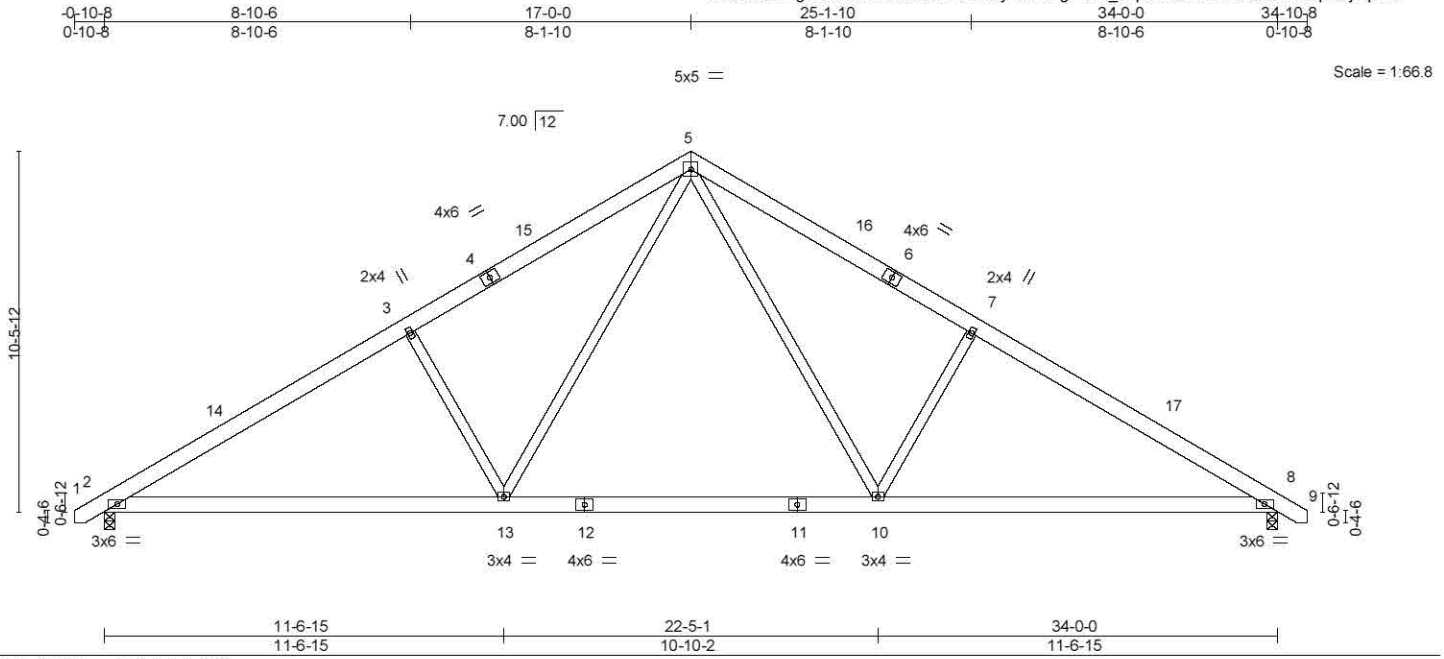


Plate Offsets (X,Y) = [6:0-0-0,0-0-0]					
<b>LOADING</b> (psf)	<b>SPACING</b>	<b>CSI</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.33	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.49	Vert(LL) -0.22 10-13 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.36	Vert(CT) -0.30 10-13 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.05 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.05 2-13 >999 240	Weight: 226 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
WEBS 2x4 SP No.2 \*Except\*  
7-10,3-13: 2x4 SP No.3

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

**REACTIONS.** (lb/size) 2=1401/0-3-8, 8=1401/0-3-8  
Max Horz 2=248(LC 10)  
Max Uplift 2=89(LC 12), 8=89(LC 13)  
Max Grav 2=1474(LC 19), 8=1474(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2291/434, 3-5=-2087/495, 5-7=-2087/495, 7-8=-2291/434  
BOT CHORD 2-13=-234/2043, 10-13=-18/1320, 8-10=-242/1857  
WEBS 5-10=-156/1001, 7-10=-561/311, 5-13=-156/1000, 3-13=-561/311

- 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) -0-8-13 to 3-8-0, Interior(1) 3-8-0 to 17-0-0, Exterior(2) 17-0-0 to 21-4-13 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.



January 30, 2019

Job J0119-0148	Truss A4	Truss Type ROOF SPECIAL	Qty 2	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651708
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:31 2019 Page 1

ID:S5MG8EgBIVMxfEJ50K9uoEzw9E3-QN8uiJh1u4nrPpG05UojXPP6PshQ2GhndUuQg9zq9ac



Scale = 1:71.0

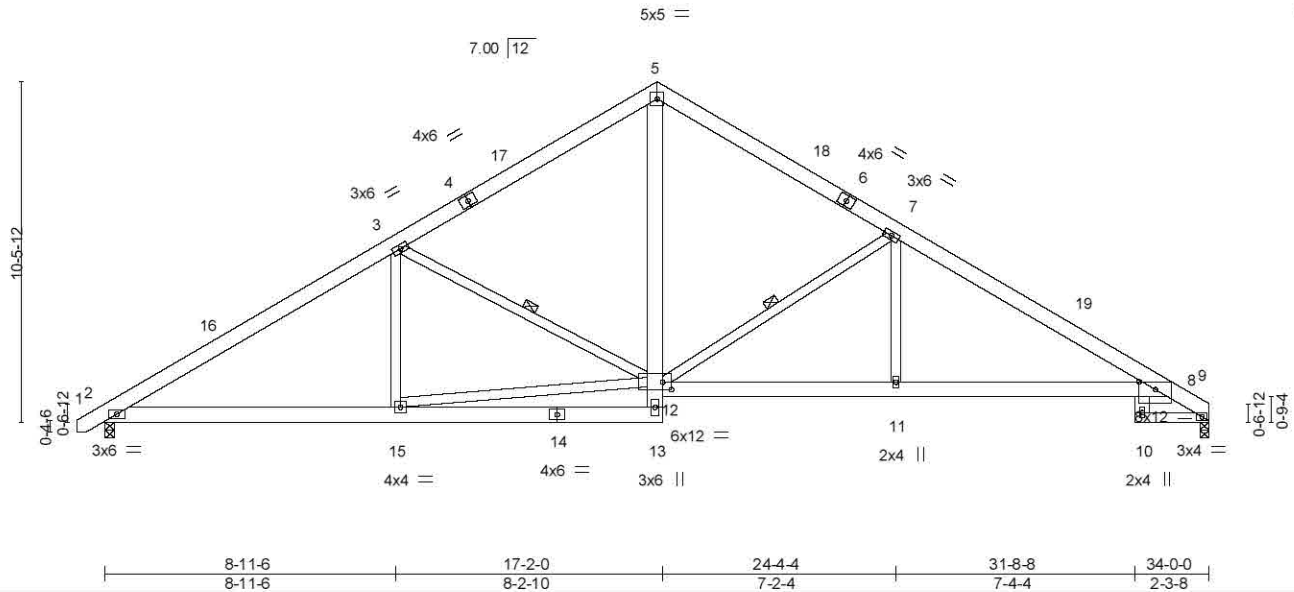


Plate Offsets (X,Y) - [8:0-6-0,0-2-14], [12:0-3-4,0-2-12]

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 0.97	Vert(LL)	-0.20	10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.80	Vert(CT)	-0.41	8-11	>995		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.25	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.16	10	>999		
								Weight: 249 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.1 *Except* 9-10: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 9-10.
WEBS 2x4 SP No.3 *Except* 8-10: 2x6 SP No.1	WEBS 1 Row at midpt 3-12, 7-12

**REACTIONS.** (lb/size) 9=1364/0-3-8, 2=1402/0-3-8  
Max Horz 2=246(LC 11)  
Max Uplift 9=67(LC 13), 2=88(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2174/411, 3-5=-1563/403, 5-7=-1571/413, 7-8=-2398/456, 8-9=-820/182  
BOT CHORD 2-15=-227/1773, 13-15=-50/440, 5-12=-206/1163, 11-12=-248/2054, 8-11=-248/2054  
WEBS 3-15=0/281, 12-15=-182/1350, 3-12=-730/242, 7-12=-1057/281, 7-11=0/461

- 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) -0-8-13 to 3-8-0, Interior(1) 3-8-0 to 17-0-0, Exterior(2) 17-0-0 to 21-4-13 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) 9, 2.



January 30, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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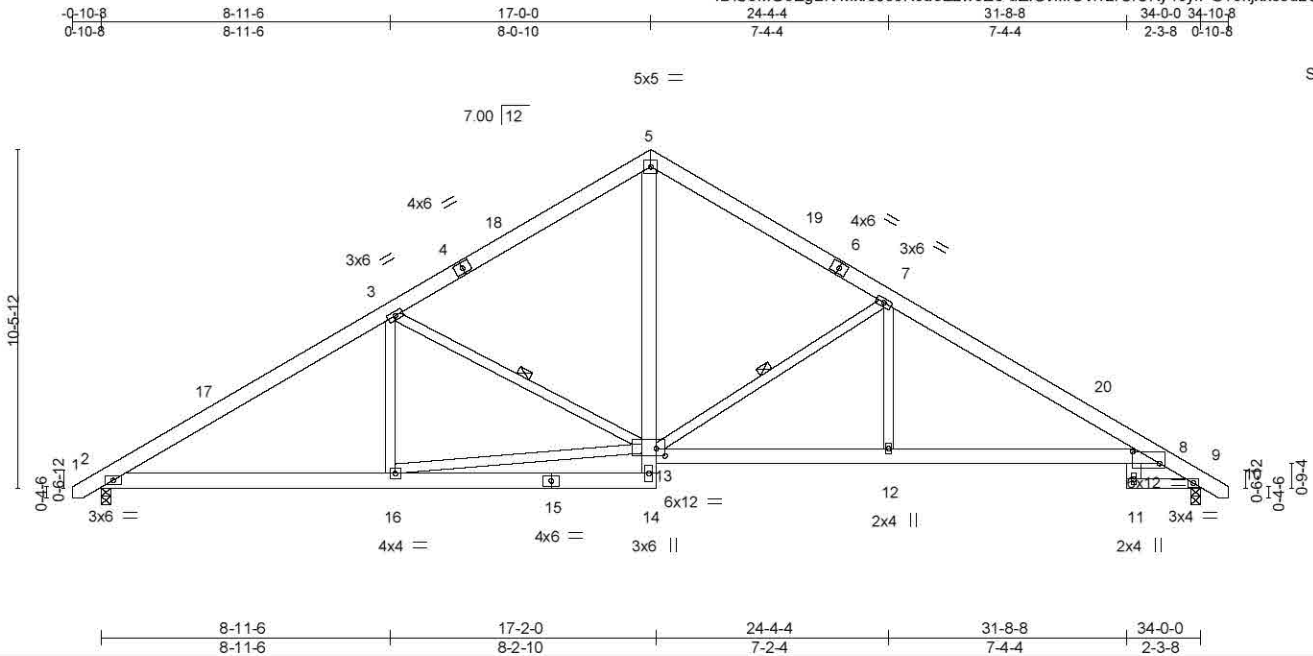


818 Soundside Road  
Edenton, NC 27932

Job J0119-0148	Truss A5	Truss Type ROOF SPECIAL	Qty 3	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651709
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:32 2019 Page 1  
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Scale = 1:71.3

Plate Offsets (X,Y) - [8:0-9-15,0-4-6], [13:0-3-4,0-2-12]

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 0.95	Vert(LL)	-0.20	11	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.79	Vert(CT)	-0.40	8-12	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.55	Horz(CT)	0.24	9	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.15	11	>999		
								Weight: 251 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.1 *Except* 9-11: 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 6-0-0 oc bracing: 9-11.
WEBS 2x4 SP No.3 *Except* 8-11: 2x6 SP No.1	WEBS 1 Row at midpt 3-13, 7-13

**REACTIONS.** (lb/size) 9=1417/0-3-8, 2=1402/0-3-8  
 Max Horz 2=249(LC 11)  
 Max Uplift 9=-79(LC 13), 2=-88(LC 12)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-2172/411, 3-5=-1561/402, 5-7=-1570/408, 7-8=-2393/442, 8-9=-825/194  
 BOT CHORD 2-16=-211/1775, 14-16=-47/439, 5-13=-201/1162, 12-13=-236/2049, 8-12=-236/2049  
 WEBS 3-16=0/281, 13-16=-169/1353, 3-13=-731/243, 7-13=-1059/278, 7-12=0/460

- 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) -0-8-13 to 3-8-0, Interior(1) 3-8-0 to 17-0-0, Exterior(2) 17-0-0 to 21-4-13 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) 9, 2.



January 30, 2019

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818 Soundside Road  
 Edenton, NC 27932

Job J0119-0148	Truss A6-GE	Truss Type GABLE	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651710
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	



Scale = 1:67.4

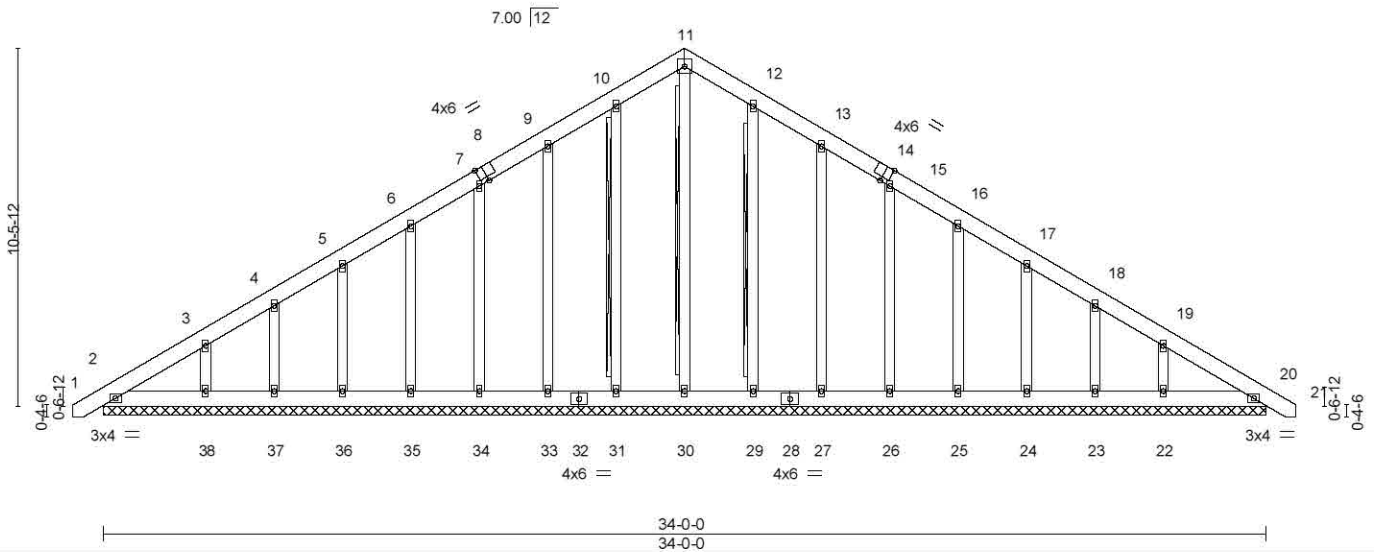


Plate Offsets (X,Y) - [8:0-2-11,Edge], [14:0-2-10,Edge]

<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	Plate Grip DOL	1.15	TC 0.04	Vert(LL)	0.00	20	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.03	Vert(CT)	0.00	20	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.16	Horz(CT)	0.01	20	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						
								Weight: 293 lb	FT = 20%

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

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
 Rigid ceiling directly applied or 10-0-0 oc bracing.  
 BOT CHORD T-Brace: 2x4 SPF No.2 - 11-30, 10-31, 12-29  
 WEBS Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.  
 Brace must cover 90% of web length.

**REACTIONS.** All bearings 34-0-0.  
 (lb) - Max Horz 2=310(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 33, 34, 35, 36, 37, 29, 27, 26, 25, 24, 23 except 38=-118(LC 12), 22=-116(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 20, 31, 33, 34, 35, 36, 37, 29, 27, 26, 25, 24, 23 except 30=257(LC 22), 38=259(LC 19), 22=257(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-284/232, 9-10=-215/254, 10-11=-245/278, 11-12=-245/278

- 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) gable end zone and C-C Exterior(2) zone; 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - 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, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 31, 33, 34, 35, 36, 37, 29, 27, 26, 25, 24, 23 except (jt=lb) 38=118, 22=116.
  - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 30, 2019

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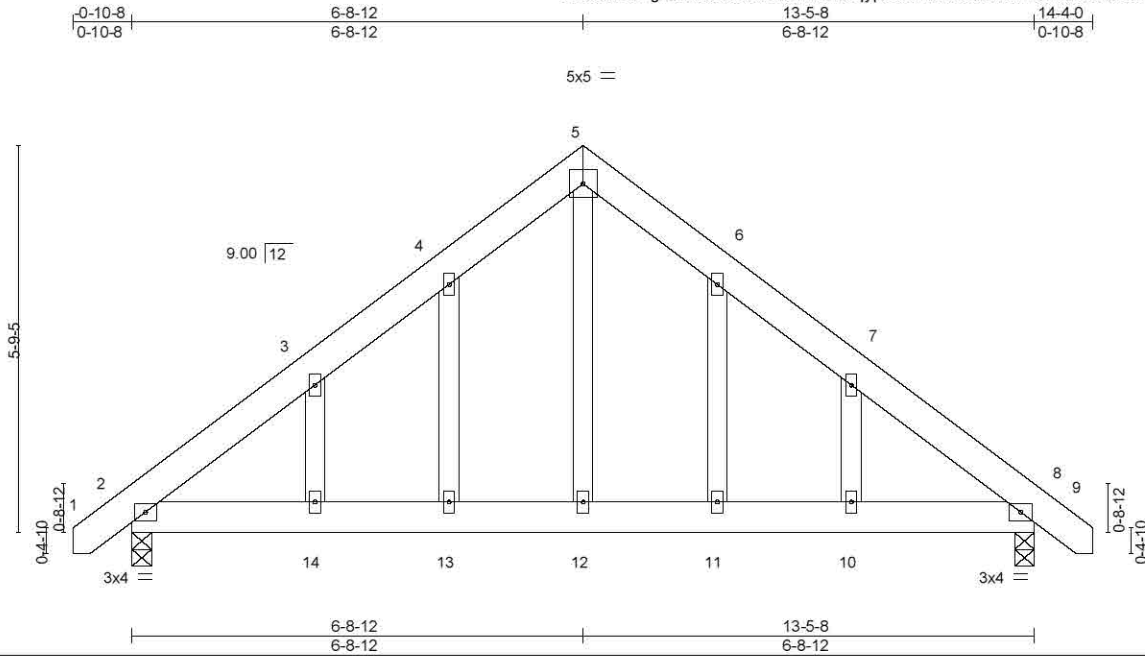


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Mohler/Lot 22 Quail Glen/Harnett	E12651711
J0119-0148	B1-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:34 2019 Page 1  
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Scale = 1:34.4

LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.19	Vert(LL) -0.02 14 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.03 13-14 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 8 n/a n/a	Weight: 99 lb	FT = 20%
	Code IRC2015/TPI2014		Wind(LL) 0.02 14 >999 240		

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 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 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 2=580/0-3-8, 8=580/0-3-8  
 Max Horz 2=-134(LC 10)  
 Max Uplift 2=-37(LC 12), 8=-37(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-589/108, 3-4=-514/181, 4-5=-538/245, 5-6=-538/245, 6-7=-515/181, 7-8=-589/108  
 BOT CHORD 2-14=0/396, 13-14=0/396, 12-13=0/396, 11-12=0/396, 10-11=0/396, 8-10=0/396  
 WEBS 5-12=-150/377

- 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 Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 6-8-12, Corner(3) 6-8-12 to 11-1-9 zone; 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.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - 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) 2, 8.



January 30, 2019

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**

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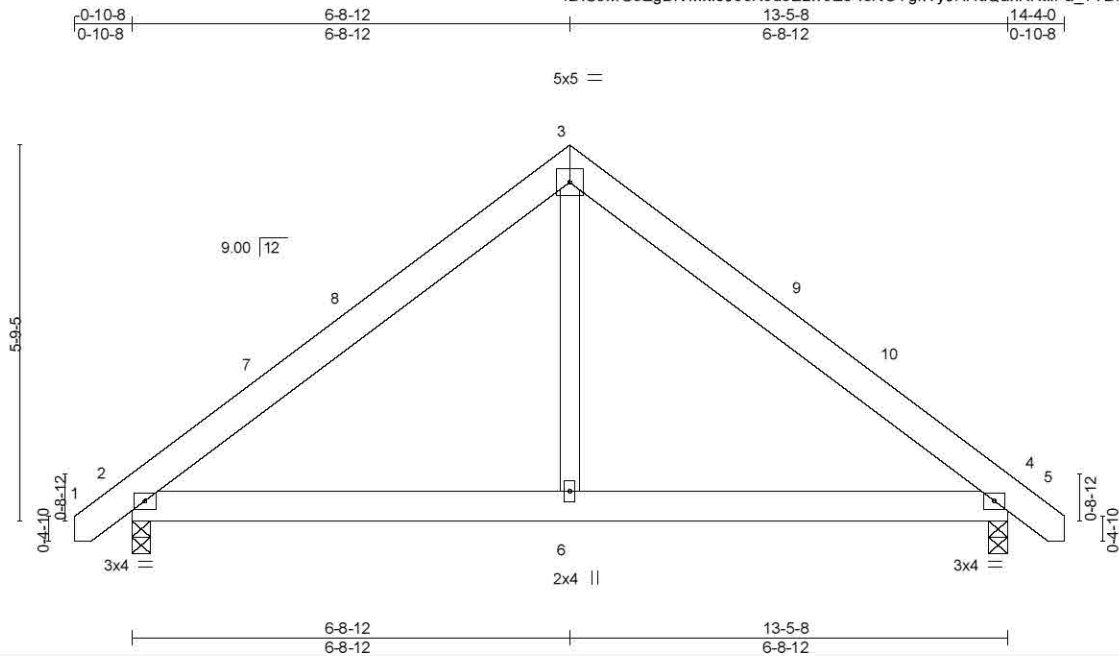
818 Soundside Road  
 Edenton, NC 27932

Job J0119-0148	Truss B2	Truss Type COMMON	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651712
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Comtech, Inc., Fayetteville, NC 28309

8:130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:35 2019 Page 1

ID:S5MG8EgBIVMxfeJ50K9uoEzw9E3-I8NOYgkYyJHHuQanKKffFa\_TTDP\_BONY6sdpwzq9aY



LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.19	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(LL) -0.01 2-6 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.03 2-6 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 4 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.01 2-6 >999 240	Weight: 84 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

**REACTIONS.** (lb/size) 2=580/0-3-8, 4=580/0-3-8  
 Max Horz 2=-134(LC 10)  
 Max Uplift 2=-37(LC 12), 4=-37(LC 13)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-604/159, 3-4=-604/159  
 BOT CHORD 2-6=0/390, 4-6=0/390  
 WEBS 3-6=0/320

- 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) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 6-8-12, Exterior(2) 6-8-12 to 11-1-9 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) 2, 4.

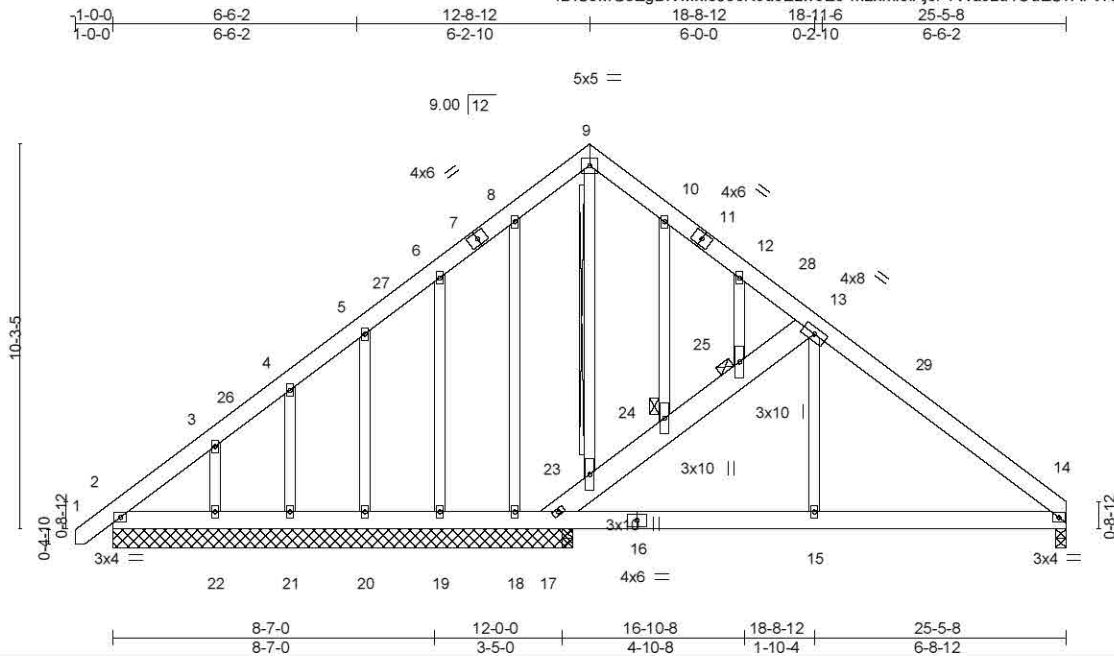


January 30, 2019

Job J0119-0148	Truss B3-GE	Truss Type GABLE	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651713
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Comtech, Inc., Fayetteville, NC 28309

8,130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:36 2019 Page 1  
ID: S5MG8EgBIVMxFeJ50K9uoEzw9E3-mLxml0IAjcP7Ww9zu1OuES7APYoJcMVWmbBLNzq9aX



Scale = 1:61.5

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.18	Vert(LL) -0.01	14-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.03	14-15	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT) 0.01	14	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.01	14-15	>999	240		
							Weight: 232 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3 *Except* 13-17: 2x8 SP No.1	WEBS T-Brace: 2x4 SPF No.2 - 9-23 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance. Brace must cover 90% of web length.
OTHERS 2x4 SP No.3	JOINTS 1 Brace at Jt(s): 24, 25

**REACTIONS.** All bearings 12-3-8 except (jt=length) 14=0-3-8.  
(lb) - Max Horz 2=241(LC 9)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 19, 20, 21, 22 except 18=104(LC 12)  
Max Grav All reactions 250 lb or less at joint(s) 2, 18, 19, 20, 21, 22 except 14=591(LC 1), 17=617(LC 3), 17=542(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-253/202, 13-14=-687/99  
BOT CHORD 15-17=0/473, 14-15=0/475  
WEBS 13-15=0/303, 17-23=-603/203, 23-24=-640/256, 24-25=-572/211, 13-25=-599/232

- 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) -0-10-8 to 3-6-5, Interior(1) 3-6-5 to 12-8-12, Exterior(2) 12-8-12 to 17-1-9 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 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, with BCDL = 10.0psf.
  - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 14, 19, 20, 21, 22 except (jt=l) 18=104.
  - 9) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



January 30, 2019

**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.

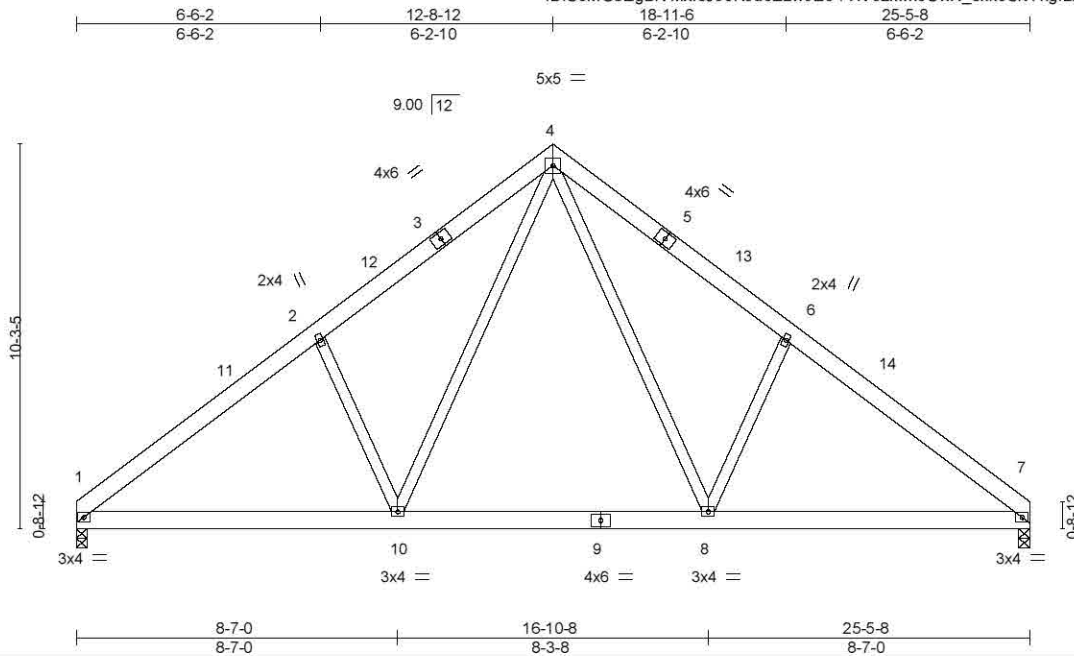


818 Soundside Road  
Edenton, NC 27932

Job J0119-0148	Truss B4	Truss Type Common	Qty 2	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651714
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:37 2019 Page 1  
ID:S5MG8EgBIVMxfEJ50K9uoEzw9E3-FXV9zMmoUwX\_8kk9Slv7ngfLFHs1S tJg?QLkupzq9aW



Scale = 1:61.5

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 0.17	Vert(LL)	-0.08	8-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.11	8-10	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.32	Horz(CT)	0.02	7	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.02	1-10	>999	Weight: 181 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 6-8,2-10: 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.**

(lb/size) 1=1007/0-3-8, 7=1007/0-3-8  
 Max Horz 1=234(LC 11)  
 Max Uplift 1=-48(LC 12), 7=-48(LC 13)  
 Max Grav 1=1052(LC 19), 7=1052(LC 20)

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

TOP CHORD 1-2=-1407/302, 2-4=-1320/417, 4-6=-1320/417, 6-7=-1408/302  
 BOT CHORD 1-10=-120/1203, 8-10=0/786, 7-8=-121/1061  
 WEBS 4-8=-168/706, 6-8=-424/280, 4-10=-168/706, 2-10=-424/280

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 12-8-12, Exterior(2) 12-8-12 to 17-1-9 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, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



January 30, 2019

**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 J0119-0148	Truss B5	Truss Type Common Girder	Qty 1	Ply 2	Mohler/Lot 22 Quail Glen/Harnett	E12651715
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:38 2019 Page 1  
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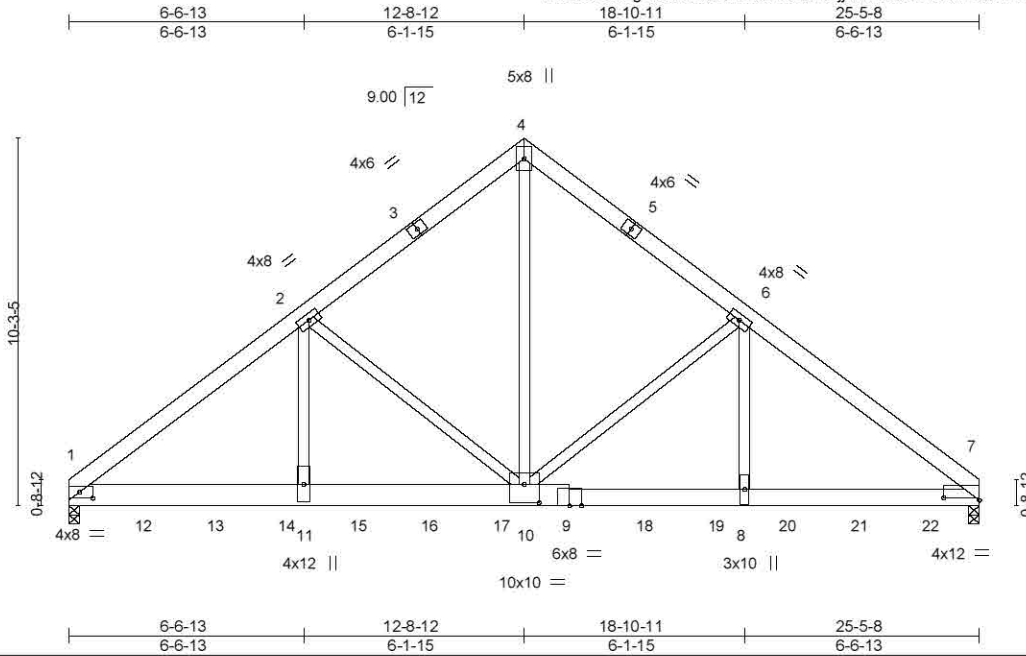


Plate Offsets (X,Y) - [1:0-4-7,0-2-0], [7:1-0-0,0-0-13], [10:0-5-0,0-6-4]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.29	Vert(LL) -0.12	7-8	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.23	7-8	>999	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.96	Horz(CT) 0.06	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08	7-8	>999	240		
							Weight: 391 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP 2400F 2.0E  
BOT CHORD 2x6 SP 2400F 2.0E \*Except\*  
1-9: 2x8 SP 2400F 2.0E  
WEBS 2x4 SP No.3 \*Except\*  
4-10: 2x4 SP No.2

**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.** (lb/size) 1=7353/0-3-8, 7=7695/0-3-9  
Max Horz 1=-234(LC 23)  
Max Uplift 1=-344(LC 8), 7=-360(LC 9)  
Max Grav 1=7590(LC 2), 7=7951(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-10235/477, 2-4=-6883/421, 4-6=-6908/422, 6-7=-10197/476  
BOT CHORD 1-11=-396/7991, 10-11=-396/7991, 8-10=-304/8025, 7-8=-302/7940  
WEBS 4-10=-388/7830, 6-10=-3218/301, 6-8=-95/3919, 2-10=-3280/300, 2-11=-96/3966

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-7-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - 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); 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) 1=344, 7=360.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1148 lb down and 59 lb up at 2-0-12, 1148 lb down and 59 lb up at 4-0-12, 1148 lb down and 59 lb up at 6-0-12, 1148 lb down and 59 lb up at 8-0-12, 1148 lb down and 59 lb up at 10-0-12, 1148 lb down and 59 lb up at 12-0-12, 1148 lb down and 59 lb up at 14-0-12, 1148 lb down and 59 lb up at 16-0-12, 1148 lb down and 59 lb up at 18-0-12, 1148 lb down and 59 lb up at 20-0-12, and 1148 lb down and 59 lb up at 22-0-12, and 1148 lb down and 59 lb up at 24-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

Continued on page 2



January 30, 2019

**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 J0119-0148	Truss B5	Truss Type Common Girder	Qty 1	Ply <b>2</b>	Mohler/Lot 22 Quail Glen/Harnett Job Reference (optional)	E12651715
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:38 2019 Page 2  
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**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 1-7=-20

Concentrated Loads (lb)

Vert: 9=-1086(B) 12=-1086(B) 13=-1086(B) 14=-1086(B) 15=-1086(B) 16=-1086(B) 17=-1086(B) 18=-1086(B) 19=-1086(B) 20=-1086(B) 21=-1086(B) 22=-1086(B)

**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 J0119-0148	Truss C1-GE	Truss Type ATTIC	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651716
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Comtech, Inc., Fayetteville, NC 28309

8:130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:39 2019 Page 1

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0-11-0 4-5-4 7-2-8 8-6-0,10-4-8 12-3-0 13-6-8 16-3-12 20-9-0 21-8-0  
 0-11-0 4-5-4 2-9-4 1-3-8 1-10-8 1-10-8 1-3-8 2-9-4 4-5-4 0-11-0

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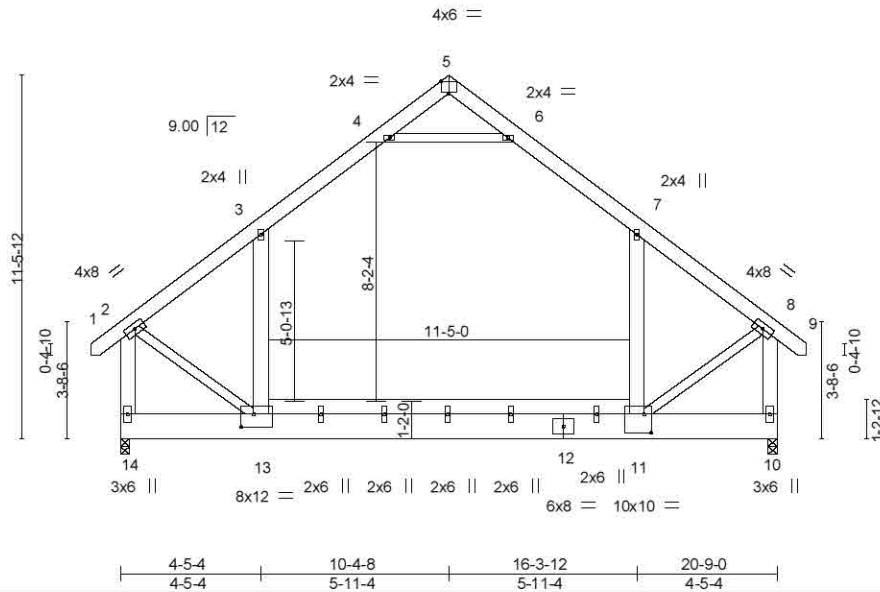


Plate Offsets (X,Y) - [5:0-3-0,Edge], [11:0-2-12,0-7-0], [13:0-4-12,0-4-12]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.68	Vert(LL) -0.21	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.33	11-13	>742	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	11-13	>999	240		
							Weight: 235 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 11-13: 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 4-6: 2x4 SP No.1, 2-13,8-11: 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 14=1174/0-3-8, 10=1174/0-3-8  
 Max Horz 14=-201(LC 10)  
 Max Grav 14=1441(LC 20), 10=1441(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1266/6, 3-4=-943/172, 4-5=0/421, 5-6=0/421, 6-7=-943/172, 7-8=-1266/6,  
 2-14=-1595/13, 8-10=-1595/13  
 BOT CHORD 13-14=-184/252, 11-13=0/898  
 WEBS 7-11=-141/423, 3-13=-141/423, 4-6=-1259/211, 2-13=0/1043, 8-11=0/1043

- 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 Corner(3) -0-9-0 to 3-7-13, Exterior(2) 3-7-13 to 10-5-0, Corner(3) 10-5-0 to 14-9-13 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.
  - Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-11, 3-13
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
  - Attic room checked for L/360 deflection.



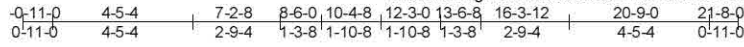
January 30, 2019

Job J0119-0148	Truss C2	Truss Type ATTIC	Qty 1	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651717
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:40 2019 Page 1

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Scale = 1:72.8

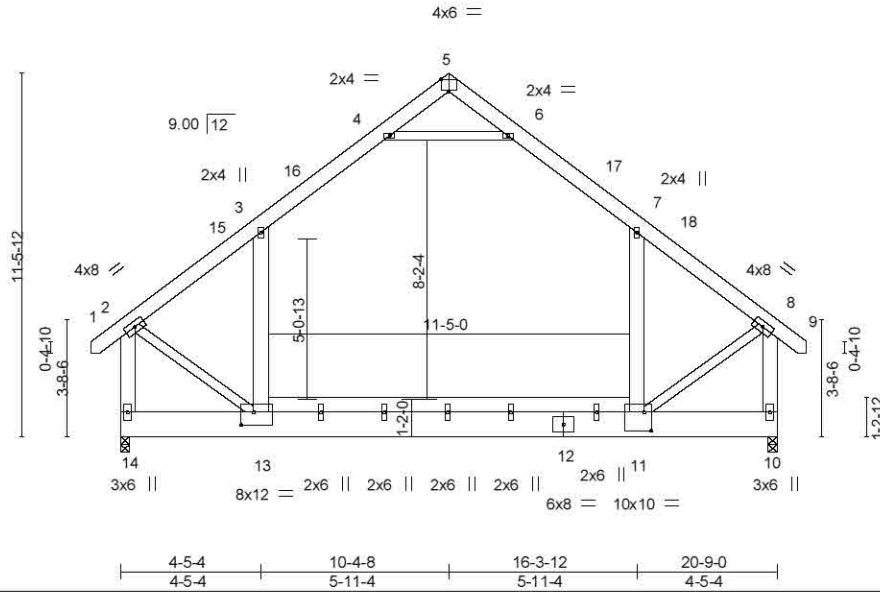


Plate Offsets (X,Y) - [5:0-3-0,Edge], [11:0-2-12,0-7-0], [13:0-4-12,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.67	Vert(LL) -0.21	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.33	11-13	>742	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.39	Horz(CT) 0.01	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.05	11-13	>999	240		
							Weight: 235 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 11-13: 2x6 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 4-6: 2x4 SP No.1, 2-13,8-11: 2x4 SP No.3

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-9-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(lb/size) 14=1174/0-3-8, 10=1174/0-3-8  
 Max Horz 14=201(LC 11)  
 Max Grav 14=1441(LC 20), 10=1441(LC 21)

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

TOP CHORD 2-3=-1266/0, 3-4=-943/138, 4-5=0/421, 5-6=0/421, 6-7=-943/138, 7-8=-1266/0,  
 2-14=-1595/0, 8-10=-1595/0  
 BOT CHORD 13-14=-184/252, 11-13=0/898  
 WEBS 7-11=-141/423, 3-13=-141/423, 4-6=-1259/142, 2-13=0/1043, 8-11=0/1043

**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) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 10-5-0, Exterior(2) 10-5-0 to 14-9-13 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).7-11, 3-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Attic room checked for L/360 deflection.



January 30, 2019

**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.



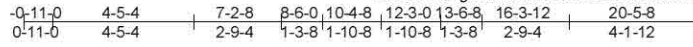
818 Soundside Road  
 Edenton, NC 27932

Job J0119-0148	Truss C3	Truss Type ATTIC	Qty 2	Ply 1	Mohler/Lot 22 Quail Glen/Harnett	E12651718
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Comtech, Inc., Fayetteville, NC 28309

8.130 s Mar 11 2018 MiTek Industries, Inc. Wed Jan 30 12:58:41 2019 Page 1

ID:S5MG8EgBIVMxfeJ50K9uoEzw9E3-7IkfokpJY92QcL1xhb\_3xWqvwu8cOqAGw1Jy1azq9aS



Scale = 1:72.8

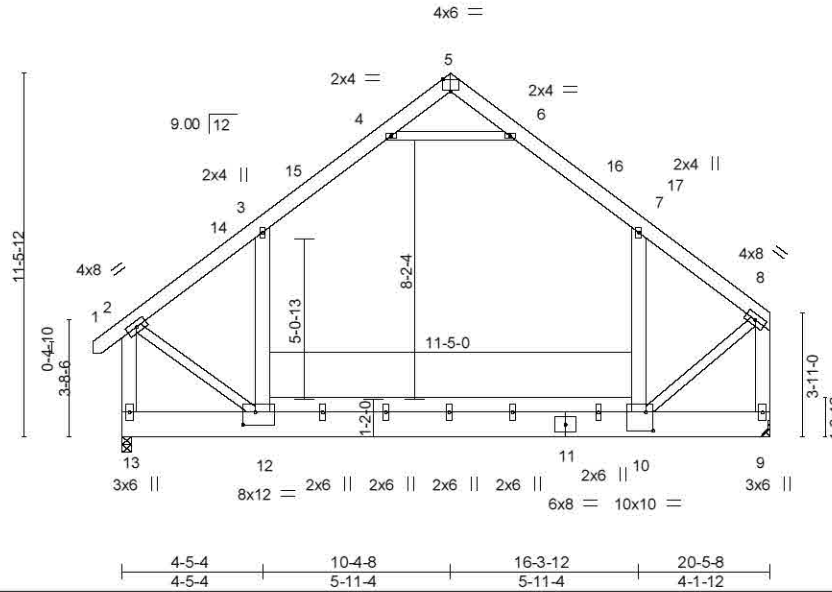


Plate Offsets (X,Y) - [5:0-3-0,Edge], [10:0-2-12,0-7-0], [12:0-4-12,0-4-12]

LOADING (psf)	SPACING	CSI	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.64	Vert(LL)	-0.20	10-12	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.68	Vert(CT)	-0.32	10-12	>760		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.42	Horz(CT)	0.01	9	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.05	10-12	>999		
	Code IRC2015/TPI2014						Weight: 231 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 5-10-10 oc purtins, except end verticals.
BOT CHORD 2x10 SP No.1 *Except* 10-12: 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x6 SP No.1 *Except* 4-6: 2x4 SP No.1, 2-12,8-10: 2x4 SP No.3	

**REACTIONS.** (lb/size) 13=1159/0-3-8, 9=1104/Mechanical  
Max Horz 13=195(LC 9)  
Max Grav 13=1424(LC 20), 9=1390(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1234/0, 3-4=-923/135, 4-5=0/404, 5-6=0/402, 6-7=-928/136, 7-8=-1225/0,  
2-13=-1555/0, 8-9=-1607/0  
BOT CHORD 10-12=0/866  
WEBS 3-12=-152/405, 7-10=-165/397, 4-6=-1218/135, 2-12=0/1014, 8-10=0/1096

- 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) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 10-5-0, Exterior(2) 10-5-0 to 14-9-13 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.
  - Ceiling dead load (10.0 psf) on member(s). 3-4, 6-7, 4-6; Wall dead load (5.0psf) on member(s).3-12, 7-10
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 10-12
  - Refer to girder(s) for truss to truss connections.
  - Attic room checked for L/360 deflection.



January 30, 2019

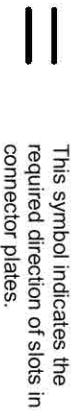
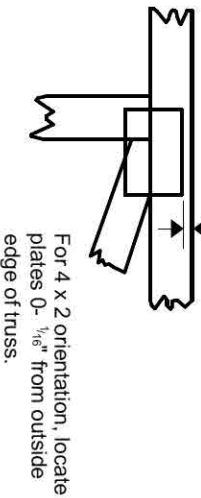
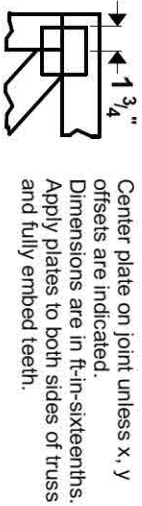
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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  
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# Symbols

## PLATE LOCATION AND ORIENTATION



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

## PLATE SIZE

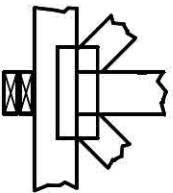
**4 X 4**

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

## LATERAL BRACING LOCATION



## BEARING

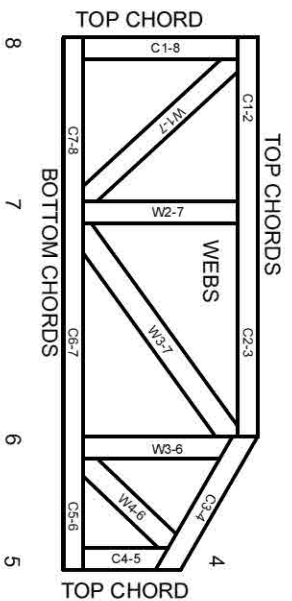


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing, 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  
ESR-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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MiTrak Engineering Reference Sheet: 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 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/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord 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 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/TP1 1 Quality Criteria.