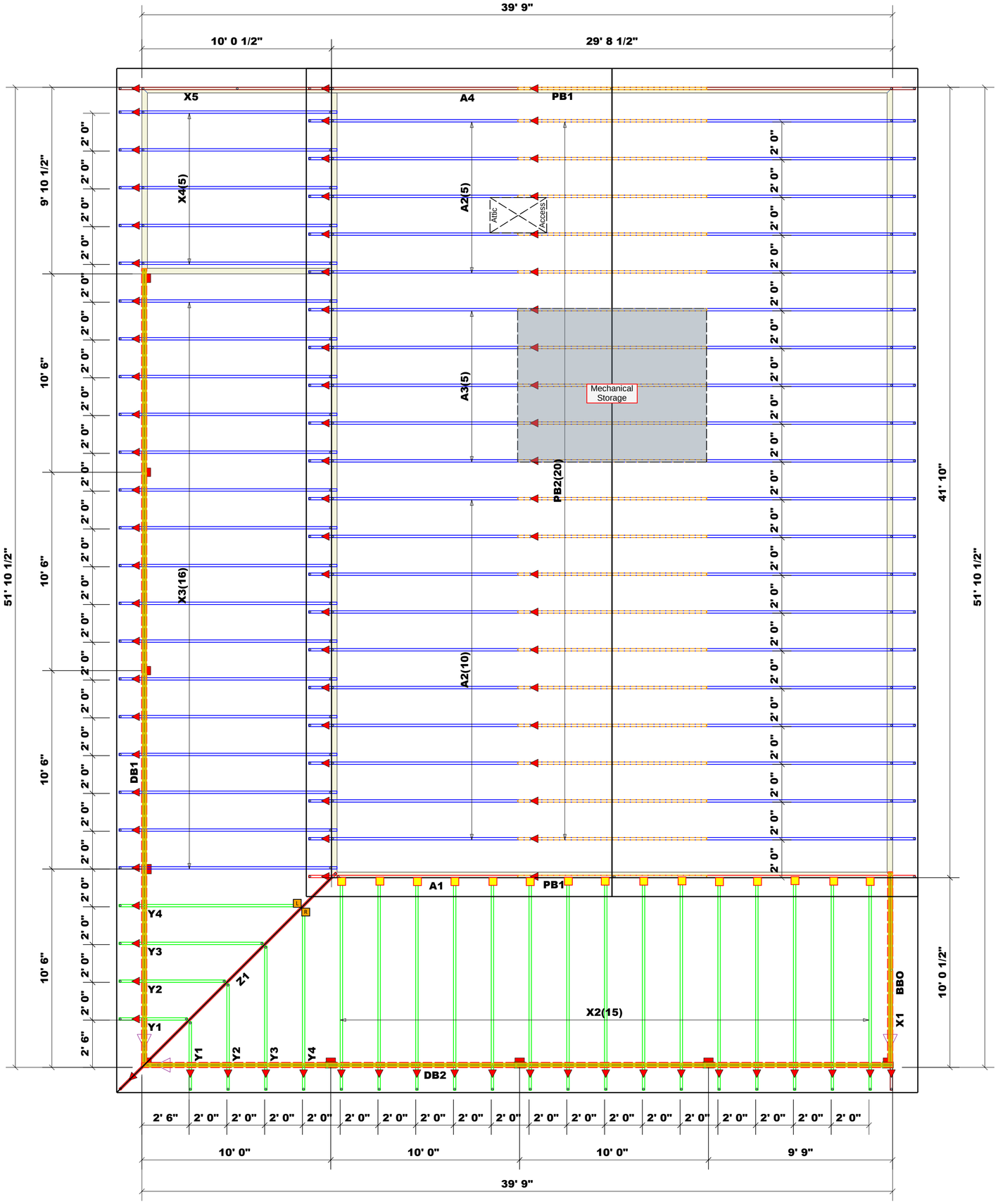


Roof Area = 2705.11 sq.ft.
Ridge Line = 43.83 ft.
Hip Line = 16.34 ft.
Horiz. OH = 226.13 ft.
Raked OH = 101.27 ft.
Decking = 93 sheets

All Walls Shown Are Considered Load Bearing

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

▲= Denotes Left End of Truss
(Reference Engineered Truss Drawing)

Dimension Notes

1. All exterior wall to wall dimensions are to face of stud unless noted otherwise
2. All interior wall dimensions are to face of stud unless noted otherwise
3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

Hatch Legend

Padded HVAC

Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	JUS24	USP	15	NA	10d/3"	10d/3"
L	SKH26L	USP	1	Varies	16d/3-1/2"	10d/1-1/2"
R	SKH26R	USP	1	Varies	16d/3-1/2"	10d/1-1/2"

Products				
PlotID	Length	Product	Plies	Net Qty
DB1	44' 0"	2x12 SP No.2	2	2
DB2	40' 0"	2x12 SP No.2	2	2

All Truss Reactions are Less than 3,000 lbs. Unless Noted Otherwise.

-- Denotes Reaction Greater than 3,000 lbs. Reaction / # of Studs

COMTECH
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

Neil Baggett

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (SP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (DF TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (SP TO)	REQ'D STUDS FOR (4) 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				

BUILDER	Cash/Brian Shirey
JOB NAME	Shirey Residence
PLAN	Custom
SEAL DATE	Seal Date
QUOTE #	Quote #
JOB #	J0524-2717
CITY / CO.	Spring Lake / Harnett
ADDRESS	184 Donnas Lane
MODEL	Roof
DATE REV.	5/9/2024
DRAWN BY	Neil Baggett
SALES REP.	Neil Baggett

Reaction Summary of Order

ComTech
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	**ORDER #**	J0524-2717
ORDER DATE	05/07/24	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	000127
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	NONE	**INVOICE #**	
COUNTY	Harnett	**TERMS**	TO BE PRE-PAID
SUPERINTENDANT	NONE	**SALES REP**	Neil Baggett
JOBSITE PHONE #	( ) -	**SALES AREA**	Neil Baggett

SOLD TO
CASH OR CHECKS ONLY
NO CREDIT CARDS,
( ) -

SHIP TO
Cash/Brian Shirey
184 Donnas Lane
Spring Lake, NC

JOB NAME: Shirey Residence **LOT #** **SUBDIV:**
MODEL: Roof **TAG:** Custom **JOB CATEGORY:** WCall - Will Call

DELIVERY INSTRUCTIONS:
50 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

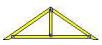
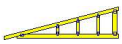
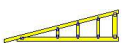
BUILDING DEPARTMENT	**OVERHANG INFO**		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**					**BY**	**DATE**
Roof Order	**END CUT**	**RETURN**											**QUOTE**		/ /
	PLUMB		**GABLE STUDS**	24 IN. OC			JOBSITE	1			JOBSITE	1	**LAYOUT**		/ /
													CUTTING	NB	05/07/24

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY	PITCH		TYPE	BASE	LUMBER		OVERHANG		REACTIONS				
	PLY	TOP	BOT	ID	O/A	TOP	BOT	LEFT	RIGHT					
	1	8.00	0.00	PIGGYBACK A1	29-05-00 29-04-00	2 X 6	2 X 6	01-06-08	01-03-00	Joint 19 711.0 lbs. -647.8 lbs.	Joint 20 923.4 lbs. -789.9 lbs.	Joint 21 551.1 lbs. -266.7 lbs.	Joint 22 554.4 lbs. -270.1 lbs.	Joint 23 553.4 lbs. -249.9 lbs.
	15	8.00	0.00	PIGGYBACK A2	29-08-08 29-07-08	2 X 6	2 X 6	01-03-00	01-03-00	Joint 7 1418.2 lbs. -53.4 lbs.	Joint 11 1418.2 lbs. -53.4 lbs.			
	5	8.00	0.00	PIGGYBACK A3	29-08-08 29-07-08	2 X 6	2 X 6	01-03-00	01-03-00	Joint 7 1418.2 lbs. -53.4 lbs.	Joint 11 1418.2 lbs. -53.4 lbs.			
	1	8.00	0.00	GABLE A4	29-08-08 29-07-08	2 X 6	2 X 6	01-03-00	01-03-00	Joint 19 544.3 lbs. -484.1 lbs.	Joint 20 626.8 lbs. -514.0 lbs.	Joint 21 178.3 lbs. -96.1 lbs.	Joint 22 182.6 lbs. -95.6 lbs.	Joint 23 176.5 lbs. -68.5 lbs.
	2	8.00	0.00	GABLE PB1	08-05-12 08-05-12	2 X 4	2 X 4			Joint 2 113.3 lbs. -19.6 lbs.	Joint 6 113.3 lbs. -17.6 lbs.	Joint 8 225.2 lbs. -114.8 lbs.	Joint 9 111.8 lbs. 24.0 lbs.	Joint 10 225.8 lbs. -115.3 lbs.
	20	8.00	0.00	PIGGYBACK PB2	08-05-12 08-05-12	2 X 4	2 X 4			Joint 2 216.0 lbs. -37.3 lbs.	Joint 4 216.0 lbs. -44.7 lbs.	Joint 6 305.9 lbs. 24.7 lbs.		
	1	3.00	0.00	MONOPITCH X1	10-00-08 10-00-08	2 X 4	2 X 6	01-02-08		Joint 2 219.4 lbs. -83.7 lbs.	Joint 7 3.7 lbs. -9.8 lbs.	Joint 8 70.7 lbs. -25.7 lbs.	Joint 9 168.9 lbs. -47.2 lbs.	Joint 10 99.0 lbs. -39.6 lbs.
	15	3.00	0.00	JACK-CLOSED X2	10-00-08 10-00-08	2 X 4	2 X 6	01-02-08		Joint 2 464.0 lbs. -184.5 lbs.	Joint 7 411.8 lbs. -159.0 lbs.			
	16	3.00	0.00	MONOPITCH X3	10-00-08 10-00-08	2 X 4	2 X 6	01-02-08	00-03-08	Joint 2 484.2 lbs. -192.6 lbs.	Joint 6 394.5 lbs. -160.3 lbs.			
	5	3.00	0.00	MONOPITCH X4	10-00-08 10-00-08	2 X 4	2 X 6	01-02-08	00-03-08	Joint 2 484.2 lbs. -79.0 lbs.	Joint 6 394.5 lbs. -48.4 lbs.			
	1	3.00	0.00	MONOPITCH X5	10-00-08 10-00-08	2 X 4	2 X 6	01-02-08		Joint 2 219.4 lbs. -83.7 lbs.	Joint 7 3.7 lbs. -9.8 lbs.	Joint 8 70.7 lbs. -25.7 lbs.	Joint 9 168.9 lbs. -47.2 lbs.	Joint 10 99.0 lbs. -39.6 lbs.

Reaction Summary of Order

ROOF & FLOOR TRUSSES & BEAMS
ComTech
Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	**ORDER #**	J0524-2717
ORDER DATE	05/07/24	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	000127
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	NONE	**INVOICE #**	
COUNTY	Harnett	**TERMS**	TO BE PRE-PAID
SUPERINTENDANT	NONE	**SALES REP**	Neil Baggett
JOBSITE PHONE #	( ) -	**SALES AREA**	Neil Baggett

SOLD TO
CASH OR CHECKS ONLY
NO CREDIT CARDS,
( ) -

SHIP TO
Cash/Brian Shirey
184 Donnas Lane
Spring Lake, NC

JOB NAME: Shirey Residence **LOT #** **SUBDIV:**
MODEL: Roof **TAG:** Custom **JOB CATEGORY:** WCall - Will Call

DELIVERY INSTRUCTIONS:
50 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

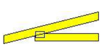
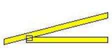
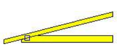
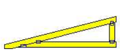
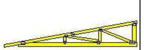
BUILDING DEPARTMENT	**OVERHANG INFO**		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**					**BY**	**DATE**
Roof Order	**END CUT**	**RETURN**											**QUOTE**		/ /
													LAYOUT		/ /
	PLUMB		**GABLE STUDS**	24 IN. OC			JOBSITE	1			JOBSITE	1	**CUTTING**	NB	05/07/24

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY PLY	PITCH TOP	PITCH BOT	TYPE ID	BASE O/A	LUMBER TOP	LUMBER BOT	OVERHANG LEFT	OVERHANG RIGHT	REACTIONS
	2	3.00	0.00	JACK-OPEN Y1	02-04-15 02-04-15	2 X 4	2 X 4	01-02-08		Joint 2: 185.1 lbs. -86.7 lbs.; Joint 3: 52.9 lbs. -19.4 lbs.; Joint 4: 40.0 lbs. -12.6 lbs.
	2	3.00	0.00	JACK-OPEN Y2	04-04-15 04-04-15	2 X 4	2 X 4	01-02-08		Joint 2: 256.5 lbs. -110.6 lbs.; Joint 3: 113.1 lbs. -43.4 lbs.; Joint 4: 78.1 lbs. -24.0 lbs.
	2	3.00	0.00	JACK-OPEN Y3	06-04-15 06-04-15	2 X 4	2 X 6	01-02-08		Joint 2: 333.4 lbs. -138.4 lbs.; Joint 3: 142.0 lbs. -54.2 lbs.; Joint 4: 132.1 lbs. -47.1 lbs.
	2	3.00	0.00	JACK-CLOSED Y4	08-04-15 08-04-15	2 X 6	2 X 6	01-02-08		Joint 2: 379.3 lbs. -150.1 lbs.; Joint 6: 348.2 lbs. -132.2 lbs.
	1	2.12	0.00	ROOF Z1	14-05-14 14-05-14	2 X 4	2 X 6	01-08-08		Joint 2: 924.4 lbs. -386.8 lbs.; Joint 9: 1350.2 lbs. -528.3 lbs.

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
15	Hangers, USP	JUS24			SIMPSON (LUS24)
1	Hangers, USP	SKH26L			SIMPSON (SUL26)
1	Hangers, USP	SKH26R			SIMPSON (SUR26)

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0524-2717
Cash/Shirey Residence/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: I65454086 thru I65454101

My license renewal date for the state of North Carolina is December 31, 2024.

North Carolina COA: C-0844

May 9,2024

Gilbert, Eric

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

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	A1	PIGGYBACK BASE GIRDE	1	1	I65454086
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:42 2024 Page 1
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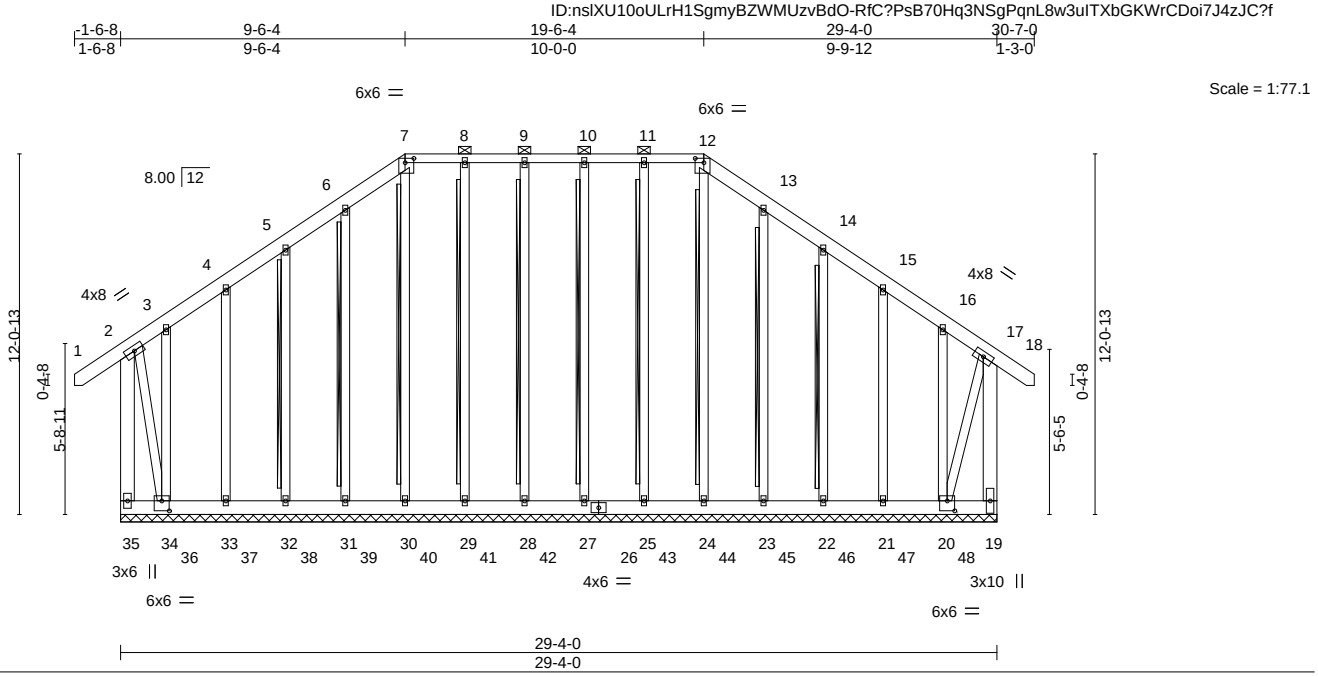


Plate Offsets (X,Y)-- [7:0-3-8,0-1-12], [12:0-3-8,0-1-12], [20:0-3-0,0-4-0], [34:0-3-0,0-4-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	-0.00	17	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	0.00	17	n/r	120		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.32	Horz(CT)	-0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 378 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except* 7-12: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1 *Except* 2-34,17-20: 2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 7-12.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 19-20.
WEBS	T-Brace: 2x4 SPF No.2 - 12-24, 11-25, 10-27, 9-28, 8-29, 7-30, 6-31, 5-32, 13-23, 14-22 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 29-4-0.
(lb) - Max Horz 35=-452(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) except 35=-732(LC 4), 19=-648(LC 5), 24=-184(LC 6), 25=-195(LC 4), 27=-236(LC 5), 28=-222(LC 4), 29=-215(LC 4), 30=-158(LC 7), 31=-251(LC 8), 32=-268(LC 8), 33=-278(LC 8), 34=-750(LC 5), 23=-250(LC 9), 22=-270(LC 9), 21=-267(LC 9), 20=-790(LC 4)
Max Grav All reactions 250 lb or less at joint(s) except 35=834(LC 34), 19=711(LC 25), 24=558(LC 1), 25=510(LC 1), 27=587(LC 19), 28=557(LC 20), 29=557(LC 1), 30=548(LC 1), 31=558(LC 1), 32=547(LC 19), 33=575(LC 1), 34=853(LC 25), 23=553(LC 1), 22=554(LC 20), 21=551(LC 1), 20=923(LC 34)

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

TOP CHORD	2-35=-588/536, 6-7=-56/267, 12-13=-77/278, 17-19=-620/570
BOT CHORD	34-35=-408/366, 33-34=-277/247, 32-33=-277/247, 31-32=-277/247, 30-31=-277/247, 29-30=-277/247, 28-29=-277/247, 27-28=-277/247, 25-27=-277/247, 24-25=-277/247, 23-24=-277/247, 22-23=-277/247, 21-22=-277/247, 20-21=-277/247
WEBS	2-34=-622/591, 17-20=-625/592

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; end vertical left and right exposed; 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

Continued on page 2

May 9,2024

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

NOTES-

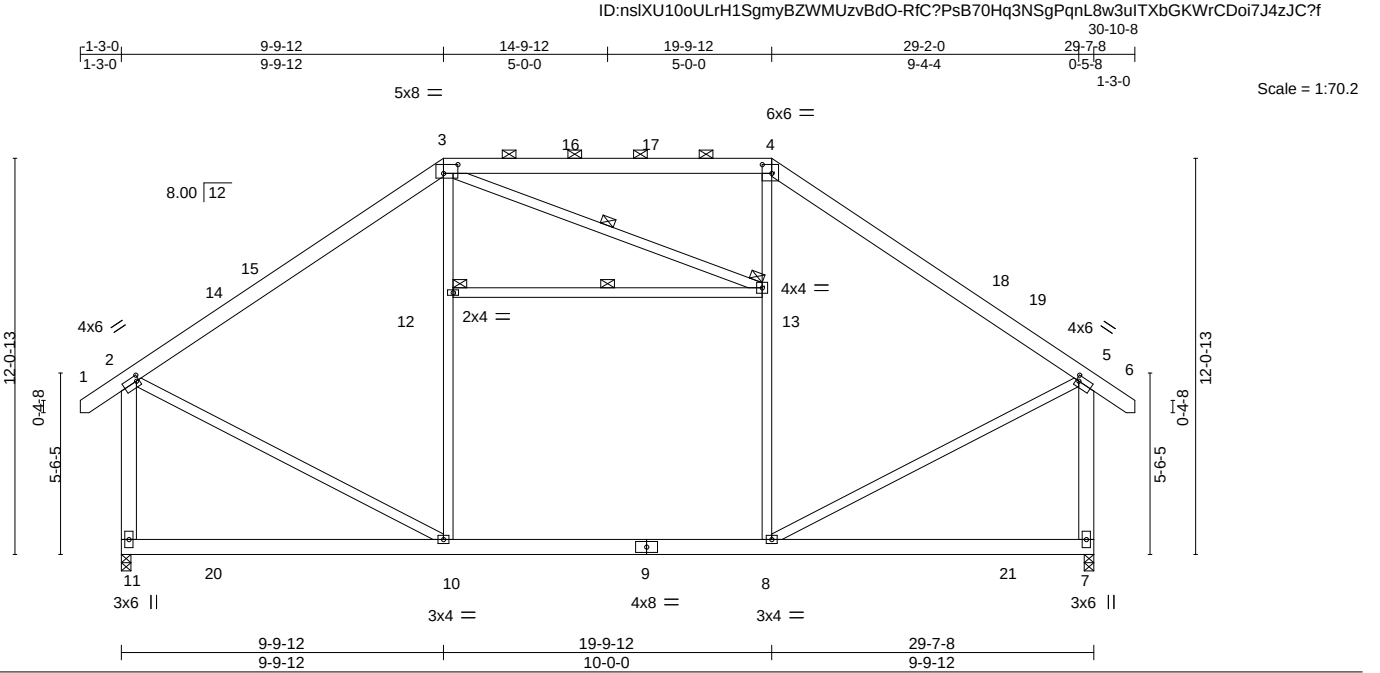
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 732 lb uplift at joint 35, 648 lb uplift at joint 19, 184 lb uplift at joint 24, 195 lb uplift at joint 25, 236 lb uplift at joint 27, 222 lb uplift at joint 28, 215 lb uplift at joint 29, 158 lb uplift at joint 30, 251 lb uplift at joint 31, 268 lb uplift at joint 32, 278 lb uplift at joint 33, 750 lb uplift at joint 34, 250 lb uplift at joint 23, 270 lb uplift at joint 22, 267 lb uplift at joint 21 and 790 lb uplift at joint 20.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 402 lb down and 170 lb up at 0-3-4, 392 lb down and 181 lb up at 2-2-12, 392 lb down and 181 lb up at 4-2-12, 392 lb down and 181 lb up at 6-2-12, 392 lb down and 181 lb up at 8-2-12, 392 lb down and 181 lb up at 10-2-12, 392 lb down and 181 lb up at 12-2-12, 392 lb down and 181 lb up at 14-2-12, 392 lb down and 181 lb up at 16-2-12, 392 lb down and 181 lb up at 18-2-12, 392 lb down and 181 lb up at 20-2-12, 392 lb down and 181 lb up at 22-2-12, 392 lb down and 181 lb up at 24-2-12, and 392 lb down and 181 lb up at 26-2-12, and 393 lb down and 180 lb up at 28-2-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.
15) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-7=-60, 7-12=-60, 12-17=-60, 17-18=-60, 19-35=-20
   Concentrated Loads (lb)
   Vert: 35=-402(F) 26=-392(F) 36=-392(F) 37=-392(F) 38=-392(F) 39=-392(F) 40=-392(F) 41=-392(F) 42=-392(F) 43=-392(F) 44=-392(F) 45=-392(F) 46=-392(F) 47=-392(F) 48=-393(F)

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	A2	PIGGYBACK BASE	15	1	I65454087
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:43 2024 Page 1
ID:nslXU10oULrH1SgmyBZWMUzvBdO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:70.2

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

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.18	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.22	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.20	10-11	>999	240	Weight: 272 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 2-11,5-7: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 12-13, 3-13
JOINTS	1 Brace at Jt(s): 12, 13

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=-356(LC 10)
Max Uplift 11=-53(LC 12), 7=-53(LC 13)
Max Grav 11=1418(LC 2), 7=1418(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1118/332, 3-4=-821/384, 4-5=-1118/332, 2-11=-1253/424, 5-7=-1252/424
BOT CHORD 10-11=-333/377, 8-10=-175/864
WEBS 2-10=-135/905, 5-8=-136/905

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 9-10-4, Exterior(2) 9-10-4 to 16-0-15, Interior(1) 16-0-15 to 19-10-4, Exterior(2) 19-10-4 to 26-0-15, Interior(1) 26-0-15 to 30-9-7 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 11 and 53 lb uplift at joint 7.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	A3	PIGGYBACK BASE	5	1	I65454088
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:43 2024 Page 1
ID:nslXU10oULrH1SgmyBZWMUzvBdO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

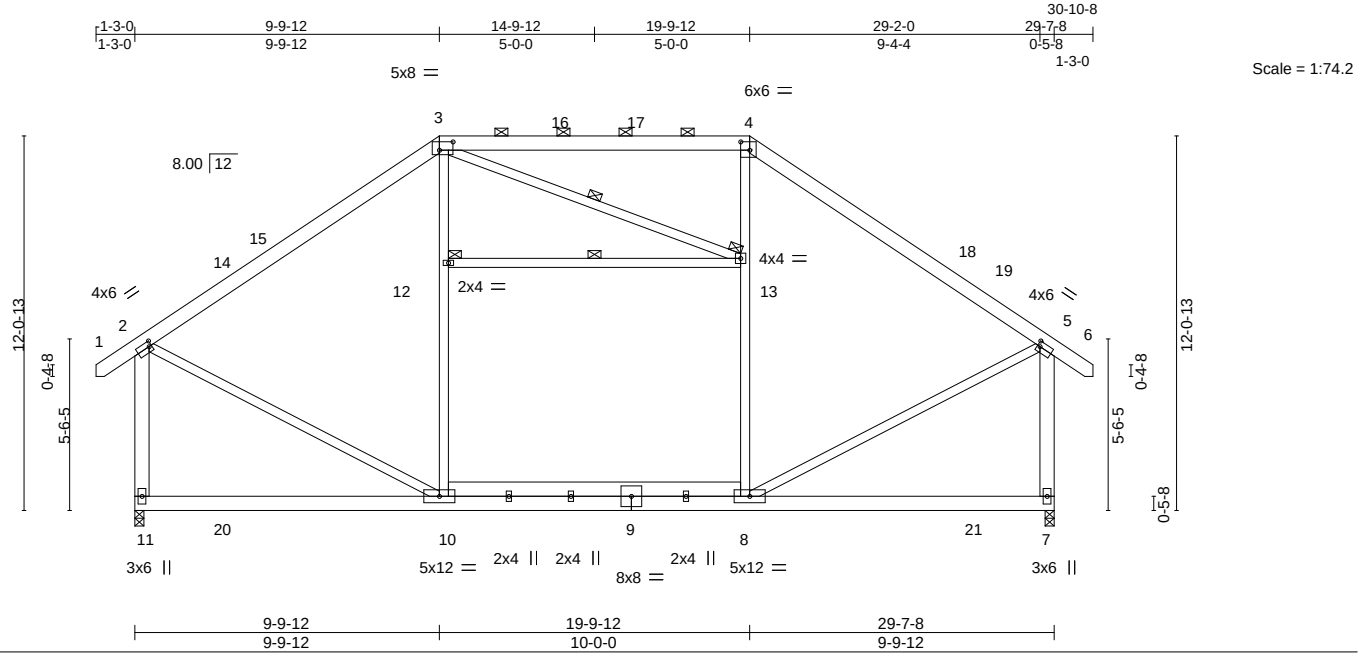

Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [3:0-5-4,0-3-4], [4:0-3-8,0-3-4], [5:0-1-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.40	Vert(LL)	-0.18	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.22	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.20	10-11	>999	240	Weight: 294 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 2-11,5-7: 2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD	Rigid ceiling directly applied.
WEBS	1 Row at midpt 12-13, 3-13
JOINTS	1 Brace at Jt(s): 12, 13

REACTIONS. (size) 11=0-3-8, 7=0-3-8
Max Horz 11=-356(LC 10)
Max Uplift 11=-53(LC 12), 7=-53(LC 13)
Max Grav 11=1418(LC 2), 7=1418(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1118/332, 3-4=-821/384, 4-5=-1118/332, 2-11=-1253/424, 5-7=-1252/424
BOT CHORD 10-11=-333/377, 8-10=-175/864
WEBS 2-10=-135/905, 5-8=-136/905

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-0-15 to 3-3-14, Interior(1) 3-3-14 to 9-10-4, Exterior(2) 9-10-4 to 16-0-15, Interior(1) 16-0-15 to 19-10-4, Exterior(2) 19-10-4 to 26-0-15, Interior(1) 26-0-15 to 30-9-7 zone; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 53 lb uplift at joint 11 and 53 lb uplift at joint 7.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett	
J0524-2717	A4	GABLE	1	1	Job Reference (optional)	I65454089

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:44 2024 Page 1
ID:nslXU10oULrH1SgmyBZWMUzvBdO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

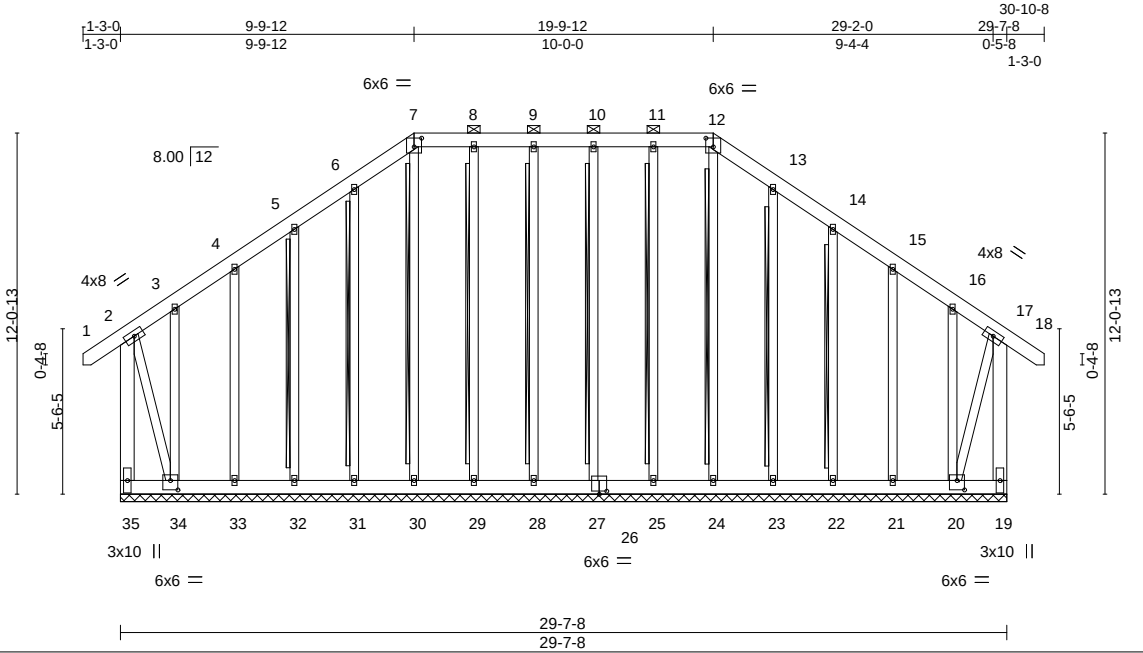

Plate Offsets (X,Y)-- [7:0-3-0,0-3-8], [12:0-3-0,0-3-8], [20:0-3-0,0-3-12], [26:0-3-0,0-1-4], [34:0-3-0,0-3-12]

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	0.09	Vert(LL)	-0.00	18	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	18	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.29	Horz(CT)	-0.01	19	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 386 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1 *Except* 2-34,17-20: 2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (10-0-0 max.): 7-12.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	T-Brace: 2x4 SPF No.2 - 12-24, 11-25, 10-27, 9-28, 8-29, 7-30, 6-31, 5-32, 13-23, 14-22

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 29-7-8.
(lb) - Max Horz 35=-446(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 25, 27, 28, 29, 31, 32, 33, 23, 22, 21 except 35=-581(LC 8), 19=-484(LC 9), 34=-593(LC 9), 20=-514(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 24, 25, 27, 28, 29, 30, 31, 32, 33, 23, 22, 21 except 35=645(LC 11), 19=544(LC 10), 34=710(LC 10), 20=627(LC 11)

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

TOP CHORD	5-6=-208/283, 6-7=-258/342, 7-8=-235/317, 8-9=-234/317, 9-10=-234/317, 10-11=-234/317, 11-12=-235/317, 12-13=-258/342, 13-14=-208/283, 2-35=-599/548, 17-19=-502/456
BOT CHORD	34-35=-406/368
WEBS	2-34=-603/575, 17-20=-521/496

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph 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; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 27, 28, 29, 31, 32, 33, 23, 22, 21 except (jt=lb) 35=581, 19=484, 34=593, 20=514.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

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NOTES-

13) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	PB1	GABLE	2	1	I65454090
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:45 2024 Page 1
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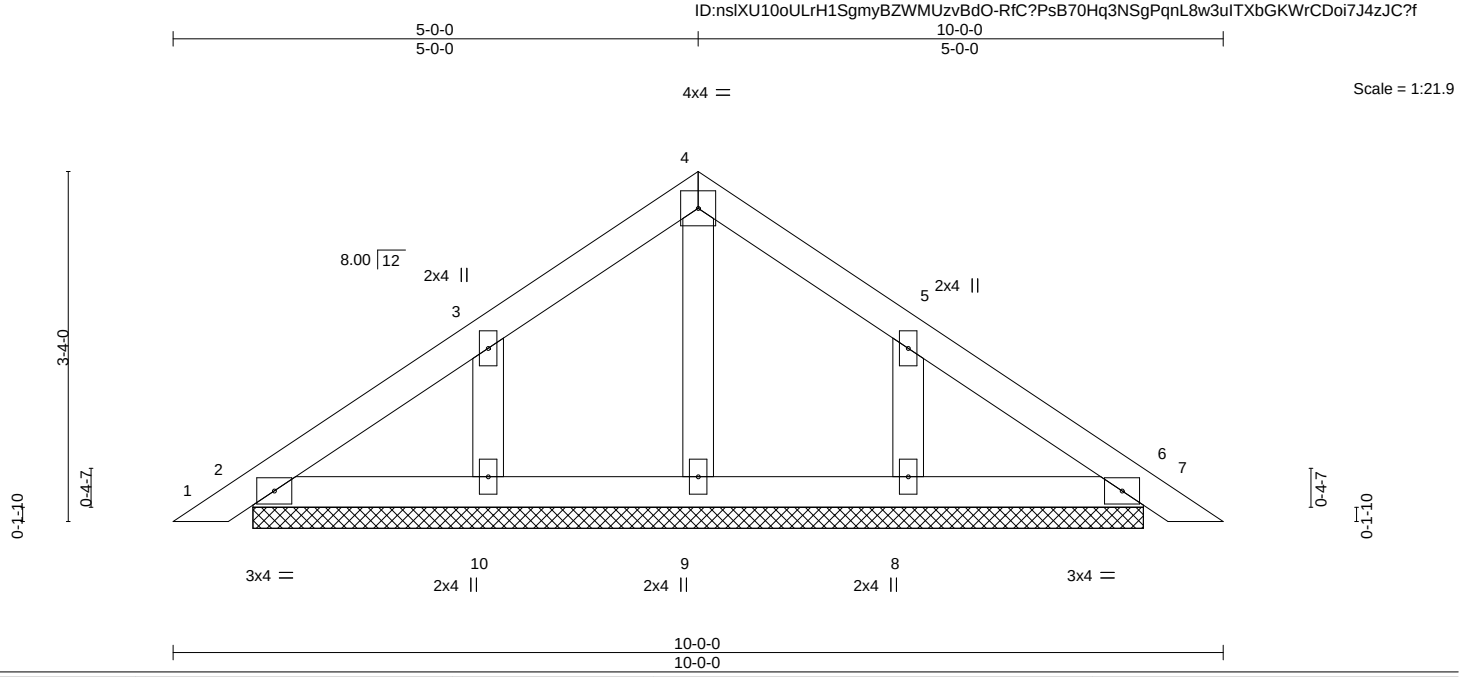

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	7	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 38 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 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. All bearings 8-5-12.
(lb) - Max Horz 2=-95(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-115(LC 12), 8=-115(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph 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
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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=115, 8=115.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	PB2	PIGGYBACK	20	1	I65454091
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:45 2024 Page 1
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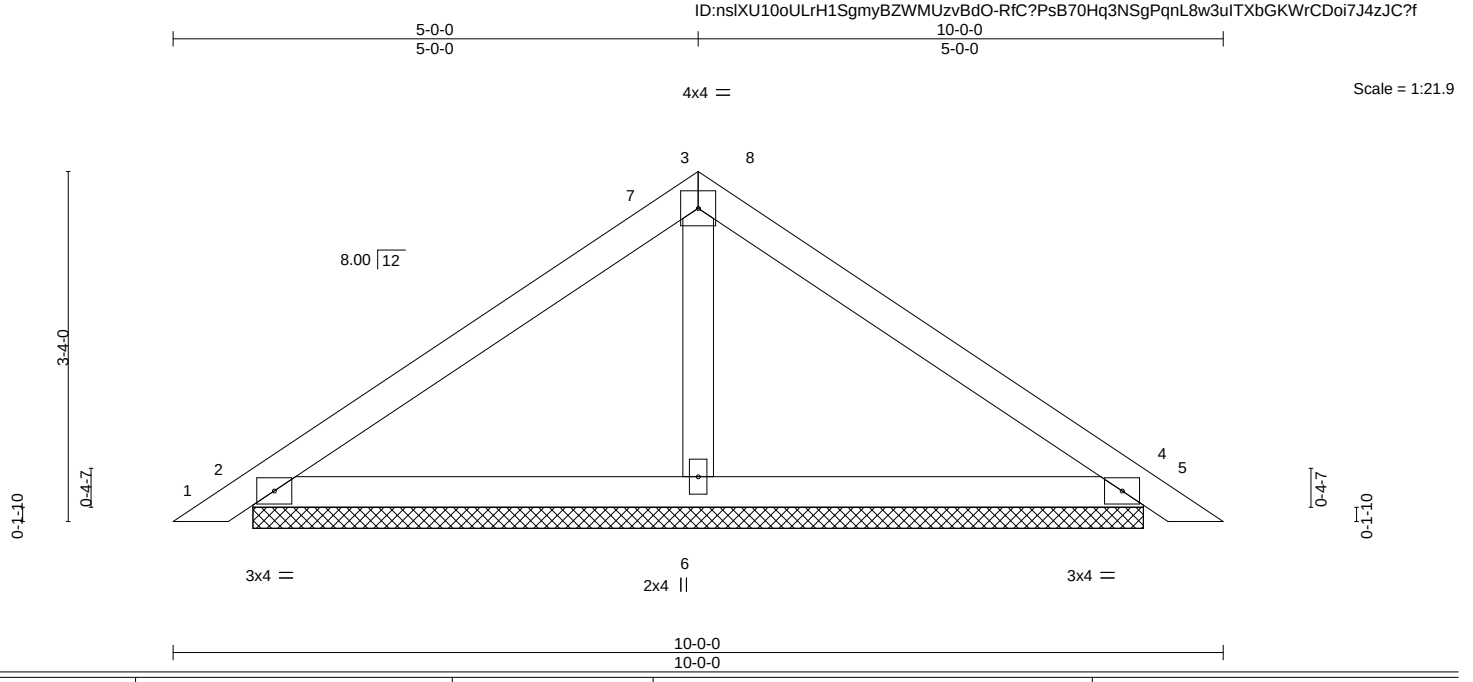

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.25	Vert(LL)	0.01	5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.02	5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 34 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 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. (size) 2=8-5-12, 4=8-5-12, 6=8-5-12
Max Horz 2=-76(LC 10)
Max Uplift 2=-37(LC 12), 4=-45(LC 13)
Max Grav 2=216(LC 1), 4=216(LC 1), 6=306(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-3-2 to 4-7-15, Interior(1) 4-7-15 to 5-0-0, Exterior(2) 5-0-0 to 9-2-14, Interior(1) 9-2-14 to 9-8-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	X1	MONOPITCH SUPPORTED	1	1	I65454092

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:46 2024 Page 1

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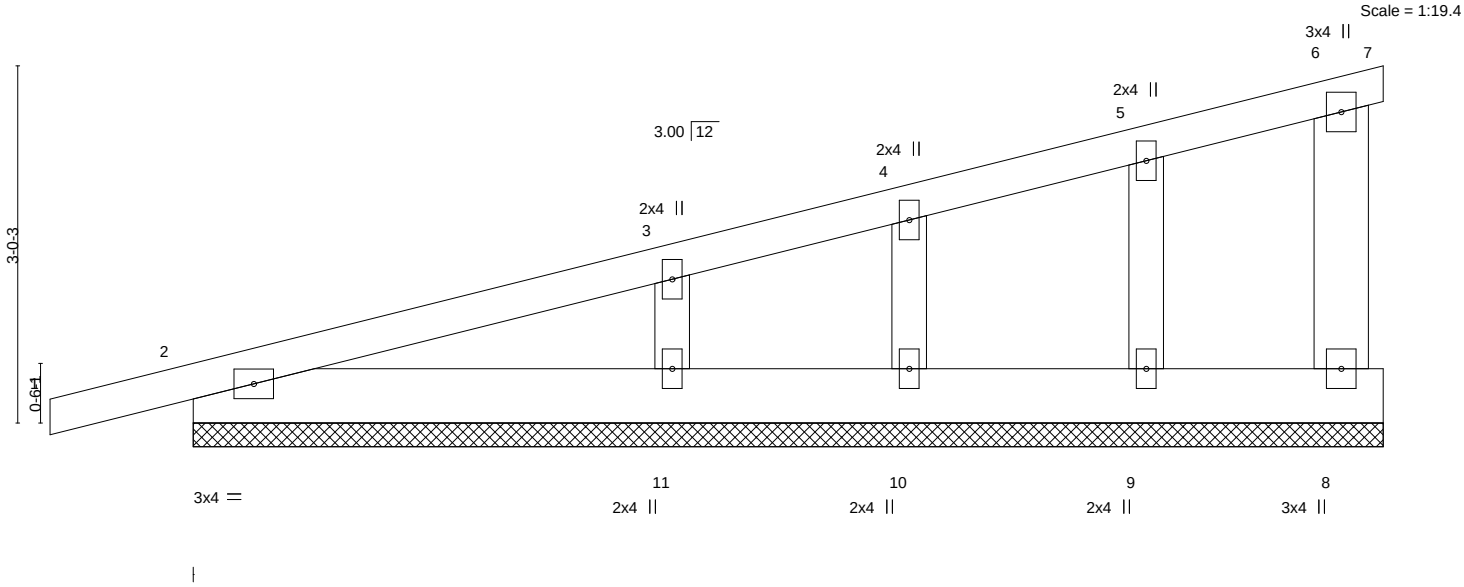
-1-2-8 1-2-8 | 10-0-8 10-0-8

Scale = 1:19.4



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 lb	FT = 25%

LUMBER-

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

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 10-0-8.

(lb) - Max Horz 2=134(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 2, 9, 10, 11

Max Grav All reactions 250 lb or less at joint(s) 7, 8, 2, 9, 10 except 11=307(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph 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; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 2, 9, 10, 11.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	X2	JACK-CLOSED	15	1	I65454093
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:46 2024 Page 1
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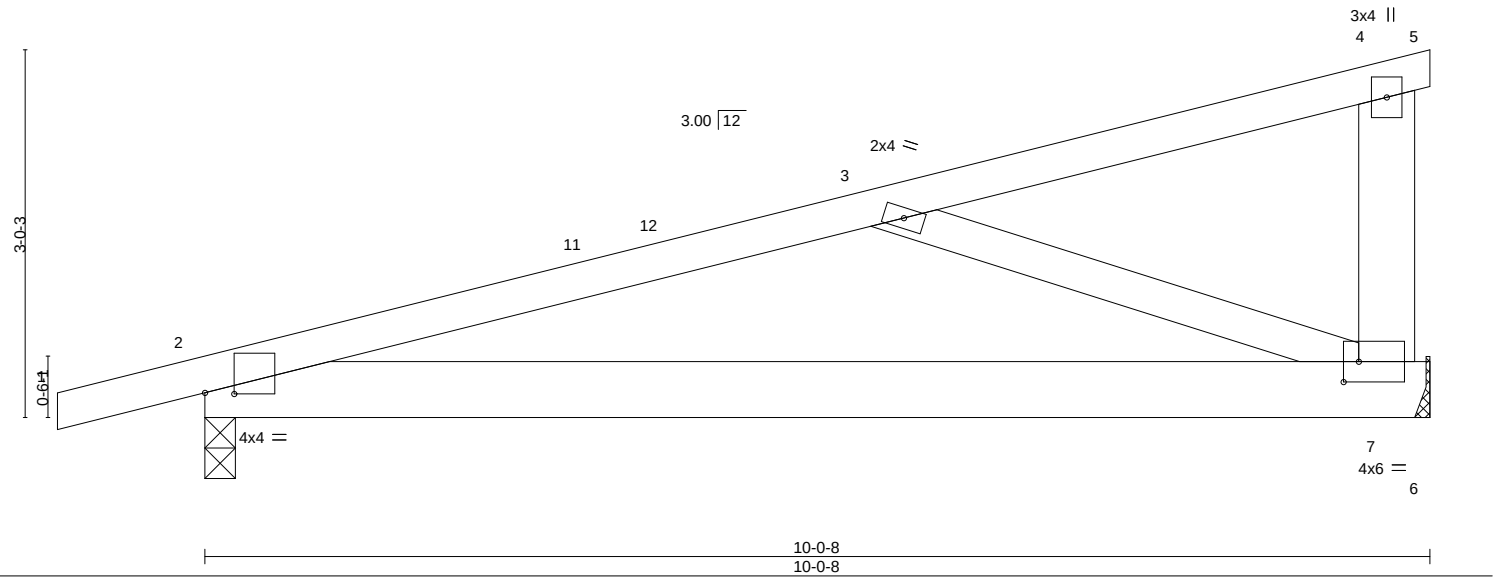
-1-2-8 | 5-8-12 | 10-0-8
1-2-8 | 5-8-12 | 4-3-12

Scale = 1:18.9



10-0-8
10-0-8

Plate Offsets (X,Y)-- [2:0-2-14,0-0-2], [7:0-1-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	-0.05	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.10	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.12	7-10	>986	240	Weight: 52 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-0, 7=Mechanical
Max Horz 2=96(LC 8)
Max Uplift 2=-185(LC 8), 7=-159(LC 8)
Max Grav 2=464(LC 1), 7=412(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-631/544
BOT CHORD 2-7=-633/594
WEBS 3-7=-528/491

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 10-0-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=185, 7=159.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 9,2024

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	X3	MONOPITCH	16	1	I65454094
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:47 2024 Page 1
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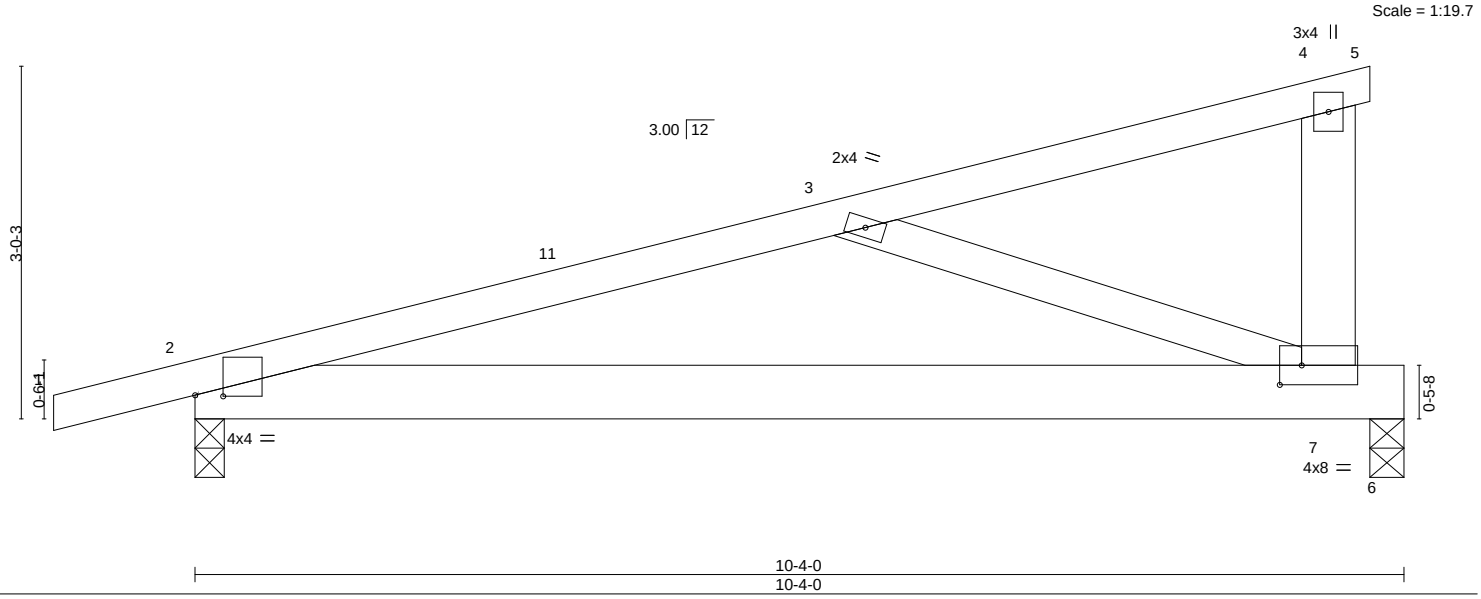
-1-2-8 / 1-2-8 | 5-8-12 / 5-8-12 | 10-0-8 / 4-3-12

Scale = 1:19.7



10-4-0 / 10-4-0

Plate Offsets (X,Y)-- [2:0-2-14,0-0-2], [7:0-2-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	-0.05	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.12	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.14	7-10	>902	240	Weight: 53 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-0, 6=0-3-8
Max Horz 2=96(LC 8)
Max Uplift 2=-193(LC 8), 6=-160(LC 8)
Max Grav 2=484(LC 1), 6=395(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-690/563
BOT CHORD 2-7=-645/652
WEBS 3-7=-528/431

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 10-0-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=193, 6=160.
5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	X4	MONOPITCH	5	1	I65454095

Job Reference (optional)

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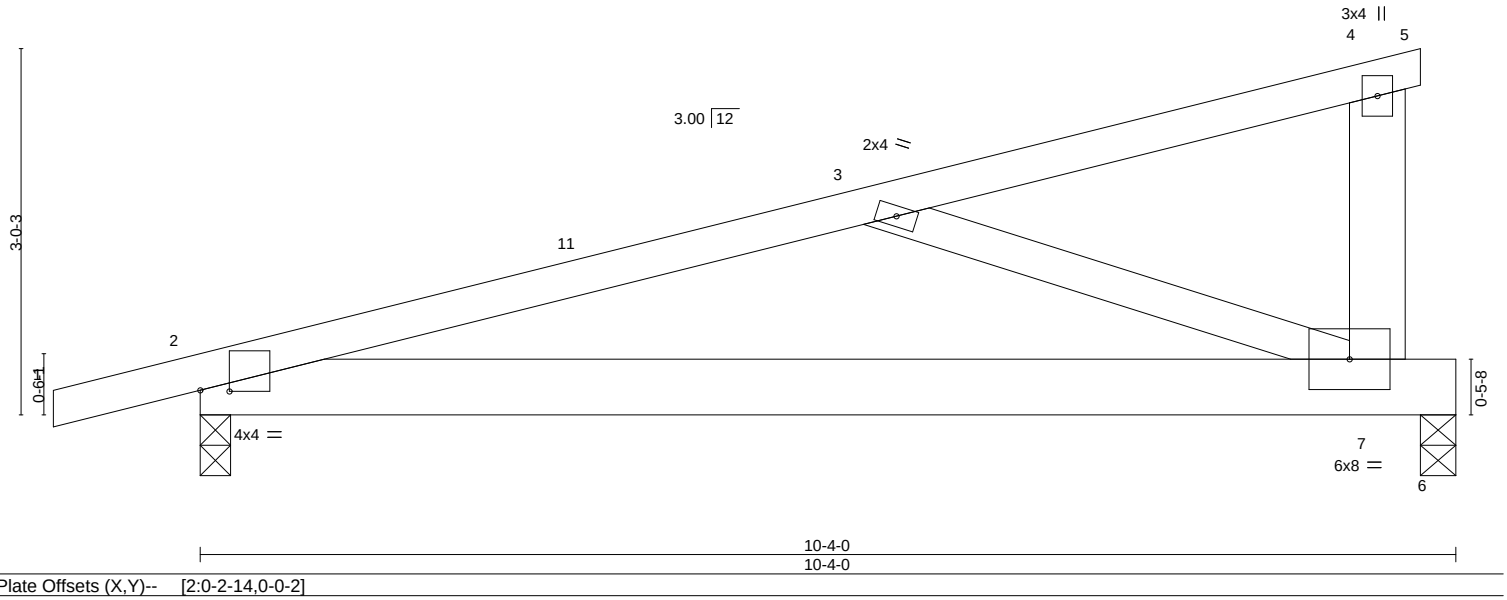
Scale = 1:19.0



10-4-0 / 10-4-0

Plate Offsets (X,Y)-- [2:0-2-14,0-0-2]

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	0.30	Vert(LL)	-0.05	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.12	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.02	7-10	>999	240	Weight: 53 lb	FT = 25%

LUMBER-

TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
3-7: 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-0, 6=0-3-8
Max Horz 2=96(LC 8)
Max Uplift 2=-79(LC 8), 6=-48(LC 12)
Max Grav 2=484(LC 1), 6=395(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-690/226
BOT CHORD 2-7=-302/652
WEBS 3-7=-528/291

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 10-0-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.
5) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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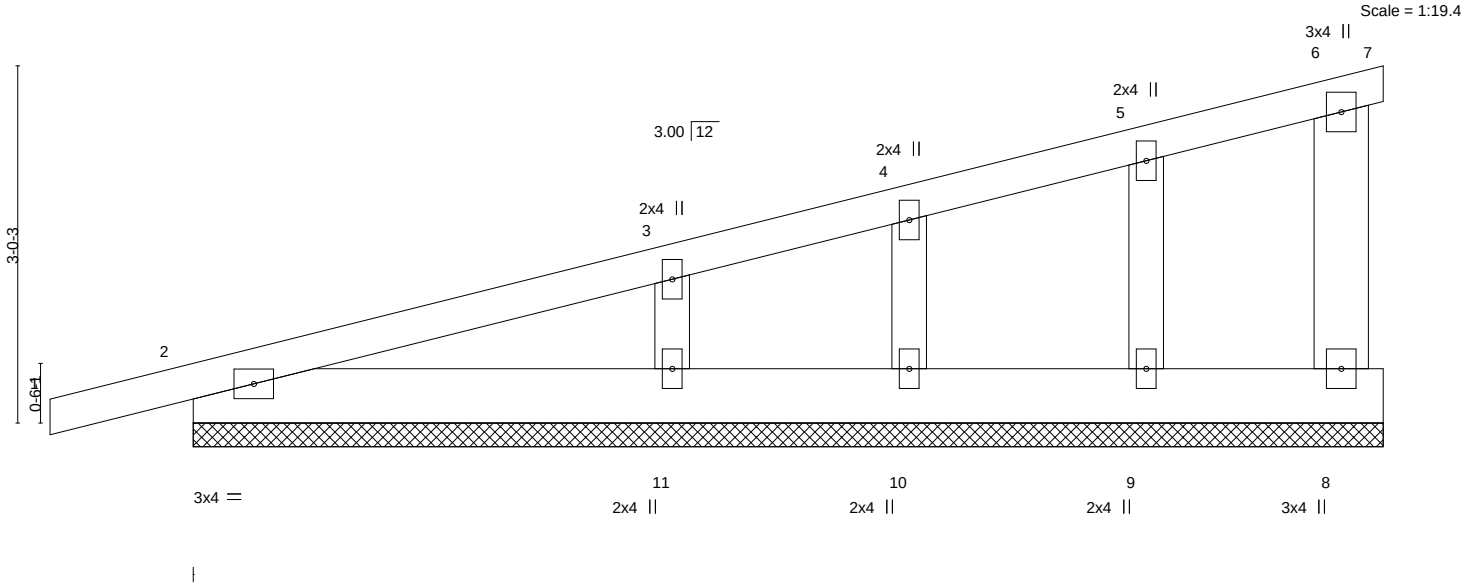
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	X5	MONOPITCH SUPPORTED	1	1	I65454096
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:47 2024 Page 1
ID:nslXU10oULrH1SgmyBZWMUzvBdO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-1-2-8 1-2-8 | 10-0-8 10-0-8

Scale = 1:19.4



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 lb	FT = 25%

LUMBER-

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

BRACING-

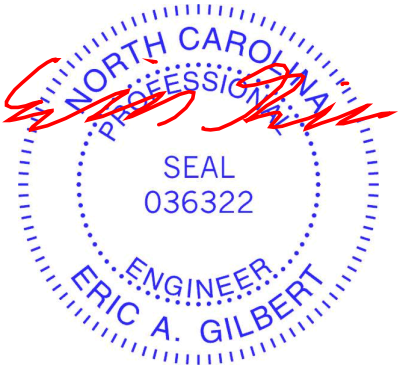
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 10-0-8.
(lb) - Max Horz 2=134(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 2, 9, 10, 11
Max Grav All reactions 250 lb or less at joint(s) 7, 8, 2, 9, 10 except 11=307(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 2, 9, 10, 11.



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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	Y1	JACK-OPEN	2	1	I65454097
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:48 2024 Page 1
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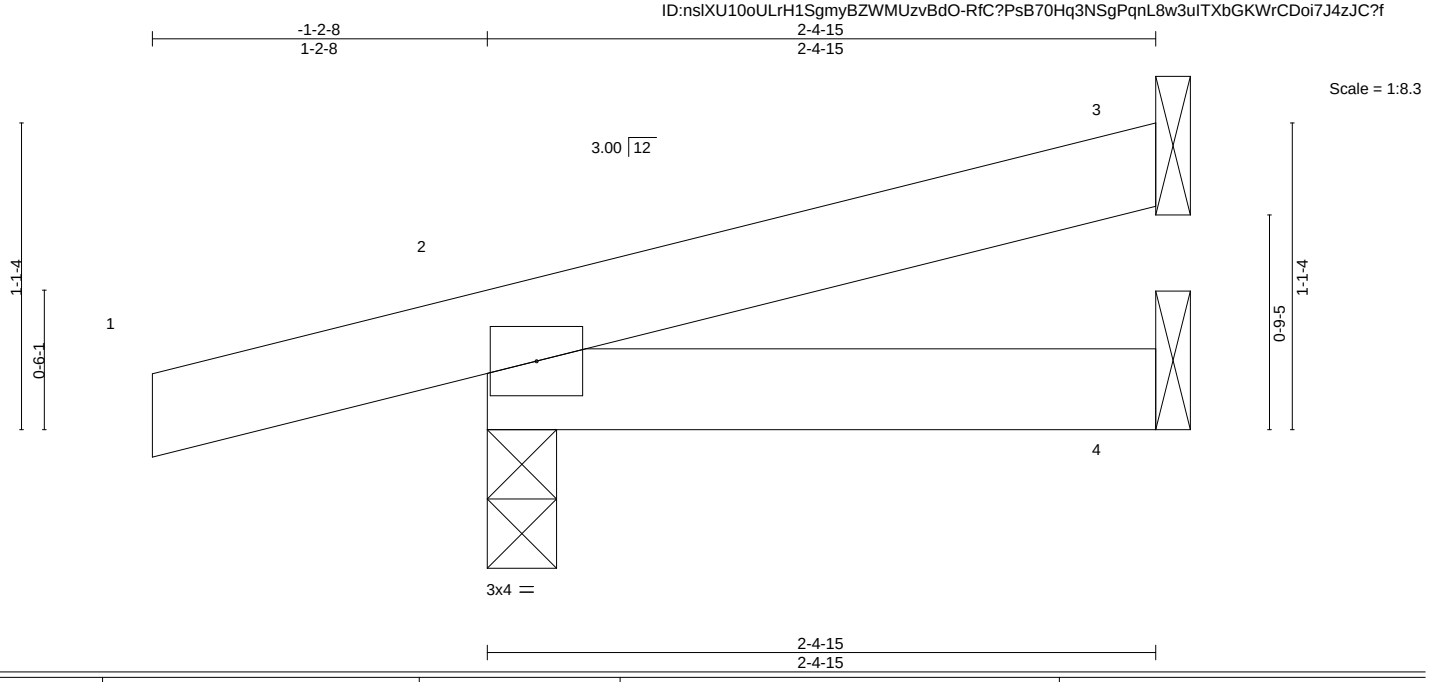

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	-0.00	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-MP		Wind(LL)	0.00	4-7	>999	240	Weight: 9 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical
Max Horz 2=34(LC 8)
Max Uplift 3=-19(LC 8), 2=-87(LC 8), 4=-13(LC 9)
Max Grav 3=53(LC 1), 2=185(LC 1), 4=40(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.

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Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	Y2	JACK-OPEN	2	1	I65454098
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:48 2024 Page 1
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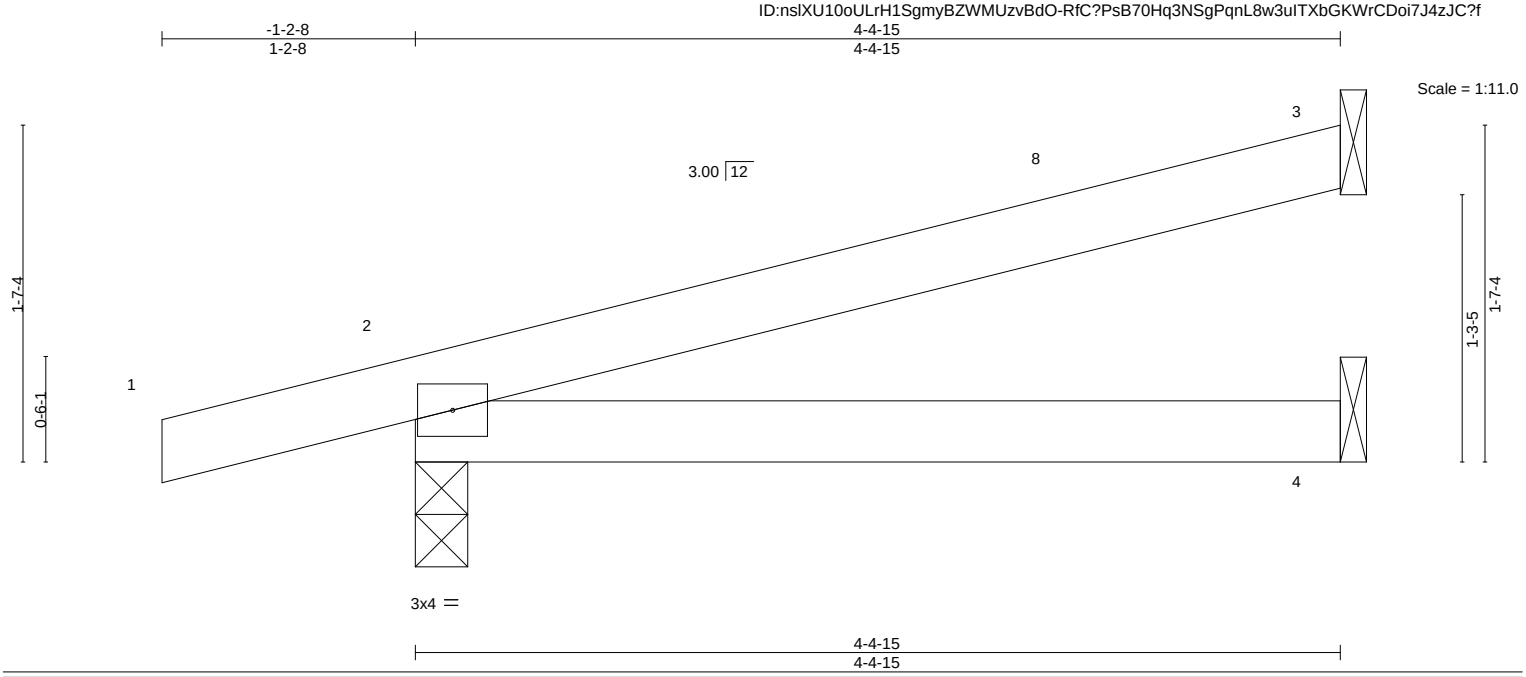

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.04	4-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.03	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 15 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical
Max Horz 2=50(LC 8)
Max Uplift 3=-43(LC 8), 2=-111(LC 8), 4=-24(LC 8)
Max Grav 3=113(LC 1), 2=257(LC 1), 4=78(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-4-3 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=111.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 9,2024

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	Y3	JACK-OPEN	2	1	I65454099
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:49 2024 Page 1
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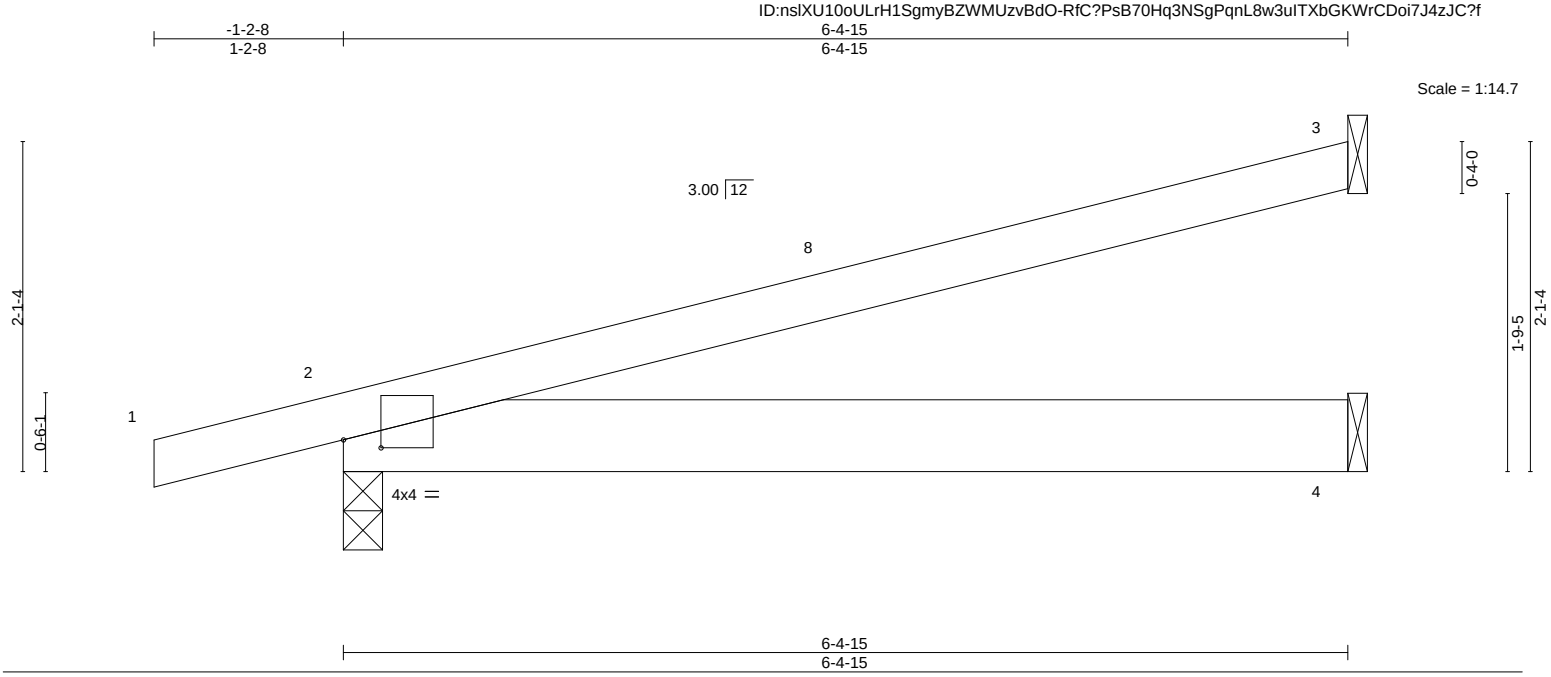

Plate Offsets (X,Y)-- [2:0-2-14,0-0-10]

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	0.29	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-AS		Wind(LL)	0.07	4-7	>999	240	Weight: 27 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 3=Mechanical, 2=0-3-0, 4=Mechanical
Max Horz 2=66(LC 8)
Max Uplift 3=-54(LC 8), 2=-138(LC 8), 4=-47(LC 8)
Max Grav 3=142(LC 1), 2=333(LC 1), 4=132(LC 3)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-4-3 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 4 except (jt=lb) 2=138.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett
J0524-2717	Y4	JACK-CLOSED	2	1	I65454100
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:49 2024 Page 1
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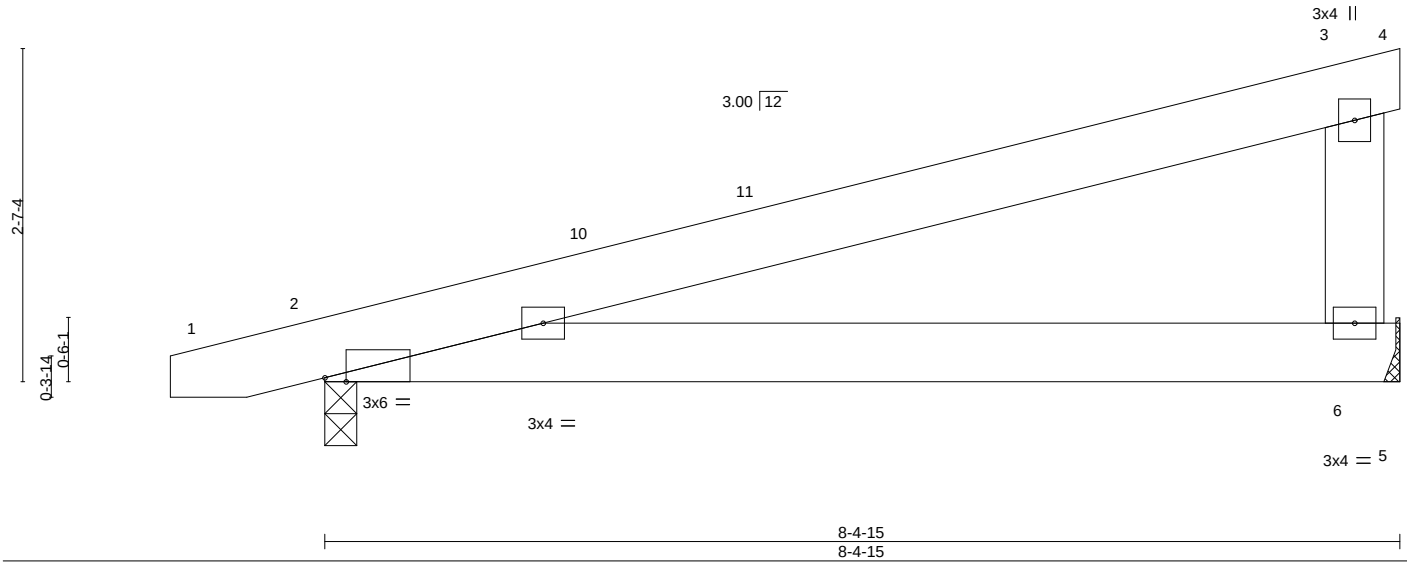
-1-2-8 / 1-2-8 | 8-4-15 / 8-4-15

Scale = 1:18.0



8-4-15 / 8-4-15

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.04	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(CT)	-0.10	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.12	6-9	>837	240	Weight: 47 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=Mechanical, 2=0-3-0
Max Horz 2=79(LC 8)
Max Uplift 6=-132(LC 8), 2=-150(LC 8)
Max Grav 6=348(LC 1), 2=379(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-10-15 to 3-5-14, Interior(1) 3-5-14 to 8-4-15 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=132, 2=150.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

May 9,2024

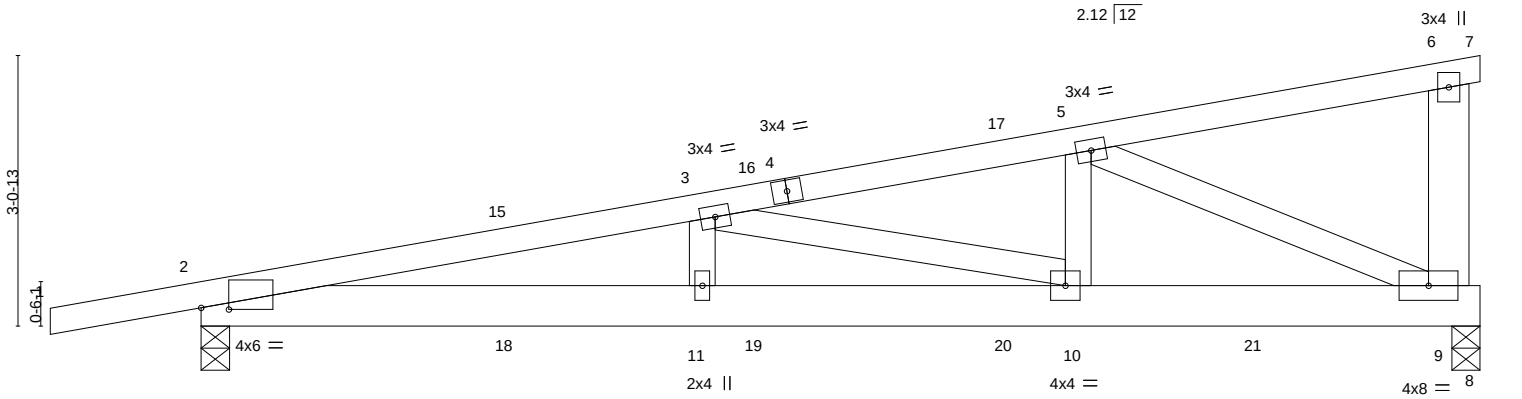
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Cash/Shirey Residence/Harnett	
J0524-2717	Z1	ROOF SPECIAL GIRDER	1	1	Job Reference (optional)	I65454101

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed May 8 14:57:50 2024 Page 1
ID:nslXU10oULrH1SgmyBZWMUzvBdO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-1-8-8 | 5-8-2 | 9-11-4 | 14-5-14
1-8-8 | 5-8-2 | 4-3-2 | 4-6-10

Scale = 1:26.1



5-8-2 | 9-11-4 | 14-5-14
5-8-2 | 4-3-2 | 4-6-10

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.12	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.17	10-11	>988	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.72	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 79 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
6-9: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 7-3-4 oc bracing.

REACTIONS. (size) 2=0-3-14, 9=0-3-13
Max Horz 2=98(LC 19)
Max Uplift 2=-387(LC 4), 9=-528(LC 4)
Max Grav 2=924(LC 1), 9=1350(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2839/1114, 3-5=-2109/813
BOT CHORD 2-11=-1155/2774, 10-11=-1155/2774, 9-10=-837/2044
WEBS 3-10=-755/330, 5-10=-346/824, 5-9=-2091/860

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); porch left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=387, 9=528.
5) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 20 lb down and 25 lb up at 3-6-0, 20 lb down and 25 lb up at 3-6-0, 48 lb down and 61 lb up at 6-3-15, 48 lb down and 61 lb up at 6-3-15, and 60 lb down and 73 lb up at 9-1-14, and 60 lb down and 73 lb up at 9-1-14 on top chord, and 5 lb down and 26 lb up at 3-6-0, 5 lb down and 26 lb up at 3-6-0, 27 lb down and 51 lb up at 6-3-15, 27 lb down and 51 lb up at 6-3-15, 77 lb down and 77 lb up at 9-1-14, 77 lb down and 77 lb up at 9-1-14, and 320 lb down and 162 lb up at 11-11-13, and 320 lb down and 162 lb up at 11-11-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-6=-60, 6-7=-60, 8-12=-20

May 9,2024

Continued on page 2

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Edenton, NC 27932

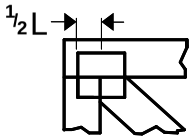
LOAD CASE(S) Standard

Concentrated Loads (lb)

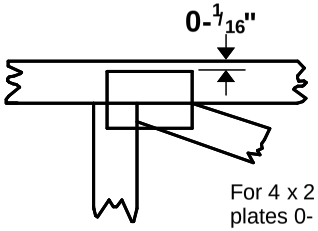
Vert: 16=-56(F=-28, B=-28) 17=-114(F=-57, B=-57) 18=-4(F=-2, B=-2) 19=-45(F=-23, B=-23) 20=-154(F=-77, B=-77) 21=-640(F=-320, B=-320)

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

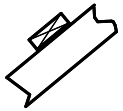
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

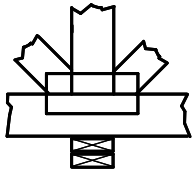
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

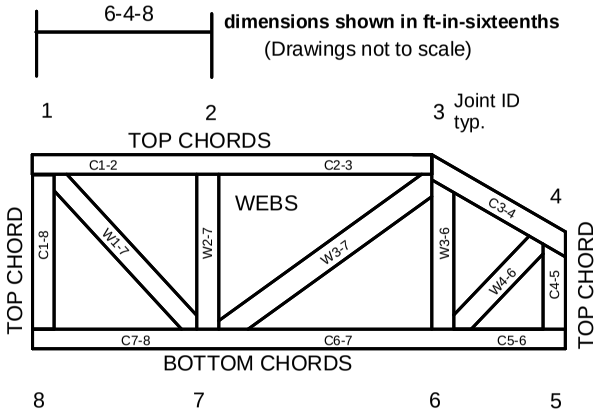


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

General Safety Notes

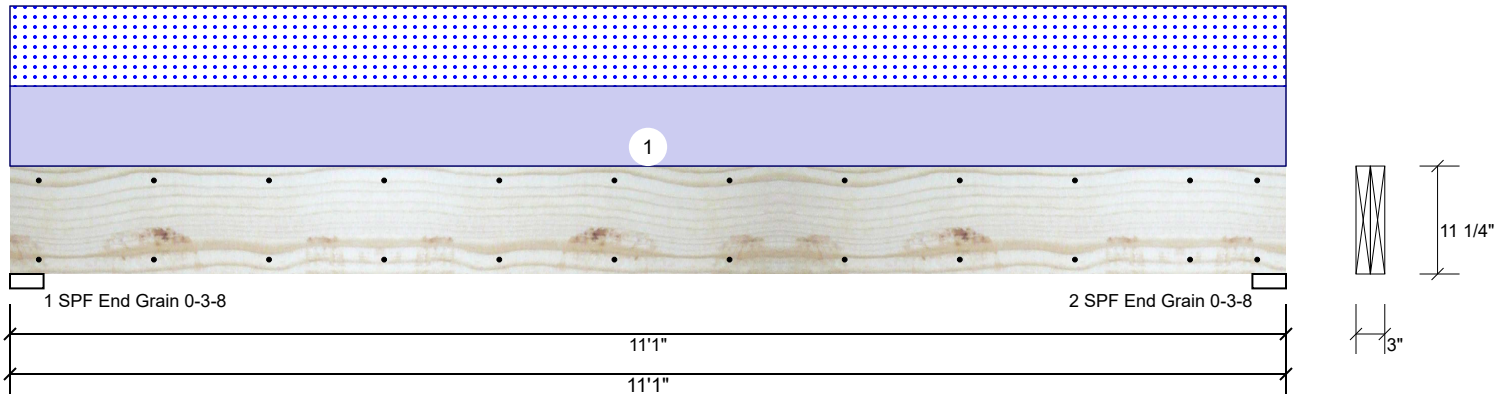
Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

Client:		Date:	5/9/2024
Project:		Input by:	NEIL BAGGETT
Address:		Job Name:	SHIREY RESIDENCE
		Project #:	

DB1 SP #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IRC 2018
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	671	671	0	0
2	Vertical	0	671	671	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	23%	671 / 671	1341	L	D+S
2 - SPF End Grain	3.500"	Vert	23%	671 / 671	1341	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3415 ft-lb	5'6 1/2"	4548 ft-lb	0.751 (75%)	D+S	L
Unbraced	3415 ft-lb	5'6 1/2"	3421 ft-lb	0.998 (100%)	D+S	L
Shear	1044 lb	9'10 1/4"	4528 lb	0.230 (23%)	D+S	L
LL Defl inch	0.070 (L/1831)	5'6 1/2"	0.266 (L/480)	0.262 (26%)	S	L
TL Defl inch	0.139 (L/916)	5'6 1/2"	0.354 (L/360)	0.393 (39%)	D+S	L

Design Notes

1. Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
2. Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
3. Refer to last page of calculations for fasteners required for specified loads.
4. Girders are designed to be supported on the bottom edge only.
5. Top loads must be supported equally by all plies.
6. Top must be laterally braced at a maximum of 9'11 1/2" o.c.
7. Bottom must be laterally braced at end bearings.
8. Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	121 PLF	0 PLF	121 PLF	0 PLF	0 PLF	X3

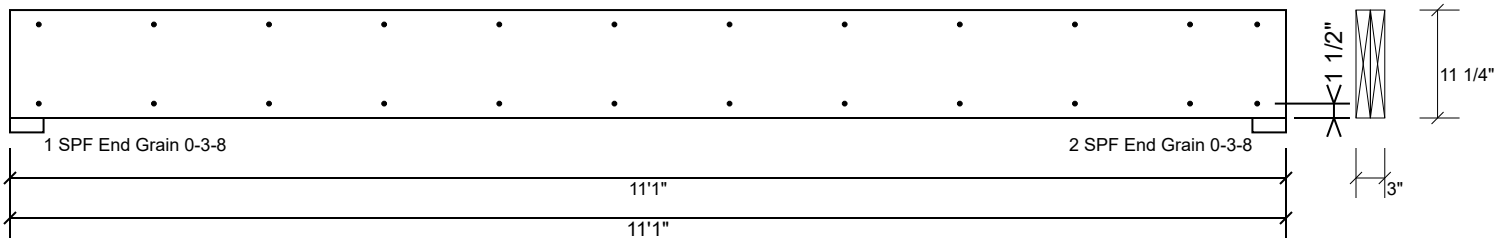
Manufacturer Info

This design is valid until 6/28/2026

Client:		Date:	5/9/2024
Project:		Input by:	NEIL BAGGETT
Address:		Job Name:	SHIREY RESIDENCE
		Project #:	

DB1 SP #2 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Manufacturer Info

This design is valid until 6/28/2026