NOTICE TO CONTRACTOR:
All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for full compliance with the code

03/10/2023

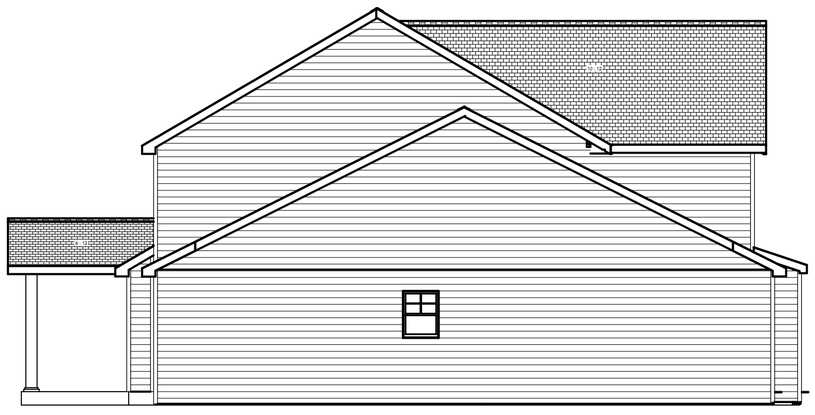
Harnett COUNTY NORTH CAROLINA

FRONT ELEVATION

Scale: 1/4" = 1'0"

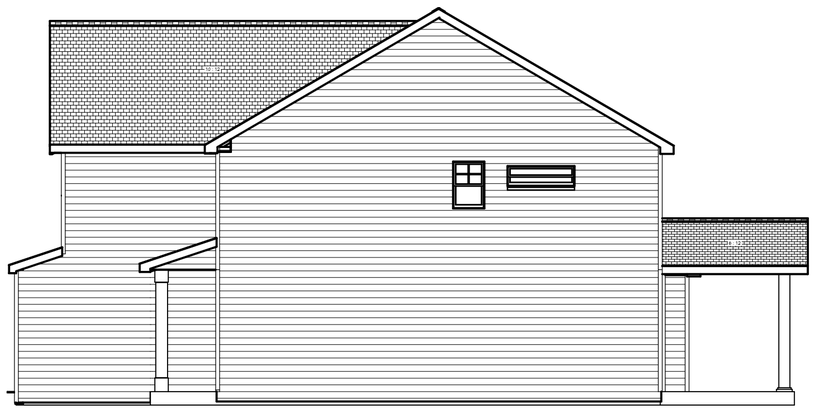
9'0" CEILING HEIGHT FIRST FLOOR
(HEADER HEIGHT 7'6")
8'0" CEILING HEIGHT SECOND FLOOR
(HEADER HEIGHT 7')

FRAME WINDOWS TO HEADER HEIGHT



LEFT ELEVATION

Scale: 1/8" = 1'0"



RIGHT ELEVATION

Scale: 1/8" = 1'0"

REAR ELEVATION

Scale: 1/8" = 1'0"

PLAN:
Liberty 2.0

SHEET TITLE:
ELEVATIONS

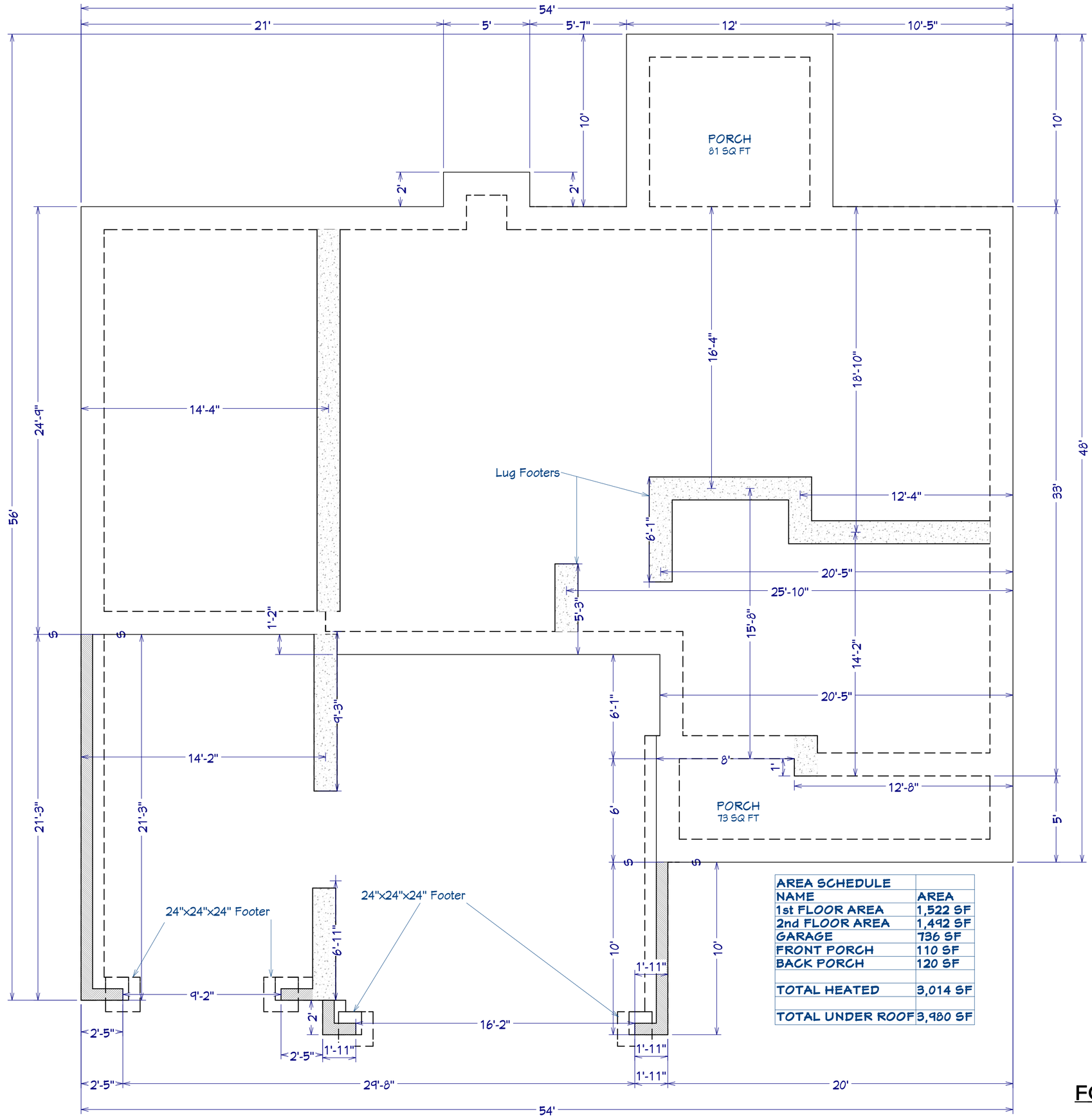
PROJECT ADDRESS:
56 Hancock Ct. (Lot 38)

DESIGNED BY:
Precision Custom Homes
Raeford, NC
Shaun@PrecisionCustomHomesNC.com

DATE:
3/2/23

SCALE:
1/4" = 1'

SHEET:
A-1



AREA SCHEDULE	
NAME	AREA
1st FLOOR AREA	1,522 SF
2nd FLOOR AREA	1,492 SF
GARAGE	736 SF
FRONT PORCH	110 SF
BACK PORCH	120 SF
TOTAL HEATED	3,014 SF
TOTAL UNDER ROOF	3,980 SF

FOUNDATION PLAN

Scale: 1/4" = 1'0"

PLAN:
Liberty 2.0

SHEET TITLE:
FOUNDATION

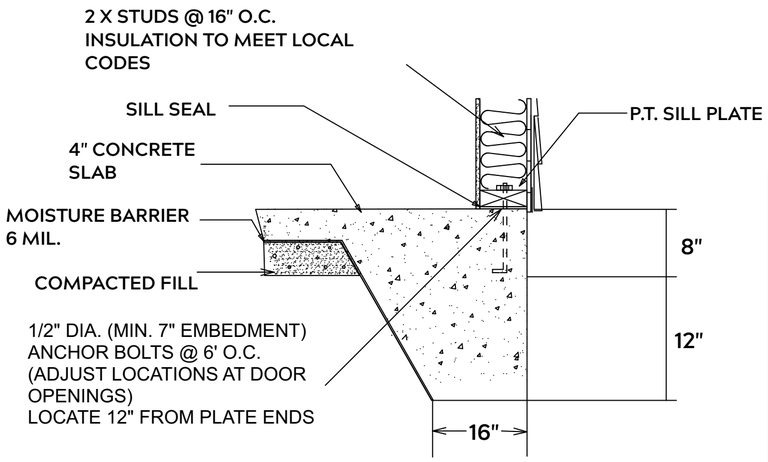
PROJECT ADDRESS:
56 Hancock Ct. (Lot 38)

DESIGNED BY:
Precision Custom Homes
Raeford, NC
Shaun@PrecisionCustomHomesNC.com

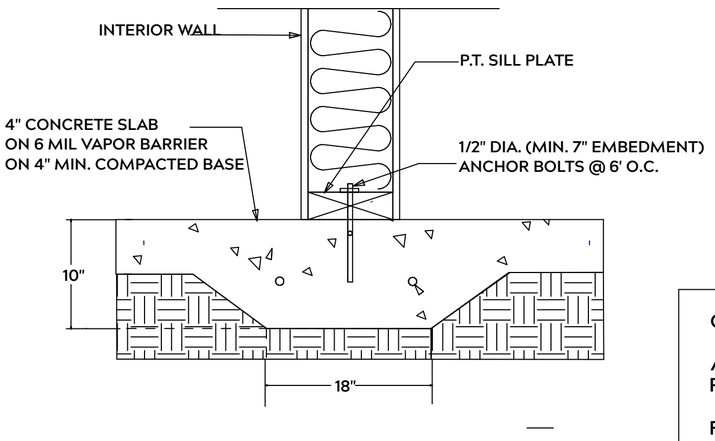
DATE:
3/2/23

SCALE:
1/4" = 1'

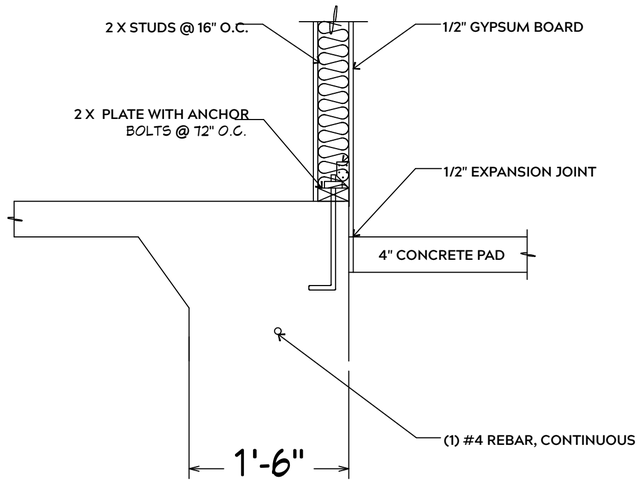
SHEET:
A-2



MONOLITHIC SLAB



LUG FOOTING



INTERIOR WALL @ GARAGE STEP DOWN

FOUNDATION NOTES:

ALL FOOTINGS SHALL BEAR ON ORIGINAL UNDISTURBED SOIL
THE 28 DAY COMPRESSIVE STRENGTH OF ALL FOOTINGS IS 3000 PSI

PROVIDE WATER PROOFING AND PERIMTER DRAINS AS REQUIRED

FOOTING WIDTHS ARE BASED ON A LOAD BEARING SOIL CAPACITY OF 2000 PSI

PROVIDE 6 MIL POLY VAPOR BARRIER TO COVER GROUND IN CRAWL SPACE AND GROUND UNDER POURED CONCRETE

ALL ANCHOR BOLTS TO BE 1/2" X 12" LONG. ANCHOR BOLTS SHALL BE SPACED AT A MAXIMUM OF 6' ON CENTER AND NO MORE THEN 1' FROM EACH CORNER

GENERAL FRAMING NOTES:

ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY SHALLE BE PRESSURE TREATED

FRAMING LUMBER SHALL BE SYP #2 GRADE AND / OR SPRUCE PINE FIR #1 AND / OR KILN DRIED

WHERE PRE-ENGINEERED JOISTS AND TRUSSES ARE USED, MANUFACTURER SHALL PROVIDE DRAWINGS / SCHEMATICS, WHICH SHALL BEAR OF A N.C. ENGINEER

STUDS AND JOISTS SHALL NOT BE CUT TO INSTALL PLUMBING OR WIRING WITHOUT ADDING METAL OR WOOD SIDE PANELS TO STRENGTHEN MEMBER TO ITS ORIGINAL CAPACITY

NAIL MULTIPLE MEMBERS WITH 2 ROWS OF 16d NAILS STAGGERED 32" O.C. AND USE 3 X 16d NAILS 2" IN AT EACH END.

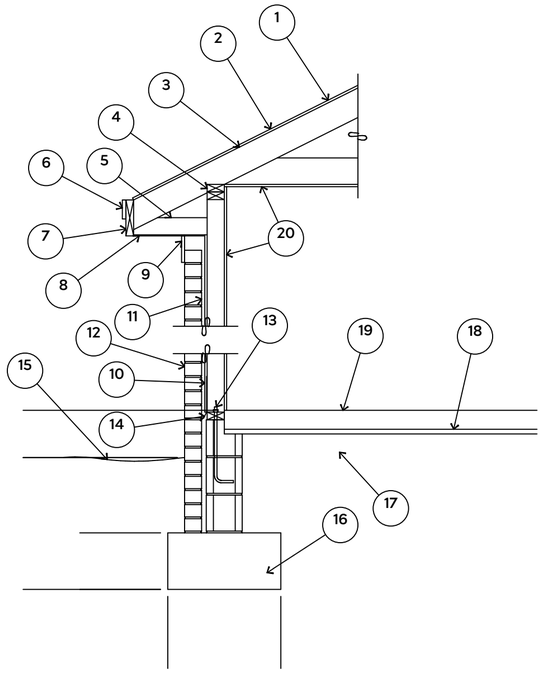
NAIL FLOOR JOISTS TO SILL PLATE WITH WITH 8d TOE NAILS

ALL EXPOSED FRAMING ON PORCHES OR DECKS SHALL BE PRESSURE TREATED

PROVIDE WATERPROOFING AND DRAINS AS REQUIRED

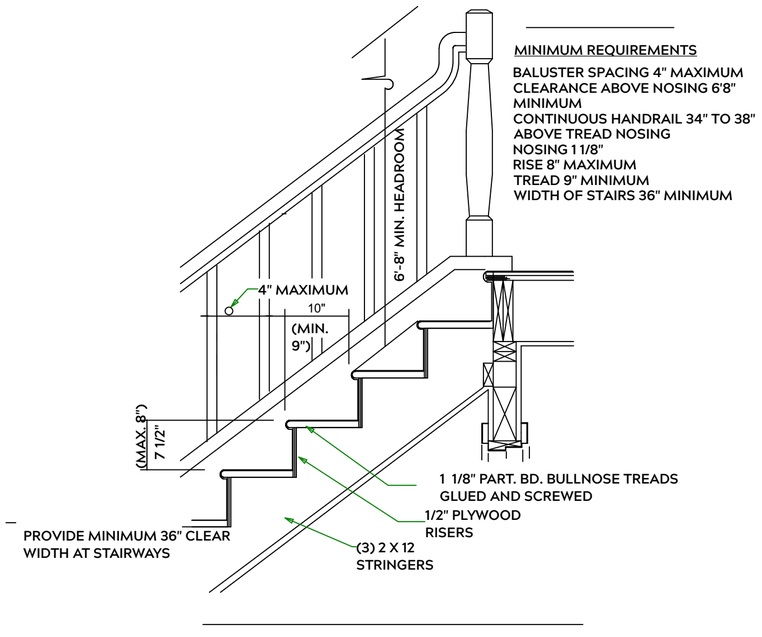
ALL FRAMING TO BE 16" O.C. WALL FRAMING DIMENSIONS ARE BASED ON 2X4 OR 2X6 EXTERIOR WALLS AND 2X4 INTERIOR WALLS. DOULBE / TRIPLE JACK STUDS AS NECESSARY UNDER HEADERS AS REQUIRED

LVL'S TO BE SIZED BY OTHERS (TRUSS MANUFACTURER)



1. 15# FELT UNDERLAYMENT UNDER COMPOSITION SHINGLES.
2. ROOF DECKING.
3. 2 X RAFTERS / ENGINEERED TRUSSES
4. DOUBLE TOP PLATE.
5. 2 X 4 RETURN.
6. 3/4" FASCIA OR PVC TRIM COIL
7. 2 X FASCIA
8. 1/4" PLYWOOD OR VINYL SOFFIT
9. 1 X FREIZE BOARD (TO BE USED WITH BRICK VENEERS)
10. INSULATION BOARD OR HOUSE WRAP
11. AIR SPACE.
12. BRICK WITH BRICK TIES PER MANUFACTURER'S SPECIFICATIONS.
13. 1/2" X 12" ANCHOR BOLTS, 6'-0" O.C., 12" FROM CORNERS.
14. FLASHING WITH WEEP HOLES @ 48" O.C.
15. FINISHED GRADE.
16. FOOTING
17. COMPACTED EARTH FILL.
18. 6 MIL. VAPOR BARRIER
19. 4" CONCRETE SLAB, 3,000 P.S.I. WITH 6" X 6" 10 GA. X 10 GA. WELDED WIRE FABRIC.
20. 1/2" GYPSUM BOARD.

EXTERIOR WALL SECTION



STAIR DETAIL

PLAN:
Liberty 2.0

SHEET TITLE:
DETAIL SHEETS

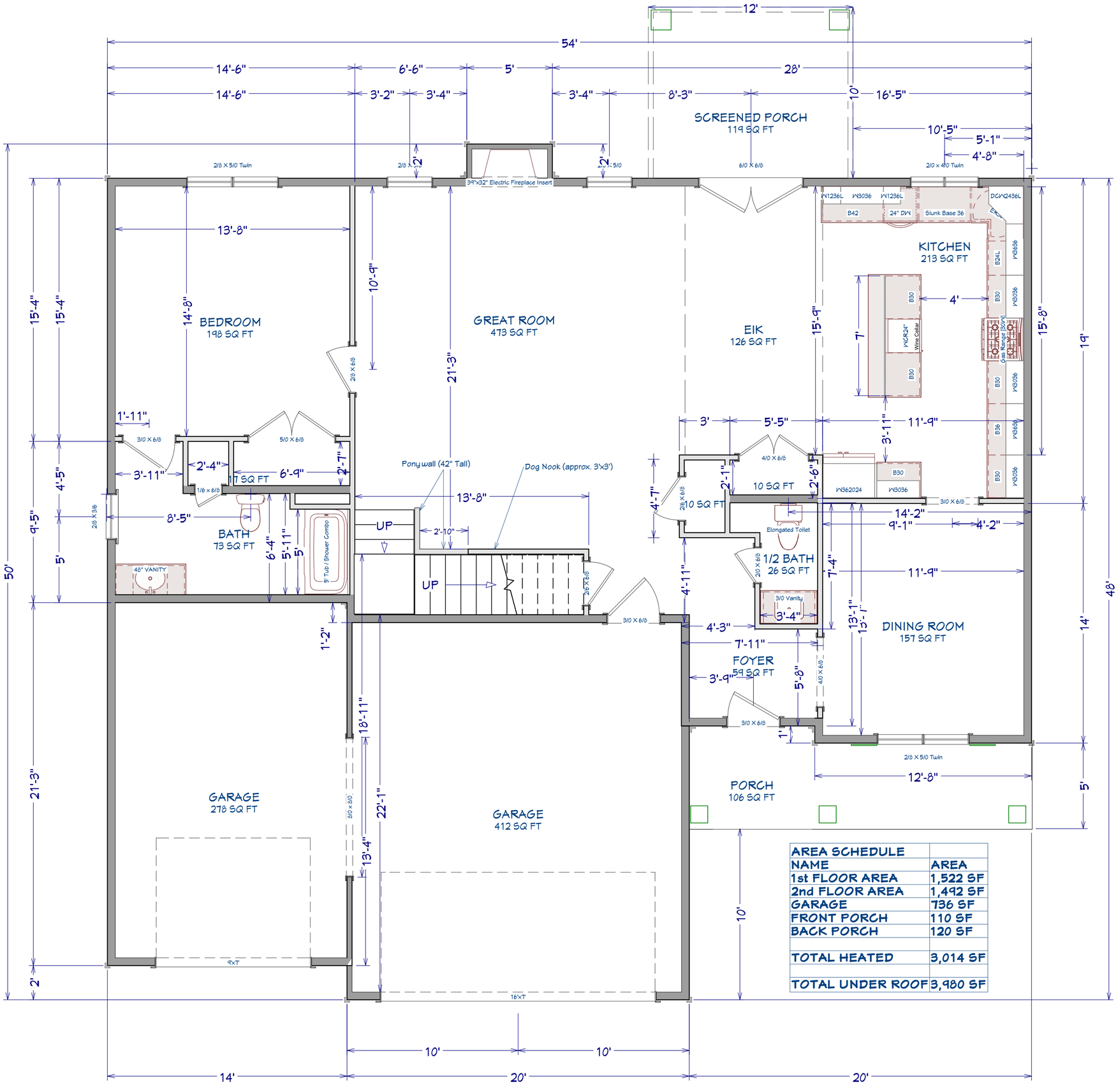
PROJECT ADDRESS:
56 Hancock Ct. (Lot 38)

DESIGNED BY:
Precision Custom Homes
Raeford, NC
Shaun@PrecisionCustomHomesNC.com

DATE:
3/2/23

SCALE:
1/4" = 1'

SHEET:
A-3



AREA SCHEDULE	
NAME	AREA
1st FLOOR AREA	1,522 SF
2nd FLOOR AREA	1,492 SF
GARAGE	736 SF
FRONT PORCH	110 SF
BACK PORCH	120 SF
TOTAL HEATED	3,014 SF
TOTAL UNDER ROOF	3,980 SF

PLAN:
Liberty 2.0

SHEET TITLE:
1st FLOOR

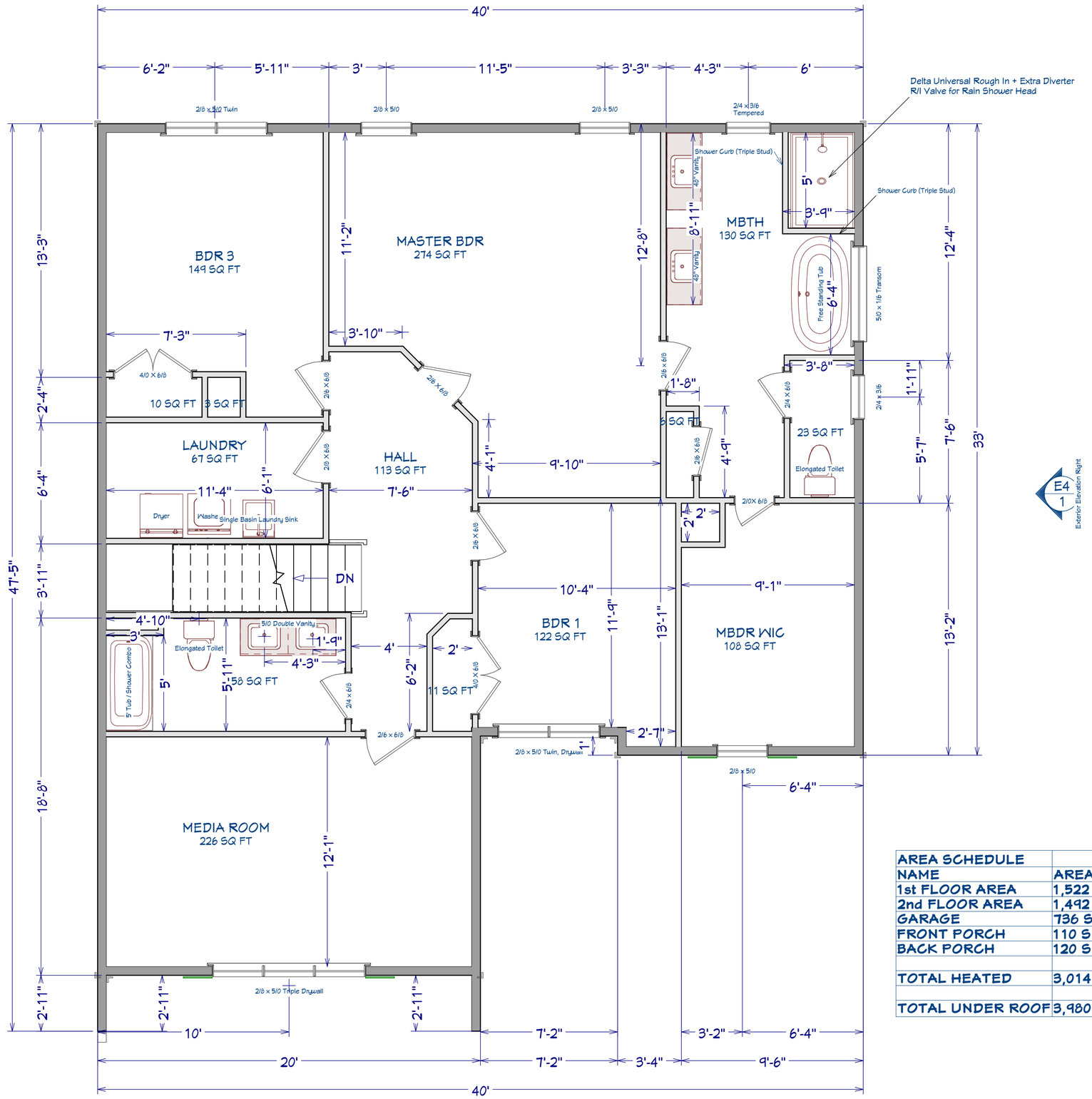
PROJECT ADDRESS:
56 Hancock Ct. (Lot 38)

DESIGNED BY:
Precision Custom Homes
Raeford, NC
Shaun@PrecisionCustomHomesNC.com

DATE:
3/2/23

SCALE:
1/4" = 1'

SHEET:
A-4



AREA SCHEDULE	
NAME	AREA
1st FLOOR AREA	1,522 SF
2nd FLOOR AREA	1,492 SF
GARAGE	736 SF
FRONT PORCH	110 SF
BACK PORCH	120 SF
TOTAL HEATED	3,014 SF
TOTAL UNDER ROOF	3,980 SF

PLAN:
Liberty 2.0

SHEET TITLE:
2nd FLOOR

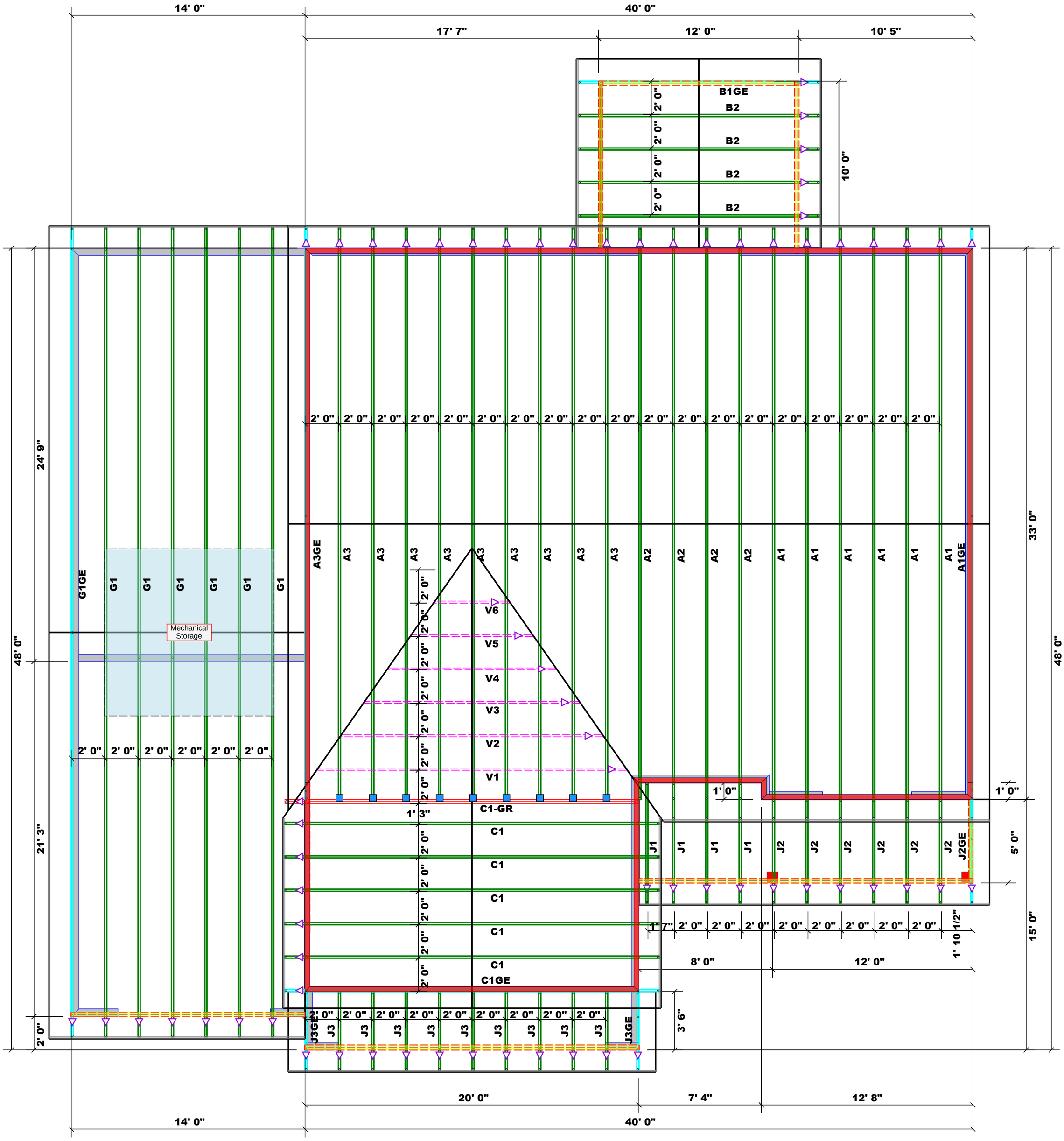
PROJECT ADDRESS:
56 Hancock Ct. (Lot 38)

DESIGNED BY:
Precision Custom Homes
Raeford, NC
Shaun@PrecisionCustomHomesNC.com

DATE:
3/2/23

SCALE:
1/4" = 1'

SHEET:
A-5



Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	17' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	20' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM3	12' 0"	2x10 SP No.2	2	4	FF
BM4	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
BM5	9' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
GDH2	14' 0"	2x12 SPF No.2	2	2	FF

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

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	9	NA	16d/3-1/2"	16d/3-1/2"

Hatch Legend
Box Storage
Drop Beam
2nd Floor Walls

Roof Area = 3371.07 sq.ft.
Ridge Line = 96.21 ft.
Hip Line = 0 ft.
Horiz. OH = 183.58 ft.
Raked OH = 213.39 ft.
Decking = 116 sheets

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

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

END REACTION (LB TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (LB TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (LB 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	Precision Custom Homes and Renovations	**COUNTY**	Cameron / Harnett
JOB NAME	Lot 38 Liberty Meadow	**ADDRESS**	Lot 38 Liberty Meadow
PLAN	Liberty 2.0 w/ CP	**MODEL**	Roof
SEAL DATE	N/A	**DATE REV.**	03/01/23
QUOTE #		**DRAWN BY**	David Landry
JOB #	J0922-4865	**SALESMAN**	Neil Baggett

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

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
David Landry

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

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 #**	J0922-4865
ORDER DATE	09/23/22	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	0000007216
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Shaun Garderner	**INVOICE #**	
COUNTY	Harnett	**TERMS**	
SUPERINTENDANT	Shaun Garderner	**SALES REP**	Neil Baggett
JOBSITE PHONE #	(910) 988-8172	**SALES AREA**	David Landry

SOLD TO
Precision Custom Homes
256 Briar Hill Rd.
Raeford, NC 28376
(910) 988-8172

SHIP TO
Precision Custom Homes and
Lot 38 Liberty Meadow
Cameron, NC 28356

JOB NAME: Lot 38 Liberty Meadow **LOT #** 38 **SUBDIV:** Liberty Meadow
MODEL: Roof **TAG:** Liberty 2.0 w/ CP **JOB CATEGORY:** _

DELIVERY INSTRUCTIONS:
52 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

BUILDING DEPARTMENT
Roof Order

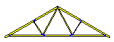
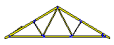
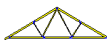
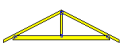
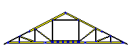
OVERHANG INFO		HEEL HEIGHT	00-06-08	REQ. LAYOUTS				REQ. ENGINEERING					BY	DATE
END CUT	RETURN											QUOTE	DTL	03/01/23
		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	LAYOUT	DTL	03/01/23
												CUTTING	DTL	03/01/23

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
	6	7.00	0.00	COMMON A1	33-00-00 33-00-00	2 X 6	2 X 6	01-02-08	01-02-08	Joint 2 1525.2 lbs. -90.9 lbs. Joint 8 1525.2 lbs. -90.9 lbs.
	1	7.00	0.00	GABLE A1GE	33-00-00 33-00-00	2 X 6	2 X 6	01-02-08	01-02-08	Joint 2 198.3 lbs. -61.9 lbs. Joint 20 172.7 lbs. -4.6 lbs. Joint 22 209.1 lbs. -93.2 lbs. Joint 23 164.5 lbs. -75.0 lbs. Joint 24 175.8 lbs. -77.8 lbs.
	4	7.00	0.00	COMMON A2	33-00-00 33-00-00	2 X 6	2 X 6	01-02-08	01-02-08	Joint 2 1315.9 lbs. -17.7 lbs. Joint 3 150.9 lbs. -112.7 lbs. Joint 4 87.0 lbs. 26.1 lbs. Joint 8 1525.2 lbs. -90.9 lbs.
	9	7.00	0.00	COMMON A3	33-00-00 33-00-00	2 X 6	2 X 6	01-02-08		Joint 2 1529.4 lbs. -91.0 lbs. Joint 8 1461.3 lbs. -74.7 lbs.
	1	7.00	0.00	GABLE A3GE	33-00-00 33-00-00	2 X 6	2 X 6	01-02-08		Joint 2 197.6 lbs. -59.9 lbs. Joint 20 117.2 lbs. -2.3 lbs. Joint 21 230.5 lbs. -107.2 lbs. Joint 22 158.3 lbs. -71.1 lbs. Joint 23 177.0 lbs. -78.5 lbs.
	1	6.00	0.00	GABLE B1GE	12-00-00 12-00-00	2 X 4	2 X 6	01-02-08	01-02-08	Joint 2 550.0 lbs. -142.9 lbs. Joint 8 550.0 lbs. -142.9 lbs.
	4	6.00	0.00	COMMON B2	12-00-00 12-00-00	2 X 4	2 X 6	01-02-08	01-02-08	Joint 2 550.0 lbs. -108.9 lbs. Joint 4 550.0 lbs. -108.9 lbs.
	5	10.00	0.00	COMMON C1	20-00-00 20-00-00	2 X 6	2 X 6	01-02-08	01-02-08	Joint 2 1043.7 lbs. -48.5 lbs. Joint 4 1043.7 lbs. -48.5 lbs.
	1 / 2 Ply	10.00	0.00	COMMON C1-GR	20-00-00 20-00-00	2 X 6	2 X 8	01-02-08		Joint 2 6838.3 lbs. -436.9 lbs. Joint 6 6844.2 lbs. -424.1 lbs.
	1	10.00	0.00	GABLE C1GE	20-00-00 20-00-00	2 X 6	2 X 6	01-02-08	01-02-08	Joint 2 859.7 lbs. -169.5 lbs. Joint 12 859.7 lbs. -169.5 lbs.
	6	6.00	0.00	COMMON G1	46-00-00 46-00-00	2 X 6	2 X 8	01-02-08	01-02-08	Joint 2 1250.3 lbs. -65.6 lbs. Joint 12 1365.2 lbs. -168.3 lbs. Joint 18 1447.0 lbs. -119.5 lbs.

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 #**	J0922-4865
ORDER DATE	09/23/22	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	0000007216
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Shaun Garderner	**INVOICE #**	
COUNTY	Harnett	**TERMS**	
SUPERINTENDANT	Shaun Garderner	**SALES REP**	Neil Baggett
JOBSITE PHONE #	(910) 988-8172	**SALES AREA**	David Landry

SOLD TO
Precision Custom Homes
256 Briar Hill Rd.
Raeford, NC 28376
(910) 988-8172

SHIP TO
Precision Custom Homes and
Lot 38 Liberty Meadow
Cameron, NC 28356

JOB NAME: Lot 38 Liberty Meadow **LOT #** 38 **SUBDIV:** Liberty Meadow
MODEL: Roof **TAG:** Liberty 2.0 w/ CP **JOB CATEGORY:** _

DELIVERY INSTRUCTIONS:
52 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

BUILDING DEPARTMENT
Roof Order

OVERHANG INFO		HEEL HEIGHT	00-06-08	REQ. LAYOUTS				REQ. ENGINEERING					BY	DATE
END CUT	RETURN											QUOTE	DTL	03/01/23
		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	LAYOUT	DTL	03/01/23
												CUTTING	DTL	03/01/23

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
	1	6.00	0.00	COMMON G1GE	46-00-00 46-00-00	2 X 4	2 X 6	01-02-08	01-02-08	Joint 2 196.2 lbs. -27.2 lbs. / Joint 26 196.2 lbs. -3.2 lbs. / Joint 28 219.1 lbs. -94.9 lbs. / Joint 29 139.7 lbs. -62.0 lbs. / Joint 30 165.1 lbs. -70.6 lbs.
	4	4.00	0.00	MONO TRUSS J1	06-00-00 06-00-00	2 X 4	2 X 6	01-02-08	-00-01-08	Joint 2 316.0 lbs. -132.3 lbs. / Joint 4 215.2 lbs. -90.3 lbs.
	6	4.00	0.00	MONOPITCH J2	05-00-00 05-00-00	2 X 4	2 X 6	01-02-08	-00-01-08	Joint 2 277.3 lbs. -119.5 lbs. / Joint 4 174.4 lbs. -72.2 lbs.
	1	4.00	0.00	MONOPITCH J2GE	05-00-00 05-00-00	2 X 4	2 X 6	01-02-08		Joint 2 189.3 lbs. -89.3 lbs. / Joint 5 3.5 lbs. -3.4 lbs. / Joint 6 52.4 lbs. -34.0 lbs. / Joint 7 222.4 lbs. -70.5 lbs.
	9	4.00	0.00	MONOPITCH J3	03-04-08 03-04-08	2 X 4	2 X 6	01-02-08		Joint 2 223.8 lbs. -68.8 lbs. / Joint 4 107.4 lbs. -14.2 lbs.
	2	4.00	0.00	MONOPITCH J3GE	03-06-00 03-06-00	2 X 4	2 X 4	01-02-08		Joint 2 164.5 lbs. -91.1 lbs. / Joint 7 52.0 lbs. -26.0 lbs. / Joint 8 125.2 lbs. -37.7 lbs.
	1	10.00	0.00	VALLEY V1	18-05-05 18-05-05	2 X 4	2 X 4			Joint 1 193.5 lbs. -7.5 lbs. / Joint 5 182.2 lbs. 22.4 lbs. / Joint 6 560.1 lbs. -171.8 lbs. / Joint 8 410.9 lbs. 55.3 lbs. / Joint 9 560.3 lbs. -171.9 lbs.
	1	10.00	0.00	VALLEY V2	15-07-11 15-07-11	2 X 4	2 X 4			Joint 1 150.3 lbs. -16.8 lbs. / Joint 5 134.9 lbs. 10.7 lbs. / Joint 6 428.5 lbs. -142.4 lbs. / Joint 7 410.8 lbs. 56.2 lbs. / Joint 8 428.9 lbs. -142.5 lbs.
	1	10.00	0.00	VALLEY V3	12-10-02 12-10-02	2 X 4	2 X 4			Joint 1 101.5 lbs. -31.1 lbs. / Joint 5 84.7 lbs. -8.6 lbs. / Joint 6 329.9 lbs. -123.9 lbs. / Joint 7 242.2 lbs. 54.2 lbs. / Joint 8 330.1 lbs. -124.1 lbs.
	1	10.00	0.00	VALLEY V4	10-00-08 10-00-08	2 X 4	2 X 4			Joint 1 198.9 lbs. -21.8 lbs. / Joint 3 198.9 lbs. -30.4 lbs. / Joint 4 346.9 lbs. 10.9 lbs.
	1	10.00	0.00	VALLEY V5	07-02-15 07-02-15	2 X 4	2 X 4			Joint 1 150.6 lbs. -22.7 lbs. / Joint 3 150.7 lbs. -28.7 lbs. / Joint 4 219.7 lbs. 22.5 lbs.

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 #**	J0922-4865
ORDER DATE	09/23/22	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	0000007216
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Shaun Garderner	**INVOICE #**	
COUNTY	Harnett	**TERMS**	
SUPERINTENDANT	Shaun Garderner	**SALES REP**	Neil Baggett
JOBSITE PHONE #	(910) 988-8172	**SALES AREA**	David Landry

SOLD TO
Precision Custom Homes
256 Briar Hill Rd.
Raeford, NC 28376
(910) 988-8172

SHIP TO
Precision Custom Homes and
Lot 38 Liberty Meadow
Cameron, NC 28356

JOB NAME: Lot 38 Liberty Meadow **LOT #** 38 **SUBDIV:** Liberty Meadow
MODEL: Roof **TAG:** Liberty 2.0 w/ CP **JOB CATEGORY:** _

DELIVERY INSTRUCTIONS:
52 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

BUILDING DEPARTMENT
Roof Order

OVERHANG INFO		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**					**BY**	**DATE**
END CUT	**RETURN**											**QUOTE**	DTL	03/01/23
		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	**LAYOUT**	DTL	03/01/23
												CUTTING	DTL	03/01/23

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				
										Joint 1	Joint 3	Joint 4	Joint 17	Joint 18
	1	10.00	0.00	VALLEY V6	04-05-05 04-05-05	2 X 4	2 X 4			85.8 lbs. -12.9 lbs.	85.8 lbs. -16.3 lbs.	125.2 lbs. 12.8 lbs.	304.2 lbs. -31.6 lbs.	337.3 lbs. -27.3 lbs.

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
9	Hangers, USP	HUS 26			SIMPSON (HUS26)

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0922-4865
Lot 38 Liberty Meadow

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: I56917876 thru I56917898

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

March 1,2023

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	Lot 38 Liberty Meadow
J0922-4865	A1	COMMON	6	1	I56917876
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:40 2023 Page 1
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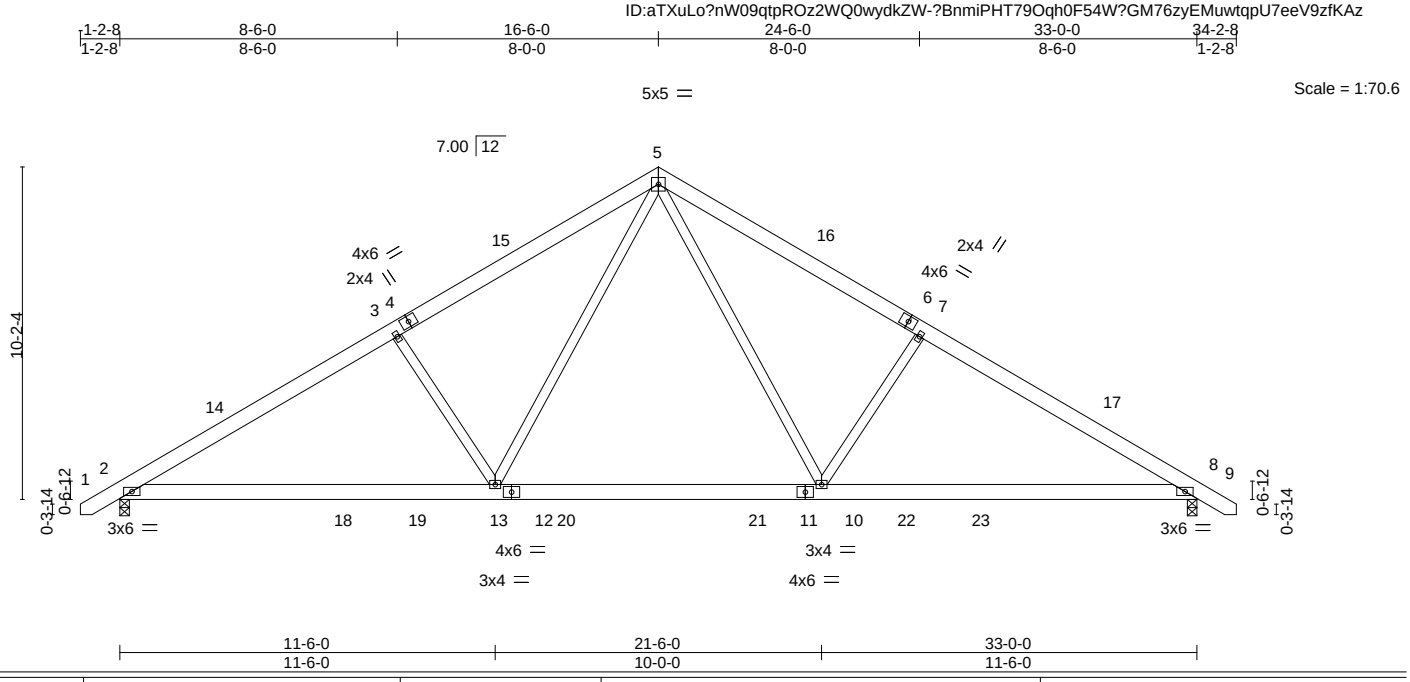

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.15	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	-0.26	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 221 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=245(LC 11)
Max Uplift 2=-91(LC 12), 8=-91(LC 13)
Max Grav 2=1525(LC 19), 8=1525(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2295/423, 3-5=-2090/464, 5-7=-2091/464, 7-8=-2296/423
BOT CHORD 2-13=-222/2070, 10-13=-9/1347, 8-10=-233/1886
WEBS 3-13=-544/300, 5-13=-140/991, 5-10=-139/991, 7-10=-544/300

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) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 34-0-6 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 91 lb uplift at joint 2 and 91 lb uplift at joint 8.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	A1GE	GABLE	1	1	I56917877
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:43 2023 Page 1
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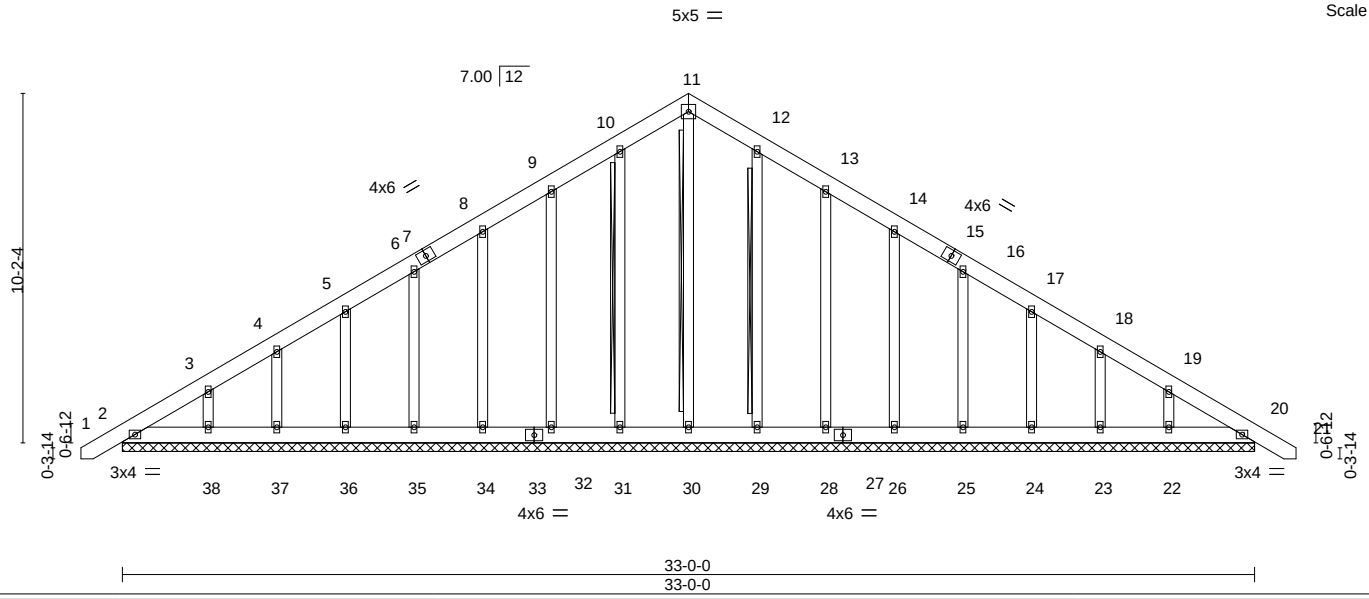
1-2-8 16-6-0 33-0-0 34-2-8
1-2-8 16-6-0 16-6-0 1-2-8

Scale = 1:67.2



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	0.04	Vert(LL)	-0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 283 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 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.
WEBS T-Brace: 2x4 SPF No.2 - 11-30, 10-31, 12-29
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 33-0-0.
(lb) - Max Horz 2=306(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22
Max Grav All reactions 250 lb or less at joint(s) 2, 20, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-277/226, 10-11=-242/277, 11-12=-242/277

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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	A2	COMMON	4	1	I56917878
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:45 2023 Page 1
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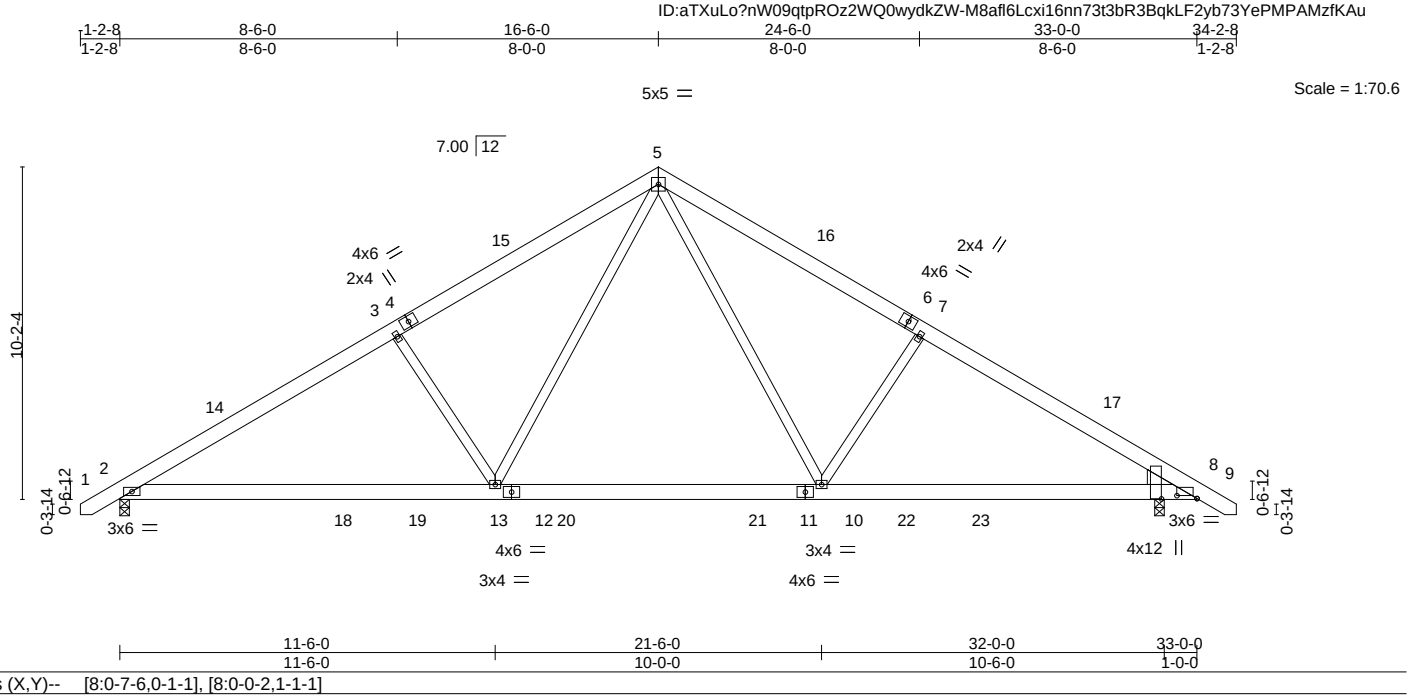

Plate Offsets (X,Y)-- [8:0-7-6,0-1-1], [8:0-0-2,1-1-1]

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	0.65	Vert(LL)	-0.15	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.26	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 223 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Right: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-2 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=245(LC 11)
Max Uplift 2=-91(LC 12), 8=-91(LC 13)
Max Grav 2=1525(LC 19), 8=1525(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2295/423, 3-5=-2090/464, 5-7=-2091/464, 7-8=-2296/423
BOT CHORD 2-13=-222/2070, 10-13=-9/1347, 8-10=-233/1886
WEBS 3-13=-544/300, 5-13=-140/991, 5-10=-139/991, 7-10=-544/300

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) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 34-0-6 zone; cantilever right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	A3	COMMON	9	1	I56917879
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:46 2023 Page 1
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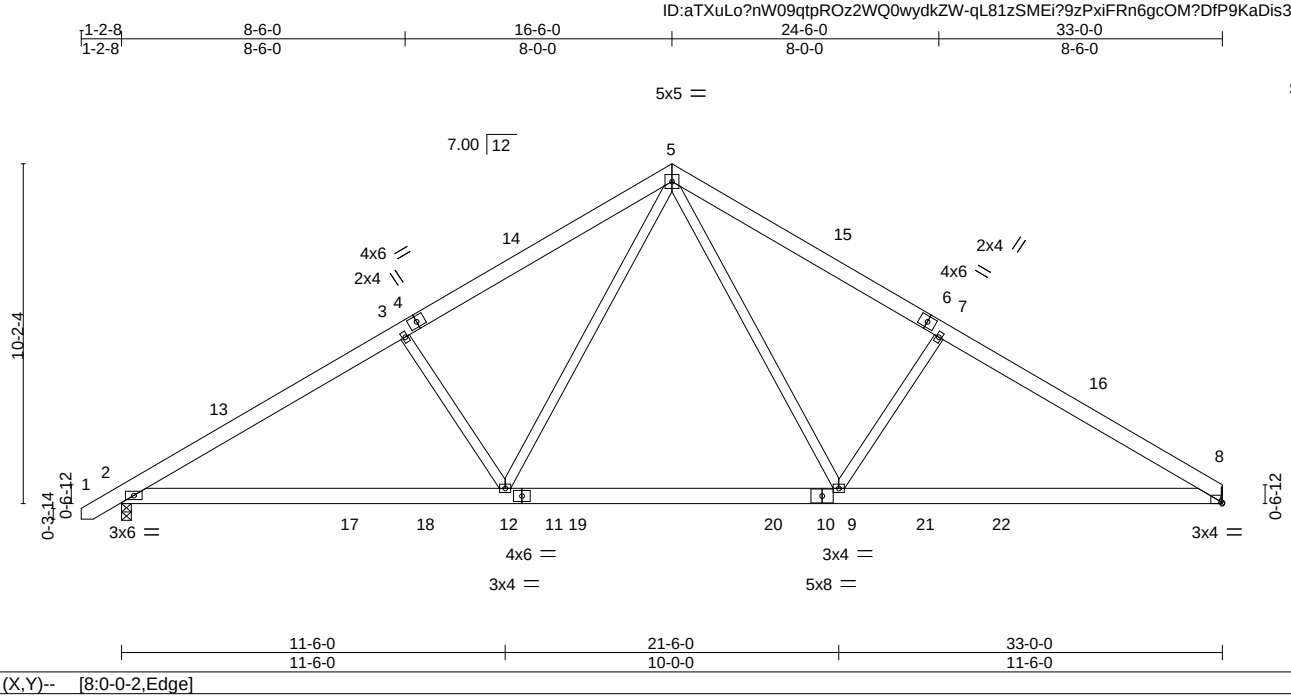

Plate Offsets (X,Y)-- [8:0-0-2,Edge]

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	0.32	Vert(LL)	-0.15	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.27	8-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-12	>999	240	Weight: 218 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-8, 8=Mechanical
Max Horz 2=241(LC 11)
Max Uplift 2=-91(LC 12), 8=-75(LC 13)
Max Grav 2=1529(LC 19), 8=1461(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2303/425, 3-5=-2098/466, 5-7=-2112/480, 7-8=-2319/440
BOT CHORD 2-12=-255/2070, 9-12=-30/1348, 8-9=-260/1916
WEBS 3-12=-545/300, 5-12=-141/990, 5-9=-144/1011, 7-9=-555/308

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) -1-0-6 to 3-4-7, Interior(1) 3-4-7 to 16-6-0, Exterior(2) 16-6-0 to 20-10-13, Interior(1) 20-10-13 to 32-11-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	A3GE	GABLE	1	1	I56917880
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:48 2023 Page 1
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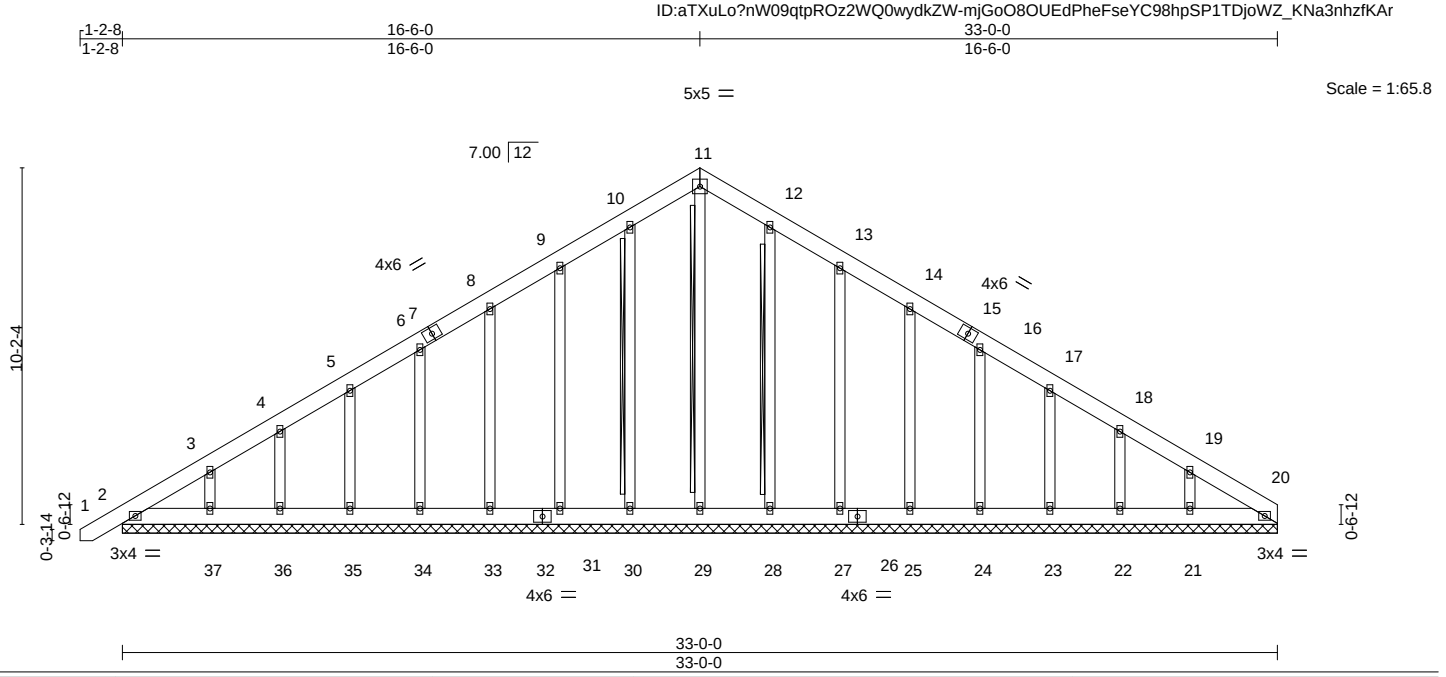

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 280 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 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.
WEBS T-Brace: 2x4 SPF No.2 - 11-29, 10-30, 12-28
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 33-0-0.
(lb) - Max Horz 2=301(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22 except 21=-107(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 20, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-280/222, 10-11=-236/265, 11-12=-236/265

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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22 except (jt=lb) 21=107.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	B1GE	GABLE	1	1	I56917881
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:50 2023 Page 1
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1-2-8 6-0-0 6-0-0 1-2-8

Scale = 1:23.6

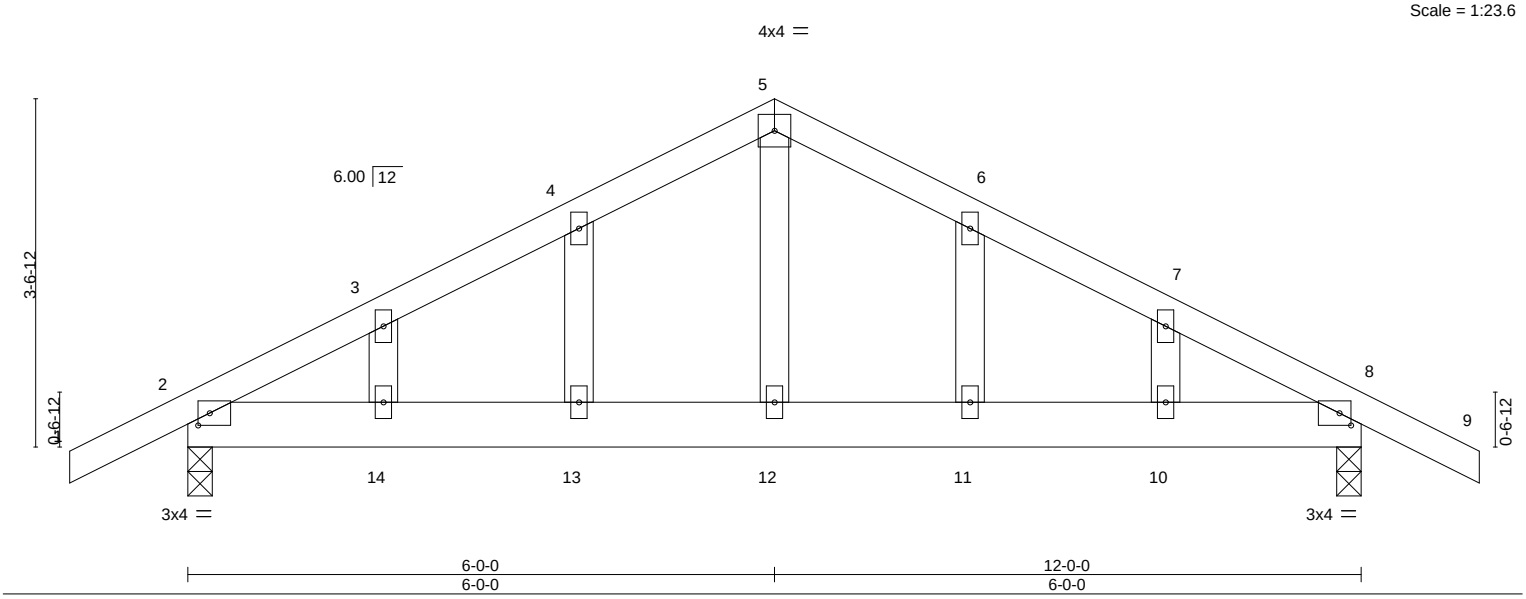


Plate Offsets (X,Y)-- [2:0-1-7,0-1-8], [8:0-1-7,0-1-8]

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	0.14	Vert(LL)	-0.02	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.03	10-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	10-11	>999	240	Weight: 65 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
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=0-3-0, 8=0-3-0
Max Horz 2=-73(LC 17)
Max Uplift 2=-143(LC 9), 8=-143(LC 8)
Max Grav 2=550(LC 1), 8=550(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-617/666, 3-4=-570/687, 4-5=-561/740, 5-6=-561/740, 6-7=-570/688, 7-8=-617/666
BOT CHORD 2-14=-494/491, 13-14=-494/491, 12-13=-494/491, 11-12=-494/491, 10-11=-494/491, 8-10=-494/491
WEBS 5-12=-513/328

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; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
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 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) except (jt=lb) 2=143, 8=143.

March 1,2023

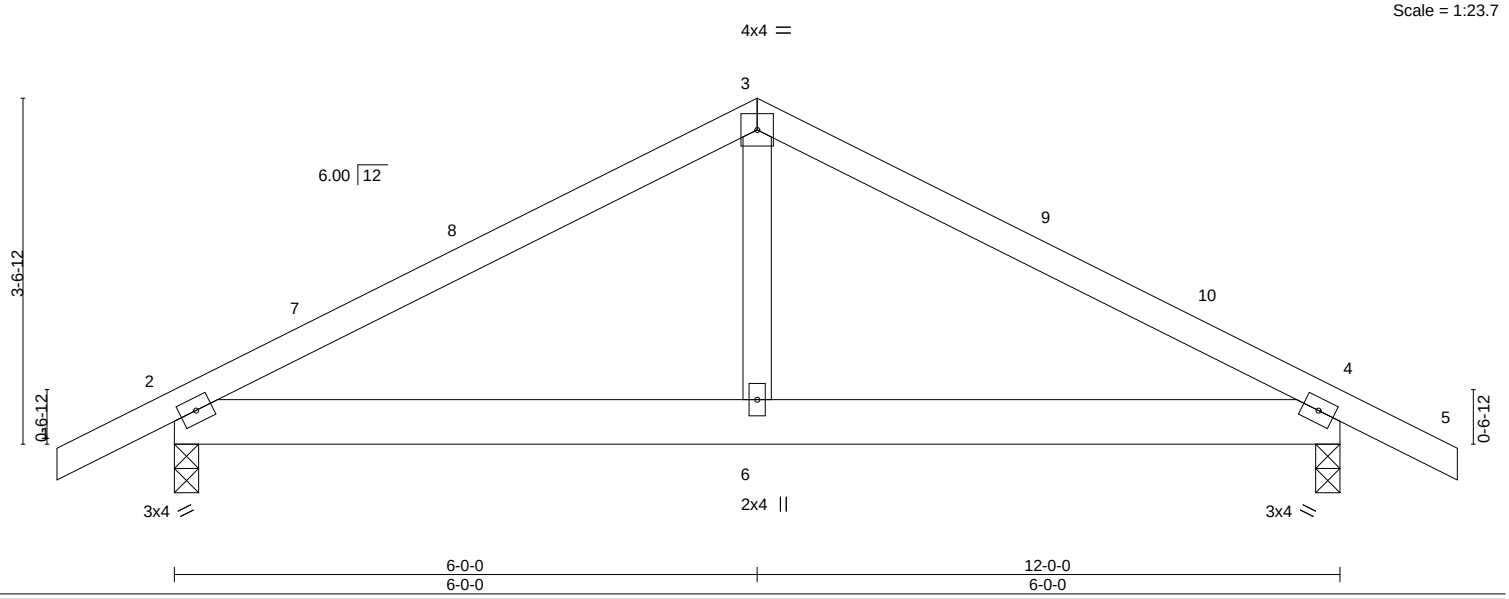
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	B2	COMMON	4	1	I56917882
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:51 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-BIxw09QNXYnGVibDEKirJS4rMgCN?uKR0KpjN0zfKAo

-1-2-8 1-2-8 | 6-0-0 6-0-0 | 12-0-0 6-0-0 | 13-2-8 1-2-8

Scale = 1:23.7



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)	-0.01	4-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	4-6	>999	240	Weight: 57 lb	FT = 20%

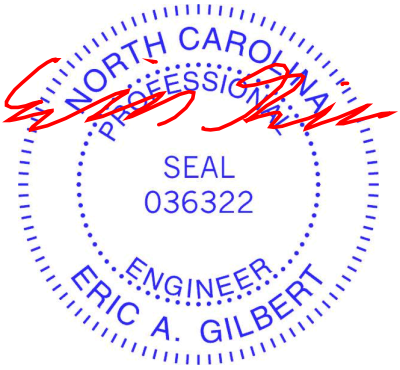
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

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=0-3-0, 4=0-3-0
Max Horz 2=-47(LC 10)
Max Uplift 2=-109(LC 9), 4=-109(LC 8)
Max Grav 2=550(LC 1), 4=550(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-640/667, 3-4=-640/667
BOT CHORD 2-6=-457/485, 4-6=-457/485
WEBS 3-6=-394/296

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) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13, Interior(1) 10-4-13 to 13-2-8 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=109, 4=109.



March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	C1	COMMON	5	1	I56917883
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:52 2023 Page 1
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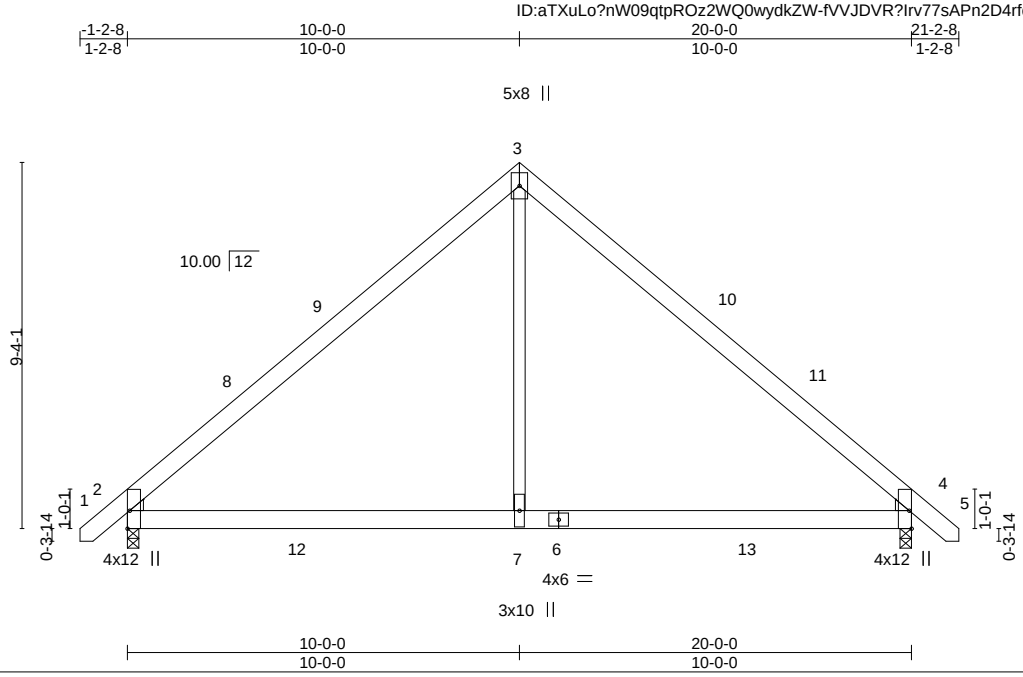

Plate Offsets (X,Y)-- [2:Edge,0-0-11], [4:Edge,0-0-11]

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	0.49	Vert(LL)	-0.10	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	-0.17	4-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.19	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	2-7	>999	240	Weight: 129 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 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. (size) 4=0-3-8, 2=0-3-8
Max Horz 2=-221(LC 10)
Max Uplift 4=-48(LC 13), 2=-48(LC 12)
Max Grav 4=1044(LC 20), 2=1044(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1118/210, 3-4=-1118/210
BOT CHORD 2-7=0/784, 4-7=0/784
WEBS 3-7=0/822

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) -1-0-8 to 3-4-4, Interior(1) 3-4-4 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 21-0-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 2.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	C1-GR	COMMON GIRDER	1	2	I56917884
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 1
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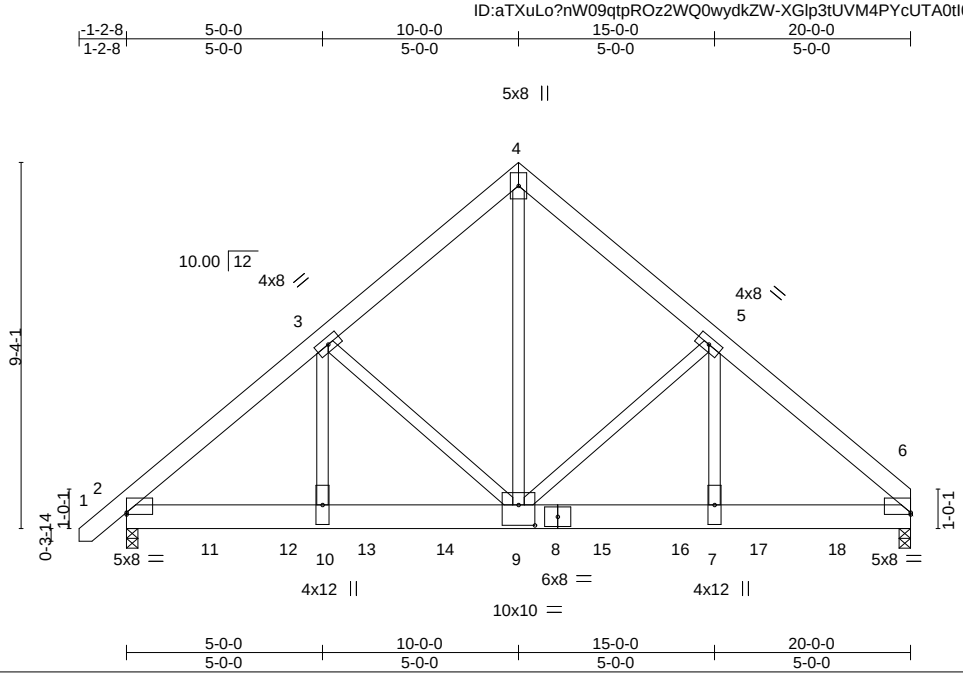

Plate Offsets (X,Y)-- [2:0-0-0,0-0-9], [6:Edge,0-0-9], [9:0-5-0,0-6-4]

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	0.61	Vert(LL)	-0.07	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.13	9-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.03	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	9-10	>999	240	Weight: 341 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=217(LC 26)
Max Uplift 6=-424(LC 9), 2=-437(LC 8)
Max Grav 6=6844(LC 2), 2=6838(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-8399/550, 3-4=-5693/462, 4-5=-5691/461, 5-6=-8413/547
BOT CHORD 2-10=-410/6080, 9-10=-410/6081, 7-9=-340/6084, 6-7=-340/6083
WEBS 4-9=-485/6901, 5-9=-2367/286, 5-7=-162/3485, 3-9=-2363/282, 3-10=-164/3461

NOTES-
1) 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.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph 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
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) except (jt=lb) 6=424, 2=437.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1360 lb down and 95 lb up at 2-0-12, 1360 lb down and 95 lb up at 4-0-12, 1360 lb down and 95 lb up at 6-0-12, 1360 lb down and 95 lb up at 8-0-12, 1360 lb down and 95 lb up at 10-0-12, 1360 lb down and 95 lb up at 12-0-12, 1360 lb down and 95 lb up at 14-0-12, and 1360 lb down and 95 lb up at 16-0-12, and 1360 lb down and 95 lb up at 18-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-4=-60, 4-6=-60, 2-6=-20

March 1,2023

Continued on page 2

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

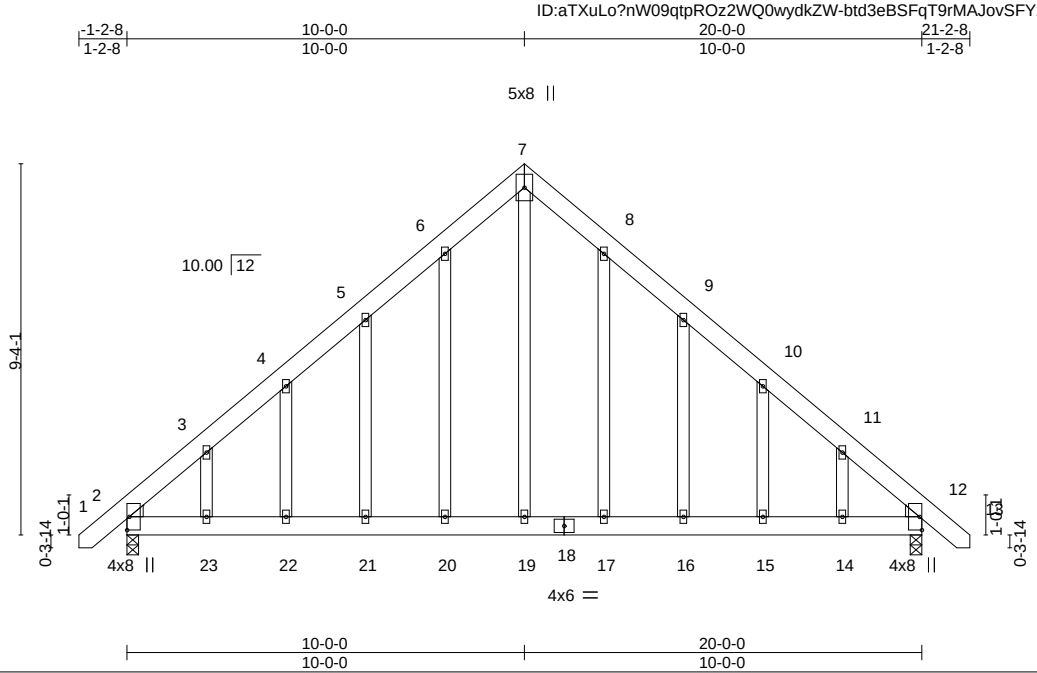
LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 9=-1290(F) 11=-1290(F) 12=-1290(F) 13=-1290(F) 14=-1290(F) 15=-1290(F) 16=-1290(F) 17=-1290(F) 18=-1290(F)

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	C1GE	GABLE	1	1	I56917885
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:54 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-btd3eBSFqT9rMAJovSFYx4hN?tAECAttiI1O_LzfKAl



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	0.20	Vert(LL)	-0.09	15-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.14	15-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.15	21-22	>999	240	Weight: 180 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 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. (size) 12=0-3-8, 2=0-3-8
Max Horz 2=-276(LC 10)
Max Uplift 12=-169(LC 13), 2=-169(LC 12)
Max Grav 12=860(LC 1), 2=860(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-870/130, 3-4=-749/172, 4-5=-705/231, 5-6=-739/304, 6-7=-776/383, 7-8=-776/383, 8-9=-739/304, 9-10=-705/231, 10-11=-749/172, 11-12=-870/129
BOT CHORD 2-23=-39/567, 22-23=-39/567, 21-22=-39/567, 20-21=-39/567, 19-20=-39/567, 17-19=-39/567, 16-17=-39/567, 15-16=-39/567, 14-15=-39/567, 12-14=-39/567
WEBS 7-19=-309/660

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) 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 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) except (jt=lb) 12=169, 2=169.

March 1,2023

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

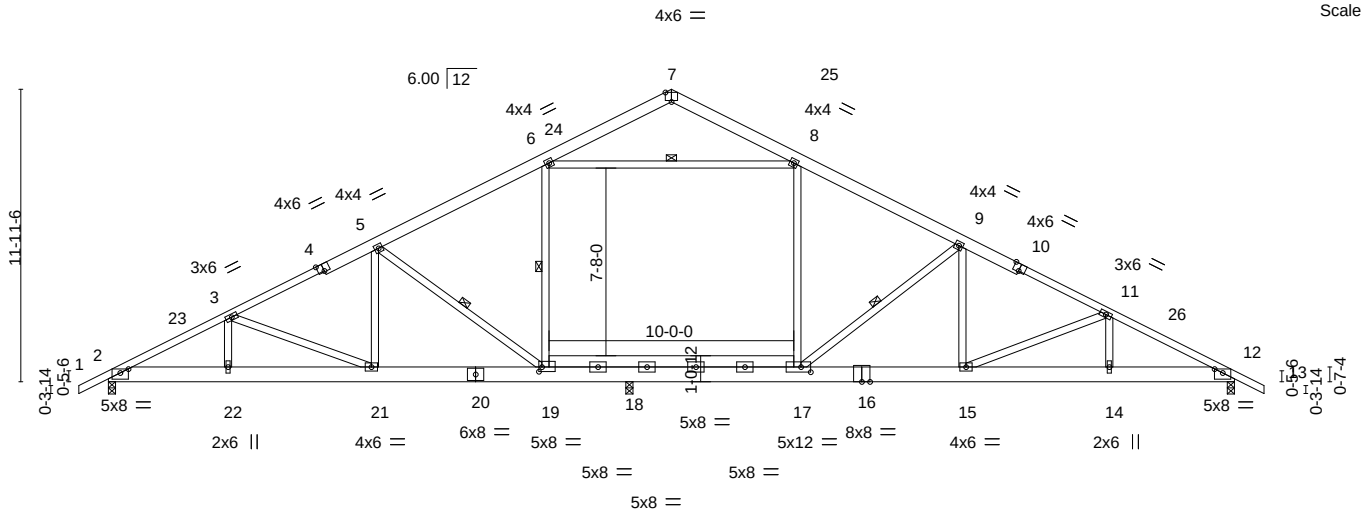
Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	G1	COMMON	6	1	I56917886
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:57 2023 Page 1

ID:aTXuLo?nW09qtpROz2WQ0wydkZW-?SJBHDV86OXPDe2MabpFYjJtO5BGPXLJOGG2bgzfKAi

-1-2-8	4-10-10	8-8-12	10-10-10	17-10-10	23-0-0	27-10-10	34-10-10	40-10-10	46-0-0	47-2-8
1-2-8	4-10-10	3-10-2	2-1-14	7-0-0	5-1-6	4-10-10	7-0-0	6-0-0	5-1-6	1-2-8

Scale = 1:94.1



4-10-10	10-10-10	17-10-10	21-1-10	28-1-5	34-10-10	40-10-10	46-0-0
4-10-10	6-0-0	7-0-0	3-3-0	6-11-11	6-9-5	6-0-0	5-1-6

Plate Offsets (X,Y)-- [2:0-4-0,0-1-15], [4:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [12:0-4-0,0-1-15], [17:0-4-12,0-2-8], [19:0-1-8,0-2-4]

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	0.26	Vert(LL)	-0.24	15-17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.40	15-17	>739	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.42	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.16	15-17	>999	240	Weight: 376 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	1-4,10-13: 2x4 SP No.1
BOT CHORD	2x8 SP 2400F 2.0E *Except*
	17-19: 2x6 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-11-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
	8-5-9 oc bracing: 18-19
	7-9-4 oc bracing: 17-18.
WEBS	1 Row at midpt 9-17, 6-19, 5-19, 6-8

REACTIONS. (size) 2=0-3-8, 12=0-3-8, 18=0-3-8
Max Horz 2=156(LC 11)
Max Uplift 2=-66(LC 12), 12=-168(LC 13), 18=-120(LC 12)
Max Grav 2=1250(LC 1), 12=1365(LC 24), 18=1447(LC 19)

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

TOP CHORD	2-3=-2175/456, 3-5=-1759/445, 5-6=-1250/413, 6-7=-378/186, 7-8=-350/181, 8-9=-1235/382, 9-11=-2082/468, 11-12=-2367/451
BOT CHORD	2-22=-304/1880, 21-22=-304/1880, 19-21=-194/1515, 18-19=-52/1043, 17-18=-48/1031, 15-17=-245/1812, 14-15=-325/2045, 12-14=-325/2045
WEBS	9-17=-1058/260, 9-15=-26/593, 5-19=-875/234, 5-21=-23/446, 3-21=-393/120, 11-15=-281/104, 6-8=-846/319

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) -1-2-7 to 3-2-5, Interior(1) 3-2-5 to 23-0-0, Exterior(2) 23-0-0 to 27-4-13, Interior(1) 27-4-13 to 47-2-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 12=168, 18=120.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	G1GE	COMMON SUPPORTED GAB	1	1	I56917887
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:00 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-Q1_KvEX0PJw_45nxFjMyALxRZIJPcyol4EUiC?zfKAf

1-2-8 23-0-0 46-0-0 47-2-8
1-2-8 23-0-0 23-0-0 1-2-8

Scale = 1:81.7

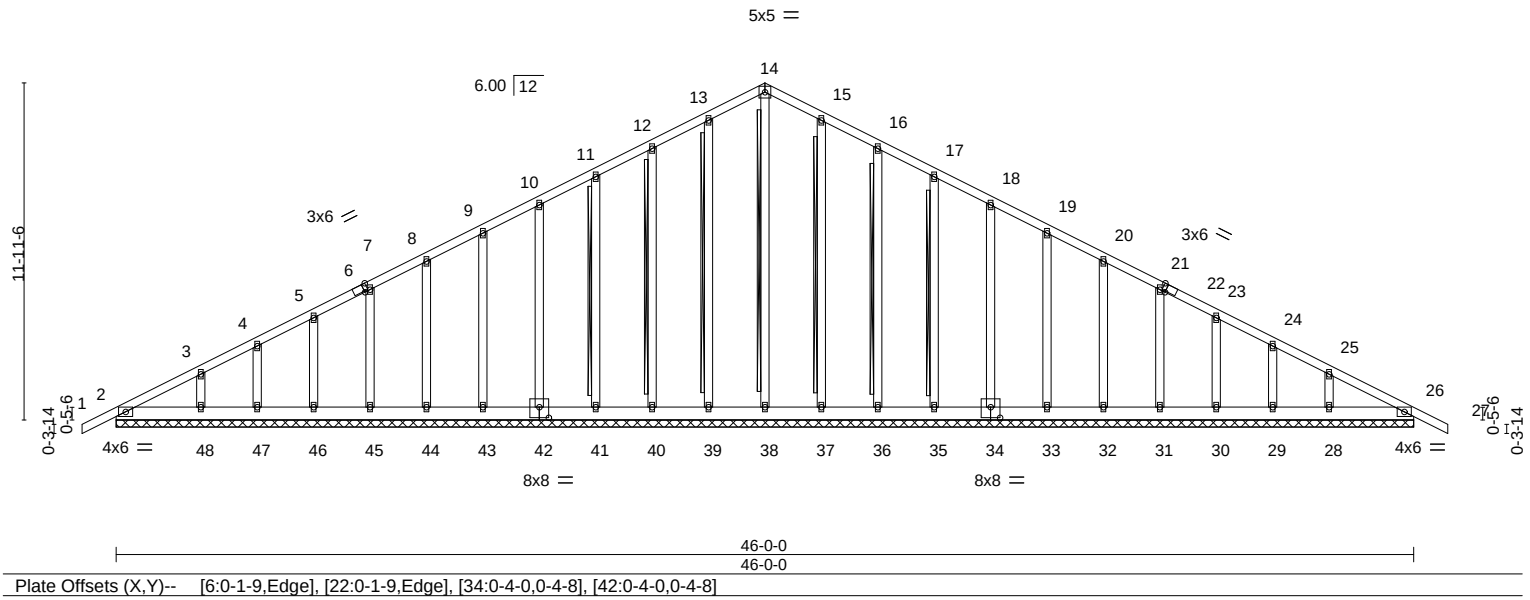


Plate Offsets (X,Y)-- [6:0-1-9,Edge], [22:0-1-9,Edge], [34:0-4-0,0-4-8], [42:0-4-0,0-4-8]

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	27	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	27	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 376 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 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.
WEBS T-Brace: 2x4 SPF No.2 - 14-38, 13-39, 12-40, 11-41, 15-37, 16-36, 17-35
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 46-0-0.
(lb) - Max Horz 2=245(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26
Max Grav All reactions 250 lb or less at joint(s) 2, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-322/96, 11-12=-106/275, 12-13=-127/337, 13-14=-146/387, 14-15=-146/387, 15-16=-127/337, 16-17=-106/275
BOT CHORD 2-48=-82/271, 47-48=-82/271, 46-47=-82/271, 45-46=-82/271, 44-45=-82/271, 43-44=-82/271, 42-43=-82/271, 41-42=-82/271, 40-41=-82/271, 39-40=-82/271, 38-39=-82/271, 37-38=-82/271, 36-37=-82/271, 35-36=-82/271, 34-35=-82/271, 33-34=-82/271, 32-33=-82/271, 31-32=-82/271, 30-31=-82/271, 29-30=-82/271, 28-29=-82/271, 26-28=-82/271

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) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 26.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	J1	MONO TRUSS	4	1	I56917888
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:02 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-MQ64KwYGxwAiKPxKN8PQFm1ij6zP4t52YYzpGtzfKAd

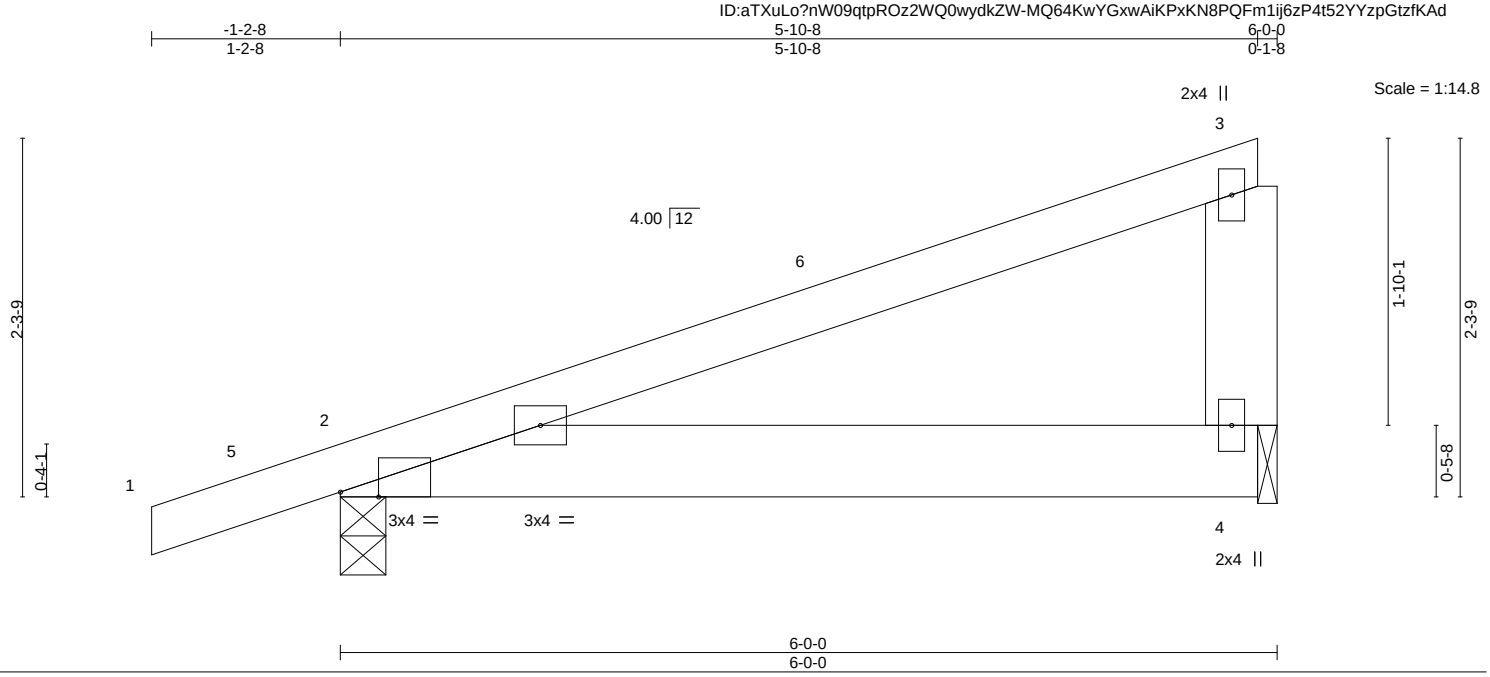


Plate Offsets (X,Y)-- [2:0-2-15,Edge]

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	0.41	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.03	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.03	2-4	>999	240	Weight: 29 lb	FT = 20%

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

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. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=83(LC 8)
Max Uplift 2=-132(LC 8), 4=-90(LC 8)
Max Grav 2=316(LC 1), 4=215(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) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 5-9-4 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=132.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	J2	MONOPITCH	6	1	I56917889
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:03 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-qcgTXGZuiEIZyZVWxrwfo_ZvtWJHpKLCmCjMpJzfKAc

-1-2-8 4-10-8 5-0-0
1-2-8 4-10-8 0-1-8

Scale = 1:12.5

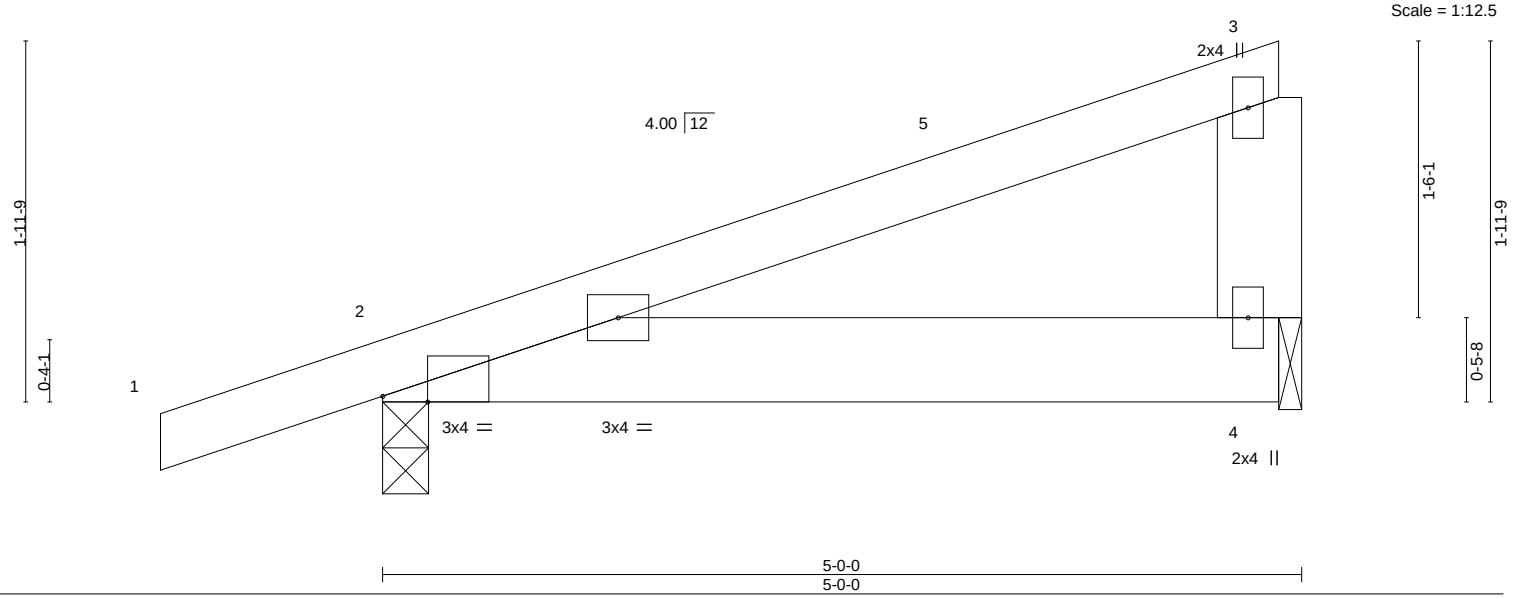


Plate Offsets (X,Y)-- [2:0-2-15,Edge]

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	0.26	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.01	2-4	>999	240	Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=72(LC 8)
Max Uplift 2=-119(LC 8), 4=-72(LC 8)
Max Grav 2=277(LC 1), 4=174(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) -1-2-8 to 3-2-5, Interior(1) 3-2-5 to 4-9-4 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=119.

March 1,2023

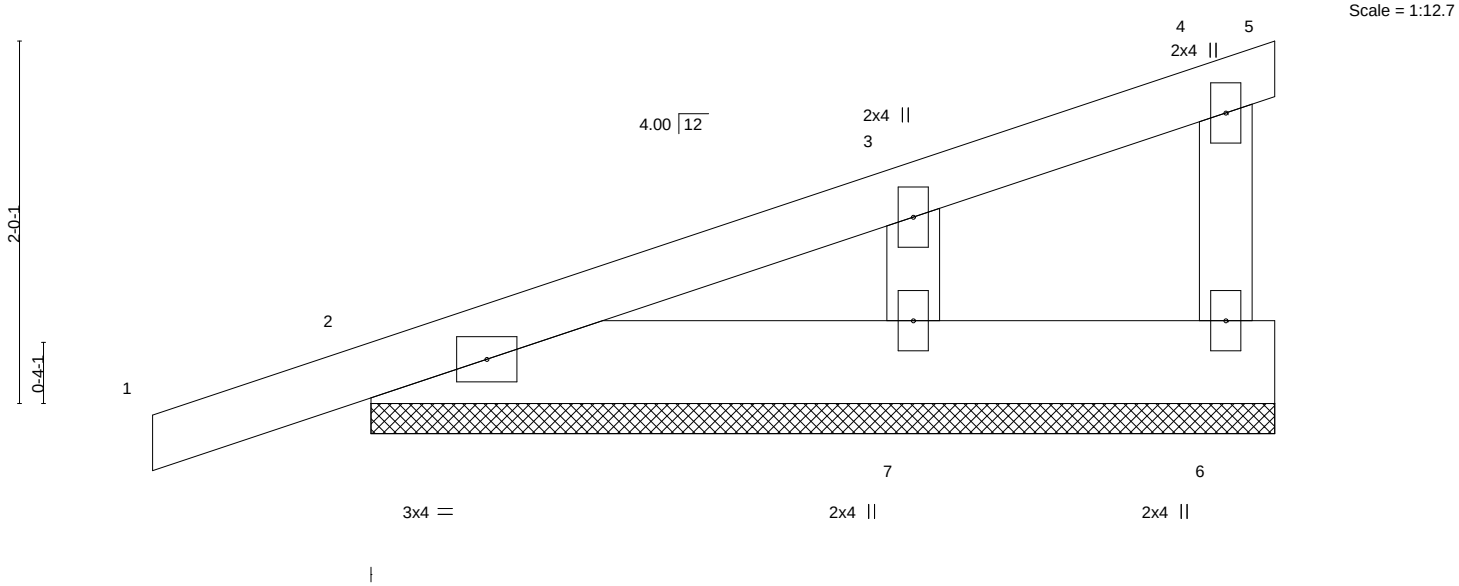
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	J2GE	MONOPITCH SUPPORTED	1	1	I56917890
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:05 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-m?oDyyb9ErYHBsfv2Gy7tPfIlJ0hHEMVEWCTtCzfKAa

-1-2-8 5-0-0
1-2-8 5-0-0

Scale = 1:12.7



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	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 24 lb	FT = 20%

LUMBER-

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

BRACING-

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

REACTIONS. All bearings 5-0-0.
(lb) - Max Horz 2=104(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 5, 6, 2, 7
Max Grav All reactions 250 lb or less at joint(s) 5, 6, 2, 7

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) 5, 6, 2, 7.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

March 1,2023

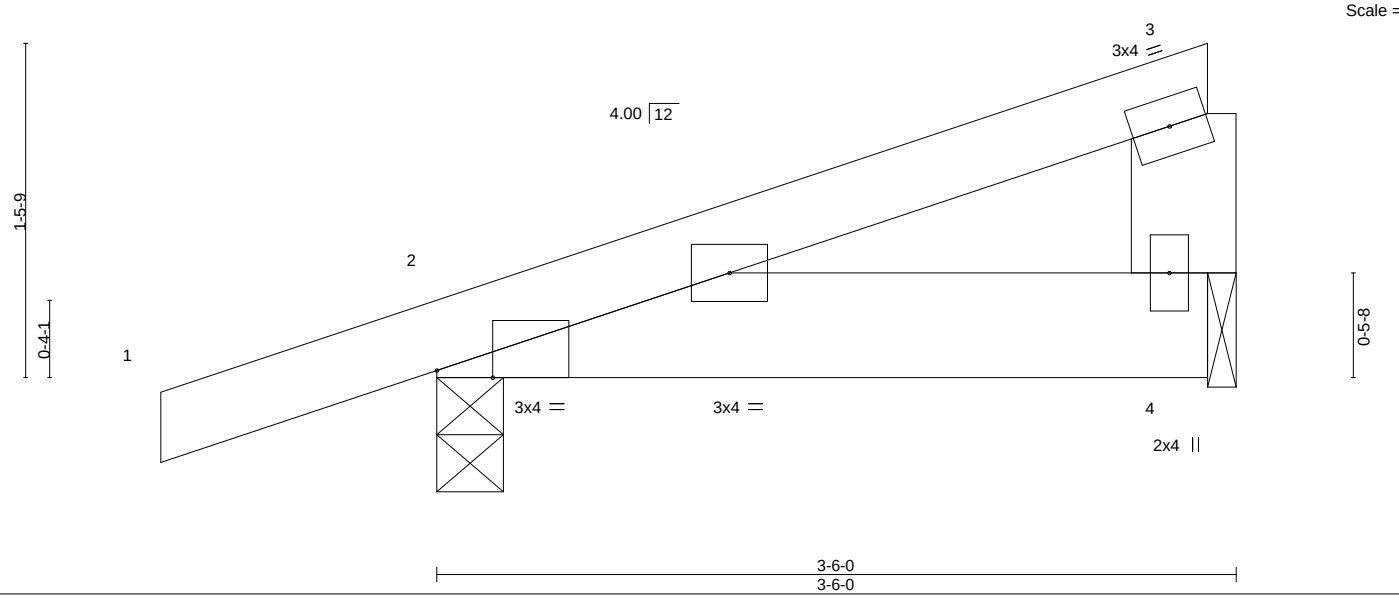
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	J3	MONOPITCH	9	1	I56917891
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:06 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-FBMb9Icn?9g8p0E5c_TMQcBTmjMk0h_eTAx0PezfKAZ

-1-2-8 3-6-0
1-2-8 3-6-0

Scale = 1:10.1



3-6-0
3-6-0

Plate Offsets (X,Y)-- [2:0-2-15,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	0.09	Vert(LL)	-0.00	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 17 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 4=0-1-8
Max Horz 2=56(LC 8)
Max Uplift 2=-69(LC 8), 4=-14(LC 12)
Max Grav 2=224(LC 1), 4=107(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) 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) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	J3GE	MONOPITCH SUPPORTED	2	1	I56917892
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:07 2023 Page 1
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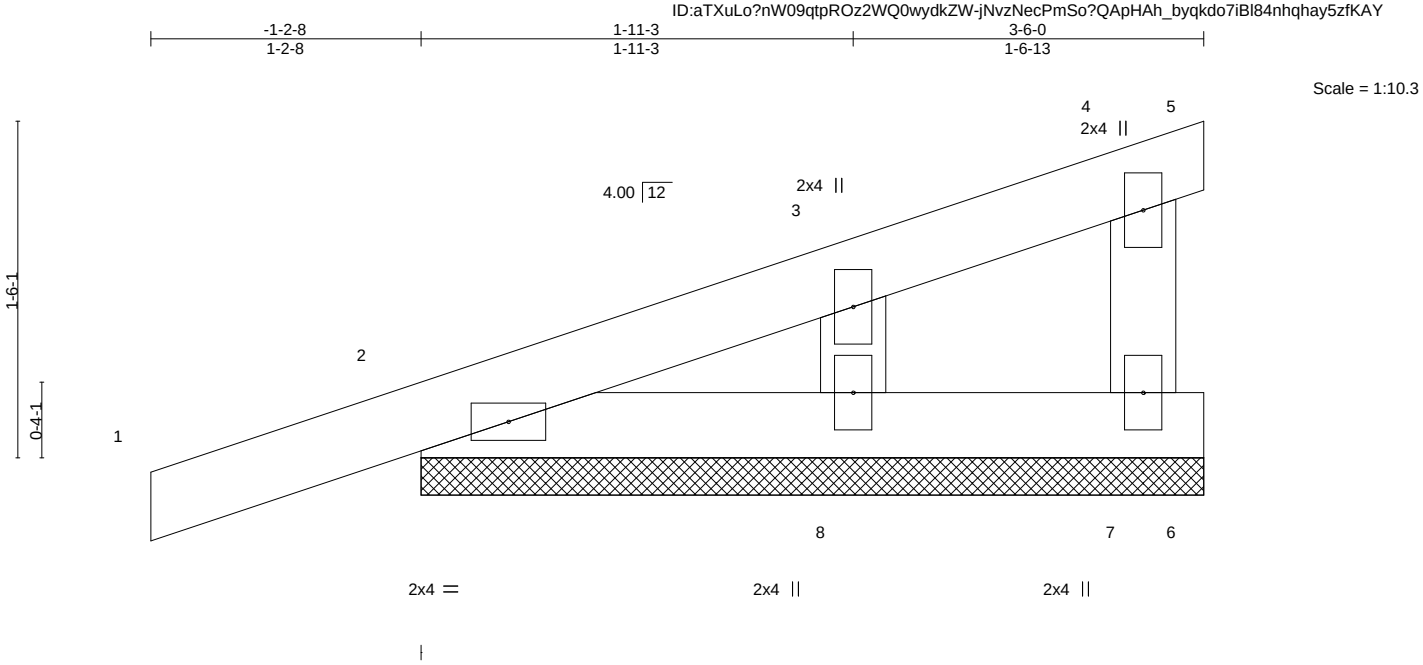

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 15 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-6-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=3-6-0, 2=3-6-0, 8=3-6-0
Max Horz 2=79(LC 8)
Max Uplift 7=-26(LC 8), 2=-91(LC 8), 8=-38(LC 12)
Max Grav 7=52(LC 1), 2=164(LC 1), 8=125(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, 2, 8.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	V1	VALLEY	1	1	I56917893
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:08 2023 Page 1
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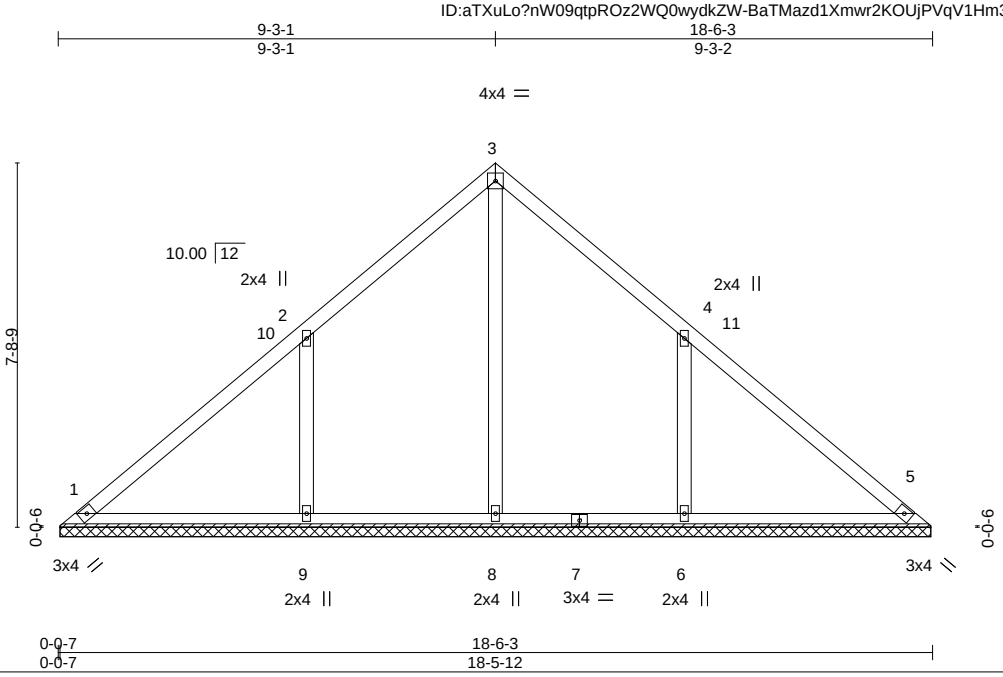

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 84 lb	FT = 20%

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 18-5-5.
(lb) - Max Horz 1=177(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-172(LC 12), 6=-172(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=411(LC 22), 9=560(LC 19), 6=560(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-428/293, 4-6=-428/292

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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 9-3-1, Exterior(2) 9-3-1 to 13-7-14, Interior(1) 13-7-14 to 18-1-6 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=172, 6=172.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	V2	VALLEY	1	1	I56917894
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:10 2023 Page 1
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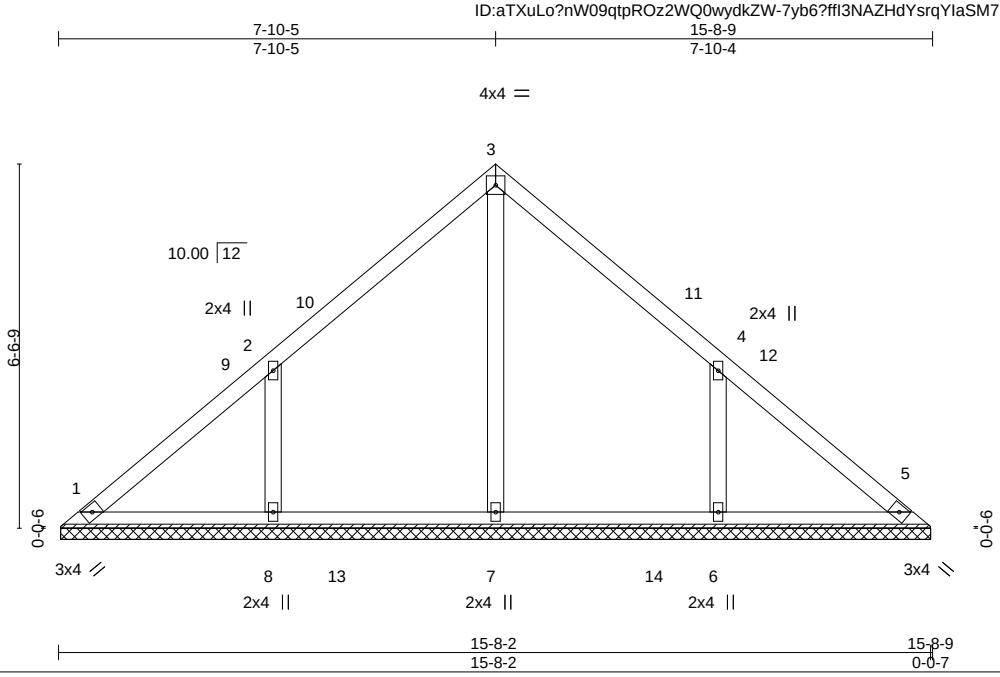

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 69 lb	FT = 20%

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 15-7-11.
(lb) - Max Horz 1=-149(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-143(LC 12), 6=-142(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=411(LC 19), 8=429(LC 19), 6=429(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-356/254, 4-6=-356/254

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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-10-5, Exterior(2) 7-10-5 to 12-3-1, Interior(1) 12-3-1 to 15-3-12 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, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=143, 6=142.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	V3	VALLEY	1	1	I56917895

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:11 2023 Page 1
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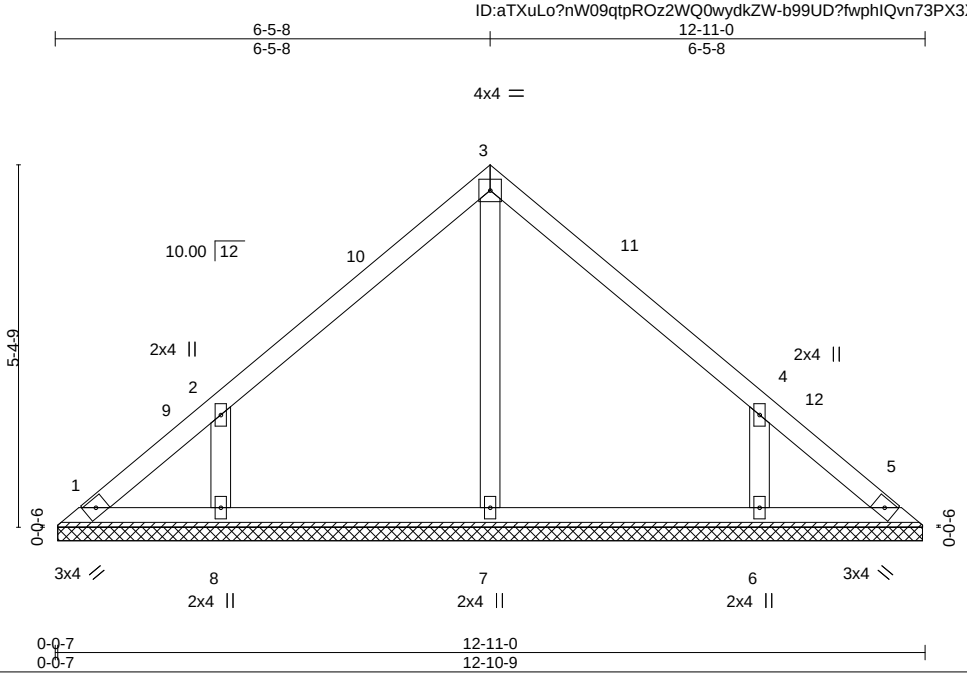

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 54 lb	FT = 20%

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 12-10-1.
(lb) - Max Horz 1=-121(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-124(LC 12), 6=-124(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=330(LC 19), 6=330(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-314/239, 4-6=-314/239

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) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-5-8, Exterior(2) 6-5-8 to 10-10-5, Interior(1) 10-10-5 to 12-6-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=124, 6=124.
6) Non Standard bearing condition. Review required.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	V4	VALLEY	1	1	I56917896
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:13 2023 Page 1
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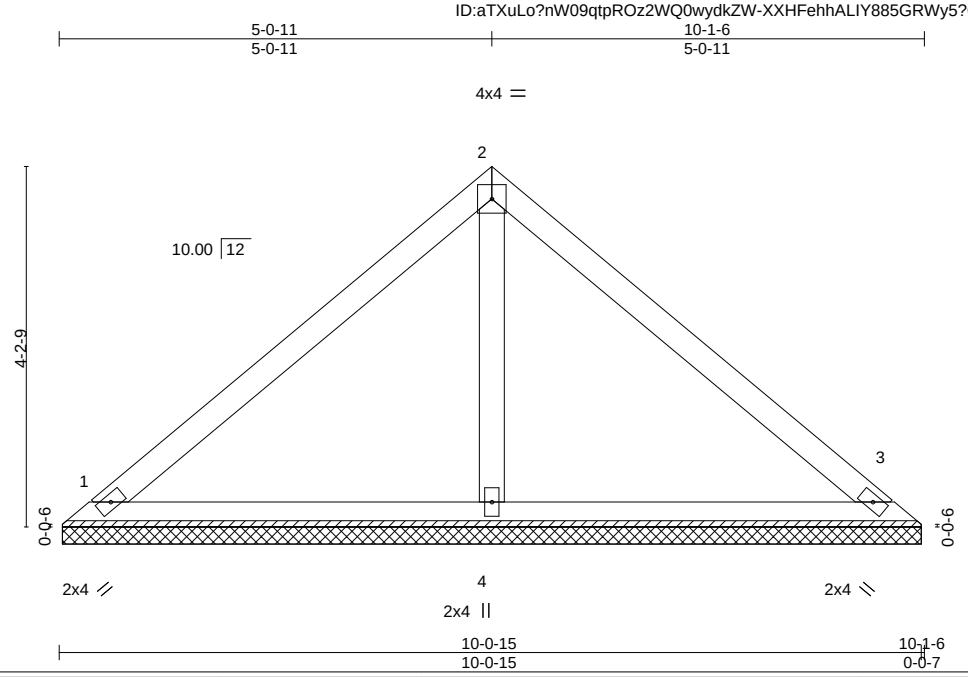

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 38 lb	FT = 20%

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) 1=10-0-8, 3=10-0-8, 4=10-0-8
Max Horz 1=93(LC 11)
Max Uplift 1=-22(LC 13), 3=-30(LC 13)
Max Grav 1=199(LC 1), 3=199(LC 1), 4=347(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) 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) 1, 3.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	V5	VALLEY	1	1	I56917897

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:14 2023 Page 1

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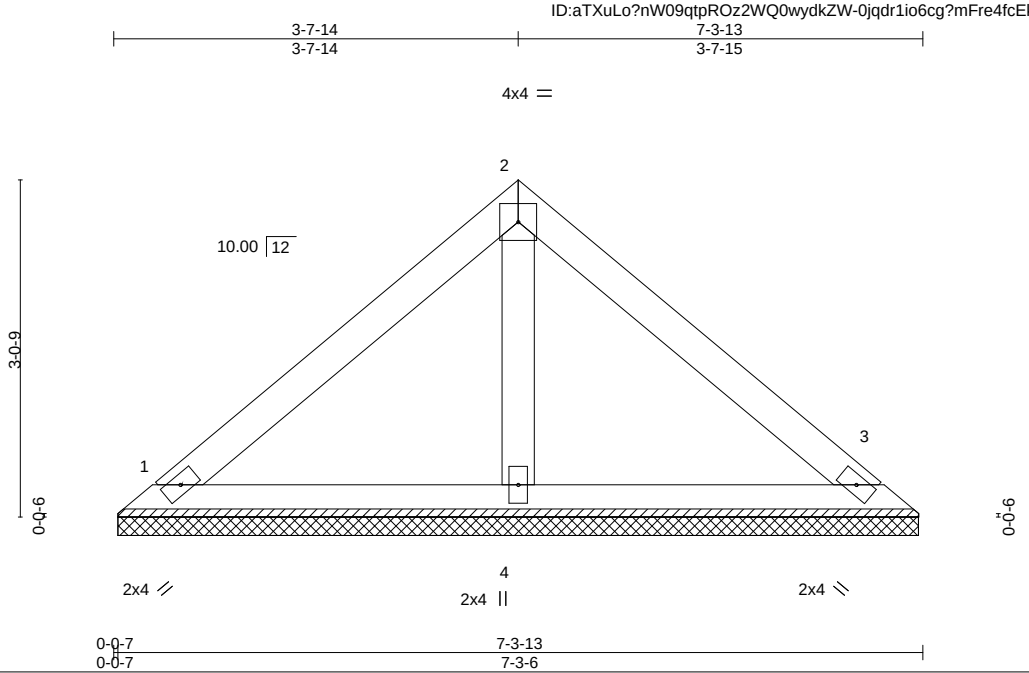

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%

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) 1=7-2-14, 3=7-2-14, 4=7-2-14
Max Horz 1=-65(LC 8)
Max Uplift 1=-23(LC 13), 3=-29(LC 13)
Max Grav 1=151(LC 1), 3=151(LC 1), 4=220(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) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4865	V6	VALLEY	1	1	I56917898
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:55:16 2023 Page 1
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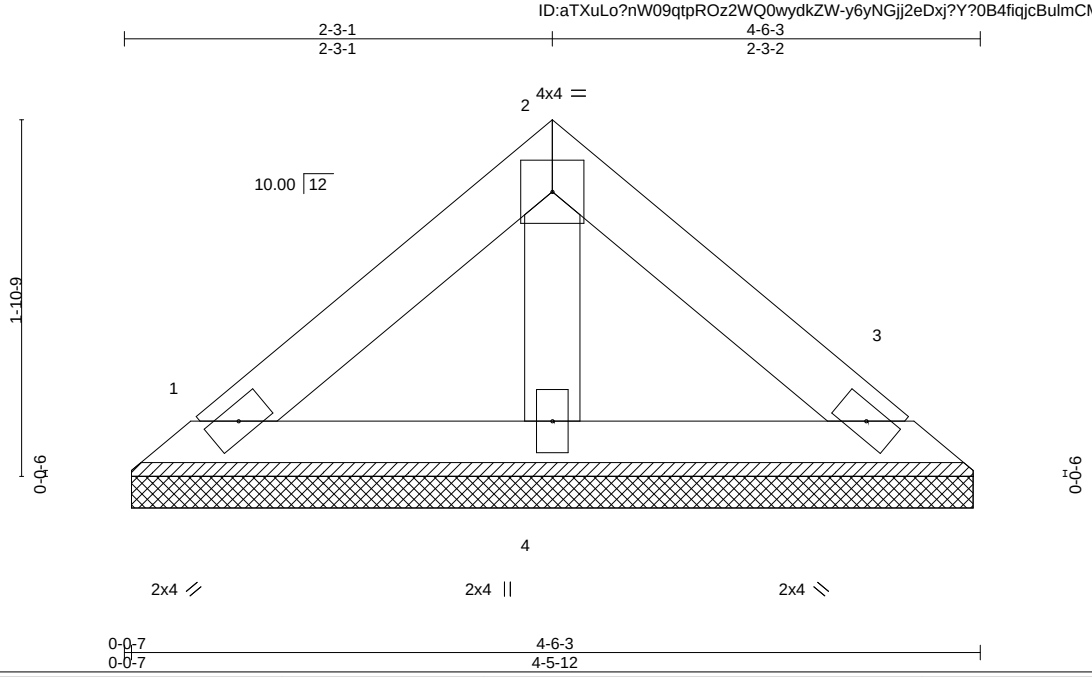

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 16 lb	FT = 20%

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 4-6-3 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-5-5, 3=4-5-5, 4=4-5-5
Max Horz 1=-37(LC 8)
Max Uplift 1=-13(LC 13), 3=-16(LC 13)
Max Grav 1=86(LC 1), 3=86(LC 1), 4=125(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) 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) 1, 3.

March 1,2023

ENGINEERING BY TRENCO
A MiTek Affiliate
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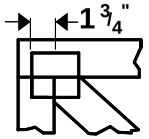
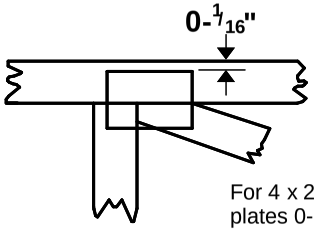
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

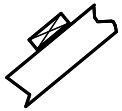
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

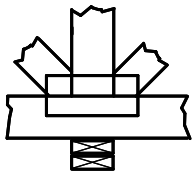
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

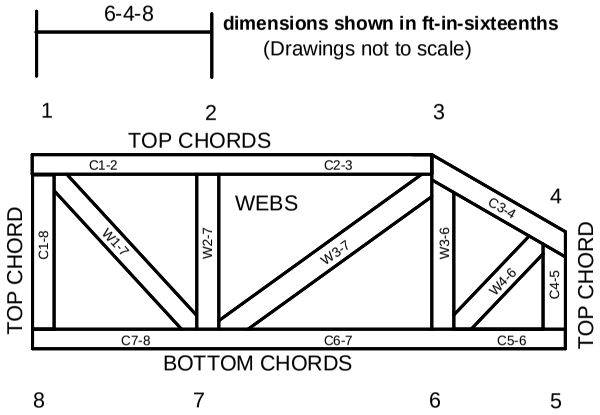


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

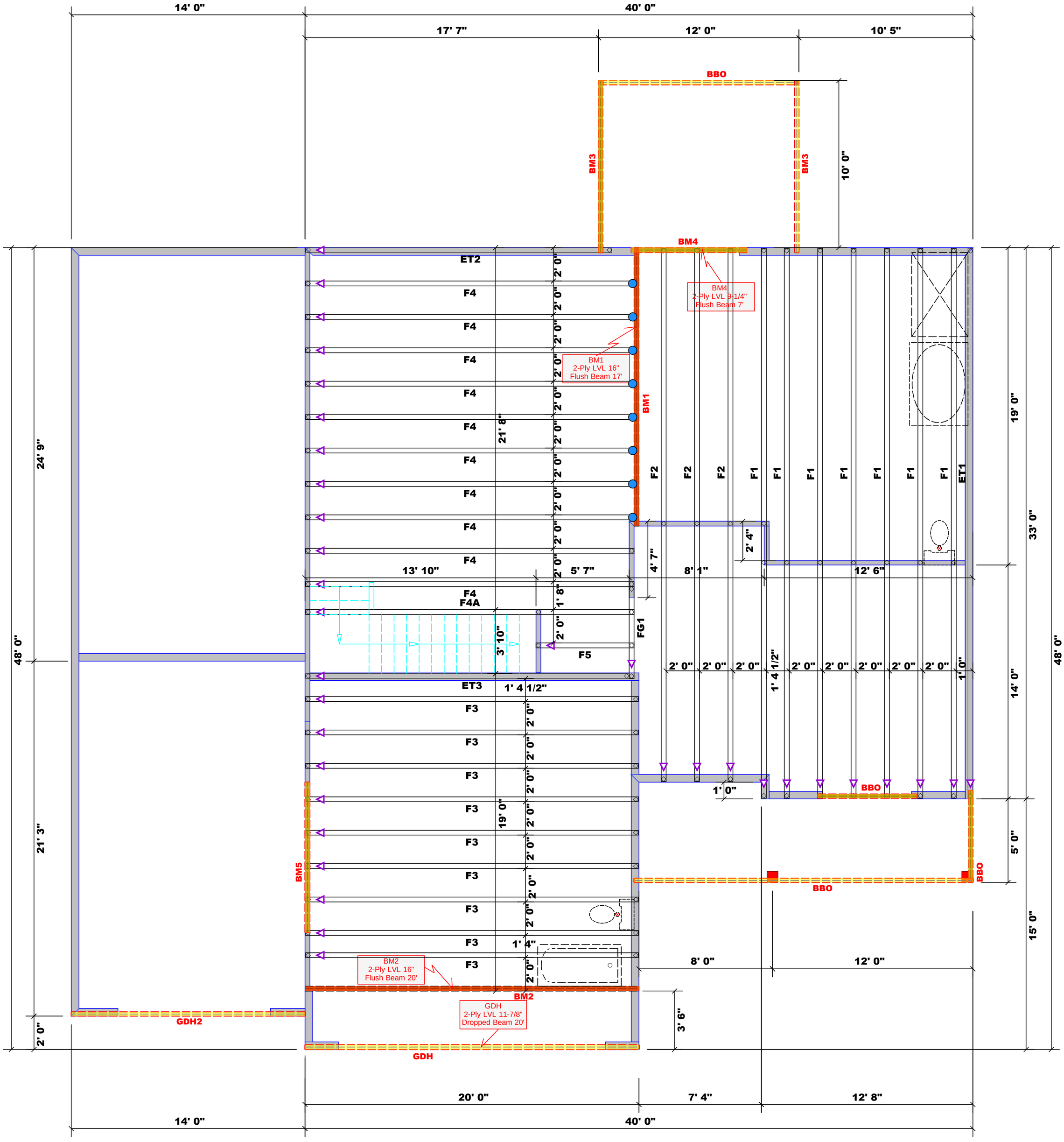
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.



Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	17' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	20' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM3	12' 0"	2x10 SP No.2	2	4	FF
BM4	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2	FF
BM5	9' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
GDH	20' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF
GDH2	14' 0"	2x12 SPF No.2	2	2	FF

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

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise 2. All interior wall dimensions are to face of frame wall unless noted otherwise 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	8	Varies	16d/3-1/2"	16d/3-1/2"

Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact. 2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses. 3. Adjust spacing as needed not to exceed 24"oc.

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

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

END REACTION (LB "D)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (LB "D)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (LB "D)	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	Precision Custom Homes and Renovations	COUNTY	Cameron / Harnett
JOB NAME	Lot 38 Liberty Meadow	ADDRESS	Lot 38 Liberty Meadow
PLAN	Liberty 2.0 w/ CP	MODEL	Floor
SEAL DATE	N/A	DATE REV.	03/01/23
QUOTE #		DRAWN BY	David Landry
JOB #	J0922-4866	SALESMAN	Neil Baggett

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

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#.

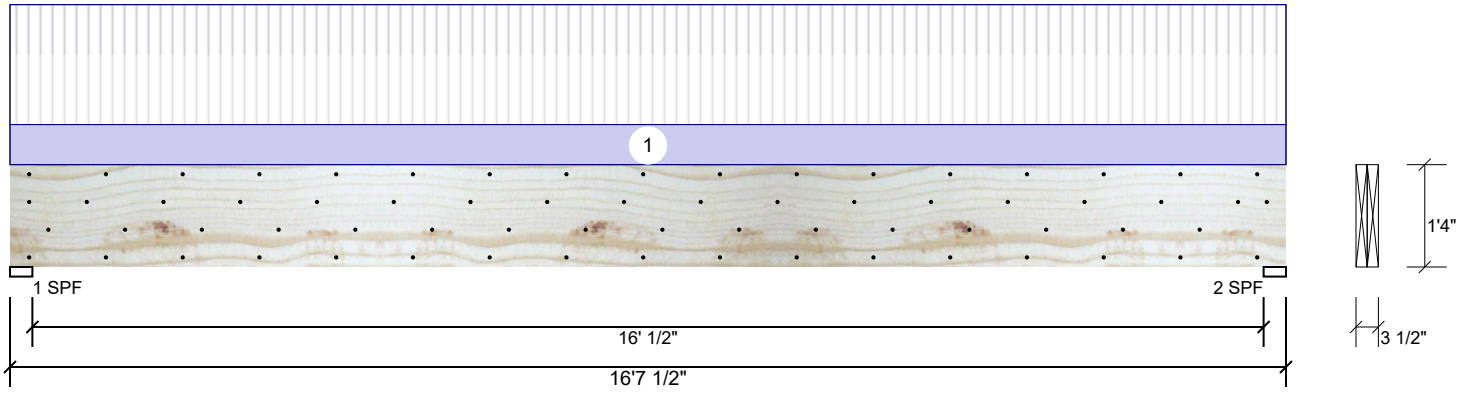
Signature
David Landry

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3333	1217	0	0	0
2	Vertical	3333	1217	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	87%	1217 / 3333	4551	L	D+L
2 - SPF	3.500"	Vert	87%	1217 / 3333	4551	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	17931 ft-lb	8'3 3/4"	34565 ft-lb	0.519 (52%)	D+L	L
Unbraced	17931 ft-lb	8'3 3/4"	17951 ft-lb	0.999 (100%)	D+L	L
Shear	4391 lb	15'	11947 lb	0.368 (37%)	D+L	L
LL Defl inch	0.286 (L/678)	8'3 13/16"	0.405 (L/480)	0.707 (71%)	L	L
TL Defl inch	0.391 (L/497)	8'3 13/16"	0.809 (L/240)	0.483 (48%)	D+L	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 4 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 must be laterally braced at a maximum of 6'5 3/4" o.c.
6 Bottom must be laterally braced at end bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	134 PLF	401 PLF	0 PLF	0 PLF	0 PLF	F4
	Self Weight				12 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

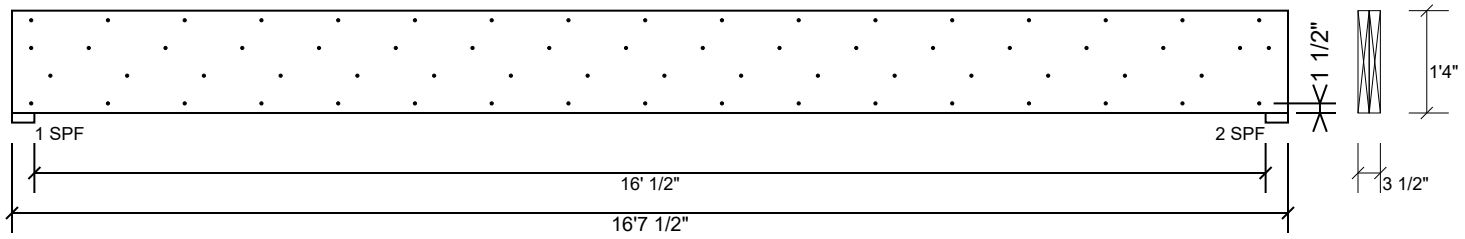
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

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

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 4 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	81.7 %
Load	267.5 PLF
Yield Limit per Foot	327.4 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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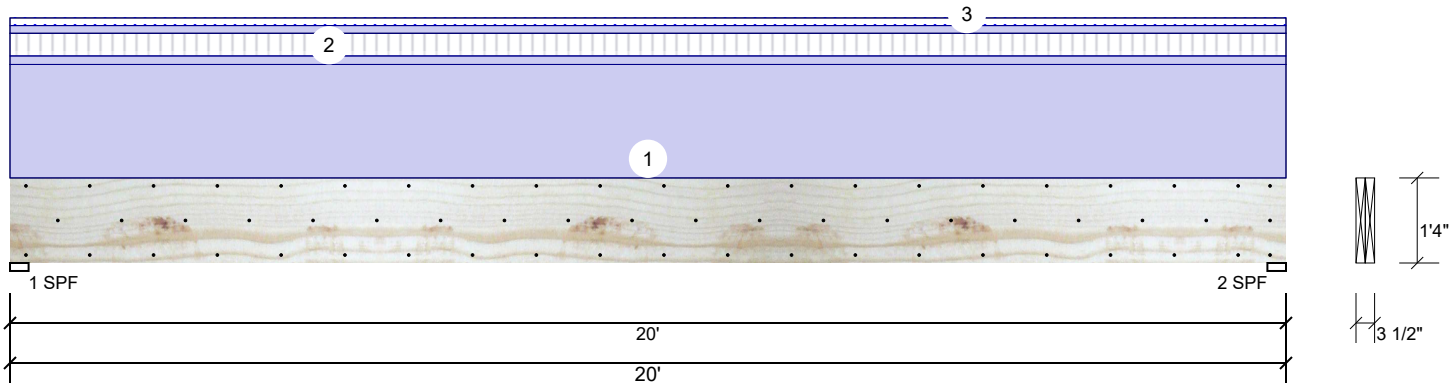
Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	400	2409	135	0	0
2	Vertical	400	2409	135	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	54%	2409 / 401	2811	L	D+0.75(L+S)
2 - SPF	3.500"	Vert	54%	2409 / 401	2811	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13439 ft-lb	10'	34565 ft-lb	0.389 (39%)	D+L	L
Unbraced	13439 ft-lb	10'	13492 ft-lb	0.996 (100%)	D+L	L
Shear	2461 lb	18'4 1/2"	11947 lb	0.206 (21%)	D+L	L
LL Defl inch	0.059 (L/3960)	10' 1/16"	0.489 (L/480)	0.121 (12%)	0.75(L+S)	L
TL Defl inch	0.415 (L/565)	10' 1/16"	0.978 (L/240)	0.425 (42%)	D+0.75(L+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 3 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 8'9 7/16" 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	200 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above, C1GE
2	Tie-In	0-0-0 to 20-0-0	1-0-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor Load
3	Tie-In	0-0-0 to 20-0-0	0-6-0	Near Face	27 PSF	0 PSF	27 PSF	0 PSF	0 PSF	J3
	Self Weight				12 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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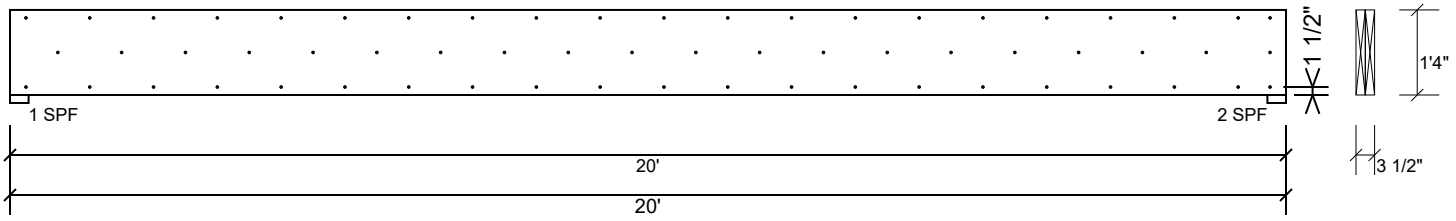
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	11.2 %
Load	27.5 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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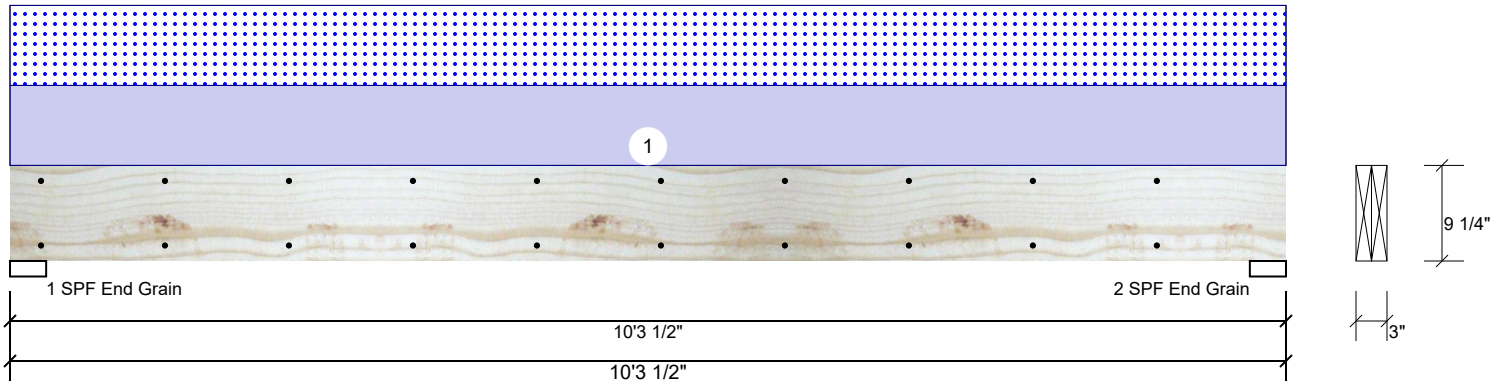
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal - II	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	607	607	0	0
2	Vertical	0	607	607	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	27%	607 / 607	1214	L	D+S
2 - SPF End Grain	3.500"	Vert	27%	607 / 607	1214	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2852 ft-lb	5'1 3/4"	3946 ft-lb	0.723 (72%)	D+S	L
Unbraced	2852 ft-lb	5'1 3/4"	2937 ft-lb	0.971 (97%)	D+S	L
Shear	964 lb	1' 3/4"	2872 lb	0.336 (34%)	D+S	L
LL Defl inch	0.090 (L/1317)	5'1 3/4"	0.246 (L/480)	0.365 (36%)	S	L
TL Defl inch	0.179 (L/658)	5'1 3/4"	0.328 (L/360)	0.547 (55%)	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 end bearings.
7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	118 PLF	0 PLF	118 PLF	0 PLF	0 PLF	B2

This design is valid until 11/3/2024

Manufacturer Info

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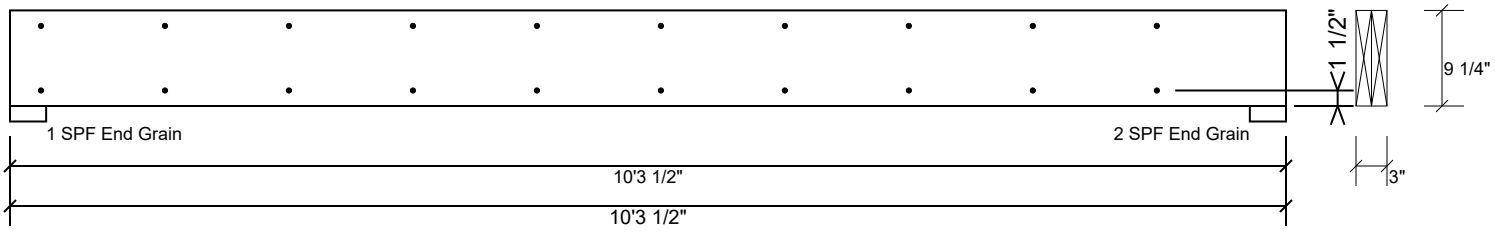
910-864-TRUS

BM3 S-P-F #2 2.000" X 10.000" 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	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

This design is valid until 11/3/2024

Manufacturer Info

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1001 S. Reilly Road, Suite #639
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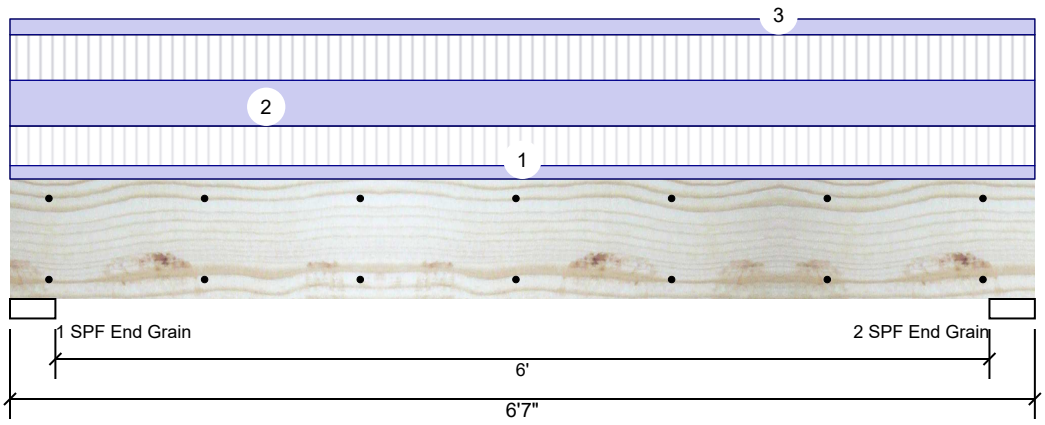
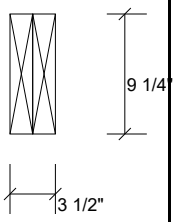
USA
28314
910-864-TRUS

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM4 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
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	2149	1903	0	0	0
2	Vertical	2149	1903	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	39%	1903 / 2149	4053	L	D+L
2 - SPF End Grain	3.500"	Vert	39%	1903 / 2149	4053	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5774 ft-lb	3'3 1/2"	12542 ft-lb	0.460 (46%)	D+L	L
Unbraced	5774 ft-lb	3'3 1/2"	9934 ft-lb	0.581 (58%)	D+L	L
Shear	2750 lb	1' 3/4"	6907 lb	0.398 (40%)	D+L	L
LL Defl inch	0.056 (L/1320)	3'3 1/2"	0.153 (L/480)	0.364 (36%)	L	L
TL Defl inch	0.105 (L/700)	3'3 1/2"	0.204 (L/360)	0.514 (51%)	D+L	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 end bearings.
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	102 PLF	304 PLF	0 PLF	0 PLF	0 PLF	F2
2	Uniform			Top	349 PLF	349 PLF	0 PLF	0 PLF	0 PLF	A1
3	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
	Self Weight				7 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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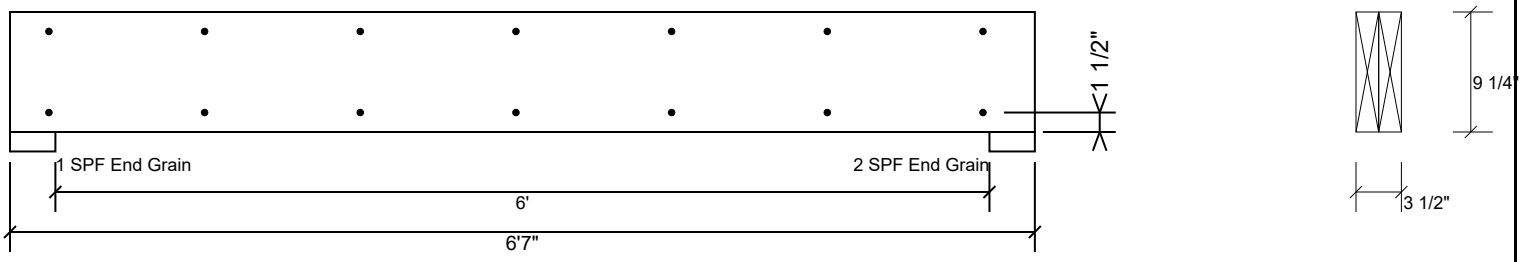
		Project #:	J0922-4866

BM4 Kerto-S LVL 1.750" X 9.250" 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	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

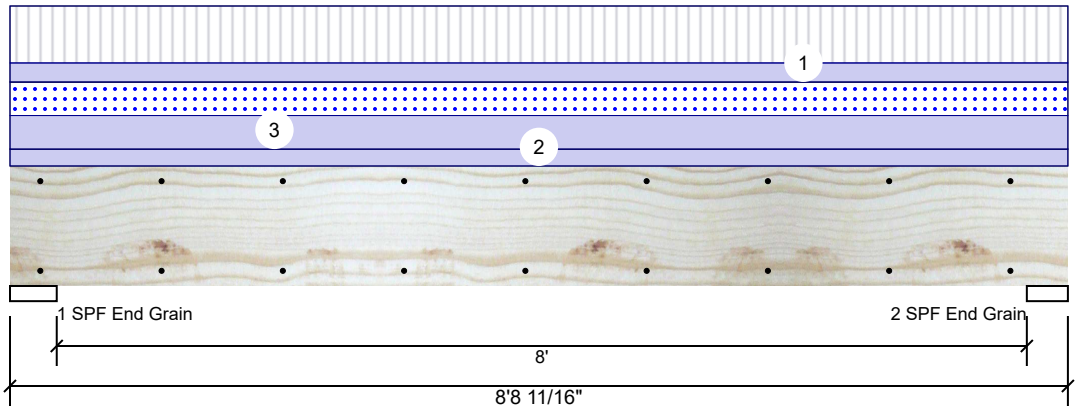
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

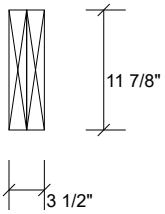
Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM5 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1772	2203	1044	0	0
2	Vertical	1753	2179	1033	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.625"	Vert	32%	2203 / 2112	4314	L	D+0.75(L+S)
2 - SPF End Grain	4.063"	Vert	36%	2179 / 2089	4268	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7478 ft-lb	4'4 5/8"	19911 ft-lb	0.376 (38%)	D+L	L
Unbraced	8118 ft-lb	4'4 5/8"	11006 ft-lb	0.738 (74%)	D+0.75(L+S)	L
Shear	2737 lb	1'4 1/2"	8867 lb	0.309 (31%)	D+L	L
LL Defl inch	0.059 (L/1643)	4'4 11/16"	0.203 (L/480)	0.292 (29%)	0.75(L+S)	L
TL Defl inch	0.121 (L/804)	4'4 11/16"	0.406 (L/240)	0.298 (30%)	D+0.75(L+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 end bearings.
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	Part. Uniform	0-0-0 to 8-8-11		Top	135 PLF	404 PLF	0 PLF	0 PLF	0 PLF	F3
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
3	Uniform			Top	238 PLF	0 PLF	238 PLF	0 PLF	0 PLF	C1
	Self Weight				9 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

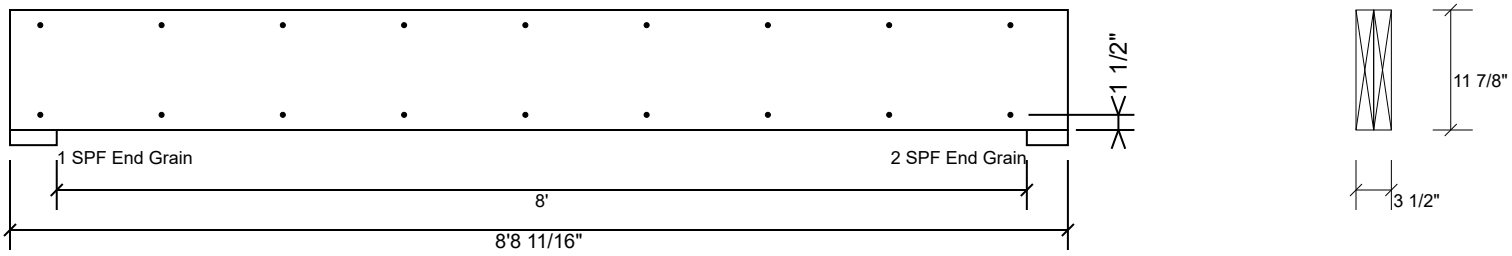
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

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

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

BM5 Kerto-S LVL 1.750" X 11.875" 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	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

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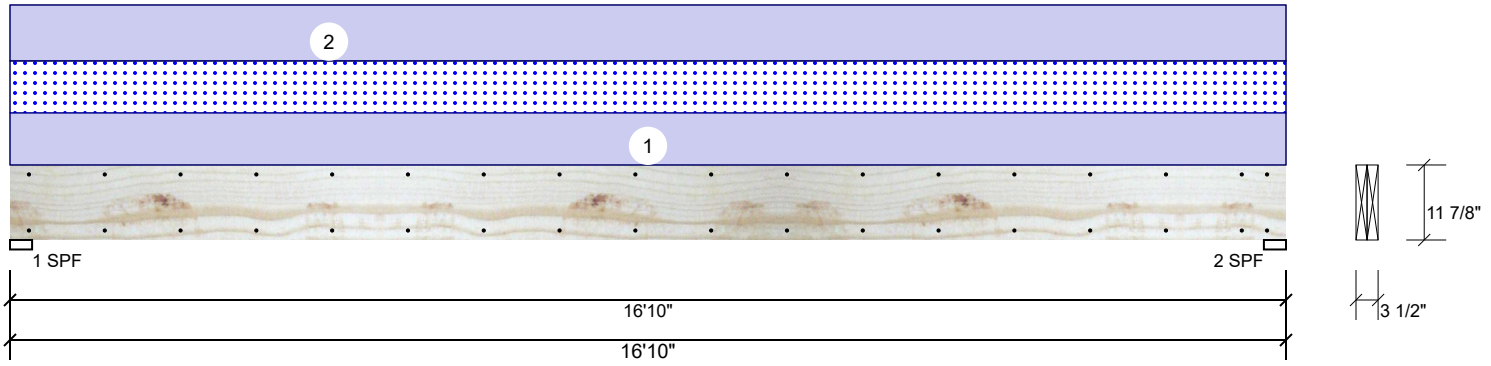
910-864-TRUS

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	1054	471	0	0
2	Vertical	0	1054	471	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	29%	1054 / 471	1525	L	D+S
2 - SPF	3.500"	Vert	29%	1054 / 471	1525	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6075 ft-lb	8'5"	22897 ft-lb	0.265 (27%)	D+S	L
Unbraced	6075 ft-lb	8'5"	6086 ft-lb	0.998 (100%)	D+S	L
Shear	1413 lb	1'3 3/8"	10197 lb	0.139 (14%)	D+S	L
LL Defl inch	0.098 (L/2006)	8'5 1/16"	0.409 (L/480)	0.239 (24%)	S	L
TL Defl inch	0.317 (L/620)	8'5 1/16"	0.819 (L/240)	0.387 (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 end bearings.
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			Near Face	56 PLF	0 PLF	56 PLF	0 PLF	0 PLF	J3
2	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
	Self Weight				9 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

Manufacturer Info

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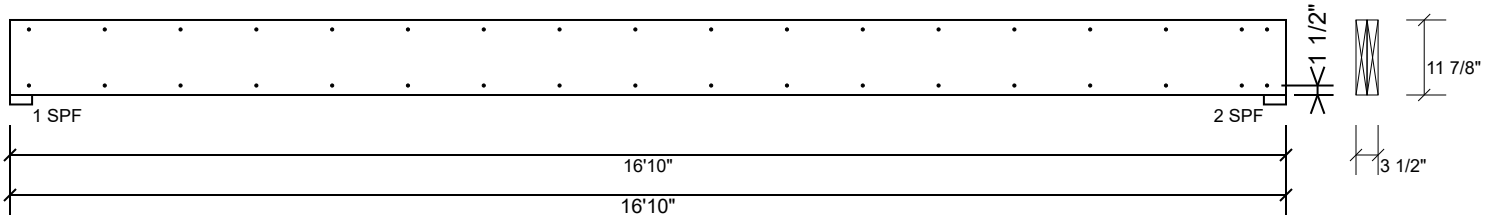
Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

GDH Kerto-S LVL 1.750" X 11.875" 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	29.7 %
Load	56.0 PLF
Yield Limit per Foot	188.3 PLF
Yield Limit per Fastener	94.1 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+S
Duration Factor	1.15

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 11/3/2024

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Norwalk, CT 06851
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Fayetteville, NC
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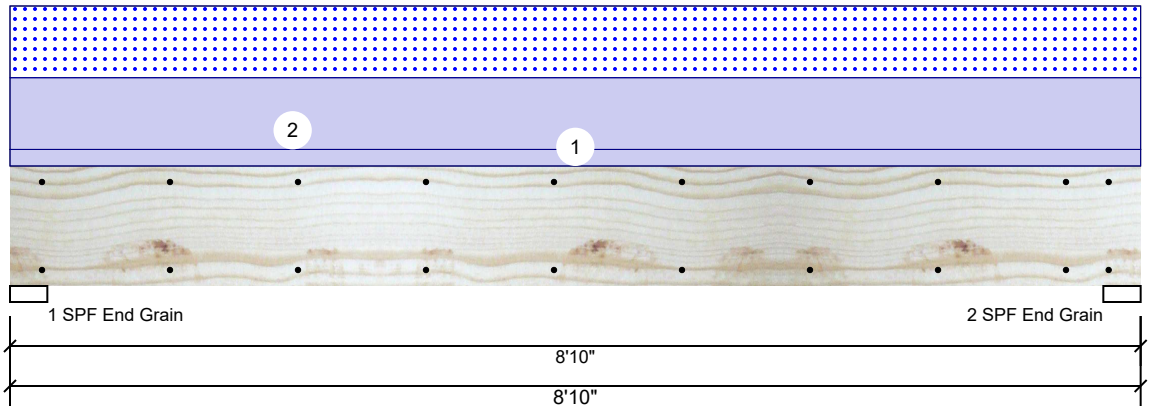
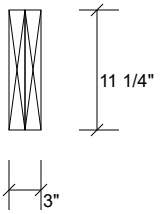
28314
910-864-TRUS

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

GDH2 S-P-F #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:	IBC 2012
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	1413	1148	0	0
2	Vertical	0	1413	1148	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	57%	1413 / 1148	2562	L	D+S
2 - SPF End Grain	3.500"	Vert	57%	1413 / 1148	2562	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5085 ft-lb	4'5"	5306 ft-lb	0.958 (96%)	D+S	L
Unbraced	5085 ft-lb	4'5"	5088 ft-lb	0.999 (100%)	D+S	L
Shear	1849 lb	7'7 1/4"	3493 lb	0.529 (53%)	D+S	L
LL Defl inch	0.058 (L/1740)	4'5 1/16"	0.209 (L/480)	0.276 (28%)	S	L
TL Defl inch	0.129 (L/780)	4'5 1/16"	0.279 (L/360)	0.461 (46%)	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 3'3 5/8" 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	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Top	260 PLF	0 PLF	260 PLF	0 PLF	0 PLF	G1

This design is valid until 11/3/2024

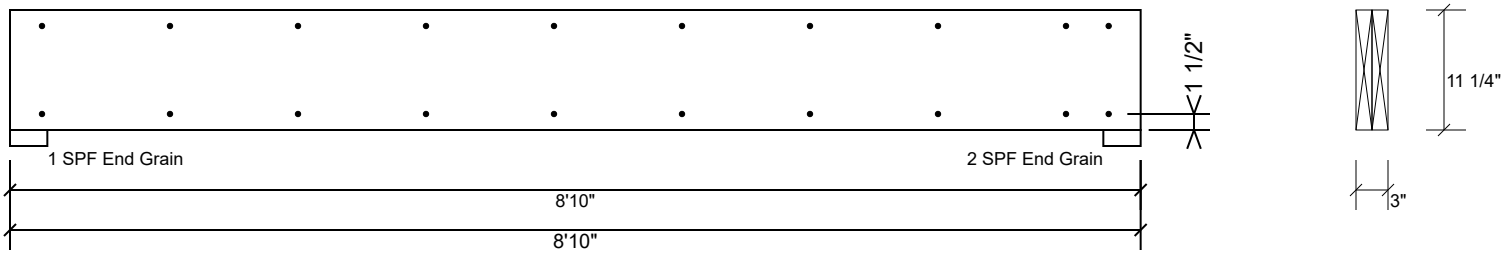
Manufacturer Info

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

Client:	Precision Custom Homes	Date:	3/1/2023
Project:	Liberty 2.0	Input by:	David Landry
Address:		Job Name:	Lot 38 Liberty Meadow
		Project #:	J0922-4866

GDH2 S-P-F #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	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

This design is valid until 11/3/2024

Manufacturer Info

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

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 #**	J0922-4866
ORDER DATE	09/23/22	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	0000007216
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Shaun Garderner	**INVOICE #**	
COUNTY	Harnett	**TERMS**	
SUPERINTENDANT	Shaun Garderner	**SALES REP**	Neil Baggett
JOBSITE PHONE #	(910) 988-8172	**SALES AREA**	David Landry

SOLD TO
Precision Custom Homes
256 Briar Hill Rd.
Raeford, NC 28376
(910) 988-8172

SHIP TO
Precision Custom Homes and
Lot 38 Liberty Meadow
Cameron, NC 28356

JOB NAME: Lot 38 Liberty Meadow **LOT #** 38 **SUBDIV:** Liberty Meadow
MODEL: Floor **TAG:** Liberty 2.0 w/ CP **JOB CATEGORY:** _

DELIVERY INSTRUCTIONS:
52 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

BUILDING DEPARTMENT
Floor Order

OVERHANG INFO		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**					**BY**	**DATE**
END CUT	**RETURN**											**QUOTE**	DTL	03/01/23
		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	**LAYOUT**	DTL	03/01/23
												CUTTING	DTL	03/01/23

FLOOR TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
40.0,10.0,0.0,5.0	1.00

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

FLOOR PROFILE	QTY / PLY	DEPTH ID	BASE SPAN	O/A SPAN	END TYPE LEFT	END TYPE RIGHT	INT BEARING SIZE	INT BEARING LOCATION	REACTIONS
	1	01-04-00 ET1	32-11-00	32-11-00					Joint 29 23.4 lbs. Joint 30 127.1 lbs. Joint 31 151.2 lbs. Joint 32 145.5 lbs. Joint 33 147.0 lbs.
	1	01-04-00 ET2	18-04-00	18-04-00					Joint 17 32.7 lbs. Joint 18 134.3 lbs. Joint 19 150.0 lbs. Joint 20 145.8 lbs. Joint 21 146.9 lbs.
	1	01-04-00 ET3	19-04-08	19-04-08					Joint 18 35.3 lbs. Joint 19 136.7 lbs. Joint 20 149.5 lbs. Joint 21 145.9 lbs. Joint 22 146.9 lbs.
	7	01-04-00 F1	32-11-00	32-11-00					Joint 24 882.3 lbs. 204.1 lbs. Joint 33 2190.2 lbs. 1224.3 lbs. Joint 40 662.4 lbs. 22.2 lbs.
	3	01-04-00 F2	31-11-00	31-11-00					Joint 22 794.9 lbs. 131.6 lbs. Joint 30 2078.8 lbs. 1319.8 lbs. Joint 36 719.4 lbs. 127.0 lbs.
	9	01-04-00 F3	19-11-00	19-11-00					Joint 14 1075.4 lbs. 522.5 lbs. Joint 24 1075.4 lbs. 522.5 lbs.
	10	01-04-00 F4	19-08-00	19-08-00					Joint 16 1067.9 lbs. 512.1 lbs. Joint 25 1061.7 lbs. 567.4 lbs.
	1	01-04-00 F4A	19-08-00	19-08-00					Joint 16 275.1 lbs. 3.8 lbs. Joint 20 1157.1 lbs. 526.1 lbs. Joint 31 730.4 lbs. 198.6 lbs.
	1	01-04-00 F5	05-10-08	05-10-08					Joint 4 294.4 lbs. 198.6 lbs. Joint 8 288.3 lbs. 193.7 lbs.

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 #**	J0922-4866
ORDER DATE	09/23/22	**QUOTE #**	
DELIVERY DATE	/ /	**CUSTOMER ACCT #**	0000007216
DATE OF INVOICE	/ /	**CUSTOMER PO #**	
ORDERED BY	Shaun Garderner	**INVOICE #**	
COUNTY	Harnett	**TERMS**	
SUPERINTENDANT	Shaun Garderner	**SALES REP**	Neil Baggett
JOBSITE PHONE #	(910) 988-8172	**SALES AREA**	David Landry

SOLD TO
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256 Briar Hill Rd.
Raeford, NC 28376
(910) 988-8172

SHIP TO
Precision Custom Homes and
Lot 38 Liberty Meadow
Cameron, NC 28356

JOB NAME: Lot 38 Liberty Meadow **LOT #** 38 **SUBDIV:** Liberty Meadow
MODEL: Floor **TAG:** Liberty 2.0 w/ CP **JOB CATEGORY:** _

DELIVERY INSTRUCTIONS:
52 miles round trip

SPECIAL INSTRUCTIONS:

PLAN SEAL DATE:

BUILDING DEPARTMENT
Floor Order

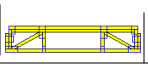
OVERHANG INFO		**HEEL HEIGHT**	00-06-08	**REQ. LAYOUTS**				**REQ. ENGINEERING**					**BY**	**DATE**
END CUT	**RETURN**											**QUOTE**	DTL	03/01/23
		GABLE STUDS	24 IN. OC			JOBSITE	1			JOBSITE	1	**LAYOUT**	DTL	03/01/23
												CUTTING	DTL	03/01/23

FLOOR TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
40.0,10.0,0.0,5.0	1.00

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

FLOOR PROFILE	QTY / PLY	DEPTH ID	BASE SPAN	O/A SPAN	END TYPE LEFT	END TYPE RIGHT	INT BEARING SIZE	INT BEARING LOCATION	REACTIONS
	1	01-01-00 FG1	05-06-00	05-06-00					Joint 5 475.8 lbs. 411.8 lbs. Joint 8 455.3 lbs. 376.1 lbs.

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
8	Hangers, USP	HUS 410			SIMPSON (HUS410)
2	LVL Beams (Sized)	LVL, 1-3/4" x 9-1/4" (S)	07-00-00		BM4
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	09-00-00		BM5
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	20-00-00		GDH
2	LVL Beams (Sized)	LVL, 1-3/4" x 16" (S)	17-00-00		BM1
2	LVL Beams (Sized)	LVL, 1-3/4" x 16" (S)	20-00-00		BM2

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0922-4866
Lot 38 Liberty Meadow

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: I56917899 thru I56917908

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

March 1,2023

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	Lot 38 Liberty Meadow
J0922-4866	ET1	GABLE	1	1	I56917899
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:46 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-vFAMz0IokDfoj_POPHmBiuM3HfXVKefis35yipzfKAt

0-1-8 0-1-8

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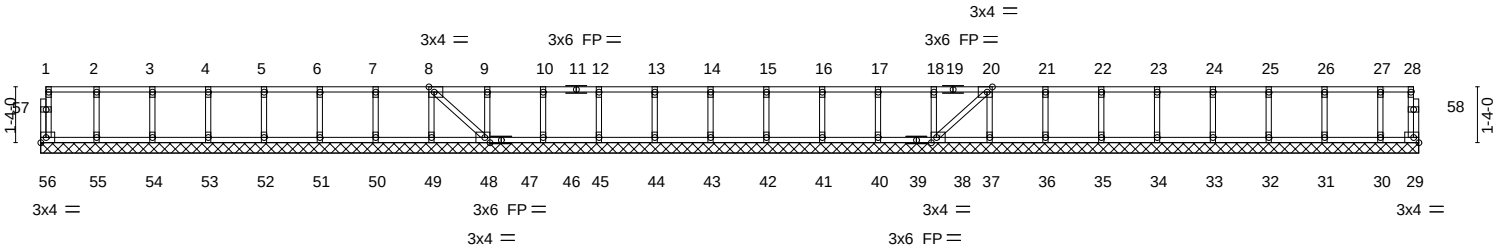

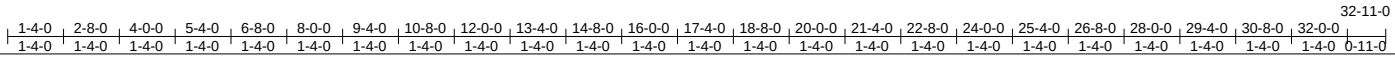

Plate Offsets (X,Y)-- [8:0-1-8,Edge], [20:0-1-8,Edge], [38:0-1-8,Edge], [48:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	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	38	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 147 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 6-0-0 oc bracing.

REACTIONS. All bearings 32-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 56, 29, 55, 54, 53, 52, 51, 50, 49, 48, 46, 45, 44, 43, 42, 41, 40, 38, 37, 36, 35, 34, 33, 32, 31, 30

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.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	ET2	GABLE	1	1	I56917900
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:47 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-NRklAMJQVXnfL8_az_HQE6vDv3tj35vr5jrWEFzfKAs

0-1-8

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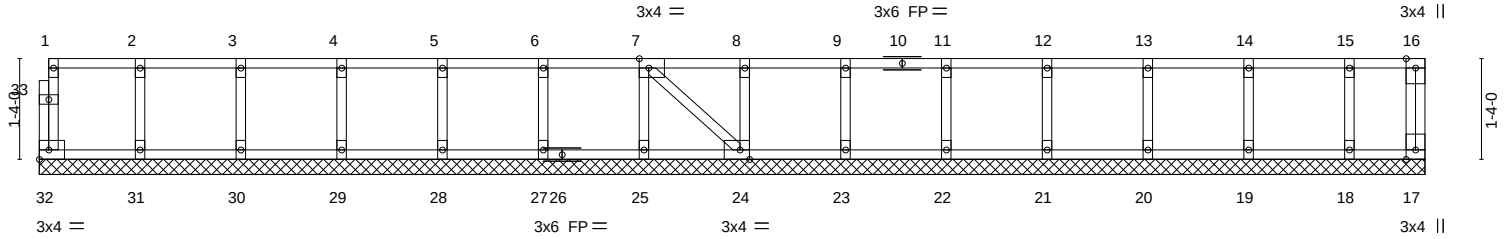


1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	18-4-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-0-0

Plate Offsets (X,Y)-- [7:0-1-8,Edge], [24:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	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	NO	WB	0.03	Horz(CT)	0.00	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 84 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 18-4-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 32, 17, 31, 30, 29, 28, 27, 25, 24, 23, 22, 21, 20, 19, 18

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.
7) CAUTION, Do not erect truss backwards.

March 1,2023

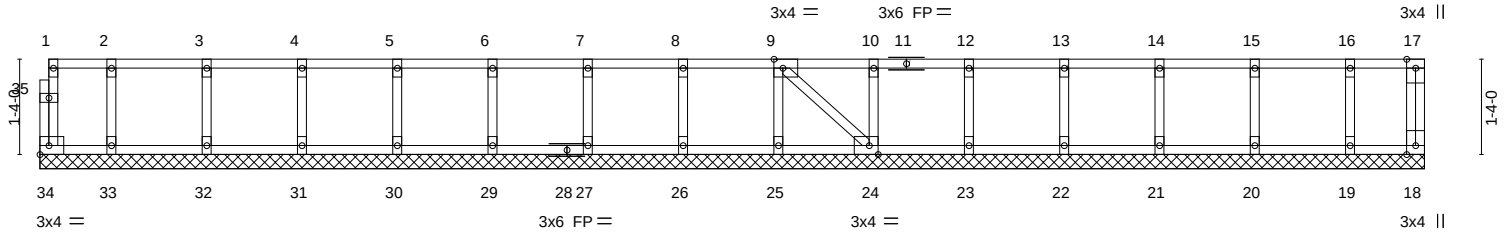
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	ET3	GABLE	1	1	I56917901
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:48 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-rdI7OiK2GrvWyIZnWipfnJSPnTDzoY9_KNa3nhzfKAr

0-1-8

Scale: 3/8"=1'



1-0-0	2-4-0	3-8-0	5-0-0	6-4-0	7-8-0	9-0-0	10-4-0	11-8-0	13-0-0	14-4-0	15-8-0	17-0-0	18-4-0	19-4-8
1-0-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-0-8

Plate Offsets (X,Y)-- [9:0-1-8,Edge], [24:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	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	18	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 89 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 19-4-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 27, 26, 25, 24, 23, 22, 21, 20, 19

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.
7) CAUTION, Do not erect truss backwards.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	F1	Floor	7	1	I56917902
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:50 2023 Page 1
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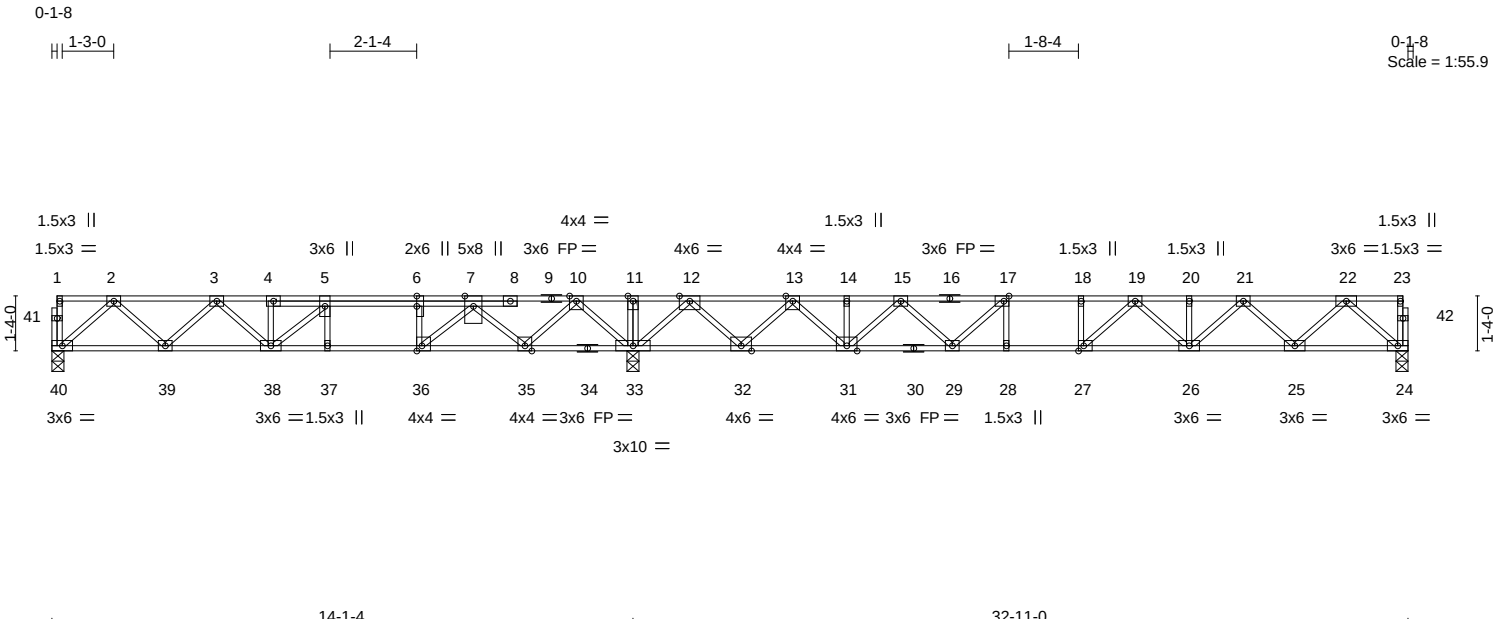

Plate Offsets (X,Y)-- [6:0-3-0,0-0-0], [17:0-1-8,Edge], [27:0-1-8,Edge], [36:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.63	Vert(LL)	-0.20	27	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.27	26-27	>820	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.04	24	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 180 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 6-0-0 oc bracing.

REACTIONS. (size) 40=0-3-8, 24=0-3-8, 33=0-3-8
Max Grav 40=662(LC 3), 24=882(LC 4), 33=2190(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1110/36, 3-4=-1659/212, 4-5=-1659/219, 5-6=-1602/621, 6-7=-1602/621, 7-10=-392/1404, 10-11=0/2571, 11-12=0/2571, 12-13=-40/475, 13-14=-1631/0, 14-15=-1631/0, 15-17=-2564/0, 17-18=-2931/0, 18-19=-2931/0, 19-20=-2592/0, 20-21=-2592/0, 21-22=-1586/0
BOT CHORD 39-40=0/704, 38-39=-106/1489, 37-38=-621/1602, 36-37=-621/1602, 35-36=-1086/1024, 33-35=-1709/0, 32-33=-1291/0, 31-32=-200/935, 29-31=0/2220, 28-29=0/2931, 27-28=0/2931, 26-27=0/2856, 25-26=0/2193, 24-25=0/952
WEBS 2-40=-935/0, 2-39=-59/564, 3-39=-528/98, 4-38=-325/0, 5-38=0/648, 22-24=-1266/0, 22-25=0/881, 21-25=-845/0, 21-26=0/542, 19-26=-358/0, 19-27=-253/331, 12-33=-1704/0, 12-32=0/1314, 10-33=-1399/0, 10-35=0/993, 7-35=-1033/0, 7-36=0/1214, 6-36=-690/0, 13-32=-1288/0, 13-31=0/991, 15-31=-835/0, 15-29=0/579, 17-29=-718/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 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.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	F2	Floor	3	1	I56917903
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:52 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-kPXeD3NZK3PyRvtYlYtbx9ctN4MlkEBaF_YHwSzfKAn

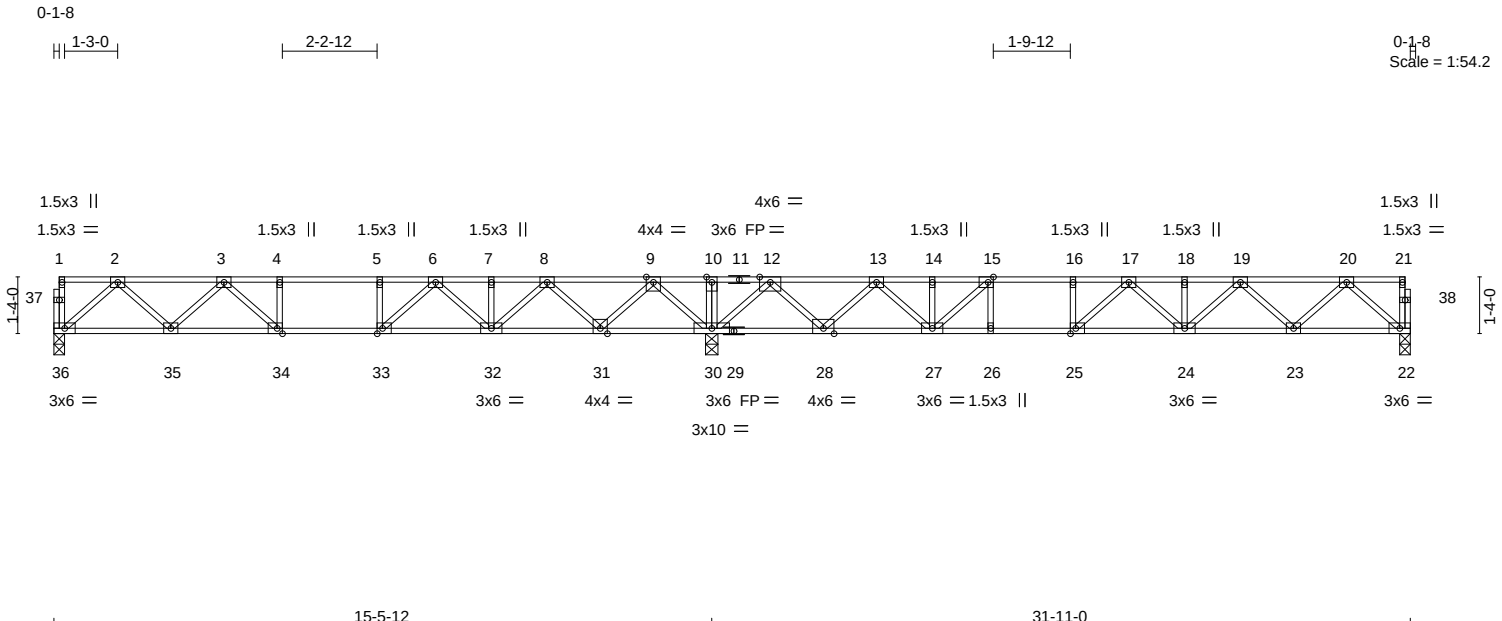

Plate Offsets (X,Y)-- [15:0-1-8,Edge], [25:0-1-8,Edge], [33:0-1-8,Edge], [34:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	-0.18	24-25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.25	24-25	>776	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.04	22	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 167 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 6-0-0 oc bracing.

REACTIONS. (size) 36=0-3-0, 30=0-3-8, 22=0-3-0
Max Grav 36=719(LC 3), 30=2079(LC 1), 22=795(LC 4)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1229/0, 3-4=-1941/0, 4-5=-1941/0, 5-6=-1941/0, 6-7=-1408/202, 7-8=-1408/202, 8-9=-241/659, 9-10=0/2218, 10-12=0/2218, 12-13=-523/817, 13-14=-1712/332, 14-15=-1712/332, 15-16=-2291/0, 16-17=-2291/0, 17-18=-2225/0, 18-19=-2225/0, 19-20=-1395/0
BOT CHORD 35-36=0/769, 34-35=0/1668, 33-34=0/1941, 32-33=-35/1748, 31-32=-414/927, 30-31=-1214/0, 28-30=-1129/0, 27-28=-547/1232, 26-27=0/2291, 25-26=0/2291, 24-25=0/2385, 23-24=0/1918, 22-23=0/852
WEBS 2-36=-1022/0, 2-35=0/640, 3-35=-610/0, 3-34=-83/372, 9-30=-1439/0, 9-31=0/1062, 20-22=-1132/0, 20-23=0/755, 19-23=-728/0, 19-24=-1/417, 17-25=-477/33, 12-30=-1508/0, 8-31=-1027/0, 8-32=0/734, 6-32=-547/0, 6-33=0/628, 5-33=-320/0, 12-28=0/1134, 13-28=-1085/0, 13-27=0/740, 15-27=-1088/0, 15-26=0/273

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 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.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	F3	Floor	9	1	I56917904
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:53 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-Cb50RPNB5NXp33RkJFOqUN97gUiPThFjTeIqSvzfKAm

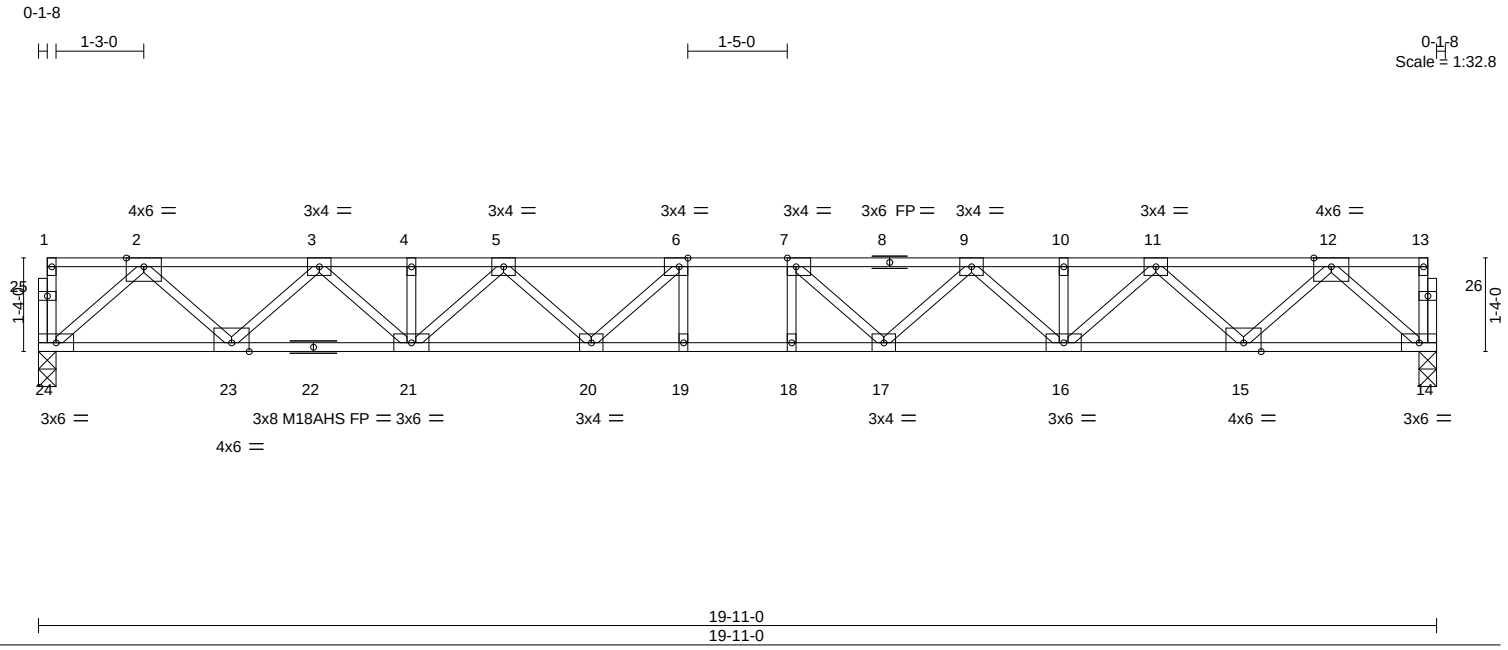

Plate Offsets (X,Y)-- [6:0-1-8,Edge], [7:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	Vert(LL)	-0.33	18-19	>724	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.95	Vert(CT)	-0.45	18-19	>526	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.08	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 106 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 5-9-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (size) 24=0-3-0, 14=0-3-0
Max Grav 24=1075(LC 1), 14=1075(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2005/0, 3-4=-3408/0, 4-5=-3408/0, 5-6=-4160/0, 6-7=-4391/0, 7-9=-4160/0, 9-10=-3408/0, 10-11=-3408/0, 11-12=-2005/0
BOT CHORD 23-24=0/1172, 21-23=0/2810, 20-21=0/3918, 19-20=0/4391, 18-19=0/4391, 17-18=0/4391, 16-17=0/3918, 15-16=0/2810, 14-15=0/1172
WEBS 2-24=-1557/0, 2-23=0/1160, 3-23=-1119/0, 3-21=0/814, 5-21=-693/0, 5-20=0/469, 6-20=-575/87, 12-14=-1557/0, 12-15=0/1160, 11-15=-1119/0, 11-16=0/814, 9-16=-693/0, 9-17=0/469, 7-17=-575/87

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.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	F4	Floor	10	1	I56917905
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:54 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-gnfOelOpshfggD0xtyv31ahK0t3hC8etiI1O_LzfKAI

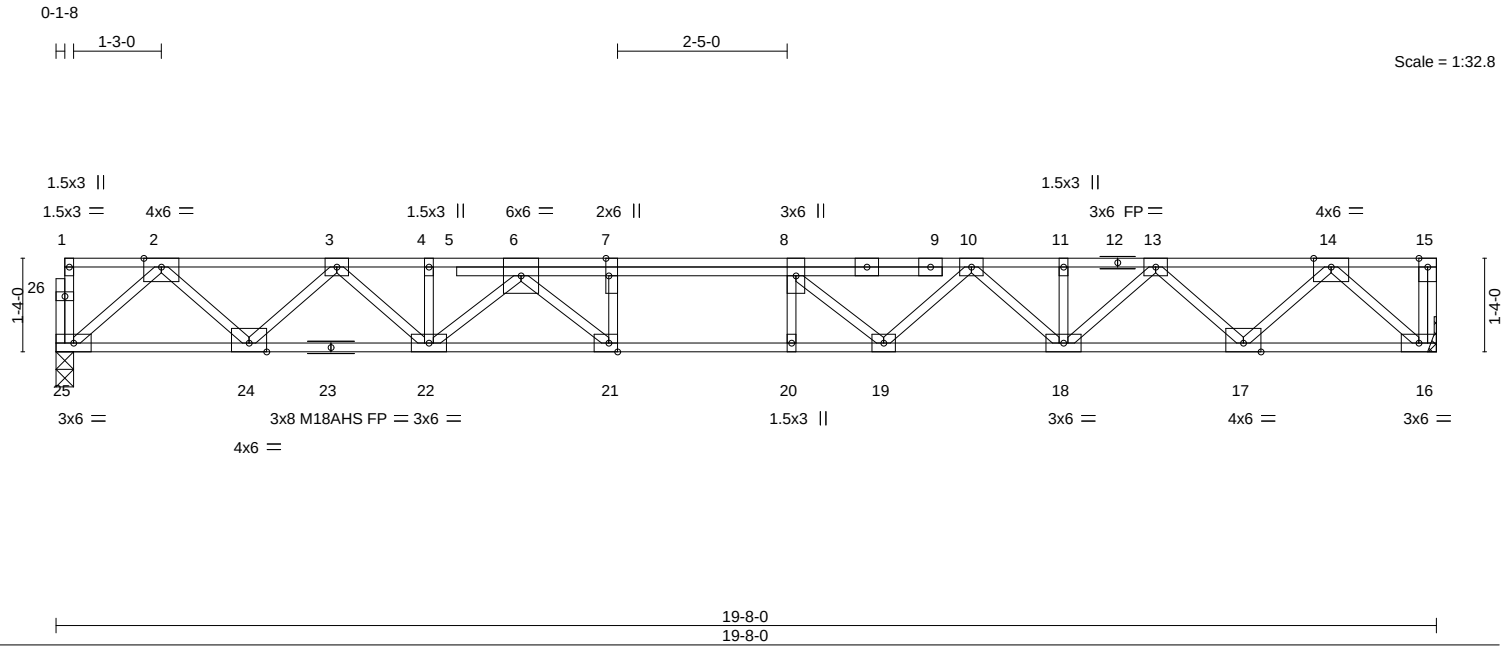

Plate Offsets (X,Y)-- [7:0-3-0,Edge], [21:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.29	20	>806	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.40	20	>587	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.54	Horz(CT)	0.08	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 112 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. (size) 25=0-3-0, 16=Mechanical
Max Grav 25=1062(LC 1), 16=1068(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1976/0, 3-4=-3346/0, 4-6=-3350/0, 6-7=-4437/0, 7-8=-4437/0, 8-10=-4140/0, 10-11=-3354/0, 11-13=-3354/0, 13-14=-1976/0
BOT CHORD 24-25=0/1156, 22-24=0/2765, 21-22=0/3951, 20-21=0/4437, 19-20=0/4437, 18-19=0/3823, 17-18=0/2764, 16-17=0/1157
WEBS 2-25=-1537/0, 2-24=0/1140, 3-24=-1097/0, 3-22=0/790, 6-22=-803/0, 6-21=0/970, 7-21=-557/0, 14-16=-1541/0, 14-17=0/1139, 13-17=-1096/0, 13-18=0/802, 10-18=-637/0, 10-19=0/581, 8-19=-621/0

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 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Refer to girder(s) for truss to truss connections.
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.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	F4A	Floor	1	1	I56917906
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:56 2023 Page 1
ID:aTXuLo?nW09qtpROz2WQ0wydkZW-cAn83RQ3OIvNwXAJ_NyX6?ngOhsyg5uA9cWU3DzfKAj

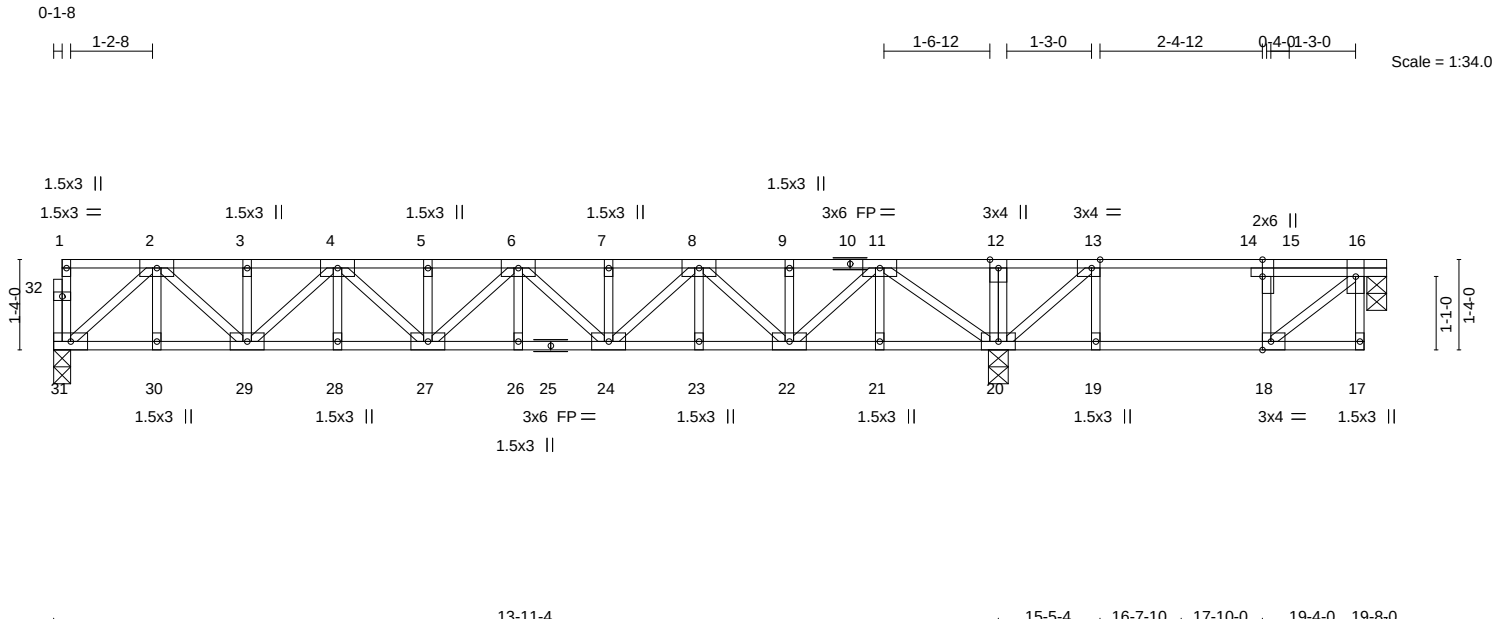

Plate Offsets (X,Y)-- [13:0-1-8,Edge], [15:0-3-0,0-0-0], [18:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.08	26	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.38	Vert(CT)	-0.11	26	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	20	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 115 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, Except: 6-0-0 oc bracing: 19-20,18-19.

REACTIONS. (size) 31=0-3-0, 16=0-3-8, 20=0-3-8
Max Grav 31=730(LC 8), 16=275(LC 4), 20=1157(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1331/0, 3-4=-1331/0, 4-5=-1969/0, 5-6=-1969/0, 6-7=-1961/0, 7-8=-1961/0, 8-9=-1306/0, 9-11=-1306/0, 11-12=0/365, 12-13=0/364, 13-15=-276/99, 15-16=-253/96
BOT CHORD 30-31=0/775, 29-30=0/775, 28-29=0/1732, 27-28=0/1732, 26-27=0/2047, 24-26=0/2047, 23-24=0/1717, 22-23=0/1717, 21-22=0/750, 20-21=0/750, 19-20=-96/253, 18-19=-96/253
WEBS 16-18=-125/330, 2-31=-1021/0, 2-29=0/751, 4-29=-541/0, 4-27=0/319, 8-24=0/345, 8-22=-569/0, 11-22=0/769, 11-20=-1229/0, 13-20=-575/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 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) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.

March 1,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	F5	FLOOR	1	1	I56917907
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:57 2023 Page 1
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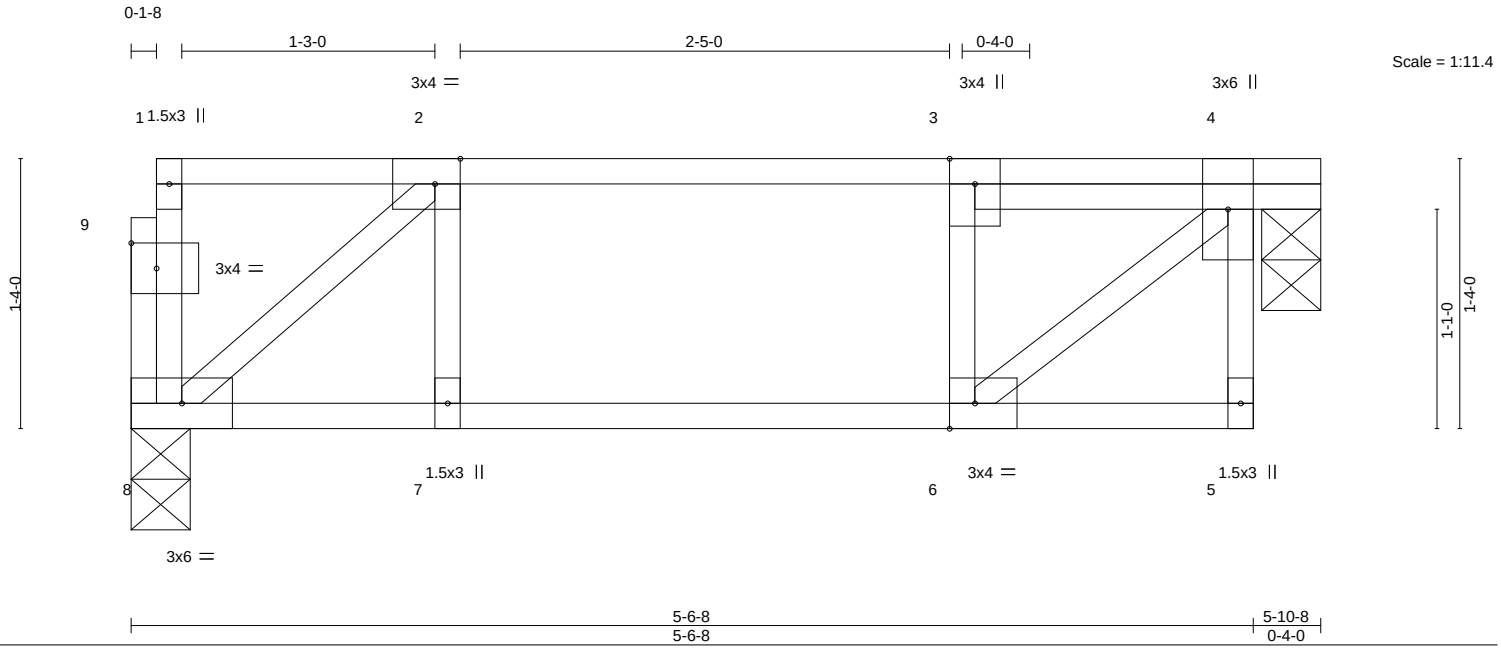

Plate Offsets (X,Y)-- [2:0-1-8,Edge], [6:0-1-8,Edge], [9:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	-0.01	6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	-0.01	4	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 32 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 5-10-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=0-3-8
Max Grav 8=288(LC 1), 4=294(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-294/0, 3-4=-296/0
BOT CHORD 7-8=0/294, 6-7=0/294
WEBS 2-8=-382/0, 4-6=0/383

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.
4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
5) CAUTION, Do not erect truss backwards.

March 1,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 Liberty Meadow
J0922-4866	FG1	FLOOR	1	1	I56917908
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 1 09:54:58 2023 Page 1
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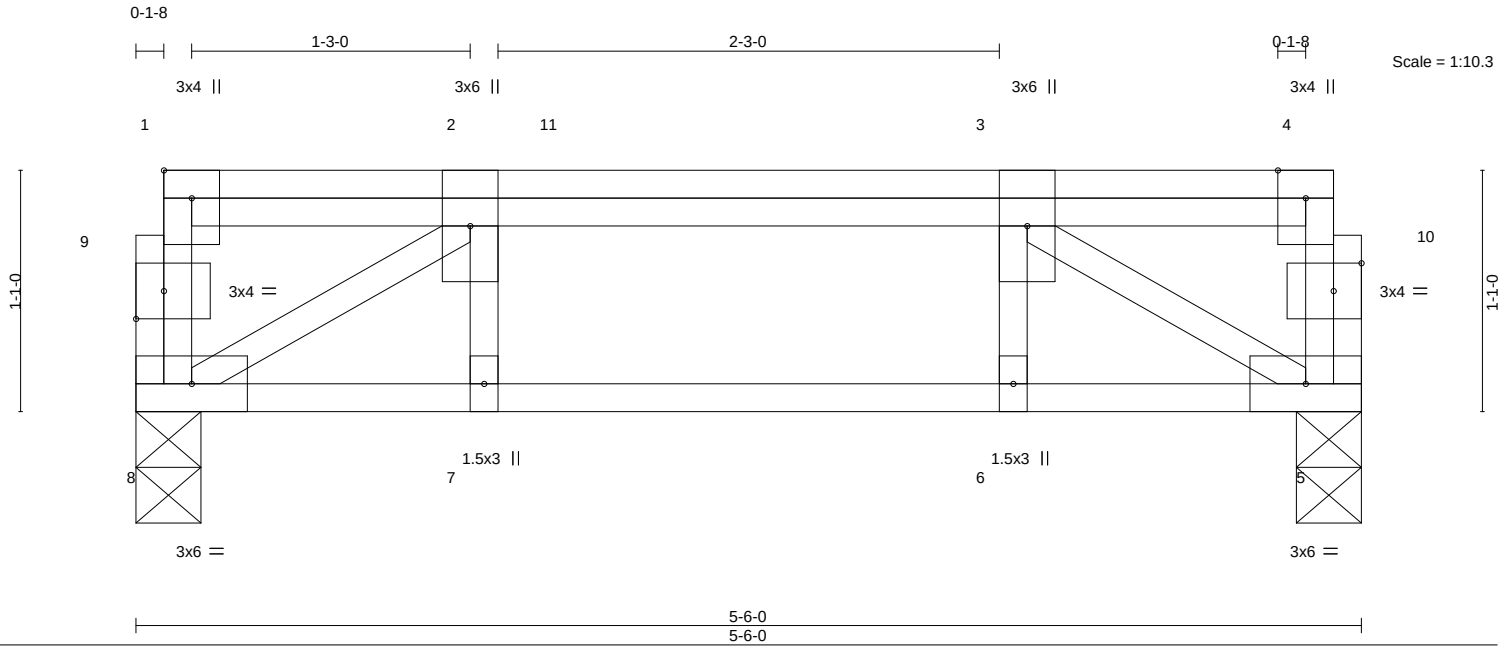

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [9:0-1-8,0-1-8], [10:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.17	Vert(CT)	-0.01	6-7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 34 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 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 5=0-3-8
Max Grav 8=455(LC 1), 5=476(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-683/0
BOT CHORD 7-8=0/683, 6-7=0/683, 5-6=0/683
WEBS 2-8=-802/0, 3-5=-801/0

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.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 3=-172 11=-194

March 1,2023

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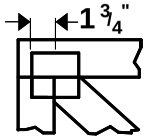
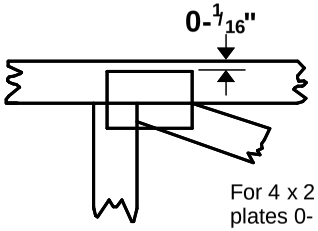
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

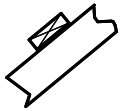
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

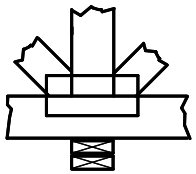
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

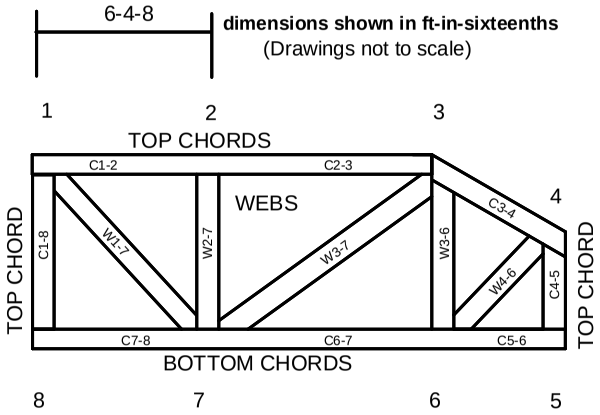


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

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

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

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.