MAPLE HILL - LOT 2
4214 DARROCH ROAD
LILLINGTON, NC 27546

FRONT ELEVATION

SCALE 1/4" = 1'0"

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

10/28/2024

Harnett COUNTY NORTH CAROLINA

ATTIC VENTILATION:

THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 TO 150 OF THE AREA OF THE SPACE VENTILATED EXCEPT THAT THE AREA MAY BE 1 TO 300 , PROVIDED AT LEAST 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION TO BE PROVIDED BY EAVE OR CORNICE VENTS.

GROSS ATTIC AREA TO BE VENTILATED 1033 SQ.FT.

1033/300 = 3.4 SQ.FT. NET FREE AREA

50% OF VENTING MUST BE 3FT. ABOVE EAVE OR SOFFIT VENTS.

REAR ELEVATION

SCALE 1/4" = 1'0"

MIDTOWN DESIGNS

Purchaser must verify all dimensions and conditions before beginning construction.

MidTown Designs Inc. assumes no liability for contractors practices and procedures

These drawings are instruments of service and as such shall remain property of the designer

Plan # ALLIE

THIS PLAN DESIGNED UNDER NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION (2018 IRC)

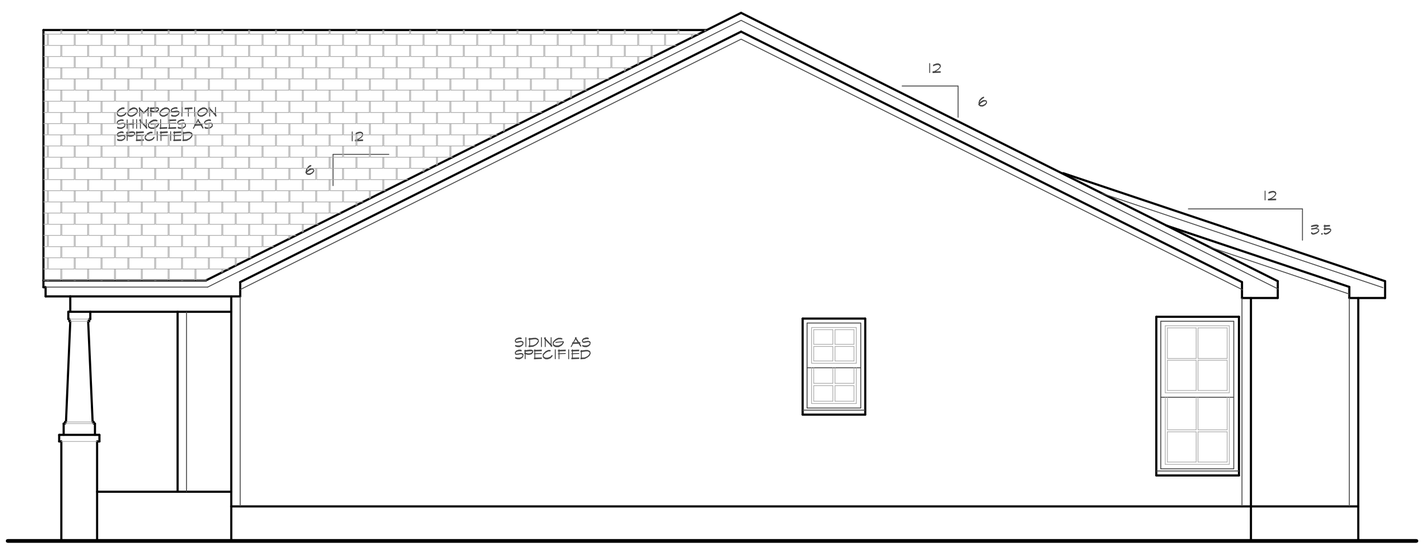
DATE 10/17/2023

PROJECT # 231002

MidTown Designs Inc. 1732 Deacon Falls Way. Wendell NC 27591 Phone: 919-783-8626 www.midtowndesigns.com

LEFT SIDE ELEVATION

SCALE 1/4" = 1'0"



RIGHT SIDE ELEVATION

SCALE 1/4" = 1'0"

MIDTOWN DESIGNS

ALLIE

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FOUNDATION STRUCTURAL NOTES:

1. (3) 2 x 10 SPF #2 GIRDER DROPPED, TYPICAL UNO.

2. CONCRETE BLOCK PIER SIZE SHALL BE:

SIZE	HALLOW MASONRY	SOLID MASONRY
8 x 16	UP TO 32" HIGH	UP TO 5'-0" HIGH
12 x 16	UP TO 48" HIGH	UP TO 9'-0" HIGH
16 x 16	UP TO 64" HIGH	UP TO 12'-0" HIGH
24 x 24	UP TO 96" HIGH	

WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

3. WALL FOOTING AS FOLLOWS:

DEPTH: 8" - UP TO 2-1/2 STORY
10" - 3 STORY

WIDTH: SIDING (OR EQUAL)
- 16" - UP TO 2-1/2 STORY
- 18" - 3 STORY

BRICK VENEER
- 16" - 1 STORY
- 20" - 2 STORY
- 24" - 3 STORY

FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO NORTH CAROLINA RESIDENTIAL CODE TABLE R404.1.1 (1 THRU 4)
NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF.
CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.

ATTACH SILL PLATE WITH 1/2"dia. ANCHOR BOLTS AT 6'-0" CENTERS (7" EMBEDMENT) AND 12" FROM EACH PLATE END. (SECTION R 403.1.6)

4. "■" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

5. ABBREVIATIONS:

"SJ" = SINGLE JOIST
"DJ" = DOUBLE JOIST
"TJ" = TRIPLE JOIST

FOUNDATION VENTING

SECTION R408 UNDER FLOOR SPACE

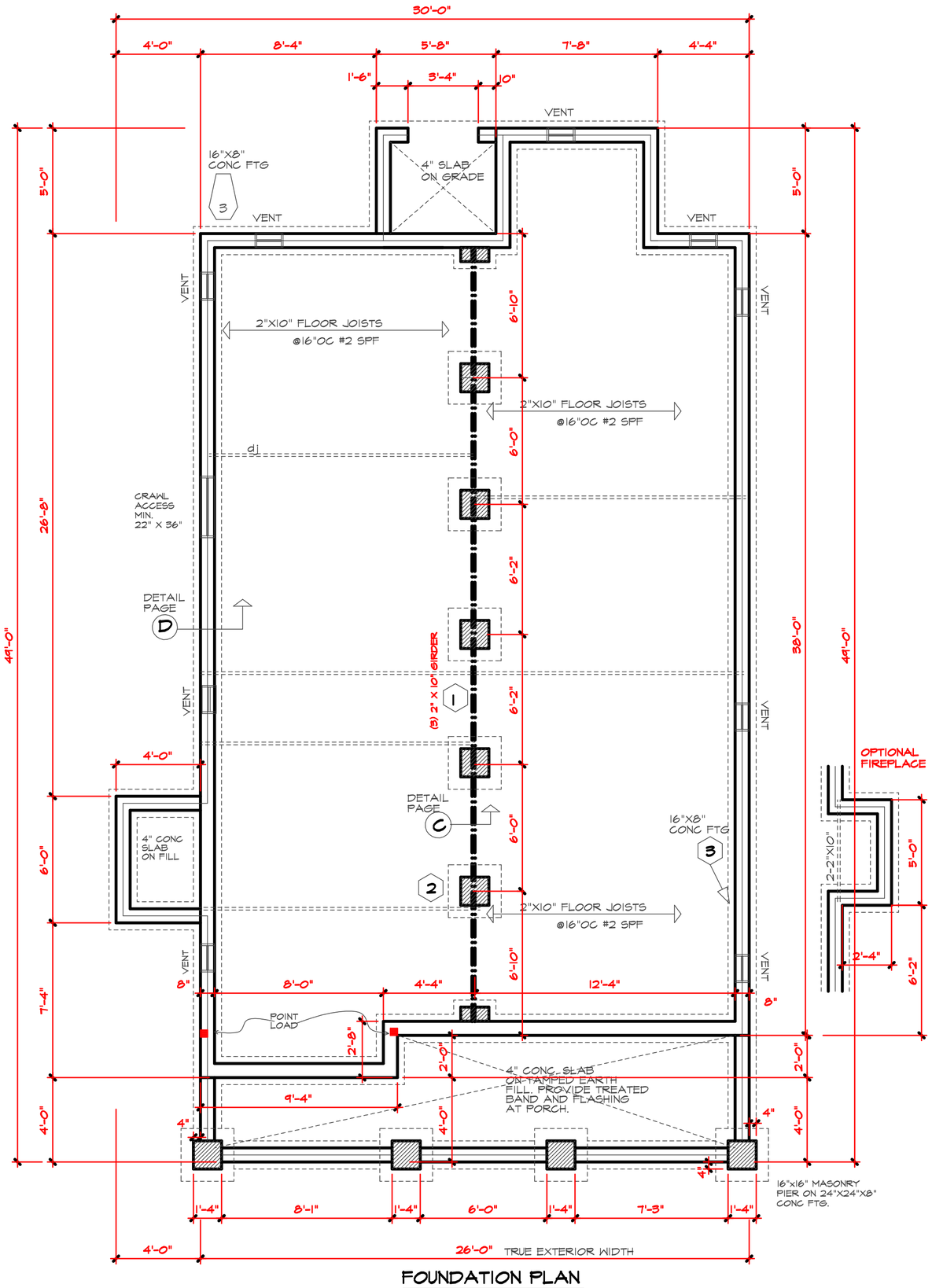
R408.1 Ventilation. The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement or cellar) shall be provided with ventilation openings through foundation walls or exterior walls. The minimum net area of ventilation openings shall not be less than 1 square foot for each 150 square feet (0.67 m squared for each 100 m squared) of under-floor space area. One such ventilating opening shall be within 3 feet (914 mm) of each corner of said building.

CRAWL AREA TO BE VENTED: 971 SQ.FT.
971/1500 = 6.4 NET FREE VENTING AREA REQUIRED

R408.2 Ground Vapor Retarder
A minimum 6 mil. polyethlyne vapor retarder shall be installed to cover all earth in the crawl space with joints lapped not less than 12"

FOUNDATION NOTES:

1. Deck posts min. 4'-0" above grade are to be knee or diagonally braced per Appendix M. fastening to house will be by nailer with 5/8" galvanized bolts @ 20" o.c. and 12d hot dipped galv. @ 42" o.c.
2. Corners shall be braced with one of the approved methods as outlined in R602.10.3.
3. Structural members fastening tc conform to Table R602.3(1) and (2).
4. Girders and piers shall bear on center 1/3 of pier and footing, respectively.
5. 2018 NC State Residential Building Code apply to the construction of footings.
6. Typical lug footing to be 18"x 8"deep, (UNO)
7. Pressure treated wood shall be installed for exterior use.
8. Hanger Schedule (Simpson hangers) for beam to beam connections (UNO)
   a. (2)2x10's: LUS210-2
   b. (3)2x10's: LUS210-3
   c. (2)9-1/4 L/L's: HUS410
9. Concrete shall have min. 28 day strength of 3000 psi. and max. Slump of 5 inches unless noted otherwise (UNO).Air entrained per Table 4022. All concrete shall be proportioned, mixed, handled, sampled, tastec, and placed in accordance with ACI current standards. All samples for pumping shall be taken from the exit pump.
10. Allowable soil bearing pressure assumed to be 2000 psf. The contractor must contact Geotechnical Engineer & the Structural Engineer if unsatisfactory subsurface conditions are encountered. The surface area adjacent to the foundation wall shall be provided adequate drainage, and shall be graded so as to drain surface wate: away from foundation walls



FOUNDATION PLAN

SCALE 1/4" = 1'-0"

MIDTOWN DESIGNS

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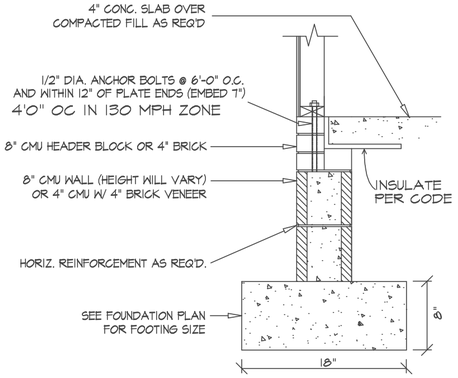

SLAB FND. W/ STEM WALL (A)

N.T.S.

FOUNDATION STRUCTURAL NOTES:

1. (3) 2 x 10 SPF #2 GIRDER DROPPED, TYPICAL UNO.
2. CONCRETE BLOCK PIER SIZE SHALL BE:

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8 x 16	UP TO 32" HIGH	UP TO 5'-0" HIGH
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WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

3. WALL FOOTING AS FOLLOWS:

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ATTACH SILL PLATE WITH 1/2"dia. ANCHOR BOLTS AT 6'-0" CENTERS (7" EMBEDMENT) AND 12" FROM EACH PLATE END. (SECTION R 403.1.6)

4 "■" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

5 ABBREVIATIONS:

"SJ" = SINGLE JOIST
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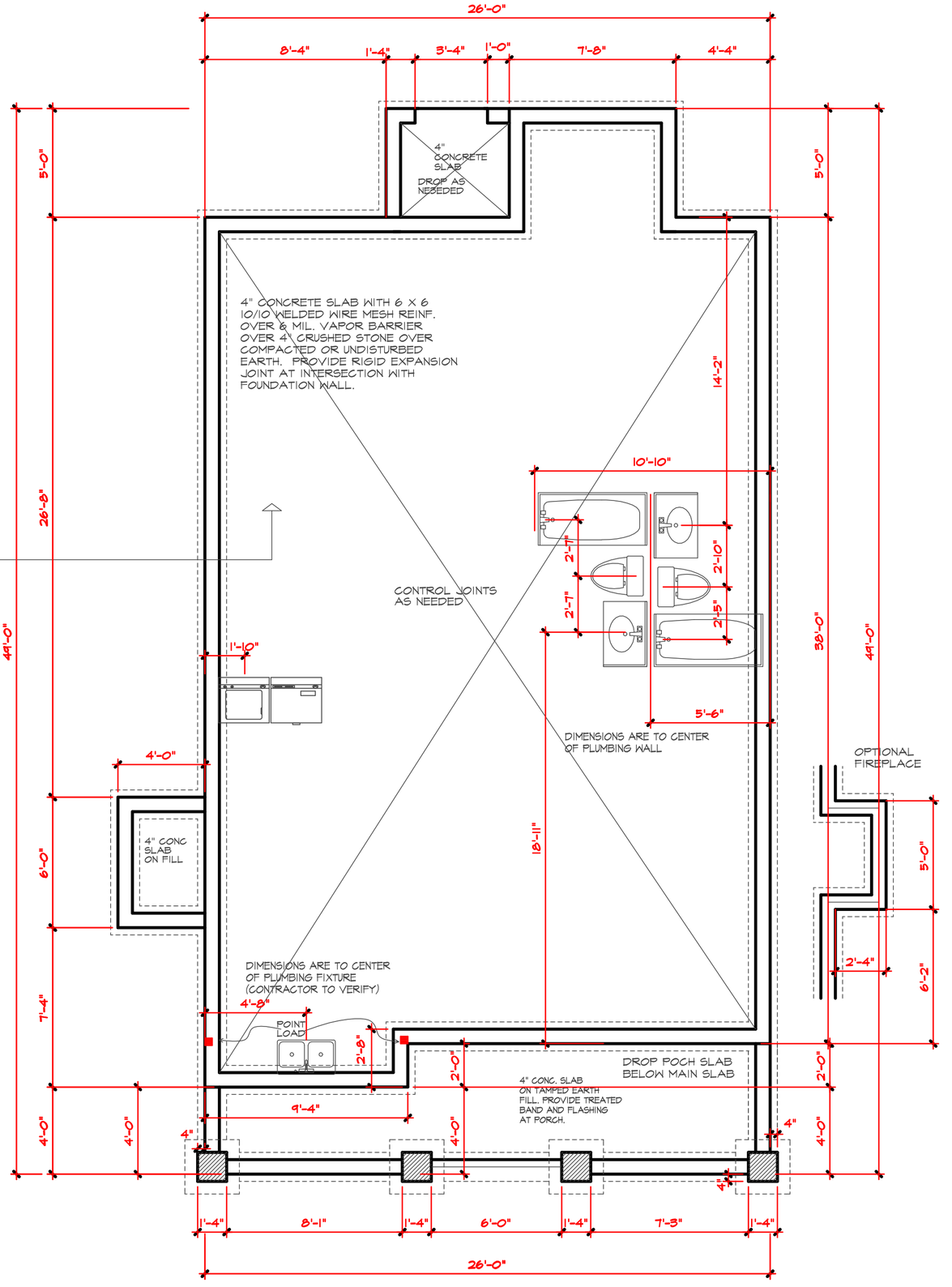

STEM WALL FOUNDATION PLAN

SCALE 1/4" = 1'-0"

PLUMBING CONTRATOR TO VERIFY ALL PLUMBING FIXTURES BEFORE CONCRETE POUR.

MIDTOWN DESIGNS

ALLIE

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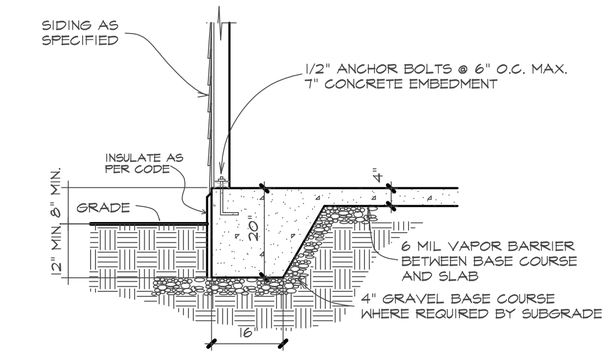

SECTION THROUGH MONOLITHIC SLAB/ FOOTING

SCALE 1/2" = 1'-0"

FOUNDATION STRUCTURAL NOTES:

1. (3) 2 x 10 SPF #2 GIRDER DROPPED, TYPICAL UNO.
2. CONCRETE BLOCK PIER SIZE SHALL BE:

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8 x 16	UP TO 32" HIGH	UP TO 5'-0" HIGH
12 x 16	UP TO 48" HIGH	UP TO 9'-0" HIGH
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WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.

3. WALL FOOTING AS FOLLOWS:

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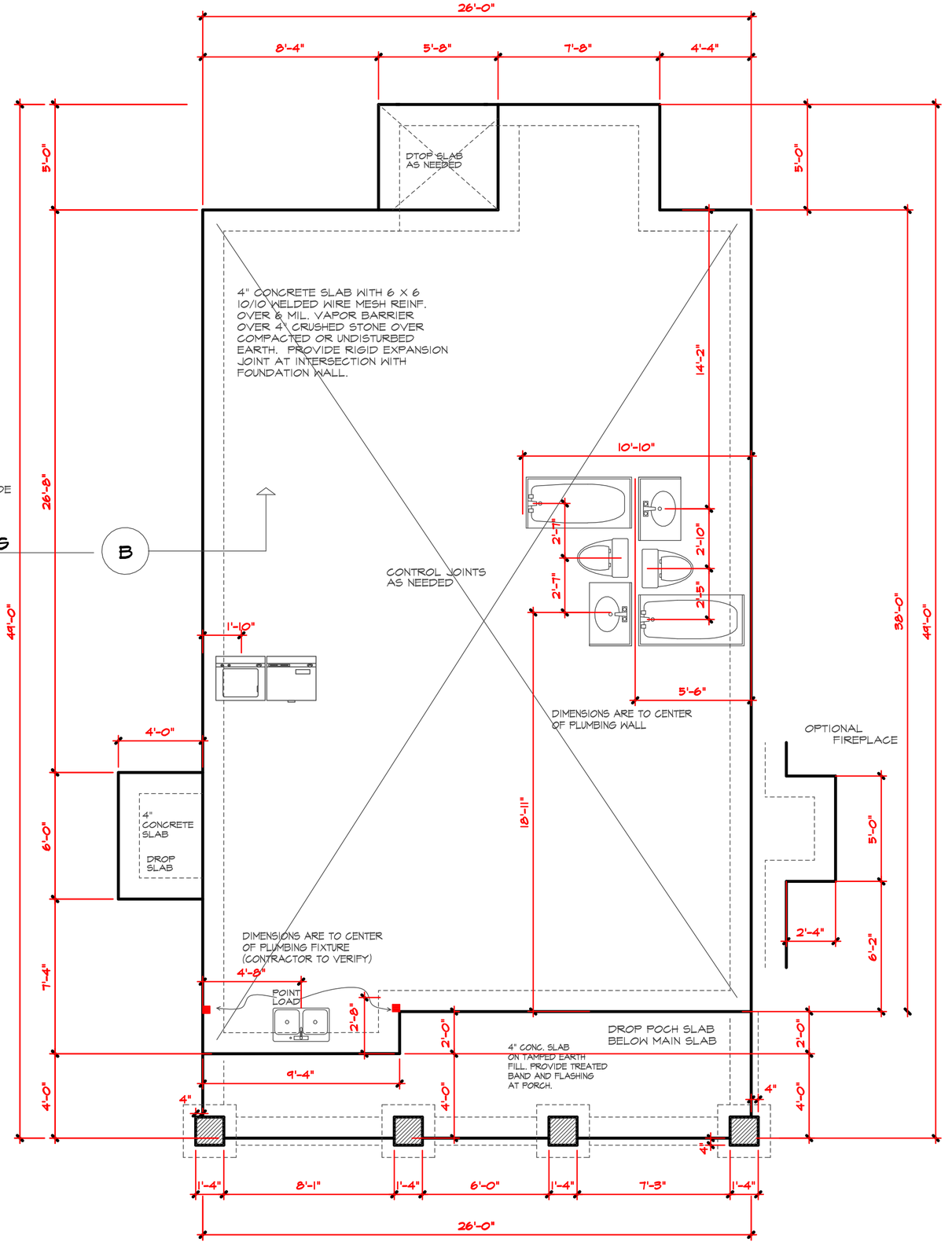

MONOLITHIC SLAB PLAN

SCALE 1/4" = 1'-0"

PLUMBING CONTRATOR TO VERIFY ALL PLUMBING FIXTURES BEFORE CONCRETE POUR.

MIDTOWN DESIGNS

ALLIE

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STRUCTURAL NOTES:

1. Framing lumber shall be #2 SPF (modulus of of elasticity 1,100,000 psi, fb 950). All beams & treatec lumber to be #2 SYP, E=1,600,000, fb=1100 min. Studs min.#2 or stud grade.
2. Use hangers for all beam to beam connections Structural fastening as per R602.3(1). Adequate connections is the sole responsibility of the general contractor and his subs.
3. Structural members fastening to conform to Table R602.3(1) and (2).
4. Roof Framing Notes:
   a. Dbl Hips may be spliced with a min, 6'-0" overlap at center. No valley splices
   b. Use 2x10 or fir down rafters for vaulted areas
   c. Attach vaulted rafters with hurricane connectors: Simpson H-2.5, H-5 or approved equal.
5. All construction shall conform to the latest requirements of the NC State Residential Building Code - 2018 Edition, plus all local codes & regulations or 2015 IBC.
6. Structural Engineer is not responsible for and will not control of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the construction work.
7. Structural Engineer is not responsible for the contractor's failure to carry out the proposed construction work in accordance with the contract document.

FRAMING NOTES:

1. Design Loads (R301.5)

	Live Loads (PSF)	Dead (PSF)
Rooms not for Sleeping	40	10
Sleeping Rooms	30	10
Attic w/Permanent Stairs	40	10
Attic w/o Permanent Stairs	20	10
Attic w/o Storage	10	10
Stairs	40	–
Exterior Balconies	60	10
Decks	40	10
Guardrails & Handrails	200	–
Passenger Vehicle Garages	50	10
Fire Escapes	40	10
Snow	20	–

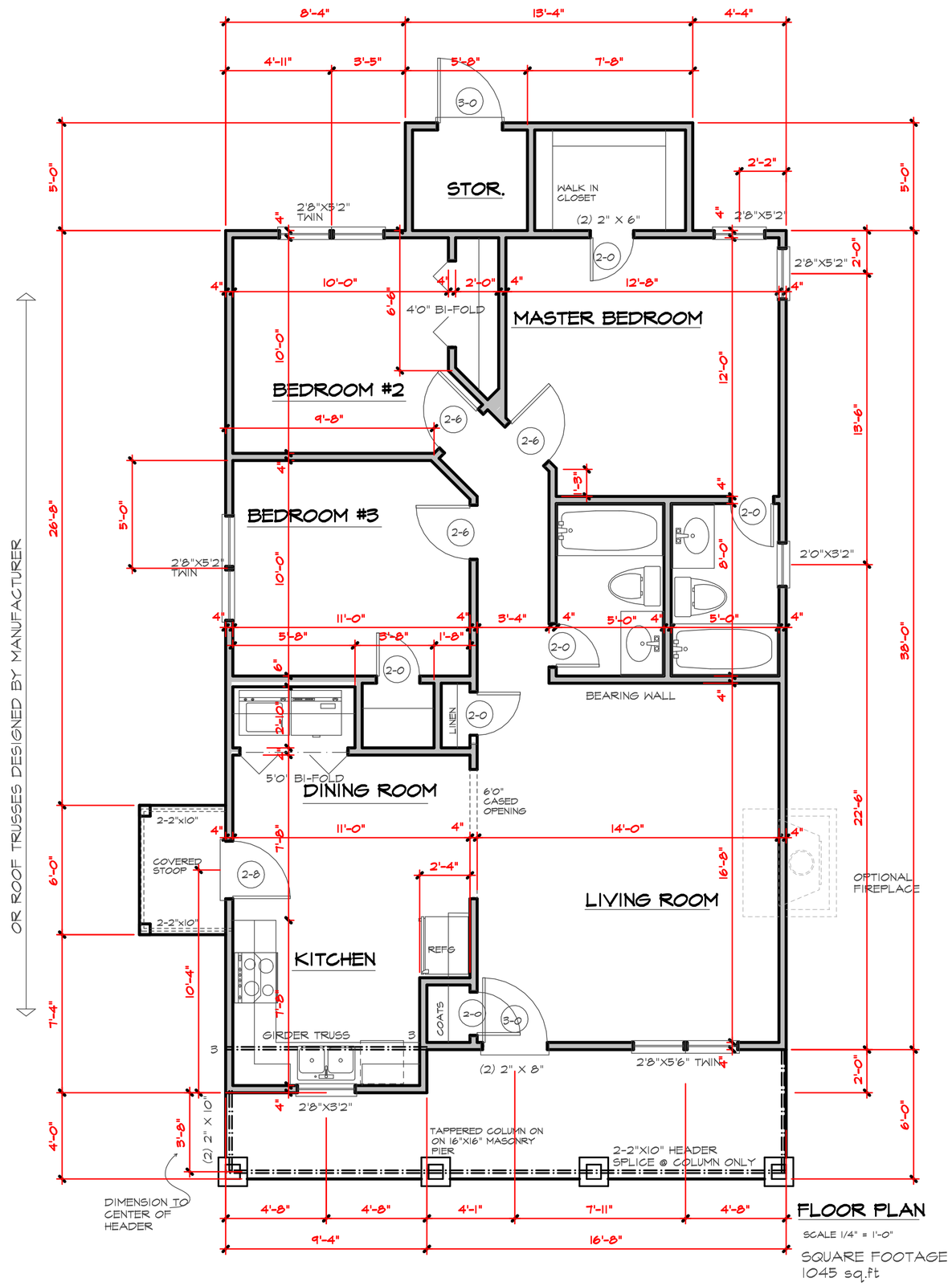
   Wind Load: (Refer to Table R301.2.4)
   Verify Zone before Construction
   Wake County 115 mph
2. Wall Bracing: Braced wall panels shall be constructed according to section R602.103. The wall structural paneling shall comply with Table R602.103. The length of braced panels shall be determined by section R602.10.4. Latera bracing shall be satisfied per method 3 by continuously sheathing walls with structural sheathing per Table 601.3. Note that any specific bracec wal detail shall be installed as specified.
3. All framing lumber shall be SPF#2 (Fb=875 psi) unless otherwise noted (UNO). All treated lumber shall be SYP#2 (Fb=975 psi). Plate material may be SPF#3 or SYP#3 (Fc (perp.) = 425 psi min.)
4. All exterior headers to be (2)2x10 spf. u.n.o w/ dbl. Jacks for all openings >5'-0".
5. All interior bearing headers to be (2)2x10 u.n.o. w/ dbl. jacks for all openings >4'-6", use (2)2x8 w/ dbl. Jacks for all openings >3'-0" u.n.o.
6. All interior non-bearing headers to be min. (2)2x4 flat u.n.o.
7. Fireblock to conform with R602.8

HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x10 (4" WALL) OR (3) 2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.

2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW:

- UP TO 4' SPAN: (1) KING STUD
- OVER 4' UP TO 8' SPAN: (2) KING STUDS
- OVER 8' UP TO 11' SPAN: (3) KINGS STUDS
- OVER 11' SPAN: (4) KING STUDS



OR ROOF TRUSSES DESIGNED BY MANUFACTURER

FLOOR PLAN

SCALE 1/4" = 1'-0"

SQUARE FOOTAGE
1045 sq.ft

MIDTOWN DESIGNS

ALLIE

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TRUSS SYSTEM REQUIREMENTS

NC (2018 NCRC): Wind: 115-120 MPH

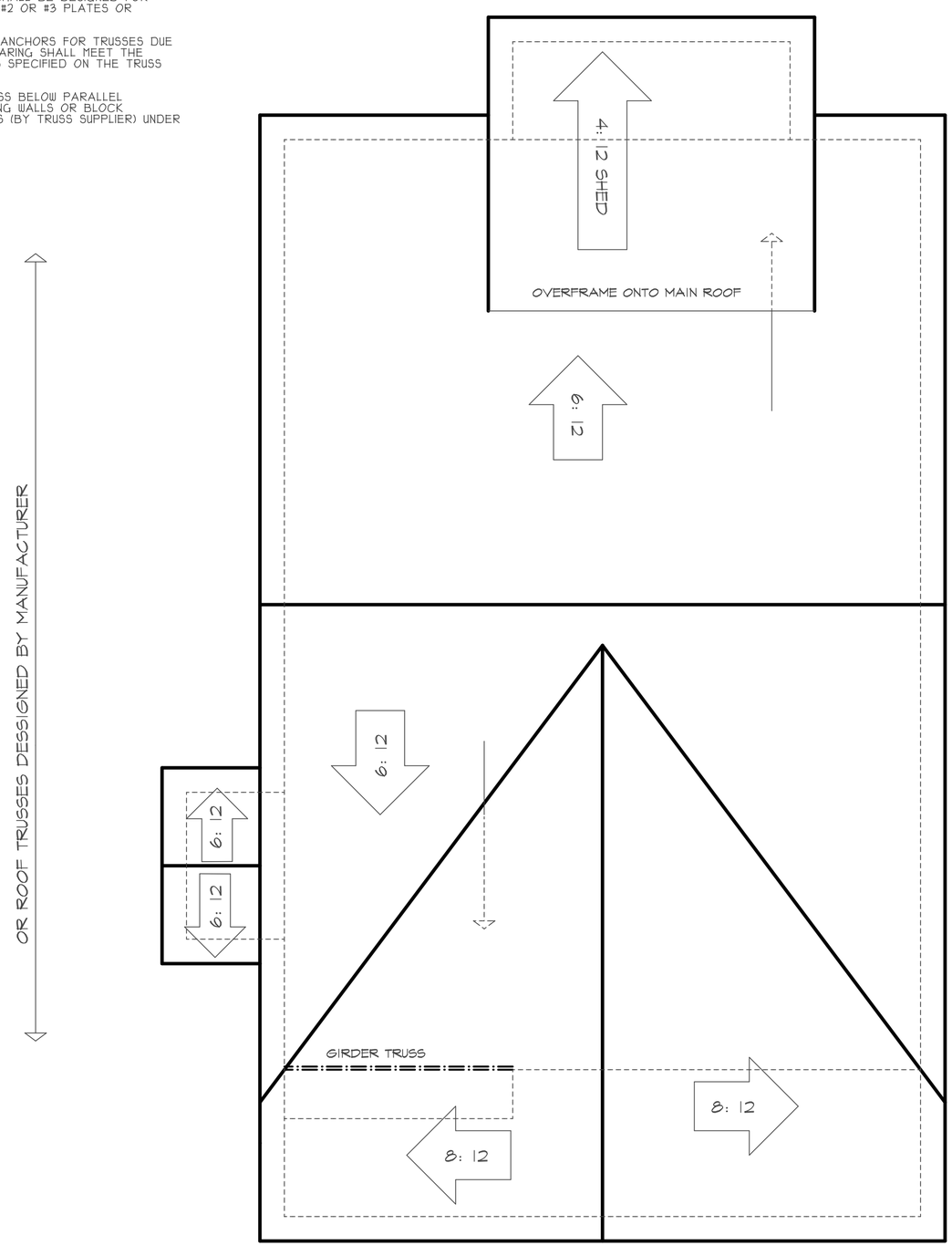
1. TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.

2. TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.

3. ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).

4. ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.

5. INSTALL A TRUSS BELOW PARALLEL NON-LOAD BEARING WALLS OR BLOCK BETWEEN TRUSSES (BY TRUSS SUPPLIER) UNDER WALLS.



OR ROOF TRUSSES DESIGNED BY MANUFACTURER

ROOF PLAN

SCALE 1/4" = 1'-0"

NOTE!
IF ROOF TRUSSES SEE DRAWING BY MANUFACTURER

MIDTOWN DESIGNS

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STRUCTURAL NOTES

1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION (2018 IRC), PLUS ALL LOCAL CODES AND REGULATIONS.
ALL MEMBERS SHALL BE FRAMED, ANCHORED,, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

2) DESIGN LOADS SEE TABLE R301.5

WIND SPEED: (REFER TO TABLE R301.2.4)
VERIFY ZONE BEFORE CONSTRUCTION.

3) WALL BRACING: WALLS SHALL BE BRACED ALONG BRACED WALL LINES ACCORDING TO SECTION R602.10. THE AMOUNT, LOCATION, AND CONSTRUCTION OF BRACING SHALL COMPLY WITH R602.10. NOTE THAT THE BRACING SHOWN ON THE PLANS IS BASED ON THE PRESCRIPTIVE BRACING REQUIREMENTS OF THE CODE AND SHALL BE VERIFIED AND/ORAPPROVED BY THE CODE OFFICIAL.

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIT ENTRAINED PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.

5) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.

6) ALL FRAMING LUMBER SHALL BE SPF #2(FB = 875 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2 (FB=975 PSI). PLATE MATERIAL MAY BE SPF #3 OR SYP #3 (FC(PERP) = 425 PSI - MIN).

7) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2X4 STUD COLUMN FOR 6'-0" MAX. BEAM SPAN (UNO), (2)2X4 STUDS FOR BEAM SPAN GREATER THAN 6'-0" (UNO).

8) L.V.L SHALL BE LAMINATED VENEER LUMBER: FB=2600 PSI, FV=285 PSI, E=1,900,000 PSI. P.S.L SHALL BE PARALLEL STRAND LUMBER: FB=2900 PSI, FV=290 PSI, E=2,000,000 PSI. L.S.L SHALL BE LAMINATED STRAND LUMBER: FB=2250 PSI, FV=400 PSI, E=1,550,000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.

9) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

10) ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER X 4" LONG). LATERAL SUPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.

11) REBAR SHALL BE DEFORMED STEEL. ASTM615, GRADE 60.

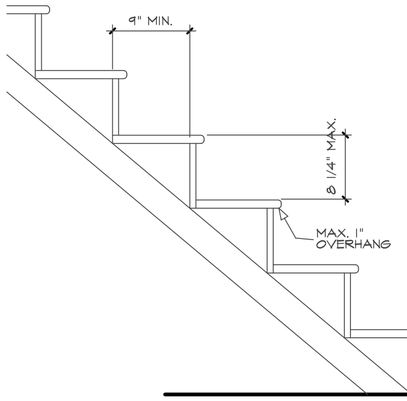
12) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX). AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.

13) BRICK LINTELS SHALL BE 3 1/2"X3 1/2"X1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"X4"X5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).

14) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS SEE R301.2(6)

DWELLING / GARAGE SEPARATION

REFER TO SECTIONS R302.5, R302.6, AND R302.7
WALLS. A minimum 1/2" gypsum board must be installed on all walls supporting floor/ceiling assemblies used for separation required by this section.
STAIRS. A minimum of 1/2" gypsum board must be installed on the underside and exposed sides of all stairways.
CEILINGS. A minimum of 1/2" gypsum must be installed on the garage ceiling if there are no habitable room above the garage. If there are habitable room above the garage a minimum of 5/8" type X gypsum board must be installed on the garage ceiling.
OPENING PENETRATIONS. Openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.
DUCT PENETRATIONS. Ducts in the garage and ducts penetrating the walls or ceilings separating the *dwelling* from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other *approved* material and shall have no openings into the garage.
OTHER PENETRATIONS. Penetrations through the separation required in Section R302.6 shall be protected as required by Section R302.11, Item 4.

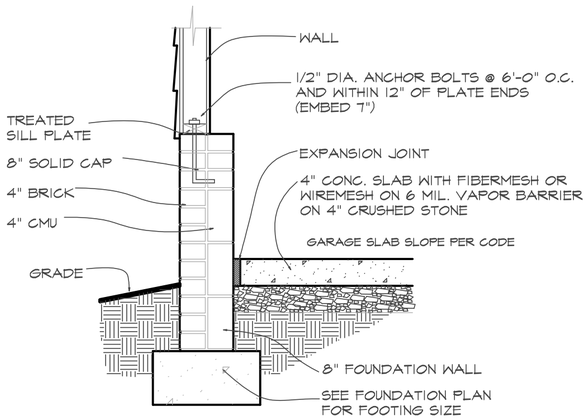


STAIR NOTES:

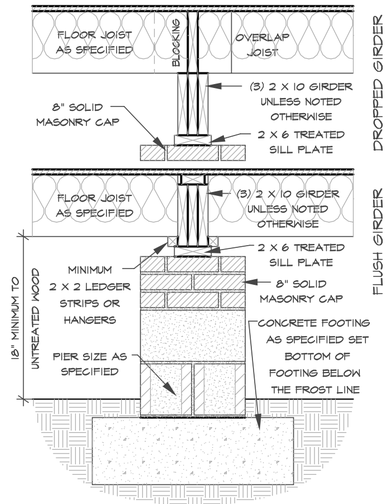
1. STAIRS RISERS MUST BE UNIFORM AND NOT EXCEED 8 1/4".
2. TREADS SHALL NOT BE LESS THAN 10" DEEP A 1" PROJECTION OVER RISER IS PERMITTED.
3. A MINIMUM OF 6'8" HEADROOM MUST BE MAINTAINED AT ALL PLACES ON STAIR.
4. THE WIDTH OF THE STAIR SHALL BE A MINIMUM OF 3'0". HANDRAIL MAY PROJECT FROM EACH SIDE OF STAIR A DISTANCE OF 3 1/2" INTO THE REQUIRED WIDTH.
5. WINDERS MUST BE A MINIMUM OF 9" IN WIDTH AT 12" FROM THE NARROWEST SIDE. TREAD SHALL BE NO NARROWER THAN 4" AT ANY POINT AND AVERAGE NO LESS THAN 9 INCHES.
6. HANDRAILS SHALL BE NO LESS THAN 34" AND NO MORE THAN 38" ABOVE TREAD NOSING.
7. WINDERS AND SPIRAL STAIRS SHALL HAVE THE HANDRAIL LOCATED ON THE OUTSIDE RADIUS.
8. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS.

STAIR DETAIL

NO SCALE

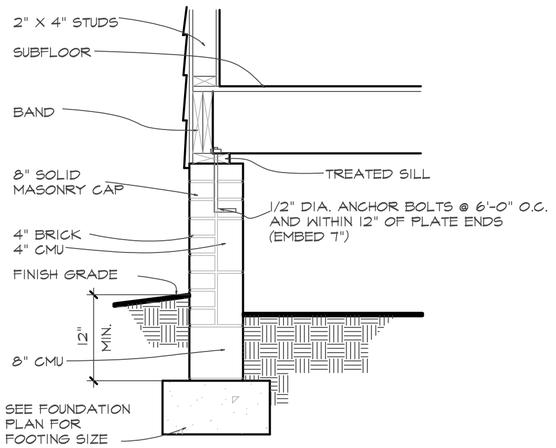


(B) SECTION AT GARAGE SLAB



(C) DROPPED/ FLUSH PIER

SCALE 3/4" = 1'-0"

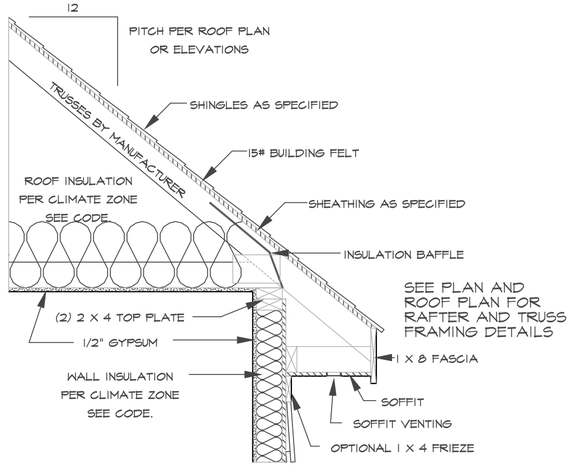


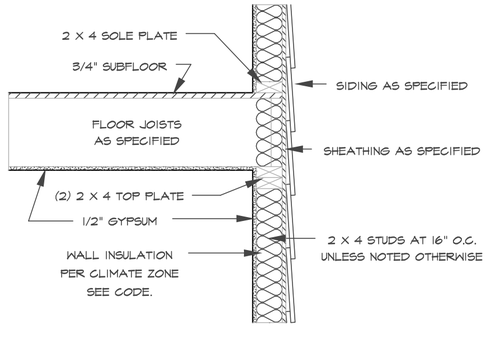
(D) SECTION AT CRAWL

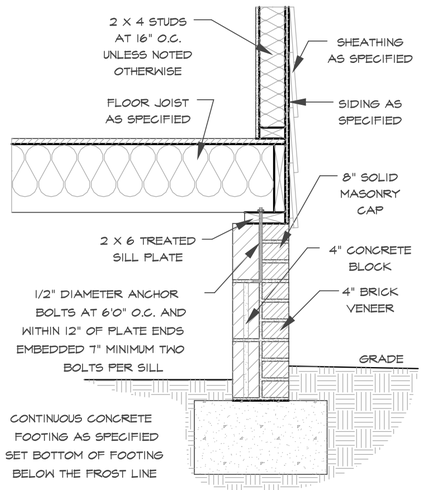
TABLE R402.1.4
EQUIVALENT *U*-FACTORS*

CLIMATE ZONE	FENESTRATION *U*-FACTOR[a]	SKYLIGHT *U*-FACTOR	CEILING *U*-FACTOR	FRAME WALL *U*-FACTOR	MASS WALL *U*-FACTOR[b]	FLOOR *U*-FACTOR	BASEMENT WALL *U*-FACTOR	CRAWL SPACE WALL *U*-FACTOR
3	0.35	0.55	0.030	0.077	0.141	0.047	0.091[c]	0.136
4	0.35	0.55	0.030	0.077	0.141	0.047	0.059	0.065
5	0.35	0.55	0.030	0.061	0.082	0.033	0.059	0.065

a. Nonfenestration *U*-factors shall be obtained from measurement, calculation or an approved source.
b. When more than half the insulation is on the interior, the mass wall *U*-factors shall be a maximum of 0.07 in Climate Zone 3, 0.07 in Climate Zone 4 and 0.054 in Climate Zone 5.
c. Basement wall *U*-factor of 0.360 in warm-humid locations as defined by Figure R301.1 and Table R301.1.
d. A maximum of two glazed fenestration product assemblies having a *U*-factor no greater than 0.55 and a SHGC no greater than 0.70 shall be permitted to be substituted for minimum code compliant fenestration product assemblies without penalty. When applying this note and using the REScheck "UA Trade-off" compliance method to allow continued use of the software, the applicable fenestration products shall be modeled as meeting the *U*-factor of 0.35 and the SHGC of 0.30, as applicable, but the fenestration products actual *U*-factor and actual SHGC shall be noted in the comments section of the software for documentation of application of this note to the applicable products. Compliance for these substitute products shall be verified compared to the allowed substituted maximum *U*-value requirement and maximum SHGC requirement, as applicable.







TYPICAL WALL SECTION

SCALE 3/4" = 1'-0"

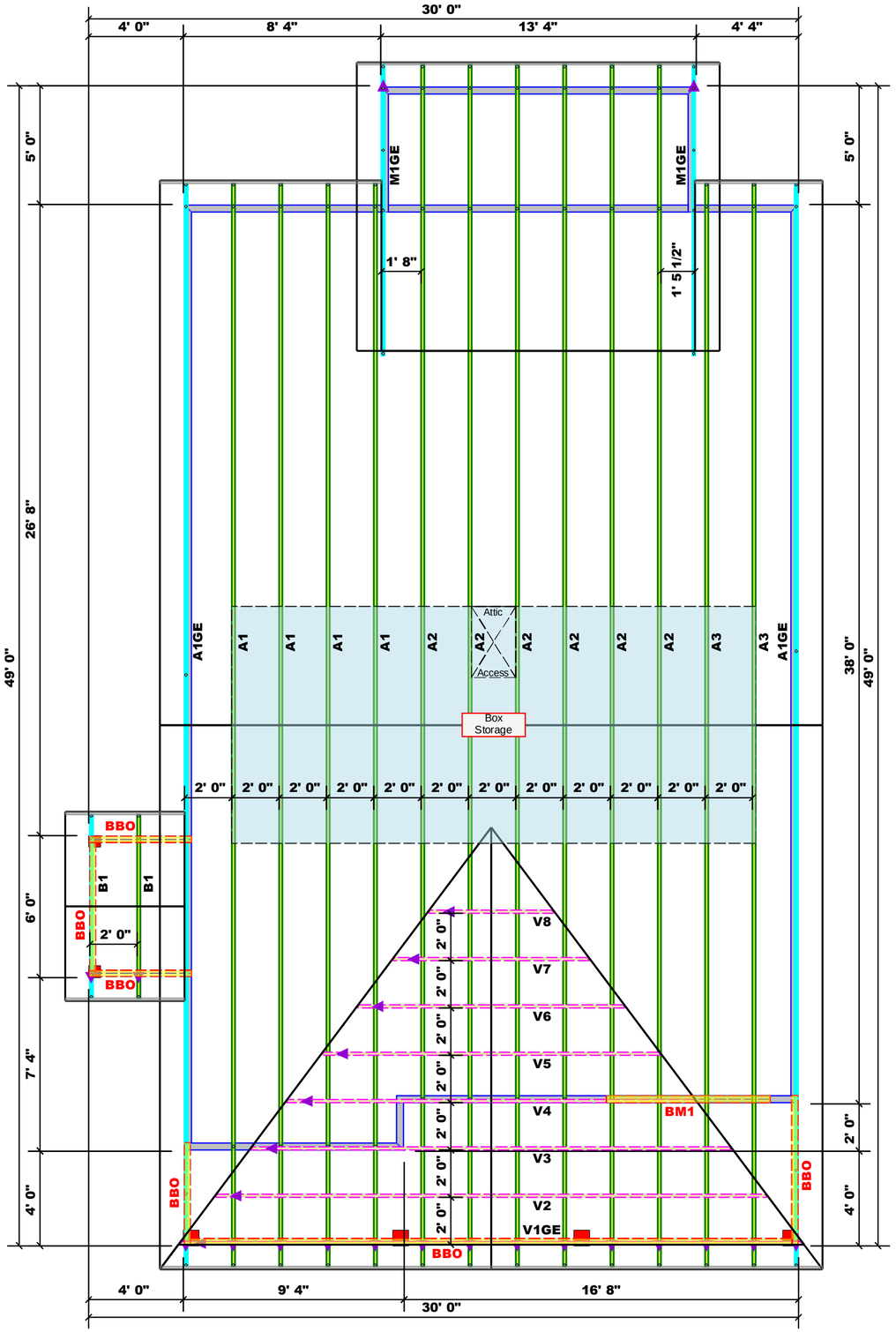
TABLE R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT*

CLIMATE ZONE	FENESTRATION *U*-FACTOR[b,j]	SKYLIGHT[b] *U*-FACTOR	GLAZED FENESTRATION SHGC[a,k]	CEILING *R*-VALUE[h]	WOOD FRAME WALL *R*-VALUE	MASS WALL *R*-VALUE[i]	FLOOR *R*-VALUE	BASEMENT[c,j] WALL *R*-VALUE	SLAB[d] *R*-VALUE & DEPTH	CRAWL SPACE[c] WALL *R*-VALUE
3	0.35	0.55	0.30	38 or 30ci[j]	15 or 13+2.5[g]	5/13 or 5/10ci	19	5/13[f]	0	5/13
4	0.35	0.55	0.30	38 or 30ci[j]	15 or 13+2.5[g]	5/13 or 5/10ci	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30ci[j]	19[g] or 13+5[g] or 15+3[g]	13/17 or 13/12.5ci	30[g]	10/15	10	10/19

HOUSE DESIGNED UNDER
RESIDENTIAL CODE 2018 IRC

DETAIL PAGE

DATE



All Headers Are Considered 2X10 Beams Unless Otherwise Noted

All Walls Shown Are Considered Load Bearing

Roof Area	= 1626.94 sq.ft.
Ridge Line	= 33.04 ft.
Hip Line	= 1.4 ft.
Horiz. OH	= 77.5 ft.
Raked OH	= 127.47 ft.
Decking	= 56 sheets

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

Hatch Legend
Box Storage
Drop Beam

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2

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

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

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

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

Signature Jonathan Landry

Jonathan Landry

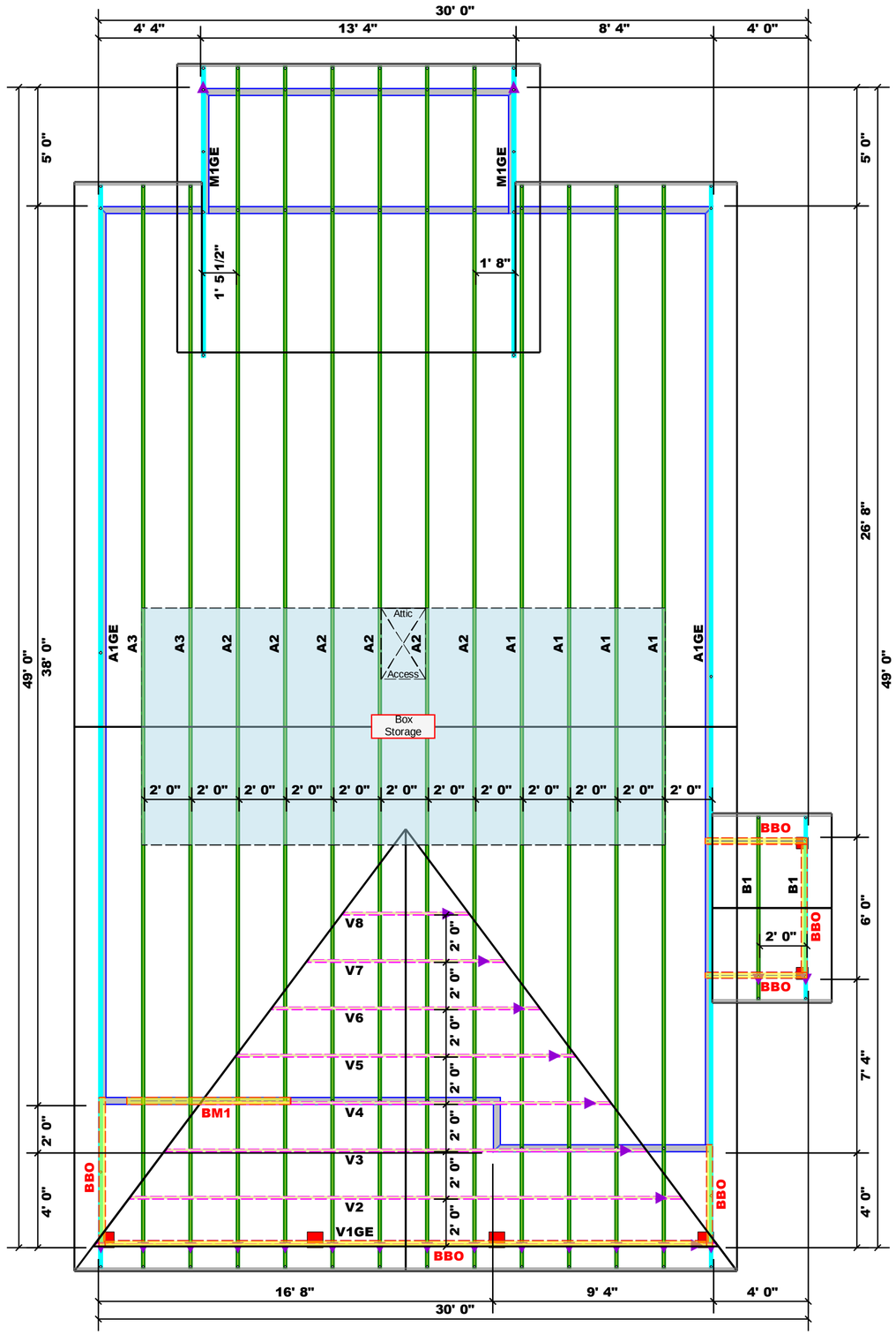
LOAD CHART FOR JACK STUDS

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

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

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP 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	Weaver Homes
JOB NAME	Lot 2 Maple Hill
PLAN	Allie
SEAL DATE	N/A
QUOTE #	
JOB #	J1024-5768
CITY / CO.	Lillington / Harnett
ADDRESS	4214 Darroch Road
MODEL	Roof
DATE REV.	10/24/24
DRAWN BY	Jonathan Landry
SALES REP.	Lenny Norris



All Headers Are Considered 2X10 Beams Unless Otherwise Noted

All Walls Shown Are Considered Load Bearing

Roof Area	= 1626.94 sq.ft.
Ridge Line	= 33.04 ft.
Hip Line	= 1.4 ft.
Horiz. OH	= 77.5 ft.
Raked OH	= 127.47 ft.
Decking	= 56 sheets

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

Hatch Legend

- Box Storage
- Drop Beam

Products				
PlotID	Length	Product	Plies	Net Qty
BM1	7' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2

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

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

COMTECH
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Signature Jonathan Landry

Jonathan Landry

LOAD CHART FOR JACK STUDS

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

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

END REACTION (UP TO)	REQ'D STUDS FOR (2) 9.5" HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) 9.5" HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) 9.5" 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	Weaver Homes
JOB NAME	Lot 2 Maple Hill
PLAN	Allie
SEAL DATE	N/A
QUOTE #	
JOB #	J1024-5768
CITY / CO.	Lillington / Harnett
ADDRESS	4214 Darroch Road
MODEL	Roof
DATE REV.	10/24/24
DRAWN BY	Jonathan Landry
SALES REP.	Lenny Norris

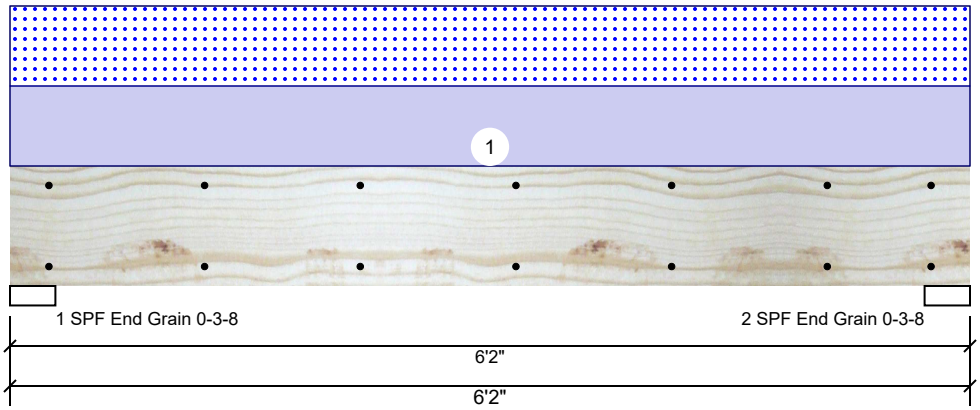
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

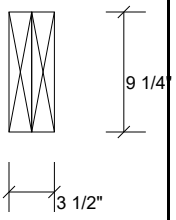
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent 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

Client:	Weaver Homes	Date:	10/24/2024
Project:	Allie	Input by:	Jonathan Landry
Address:	4214 Darroch Road Lillington, NC 27546	Job Name:	Lot 2 Maple Hill
		Project #:	J1024-5768

BM1 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/IRC 2015
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	1629	1606	0	0
2	Vertical	0	1629	1606	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	31%	1629 / 1606	3235	L	D+S
2 - SPF End Grain	3.500"	Vert	31%	1629 / 1606	3235	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4274 ft-lb	3'1"	14423 ft-lb	0.296 (30%)	D+S	L
Unbraced	4274 ft-lb	3'1"	10861 ft-lb	0.393 (39%)	D+S	L
Shear	2126 lb	1' 3/4"	7943 lb	0.268 (27%)	D+S	L
LL Defl inch	0.035 (L/1985)	3'1"	0.143 (L/480)	0.242 (24%)	S	L
TL Defl inch	0.069 (L/986)	3'1"	0.190 (L/360)	0.365 (37%)	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	521 PLF	0 PLF	521 PLF	0 PLF	0 PLF	A3
	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

This design is valid until 6/28/2026

Manufacturer Info

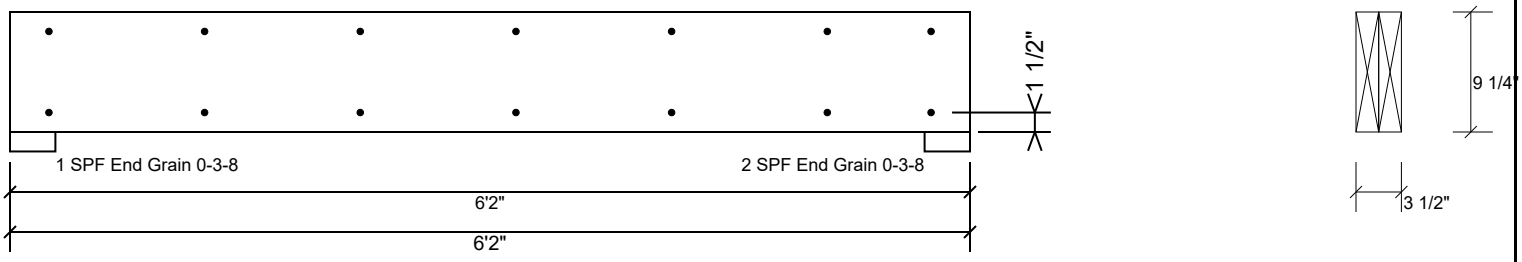
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

Comtech, Inc.
1001 S Reilly Road
Fayetteville
Cumberland
28314

Client:	Weaver Homes	Date:	10/24/2024
Project:	Allie	Input by:	Jonathan Landry
Address:	4214 Darroch Road Lillington, NC 27546	Job Name:	Lot 2 Maple Hill
		Project #:	J1024-5768

BM1 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.
C_M	1
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
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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
Fayetteville
Cumberland
28314

ENGINEERING BY TRENCO
A MiTek Affiliate

RE: J1024-5768
Lot 2 Maple Hill

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Weaver Home Project Name: J1024-5768
Lot/Block: 2 Model: Allie
Address: 4214 Darroch Road Subdivision: Maple Hill
City: Lillington State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE 7-10 Wind Speed: 150 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 14 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	I62158871	A1	11/22/2023
2	I62158872	A1GE	11/22/2023
3	I62158873	A2	11/22/2023
4	I62158874	A3	11/22/2023
5	I62158875	B1	11/22/2023
6	I62158876	M1GE	11/22/2023
7	I62158877	V1GE	11/22/2023
8	I62158878	V2	11/22/2023
9	I62158879	V3	11/22/2023
10	I62158880	V4	11/22/2023
11	I62158881	V5	11/22/2023
12	I62158882	V6	11/22/2023
13	I62158883	V7	11/22/2023
14	I62158884	V8	11/22/2023

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

Truss Design Engineer's Name: Gilbert, Eric

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

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.

November 22, 2023

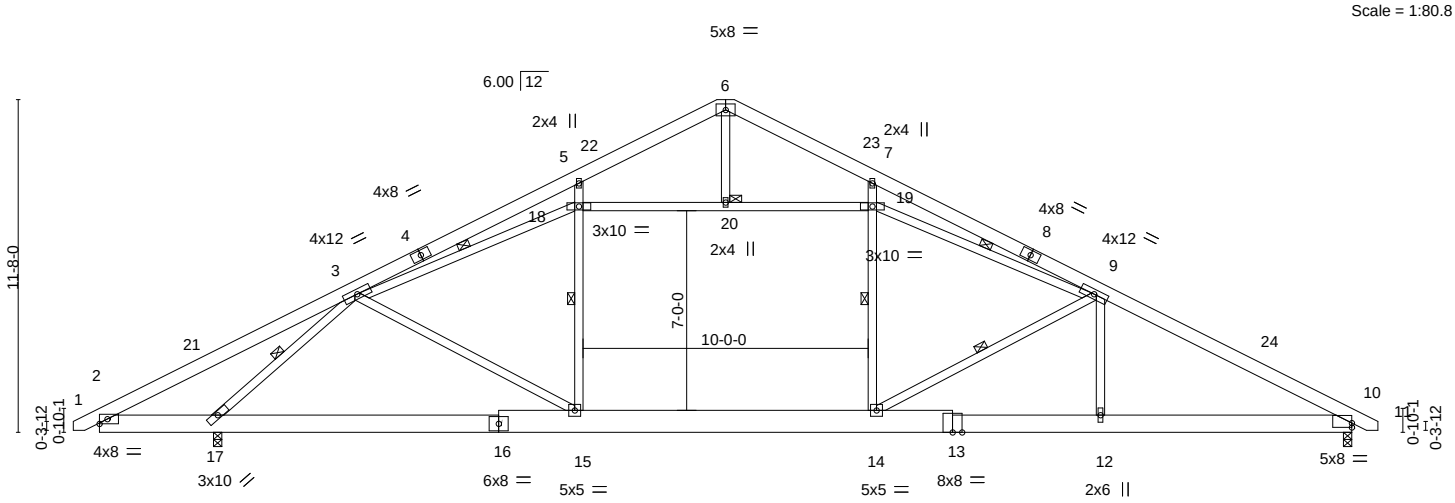
Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	A1	COMMON	4	1	I62158871
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:24 2023 Page 1
ID:0HBBE069enZ37z3NnPm79EyKfKQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0	8-11-8	16-11-8	21-11-8	26-11-8	34-11-8	43-11-0	44-10-0
0-11-0	8-11-8	8-0-0	5-0-0	5-0-0	8-0-0	8-11-8	0-11-0

Scale = 1:80.8



4-1-12	16-11-8	26-11-8	34-11-8	43-11-0
4-1-12	12-9-12	10-0-0	8-0-0	8-11-8

Plate Offsets (X,Y)-- [10:0-0-0,0-1-13]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	-0.29	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.45	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.27	12-14	>999	240	Weight: 378 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
13-16: 2x10 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-17.
WEBS 1 Row at midpt 3-17, 5-15, 7-14, 9-14, 3-18, 9-19
JOINTS 1 Brace at Jt(s): 20

REACTIONS. (size) 10=0-3-8, 17=0-3-8
Max Horz 17=197(LC 11)
Max Uplift 10=-314(LC 13), 17=-363(LC 12)
Max Grav 10=1630(LC 2), 17=1976(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-697/566, 3-5=-516/130, 5-6=-452/296, 6-7=-407/280, 7-9=-534/147, 9-10=-2912/996
BOT CHORD 2-17=-391/749, 15-17=-360/1612, 14-15=-408/2107, 12-14=-705/2476, 10-12=-704/2481
WEBS 3-17=-2560/1419, 3-15=-105/771, 15-18=0/409, 5-18=-403/380, 14-19=0/479, 7-19=-277/308, 9-14=-793/375, 9-12=-9/415, 18-20=-1784/700, 19-20=-1784/700, 3-18=-1853/725, 9-19=-1858/728

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-11-8, Exterior(2) 21-11-8 to 26-4-5, Interior(1) 26-4-5 to 44-7-10 zone; cantilever left 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 314 lb uplift at joint 10 and 363 lb uplift at joint 17.

November 22,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	A1GE	COMMON SUPPORTED GAB	2	1	I62158872
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:26 2023 Page 1
ID:0HBBE069enZ37z3NnPm79EyKfKQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0 21-11-8 43-11-0 44-10-0
0-11-0 21-11-8 21-11-8 0-11-0

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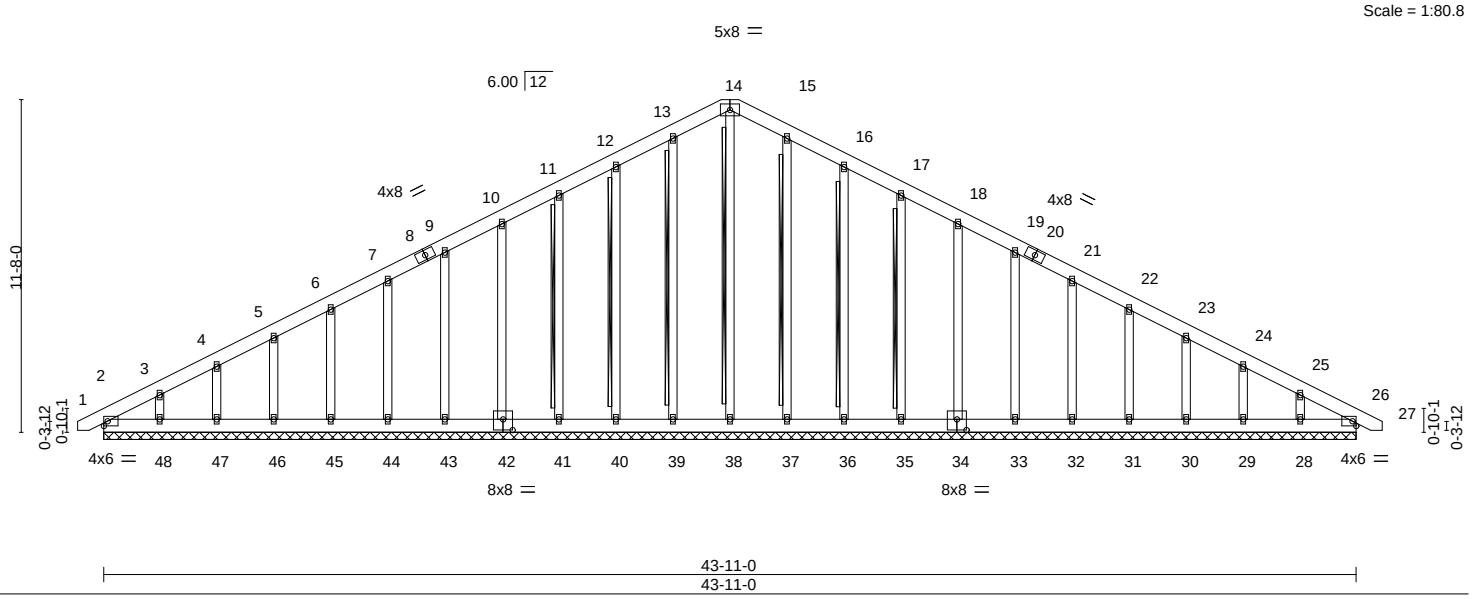

Plate Offsets (X,Y)-- [34:0-4-0,0-4-8], [42:0-4-0,0-4-8]

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	0.08	Vert(LL)	0.00	26	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	26	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: 400 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 - 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 43-11-0.
(lb) - Max Horz 2=305(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 37 except 40=-122(LC 12), 41=-109(LC 12), 42=-107(LC 12), 43=-107(LC 12), 44=-108(LC 12), 45=-108(LC 12), 46=-108(LC 12), 47=-108(LC 12), 48=-182(LC 12), 36=-126(LC 13), 35=-110(LC 13), 34=-107(LC 13), 33=-107(LC 13), 32=-108(LC 13), 31=-108(LC 13), 30=-108(LC 13), 29=-107(LC 13), 28=-164(LC 13)
Max Grav All reactions 250 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 except 38=256(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-446/137, 3-4=-332/131, 4-5=-261/151, 9-10=-93/285, 10-11=-119/324, 11-12=-146/374, 12-13=-176/459, 13-14=-190/506, 14-15=-190/506, 15-16=-176/459, 16-17=-146/374, 17-18=-119/296, 25-26=-314/102
BOT CHORD 2-48=-89/297, 47-48=-89/297, 46-47=-89/297, 45-46=-89/297, 44-45=-89/297, 43-44=-89/297, 42-43=-89/297, 41-42=-89/297, 40-41=-89/297, 39-40=-89/297, 38-39=-89/297, 37-38=-89/297, 36-37=-89/297, 35-36=-89/297, 34-35=-89/297, 33-34=-89/297, 32-33=-89/297, 31-32=-89/297, 30-31=-89/297, 29-30=-89/297, 28-29=-89/297, 26-28=-89/297
WEBS 14-38=-258/51

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; 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.

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Continued on page 2

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NOTES-

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 37 except (jt=lb) 40=122, 41=109, 42=107, 43=107 , 44=108, 45=108, 46=108, 47=108, 48=182, 36=126, 35=110, 34=107, 33=107, 32=108, 31=108, 30=108, 29=107, 28=164.

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

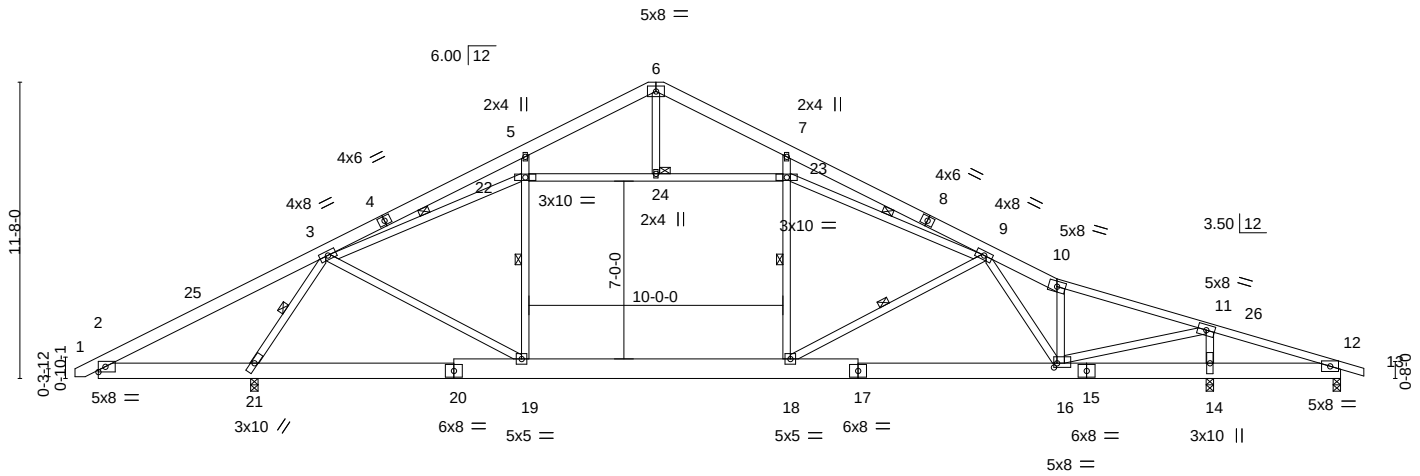
Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	A2	ROOF SPECIAL	6	1	I62158873
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:28 2023 Page 1

ID:0HBBE069enZ37z3NnPm79EyKfKQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0	8-11-8	16-11-8	21-11-8	26-11-8	34-11-8	37-9-0	43-9-4	48-11-0	49-10-0
0-11-0	8-11-8	8-0-0	5-0-0	5-0-0	8-0-0	2-9-8	6-0-4	5-1-12	0-11-0

Scale = 1:90.7



6-1-12	16-11-8	26-11-8	37-9-0	43-9-4	48-11-0
6-1-12	10-9-12	10-0-0	10-9-8	6-0-4	5-1-12

Plate Offsets (X,Y)-- [16:0-1-8,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.27	16-18	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.50	16-18	>903	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.02	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.28	16-18	>999	240	Weight: 408 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	10-13: 2x4 SP No.1
BOT CHORD	2x8 SP No.1 *Except*
	17-20: 2x10 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-9-2 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS	1 Row at midpt 3-21, 5-19, 7-18, 9-18, 3-22, 9-23
JOINTS	1 Brace at Jt(s): 24

REACTIONS. (size) 21=0-3-8, 12=0-3-8, 14=0-3-8
Max Horz 21=-197(LC 10)
Max Uplift 21=-385(LC 12), 12=-540(LC 20), 14=-603(LC 13)
Max Grav 21=1995(LC 2), 12=167(LC 13), 14=2399(LC 2)

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

TOP CHORD	2-3=-505/776, 3-5=-471/118, 5-6=-430/283, 6-7=-379/273, 7-9=-490/121, 9-10=-1570/642, 10-11=-1523/553, 11-12=-793/1870
BOT CHORD	2-21=-570/581, 19-21=-200/791, 18-19=-315/1661, 16-18=-467/1652, 14-16=-1713/780, 12-14=-1713/780
WEBS	3-21=-2235/1089, 3-19=-253/1123, 19-22=-91/267, 5-22=-429/389, 18-23=0/365, 7-23=-296/357, 22-24=-1343/604, 23-24=-1343/604, 10-16=-402/212, 11-16=-1047/3074, 9-16=-515/234, 3-22=-1392/625, 9-23=-1397/627, 11-14=-2131/883

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 4-2-2, Interior(1) 4-2-2 to 21-11-8, Exterior(2) 21-11-8 to 27-1-4, Interior(1) 27-1-4 to 49-10-0 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) except (jt=lb) 21=385, 12=540, 14=603.

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Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	A3	COMMON	2	1	I62158874
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:29 2023 Page 1

ID:0HBBE069enZ37z3NnPm79EyKfKQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0	8-11-8	16-11-8	21-11-8	26-11-8	34-11-8	43-11-0	44-10-0
0-11-0	8-11-8	8-0-0	5-0-0	5-0-0	8-0-0	8-11-8	0-11-0

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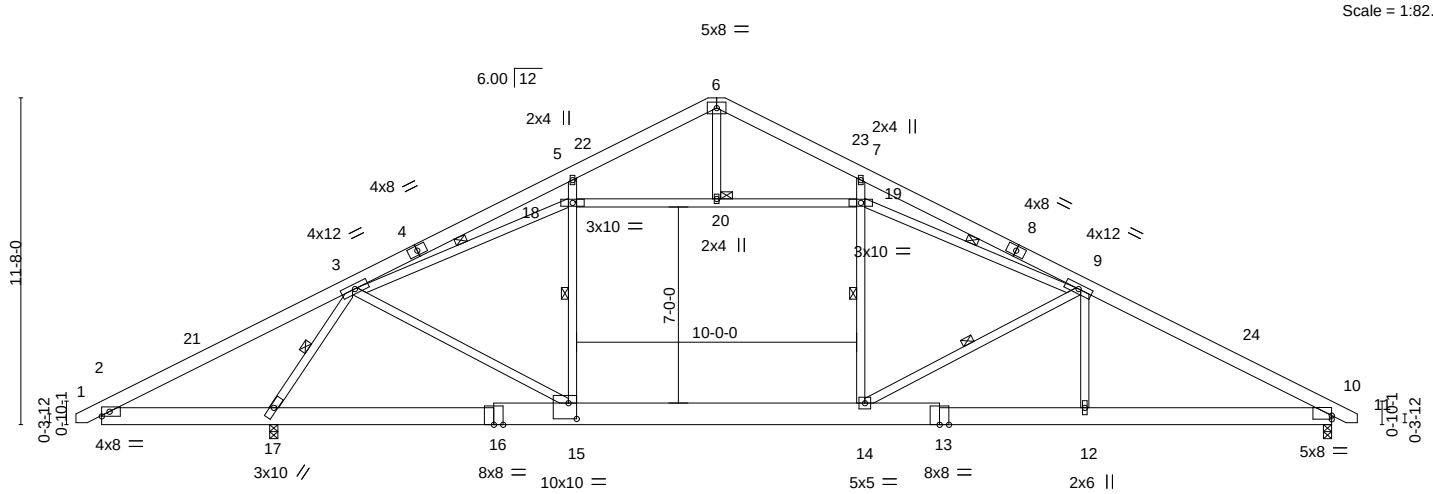

6-1-12	16-11-8	26-11-8	34-11-8	43-11-0
6-1-12	10-9-12	10-0-0	8-0-0	8-11-8

Plate Offsets (X,Y)-- [10:0-0-0,0-1-9], [15:0-3-8,0-6-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	-0.29	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.52	12-14	>879	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.31	12-14	>999	240	Weight: 376 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x8 SP No.1 *Except* 13-16: 2x10 SP No.1
WEBS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-6-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.
WEBS	1 Row at midpt 3-17, 5-15, 7-14, 9-14, 3-18, 9-19
JOINTS	1 Brace at Jt(s): 20

REACTIONS. (size) 17=0-3-8, 10=0-3-8
Max Horz 17=197(LC 11)
Max Uplift 17=-383(LC 12), 10=-303(LC 13)
Max Grav 17=2083(LC 2), 10=1524(LC 2)

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

TOP CHORD	2-3=-834/801, 3-5=-489/121, 5-6=-448/294, 6-7=-387/272, 7-9=-517/136, 9-10=-2715/901
BOT CHORD	2-17=-593/866, 15-17=-197/906, 14-15=-263/1823, 12-14=-620/2301, 10-12=-621/2309
WEBS	3-17=-2389/1351, 3-15=-412/1275, 15-18=-74/308, 5-18=-437/390, 14-19=0/422, 7-19=-254/298, 9-14=-883/454, 9-12=-47/483, 18-20=-1493/560, 19-20=-1493/560, 3-18=-1548/579, 9-19=-1556/583

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 21-11-8, Exterior(2) 21-11-8 to 26-4-5, Interior(1) 26-4-5 to 44-7-10 zone; cantilever left 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) except (jt=lb) 17=383, 10=303.

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Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	B1	COMMON	2	1	I62158875
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:30 2023 Page 1
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-0-11-0 2-11-8 5-11-0 6-10-0
0-11-0 2-11-8 2-11-8 0-11-0

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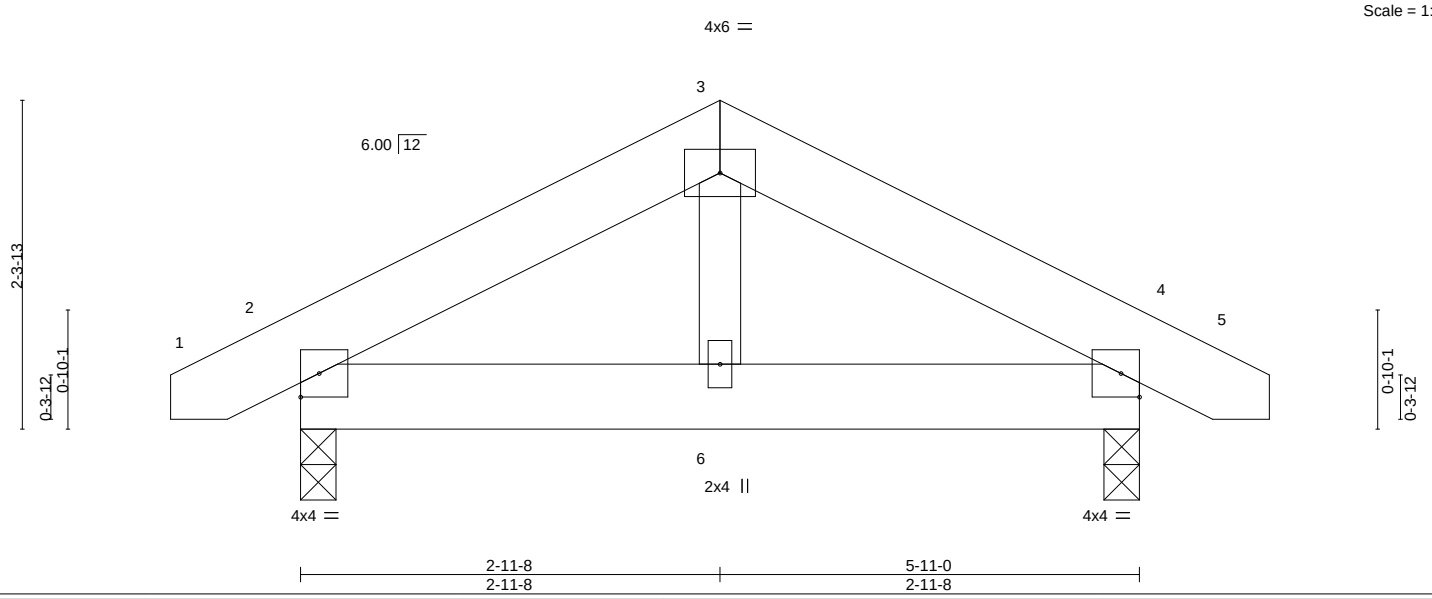


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	0.00	6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.00	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 37 lb	FT = 20%

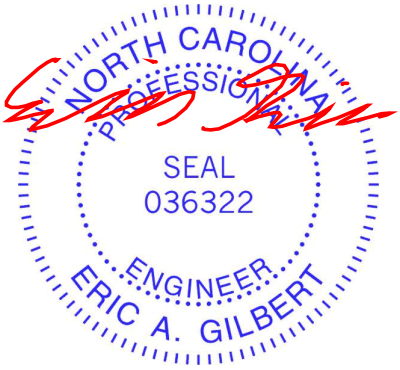
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-0 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=32(LC 11)
Max Uplift 2=-95(LC 9), 4=-95(LC 8)
Max Grav 2=277(LC 1), 4=277(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-249/420, 3-4=-249/420
BOT CHORD 2-6=-256/167, 4-6=-256/167

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) 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) 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) 2, 4.



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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	M1GE	GABLE	2	1	I62158876
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:31 2023 Page 1
ID:0HBBE069enZ37z3NnPm79EyKfKQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0 5-3-8 9-3-8 11-4-0
0-11-0 5-3-8 4-0-0 2-0-8

Scale = 1:23.6

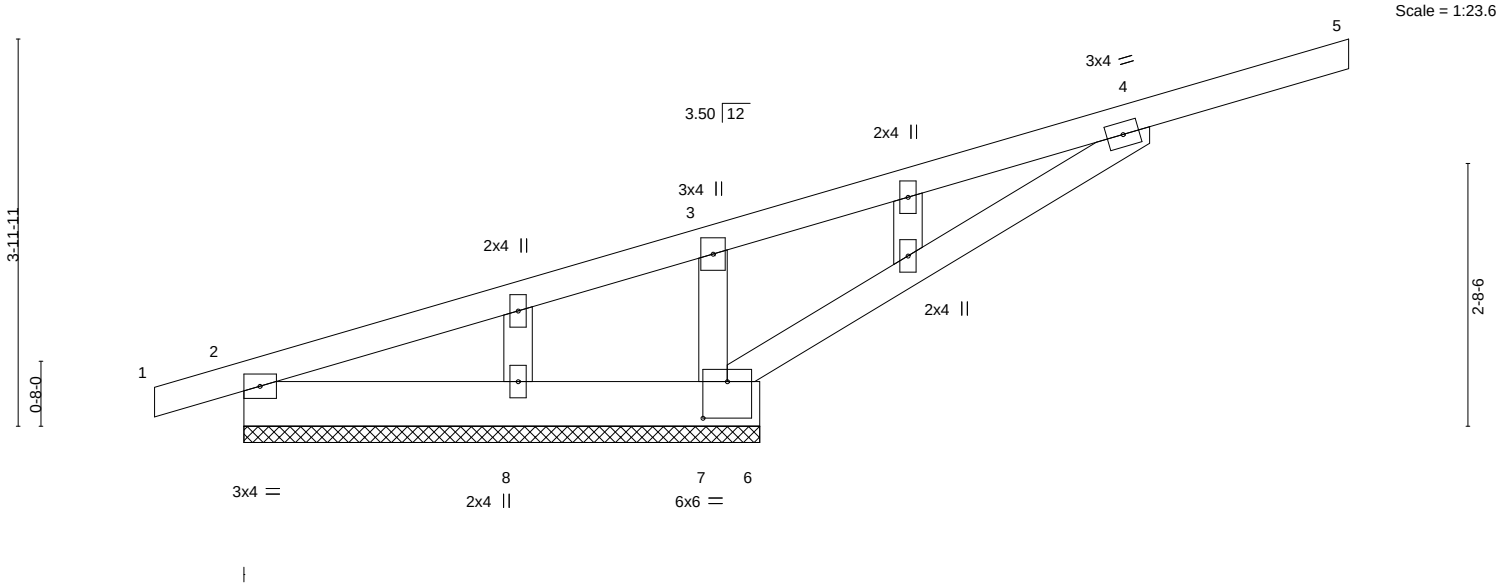

Plate Offsets (X,Y)-- [2:0-0-1,0-0-0], [7:0-3-0,0-4-8]

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	0.33	Vert(LL)	-0.05	4-5	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.03	4-5	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 43 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 4-11-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 7=5-3-8, 2=5-3-8, 8=5-3-8
Max Horz 2=217(LC 12)
Max Uplift 7=-694(LC 12), 2=-38(LC 1)
Max Grav 7=819(LC 1), 2=165(LC 9), 8=120(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1486/767, 3-4=-1304/735, 3-7=-352/538
BOT CHORD 2-8=-671/1116, 7-8=-671/1116
WEBS 4-7=-808/1345

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 7=694.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.

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Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V1GE	GABLE	1	1	I62158877
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:33 2023 Page 1
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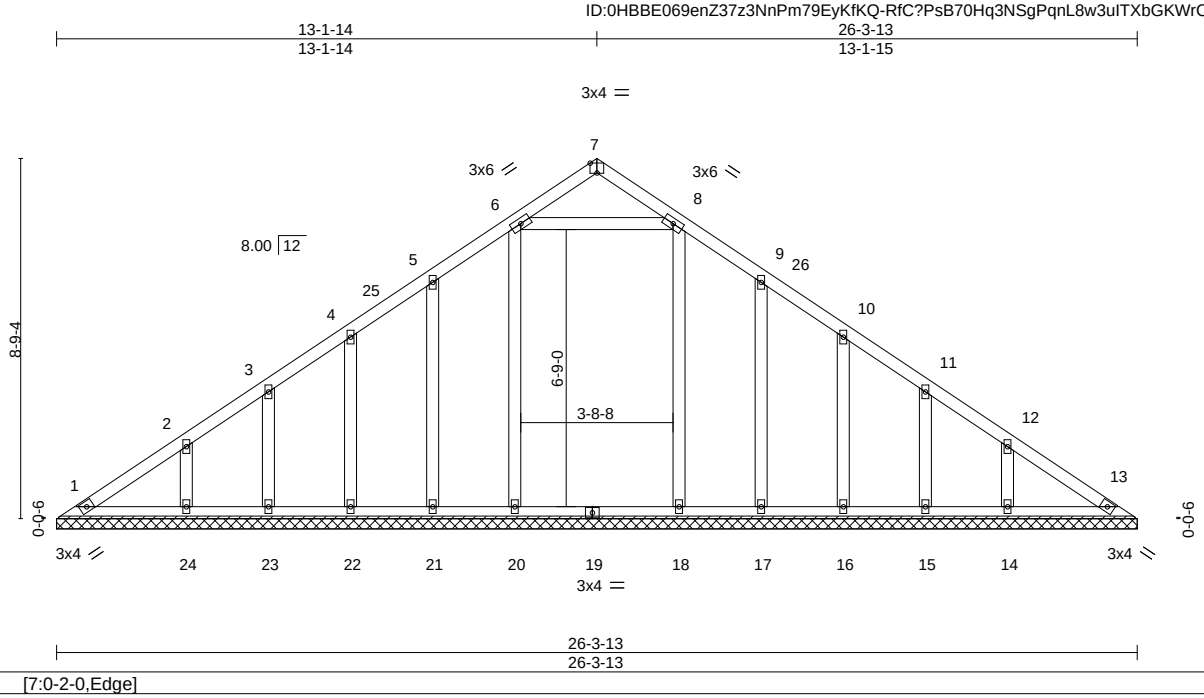

Plate Offsets (X,Y)-- [7:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 153 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 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. All bearings 26-3-13.
(lb) - Max Horz 1=270(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 20, 21, 22, 23, 17, 16, 15 except 24=-108(LC 12), 14=-108(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 21, 22, 23, 17, 16, 15 except 20=385(LC 19), 24=255(LC 19), 18=339(LC 20), 14=255(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-262/265, 8-9=-262/265

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 5-1-14, Interior(1) 5-1-14 to 13-1-14, Exterior(2) 13-1-14 to 17-6-11, Interior(1) 17-6-11 to 25-9-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 20, 21, 22, 23, 17, 16, 15 except (jt=lb) 24=108, 14=108.

November 22,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V2	VALLEY	1	1	I62158878

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:34 2023 Page 1

ID:0HBBE069enZ37z3NnPm79EyKfKQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

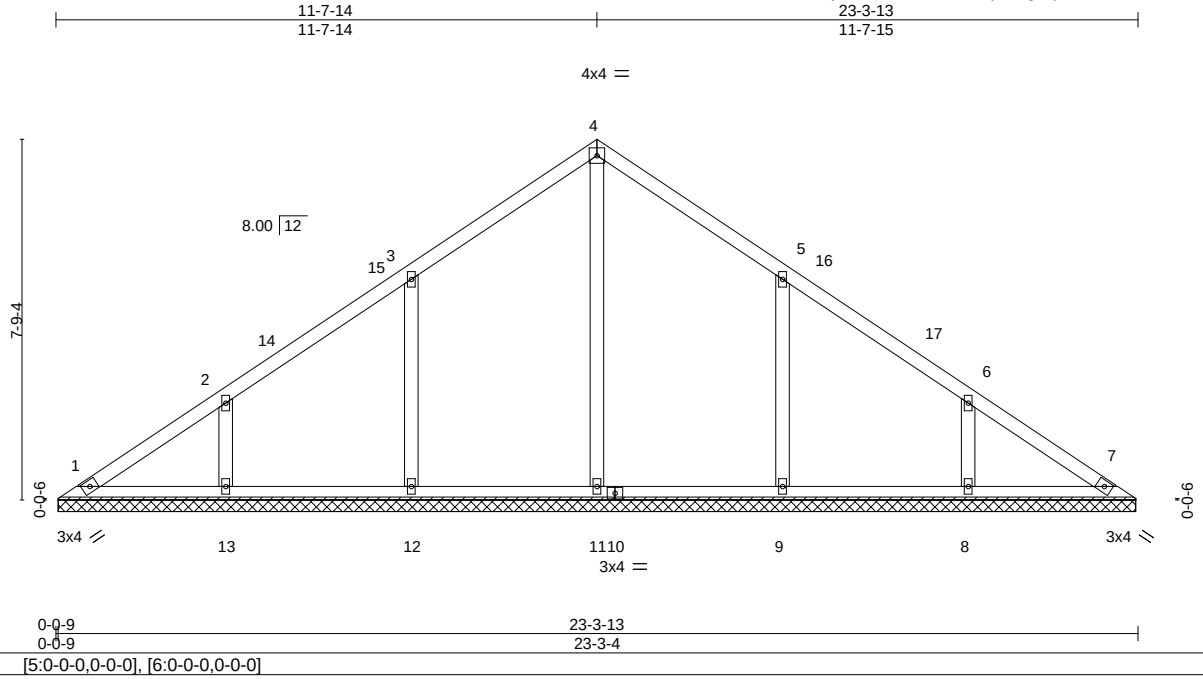

Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

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	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 104 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 23-2-11.

(lb) - Max Horz 1=-238(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 12=-170(LC 12), 13=-151(LC 12), 9=-169(LC 13), 8=-151(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=461(LC 22), 12=475(LC 19), 13=345(LC 19), 9=474(LC 20), 8=346(LC 20)

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

TOP CHORD 3-4=-253/243, 4-5=-253/243
WEBS 3-12=-386/290, 2-13=-348/267, 5-9=-386/290, 6-8=-348/268

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 11-7-14, Exterior(2) 11-7-14 to 16-0-11, Interior(1) 16-0-11 to 22-9-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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) 12=170, 13=151, 9=169, 8=151.
7) N/A

November 22,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V3	VALLEY	1	1	I62158879

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:35 2023 Page 1

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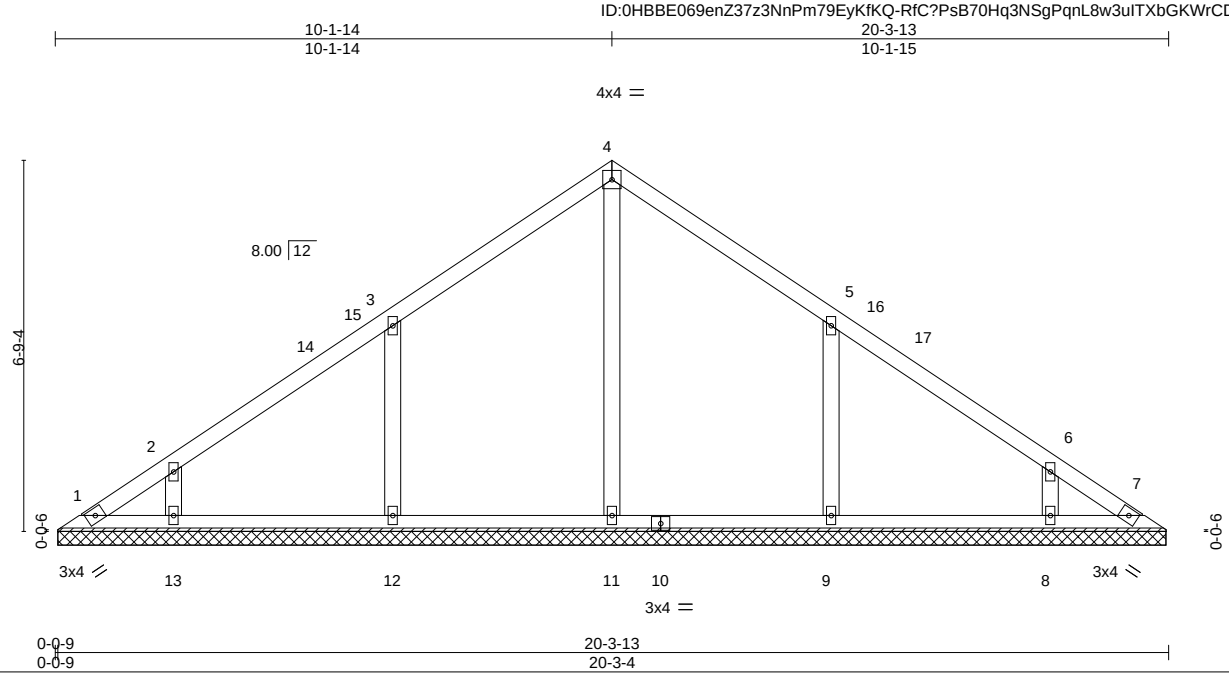

Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 87 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 20-2-11.

(lb) - Max Horz 1=-206(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7 except 12=-174(LC 12), 13=-125(LC 12), 9=-174(LC 13), 8=-125(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=452(LC 19), 12=487(LC 19), 13=281(LC 19), 9=486(LC 20), 8=281(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-395/296, 2-13=-297/245, 5-9=-395/296, 6-8=-298/245

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 10-1-14, Exterior(2) 10-1-14 to 14-6-11, Interior(1) 14-6-11 to 19-9-14 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
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, 7 except (jt=lb) 12=174, 13=125, 9=174, 8=125.
7) N/A

November 22,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V4	VALLEY	1	1	I62158880
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:36 2023 Page 1
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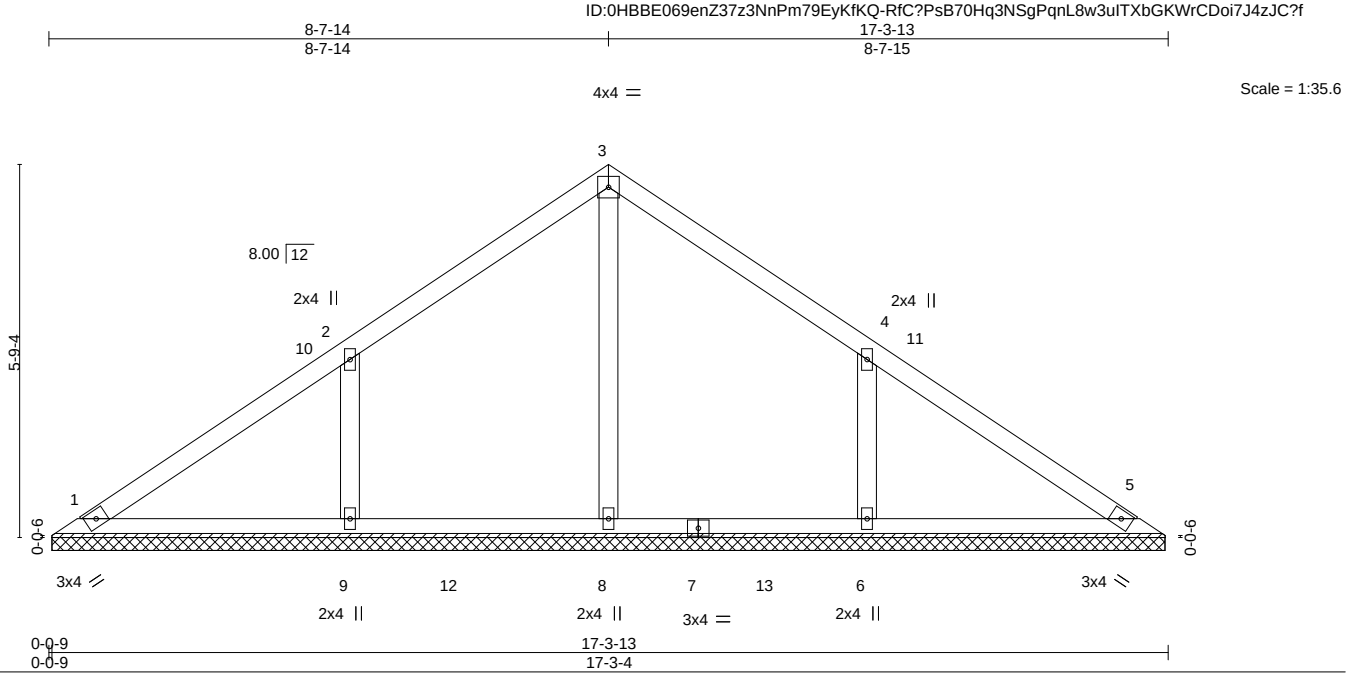


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 70 lb	FT = 20%

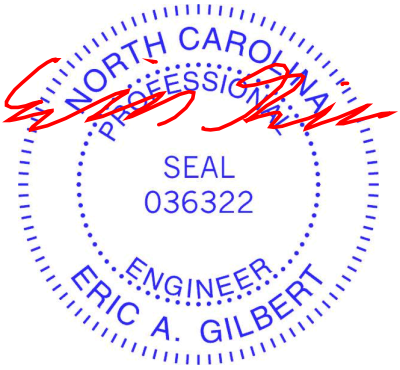
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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 17-2-11.
(lb) - Max Horz 1=174(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-194(LC 12), 6=-194(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=405(LC 19), 9=470(LC 19), 6=470(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-430/315, 4-6=-430/315

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-7-14, Interior(1) 4-7-14 to 8-7-14, Exterior(2) 8-7-14 to 13-0-11, Interior(1) 13-0-11 to 16-9-14 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) 1, 5 except (jt=lb) 9=194, 6=194.
6) N/A



November 22,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V5	VALLEY	1	1	I62158881
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:37 2023 Page 1
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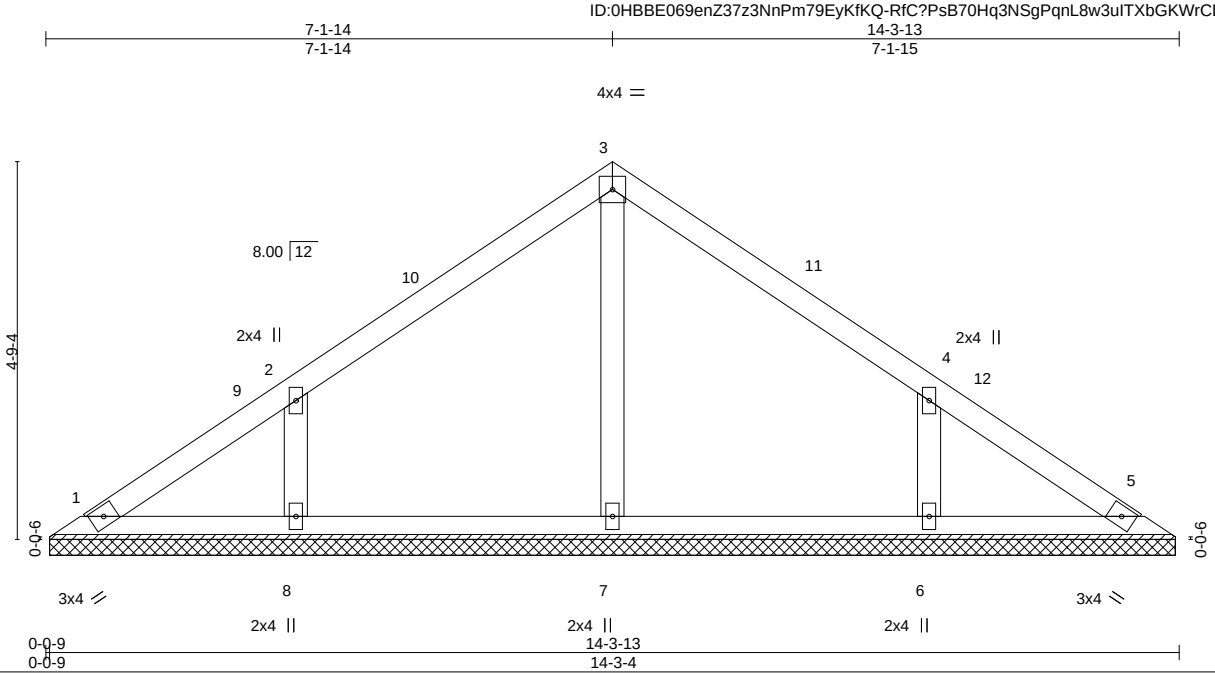

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 56 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 14-2-11.
(lb) - Max Horz 1=-142(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-161(LC 12), 6=-160(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=260(LC 1), 8=361(LC 19), 6=361(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-361/281, 4-6=-361/281

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 7-1-14, Exterior(2) 7-1-14 to 11-6-11, Interior(1) 11-6-11 to 13-9-14 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 except (jt=lb) 8=161, 6=160.
6) N/A

November 22,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V6	VALLEY	1	1	I62158882
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:39 2023 Page 1
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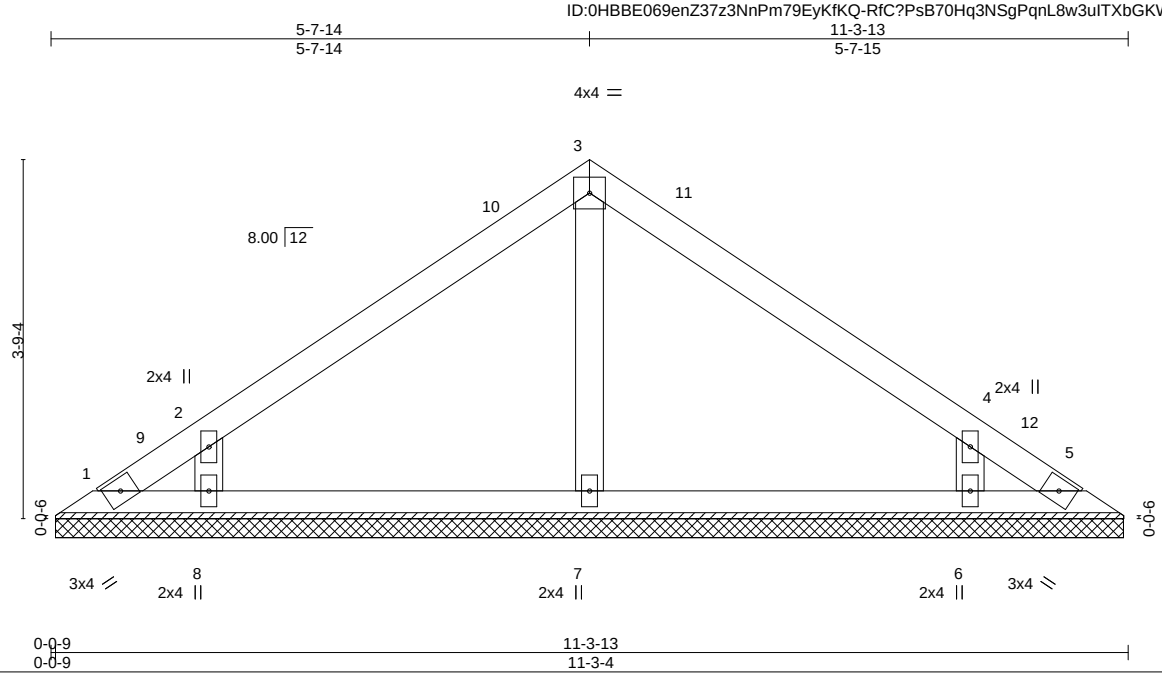

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.14	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	0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 42 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 11-2-11.
(lb) - Max Horz 1=110(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-159(LC 12), 6=-158(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=262(LC 1), 8=346(LC 19), 6=346(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-365/307, 4-6=-365/307

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 5-7-14, Exterior(2) 5-7-14 to 10-0-11, Interior(1) 10-0-11 to 10-9-14 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=159, 6=158.
6) N/A

November 22,2023

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V7	VALLEY	1	1	I62158883
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:40 2023 Page 1
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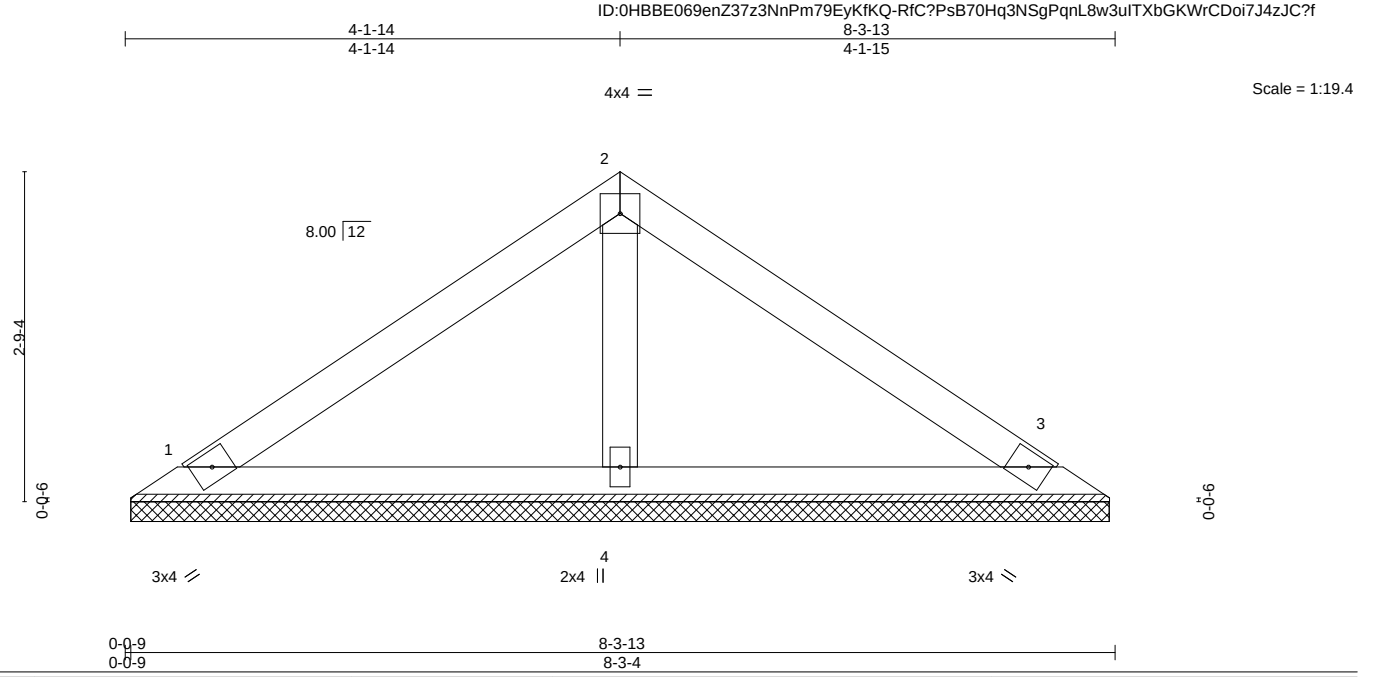

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 29 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=8-2-11, 3=8-2-11, 4=8-2-11
Max Horz 1=-78(LC 8)
Max Uplift 1=-48(LC 12), 3=-55(LC 13), 4=-4(LC 12)
Max Grav 1=159(LC 1), 3=162(LC 20), 4=268(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=150mph Vasd=119mph; 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, 4.
6) N/A

November 22,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 2 Maple Hill
J1024-5768	V8	VALLEY	1	1	I62158884
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Tue Nov 21 14:54:41 2023 Page 1
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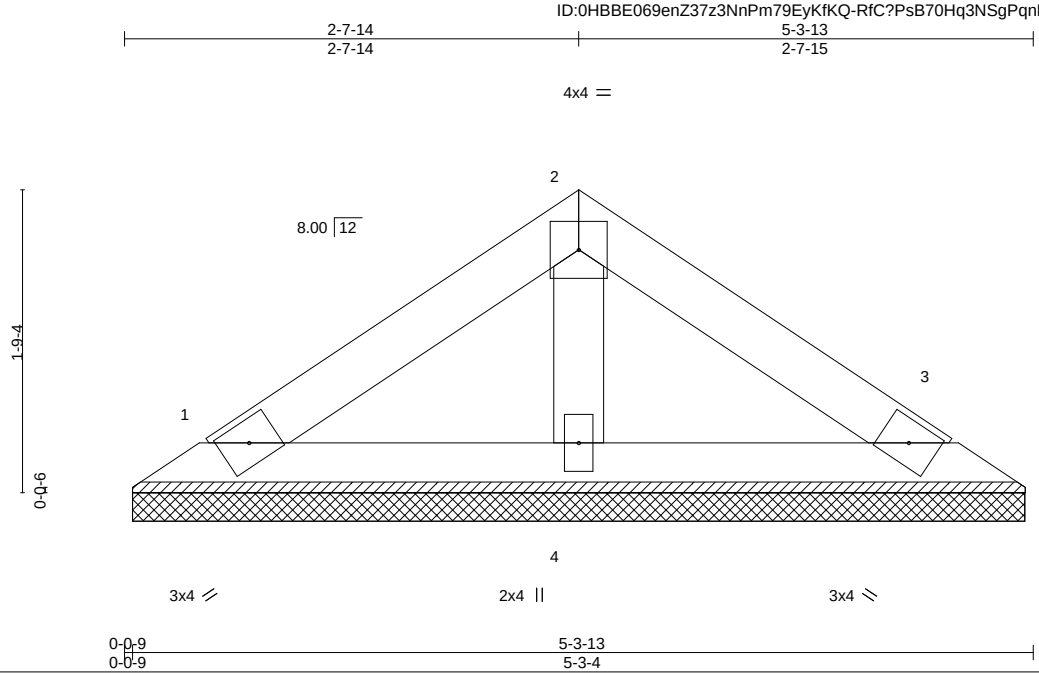


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 17 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 5-3-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-11, 3=5-2-11, 4=5-2-11
Max Horz 1=-46(LC 8)
Max Uplift 1=-28(LC 12), 3=-33(LC 13), 4=-3(LC 12)
Max Grav 1=94(LC 1), 3=96(LC 20), 4=158(LC 1)

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

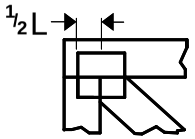
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip 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, 4.
6) N/A

November 22,2023

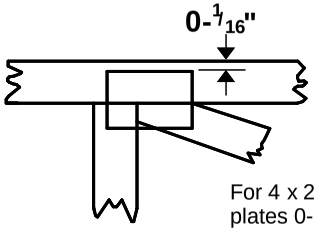
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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

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

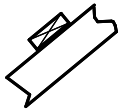
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

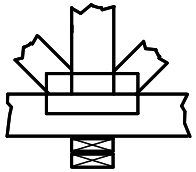
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

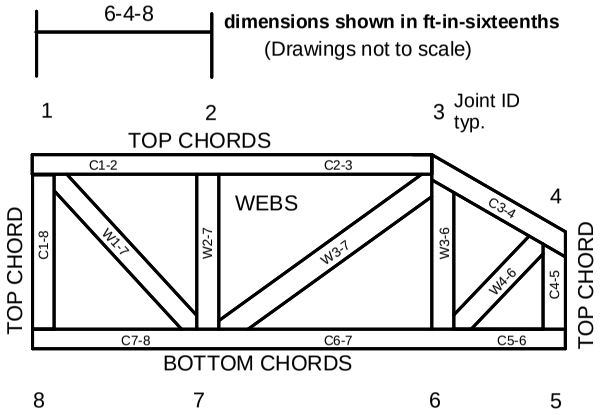


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

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

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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