FRONT & REAR ELEVATIONS

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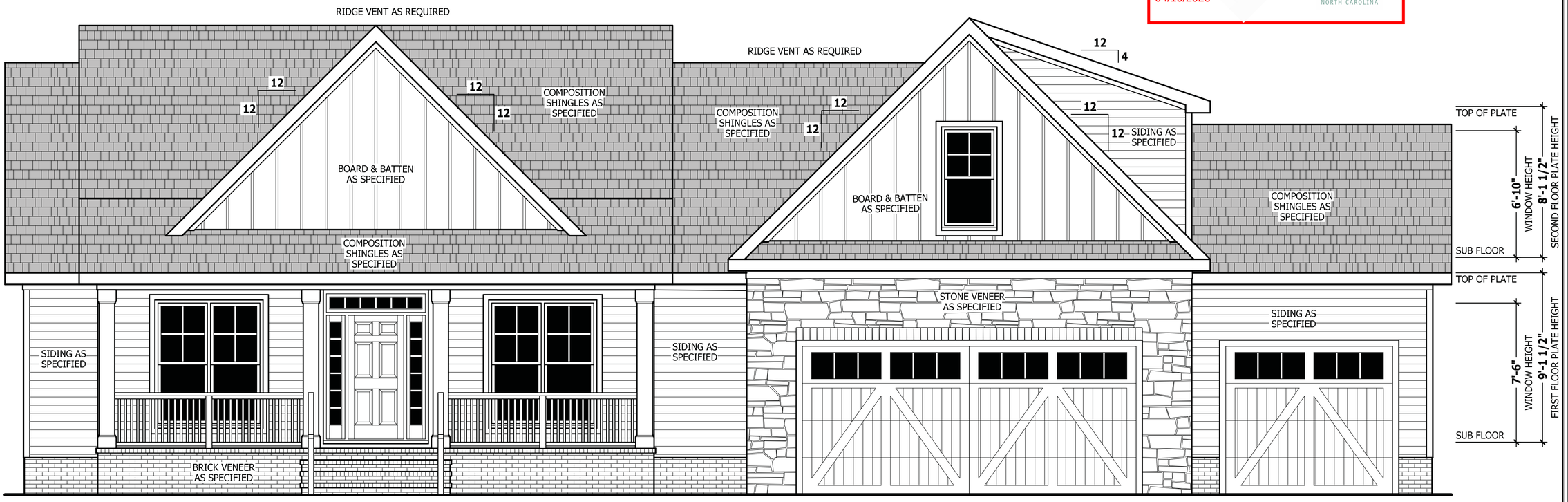


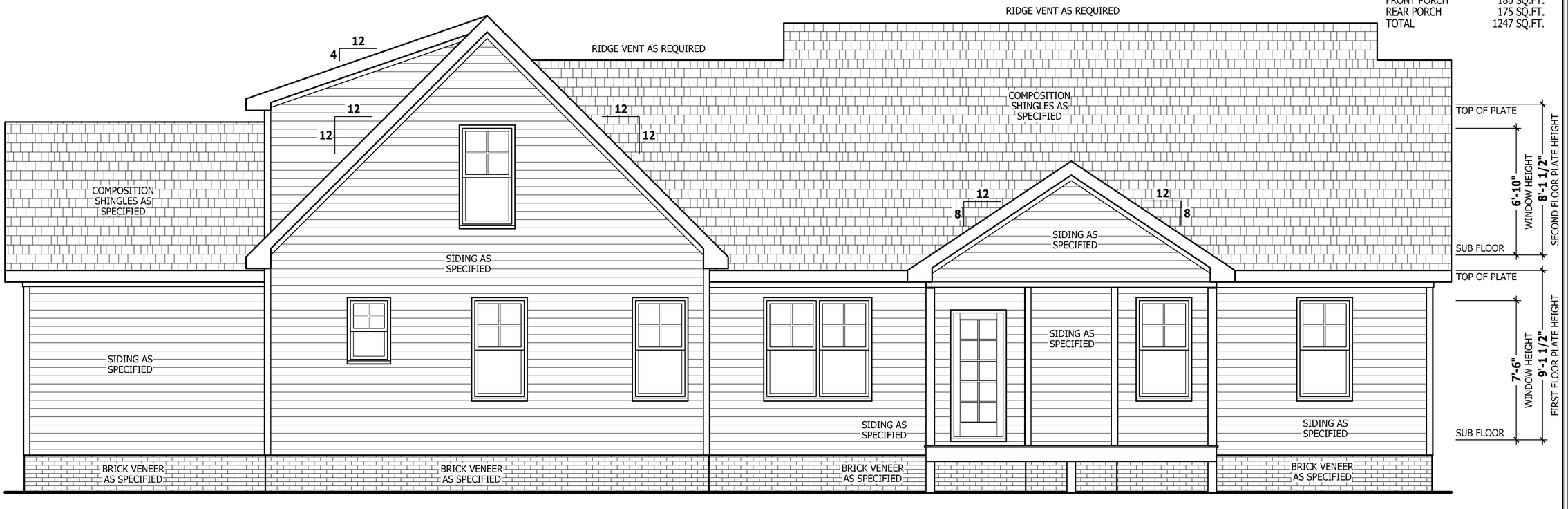
FRONT ELEVATION

SCALE 1/4" = 1'-0"

PLANS DESIGNED TO THE
2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1962 SQ.FT.
SECOND FLOOR	816 SQ.FT.
TOTAL	2778 SQ.FT.
UNHEATED	
GARAGE	892 SQ.FT.
FRONT PORCH	180 SQ.FT.
REAR PORCH	175 SQ.FT.
TOTAL	1247 SQ.FT.



REAR ELEVATION

SCALE 1/4" = 1'-0"

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SQUARE FOOTAGE
HEATED
FIRST FLOOR 1962 SQ.FT.
SECOND FLOOR 816 SQ.FT.
TOTAL 2778 SQ.FT.
UNHEATED
GARAGE 892 SQ.FT.
FRONT PORCH 180 SQ.FT.
REAR PORCH 175 SQ.FT.
TOTAL 1247 SQ.FT.

3/21/2023

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PLANS DESIGNED TO THE
2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE

MEAN ROOF HEIGHT: 18.-8" HEIGHT TO RIDGE: 25'-3"

CLIMATE ZONE	ZONE 3A	ZONE 4A	ZONE 5A
FENESTRATION U-FACTOR	0.35	0.35	0.35
SKYLIGHT U-FACTOR	0.55	0.55	0.55
GLAZED FENESTRATION SHGC	0.30	0.30	0.30
CEILING R-VALUE	38 or 30ci	38 or 30ci	38 or 30ci
WALL R-VALUE	15	15	19
FLOOR R-VALUE	19	19	30
* BASEMENT WALL R-VALUE	5/13	10/15	10/15
** SLAB R-VALUE	0	10	10
* CRAWL SPACE WALL R-VALUE	5/13	10/15	10/19

* "10/13" MEANS R-10 SHEATHING INSULATION OR R-13 CAVITY INSULATION
** INSULATION DEPTH WITH MONOLITHIC SLAB 24" OR FROM INSPECTION GAP TO BOTTOM OF FOOTING; INSULATION DEPTH WITH STEM WALL SLAB 24" OR TO BOTTOM OF FOUNDATION WALL

DESIGNED FOR WIND SPEED OF 115 MPH, 3 SECOND GUST (89 FASTEST MILE) EXPOSURE "B"

COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS								
MEAN ROOF	UP TO 30'		30'-1" TO 35'		35'-1" TO 40'		40'-1" TO 45'	
ZONE 1	13.1	-14.0	13.8	-14.7	14.3	-15.3	14.7	-15.7
ZONE 2	13.0	-13.0	13.7	-13.7	14.2	-14.2	14.6	-14.6
ZONE 3	13.1	-16.0	13.8	-16.8	14.3	-17.4	14.7	-17.9
ZONE 4	14.3	-15.0	15.0	-15.8	15.6	-16.4	16.0	-16.8
ZONE 5	14.3	-19.0	15.0	-20.0	15.6	-20.7	16.0	-21.3

ROOF VENTILATION

SECTION R806
R806.1 Ventilation required. Enclosed *attics* and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Ventilation openings having a least dimension larger than 1/4 inch (6.4 mm) shall be provided with corrosion-resistant wire cloth screening, hardware cloth, or similar material with openings having a least dimension of 1/16 inch (1.6 mm) minimum and 1/4 inch (6.4 mm) maximum. Openings in roof framing members shall conform to the requirements of Section R802.7.
R806.2 Minimum area. The total net free ventilating area shall not be less than 1/150 of the area of the space ventilated except that reduction of the total area to 1/300 is permitted provided that at least 50 percent and not more than 80 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 (914 mm) above the eave or cornice vents with the balance of the required ventilation provided by eave or cornice vents. As an alternative, the net free cross-ventilation area may be reduced to 1/300 when a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
Exceptions:
1. Enclosed attic/rafter spaces requiring less than 1 square foot (0.0929 m2) of ventilation may be vented with continuous soffit ventilation only.
2. Enclosed attic/rafter spaces over unconditioned space may be vented with continuous soffit vent only.

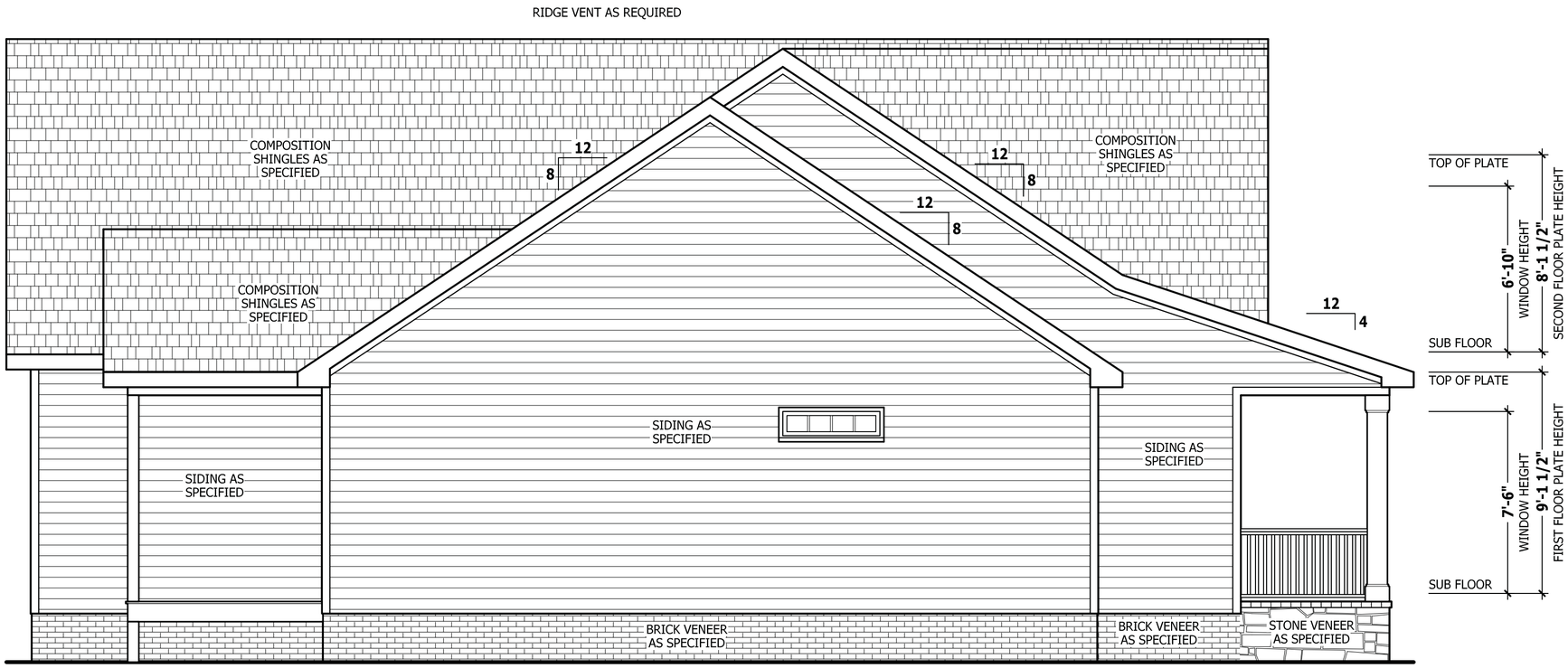
SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,933 SQ.FT.
NET FREE CROSS VENTILATION NEEDED:
WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 19.56 SQ.FT.
WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE; OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 9.78 SQ.FT.

GUARD RAIL NOTES

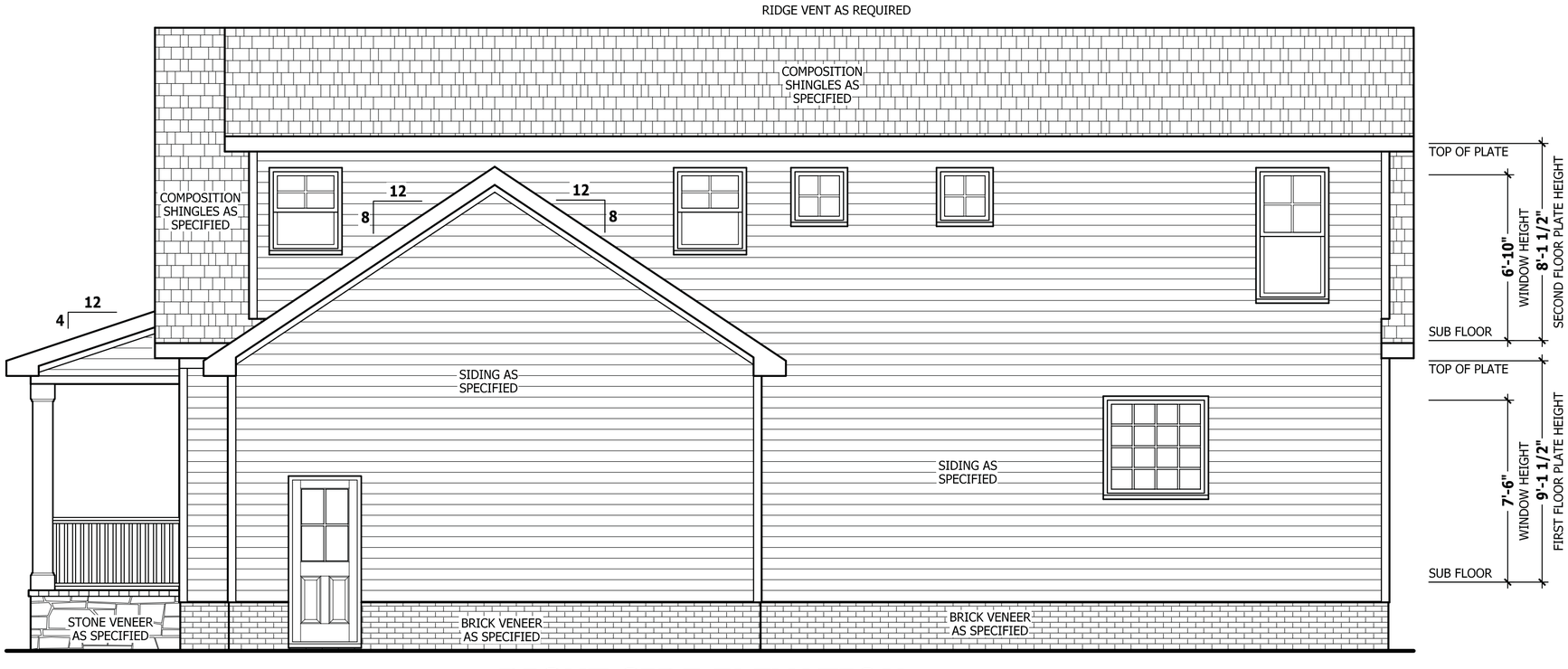
SECTION R312
R312.1 Where required. *Guards* shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*.
R312.2 Height. Required *guards* at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads.
Exceptions:
1. *Guards* on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
2. Where the top of the *guard* also serves as a handrail on the open sides of stairs, the top of the *guard* shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.
R312.3 Opening limitations. Required *guards* shall not have openings from the walking surface to the required *guard* height which allow passage of a sphere 4 inches (102 mm)in diameter.
Exceptions:
1. The triangular openings at the open side of a stair, formed by the riser, tread and bottom rail of a *guard*, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
2. *Guards* on the open sides of stairs shall not have openings which allow passage of a sphere 4 3/8 inches (111 mm) in diameter.

AIR LEAKAGE

Section N1102.4
N1102.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gasketed, weather stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code:
1. Blocking and sealing floor/ceiling systems and under knee walls open to unconditioned or exterior space.
2. Capping and sealing shafts or chases, including flue shafts.
3. Capping and sealing soffit or dropped ceiling areas.



LEFT SIDE ELEVATION
SCALE 1/4" = 1'-0"



RIGHT SIDE ELEVATION
SCALE 1/4" = 1'-0"

LEFT & RIGHT ELEVATIONS
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SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1962 SQ.FT.
SECOND FLOOR	816 SQ.FT.
TOTAL	2778 SQ.FT.
UNHEATED	
GARAGE	892 SQ.FT.
FRONT PORCH	180 SQ.FT.
REAR PORCH	175 SQ.FT.
TOTAL	1247 SQ.FT.

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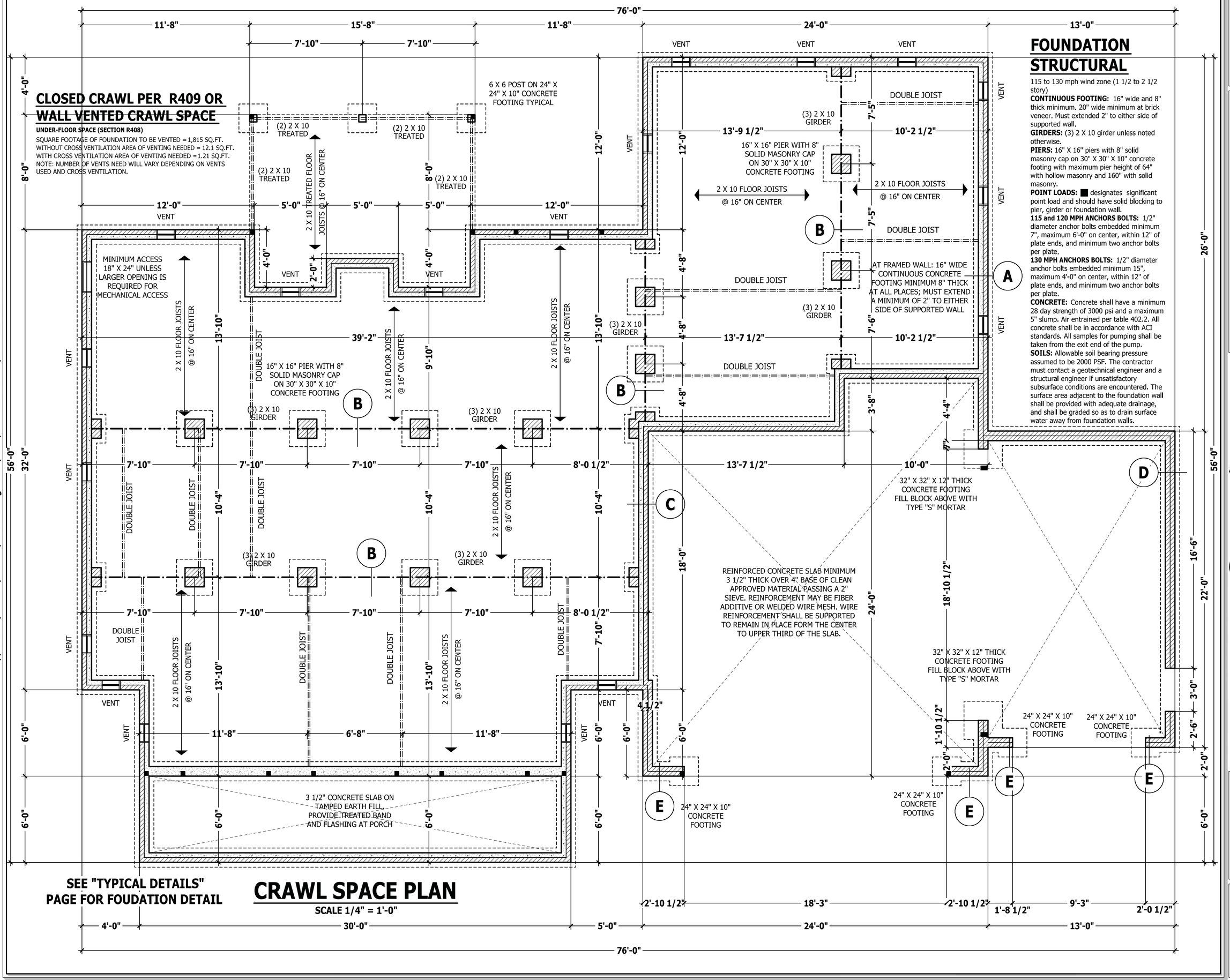

CLOSED CRAWL PER R409 OR WALL VENTED CRAWL SPACE

UNDER-FLOOR SPACE (SECTION R408)

SQUARE FOOTAGE OF FOUNDATION TO BE VENTED = 1,815 SQ.FT.
WITHOUT CROSS VENTILATION AREA OF VENTING NEEDED = 12.1 SQ.FT.
WITH CROSS VENTILATION AREA OF VENTING NEEDED = 1.21 SQ.FT.
NOTE: NUMBER OF VENTS NEED WILL VARY DEPENDING ON VENTS USED AND CROSS VENTILATION.

FOUNDATION STRUCTURAL

115 to 130 mph wind zone (1 1/2 to 2 1/2 story)

CONTINUOUS FOOTING: 16" wide and 8" thick minimum. 20" wide minimum at brick veneer. Must extended 2" to either side of supported wall.

GIRDERS: (3) 2 X 10 girder unless noted otherwise.

PIERS: 16" X 16" piers with 8" solid masonry cap on 30" X 30" X 10" concrete footing with maximum pier height of 64" with hollow masonry and 160" with solid masonry.

POINT LOADS: ■ designates significant point load and should have solid blocking to pier, girder or foundation wall.

115 and 120 MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 7", maximum 6'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

130 MPH ANCHORS BOLTS: 1/2" diameter anchor bolts embedded minimum 15", maximum 4'-0" on center, within 12" of plate ends, and minimum two anchor bolts per plate.

CONCRETE: Concrete shall have a minimum 28 day strength of 3000 psi and a maximum 5" slump. Air entrained per table 402.2. All concrete shall be in accordance with ACI standards. All samples for pumping shall be taken from the exit end of the pump.

SOILS: Allowable soil bearing pressure assumed to be 2000 PSF. The contractor must contact a geotechnical engineer and a 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.

SEE "TYPICAL DETAILS" PAGE FOR FOUDATION DETAIL

CRAWL SPACE PLAN

SCALE 1/4" = 1'-0"

FOUNDATION PLAN

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SQUARE FOOTAGE

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REAR PORCH	175 SQ.FT.
TOTAL	1247 SQ.FT.

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FIRST FLOOR PLAN
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WALL THICKNESSES

Exterior walls and walls adjacent to a garage area are drawn as 4" or as noted 2 X 6 are drawn as 6" to include 1/2" sheathing or gypsum. Subtract 1/2" for stud face.
Interior walls are drawn as 3 1/2" or as noted 2 X 6 are drawn as 5 1/2", and do not include gypsum.

SQUARE FOOTAGE

HEATED	
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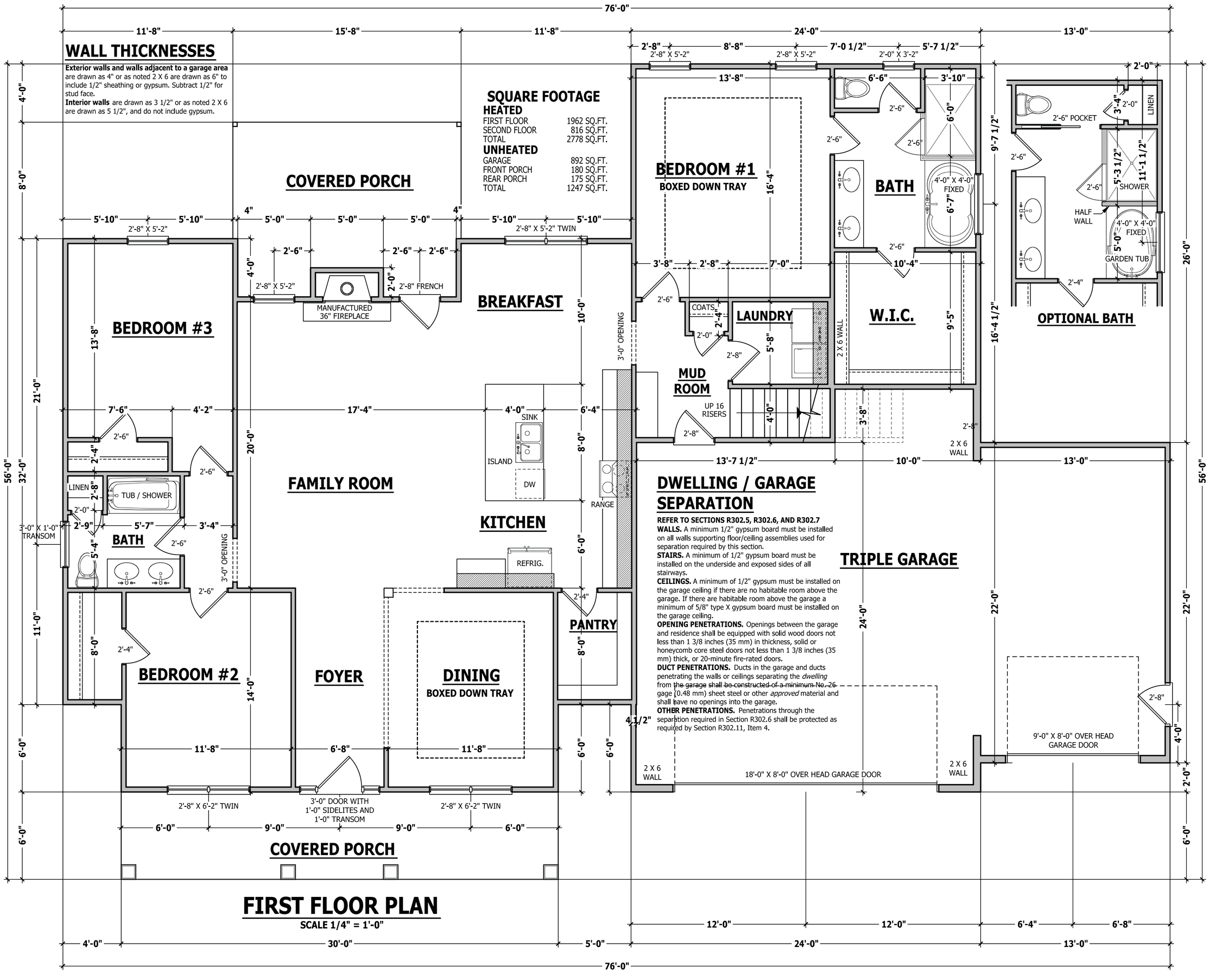

DWELLING / GARAGE SEPARATION

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.

FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"

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REAR PORCH	175 SQ.FT.
TOTAL	1247 SQ.FT.

3/21/2023

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EXTERIOR HEADERS

- (2) 2 X 6 WITH 1 JACK STUD EACH END UNLESS NOTED OTHERWISE
- KING STUDS EACH END PER TABLE BELOW

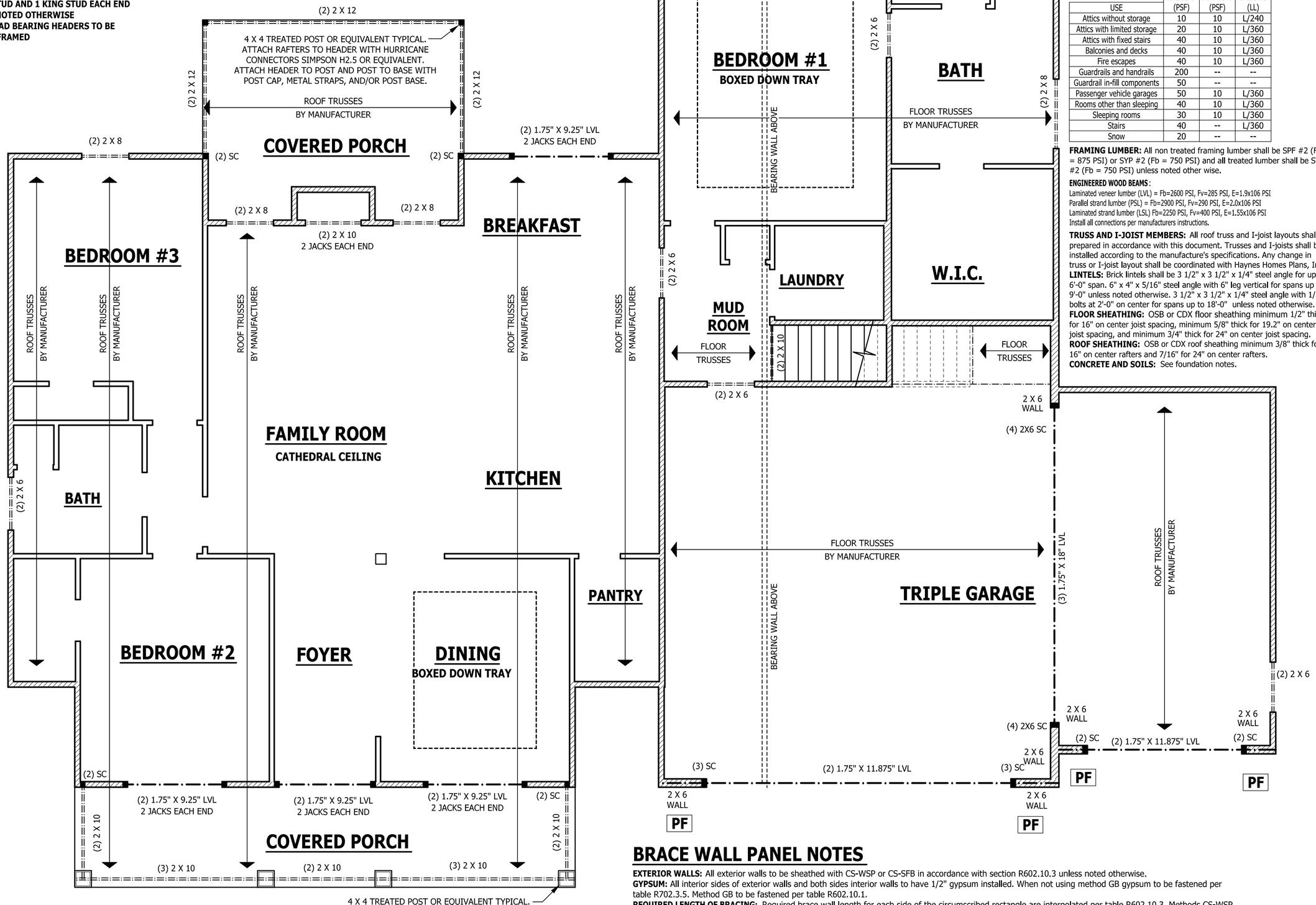
HEADER SPAN	< 3'	3'-4'	4'-8'	8'-12'	12'-16'
KING STUD(S)	1	2	3	5	6

INTERIOR HEADERS

- LOAD BEARING HEADERS (2) 2 X 6 WITH 1 JACK STUD AND 1 KING STUD EACH END UNLESS NOTED OTHERWISE
- NON LOAD BEARING HEADERS TO BE LADDER FRAMED

ROOF TRUSS REQUIREMENTS

TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins.
KNEE WALL AND CEILING HEIGHTS. All finished knee wall heights and ceiling heights are shown furred down 10" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these drawings the finished square footage may vary. Any discrepancy must be brought to Haynes Home Plans, Inc. attention, so a suitable solution can be reached before construction begins. Any variation due to these conditions not being met is the reasonability of the truss manufacturer.
ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics.
BEARING. All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.
Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.



FIRST FLOOR STRUCTURAL

SCALE 1/4" = 1'-0"

STRUCTURAL NOTES

All construction shall conform to the latest requirements of the 2018 North Carolina Residential Building Code, plus all local codes and regulations. This document in no way shall be construed to supersede the code.
JOB SITE PRACTICES AND SAFETY: Haynes Home Plans, Inc. assumes no liability for contractors practices and procedures or safety program. Haynes Home Plans, Inc. takes no responsibility for the contractor's failure to carry out the construction work in accordance with the contract documents. All members shall be framed, anchored, and braced in accordance with good construction practice and the building code.

DESIGN LOADS

USE	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (LL)
Attics without storage	10	10	L/240
Attics with limited storage	20	10	L/360
Attics with fixed stairs	40	10	L/360
Balconies and decks	40	10	L/360
Fire escapes	40	10	L/360
Guardrails and handrails	200	--	--
Guardrail in-fill components	50	--	--
Passenger vehicle garages	50	10	L/360
Rooms other than sleeping	40	10	L/360
Sleeping rooms	30	10	L/360
Stairs	40	--	L/360
Snow	20	--	--

FRAMING LUMBER: All non treated framing lumber shall be SPF #2 (Fb = 875 PSI) or SYP #2 (Fb = 750 PSI) and all treated lumber shall be SYP #2 (Fb = 750 PSI) unless noted other wise.
ENGINEERED WOOD BEAMS:
Laminated veneer lumber (LVL) = Fb=2600 PSI, Fv=285 PSI, E=1.9x106 PSI
Parallel strand lumber (PSL) = Fb=2900 PSI, Fv=290 PSI, E=2.0x106 PSI
Laminated strand lumber (LSL) Fb=2250 PSI, Fv=400 PSI, E=1.55x106 PSI
Install all connections per manufacturers instructions.
TRUSS AND I-JOIST MEMBERS: All roof truss and I-joist layouts shall be prepared in accordance with this document. Trusses and I-joists shall be installed according to the manufacture's specifications. Any change in truss or I-joist layout shall be coordinated with Haynes Homes Plans, Inc.
LINTELS: Brick lintels shall be 3 1/2" x 3 1/2" x 1/4" steel angle for up to 6'-0" span. 6" x 4" x 5/16" steel angle with 6" leg vertical for spans up to 9'-0" unless noted otherwise. 3 1/2" x 3 1/2" x 1/4" steel angle with 1/2" bolts at 2'-0" on center for spans up to 18'-0" unless noted otherwise.
FLOOR SHEATHING: OSB or CDX floor sheathing minimum 1/2" thick for 16" on center joist spacing, minimum 5/8" thick for 19.2" on center joist spacing, and minimum 3/4" thick for 24" on center joist spacing.
ROOF SHEATHING: OSB or CDX roof sheathing minimum 3/8" thick for 16" on center rafters and 7/16" for 24" on center rafters.
CONCRETE AND SOILS: See foundation notes.

BRACE WALL PANEL NOTES

EXTERIOR WALLS: All exterior walls to be sheathed with CS-WSP or CS-SFB in accordance with section R602.10.3 unless noted otherwise.
GYPSUM: All interior sides of exterior walls and both sides interior walls to have 1/2" gypsum installed. When not using method GB gypsum to be fastened per table R702.3.5. Method GB to be fastened per table R602.10.1.
REQUIRED LENGTH OF BRACING: Required brace wall length for each side of the circumscribed rectangle are interpolated per table R602.10.3. Methods CS-WSP and CS-SFB contribute their actual length. Method GB contributes 0.5 it's actual length. Method PF contributes 1.5 times its actual length.
HD: 800 lbs hold down hold down device fastened to the edge of the brace wall panel closets to the corner.
Methods Per Table R602.10.1
CS-WSP: Shall be minimum 3/8" OSB or CDX nailed at 6" on center at edges and 12" on center at intermediate supports with 6d common nails or 8d(2 1/2" long x 0.113" diameter).
CS-SFB: Shall be minimum 1/2" structural fiber board nailed at 3" on center at edges and 3" on center at intermediate supports with 1 1/2" long x 0.12" diameter galvanized roofing nails.
GB: Interior walls show as GB are to have minimum 1/2" gypsum board on both sides of the wall fastened at 7" on center at edges and 7" on center at intermediate supports with minimum 5d cooler nails or #6 screws.
PF: Portal fame per figure R602.10.1

FIRST FLOOR STRUCTURAL | **Paxton**

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SQUARE FOOTAGE

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TOTAL	2778 SQ.FT.
UNHEATED	
GARAGE	892 SQ.FT.
FRONT PORCH	180 SQ.FT.
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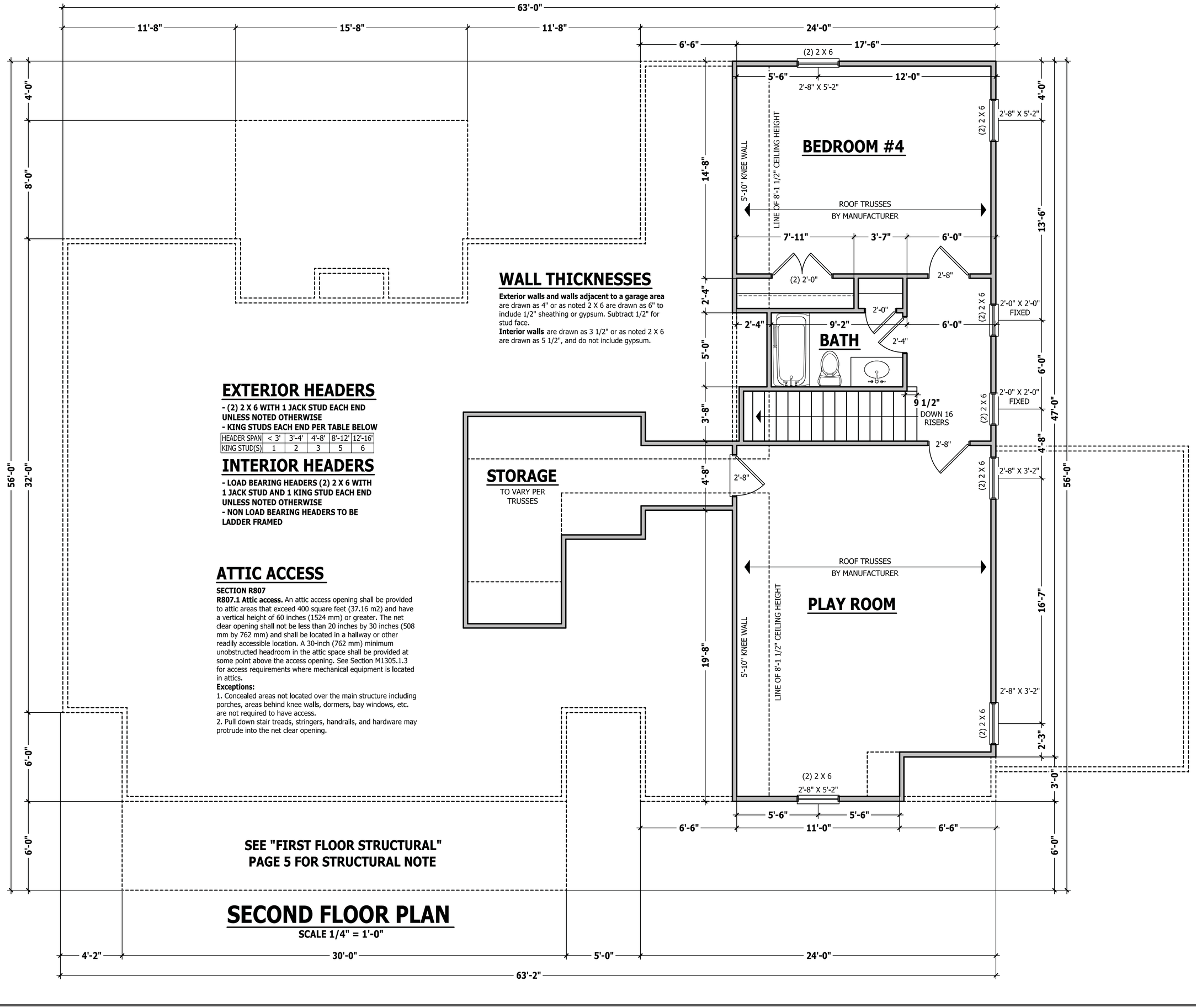

WALL THICKNESSES

Exterior walls and walls adjacent to a garage area are drawn as 4" or as noted 2 X 6 are drawn as 6" to include 1/2" sheathing or gypsum. Subtract 1/2" for stud face.
Interior walls are drawn as 3 1/2" or as noted 2 X 6 are drawn as 5 1/2", and do not include gypsum.

EXTERIOR HEADERS

- (2) 2 X 6 WITH 1 JACK STUD EACH END UNLESS NOTED OTHERWISE
- KING STUDS EACH END PER TABLE BELOW

HEADER SPAN	< 3'	3'-4'	4'-8'	8'-12'	12'-16'
KING STUD(S)	1	2	3	5	6

INTERIOR HEADERS

- LOAD BEARING HEADERS (2) 2 X 6 WITH 1 JACK STUD AND 1 KING STUD EACH END UNLESS NOTED OTHERWISE
- NON LOAD BEARING HEADERS TO BE LADDER FRAMED

ATTIC ACCESS

SECTION R807
R807.1 Attic access. An attic access opening shall be provided to attic areas that exceed 400 square feet (37.16 m2) and have a vertical height of 60 inches (1524 mm) or greater. The net clear opening shall not be less than 20 inches by 30 inches (508 mm by 762 mm) and shall be located in a hallway or other readily accessible location. A 30-inch (762 mm) minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics.
Exceptions:
1. Concealed areas not located over the main structure including porches, areas behind knee walls, dormers, bay windows, etc. are not required to have access.
2. Pull down stair treads, stringers, handrails, and hardware may protrude into the net clear opening.

SEE "FIRST FLOOR STRUCTURAL"
PAGE 5 FOR STRUCTURAL NOTE

SECOND FLOOR PLAN

SCALE 1/4" = 1'-0"

SECOND FLOOR PLAN
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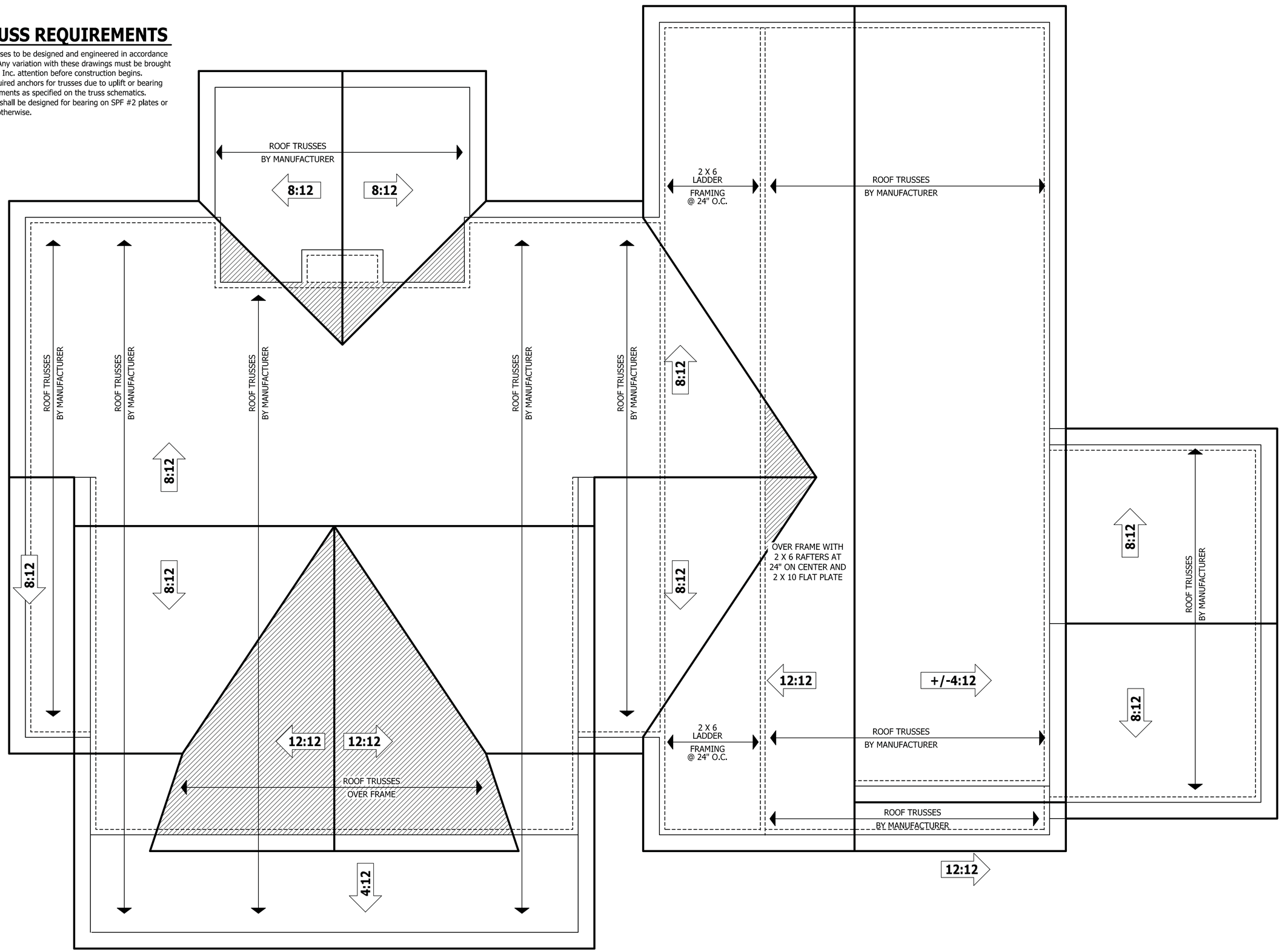
ROOF TRUSS REQUIREMENTS

TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins.
ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics.
BEARING. All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.



ROOF PLAN

SCALE 1/4" = 1'-0"

ROOF PLAN

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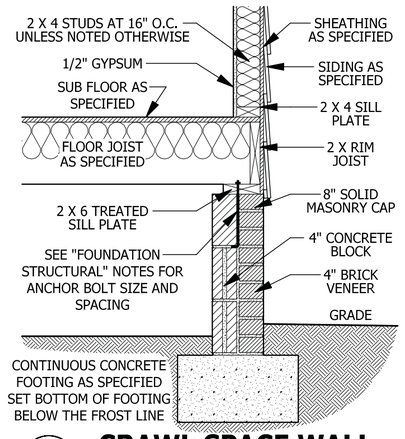
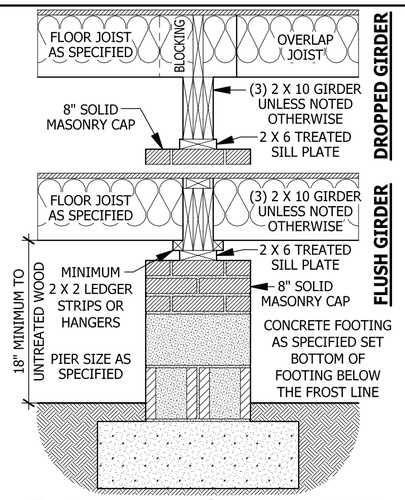
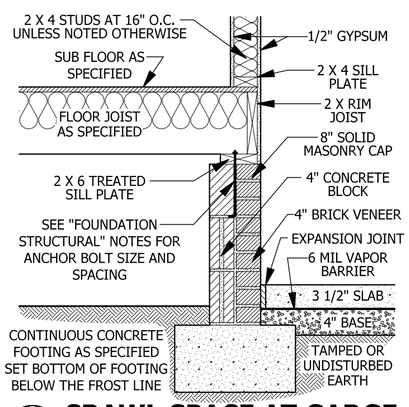


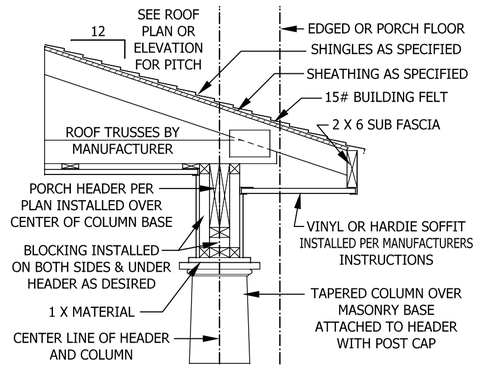
A **CRAWL SPACE WALL**
SCALE 3/4" = 1'-0"



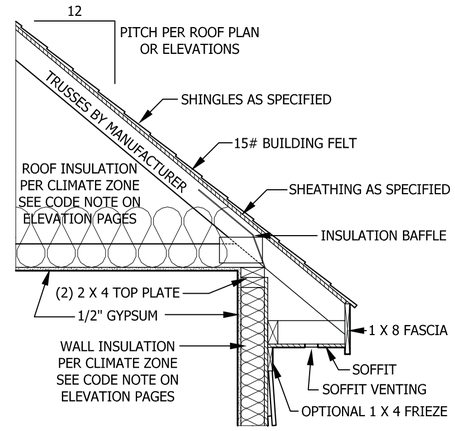
B **DROPPED/ FLUSH PIER**
SCALE 3/4" = 1'-0"

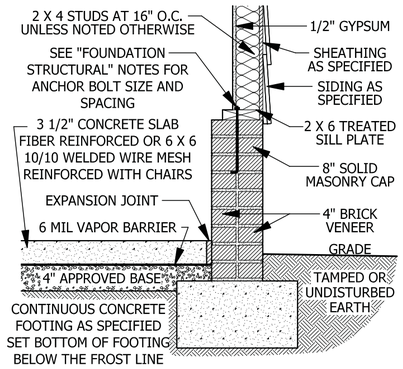


C **CRAWL SPACE AT GARGE**
SCALE 3/4" = 1'-0"

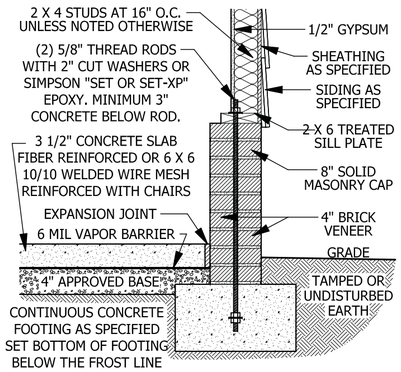


PORCH HEADER WITH TAPERED COLUMN
SCALE 3/4" = 1'-0"

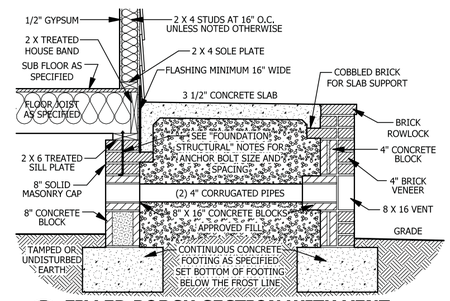




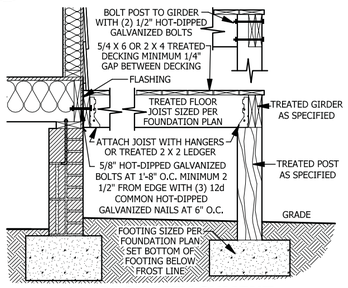
D **GARAGE STEM WALL**
SCALE 3/4" = 1'-0"



E **<48" GARAGE WING WALL**
SCALE 3/4" = 1'-0"



F **FILLED PORCH SECTION WITH VENT**
SCALE 1/2" = 1'-0"



G **DECK ATTACHMENT**
SCALE 1/2" = 1'-0"

DECK STAIR NOTES

SECTION AM110
AM110.1 Stairs shall be constructed per Figure AM110. Stringer spans shall be no greater than 7 foot span between supports. Spacing between stringers shall be based upon decking material used per AM107.1. Each Stringer shall have minimum 3 1/2 inches between step cut and back of stringer. If used, suspended headers shall shall be attached with 3/8 inch galvanized bolts with nuts and washers to securely support stringers at the top.

DECK BRACING

SECTION AM109
AM109.1 Deck bracing. Decks shall be braced to provide lateral stability. The following are acceptable means to provide lateral stability.
AM109.1.1. When the deck floor height is less than 4'-0" above finished grade per Figure AM109 and the deck is attached to the structure in accordance with Section AM104, lateral bracing is not required.
AM109.1.2. 4 x 4 wood knee braces may be provided on each column in both directions. The knee braces shall attach to each post at a point not less than 1/3 of the post length from the top of the post, and the braces shall be angled between 45 degrees and 60 degrees from the horizontal. Knee braces shall be bolted to the post and the girder/double band with one 5/8 inch hot dipped galvanized bolt with nut and washer at both ends of the brace per Figure AM109.1
AM109.1.3. For freestanding decks without knee braces or diagonal bracing, lateral stability may be provided by embedding the post in accordance with Figure AM109.2 and the following:

POST SIZE	MAX TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4 X 4	48 SF	4'-0"	2'-6"	1'-0"
6 X 6	120 SF	6'-0"	3'-6"	1'-8"

AM109.1.4. 2 x 6 diagonal vertical cross bracing may be provided in two perpendicular directions for freestanding decks or parallel to the structure at the exterior column line for attached decks. The 2 x 6's shall be attached to the posts with one 5/8 inch hot dipped galvanized bolt with nut and washer at each end of each bracing member per Figure AM109.3.
AM109.1.5. For embedment of piles in Coastal Regions, see Chapter 45.

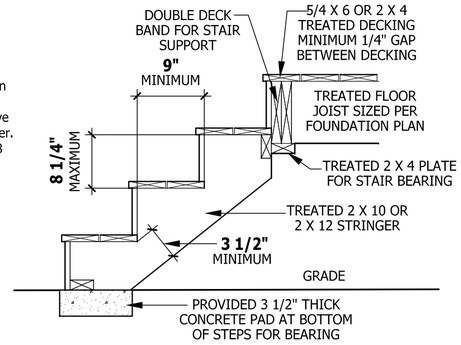
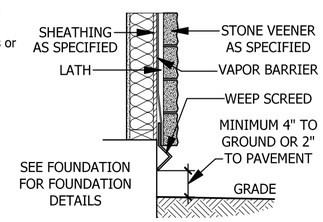


FIGURE AM110
TYPICAL DECK STAIR DETAIL
SCALE 3/4" = 1'-0"



WEEP SCREED
SCALE 3/4" = 1'-0"

WEEP SCREEDS

All weep screeds and stone veneer to be installed per manufactures instructions and per the 2012 North Carolina Residential Building code.
R703.6.2.1 - A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 31/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas and shall be of a type that will allow trapped water to drain to the exterior of the building. The weather-resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.

SMOKE ALARMS

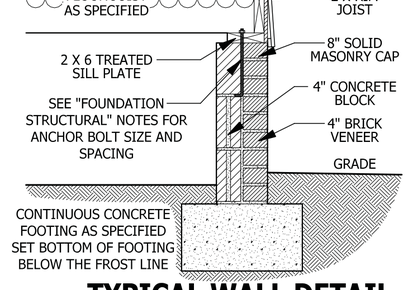
SECTION R314
R314.1 Smoke detection and notification. All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning *equipment* provisions of NFPA 72.
R314.2 Smoke detection systems. Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner. The system shall be monitored by an *approved* supervising station and be maintained in accordance with NFPA 72.
Exception: Where smoke alarms are provided meeting the requirements of Section R314.4.
R314.3 Location. Smoke alarms shall be installed in the following locations:
1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional *story* of the *dwelling,* including *basements* and habitable attics (finished) but not including crawl spaces, uninhabitable (unfinished) attics and uninhabitable (unfinished) attic-stories. In *dwellings* or *dwelling units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full *story* below the upper level.
When more than one smoke alarm is required to be installed within an individual *dwelling* unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit.
R314.4 Power source. Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected.

CARBON MONOXIDE ALARMS

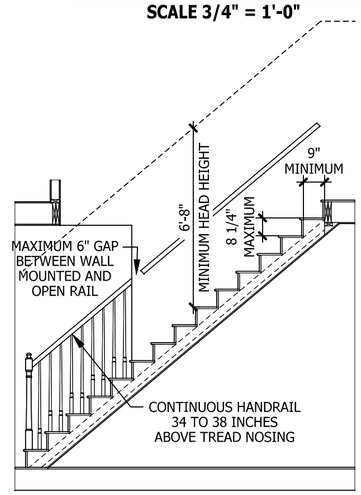
SECTION R315
R315.1 Carbon monoxide alarms. In new construction, dwelling units shall be provided with an approved carbon monoxide alarm installed outside of each separate sleeping area in the immediate vicinity of the bedroom(s) as directed by the alarm manufacturer.
R315.2 Where required in existing dwellings. In existing dwellings, where interior alterations, repairs, fuel-fired appliance replacements, or additions requiring a permit occurs, or where one or more sleeping rooms are added or created, carbon monoxide alarms shall be provided in accordance with Section 315.1.
R315.3 Alarm requirements. The required carbon monoxide alarms shall be audible in all bedrooms over background noise levels with all intervening doors closed. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

STAIRWAY NOTES

R311.7
R311.7.2 Headroom. The minimum headroom in all parts of the stairway shall not be less than 6 feet 8 inches (2032 mm) measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.
R311.7.4 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.
R311.7.4.1 Riser height. The maximum riser height shall be 8 1/4 inches (210 mm). The riser shall be measured vertically between leading edges of the adjacent treads.
R311.7.4.2 Tread depth. The minimum tread depth shall be 9 inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. Winder treads shall have a minimum tread depth of 9 inches (229 mm) measured as above at a point 12 inches (305 mm) from the side where the treads are narrower. Winder treads shall have a minimum tread depth of 4 inches (102 mm) at any point.
R311.7.4.3 Profile. The radius of curvature at the nosing shall be no greater than 9/16 inch (14 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers.
R311.7.7 Handrails. Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.
R311.7.7.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm)and not more than 38 inches (965 mm).
Exceptions:
1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.
R311.7.7.2 Continuity. Handrails for stairways shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall shall have a space of not less than 11/2 inch (38 mm) between the wall and the handrails.
Exceptions:
1. Handrails shall be permitted to be interrupted by a newel post.
2. The use of a volute, turnout, starting easing or starting newel shall be allowed over the lowest tread.
3. Two or more separate rails shall be considered continuous if the termination of the rails occurs within 6 inches (152 mm) of each other. If transitioning between a wall-mounted handrail and a guardrail/handrail, the wall-mounted rail must return into the wall.



TYPICAL WALL DETAIL
SCALE 3/4" = 1'-0"



TYPICAL STAIR DETAIL
SCALE 1/4" = 1'-0"

PURCHASER MUST VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE CONSTRUCTION BEGINS.
HAYNES HOME PLANS, INC. ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND PROCEDURES.
CODES AND CONDITIONS MAY VARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR ENGINEER SHOULD BE CONSULTED BEFORE CONSTRUCTION.
THESE DRAWING ARE INSTRUMENTS OF SERVICE AND AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER.

TYPICAL DETAILS
Paxton

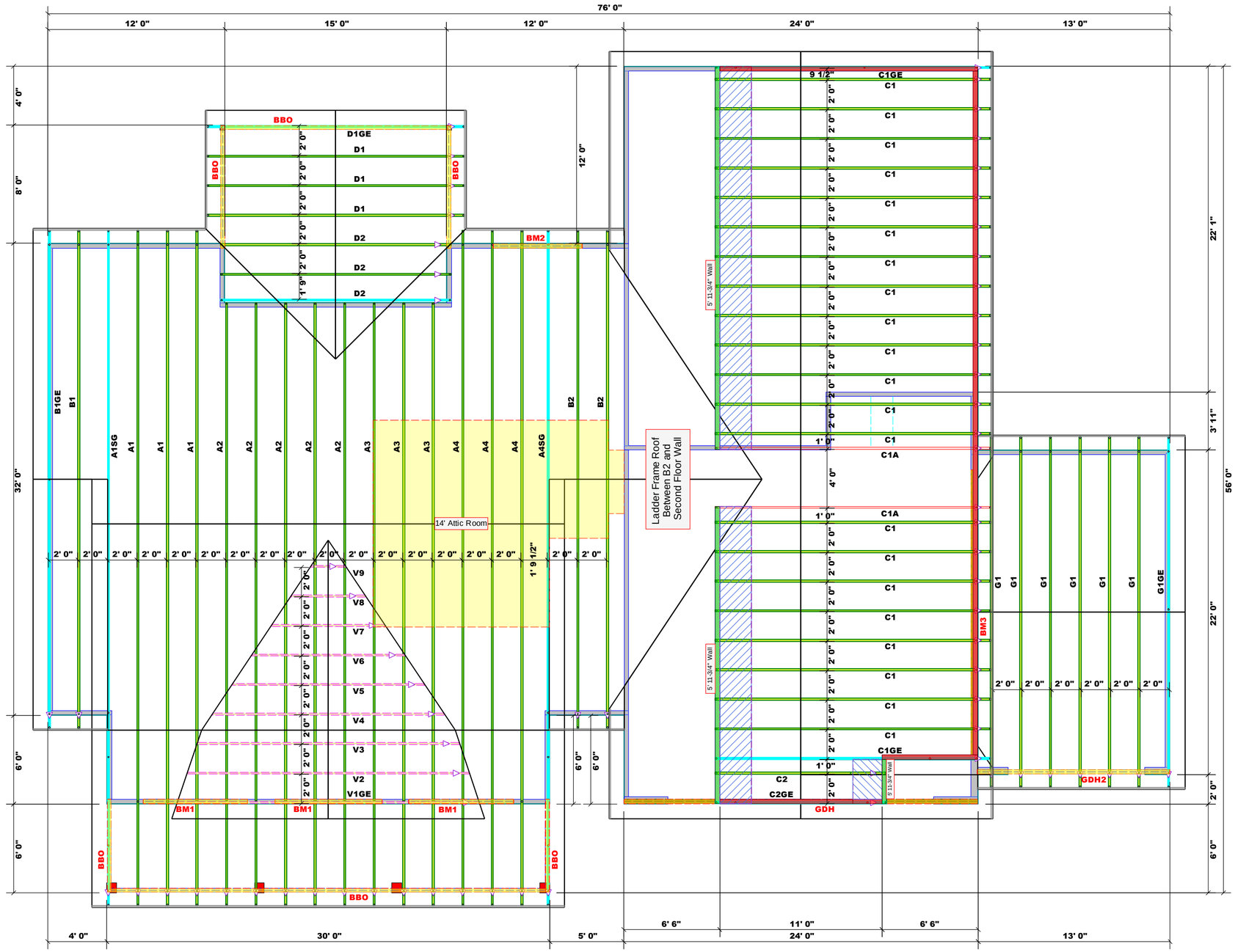
Glover Design Build
Gloverdesignbuild@gmail.com
HAYNES HOME PLANS, INC.
P.O. BOX 702, WAKE FOREST, NC 27588 919-435-6180 FAX 1-866-491-0396

SQUARE FOOTAGE

HEATED	
FIRST FLOOR	1962 SQ.FT.
SECOND FLOOR	816 SQ.FT.
TOTAL	2778 SQ.FT.
UNHEATED	
GARAGE	892 SQ.FT.
FRONT PORCH	180 SQ.FT.
REAR PORCH	175 SQ.FT.
TOTAL	1247 SQ.FT.

3/21/2023

230312B



Products				
PlotID	Length	Product	Plies	Net Qty
BM1	8' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	6
BM2	6' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
BM3	20' 0"	1-3/4"x 23-7/8" LVL Kerto-S	3	3
GDH	24' 0"	1-3/4"x 16" LVL Kerto-S	2	2
GDH2	13' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

1 Truss Placement Plan
Scale: 3/16"=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

Roof Area	= 4664.19 sq.ft.
Ridge Line	= 134.33 ft.
Hip Line	= 0 ft.
Horiz. OH	= 248.24 ft.
Raked OH	= 263.34 ft.
Decking	= 160 sheets

Hatch Legend
5' 11-3/4" Walls
Second Floor Walls
Vaulted Ceiling
Drop Beam

All Walls Shown Are Considered Load Bearing

▲= 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) 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	Glover Design Build
JOB NAME	Lot 19 Purfoy Place
PLAN	Paxton / 36RF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0922-4569
CITY / CO.	Fuquay Varina / Harnett
ADDRESS	438 Lambert Lane
MODEL	Roof
DATE REV.	03/27/23
DRAWN BY	Jonathan Landry
SALES REP.	Lenny Norris

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0922-4569
Lot 19 Purfoy Place

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: I57394434 thru I57394461

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

North Carolina COA: C-0844

March 27,2023

Gilbert, Eric

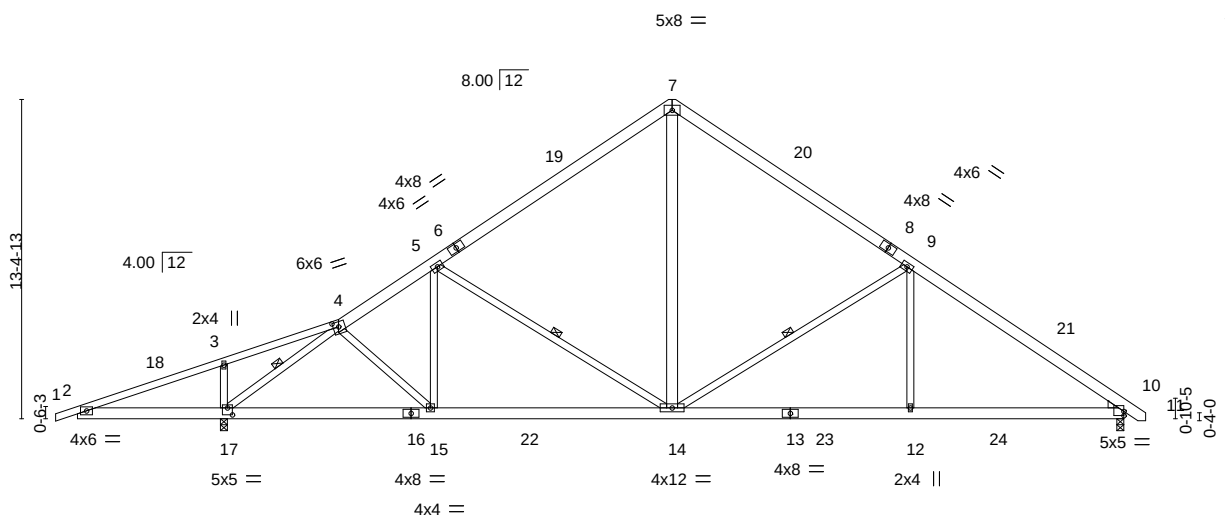
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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 19 Purfoy Place
J0922-4569	A1	ROOF SPECIAL	3	1	I57394434
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:45:57 2023 Page 1
ID:X5az_D23vLwLuiTNLuG6bHyGfxb-ptt1xlnzXl6eVhhv?BsJzrrvbXefDJ8UTai5hXzWnde

-0-11-0 6-1-12 10-11-8 14-11-8 24-11-8 34-11-8 43-11-0 44-10-0
0-11-0 6-1-12 4-9-12 4-0-0 10-0-0 10-0-0 8-11-8 0-11-0

Scale: 1/8"=1'



6-1-12 14-11-8 24-11-8 34-11-8 43-11-0
6-1-12 8-9-12 10-0-0 10-0-0 8-11-8

Plate Offsets (X,Y)-- [4:0-2-12,0-2-8], [10:0-0-0,0-2-2], [17:0-2-8,0-3-8]

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	0.46	Vert(LL)	-0.11	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.20	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	14-15	>999	240	Weight: 317 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
7-14: 2x6 SP No.1
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-8-8 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 4-17, 5-14, 9-14

REACTIONS. (size) 17=0-3-8, 10=0-3-8
Max Horz 17=428(LC 11)
Max Uplift 17=-407(LC 12), 10=-272(LC 13)
Max Grav 17=2101(LC 1), 10=1741(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1030/770, 3-4=-898/721, 4-5=-2076/500, 5-7=-1695/602, 7-9=-1704/634, 9-10=-2482/689
BOT CHORD 2-17=-663/1045, 15-17=-282/1769, 14-15=-288/1972, 12-14=-366/1898, 10-12=-366/1898
WEBS 3-17=-403/327, 4-17=-2428/1189, 4-15=-285/334, 5-15=-63/345, 5-14=-812/325, 7-14=-277/1180, 9-14=-1074/470, 9-12=0/587

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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 24-11-8, Exterior(2) 24-11-8 to 29-4-5, Interior(1) 29-4-5 to 44-8-1 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 407 lb uplift at joint 17 and 272 lb uplift at joint 10.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	A1SG	GABLE	1	1	I57394435
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:00 2023 Page 1

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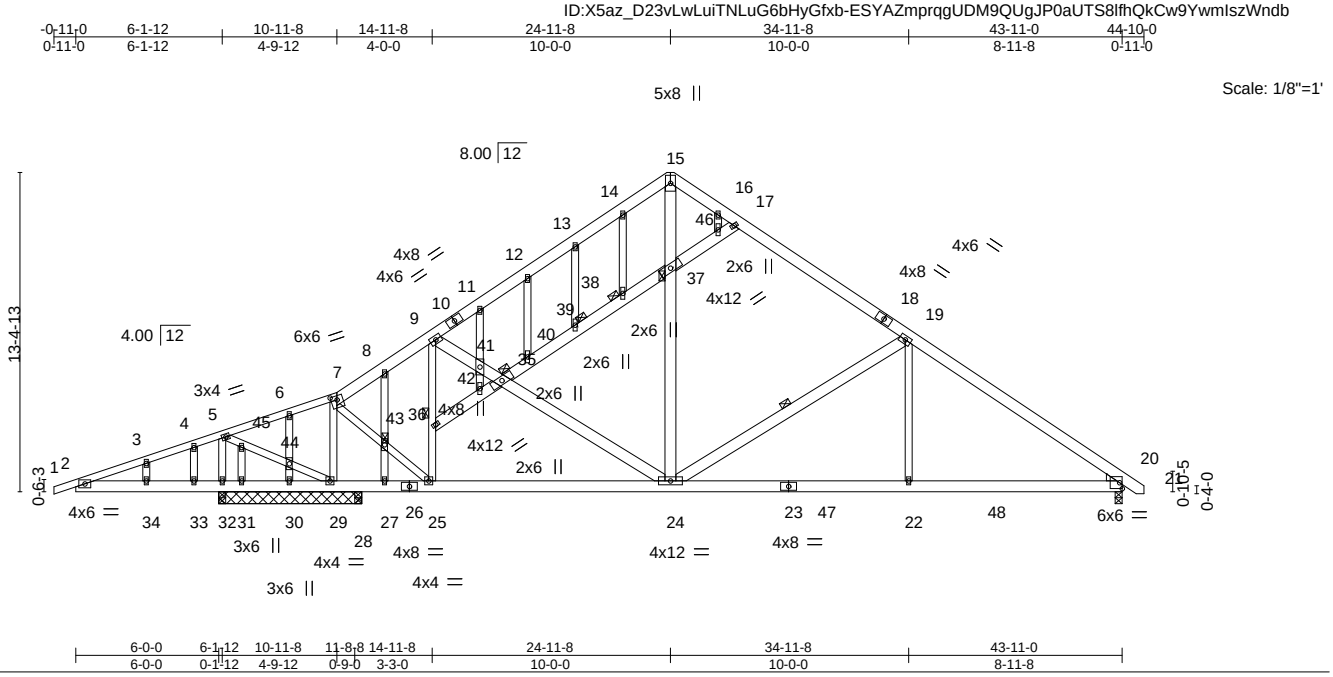

Plate Offsets (X,Y)-- [7:0-3-0,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	-0.06	22-24	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.12	22-24	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.03	20	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.07	20-22	>999	240	Weight: 412 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
1-7: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
5-32,5-29,7-29,7-25,9-25,19-22: 2x4 SP No.2
OTHERS 2x4 SP No.2
WEDGE
Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-0-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except:
10-0-0 oc bracing: 24-25,22-24,20-22.
WEBS 1 Row at midpt 19-24
JOINTS 1 Brace at Jt(s): 35, 36, 37, 38, 39, 43

REACTIONS. All bearings 6-0-0 except (jt=length) 20=0-3-8, 28=0-3-8.
(lb) - Max Horz 32=553(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) except 32=-1265(LC 8), 29=-345(LC 12), 20=-514(LC 13), 30=-176(LC 8), 31=-544(LC 23), 28=-185(LC 12)
Max Grav All reactions 250 lb or less at joint(s) except 32=1193(LC 23), 32=1137(LC 1), 29=1059(LC 19), 20=1516(LC 20), 30=313(LC 1), 31=571(LC 8), 28=464(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-962/724, 3-4=-902/722, 4-5=-861/715, 5-6=-386/467, 6-7=-328/445, 7-8=-784/348, 8-9=-883/352, 9-11=-1162/483, 11-12=-1143/486, 12-13=-1218/580, 13-14=-1265/646, 14-15=-1197/626, 15-16=-1159/597, 16-17=-1241/635, 17-19=-1323/633, 19-20=-2071/749
BOT CHORD 2-34=-660/960, 33-34=-660/960, 32-33=-660/960, 31-32=-780/932, 30-31=-780/932, 29-30=-780/932, 28-29=-571/492, 27-28=-571/492, 25-27=-571/492, 24-25=-253/853, 22-24=-404/1545, 20-22=-404/1545
WEBS 5-32=-390/502, 5-45=-489/331, 44-45=-488/332, 29-44=-501/340, 7-29=-1456/714, 7-43=-603/1314, 25-43=-577/1263, 25-36=-704/516, 9-36=-574/418, 9-41=-5/345, 35-41=-63/423, 24-35=-149/387, 24-37=-240/736, 15-37=-266/760, 19-24=-1050/585, 19-22=0/594, 8-43=-262/69

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; cantilever 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) 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.

Continued on page 2

March 27,2023

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

NOTES-

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, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1265 lb uplift at joint 32, 345 lb uplift at joint 29, 514 lb uplift at joint 20, 176 lb uplift at joint 30, 544 lb uplift at joint 31 and 185 lb uplift at joint 28.

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	A2	ROOF SPECIAL	5	1	I57394436
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:01 2023 Page 1
ID:X5az_D23vLwLuiTNLuG6bHyGfxb-ie6Ym6qTb_c4_J_gE1wF7h?cJ90S99W3OBgJqJzWnda

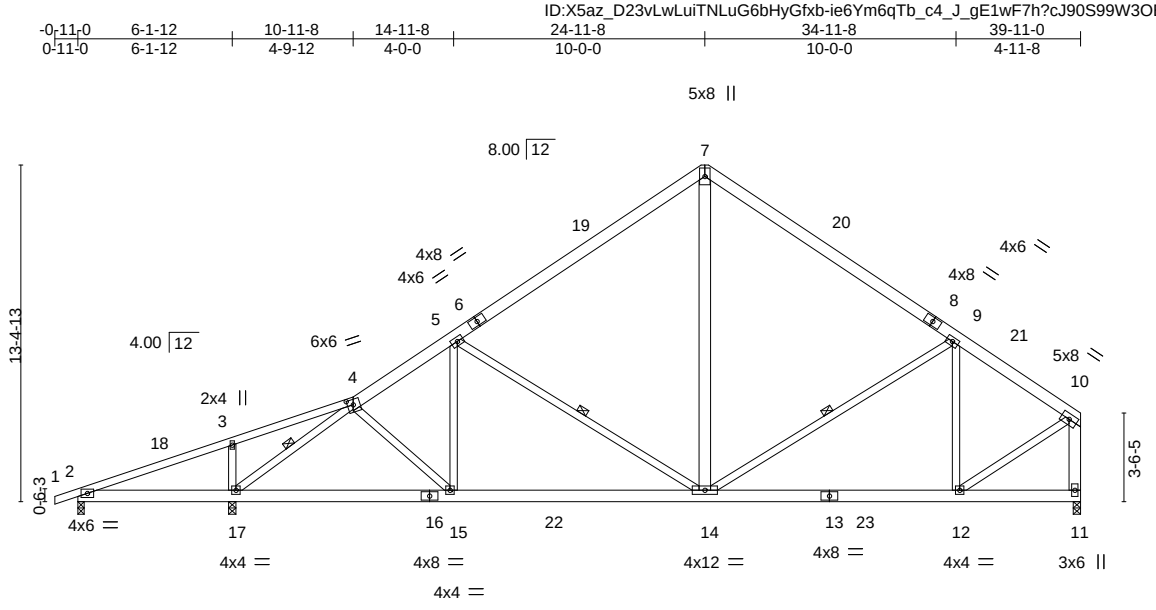

Plate Offsets (X,Y)-- [4:0-2-12,0-2-8]

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	0.41	Vert(LL)	-0.08	14-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.37	Vert(CT)	-0.15	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.03	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	14-15	>999	240	Weight: 308 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-4: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
10-11,7-14: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 4-17, 9-14, 5-14

REACTIONS. (size) 2=0-3-0, 17=0-3-8, 11=0-3-8
Max Horz 2=421(LC 9)
Max Uplift 2=-138(LC 8), 17=-377(LC 12), 11=-206(LC 13)
Max Grav 2=182(LC 23), 17=1739(LC 1), 11=1410(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-203/368, 3-4=-116/369, 4-5=-1783/601, 5-7=-1381/579, 7-9=-1381/588, 9-10=-1251/444, 10-11=-1423/487
BOT CHORD 2-17=-368/118, 15-17=-437/1454, 14-15=-448/1651, 12-14=-307/1013
WEBS 3-17=-384/287, 4-17=-2012/635, 4-15=-16/270, 10-12=-366/1223, 7-14=-219/812, 9-14=-282/259, 9-12=-525/312, 5-14=-825/401, 5-15=0/275

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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 24-11-8, Exterior(2) 24-11-8 to 29-4-5, Interior(1) 29-4-5 to 39-8-4 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 138 lb uplift at joint 2, 377 lb uplift at joint 17 and 206 lb uplift at joint 11.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place	I57394437
J0922-4569	A3	ROOF TRUSS	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:03 2023 Page 1
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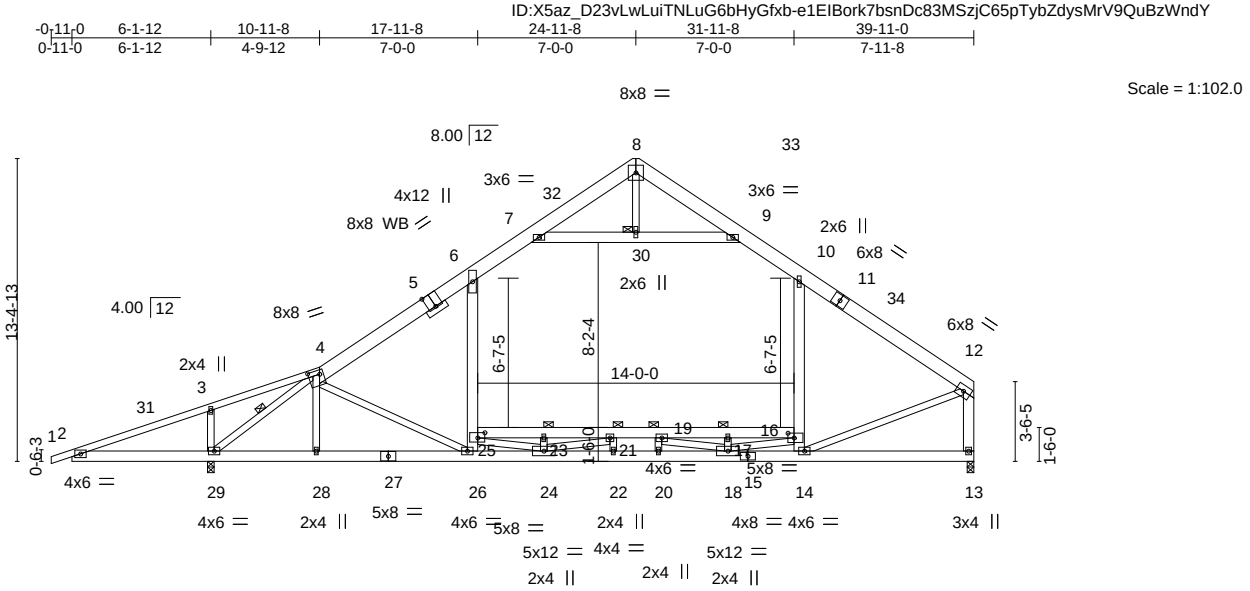

Plate Offsets (X,Y)-- [4:0-6-0,0-2-4], [5:0-4-0,Edge], [16:0-3-4,0-2-8], [25:0-3-12,0-2-12]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.94	Vert(LL)	-0.35	26	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.76	26	>531	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.90	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.30	26-28	>999	240	Weight: 381 lb	FT = 20%

LUMBER-

TOP CHORD	2x8 SP No.1 *Except* 1-4: 2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2 *Except* 6-26,10-14,12-13,7-9: 2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-11-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-29 9-6-15 oc bracing: 13-14.
WEBS	1 Row at midpt 4-29
JOINTS	1 Brace at Jt(s): 30, 21, 19, 23, 17

REACTIONS. (size) 29=0-3-8, 13=0-3-8
Max Horz 29=419(LC 9)
Max Uplift 29=-38(LC 12)
Max Grav 29=2604(LC 2), 13=2254(LC 21)

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

TOP CHORD	2-3=-583/770, 3-4=-463/732, 4-6=-2702/36, 6-7=-1948/233, 9-10=-2046/258, 10-12=-2429/55, 12-13=-2257/115
BOT CHORD	2-29=-664/628, 28-29=0/2506, 26-28=0/2498, 24-26=0/2949, 22-24=0/4355, 20-22=0/4355, 18-20=0/4355, 14-18=-37/1376, 23-25=-2487/0, 21-23=-2487/0, 19-21=-2628/0, 17-19=-1186/180, 16-17=-1186/180
WEBS	3-29=-393/300, 4-29=-3419/259, 4-26=-397/107, 6-25=0/1020, 10-16=0/714, 12-14=0/2069, 7-30=-2178/188, 9-30=-2178/188, 19-20=-14/263, 23-24=-399/0, 17-18=-429/0, 24-25=0/2032, 21-24=-424/513, 18-19=-1738/0, 16-18=0/2050

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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 24-11-8, Exterior(2) 24-11-8 to 29-4-5, Interior(1) 29-4-5 to 39-8-4 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.
5) Ceiling dead load (10.0 psf) on member(s). 4-6, 6-7, 9-10, 7-30, 9-30; Wall dead load (5.0psf) on member(s).6-25, 10-16
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 23-25, 21-23, 19-21, 17-19, 16-17
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 38 lb uplift at joint 29.
8) Attic room checked for L/360 deflection.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place	I57394438
J0922-4569	A4	ROOF TRUSS	3	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:05 2023 Page 1
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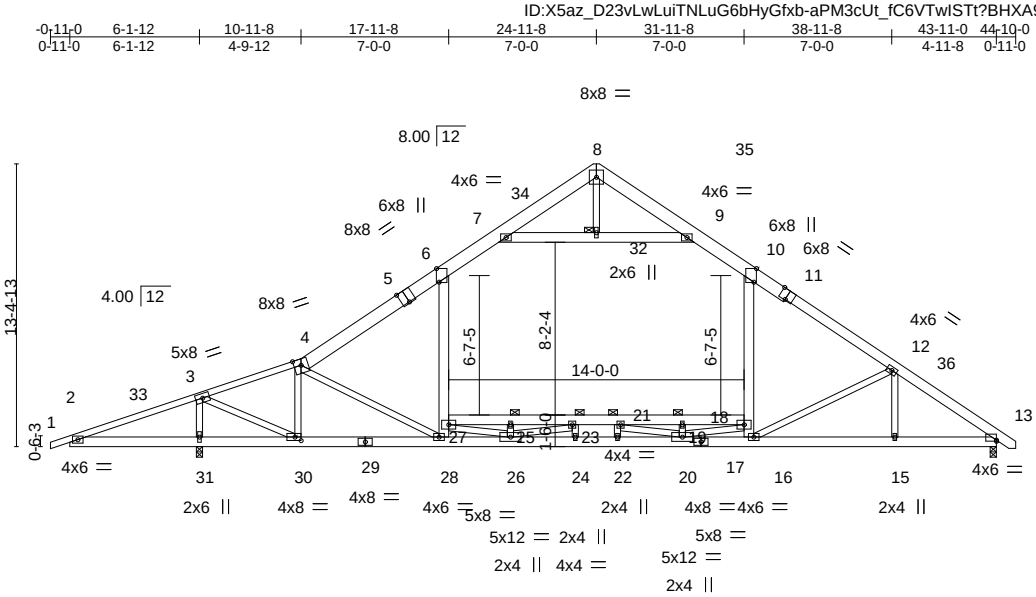

Plate Offsets (X,Y)-- [5:0-4-0,Edge], [6:0-7-11,Edge], [10:0-7-11,Edge], [11:0-4-0,Edge], [13:0-0-0,0-0-10], [30:0-3-8,0-2-0]

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	0.92	Vert(LL)	-0.29	16-20	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.57	22-24	>795	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.09	13	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.29	15-16	>999	240	Weight: 393 lb	FT = 20%

LUMBER-

TOP CHORD 2x8 SP No.1 *Except*
1-4: 2x4 SP No.1, 11-14: 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
10-16,6-28,7-9: 2x6 SP No.1

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-31,30-31.
JOINTS 1 Brace at Jt(s): 32, 21, 23, 25, 19

REACTIONS. (size) 31=0-3-8, 13=0-3-8
Max Horz 31=425(LC 11)
Max Uplift 31=-20(LC 12)
Max Grav 31=2854(LC 2), 13=2387(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-581/774, 3-4=-2620/0, 4-6=-3232/64, 6-7=-2475/258, 7-8=-63/326, 8-9=-57/321, 9-10=-2453/276, 10-12=-3251/128, 12-13=-3697/209
BOT CHORD 2-31=-668/626, 30-31=-733/618, 28-30=0/2782, 26-28=0/2761, 24-26=0/4799, 22-24=0/4799, 20-22=0/4799, 16-20=0/2562, 15-16=-52/2930, 13-15=-52/2930, 25-27=-1722/0, 23-25=-1722/0, 21-23=-2543/0, 19-21=-1827/68, 18-19=-1827/68
WEBS 3-31=-2614/470, 12-16=-670/340, 16-18=0/495, 10-18=0/1260, 27-28=-59/395, 6-27=0/1159, 7-32=-2956/217, 9-32=-2956/217, 4-30=-1384/215, 25-26=-421/0, 19-20=-420/0, 26-27=0/2034, 23-26=-1090/291, 20-21=-979/160, 18-20=0/2044, 3-30=-243/3176

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) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 24-11-8, Exterior(2) 24-11-8 to 29-4-5, Interior(1) 29-4-5 to 44-8-1 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) Ceiling dead load (10.0 psf) on member(s). 4-6, 6-7, 9-10, 7-32, 9-32; Wall dead load (5.0psf) on member(s).10-18, 6-27
6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 25-27, 23-25, 21-23, 19-21, 18-19
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 20 lb uplift at joint 31.
8) Attic room checked for L/360 deflection.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	A4SG	ROOF TRUSS	1	1	I57394439
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:07 2023 Page 1

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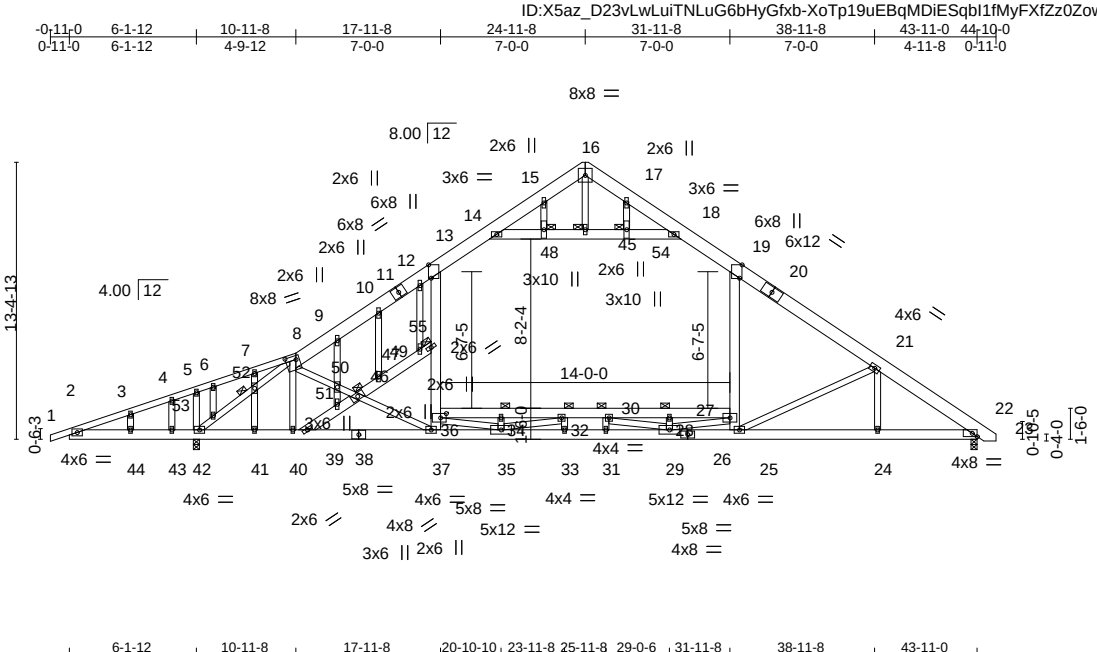

Plate Offsets (X,Y)-- [8:0-6-0,0-2-4], [13:0-7-11,Edge], [19:0-7-11,Edge], [36:0-3-4,0-2-8]

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	0.80	Vert(LL)	-0.24	25-29	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.74	Vert(CT)	-0.49	30	>915	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.83	Horz(CT)	0.10	22	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.30	24-25	>999	240	Weight: 450 lb	FT = 20%

LUMBER-

TOP CHORD 2x8 SP No.1 *Except*
1-8: 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
19-25,13-37,14-18,46-47,39-46: 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
6-0-0 oc bracing: 2-44,43-44,42-43.
WEBS 1 Row at midpt 8-42
JOINTS 1 Brace at Jt(s): 45, 46, 47, 48, 54, 30, 32, 34, 28

REACTIONS. (size) 42=0-3-8, 22=0-3-8
Max Horz 42=549(LC 11)
Max Uplift 42=-509(LC 12), 22=-234(LC 13)
Max Grav 42=2751(LC 2), 22=2356(LC 21)

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

TOP CHORD 2-3=-1013/729, 3-4=-950/727, 4-5=-928/719, 5-6=-852/727, 6-7=-842/706, 7-8=-784/695, 8-9=-3196/165, 9-10=-3350/228, 10-12=-3467/267, 12-13=-3557/245, 13-14=-2441/421, 15-16=0/472, 16-17=0/464, 18-19=-2429/407, 19-21=-3226/265, 21-22=-3722/410

BOT CHORD 2-44=-665/1009, 43-44=-665/1009, 42-43=-665/1009, 41-42=-170/2818, 40-41=-170/2818, 39-40=-158/2803, 37-39=-522/3299, 35-37=-511/2598, 33-35=0/4653, 31-33=0/4653, 29-31=0/4653, 25-29=-6/2471, 24-25=-227/2978, 22-24=-227/2977, 34-36=-1517/331, 32-34=-1517/331, 30-32=-2301/0, 28-30=-1650/15, 27-28=-1650/15

WEBS 5-42=-24/256, 42-53=-3703/774, 52-53=-3559/760, 8-52=-3456/735, 8-40=-326/476, 8-50=-494/551, 46-50=-461/468, 37-46=-827/524, 16-45=-422/0, 21-25=-765/537, 25-27=-63/525, 19-27=0/1248, 36-37=-68/589, 36-47=0/1314, 13-47=0/1875, 14-48=-2890/366, 45-48=-2883/367, 45-54=-2883/367, 18-54=-2888/366, 46-49=-367/454, 49-55=-285/628, 47-55=-169/770, 39-51=-661/462, 46-51=-542/420, 15-48=-11/447, 10-49=-447/133, 9-50=-399/164, 50-51=-321/129, 17-54=0/464, 12-55=-429/35, 34-35=-425/0, 28-29=-426/0, 27-29=0/1944, 29-30=-924/326, 32-35=-1341/366, 35-36=0/2097

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; cantilever left exposed ;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.
6) Ceiling dead load (10.0 psf) on member(s). 13-14, 18-19, 14-48, 45-48, 45-54, 18-54; Wall dead load (5.0psf) on member(s).19-27, 36-47, 13-47

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

March 27,2023

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

NOTES-

7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 34-36, 32-34, 30-32, 28-30, 27-28
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 509 lb uplift at joint 42 and 234 lb uplift at joint 22.
9) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	B1	COMMON	1	1	I57394440
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:09 2023 Page 1
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-0-11-0 7-11-8 15-11-8 23-11-8 31-11-0 32-10-0
0-11-0 7-11-8 8-0-0 8-0-0 7-11-8 0-11-0

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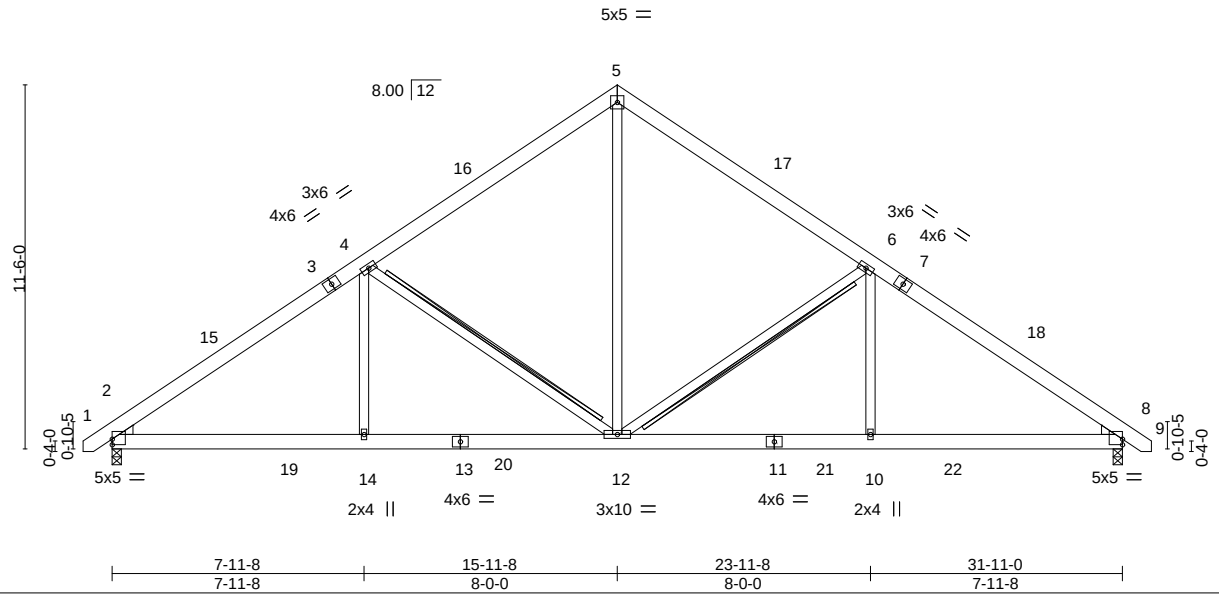

7-11-8 15-11-8 23-11-8 31-11-0
7-11-8 8-0-0 8-0-0 7-11-8

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

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	0.35	Vert(LL)	-0.05	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.10	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.04	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.04	2-14	>999	240	Weight: 230 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 5-3-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS T-Brace: 2x4 SPF No.2 - 6-12, 4-12
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. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=356(LC 11)
Max Uplift 2=-233(LC 12), 8=-233(LC 13)
Max Grav 2=1472(LC 19), 8=1472(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2046/647, 4-5=-1483/609, 5-6=-1483/609, 6-8=-2047/647
BOT CHORD 2-14=-345/1807, 12-14=-345/1807, 10-12=-348/1560, 8-10=-348/1560
WEBS 5-12=-342/1092, 6-12=-832/389, 6-10=0/444, 4-12=-831/389, 4-14=0/444

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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 32-8-1 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 233 lb uplift at joint 2 and 233 lb uplift at joint 8.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
7) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

March 27,2023

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place	I57394441
J0922-4569	B1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:11 2023 Page 1
ID:X5az_D23vLwLuiTNLuG6bHyGfxb-PZjKtXylE2tfBrlbq76bXoQOABW1VmDYhl5rBjzWndQ

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0-11-0 15-11-8 15-11-8 0-11-0

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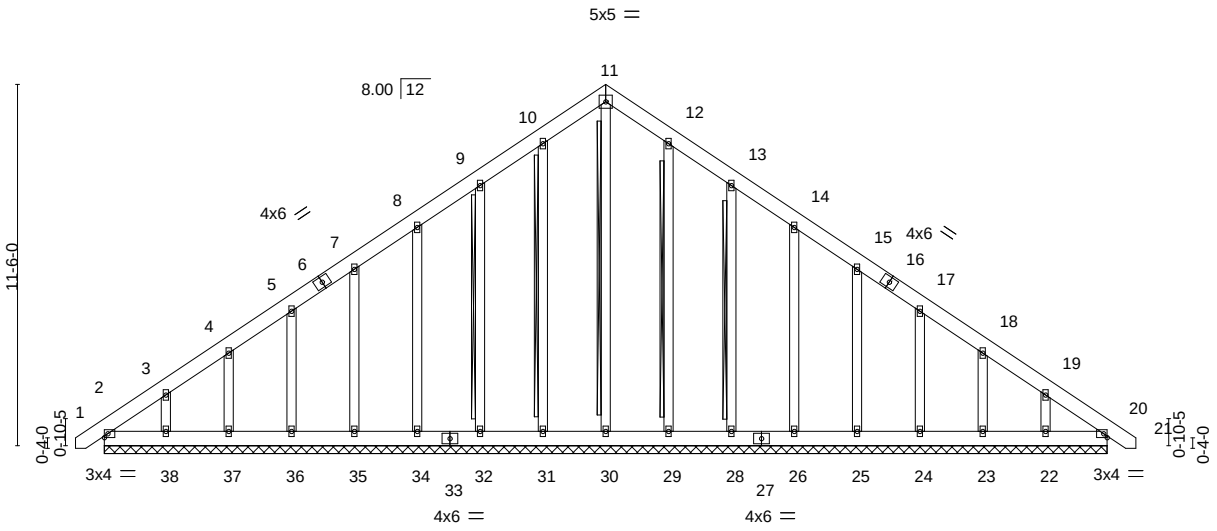

-0-11-0 32-10-0 33-9-0
0-11-0 31-11-0 0-11-0

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	0.06	Vert(LL)	0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 295 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, 9-32, 12-29, 13-28
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 31-11-0.
(lb) - Max Horz 2=445(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 20, 30, 31, 29 except 2=-150(LC 8), 32=-148(LC 12), 34=-133(LC 12), 35=-131(LC 12), 36=-132(LC 12), 37=-132(LC 12), 38=-212(LC 12), 28=-153(LC 13), 26=-133(LC 13), 25=-131(LC 13), 24=-132(LC 13), 23=-131(LC 13), 22=-198(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 20, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22 except 2=257(LC 9), 30=285(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-489/359, 3-4=-339/289, 4-5=-278/252, 8-9=-200/281, 9-10=-288/346, 10-11=-334/381, 11-12=-334/381, 12-13=-288/321, 19-20=-383/255
BOT CHORD 2-38=-224/347, 37-38=-224/347, 36-37=-224/347, 35-36=-224/347, 34-35=-224/347, 32-34=-224/347, 31-32=-224/347, 30-31=-224/347, 29-30=-224/347, 28-29=-224/347, 26-28=-224/347, 25-26=-224/347, 24-25=-224/347, 23-24=-224/347, 22-23=-224/347, 20-22=-224/347
WEBS 11-30=-261/174

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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 30, 31, 29 except (jt=lb) 2=150, 32=148, 34=133, 35=131, 36=132, 37=132, 38=212, 28=153, 26=133, 25=131, 24=132, 23=131, 22=198.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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Continued on page 2

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Edenton, NC 27932

NOTES-

11) 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 19 Purfoy Place
J0922-4569	B2	ROOF TRUSS	2	1	I57394442
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:12 2023 Page 1

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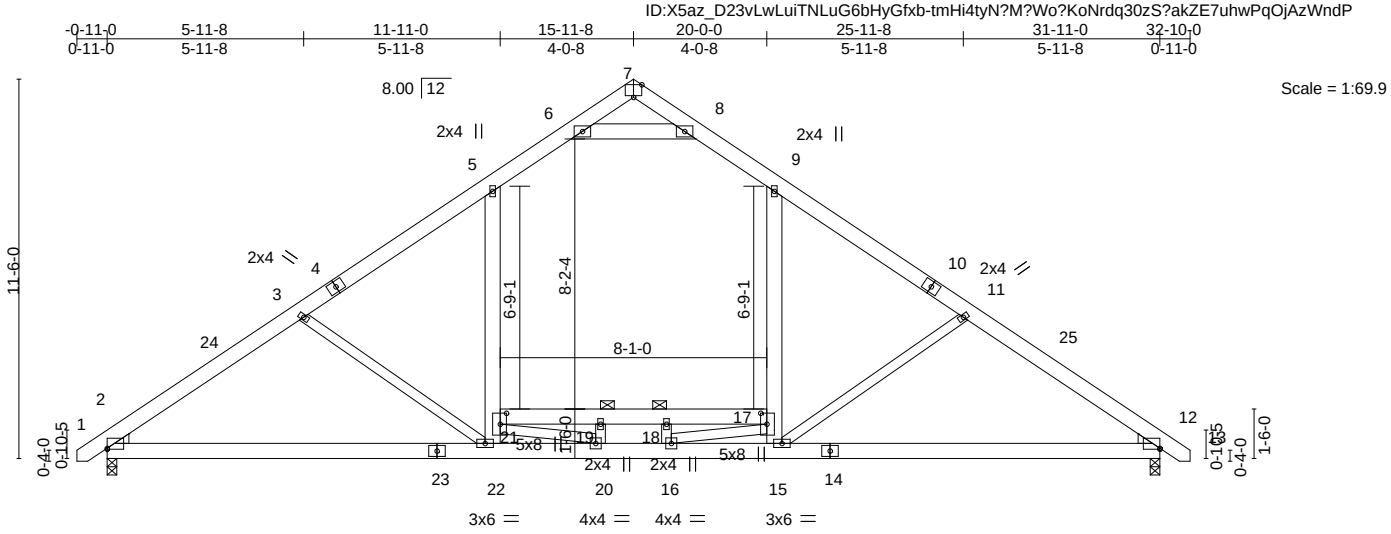

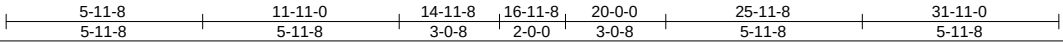

Plate Offsets (X,Y)-- [2:0-0-0,0-0-6], [7:0-3-0,Edge], [12:0-0-0,0-0-6], [17:0-4-0,0-2-4], [21:0-4-0,0-2-4]

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	0.57	Vert(LL)	-0.16	12-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.46	Vert(CT)	-0.34	12-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	2-22	>999	240	Weight: 266 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
1-4,10-13: 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2 *Except*
9-15,5-22,6-8: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-9-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 18, 19

REACTIONS. (size) 2=0-3-8, 12=0-3-8
Max Horz 2=-356(LC 10)
Max Uplift 2=-14(LC 12), 12=-14(LC 13)
Max Grav 2=1810(LC 20), 12=1810(LC 21)

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

TOP CHORD 2-3=-2606/327, 3-5=-2315/243, 5-6=-1746/318, 6-7=-96/1026, 7-8=-96/1025, 8-9=-1746/318, 9-11=-2314/243, 11-12=-2606/327
BOT CHORD 2-22=-125/2314, 20-22=0/2028, 16-20=0/2465, 15-16=0/1768, 12-15=-123/2048, 19-21=-713/0, 18-19=-713/0, 17-18=-713/0
WEBS 11-15=-619/356, 3-22=-619/356, 15-17=-60/585, 9-17=0/907, 21-22=-60/585, 5-21=0/907, 6-8=-3181/491, 16-18=-330/43, 19-20=-330/43, 20-21=-155/898, 16-17=-151/895

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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 15-11-8, Exterior(2) 15-11-8 to 20-2-12, Interior(1) 20-2-12 to 32-8-1 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 4x6 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.
6) Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-8; Wall dead load (5.0psf) on member(s).9-17, 5-21
7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 19-21, 18-19, 17-18
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 12.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
10) Attic room checked for L/360 deflection.

March 27,2023

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Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	C1	ROOF SPECIAL	21	1	I57394443
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:13 2023 Page 1
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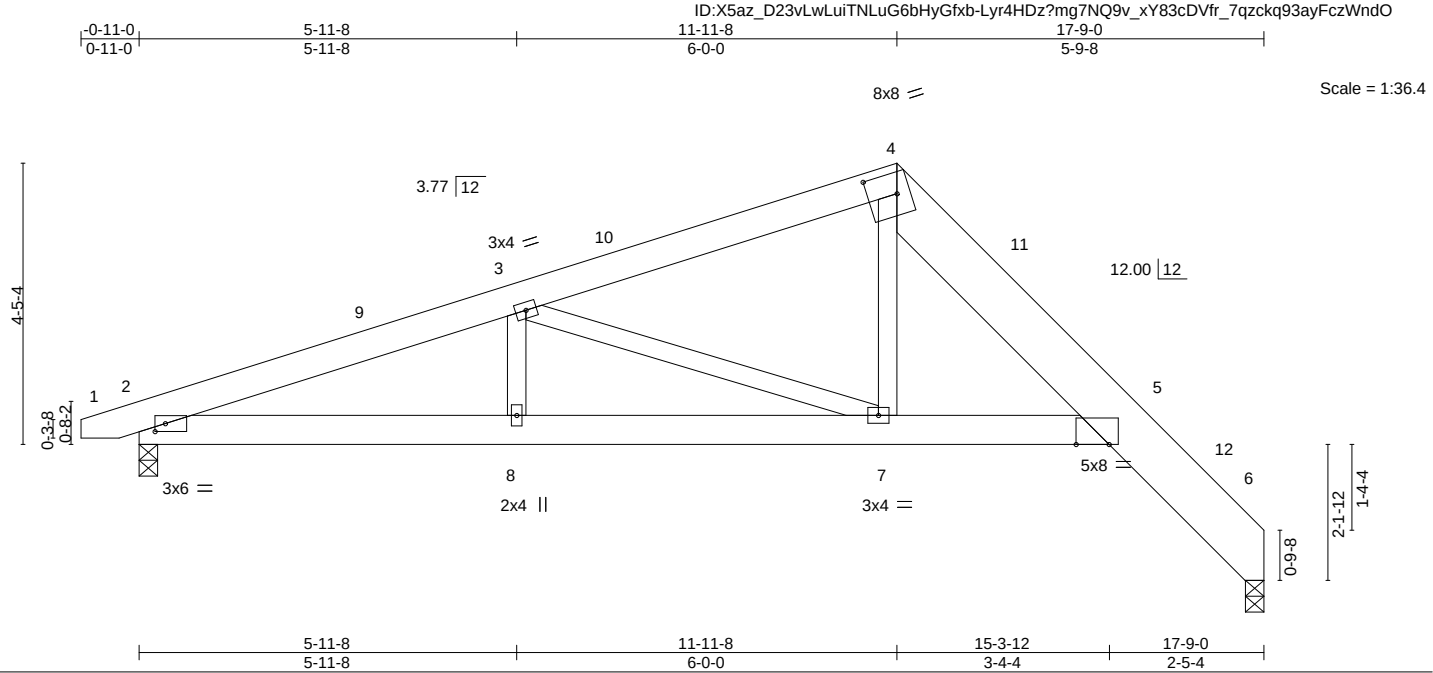

Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [4:0-5-8,0-4-0], [5:0-6-4,0-0-0]

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	0.44	Vert(LL)	-0.05	5-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.10	5-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	5-7	>999	240	Weight: 118 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
4-6: 2x10 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=0-3-8, 6=0-3-8
Max Horz 2=166(LC 11)
Max Uplift 2=-189(LC 8), 6=-108(LC 8)
Max Grav 2=746(LC 1), 6=711(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1503/605, 3-4=-857/407, 4-5=-926/397, 5-6=-451/249
BOT CHORD 2-8=-396/1365, 7-8=-396/1365, 5-7=-104/761
WEBS 3-7=-650/307, 4-7=-85/424

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) -0-7-6 to 3-9-6, Interior(1) 3-9-6 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 17-7-4 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.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=189, 6=108.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	C1A	ROOF SPECIAL	2	1	I57394444
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:14 2023 Page 1

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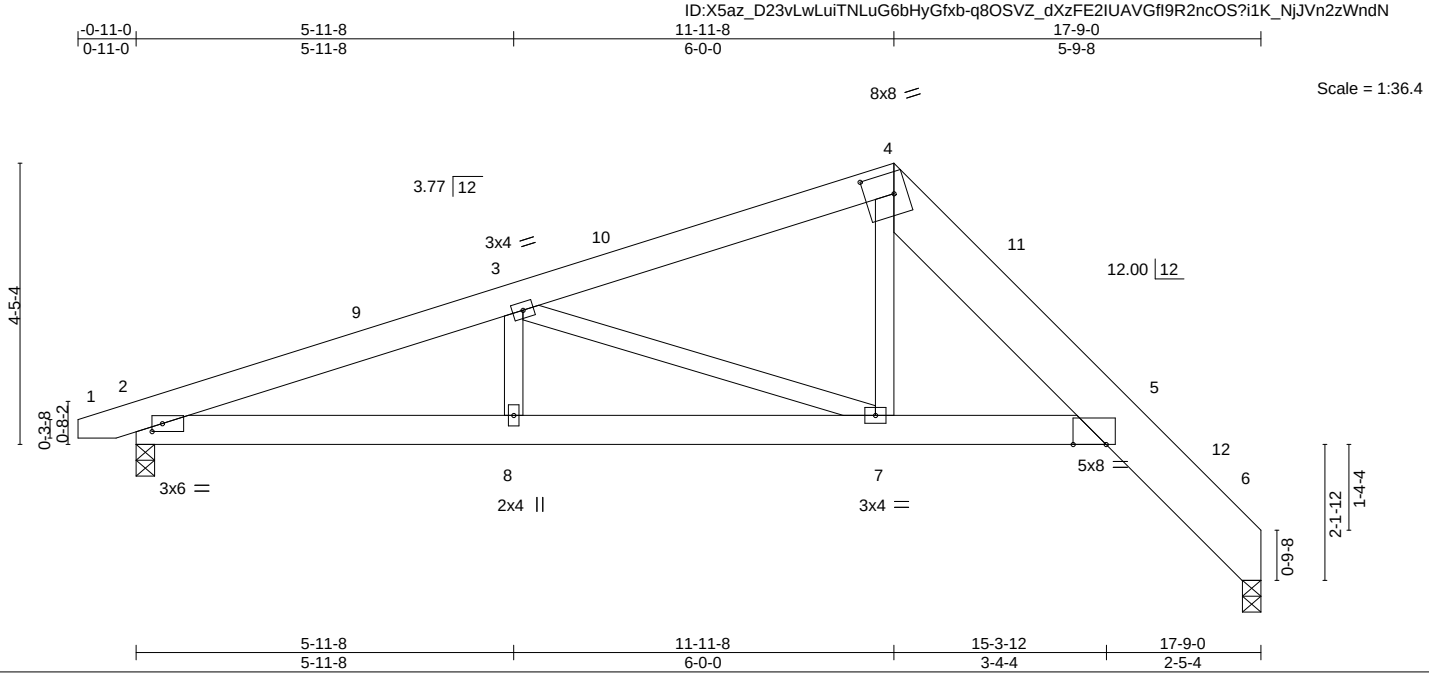

Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [4:0-5-8,0-4-0], [5:0-6-4,0-0-0]

LOADING (psf)		SPACING-	2-6-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.06	5-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.12	5-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.53	Horz(CT)	0.12	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	5-7	>999	240	Weight: 118 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except*
4-6: 2x10 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-

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

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=207(LC 11)
Max Uplift 2=-236(LC 8), 6=-134(LC 8)
Max Grav 2=933(LC 1), 6=889(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1879/756, 3-4=-1072/508, 4-5=-1157/496, 5-6=-564/311
BOT CHORD 2-8=-495/1707, 7-8=-495/1707, 5-7=-130/951
WEBS 3-8=0/295, 3-7=-813/383, 4-7=-106/530

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) -0-7-6 to 3-9-6, Interior(1) 3-9-6 to 11-11-8, Exterior(2) 11-11-8 to 16-4-5, Interior(1) 16-4-5 to 17-7-4 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.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=236, 6=134.

March 27,2023

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	C1GE	GABLE	2	1	I57394445
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:15 2023 Page 1

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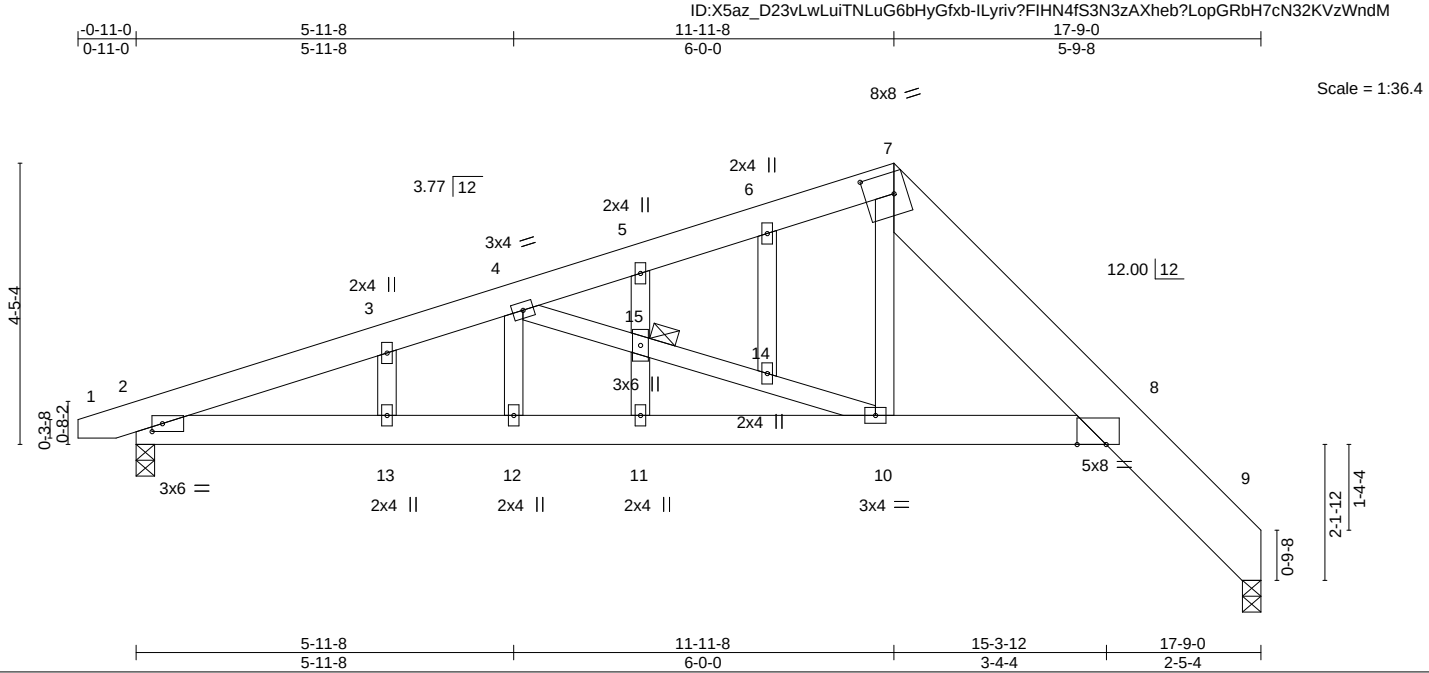

Plate Offsets (X,Y)-- [2:0-1-15,0-1-8], [7:0-5-8,0-4-0], [8:0-5-8,0-0-0]

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	0.44	Vert(LL)	-0.05	11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.10	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.06	11	>999	240	Weight: 126 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1 *Except*
	7-9: 2x10 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.
JOINTS	1 Brace at Jt(s): 15

REACTIONS. (size) 2=0-3-8, 9=0-3-8
Max Horz 2=-227(LC 13)
Max Uplift 2=-350(LC 8), 9=-214(LC 13)
Max Grav 2=746(LC 1), 9=711(LC 1)

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

TOP CHORD	2-3=-1469/782, 3-4=-1392/828, 4-5=-855/460, 5-6=-820/493, 6-7=-797/512, 7-8=-931/488, 8-9=-451/278
BOT CHORD	2-13=-593/1328, 12-13=-593/1328, 11-12=-593/1328, 10-11=-593/1328, 8-10=-172/765
WEBS	4-15=-609/440, 14-15=-604/434, 10-14=-617/445, 7-10=-190/418

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) 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) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=350, 9=214.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	C2	ROOF SPECIAL	1	1	I57394446
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:16 2023 Page 1
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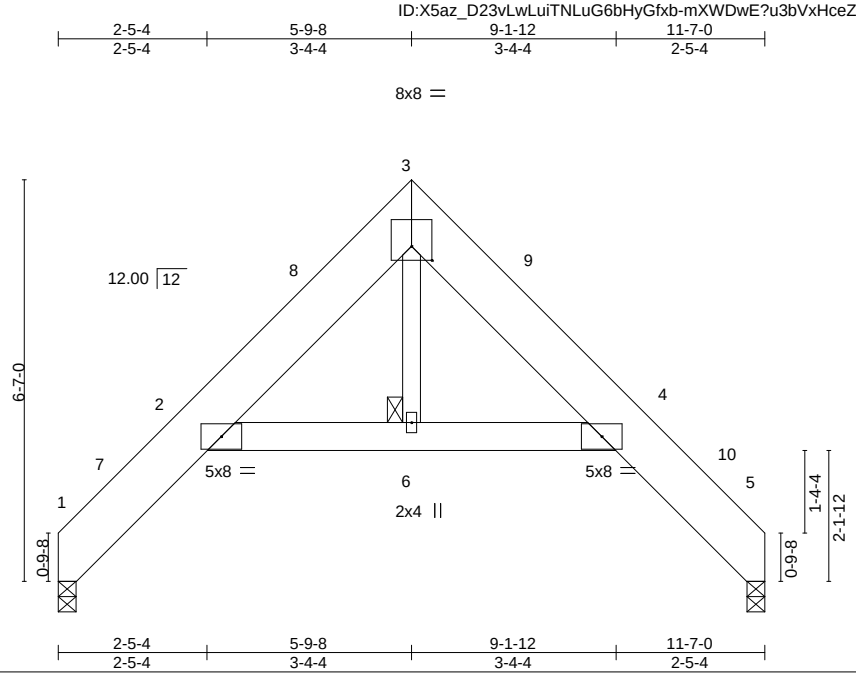

Plate Offsets (X,Y)-- [3:0-4-0,0-2-12]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	-0.03	6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.06	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.09	5	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.03	2-6	>999	240	Weight: 89 lb	FT = 20%

LUMBER-
TOP CHORD 2x10 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.
JOINTS 1 Brace at Jt(s): 6

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-180(LC 8)
Max Uplift 1=-56(LC 12), 5=-56(LC 13)
Max Grav 1=466(LC 1), 5=466(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-368/196, 2-3=-514/219, 3-4=-539/220, 4-5=-346/194
BOT CHORD 2-6=-36/499, 4-6=-36/499

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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 5-9-8, Exterior(2) 5-9-8 to 10-2-5, Interior(1) 10-2-5 to 11-5-4 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.
5) Bearing at joint(s) 1, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.

March 27,2023

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	C2GE	GABLE	1	1	I57394447
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:17 2023 Page 1
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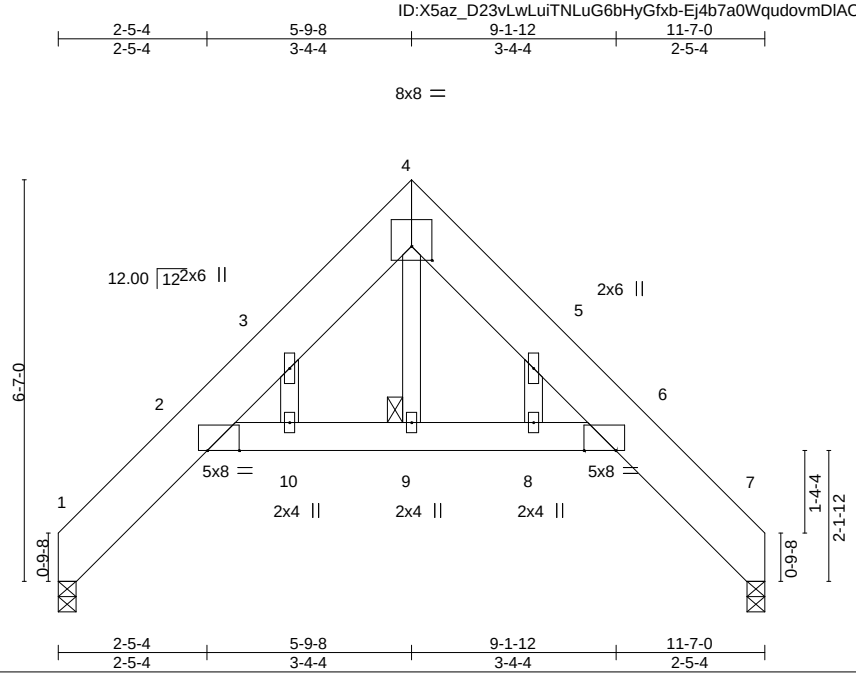

Plate Offsets (X,Y)-- [2:0-6-4,Edge], [4:0-4-0,0-2-12], [6:0-6-4,Edge]

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)	-0.03	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.06	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.09	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	10	>999	240	Weight: 92 lb	FT = 20%

LUMBER-

TOP CHORD	2x10 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.
JOINTS	1 Brace at Jt(s): 9

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-225(LC 8)
Max Uplift 1=-132(LC 12), 7=-132(LC 13)
Max Grav 1=466(LC 1), 7=466(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-391/243, 2-3=-483/175, 3-4=-565/274, 4-5=-565/274, 5-6=-539/190, 6-7=-346/195
BOT CHORD 2-10=-84/548, 9-10=-78/539, 8-9=-78/539, 6-8=-78/544
WEBS 4-9=-109/318

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) 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) Bearing at joint(s) 1, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=132, 7=132.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	D1	COMMON	3	1	I57394448
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:18 2023 Page 1
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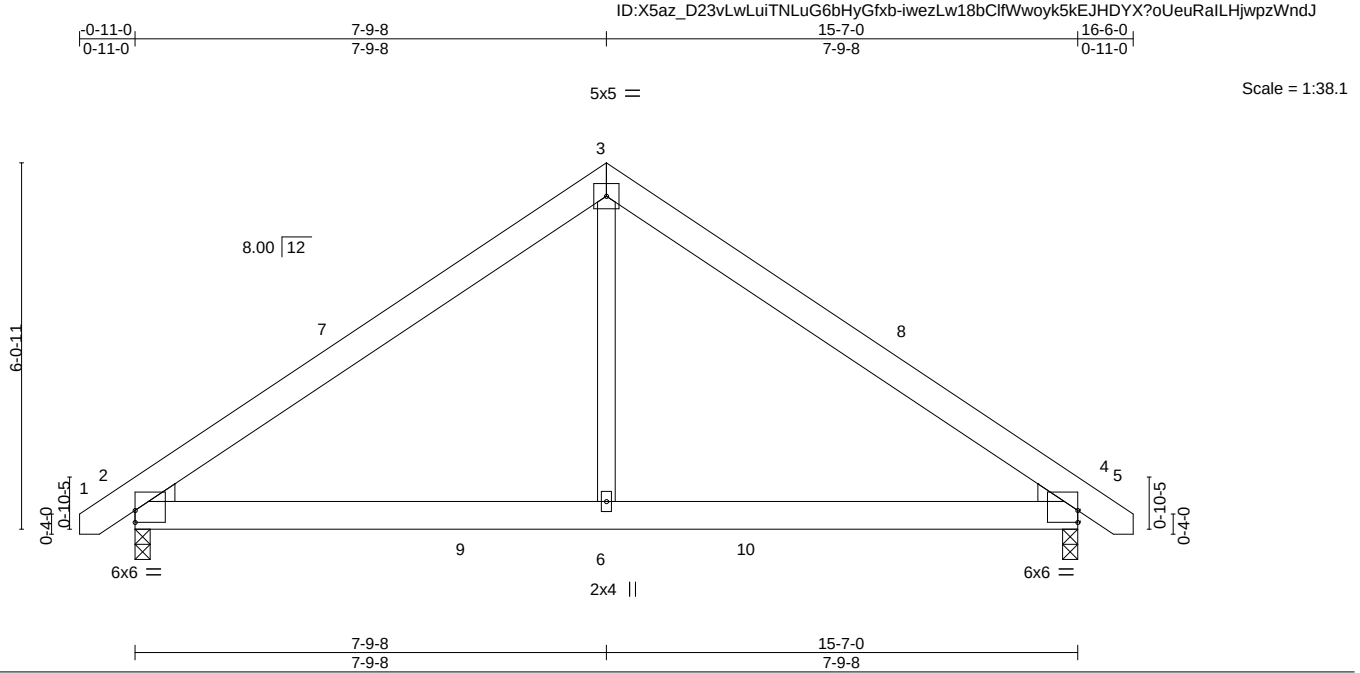

Plate Offsets (X,Y)-- [2:0-0-0,0-2-6], [4:Edge,0-2-6]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.07	4-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.05	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 95 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 9-7-8 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-3-0
Max Horz 2=182(LC 11)
Max Uplift 2=-192(LC 9), 4=-192(LC 8)
Max Grav 2=685(LC 2), 4=685(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-807/920, 3-4=-807/917
BOT CHORD 2-6=-564/567, 4-6=-564/567
WEBS 3-6=-674/457

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) -0-9-1 to 3-7-12, Interior(1) 3-7-12 to 7-9-8, Exterior(2) 7-9-8 to 12-2-5, Interior(1) 12-2-5 to 16-4-1 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, 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) 2=192, 4=192.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 27,2023

ENGINEERING BY
TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	D1GE	GABLE	1	1	I57394449
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:19 2023 Page 1
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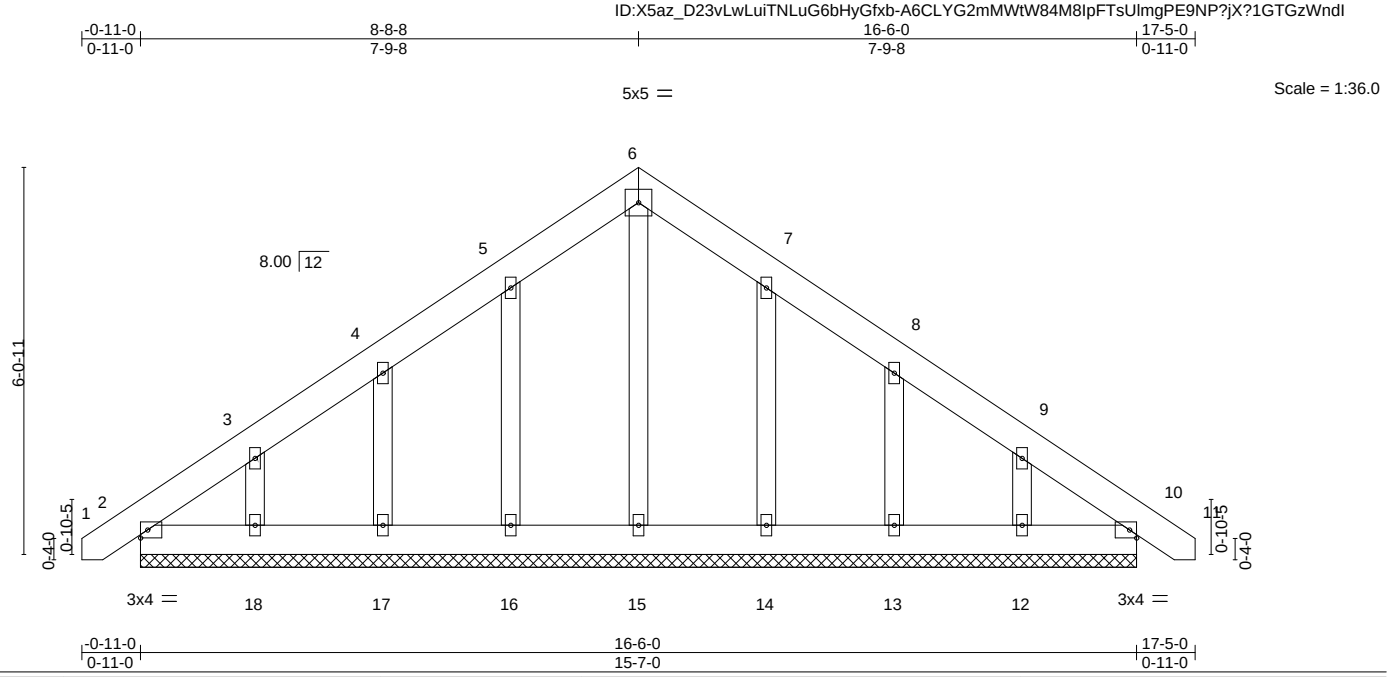

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 116 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.

REACTIONS. All bearings 15-7-0.
(lb) - Max Horz 2=227(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10 except 16=-121(LC 12), 17=-139(LC 12), 18=-168(LC 12), 14=-116(LC 13), 13=-141(LC 13), 12=-160(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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) 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 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, 10 except (jt=lb) 16=121, 17=139, 18=168, 14=116, 13=141, 12=160.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	D2	COMMON	3	1	I57394450
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:20 2023 Page 1
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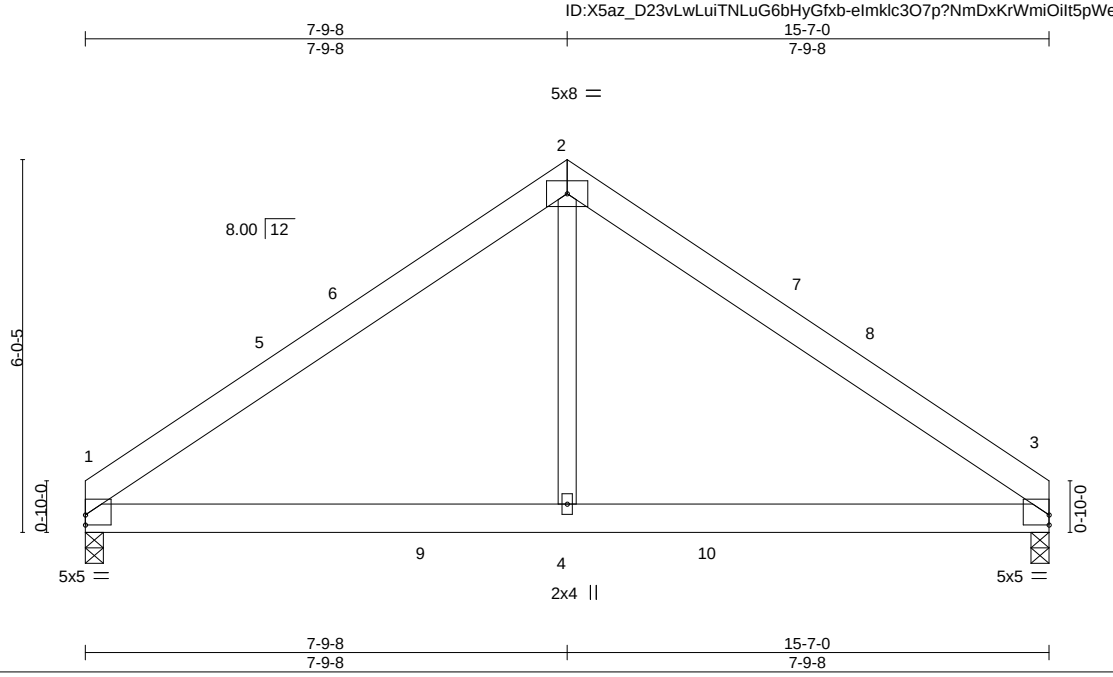

Plate Offsets (X,Y)-- [1:0-0-0,0-1-15], [3:0-0-0,0-1-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.31	Vert(LL)	0.07	1-4	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.05	1-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 89 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 9-6-4 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-176(LC 8)
Max Uplift 1=-183(LC 9), 3=-183(LC 8)
Max Grav 1=638(LC 2), 3=638(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-804/923, 2-3=-804/923
BOT CHORD 1-4=-580/569, 3-4=-580/569
WEBS 2-4=-669/452

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) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 7-9-8, Exterior(2) 7-9-8 to 12-2-5, Interior(1) 12-2-5 to 15-5-4 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, 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) 1=183, 3=183.

March 27,2023

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Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	G1	COMMON	6	1	I57394451
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:21 2023 Page 1
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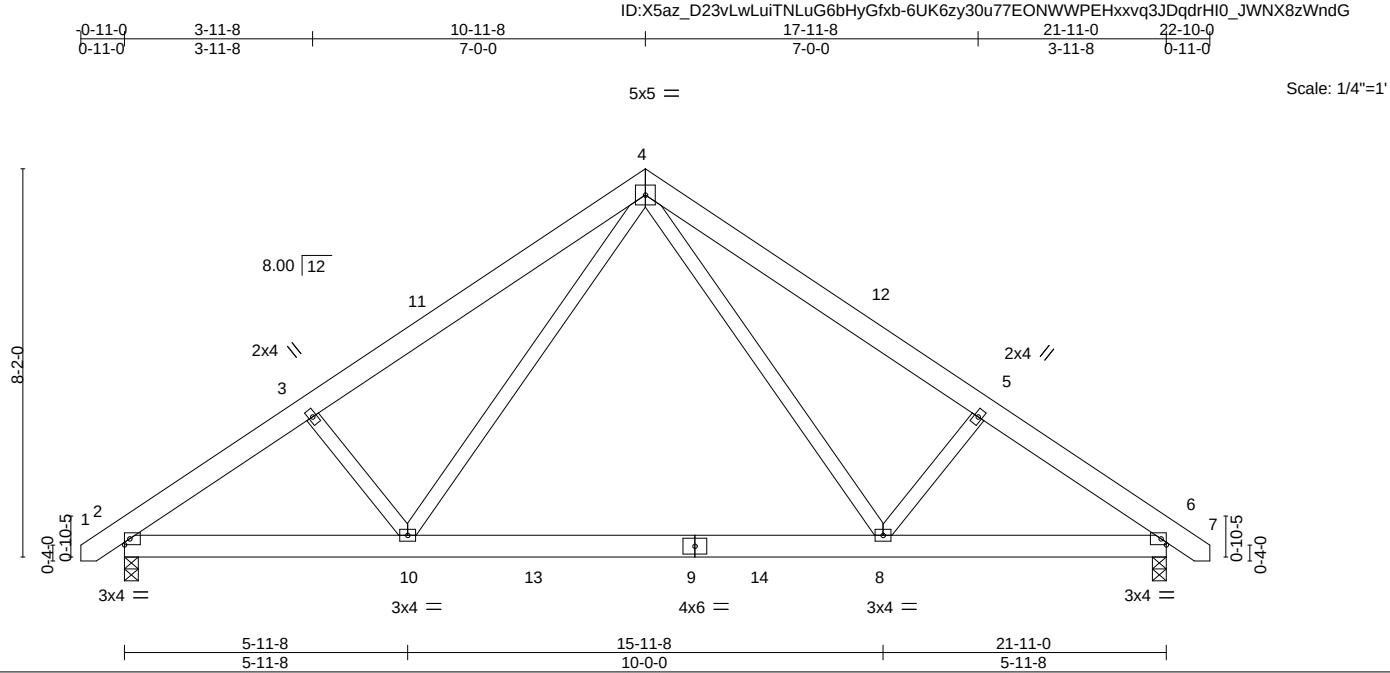

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	-0.13	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(CT)	-0.20	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.02	8-10	>999	240	Weight: 154 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 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
Max Horz 2=187(LC 11)
Max Uplift 2=-57(LC 12), 6=-57(LC 13)
Max Grav 2=960(LC 19), 6=960(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1386/278, 3-4=-1267/323, 4-5=-1268/323, 5-6=-1386/278
BOT CHORD 2-10=-158/1188, 8-10=0/718, 6-8=-163/1048
WEBS 4-8=-83/607, 5-8=-299/225, 4-10=-83/607, 3-10=-299/225

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) -0-9-1 to 3-9-12, Interior(1) 3-9-12 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-1 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, 6.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 27,2023

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TRENCO
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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place	I57394452
J0922-4569	G1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:23 2023 Page 1
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0-11-0 10-11-8 10-11-8 0-11-0

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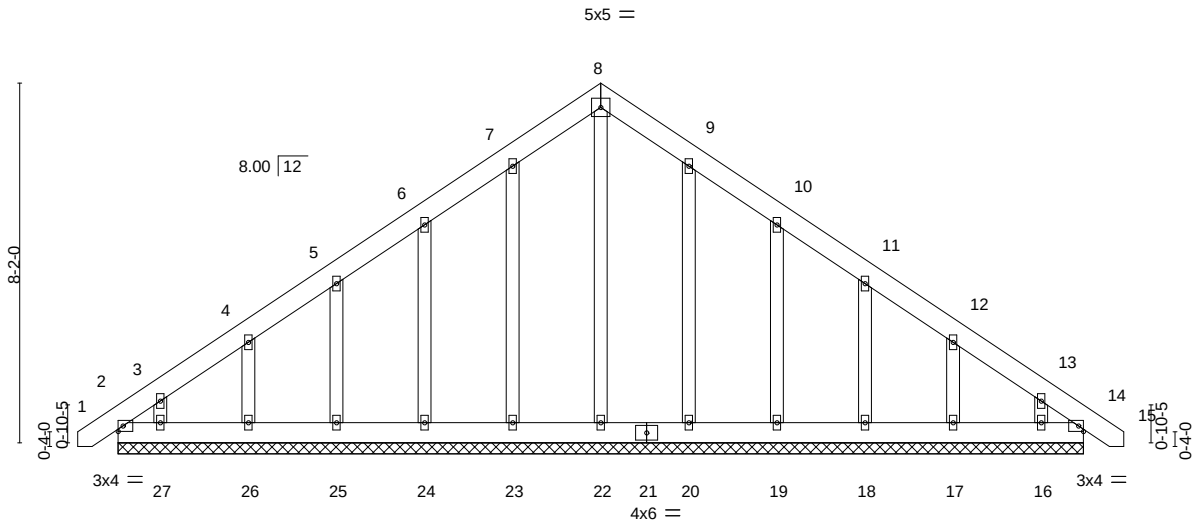

-0-11-0 22-10-0 23-9-0
0-11-0 21-11-0 0-11-0

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	0.03	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 178 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.

REACTIONS. All bearings 21-11-0.
(lb) - Max Horz 2=234(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 2, 14, 23, 24, 25, 26, 20, 19, 18, 17 except 27=-134(LC 12), 16=-120(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 22, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-275/196

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, 14, 23, 24, 25, 26, 20, 19, 18, 17 except (jt=lb) 27=134, 16=120.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V1GE	VALLEY	1	1	I57394453
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:24 2023 Page 1
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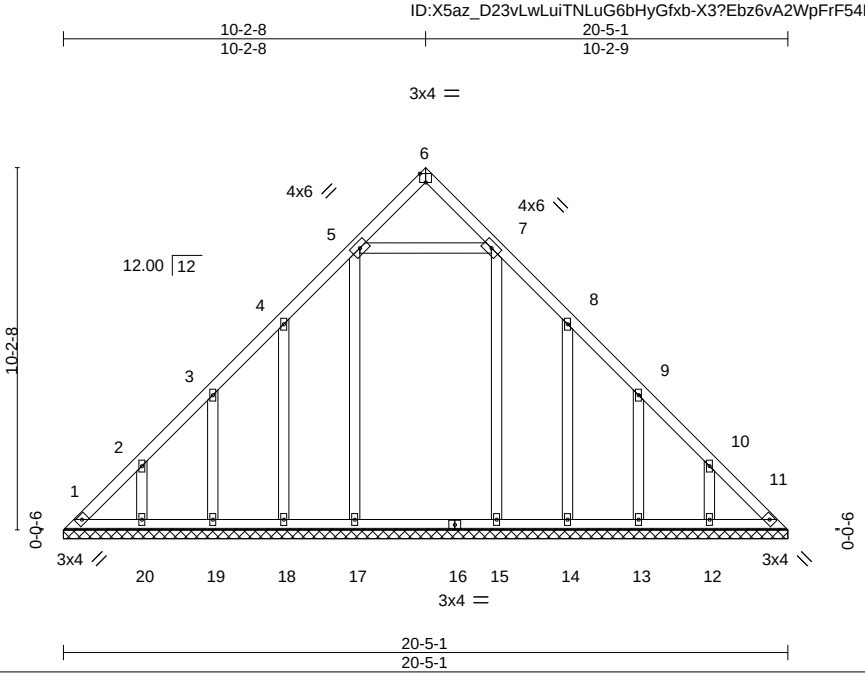

Plate Offsets (X,Y)-- [6:0-2-0,Edge], [7:0-0-0,0-0-0], [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0]

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	0.08	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	0.23	Horz(CT)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 133 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 20-5-1.
(lb) - Max Horz 1=-393(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 11, 17 except 1=-174(LC 10), 18=-200(LC 12), 19=-200(LC 12), 20=-217(LC 12), 14=-197(LC 13), 13=-201(LC 13), 12=-217(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 11, 18, 19, 20, 14, 13, 12 except 1=265(LC 9), 17=404(LC 19), 15=340(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-399/324, 2-3=-293/256, 3-4=-245/253, 4-5=-282/345, 7-8=-282/296, 10-11=-313/197
BOT CHORD 1-20=-146/267, 19-20=-146/267, 18-19=-146/267, 17-18=-146/267, 15-17=-146/267, 14-15=-146/267, 13-14=-146/267, 12-13=-146/267, 11-12=-146/267
WEBS 5-7=-236/292

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, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 17 except (jt=lb) 1=174, 18=200, 19=200, 20=217, 14=197, 13=201, 12=217.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V2	VALLEY	1	1	I57394454
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:26 2023 Page 1
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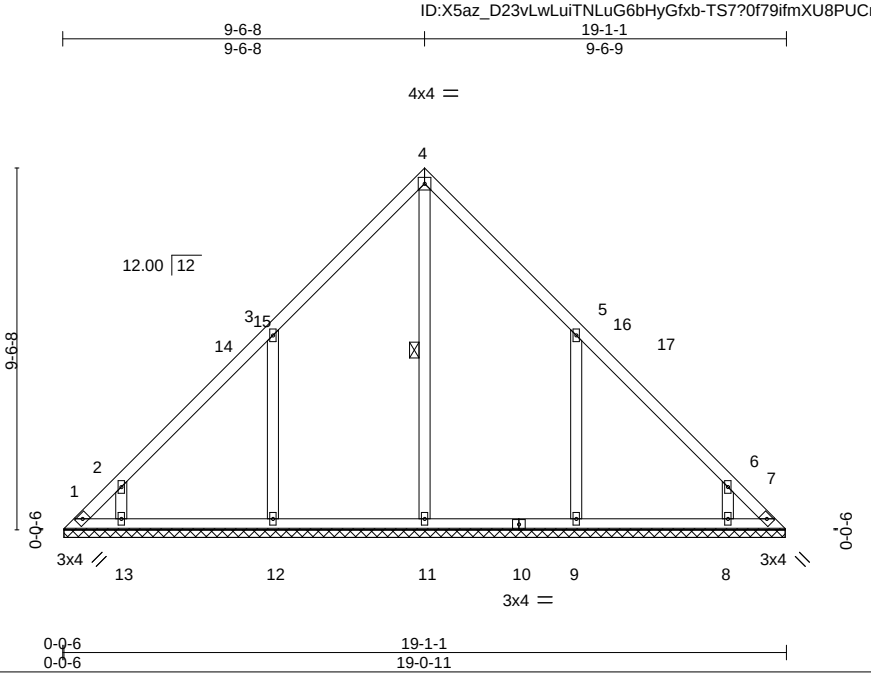

Plate Offsets (X,Y)-- [5:0-0-0,0-0-0], [6:0-0-0,0-0-0]

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	0.21	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	0.23	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 98 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.
WEBS 1 Row at midpt 4-11

REACTIONS. All bearings 19-0-5.
(lb) - Max Horz 1=-293(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-189(LC 10), 7=-140(LC 11), 12=-280(LC 12), 13=-203(LC 12), 9=-279(LC 13), 8=-204(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 7 except 1=255(LC 12), 11=447(LC 22), 12=523(LC 19), 13=304(LC 19), 9=523(LC 20), 8=304(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-357/311, 3-4=-273/261, 4-5=-273/261, 6-7=-355/311
WEBS 3-12=-511/429, 2-13=-395/368, 5-9=-511/429, 6-8=-395/368

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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 9-6-8, Exterior(2) 9-6-8 to 13-11-5, Interior(1) 13-11-5 to 18-8-13 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 189 lb uplift at joint 1, 140 lb uplift at joint 7, 280 lb uplift at joint 12, 203 lb uplift at joint 13, 279 lb uplift at joint 9 and 204 lb uplift at joint 8.
7) N/A

March 27,2023

ENGINEERING BY TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V3	VALLEY	1	1	I57394455
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:27 2023 Page 1
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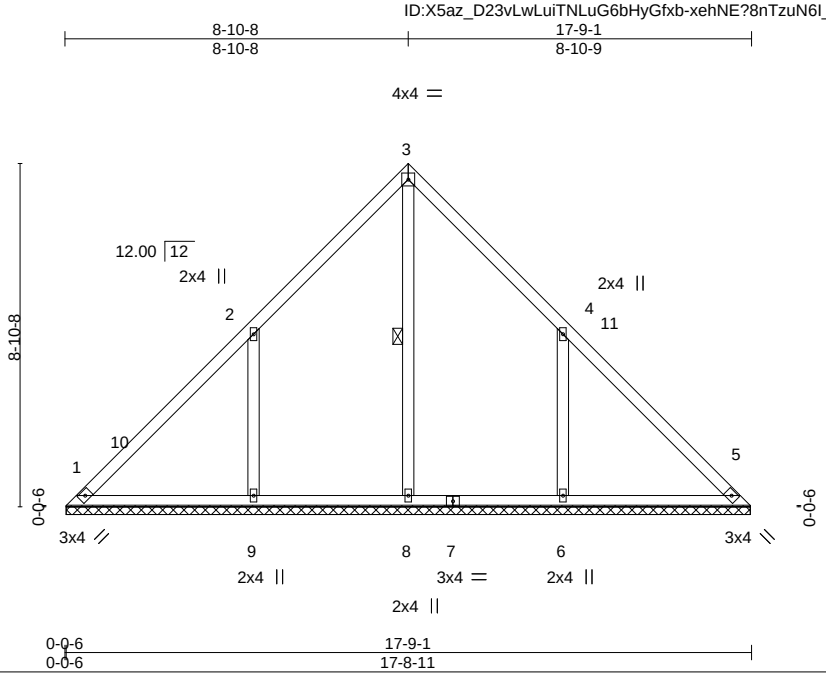

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.28	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	0.20	Horz(CT)	0.00	5	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.
WEBS 1 Row at midpt 3-8

REACTIONS. All bearings 17-8-5.
(lb) - Max Horz 1=-272(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 9=-328(LC 12), 6=-327(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=427(LC 22), 9=594(LC 19), 6=594(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-255/243, 3-4=-255/244
WEBS 2-9=-583/475, 4-6=-583/475

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) 0-4-4 to 4-10-8, Interior(1) 4-10-8 to 8-10-8, Exterior(2) 8-10-8 to 13-3-5, Interior(1) 13-3-5 to 17-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 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=328, 6=327.
6) N/A

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V4	VALLEY	1	1	I57394456
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:28 2023 Page 1
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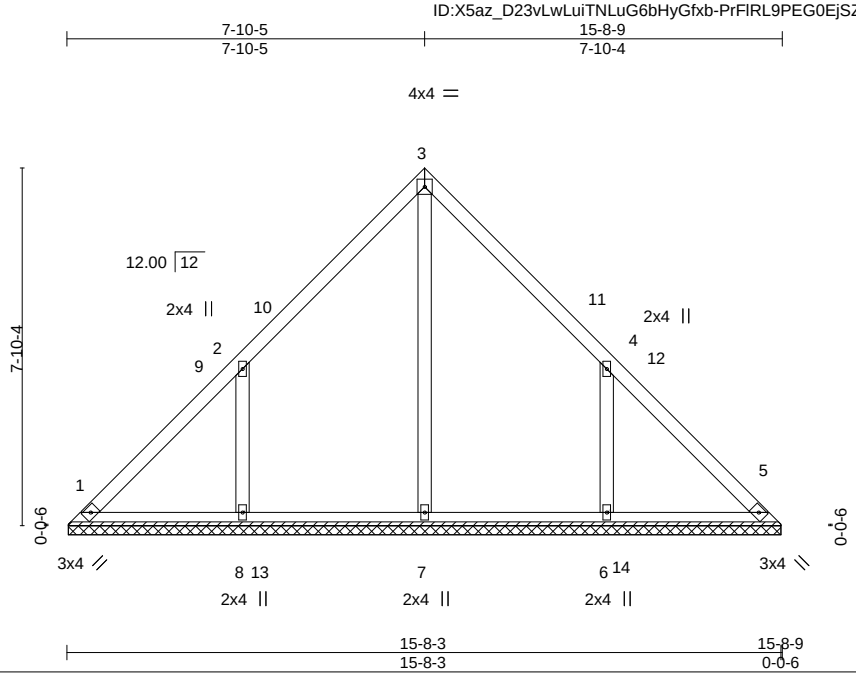

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.21	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	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 75 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 15-7-13.
(lb) - Max Horz 1=240(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-284(LC 12), 6=-284(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=425(LC 22), 8=512(LC 19), 6=512(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-511/431, 4-6=-511/431

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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 7-10-5, Exterior(2) 7-10-5 to 12-3-1, Interior(1) 12-3-1 to 15-4-5 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, 5 except (jt=lb) 8=284, 6=284.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V5	VALLEY	1	1	I57394457
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:29 2023 Page 1
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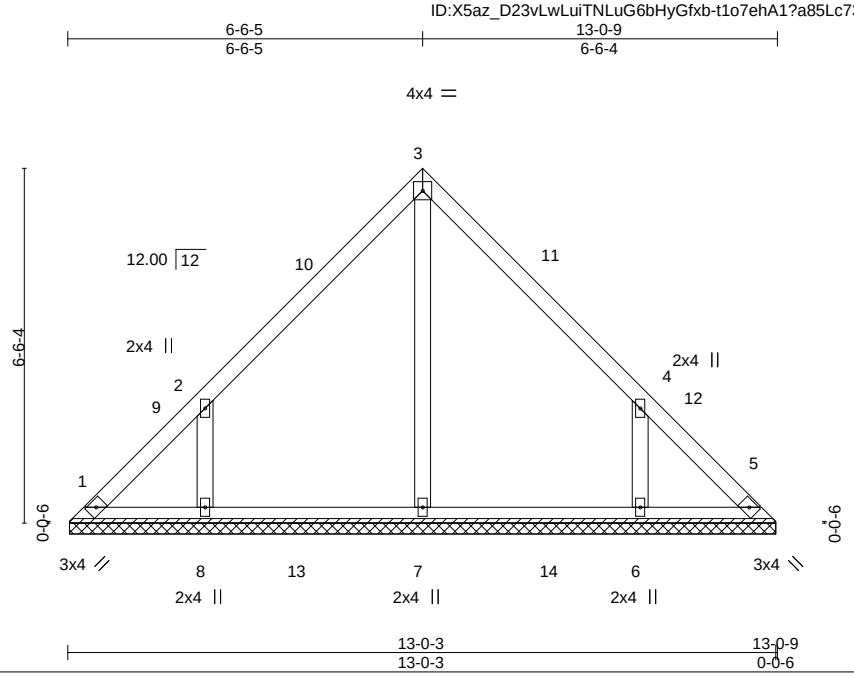

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.17	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	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 60 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 12-11-13.
(lb) - Max Horz 1=197(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-245(LC 12), 6=-245(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=390(LC 19), 8=404(LC 19), 6=404(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-451/401, 4-6=-451/402

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) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-6-5, Exterior(2) 6-6-5 to 10-11-1, Interior(1) 10-11-1 to 12-8-5 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, 5 except (jt=lb) 8=245, 6=245.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V6	VALLEY	1	1	I57394458
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:30 2023 Page 1
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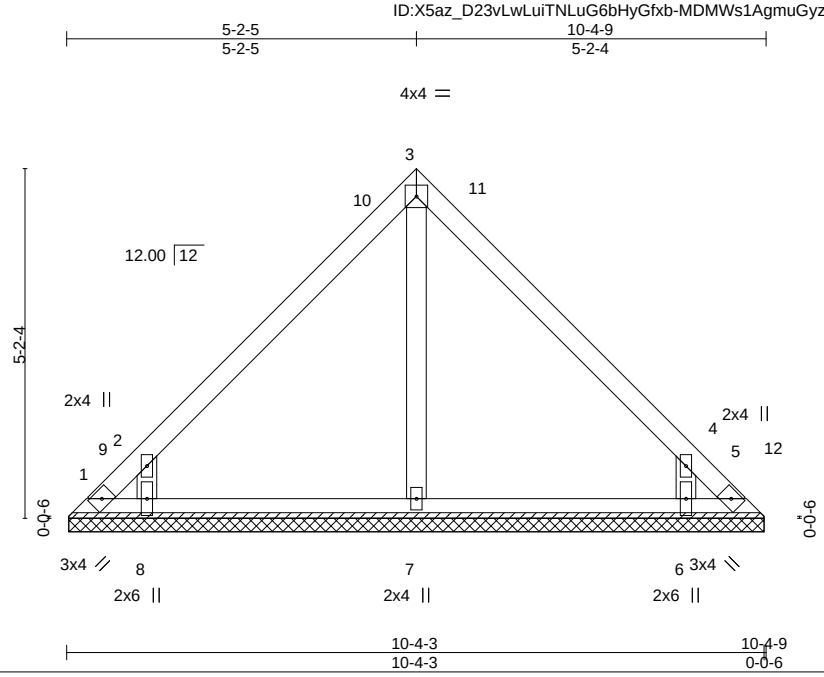


Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

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	0.20	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	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 44 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 10-3-13.
(lb) - Max Horz 1=-154(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-178(LC 10), 5=-153(LC 11), 8=-276(LC 12), 6=-276(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=416(LC 19), 6=416(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-257/213, 4-5=-258/213
WEBS 2-8=-529/498, 4-6=-530/498

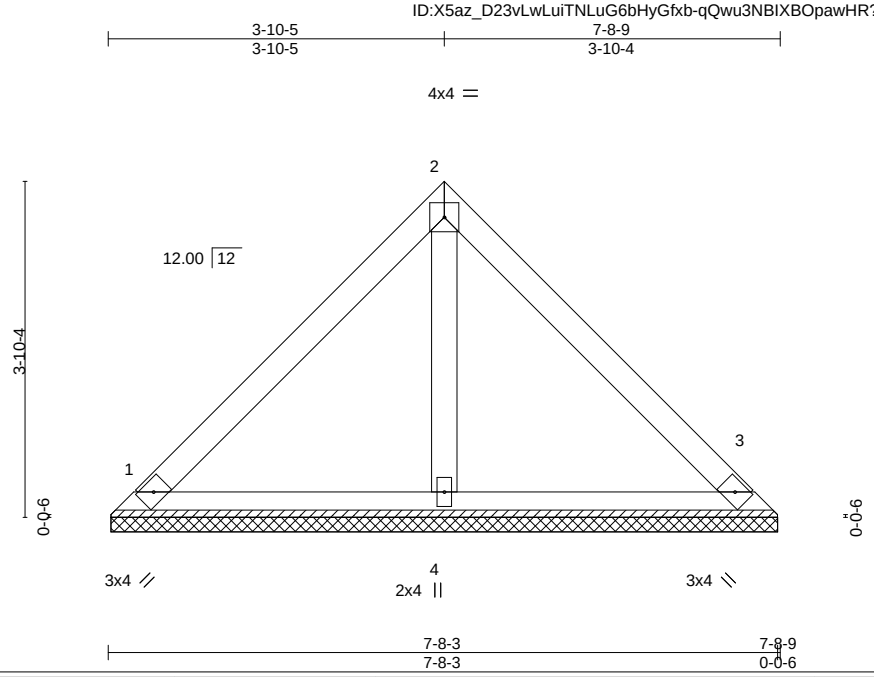
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 5-2-5, Exterior(2) 5-2-5 to 9-7-1, Interior(1) 9-7-1 to 10-0-5 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 178 lb uplift at joint 1, 153 lb uplift at joint 5, 276 lb uplift at joint 8 and 276 lb uplift at joint 6.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V7	VALLEY	1	1	I57394459
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:31 2023 Page 1
ID:X5az_D23vLwLuiTNLuG6bHyGfxb-qQwu3NBIXBOpawHR?KTHL0Fm2FJrBrOUHsxvuZzWnd6



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)	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	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 31 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=7-7-13, 3=7-7-13, 4=7-7-13
Max Horz 1=-112(LC 10)
Max Uplift 1=-55(LC 13), 3=-55(LC 13)
Max Grav 1=171(LC 1), 3=171(LC 1), 4=219(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) 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 55 lb uplift at joint 1 and 55 lb uplift at joint 3.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V8	VALLEY	1	1	I57394460
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:32 2023 Page 1
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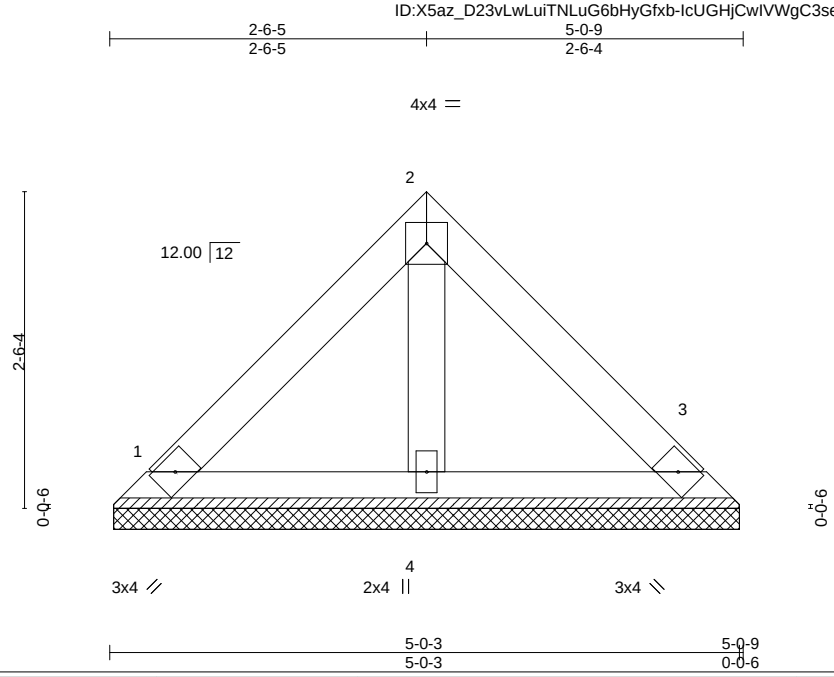

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-P							Weight: 19 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 5-0-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-11-13, 3=4-11-13, 4=4-11-13
Max Horz 1=-69(LC 8)
Max Uplift 1=-34(LC 13), 3=-34(LC 13)
Max Grav 1=106(LC 1), 3=106(LC 1), 4=136(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) 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 34 lb uplift at joint 1 and 34 lb uplift at joint 3.

March 27,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4569	V9	VALLEY	1	1	I57394461
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Mon Mar 27 08:46:33 2023 Page 1
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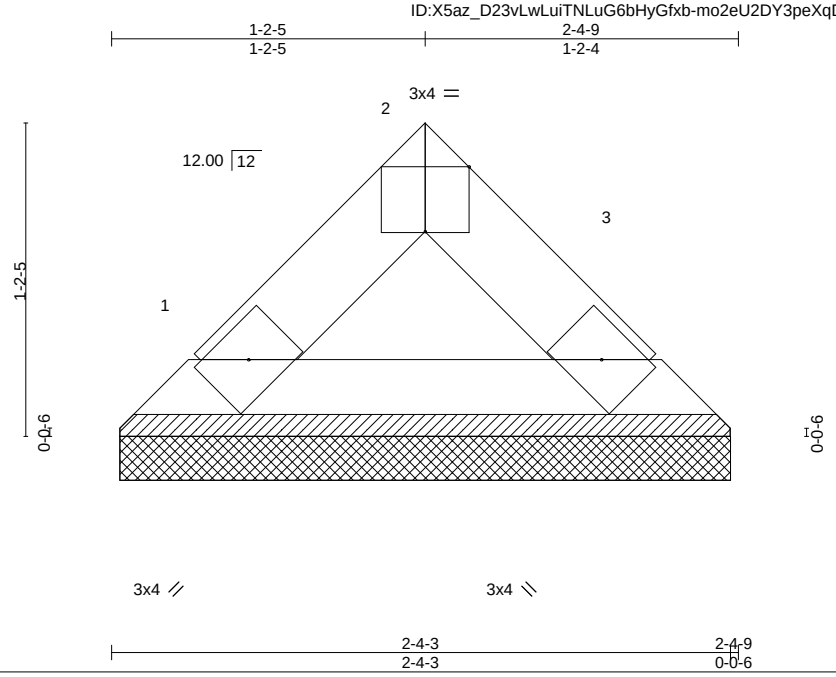


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 7 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-4-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-3-13, 3=2-3-13
Max Horz 1=-27(LC 8)
Max Uplift 1=-10(LC 12), 3=-10(LC 12)
Max Grav 1=67(LC 1), 3=67(LC 1)

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

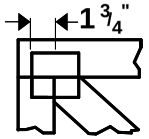
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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 10 lb uplift at joint 1 and 10 lb uplift at joint 3.

March 27,2023

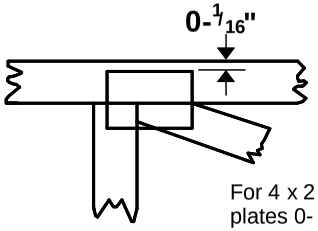
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

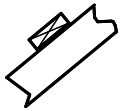
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

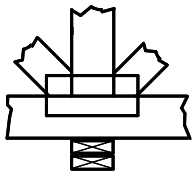
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

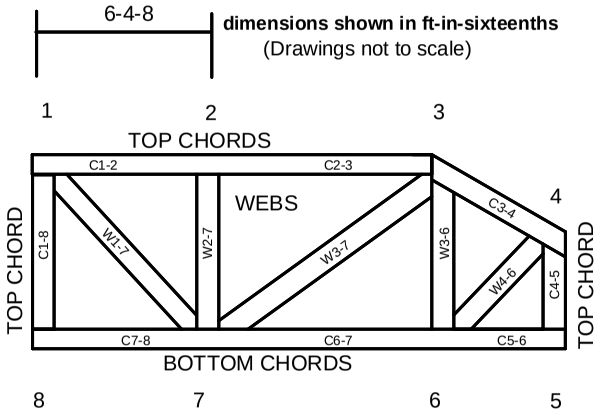


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

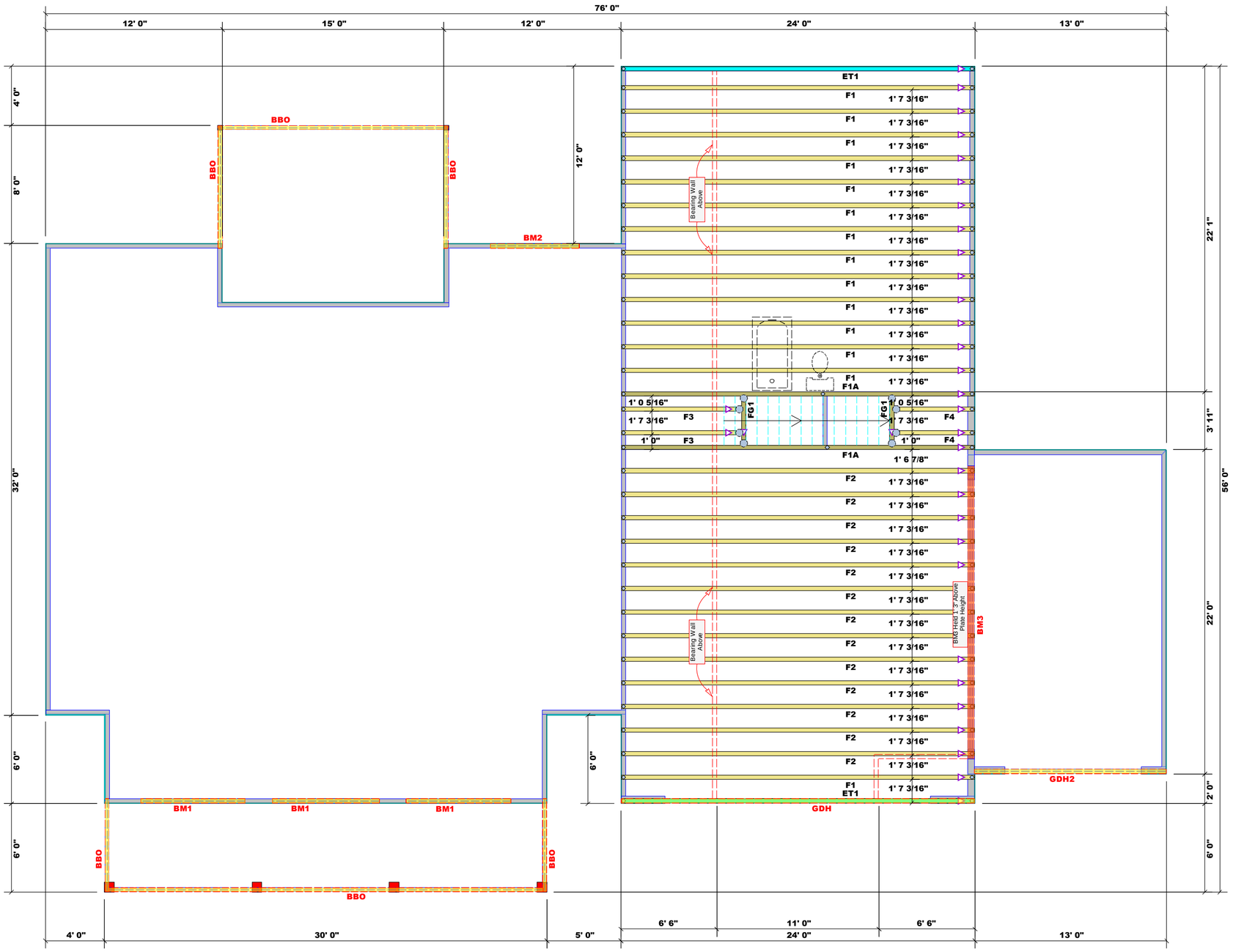
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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
BM1	8' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	6
BM2	6' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
BM3	20' 0"	1-3/4"x 18" LVL Kerto-S	3	3
GDH	24' 0"	1-3/4"x 16" LVL Kerto-S	2	2
GDH2	13' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	MSH422	USP	8	Varies	10d/3"	10d/3"

1 Truss Placement Plan
Scale: 3/16"=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

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.

Hatch Legend
Second Floor Walls
5' 11-3/4" Walls
Vaulted Ceiling
Drop Beam
Flush Beam

All Walls Shown Are Considered Load Bearing

▲= 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	Glover Design Build
JOB NAME	Lot 19 Purfoy Place
PLAN	Paxton / 36RF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0922-4570
CITY / CO.	Fuquay Varina / Harnett
ADDRESS	438 Lambert Lane
MODEL	Floor
DATE REV.	03/29/23
DRAWN BY	Jonathan Landry
SALES REP.	Lenny Norris

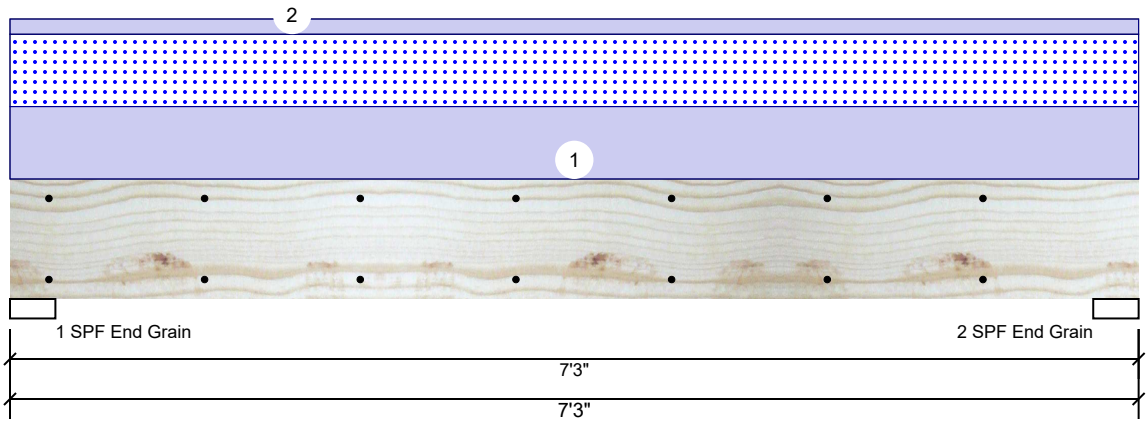
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.

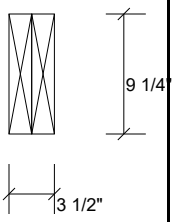
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent 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:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

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:	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	3158	2588	0	0
2	Vertical	0	3158	2588	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	56%	3158 / 2588	5746	L	D+S
2 - SPF End Grain	3.500"	Vert	56%	3158 / 2588	5746	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	9140 ft-lb	3'7 1/2"	14423 ft-lb	0.634 (63%)	D+S	L
Unbraced	9140 ft-lb	3'7 1/2"	9819 ft-lb	0.931 (93%)	D+S	L
Shear	4068 lb	1' 3/4"	7943 lb	0.512 (51%)	D+S	L
LL Defl inch	0.089 (L/919)	3'7 9/16"	0.170 (L/480)	0.522 (52%)	S	L
TL Defl inch	0.197 (L/414)	3'7 9/16"	0.340 (L/240)	0.580 (58%)	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			Top	714 PLF	0 PLF	714 PLF	0 PLF	0 PLF	A3
2	Uniform			Top	150 PLF	0 PLF	0 PLF	0 PLF	0 PLF	V1GE
	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 11/3/2024

Manufacturer Info

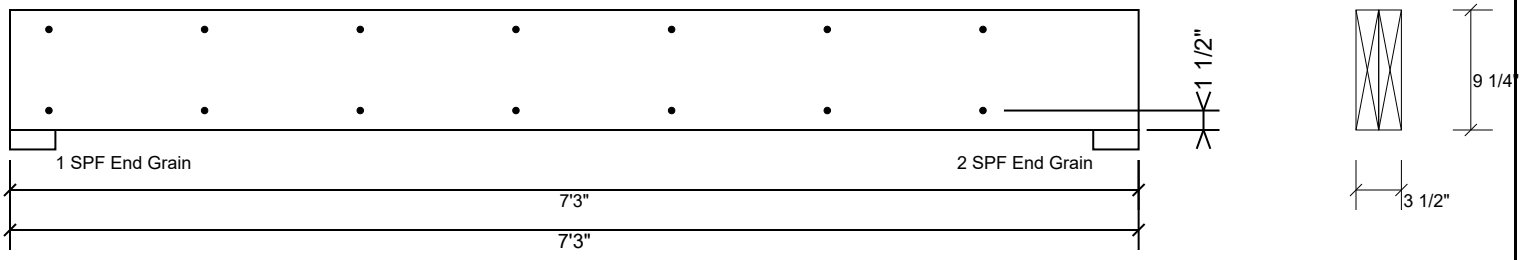
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

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

Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

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.
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

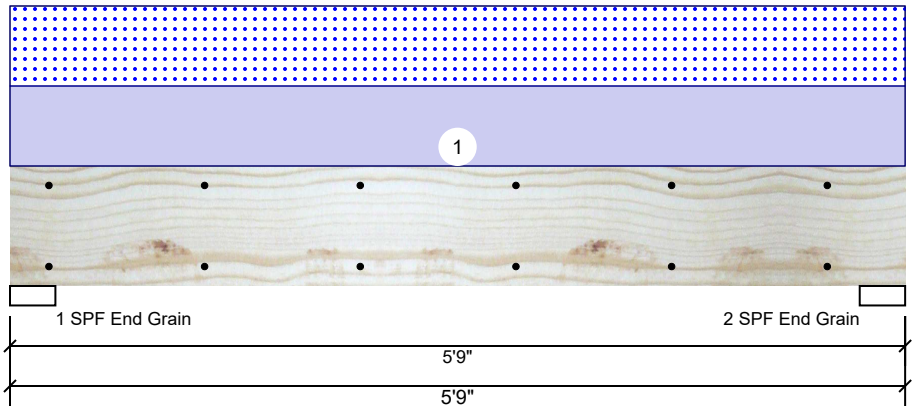
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us

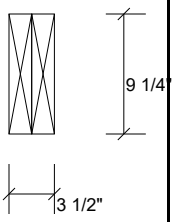
Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

BM2 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:	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	1737	1716	0	0
2	Vertical	0	1737	1716	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	34%	1737 / 1716	3453	L	D+S
2 - SPF End Grain	3.500"	Vert	34%	1737 / 1716	3453	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4204 ft-lb	2'10 1/2"	14423 ft-lb	0.292 (29%)	D+S	L
Unbraced	4204 ft-lb	2'10 1/2"	11298 ft-lb	0.372 (37%)	D+S	L
Shear	2183 lb	1' 3/4"	7943 lb	0.275 (27%)	D+S	L
LL Defl inch	0.030 (L/2099)	2'10 1/2"	0.132 (L/480)	0.229 (23%)	S	L
TL Defl inch	0.061 (L/1043)	2'10 1/2"	0.265 (L/240)	0.230 (23%)	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			Top	597 PLF	0 PLF	597 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 11/3/2024

Manufacturer Info

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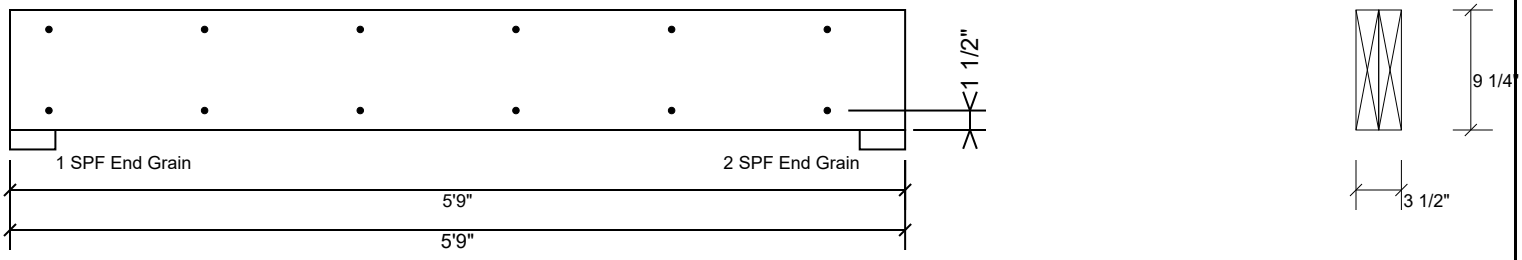
910-864-TRUS

Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

BM2 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

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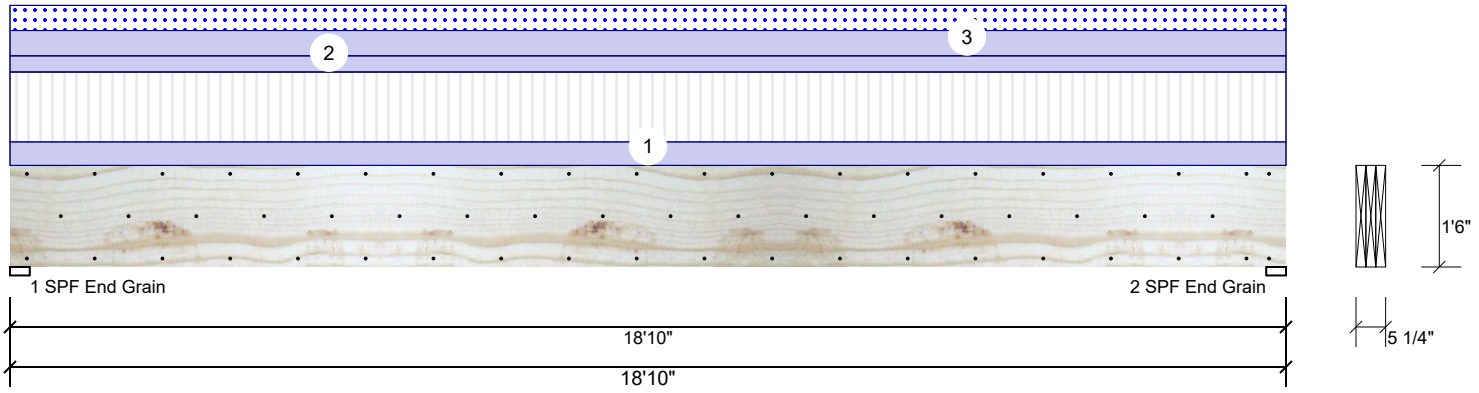
Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

BM3 Kerto-S LVL 1.750" X 18.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
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	4897	4727	1761	0	0
2	Vertical	4897	4727	1761	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	63%	4727 / 4993	9720	L	D+0.75(L+S)
2 - SPF End Grain	3.500"	Vert	63%	4727 / 4993	9720	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	43231 ft-lb	9'5"	67051 ft-lb	0.645 (64%)	D+L	L
Unbraced	43231 ft-lb	9'5"	43277 ft-lb	0.999 (100%)	D+L	L
Shear	7824 lb	17' 1/2"	20160 lb	0.388 (39%)	D+L	L
LL Defl inch	0.295 (L/748)	9'5 1/16"	0.460 (L/480)	0.642 (64%)	0.75(L+S)	L
TL Defl inch	0.574 (L/384)	9'5 1/16"	0.613 (L/360)	0.937 (94%)	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 4'5 1/16" o.c.
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	174 PLF	520 PLF	0 PLF	0 PLF	0 PLF	F1
2	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
3	Uniform			Top	187 PLF	0 PLF	187 PLF	0 PLF	0 PLF	C1
	Self Weight				21 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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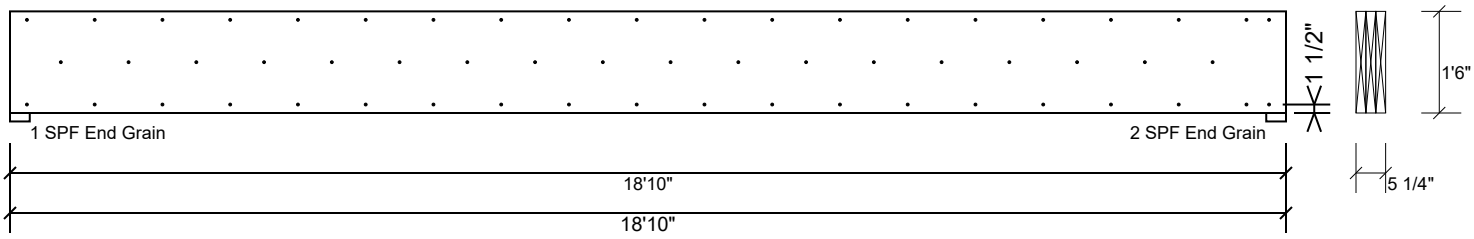
Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

BM3 Kerto-S LVL 1.750" X 18.000" 3-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 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

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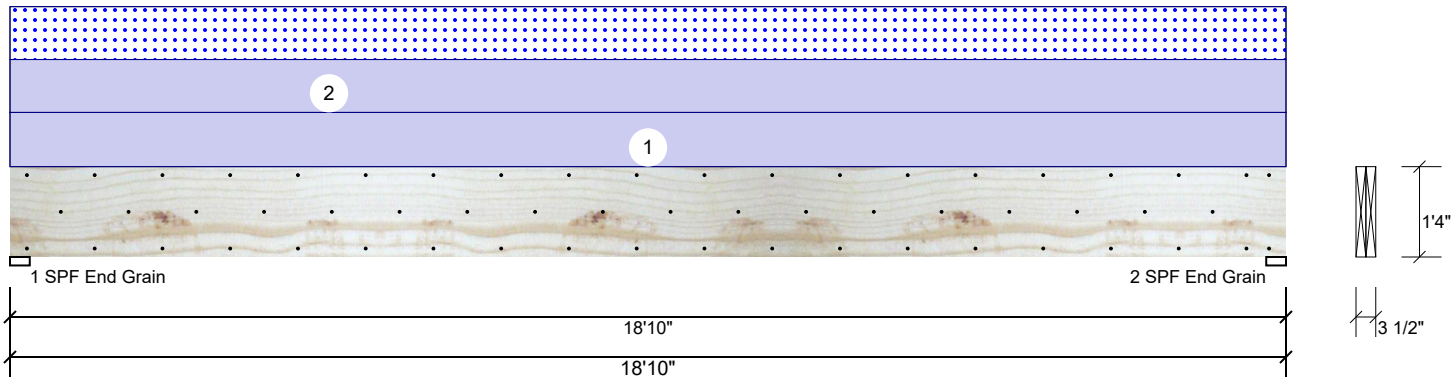
Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

GDH 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/IRC 2015
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	2349	1102	0	0
2	Vertical	0	2349	1102	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	34%	2349 / 1102	3451	L	D+S
2 - SPF End Grain	3.500"	Vert	34%	2349 / 1102	3451	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	15501 ft-lb	9'5"	39750 ft-lb	0.390 (39%)	D+S	L
Unbraced	15501 ft-lb	9'5"	15563 ft-lb	0.996 (100%)	D+S	L
Shear	2872 lb	1'7 1/2"	13739 lb	0.209 (21%)	D+S	L
LL Defl inch	0.136 (L/1619)	9'5 1/16"	0.460 (L/480)	0.296 (30%)	S	L
TL Defl inch	0.427 (L/517)	9'5 1/16"	0.920 (L/240)	0.464 (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 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 7'7 3/8" 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	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	117 PLF	0 PLF	117 PLF	0 PLF	0 PLF	C2GE
	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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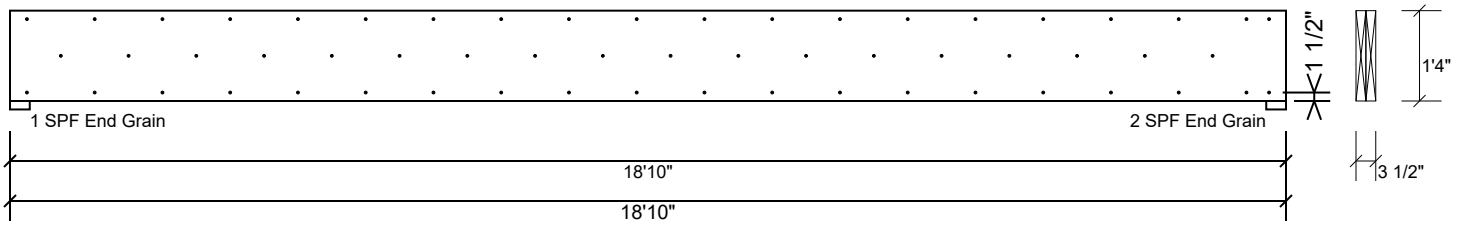
Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

GDH 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	0.0 %
Load	0.0 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	
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

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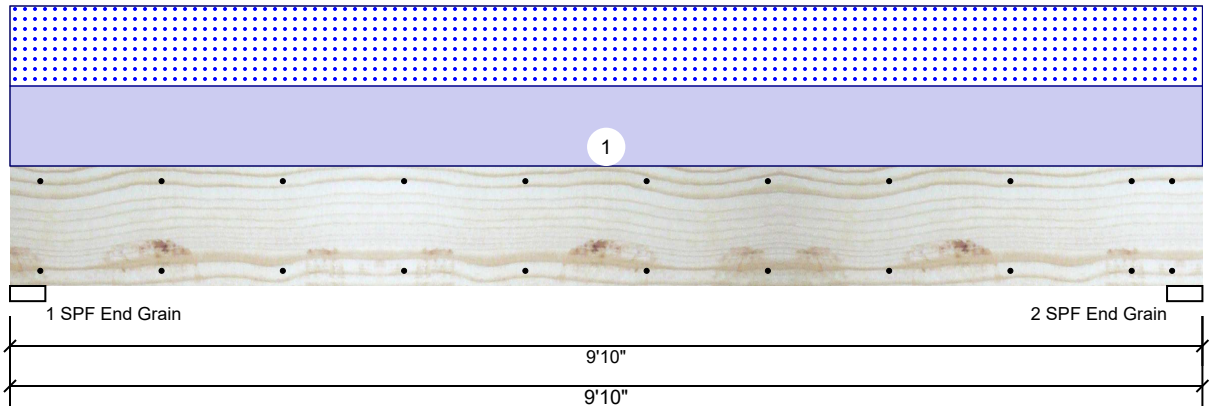
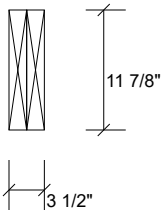
Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

GDH2 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/IRC 2015
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	1225	1180	0	0
2	Vertical	0	1225	1180	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	23%	1225 / 1180	2405	L	D+S
2 - SPF End Grain	3.500"	Vert	23%	1225 / 1180	2405	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5375 ft-lb	4'11"	22897 ft-lb	0.235 (23%)	D+S	L
Unbraced	5375 ft-lb	4'11"	9857 ft-lb	0.545 (55%)	D+S	L
Shear	1788 lb	1'3 3/8"	10197 lb	0.175 (18%)	D+S	L
LL Defl inch	0.050 (L/2249)	4'11"	0.234 (L/480)	0.213 (21%)	S	L
TL Defl inch	0.102 (L/1104)	4'11"	0.469 (L/240)	0.217 (22%)	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			Top	240 PLF	0 PLF	240 PLF	0 PLF	0 PLF	G1
	Self Weight				9 PLF					

Notes

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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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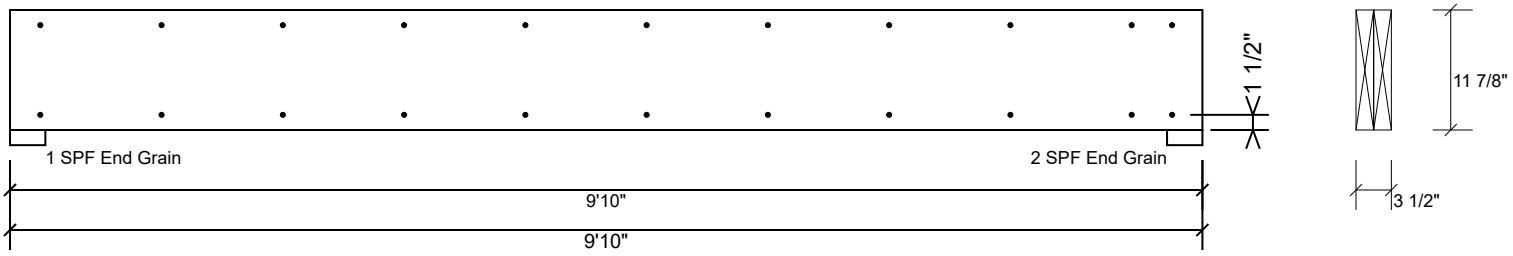
Client:	Glover Design Build	Date:	3/29/2023
Project:	Paxton	Input by:	Jonathan Landry
Address:	438 Lambert Lane Fuquay Varina, NC 27526	Job Name:	Lot 19 Purfoy Place
		Project #:	J0922-4570

GDH2 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

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

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0922-4570
Lot 19 Purfoy Place

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: I57456101 thru I57456107

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

North Carolina COA: C-0844

March 29,2023

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 19 Purfoy Place
J0922-4570	ET1	GABLE	2	1	I57456101
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:12 2023 Page 1
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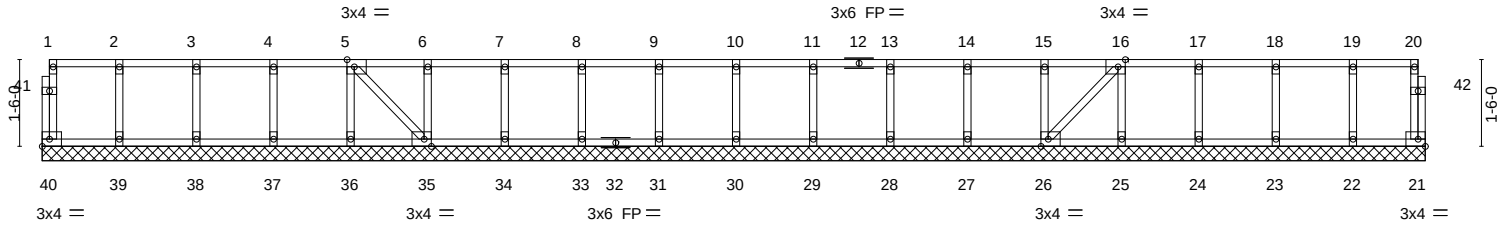

1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	12-0-0	13-4-0	14-8-0	16-0-0	17-4-0	18-8-0	20-0-0	21-4-0	22-8-0	23-11-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-3-0

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [16:0-1-8,Edge], [26:0-1-8,Edge], [35:0-1-8,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	26	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 114 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 23-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 40, 21, 39, 38, 37, 36, 35, 34, 33, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22

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 29,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4570	F1	FLOOR	14	1	I57456102
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:13 2023 Page 1
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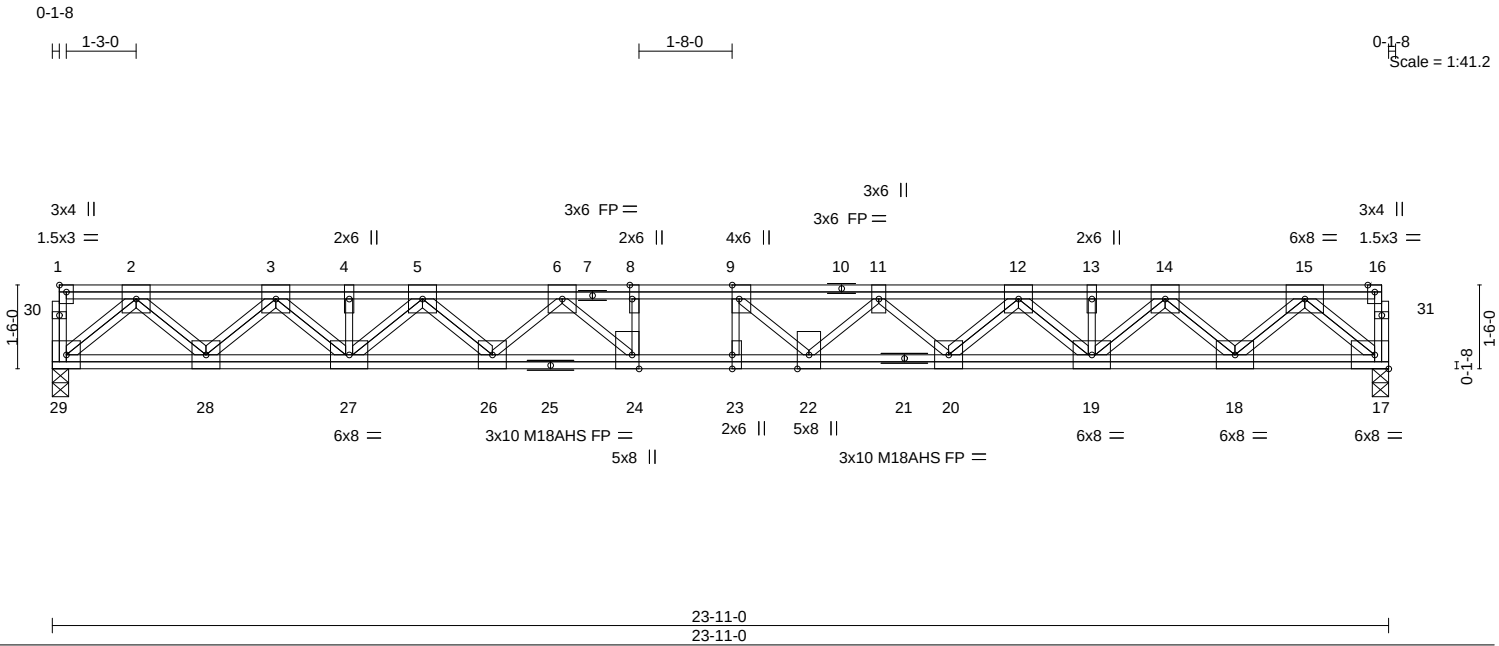

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-3-0,Edge], [9:0-3-0,Edge], [23:0-3-0,0-0-0], [24:0-3-0,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.38	22-23	>756	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.52	22-23	>550	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.69	Horz(CT)	0.08	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 222 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 29=0-3-8, 17=0-3-8
Max Grav 29=1393(LC 1), 17=1979(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2650/0, 3-4=-4820/0, 4-5=-4820/0, 5-6=-6418/0, 6-8=-8034/0, 8-9=-8034/0, 9-11=-8559/0, 11-12=-8790/0, 12-13=-7231/0, 13-14=-7231/0, 14-15=-3872/0
BOT CHORD 28-29=0/1480, 27-28=0/3803, 26-27=0/5761, 24-26=0/7207, 23-24=0/8034, 22-23=0/8034, 20-22=0/8839, 19-20=0/8751, 18-19=0/5601, 17-18=0/2120
WEBS 2-29=-1997/0, 2-28=0/1655, 3-28=-1631/0, 3-27=0/1404, 15-17=-2862/0, 15-18=0/2478, 14-18=-2445/0, 14-19=0/2251, 12-19=-2099/0, 12-20=-133/289, 5-27=-1300/0, 5-26=0/948, 6-26=-1098/0, 11-20=-269/119, 11-22=-629/217, 6-24=0/1446, 8-24=-593/0, 9-22=-214/1061, 9-23=-521/33

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 6x6 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.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1300 lb down at 17-4-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-29=-8, 1-16=-80
Concentrated Loads (lb)
Vert: 12=-1300(F)

March 29,2023

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

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4570	F1A	FLOOR GIRDER	2	1	I57456103
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:16 2023 Page 1
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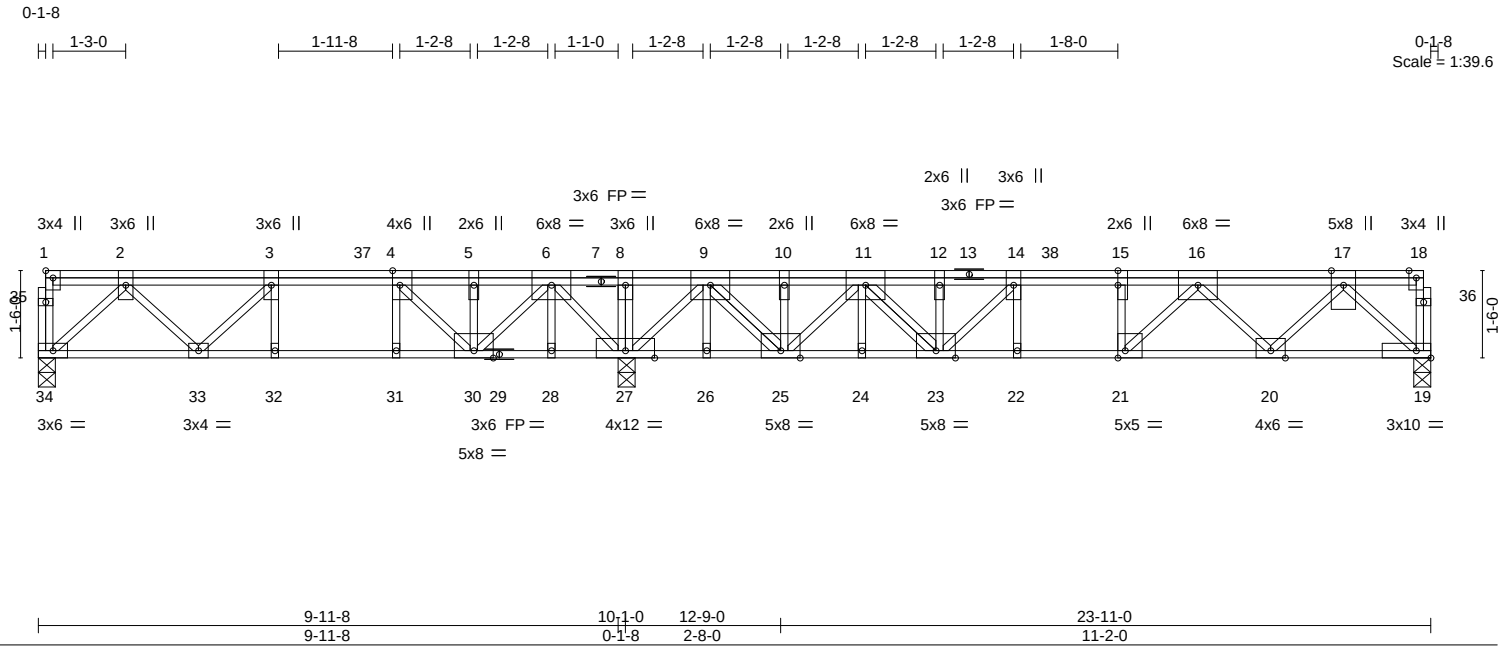

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [4:0-3-0,Edge], [15:0-3-0,0-0-0], [21:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.14	22-23	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.73	Vert(CT)	-0.19	22-23	>862	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.03	19	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 174 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 28-30,27-28,26-27,25-26.

REACTIONS. (size) 34=0-3-8, 19=0-3-8, 27=0-3-8
Max Grav 34=521(LC 3), 19=1302(LC 7), 27=3526(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-795/0, 3-4=-1043/0, 4-5=0/1471, 5-6=0/1471, 6-8=0/3631, 8-9=0/3631, 9-10=-553/144, 10-11=-561/141, 11-12=-4047/0, 12-14=-4086/0, 14-15=-4606/0, 15-16=-4606/0, 16-17=-2322/0
BOT CHORD 33-34=0/512, 32-33=0/1043, 31-32=0/1043, 30-31=0/1043, 28-30=-2487/0, 27-28=-2487/0, 26-27=-1535/0, 25-26=-1533/0, 24-25=0/2411, 23-24=0/2412, 22-23=0/4606, 21-22=0/4606, 20-21=0/3324, 19-20=0/1329
WEBS 8-27=-287/0, 2-34=-706/0, 2-33=-16/411, 3-33=-350/127, 6-27=-1769/0, 6-30=0/1660, 5-30=0/461, 4-30=-2274/0, 9-25=0/2771, 11-25=-2548/0, 11-23=0/2403, 12-23=-1155/0, 14-23=-854/149, 17-19=-1836/0, 17-20=0/1440, 16-20=-1452/0, 16-21=0/1910, 15-21=-1218/0, 9-27=-2837/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1280 lb down at 17-4-12, and 976 lb down at 5-7-0, and 976 lb down at 15-7-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 19-34=-8, 1-18=-80
Concentrated Loads (lb)
Vert: 12=-912(B) 37=-912(B) 38=-1280(F)

March 29,2023

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A MiTek Affiliate
818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4570	F2	FLOOR	13	1	I57456104
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:18 2023 Page 1
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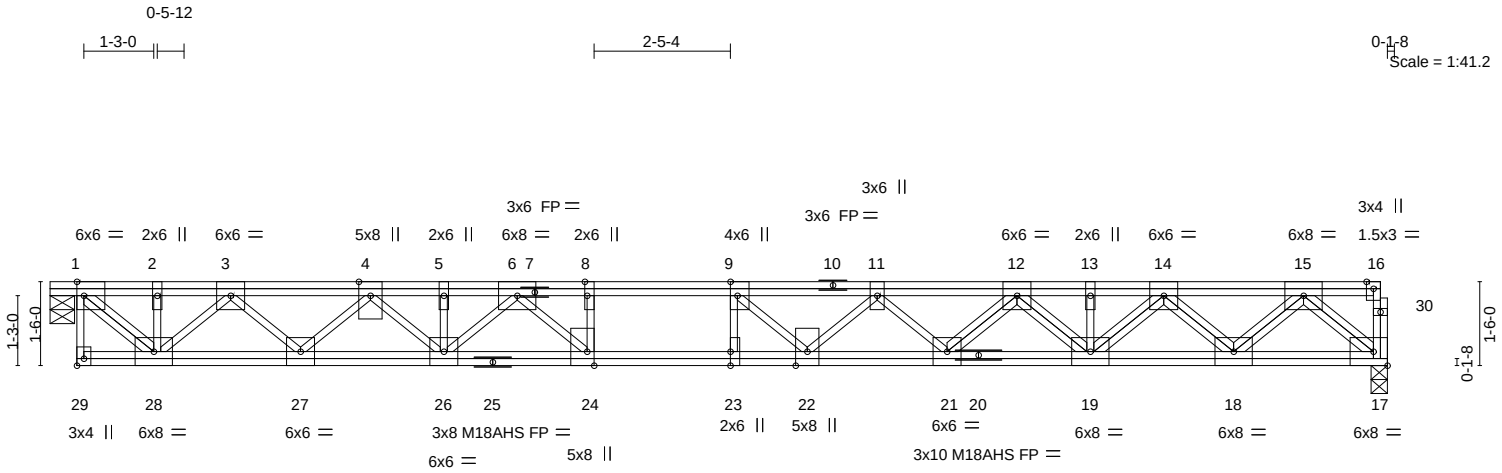

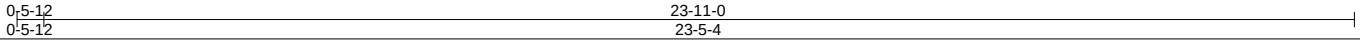

Plate Offsets (X,Y)-- [1:0-1-8,Edge], [8:0-3-0,Edge], [9:0-3-0,Edge], [23:0-3-0,0-0-0], [24:0-3-0,Edge], [29:Edge,0-1-8]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.40	22-23	>706	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.54	22-23	>514	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.02	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 207 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

REACTIONS. (size) 1=0-5-4, 17=0-3-8
Max Grav 1=1386(LC 1), 17=1954(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1423/0, 2-3=-1428/0, 3-4=-3776/0, 4-5=-5637/0, 5-6=-5637/0, 6-8=-7637/0, 8-9=-7637/0, 9-11=-8344/0, 11-12=-8642/0, 12-13=-7131/0, 13-14=-7131/0, 14-15=-3820/0
BOT CHORD 27-28=0/2729, 26-27=0/4768, 24-26=0/6493, 23-24=0/7637, 22-23=0/7637, 21-22=0/8688, 19-21=0/8616, 18-19=0/5525, 17-18=0/2093
WEBS 1-28=0/1956, 3-28=-1767/0, 3-27=0/1481, 15-17=-2826/0, 15-18=0/2443, 14-18=-2411/0, 14-19=0/2219, 12-19=-2049/0, 12-21=-111/267, 11-22=-683/190, 9-22=-152/1289, 9-23=-636/0, 4-27=-1402/0, 4-26=0/1201, 6-26=-1181/0, 6-24=0/1847, 8-24=-799/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates 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.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1300 lb down at 17-4-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-29=-8, 1-16=-80
Concentrated Loads (lb)
Vert: 12=-1300(F)

March 29,2023

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TRENCO
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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4570	F3	FLOOR	2	1	I57456105
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:19 2023 Page 1
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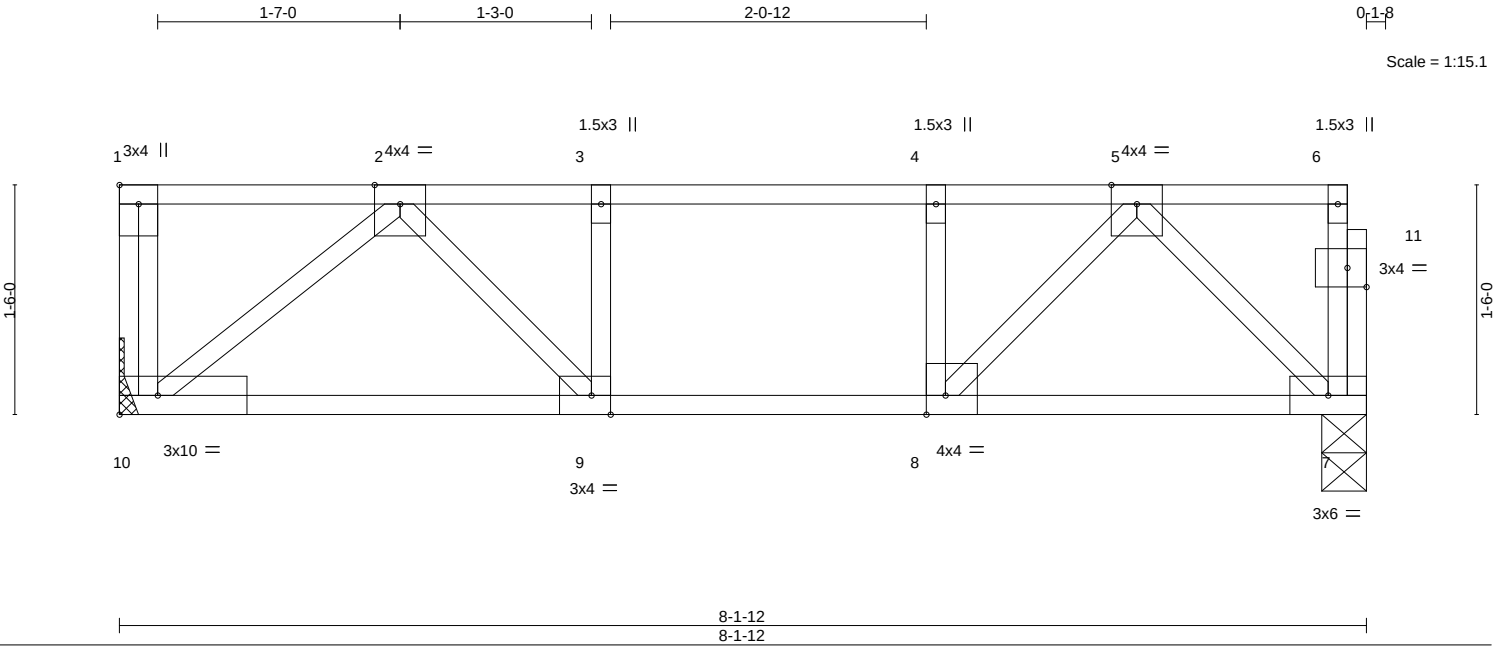

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-1-8]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.89	Vert(LL)	-0.14	9-10	>679	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.92	Vert(CT)	-0.19	9-10	>498	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 46 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(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) 10=Mechanical, 7=0-3-8
Max Grav 10=1366(LC 1), 7=623(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1253/0, 3-4=-1253/0, 4-5=-1253/0
BOT CHORD 9-10=0/1593, 8-9=0/1253, 7-8=0/571
WEBS 2-10=-2045/0, 2-9=-565/59, 5-7=-802/0, 5-8=0/1016, 4-8=-566/0, 3-9=-43/289

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) Refer to girder(s) for truss to truss connections.
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.
6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1300 lb down at 1-10-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 7-10=-8, 1-6=-80
Concentrated Loads (lb)
Vert: 2=-1300(F)

March 29,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4570	F4	FLOOR	2	1	I57456106
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:20 2023 Page 1
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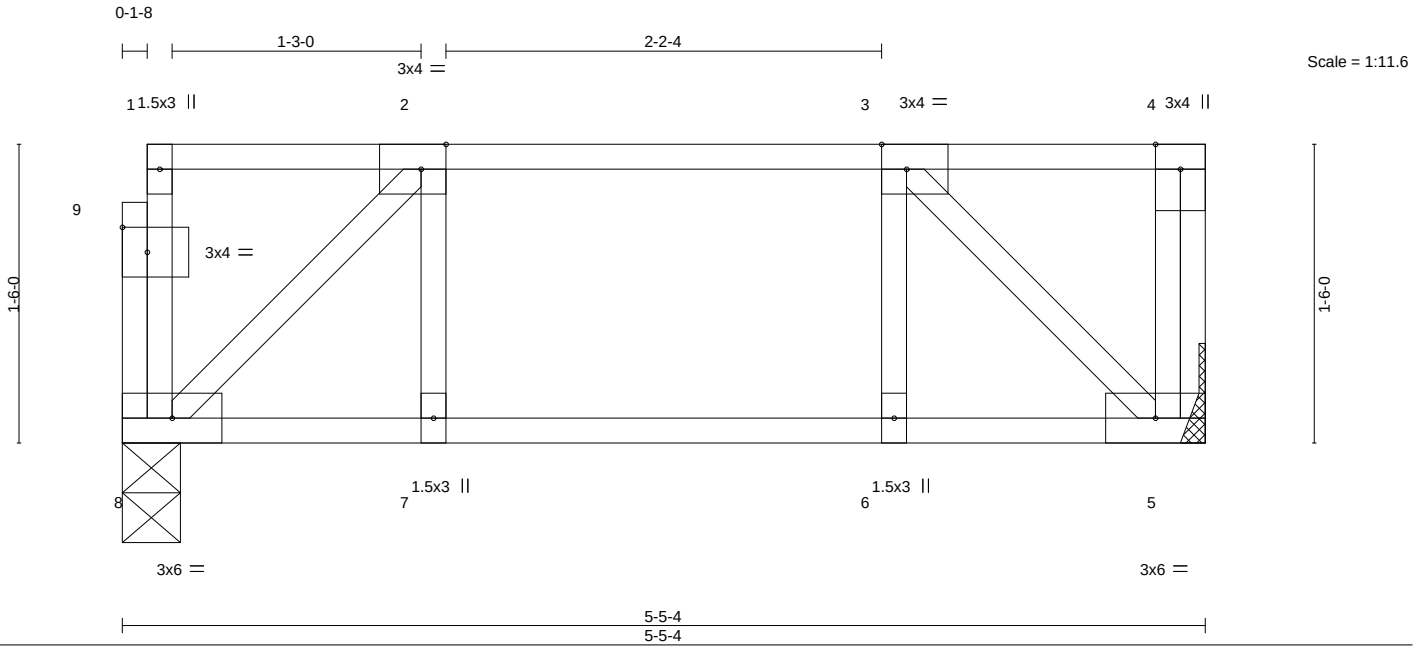


Plate Offsets (X,Y)-- [2:0-1-8,Edge], [3:0-1-8,Edge], [9:0-1-8,0-1-8]

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	0.18	Vert(LL)	-0.01	6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.01	6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	5	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 5-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 5=Mechanical
Max Grav 8=279(LC 1), 5=285(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-336/0, 3-5=-339/0

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) Refer to girder(s) for truss to truss connections.
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 29,2023

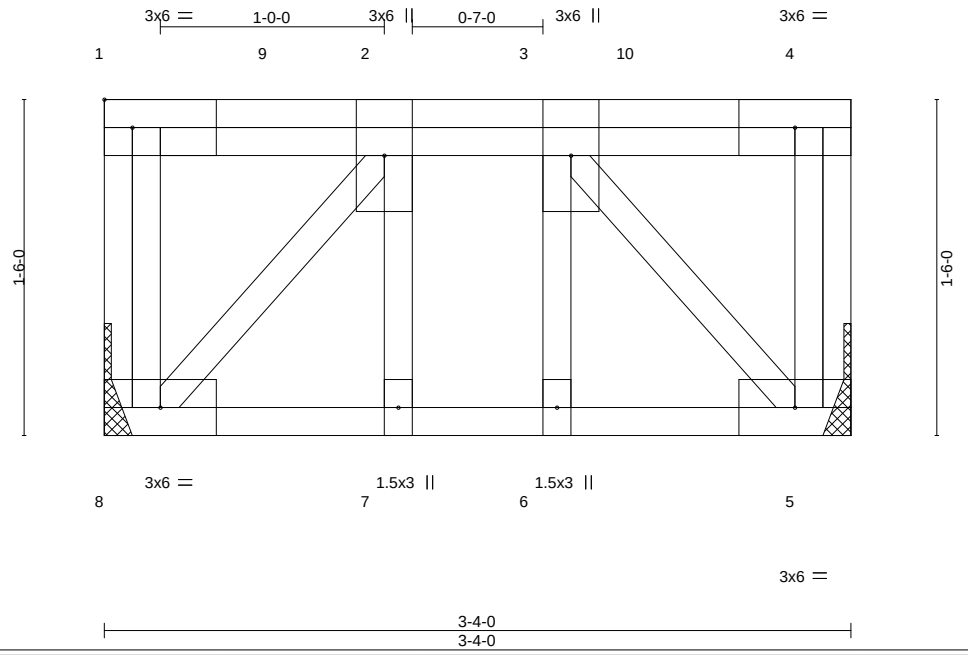
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 19 Purfoy Place
J0922-4570	FG1	FLOOR GIRDER	2	1	I57456107

Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Jan 6 2022 MiTek Industries, Inc. Wed Mar 29 09:16:20 2023 Page 1

ID:X5az_D23vLwLuiTNLuG6bHyGfxb-6BiXGocua4uEtisNgR7zFZik?7GeBv9SzzWt9dzW7?9



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	0.46	Vert(LL)	-0.01	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.21	Vert(CT)	-0.01	7	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.32	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-S							Weight: 29 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 3-4-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=Mechanical, 5=Mechanical
Max Grav 8=1470(LC 1), 5=1447(LC 1)

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

TOP CHORD	1-8=-448/0, 4-5=-424/0, 2-3=-916/0
BOT CHORD	7-8=0/916, 6-7=0/916, 5-6=0/916
WEBS	2-8=-1366/0, 3-5=-1366/0

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) Refer to girder(s) for truss to truss connections.
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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1337 lb down at 0-10-4, and 1336 lb down at 2-5-7 on top chord. The design/selection of such connection device(s) is the responsibility of others.
6) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + 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: 9=-1289(F) 10=-1288(F)

March 29,2023

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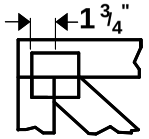
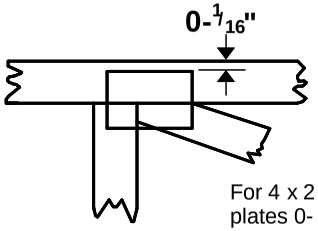
Symbols

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.

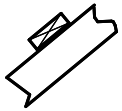
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

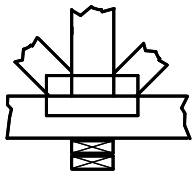
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

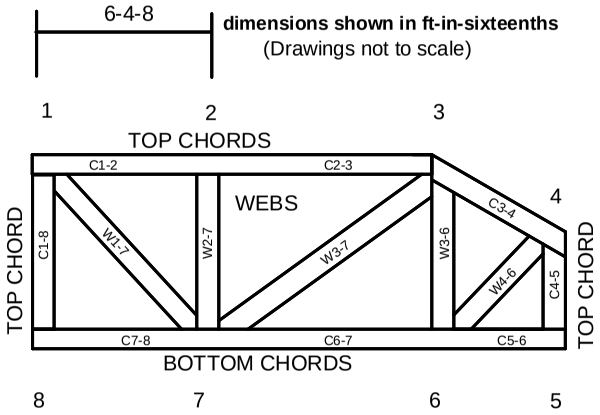


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.