

# **PLANS DESIGNED TO THE 2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE**

WITH OPTIONAL

SIDE LOAD

CALE 1/8" = 1'-0

MEAN ROOF HEIGHT: 18'-8	3"	HEIGHT TO RIDGE: 25'-5"			
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 120 MPH, 3 SECOND GUST (93 FASTEST MILE) EXPOSURE "B"								
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS								LOADS
MEAN ROOF   UP TO 30'   30'-1" TO 35'   35'-1" TO 40					TO 40'	40'-1"	TO 45'	
ZONE 1	14.2	-15.0	14.9	-15.8	15.5	-16.4	15.9	-16.8
ZONE 2	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2
ZONE 3	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2
ZONE 4	15.5	-16.0	16.3	-16.8	16.9	-17.4	17.4	-17.9
ZONE 5	155	-20 O	16.3	-21.0	16.0	_21 Q	174	-22.4

	DESIGNED FOR WIN	ID SPEED	OF 130 MF	PH, 3 SECO	OND GUST	(101 FAS	TEST MILE	) EXPOSU	RE "B"
COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING I						_OADS			
	MEAN ROOF	UP T	O 30'	30'-1"	TO 35'	35'-1"	TO 40'	40'-1"	TO 45'
	ZONE 1	16.7	-18.0	17.5	-18.9	18.2	-19.6	18.7	-20.2
	ZONE 2	16.7	-21.0	17.5	-22.1	18.2	-22.9	18.7	-23.5
	ZONE 3	16.7	-21.0	17.5	-22.1	18.2	-22.9	18.7	-23.5
	ZONE 4	18.2	-19.0	19.1	-20.0	19.8	-20.7	20.4	-21.3
	ZONE 5	18.2	-24.0	19.1	-25.2	19.8	-26.2	20.4	-26.9

# **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 = 2,283 SQ.FT.

NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 15.22 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 = 7.61 SQ.FT.

TOP OF PLATE SHINGLES AS SPECIFIED **SPECIFIED** SUB FLOOR TOP OF PLATE SIDING AS-SUB FLOOR **RAIL AS NEEDED FRONT ELEVATION** PER CODE **AIR LEAKAGE** SCALE 1/4" = 1'-0" N1102.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed with an air barrier system to limit

\*\*\* STONE ON FRONT FACING ONLY.

**SQUARE FOOTAGE** HEATED

SUB FLOOR

FIRST FLOOR PALYROOM 1555 SQ.FT. 264 SQ.FT. 1819 SQ.FT

**HEATED OPTIONAL** 570 SQ.FT. 570 SQ.FT. SECOND FLOOR

**UNHEATED** GARAGE FRONT PORCH 448 SQ.FT. 42 SQ.FT. REAR PORCH 154 SQ.FT 644 SQ.FT

UNHEATED OPTIONAL 298 SQ.FT 298 SQ.FT THIRD GARAGE TOTAL

TOP OF PLATE TOP OF PLATE  $\perp$  COMPOSITION-SHINGLES AS-WINE ВАТН SUB FLOOR SUB FLOOR TOP OF PLATE TOP OF PLATE - SIDING AS--SPECIFIED SIDING AS SUB FLOOR SPECIFIED. SUB FLOOR

RIDGE VENT AS REQUIRED

PLUMBING: DOUBLE J **ELECTRICAL: PIONEER** 

HVAC: TBD

infiltration. The sealing methods between dissimilar materials shall

where present, the following shall be caulked, gasketed, weather

stripped or otherwise sealed with an air barrier material or solid

1. Blocking and sealing floor/ceiling systems and under knee walls

2. Capping and sealing shafts or chases, including flue shafts.

material consistent with Appendix E-2.4 of this code:

3. Capping and sealing soffit or dropped ceiling areas.

open to unconditioned or exterior space.

allow for differential expansion and contraction. For all homes,

**REAR ELEVATION** 

RAIL AS NEEDED

PER CODE

SCALE 1/4" = 1'-0"

PURCHASER MUST VERIFY ALI **LOT 1 NORTH POINTE** HAYNES HOME PLANS, INC. TBD JOSIE WILLIAMS RE

**ERWIN, NC 28339** 

TOP OF PLATE

SUB FLOOR

TOP OF PLATE

3 CAR GARAGE **COVERED PORCH**  ASSUMES NO LIABILITY FOR CONTRACTORS PRACTICES AND VARY WITH LOCATION. A LOCAL DESIGNER, ARCHITECT OR ENGINEER SHOULD BE CONSULTED

THESE DRAWING ARE AS SUCH SHALL REMAIN

**ELEVATIONS** REAR

Halifax The **∞ FRONT** 

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1555 SQ.FT
PALYROOM 264 SQ.FT TOTAL 1819
HEATED OPTIONAL
SECOND FLOOR 570 TOTAL UNHEATED GARAGE FRONT PORCH REAR PORCH UNHEATED OPTIONAL

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PAGE 1 OF 8

**GUARD RAIL NOTES** 

screening shall not be considered as a guard.

the leading edges of the treads.

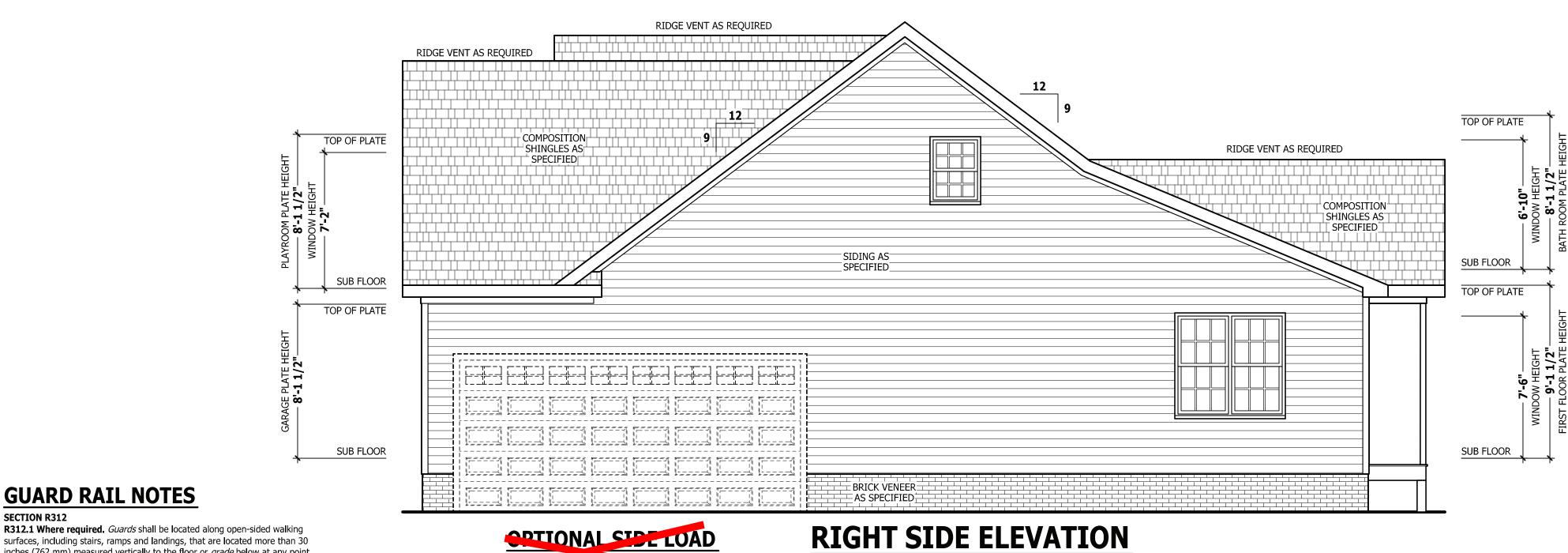
inches (102 mm)in diameter.

mm) in diameter.

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

fixed seating or the line connecting the leading edges of the treads.

passage of a sphere 4 3/8 inches (111 mm) in diameter.

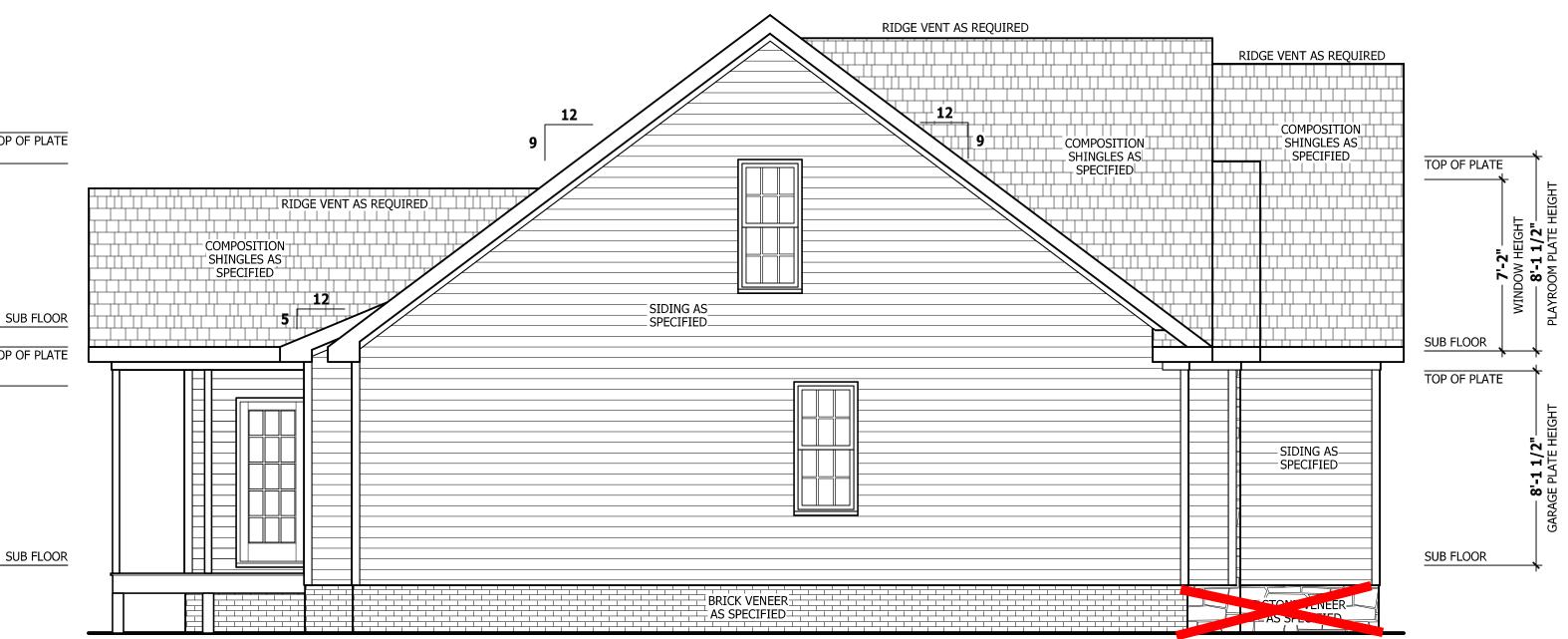


# **R312.2 Height.** Required *guards* at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent 1. Guards on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the 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 **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 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 2. Guards on the open sides of stairs shall not have openings which allow TOP OF PLATE BATH ROOM 8'=: SUB FLOOR TOP OF PLATE

WIND

# RIGHT SIDE ELEVATION

SCALE 1/4" = 1'-0"



**LEFT SIDE ELEVATION** 

SCALE 1/4" = 1'-0"

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NSTRUMENTS OF SERVICE AND AS SUCH SHALL REMAIN PROPERTY OF THE DESIGNER.

**ELEVATIONS** Halifax

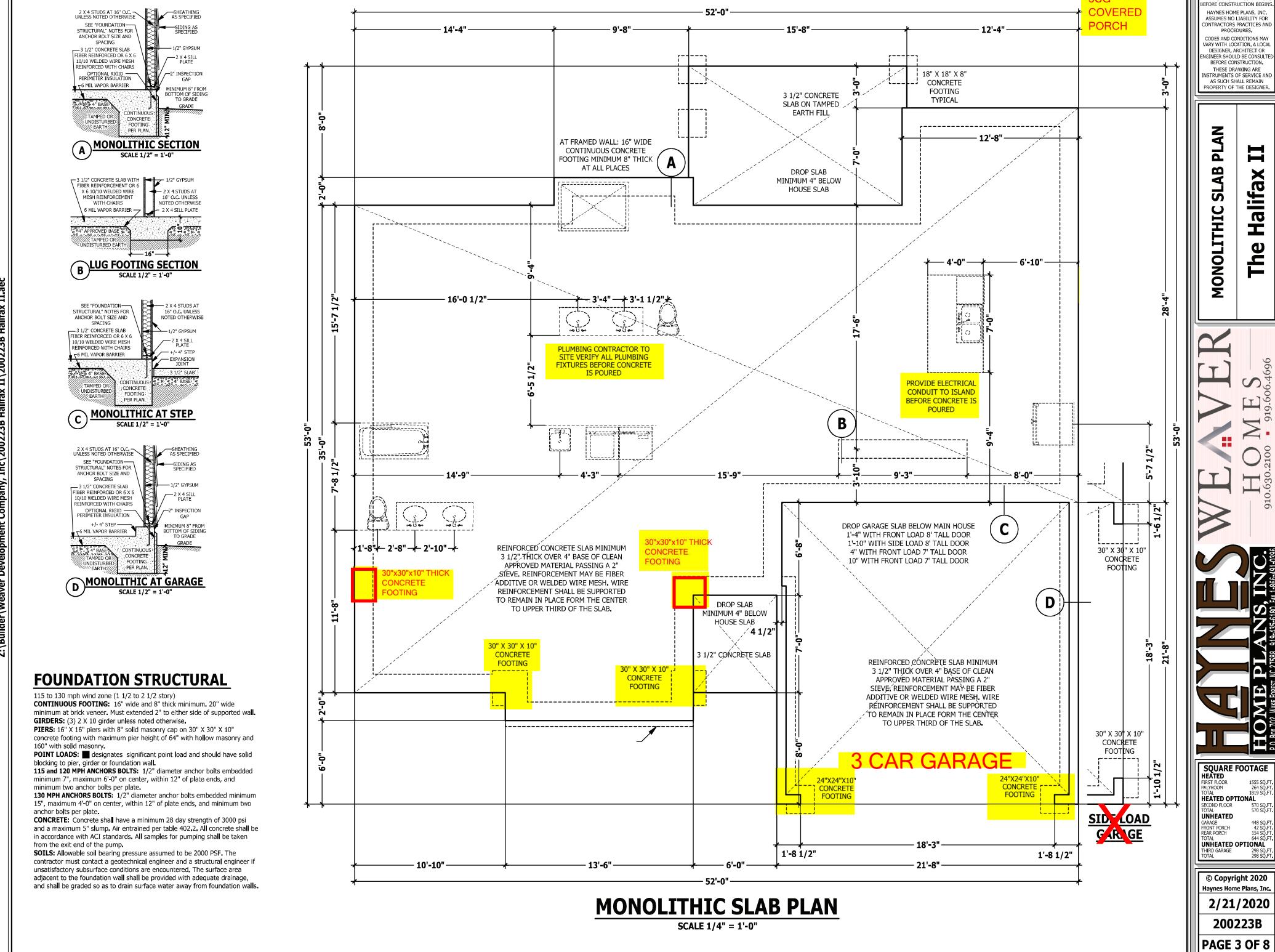
The

SQUARE FOOTAGE
HEATED
FIRST FLOOR
PALYROOM 264 SQ.FT.
TOTAL PALTKOUM 264
TOTAL 1819 S
HEATED OPTIONAL
SECOND FLOOR 570 S
TOTAL 570 S
UNHEATED
GARAGE 448 S
FRONT PORCH 42 S
REAR PORCH 154
TOTAL 644 GARAGE 448 SO,FT FRONT PORCH 42 SO,FT REAR PORCH 154 SO,FT TOTAL 644 SO,FT UNHEATED OPTIONAL THIRD GAPAGE 298 SO,FT

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PAGE 2 OF 8

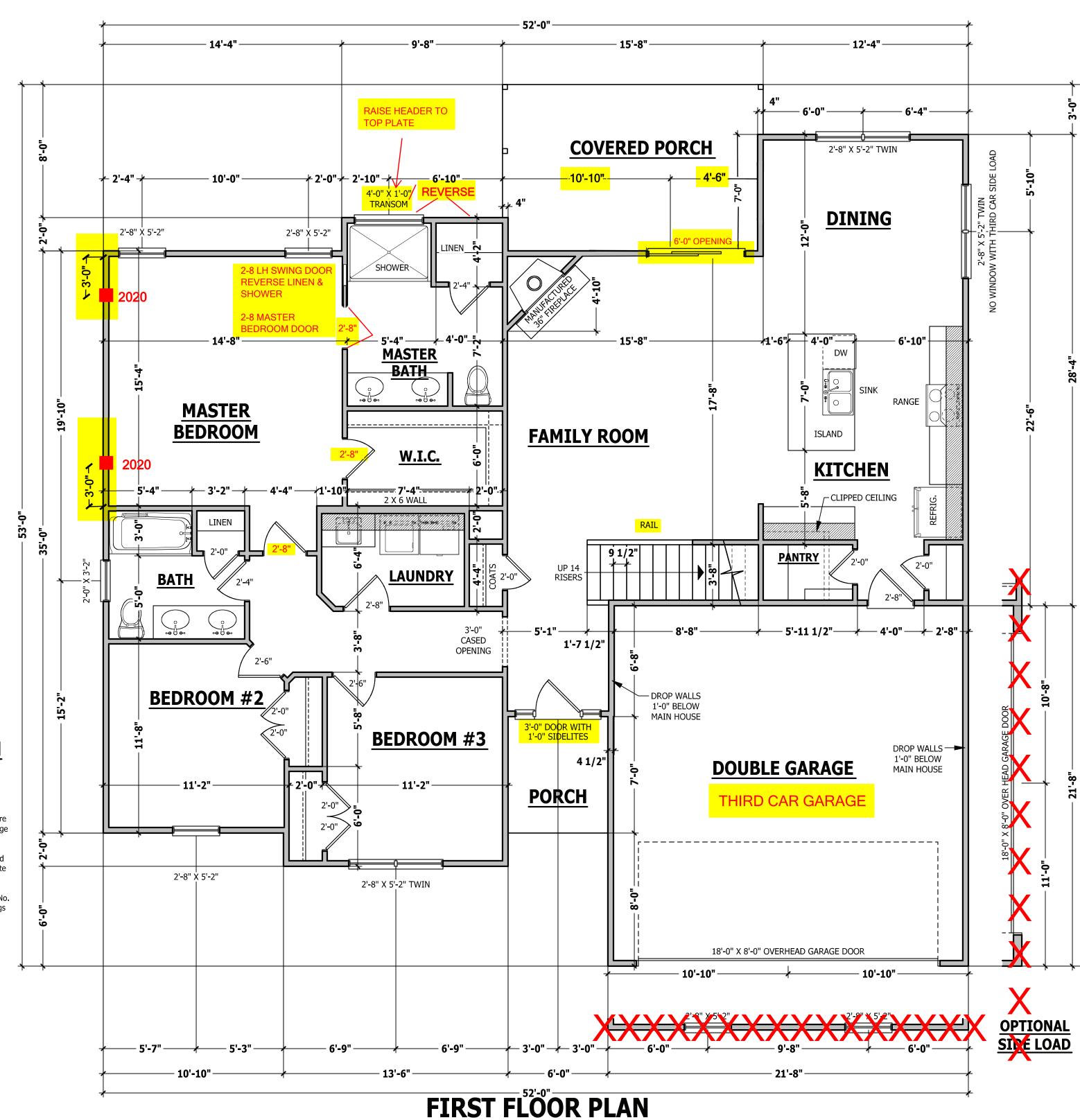


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PAGE 3 OF 8



**SCALE 1/4" = 1'-0"** 

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PLAN

FLOOR

**FIRST** 

SQUARE FOOTAGE
HEATED
FIRST FLOOR
PALYROOM 264 SQ.FT.
TOTAL

TOTAL 1819
HEATED OPTIONAL

TOTAL 644 SQ.F

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PAGE 4 OF 8

TOTAL UNHEATED

GARAGE FRONT PORCH REAR PORCH

Halifax

The

# **SQUARE FOOTAGE** HEATED FIRST FLOOR

264 SQ.FT. PALYROOM TOTAL 1819 SQ.FT. **HEATED OPTIONAL** 570 SQ.FT. 570 SQ.FT. SECOND FLOOR

UNHEATED

448 SQ.FT. 42 SQ.FT. 154 SQ.FT. GARAGE FRONT PORCH **REAR PORCH** 644 SQ.FT.

# UNHEATED OPTIONAL

298 SQ.FT. THIRD GARAGE TOTAL 298 SQ.FT.

# **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.

# **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

**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.

# **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.

LIVE LOAD	DEAD LOAD	DEFLECTION
(PSF)	(PSF)	(LL)
10		L/240
20	10	L/360
40	10	L/360
40	10	L/360
40	10	L/360
200		
50		
50	10	L/360
40	10	L/360
30	10	L/360
40		L/360
20		
	(PSF) 10 20 40 40 40 200 50 50 40 30 40	(PSF)         (PSF)           10         20         10           40         10         10           40         10         200            50          50         10           40         10         30         10           40

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. **CONCRETE AND SOILS:** See foundation notes.

# **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

**Plate Heights & Floor Systems.** See elevation page(s) for plate heights and floor system thicknesses.

# **ATTIC ACCESS**

ledgers unless noted otherwise.

# 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

# 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.

# **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

are drawn as 5 1/2", and do not include gypsum.

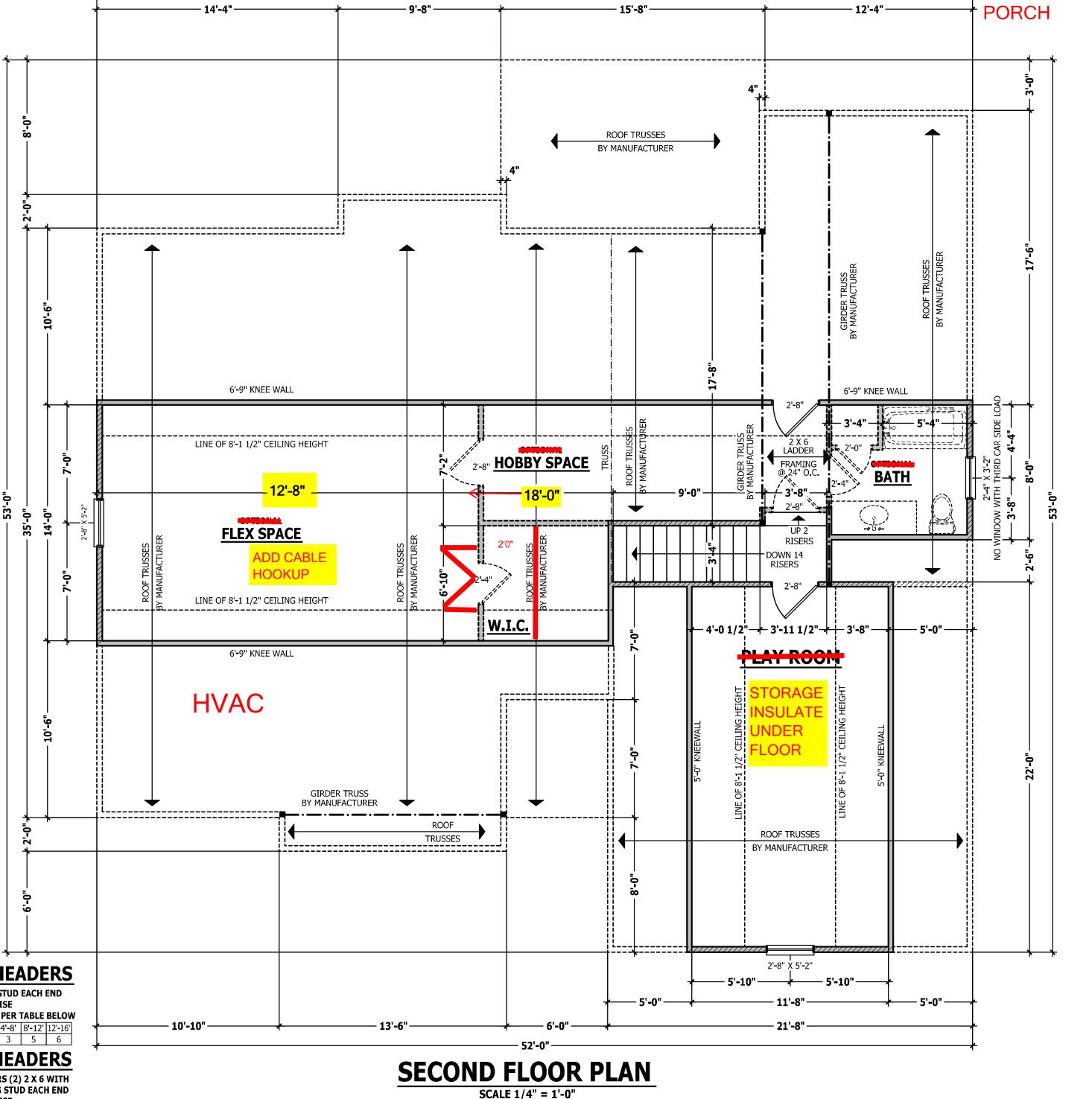
# **EXTERIOR HEADERS**

Interior walls are drawn as 3 1/2" or as noted 2 X 6 - (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



52'-0"

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> PLAN FLOOR

ECOND

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Halifax Φ

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1555 SQ.FT
PALYROOM 264 SQ.FT TOTAL 1819 **HEATED OPTIONAL**SECOND FLOOR 570

TOTAL 570 **UNHEATED** GARAGE FRONT PORCH REAR PORCH

UNHEATED OPTIONAL

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PAGE 6 OF 8

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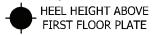
# HOME PLANS, INC.

SQUARE FOOTAGE
HEATED
FIRST FLOOR 1555 SQ.FT.
PALYROOM 264 SQ.FT.
TOTAL 1819 SQ.FT.
HEATED OPTIONAL
SECOND FLOOR 570 SQ.FT.
TOTAL 570 SQ.FT.
UNHEATED
GARACE 448 SQ.FT.

GARAGE 448 SQ.FT.
GARAGE 448 SQ.FT.
FRONT PORCH 42 SQ.FT.
TOTAL 54 SQ.FT.
UNHEATED OPTIONAL
THIRD GARAGE 298 SQ.FT.
TOTAL 298 SQ.FT.

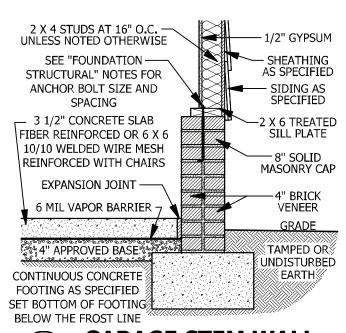
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PAGE 7 OF 8

**Plate Heights & Floor Systems.** See elevation page(s) for plate heights and floor system thicknesses.



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HEEL HEIGHT ABOVE SECOND FLOOR PLATE





# **GARAGE STEM WALL** SCALE 3/4" = 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

**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

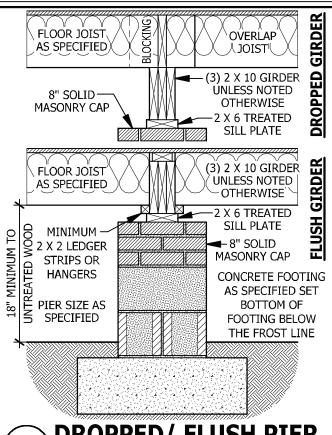
brace per Figure AM109.1

AM109.1.3. For freestanding decks without knee braces or AS SPECIFIED

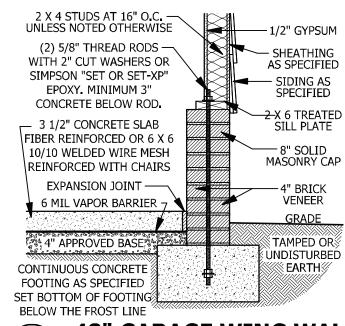
SHEATHING
AS SPECIFIED diagonal bracing, lateral stability may be provided by embedding the post in accordance with Figure AM109.2 and the following:

	POST SIZE	MAX TRIBUTARY AREA	MAX. POST EMBEDMEN' HEIGHT 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"					
ľ	AM109.1.4. 2 x 6 diagonal vertical cross bracing may									

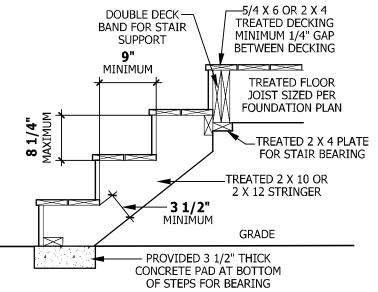
be provided in two perpendicular directions for freestanding decks or parallel to the structure at the exterior column line for attached decks. The 2 x 6's shall be attached to the posts with one 5/8 inch hot dipped galvanized bolt with nut and washer at each end of each bracing member per Figure AM109.3.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



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



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



# FIGURE AM110 TYPICAL DECK STAIR DETAIL

SCALE 3/4" = 1'-0"

STONE VEENER

AS SPECIFIED

-VAPOR BARRIER

-WEEP SCREED

MINIMUM 4" TO

GROUND OR 2"

-TO PAVEMENT

GRADE

SEE FOUNDATION

FOR FOUNDATION

DETAILS

**WEEP SCREED** 

SCALE 3/4" = 1'-0"

installed per manufactures instructions and

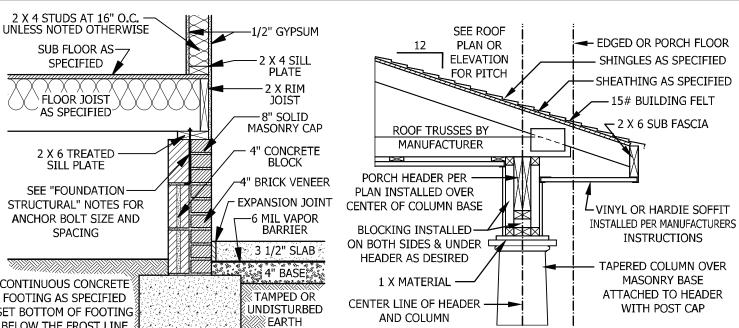
**R703.6.2.1** - A minimum 0.019-inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion-resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 31/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM 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 shall cover and terminate on the

attachment flange of the weep screed.

# **WEEP SCREEDS**

All weep screeds and stone veneer to be per the 2012 North Carolina Residential Building code.

lap the attachment flange. The exterior lath



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

SUB FLOOR AS-

SPECIFIED

FLOOR JOIST

AS SPECIFIED

2 X 6 TREATED

SILL PLATE

SEE "FOUNDATION-

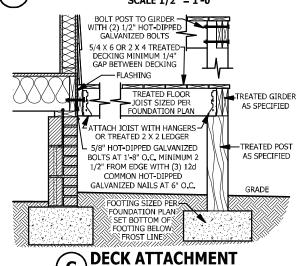
SPACING

CONTINUOUS CONCRETE

FOOTING AS SPECIFIED

SET BOTTOM OF FOOTING

1/2" GYPSUM--2 X 4 STUDS AT 16" O.C. UNLESS NOTED OTHERWISE 2 X TREATED-HOUSE BAND - 2 X 4 SOLE PLATE SUB FLOOR AS -LASHING MINIMUM 16" WIDE - COBBLED BRICK 3 1/2" CONCRETE SLAB - 8 X 16 VENT 8" CONCRETE : BLOCK GRADE EOOTING AS SPECIFIED FILLED PORCH SECTION WITH VENT SCALE 1/2" = 1'-0"



# **SMOKE ALARMS**

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 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 between the wall and the handrails. an individual *dwelling* unit the alarm devices shall be interconnected **Exceptions**: 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 building. The weather-resistant barrier shall 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** 

**PORCH HEADER WITH** 

**TAPERED COLUMN** 

SCALE 3/4" = 1'-0"

# 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

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**

R311.7.2 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 device(s), it shall become a permanent fixture of the occupancy and more than 1 1/4 inches (32 mm) shall be provided on stairways with solid

> 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:

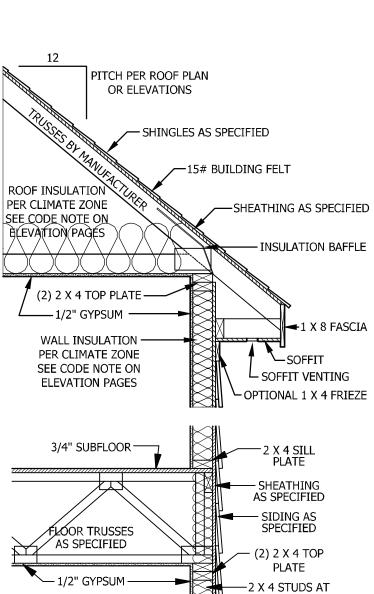
1. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.

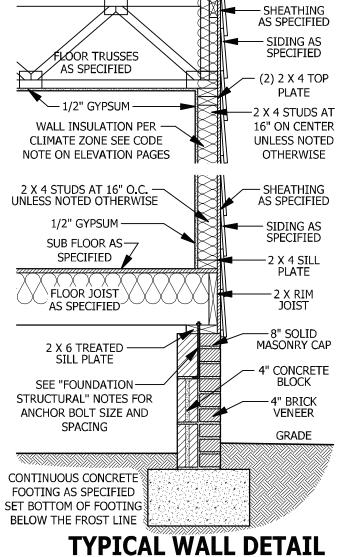
2. When handrail fittings or bendings are used to provide continuous transition between flights, the transition from handrail to guardrail, or used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

**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)

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.





4AXIMUM 6" GAP BETWEEN WALL MOUNTED AND OPEN RAIL CONTINUOUS HANDRAIL 34 TO 38 INCHES ABOVE TREAD NOSING

SCALE 3/4" = 1'-0"

# TYPICAL STAIR DETAIL

SCALE 1/4" = 1'-0"

alifax PICA I

PURCHASER MUST VERIFY ALI IMENSIONS AND CONDITION

BEFORE CONSTRUCTION BEGINS

HAYNES HOME PLANS, INC.

CONTRACTORS PRACTICES AND

PROCEDURES.

CODES AND CONDITIONS MA

VARY WITH LOCATION, A LOCAL

DESIGNER, ARCHITECT OR

NGINEER SHOULD BE CONSULTE

BEFORE CONSTRUCTION.

THESE DRAWING ARE

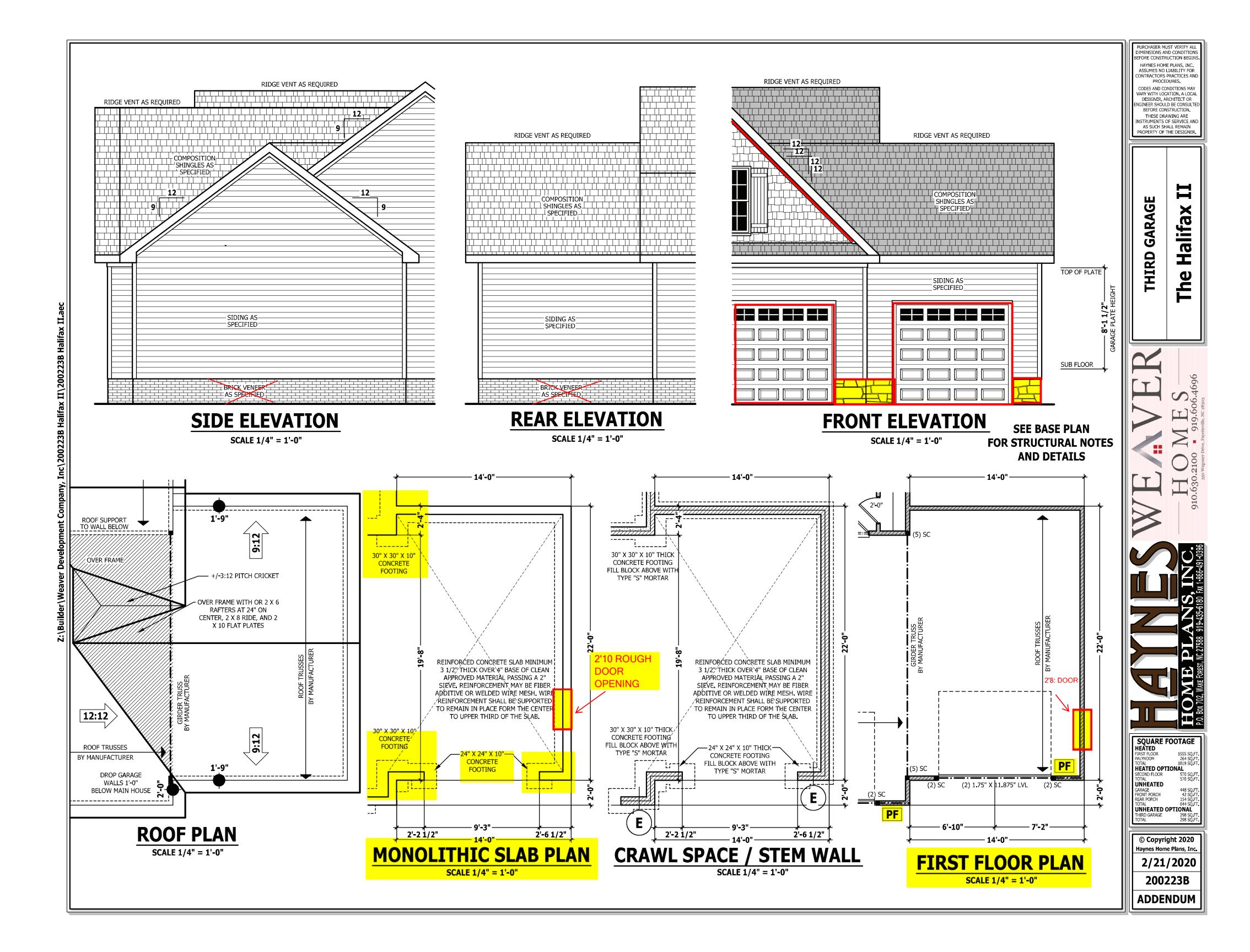
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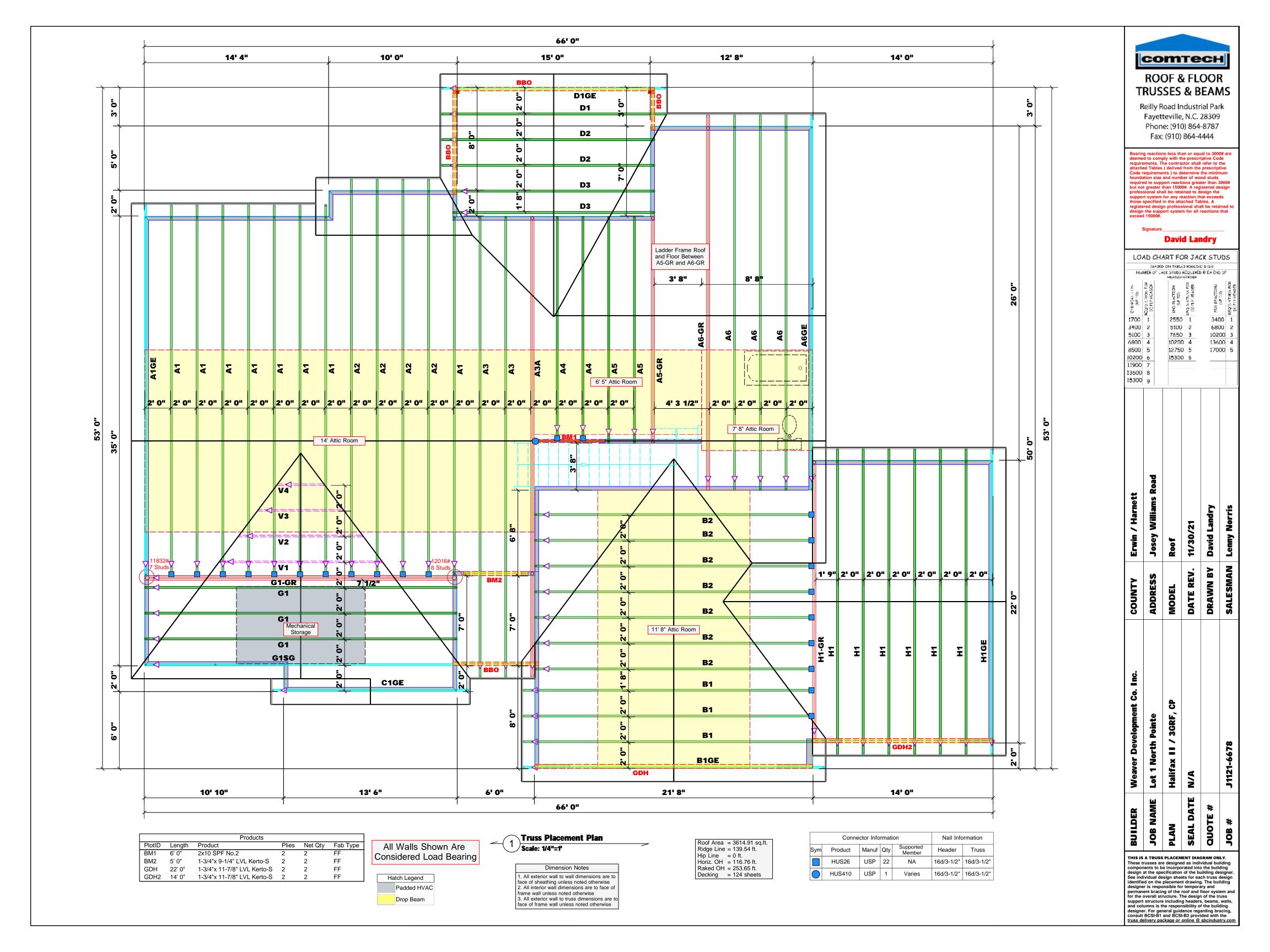
PROPERTY OF THE DESIGNER

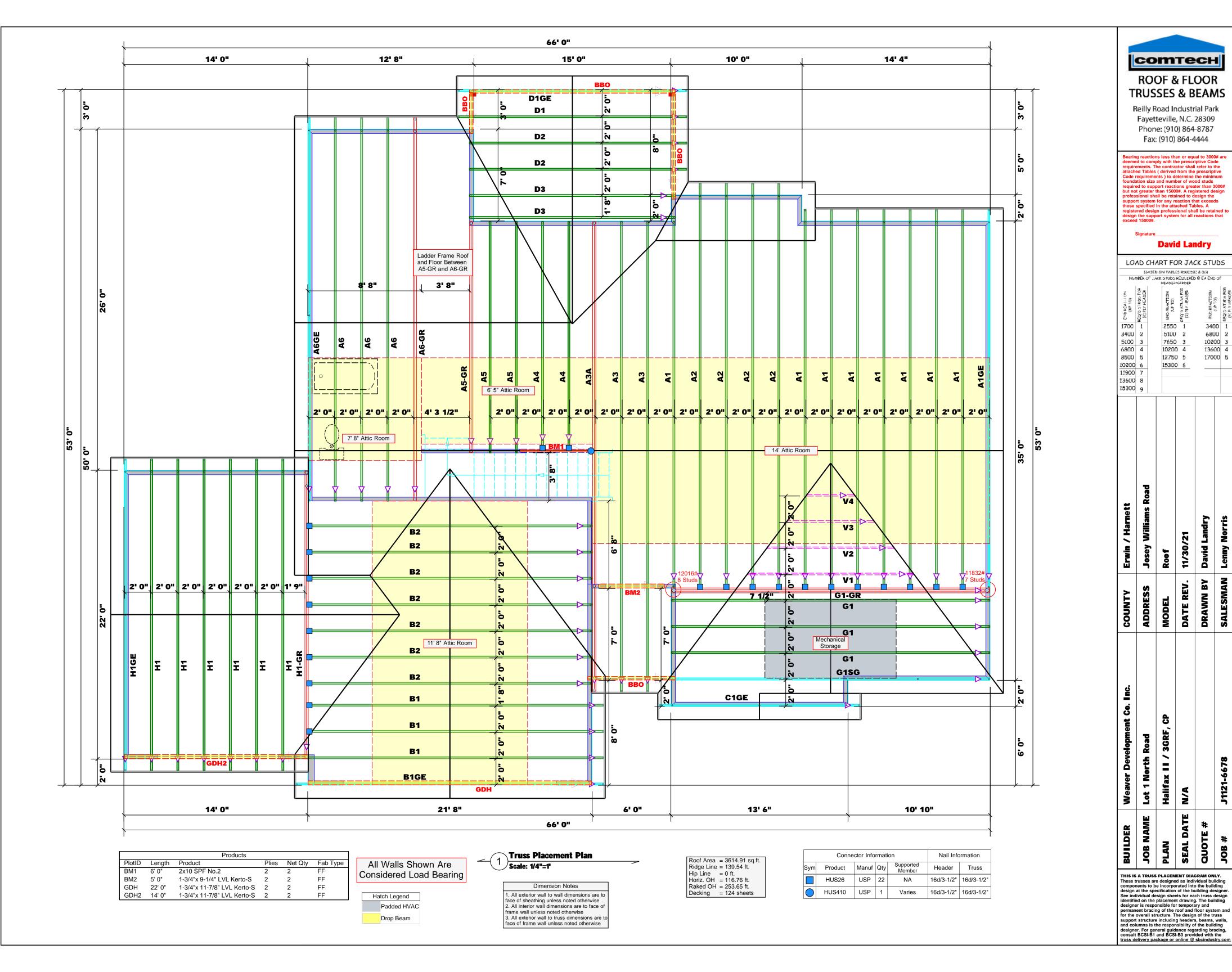
SQUARE FOOTAGE
HEATED
FIRST FLOOR 1555 SQ.FT
PALYROOM 264 SQ.FT HEATED OPTIONAL UNHEATED GARAGE FRONT PORCH REAR PORCH UNHEATED OPTIONAL

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PAGE 8 OF 8









Client:

Project:

Address:

Weaver Development Co. Inc.

Josey Williams Road Erwin, NC 28339

Project #:

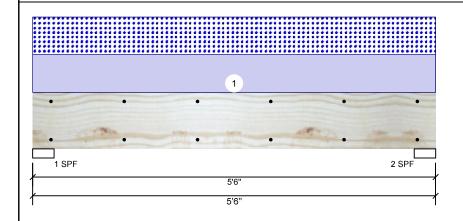
Date: 11/30/2021 Input by: David Landry Job Name: Lot 1 North Pointe

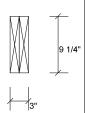
J1121-6678

S-P-F #2 2.000" X 10.000" **BM1** 

2-Ply - PASSED

Level: Level





Const

0

0

Page 1 of 8

/lember Info	rmation			Reactions UNPAT				
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	
Plies:	2	Design Method:	ASD	1	0	919	919	
Moisture Condition	on: Dry	Building Code:	IBC/IRC 2015	2	0	919	919	
Deflection LL:	480	Load Sharing:	No					
Deflection TL:	360	Deck:	Not Checked					
Importance:	Normal							
Temperature:	Temp <= 100°F							
•	•			Bearin	gs			
		I						

Bearings									
Bearing	Length	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.			
1 - SPF	3.500"	41%	919 / 919	1837	L	D+S			
2 - SPF	3.500"	41%	919 / 919	1837	L	D+S			

Wind

0

0

# **Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2122 ft-lb	2'9"	3946 ft-lb	0.538 (54%)	D+S	L
Unbraced	2122 ft-lb	2'9"	3654 ft-lb	0.581 (58%)	D+S	L
Shear	1169 lb	1'	2872 lb	0.407 (41%)	D+S	L
LL Defl inch	0.018 (L/3452)	2'9"	0.126 (L/480)	0.140 (14%)	S	L
TL Defl inch	0.035 (L/1726)	2'9"	0.168 (L/360)	0.210 (21%)	D+S	L

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- $2\,$  Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	334 PLF	0 PLF	334 PLF	0 PLF	0 PLF	A4

This design is valid until 4/24/2023

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



Client: Weaver Development Co. Inc.

Halifax II

Address: Josey Williams Road

Josey Williams Road Erwin, NC 28339 Date: 11/30/2021

Input by: David Landry
Job Name: Lot 1 North Pointe
Project #: J1121-6678

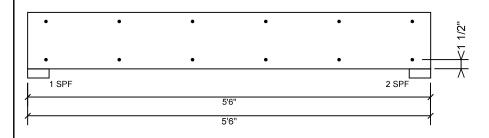
BM1 S-P-F #2

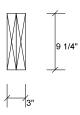
2.000" X 10.000"

Project:

2-Ply - PASSED

Level: Level





Page 2 of 8

# 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"

0.0 % Capacity 0.0 PLF Load Yield Limit per Foot 157.4 PLF Yield Limit per Fastener 78.7 lb. Yield Mode IV Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00



Client: Weaver Development Co. Inc.

Project: Address: Josey Williams Road

Erwin, NC 28339

11/30/2021 Date:

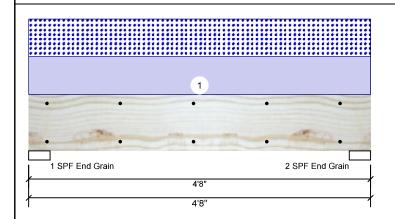
Input by: David Landry Job Name: Lot 1 North Pointe J1121-6678 Project #:

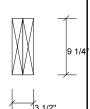
**Kerto-S LVL BM2** 

1.750" X 9.250"

2-Ply - PASSED

Level: Level





Page 3 of 8

Member Information										
Type:	Girder	Application:	Floor							
Plies:	2	Design Method:	ASD							
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015							
Deflection LL:	480	Load Sharing:	No							
Deflection TL:	360	Deck:	Not Checked							
Importance:	Normal									
Temperature:	Temp <= 100°F									

Reactio	Reactions UNPATTERNED lb (Uplift)									
Brg	Live	Dead	Snow	Wind	Const					
1	0	1526	1510	0	0					
2	0	1526	1510	0	0					

### Analysis Results Analysis Actual Location Allowed Capacity Comb. Case Moment 2881 ft-lb 2'4" 14423 ft-lb 0.200 (20%) D+S 2881 ft-lb 2'4" 12555 ft-lb 0.229 (23%) D+S Unbraced L 1735 lb 1' 7943 lb 0.218 (22%) D+S Shear L LL Defl inch 0.015 (L/3370) 2'4 1/16" 0.105 (L/480) 0.140 (14%) S L

l	Bearings										
ſ	Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.				
	1 - SPF End Grain	3.500"	28%	1526 / 1510	3036	L	D+S				
	2 - SPF End Grain	3.500"	28%	1526 / 1510	3036	L	D+S				

# **Design Notes**

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

2'4 1/16" 0.140 (L/360) 0.210 (21%) D+S

- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.

TL Defl inch 0.030 (L/1676)

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			Тор	647 PLF	0 PLF	647 PLF	0 PLF	0 PLF	A3
	Self Weight				7 PLF					

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

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

## chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851

(800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info





isDesign

Client: Weaver Development Co. Inc.

Input by: David Landry Josey Williams Road Job Name: Lot 1 North Pointe

Date:

Erwin, NC 28339

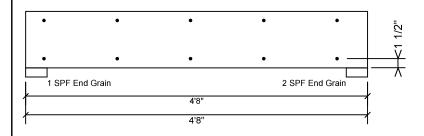
**Kerto-S LVL BM2** 

1.750" X 9.250"

2-Ply - PASSED

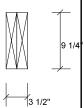
J1121-6678 Project #: Level: Level

11/30/2021



Project:

Address:



Page 4 of 8

# 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"

all to   all	, , , , , , , , , , , , , , , , , , ,
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

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

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

## chemicals

# Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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 4/24/2023

301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851

Manufacturer Info

Metsä Wood

(800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633







Client: Weaver Development Co. Inc.

Address: Josey Williams Road

Erwin, NC 28339

11/30/2021 Date:

Input by: David Landry Job Name: Lot 1 North Pointe J1121-6678 Project #:

Page 5 of 8

1.750" X 11.875" 3-Ply - PASSED **Kerto-S LVL GDH** 

Project:

Level: Level

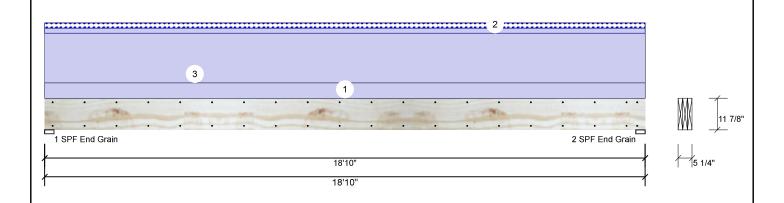
**Reactions UNPATTERNED lb (Uplift)** 

2720 / 188

18%

2908 L

D+S



Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	3	Design Method:	ASD	1	0	2720	188	0	0
Moisture Condition	n: Dry	Building Code:	IBC/IRC 2015	2	0	2720	188	0	0
Deflection LL:	480	Load Sharing:	Yes						
Deflection TL:	360	Deck:	Not Checked						
Importance:	Normal								
Temperature:	Temp <= 100°F								
				Bearing	s				
				Bearing	Length	Cap. React	D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	3.500"	18% 2720	) / 188	2908 L	D+S
				End					
A	Analysis Dassilfa								

2 - SPF 3.500"

End Grain

	Resu	
 . ,		

**Member Information** 

ſ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
l	Moment	12191 ft-lb	9'5"	27954 ft-lb	0.436 (44%)	D	Uniform
	Unbraced	13035 ft-lb	9'5"	13056 ft-lb	0.998 (100%)	D+S	L
l	Shear	2368 lb	1'2 5/8"	11970 lb	0.198 (20%)	D	Uniform
l	LL Defl inch	0.037 (L/6029)	9'5 1/16"	0.459 (L/480)	0.080 (8%)	S	L
l	TL Defl inch	0.565 (L/390)	9'5 1/16"	0.612 (L/360)	0.920 (92%)	D+S	L

# **Design Notes**

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

I Lateral Sieriu	Lateral steriderness ratio based on single piy 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			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall	
2	Tie-In	0-0-0 to 18-10-0	1-0-0	Тор	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof	
3	Uniform			Тор	195 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE	
	Self Weight				14 PLF						

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

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

## chemicals Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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

For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info





isDesign

Client: Weaver Development Co. Inc.

Address: Josey Williams Road

Erwin, NC 28339

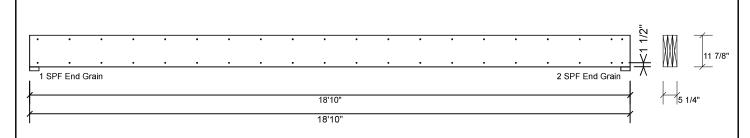
11/30/2021 Date:

Input by: David Landry Job Name: Lot 1 North Pointe J1121-6678 Project #:

**Kerto-S LVL** 1.750" X 11.875" 3-Ply - PASSED **GDH** 

Project:

Level: Level



# **Multi-Ply Analysis**

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

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

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

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

## chemicals

## Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851

(800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info

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



Page 6 of 8





Client: Weaver Development Co. Inc.

Project: Address: Josey Williams Road

Erwin, NC 28339

11/30/2021 Date: Input by: David Landry

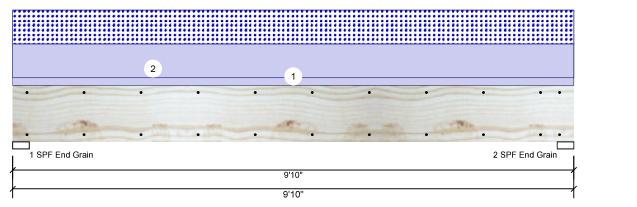
Job Name: Lot 1 North Pointe J1121-6678 Project #:

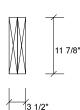
**Kerto-S LVL** GDH2

1.750" X 11.875"

2-Ply - PASSED

Level: Level





Page 7 of 8

I	Type:	Girder
ı	Plies:	2
ı	Moisture Condition:	Dry
ı	Deflection LL:	480
ı	Deflection TL:	360

Normal Temp <= 100°F

**Member Information** 

Floor Application: Design Method: ASD **Building Code:** IBC/IRC 2015

Load Sharing: No Deck: Not Checked

Reactions	UNPAT	TERNEI	O lb	(Uplift)	
_				_	

Brg	Live	Dead	Snow	Wind	Const
1	0	1653	1313	0	0
2	0	1653	1313	0	0

# **Analysis Results**

Importance:

Temperature:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6627 ft-lb	4'11"	22897 ft-lb	0.289 (29%)	D+S	L
Unbraced	6627 ft-lb	4'11"	9857 ft-lb	0.672 (67%)	D+S	L
Shear	2231 lb	8'7 3/8"	10197 lb	0.219 (22%)	D+S	L
LL Defl inch	0.056 (L/2022)	4'11"	0.234 (L/480)	0.240 (24%)	S	L
TL Defl inch	0.126 (L/895)	4'11"	0.312 (L/360)	0.400 (40%)	D+S	L

# Bearings

Bearing	Length	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	28%	1653 / 1313	2966	L	D+S
2 - SPF End Grain	3.500"	28%	1653 / 1313	2966	L	D+S

# **Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.

ID	Lood Tyme	Location	Trib \Midth	Sido	Dood 0.0	Live 1	Cnow 1 1E	Mind 1 C	Const
7 Later	ral slenderness ratio based on si	ingle ply width.							
6 Botto	om braced at bearings.								
2 10b t	oraced at bearings.								

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Тор	267 PLF	0 PLF	267 PLF	0 PLF	0 PLF	G1
	Self Weight				9 PLF					

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

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

## chemicals Handling & Installation

- Handling & Installation

  1. IVL beams must not be cut or drilled

  2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info





isDesign

GDH2

**Kerto-S LVL** 

Client: Weaver Development Co. Inc.

1.750" X 11.875"

Project: Address: Josey Williams Road

Date: Input by: 11/30/2021

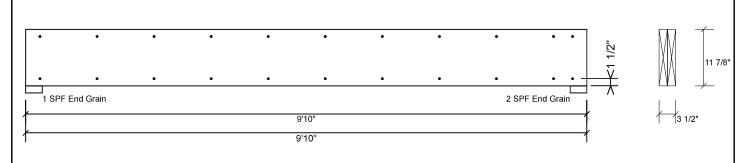
J1121-6678

David Landry Job Name: Lot 1 North Pointe Page 8 of 8

Erwin, NC 28339

Project #: 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 % 0.0 PLF Load Yield Limit per Foot 163.7 PLF Yield Limit per Fastener 81.9 lb. IV Yield Mode Edge Distance 1 1/2" Min. End Distance 3" Load Combination Duration Factor 1.00

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

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

## chemicals

## Handling & Installation

Handling & Installation

1. IVL beams must not be cut or drilled

2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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 4/24/2023

Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633

Manufacturer Info







RE: J1121-6678 Lot 1 North Pointe Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Weaver Development Co. Inc. Lot/Block: 1

Project Name: J1121-6678 Model: Halifax II

Address: Josey Williams Road

Subdivision: North Pointe

City: Erwin

State: NC

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

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3

Wind Code: ASCE 7-10 Wind Speed: 130 mph Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 29 individual, dated Truss Design Drawings and 0 Additional Drawings.

8/3/2021

8/3/2021

8/3/2021

8/3/2021

8/3/2021

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E16002619	A1	8/3/2021	21	E16002639	G1-GR	8/3/2021
2	E16002620	A1GE	8/3/2021	22	E16002640	G1SG	8/3/2021
3	E16002621	A2	8/3/2021	23	E16002641	H1	8/3/2021
4	E16002622	A3	8/3/2021	24	E16002642	H1-GR	8/3/2021
5	E16002623	A3A	8/3/2021	25	E16002643	H1GE	8/3/2021
6	E16002624	A4	8/3/2021	26	E16002644	V1	8/3/2021
7	E16002625	A5	8/3/2021	27	E16002645	V2	8/3/2021
8	E16002626	A5-GR	8/3/2021	28	E16002646	V3	8/3/2021
9	E16002627	A6	8/3/2021	29	E16002647	V4	8/3/2021
10	E16002628	A6-GR	8/3/2021				
11	E16002629	A6GE	8/3/2021				
12	E16002630	B1	8/3/2021				
13	E16002631	B1GE	8/3/2021				
14	E16002632	B2	8/3/2021				
15	E16002633	C1GE	8/3/2021				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision

based on the parameters provided by Comtech, Inc - Fayetteville.

D1

D2

D3

G1

D1GE

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2021

North Carolina COA: C-0844

E16002634

E16002635

E16002636

E16002637

E16002638

16

17

18

19

20

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



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A4	ATTIC		,	E16002619
31121-0070	A1	ATTIC	0	'	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:01 2021 Page 1

Structural wood sheathing directly applied or 4-5-13 oc purlins,

Rigid ceiling directly applied or 5-11-10 oc bracing.

except end verticals.

1 Brace at Jt(s): 16

1 Row at midpt

ID: G? Mgu2wAOefhMlzVCCS4xvzzRiE-lvBFfj0uvLSlczubQ8766ZC1Pq8utNLekRT9YAyraia27-11-0 22-5-8 17-8-4

> Scale = 1:88.2 6x8 =

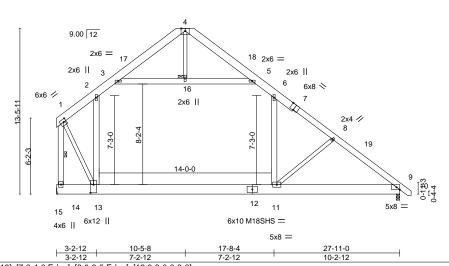


Plate Offsets (X,Y)--[1:0-2-8,0-2-12], [7:0-4-0,Edge], [9:0-3-5,Edge], [13:0-8-0,0-3-0] LOADING (psf) SPACING-CSI. DEFL. **PLATES** 2-0-0 I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.59 Vert(LL) -0.30 11-13 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.69 Vert(CT) -0.61 11-13 >538 240 M18SHS 244/190 **BCLL** 0.0 Rep Stress Incr YES WB 0.72 Horz(CT) 0.02 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.21 9-11 >999 240 Weight: 307 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

WEBS

JOINTS

LUMBER-TOP CHORD

**WEBS** 

2x8 SP No.1 \*Except\*

7-10: 2x6 SP No.1 BOT CHORD

2x10 SP 2400F 2.0E \*Except\* 9-12: 2x10 SP No.1

2x6 SP No.1 \*Except\* 8-11,4-16,1-13: 2x4 SP No.2

(size) 14=Mechanical, 9=0-3-8 REACTIONS.

Max Horz 14=-317(LC 8)

Max Grav 14=2033(LC 21), 9=1665(LC 21)

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

TOP CHORD 1-2=-1625/0, 2-3=-1477/112, 3-4=-556/107, 4-5=-411/104, 5-6=-1312/102, 6-8=-1903/0,

8-9=-2117/0. 1-14=-3612/0

**BOT CHORD** 13-14=-267/321, 11-13=0/1397, 9-11=0/1642

WEBS 2-13=-362/304, 6-11=0/784, 8-11=-523/203, 3-16=-1122/83, 5-16=-1122/83,

1-13=0/3077

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-6-6, Interior(1) 4-6-6 to 10-5-8, Exterior(2) 10-5-8 to 14-10-5, Interior(1) 14-10-5 to 28-8-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates 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). 2-3, 5-6, 3-16, 5-16; Wall dead load (5.0psf) on member(s).2-13, 6-11
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 8) Refer to girder(s) for truss to truss connections.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A1GE	GABLE	1	1	E16002620
31121-0076	AIGL	GABLE	'	'	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:03 2021 Page 1

 $ID:G?Mgu2wAOefhMIzVCCS4xvzzRiE-iIJ?4P28Rzi0rH1\_YZAaB\_HN\_dqjLGvxBlyFd2yraiY$ 15-10-13 22-5-8 27-11-0

> Scale = 1:88.2 6x8 =

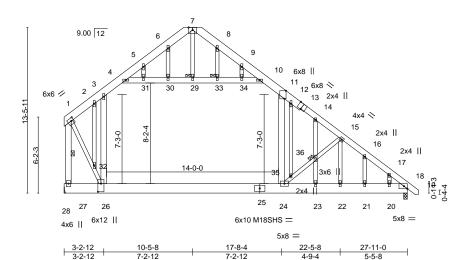


Plate Offsets (X,Y)--[1:0-2-8,0-2-12], [11:0-7-14,Edge], [13:0-4-0,Edge], [18:0-3-5,Edge], [26:0-8-0,0-3-0] LOADING (psf) SPACING-CSI. DEFL **PLATES** 2-0-0 (loc) I/defl L/d **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.58 Vert(LL) -0.28 24-26 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.67 Vert(CT) -0.57 24-26 >579 240 M18SHS 244/190 **BCLL** 0.0 Rep Stress Incr YES WB 0.78 Horz(CT) 0.02 18 n/a n/a

Wind(LL)

JOINTS

0.26

24 >999

Matrix-S

LUMBER-**BRACING-**2x8 SP No.1 \*Except\* TOP CHORD TOP CHORD 13-19: 2x6 SP No.1 2x10 SP 2400F 2.0E \*Except\* BOT CHORD BOT CHORD 18-25: 2x10 SP No.1 **WEBS** 2x6 SP No.1 \*Except\* 15-24,7-29,1-26,15-22: 2x4 SP No.2 WEBS

OTHERS 2x4 SP No.2 REACTIONS. (size) 27=Mechanical, 18=0-3-8

Max Horz 27=-432(LC 13)

Max Uplift 18=-35(LC 13)

Max Grav 27=2032(LC 21), 18=1669(LC 21)

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

Code IRC2015/TPI2014

1-2=-1613/0, 2-3=-1516/0, 3-4=-1471/166, 4-5=-656/111, 5-6=-453/132, 6-7=-432/188, TOP CHORD

7-8=-345/181, 8-9=-399/132, 9-10=-401/114, 10-11=-1295/156, 11-12=-1925/44, 12-14=-1885/8, 14-15=-1743/0, 15-16=-2232/131, 16-17=-2287/79, 17-18=-2454/0,

**BOT CHORD** 26-27=-326/435, 24-26=0/1410, 23-24=0/1780, 22-23=0/1780, 21-22=0/1751,

20-21=0/1751, 18-20=0/1751

**WEBS** 3-26=-407/223, 11-24=0/1075, 24-35=-994/479, 35-36=-812/423, 15-36=-811/415,

 $4-31 = -1087/103, \ 30-31 = -1077/104, \ 29-30 = -1078/104, \ 29-33 = -1078/104, \ 33-34 =$ 

10-34=-1073/102, 1-32=-10/3046, 26-32=-19/3104, 5-31=-9/358, 12-35=-261/81,

14-36=-400/35, 23-36=-399/25, 15-22=-247/660

Structural wood sheathing directly applied or 5-0-7 oc purlins, except end verticals.

Weight: 352 lb

FT = 20%

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

6-2-6 oc bracing: 26-27

6-6-8 oc bracing: 24-26



240

# NOTES-

BCDL

10.0

- 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
- 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 MT20 plates unless otherwise indicated.
- 5) All plates are 2x6 MT20 unless otherwise indicated.
- 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 10-11, 4-31, 30-31, 29-30, 29-33, 33-34, 10-34; Wall dead load (5.0 psf) on member(s).3-26, 11-24

August 3,2021

Design valid for use only with MTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A1GE	GABLE	1	1	E16002620
31121-0076	AIGL	GABLE	'	'	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:03 2021 Page 2 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-iIJ?4P28Rzi0rH1\_YZAaB\_HN\_dqjLGvxBlyFd2yraiY

- 11) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18.
- 13) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 14) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A2	ATTIC	4	1	E16002621
					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:07 2021 Page 1 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-a3ZWwm5fVBCRKuLlnPEWLqS5cFAYH1bX6MwTmpyraiU

Structural wood sheathing directly applied or 3-6-9 oc purlins,

Rigid ceiling directly applied or 5-6-5 oc bracing.

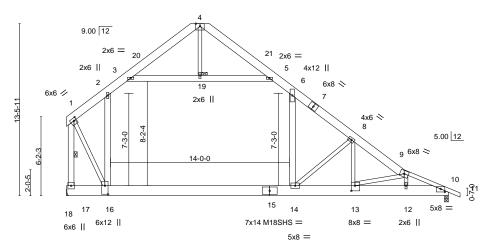
except end verticals.

1 Brace at Jt(s): 19

1 Row at midpt

29-11-0 30-10-0 3-5-8 0-11-0 15-10-13 5-5-5 26-5-8 22-5-8

> Scale = 1:85.0 6x8 =



29-11-0 7-2-12 4-9-4 4-0-0 3-5-8

_ riale (	Jiisels (A, i )	[1.0-2-6,0-2-6], [10.0-4-0	,0-2-14], [13.0-	-3-6,0-4-12 <u>], [10.</u> 0	J-6-0,0-3-0j						
LOAD	ING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC 0.4	2 Vert(LL)	-0.36 14-16	>978	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC 0.7	74 Vert(CT)	-0.74 14-16	>479	240	M18SHS	244/190	
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.9	9 Horz(CT)	0.02 10	n/a	n/a			
BCDL	10.0	Code IRC2015/T	PI2014	Matrix-S	Wind(LL)	0.22 14	>999	240	Weight: 334 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

WEBS

JOINTS

LUMBER-

2x8 SP 2400F 2.0E \*Except\*

TOP CHORD 9-11: 2x4 SP No.1

BOT CHORD 2x10 SP 2400F 2 0F 2x4 SP No.2 \*Except\* **WEBS** 

2-16,6-14,3-5,1-17: 2x6 SP No.1

REACTIONS. (size) 17=Mechanical, 10=0-3-8

Max Horz 17=-320(LC 8)

Max Grav 17=2144(LC 21), 10=1640(LC 21)

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

TOP CHORD 1-2=-1710/0, 2-3=-1583/108, 3-4=-573/106, 4-5=-392/105, 5-6=-1377/102, 6-8=-2121/0,

8-9=-3066/14, 9-10=-2967/3, 1-17=-3817/0

16-17=-219/323, 14-16=0/1512, 13-14=0/2530, 12-13=0/2793, 10-12=0/2680 2-16=-372/266, 6-14=0/1019, 8-14=-1601/216, 9-12=-533/69, 3-19=-1220/78, **BOT CHORD WEBS** 

5-19=-1220/78, 1-16=0/3299, 8-13=-80/1003, 9-13=-314/97

## NOTES-

1) Unbalanced roof live loads have been considered for this design.

2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-6-6, Interior(1) 4-6-6 to 10-5-8, Exterior(2) 10-5-8 to 14-10-5, Interior(1) 14-10-5 to 30-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) All plates are MT20 plates 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). 2-3, 5-6, 3-19, 5-19; Wall dead load (5.0psf) on member(s).2-16, 6-14

7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16

8) Refer to girder(s) for truss to truss connections.

9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

10) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A3	ATTIC	2	1	E16002622
					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:12 2021 Page 1

				IC	G?Mgu2wAOe	fhMIzVCCS	S4xvzzRiE-x1	MPzU9nJkrkQfEjayo	h2t9vRGtFyL1GGeeER1yraiP
-0 <sub>C</sub> 11 <sub>C</sub> 0	7-1-12	10-2-12	12-0-3	17-5-8	22-10-13	24-8-4 <sub>1</sub>	29-5-8	34-11-0	1
0-11-0	7-1-12	3-1-0	1-9-7	5-5-5	5-5-5	1-9-7	4-9-4	5-5-8	1

Scale = 1:89.3 6x8 =

Structural wood sheathing directly applied or 4-7-1 oc purlins.

3-17

Rigid ceiling directly applied or 5-7-4 oc bracing.

1 Row at midnt

1 Brace at Jt(s): 18

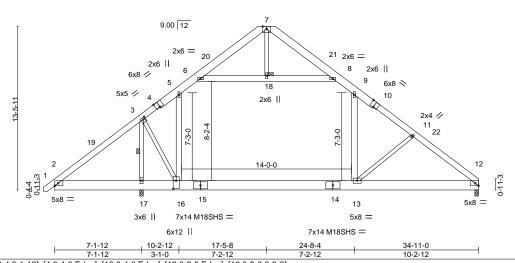


Plate Offs	Plate Offsets (X,Y) [3:0-2-4,U-1-12], [4:U-4-U,Edge], [10:U-4-U,Edge], [12:U-3-5,Edge], [16:U-8-U,U-3-U]										
LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in (le	oc) I/o	lefl L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.32 13-	16 >9	99 360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.71	Vert(CT)	-0.67 13-	16 >4	95 240	M18SHS	244/190
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.01	12	n/a n/a		
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL)	0.21	13 >9	99 240	Weight: 349 lb	FT = 20%

BRACING-

TOP CHORD

BOT CHORD

WFBS

JOINTS

LUMBER-

TOP CHORD 2x8 SP No.1 \*Except\* 1-4.10-12: 2x6 SP No.1

BOT CHORD 2x10 SP 2400F 2.0E 2x4 SP No.2 \*Except\* **WEBS** 

5-16,9-13,6-8: 2x6 SP No.1

REACTIONS. (size) 17=0-3-8, 12=0-3-8

Max Horz 17=323(LC 9)

Max Grav 17=2585(LC 2), 12=1558(LC 21)

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

TOP CHORD 2-3=-359/523, 3-5=-1443/0, 5-6=-1383/35, 6-7=-583/127, 7-8=-419/108, 8-9=-1216/43,

9-11=-1770/0. 11-12=-1987/0

**BOT CHORD** 2-17=-366/407, 16-17=-456/389, 13-16=0/1282, 12-13=0/1537

3-17=-3830/192, 3-16=0/3169, 5-16=-533/223, 9-13=0/749, 11-13=-530/237, **WEBS** 

6-18=-1007/0, 8-18=-1007/0

## 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) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 17-5-8, Exterior(2) 17-5-8 to 21-10-5, Interior(1) 21-10-5 to 34-9-4 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 MT20 plates 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, 6-18, 8-18; Wall dead load (5.0psf) on member(s), 5-16, 9-13
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
- 10) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	АЗА	ATTIC	1	2	E16002623  Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:22 2021 Page 1

				ID:G?Mgu2wAO	efhMIzVC0	CS4xvzzRiE-ey	zB3uG3zo5JdB_e	92?2S_afalEblrLkZC3moSyraiF
-0 <sub>C</sub> 11 <sub>C</sub> 0	7-1-12	10-2-12 12-0	-3 <sub>1</sub> 17-5-8	22-10-13	24-8-4	29-5-8	34-11-0	
0 11 0	7 1 12	3-1-0 1-0	7 555	5.5.5	107	101	550	

Scale = 1:89.4 6x8 =

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 6-0-0 oc bracing.

1 Brace at Jt(s): 18

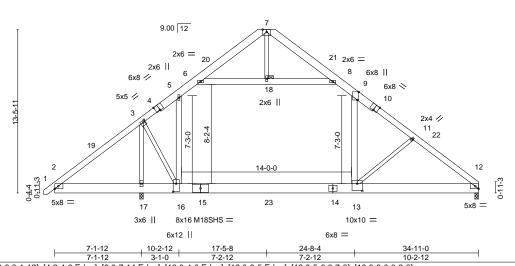


Plate Offsets (X	Plate Offsets (X,Y) [3:0-2-0,0-1-12], [4:0-4-0,Edge], [9:0-7-14,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [13:0-5-0,0-7-0], [16:0-8-0,0-3-0]							
LOADING (psf	SPACING- 2-0	0 <b>CSI</b> .	DEFL. in (loc) I/defl L/d	PLATES GRIP				
TCLL 20.0	Plate Grip DOL 1.	5 TC 0.43	Vert(LL) -0.44 13-16 >747 360	MT20 244/190				
TCDL 10.0	Lumber DOL 1.	5 BC 0.96	Vert(CT) -0.71 13-16 >468 240	M18SHS 244/190				
BCLL 0.0	* Rep Stress Incr N	O WB 0.86	Horz(CT) 0.01 12 n/a n/a					
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.20 13-16 >999 240	Weight: 699 lb FT = 20%				

BRACING-

TOP CHORD

**BOT CHORD** 

JOINTS

LUMBER-TOP CHORD

2x8 SP 2400F 2.0E \*Except\* 1-4.10-12: 2x6 SP 2400F 2.0E

BOT CHORD 2x10 SP 2400F 2.0E 2x4 SP No.2 \*Except\* **WEBS** 

5-16,9-13,6-8: 2x6 SP No.1

REACTIONS. (size) 17=0-3-8, 12=0-3-8

Max Horz 17=323(LC 11)

Max Grav 17=4603(LC 21), 12=2767(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-359/514, 3-5=-3511/152, 5-6=-2754/232, 6-7=-542/115, 7-8=-302/99,

8-9=-2471/221, 9-11=-4020/206, 11-12=-4280/227 2-17=-357/405, 16-17=-440/387, 13-16=0/2920, 12-13=-78/3320

**BOT CHORD WEBS** 

3-17=-8046/801, 3-16=-480/6540, 5-16=-88/1207, 9-13=-84/2257, 11-13=-732/263,

6-18=-2795/253, 8-18=-2795/253

## NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.

2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 17-5-8, Exterior(2) 17-5-8 to 21-10-5, Interior(1) 21-10-5 to 34-9-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

5) All plates are MT20 plates unless otherwise indicated.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-18, 8-18; Wall dead load (5.0psf) on member(s).5-16, 9-13
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- 12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3237 lb down and 464 lb up at 17-5-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

August 3,2021



meters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see \*\*ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information\*\* available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A3A	ATTIC	1		E16002623
01121 0070	7.07.1	7.1110		2	Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:22 2021 Page 2 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-eyzB3uG3zo5JdB\_e92?2S\_afalEbIrLkZC3moSyraiF

# LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-80, 6-7=-60, 7-8=-60, 8-9=-80, 9-12=-60, 2-16=-20, 13-16=-40, 12-13=-20, 6-8=-20

Drag: 5-16=-10, 9-13=-10

Concentrated Loads (lb) Vert: 23=-1837(F)

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A 4	ROOF TRUSS	2	1	E16002624
31121-0076	A4	ROOF TRUSS	2	'	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:43 2021 Page 1

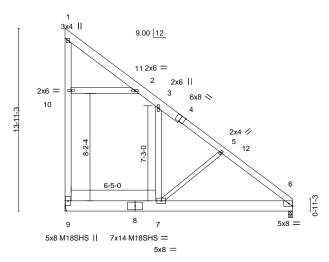
Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

except end verticals.



Scale = 1:82.7



0<sub>7</sub>10<sub>7</sub>8 0-10-8 6-2-12 10-2-12

Plate Offsets (X,Y)	[4:0-4-0,Edge], [6:0-3-5,Edge]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.64	Vert(LL) -0.21 6-7 >960 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0.48 6-7 >426 240	M18SHS 244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) 0.00 6 n/a n/a	
BCDI 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.20 6-7 >996 240	Weight: 195 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

LUMBER-

2x6 SP No.1 \*Except\* TOP CHORD 1-4: 2x8 SP No.1 BOT CHORD 2x10 SP 2400F 2.0E 2x6 SP No.1 \*Except\*

**WEBS** 

5-7: 2x4 SP No.2

REACTIONS. (size) 9=Mechanical, 6=0-3-8

Max Horz 9=-424(LC 13) Max Uplift 9=-57(LC 13)

Max Grav 9=1336(LC 21), 6=803(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 9-10=-530/90, 1-10=-473/123, 1-2=-114/423, 3-5=-473/83, 5-6=-699/91

BOT CHORD 7-9=-75/413, 6-7=0/545 **WEBS** 5-7=-565/221, 2-10=-539/271

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 17-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 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). 2-3, 2-10; Wall dead load (5.0psf) on member(s).3-7
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 7-9
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
14404 0070	A.F.	DOOF TRUES			E16002625
J1121-6678	A5	ROOF TRUSS	2	1	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:46 2021 Page 1

Structural wood sheathing directly applied or 6-0-0 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing.

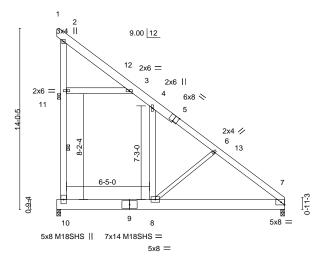
except end verticals

1 Brace at Jt(s): 11

1 Row at midpt

	ID:G?Mgu2w	AOefhMlzVCCS4xv	zzRiE-xaPG66Z6JA7vVuqFZ5RgQ2ZhNzaTwp?G4xt1d3yraht
7-4-12	12-2-0	17-7-8	1
7-4-12	4-9-4	5-5-8	1

Scale = 1:83.9



1-2-0 17-7-8 6-2-12 10-2-12

BRACING-

TOP CHORD

BOT CHORD

WEBS

**JOINTS** 

Plate Offsets (X,Y)	[5:0-4-0,Edge], [7:0-3-5,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 0.76	Vert(LL) -0	).21 T-8	>960 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.37	Vert(CT) -0	0.48 7-8	>426 240	M18SHS 244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.37	Horz(CT) 0	0.00 7	n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0	0.20 7-8	>997 240	Weight: 196 lb FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 \*Except\* 1-5: 2x8 SP No.1 BOT CHORD 2x10 SP 2400F 2.0E

2x6 SP No.1 \*Except\* WEBS

6-8: 2x4 SP No.2

REACTIONS. (size) 10=0-3-8, 7=0-3-8

Max Horz 10=-432(LC 13) Max Uplift 10=-70(LC 13)

Max Grav 10=1362(LC 21), 7=801(LC 21)

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

10-11=-557/103, 2-11=-500/136, 2-3=-123/425, 4-6=-481/55, 6-7=-706/63 TOP CHORD

BOT CHORD 8-10=-78/421, 7-8=0/551 3-11=-537/268, 6-8=-565/223 **WEBS** 

- 1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 17-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) All plates are MT20 plates unless otherwise indicated.
- 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). 3-4, 3-11; Wall dead load (5.0psf) on member(s).4-8
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Attic room checked for L/360 deflection.



August 3,2021

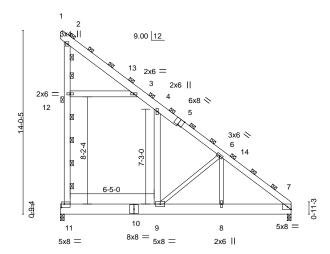


Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A5-GR	ROOF TRUSS	1	2	E16002626
					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:38:55 2021 Page 1

	ID:G?Mgu2w	AOefhMIzVCCS4xv	zzRiE-AlSf?BgmBxFe4G0_bU5nlyRHqbfBXw7b9qY?S1
7-4-12	12-2-0	17-7-8	1
7-4-12	4-9-4	5-5-8	1

Scale = 1:82.8



1-2-0	7-4-12	12-2-0	17-7-8
1-2-0	6-2-12	4-9-4	5-5-8

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

LOADIN	IG (psf)	SPACING-	3-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	-0.13	9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.29	9	>708	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.25	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2	2014	Matri	x-S	Wind(LL)	0.12	9	>999	240	Weight: 404 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

TOP CHORD 2x6 SP No.1 \*Except\* 1-5: 2x8 SP No.1 BOT CHORD 2x10 SP 2400F 2 0F 2x6 SP No.1 \*Except\* WEBS

6-9,6-8: 2x4 SP No.2

REACTIONS. (size) 11=0-3-8, 7=0-3-8

Max Horz 11=-648(LC 13) Max Uplift 11=-105(LC 13)

Max Grav 11=2043(LC 21), 7=1202(LC 21)

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

TOP CHORD  $11 - 12 = -756/151, \ 2 - 12 = -672/201, \ 2 - 3 = -182/549, \ 3 - 4 = -356/158, \ 4 - 6 = -640/90,$ 

6-7=-1826/37

**BOT CHORD** 9-11=-149/634, 8-9=0/1320, 7-8=0/1320 WEBS 3-12=-730/408, 6-9=-1729/329, 6-8=-49/1323

## NOTES-

- 1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.
  - Bottom chords connected as follows: 2x10 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) 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) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 17-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 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). 3-4, 3-12; Wall dead load (5.0psf) on member(s).4-9
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=105.
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.



2-0-0 oc purlins (6-0-0 max.), except end verticals

Rigid ceiling directly applied or 10-0-0 oc bracing.

(Switched from sheeted: Spacing > 2-8-0).

1 Brace at Jt(s): 2, 12

August 3,2021





Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A6	ROOF TRUSS	2	1	E16002627
31121-0076	Au	ROOI 1ROSS	3	· '	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:00 2021 Page 1

Structural wood sheathing directly applied or 4-5-13 oc purlins,

3-15, 14-15

Rigid ceiling directly applied or 5-11-2 oc bracing.

		ID:G	: Niguzwa Oeiniviiz v C	JUS4XVZZRIE-AGG Y ZUKU	OUUWBTUXO	iny??85HCDVCUCKI6Giii/Fyiai
3-10-0	9-7-0	10-10-0 13-7-1	19-10-0	28-3-8	29-2-8	
3-10-0	5-9-0	1-3-0 2-9-1	6-2-15	8-5-8	0-111-0	

Scale = 1:88.6 6x10 M18SHS =

except end verticals

1 Brace at Jt(s): 15

1 Row at midpt

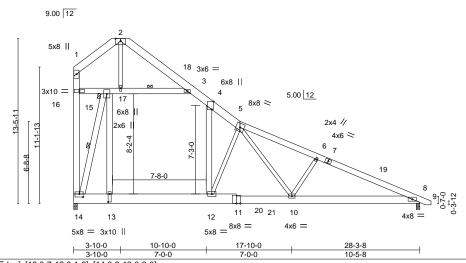


Plate Of	Plate Offsets (X,Y) [4:0-7-14,Edge], [13:0-7-12,0-1-8], [14:0-3-12,0-3-0]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.22 10-12	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.90	Vert(CT)	-0.46 10-12	>736	240	M18SHS	244/190	
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.94	Horz(CT)	0.03 8	n/a	n/a			
BCDL	10.0	Code IRC2015/TPI2	2014	Matri	x-S	Wind(LL)	0.15 10-12	>999	240	Weight: 322 lb	FT = 20%	

**BRACING-**

TOP CHORD

BOT CHORD

WEBS

**JOINTS** 

LUMBER-

TOP CHORD 2x8 SP No.1 \*Except\* 5-7.7-9: 2x6 SP No.1

BOT CHORD 2x8 SP No 1 \*Except\*

11-14: 2x10 SP No.1 2x6 SP No.1 \*Except\* **WEBS** 

2-17,5-12,5-10,6-10: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 8=0-3-8

Max Horz 14=-386(LC 13)

Max Grav 14=1899(LC 21), 8=1327(LC 2)

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

 $1\hbox{-}2\hbox{--}46/909,\ 2\hbox{-}3\hbox{--}81/883,\ 3\hbox{-}4\hbox{--}845/0,\ 4\hbox{-}5\hbox{--}1740/0,\ 5\hbox{-}6\hbox{--}2479/0,\ 6\hbox{-}8\hbox{--}2689/6,}$ TOP CHORD

14-16=-69/1026, 1-16=-13/598

**BOT CHORD** 13-14=0/1154, 12-13=0/1196, 10-12=0/1729, 8-10=0/2401

WEBS 13-15=0/1674, 4-12=0/1284, 15-16=-703/80, 15-17=-2008/133, 3-17=-1755/94, 14-15=-3791/83, 2-17=-1396/254, 5-12=-1480/147, 5-10=-173/947, 6-10=-420/248

- 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) 0-2-12 to 8-2-13, Interior(1) 8-2-13 to 28-11-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) All plates are MT20 plates 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 15-16, 15-17, 3-17; Wall dead load (5.0psf) on member(s). 13-15, 4-12
- 7) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A6-GR	ROOF TRUSS	1	2	E16002628
					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:11 2021 Page 1 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-iNQjMfsoQsGM?jE2XrOXxK60620XH\_xxqKQs06yrahU 10-10-0 13-7-1 1-3-0 2-9-1 19-10-0 28-3-8 6-2-15

Scale = 1:83.9 6x8 =

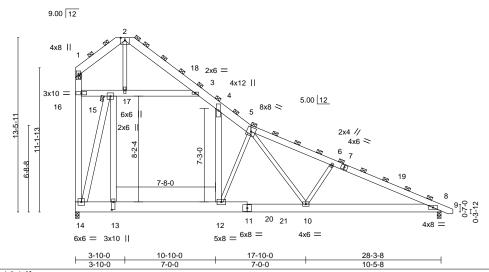


Plate Offsets (X,Y)	[13:0-7-4,0-1-8]			
LOADING (psf)	SPACING- 3-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.50	Vert(LL) -0.16 10-12 >999 360	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.74	Vert(CT) -0.34 10-12 >981 240	
BCLL 0.0 *	Rep Stress Incr NO	WB 0.90	Horz(CT) 0.02 8 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.11 10-12 >999 240	Weight: 644 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

TOP CHORD 2x8 SP No.1 \*Except\* 5-7.7-9: 2x6 SP No.1 2x8 SP No 1 \*Except\*

BOT CHORD 11-14: 2x10 SP No.1 **WEBS** 

2x6 SP No.1 \*Except\* 2-17,5-12,5-10,6-10: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 8=0-3-8 Max Horz 14=-579(LC 13)

Max Grav 14=2848(LC 21), 8=1990(LC 2)

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

 $1\hbox{-}2\hbox{-}69/1364, 2\hbox{-}3\hbox{-}-122/1324, 3\hbox{-}4\hbox{-}-1268/0, 4\hbox{-}5\hbox{-}-2610/0, 5\hbox{-}6\hbox{-}-3719/0, 6\hbox{-}8\hbox{-}-4034/9,}$ TOP CHORD

14-16=-103/1539, 1-16=-19/897

13-14=0/1730, 12-13=0/1794, 10-12=0/2594, 8-10=0/3601 **BOT CHORD** 

WEBS 13-15=0/2510, 4-12=0/1926, 15-16=-1055/120, 15-17=-3012/199, 3-17=-2632/140,

14-15=-5686/124, 2-17=-2094/382, 5-12=-2220/220, 5-10=-260/1421, 6-10=-630/372

## NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x8 - 2 rows staggered at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc. Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 8-2-13, Interior(1) 8-2-13 to 28-11-14 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \*This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 15-16, 15-17, 3-17; Wall dead load (5.0psf) on member(s).13-15, 4-12
- 8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
- 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- 11) Attic room checked for L/360 deflection.

2-0-0 oc purlins (6-0-0 max.), except end verticals

Rigid ceiling directly applied or 10-0-0 oc bracing.

(Switched from sheeted: Spacing > 2-8-0).

1 Brace at Jt(s): 1, 2, 5, 15

August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
14404 0070	4005	CARLE	_	,	E16002629
J1121-6678	A6GE	GABLE	1	1	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:06 2021 Page 1

Structural wood sheathing directly applied or 4-11-1 oc purlins,

27-28. 8-25

Rigid ceiling directly applied or 10-0-0 oc bracing, Except:

			IL	J:G /MguzwAOeiniMiz	VCC54XVZZRIE-IVIQUQIXOIL	ne4vyivi:	okiowie GO90 i mychocgzjokvyran.
1	3-10-0	9-7-0	10-10-0 13-7-1	19-10-0	28-3-8	29-2-8	
Г	3-10-0	5-9-0	1-3-0 2-9-1	6-2-15	8-5-8	0-11-0	

Scale = 1:88.6 6x10 M18SHS =

except end verticals.

8-9-11 oc bracing: 26-27

6-11-2 oc bracing: 25-26 1 Row at midpt 1 1 Brace at Jt(s): 28, 35, 39

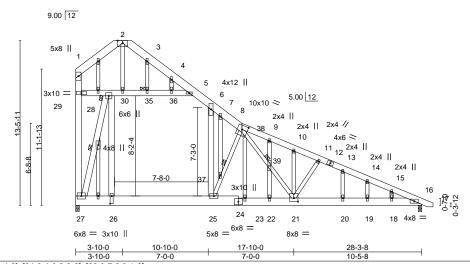


Plate Offsets (X,Y)--[8:0-5-8,0-4-0], [21:0-4-0,0-3-8], [26:0-7-8,0-1-8] LOADING (psf) SPACING-DEFL. **PLATES** GRIP 2-0-0 CSI I/defl L/d (loc) **TCLL** 20.0 Plate Grip DOL 1.15 TC 0.56 Vert(LL) -0.17 25 >999 360 MT20 244/190 TCDL 10.0 Lumber DOL 1.15 ВС 0.83 Vert(CT) -0.37 23-25 >898 240 M18SHS 244/190 **BCLL** 0.0 Rep Stress Incr YES WB 0.68 Horz(CT) 0.03 16 n/a n/a BCDL 10.0 Code IRC2015/TPI2014 Matrix-S Wind(LL) 0.18 23-25 >999 240 Weight: 372 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

WEBS

JOINTS

LUMBER-2x8 SP No.1 \*Except\* TOP CHORD

8-12.12-17: 2x6 SP No.1

BOT CHORD 2x8 SP No 1 \*Except\* 24-27: 2x10 SP No.1

2x6 SP No.1 \*Except\* **WEBS** 

2-30,8-25,8-21,11-21: 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 27=0-3-8, 16=0-3-8

Max Horz 27=-563(LC 13)

Max Uplift 27=-62(LC 13), 16=-134(LC 13) Max Grav 27=1798(LC 21), 16=1288(LC 1)

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

26-27=0/1083, 25-26=0/1123, 23-25=0/1668, 22-23=0/1668, 21-22=0/1668,

**BOT CHORD** 

26-28=-65/1610, 6-25=-26/999, 28-29=-589/141, 28-30=-1741/298, 30-35=-1523/241,

### 1-2=-128/768, 2-3=-152/797, 3-4=-176/666, 4-5=-229/603, 5-6=-810/21, 6-7=-1473/0, TOP CHORD

## 7-8=-1553/0, 8-9=-2182/301, 9-10=-2203/254, 10-11=-2244/236, 11-13=-2332/264, 13-14=-2405/262, 14-15=-2401/211, 15-16=-2447/172, 27-29=-204/868, 1-29=-80/527

# 20-21=-104/2197, 19-20=-104/2197, 18-19=-104/2197, 16-18=-104/2197 **WEBS**

## $35 - 36 = -1524/241, \ 5 - 36 = -1525/239, \ 27 - 28 = -3429/396, \ 2 - 30 = -1299/326, \ 25 - 37 = -1571/470, \$ $8-37 = -1650/498,\ 8-38 = -491/1192,\ 38-39 = -311/673,\ 21-39 = -325/714,\ 11-21 = -413/251,$ 23-38=-204/583

## 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 MT20 plates unless otherwise indicated.
- 5) All plates are 2x6 MT20 unless otherwise indicated.
- 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) Ceiling dead load (10.0 psf) on member(s). 5-6, 28-29, 28-30, 30-35, 35-36, 5-36; Wall dead load (5.0psf) on member(s).26-28,
- 10) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 25-26

August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	A6GE	GABLE	1	1	E16002629
31121-0076	AUGL	GABLE	!	'	Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:06 2021 Page 2 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-MQdqlxofbKe4vyM5kloMEGO9U1Hvcn5Cg2j5KvyrahZ

- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27 except (jt=lb) 16=134.

  12) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 13) Attic room checked for L/360 deflection.

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	R1	ATTIC	3	1	E16002630
31121-0070		ATTIO	٦	'	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:12 2021 Page 1 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-Aa\_5Z?tQBAODdtpF5YvmUXe6LSMe0c453\_APYYyrahT

Structural wood sheathing directly applied or 4-2-15 oc purlins,

Rigid ceiling directly applied or 9-7-6 oc bracing.

except end verticals.

1 Brace at Jt(s): 15

-Q-11 <sub>T</sub> 0	4-8-12	7-7-12	10-9-8	13-11-4	16-10-4	21-7-0	1
0-11-h	1-8-12	2-11-0	3-1-12	3-1-12	2-11-0	1-8-12	7

Scale = 1:76.9

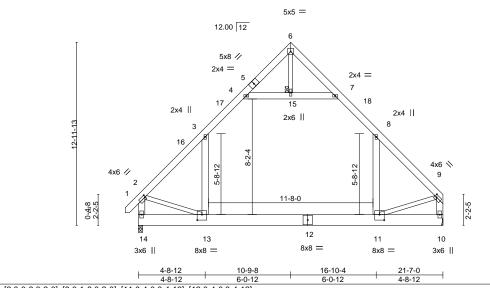


Plate Offsets (A, f) [2.0-0-6,0-2-0], [9.0-1-6,0-2-0], [11.0-4-0,0-4-12]												
LOADING (ps	f)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.	o	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.23 11-13	>999	360	MT20	244/190	
TCDL 10.	0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.38 11-13	>659	240			
BCLL 0.	0 *	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01 10	n/a	n/a			
BCDL 10.	0	Code IRC2015/TP	12014	Matrix	x-S	Wind(LL)	0.06 11-13	>999	240	Weight: 226 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x10 SP No.1

WEBS 2x6 SP No.1 \*Except\*

6-15,2-13,9-11: 2x4 SP No.2

REACTIONS. (size) 14=0-3-8, 10=Mechanical

Max Horz 14=329(LC 9)

Max Grav 14=1486(LC 21), 10=1445(LC 20)

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

TOP CHORD 2-3=-1617/0, 3-4=-981/145, 7-8=-984/149, 8-9=-1597/0, 2-14=-1643/8, 9-10=-1598/0

BOT CHORD 13-14=-312/478, 11-13=0/995

WEBS 8-11=-8/675, 3-13=-2/708, 4-15=-1030/189, 7-15=-1030/189, 2-13=0/854, 9-11=0/917

- 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) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-4-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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). 3-4, 7-8, 4-15, 7-15; Wall dead load (5.0psf) on member(s).8-11, 3-13
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- 7) Refer to girder(s) for truss to truss connections.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	B1GE	GABLE	1	1	E16002631
					Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:14 2021 Page 1

Structural wood sheathing directly applied or 4-9-4 oc purlins,

Rigid ceiling directly applied or 10-0-0 oc bracing

except end verticals.

 $ID: G? Mgu2wAOefhMIzVCCS4xvzzRiE-7y6r\_gvgjnfxsBzdCzxEZyjUCF2cUOUOWIfWdRyrahR\\$ 10-9-8

13-11-4 3-1-12 16-10-4 2-11-0 -0-11-0 0-11-0 2-11-0 4-8-12

Scale = 1:80.5

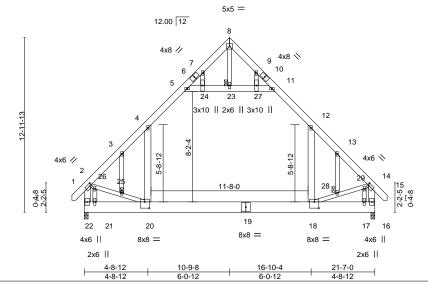


Plate Offsets (X,Y)	[2:0-1-0,0-2-0], [14:0-1-0,0-2-0], [18:0-4-0,0-5-8], [20:0-4-0,0-5-	8]
		〒

LOADING	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (le	oc) I/defl	L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.70	Vert(LL) -0.21 18-	20 >999	360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.72	Vert(CT) -0.35 18-	20 >726	240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.01	16 n/a	n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.08 18-	20 >999	240	Weight: 244 lb FT = 20%

BRACING-

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x10 SP No.1

2x6 SP No 1 \*Except\* WFBS 8-23,2-20,14-18: 2x4 SP No.2

**OTHERS** 2x4 SP No.2

REACTIONS. (size) 22=0-3-8, 16=0-3-8

Max Horz 22=422(LC 11)

Max Grav 22=1480(LC 21), 16=1480(LC 20)

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

2-3=-1601/0, 3-4=-1592/42, 4-5=-995/179, 7-8=-26/326, 8-9=-26/326, 11-12=-995/179, TOP CHORD

12-13=-1591/42, 13-14=-1600/0, 2-22=-1231/0, 14-16=-1232/0

BOT CHORD 21-22=-379/571, 20-21=-379/571, 18-20=0/1047, 17-18=-83/286, 16-17=-83/286 12-18=0/790, 4-20=0/790, 5-24=-1075/235, 23-24=-1070/236, 23-27=-1070/236, **WEBS** 

11-27=-1075/235, 8-23=-438/0, 2-26=-22/762, 25-26=-3/913, 20-25=-19/874, 18-28=-26/879, 28-29=-10/918, 14-29=-29/767, 7-24=-10/475, 21-26=-476/69,

9-27=-10/474, 17-29=-477/69

## NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 8) Ceiling dead load (10.0 psf) on member(s). 4-5, 11-12, 5-24, 23-24, 23-27, 11-27; Wall dead load (5.0psf) on member(s).12-18, 4-20
- 9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1
- 11) Attic room checked for L/360 deflection.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
14404 0070	20		_		E16002632
J1121-6678	B2	ATTIC	/	1	Job Reference (optional)

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:16 2021 Page 1

		I.	D:G?Mgu2w/	AOethMlzVC	CCS4xvzzRiE-3LDc	cPMwxFOvt6V70KOzieNpoa3jXyQ3h	ı_b8dhJyı
4-8-12	7-7-12	10-9-8	13-11-4	16-10-4	21-7-0	1	
4 0 40	0.44.0	2442	2 4 42	0.44.0	4 0 40	1	

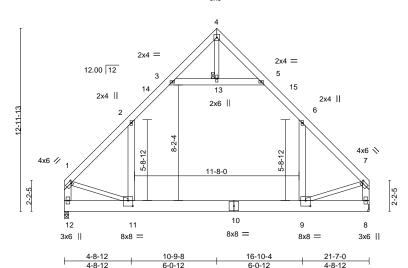
5x5 = Scale = 1:76.9

Structural wood sheathing directly applied or 4-2-11 oc purlins,

Rigid ceiling directly applied or 9-6-8 oc bracing.

except end verticals.

1 Brace at Jt(s): 13



LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.78	Vert(LL)	-0.23	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.75	Vert(CT)	-0.39	9-11	>653	240		
BCLL	0.0 *	Rep Stress Incr YES	WB 0.20	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL)	0.07	9-11	>999	240	Weight: 223 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

JOINTS

LUMBER-

REACTIONS.

TOP CHORD 2x6 SP No.1 BOT CHORD 2x10 SP No.1

WEBS 2x6 SP No.1 \*Except\*

4-13,1-11,7-9: 2x4 SP No.2

(size) 12=0-3-8, 8=Mechanical

Max Horz 12=313(LC 11) Max Grav 12=1446(LC 21), 8=1446(LC 20)

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

TOP CHORD 1-2=-1600/0, 2-3=-984/147, 5-6=-984/147, 6-7=-1600/0, 1-12=-1600/0, 7-8=-1601/0

BOT CHORD 11-12=-303/406, 9-11=0/997

WEBS 6-9=-6/678, 2-11=-7/678, 3-13=-1036/187, 5-13=-1036/187, 1-11=0/915, 7-9=0/919

- 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) 0-2-12 to 4-8-12, Interior(1) 4-8-12 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-4-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) 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). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s).6-9, 2-11
- 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- 7) Refer to girder(s) for truss to truss connections.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 9) Attic room checked for L/360 deflection.



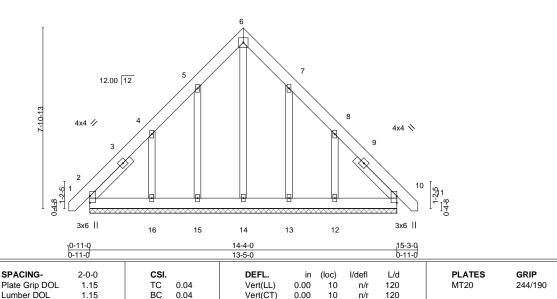
August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
					E16002633
J1121-6678	C1GE	COMMON SUPPORTED GAB	1	1	
					Job Reference (optional)
Comtech, Inc,	Fayetteville, NC - 28314,			8.430 s Ju	n 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:17 2021 Page 1
			ID 0014040	- CL B AL - V / O C	0.4 DIE VV/ 70:4\MI:0:0\V/- DI-LOTEMOE(A.D

1D:G?Mgu2wAOefhMlzVCCS4xvzzRiE-XXn\_cixZ0i1WjeiCt6VxBbL9mTEyhuMqCFtADmyrahO -0-11-0 7-7-8 14-4-0 15-3-0 0-11-0 6-8-8 6-8-8 0-11-0

5x5 = Scale = 1:47.4



Horz(CT)

BRACING-

TOP CHORD

**BOT CHORD** 

0.00

10

n/a

n/a

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

Weight: 124 lb

FT = 20%

LUMBER-

**TCLL** 

**TCDL** 

**BCLL** 

BCDL

LOADING (psf)

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1

20.0

10.0

0.0

10.0

OTHERS 2x4 SP No.2

SLIDER Left 2x4 SP No.2 2-6-0, Right 2x4 SP No.2 2-6-0

Rep Stress Incr

Code IRC2015/TPI2014

REACTIONS. All bearings 13-5-0.

(lb) - Max Horz 2=-224(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 13 except 16=-256(LC 12), 12=-251(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 13 except 16=270(LC 19), 12=265(LC 20)

WB

Matrix-S

0.13

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

WEBS 4-16=-280/263, 8-12=-280/260

### 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.

YES

- 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, 15, 13 except (jt=lb) 16=256, 12=251.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe	E160	002634
J1121-6678	D1	COMMON	1	1		£100	02034
Comtech, Inc, Fayette	ville, NC - 28314, r0-10-8 0-10-8	7-10-0 7-10-0	/lgu2wAOeft	MIzVCCS 15	Job Reference (optional) Jun 2 2021 MiTek Industries 4xvzzRiE-?kLMq2yBn09Nl 5-8-0 10-0	Inc. Tue Aug 3 10:39:18 2021 PagroGORp0AjouGssW4QJtzRvdjmCyrah	e 1 nN
		5x5 =				Scale :	= 1:41.4
		9 6 2x4		10	8 4x12	4 5 10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Plate Off	sets (X,Y)	[2:0-5-8,Edge], [4:0-5-8,E	Edge]										
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.03	4-6	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	4-6	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	4	n/a	n/a			
BCDL	10.0	Code IRC2015/TF	PI2014	Matri	x-S	Wind(LL)	0.06	4-6	>999	240	Weight: 98 lb	FT = 20%	

**BRACING-**

TOP CHORD

BOT CHORD

7-10-0

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 WFBS 2x4 SP No 2

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-0, 4=0-3-0

Max Horz 2=-154(LC 10) Max Uplift 2=-90(LC 9), 4=-90(LC 8) Max Grav 2=717(LC 2), 4=717(LC 2)

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

TOP CHORD 2-3=-810/620, 3-4=-810/618 2-6=-323/544, 4-6=-323/544 BOT CHORD

**WEBS** 3-6=-488/523

### 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; DCDL=6.0psf; and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 16-4-12 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

7-10-0

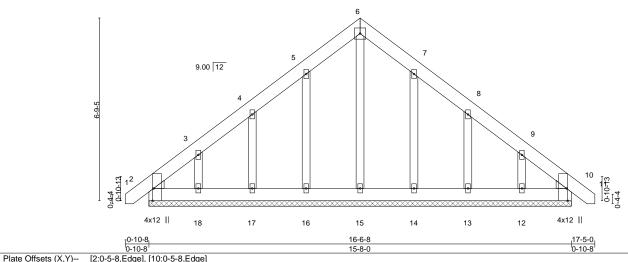
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other 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, 4.
  6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe	
						E16002635
J1121-6678	D1GE	COMMON SUPPORTED GAB	1	1		
					Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,			8.430 s Ju	n 2 2021 MiTek Industries, Inc. Tue Au	ug 3 10:39:19 2021 Page 1
			ID:G?Mgu2wAOefl	MIzVCCS4x	vzzRiE-Twvk1OypYJHEzyrb?WXPG0R	VWGwg9ps7gZMHleyrahM
	<sub>T</sub> 0-10-8 <sub>L</sub>	8-8-8		1	6-6-8 17-5-0	
	0-10-8	7-10-0		7	-10-0 0-10-8	
			5x5 =			Scale = 1:40.2



I late Oil	3Ct3 (7, 1)	[2.0 5 0,Eugc], [10.0 5 0,Eug	ici									
LOADING	G (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 Y	′ES	WB	0.07	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI20	14	Matri	x-S						Weight: 124 lb	FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD BOT CHORD 2x6 SP No.1 2x6 SP No.1

OTHERS WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. All bearings 15-8-0.

(lb) - Max Horz 2=-192(LC 10)

2x4 SP No.2

Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 14 except 17=-104(LC 12), 18=-135(LC 12),

13=-106(LC 13), 12=-129(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=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable 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, 16, 14 except (jt=lb) 17=104, 18=135, 13=106, 12=129.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

August 3,2021



Job		Truss	Truss Type		Qty	Ply	Lot 1 North Pointe	
								E16002636
J1121-6678		D2	COMMON		2	1		
							Job Reference (optional)	
Comtech, Inc,	Fayettev	ille, NC - 28314,				8.430 s Ju	n 2 2021 MiTek Industries, Inc. Tue Aug 3	10:39:21 2021 Page 1
				ID:G?M	gu2wAOefh	MIzVCCS	4xvzzRiE-PI1VS4_33wXxCG?z6xZtLRWnp-	4YmdfdQ7trOMXyrahK
		<sub>T</sub> 0-10-8	7-10-0	1			15-8-0	
		0-10-8	7-10-0				7-10-0	

5x5 =

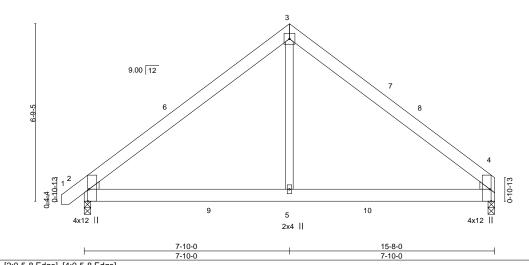


Plate Offsets (	Λ, t) [2.	.0-5-6,Eugej, [4.0-5-6,E	ugej										
LOADING (ps	sf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.	.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.03	2-5	>999	360	MT20	244/190	
TCDL 10.	.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	-0.05	2-5	>999	240			
BCLL 0	.0 *	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.01	4	n/a	n/a			
BCDL 10.	.0	Code IRC2015/TP	I2014	Matrix	k-S	Wind(LL)	0.06	2-5	>999	240	Weight: 96 lb	FT = 20%	

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

Dieta Officata (V.V.)

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 2=0-3-0, 4=0-3-0

Max Horz 2=153(LC 11) Max Uplift 2=-90(LC 9), 4=-86(LC 8)

Max Grav 2=718(LC 2), 4=673(LC 2)

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

2-3=-811/620, 3-4=-809/620 2-5=-333/542, 4-5=-333/542 BOT CHORD

3-5=-486/524 **WEBS** 

### 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; DCDL=6.0psf; and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 15-6-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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, 4.
  6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

August 3,2021

Scale = 1:41.4



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe	
J1121-6678	D3	COMMON	2	1	E1	6002637
					Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,			8.430 s Ju	in 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:22 2021 Pa	age 1
			ID:G?Mau2wA	OefhMlzV	CCS4xvzzRiF-uVhtfP?igFfggQaAgf46ue3vZUtAM6vZMXhxvzv	rah.I

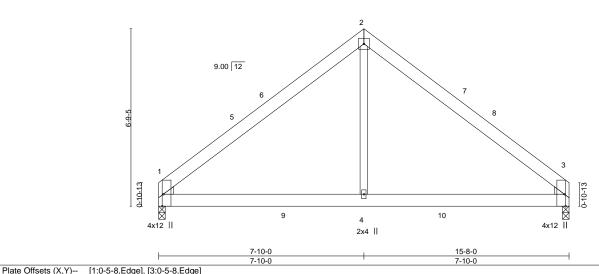
7-10-0 7-10-0

Scale = 1:41.4 5x5 =

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

15-8-0 7-10-0



1 late Oil	3Ct3 (A, I)	[1.0 5 0,Edgc], [5.0 5 0,Edgc]			
LOADIN	G (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL	20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL) -0.02 3-4 >999 360	MT20 244/190
TCDL	10.0	Lumber DOL 1.15	BC 0.29	Vert(CT) -0.05 3-4 >999 240	
BCLL	0.0 *	Rep Stress Incr YES	WB 0.31	Horz(CT) 0.01 3 n/a n/a	
BCDL	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06 1-4 >999 240	Weight: 94 lb FT = 20%

**BRACING-**

TOP CHORD

BOT CHORD

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No.2 WFBS

WEDGE

Left: 2x4 SP No.2, Right: 2x4 SP No.2

REACTIONS. (size) 1=0-3-0, 3=0-3-0

Max Horz 1=-150(LC 10) Max Uplift 1=-86(LC 9), 3=-86(LC 8) Max Grav 1=674(LC 2), 3=674(LC 2)

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

TOP CHORD 1-2=-810/622, 2-3=-810/622 1-4=-335/543, 3-4=-335/543

BOT CHORD

2-4=-483/524 **WEBS** 

- 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) 0-1-8 to 4-6-5, Interior(1) 4-6-5 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 15-6-8 zone; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, 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, 3.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
14404 0070	04	0			E16002638
J1121-6678	G1	Common	3	1	Job Reference (optional)

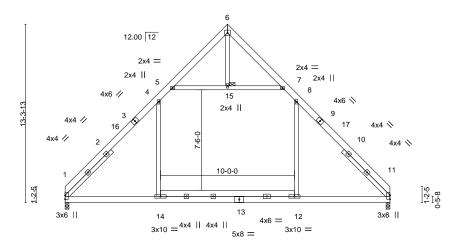
Comtech, Inc. Fayetteville, NC - 28314,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:24 2021 Page 1 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-qtid450yMrvW3jkYo47az38JgHWCq2Aspr42zsyrahHunderspread and the property of th



5x5 =

Scale = 1:80.9



10-0-0

TOP CHORD

**BOT CHORD** 

JOINTS

LOADING	i (psf)	SPACING-	2-0-0	CSI.
TCLL	20.0	Plate Grip DOL	1.15	TC 0.26
TCDL	10.0	Lumber DOL	1.15	BC 0.51
BCLL	0.0 *	Rep Stress Incr	YES	WB 0.13
BCDI	10.0	Code IRC2015/TF	PI2014	Matrix-S

DEFL. L/d **PLATES** GRIP in (loc) I/defl Vert(LL) -0.14 11-12 244/190 >999 360 MT20 Vert(CT) -0.16 11-12 >999 240 Horz(CT) 0.02 n/a n/a Wind(LL) 0.19 1-14 >999 240 Weight: 217 lb FT = 20% BRACING-

1 Brace at Jt(s): 15

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x6 SP No.1 2x4 SP No 2 WFBS

SLIDER Left 2x4 SP No.2 4-10-11, Right 2x4 SP No.2 4-10-11

REACTIONS.

(size) 1=0-3-8, 11=0-3-8 Max Horz 1=-306(LC 10)

Max Uplift 1=-35(LC 13), 11=-35(LC 12) Max Grav 1=1110(LC 20), 11=1110(LC 19)

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

TOP CHORD  $1\text{-}4\text{=-}1451/251,\ 4\text{-}5\text{=-}805/321,\ 7\text{-}8\text{=-}805/320,\ 8\text{-}11\text{=-}1453/251}$ 

BOT CHORD 1-14=-7/913. 12-14=-12/914. 11-12=-7/912

**WEBS** 4-14=-25/552, 8-12=-26/554, 5-15=-863/391, 7-15=-863/391

- 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) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-1-8, Exterior(2) 12-1-8 to 16-6-7, Interior(1) 16-6-7 to 24-3-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11. 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	G1-GR	COMMON GIRDER	1	2	E16002639
				<u> </u>	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

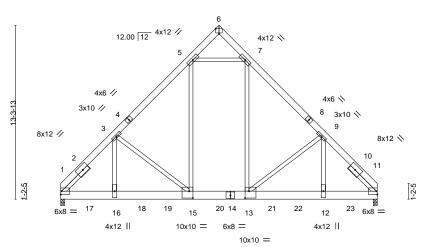
8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:27 2021 Page 1



4x6 = Scale = 1:83.1

Structural wood sheathing directly applied or 4-0-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



 4-1-8
 10-1-8
 14-1-8
 20-1-8
 24-3-0

 4-1-8
 6-0-0
 4-0-0
 6-0-0
 4-1-8

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

LOADING (	(psf) 20.0	SPACING- 2-0-0 Plate Grip DOL 1.15	<b>CSI.</b> TC 0.97	<b>DEFL.</b> in (loc) I/defl L/d Vert(LL) -0.09 12-13 >999 360	PLATES GRIP MT20 244/190
	10.0	Lumber DOL 1.15	BC 0.40	Vert(CT) -0.18 12-13 >999 240	
BCLL	0.0 *	Rep Stress Incr NO	WB 0.56	Horz(CT) 0.04 11 n/a n/a	
BCDL 1	10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.02 15-16 >999 240	Weight: 703 lb FT = 20%

BRACING-

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WERS 2x4 SP No.2

SLIDER Left 2x4 SP No.2 2-9-4, Right 2x4 SP No.2 2-9-4

REACTIONS. (

(size) 1=0-3-8, 11=0-3-8 Max Horz 1=304(LC 24)

Max Grav 1=11831(LC 2), 11=12016(LC 2)

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

TOP CHORD 1-3=-13875/0, 3-5=-10297/0, 7-9=-10310/0, 9-11=-14178/0

BOT CHORD 1-16=0/9026, 15-16=0/9042, 13-15=0/7348, 12-13=0/9245, 11-12=0/9228

WEBS 7-13=0/6894, 9-13=-2492/0, 9-12=0/4965, 5-15=0/6826, 3-15=-2232/0, 3-16=0/4595,

5-7=-7517/0

### NOTES-

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows: Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.

Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-4-0 oc. Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1958 lb down at 2-0-12, 1958 lb down at 4-0-12, 1958 lb down at 4-0-12, 1958 lb down at 10-0-12, 1958 lb down at 12-0-12, 1958 lb down at 12-0-12, 1958 lb down at 12-0-12, 2068 lb down at 16-0-12, 2068 lb down at 16-0-12, 2068 lb down at 20-0-12, and 2068 lb down at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

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

Vert: 1-6=-60, 6-11=-60, 1-11=-20



August 3,2021

### Continued on page 2

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.

Design valid for use only with MITEk® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and properly damage. For general guidance regarding the fabrication, storage, delivery, cerection and bracing of trusses and truss systems, see 

ANSITYPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information

available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	G1-GR	COMMON GIRDER	1		E16002639
31121-0070	01-0K	CONNINCT GIRDER	l'	3	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:27 2021 Page 2 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-ESOmi73qfmH5wBS7TCgHbimdlVZb1J6IWpliaByrahE

### LOAD CASE(S) Standard

Concentrated Loads (lb)

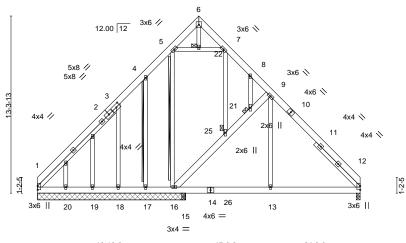
Vert: 13=-1547(B) 12=-1645(B) 15=-1547(B) 16=-1547(B) 17=-1547(B) 18=-1547(B) 19=-1547(B) 20=-1547(B) 21=-1645(B) 22=-1645(B) 23=-1645(B)

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	G1SG	GABLE	1	1	E16002640
31121-0070	0100	OABLE	'		Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:28 2021 Page 1



Scale = 1:81.5 5x5 =



10-10-0 17-6-2 6-8-14

Plate Off	Plate Offsets (X,Y) [3:0-3-8,0-2-8]											
LOADIN	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL	20.Ó	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.02 13-15	>999	360	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.03 12-13	>999	240			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.01 12	n/a	n/a			
BCDL	10.0	Code IRC2015/TP	12014	Matri	x-S	Wind(LL)	0.01 12-13	>999	240	Weight: 259 lb	FT = 20%	

BRACING-

TOP CHORD

BOT CHORD

WFBS

JOINTS

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

2x4 SP No.2 \*Except\* 9-16: 2x6 SP No.1

**OTHERS** 2x4 SP No.2

SLIDER Left 2x4 SP No.2 8-5-2, Right 2x4 SP No.2 4-8-11

REACTIONS. All bearings 11-1-8 except (jt=length) 12=0-3-8, 15=0-3-8.

Max Horz 1=-382(LC 10)

Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 17, 20 except 16=-205(LC 13),

18=-446(LC 12)

Max Grav All reactions 250 lb or less at joint(s) 17, 19, 20 except 1=385(LC 21),

12=663(LC 20), 16=287(LC 1), 18=434(LC 19), 15=352(LC 18)

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

TOP CHORD 1-3=-503/279, 3-4=-349/173, 4-5=-269/210, 8-9=-311/176, 9-12=-683/95 **BOT CHORD** 1-20=-204/371, 19-20=-204/371, 18-19=-204/371, 17-18=-205/372, 16-17=-205/372,

15-16=0/417, 13-15=0/417, 12-13=0/417

**WEBS** 16-25=-528/327, 21-25=-506/310, 9-21=-552/358, 9-13=0/298, 3-18=-507/461

### NOTES-

WFBS

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable studs spaced at 2-0-0 oc.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 17, 20 except (jt=lb) 16=205, 18=446. 9) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and
- referenced standard ANSI/TPI 1 10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.

2x4 SPF No.2 - 5-16, 4-17 T-Brace: 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.



August 3,2021

Job Truss Truss Type Qty Ply Lot 1 North Pointe F16002641 J1121-6678 Н1 COMMON Job Reference (optional) 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:29 2021 Page 1 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-ArWW7p45BOYp9UcWadilg7r3gIACVIGbz7npe3yrahC Comtech, Inc. Fayetteville, NC - 28314, 10-11-8 10-11-8 10-11-8 Scale = 1:57.9 5x8 || 3 9.00 12 10 12 6 13 7 5x8 II 5x8 II 4x8 =3x10 || 10-11-8 10-11-8 10-11-8 LOADING (psf) SPACING-CSI. DEFL. **PLATES** GRIP 2-0-0 in (loc) I/defl L/d 20.0 Plate Grip DOL TC Vert(LL) 244/190 **TCLL** 1.15 0.62 -0.14 4-7 >999 360 MT20 **TCDL** 10.0 Lumber DOL 1.15 вс 0.65 Vert(CT) -0.24 4-7 >999 240

Horz(CT)

Wind(LL)

BRACING-

TOP CHORD

**BOT CHORD** 

0.02

2-7

n/a

240

Rigid ceiling directly applied or 10-0-0 oc bracing.

Structural wood sheathing directly applied or 5-6-9 oc purlins.

Weight: 135 lb

FT = 20%

n/a

>999

LUMBER-

**BCLL** 

BCDL

TOP CHORD 2x6 SP No.1 2x6 SP No.1 BOT CHORD 2x4 SP No.2 WFBS

0.0

WEDGE

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

REACTIONS. (size) 2=0-3-8, 4=0-3-8 Max Horz 2=-211(LC 10)

Max Uplift 2=-53(LC 12), 4=-53(LC 13)

Rep Stress Incr

Code IRC2015/TPI2014

Max Grav 2=1125(LC 19), 4=1125(LC 20)

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

TOP CHORD 2-3=-1278/229, 3-4=-1278/229

BOT CHORD 2-7=0/940, 4-7=0/940 WEBS 3-7=0/893

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) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

WB

Matrix-S

0.20

3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

YES

- 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, 4.
- 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 7) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



August 3,2021

neters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designs. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*



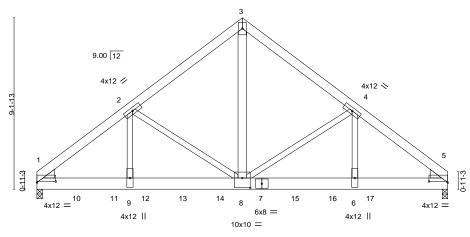
Job Truss Truss Type Qty Ply Lot 1 North Pointe F16002642 J1121-6678 H1-GR COMMON GIRDER Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:33 2021 Page 1

ID: G? Mgu2wAOefhMIzVCCS4xvzzRiE-3cl1zA7bFc2Ee6wHpTnhqz0qqvaJR1gBull0oqyrah821-11-0 10-11-8 6-0-0 4-11-8

> Scale = 1:57.9 5x8 II

> > Structural wood sheathing directly applied or 5-0-8 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.



4-11-8 10-11-8 16-11-8 21-11-0 4-11-8 Plate Offsets (X,Y)-- [1:1-0-0,0-0-11], [5:1-0-0,0-0-11], [8:0-5-0,0-6-4]

4-11-8 4-11-8

LOADING (psf) TCLL 20.0 TCDL 10.0 BCLL 0.0 *	SPACING-         2-0-0           Plate Grip DOL         1.15           Lumber DOL         1.15           Rep Stress Incr         NO	CSI. TC 0.29 BC 0.57 WB 0.56	DEFL.         in (loc)         l/defl         L/d           Vert(LL)         -0.08         6-8         >999         360           Vert(CT)         -0.17         6-8         >999         240           Horz(CT)         0.05         5         n/a         n/a	PLATES         GRIP           MT20         244/190
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) -0.01 8-9 >999 240	Weight: 370 lb FT = 20%

**BRACING-**

TOP CHORD

**BOT CHORD** 

LUMBER-

TOP CHORD 2x6 SP No.1 BOT CHORD 2x8 SP 2400F 2.0E 2x4 SP No.2 \*Except\* WFBS

3-8: 2x6 SP No.1

WEDGE

Left: 2x6 SP No.2, Right: 2x6 SP No.2

REACTIONS. (size) 1=0-3-8, 5=0-3-8

Max Horz 1=205(LC 5)

Max Grav 1=7649(LC 2), 5=6352(LC 2)

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

1-2=-10330/0, 2-3=-6810/0, 3-4=-6808/0, 4-5=-9583/0 TOP CHORD 1-9=0/7859, 8-9=0/7859, 6-8=0/7270, 5-6=0/7270 **BOT CHORD** 

**WEBS** 3-8=0/7742, 4-8=-2267/0, 4-6=0/3124, 2-8=-2978/0, 2-9=0/3981

### NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:

Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc. Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.

Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.

- 2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- 3) Unbalanced roof live loads have been considered for this design.
- 4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1387 lb down at 2-0-12, 1387 lb down at 4-0-12, 1388 lb down at 5-8-12, 1388 lb down at 7-8-12, 1388 lb down at 9-8-12, 1388 lb down at 11-8-12, 1388 lb down at 13-8-12, and 1388 lb down at 15-8-12, and 1388 lb down at 17-8-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

### LOAD CASE(S) Standard

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



August 3,2021

eters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building designs. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss experts.

\*\*Starty Information\*\*

\*\*Ansity Prevent\*\*



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	H1-GR	COMMON GIRDER	1		E16002642
31121-0076	ni-GK	COMMON GIRDER	'	2	Job Reference (optional)

Fayetteville, NC - 28314, Comtech, Inc,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:34 2021 Page 2 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-XpJPAW8D?wA5GGVTNAlwNAZ?aJwYAUwK7PVaKHyrah7

LOAD CASE(S) Standard

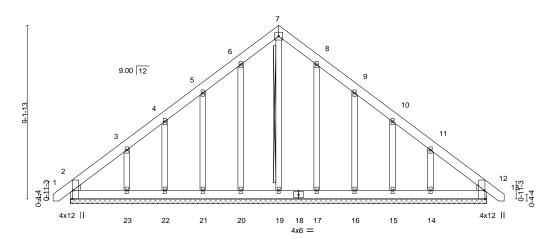
Uniform Loads (plf) Vert: 1-3=-60, 3-5=-60, 1-5=-20

Concentrated Loads (lb)

Vert: 7=-1130(B) 10=-1128(B) 11=-1128(B) 12=-1130(B) 13=-1130(B) 14=-1130(B) 15=-1130(B) 16=-1130(B) 17=-1130(B) 16=-1130(B) 17=-1130(B) 18=-1130(B) 1

Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	H1GE	COMMON SUPPORTED GAB	1	1	E16002643
					Job Reference (optional)
Comtech, Inc, Fayette	ville, NC - 28314,			8.430 s Ju	n 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:32 2021 Page 1
		ID	C:G?Mgu2wAOe	hMlzVCC	S4xvzzRiE-bQBfmq7zUJwO0yL5GIGSIITj1WMWihH1f50TFOyrah9
	-Q-11-Q	11-10-8		22-1	10-0 23-9-0
	Ó-11-Ó	10-11-8		10-1	l1-8

Scale = 1:57.1 5x5 =



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

Plate Offs	Plate Offsets (X,Y) [2:0-5-8,Edge], [12:0-5-8,Edge]												
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	12	n/r	120	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	12	n/r	120			
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	12	n/a	n/a			
BCDL	10.0	Code IRC2015/TI	PI2014	Matri	x-S						Weight: 188 lb	FT = 20%	

LUMBER-

TOP CHORD BOT CHORD 2x6 SP No.1 2x6 SP No.1

OTHERS 2x4 SP No 2

WEDGE

Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**

TOP CHORD BOT CHORD WFBS

Structural wood sheathing directly applied or 6-0-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing. T-Brace: 2x4 SPF No.2 - 7-19

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 21-11-0.

(lb) - Max Horz 2=264(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 22, 17, 15, 12 except 21=-110(LC 12), 23=-180(LC 12),

16=-113(LC 13), 14=-175(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 17, 16, 15, 12 except 23=275(LC 19),

14=268(LC 20)

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

TOP CHORD 2-3=-270/203

- 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; DCDL=6.0psf; gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) All plates are 2x4 MT20 unless otherwise indicated.
- 5) Gable requires continuous bottom chord bearing.
- 6) Gable studs spaced at 2-0-0 oc.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 22, 17, 15, 12 except (jt=lb) 21=110, 23=180, 16=113, 14=175.
- 10) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building
- 12) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



August 3,2021



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe
J1121-6678	V1	VALLEY	1	1	E16002644
31121-0076	VI	VALLE	<b>'</b>	'	Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314,

8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:34 2021 Page 1 ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-XpJPAW8D?wA5GGVTNAIwNAZ1?J14AbJK7PVaKHyrah7



4x4 = Scale = 1:40.6

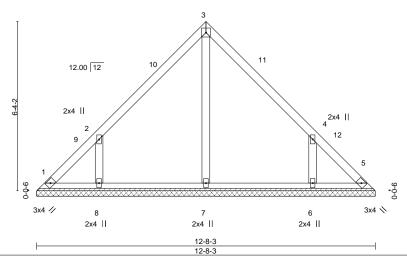


Plate Offsets (X,Y)	[4:0-0-0,0-0-0]			
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) I/defl L/d	PLATES GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.14	Vert(LL) n/a - n/a 999	MT20 244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT) n/a - n/a 999	
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.00 5 n/a n/a	
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S		Weight: 58 lb FT = 20%

LUMBER-

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

OTHERS 2x4 SP No.1

BRACING-TOP CHORD

**BOT CHORD** 

Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 12-8-3.

(lb) - Max Horz 1=144(LC 9)

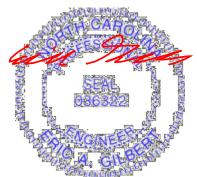
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-161(LC 12), 6=-161(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=342(LC 19), 6=342(LC 20)

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

WEBS 2-8=-356/291, 4-6=-355/291

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-4-1, Exterior(2) 6-4-1 to 10-8-14, Interior(1) 10-8-14 to 12-3-15 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.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=161, 6=161.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 3,2021



Job	Truss	Truss Type	Q	ty	Ply	Lot 1 North Pointe	
				•	'	E	16002645
J1121-6678	V2	VALLEY	1		1		
0	- III NO 22244				0.400	Job Reference (optional)	
Comtech, Inc,	Fayetteville, NC - 28314,		ID-C3M	ΛαιιΩνιΛ	8.430 s Ju	n 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:35 2021 CCS4xvzzRiE-??tnOs9rmElytP4gxtp9wO5BSjLMv3xUL3E7:	Page 1
		4-10-1	ID:G?W	iguzwA	9-8-3	CC54xv22Rie-??inOs9imEiyiP4gxip9wO5B5jLiviv3xUL3E7	sjyrano
		4-10-1	-		4-10-2		
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			444 —				
			2				
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		12.00 12	//       \  \				
		12.00   12	/    \				
	2			/			
	10-2						
	4						
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						\ \ 3	

		9-8-3										
LOADING	G (psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	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 BCDL	0.0 * 10.0	Rep Stress Incr Code IRC2015/T	YES	WB Matri	0.06	Horz(CT)	0.00	3	n/a	n/a	Weight: 39 lb	FT = 2
DCDL	10.0	Code IRC2015/1	P12014	Iviati	IX-S						weight, 39 ib	$\Gamma I = Z$

LUMBER-

2x4 SP No.1 2x4 SP No.1 TOP CHORD BOT CHORD 2x4 SP No.2 **OTHERS** 

**BRACING-**

2x4 || 9-8-3

> TOP CHORD **BOT CHORD**

Structural wood sheathing directly applied or 6-0-0 oc purlins.

9-0-0

Rigid ceiling directly applied or 10-0-0 oc bracing.

3x4 📏

REACTIONS. (size) 1=9-8-3, 3=9-8-3, 4=9-8-3

Max Horz 1=-108(LC 8)

Max Uplift 1=-27(LC 13), 3=-27(LC 13)

Max Grav 1=204(LC 1), 3=204(LC 1), 4=311(LC 1)

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

### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 3,2021

FT = 20%



Job	Truss	Truss Type	Qty	Ply	Lot 1 North Pointe						
J1121-6678	V3	VALLEY	1	1		E16002646					
31121-0076	٧٥	VALLET	'	'	Job Reference (option	nal)					
Comtech, Inc, F	ayetteville, NC - 28314,			8.430 s Ju	n 2 2021 MiTek Indus	tries, Inc. Tue Aug 3 10:39:36 2021 Page 1					
		ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-TBR9bCAUXXQpVZfsVbKOSbeNK7iveWrdaj_gO9yrah5									
		3-4-1 3-4-1		6-8-3 3-4-2							
		3-4-1		3-4-2							
						Scale = 1:23.0					
			4x4 =								
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	9-8-0	hilinininininininininininininininininini		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		9-0-0					
	1 3					0					
		3x4 //	4		3x4 📏						
			2x4								
			6-8-3								
			6-8-3								
	-										
LOADING (psf)		0-0 <b>CSI</b> .		in (loc)	I/defl L/d	PLATES GRIP					
TCLL 20.0 TCDL 10.0		15 TC 0.15 15 BC 0.07		/a - /a -	n/a 999 n/a 999	MT20 244/190					
BCLL 0.0 *		ES WB 0.02	Horz(CT) 0.0		n/a 999 n/a n/a						
BCDL 10.0	Code IRC2015/TPI20		11012(01) 0.0	,,,	11/4 11/4	Weight: 26 lb FT = 20%					
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					11.2.3 22 11.2070					

LUMBER-

TOP CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.1 BOT CHORD 2x4 SP No.2 **OTHERS** 

**BRACING-**

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-8-3, 3=6-8-3, 4=6-8-3

Max Horz 1=-72(LC 8)

Max Uplift 1=-26(LC 13), 3=-26(LC 13)

Max Grav 1=146(LC 1), 3=146(LC 1), 4=187(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 3,2021





Job Truss Truss Type Qty Ply Lot 1 North Pointe F16002647 J1121-6678 V4 VALLEY Job Reference (optional) Comtech, Inc. Fayetteville, NC - 28314, 8.430 s Jun 2 2021 MiTek Industries, Inc. Tue Aug 3 10:39:37 2021 Page 1 ID: G? Mgu2wAOefhMlzVCCS4xvzzRiE-xN?YpYA6lrYg7jD22lsd?pAasX3wNzlmpNjExcyrah41-10-1 1-10-1 4x4 = Scale: 1"=1' 12.00 12 3 9-0-0 9-0-0 3x4 // 2x4 || 3x4 📏 3-8-3 LOADING (psf) SPACING-2-0-0 CSI. DEFL. **PLATES** GRIP in (loc) I/defl L/d 20.0 Plate Grip DOL TC Vert(LL) 244/190 **TCLL** 1.15 0.03 n/a 999 MT20 n/a **TCDL** 10.0 Lumber DOL 1.15 вс 0.02 Vert(CT) n/a n/a 999 WB **BCLL** 0.0 Rep Stress Incr YES 0.01 Horz(CT) 0.00 3 n/a n/a BCDL Code IRC2015/TPI2014 Matrix-P Weight: 13 lb FT = 20%

LUMBER-

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

TOP CHORD BOT CHORD Structural wood sheathing directly applied or 3-8-3 oc purlins.

Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 1=3-8-3, 3=3-8-3, 4=3-8-3

Max Horz 1=-36(LC 8)

Max Uplift 1=-13(LC 13), 3=-13(LC 13)

Max Grav 1=72(LC 1), 3=73(LC 1), 4=93(LC 1)

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

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Gable requires continuous bottom chord bearing.
- 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 5) \* This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 7) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



August 3,2021



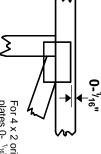


## Symbols

# PLATE LOCATION AND ORIENTATION



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



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

ω

O

S

required direction of slots in connector plates This symbol indicates the

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

### PLATE SIZE



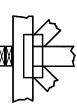
to slots. Second dimension is the length parallel to slots. width measured perpendicular The first dimension is the plate

# LATERAL BRACING LOCATION



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

### BEARING



number where bearings occur.

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

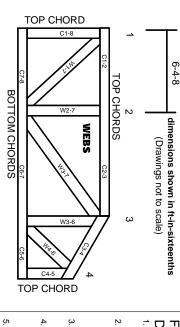
### Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.

DSB-89:

Installing & Bracing of Metal Plate Connected Wood Trusses. Guide to Good Practice for Handling, Building Component Safety Information Design Standard for Bracing

# **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

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

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

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

# **General Safety Notes**

## Damage or Personal Injury Failure to Follow Could Cause Property

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI
- 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.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the camber for dead load deflection. esponsibility of truss fabricator. General practice is to
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that
- 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
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words is not sufficient. and pictures) before use. Reviewing pictures alone
- 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.