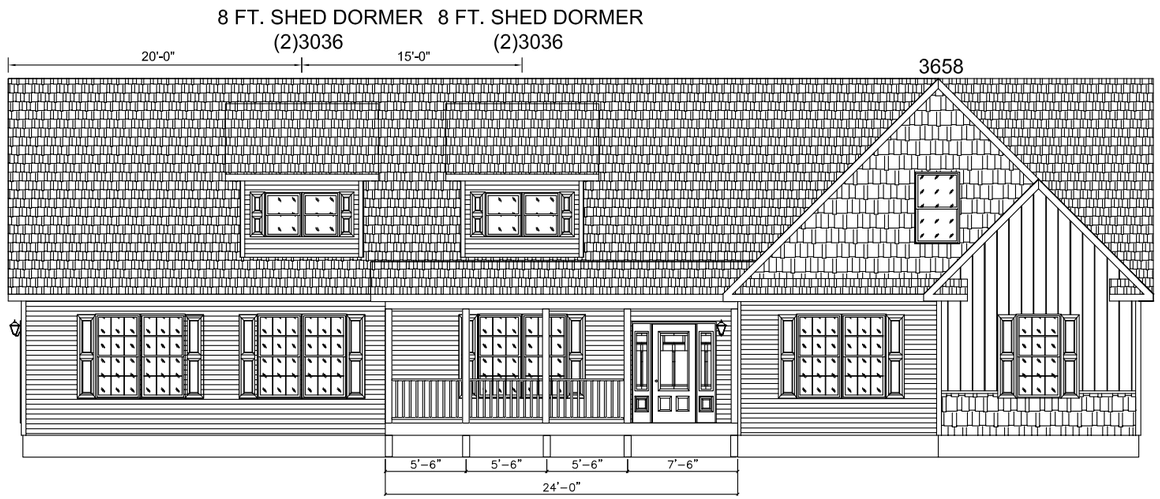
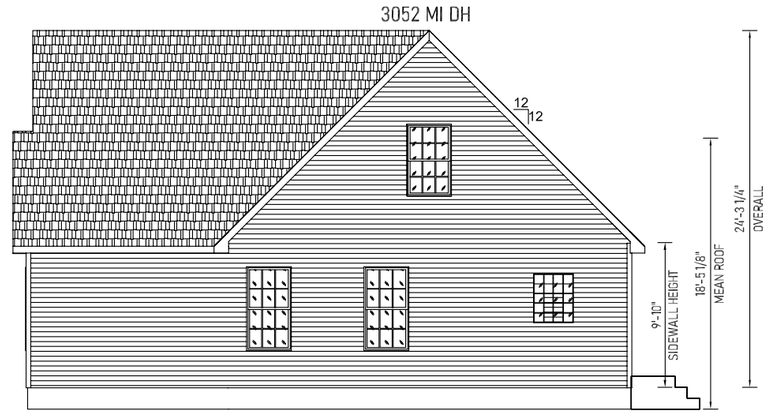
ELEVATIONS SHOWN ON THIS PAGE REPRESENT BASIC COMPONENTS AND ARE NOT INTENDED TO BE ALL INCLUSIVE, NOR DO THESE ELEVATIONS DETAIL EVERY CODE REQUIRED ASPECT OF THIS BUILDING. SITE BUILT STOOPS, STEPS, DECKS, PORCHES, HANDRAILS AND/OR SIMILAR ITEMS MUST BE PROVIDED BY OTHERS ON SITE FOR COMPLIANCE WITH APPLICABLE CODES. COMPLIANCE WITH ALL APPLICABLE CODES PER LOCAL AUTHORITY HAVING JURISDICTION, WHETHER DETAILED IN THIS SET OR NOT, MUST BE MET.

Note: Window fall protection must be provided on-site where required in accordance with applicable code.

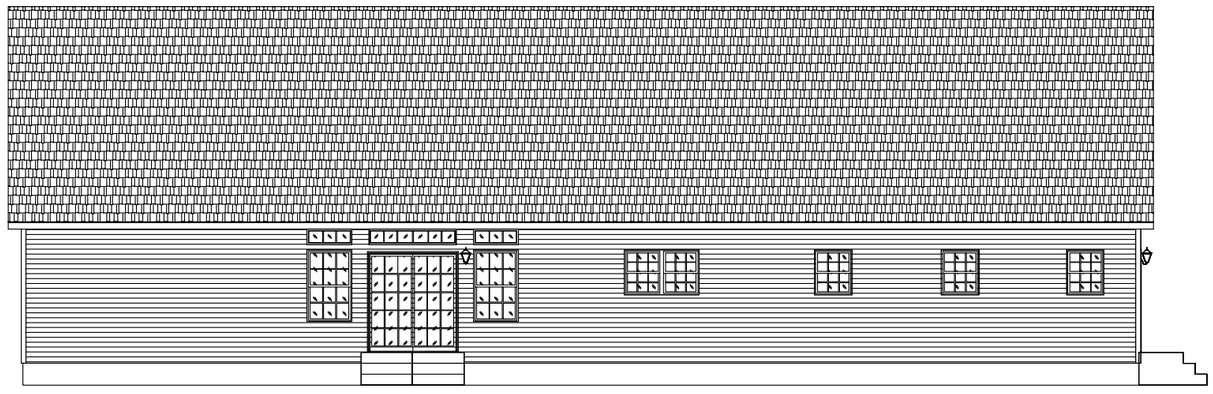



FRONT VIEW

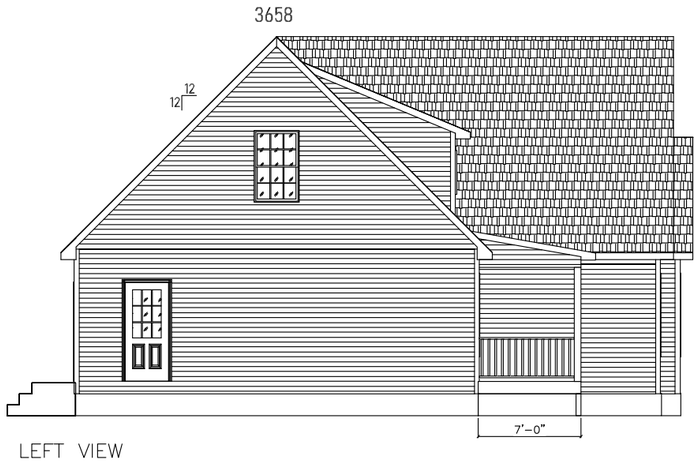
NOTE:
. HOMES WITH ATTIC SPACE QUALIFYING AS HABITABLE, MUST BE EQUIPPED WITH EMERGENCY ESCAPE AND RESCUE OPENINGS REGARDLESS OF WHETHER ATTIC AREA IS FINISHED OR UNFINISHED. OPENINGS MAY OCCUR AT END WALL OF ATTIC AND/OR AT ROOF DORMERS IN WHATEVER ARRANGEMENT NECESSARY TO INSURE THAT ANY SLEEPING ROOM HAS AT LEAST ONE EGRESS OPENING.




RIGHT VIEW



REAR VIEW



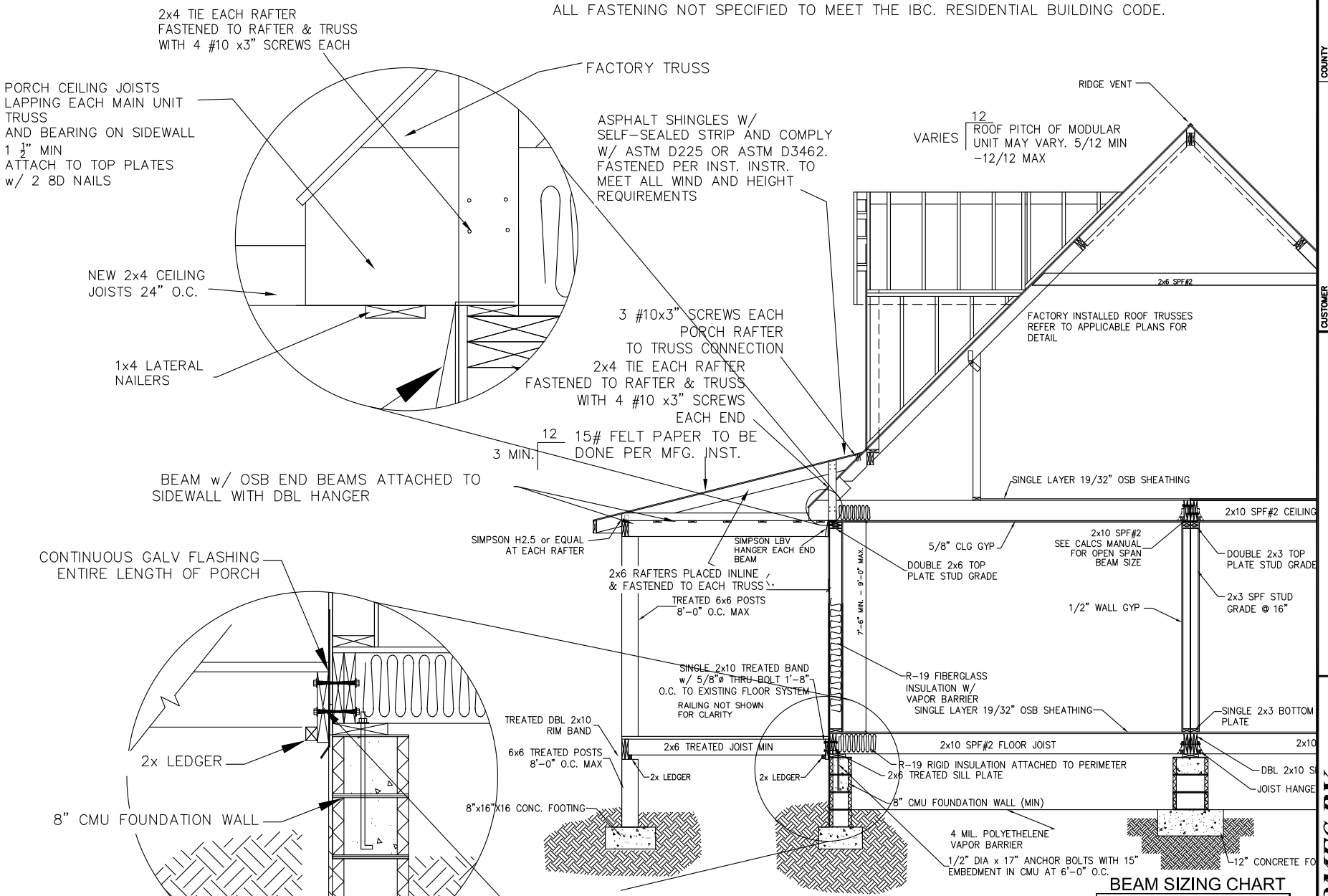

LEFT VIEW

-NOTES-

1. FOUNDATION SHALL BE DESIGNED AND CONSTRUCTED BY OTHERS WHERE "OTHERS" REFERS TO THE DEALER BUILDER.
2. GUTTERS AND LEADERS SHALL BE INSTALLED BY OTHERS.
3. TYPICAL 12" OR 15" VINYL SHUTTERS PROVIDED BY MANUFACTURERS.
4. ALL FOOTINGS, RAILINGS AND STEPS SHALL BE FIELD INSTALLED IN COMPLIANCE WITH APPLICABLE STATE AND LOCAL CODES.
5. SIDING SHALL BE VINYL SIDING WITH VINYL TRIM, AND MAY BE PARTIALLY INSTALLED ON SITE.
6. EXTERIOR LIGHTS MAY BE SHIPPED LOOSE FOR INSTALLATION ON SITE.
7. ROOFING SHINGLES MAY BE PARTIALLY SITE INSTALLED.
8. PORCH RAILINGS ARE PVC. TREATED LUMBER PORCH POSTS MAY BE COVERED WITH VINYL. PORCH DECKING SHALL BE TREATED.
9. ALL EXTERIOR COVERINGS SHALL BE WEATHER AND DECAY RESISTIVE TO PROVIDE PROPER PROTECTION FOR UNTREATED MATERIALS.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: TCC VANDERBUILT | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: N.T.S. | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Elevations | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV | | | |
| | | | | | S/N: 44850 | Pg.: | EL | Run: |

ALL SITE CONSTRUCTION TO MEET 2018 ED. OF THE IBC RESIDENTIAL BUILDING CODE, SUBJECT TO LOCAL JURISDICTION INSPECTION AND APPROVAL.
ALL FASTENING NOT SPECIFIED TO MEET THE IBC. RESIDENTIAL BUILDING CODE.




## BEAM SIZING CHART

| GROUND SNOW LOAD (psf) 30 | |
|---|---|
| HEADER SIZE | MAX. SPAN |
| 2-2x8 | 7'-4" |
| 2-2x10 | 9'-0" |
| 3-2x8 | 9'-3" |
| 3-2x10 | 11'-4" |

VALUES DERIVED FROM TABLE R502.5(1) NCRC INTERPOLATED TO 16' BUILDING WIDTH.

DESIGN APPLICABLE FOR UNITS UP TO 130 MPH, EXP. C.

| | | | |
|---|---|---|---|
| CUSTOMER | | COUNTY | VARIOUS |
| | | STATE | NC |
| CITY | | SNOW LOAD | 20 |
| WIND SPEED | 110 | WIND LOAD | 32.4 |
| CUST. NO. | | DRAWING NAME | |

SHED PORCH DETAIL

| DATE: | REVISION: | BY: | NOTE: |
|---|---|---|---|
| 7/08/08 | CRTED | BRB | |

T:\MISCELLANEOUS\SHED_PORCH_2012.DWG


HOMES BY VANDERBUILT
3300 JEFFERSON DAVIS HWY
SANFORD, NC 27332
PHONE: (919) 718-2760
FAX: (919) 718-2799

| Footing size (in.) | Footing max. load (lbs.) for 8" x16" pier | | |
|---|---|---|---|
| | 1500 PSF | 2000 PSF | 2500 PSF |
| *16x16x6 | 2.5K | 3.4K | 4.3K |
| *20x20x6 | 4.0K | 5.3K | 6.7K |
| 24x24x8 | 5.6K | 7.6K | 9.6K |
| 30x30x10 | 8.5K | 11.7K | 14.8K |
| 36x36x12 | 12.4K | 16.7K | 20.7K |
| 42x42x14 | 16.5K | 22.4K | 28.2K |
| 48x48x14 | 21.2K | N/A | N/A |

* = A 4" thick pre-cast footer of equivalent width and length may be used in place of a 6" thick cast in place footer.

Footer size must be designed by others to site conditions if noted kip load exceeds capacities listed above

**COLUMNS & FOOTINGS MUST BE RATED TO MEET THE CENTER LINE LOADS LISTED**

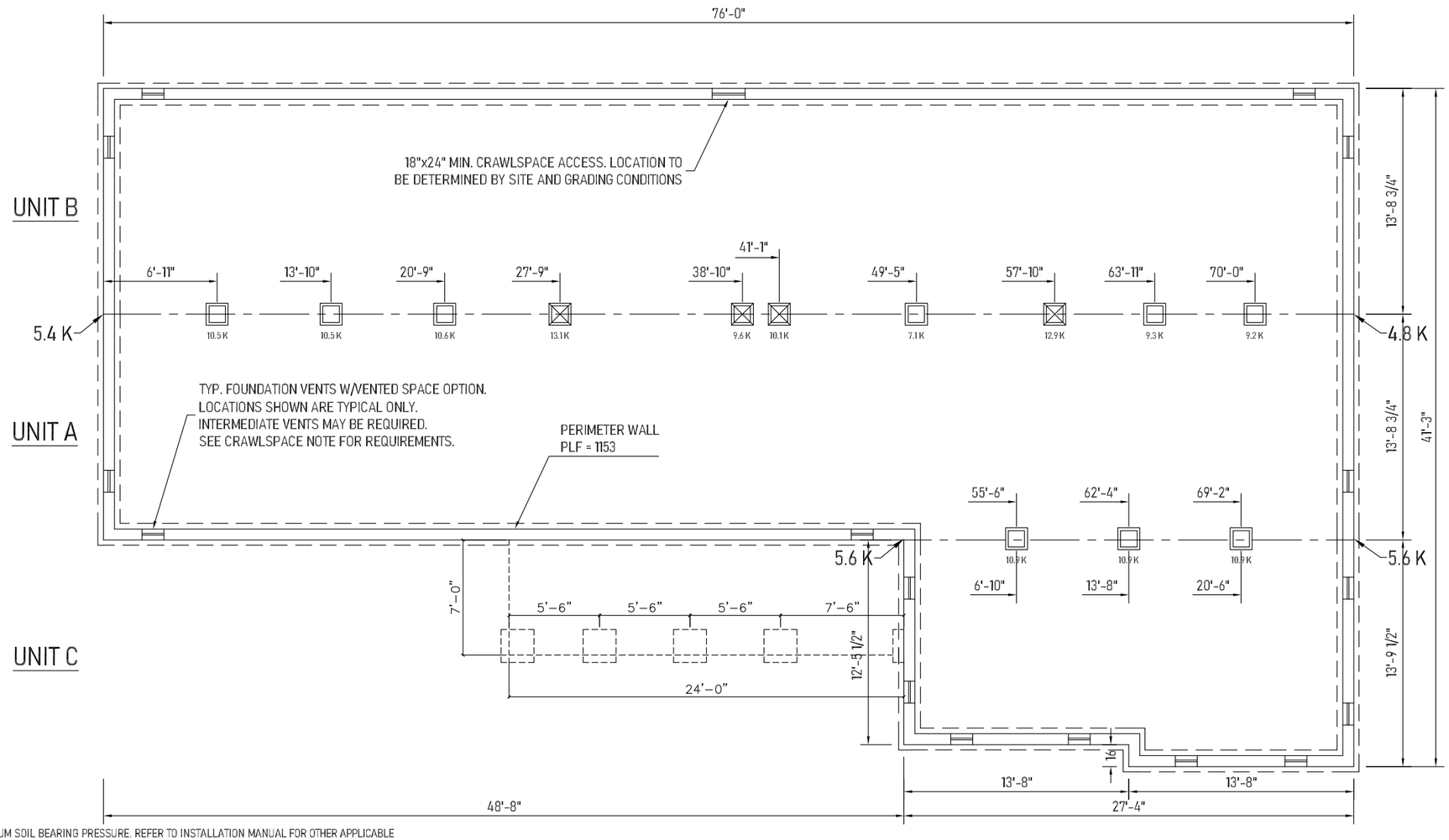
GROUND SNOW LOAD **20 PSF**

**Kip loads noted are based on allowable stress design (ASD).**
**Capacity of supports (columns, footings, etc.) must exceed noted Kip loads.**
**Any changes to this plan that effect the foundation in any way will be the sole responsibility of the builder/dealer.**

SELF-WEIGHT ON FOOTERS NOT INCLUDED IN LOADS SHOWN.
♦ = IF APPLICABLE, REPRESENTS TIE DOWN LOADS FROM BRACE WALLS TO FOUNDATION. TO BE DESIGNED ON SITE BY OTHERS.

FOR CONNECTION OF THE HOME TO FOUNDATION AT BRACING WALLS, REFER TO "BRACED WALLS-CALCULATED" PAGE, IF APPLICABLE. WHEN THIS PAGE IS PRESENT, HORIZONTAL AND OVERTURNING (RACKING) LOADS AT BRACING WALL LOCATIONS ARE INDICATED FOR THESE FOUNDATION CONNECTIONS. THESE LOADS MAY BE RECALCULATED AND REDESIGNED PER LOCAL CODES TO CONFORM TO SITE CONDITIONS AS REQUIRED. REFER TO CHAPTER 3 (3.9 TIE DOWN TO FOUNDATION) OF THE "MODULAR HOME INSTALLATION MANUAL" FOR ADDITIONAL INFORMATION.
REFER TO APPLICABLE CODES FOR CONNECTION OF HOME TO FOUNDATION WHEN "BRACED WALLS-PRESCRIPTIVE" PAGE IS APPLICABLE.

FOUNDATION SHOWN MUST BE DESIGNED BY OTHERS TO THE SITE CONDITIONS. THIS INCLUDES SEISMIC DESIGN AND ATTACHING THE HOME TO THE FOUNDATION, ALONG WITH RESISTANCE TO LATERAL, LONGITUDINAL SHEAR, UPLIFT AND DOWNLIFT FORCES IN BOTH DIRECTIONS.

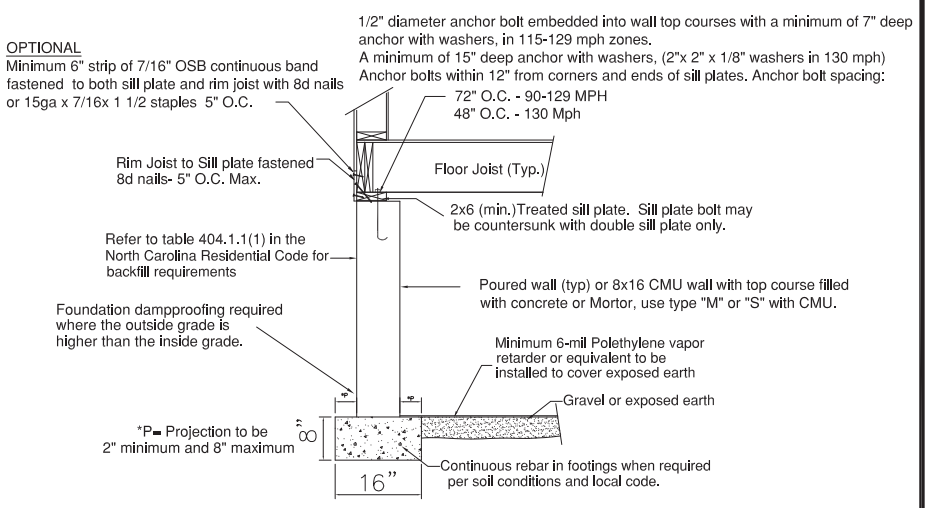



- 2X10 OR TRUSS FLOOR NOTES -

1. FOUNDATION LAYOUT IS APPLICABLE TO NOTED MAXIMUM SNOW LOADING AND MINIMUM SOIL BEARING PRESSURE. REFER TO INSTALLATION MANUAL FOR OTHER APPLICABLE INFORMATION. CONSULT LOCAL OFFICIALS AND THE APPLICABLE LOCAL CODES FOR OTHER REQUIREMENTS (I.E. DRAINAGE, DAMP-PROOFING, BACKFILL SUPPORT, ETC.).
2. WIDTH DIMENSIONS SHOWN INCLUDE A 3/4" ALLOWANCE PER HOME SECTION FOR HOMES WITH FACTORY-INSTALLED O.S.B. ON THE MARRIAGE WALL MATE LINE. THIS ALLOWANCE TAKES INTO ACCOUNT THE 7/16" O.S.B. MATERIAL INSTALLED ON EACH MARRIAGE WALL PLUS ALLOWANCE DUE TO OTHER FACTORS. IF HOME DOES NOT INCLUDE O.S.B. ON THE MARRIAGE WALL MATE LINE, FOUNDATION WIDTH IS TO BE SIZED EQUAL TO ACTUAL MANUFACTURED FLOOR WIDTH. LESSER DIMENSION, IF SHOWN, INDICATES ACTUAL FLOOR WIDTH. THESE DIMENSIONS DO NOT ALLOW FOR ANY VARIANCE THAT MAY OCCUR IN SITE INSTALLATION SUCH AS GAPPING, OFF CENTER SET OR OTHER FIELD-ENCOUNTERED VARIABLES. ANY ADJUSTMENTS NEEDED IN FOUNDATION WIDTH DUE TO SUCH VARIANCES ARE AT THE DISCRETIONOF THE INSTALLER.
3. FOR DEVIATIONS &/OR OTHER FOUNDATION DESIGNS CONSULT A LOCAL PROFESSIONAL ENGINEER & YOUR LOCAL BUILDING OFFICIAL.
4. SILL PLATE FASTENING TO BE PER INSTALLATION MANUAL AND/OR LOCAL CODES. SILL FASTENING REQUIREMENT IS PER APPLICABLE WIND SPEED AND SEISMIC ZONES. SEE YOUR HOME DATA PLATE FOR APPLICABLE ZONES.
5. CONCRETE COMPRESSIVE STRENGTH (FC'): 2500 PSI MINIMUM.
6. CENTERLINE LINE SUPPORTS AND SPACING ARE BASED ON (2) 2X10's SPF#2 ON EACH HALF (4-2X10'S TOTAL).
7. CRAWLSPACE VENTILATION IS NOT REQUIRED WHEN INSULATION IS APPLIED TO CRAWLSPACE WALLS AS REQUIRED BY RESCHECK (CONDITIONED AIR). INSTALLATION OF VENTS IN CRAWLSPACE WALLS WOULD MANDATE INSULATING THE FLOOR SYSTEM PER APPLICABLE THERMAL CALCULATIONS. REFER TO APPLICABLE PRESCRIPTIVE CODES & GUIDELINES. WHEN REQUIRED, ONE VENT SHALL BE PROVIDED WITHIN 3 FEET OF EACH CORNER.
8. FOUNDATION CONSTRUCTION AND TIE DOWN REQUIREMENTS FOR HOMES LOCATED IN 90 MPH OR LESS WIND ZONES MAY USE APPLICABLE PRESCRIPTIVE CODES & GUIDELINES UNLESS NOTED OTHERWISE.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Builder: TCC VANDERBUILT LLC. | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 1/8" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Foundation 2x10 Marriage Line without Stair | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV | Pg.: | FD20# | Run: . |
| | | | | | S/N: 44850 | | | |

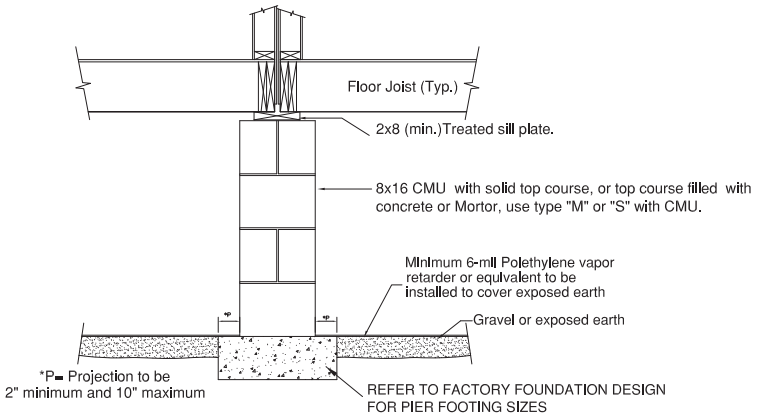
## N.C. Foundation Cross Section- 90 to 130 Mph 1-1/2, 2, OR 2-1/2 STORY




BOTTOM OF FOOTINGS TO BE A MIN. OF 12" BELOW GRADE

Applicable to Seismic Zone C with minimum soil bearing capacity of 1500 PSF. Concrete 2500-PSI. min. Wind speed up to 130 Mph Exp. C. Refer to Chapter 4 in the North Carolina Residential Code for specific foundation application or CMU Construction. Refer to the wind bracing pages for additional tie down and braced wall requirements.

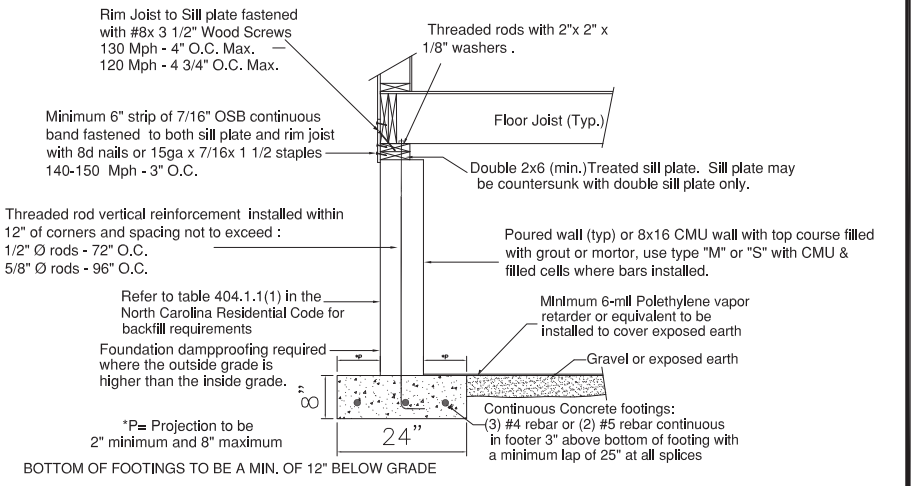
## N.C. Pier Cross Section- All Zones- UP TO 3 STORIES




BOTTOM OF FOOTINGS TO BE A MIN. OF 12" BELOW GRADE

R404.1.5.4Piers.
The unsupported height of masonry piers shal lnot exceed 10 times their least dimension.
When structural clay tile or hollow concrete masonry units are used for isolated piers to support beams and girders, the cellular spaces shall be filled solidly with concrete or Type M or S mortar, except that unfilled hollow piers may be used if their unsupported height is not more than four times their least dimension. When hollow masonry units are solidly filled with concrete or Type M or S mortar, the allowable compressive stress may be increased as provided in Table 606.9.

## N.C. High Wind Foundation Cross Section- 140 to 150 Mph 1-1/2, 2, OR 2-1/2 STORY

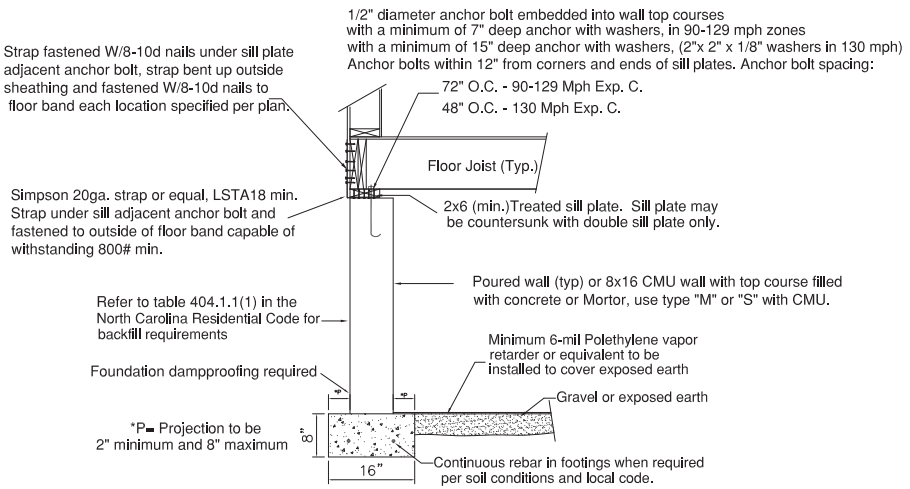



BOTTOM OF FOOTINGS TO BE A MIN. OF 12" BELOW GRADE

Applicable to Seismic Zone C, D0, D1 with minimum soil bearing capacity of 2500 PSF. Concrete-2500 PSI.min. Wind speed up to 130 Mph maximum. Refer to wind bracing pages for additional tie down requirements at braced wall locations. Refer to Chapters 4 & 45 in the North Carolina Residential Code for specific foundation application or CMU Construction.

REFER TO FIGURE R4504.2(B) FOUNDATION WALL WITH UPLIFT ANCHOR BOLTS FROM FOOTING TO SILL PLATE

## N.C. 800# HOLD DOWN STRAP DEVICE




Applicable to Seismic Zone C with minimum soil bearing capacity of 2500 PSF. Concrete 2500-PSI. min. Wind speed up to 110 Mph Exp. C. Refer to Chapter 4 In the North Carolina Residential Code for specific foundation application or CMU Construction. Refer to the wind bracing pages for additional tie down and braced wall requirements.

CUSTOMER | ALL HOMES | COUNTY: ALL | STATE: NC | CITY | WIND SPEED: 110 – 150 | WIND LOAD | SNOW LOAD: 20 | CUST. NO. | DRAWING NAME

TYP FOUNDATION DETAILS

| DATE: | REVISION: | BY: | NOTE: |
|---|---|---|---|
| 11/18/18 | | | |
| 1/30/19 | 2018 CODE UPDATES | | |

T:\NC_WALL_PIER_DETAILS_2021.DWG

HOMES BY VANDERBUILT
3300 JEFFERSON DAVIS HWY
SANFORD, NC 27332
PHONE: (919) 718-2760
FAX: (919) 718-2799

INTERNATIONAL CODE COUNCIL®

TESTING • INSPECTION • ENGINEERING

305 N. OAKLAND AVE. • P.O. BOX 490 • NAPPANEE, IN 46550 • P: 574.773.7975 • F: 574.773.2732 • ICC-NTA.ORG

June 9, 2025

Mr. Shane Phelps
State of North Carolina
Department of Insurance
Manufactured Building Division
322 Chapanoke Road
Suite 200
Raleigh, NC 27603

RE : Cavco-Crouse
Model: 2025-1003370-NC

Dear Mr. Phelps,

Enclosed, you will find one (1) copy of the above mentioned project for your files.

Should you have any questions or comments, please contact me at your earliest convenience.

Sincerely,

*Joe Shultz*

Joe Shultz
Account Manager
ICC NTA, LLC

Enclosures

# Adopted Codes: State of North Carolina

2018 North Carolina Residential Code
2017 North Carolina Electrical Code (2017 NEC)
2018 North Carolina Energy Code
2018 North Carolina Mechanical Code
2018 North Carolina Plumbing Code
2018 North Carolina Fuel Gas Code
.
.
.

**Project Location:**

TBD Baptist Grove Rd
Fuquay-Varina, NC 27526
HARNETT County

**Occupancy:**

Occupancy: .....IRC - Single Family Dwelling
Construction Type: .....5B (Wood Frame - Unprotected)
Number of Stories: .....One Story Cape

**Design Load:**

Floor Area: .....2433 Sq.Ft.
Ground Snow Load: .....20 psf
Top Chord Dead Load: .....10 psf
Ultimate Wind Speed: ..... 120 mph
Seismic Design Category: ...C
Floor Live Load: .....40 psf
Floor Dead Load: .....10 psf
Bottom Chord Live Load: See Truss Diagram
Wind Exposure Category: .....B
IECC Geographical Code: .....4

**Insulation**

Reference RESCheck for Requirements.

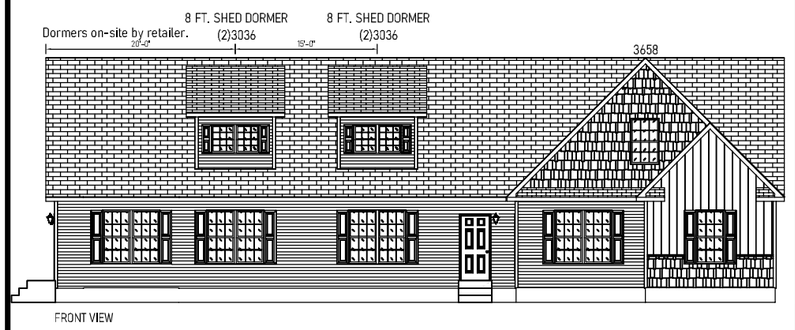
**Attention Local Inspection Departments:**

1. Set-up instructions for this modular unit are included by attachment to these plans. Any plans set that does not include an attachment entitled "MODULAR HOME INSTALLATION MANUAL" is incomplete.
2. The following items are not completed by the home manufacturer, are not inspected by in-factory third party inspectors, and are not certified by the modular compliance label: (A) Components or connections for heating or air conditioning systems which are NOT part of the factory installation. (B) Below floor ducts. (C) Electrical service disconnect. (D) Foundation designs and attachments. In order to verify that all required systems connections are complete, refer to the "Inspection Check Sheet" in the manufacturer's modular home installation manual. Regardless of factory or site installation, the furnace, water heater, and all elements of heating system must be per applicable codes, (refer to ResCheck if applicable). (E) The following items are omitted: furnace, heat ducts, and ceiling room to room return air jumpers.
3. Site installed furnace must meet IECC Energy Efficiency Certificate if applicable.
4. This unit must be connected to a public water supply and sewer system if these are available.
5. ***If this structure is in a thermal zone more stringent than that listed on these plans, is set on pilings, or is installed at a mountain region or coastal high hazard site such that wind or other design parameters are increased, the design must be determined to be adequate for actual site conditions. Alterations may be required to bring the home into compliance with the more stringent conditions.***
6. Soffit materials for this unit assume that the building face will be 10 feet or greater from the property line when installed on site. Where the building face is less than 10 feet from the property line, underlayment materials and ventilation in accordance with **Section R302.1.1, NC Residential Code**, must be provided and installed at the site and inspected by the local jurisdiction.
7. If after installation of this home, the lowest part of the clear opening of any window is more than 72" above the finished grade, guards will be required to be installed onsite in accordance with **Section R312**; subject to local inspection.
8. Partial plumbing installation (stubbed in) requires full DWV testing in field. Testing of factory portion of DWV is not required unless partial testing is mandated by code.
9. Smoke detectors required by code that are not shown on the plan will be site installed by others and are subject to inspection by the authority having jurisdiction.
10. Where required, window protection designed and provided on site by others to meet applicable local codes.

Plan: 2025-1003370
Customer: BROWN, JEFFREY
Builder: HBV

## Manufacturer:

530 Cavco-Crouse
235 Anthony Grove Rd.
Crouse, NC 28033

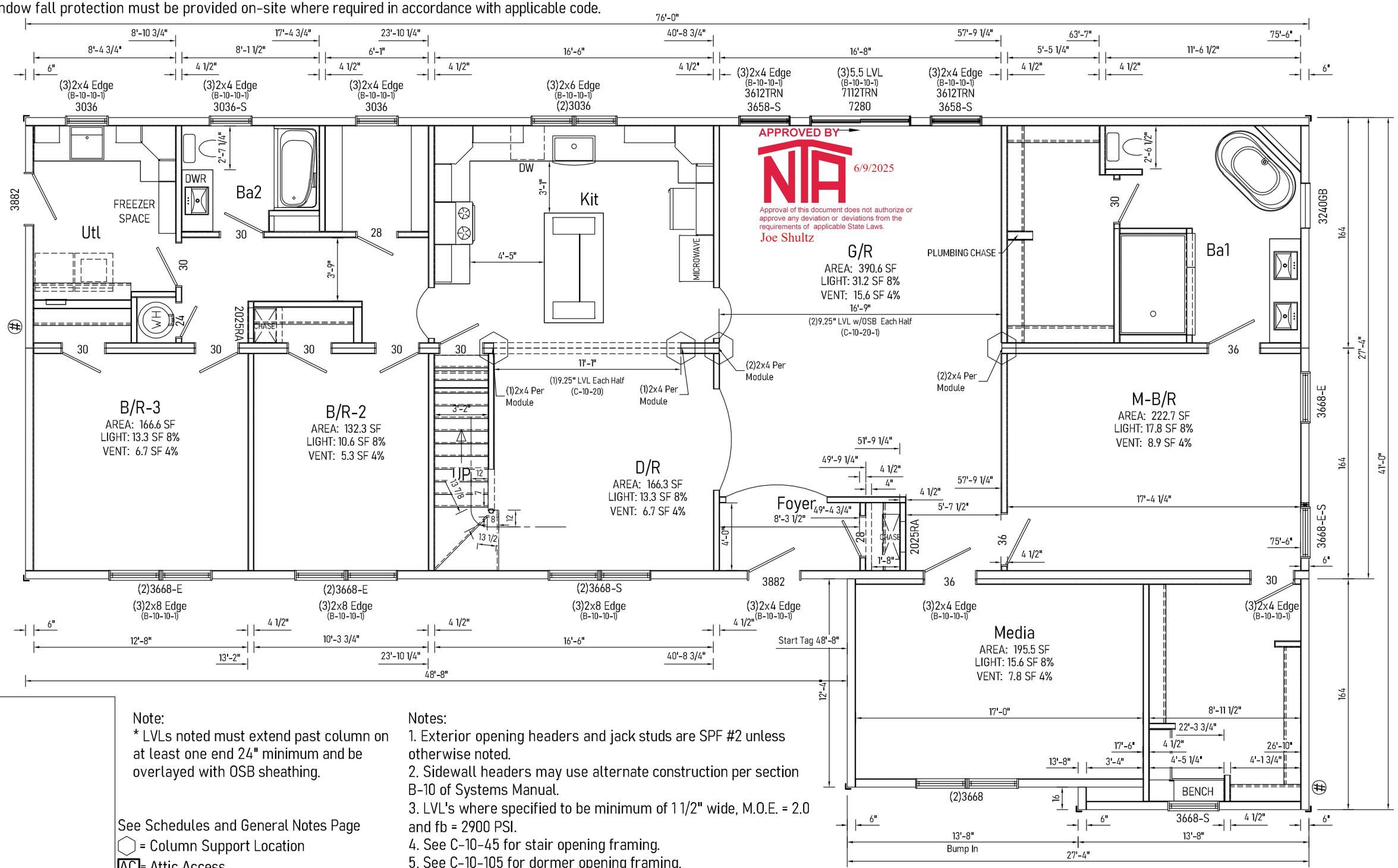



## Drawing Index



APPROVED BY
NTA
6/9/2025
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
Joe Shultz

Note: Window fall protection must be provided on-site where required in accordance with applicable code.




Note:
* LVLs noted must extend past column on at least one end 24" minimum and be overlayed with OSB sheathing.

See Schedules and General Notes Page
⬡ = Column Support Location
AC = Attic Access

Notes:
1. Exterior opening headers and jack studs are SPF #2 unless otherwise noted.
2. Sidewall headers may use alternate construction per section B-10 of Systems Manual.
3. LVL's where specified to be minimum of 1 1/2" wide, M.O.E. = 2.0 and fb = 2900 PSI.
4. See C-10-45 for stair opening framing.
5. See C-10-105 for dormer opening framing.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions - . | Scale: 3/16" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Floor Plan | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: FP | | Run: . |

530094276382025-1003370

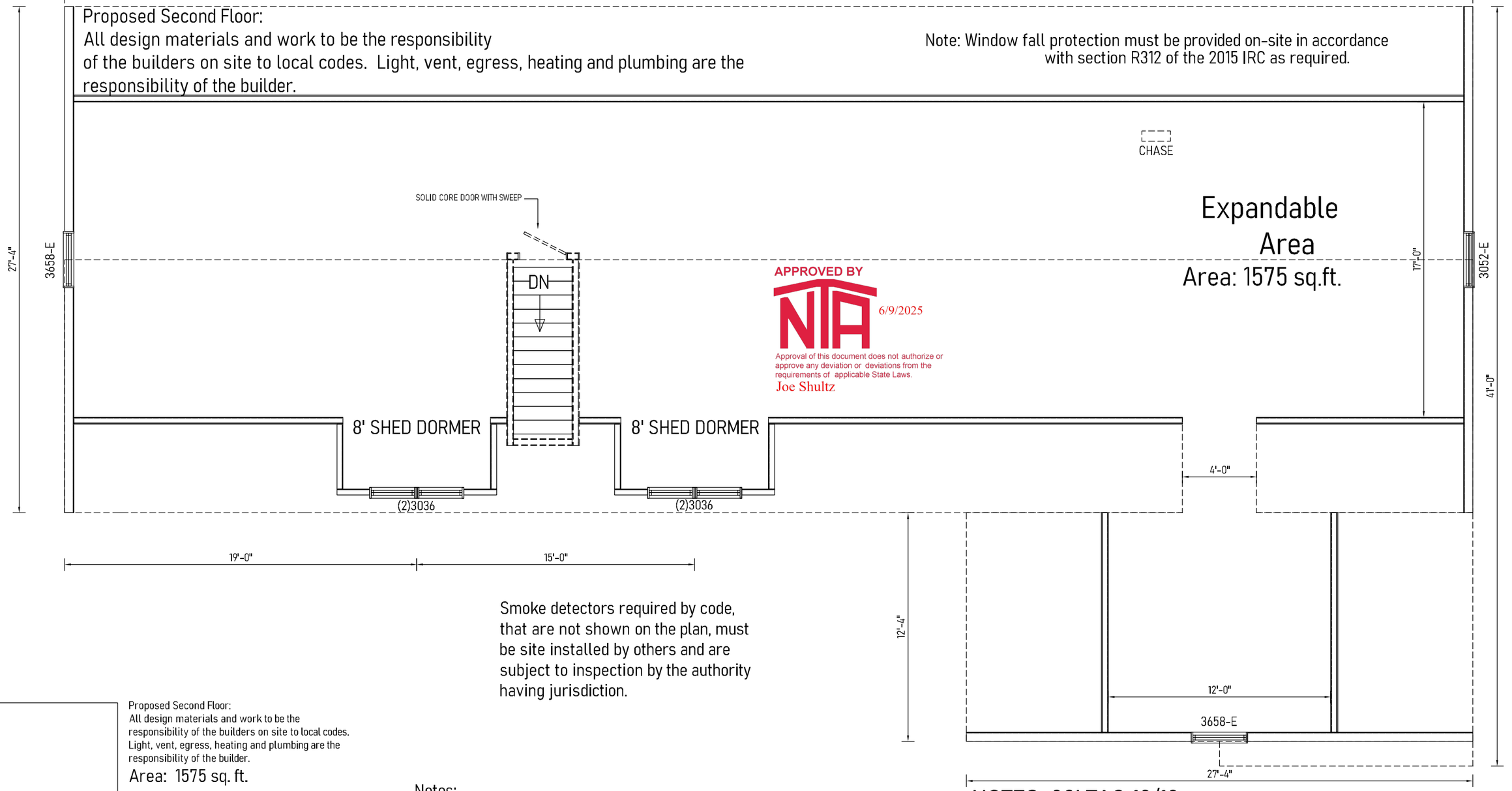
Note: Window fall protection must be provided on-site where required in accordance with applicable code.

Note:
* LVLs noted must extend past column on at least one end 24" minimum and be overlayed with OSB sheathing.

# NOTES: 28' 12/12 cape

Proposed Second Floor:
All design materials and work to be the responsibility of the builders on site to local codes. Light, vent, egress, heating and plumbing are the responsibility of the builder.

Note: Window fall protection must be provided on-site in accordance with section R312 of the 2015 IRC as required.




APPROVED BY
NTA
6/9/2025
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
Joe Shultz

Smoke detectors required by code, that are not shown on the plan, must be site installed by others and are subject to inspection by the authority having jurisdiction.

Proposed Second Floor:
All design materials and work to be the responsibility of the builders on site to local codes. Light, vent, egress, heating and plumbing are the responsibility of the builder.
Area: 1575 sq. ft.

See Schedules and General Notes Page
⬡ = Column Support Location
AC = Attic Access

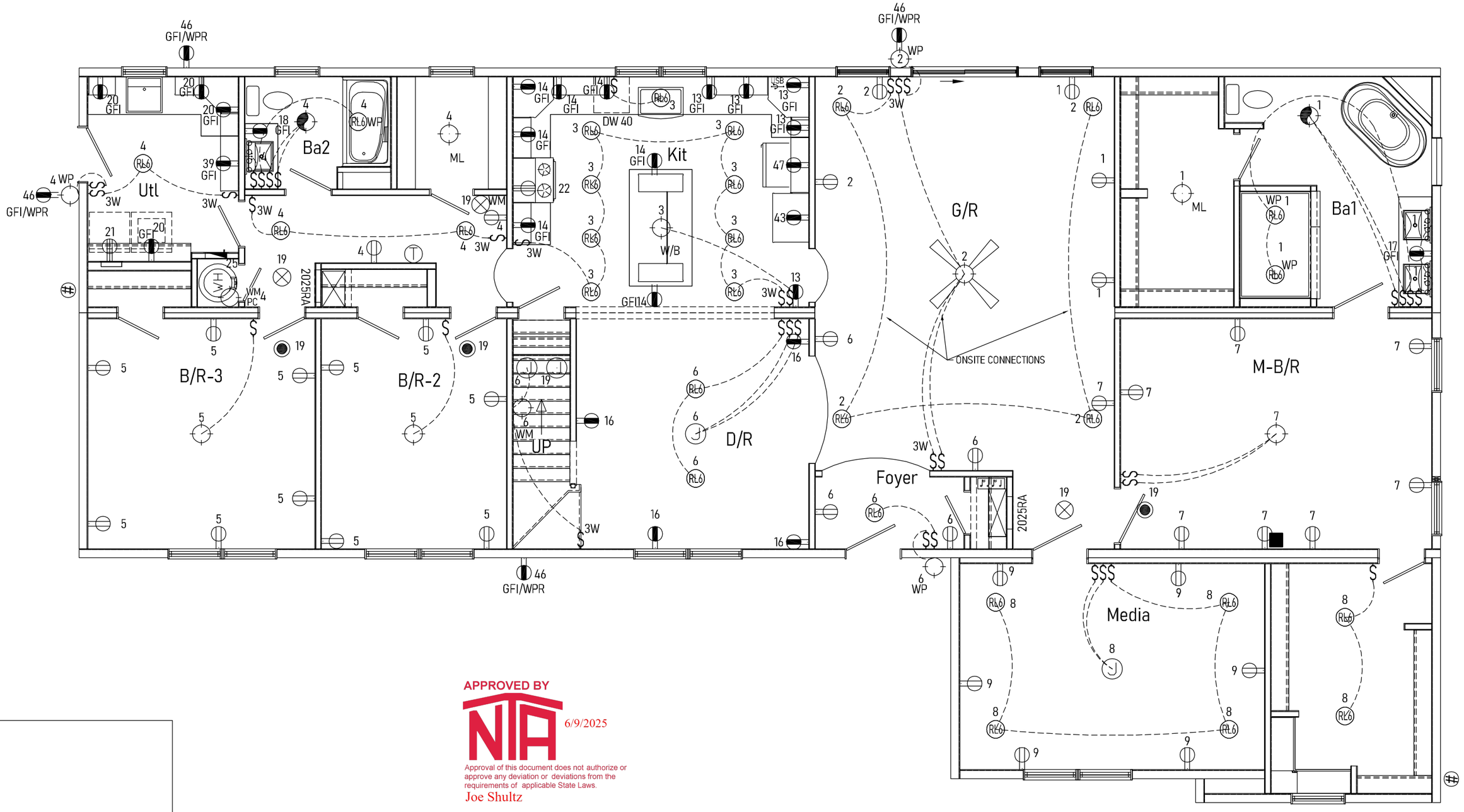
Notes:
1. Exterior opening headers and jack studs are SPF #2 unless otherwise noted.
2. Sidewall headers may use alternate construction per section B-10 of Systems Manual.
3. LVL's where specified to be minimum of 1 1/2" wide, M.O.E. = 2.0 and fb = 2900 PSI.
4. See C-10-45 for stair opening framing.
5. See C-10-105 for dormer opening framing.

NOTES: 28' TAG 12/12 cape

Engineer seal applies ONLY to FACTORY MANUFACTURED portions of the building. Seal does not apply to site installed elements or portions built on site such as, but not limited to; foundation, connections to foundation, exterior steps, smoke detectors, or other site works. Site work must be designed BY OTHERS for site conditions, under local jurisdiction. COMPLIANCE WITH ALL APPLICABLE CODES PER LOCAL AUTHORITY HAVING JURISDICTION, WHETHER DETAILED IN THIS SET OR NOT, MUST BE MET.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 3/16" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Proposed Cape Floor Plan | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV | Pg.: PCFP | | Run: . |
| | | | | | S/N: 44850 | | | |

530094276382025-1003370




APPROVED BY
NTA
6/9/2025
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
Joe Shultz

See Schedules and General Notes Page

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 3/16" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Electrical Plan | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: EP | | Run: . |

530D9427632025-1003370

## Optional Method Load Calculation for One-Family Dwellings

Model # 2025-1003370

| | | | |
|---|---|---|---|
| 1 General Lighting and Receptacle Loads 220.82(B)(1) *Do not include open porches, garages, or unused or unfinished spaces not adaptable for future use.* | 3 x 4008 = (ft² using outside dimensions) | 1 | 12024 |
| 2 Small-Appliance Branch Circuits 220.82(B)(2) *At least two small-appliance branch circuits must be included. 210.11(C)(1)* | 1500 x 3 = (minimum of two) | 2 | 4500 |
| 3 Laundry Branch Circuits(s) 220.82(B)(2) *At least one laundry branch circuit must be included. 210.11(C)(2)* | 1500 x 1 = (minimum of one) | 3 | 1500 |
| 4 Appliances 220.82(B)(3) and (4) *Use the nameplate rating of all appliances (fastened in place, permanently connected, or connected to a specific circuit), ranges, ovens, cooktops, motors, and clothes dryers. Convert any nameplate rating given in amperes to volt-amperes by multiplying the amperes by the rated voltage.* | *Do NOT include any heating or A/C equipment in this section.* Total volt-amps of all app. LISTED BLEOW | 4 | 34300 |

(1) Electric $H_2O$ Heater 4.5 KVA; (1) Electric Dryer 5.4 KVA; (1) Electric Range 14.2 KVA; (0) Electric Wal Oven (S) 0 KVA; (0) Electric Wal Oven (D) 0 KVA; (2) Bath Circ's 3 KVA

(4) Vent Fans 1.2 KVA; (1) Microwave 1.5 KVA; (1) Dishwashe 1.5 KVA; (1) Freezer 1.5 KVA; (1) Refrigerato 1.5 KVA; KVA

5 Apply 220.82(B) demand factor to the total of lines 1 through 4.

52324 - 10,000 = 42324 x 40 % = 16930 + 10,000 = **26930**

(total of lines 1-4)

6 Heating or Air-Conditioning System 220.82(C). *Use the nameplate ratings in volt-amperes for all applicable systems in lines a through e.*

a) Air-conditioning and cooling systems, including heat pumps without any supplemental electric heating: 6000 x 100 % = **a)** 6000

b) Electric thermal storage & other heating systems where the usual load is expected to be continuous at full nameplate value. *Systems qualifying under this selection shall not be figured under any other selection in 220.82(C).* 0 x 100 % = **b)** 0

c) Supplemental electric heating equipment for heat-pump systems. Include the heat-pump compressor(s) at 100%. *If the heat-pump compressor is prevented from operating with the supplemental heat, omit the compressor.* 0 x 65 % = **c)** 0

d) Electric space-heating equipment, if fewer than four seperately controlled units: 20000 x 65 % = **d)** 13000

e) Electric space-heating equipment, if four or more seperately controlled units: 0 x 40 % = **e)** 0

| | | | |
|---|---|---|---|
| 7 Total Volt-Ampere Demand Load: | 13000 (Largest VA rating, 6a - 6e) + 26930 (Line 5) = | 7 | 39930 |
| 8 Minimum Amperes *Divide the total volt-amperes by voltage.* | 39930 (line 7) ÷ 240 (voltage) = 167 (min. amperes) | 9 Minimum Size Service or Feeder 240.6(A) | 200 Amps Installed |
| 10 Size the Service or Feeder Conductors. *Use 310.15(B)(6) to find the service conduct up to 400 amperes. Ratings in excess of 400 amperes shall comply w/ Table 310.16. 310.15(B)(6) also applies to feeder conductors serving as the main power feeder.* | | 10 Minimum Size Conductors | 2/0 Copper OR 4/0 Aluminum |

REFER TO RESCHECK FOR DOOR AND WINDOW U-VALUES

### WINDOW SCHEDULE

AT LEAST ONE EGRESS WINDOW IS REQUIRED FOR EACH SLEEPING AREA WHERE NO EXTERIOR EXIT DOOR EXISTS.

S SUFFIX DENOTES SAFETY GLAZING / E SUFFIX DENOTES EGRESS

| Label | Width R/O | Height R/O | R/O SF | Light | Vent | Room SF | U Value | Egress | Design Load | SHGC w/o Grids |
|---|---|---|---|---|---|---|---|---|---|---|
| (2)3036 | 61 | 36.5 | 15.46 | 11.09 | 5.28 | 132.00 | 0.34 | No | +50/-50 | 0.23 |
| (2)3668 | 73 | 68.5 | 34.73 | 28.01 | 13.84 | 346.00 | 0.34 | Yes | +50/-50 | 0.23 |
| (2)3668-E | 73 | 68.5 | 34.73 | 28.01 | 13.84 | 346.00 | 0.34 | Yes | +50/-50 | 0.23 |
| (2)3668-S | 73 | 68.5 | 34.73 | 28.01 | 13.84 | 346.00 | 0.34 | Yes | +50/-50 | 0.23 |
| 3036 | 30.5 | 36.5 | 7.73 | 5.50 | 2.64 | 66.00 | 0.34 | No | +50/-50 | 0.23 |
| 3036-S | 30.5 | 36.5 | 7.73 | 5.50 | 2.64 | 66.00 | 0.34 | No | +50/-50 | 0.23 |
| 3240GB | 32.25 | 39.75 | 8.90 | 8.90 | 0.00 | 0.00 | 0.51 | No | +58/-58 | 0.58 |
| 3612TRN | 36.5 | 12.5 | 3.17 | 2.15 | 0.00 | 0.00 | 0.31 | No | +50/-50 | 0.26 |
| 3658-S | 36.5 | 58.5 | 14.83 | 11.76 | 5.76 | 144.00 | 0.34 | Yes | +50/-50 | 0.23 |
| 3668-E | 36.5 | 68.5 | 17.36 | 14.00 | 6.92 | 173.00 | 0.34 | Yes | +50/-50 | 0.23 |
| 3668-E-S | 36.5 | 68.5 | 17.36 | 14.00 | 6.92 | 173.00 | 0.34 | Yes | +50/-50 | 0.23 |
| 3668-S | 36.5 | 68.5 | 17.36 | 14.00 | 6.92 | 173.00 | 0.34 | Yes | +50/-50 | 0.23 |
| 7112TRN | 71.5 | 12.5 | 6.21 | 4.42 | 0.00 | 0.00 | 0.31 | No | +50/-50 | 0.26 |

### LEGEND

=15 AMP RECPT; =15 AMP FLOOR RECPT; =20 AMP RECPT; =20 AMP FLOOR RECPT

=SWITCHED RECPT; =220 VOLT RECPT; WPR = WEATHERPROOF ENCLOSURE WITH WEATHE RESISTANT RECPT

=STD LIGHT; (R) =RECESSED LIGHT; (RL4) =RECESSED 4" LED LIGHT; (RL6) =RECESSED 6" LED LIGHT

18" FLOURESCENT; 48" FLOURESCENT; 24" STRIPLIGHT; (PC) =PULL CHAIN LIGHT

=UNDER CABINET LIGHT / WALL LIGHT; =UNDER CABINET STEREO

S =SWITCH; $S^{DM}$ =DIMMER SWITCH; $S^{3W}$ =3-WAY SWITCH; $S^{3DM}$ =3-WAY DIMMER SWITCH

=STANDARD VENT; ( ) =WIRE; =DOORBELL; [CHIMES] =CHIMES

=WHOLE HOUSE VENTILATION FAN; ML =MOTION LIGHT; =STANDARD FAN; =STANDARD FAN w/LIGHT

=PHONE JACK; =DATA JACK; =TV JACK; (J) =JUNCTION BOX; (#) =HOSE BIBB

GFI =GROUND FAULT CIRCUIT INTERRUPTER; =BULLET; =PANEL BOX

WP =WET LOCATION; =SPEAKER; =AV JACK; =MEDIA RECEPT

=IONIZATION SMOKE ALARM; (T) =THERMOSTAT; [F] = FIRE EXTINGUISHER

=SMOKE/CO ALARM; PE = PHOTOELECTRIC SMOKE/CO ALARM; = CO ALARM

| CIRCUIT ID NO. | LOAD | AMPS | POLES REQ'D | WIRE SIZE |
|---|---|---|---|---|
| 1-12 | General Lighting/Receptacles | 15 | 1 | NM14-2/WG |
| 13-16 | Small Appliance | 20 | 1 | NM12-2/WG |
| 17-18 | Bath (GFCI) | 20 | 1 | NM12-2/WG |
| 19 | Smoke Alarms (AFCI) | 15 | 1 | NM14-2/WG |
| 20 | Laundry | 20 | 1 | NM12-2/WG |
| 21 | Electric Dryer | 30 | 2 | NM10-3/WG |
| 22 | Electric Range | 50 | 2 | NM6-3/WG |
| 23 | Electric Cooktop | 40 | 2 | NM8-3/WG |
| 24 | Electric Wall Oven | 20 | 2 | NM12-2/WG |
| | Electric Wall Oven | 40 | 2 | NM8-2/WG |
| 25 | Electric W/H | 25 | 2 | NM10-2/WG |
| 25.1 | Tankless W/H | 20 | 1 | NM12-2/WG |
| 26 | Gas Furnace | 15 | 1 | NM14-2/WG |
| 27 | Electric Furnace | 60/30 | 4 | NM4-2/WG |
| | Electric Furnace | 60/60 | 4 | NM4-2/WG |
| 28-37 | Electric BB Heat | 20 | 2 | NM12-2/WG |
| 38 | A/C | 50 | 2 | NM6-2/WG |
| 39 | Freezer | 20 | 1 | NM12-2/WG |
| 40 | Dishwasher | 15 | 1 | NM14-2/WG |
| 41 | Disposal (GFCI) | 15 | 1 | NM14-2/WG |
| 42 | Whirlpool Tub (GFCI) | 20 | 1 | NM12-2/WG |
| 43 | Microwave Oven | 20 | 1 | NM12-2/WG |
| 44 | Garage (GFCI) | 20 | 1 | NM12-2/WG |
| 46 | Exterior Receptacles | 15 (Opt. 20) | 1 | NM14-2/WG (Opt. NM12-2/WG) |
| 47 | Refrigerator | 20 | 1 | NM12-2/WG |

If an attached garage is to be added to this home, the entrance door to the home from the garage must be a self-closing fire rated door per applicable code.
Clothes dryer vents may need to be completed to the exterior of the home on site. Refer to sections of applicable local codes and to Section 8 of the home installation manual for required completion of dryer ventilation as necessary.

Ventilation Requirements
1. Bathroom exhaust fans to be minimum 50 CFM per G-20-20
2. Kitchen range hoods minimum 100 CFM and should exhaust to the outside or be an approved recirculating hood if adequate natural ventilation per G-20-30
3. Whole house ventilation minimum 30 CFM per E-20-20 & E-20-20.1

FOR PERMANENTLY CONNECTED APPLIANCES RATED AT OVER 300 VOLT-AMPERES OR 1/8 HP,THE BRANCH CIRCUIT BREAKER SHALL BE PERMITTED TO SERVE AS THE DISCONNECTING MEANS WHERE THE CIRCUIT BREAKER IS WITHIN SIGHT FROM THE APPLIANCE OR IS CAPABLE OF BEING LOCKED IN THE OPEN POSITION. THE LOCKING MEANS SHALL REMAIN IN PLACE WITH OR WITHOUT THE LOCK INSTALLED.
MAIN DISCONNECT SHALL BE LOCATED ON THE EXTERIOR OF THE HOME.

APPROVED BY NTA 6/9/2025

Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.

Joe Shultz

### DOOR SCHEDULE

| Description | Label | R/O SF | Light | Vent | Design Load |
|---|---|---|---|---|---|
| 7280 Sliding Patio Door | 7280 | 40.00 | 32.88 | 16.06 | +50/-50 |
| 3882 9 Lite Exterior Door | 3882 | 21.70 | 5.12 | 20.76 | +50/-50 |
| 3882 6 Panel Exterior Door | 3882 | 21.70 | 0.00 | 20.76 | +50/-50 |
| 28 Hinged Interior Door | 28 | 17.29 | 0.00 | 0.00 | NA |
| 24 Hinged Interior Door | 24 | 14.99 | 0.00 | 0.00 | NA |
| 30 Hinged Interior Door | 30 | 18.44 | 0.00 | 0.00 | NA |
| 36 Hinged Interior Door | 36 | 21.90 | 0.00 | 0.00 | NA |

STAIRWAYS
RISER HEIGHT - 8 1/4" MAX.
TREAD DEPTH - 9" MIN.
HEAD ROOM 80" MIN.
NOTE: THE STAIRWELL GEOMETRY IN THIS HOME HAS BEEN DESIGNED TO THE CRITERIA ABOVE. IF MORE STRINGENT STAIR GEOMETRY IS REQUIRED OR DESIRED, PLEASE CONTACT THE PLANT OF MANUFACTURE FOR PLAN ADJUSTMENTS.

ELECTRICAL PLAN NOTES BASED ON NEC 2017:
1. ALL KITCHEN AND BATHROOM COUNTER RECEPTS TO BE GFCI PROTECTED.
2. ALL CLOSET LIGHTS TO BE ENCLOSED SURFACE MOUNT FIXTURES, 12" MIN. FROM STORAGE SPACE.
3. ALL RECEPTS TO BE GROUNDING TYPE, PER 406.4/NEC.
4. SPECS, WIRING, INSTALLATIONS, ETC. TO COMPLY WITH NEC REGULATIONS.
5. SERVICE PANEL MAY BE LOCATED IN GARAGE.
6. ALL SMOKE ALARMS TO HAVE BATTERY BACK-UP AND TO BE INTERCONNECTED WITH A 14 GA. MIN. INTERCONNECTION WIRE, 14-3 CABLE, OR EQUIVALENT PER MFG.S RECOMMENDATIONS.
7. EXTERIOR LIGHT AT GARAGE SIDE MAY BE REPLACED.
8. GAS APPLIANCES MAY BE SUBSTITUTED FOR ELECTRIC APPLIANCES WHERE APPLICABLE. WHEN GAS APPLIANCES ARE INSTALLED, ALL GAS PIPING, CONNECTIONS, HOOK-UPS, ETC, TO BE INSTALLED ON SITE BY OTHERS. THE OPTIONAL GARBAGE DISPOSAL CONNECTED TO INDEPENDENT RECEPTACLE AND WALL SWITCH.
9. 200 AMP PANEL BOX INSTALLED
10. ALL 120v GENERAL USE RECEPTS ARE TAMPER RESISTANT UNLESS MOUNTED AT LEAST 66" ABOVE FLOOR, OR ARE PART OF A LISTED LIGHT FIXTURE OR APPLIANCE, OR WHERE CORD & PLUG APPLIANCE IN DEDICATED SPACE IS NOT EASILY MOVED FOR USE.
11. ALL EXTERIOR RECEPTACLES ARE GFI, TAMPER RESISTANT AND LISTED FOR WET LOCATIONS.
12. COMBINATION TYPE AFCI BREAKERS ARE REQUIRED FOR ALL 120 V CIRCUITS EXCEPT THOSE SERVING BATHROOMS, GARAGE, LAUNDRY AREAS, KITCHENS, UNFINISHED BASEMENTS AND OUTDOORS.
13. ALL ELECTRICAL BOXES SUPPORTING LIGHTING FIXTURES MUST BE RATED @ 50# AND IDENTIFIED ON THE BOX.
14. WHIRLPOOL RECEPTACLES MUST BE GFCI, TAMPER RESISTANT AND READILY ACCESSIBLE PER NEC 680.71
15. A CIRCUIT BREAKER LOCKING DEVICE SHALL BE PROVIDED TO LOCK THE APPLICABLE BREAKERS IN THEIR "OFF" POSITION. THIS APPLIES TO CIRCUIT BREAKERS WHICH SERVE AS THE DISCONNECT FOR ELECTRIC WATER HEATERS, ELECTRIC BASEBOARD HEATERS, AND ANY APPLIANCE RATED OVER 300 WATTS OR 1/8 HORSEPOWER, WHICH ARE NOT LOCATED WITHIN CLEAR SIGHT OF THEIR DISCONNECT
16. A RECEPTACLE OUTLET IS REQUIRED FOR PORCHES, BALCONIES OR DECKS WHICH ARE ACCESSIBLE FROM THE INSIDE OF THE DWELLING UNIT REGARDLESS OF THE SIZE OF THE PORCH, BALCONY OR DECK.
17. NON-SWITCHED CIRCUIT NEUTRAL CONDUCTOR MUST BE PRESENT AT EACH WALL SWITCH. RE-IDENTIFIED CONDUCTORS WITH WHITE, GREY OR THREE STRIPE INSULATION MAY ONLY BE USED AS SUPPLY TO SWITCH AND NOT FOR HOT RETURN TO FIXTURE.
18. 120v 15 OR 20 AMP RECEPTS LOCATED WITHIN 6' FROM ANY DWELLING UNIT SINK MUST BE GFCI PROTECTED.
19. IF THE PERIMETERS OF THE AREAS OF THE ON-SITE INSTALLED STOOPS, PORCHES OR DECKS ARE NOT UNDER THE EXTERIOR ELECTRICAL RECEPTACLES SHOWN IN THE ELECTRICAL FLOOR PLAN, THEN ADDITIONAL RECEPTACLES SHALL BE SITE INSTALLED WITHIN THESE AREAS BY THE CONTRACTOR.

### WINDOW SCHEDULE - PROPOSED CAPE

AT LEAST ONE EGRESS WINDOW IS REQUIRED FOR EACH SLEEPING AREA WHERE NO EXTERIOR EXIT DOOR EXISTS.

S SUFFIX DENOTES SAFETY GLAZING / E SUFFIX DENOTES EGRESS

| Label | Width R/O | Height R/O | R/O SF | Light | Vent | Room SF | U Value | Egress | Design Load | SHGC w/o Grids |
|---|---|---|---|---|---|---|---|---|---|---|
| (2)3036 | 61 | 36.5 | 15.46 | 11.09 | 5.28 | 132.00 | 0.34 | No | +50/-50 | 0.23 |
| 3052-E | 36.25 | 62 | 15.61 | 10.26 | 5.88 | 128.25 | 0.31 | Yes | +50.13/-50.13 | 0.21 |
| 3658-E | 36.5 | 58.5 | 14.83 | 11.76 | 5.76 | 144.00 | 0.34 | Yes | +50/-50 | 0.23 |

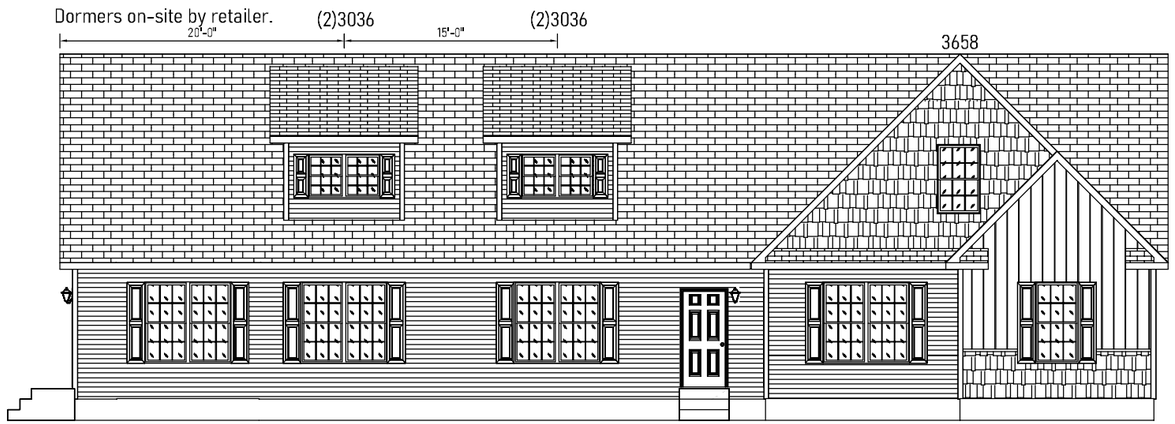
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: N.T.S. | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Schedules and General Notes | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: NG | Run: . | |

530D9427638202S-1003370

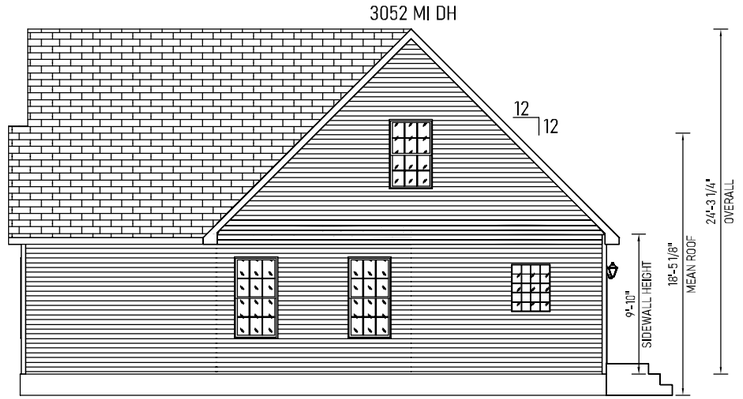
ELEVATIONS SHOWN ON THIS PAGE REPRESENT BASIC COMPONENTS AND ARE NOT INTENDED TO BE ALL INCLUSIVE, NOR DO THESE ELEVATIONS DETAIL EVERY CODE REQUIRED ASPECT OF THIS BUILDING. SITE BUILT STOOPS, STEPS, DECKS, PORCHES, HANDRAILS AND/OR SIMILAR ITEMS MUST BE PROVIDED BY OTHERS ON SITE FOR COMPLIANCE WITH APPLICABLE CODES. COMPLIANCE WITH ALL APPLICABLE CODES PER LOCAL AUTHORITY HAVING JURISDICTION, WHETHER DETAILED IN THIS SET OR NOT, MUST BE MET.

Note: Window fall protection must be provided on-site where required in accordance with applicable code.

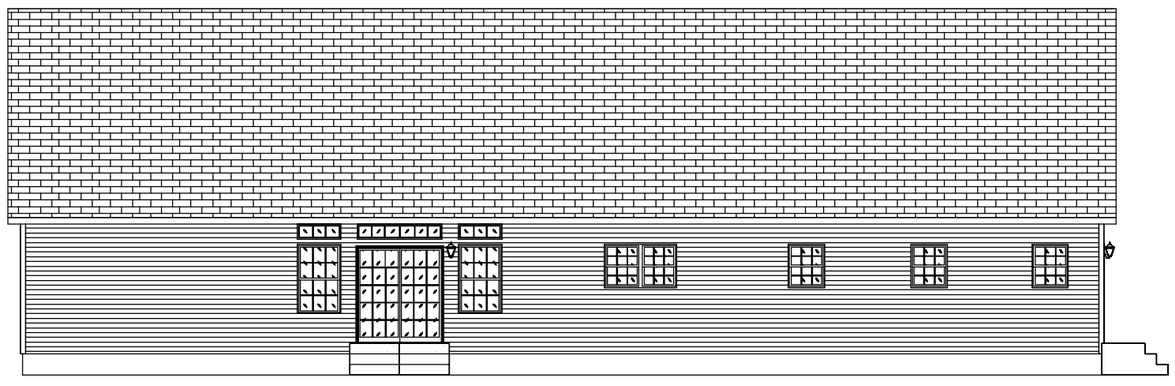
NOTE:
- HOMES WITH ATTIC SPACE QUALIFYING AS HABITABLE, MUST BE EQUIPPED WITH EMERGENCY ESCAPE AND RESCUE OPENINGS REGARDLESS OF WHETHER ATTIC AREA IS FINISHED OR UNFINISHED. OPENINGS MAY OCCUR AT END WALL OF ATTIC AND/OR AT ROOF DORMERS IN WHATEVER ARRANGEMENT NECESSARY TO INSURE THAT ANY SLEEPING ROOM HAS AT LEAST ONE EGRESS OPENING.

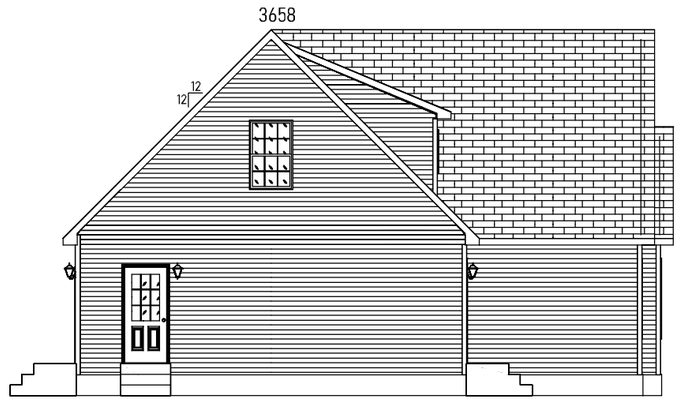


FRONT VIEW



RIGHT VIEW


REAR VIEW



LEFT VIEW

-NOTES-
1. FOUNDATION SHALL BE DESIGNED AND CONSTRUCTED BY OTHERS WHERE "OTHERS" REFERS TO THE DEALER BUILDER.
2. GUTTERS AND LEADERS SHALL BE INSTALLED BY OTHERS.
3. TYPICAL 12" OR 15" VINYL SHUTTERS PROVIDED BY MANUFACTURERS.
4. ALL FOOTINGS, RAILINGS AND STEPS SHALL BE FIELD INSTALLED IN COMPLIANCE WITH APPLICABLE STATE AND LOCAL CODES.
5. SIDING SHALL BE VINYL SIDING WITH VINYL TRIM, AND MAY BE PARTIALLY INSTALLED ON SITE.
6. EXTERIOR LIGHTS MAY BE SHIPPED LOOSE FOR INSTALLATION ON SITE.
7. ROOFING SHINGLES MAY BE PARTIALLY SITE INSTALLED.
8. PORCH RAILINGS ARE PVC. TREATED LUMBER PORCH POSTS MAY BE COVERED WITH VINYL. PORCH DECKING SHALL BE TREATED.
9. ALL EXTERIOR COVERINGS SHALL BE WEATHER AND DECAY RESISTIVE TO PROVIDE PROPER PROTECTION FOR UNTREATED MATERIALS.

APPROVED BY
NTA
6/9/2025
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
Joe Shultz

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: N.T.S. | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Elevations | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: EL | | Run: . |

530D9427638202S-1003370

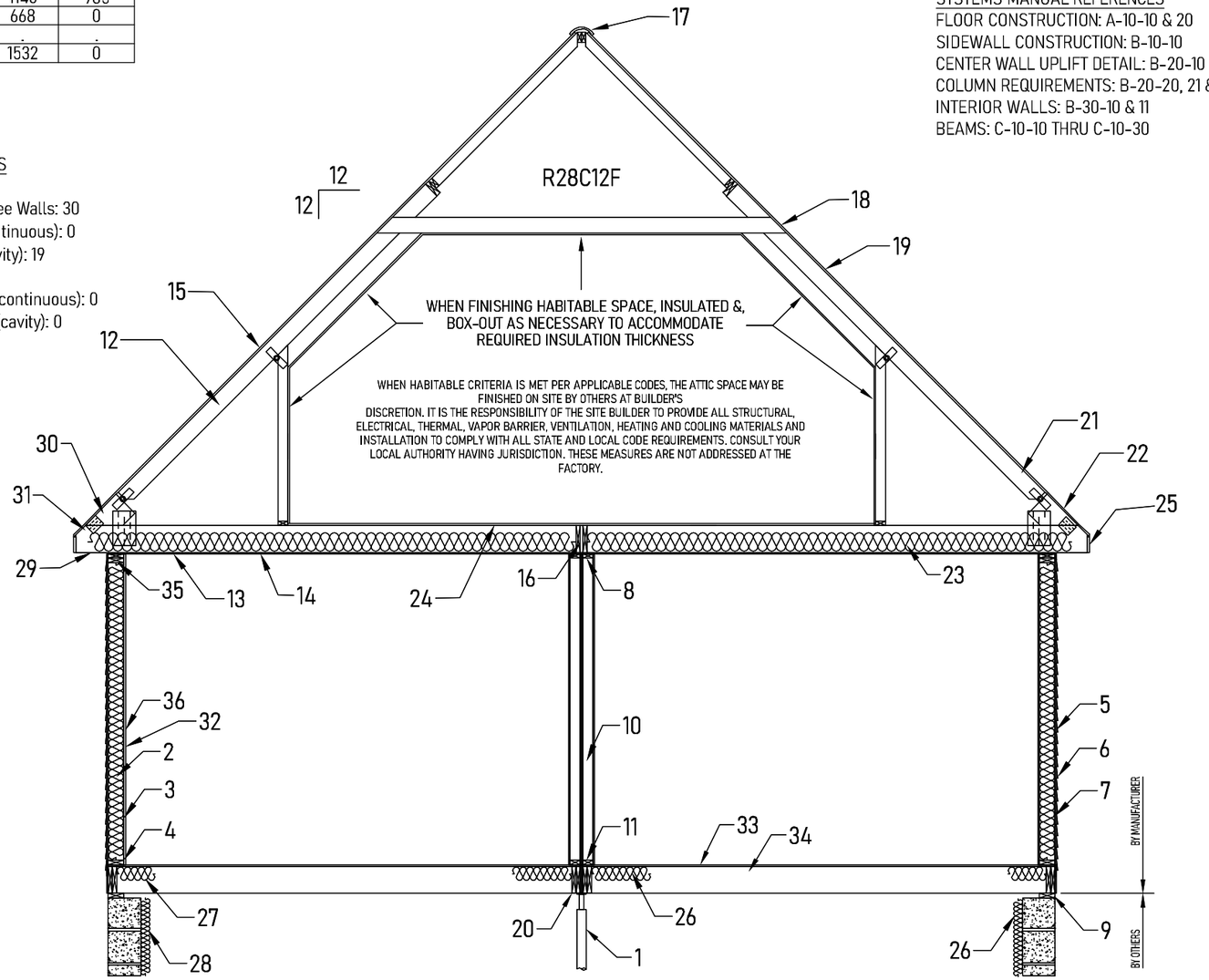
LEGEND

1 JACK POST, PIER OR CONCRETE FILLED POST THAT MEETS OR EXCEEDS REQUIRED SUPPORT CAPACITY PER FOUNDATION DESIGN.
2 EXTERIOR WALL INSULATION (SEE INSULATION R-VALUES).
3 2X6 #3 SPF EXTERIOR WALL STUDS. (SEE STUD O.C. SPACING NOTE)
4 2X6 #3 SPF SIDEWALL BOTTOM PLATE.
5 7/16" RATED SHEATHING.
6 VINYL OR HARDBOARD SIDING (RAN VERT. OR HORZ.) INSTALLED PER MFGR.'S INSTRUCTIONS.
7 AIR INFILTRATION AND WATER RESISTANT BARRIER.
8 2X4 #3 SPF SINGLE OR DOUBLE TOP PLATE.
9 2X6 TREATED SILL PLATE. FASTENING OF SILL AND HOME TO FOUNDATION ON SITE PER CODES OR BY LOCAL ENGINEER WHEN APPLICABLE.
10 2X4 #3 SPF INTERIOR WALL STUDS. (SEE STUD O.C. SPACING NOTE)
11 2X4 #3 SPF BOTTOM PLATE INTERIOR WALLS, TYP.
12 ENGINEERED TRUSSES SPACED TO MEET DESIGNED GROUND LOAD SNOW LOAD.
13 VAPOR BARRIER.
14 CEILING BOARD 1/2" GYPSUM.
15 7/16" 24/16 RATED ROOF DECKING MIN. TYP.
16 2X4 #3 SPF MIN. VERT. RAIL CONT. ON BOTH SECTIONS OVER MATE WALL. USE APPLICABLE BEAM OVER OPEN SPANS (TYP.) PER PG'S C-10-10 OF SYSTEM DOCUMENT.
17 RIDGE VENT TYP. 50% VENTILATION OF ROOF CAVITY (UPPER PORTION), INSTALLED PER CODE REQUIREMENTS.
18 TYPICAL SHINGLES, INSTALLED PER MFGR'S INSTRUCTIONS.
19 SHINGLE UNDERLAYMENT TYP.
20 JOIST HANGERS AT MATELINE(S).
21 1" MIN. SPACE FOR ATTIC VENTILATION.
22 TYPICAL ICE BARRIER PER SECTION 905 OF APPLICABLE CODE.
23 CEILING INSULATION TYP. (SEE INSULATION R-VALUES).
24 23/32" (O.S.B.) BOARD DECKING.
25 ALUM., VINYL OR HARDIE BOARD FACIA AND DRIP EDGE.
26 FLOOR CAVITY OR PERIMETER WALL MUST BE INSULATED ON SITE OR AT THE FACTORY (SEE "INSULATION R-VALUES")
27 PERIMETER RIM JOIST MUST BE INSULATED TO R-VALUE LISTED FOR EXTERIOR WALLS
28 INSULATION INSTALLED ONSITE BY OTHERS PER THERMAL REQUIREMENTS AND/OR STATE AND LOCAL CODES
29 VENTED SOFFIT 50% OF LOWER ROOF VENTILATION.
30 BAFFLE REQUIRED
31 DRIFT BLOCKER
32 VAPOR RETARDER (AS REQUIRED PER CLIMATE ZONE).
33 FLOOR DECKING RATED FOR 19.2" O.C. JOIST SPACING MAX.
34 MIN. 2X10 #2 SPF FLOOR JOIST 16" O.C.
35 2X6 #3 SPF DOUBLE TOP PLATE.
36 WALL COVERING (MIN. 1/2" GYPSUM).

| Truss Data | | | |
|---|---|---|---|
| Truss # | Spacing | Sidewall | Centerline |
| R28C12F | 24 | 1146 | 985 |
| R14C12T | 24 | 668 | 0 |
| . | . | . | . |
| R274G12F | 24 | 1532 | 0 |

STUD O.C. SPACING
EXTERIOR WALL: 16"
INTERIOR WALL: 24"

INSULATION R-VALUES
CEILING: 38
CEILING (Between Knee Walls: 30
EXTERIOR WALLS (continuous): 0
EXTERIOR WALLS (cavity): 19
FLOOR: 30
FOUNDATION WALLS (continuous): 0
FOUNDATION WALLS (cavity): 0




SYSTEMS MANUAL REFERENCES
FLOOR CONSTRUCTION: A-10-10 & 20
SIDEWALL CONSTRUCTION: B-10-10
CENTER WALL UPLIFT DETAIL: B-20-10
COLUMN REQUIREMENTS: B-20-20, 21 & 30
INTERIOR WALLS: B-30-10 & 11
BEAMS: C-10-10 THRU C-10-30

APPROVED BY NTA 6/9/2025
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
Joe Shultz

TRIMLINE RIDGE VENT: ALLOWS 13" OF NET FREE AIR PER LINEAL FOOT

FULL LENGTH OF HOUSE AIR FLO SOFFIT: FULL VENTED 5.89 SQ IN PER LINEAL FOOT

FULL LENGTH OF HOUSE 2433/300 = 8.11 VENT REQUIRED

IMPORTANT!
MAIN LEVEL FLOORS, OVER ENCLOSED FOUNDATIONS, CONSTRUCTED WITH OPTIONAL ENGINEERED WEB FLOOR JOISTS (OPEN JOISTS) OR WITH JOISTS OF NOMINAL LUMBER LESS THAN 2X10, MAY BE SUBJECT TO SPECIAL FIRE PROTECTIVE REQUIREMENTS TO BE PERFORMED BY OTHERS ON SITE. CONSULT ADOPTED LOCAL CODES FOR COMPLIANCE WITH FIRE PROTECTION OF FLOORS. REFERENCE THE APPROVED SYSTEMS PACKAGE FOR ADDITIONAL AND SPECIFIC CROSS SECTION INFORMATION

NOTES:
FOLLOW RECOMMENDED ATTACHMENTS FOR FASTENING OF HOME TO FOUNDATION.
FOUNDATIONS TO BE BUILT AND CONSTRUCTED BY OTHERS ON SITE.
FOUNDATIONS (BY OTHERS) MUST MEET ALL APPLICABLE CODES.
NOTES AND/OR ILLUSTRATIONS SHOWN ARE TYPICAL AND MAY NOT APPLY TO ALL HOMES CONSTRUCTED.
CONSTRUCTION & SPECIFICATIONS MAY VARY PER PLAN.
REFER TO INSTALLATION MANUAL FOR MODULE CONNECTIONS.
REFER TO INSTALLATION MANUAL AND TRUSS MFG. DIAGRAM FOR ROOF TRUSS BRACING.

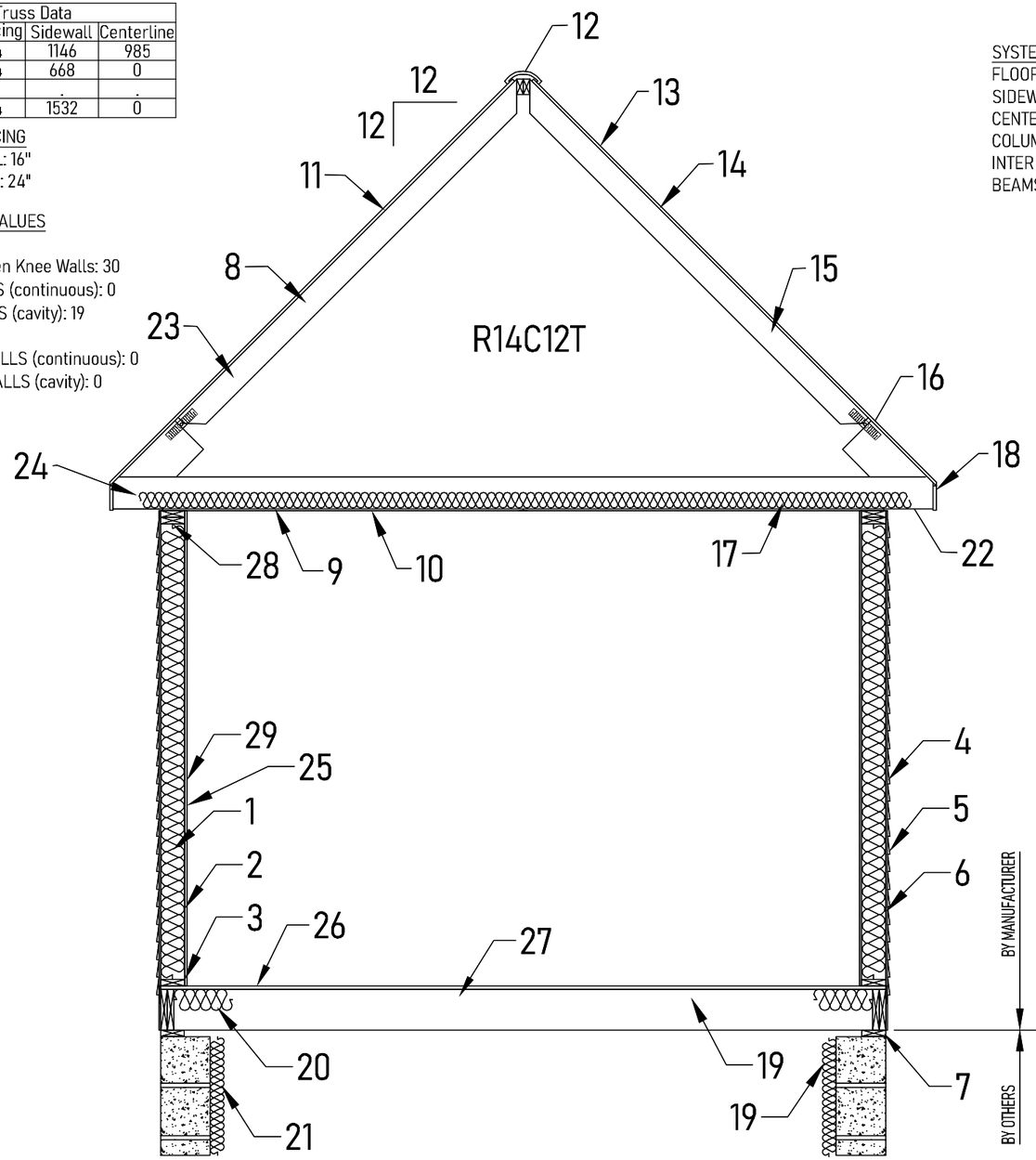
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 1/4" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Cross Section | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: XS | | Run: . |

530D9427638220325-1003370

| Truss Data | | | |
|---|---|---|---|
| Truss # | Spacing | Sidewall | Centerline |
| R28C12F | 24 | 1146 | 985 |
| R14C12T | 24 | 668 | 0 |
| . | . | . | . |
| R274G12F | 24 | 1532 | 0 |

STUD O.C. SPACING
EXTERIOR WALL: 16"
INTERIOR WALL: 24"

INSULATION R-VALUES
CEILING: 38
CEILING (Between Knee Walls: 30
EXTERIOR WALLS (continuous): 0
EXTERIOR WALLS (cavity): 19
FLOOR: 30
FOUNDATION WALLS (continuous): 0
FOUNDATION WALLS (cavity): 0




SYSTEMS MANUAL REFERENCES
FLOOR CONSTRUCTION: A-10-10 & 20
SIDEWALL CONSTRUCTION: B-10-10
CENTER WALL UPLIFT DETAIL: B-20-10
COLUMN REQUIREMENTS: B-20-20, 21 & 30
INTERIOR WALLS: B-30-10 & 11
BEAMS: C-10-10 THRU C-10-30

LEGEND

1 EXTERIOR WALL INSULATION (SEE INSULATION R-VALUES).
2 2X6 #3 SPF EXTERIOR WALL STUDS. (SEE STUD O.C. SPACING NOTE)
3 2X6 #3 SPF SIDEWALL BOTTOM PLATE.
4 7/16" RATED SHEATHING.
5 VINYL OR HARDBOARD SIDING (RAN VERT. OR HORZ.) INSTALLED PER MFGR.'S INSTRUCTIONS.
6 AIR INFILTRATION AND WATER RESISTANT BARRIER.
7 2X6 TREATED SILL PLATE. FASTENING OF SILL AND HOME TO FOUNDATION ON SITE PER CODES OR BY LOCAL ENGINEER WHEN APPLICABLE.
8 ENGINEERED TRUSSES SPACED TO MEET DESIGNED GROUND LOAD SNOW LOAD.
9 VAPOR BARRIER.
10 CEILING BOARD 1/2" GYPSUM.
11 7/16" 24/16 RATED ROOF DECKING MIN. TYP.
12 RIDGE VENT TYP. 50% VENTILATION OF ROOF CAVITY (UPPER PORTION), INSTALLED PER CODE REQUIREMENTS.
13 TYPICAL SHINGLES, INSTALLED PER MFGR'S INSTRUCTIONS.
14 SHINGLE UNDERLAYMENT TYP.
15 1" MIN. SPACE FOR ATTIC VENTILATION.
16 TYPICAL ICE BARRIER PER SECTION 905 OF APPLICABLE CODE.
17 CEILING INSULATION TYP. (SEE INSULATION R-VALUES).
18 ALUM., VINYL OR HARDIE BOARD FACIA AND DRIP EDGE.
19 FLOOR CAVITY OR PERIMETER WALL MUST BE INSULATED ON SITE OR AT THE FACTORY (SEE "INSULATION R-VALUES")
20 PERIMETER RIM JOIST MUST BE INSULATED TO R-VALUE LISTED FOR EXTERIOR WALLS
21 INSULATION INSTALLED ONSITE BY OTHERS PER THERMAL REQUIREMENTS AND/OR STATE AND LOCAL CODES
22 VENTED SOFFIT 50% OF LOWER ROOF VENTILATION.
23 BAFFLE REQUIRED
24 DRIFT BLOCKER
25 VAPOR RETARDER (AS REQUIRED PER CLIMATE ZONE).
26 FLOOR DECKING RATED FOR 19.2" O.C. JOIST SPACING MAX.
27 MIN. 2X10 #2 SPF FLOOR JOIST 16" O.C.
28 2X6 #3 SPF DOUBLE TOP PLATE.
29 WALL COVERING (MIN. 1/2" GYPSUM).

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Joe Shultz

NOTES:
FOLLOW RECOMMENDED ATTACHMENTS FOR FASTENING OF HOME TO FOUNDATION.
FOUNDATIONS TO BE BUILT AND CONSTRUCTED BY OTHERS ON SITE.
FOUNDATIONS (BY OTHERS) MUST MEET ALL APPLICABLE CODES.
NOTES AND/OR ILLUSTRATIONS SHOWN ARE TYPICAL AND MAY NOT APPLY TO ALL HOMES CONSTRUCTED.
CONSTRUCTION & SPECIFICATIONS MAY VARY PER PLAN.
REFER TO INSTALLATION MANUAL FOR MODULE CONNECTIONS.
REFER TO INSTALLATION MANUAL AND TRUSS MFG. DIAGRAM FOR ROOF TRUSS BRACING.

TRIMLINE RIDGE VENT: ALLOWS 13" OF NET FREE AIR PER LINEAL FOOT

FULL LENGTH OF HOUSE AIR FLO SOFFIT: FULL VENTED 5.89 SQ IN PER LINEAL FOOT

FULL LENGTH OF HOUSE 2433/300 = 8.11 VENT REQUIRED

IMPORTANT!
MAIN LEVEL FLOORS, OVER ENCLOSED FOUNDATIONS, CONSTRUCTED WITH OPTIONAL ENGINEERED WEB FLOOR JOISTS (OPEN JOISTS) OR WITH JOISTS OF NOMINAL LUMBER LESS THAN 2X10, MAY BE SUBJECT TO SPECIAL FIRE PROTECTIVE REQUIREMENTS TO BE PERFORMED BY OTHERS ON SITE. CONSULT ADOPTED LOCAL CODES FOR COMPLIANCE WITH FIRE PROTECTION OF FLOORS. REFERENCE THE APPROVED SYSTEMS PACKAGE FOR ADDITIONAL AND SPECIFIC CROSS SECTION INFORMATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 3/8" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Cross Section 2 | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: XS-2 | | Run: . |

530D9427638202S-1003370

| Truss Data | | | |
|---|---|---|---|
| Truss # | Spacing | Sidewall | Centerline |
| R28C12F | 24 | 1146 | 985 |
| R14C12T | 24 | 668 | 0 |
| . | . | . | . |
| R274G12F | 24 | 1532 | 0 |

STUD O.C. SPACING
EXTERIOR WALL: 16"
INTERIOR WALL: 24"

INSULATION R-VALUES
CEILING: 38
CEILING (Between Knee Walls: 30
EXTERIOR WALLS (continuous): 0
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SIDEWALL CONSTRUCTION: B-10-10
CENTER WALL UPLIFT DETAIL: B-20-10
COLUMN REQUIREMENTS: B-20-20, 21 & 30
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BEAMS: C-10-10 THRU C-10-30

LEGEND
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9 VAPOR BARRIER.
10 CEILING BOARD 1/2" GYPSUM.
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12 RIDGE VENT TYP. 50% VENTILATION OF ROOF CAVITY (UPPER PORTION), INSTALLED PER CODE REQUIREMENTS.
13 TYPICAL SHINGLES, INSTALLED PER MFGR'S INSTRUCTIONS.
14 SHINGLE UNDERLAYMENT TYP.
15 1" MIN. SPACE FOR ATTIC VENTILATION.
16 TYPICAL ICE BARRIER PER SECTION 905 OF APPLICABLE CODE.
17 CEILING INSULATION TYP. (SEE INSULATION R-VALUES).
18 23/32" (O.S.B.) BOARD DECKING.
19 ALUM., VINYL OR HARDIE BOARD FACIA AND DRIP EDGE.
20 FLOOR CAVITY OR PERIMETER WALL MUST BE INSULATED ON SITE OR AT THE FACTORY (SEE "INSULATION R-VALUES")
21 PERIMETER RIM JOIST MUST BE INSULATED TO R-VALUE LISTED FOR EXTERIOR WALLS
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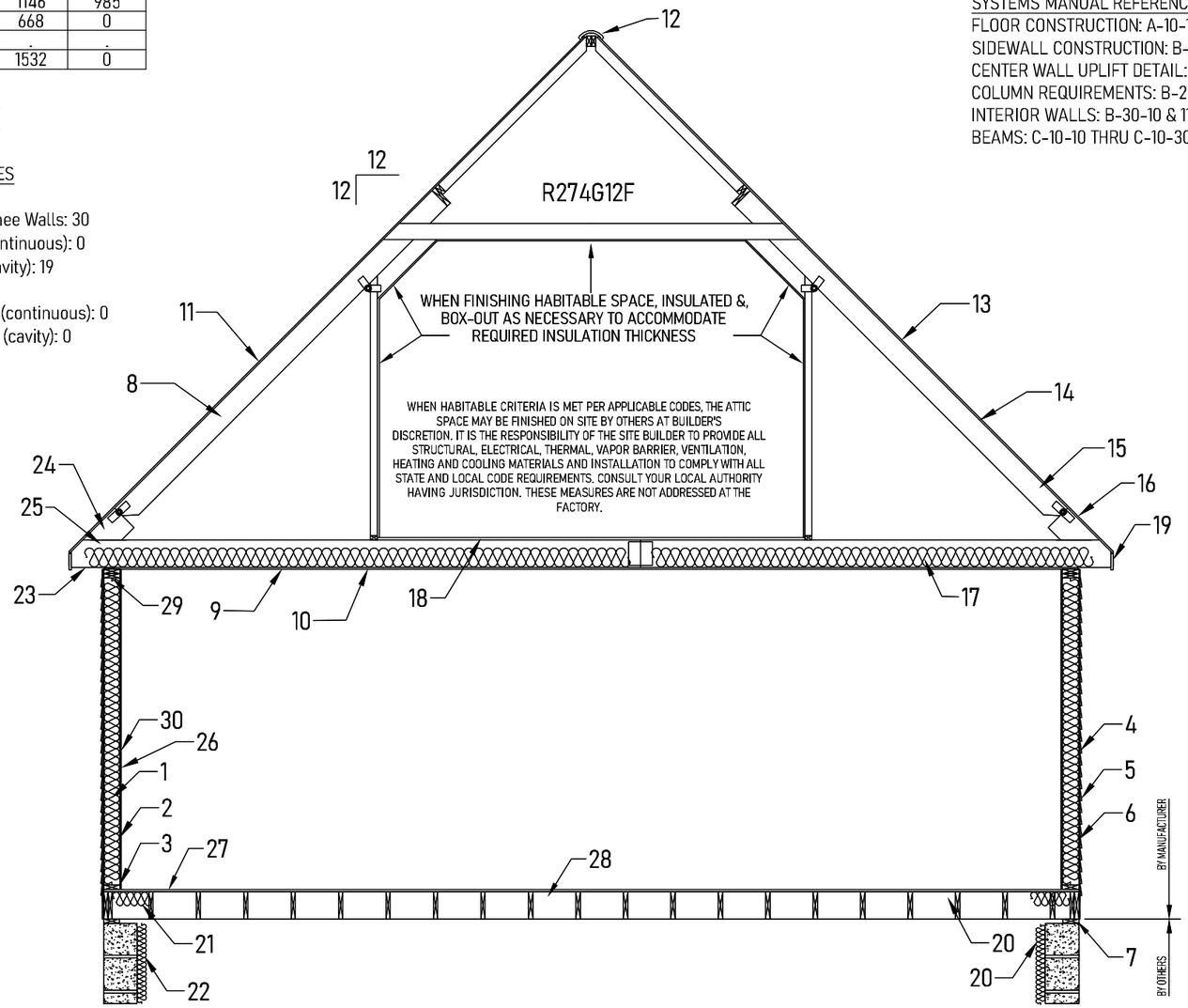
27 FLOOR DECKING RATED FOR 19.2" O.C. JOIST SPACING MAX.
28 MIN. 2X10 #2 SPF FLOOR JOIST 16" O.C.
29 2X6 #3 SPF DOUBLE TOP PLATE.
30 WALL COVERING (MIN. 1/2" GYPSUM).

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TRIMLINE RIDGE VENT: ALLOWS 13" OF NET FREE AIR PER LINEAL FOOT

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REFER TO INSTALLATION MANUAL AND TRUSS MFG. DIAGRAM FOR ROOF TRUSS BRACING.

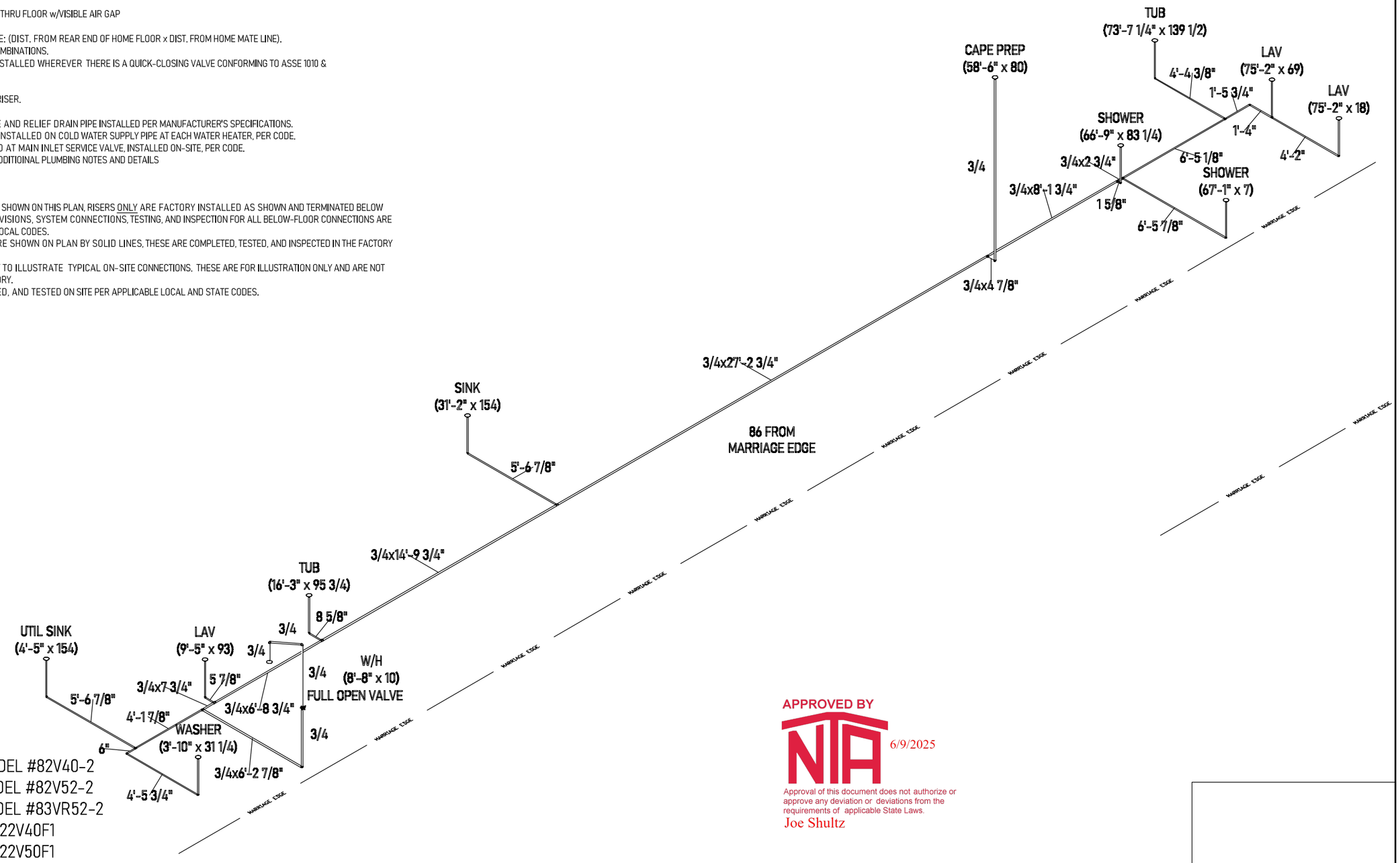
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 1/4" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Cross Section Tag | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: XS-TAG | | Run: . |

530D9427638202325-1003370

NOTE:
1. 3/4" GALVANIZED, OR COPPER RELIEF DRAIN (NOT SHOWN) THRU FLOOR w/VISIBLE AIR GAP
2. INLET WITH 1" CAP & CHAIN.
3. DIMENSIONS EXPRESSED IN PARENTHESIS (A x B) INDICATE: (DIST. FROM REAR END OF HOME FLOOR x DIST. FROM HOME MATE LINE).
4. ANTI-SCALD DEVICE ON ALL SHOWER, AND TUB/SHOWER COMBINATIONS.
5. WATER-HAMMER ARRESTORS AT BATTERY OF FIXTURES INSTALLED WHEREVER THERE IS A QUICK-CLOSING VALVE CONFORMING TO ASSE 1010 & MANUFACTURER'S INSTRUCTIONS.
6. SHUT-OFF VALVE IS REQUIRED AT EACH FIXTURE
7. BATHROOMS WITH DOUBLE LAVS ARE FED FROM THE SAME RISER.
8. ANY LINE NOT LABELED IS 1/2"
9. WATER HEATER TEMPERATURE & PRESSURE RELIEF VALVE AND RELIEF DRAIN PIPE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
10. SHUT-OFF VALVE AT WATER HEATER IS FULL OPEN VALVE INSTALLED ON COLD WATER SUPPLY PIPE AT EACH WATER HEATER, PER CODE.
11. FULLWAY SHUT-OFF VALVE WITH BLEED ORIFICE INSTALLED AT MAIN INLET SERVICE VALVE, INSTALLED ON-SITE, PER CODE.
12. SEE SYSTEMS PACKAGE PLUMBING SECTION PAGES FOR ADDITIOINAL PLUMBING NOTES AND DETAILS

SITE NOTES FOR DIAGRAM EXPLANATION:

A. WHEN VERTICAL FIXTURE WATER SUPPY RISERS ONLY ARE SHOWN ON THIS PLAN, RISERS ONLY ARE FACTORY INSTALLED AS SHOWN AND TERMINATED BELOW THE FLOOR AT THE INDICATED LOCATIONS. MATERIAL PROVISIONS, SYSTEM CONNECTIONS, TESTING, AND INSPECTION FOR ALL BELOW-FLOOR CONNECTIONS ARE ON SITE BY OTHERS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
B. WHEN BELOW-FLOOR SYSTEM CONNECTIONS TO RISERS ARE SHOWN ON PLAN BY SOLID LINES, THESE ARE COMPLETED, TESTED, AND INSPECTED IN THE FACTORY TO THE TERMINATION POINT SHOWN ON ILLUSTRATED PLAN.
C. DOTTED LINES ON PLAN,(IF PRESENT), ARE INTENDED ONLY TO ILLUSTRATE TYPICAL ON-SITE CONNECTIONS. THESE ARE FOR ILLUSTRATION ONLY AND ARE NOT PROVIDED, INSTALLED, TESTED, OR INSPECTED BY THE FACTORY.
D. ALL BELOW FLOOR WATER LINES MUST BE SIZED, INSTALLED, AND TESTED ON SITE PER APPLICABLE LOCAL AND STATE CODES.




LINE SIZED FOR DISHWASHER

ELECTRIC WATER HEATER-RHEEM MODEL #82V40-2
ELECTRIC WATER HEATER-RHEEM MODEL #82V52-2
ELECTRIC WATER HEATER-RHEEM MODEL #83VR52-2
GAS WATER HEATER-RHEEM MODEL #22V40F1
GAS WATER HEATER-RHEEM MODEL #22V50F1

| HANGER SPACING - PEX PIPE (SUPPLY) | |
|---|---|
| MAX HORIZONTAL SPACING (FT.) | MAX VERTICAL SPACING (FT.) |
| 2'-8" | 4'-0" |

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6/9/2025
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ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: CUSTOM | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Hot Water Lines | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: WH | | Run: . |

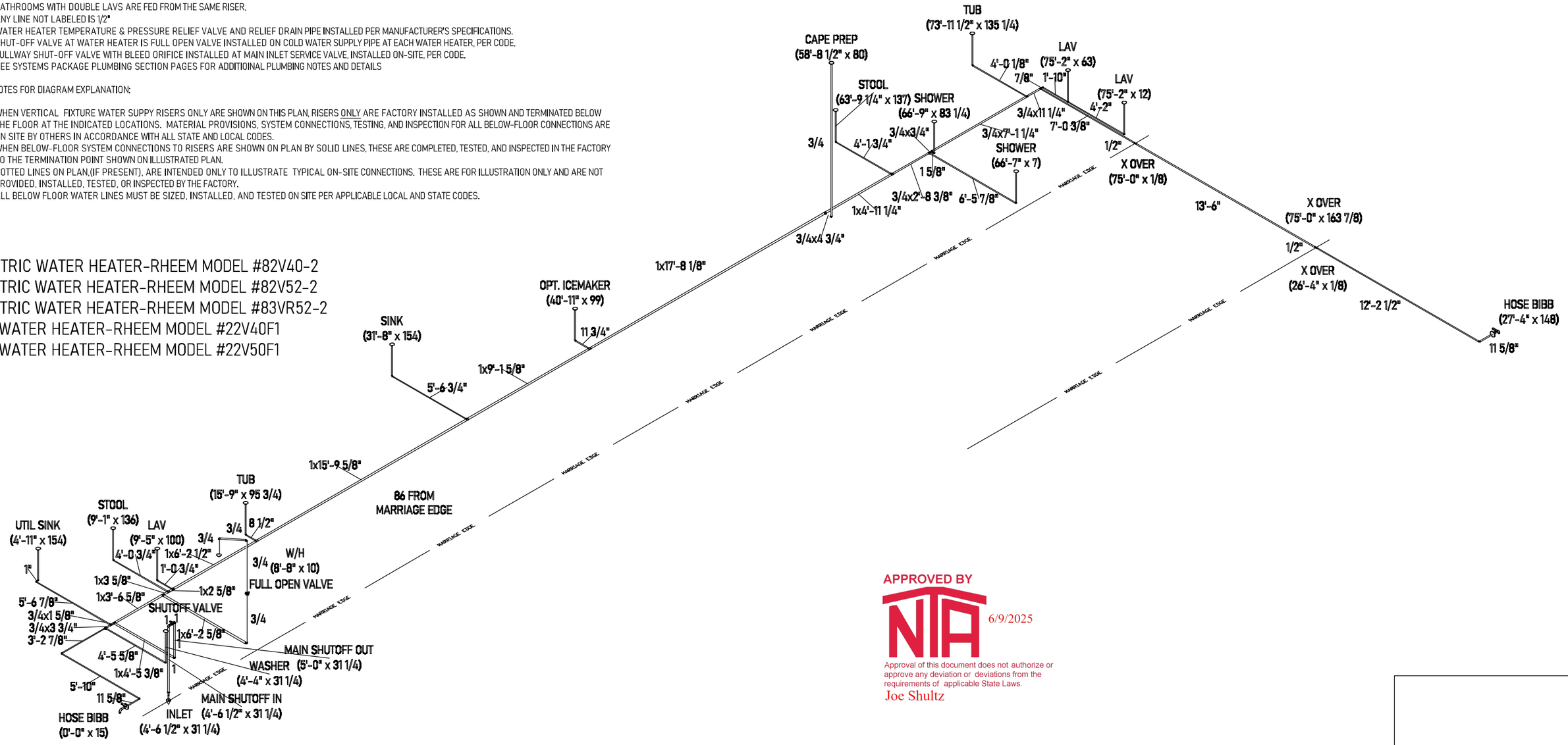
530D94276382025-1003370

NOTE:
1. 3/4" GALVANIZED, OR COPPER RELIEF DRAIN (NOT SHOWN) THRU FLOOR w/VISIBLE AIR GAP
2. INLET WITH 1" CAP & CHAIN.
3. DIMENSIONS EXPRESSED IN PARENTHESIS (A x B) INDICATE: (DIST. FROM REAR END OF HOME FLOOR x DIST. FROM HOME MATE LINE).
4. ANTI-SCALD DEVICE ON ALL SHOWER, AND TUB/SHOWER COMBINATIONS.
5. WATER-HAMMER ARRESTORS AT BATTERY OF FIXTURES INSTALLED WHEREVER THERE IS A QUICK-CLOSING VALVE CONFORMING TO ASSE 1010 & MANUFACTURER'S INSTRUCTIONS.
6. SHUT-OFF VALVE IS REQUIRED AT EACH FIXTURE
7. BATHROOMS WITH DOUBLE LAVS ARE FED FROM THE SAME RISER.
8. ANY LINE NOT LABELED IS 1/2"
9. WATER HEATER TEMPERATURE & PRESSURE RELIEF VALVE AND RELIEF DRAIN PIPE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
10. SHUT-OFF VALVE AT WATER HEATER IS FULL OPEN VALVE INSTALLED ON COLD WATER SUPPLY PIPE AT EACH WATER HEATER, PER CODE.
11. FULLWAY SHUT-OFF VALVE WITH BLEED ORIFICE INSTALLED AT MAIN INLET SERVICE VALVE, INSTALLED ON-SITE, PER CODE.
12. SEE SYSTEMS PACKAGE PLUMBING SECTION PAGES FOR ADDITIOINAL PLUMBING NOTES AND DETAILS

SITE NOTES FOR DIAGRAM EXPLANATION:

A. WHEN VERTICAL FIXTURE WATER SUPPY RISERS ONLY ARE SHOWN ON THIS PLAN, RISERS ONLY ARE FACTORY INSTALLED AS SHOWN AND TERMINATED BELOW THE FLOOR AT THE INDICATED LOCATIONS. MATERIAL PROVISIONS, SYSTEM CONNECTIONS, TESTING, AND INSPECTION FOR ALL BELOW-FLOOR CONNECTIONS ARE ON SITE BY OTHERS IN ACCORDANCE WITH ALL STATE AND LOCAL CODES.
B. WHEN BELOW-FLOOR SYSTEM CONNECTIONS TO RISERS ARE SHOWN ON PLAN BY SOLID LINES, THESE ARE COMPLETED, TESTED, AND INSPECTED IN THE FACTORY TO THE TERMINATION POINT SHOWN ON ILLUSTRATED PLAN.
C. DOTTED LINES ON PLAN,(IF PRESENT), ARE INTENDED ONLY TO ILLUSTRATE TYPICAL ON-SITE CONNECTIONS. THESE ARE FOR ILLUSTRATION ONLY AND ARE NOT PROVIDED, INSTALLED, TESTED, OR INSPECTED BY THE FACTORY.
D. ALL BELOW FLOOR WATER LINES MUST BE SIZED, INSTALLED, AND TESTED ON SITE PER APPLICABLE LOCAL AND STATE CODES.

ELECTRIC WATER HEATER-RHEEM MODEL #82V40-2
ELECTRIC WATER HEATER-RHEEM MODEL #82V52-2
ELECTRIC WATER HEATER-RHEEM MODEL #83VR52-2
GAS WATER HEATER-RHEEM MODEL #22V40F1
GAS WATER HEATER-RHEEM MODEL #22V50F1

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| HANGER SPACING - PEX PIPE (SUPPLY) | |
|---|---|
| MAX HORIZONTAL SPACING (FT.) | MAX VERTICAL SPACING (FT.) |
| 2'-8" | 4'-0" |

ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: CUSTOM | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Cold Water Lines | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: WC | | Run: . |

530D9427632025-1003370

NOTE:

1. ALL LINES 1/4" SLOPE/FOOT MINIMUM UNLESS OTHERWISE NOTED.
2. ←o— DENOTES 1/8" SLOPE/FOOT.
3. ALL 2" DIA. LINES SHOWN FILLED (BOLD)
4. ALL LINES 1-1/2" DIA. MINIMUM OTHERWISE NOTED.
5. LINES SERVING STOOL ARE 3" DIA.CONTINUOUS TO OUTLET.
6. AIR ADMITTANCE VALVES SHOWN ARE IN ACCORDANCE w/ASSE 1051 & MANUFACTURER'S INSTRUCTIONS.
7. CONTINUOUS WASTE APPL. ON SINKS AND LAVATORIES WHERE SPACING DOES NOT EXCEED 30".
8. STACKS CLEANED THROUGH REMOVABLE FIXTURE P-TRAPS.
9. THE DISCHARGE LINE FROM THE DISHWASHER SHALL BE NOT LESS THAN 1/2 INCH NOMINAL SIZE AND SHALL EITHER BE LOOPED UP AND SECURELY FASTENED TO THE UNDERSIDE OF THE COUNTER OR BE CONNECTED TO A DECK-MOUNTED DISHWASHER AIR GAP FITTING THAT IS LISTED.

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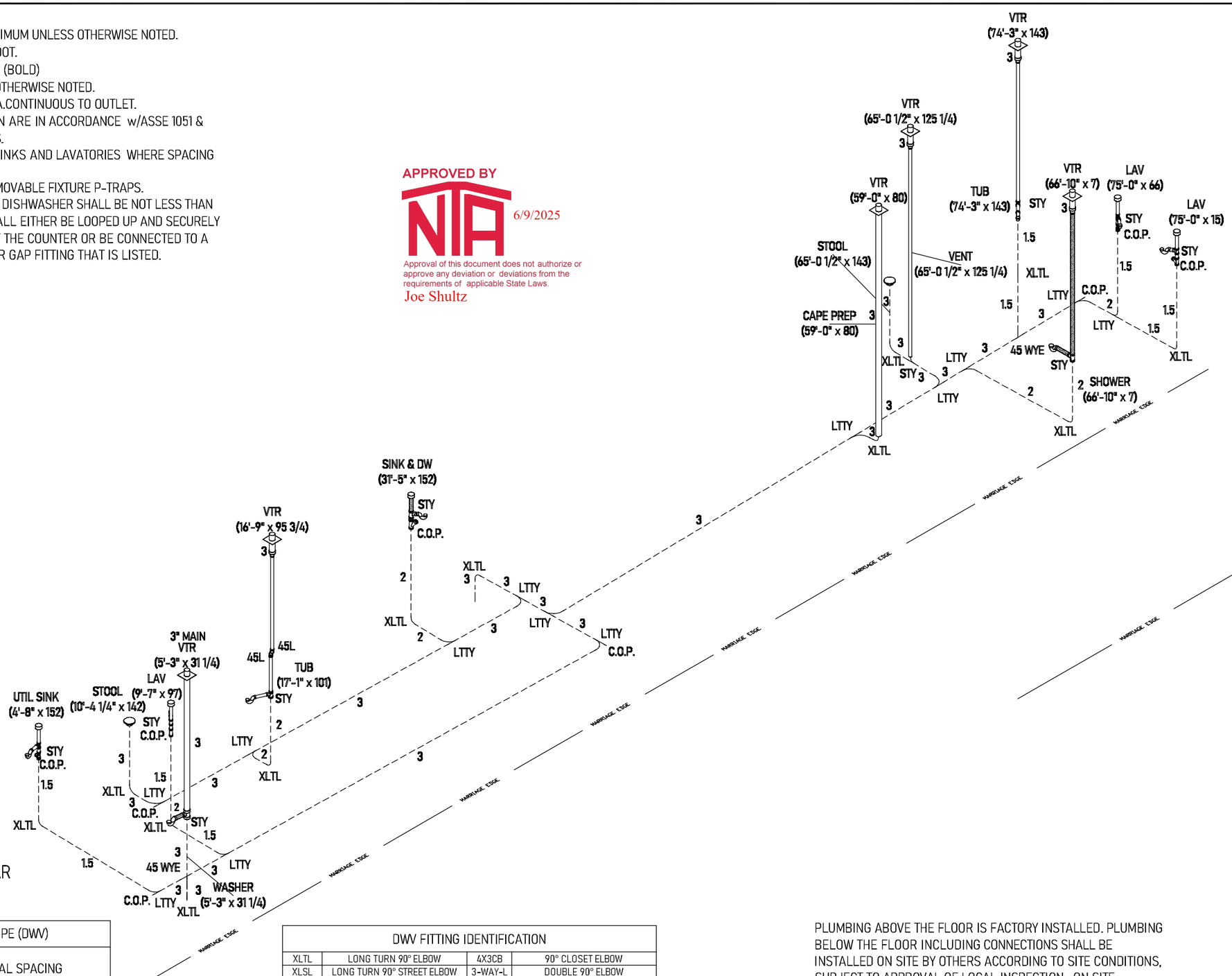



ALL DIMENSIONS FROM REAR AND MARRIAGE EDGE

| HANGER SPACING - DRAIN PIPE (DWV) | |
|---|---|
| MAX HORIZONTAL SPACING (FT.) | VERTICAL SPACING |
| 4'-0" | Vertical piping shall be supported at each story or floor level. |

| DWV FITTING IDENTIFICATION | | | |
|---|---|---|---|
| XLTL | LONG TURN 90° ELBOW | 4X3CB | 90° CLOSET ELBOW |
| XLSL | LONG TURN 90° STREET ELBOW | 3-WAY-L | DOUBLE 90° ELBOW |
| 45L | 45° ELBOW | STY | SANITARY TEE |
| 45SL | 45° STREET ELBOW | LTTY | LONG RADIUS TY |
| 22.5L | 22 1/2° ELBOW | 45 WYE | 45° WYE |
| 22.5SL | 22 1/2° STREET ELBOW | | |

PLUMBING ABOVE THE FLOOR IS FACTORY INSTALLED. PLUMBING BELOW THE FLOOR INCLUDING CONNECTIONS SHALL BE INSTALLED ON SITE BY OTHERS ACCORDING TO SITE CONDITIONS, SUBJECT TO APPROVAL OF LOCAL INSPECTION. ON SITE PLUMBING SHOWN IS SUGGESTIVE ONLY.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: CUSTOM | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: DWV System | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: DL | | Run: . |

530D94276362025-1003370

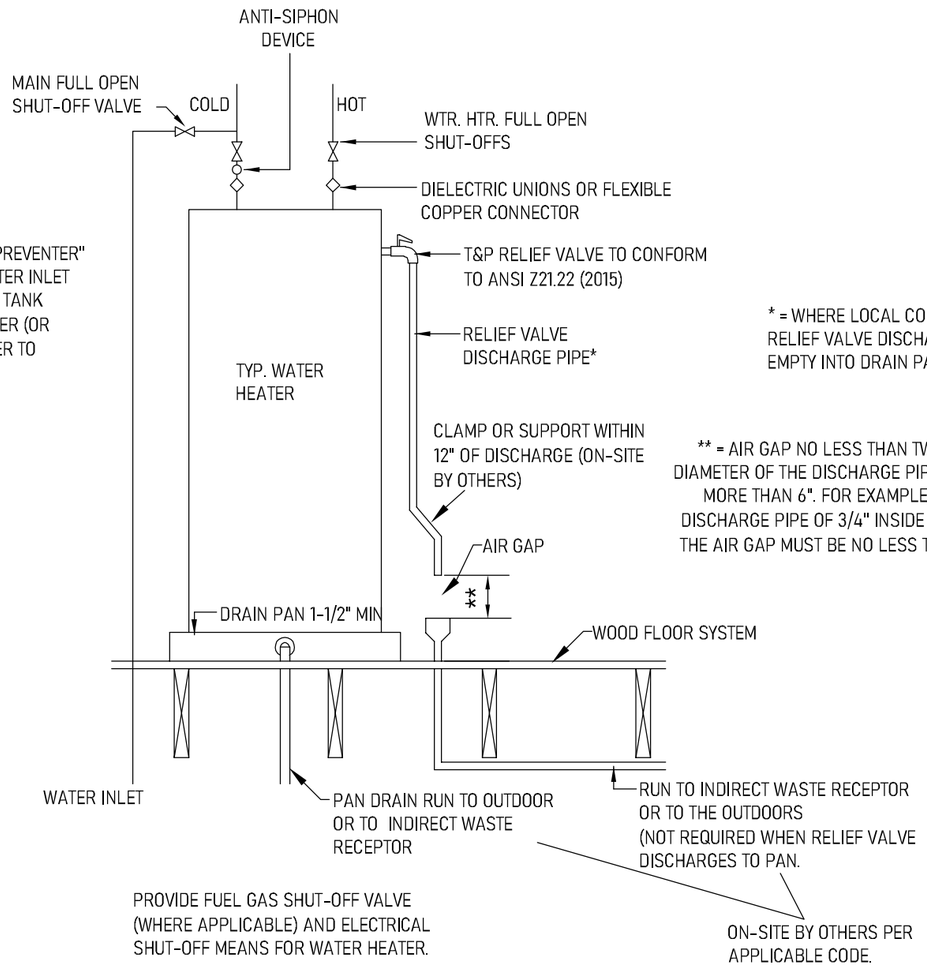
## PIPE SUPPORT:

VERTICAL PIPING:
SUPPORTS AT 10' O.C. MAX. OR BETWEEN FLOOR LEVELS.

HORIZONTAL PIPING:
SUPPORTS AT 4' O.C. MAX. ENDS OF BRANCHES, AND AT CHANGES IN ELEVATION AND/OR DIRECTION.

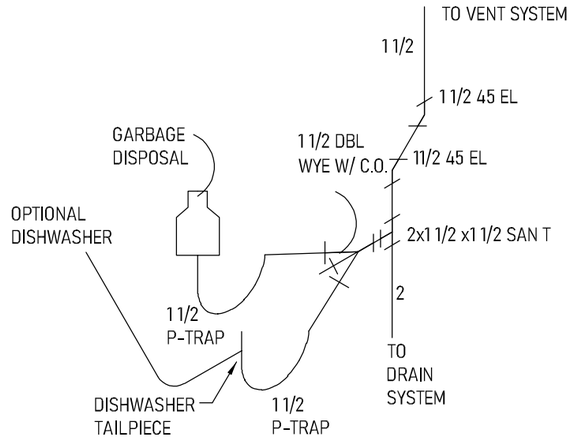
TRAP ARMS:
SUPPORT LOCATED AS CLOSE TO TRAP AS POSSIBLE WHEN TRAP TO VENT EXCEEDS 3'.

WATER HEATERS, WHICH HAVE A "BACK-FLOW PREVENTER" OR A "CHECK VALVE" LOCATED IN THE COLD WATER INLET LINE, ARE TO BE EQUIPPED WITH AN EXPANSION TANK INSTALLED BETWEEN THE BACK-FLOW PREVENTER (OR CHECK VALVE) AND THE WATER HEATER IN ORDER TO ALIEVIATE THERMAL EXPANSION.




* = WHERE LOCAL CODE ALLOWS, RELIEF VALVE DISCHARGE PIPE MAY EMPTY INTO DRAIN PAN.

** = AIR GAP NO LESS THAN TWICE THE DIAMETER OF THE DISCHARGE PIPE, BUT NOT MORE THAN 6". FOR EXAMPLE, FOR A DISCHARGE PIPE OF 3/4" INSIDE DIAMETER THE AIR GAP MUST BE NO LESS THAN 1 1/2".




OPTIONAL GARBAGE DISPOSAL PLUMBING ILLINOIS MODELS ONLY - USE DETAIL ABOVE FOR OPTIONAL GARBAGE DISPOSAL.

APPROVED BY
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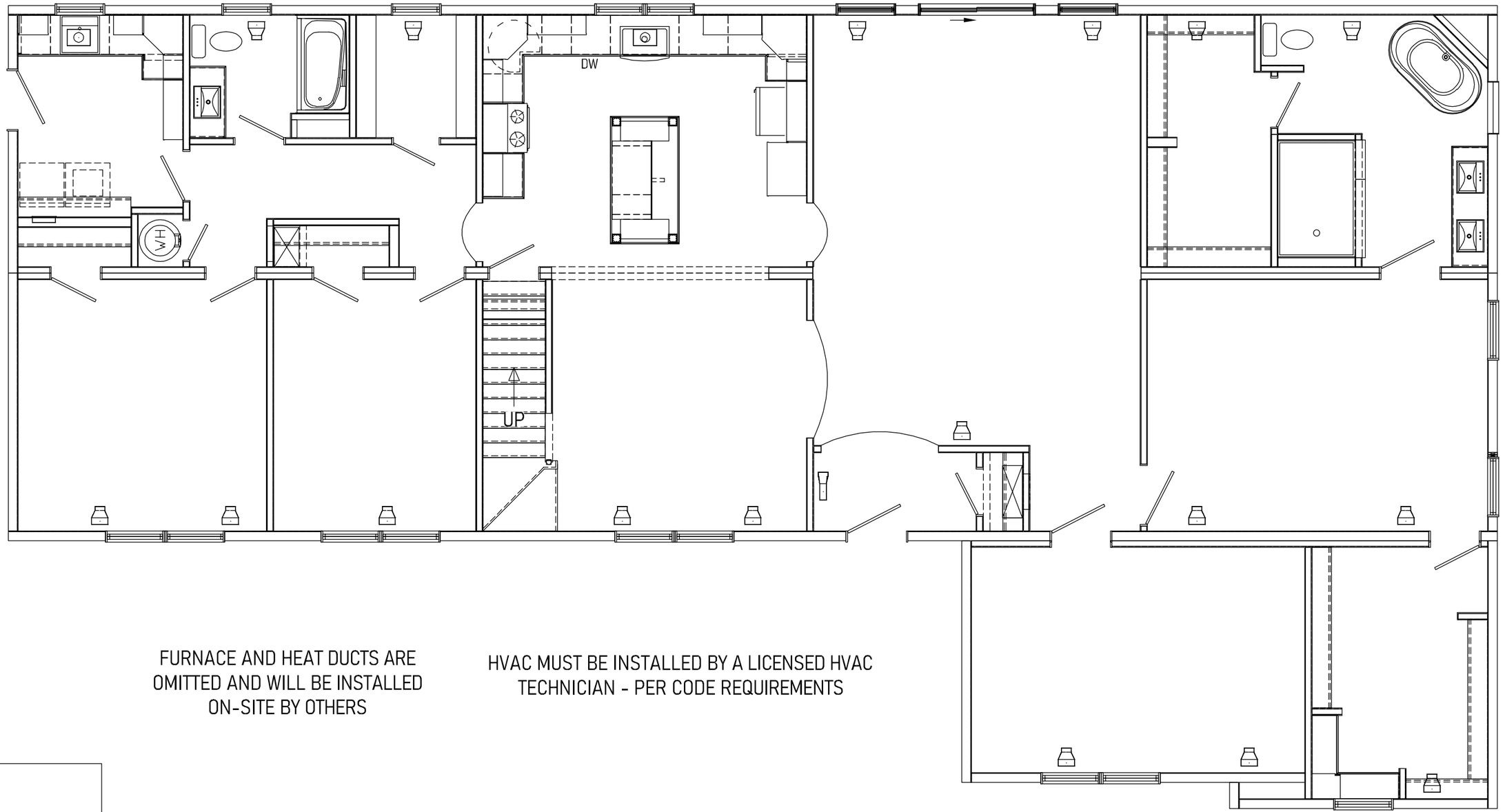
NOTES:
ALL BELOW FLOOR PLUMBING BY OTHERS. ALL FITTINGS BELOW BOTTOM CAN BE SHIPPED LOOSE.
ALL BELOW FLOOR PLUMBING ILLUSTRATIONS ARE RECOMMENDATIONS ONLY. ON-SITE CONDITIONS AND/OR RESTRICTIONS MAY REQUIRE SOME MODIFICATIONS.
OPT. GARBAGE DISPOSAL TO BE LOCATED ON KITCHEN SINK WASTE ASSEMBLY. ALL VENTS THRU ROOF TO BE 3", 12" MIN. ABOVE AND BELOW ROOF PENETRATION.
ALL P-TRAPS TO BE 1 1/2" UNLESS NOTED.
HORIZONTAL VENT SLOPE : 1/8" PER FOOT
HORIZONTAL DRAIN SLOPE: 1/4" PER FOOT
DRAIN, WASTE, AND VENT PLUMBING TO BE PVC PLASTIC OR EQUAL, APPROVED FOR DWV APPLICATIONS.
DRAIN AND DISCHARGE PIPES SERVING WATER HEATERS TO BE CPVC OR OTHER CODE APPROVED MATERIAL.
ANY TRANSITIONS TO MATERIALS, OTHER THAN THE SPECIFIED MATERIAL, MUST INCORPORATE AN APPROVED FITTING FOR CONNECTION.
ALL TUBS WITH WHIRLPOOL MUST BE PROVIDED WITH ACCESS TO MOTOR. ALL PLUMBING TO MEET OR EXCEED CURRENT ADOPTED PLUMBING CODES.
IN CONCEALED SPACES WHERE PIPING IS INSTALLED THRU HOLES OR NOTCHES IN STUDS, JOISTS, TRUSSES, OR SIMILAR MEMBERS LESS THAN 1 1/2" FROM NEAREST EDGE OF THE MEMBER, THE PIPE SHALL BE PROTECTED BY SHIELD PLATES.
PROTECTIVE SHIELD PLATES SHALL BE A MINIMUM OF 16 GA. STEEL. PLATES SHALL COVER AREA OF THE PIPE WHERE THE MEMBERS ARE NOTCHED OR BORED, AND SHALL EXTEND A MINIMUM OF 2" ABOVE SOLE PLATES AND BELOW TOP PLATES.
AIR ADMITTANCE VALVES MAY SUBSTITUTE ROOF VENTS AT VARIOUS LOCATIONS PER APPLICABLE STATE AND LOCAL PLUMBING CODES. THE 3" MAIN VENT MUST BE VENTED THRU THE ROOF AND CANNOT BE MECHANICALLY VENTED.
IN SEISMIC CATEGORIES D0, D1, D2 OR E STRAP UPPER THIRD AND LOWER THIRD OF WATER HEATER TO RESIST A HORIZONTAL FORCE OF 1/3 THE OPERATING WEIGHT OF THE WATER HEATER.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: N.T.S. | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: DWV Notes | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: DN | | Run: . |

530D9427638202S-1003370




FURNACE AND HEAT DUCTS ARE OMITTED AND WILL BE INSTALLED ON-SITE BY OTHERS

HVAC MUST BE INSTALLED BY A LICENSED HVAC TECHNICIAN - PER CODE REQUIREMENTS

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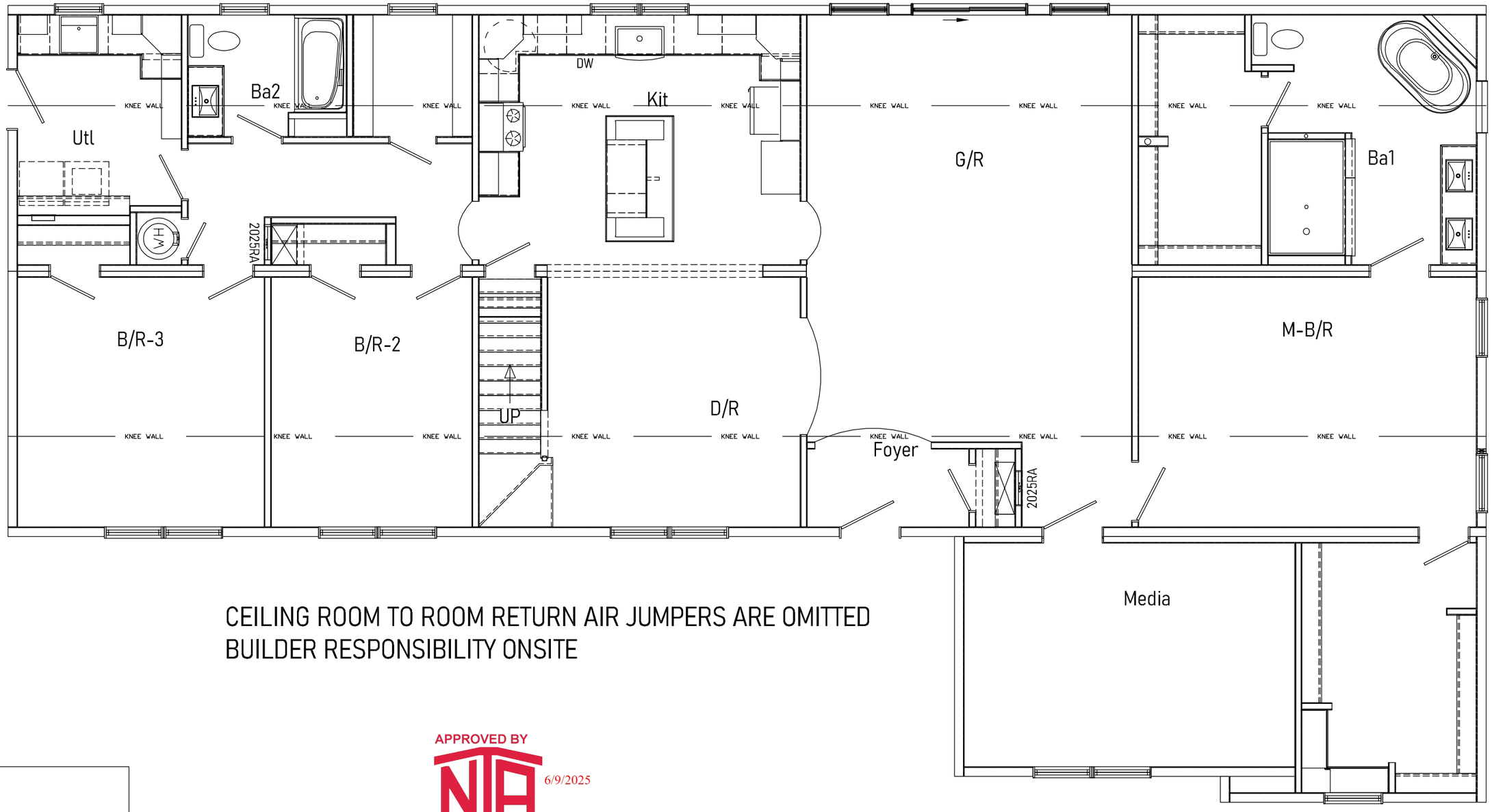
Joe Shultz

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 3/16" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Supply Air Ducts - Perimeter Registers | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: SP | | Run: . |

530D9427632025-1003370




CEILING ROOM TO ROOM RETURN AIR JUMPERS ARE OMITTED
BUILDER RESPONSIBILITY ONSITE

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RETURNS IN CEILING IN ADDITION TO AIR THRU GRILLES/OPENINGS

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 3/16" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Ceiling Return Air System | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV<br>S/N: 44850 | Pg.: HR | | Run: . |

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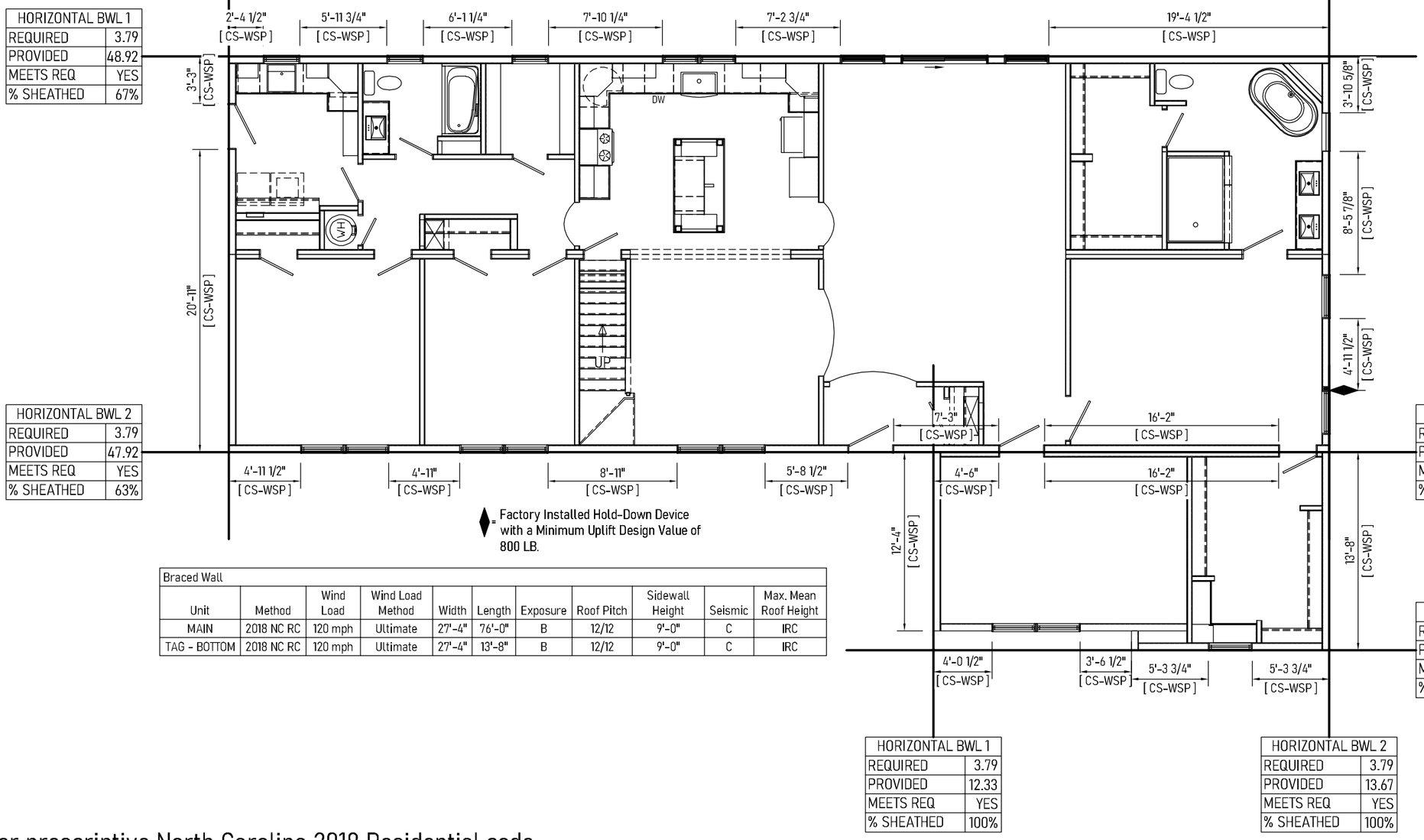
| VERTICAL BWL 1 | |
|---|---|
| REQUIRED | 10.13 |
| PROVIDED | 24.17 |
| MEETS REQ | YES |
| % SHEATHED | 88% |

| NCRC BRACED WALL CONSTRUCTION DETAILS | |
|---|---|
| WALL TYPE | CONSTRUCTION |
| EXTERIOR | 7/16" SHEATHING ONE SIDE WITH 0.131 PD NAILS AT 6" O/C EDGE SPACING AND 12" O/C FIELD SPACING. |

| VERTICAL BWL 2 | |
|---|---|
| REQUIRED | 10.13 |
| PROVIDED | 17.33 |
| MEETS REQ | YES |
| % SHEATHED | 67% |

| HORIZONTAL BWL 1 | |
|---|---|
| REQUIRED | 3.79 |
| PROVIDED | 48.92 |
| MEETS REQ | YES |
| % SHEATHED | 67% |




| HORIZONTAL BWL 2 | |
|---|---|
| REQUIRED | 3.79 |
| PROVIDED | 47.92 |
| MEETS REQ | YES |
| % SHEATHED | 63% |

| VERTICAL BWL 1 | |
|---|---|
| REQUIRED | 2.26 |
| PROVIDED | 20.67 |
| MEETS REQ | YES |
| % SHEATHED | 75% |

| VERTICAL BWL 2 | |
|---|---|
| REQUIRED | 2.26 |
| PROVIDED | 18.21 |
| MEETS REQ | YES |
| % SHEATHED | 66% |

| HORIZONTAL BWL 1 | |
|---|---|
| REQUIRED | 3.79 |
| PROVIDED | 12.33 |
| MEETS REQ | YES |
| % SHEATHED | 100% |

| HORIZONTAL BWL 2 | |
|---|---|
| REQUIRED | 3.79 |
| PROVIDED | 13.67 |
| MEETS REQ | YES |
| % SHEATHED | 100% |

▲ = Factory Installed Hold-Down Device with a Minimum Uplift Design Value of 800 LB.

| Braced Wall | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Unit | Method | Wind Load | Wind Load Method | Width | Length | Exposure | Roof Pitch | Sidewall Height | Seismic | Max. Mean Roof Height |
| MAIN | 2018 NC RC | 120 mph | Ultimate | 27'-4" | 76'-0" | B | 12/12 | 9'-0" | C | IRC |
| TAG - BOTTOM | 2018 NC RC | 120 mph | Ultimate | 27'-4" | 13'-8" | B | 12/12 | 9'-0" | C | IRC |

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Bracing per prescriptive North Carolina 2018 Residential code.

In conjuction with the wall bracing requirements of Section 602.10, all exterior walls are sheathed with wood structural sheathing panels in accordance with 4506.2 for 140 to 150 MPH structural bracing.

FOUNDATION TIE-DOWN MUST BE CONNECTED ON-SITE BY POINT LOAD LOCATIONS AS NOTED (BY OTHERS). ALTERNATIVE TIE DOWN CONNECTION METHODS APPROVED BY A LOCAL ENGINEER MAY BE USED. REFER TO THE IRC FOR FOUNDATION TIE DOWN REQUIREMENTS FOR 130 MPH OR LESS WIND ZONES

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions . . | Scale: 1/8" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Braced Walls-Prescriptive | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV S/N: 44850 | Pg.: BWP | | Run: . |

530D9427638202S-1003370

| Footing size (in.) | Footing max. load (lbs.) for 8" x16" pier | | |
|---|---|---|---|
| | 1500 PSF | 2000 PSF | 2500 PSF |
| *16x16x6 | 2.5K | 3.4K | 4.3K |
| *20x20x6 | 4.0K | 5.3K | 6.7K |
| 24x24x8 | 5.6K | 7.6K | 9.6K |
| 30x30x10 | 8.5K | 11.7K | 14.8K |
| 36x36x12 | 12.4K | 16.7K | 20.7K |
| 42x42x14 | 16.5K | 22.4K | 28.2K |
| 48x48x14 | 21.2K | N/A | N/A |
| * = A 4" thick pre-cast footer of equivalent width and length may be used in place of a 6" thick cast in place footer. | | | |
| Footer size must be designed by others to site conditions if noted kip load exceeds capacities listed above | | | |

**COLUMNS & FOOTINGS MUST BE RATED TO MEET THE CENTER LINE LOADS LISTED**

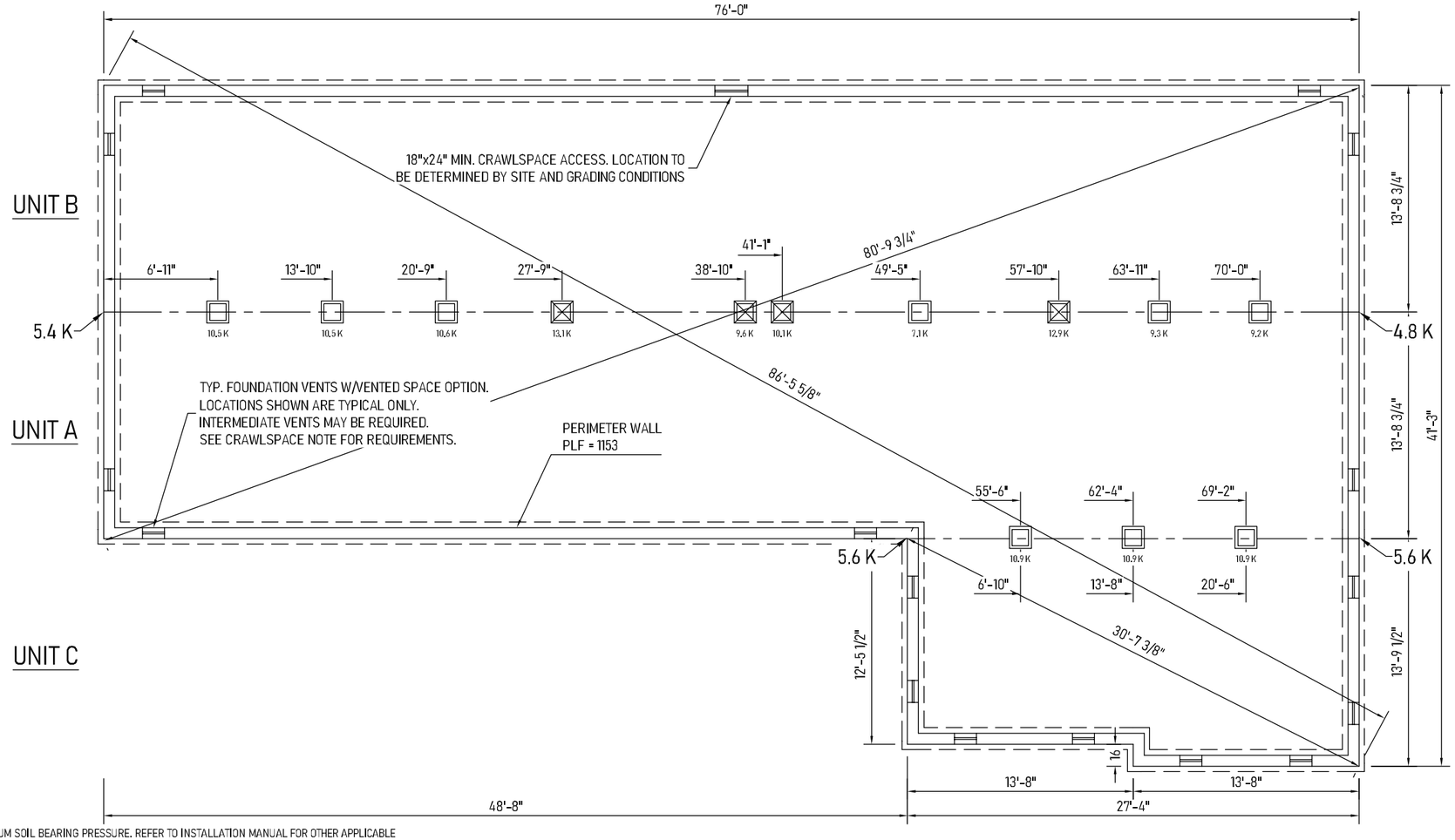
GROUND SNOW LOAD **20 PSF**

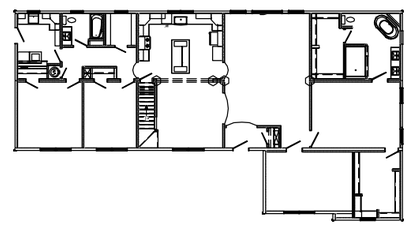
**Kip loads noted are based on allowable stress design (ASD).**
**Capacity of supports (columns, footings, etc.) must exceed noted Kip loads.**
**Any changes to this plan that effect the foundation in any way will be the sole responsibility of the builder/dealer.**

SELF-WEIGHT ON FOOTERS NOT INCLUDED IN LOADS SHOWN.
♦- IF APPLICABLE, REPRESENTS TIE DOWN LOADS FROM BRACE WALLS TO FOUNDATION. TO BE DESIGNED ON SITE BY OTHERS.

FOR CONNECTION OF THE HOME TO FOUNDATION AT BRACING WALLS, REFER TO "BRACED WALLS-CALCULATED" PAGE, IF APPLICABLE. WHEN THIS PAGE IS PRESENT, HORIZONTAL AND OVERTURNING (RACKING) LOADS AT BRACING WALL LOCATIONS ARE INDICATED FOR THESE FOUNDATION CONNECTIONS. THESE LOADS MAY BE RECALCULATED AND REDESIGNED PER LOCAL CODES TO CONFORM TO SITE CONDITIONS AS REQUIRED. REFER TO CHAPTER 3 (3.9 TIE DOWN TO FOUNDATION) OF THE "MODULAR HOME INSTALLATION MANUAL" FOR ADDITIONAL INFORMATION.
REFER TO APPLICABLE CODES FOR CONNECTION OF HOME TO FOUNDATION WHEN "BRACED WALLS-PRESCRIPTIVE" PAGE IS APPLICABLE.

FOUNDATION SHOWN MUST BE DESIGNED BY OTHERS TO THE SITE CONDITIONS. THIS INCLUDES SEISMIC DESIGN AND ATTACHING THE HOME TO THE FOUNDATION, ALONG WITH RESISTANCE TO LATERAL, LONGITUDINAL SHEAR, UPLIFT AND DOWNLIFT FORCES IN BOTH DIRECTIONS.



- 2X10 OR TRUSS FLOOR NOTES -

1. FOUNDATION LAYOUT IS APPLICABLE TO NOTED MAXIMUM SNOW LOADING AND MINIMUM SOIL BEARING PRESSURE. REFER TO INSTALLATION MANUAL FOR OTHER APPLICABLE INFORMATION. CONSULT LOCAL OFFICIALS AND THE APPLICABLE LOCAL CODES FOR OTHER REQUIREMENTS (I.E. DRAINAGE, DAMP-PROOFING, BACKFILL SUPPORT, ETC.).
2. WIDTH DIMENSIONS SHOWN INCLUDE A 3/4" ALLOWANCE PER HOME SECTION FOR HOMES WITH FACTORY-INSTALLED O.S.B. ON THE MARRIAGE WALL MATE LINE. THIS ALLOWANCE TAKES INTO ACCOUNT THE 7/16" O.S.B. MATERIAL INSTALLED ON EACH MARRIAGE WALL PLUS ALLOWANCE DUE TO OTHER FACTORS. IF HOME DOES NOT INCLUDE O.S.B. ON THE MARRIAGE WALL MATE LINE, FOUNDATION WIDTH IS TO BE SIZED EQUAL TO ACTUAL MANUFACTURED FLOOR WIDTH. LESSER DIMENSION, IF SHOWN, INDICATES ACTUAL FLOOR WIDTH. THESE DIMENSIONS DO NOT ALLOW FOR ANY VARIANCE THAT MAY OCCUR IN SITE INSTALLATION SUCH AS GAPPING, OFF CENTER SET OR OTHER FIELD-ENCOUNTERED VARIABLES. ANY ADJUSTMENTS NEEDED IN FOUNDATION WIDTH DUE TO SUCH VARIANCES ARE AT THE DISCRETIONOF THE INSTALLER.
3. FOR DEVIATIONS &/OR OTHER FOUNDATION DESIGNS CONSULT A LOCAL PROFESSIONAL ENGINEER & YOUR LOCAL BUILDING OFFICIAL.
4. SILL PLATE FASTENING TO BE PER INSTALLATION MANUAL AND/OR LOCAL CODES. SILL FASTENING REQUIREMENT IS PER APPLICABLE WIND SPEED AND SEISMIC ZONES. SEE YOUR HOME DATA PLATE FOR APPLICABLE ZONES.
5. CONCRETE COMPRESSIVE STRENGTH (FC'): 2500 PSI MINIMUM.
6. CENTERLINE LINE SUPPORTS AND SPACING ARE BASED ON (2) 2X10's SPF#2 ON EACH HALF (4-2X10'S TOTAL).
7. CRAWLSPACE VENTILATION IS NOT REQUIRED WHEN INSULATION IS APPLIED TO CRAWLSPACE WALLS AS REQUIRED BY RESCHECK (CONDITIONED AIR). INSTALLATION OF VENTS IN CRAWLSPACE WALLS WOULD MANDATE INSULATING THE FLOOR SYSTEM PER APPLICABLE THERMAL CALCULATIONS. REFER TO APPLICABLE PRESCRIPTIVE CODES & GUIDELINES. WHEN REQUIRED, ONE VENT SHALL BE PROVIDED WITHIN 3 FEET OF EACH CORNER.
8. FOUNDATION CONSTRUCTION AND TIE DOWN REQUIREMENTS FOR HOMES LOCATED IN 90 MPH OR LESS WIND ZONES MAY USE APPLICABLE PRESCRIPTIVE CODES & GUIDELINES UNLESS NOTED OTHERWISE.

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Joe Shultz

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Builder: 530 Cavco-Crouse | Address: 235 Anthony Grove Rd. Crouse, NC 28033 | Revisions - . | Scale: 1/8" = 1'-0" | Date: 06/03/2025 | Cust: BROWN, JEFFREY | Prod. Code: D9 | Number: 42763B | Order/Plan Number: 2025-1003370 |
| Title: Foundation 2x10 Marriage Line without Stair | | Drawn By: NE | Reference: 2R2010-R | | Dlr: HBV | | | |
| | | | | | S/N: 44850 | Pg.: FD20# | | Run: . |

530094276382025-1003370

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# Load Short Form
## *Entire House*
## AMS of Indiana, Inc.

Job: 2025-1003370(NC)
Date: 6/3/2025
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 Email: eng-ams@comcast.net

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## Project Information

For: The Commodore Corporation
2025-1003370(NC)

## Design Information

| | Htg | Clg |
|---|---|---|
| Outside db (°F) | 10 | 99 |
| Inside db (°F) | 70 | 75 |
| Design TD (°F) | 60 | 24 |
| Daily range | - | M |
| Inside humidity (%) | 50 | 50 |
| Moisture difference (gr/lb) | 48 | 42 |

**Infiltration**

| | |
|---|---|
| Method | Simplified |
| Construction quality | Average |
| Fireplaces | 0 |

### HEATING EQUIPMENT

| | | | |
|---|---|---|---|
| Make | Generic | | |
| Trade | | | |
| Model | AFUE 100 | | |
| AHRI ref | | | |
| Efficiency | | 100 AFUE | |
| Heating input | | 10.8 | kW |
| Heating output | | 36899 | Btuh |
| Temperature rise | | 26 | °F |
| Actual air flow | | 1303 | cfm |
| Air flow factor | | 0.040 | cfm/Btuh |
| Static pressure | | 0.50 | in H2O |
| Space thermostat | | | |

### COOLING EQUIPMENT

| | | | |
|---|---|---|---|
| Make | Generic | | |
| Trade | | | |
| Cond | SEER 14.0 | | |
| Coil | | | |
| AHRI ref | | | |
| Efficiency | | 12.2 EER, 14 SEER | |
| Sensible cooling | | 26872 | Btuh |
| Latent cooling | | 11516 | Btuh |
| Total cooling | | 38388 | Btuh |
| Actual air flow | | 1303 | cfm |
| Air flow factor | | 0.054 | cfm/Btuh |
| Static pressure | | 0.50 | in H2O |
| Load sensible heat ratio | | 0.80 | |

| ROOM NAME | Area (ft²) | Htg load (Btuh) | Clg load (Btuh) | Htg AVF (cfm) | Clg AVF (cfm) |
|---|---|---|---|---|---|
| BA1 | 159 | 2701 | 1161 | 107 | 62 |
| C1 | 80 | 770 | 324 | 30 | 17 |
| G/R | 407 | 4364 | 3229 | 173 | 174 |
| KIT DR | 411 | 5083 | 4803 | 201 | 259 |
| pan | 44 | 897 | 696 | 36 | 37 |
| BA2 | 58 | 1157 | 835 | 46 | 45 |
| UTL | 83 | 2396 | 1322 | 95 | 71 |
| B3 | 204 | 3541 | 2839 | 140 | 153 |
| B2 | 173 | 2307 | 2504 | 91 | 135 |
| FOYER | 56 | 1308 | 549 | 52 | 30 |
| MASTER BED | 252 | 2511 | 1915 | 99 | 103 |
| MEDIA | 213 | 3489 | 2551 | 138 | 137 |
| room 1 | 128 | 2387 | 1479 | 95 | 80 |
| stair | 52 | 0 | 0 | 0 | 0 |

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

| | | | | | | |
|---|---|---|---|---|---|---|
| H | | 92 | 0 | 0 | 0 | 0 |
| Entire House | d | 2412 | 32908 | 24207 | 1303 | 1303 |
| Other equip loads | | | 3991 | 1606 | | |
| Equip. @ 1.04 RSM | | | | 26872 | | |
| Latent cooling | | | | 6442 | | |
| TOTALS | | 2412 | 36899 | 33314 | 1303 | 1303 |

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Joe Shultz

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# Project Summary
## *Entire House*
## AMS of Indiana, Inc.

Job: 2025-1003370(NC)
Date: 6/3/2025
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 Email: eng-ams@comcast.net

## Project Information

For: The Commodore Corporation
2025-1003370(NC)

Notes:

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NTA
6/9/2025
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## Design Information

Weather: Raleigh Executive, NC, US

### Winter Design Conditions

| | | |
|---|---|---|
| Outside db | 10 | °F |
| Inside db | 70 | °F |
| Design TD | 60 | °F |
| Ventilation Method | MJ8 | |

### Summer Design Conditions

| | | |
|---|---|---|
| Outside db | 99 | °F |
| Inside db | 75 | °F |
| Design TD | 24 | °F |
| Daily range | M | |
| Relative humidity | 50 | % |
| Moisture difference | 42 | gr/lb |

### Heating Summary

| | | |
|---|---|---|
| Structure | 28001 | Btuh |
| Ducts (R-4.0) | 4907 | Btuh |
| Central vent (61 cfm) | 3991 | Btuh |
| Outside air | | |
| Humidification | 0 | Btuh |
| Piping | 0 | Btuh |
| Equipment load | 36899 | Btuh |

### Sensible Cooling Equipment Load Sizing

| | | |
|---|---|---|
| Structure | 22046 | Btuh |
| Ducts (R-4.0) | 2161 | Btuh |
| Central vent (61 cfm) | 1606 | Btuh |
| Outside air | | |
| Blower | 0 | Btuh |
| Use manufacturer's data | n | |
| Rate/swing multiplier | 1.04 | |
| Equipment sensible load | 26872 | Btuh |

### Infiltration

| | |
|---|---|
| Method | Simplified |
| Construction quality | Average |
| Fireplaces | 0 |

| | Heating | Cooling |
|---|---|---|
| Area (ft²) | 2412 | 2412 |
| Volume (ft³) | 19300 | 19300 |
| Air changes/hour | 0.32 | 0.16 |
| Equiv. AVF (cfm) | 103 | 51 |

### Latent Cooling Equipment Load Sizing

| | | |
|---|---|---|
| Structure | 2441 | Btuh |
| Ducts | 2291 | Btuh |
| Central vent (61 cfm) | 1711 | Btuh |
| Outside air | | |
| Equipment latent load | 6442 | Btuh |
| **Equipment Total Load (Sen+Lat)** | 33314 | Btuh |
| Req. total capacity at 0.70 SHR | 3.2 | ton |

### Heating Equipment Summary

| | |
|---|---|
| Make | Generic |
| Trade | |
| Model | AFUE 100 |
| AHRI ref | |

| | | |
|---|---|---|
| Efficiency | 100 | AFUE |
| Heating input | 10.8 | kW |
| Heating output | 36899 | Btuh |
| Temperature rise | 26 | °F |
| Actual air flow | 1303 | cfm |
| Air flow factor | 0.040 | cfm/Btuh |
| Static pressure | 0.50 | in H2O |
| Space thermostat | | |

### Cooling Equipment Summary

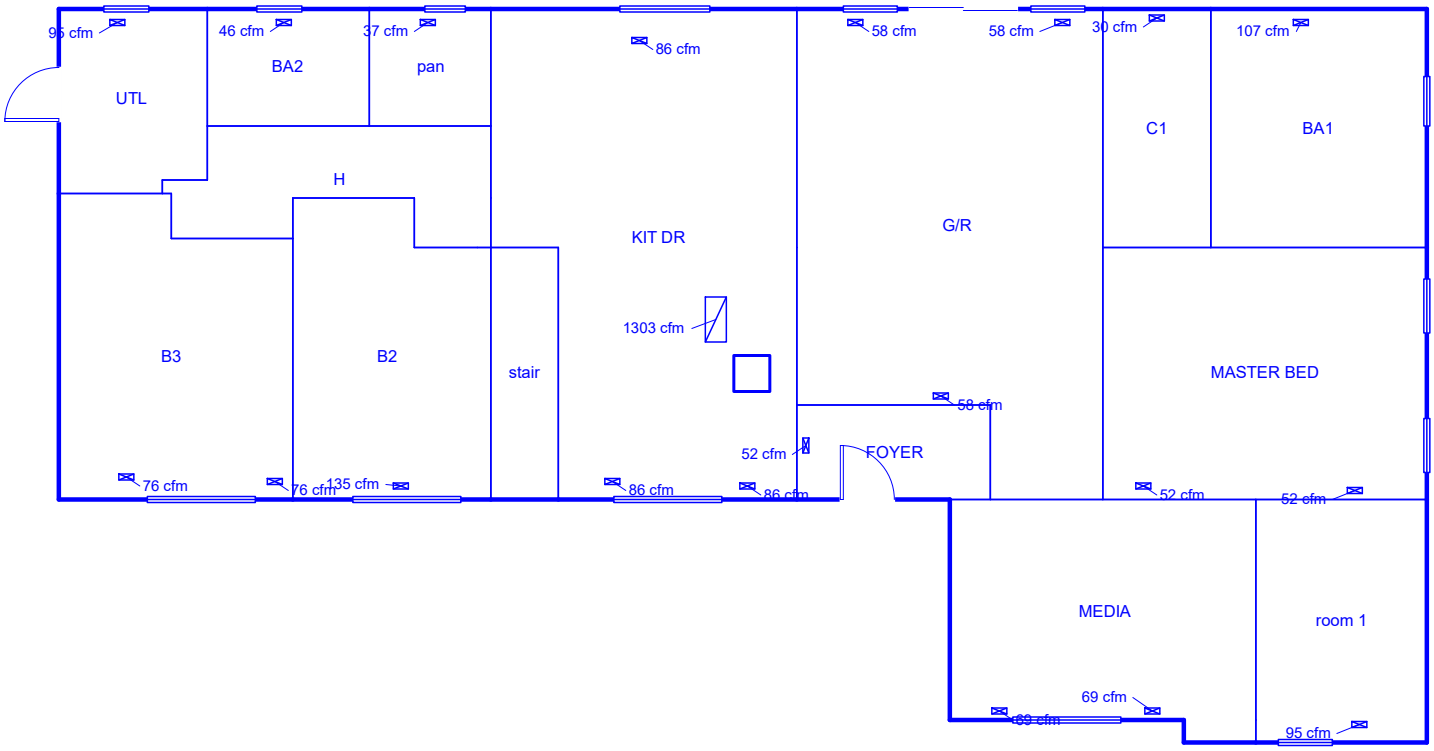
| | |
|---|---|
| Make | Generic |
| Trade | |
| Cond | SEER 14.0 |
| Coil | |
| AHRI ref | |

| | | |
|---|---|---|
| Efficiency | 12.2 EER, 14 SEER | |
| Sensible cooling | 26872 | Btuh |
| Latent cooling | 11516 | Btuh |
| Total cooling | 38388 | Btuh |
| Actual air flow | 1303 | cfm |
| Air flow factor | 0.054 | cfm/Btuh |
| Static pressure | 0.50 | in H2O |
| Load sensible heat ratio | 0.80 | |

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

N

**1ST FLOOR**

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Joe Shultz

| | | |
|---|---|---|
| **Job #: 2025-1003370(NC)**<br>**Performed by AMS of Indiana, Inc. for:**<br>The Commodore Corporation<br>2025-1003370(NC) | **AMS of Indiana, Inc.**<br>3933 E. Jackson Blvd.<br>Elkhart, IN 46516<br>Phone: 574-293-5526 Fax: 574-294-1366<br>eng-ams@comcast.net | Scale: 1 : 128<br>Page 1<br>Right-Suite® Universal 2025<br>25.0.02 RSU56435<br>2025-Jun-04 09:33:14<br>...S\Commodore\2025-1003370(NC)... |

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# Duct System Summary
## *Entire House*
### AMS of Indiana, Inc.

Job: 2025-1003370(NC)
Date: 6/3/2025
By: AMS of Indiana, Inc.

3933 E. Jackson Blvd., Elkhart, IN 46516 Phone: 574-293-5526 Fax: 574-294-1366 Email: eng-ams@comcast.net

## Project Information

For: The Commodore Corporation
2025-1003370(NC)

| | Heating | Cooling |
|---|---|---|
| External static pressure | 0.50 in H2O | 0.50 in H2O |
| Pressure losses | 0.20 in H2O | 0.20 in H2O |
| Available static pressure | 0.30 in H2O | 0.30 in H2O |
| Supply / return available pressure | 0.150 / 0.150 in H2O | 0.150 / 0.150 in H2O |
| Lowest friction rate | 0 in/100ft | 0 in/100ft |
| Actual air flow | 1303 cfm | 1303 cfm |
| Total effective length (TEL) | 0 ft | |

## Supply Branch Detail Table

| Name | Design (Btuh) | Htg (cfm) | Clg (cfm) | Design FR | Diam (in) | H x W (in) | Duct Matl | Actual Ln (ft) | Ftg.Eqv Ln (ft) | Trunk |
|---|---|---|---|---|---|---|---|---|---|---|
| B2-A | c 2504 | 91 | 135 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| B3 | c 1420 | 70 | 76 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| B3-A | c 1420 | 70 | 76 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| BA1 | h 1161 | 107 | 62 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| BA2 | h 835 | 46 | 45 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| C1 | h 324 | 30 | 17 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| FOYER | h 549 | 52 | 30 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| G/R | c 1076 | 58 | 58 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| G/R-A | c 1076 | 58 | 58 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| G/R-B | c 1076 | 58 | 58 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| KIT DR | c 1601 | 67 | 86 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| KIT DR-A | c 1601 | 67 | 86 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| KIT DR-B | c 1601 | 67 | 86 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| MASTER BED | c 957 | 50 | 52 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| MASTER BED-A | c 957 | 50 | 52 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| MEDIA | h 1276 | 69 | 69 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| MEDIA-A | h 1276 | 69 | 69 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| UTL | h 1322 | 95 | 71 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| pan | c 696 | 36 | 37 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |
| room 1 | h 1479 | 95 | 80 | 0 | 0 | 0x 0 | VlFx | 0 | 0 | |

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## Return Branch Detail Table

| Name | Grille Size (in) | Htg (cfm) | Clg (cfm) | TEL (ft) | Design FR | Veloc (fpm) | Diam (in) | H x W (in) | Stud/Joist Opening (in) | Duct Matl | Trunk |
|---|---|---|---|---|---|---|---|---|---|---|---|
| rb2 | 0x 0 | 1303 | 1303 | 0 | 0 | 0 | 0 | 0x 0 | | VlFx | |

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# Compliance Certificate

Project 2025-1003370

| | |
|---|---|
| Energy Code: | **2018 IECC** |
| Location: | **Harnett County, North Carolina** |
| Construction Type: | **Single-family** |
| Project Type: | **New Construction** |
| Project SubType: | **None** |
| Orientation: | **Unspecified** |
| Conditioned Floor Area: | **2,433 ft2** |
| Glazing Area | **11%** |
| Climate Zone: | **4 (3499 HDD)** |
| Permit Date: | |
| Permit Number: | |
| All Electric | **false** |
| Is Renewable | **false** |
| Has Charger | **false** |
| Has Battery: | **false** |
| Has Heat Pump: | **false** |

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Construction Site:
Tbd Baptist Grove Rd
Fuquay-varina, North Carolina
27526

Owner/Agent:
BROWN, JEFFREY
HBV

Designer/Contractor:
Cavco-Crouse
235 Anthony Grove Rd.
Crouse, NC 28033

**Compliance: Passes using UA trade-off**

Compliance: **2.8% Better Than Code** Maximum UA: **426** Your UA: **414** Maximum SHGC: **0.40** Your SHGC: **0.24**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.
It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

## Envelope Assemblies

| Assembly | Gross Area or Perimeter | Cavity R-Value | Cont. R-Value | Prop. U-Factor | Req. U-Factor | Prop. UA | Req. UA |
|---|---|---|---|---|---|---|---|
| Ceiling 1: Flat Ceiling or Scissor Truss | 1,141 | 38.0 | 0.0 | 0.030 | 0.026 | 34 | 30 |
| Ceiling 2 [Between knee walls]: Flat Ceiling or Scissor Truss | 1,292 | 30.0 | 0.0 | 0.035 | 0.026 | 45 | 34 |
| Wall [1walls]: Wood Frame, 16" o.c.<br>Orientation: Right side | 401 | 19.0 | 0.0 | 0.060 | 0.060 | 21 | 21 |
| Window - Hy-Lite 3240 Glass Block {Qty 1}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.58<br>Orientation: Right side | 9 | | | 0.510 | 0.320 | 5 | 3 |
| Window - Lippert SH 3668 {Qty 2}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.23<br>Orientation: Right side | 35 | | | 0.340 | 0.320 | 12 | 11 |

| Assembly | Gross Area or Perimeter | Cavity R-Value | Cont. R-Value | Prop. U-Factor | Req. U-Factor | Prop. UA | Req. UA |
|---|---|---|---|---|---|---|---|
| Wall [1walls]: Wood Frame, 16" o.c.<br>Orientation: Left side | 401 | 19.0 | 0.0 | 0.060 | 0.060 | 23 | 23 |
| Door - Hinged - Exterior - 9 Lite {Qty 1}: null<br>Orientation: Left side | 22 | | | 0.290 | 0.320 | 6 | 7 |
| Wall [1walls]: Wood Frame, 16" o.c.<br>Orientation: Back | 743 | 19.0 | 0.0 | 0.060 | 0.060 | 37 | 37 |
| Door - Sliding Patio {Qty 1}: null<br>Orientation: Back | 40 | | | 0.230 | 0.320 | 9 | 13 |
| Window - Lippert 7112 Transom {Qty 1}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.26<br>Orientation: Back | 6 | | | 0.310 | 0.320 | 2 | 2 |
| Window - Lippert SH 3658 {Qty 2}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.23<br>Orientation: Back | 30 | | | 0.340 | 0.320 | 10 | 10 |
| Window - Lippert 3612 Transom {Qty 2}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.26<br>Orientation: Back | 6 | | | 0.310 | 0.320 | 2 | 2 |
| Window - (2) Lippert SH 3036 {Qty 1}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.23<br>Orientation: Back | 15 | | | 0.340 | 0.320 | 5 | 5 |
| Window - Lippert SH 3036 {Qty 3}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.23<br>Orientation: Back | 23 | | | 0.340 | 0.320 | 8 | 7 |
| Wall [1walls]: Wood Frame, 16" o.c.<br>Orientation: Front | 743 | 19.0 | 0.0 | 0.060 | 0.060 | 34 | 34 |
| Door - Hinged - Exterior - 6 Panel {Qty 1}: Solid<br>Orientation: Front | 22 | | | 0.170 | 0.320 | 4 | 7 |
| Window - (2) Lippert SH 3668 {Qty 4}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.23<br>Orientation: Front | 139 | | | 0.340 | 0.320 | 47 | 44 |
| Window - Lippert SH 3668 {Qty 1}: Vinyl Frame:Double Pane with Low-E<br>SHGC: 0.23<br>Orientation: Front | 17 | | | 0.340 | 0.320 | 6 | 5 |
| Wall [Cape Close Off Kit]: Wood Frame, 24" o.c.<br>Orientation: Unspecified | 200 | 11.0 | 0.0 | 0.087 | 0.060 | 16 | 11 |
| Attic Door: Solid<br>Orientation: Unspecified | 18 | | | 0.460 | 0.320 | 8 | 6 |
| Floor 1: All-Wood Joist/Truss:Over Outside Air | 2,433 | 30.0 | 0.0 | 0.033 | 0.047 | 80 | 114 |

*Compliance Statement:* The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2018 IECC requirements in RES*check* Version : REScheck-Web and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

| N. Edwards - drafter | N. Edwards | 6/3/2025 |
|---|---|---|
| Name - Title | Signature | Date |

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**RES*check* Software Version : REScheck-Web**

# Inspection Checklist

Energy Code: 2018 IECC

Requirements: 0.0% were addressed directly in the RES*check* software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

| Section # & Req.ID | Pre-Inspection/Plan Review | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 103.1, 103.2 [PR1][1] | Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 103.1, 103.2, 403.7 [PR3][1] | Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 302.1, 403.7 [PR2][2] | Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official. | Heating: Btu/hr____<br>Cooling: Btu/hr____ | Heating: Btu/hr____<br>Cooling: Btu/hr____ | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |

**Additional Comments/Assumptions:**

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| | | | | | |
|---|---|---|---|---|---|
| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |

| Section # & Req.ID | Foundation Inspection | Complies? | Comments/Assumptions |
|---|---|---|---|
| 303.2.1 [FO11]2 | A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade. | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.9 [FO12]2 | Snow- and ice-melting system controls installed. | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |

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| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |
|---|---|---|---|---|---|

| Section # & Req.ID | Framing / Rough-In Inspection | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 402.1.1, 402.3.4 [FR1][1] | Door U-factor. | U-____ | U-____ | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | *See the Envelope Assemblies table for values.* |
| 402.1.1, 402.3.1, 402.3.3, 402.5 [FR2][1] | Glazing U-factor (area-weighted average). | U-____ | U-____ | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | *See the Envelope Assemblies table for values.* |
| 303.1.3 [FR4][1] | U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 402.4.1.1 [FR23][1] | Air barrier and thermal barrier installed per manufacturer's instructions. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 402.4.3 [FR20][1] | Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 402.4.5 [FR16][2] | IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.3.1 [FR12][1] | Supply and return ducts in attics insulated >= R-8 where duct is >= 3 inches in diameter and >= R-6 where < 3 inches. Supply and return ducts in other portions of the building insulated >= R-6 for diameter >= 3 inches and R-4.2 for < 3 inches in diameter. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.3.2 [FR13][1] | Ducts, air handlers and filter boxes are sealed with joints/seams compliant with International Mechanical Code or International Residential Code, as applicable. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.3.5 [FR15][3] | Building cavities are not used as ducts or plenums. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.4 [FR17][2] | HVAC piping conveying fluids above 105 ºF or chilled fluids below 55 ºF are insulated to ≥R-3. | R-____ | R-____ | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.4.1 [FR24][1] | Protection of insulation on HVAC piping. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.5.3 [FR18][2] | Hot water pipes are insulated to ≥R-3. | R-____ | R-____ | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |



| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |
|---|---|---|---|---|---|

| Section # & Req.ID | Framing / Rough-In Inspection | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 403.6 [FR19][2] | Automatic or gravity dampers are installed on all outdoor air intakes and exhausts. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |

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| | | | | | |
|---|---|---|---|---|---|
| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |

| Section # & Req.ID | Insulation Inspection | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 303.1 [IN13][2] | All installed insulation is labeled or the installed R-values provided. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 402.1.1, 402.2.6 [IN1][1] | Floor insulation R-value. | R-____<br>☐ Wood<br>☐ Steel | R-____<br>☐ Wood<br>☐ Steel | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | *See the Envelope Assemblies table for values.* |
| 303.2, 402.2.8 [IN2][1] | Floor insulation installed per manufacturer's instructions and in substantial contact with the underside of the subfloor, or floor framing cavity insulation is in contact with the top side of sheathing, or continuous insulation is installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 402.1.1, 402.2.5, 402.2.6 [IN3][1] | Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10). | R-____<br>☐ Wood<br>☐ Mass<br>☐ Steel | R-____<br>☐ Wood<br>☐ Mass<br>☐ Steel | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | *See the Envelope Assemblies table for values.* |
| 303.2 [IN4][1] | Wall insulation is installed per manufacturer's instructions. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |

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| | | | | | |
|---|---|---|---|---|---|
| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |

| Section # & Req.ID | Final Inspection Provisions | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1][1] | Ceiling insulation R-value. | R-____<br>☐ Wood<br>☐ Steel | R-____<br>☐ Wood<br>☐ Steel | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | *See the Envelope Assemblies table for values.* |
| 303.1.1.1, 303.2 [FI2][1] | Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft². | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 402.2.3 [FI22][2] | Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 402.2.4 [FI3][1] | Attic access hatch and door insulation ≥R-value of the adjacent assembly. | R-____ | R-____ | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 402.4.1.2 [FI17][1] | Blower door test @ 50 Pa. <=5 ach in Climate Zones 1-2, and <=3 ach in Climate Zones 3-8. | ACH 50 =____ | ACH 50 =____ | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.3.3 [FI27][1] | Ducts are pressure tested to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure. | ____ cfm/100 ft² | ____ cfm/100 ft² | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.3.4 [FI4][1] | Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection. | ____ cfm/100 ft² | ____ cfm/100 ft² | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.3.2.1 [FI24][1] | Air handler leakage designated by manufacturer at <=2% of design air flow. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.1.1 [FI9][2] | Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.1.2 [FI10][2] | Heat pump thermostat installed on heat pumps. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |
| 403.5.1 [FI11][2] | Circulating service hot water systems have automatic or accessible manual controls. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |



| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |
|---|---|---|---|---|---|

| Section # & Req.ID | Final Inspection Provisions | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 403.6.1 [FI25]2 | All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.1. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.2 [FI26]2 | Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.5.1.1 [FI28]2 | Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermos-syphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists. | APPROVED BY NTA 6/9/2025 Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws. Joe Shultz | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.5.1.2 [FI29]2 | Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.5.2 [FI30]2 | Demand recirculation water systems have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to <= 104ºF. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 403.5.4 [FI31]2 | Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 404.1 [FI6]1 | 90% or more of permanent fixtures have high efficacy lamps. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 404.1.1 [FI23]3 | Fuel gas lighting systems have no continuous pilot light. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |
| 401.3 [FI7]2 | Compliance certificate posted. | | | ☐Complies ☐Does Not ☐Not Observable ☐Not Applicable | |

| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |
|---|---|---|---|---|---|

| Section # & Req.ID | Final Inspection Provisions | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---|---|---|---|---|---|
| 303.3 [FI18][3] | Manufacturer manuals for mechanical and water heating systems have been provided. | | | ☐Complies<br>☐Does Not<br>☐Not Observable<br>☐Not Applicable | |

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| | | | | | |
|---|---|---|---|---|---|
| 1 | High Impact (Tier 1) | 2 | Medium Impact (Tier 2) | 3 | Low Impact (Tier 3) |

# 2018 IECC Energy Efficiency Certificate

| Insulation Rating | R-Value |
|---|---|
| Above-Grade Wall | 19.00 |
| Below-Grade Wall | 0.00 |
| Floor | 30.00 |
| Ceiling / Roof | 30.00 |
| Ductwork (unconditioned spaces): | _____ |

| Glass & Door Rating | U-Factor | SHGC |
|---|---|---|
| Window | 0.34 | 0.23 |
| Door | 0.23 | |

| Heating & Cooling Equipment | Efficiency |
|---|---|
| Heating System:_____ | _____ |
| Cooling System:_____ | _____ |
| Water Heater:_____ | _____ |

**Name:** _____ **Date:**_____

**Comments**

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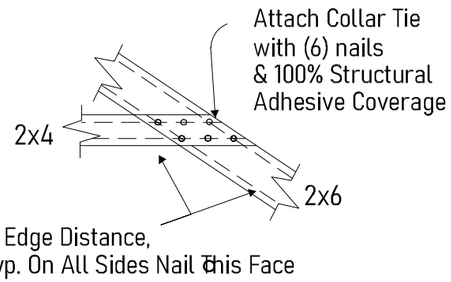
| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 32802 | A098601 | RIGID COLLAR TIE CONNECTION DETAILS 1 | | 1 | UFP ENGINEERING<br>Bulletin 05-02<br>REF # 2001092 |

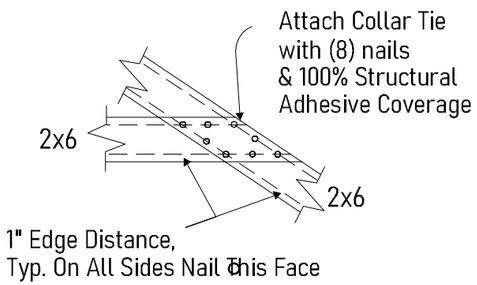
Universal Forest Products Inc., Grand Rapids, MI 49525,

## 2x4 Collar Tie Nailed to 2x6 Chord



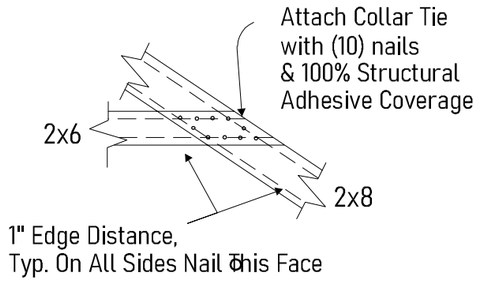

Detail (A)

## 2x6 Collar Tie Nailed to 2x6 Chord



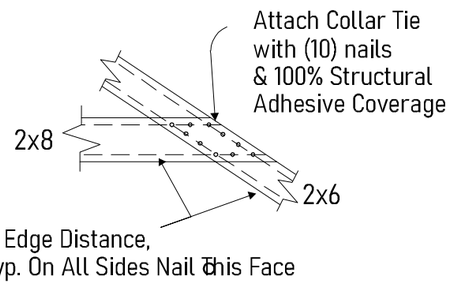

Detail (B)

## 2x6 Collar Tie Nailed to 2x8 Chord



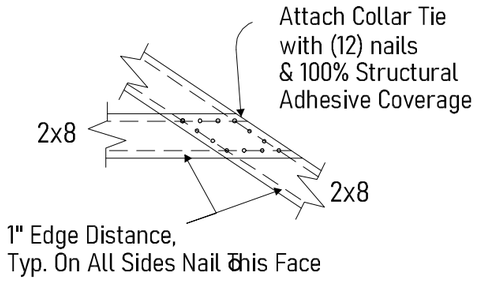

Detail (C)

## 2x8 Collar Tie Nailed to 2x6 Chord




Detail (D)

## 2x8 Collar Tie Nailed to 2x8 Chord

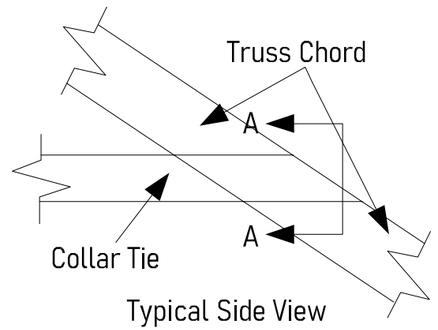



Detail (E)

## Power Driven Nails Rigid Collar Tie Connection Details

A) Side member shall be fastened with structural adhesive that meets the requirements of ASTM-2559. Maximum wood to wood gap = 1/16".
B) Bostitch .131" Dia. x 3" nails (or equal)

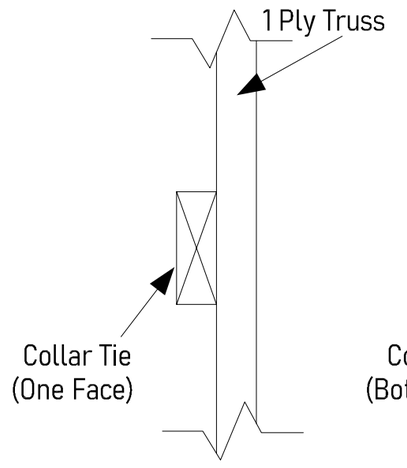
This Bulletin to be used only in conjunction with UFPI truss designs which specifically refer to this Bulletin by number for collar tie field fastening.



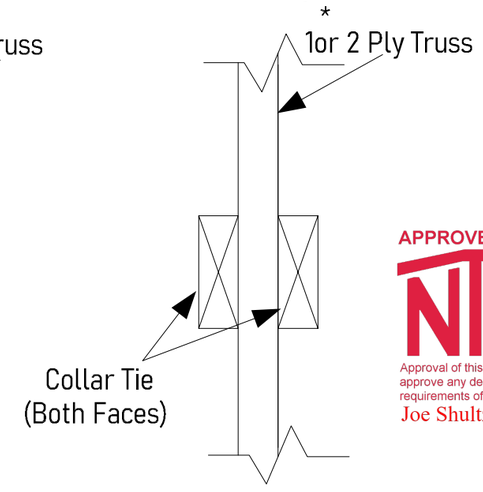

Typical Side View

### Acceptable Alternate Applications

See truss print for which detail is actually used




Section A-A




Section A-A

* FOR 1 PLY, OFFSET NAILS WITH RESPECT TO EACH FACE.

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Joe Shultz

**WARNING - Verify design parameters and READ NOTES**

Universal Forest Products, Inc.
PHONE (616)-364-6161 FAX (616)-365-0060
2801 EAST BELTLINE RD, NE
GRAND RAPIDS, MI 49505

This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication,quality control, storage, delivery, erection and bracing, consult QST-88 Quality Standard, DSB-89 Bracing Specification, and HIB-91 Handling Installing and Bracing Recommendation avaliable from Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53719

J:\support\Mitek Supp\templates\MiTekAddendum.pdf

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 112915 | CCB32621 | HINGED ATTIC | 1 | 1 | Commodore (R28-12Fc) 27' 4" wide 12/12 cape<br>Designed by ATM 274 |

UFP Industries Inc., Grand Rapids, MI 49525, Andrew Muisiner — 8.620 e Sep 22 2022 MiTek Industries, Inc. Tue Apr 4 07:13:30 2023 Page 1



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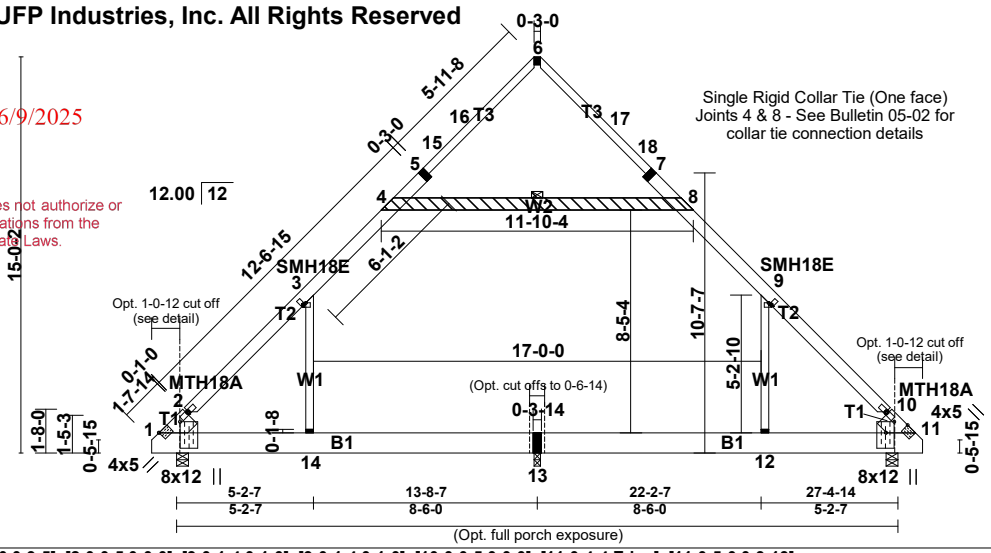
Joe Shultz




**Optional 1-0-12 heel cut off**

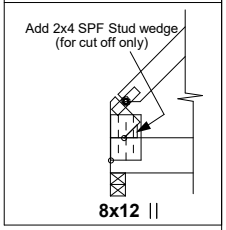



**Plate Offsets (X,Y)--** [1:0-5-0,0-9-5], [2:0-0-5,0-0-0], [3:0-1-4,0-1-0], [9:0-1-4,0-1-0], [10:0-0-5,0-0-0], [11:0-4-4,Edge], [11:0-5-0,0-3-13]

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SPACING-: 2-0-0 | | | SPACING-: 1-4-0 | | | SPACING- | 2-0-0 | | CSI. | | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
| LOADING (psf) | | | LOADING (psf) | | | Plate Grip DOL | 1.15 | | TC | 0.72 | | Vert(LL) | 0.32 | 13-14 | >519 | 240 | MT20 | 197/144 |
| TCLL | 17.8 | | TCLL | 26.7 | | Lumber DOL | 1.15 | | BC | 0.76 | | Vert(CT) | -0.33 | 13-14 | >499 | 180 | MT18HS | 197/144 |
| (Ground Snow=30.0) | | | (Ground Snow=45.0) | | | Rep Stress Incr | YES | | WB | 0.83 | | Horz(CT) | 0.01 | 11 | n/a | n/a | | |
| TCDL | 10.0 | | TCDL | 15.0 | | Code IBC2021/TPI2014 | | | Matrix-R | | | Attic | -0.19 | 13-14 | 1092 | 360 | Weight: 198 lb | |
| BCLL | 0.0 * | | BCLL | 0.0 * | | | | | | | | | | | | | FT = 0% | |
| BCDL | 10.0 | | BCDL | 15.0 | | | | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x10 SP No.2 or 2x10 SPF No.2 *Except*
T2: 2x6 SP No.2 or 2x6 SPF No.2, T3: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x10 SP No.2 or 2x10 SPF No.2
WEBS 2x4 SPF Stud *Except* W2: 2x6 SP No.2 or 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-10-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-11-2 oc bracing.
WEBS 1 Row at midpt 4-8

**REACTIONS.** (lb/size) 1=985/0-5-8 (min. 0-1-12), 11=985/0-5-8 (min. 0-1-12), 13=268/0-3-0 (min. 0-1-8)
Max Horz 1=695(LC 9)
Max Uplift1=-522(LC 13), 11=-519(LC 12), 13=-86(LC 12)
Max Grav 1=1146(LC 23), 11=1143(LC 22), 13=985(LC 18)

**FORCES.** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1368/643, 2-3=-1257/650, 3-4=-935/680, 4-5=-395/186, 5-15=-338/194, 15-16=-275/198, 6-16=-208/212, 6-17=-205/210, 17-18=-270/196, 7-18=-332/191, 7-8=-395/185, 8-9=-930/676, 9-10=-1249/645, 10-11=-1362/637
BOT CHORD 1-14=-275/904, 13-14=-274/904, 12-13=-274/904, 11-12=-273/903
WEBS 9-12=-328/483, 3-14=-331/486, 4-8=-794/686

**REQUIRED FIELD JOINT CONNECTIONS** - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
4=794/686/149/7730, 5=353/191/215/0, 6=162/215/217/0, 7=352/188/217/0, 8=794/686/149/7709, 12=328/483/0/0, 13=274/904/530/0, 14=331/486/0/0

**NOTES-**
1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph @24in o.c.; TCDL=4.0psf; BCDL=4.0psf; (Alt. 180mph @16in o.c.; TCDL=6.0psf; BCDL=6.0psf); h=36ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior(1) 3-0-8 to 10-7-11, Exterior(2R) 10-7-11 to 16-7-11, Interior(1) 16-7-11 to 24-4-6, Exterior(2E) 24-4-6 to 27-4-6 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pg=30.0 psf; Ps=17.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=0.77; Ct=1.10
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) See HINGE PLATE DETAILS for plate placement.
7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
8) All additional member connections shall be provided by others for forces as indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit b the bottom chord and any other members.
11) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-8
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 13-14, 12-13
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 522 lb uplift at joint 1, 519 lb uplift at joint 11 and 86 lb uplift at joint 13.
14) Attic room checked for L/360 deflection.
15) This truss is designed in accordance with the 2021 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
16) This truss is designed in accordance with the 2018 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
17) This truss is designed in accordance with the 2015 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
18) Take precaution to keep the chords in plane, any bending or twisting of the hinge plate must be repaired before the building is put into se
19) The field-installed members are an integral part of the truss design. Retain a design professional to specify final field connections and ten supports. All field-installed members must be properly fastened prior to applying any loading to the truss. This design anticipates the fina position.
20) Based on: CCB32611. Changes: IBC 2021, 150mph wind, 36' mean height.

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — KEVIN W. FREEMAN — ENGINEER — PE-054541-E

4/6/2023

The professional engineering seal indicates that a licensed professional engineer has designed the truss under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.



UFP Industries, Inc.
PHONE (616)-364-6161
2801 EAST BELTLINE RD, NE
GRAND RAPIDS, MI 49525

UFP INDUSTRIES

| Job | Truss | MFG | Customer |
|---|---|---|---|
| 112915 | CCB32621 | 315 | COMMODORE |

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NTA
6/9/2025
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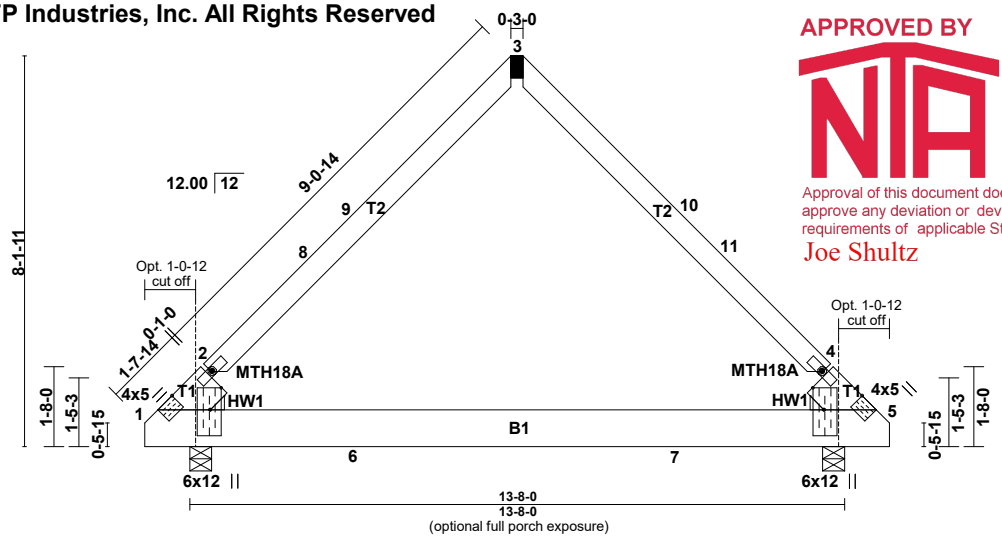
Joe Shultz

| Job | Truss | Truss Type | Qty | Ply | COMMODORE (RH422T) |
|---|---|---|---|---|---|
| 112830 | P1595413 | HINGED COMMON | 1 | 1 | 13' 8"w 12/12 dbl hinge (11-1/4" OH's) Designed by ATM 274 |

UFP Industries Inc., Grand Rapids, MI 49525, Andrew Muisiner — 8.620 e Sep 22 2022 MiTek Industries, Inc. Thu Mar 30 13:02:48 2023 Page 1 of 1



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Joe Shultz

Plate Offsets (X,Y)-- [1:0-4-4,Edge], [1:0-5-8,0-2-12], [2:0-0-4,0-0-0], [4:0-0-4,0-0-0], [5:0-5-8,0-2-12], [5:0-4-4,Edge]

| SPACING-: 2-0-0 | SPACING-: 1-4-0 | | | | | | |
|---|---|---|---|---|---|---|---|
| LOADING (psf) | LOADING (psf) | SPACING- 2-0-0 | CSI. | DEFL. in (loc) l/defl L/d | PLATES GRIP |
| TCLL 17.8 | TCLL 26.7 | Plate Grip DOL 1.15 | TC 0.70 | Vert(LL) -0.19 1-5 >865 240 | MT20 197/144 |
| (Ground Snow=30.0) | (Ground Snow=45.0) | Lumber DOL 1.15 | BC 0.63 | Vert(CT) -0.30 1-5 >545 180 | MT18HS 197/144 |
| TCDL 10.0 | TCDL 15.0 | Rep Stress Incr YES | WB 0.00 | Horz(CT) 0.00 5 n/a n/a | |
| BCLL 0.0 * | BCLL 0.0 * | Code IBC2021/TPI2014 | Matrix-R | | Weight: 115 lb |
| BCDL 10.0 | BCDL 15.0 | | | | FT = 0% |

**LUMBER-**
TOP CHORD 2x10 SP No.2 or 2x10 SPF No.2 *Except* T2: 2x6 SP No.2 or 2x6 SPF No.2
BOT CHORD 2x10 SP No.2 or 2x10 SPF No.2
WEDGE Left: 2x4 SPF Stud , Right: 2x4 SPF Stud

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-10-10 oc bracing.

**REACTIONS.** (lb/size) 1=513/0-5-8 (min. 0-1-8), 5=513/0-5-8 (min. 0-1-8)
Max Horz 1=-359(LC 8)
Max Uplift1=-303(LC 13), 5=-301(LC 12)
Max Grav 1=668(LC 3), 5=667(LC 4)

**FORCES.** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-507/399, 2-8=-358/327, 8-9=-300/332, 3-9=-296/345, 3-10=-291/342, 10-11=-298/329, 4-11=-353/325, 4-5=-507/400
BOT CHORD 1-6=-133/276, 6-7=-133/276, 5-7=-133/276

**REQUIRED FIELD JOINT CONNECTIONS** - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
3=246/349/358/0

**NOTES-**
1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph @24in o.c.; TCDL=4.0psf; BCDL=4.0psf; (Alt. 180mph @16in o.c.; TCDL=6.0psf; BCDL=6.0psf); h=36ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior(1) 3-0-8 to 3-9-4, Exterior(2R) 3-9-4 to 9-9-4, Interior(1) 9-9-4 to 10-7-8, Exterior(2E) 10-7-8 to 13-7-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pg=30.0 psf; Ps=17.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=0.77; Ct=1.10
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) See HINGE PLATE DETAILS for plate placement.
7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
8) All additional member connections shall be provided by others for forces as indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit b the bottom chord and any other members, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 303 lb uplift at joint 1 and 301 lb uplift at joint
12) This truss is designed in accordance with the 2021 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
13) This truss is designed in accordance with the 2018 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
14) This truss is designed in accordance with the 2015 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
15) Temporary supports are required to maintain the bottom chord in a level position during storage, transportation, and setup. Retain a desi professional to specify all temporary bracing to support the truss until setup is complete. Temporary support(s) must not be removed unt field connections are completed.
16) Take precaution to keep the chords in plane, any bending or twisting of the hinge plate must be repaired before the building is put into se
17) The field-installed members are an integral part of the truss design. Retain a design professional to specify final field connections and ten supports. All field-installed members must be properly fastened prior to applying any loading to the truss. This design anticipates the fina position.
18) Based on: P1595410. Changes: IBC 2021, 150mph wind, SP/SPF lower top chords.


3/30/2023

The professional engineering seal indicates that a licensed professional engineer has designed the truss under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.



UFP Industries, Inc.
PHONE (616)-364-6161
2801 EAST BELTLINE RD, NE
GRAND RAPIDS, MI 49525

UFP INDUSTRIES

| Job | Truss | MFG | Customer |
|---|---|---|---|
| 112830 | P1595413 | 315 | COMMODORE |

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APPROVED BY
NTA
6/9/2025

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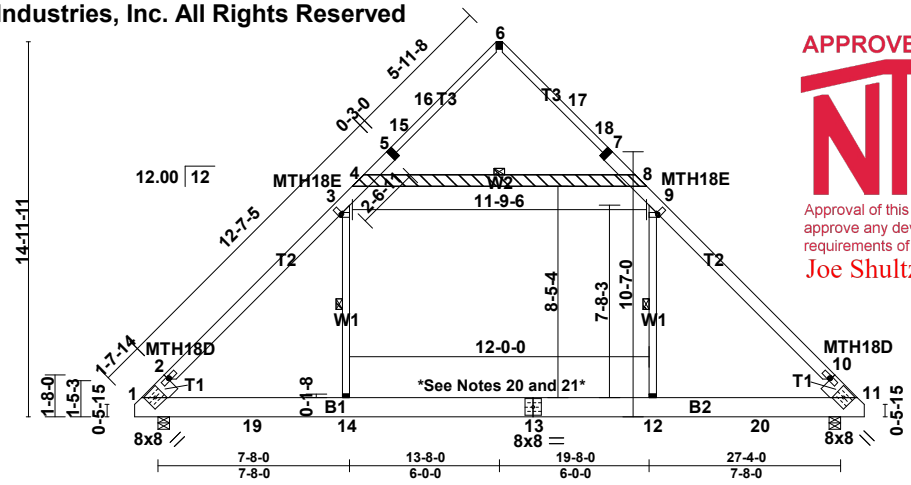
Joe Shultz

| Job | Truss | Truss Type | Qty | Ply | |
|---|---|---|---|---|---|
| 112740 | CCB33046 | HINGED ATTIC | 1 | 1 | COMMODORE (R274-12H)<br>27'4"w 12/12 transverse (11-1/4" OH)<br>Designed by ATM 274 |

UFP Industries Inc., Grand Rapids, MI 49525, Andrew Muisiner — 8.620 e Sep 22 2022 MiTek Industries, Inc. Thu Mar 23 07:17:35 2023 Page 1 of 1



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Joe Shultz

Plate Offsets (X,Y)-- [2:0-0-11,0-0-0], [3:0-0-11,0-1-2], [9:0-0-11,0-1-2], [10:0-0-11,0-0-0]

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SPACING-: 2-0-0<br>LOADING (psf)<br>TCLL 17.8<br>(Ground Snow=30.0)<br>TCDL 10.0<br>BCLL 0.0 *<br>BCDL 10.0 | SPACING-: 1-4-0<br>LOADING (psf)<br>TCLL 26.7<br>(Ground Snow=45.0)<br>TCDL 15.0<br>BCLL 0.0 *<br>BCDL 15.0 | SPACING- 2-0-0<br>Plate Grip DOL 1.15<br>Lumber DOL 1.15<br>Rep Stress Incr YES<br>Code IBC2021/TPI2014 | CSI.<br>TC 0.84<br>BC 0.88<br>WB 0.61<br>Matrix-R | DEFL. in (loc) l/defl L/d<br>Vert(LL) 0.41 1-14 >804 240<br>Vert(CT) -0.39 12-14 >835 180<br>Horz(CT) 0.02 11 n/a n/a<br>Attic -0.16 12-14 900 360 | PLATES GRIP<br>MT20 197/144<br>MT18HS 197/144<br>Weight: 203 lb<br>FT = 0% |

**LUMBER-**
TOP CHORD 2x10 SP No.2 or 2x10 SPF No.2 *Except*
T2: 2x6 SP No.2 or 2x6 SPF No.2, T3: 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x10 SP No.2 or 2x10 SPF No.2
WEBS 2x4 SPF Stud *Except* W2: 2x6 SP No.2 or 2x6 SPF No.2

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-6-8 oc bracing.
WEBS 1 Row at midpt 9-12, 3-14, 4-8

**REACTIONS.** (lb/size) 1=1091/0-5-8 (min. 0-2-6), 11=1091/0-5-8 (min. 0-2-6)
Max Horz 1=-815(LC 7)
Max Uplift1=-573(LC 10), 11=-571(LC 9)
Max Grav 1=1532(LC 3), 11=1532(LC 4)

**FORCES.** (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-1504/736, 2-3=-1503/777, 3-4=-1062/674, 4-5=-393/187, 5-15=-338/194, 15-16=-275/198, 6-16=-208/212, 6-17=-205/210, 17-18=-269/196, 7-18=-332/191, 7-8=-394/185, 8-9=-1062/674, 9-10=-1666/774, 10-11=-1504/731
BOT CHORD 1-19=-340/1075, 14-19=-340/1075, 13-14=-339/1076, 12-13=-339/1076, 12-20=-339/1075, 11-20=-339/1075
WEBS 9-12=-386/793, 3-14=-386/793, 4-8=-978/740

**REQUIRED FIELD JOINT CONNECTIONS** - Maximum Compression (lb)/ Maximum Tension (lb)/ Maximum Shear (lb)/ Maximum Moment (lb-in)
4=978/740/53/0, 5=353/191/215/0, 6=162/215/217/0, 7=352/188/217/0, 8=978/740/53/0, 12=386/793/0/0, 14=386/793/0/0

**NOTES-**
1) Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=119mph @24in o.c.; TCDL=4.0psf; BCDL=4.0psf; (Alt. 180mph @16in o.c.; TCDL=6.0psf; BCDL=6.0psf); h=36ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-0-8 to 3-0-8, Interior(1) 3-0-8 to 10-7-4, Exterior(2R) 10-7-4 to 16-7-4, Interior(1) 16-7-4 to 24-3-8, Exterior(2E) 24-3-8 to 27-3-8 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-16; Pg=30.0 psf; Ps=17.8 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat C; Partially Exp.; Ce=1.0; Cs=0.77; Ct=1.10
3) Roof design snow load has been reduced to account for slope.
4) Unbalanced snow loads have been considered for this design.
5) All plates are MT20 plates unless otherwise indicated.
6) See HINGE PLATE DETAILS for plate placement.
7) Provisions must be made to prevent lateral movement of hinged member(s) during transportation.
8) All additional member connections shall be provided by others for forces as indicated.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit b the bottom chord and any other members, with BCDL = 10.0psf.
11) Ceiling dead load (5.0 psf) on member(s). 3-4, 8-9, 4-8
12) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 12-14
13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 573 lb uplift at joint 1 and 571 lb uplift at joint
14) Attic room checked for L/360 deflection.
15) This truss is designed in accordance with the 2021 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
16) This truss is designed in accordance with the 2018 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
17) This truss is designed in accordance with the 2015 IBC Sec 2306.1 and referenced standard ANSI/TPI 1
18) Take precaution to keep the chords in plane, any bending or twisting of the hinge plate must be repaired before the building is put into se
19) The field-installed members are an integral part of the truss design. Retain a design professional to specify final field connections and ten supports. All field-installed members must be properly fastened prior to applying any loading to the truss. This design anticipates the fina position.
20) Temporary supports are required to maintain the bottom chord in a level position during storage, transportation, and setup. Retain a design professional to specify all temporary bracing to support the truss until setup is complete. Temporary support(s) must not be removed until all field connections are completed.
21) The bottom chord must be laterally braced during shipment and setup to prevent damage to the splice plate.
22) Based on: CCB33030. Changes: IBC 2021.


3/23/2023

The professional engineering seal indicates that a licensed professional engineer has designed the truss under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.



UFP Industries, Inc.
PHONE (616)-364-6161
2801 EAST BELTLINE RD, NE
GRAND RAPIDS, MI 49525

UFP INDUSTRIES

| Job | Truss | MFG | Customer |
|---|---|---|---|
| 112740 | CCB33046 | 315 | COMMODORE |

The professional engineering seal indicates that a licensed professional has reviewed the design under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use a design in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.










APPROVED BY
NTA
6/9/2025
Approval of this document does not authorize or approve any deviation or deviations from the requirements of applicable State Laws.
Joe Shultz

# NORTH CAROLINA
# MODULAR PLANS REVIEW CHECKLIST

 REVISED 1-30-2025

| | | |
|---|---|---|
| **Manufacturer** | | R-Anell Housing Group |
| **Model number/name** | | 2025-1003370 |
| **3rd Party** | | NTA |
| **Review Date** | | 6/9/25 |
| **Reviewer** | | Joe Shultz |
| | | **Plan Sheet Page # and NOTES** |
| | **QC MANUAL** (current and complete) | yes |
| | | |
| | **APPENDIX B** (required and attached) | N/A - Does Not Apply to Residential Modulars |
| | | |
| | **PLAN SHEETS** | |
| | Each plan sheet third-party stamped with approver's name | yes |
| | Each plan sheets is numbered and/or indexed | yes |
| | | |
| | **GENERAL (cover sheet)** | |
| | Code References | Cover sheet |
| | Statement regarding connection to public utilities | Cover sheet |
| | Statement regarding bathrooms if not included | NA |
| | Construction type | Cover sheet - 5B (Wood Frame - Unprotected) |
| | Occupancy classification | Cover sheet - Single Family Residential |
| | Fire resistance ratings (if required) | NA |
| | Floor live load | Cover sheet |
| | Roof live load | Cover sheet |
| | Design wind velocity | Cover sheet |
| | Seismic information (commercial projects) | NA |
| | Thermal zones | Cover sheet |
| | Notice to inspections department regarding items to be site inspected | Cover sheet |
| | | |
| | **FLOOR PLANS** | |
| | Interior and exterior wall layouts | Page FP |
| | Door and window schedule | Schedules and General Notes Page |
| | Light and Ventilation requirements | Schedules and General Notes Page |
| | Attic access (size and location) | Page FP |
| | Non-prescriptive headers | N/A |
| | Safety glazing requirements | Shown on floor plan with "S" symbol |
| | Fire rating of Exterior walls (if applicable) | NA |
| | | |
| | **EXTERIOR ELEVATIONS** | |
| | Exterior materials | Page EL |
| | Attic ventilation requirements | Page XS |
| | | |
| | **PLUMBING** | |
| | Plan | Pages WH, WC, DL, DN, & GA |
| | All fixtures furnished by mfg. shown on plans | Pages WH, WC, DL, DN, GA (references design manual |
| | Materials (water supply & distribution, DWV, storm drainage) | Pages WH, WC, DL, DN, & GA |
| | Supply and waste risers, including DWV system (generic) beneath the building. | Pages WH, WC, DL, DN, & GA |
| | Water heater (type and capacity) | Electric 50 gal |
| | | |
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# NORTH CAROLINA
# MODULAR PLANS REVIEW CHECKLIST

 REVISED 1-30-2025

| | | Plan Sheet Page # and NOTES |
|---|---|---|
| | **MECHANICAL** | |
| | Design calculations | N/A |
| | Installed unit capacity | ResCheck |
| | Supply and returns (locations and sizes) | Pages HS & HR |
| | Duct sizes | Page HS |
| | Specifications (units, ducts) | Page HS (reference design manual) |
| | All appliances furnished by mfg. shown on plans | Page HS (reference design manual) |
| | | |
| | **ELECTRICAL** | |
| | Plan | Page EP |
| | Location of all electrical boxes | Page EP |
| | Electrical panel location | Page EP |
| | Note regarding main disconnect (if applicable) | Page NG |
| | Exterior lighting and receptacles | Page EP |
| | Ground level receptacles (if applicable) | Page EP |
| | Smoke detector location(s) | Page EP |
| | Electrical load calculations | Page NG |
| | Electrical panel layout (breaker and wire sizes, circuit schedule) | Page NG |
| | Panel and service entrance sizes | Page NG |
| | All fixtures furnished by mfg. shown on plans | Page EP |
| | | |
| | **ACCESSIBILITY** | |
| | **(for other than 1 & 2 family dwellings)** | |
| | Entrances and means of egress | N/A |
| | Doors, doorways, and door hardware | N/A |
| | Stairs and handrails | N/A |
| | Toilet rooms, plumbing fixtures, grab bars, etc | N/A |
| | Bathrooms and shower rooms | N/A |
| | Occupancy specific requirements | N/A |
| | Multi-family dwellings: Type A and B units | N/A |
| | | |
| | **FLOOR X-SECTION** | |
| | Joists and beam sizes and spacing | Page XS |
| | Materials species and grade | Page XS |
| | Sheathing, decking, and concrete as applicable | Page XS |
| | Fastening instructions | Page XS |
| | Insulation | ResCheck |
| | Details as required for clarification | N/A |
| | | |
| | **WALL X-SECTION** | |
| | Stud and column sizes and spacing | Page XS |
| | Materials species and grade | Page XS |
| | Sheathing and bracing | Page XS |
| | Headers and lintels | Page XS |
| | Finishes | Page XS |
| | Fastening instructions | Cover Sheet (references Installation Manual) |
| | Insulation | ResCheck |
| | Details as required for clarification | ResCheck |
| | | |
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# NORTH CAROLINA
# MODULAR PLANS REVIEW CHECKLIST

 REVISED 1-30-2025

| | | Plan Sheet Page # and NOTES |
|---|---|---|
| | **CEILING / ROOF X-SECTION** | |
| | Truss, rafter, and beam spacing | Page XS, Cover Sheet, truss dwgs. |
| | Lumber species and grade | Design Manual |
| | Sheathing and decking | Page XS |
| | Finishes | Page XS |
| | Fastening instructions | Installation Manual |
| | Insulation | ResCheck |
| | Details including NC sealed truss designs or manual reference | Design Manual |
| | | |
| | **FOUNDATION PLAN** | |
| | Footings, pier, and curtain wall locations and specifications | Page FD20# & Installation Manual |
| | X-sections with dimensions | Page FD20# & Installation Manual |
| | Anchorage - sill plate to piers and curtain wall | Page FD20# & Installation Manual |
| | Anchorage - building to sill plate | Page FD20# & Installation Manual |
| | Anchorage - tie downs (lateral and longitudinal) | Page FD20# & Installation Manual |
| | Soil bearing capacity | Page FD20# & Installation Manual |
| | Minimum concrete compressive strength | Page FD20# & Installation Manual |
| | Mortar type | Page FD20# & Installation Manual |
| | Ventilation requirements (with and without vapor barrier) | Page FD20# & Installation Manual |
| | Crawl space access requirements | Page FD20# & Installation Manual |
| | | |
| | **ENERGY COMPLIANCE** | |
| | Demonstrated compliance | ResCheck |
| | | |
| | **SET-UP INSTRUCTIONS** | |
| | Floor and ceiling connections | Chapter 5 of Installation Manual |
| | Marriage wall connections | Chapter 5 of Installation Manual |
| | Roof set-up and connection | Chapter 5 of Installation Manual |
| | Plumbing connections | Chapter 8.2 of Installation Manual |
| | Mechanical connections | Chapter 8.5 of Installation Manual |
| | Electrical connections | Chapter 8.1 of Installation Manual |
| | Fire stopping | not specifically addressed in installation manual (inherent in design) |
| | Air infiltration elimination | not specifically addressed in installation manual (part IRC requirements) |
| | Notice to inspections department attachment if set-up instructions are by attachment | Cover Sheet |
| | | |
| | **ITEMS NOT INSPECTED IN PLANT** | |
| | List of items not inspected by 3rd. Party | Cover Sheet |
| | Notice to inspections department | Code page |