THIS PLAN HAS BEEN DRAWN TO CONFORM TO THE 2018 NORTH CAROLINA RESIDENTIAL CODE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO BEGGINING WORK. CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL STATE AND LOCAL BUILDING CODES AND ORDINANCES. KADS CUSTOM HOME DESIGNS ASSUMES NO LIABILITY FOR SITE CONDITIONS, CONSTRUCTION METHODS OR ANY DEVIATION OF THESE PLANS.

NOTE:
ALL WINDOWS TO BE INSTALLED MUST MEET A MAXIMUM OF .32 U VALUE OR BETTER, UNLESS ENERGY CALCULATIONS ARE SUBMITTED WITH PLANS PROVIDED BY BUILDER AT TIME OF PLAN REVIEW.

STRUCTURAL NOTES

1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

2) DESIGN LOADS:

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (DL & LL)
ALL FLOORS	40	10	L/360
ATTIC (pull down access)	20	10	L/240
ATTIC (no access)	10	5	L/240
EXTERNAL BALCONY	60	10	L/360
ROOF	20	10	L/180
ROOF TRUSS	20	20	L/240
WIND LOAD	[BASED ON 120 MPH (3-second gusts)]		

3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE (UNO).

5) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2012 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT

6) ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI) UNO.
ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL.

7) ALL LOAD BEARING HEADERS SHALL BE (2)2x10 (UNO). ALL WINDOW AND DOOR HEADERS SHALL BE SUPPORTED BY (1) JACK STUD AND (1) KING STUD AT EACH END UNLESS NOTED. ALL OTHER BEAMS SHALL BE SUPPORTED BY 2 STUDS OR THE AMOUNT OF STUDS REQUIRED FOR FULL BEARING AT EACH END UNLESS NOTED. POINT LOADS (STIFF KNEES, ETC.) SHALL CONSIST OF 3 STUDS UNLESS NOTED. ALL SUPPORTS OF 3 STUDS OR MORE SHALL BE TRANSFERRED THROUGH EACH FLOOR TO THE FOUNDATION.

8) ALL EXTERIOR WALLS TO BE SHEATHED WITH MIN. 7/16" WOOD STRUCTURAL PANELS FASTNED WITH 8D NAILS 6" O.C. AT EDGES AND 12" O.C. AT INT. SUPPORTS. BLOCKING SHALL BE INSTALLED IF LESS THAN 50 PERCENT OF THE WALL LENGTH IS SHEATHED. WHERE BLOCKING IS REQ'D, ALL PANELS SHALL BE FASTENED AT 3" O.C AT EDGES AND 6" O.C. AT INT. SUPPORTS.

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

10) ANCHOR BOLT PLACEMENT PER SECTION R403.1.6. 1/2" DIAMETER ANCHOR BOLTS SPACED AT 6'-0" O/C AND PLACED 12" FROM THE END OF EACH PLATE SECTION

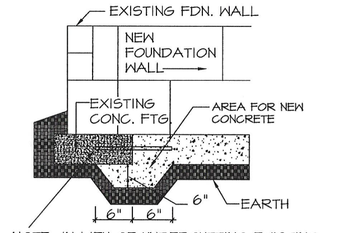
11) FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 406 AND 406 OF 2012 NC BUILDING CODE

12) WALL AND ROOF CLADDING VALUES:
WALL CLADDING SHALL BE DESIGNED FOR A 24.1 SQ.FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE
ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:
45.5 LBS/SQFT FOR ROOF PITCHES OF 0/12 TO 2.25/12
34.8 LBS/SQFT FOR ROOF PITCHES OF 2.25/12 TO 7/12
21.0 LBS/SQFT FOR ROOF PITCHES OF 7/12 TO 12/12
** MEAN ROOF HEIGHT 30' OR LESS

13) FOR ROOF SLOPES FROM 2:12 THROUGH 4:12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER

14) IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQ. FTG. ARE CORRECT PRIOR TO CONSTRUCTION. DESIGNER IS NOT RESPONSIBLE FOR DIMENSIONING OR SQ. FTG. ERRORS ONCE CONSTRUCTION BEGINS

THIS PLAN SHALL BE CONTINUOUSLY BRACED WITH WOOD STRUCTURAL PANELS PER SECTION R602.10.3 OF THE NC RESIDENTIAL BUILDING CODE. NOTE ALL WALL BRACING LINES SATISFY THE MINIMUM AMOUNTS OF WALL BRACING PER CODE. GARAGE DOOR HEADER SHALL BE CONSTRUCTED PER FIGURE R602.10.1, METHOD PF.



NOTE: IN LIEU OF UNDERCUTTING EXISTING FTG, USE (2) #4 DOWELS 12" LONG AT EACH JUNCTION BETWEEN NEW & EXISTING FTG.

NEW/EXISTING FOUNDATION DETAIL
ELEVATION (NTS)

CRAWL SPACE VENTILATION

PROVIDE AT LEAST 1.0 SQ. FT. NET FREE VENTILATION AREA FOR EACH 150 SQ. FT. OF CRAWL SPACE.

CRAWL SPACE AREA = 390 SQ.FT.
390/150 = 2.6 SQ. FT. REQ'D.

REDUCE REQUIRED AREA TO 1.0 SQ. FT NET FREE VENTILATION AREA FOR EACH 1,500 SQ. FT. OF CRAWL SPACE WITH APPROVED VAPOR BARRIER.

PROVIDE (1) VENT WITHIN 3'-0" OF EACH CORNER.

REFER TO MANUFACTURER SPECIFICATIONS FOR ACTUAL VENTS USED TO DETERMINE NUMBER OF VENTS REQUIRED.

ROOF VENTILATING REQUIREMENTS

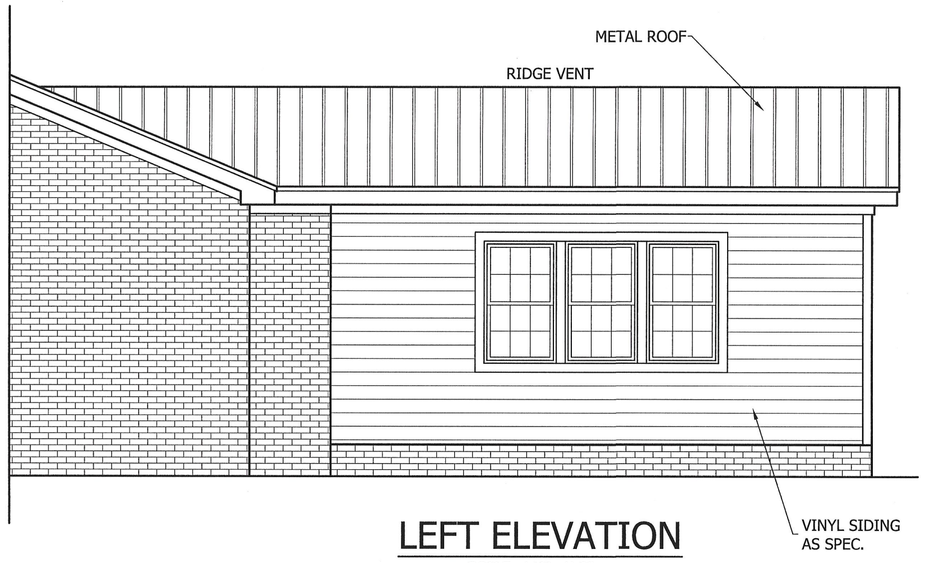
390/150 = 2.6 SQ. FT. REQ'D

ROOF VENTILATING REQUIREMENTS

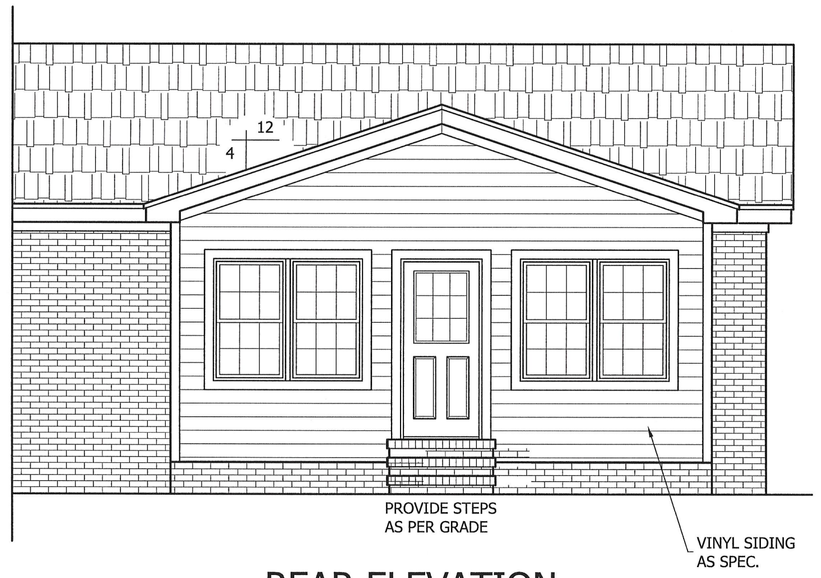
(POWER ROOF VENTILATOR REQUIRED)

390/300 = 1.3 SQ. FT. REQ'D

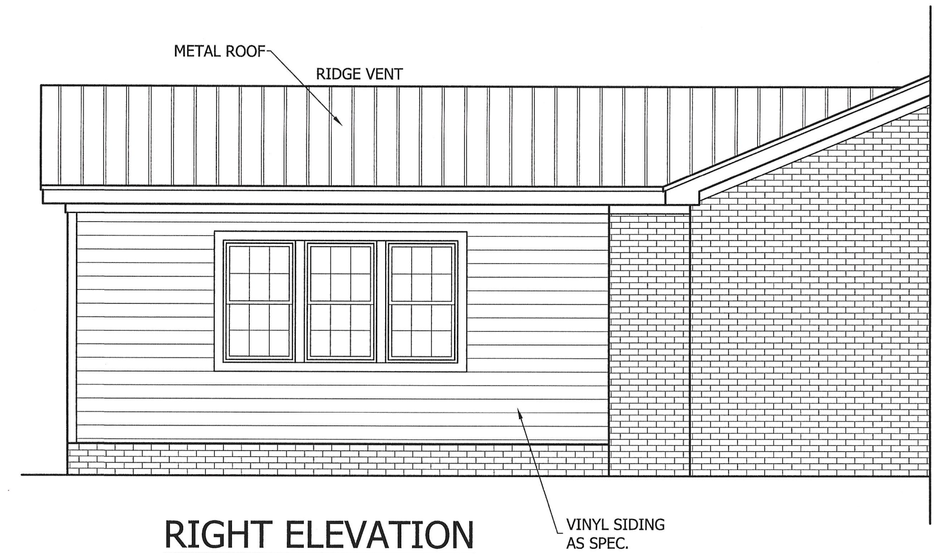
BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED.



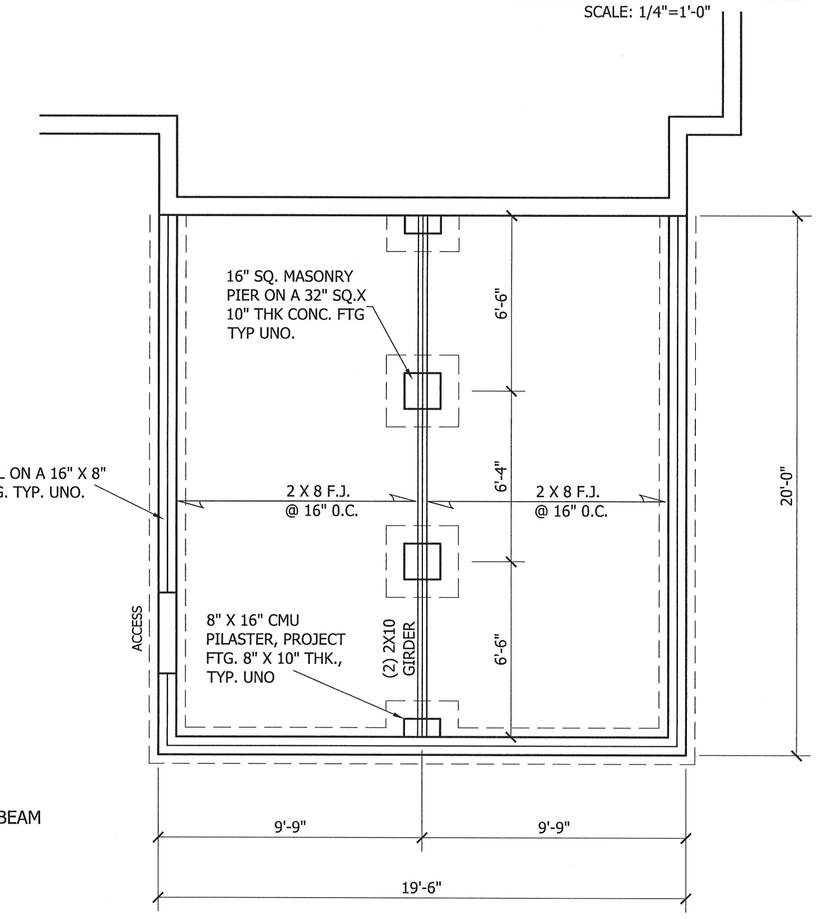
LEFT ELEVATION
SCALE: 1/4"=1'-0"



REAR ELEVATION
SCALE: 1/4"=1'-0"

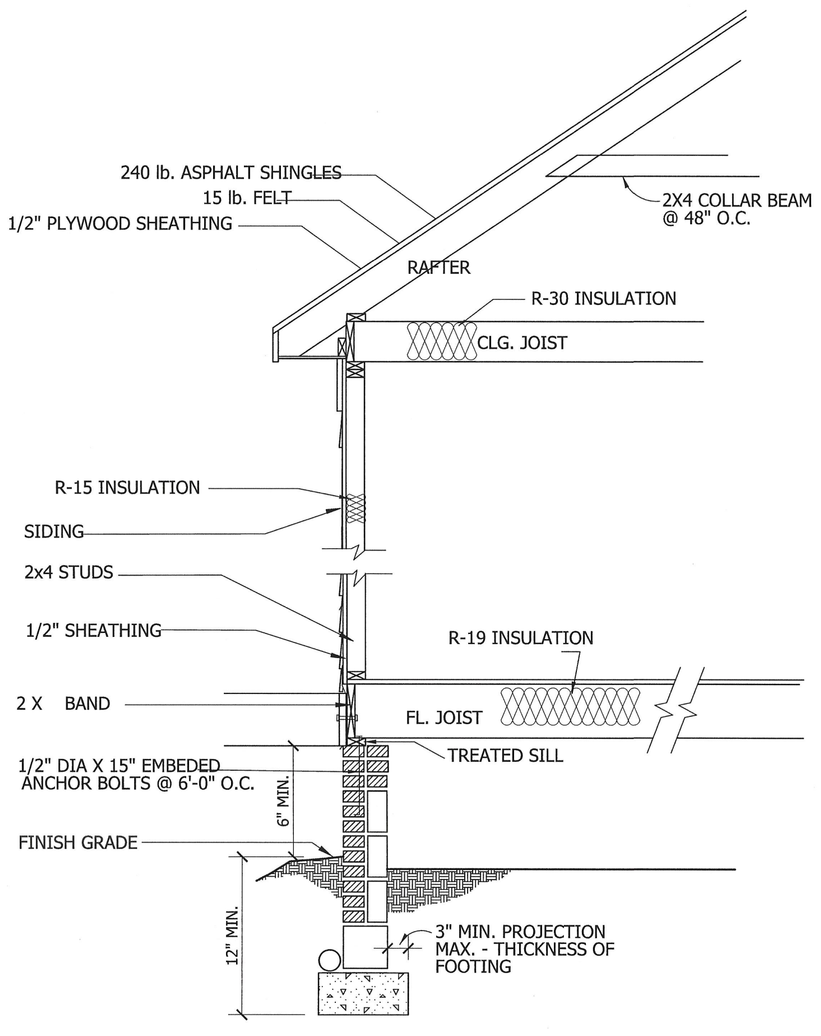


RIGHT ELEVATION
SCALE: 1/4"=1'-0"

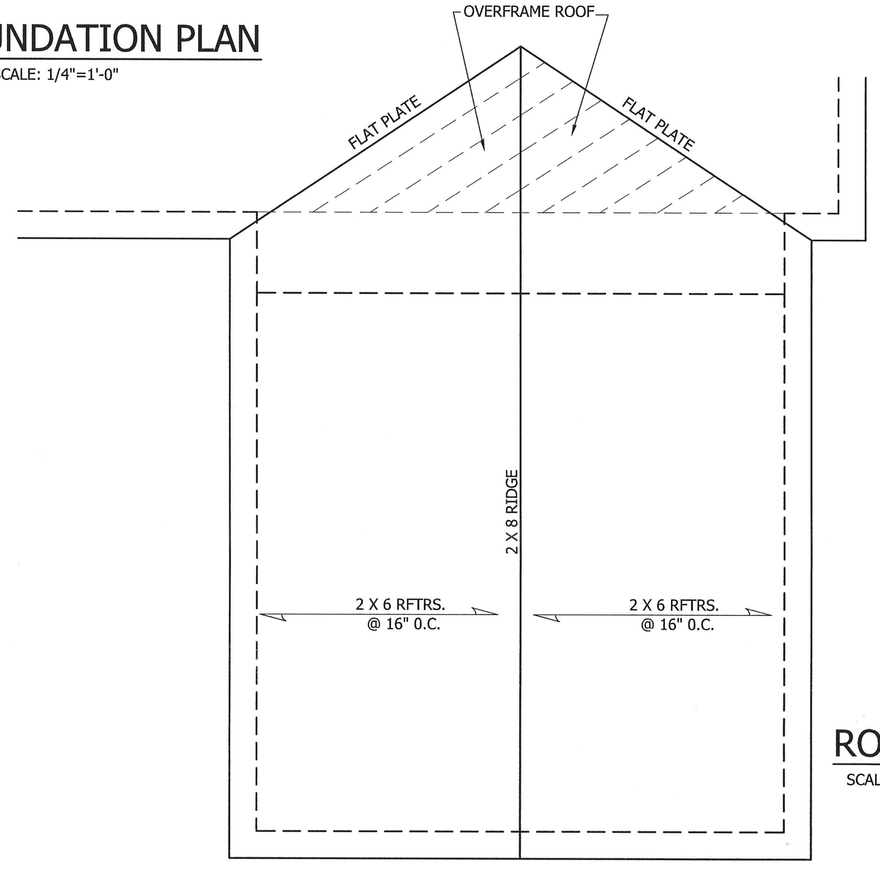


FOUNDATION PLAN
SCALE: 1/4"=1'-0"

FLOOR PLAN
SCALE: 1/4"=1'-0"
8'-0" CLG. HGT.
SET WINDOWS AT 6'-8" A.F.F.



WALL SECTION
SCALE: \" = 1'-0"



ROOF PLAN
SCALE: 1/4"=1'-0"

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review
Permit holder responsible for full compliance with the code
04/22/2025
Harnett COUNTY NORTH CAROLINA

LEE AND SUE OWEN RESIDENCE

KADS CUSTOM HOME DESIGNS

ANGIER, NC
919-369-7181

DRAWN BY: D.W.O.

DATE: 11/15/24

PAGE NO 1 OF 1

PLAN NO. LEE OWEN