

GENERAL REQUIREMENTS

- THE WORD 'CONTRACTOR' AS USED HEREIN SHALL MEAN THE GENERAL CONTRACTOR, SUBCONTRACTORS AND ALL PERSONS DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM.
- CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH THE FOLLOWING APPLICABLE CODE REQUIREMENTS:
 - ALL LAWS, STATUTES, THE MOST RECENT BUILDING CODES, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ALL PUBLIC AUTHORITIES HAVING JURISDICTION OVER OWNER, CONTRACTOR, ANY SUBCONTRACTOR, THE PROJECT, THE PROJECT SITE, THE WORK, OR THE PROSECUTION OF THE WORK.
 - THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT AND ALL OTHER APPLICABLE CODE REQUIREMENTS RELATING TO SAFETY.
 - THE FAIR HOUSING AMENDMENTS ACT, THE AMERICANS WITH DISABILITIES ACT, AND ALL OTHER APPLICABLE CODE REQUIREMENTS RELATING THERETO.
- CONTRACTOR SHALL CAREFULLY STUDY AND REVIEW THE CONSTRUCTION DOCUMENTS AND INFORMATION FURNISHED BY OWNER, AND SHALL PROMPTLY REPORT IN WRITING TO OWNER'S REPRESENTATIVE ANY ERRORS, INCONSISTENCIES, OR OMISSIONS IN THE CONSTRUCTION DOCUMENTS OR INCONSISTENCIES WITH APPLICABLE CODE REQUIREMENTS OBSERVED BY THE CONTRACTOR.
- IF CONTRACTOR PERFORMS WORK WHICH HE KNOWS OR SHOULD KNOW IS CONTRARY TO APPLICABLE CODE REQUIREMENTS, WITHOUT THE AGREEMENT OF OWNER, CONTRACTOR SHALL BE RESPONSIBLE FOR SUCH WORK AND SHALL BEAR THE RESULTANT LOSSES, INCLUDING, WITHOUT LIMITATION, THE COSTS OF CORRECTING DEFECTIVE WORK.
- CONTRACTOR SHALL PROVIDE CERTIFICATES OF INSURANCE ACCEPTABLE TO OWNER PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL TAKE FIELD MEASUREMENTS, VERIFY FIELD CONDITIONS, AND CAREFULLY COMPARE WITH THE CONSTRUCTION DOCUMENTS SUCH FIELD MEASUREMENTS, CONDITIONS, AND OTHER INFORMATION KNOWN TO CONTRACTOR BEFORE COMMENCING THE WORK. ERRORS, INCONSISTENCIES, OR OMISSIONS DISCOVERED AT ANY TIME SHALL BE PROMPTLY REPORTED IN WRITING TO THE OWNER.
- CONTRACTOR SHALL PROMPTLY NOTIFY OWNER'S REPRESENTATIVE IF CONTRACTOR BECOMES AWARE DURING THE PERFORMANCE OF THE WORK THAT THE CONSTRUCTION DOCUMENTS ARE NOT IN COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS.
- BY SUBMITTAL OF BID, CONTRACTOR WARRANTS TO OWNER THAT ALL MATERIALS AND EQUIPMENT TO BE FURNISHED ARE NEW UNLESS NOTED OTHERWISE AND ALL WORK WILL BE OF GOOD QUALITY AND FREE FROM FAULTS AND DEFECTS.
- SUB-CONTRACTORS SHALL INSURE THAT ALL WORK IS DONE IN A PROFESSIONAL WORKMANLIKE MANNER BY SKILLED MECHANICS AND SHALL REPLACE ANY MATERIALS OR ITEMS DAMAGED BY SUB-CONTRACTOR'S PERFORMANCE. SUB-CONTRACTORS AND SUPPLIERS ARE HEREBY NOTIFIED THAT THEY ARE TO CONFER AND COOPERATE FULLY WITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK. ALL SUB-CONTRACTOR WORKMANSHIP SHALL BE OF QUALITY TO PASS INSPECTIONS BY LOCAL AUTHORITIES, LENDING INSTITUTIONS, ARCHITECT OR BUILDER. ANY ONE OR ALL OF THE ABOVE MENTIONED INSPECTORS MAY INSPECT WORKMANSHIP AT ANY TIME, AND CORRECTIONS NEEDED TO ENHANCE THE QUALITY OF BUILDING WILL BE DONE IMMEDIATELY. EACH SUBCONTRACTOR, UNLESS SPECIFICALLY EXEMPTED BY THE TERMS OF HIS/HERS SUB-CONTRACT AGREEMENT, SHALL BE RESPONSIBLE FOR CLEANING UP AND REMOVING FROM THE JOB SITE ALL TRASH AND DEBRIS NOT LEFT BY OTHER SUB-CONTRACTORS. BUILDER WILL DETERMINE HOW SOON AFTER SUBCONTRACTOR COMPLETES EACH PHASE OF HIS WORK THAT TRASH AND DEBRIS WILL BE REMOVED FROM THE SITE.
- APPROVAL BY THE BUILDING INSPECTOR DOES NOT MEAN APPROVAL OR ALLOWABLE FAILURE TO COMPLY WITH THE PLANS AND SPECIFICATIONS. ANY DESIGN WHICH FAILS TO BE CLEAR OR IS AMBIGUOUS MUST BE REFERRED TO THE ARCHITECT OR ENGINEER FOR INTERPRETATION OR CLARIFICATION.
- ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED UNDER THESE PLANS SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE WORK BY OWNER UNLESS STIPULATED OTHERWISE.
- ALL TRADE NAMES AND BRAND NAMES CONTAINED HEREIN ESTABLISH QUALITY STANDARDS. SUBSTITUTIONS ARE PERMITTED, WITH PRIOR APPROVAL BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL SUBMIT FOR THE ARCHITECT'S AND BUILDER'S APPROVAL ALL MATERIALS OR EQUIPMENT WHICH IS CONSIDERED 'OR EQUAL' TO THAT SPECIFIED.
- CONSTRUCTION DOCUMENTS IDENTIFIED AS 'BID SET' ON ANY OR ALL SHEETS MAY BE SUBJECT TO REVIEW. THIS REVIEW MAY RESULT IN CHANGES WHICH MAY BE MADE TO THE PLANS PRIOR TO THE ISSUANCE OF THE FINAL CONSTRUCTION SET WHICH WILL CONTAIN NO 'BID SET' DESIGNATIONS. CONSTRUCTION DOCUMENTS IDENTIFIED AS 'BID SET' ARE NOT TO BE CONSTRUED AS BEING THE COMPLETED OR FINAL DRAWINGS AND THEY SHOULD NOT IN ANY WAY BE USED AS SUCH.
- ALL STANDARD NOTES CONTAINED HEREIN ARE TYPICAL UNLESS NOTED OTHERWISE.
- TYPICAL DETAILS AND SPECIFICATIONS ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE.
- SPECIFIC NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.
- SEE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR PITS, TRENCHES, ROOF OPENINGS, DEPRESSIONS, ETC. NOT SHOWN ON THE OTHER DRAWINGS.
- THE CONSTRUCTION DOCUMENTS AND ALL COPIES THEREOF FURNISHED TO CONTRACTOR ARE THE PROPERTY OF THE ARCHITECT AND ARE NOT TO BE USED ON OTHER WORK.

SITE WORK

- CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC., AND BURIED ARTIFACTS SUCH AS INDIAN OR DINOSAUR BONES. IF ANY SUCH ITEMS ARE FOUND THE ARCHITECT, CIVIL ENGINEER, AND SOILS ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO FULLY PROTECT ADJACENT PROPERTIES.
- REFER TO THE SOILS REPORT AS PREPARED BY THE GEOTECHNICAL ENGINEER.
- REFER TO CIVIL ENGINEER'S CURRENT GRADINGS AND PLOT PLANS.

SITE WORK (continued)

- REFER TO THE LANDSCAPE ARCHITECT'S CURRENT GRADING PLAN AND CONSTRUCTION DOCUMENTS.
- ALL FOOTINGS SHALL REST ON FIRM NATURAL SOIL OR APPROVED COMPACTED FILL. REFER TO GEOTECHNICAL REPORT.
- EXCAVATIONS FOR FOOTINGS SHALL BE MADE TO THE WIDTH, LENGTH, AND DEPTH REQUIRED AND FINISHED WITH LEVEL BOTTOMS.
- EXCAVATIONS SHALL BE KEPT FREE OF STANDING WATER.
- WHERE EXCAVATIONS ARE MADE TO A DEPTH GREATER THAN INDICATED, SUCH ADDITIONAL DEPTH SHALL BE FILLED WITH CONCRETE AS SPECIFIED FOR FOOTINGS.
- FILL MATERIALS SHALL BE FREE FROM DEBRIS, VEGETABLE MATTER AND OTHER FOREIGN SUBSTANCES.
- ALL FINISH GRADES TO DRAIN AWAY FROM THE BUILDING FOOTINGS.
- THERE SHALL BE NO ON-SITE WATER RETENTION.
- THERE SHALL BE NO DRAINAGE TO ADJACENT PROPERTY.
- FOR ONSITE CONSTRUCTION, PLANS TO COMPLY WITH NECESSARY INSPECTIONS APPROVED BY THE BUILDING OFFICIAL.
- THE REQUIREMENTS IN THESE NOTES ARE THE MINIMUM THAT SHALL BE MET. REQUIREMENTS OF THE STRUCTURAL DRAWINGS THAT EXCEED THE REQUIREMENTS SHOWN HERE SHALL BE MET.

CONCRETE

- REFER TO STRUCTURAL ENGINEERING CALCULATIONS AND SOILS REPORT FOR THE PERFORMANCE REQUIREMENTS FOR CONCRETE FOUNDATIONS.
- CONCRETE SHALL BE PROPORTIONED TO PROVIDE AN AVERAGE COMPRESSIVE STRENGTH AS PRESCRIBED IN THE N.C.-R, AS WELL AS SATISFY THE DURABILITY CRITERIA OF THE N.C.-R
- MIXING OF CONCRETE SHALL BE PERFORMED IN ACCORDANCE WITH ACI 318, SECTION 5.8.
- THE DEPOSITING OF CONCRETE SHALL COMPLY WITH THE PROVISIONS ACI 318, SECTION 5.10.
- THE CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318, SECTION 5.11.
- ALL FORM WORK SHALL BE DESIGNED, CONSTRUCTED, UTILIZED, AND REMOVED.
- CONDUIT, PIPES AND SLEEVES OF ANY MATERIAL NOT HARMFUL TO CONCRETE AND WITHIN THE LIMITATIONS OF ACI 318, SECTION 6.3, ARE PERMITTED TO BE EMBEDDED IN CONCRETE WITH APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL.
- CONSTRUCTION JOINTS INCLUDING THEIR LOCATION SHALL COMPLY WITH THE PROVISIONS OF ACI 318, SECTION 6.4.
- ALL STEEL REINFORCING OF CONCRETE SHALL BE DONE IN ACCORDANCE WITH THE N.C.-R
- TOP OF CONCRETE SLABS TO BE A MINIMUM 4" W/ MASONRY VENEER 6" ELSEWHERE (8" H.U.D.) ABOVE FINISH GRADE.
- FOUNDATION WIDTHS, DEPTHS, AND REINFORCING, AS SHOWN ON PLANS, ARE SUPERCEDED BY ANY LOCAL CODES OR ORDINANCES WHICH REQUIRE INCREASES OF THE SAME.
- ALL REINFORCEMENT, CONDUIT, OUTLET BOXES, ANCHORS, HANGERS, SLEEVES, BOLTS OR OTHER EMBEDDED MATERIALS AND ITEMS MUST BE SECURED AND APPROPRIATELY FASTENED IN THEIR PROPER LOCATIONS PRIOR TO THE PLACEMENT OF CONCRETE. SUB-CONTRACTOR SHALL VERIFY INSTALLATION OF HOLD-DOWNS, ANCHOR BOLTS, PA STRAPS, AND OTHER ANCHORAGE MATERIAL AND ITEMS PRIOR TO PLACEMENT OF CONCRETE.
- POST-TENSION SLABS, IF APPLICABLE:
 - POINT AND LINE LOADS FROM STRUCTURE ABOVE TO BE PROVIDED TO POST-TENSION ENGINEER PRIOR TO POST-TENSION DESIGN.
 - ANCHOR BOLTS AND OTHER HARDWARE TO BE SHOWN ON POST-TENSION PLANS TO AVOID MIS-LOCATION OF HARDWARE AND POSSIBLE FIELD FIXES WHICH MAY CUT TENDONS.

MASONRY

- ALL MASONRY DESIGN SHALL FOLLOW THE REQUIREMENTS OF THE CURRENT ADOPTED CODES.
- ANCHORED MASONRY VENEER SHALL COMPLY WITH THE PROVISIONS OF N.C.-R, AND SECTIONS 6.1 AND 6.2 OF ACI 580/ASCE 5/TMS 402.
- STONE VENEER UNITS NOT EXCEEDING 5 INCHES IN THICKNESS SHALL BE ANCHORED DIRECTLY TO MASONRY, CONCRETE OR TO STUD CONSTRUCTION BY ONE OF THE APPROVED METHODS LISTED IN THE N.C.-R
- MORTAR FOR USE IN MASONRY CONSTRUCTION SHALL COMPLY WITH ASTM C 270. THE TYPE OF MORTAR SHALL BE IN ACCORDANCE WITH THE N.C.-R AND SHALL MEET THE PROPORTION SPECIFICATIONS OR THE PROPERTY SPECIFICATIONS OF ASTM C 270
- GROUT SHALL CONSIST OF FIBER CEMENT MATERIAL AND AGGREGATE IN ACCORDANCE WITH ASTM C 476 AND THE PROPORTION SPECIFICATIONS PER THE N.C.-R
- AGGREGATES FOR MORTAR AND GROUT SHALL BE NATURAL SAND AND ROCK CONFORMING TO A.S.T.M. C-144-04 (MASONRY MORTAR) AND C-404-07 (GROUT).
- CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO A.S.T.M. C 150.
- ALL BRICK SHALL CONFORM TO A.S.T.M. C 216, GRADE MM.
- UNLESS SPECIFICALLY SHOWN OTHERWISE ALL BRICK SHALL BE LAID IN A RUNNING BOND PATTERN.
- ANCHORS, TIES AND WIRE FABRIC SHALL CONFORM TO N.C.-R
- ANCHOR TIES AND WIRE FABRIC FOR USE IN MASONRY WALL CONSTRUCTION SHALL CONFORM TO THE N.C.-R

METALS

- REFER TO STRUCTURAL NOTES AND SPECIFICATIONS FOR STRUCTURAL STEEL, METAL AND REINFORCING STEEL SPECIFICATIONS.
- ALL STRUCTURAL STEEL SHALL CONFORM TO AISC/CRED
- ANCHOR RODS SHALL BE SET ACCURATELY TO THE PATTERN AND DIMENSIONS CALLED FOR ON THE PLANS. THE PROTRUSION OF THE THREADED ENDS THROUGH THE CONNECTED MATERIAL SHALL BE SUFFICIENT TO FULLY ENGAGE THE THREADS OF THE NUTS, BUT SHALL NOT BE GREATER THAN THE LENGTH OF THE THREADS ON THE BOLTS
- FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. VERIFY ACCEPTABLE FASTENERS PER CHEMICALS USED IN PRESSURE PRESERVATIVELY TREATED WOOD W/ N.C.-R. FASTENINGS FOR WOOD FOUNDATIONS SHALL BE AS REQUIRED IN AF&PA TECHNICAL REPORT NO. 7.

WOOD & FRAMING

LUMBER

- THE DESIGN AND CONSTRUCTION OF CONVENTIONAL LIGHT-FRAME WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE N.C.-R
- CONSTRUCTION, PROJECTIONS, OPENINGS AND PENETRATIONS OF EXTERIOR WALLS OF DWELLINGS AND ACCESSORY BUILDINGS SHALL COMPLY WITH TABLE R302.1.
- ALL LUMBER SHALL MEET THE STANDARDS OF QUALITY AS STATED IN THE N.C.-R
- LUMBER AND PLYWOOD REQUIRED TO BE PRESSURE PRESERVATIVELY TREATED IN ACCORDANCE WITH THE N.C.-R AND SHALL BEAR THE QUALITY MARK OF AN APPROVED INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING AND INSPECTION OVER THE QUALITY OF THE PRODUCT AND THAT HAS BEEN APPROVED BY AN ACCREDITATION BODY THAT COMPLIES WITH THE REQUIREMENTS OF THE AMERICAN LUMBER STANDARD COMMITTEE TREATED WOOD PROGRAM.
- ALL LUMBER SIZES NOTED AND SPECIFIED ON PLANS ARE NOMINAL SIZES UNLESS SPECIFICALLY INDICATED AS NET SIZE.

GLUE LAMINATED LUMBER

- REFER TO THE STRUCTURAL ENGINEER'S CURRENT NOTES, CALCULATIONS, AND SPECIFICATIONS.
- GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN AISC A190.1 AND ASTM D 3757.

PROTECTION AGAINST DECAY & TERMITES

- IN AREAS SUBJECT TO DECAY DAMAGE AS ESTABLISHED BY THE N.C.-R THE FOLLOWING LOCATIONS SHALL REQUIRE THE USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVELY TREATED IN ACCORDANCE WITH ANPA VI FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE. PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF ANPA VI
 - WOOD JOISTS OR THE BOTTOM OF WOOD FLOOR WHEN CLOSER THAN 18 INCHES, OR WOOD GIRDEES WHEN CLOSER THAN 12 INCHES TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
 - ALL EXTERIOR SILLIS & PLATES THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS.
 - SILLS AND SLEEPERS ON A CONCRETE OR MASONRY, UNLESS THE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND IS SEPARATED FROM THE GROUND BY AN APPROVED IMPERVIOUS MOISTURE BARRIER.
 - THE ENDS OF WOOD GIRDEES ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING CLEARANCES OF LESS THAN 0.5 INCH ON TOPS, SIDES AND ENDS.
 - WOOD SIDING AND SHEATHING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND.
 - WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE OR MASONRY SLABS, UNLESS SEPARATED FROM SUCH FLOORS OR ROOFS BY ANIMPERVIOUS MOISTURE BARRIER.
 - WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY WALLS OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN THE WALL AND THE FURRING STRIPS OR FRAMING MEMBERS.
 - ALL PORTIONS OF A PORCH, SCREEN PORCH OR DECK FROM THE BOTTOM OF THE HEADER DOWN, INCLUDING POSTS, GUARDRAILS, PICKETS, STEPS AND FLOOR STRUCTURE, COVERINGS THAT WOULD PREVENT MOISTURE OR WATER ACCUMULATION ON THE SURFACE OR AT JOINTS BETWEEN MEMBERS ARE ALLOWED.
- IN AREAS SUBJECT TO DAMAGE FROM TERMITES METHODS OF PROTECTION SHALL BE ONE OF THE METHODS LISTED IN THE N.C.-R
- UNDER-FLOOR AREAS SHALL BE VENTILATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.C.-R

WOOD & FRAMING (continued)

SHEATHING

- WOOD STRUCTURAL PANELS SHALL CONFORM TO THE REQUIREMENTS AS SET FORTH IN THE N.C.-R
- ROOF SHEATHING PANELS SHALL BE LAID WITH FACE GRAIN OR STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS.
- ROOF SHEATHING SHALL BE IN ACCORDANCE WITH THE N.C.-R
- FLOOR SHEATHING PANELS SHALL BE LAID WITH FACE GRAIN OR STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND WITH PANEL CONTINUOUS OVER TWO OR MORE SPANS.
- STRUCTURAL FLOOR SHEATHING SHALL COMPLY WITH THE PROVISIONS OF THE N.C.-R
- REFER TO THE STRUCTURAL ENGINEER'S CURRENT SPECIFICATIONS, CALCULATIONS, AND PLANS FOR REQUIRED STRENGTH, GRADE, AND THICKNESS FOR PLYWOOD FLOOR SHEATHING PANELS AND FOR DIAPHRAGM NAILING AND ADHESIVE REQUIREMENTS.
- ALL VERTICAL JOINTS OF PANEL SHEATHINGS SHALL OCCUR OVER, AND BE FASTENED TO, COMMON STUDS. HORIZONTAL JOINTS IN BRACED WALL PANELS SHALL OCCUR OVER, AND BE FASTENED TO, COMMON BLOCKING OF A MINIMUM OF 1 1/2 INCH THICKNESS.
- WHERE APPLICABLE, REFER TO THE SHEAR WALL SCHEDULE FOR REQUIRED STRENGTH, GRADE, AND THICKNESS OF PLYWOOD SHEAR PANELS AND FOR REQUIRED SHEAR WALL NAILING SCHEDULE.
- IN ONE- AND TWO-FAMILY DWELLING CONSTRUCTION USING HARD BOARD OR ALUMINUM AS A SOFFIT MATERIAL, THE SOFFIT MATERIAL SHALL BE SECURELY ATTACHED TO FRAMING MEMBERS AND USE AN UNDERLAYMENT MATERIAL OF EITHER FIRE RETARDANT TREATED WOOD, 23/32 INCH WOOD SHEATHING OR 5/8 INCH GYPSUM BOARD. VENTING REQUIREMENTS APPLY TO BOTH SOFFIT AND UNDERLAYMENT AND SHALL BE PER SECTION R206 OF THE NORTH CAROLINA RESIDENTIAL CODE. WHERE THE PROPERTY LINE IS 10 FEET OR MORE FROM THE BUILDING FACE, THE PROVISIONS OF THIS CODE SECTION DO NOT APPLY.

FLOOR FRAMING

- ALL FLOOR JOISTS SHALL BE DESIGNED I-JOIST WOOD FLOOR TRUSSES. REFER TO MANUFACTURER FOR ALL LAYOUTS AND CALCULATIONS.
- REFER TO THE STRUCTURAL ENGINEER'S CURRENT PLANS & CALCULATIONS FOR SIZE, SPACING, AND ANCHORAGE OF ALL FLOOR JOISTS, SIZE LOCATION, AND ANCHORAGE OF ALL FLOOR BEAMS AND HEADERS, AND ALL RELATED FRAMING ISSUES.

ROOF FRAMING

- ROOF FRAMING SHALL BE BY PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.
- WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.C.-R
- THE MANUFACTURER SHALL SUPPLY TO THE ARCHITECT AND BUILDER CALCULATIONS AND SHOP DRAWINGS FOR APPROVAL OF DESIGN LOADS, CONFIGURATION (2 OR 3 POINT BEARING), VOLUME CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION.
- THE BRACING OF WOOD TRUSSES SHALL COMPLY TO THEIR APPROPRIATE ENGINEERED DESIGN, PER THE N.C.-R
- TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE APPROVAL OF A REGISTERED DESIGN PROFESSIONAL. ALTERATIONS RESULTING IN THE ADDITION OF LOAD (E.G. HVAC EQUIPMENT, WATER HEATER) THAT EXCEEDS THE DESIGN LOAD FOR THE TRUSSES SHALL NOT BE PERMITTED WITHOUT WRITTEN VERIFICATION THAT THE TRUSS IS CAPABLE OF SUPPORTING SUCH ADDITIONAL LOADINGS.
- ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHEREIN THE PROJECT IS TO BE BUILT.
- MANUFACTURER IS TO SECURE BUILDING DEPARTMENT APPROVAL OF CALCULATIONS AND SHOP DRAWINGS PRIOR TO FABRICATION.

WALL FRAMING

- THE SIZE, HEIGHT, AND SPACING OF STUDS SHALL BE IN ACCORDANCE WITH THE N.C.-R
- STUDS SHALL BE PLACED WITH THEIR WIDE DIMENSION PERPENDICULAR TO THE WALL.
- NOT LESS THAN THREE STUDS SHALL BE INSTALLED AT EACH CORNER OF AN EXTERIOR WALL.
- WOOD STUD WALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND INTERSECTIONS WITH BEARING PARTITIONS. END JOINTS IN TOP PLATES SHALL BE OFFSET AT LEAST 24 INCHES. JOINTS NEED NOT OCCUR OVER STUDS. PLATES SHALL BE NOT LESS THAN 2-INCHES NOMINAL THICKNESS AND HAVE A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE STUDS. SEE EXCEPTIONS.
- WHERE JOISTS, TRUSSES OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDS BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDS BENEATH. SEE EXCEPTIONS.
- STUDS SHALL HAVE FULL BEARINGS ON NOMINAL 2 BY OR LARGER PLATE OR SILL HAVING A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE STUDS.
- INTERIOR NONBEARING WALLS SHALL BE PERMITTED TO BE CONSTRUCTED WITH 2-INCH-BY-5-INCH STUDS SPACED 24 INCHES ON CENTER OR, WHEN NOT A PART OF A BRACED WALL, LINE 2-INCH-BY-4-INCH FLAT STUDS SPACED 16 INCHES ON CENTER. INTERIOR NONBEARING WALLS SHALL BE CAPPED WITH AT LEAST A SINGLE TOP PLATE. INTERIOR NONBEARING WALLS SHALL BE FIREBLOCKED IN ACCORDANCE WITH THE N.C.-R

WOOD & FRAMING (continued)

- DRILLING AND NOTCHING OF STUDS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- NOTCHING, ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. NOTCHING IN NONBEARING PARTITIONS MAY BE NOTCHED TO A DEPTH NOT TO EXCEED 40 PERCENT OF A SINGLE STUD WIDTH. NOTCHING OF BEARING STUDS SHALL BE ON ONE EDGE ONLY AND NOT TO EXCEED ONE-FOURTH THE HEIGHT OF THE STUD. NOTCHING SHALL NOT OCCUR IN THE BOTTOM OR TOP 6 INCHES OF BEARING STUDS.
- DRILLING, ANY STUD MAY BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60 PERCENT OF THE STUD WIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 5/8" INCH TO THE EDGE OF THE STUD, AND THE HOLE SHALL NOT BE CLOSER THAN 6 INCHES FROM AN ADJACENT HOLE OR NOTCH. HOLES NOT EXCEEDING 3/4 INCH DIAMETER CAN BE AS CLOSE AS 1 1/2 INCHES ON CENTER SPACING. STUDS LOCATED IN EXTERIOR WALLS OR BEARING PARTITIONS DRILLED OVER 40 PERCENT AND UP TO 60 PERCENT SHALL ALSO BE DOUBLED WITH NO MORE THAN TWO SUCCESSIVE DOUBLED STUDS BORED.
- CUTTING AND NOTCHING OF STUDS SHALL BE PERMITTED TO BE INCREASED TO 65 PERCENT OF THE WIDTH OF THE STUD IN EXTERIOR AND INTERIOR WALLS AND BEARING PARTITIONS, PROVIDED THAT ONE OF THE FOLLOWING CONDITIONS ARE MET:
 - THE WALL SECTION IS REINFORCED WITH 1/2-INCH EXTERIOR GRADE PLYWOOD OR EQUIVALENT REINFORCEMENT ON THE NOTCHED SIDE OF THE WALL. PLYWOOD, IF USED, SHALL REACH FROM THE FLOOR TO CEILING AND AT LEAST ONE STUD FURTHER ON EACH SIDE OF THE SECTION THAT HAS BEEN NOTCHED OR CUT.
 - THE EXTERIOR WALLS OF A KITCHEN MAY BE REINFORCED BY PLACING 1/2-INCH PLYWOOD OR EQUIVALENT REINFORCEMENT ON THE NOTCHED SIDE OF THE WALL. PLYWOOD, IF USED, SHALL REACH FROM THE FLOOR TO COUNTER-TOP HEIGHT AND AT LEAST ONE STUD FURTHER ON EACH SIDE OF THE SECTION THAT HAS BEEN NOTCHED OR CUT.
- WHEN PIPING OR DUCTWORK IS PLACED IN OR PARTIALLY IN AN EXTERIOR OR INTERIOR LOAD-BEARING WALL, NECESSITATING CUTTING, DRILLING OR NOTCHING OF THE TOP PLATE, MORE THAN 50 PERCENT OF ITS WIDTH A GALVANIZED METAL TIE OF NOT LESS THAN 0.054 INCH THICK AND 1 1/2 INCHES WIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING WITH NOT LESS THAN EIGHT 10# NAILS HAVING A MINIMUM LENGTH OF 1 1/2 INCHES (38 MM) AT EACH SIDE OR EQUIVALENT. THE METAL TIE MUST EXTEND A MINIMUM OF 6 INCHES PAST THE OPENING.

- HEADERS SHALL MEET THE REQUIREMENTS OF THE N.C.-R
- PROVIDE LATERAL BRACING PER THE N.C.-R
- FOUNDATION CRIPPLE WALLS SHALL MEET THE REQUIREMENTS OF THE N.C.-R CODE
- WOOD STUD WALLS SHALL BE BRACED AS REQUIRED BY THE N.C.-R
- UNLESS COVERED BY INTERIOR OR EXTERIOR WALL COVERINGS OR SHEATHING MEETING THE MINIMUM REQUIREMENTS OF THIS CODE, ALL STUD PARTITIONS OR WALLS WITH STUDS HAVING A HEIGHT-TO-LEAST THICKNESS RATIO EXCEEDING 50 SHALL HAVE BRACING NOT LESS THAN 2 INCHES IN THICKNESS AND OF THE SAME WIDTH AS THE STUDS FITTED SNUGLY AND NAILED THERETO TO PROVIDE ADEQUATE LATERAL SUPPORT.

FIRE BLOCKS AND DRAFT STOPS

- FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND A ROOF SPACE. FIREBLOCKING SHALL BE PROVIDED IN WOOD-FRAME CONSTRUCTION IN THE LOCATIONS SPECIFIED IN THE N.C.-R
- FIRE BLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER, OR TWO THICKNESSES OF 1-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS, OR ONE THICKNESS OF 23/32-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 23/32-INCH WOOD STRUCTURAL PANELS OR ONE THICKNESS OF 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD, 1/2-INCH GYPSUM BOARD, OR 1/4-INCH CEMENT-BASED MILLBOARD.
- BATTS OR BLANKETS OF MINERAL WOOL OR GLASS FIBER OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE SHALL BE PERMITTED AS AN ACCEPTABLE FIRE BLOCK.
- BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE PERMITTED FOR COMPLIANCE WITH THE 10 FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGERED STUDS. LOOSE FILL, INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASSES.
- WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CEILING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1,000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS, WHERE THE ASSEMBLY IS ENCLOSED BY A FLOOR MEMBRANE ABOVE AND A CEILING MEMBRANE BELOW. DRAFTSTOPPING SHALL BE PROVIDED IN FLOOR/CEILING ASSEMBLIES UNDER THE FOLLOWING CIRCUMSTANCES:
 - CEILING IS SUSPENDED UNDER THE FLOOR FRAMING.
 - FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.

HANDRAIL AND GUARDRAIL

- GUARDRAIL OF 36" HIGH MIN. SHALL BE PROVIDED WHERE FINISHED GRADE OR FLOOR BELOW RAISED AREA EXCEEDS 30".
- HANDRAIL AT STAIRS SHALL BE PROVIDED WHEN 4 OR MORE STAIR RISERS ARE REQUIRED.



NORTH CAROLINA 50' SERIES

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NORTH CAROLINA DIVISION

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2018 NORTH CAROLINA STATE BUILDING CODES

ISSUE DATE: 12/06/24
PROJECT No.: 1350999:57
DIVISION MGR.: DS
REVISIONS:

FOR INTERNAL USE ONLY	
REVIEWED BY:	
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PLAN:
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SHEET:
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SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

MECHANICAL & PLUMBING

H.V.A.C.

- ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN CONFORMANCE WITH THE NORTH CAROLINA RESIDENTIAL AND MECHANICAL CODE. INSTALLATIONS OF MECHANICAL APPLIANCES, EQUIPMENT AND SYSTEMS NOT ADDRESSED BY THIS CODE SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE NORTH CAROLINA RESIDENTIAL AND FUEL GAS CODE.
- CONTRACTOR SHALL DESIGN ENTIRE H.V.A.C. SYSTEM AND SUBMIT DRAWINGS FOR OWNER/BUILDER'S APPROVAL PRIOR TO ORDERING MATERIALS OR EQUIPMENT.
- WHERE AIR CONDITIONING IS AN OPTIONAL FEATURE, HEATING SYSTEMS MUST BE DESIGNED AND DUCT WORK SIZED TO ACCOMMODATE FUTURE AIR CONDITIONING NEEDS.
- WHERE THE PRIMARY HEATING SYSTEM IS A FORCED-AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55 DEG. F (13 C) OR UP TO 65 DEG. F (24 C).
- ALL DUCTWORK SHALL CONFORM TO THE REQUIREMENTS OF THE N.C.-R
- COMBUSTION AIR SHALL BE PROVIDED FOR FORCED AIR UNITS IN ACCORDANCE WITH N.C.-R
- CONTRACTOR TO PROVIDE BOOT IN DUCTWORK WHEN OPTIONAL "HONEYWELL" OR "CARRIER" ELECTRONIC AIR CLEANER IS PROVIDED.
- DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE GARAGE PER N.C.-R
- EXTERIOR-GRADE INSTALLATIONS, EQUIPMENT AND APPLIANCES INSTALLED ABOVE GRADE LEVEL SHALL BE SUPPORTED ON A SOLID BASE OR APPROVED MATERIAL A MINIMUM OF 2 INCHES THICK.
- UNDER-FLOOR INSTALLATION, SUSPENDED EQUIPMENT SHALL BE A MINIMUM OF 6 INCHES ABOVE THE ADJOINING GRADE.
- CRAWL SPACE SUPPORTS. IN A CRAWL SPACE, A MINIMUM OF 2-INCH THICK SOLID BASE 2-INCH (51 MM) THICK FORMED CONCRETE, OR STACKED MASONRY UNITS HELD IN PLACE BY MORTAR OR OTHER APPROVED METHOD. THE WATER HEATER SHALL BE SUPPORTED NOT LESS THAN 2 INCHES ABOVE GRADE.
- DRAINAGE, BELOW-GRADE INSTALLATIONS SHALL BE PROVIDED WITH A NATURAL DRAIN OR AN AUTOMATIC LIFT OR PUMP PUMP. FOR PIT REQUIREMENTS REFER TO N.C.-M

VENTING

- IN LIEU OF REQUIRED EXTERIOR OPENINGS FOR NATURAL VENTILATION IN BATHROOMS CONTAINING A BATHTUB, SHOWER OR COMBINATION THEREOF, A MECHANICAL VENTILATION SYSTEM MAY BE PROVIDED. THE MINIMUM VENTILATION RATES SHALL BE 50 CFM FOR INTERMITTENT VENTILATION OR 20 CFM FOR CONTINUOUS VENTILATION. VENTILATION AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTSIDE PER N.C.-R
- EXHAUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL BE EQUIPPED WITH BACKDRAFT DAMPERS.
- RANGE HOODS SHALL DISCHARGE TO THE OUTDOORS THROUGH A DUCT. THE DUCT SERVING THE HOOD SHALL HAVE A SMOOTH INTERIOR SURFACE, SHALL BE AIR TIGHT, SHALL BE EQUIPPED WITH A BACK-DRAFT DAMPER AND SHALL BE INDEPENDENT OF ALL OTHER EXHAUST SYSTEMS. DUCTS SERVING RANGE HOODS SHALL NOT TERMINATE IN AN ATTIC OR CRAWL SPACE OR AREAS INSIDE THE BUILDING. DUCTS SERVING RANGE HOODS SHALL BE CONSTRUCTED OF GALVANIZED STEEL, STAINLESS STEEL OR COPPER.
- WHERE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND WHERE MECHANICAL OR NATURAL VENTILATION IS OTHERWISE PROVIDED, LISTED AND LABELED DUCTLESS RANGE HOODS SHALL NOT BE REQUIRED TO DISCHARGE TO THE OUTDOORS PER N.C.-M
- DUCTS FOR DOMESTIC KITCHEN COOKING APPLIANCES EQUIPPED WITH DOWN DRAFT EXHAUST SYSTEMS SHALL BE PERMITTED TO BE CONSTRUCTED OF SCHEDULE 40 PVC PIPE PROVIDED THAT THE INSTALLATION COMPLIES WITH ALL OF THE FOLLOWINGS PER N.C.-M:
 - THE DUCT SHALL BE INSTALLED UNDER A CONCRETE SLAB POURED ON GRADE.
 - THE UNDERFLOOR TRENCH IN WHICH THE DUCT IS INSTALLED SHALL BE COMPLETELY BACKFILLED WITH SAND OR GRAVEL.
 - THE PVC DUCT SHALL EXTEND NOT GREATER THAN 1 INCH ABOVE THE INDOOR CONCRETE FLOOR SURFACE.
 - THE PVC DUCT SHALL EXTEND NOT GREATER THAN 1 INCH ABOVE GRADE OUTSIDE THE BUILDING.
 - THE PVC DUCTS SHALL BE SOLVENT CEMENTED.
- EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM SHALL BE PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE THAT IS IN EXCESS OF 400 CUBIC FEET PER MINUTE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH A MEANS OF CLOSURE AND SHALL BE AUTOMATICALLY CONTROLLED TO START AND OPERATE SIMULTANEOUSLY WITH THE EXHAUST SYSTEM. DAMPERS SHALL BE ACCESSIBLE FOR INSPECTION, SERVICE, REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION
- DOMESTIC WATER HEATERS, UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, SHALL BE VENTED TO THE OUTSIDE AIR BY A TYPE "M" VENT AND COMPLY WITH THE REQUIREMENTS OF THE N.C.-M

PLUMBING

- A POTABLE WATER SUPPLY SYSTEM SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN SUCH A MANNER SO AS TO PREVENT CONTAMINATION FROM NONPOTABLE LIQUIDS, SOLIDS OR GASES BEING INTRODUCED INTO THE POTABLE WATER SUPPLY THROUGH CROSS-CONNECTIONS OR ANY OTHER PIPING CONNECTIONS TO THE SYSTEM. BACKFLOW PRE-VENTER APPLICATIONS SHALL CONFORM TO N.C.-P.
- THE SUPPLY LINES OR FITTINGS FOR EVERY PLUMBING FIXTURE SHALL BE INSTALLED SO AS TO PREVENT BACKFLOW. PLUMBING FIXTURE FITTINGS SHALL PROVIDE BACKFLOW PROTECTION IN ACCORDANCE WITH ASME A112.18.1.

MECHANICAL & PLUMBING (continued)

PLUMBING (continued)

- ALL DEVICES, APPURTENANCES, APPLIANCES AND APPARATUS INTENDED TO SERVE SOME SPECIAL FUNCTION, SUCH AS STERILIZATION, DISTILLATION, PROCESSING, COOLING, OR STORAGE OF ICE OR FOODS, AND THAT CONNECT TO THE WATER SUPPLY SYSTEM, SHALL BE PROVIDED WITH PROTECTION AGAINST BACKFLOW AND CONTAMINATION OF THE WATER SUPPLY SYSTEM. WATER PUMPS, FILTERS, SOFTENERS, TANKS AND ALL OTHER APPLIANCES AND DEVICES THAT HANDLE OR TREAT POTABLE WATER SHALL BE PROTECTED AGAINST CONTAMINATION.
- MATER SERVICE PIPING SHALL BE PROTECTED IN ACCORDANCE WITH N.C.-P SECTIONS AND EXCEPTIONS)
- FIXTURE FITTINGS, FAUCETS AND DIVERTERS SHALL BE CONNECTED TO THE WATER DISTRIBUTION SYSTEM SO THAT HOT WATER CORRESPONDS TO THE LEFT SIDE OF THE FITTINGS.
- DIVERTERS FOR SINK FAUCETS WITH A SECONDARY OUTLET CONSISTING OF A FLEXIBLE HOSE AND SPRAY ASSEMBLY SHALL CONFORM TO ASTM A112.18.1 IN ADDITION TO THE REQUIREMENTS IN N.C.-P
- THE INSTALLATION OF A WATER SERVICE OR WATER DISTRIBUTION PIPE SHALL BE PROHIBITED IN SOIL AND GROUND WATER THAT IS CONTAMINATED. GROUND WATER CONDITIONS SHALL BE REQUIRED TO ASCERTAIN THE ACCEPTABILITY OF THE WATER SERVICE OR WATER DISTRIBUTION PIPING MATERIAL FOR THE SPECIFIC INSTALLATION. WHERE DETRIMENTAL CONDITIONS EXIST, APPROVED ALTERNATIVE MATERIALS OR ROUTING SHALL BE REQUIRED.
- MATER DISTRIBUTION PIPE SHALL CONFORM TO NSF 61 AND SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN N.C.-PLUMBING. ALL WATER DISTRIBUTION PIPE AND TUBING SHALL HAVE A MINIMUM PRESSURE RATINGS OF 100 PSI AT 180 DEGREES F.
- PIPE PASSING THROUGH CONCRETE OR CINDER WALLS AND FLOORS OR OTHER CORROSIVE MATERIAL SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY A PROTECTIVE SHEATHING OR WRAPPING OR OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM THE LINE AND ACID OF CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL. SHEATHING OR WRAPPING SHALL ALLOW FOR EXPANSION AND CONTRACTION OF PIPING TO PREVENT ANY RUBBING ACTION. MINIMUM WALL THICKNESS OF MATERIAL SHALL BE 0.025-INCH.
- PIPES PASSING UNDER OR THROUGH WALLS SHALL BE PROTECTED FROM PHYSICAL DAMAGE PER NC-R.
- PIPING SHALL BE INSTALLED SO AS TO PREVENT DETRIMENTAL STRAINS AND STRESSES IN THE PIPE. PROVISIONS SHALL BE MADE TO PROTECT PIPING FROM DAMAGE RESULTING FROM EXPANSION, CONTRACTION AND STRUCTURAL SETTLEMENT. PIPING SHALL BE INSTALLED TO AVOID STRUCTURAL STRESSES OR STRAINS WITHIN BUILDING COMPONENTS.
- MATER PIPES INSTALLED IN A WALL EXPOSED TO THE EXTERIOR SHALL BE LOCATED ON THE HEATED SIDE OF THE WALL INSULATION. IN OTHER CASES, WATER, SOIL, AND WASTE PIPES SHALL NOT BE INSTALLED OUTSIDE OF A BUILDING, IN UNCONDITIONED ATTICS, UNCONDITIONED UTILITY ROOMS OR IN ANY OTHER PLACE SUBJECTED TO FREEZING TEMPERATURES UNLESS ADEQUATE PROVISION IS MADE TO PROTECT SUCH PIPES FROM FREEZING BY A MINIMUM OF R-6.5 INSULATION DETERMINED AT 75 DEG. F IN ACCORDANCE WITH ASTM C177 OR HEAT OR BOTH. EXTERIOR WATER SUPPLY SYSTEM PIPING SHALL BE INSTALLED NOT LESS THAN 6 INCHES BELOW THE FROST LINE AND NOT LESS THAN 12 INCHES BELOW GRADE.
- BUILDING SEWER PIPE SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN N.C.-R.
- BUILDING SEWER PIPE FITTINGS SHALL BE APPROVED FOR INSTALLATION WITH THE PIPING MATERIAL INSTALLED AND SHALL CONFORM TO THE RESPECTIVE PIPE STANDARDS OR ONE OF THE STANDARDS LISTED IN N.C.-P.
- WHERE WASTE LINE DROPS OCCUR IN A LOCATION WHERE THE SOUND OF A FLUSHED TOILET MAY BE UNDESIRABLE, SUCH AS IN WALLS OR PARTITIONS ADJACENT TO EATING ROOMS, USE CAST IRON PIPING OR SIMILAR APPROVED HARD OR DENSE PIPING TO MITIGATE SOUND.
- CLEANOUTS ON BUILDING SEWERS SHALL BE LOCATED AS SET FORTH IN N.C.-R.
- THE MAXIMUM WATER CONSUMPTION FLOW RATES AND QUANTITIES FOR ALL PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH N.C.-R.
- INDIVIDUAL SHOWER AND TUB/SHOWER COMBINATION VALVES SHALL BE EQUIPPED WITH CONTROL VALVES OF THE PRESSURE-BALANCE, THERMOSTATIC-MIXING OR COMBINATION PRESSURE-BALANCE/ THERMOSTATIC-MIXING VALVE TYPES WITH A HIGH LIMIT STOP IN ACCORDANCE WITH ASSE 1016/ ASME A112.1016/CSA B125.16, AND SHALL BE INSTALLED AND ADJUSTED PER MANUFACTURE'S INSTRUCTIONS.
- GAS AND ELECTRIC WATER HEATERS HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18 INCHES ABOVE THE GARAGE FLOOR. REFER TO N.C.-R FOR EXCEPTION.
- MATER HEATERS, (USING SOLID, LIQUID OR GAS FUEL) WITH THE EXCEPTION OF THOSE HAVING DIRECT VENT SYSTEMS, SHALL NOT BE INSTALLED IN BATHROOMS AND BEDROOMS OR IN A CLOSET WITH ACCESS ONLY THROUGH A BEDROOM OR BATHROOM. HOWEVER, WATER HEATERS OF THE AUTOMATIC STORAGE TYPE MAY BE INSTALLED AS REPLACEMENT IN A BATHROOM WHEN APPROVED BY THE PLUMBING OFFICIAL, PROVIDED THEY ARE VENTED AND SUPPLIED WITH ADEQUATE COMBUSTION AIR.
- IN SEISMIC DESIGN CATEGORIES DO, D1 AND D2 AND TOWNHOUSES IN SEISMIC DESIGN CATEGORY C, WATER HEATERS SHALL BE INSTALLED IN THE UPPER ONE-THIRD AND IN THE LOWER ONE-THIRD OF THE APPLIANCE TO RESIST A HORIZONTAL FORCE EQUAL TO ONE-THIRD OF THE OPERATING WEIGHT OF THE WATER HEATER, ACTING IN ANY HORIZONTAL DIRECTION, OR IN ACCORDANCE WITH THE APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
- APPLIANCES LOCATED IN A GARAGE OR CARPORT SHALL BE PROTECTED FROM IMPACT BY A MOVING VEHICLE.
- WHERE WATER HEATERS OR HOT WATER STORAGE TANKS ARE INSTALLED IN REMOTE LOCATIONS SUCH AS SUSPENDED CEILINGS, ATTICS, ABOVE OCCUPIED SPACES, OR UNVENTILATED CRAWL SPACES, A LOCATION WHERE WATER LEAKAGE FROM THE TANK WILL CAUSE DAMAGE TO PRIMARY STRUCTURAL MEMBERS, THE TANK OR WATER HEATER SHALL BE INSTALLED IN A GALVANIZED STEEL PAN HAVING A MINIMUM THICKNESS OF 24 GAGE, OR OTHER PANS APPROVED FOR SUCH USE.
- WHERE CLOTHES WASHING MACHINES ARE LOCATED ON WOOD FRAMED FLOORS, WHERE LEAKAGE COULD CAUSE DAMAGE, A GALVANIZED STEEL PAN HAVING A MINIMUM THICKNESS OF 24 GAGE, OR OTHER PANS APPROVED FOR SUCH USE SHALL BE PROVIDED.

MECHANICAL & PLUMBING (continued)

PLUMBING (continued)

- APPLIANCES AND EQUIPMENT USED FOR HEATING WATER OR STORING HOT WATER SHALL BE PROTECTED BY A SEPARATE PRESSURE-RELIEF VALVE AND A SEPARATE TEMPERATURE-RELIEF VALVE OR A COMBINATION PRESSURE- AND TEMPERATURE RELIEF VALVE. RELIEF VALVES SHALL HAVE A MINIMUM RATED CAPACITY FOR THE EQUIPMENT SERVED AND SHALL CONFORM TO ANSI Z21.22. THE RELIEF VALVE SHALL NOT BE USED AS A MEANS OF CONTROLLING THERMAL EXPANSION.
- THE WATER SUPPLY TO A DISHWASHER SHALL BE PROTECTED AGAINST BACKFLOW BY AN AIR GAP COMPLYING WITH ASME A112.18 OR A112.12 THAT IS INSTALLED INTEGRALLY WITHIN THE MACHINE OR A BACKFLOW PREVENTER IN ACCORDANCE WITH THE NC-R.
- SINK AND DISHWASHER. THE COMBINED DISCHARGE FROM A DISHWASHER AND A ONE- OR TWO-COMPARTMENT SINK, WITH OR WITHOUT A FOOD-WASTE DISPOSER, SHALL BE SERVED BY A TRAP OF NOT LESS THAN 1 1/2 INCHES (38 MM) IN OUTSIDE DIAMETER. THE DISHWASHER DISCHARGE PIPE OR TUBING SHALL RISE TO THE UNDERSIDE OF THE COUNTER AND SHALL BE SECURELY FASTENED TO THE UNDERSIDE OF THE SINK RIM OR COUNTER BEFORE CONNECTING TO THE HEAD OF THE FOOD-WASTE DISPOSER OR TO A WYE FITTING IN THE SINK TAILPIECE.
- FIREPLACES
 - FACTORY-BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTINGS. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.
 - FIREPLACES ARE TO BE PROVIDED WITH AN EXTERIOR AIR SUPPLY

ELECTRICAL

- ALL MATERIALS AND APPLIANCES, INSTALLATION AND CONSTRUCTION METHODS SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE OR CURRENT SAE REQUIREMENTS.
- ALL ELECTRICAL SYSTEMS, CIRCUITS, FIXTURES AND EQUIPMENT SHALL BE GROUNDED IN A MANNER COMPLYING WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL WIRING SHALL BE SO INSTALLED THAT, WHEN COMPLETED, THE SYSTEM WILL BE FREE FROM SHORT CIRCUITS AND FROM GROUNDS OTHER THAN AS REQUIRED OR PERMITTED IN N.E.C. ARTICLE 250.
- ELECTRIC EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORK-MANLIKE MANNER.
 - BATHROOMS.
 - GARAGES AND ALSO ACCESSORY BUILDINGS THAT HAVE A FLOOR LOCATED AT OR BELOW GRADE LEVEL NOT INTENDED AS HABITABLE ROOMS AND LIMITED TO STORAGE AREAS, WORK AREAS, AND AREAS OF SIMILAR USE.
 - OUTDOORS.
 - CRAWL SPACES. WHERE THE CRAWL SPACE IS AT OR BELOW GRADE LEVEL.
 - UNFINISHED PORTIONS OR AREAS OF THE BASEMENT NOT INTENDED AS HABITABLE ROOMS.
 - KITCHENS. WHERE THE RECEPTACLES ARE INSTALLED TO SERVE THE COUNTERTOP SURFACES.
 - SINKS. WHERE RECEPTACLES ARE INSTALLED WITHIN 6 FT FROM THE TOP INSIDE EDGE OF THE BOWL OF THE SINK.
 - BOAT HOUSES.
 - BATHTUBS OR SHOWER STALLS - WHERE RECEPTACLES ARE INSTALLED WITHIN 6' OF THE OUTSIDE EDGE OF THE BATHTUB OR SHOWER STALL.
 - LAUNDRY AREAS
- DISHWASHER - GFCI PROTECTION IS NOT REQUIRED FOR OUTLETS THAT SUPPLY DISHWASHERS INSTALLED IN DWELLING UNIT LOCATIONS.
- CRAWL SPACE LIGHTING OUTLETS, GFCI PROTECTION SHALL BE PROVIDED FOR LIGHTING OUTLETS NOT EXCEEDING 120 VOLTS INSTALLED IN CRAWL SPACES.
- APPLIANCE RECEPTACLE OUTLETS INSTALLED IN A DWELLING UNIT FOR SPECIFIC APPLIANCES, SUCH AS LAUNDRY EQUIPMENT, SHALL BE INSTALLED WITHIN 6 FEET OF THE INTENDED LOCATION OF THE APPLIANCE.

- IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUNROOM, BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE FLOOR LINE IN ANY WALL SPACE IS MORE THAN 6 FEET, MEASURED HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLUDING ANY WALL SPACE 2 FEET OR MORE IN WIDTH (INCLUDING SPACE MEASURED AROUND CORNERS) AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS AND SIMILAR OPENINGS, FIREPLACES, AND FIXED CABINETS, AND THE WALL SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS, BUT EXCLUDING SLIDING PANELS IN EXTERIOR WALLS. THE WALL SPACE AFFORDED BY FIXED ROOM DIVIDERS, SUCH AS FREESTANDING BAR-TYPE COUNTERS OR RAILINGS, SHALL BE INCLUDED IN THE 6 FOOT MEASUREMENT.

- IN THE KITCHEN, PANTRY, BREAKFAST ROOM, DINING ROOM, OR SIMILAR AREA OF A DWELLING UNIT, THE TWO OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS REQUIRED SHALL SERVE ALL WALL AND FLOOR RECEPTACLE OUTLETS, ALL COUNTERTOP OUTLETS, AND RECEPTACLE OUTLETS FOR REFRIGERATION EQUIPMENT. THE TWO OR MORE SMALL-APPLIANCE BRANCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.

- IN KITCHENS, PANTRIES, BREAKFAST ROOMS, DINING ROOMS AND SIMILAR AREAS OF DWELLING UNITS, RECEPTACLE OUTLETS FOR COUNTER SPACES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING:

- A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTER SPACE 12 INCHES OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.

ELECTRICAL (continued)

- AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES OR GREATER.
- AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH PENINSULAR COUNTER SPACE WITH A LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES OR GREATER. A PENINSULAR COUNTERTOP IS MEASURED FROM CONNECTING PERPENDICULAR WALL.
- COUNTERTOP SPACES SEPARATED BY RANGE TOPS, REFRIGERATORS, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTERTOP SPACES IN APPLYING THE REQUIREMENTS OF (1), (2), AND (3) ABOVE. IF A RANGE, COUNTER-MOUNTED COOKING UNIT, OR SINK IS INSTALLED IN AN ISLAND OR PENINSULAR COUNTERTOP AND THE DEPTH OF THE COUNTER BEHIND THE ITEM IS LESS THEN 12 INCHES, IT WILL BE CONSIDERED TO DIVIDE THE COUNTERTOP SPACE INTO TWO SEPARATE COUNTERTOP SPACES. EACH COUNTERTOP SPACE SHALL COMPLY WITH APPLICABLE REQUIREMENTS.
- RECEPTACLE OUTLETS SHALL BE LOCATED NOT MORE THAN 20 INCHES ABOVE THE COUNTERTOP, RECEPTACLE OUTLETS RENDERED NOT READILY ACCESSIBLE BY APPLIANCES FASTENED IN PLACE, APPLIANCE GARAGES, SINKS, OR RANGETOPS AS COVERED IN 4) ABOVE, OR APPLIANCES OCCUPYING DEDICATED SPACE SHALL NOT BE CONSIDERED AS THESE REQUIRED OUTLETS.
- AT LEAST ONE WALL RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITHIN 3 FEET OF THE OUTSIDE EDGE OF EACH BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED IN WALL OR PARTITION THAT IS ADJACENT TO THE BASIN OR BASIN COUNTERTOP, OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET NOT MORE THAN 12" BELOW THE COUNTERTOP.
- IN DWELLING UNITS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN AREAS DESIGNATED FOR THE INSTALLATION OF LAUNDRY EQUIPMENT.
- IN EACH ATTACHED GARAGE AND IN EACH DETACHED GARAGE WITH ELECTRIC POWER, THE BRANCH CIRCUIT SUPPLYING THIS RECEPTACLE(S) SHALL NOT SUPPLY OUTLETS OUTSIDE OF THE GARAGE. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN EACH VEHICLE BAY.
- CABLE- OR RACEWAY-TYPE WIRING METHODS INSTALLED IN A GROOVE, TO BE COVERED BY WALLBOARD, SIDING, PANELING, CARPETING, OR SIMILAR FINISH, SHALL BE PROTECTED BY 1/16 INCH THICK STEEL PLATE, SLEEVE, OR EQUIVALENT OR BY NOT LESS THAN 1-1/4 INCH FREE SPACE FOR THE FULL LENGTH OF THE GROOVE IN WHICH THE CABLE OR RACEWAY IS INSTALLED.
- RECEPTACLES IN DAMP OR WET LOCATIONS.
 - A RECEPTACLE INSTALLED OUTDOORS IN A LOCATION PROTECTED FROM WEATHER OR IN OTHER DAMP LOCATIONS SHALL HAVE AN ENCLOSURE FOR THE RECEPTACLE THAT IS WEATHERPROOF WHEN THE RECEPTACLE IS COVERED. (ATTACHMENT PLUG CAP NOT INSERTED AND RECEPTACLE COVERS CLOSED.)
 - ALL 15- AND 20- AMPERE, 125- AND 250-VOLT RECEPTACLES INSTALLED IN A WET LOCATION SHALL HAVE AN ENCLOSURE THAT IS WEATHER PROOF WHETHER OR NOT THE ATTACHMENT PLUG CAP IS INSERTED. AN OUTLET BOX HOOD INSTALLED FOR THIS PURPOSE SHALL BE LISTED AND SHALL BE IDENTIFIED AS "EXTRA DUTY". ALL 15- AND 20- AMPERE, 125- AND 250-VOLT NONLOCKING RECEPTACLES SHALL BE LISTED WEATHER RESISTANT TYPE.
- LIGHTING EQUIPMENT. NOT LESS THAN 75 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH-EFFICACY LAMPS.
- LIGHT FIXTURES WITHIN CLOTHES CLOSETS SHALL BE INSTALLED IN ACCORDANCE WITH N.E.C.
- ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S). COMBINATION-TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. THE ARC-FAULT CIRCUIT INTERRUPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
- BUILDINGS SHALL BE PROVIDED WITH APPROVED ADDRESS IDENTIFICATION. THE ADDRESS IDENTIFICATION SHALL BE LEGIBLE AND PLACED IN A POSITION THAT IS VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
- TAMPER-RESISTANT RECEPTACLES IN DWELLING UNITS IN ALL AREAS. ALL NON-LOCKING TYPE 125-VOLT 15-AND 20-AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. EXCEPTIONS LISTED BELOW:
 - RECEPTACLES LOCATED MORE THAN 5 1/2' ABOVE THE FLOOR.
 - RECEPTACLES THAT ARE PART OF A LUMINAIRE OR APPLIANCE.
 - A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES LOCATED WITHIN DEDICATED SPACE FOR EACH APPLIANCE THAT, IN NORMAL USE, IS NOT EASILY MOVED FROM ONE PLACE TO ANOTHER, AND THAT IS CORD-AND-PLUG CONNECTED.
 - NON-GROUNDING RECEPTACLES USED FOR REPLACEMENTS.
- DIMMER-CONTROLLED RECEPTACLES. A RECEPTACLE SUPPLYING LIGHTING LOADS SHALL NOT BE CONNECTED TO A DIMMER UNLESS THE PLUG RECEPTACLE COMBINATION IS A NONSTANDARD CONFIGURATION TYPE THAT IS SPECIFICALLY LISTED AND IDENTIFIED FOR EACH SUCH UNIQUE COMBINATION.

SMOKE DETECTORS

- SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S INSTRUCTIONS AND NC-R 314.
- ALL SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE AND THE HOUSEHOLD FIRE WARNING EQUIPMENT PROVISIONS OF NFPA 72.

HOUSEHOLD FIRE ALARM SYSTEMS INSTALLED IN ACCORDANCE WITH NFPA 72 THAT INCLUDE SMOKE ALARMS, OR A COMBINATION OF SMOKE DETECTOR AND AUDIBLE NOTIFICATION DEVICE INSTALLED AS REQUIRED BY THE NC-R 314.3 FOR SMOKE ALARMS, SHALL BE PERMITTED. THE HOUSEHOLD FIRE ALARM SYSTEM SHALL PROVIDE THE SAME LEVEL OF SMOKE DETECTION AND ALARM RESPONSE AS WOULD BE PROVIDED BY THE LEAD FOR SMOKE ALARMS IN THE EVENT THE FIRE ALARM PANEL IS REMOVED OR THE SYSTEM IS NOT CONNECTED TO A CENTRAL STATION.

- REQUIRED SMOKE DETECTORS SHALL BE LOCATED IN ACCORDANCE WITH THE NC-R 314.3

ELECTRICAL (continued)

CARBON MONOXIDE ALARMS

- CARBON MONOXIDE ALARMS IN DWELLING UNITS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN A BEDROOM OR ITS ATTACHED BATHROOM, A CARBON MONOXIDE ALARM SHALL BE INSTALLED WITHIN THE BEDROOM.
- SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NC-R 315 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF INDIVIDUAL CARBON MONOXIDE OR SMOKE ALARMS.

DRYER VENT

- THE DRYER DUCT IS REQUIRED TO IDENTIFY THE LENGTH IN ACCORDANCE WITH SECTION M1502.4.5



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NORTH CAROLINA DIVISION

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2018 NORTH CAROLINA STATE BUILDING CODES

ISSUE DATE: 12/06/24
PROJECT No.: 1350999:57
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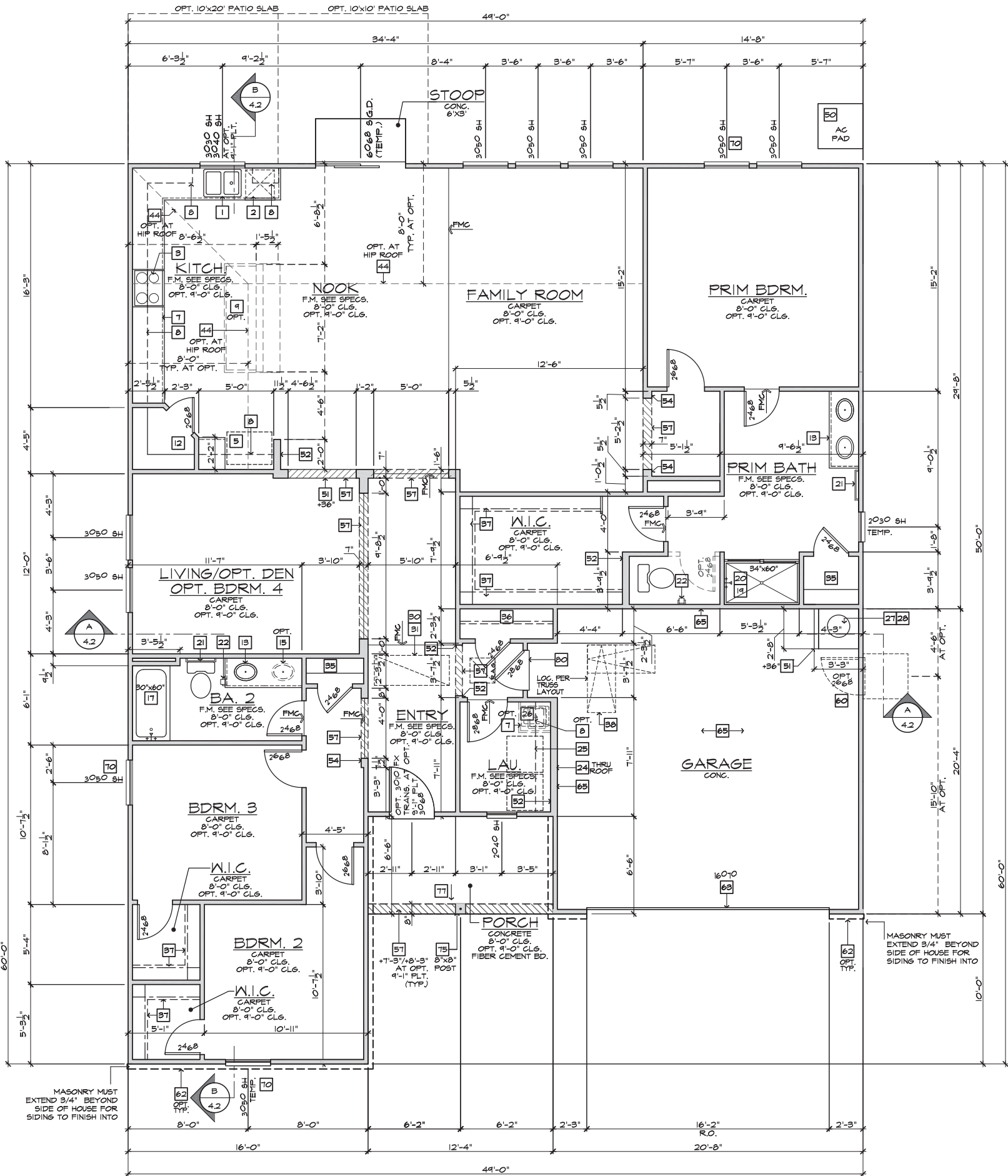
PLAN:
149.2115-R

SHEET:
GN3

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

INTERIOR KEY			
SQUARE FOOTAGE			
PLANPLAN 149.2115-R			
FIRST FLOOR AREA		2114	SQ. FT.
TOTAL AREA		2114	SQ. FT.
GARAGE AREA		416	SQ. FT.
PORCH AREA(S)			
	ELEVATION 'L'	80	SQ. FT.
	ELEVATION 'M'	40	SQ. FT.
	ELEVATION 'N'	74	SQ. FT.
PATIO AREA(S)			
	COVERED	100	SQ. FT.
	EXTENDED COVERED	200	SQ. FT.
	COVERED	144	SQ. FT.
	SCREENED-IN		
	EXTENDED COVERED	294	SQ. FT.
DECK AREA(S)			
	DECK	144	SQ. FT.
	EXTENDED DECK	294	SQ. FT.
	SCREENED-IN DECK	144	SQ. FT.
	EXTENDED		
	SCREENED-IN DECK	248	SQ. FT.
SUNROOM AREA(S)			
	SUNROOM	144	SQ. FT.

GENERAL PLAN NOTES	
ALL CEILING HEIGHTS PER SECTION AND ELEVATION PLATE HEIGHTS, U.N.O.	
ALL INTERIOR DOORS TO BE HOLLOW CORE 1 3/8" THICK, U.N.O. (REFER TO PLAN FOR SIZE).	
ALL GARAGE SERVICE DOORS TO BE HOLLOW CORE EXTERIOR GRADE (REFER TO PLAN FOR SIZE).	
ALL HOUSE TO GARAGE DOORS TO BE 20-MINUTE FIRE-RATED (REFER TO PLAN FOR SIZE).	
ALL ENTRY DOORS AND EXTERIOR FRENCH DOORS TO BE SOLID CORE 1 3/4" THICK (REFER TO PLAN FOR SIZE).	
ALL FLOOR MATERIAL CHANGES TO OCCUR AT CENTER OF DOOR JAMBS, U.N.O.	



#	FLOOR PLAN NOTES
NOTE: NOT ALL KEY NOTES APPLY.	
1.	SINK - GARBAGE DISPOSAL OPTIONAL - VERIFY DIMENSIONS WITH MANUFACTURERS' SPECS
2.	DISHWASHER - PROVIDE AIR GAP - VERIFY SPACINGS & DIMENSIONS PER MANUFACTURERS' SPECS
3.	SLIDE-IN RANGE/OVEN COMBINATION W/ BUILT-IN NON-VENTED HOOD W/LIGHT & FAN. - VERIFY WITH MANUFACTURERS' SPECS
4.	30" COOKTOP W/ BUILT-IN VENTED HOOD W/ LIGHT & FAN VERIFY WITH MANUFURS' SPECS
5.	34" CLEAR REFRIGERATOR SPACE W/ OPTIONAL CABINETS ABOVE - OPT. PLUMBING FOR ICEMAKER (RECESSED IN MALL)
6.	COMBINATION DOUBLE OVEN OR OVEN/ MICROWAVE OVEN OR OVEN VERIFY DIMENSIONS WITH MANUFACTURERS' SPECS
7.	BASE CABINETS - REFER TO INTERIOR ELEVATIONS
8.	UPPER CABINETS - REFER TO INTERIOR ELEVATIONS
9.	ISLAND CABINET - REFER TO INTERIOR ELEVATIONS
10.	MIN. 12" BAR TOP/ BREAKFAST BAR
11.	DESK AREA - REFER TO INTERIOR ELEVATIONS
12.	BUILT-IN PANTRY (15" DEEP OR U.N.O.)
13.	SINK CABINET(S) - REFER TO INTERIOR ELEVATIONS
14.	SINK CABINET W/ EXTENDED VANITY & DRAWERS BELOW - REFER TO INTERIOR ELEVATIONS
15.	OPT. SINK - REFER TO INTERIOR ELEVATIONS.
16.	DRAWERS - REFER TO INTERIOR ELEVATIONS
17.	PRE-FAB. TUB/SHOWER COMBO W/ FIBERGLASS MAINSCOT TO 72" - VERIFY DIMENSIONS W/ MANUF'S SPECS
18.	OVAL TUB - VERIFY DIMENSIONS WITH MANUF'R'S SPECS.
19.	PRE-FAB. SHOWER PAN W/ 30" MIN. CLR. INSIDE & MAINSCOT TO 72" - VERIFY DIMENSIONS W/ MANUF'S SPECS
20.	SHATTERPROOF (TEMPERED) GLASS SHOWER ENCLOSURE.
21.	TOWEL BAR - PROVIDE 2x SOLID BLK'S IN WALL
22.	TOILET PAPER HOLDER - PROVIDE 2x SOLID BLK'S IN WALL
23.	RESERVED
24.	WASHER & DRYER. - PROVIDE WATER & WASTE FOR WASHER - RECESS WASHER CONTROL VALVES IN WALL - VENT DRYER TO OUTSIDE AIR. - ACCOMMODATE TO BE LOCATED WASHER AT LEFT AND DRYER AT RIGHT.
25.	12" SHELF PER SPECS
26.	OPT. LAUNDRY SINK - REFER TO INTERIOR ELEV'S
27.	WATER HEATER LOCATION. - FOR GAS - LOCATE ON 18" HIGH PLATFORM - FOR INTERIOR LOCATION - PROVIDE PAN & DRAIN. (REFER TO TS/AD4)
28.	RESERVED
29.	MAIN LINE SHUT-OFF VALVE AND TEMP. & PRESSURE RELIEF VALVE
30.	F.A.U. LOCATION (REFER TO DETAIL 88/AD5)
31.	RESERVED
32.	LISTED FACTORY-BUILT GAS FIRED DEG. APPLIANCE (REF. 80/AD4) - INSTALL PER MFR. SPECS
33.	HEARTH TO BE INSTALLED PER FACTORY-BUILT FIREPLACE LISTING
34.	GAS APPLIANCE 'B' VENT FROM BELOW
35.	LINEN PER SPECS (15" DEEP OR U.N.O.)
36.	COAT CLOSET W/ SHELF & POLE (REFER TO DETAIL78/AD4)
37.	WARDROBE W/ SHELF & POLE (REFER TO DETAIL78/AD4)
38.	22"x30" MIN. ATTIC ACCESS
39.	25"x54" FULL DOWN LADDER R.O. ATTIC ACCESS TO BE PROTECTED
40.	LINE OF WALL BELOW
41.	DUCT CHASE
42.	LINE OF FLOOR ABOVE
43.	LINE OF FLOOR BELOW
44.	LINE OF HIP AT OPTIONAL VOLUME CEILING
45.	LINE OF RIDGE AT OPTIONAL VOLUME CEILING
46.	CEILING BREAK
47.	STAIR TREADS & RISERS. - MIN. 10" TREAD & MAX. 7 3/4" RISER - (REFER TO DETAIL 81-82/AD5)
48.	MIN. 36" HIGH GUARDWALL (REFER TO DET. 83/AD5 & 85/AD5)
49.	34" TO 36" HIGH HANDRAIL (REFER TO DETAIL 83/AD5)
50.	A/C PAD LOCATION
51.	LOW WALL - REFER TO PLAN FOR HEIGHT
52.	2x6 STUD WALL
53.	2x6 BALLOON FRAMED WALL PER STRUCTURAL
54.	DBL. 2x4 WALL PER PLAN
55.	INTERIOR SHELF-SEE PLAN FOR HT.
56.	MEDIA NICHE
57.	FLAT SOFFIT - SEE ELEV. FOR HGT.
58.	ARCHED SOFFIT - SEE ELEV. FOR HGT.
59.	WINDOW SEAT
60.	OPT. DOOR/ WINDOW
61.	PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYPON OR EQ. SURROUNDING STRUCTURAL POST.
62.	BRICK / STONE VENEER - REFER TO ELEVATIONS VENEER TO COMPLY WITH THE N.C.-R.
63.	SECTIONAL GARAGE DOOR PER SPECS
64.	MIN. 1/2" GYP. BD. ON CEILINGS & WALLS @ USEABLE SPACE UNDER STAIR.
65.	GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYP. BD. @ GARAGE SIDE WALLS & 5/8" UNDER LIVING AREA U.N.O.
66.	OPT. MIN. 36" HIGH GUARDRAIL (REFER TO DETAIL 86/AD5)
67.	5/8" TYPE-X GYP. IN GARAGE BETWEEN CEILING & FLOOR ABV.
68.	P.T. POST W/ WRAP
69.	CONCRETE STOOP. 36"x36" STANDARD SLOPE 1/4" PER FT. MIN.
70.	EGRESS WINDOW
71.	PROVIDE ADDITIONAL RISER(S) AT OPTIONAL PLATE HT.
72.	MDF TOP
73.	PLUMBING DROP FROM ABOVE
74.	ADJUST OPENING AT OPTION TO FIT THE DOOR SIZE SHOWN
75.	WINDOW LEDGE. HEIGHT & WIDTH OF OPENING TO EXTEND 6" BEYOND WINDOW(S) ON ALL SIDES U.N.O.
76.	SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE
77.	CONCRETE SLAB. SLOPE 1/4" PER FT. MIN. SEE PLAN FOR SIZE.
78.	RESERVED
79.	SLOPING LOW WALL 38" ABOVE ADJACENT TREADS
80.	20 MIN. FIRE-RATED DOOR



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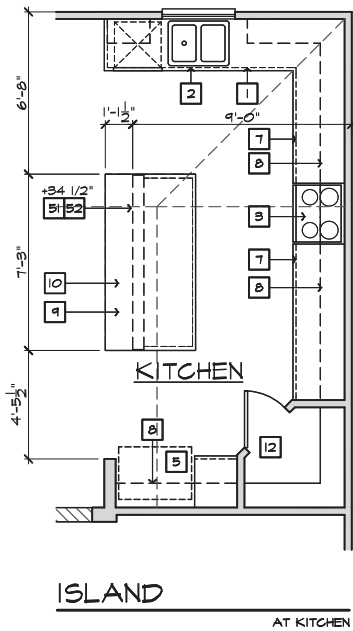
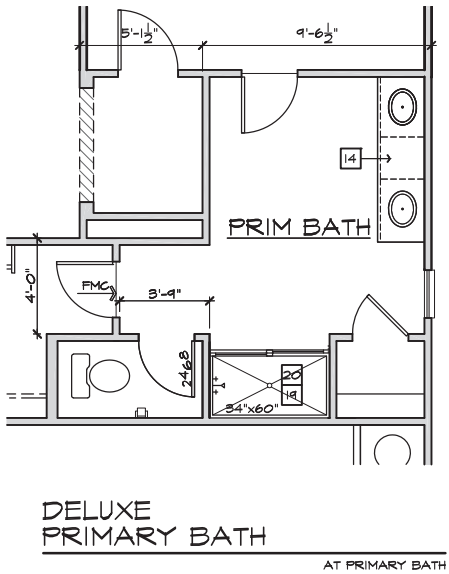
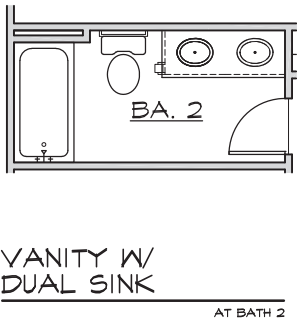
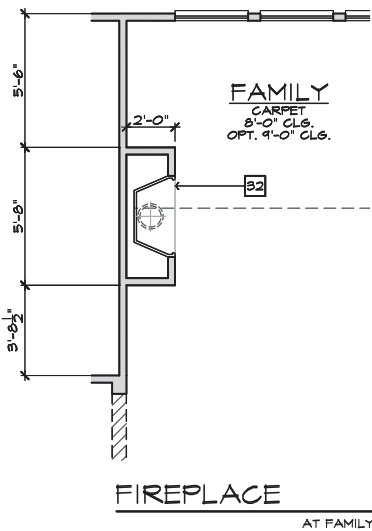
2018 NORTH CAROLINA STATE BUILDING CODES

ISSUE DATE: 03/03/25
PROJECT No.: 1350999:57
DIVISION MGR.: DS
REVISIONS: SEE BELOW

PLAN:
149.2115-R

SHEET:
1.1

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES



#	FLOOR PLAN NOTES	208.56.6
NOTE: NOT ALL KEY NOTES APPLY.		
1.	SINK - GARBAGE DISPOSAL OPTIONAL - VERIFY DIMENSIONS WITH MANUFACTURERS' SPECS	
2.	DISHWASHER - PROVIDE AIR GAP - VERIFY SPACINGS & DIMENSIONS PER MANUFACTURERS' SPECS	
3.	SLIDE-IN RANGE/OVEN COMBINATION W/ BUILT-IN NON-VENTED HOOD W/LIGHT & FAN. - VERIFY WITH MANUFACTURERS' SPECS	
4.	30" COOKTOP W/ BUILT-IN VENTED HOOD W/ LIGHT & FAN VERIFY WITH MANUFRS' SPECS	
5.	34" CLEAR REFRIGERATOR SPACE W/ OPTIONAL CABINETS ABOVE - OPT. PLUMBING FOR ICEMAKER (RECESSED IN WALL)	
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7.	BASE CABINETS - REFER TO INTERIOR ELEVATIONS	
8.	UPPER CABINETS - REFER TO INTERIOR ELEVATIONS	
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10.	MIN. 12" BAR TOP/ BREAKFAST BAR	
11.	DESK AREA - REFER TO INTERIOR ELEVATIONS	
12.	BUILT-IN PANTRY (15" DEEP OR U.N.O.)	
13.	SINK CABINET(S) - REFER TO INTERIOR ELEVATIONS	
14.	SINK CABINET W/ EXTENDED VANITY & DRAWERS BELOW - REFER TO INTERIOR ELEVATIONS	
15.	OPT. SINK - REFER TO INTERIOR ELEVATIONS.	
16.	DRAWERS - REFER TO INTERIOR ELEVATIONS	
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21.	TOWEL BAR - PROVIDE 2x SOLID BLK'G IN WALL	
22.	TOILET PAPER HOLDER - PROVIDE 2x SOLID BLK'G IN WALL	
23.	RESERVED	
24.	WASHER & DRYER: - PROVIDE WATER & WASTE FOR WASHER - RECESS WASHER CONTROL VALVES IN WALL - VENT DRYER TO OUTSIDE AIR. - ACCOMMODATE APPLIANCES TO BE LOCATED WASHER AT LEFT AND DRYER AT RIGHT.	
25.	12" SHELF PER SPECS	
26.	OPT. LAUNDRY SINK - REFER TO INTERIOR ELEV'S	
27.	WATER HEATER LOCATION: - FOR GAS - LOCATE ON 18" HIGH PLATFORM - FOR INTERIOR LOCATION - PROVIDE PAN & DRAIN. (REFER TO TS/AD4)	
28.	RESERVED	
29.	MAIN LINE SHUT-OFF VALVE AND TEMP. & PRESSURE RELIEF VALVE	
30.	F.A.U. LOCATION (REFER TO DETAIL 88/AD5)	
31.	RESERVED	
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34.	GAS APPLIANCE 'B' VENT FROM BELOW	
35.	LINEN PER SPECS (15" DEEP OR U.N.O.)	
36.	COAT CLOSET W/ SHELF & POLE (REFER TO DETAIL78/AD4)	
37.	WARDROBE W/ SHELF & POLE (REFER TO DETAIL78/AD4)	
38.	22"x30" MIN. ATTIC ACCESS 25"x54" FULL DOWN LADDER R.O. ATTIC ACCESS TO BE PROTECTED	
39.	LINE OF WALL BELOW	
40.	DUCT CHASE	
41.	LINE OF FLOOR ABOVE	
42.	LINE OF FLOOR BELOW	
43.	LINE OF OPTIONAL TRAY CEILING (REFER TO DETAIL 92/AD5)	
44.	LINE OF HIP AT OPTIONAL VOLUME CEILING	
45.	LINE OF RIDGE AT OPTIONAL VOLUME CEILING	
46.	CEILING BREAK	
47.	STAIR TREADS & RISERS: - MIN. 10" TREAD & MAX. 7 3/4" RISER - (REFER TO DETAIL 81-82/AD5)	
48.	MIN. 36" HIGH GUARDWALL (REFER TO DET. 83/AD5 & 85/AD5)	
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54.	DBL. 2x4 WALL PER PLAN	
55.	INTERIOR SHELF-SEE PLAN FOR HT.	
56.	MEDIA NICHE	
57.	FLAT SOFFIT - SEE ELEV. FOR HGT.	
58.	ARCHED SOFFIT - SEE ELEV. FOR HGT.	
59.	WINDOW SEAT	
60.	OPT. DOOR/ WINDOW	
61.	PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYFON OR EQ. SURROUNDING STRUCTURAL POST.	
62.	BRICK / STONE VENEER - REFER TO ELEVATIONS VENEER TO COMPLY WITH THE N.C.-R.	
63.	SECTIONAL GARAGE DOOR PER SPECS	
64.	MIN. 1/2" GYP. BD. ON CEILINGS & WALLS @ USEABLE SPACE UNDER STAIR.	
65.	GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYP. BD. @ GARAGE SIDE WALLS & 5/8" UNDER LIVING AREA U.N.O.	
66.	OPT. MIN. 36" HIGH GUARDRAIL (REFER TO DETAIL 86/AD5)	
67.	5/8" TYPE-X GYP. IN GARAGE BETWEEN CEILING & FLOOR ABV.	
68.	P.T. POST W/ WRAP	
69.	CONCRETE STOOP: 36"x36" STANDARD SLOPE 1/4" PER FT. MIN.	
70.	EGRESS WINDOW	
71.	PROVIDE ADDITIONAL RISER(S) AT OPTIONAL PLATE HT.	
72.	MDF TOP	
73.	PLUMBING DROP FROM ABOVE	
74.	ADJUST OPENING AT OPTION TO FIT THE DOOR SIZE SHOWN	
75.	WINDOW LEDGE. HEIGHT & WIDTH OF OPENING TO EXTEND 6" BEYOND WINDOW(S) ON ALL SIDES U.N.O.	
76.	SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE	
77.	CONCRETE SLAB. SLOPE 1/4" PER FT. MIN. SEE PLAN FOR SIZE.	
78.	RESERVED	
79.	SLOPING LOW WALL 38" ABOVE ADJACENT TREADS	
80.	20 MIN. FIRE-RATED DOOR	



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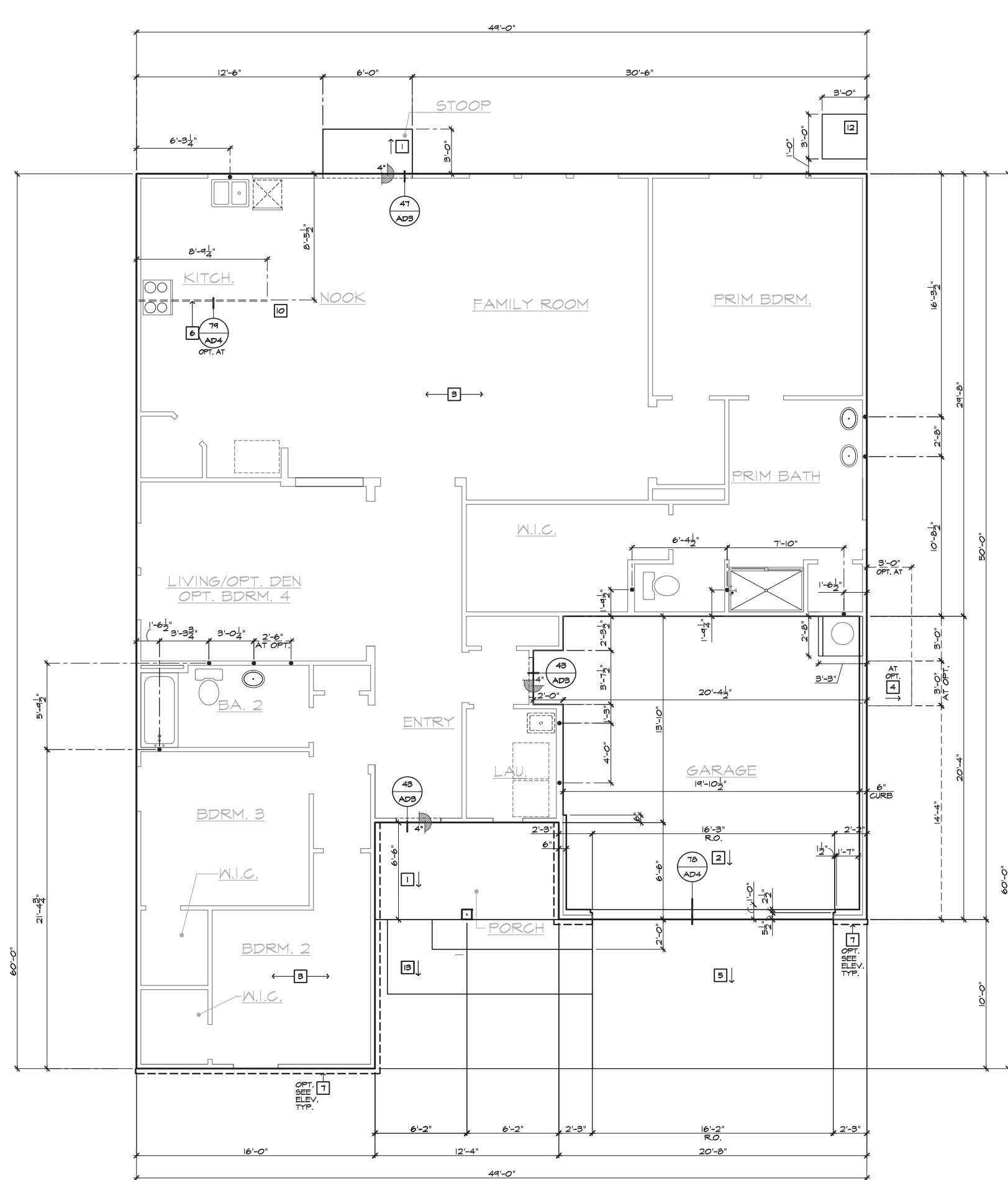
PLAN:
149.2115-R

SHEET:
1.3

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

FLOOR PLAN OPTIONS

SCALE: 1/4"=1'-0" (22"x34") - 1/8"=1'-0" (11"x17")



- #
- SLAB PLAN NOTES
- 208.26.6
- NOTE: NOT ALL KEY NOTES APPLY.
1. CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE 1/4" PER FT. MIN.
 2. CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE 1/8" PER. 1'-0" MIN. TOWARD DOOR OPENING.
 3. CONCRETE FOUNDATION PER STRUCTURAL.
 4. CONCRETE STOOP, 36"x36" STANDARD SLOPE 1/4" PER FT. MIN.
 5. CONCRETE DRIVEWAY SLOPE 1/4" PER FT. MIN. AWAY FROM GARAGE DOOR OPENING.
 6. PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND. VERIFY LOCATION.
 7. 5" BRICK LEDGE FOR MASONRY VENEER.
 8. 3" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 12" EMBEDMENT INTO CONCRETE.
 9. REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.
 10. VERIFY ALL PLUMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB.
 11. 4" MIN. 8 1/4" MAX. TO HARD SURFACE.
 12. A/C PAD. VERIFY LOCATION.
 13. 36" WIDE WALKWAY- SLOPE 1/4" PER FT. MIN.



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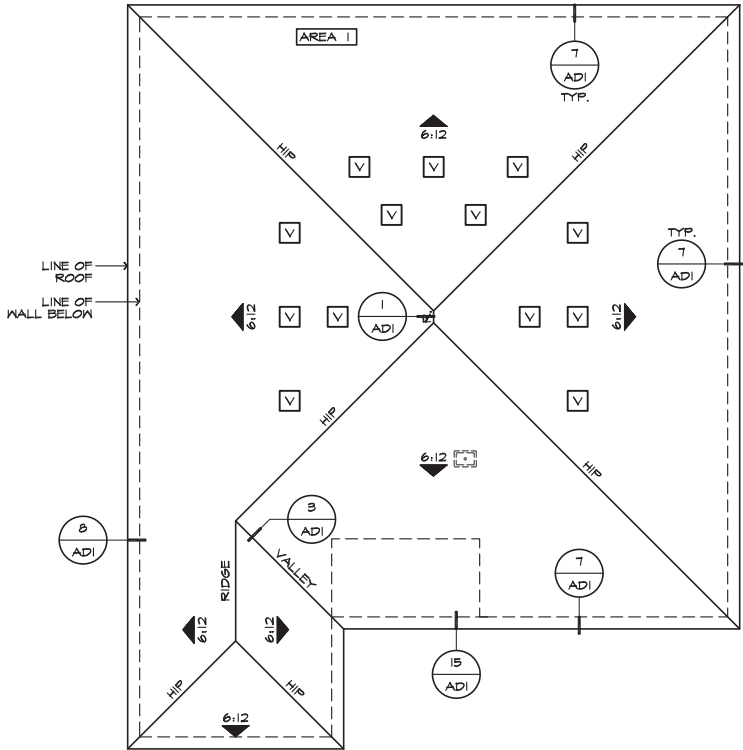
SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

SLAB INTERFACE PLAN 'L'

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

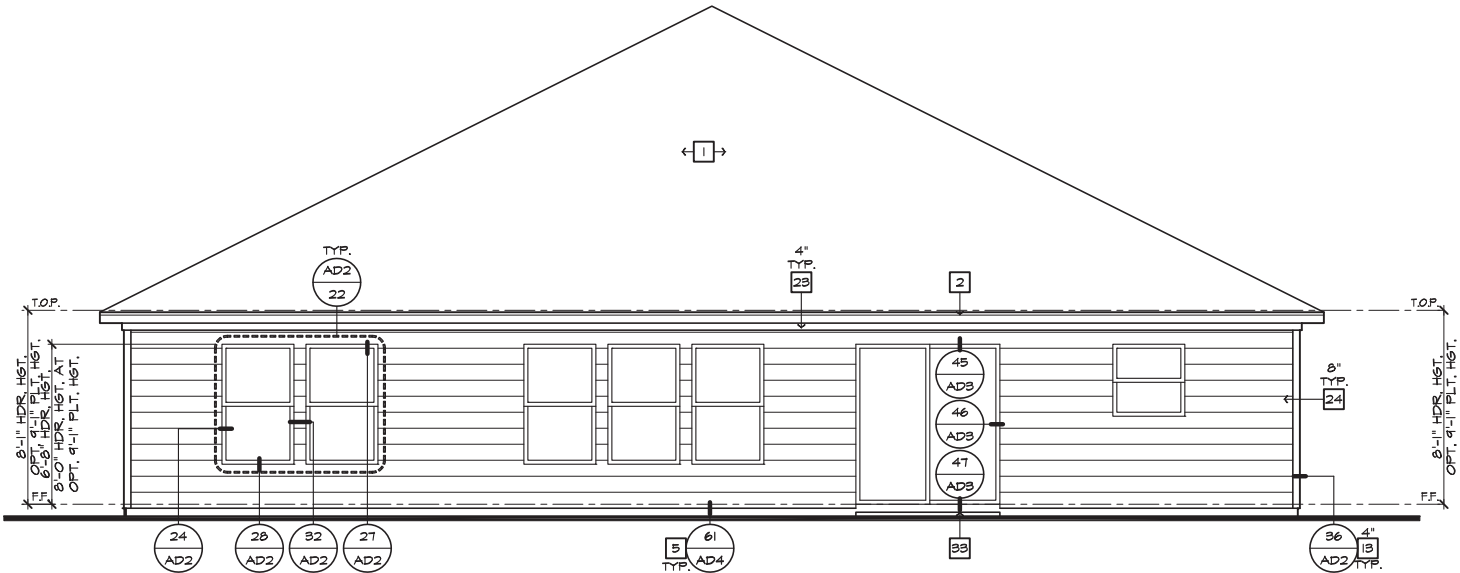
BASIC PLAN AT SLAB-ON-GRADE

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ROOF PLAN 'L'

SCALE 1/8"=1'-0" (22'x34') - 1/16"=1'-0" (11'x17')



REAR ELEVATION 'L'

SCALE 1/4"=1'-0" (22'x34') - 1/8"=1'-0" (11'x17')

#ELEVATION NOTES208.56.5

NOTE: NOT ALL KEY NOTES APPLY.

1. ROOF MATERIAL - REFER TO ROOF NOTES
2. 2X FASCIA/BARGE BOARD WITH FASCIA CAP
3. 6:1. FLASHING
4. 6:1. FLASHING & SADDLE/CRICKET
5. 6:1. DRIP SCREED
6. 24"x24" CHIMNEY
7. DECORATIVE VENT
8. DECORATIVE CORBEL, 14/ADI
9. DECORATIVE SHUTTERS
10. PEDIMENT, SEE ELEVATION FOR TYPE
11. RECESSED ELEMENT
12. DECORATIVE TRIM FYFON OR EQ. SEE ELEVATION FOR TYPE
13. TRIM PER SPEC- SEE ELEVATION FOR SIZE
14. EXTERIOR FIBER CEMENT PANEL (BEADED OR SMOOTH)
15. PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYFON OR EQ. SURROUNDING STRUCTURAL POST.
16. SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE
17. STRAIGHT SHAKE SIDING SEE SPECS
18. STONE VENEER PER SPECS
19. BRICK/MASONRY VENEER PER SPECS
20. BUILT UP BRICK COLUMN
21. SOLDIER COURSE
22. ROWLOCK COURSE
23. FRIEZE BOARD
24. SIDING PER SPECS
25. P.T. POST W/ WRAP - SEE STRUCTURAL FOR SIZE
26. PRE-FAB DECORATIVE TRIM
27. LIGHT WEIGHT PRECAST STONE TRIM
28. P.T. LUMBER RAILINGS (48" U.N.O.)
29. FIBER-CEMENT SMOOTH BOARD SEE SPECS
30. DECORATIVE WINDOW/DOOR TRIM - FYFON OR EQ. SEE ELEVATION FOR SIZE.
31. BRACKET OR KICKER - FYFON OR EQ.
32. ENTRY DOOR
33. CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN.
34. SECTIONAL GARAGE DOOR PER SPECS
35. ALUMINUM WRAP
36. OPTIONAL DOOR/WINDOW - REFER TO PLAN OPTIONS
37. RESERVED
38. KEYSTONE
39. SOLDIER CROWN
40. JACK SOLDIER COURSE
41. WATER TABLE
42. ATRIUM DOOR
43. PILASTER - SEE ELEVATION FOR TYPE

ROOF PLAN NOTES 'L'

INDICATES ROOF SLOPE AND DIRECTION, U.N.O.

6:12

ROOF MATERIAL: COMPOSITION SHINGLE

12" (INCHES) TYPICAL ROOF OVERHANGS AT RAKE, U.N.O.

12" (INCHES) TYPICAL ROOF OVERHANGS AT EAVE, U.N.O.

LOCATE EAVE/ RAFTER VENTS EQUALLY BALANCED AROUND HOUSE EXCEPT ABOVE SHEARWALL PANELS.

ATTIC VENT CALCULATIONS

PROVIDE 1 SQ. IN. OF VENTILATION PER 300 SQ. IN. OF ATTIC SPACE. PROVIDE THAT AT LEAST 50% & NO MORE THAN 80% OF THE REQ. VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE ATTIC. (HIGH VENTING) AT 3'-0" ABOVE EAVE VENT WITH THE BALANCE BEING PROVIDED BY EAVE VENTS. (LOW VENTING) (2018 N.C.-R 806.2)

* CALCULATION BY 1/150, HIGH/LOW VENTING NOT REQUIRED.

APPROXIMATE RIDGE VENT LOCATIONS SHOWN.

ACTUAL LOCATIONS TO BE DETERMINED IN THE FIELD.

AREA 1 / MAIN:			
VENTILATION REQUIRED:			
ATTIC AREA = 2810	SQ. FT. / 300	8.70 SQ. FT.	
	X 144 =	1258 SQ. IN.	
	TOTAL HIGH & LOW =	1258 SQ. IN.	
	X 50% =	626 SQ. IN.	
VENTILATION PROVIDED:			
HIGH			
0	LF RIDGE VENT(S) AT	18 SQ. IN. / LF. =	0 SQ. IN.
18	ROOF VENT(S) AT	50 SQ. IN. EA. =	650 SQ. IN.
SUB-TOTAL HIGH VENTILATION:			
650 SQ. IN.			
LOW			
44	LF VENTILATED SOFFIT AT	6.9 SQ. IN. / LF. =	603 SQ. IN.
0	ROOF VENT(S) AT	50 SQ. IN. EA. =	0 SQ. IN.
TOTAL VENTILATION PROVIDED:			
1353 SQ. IN.			

NOTES:

ALL VENT OPENINGS SHALL BE COVERED WITH 1/4" CORROSION RESISTANT METAL MESH.

FRAMER SHALL BE RESPONSIBLE FOR COORDINATING WITH TRUSS MANUFACTURER TO ACCOMMODATE ALL ATTIC VENTS.

ALL VENTS SHALL BE INSTALLED SO AS TO MAKE THEM WATER-PROOF & WALL MOUNTED LOUVERS SHALL BE SEALED & FLASHED W/ "MOISTOP" IN THE SAME MANNER PRESCRIBED FOR WINDOW INSTALLATION.

PROVIDE APPROVED INSULATION DAMS (BAFFLES) WHERE VENT BLOCKS ARE USED BETWEEN ROOF FRAMING MEMBERS TO PREVENT VENT HOLES FROM BEING BLOCKED BY INSULATION.

LOCATE HIGH VENTING MINIMUM 3'-0" VERTICAL DISTANCE ABOVE EAVES.

WHEN GABLE END TRUSS MEMBERS BLOCK GABLE END VENTS, PROVIDE ADEQUATE ADDITIONAL VENTILATION BY MEANS OF ROOF TILE VENTS.

NORTH CAROLINA
50' SERIES

KB HOME
NORTH CAROLINA DIVISION
1800 PERIMETER DRIVE
SUITE 140
MORRISVILLE, NC 27560
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2018 NORTH
CAROLINA STATE
BUILDING
CODES

ISSUE DATE: 03/03/25
PROJECT No.: 1350999:57
DIVISION MGR.: DS
REVISIONS: SEE BELOW

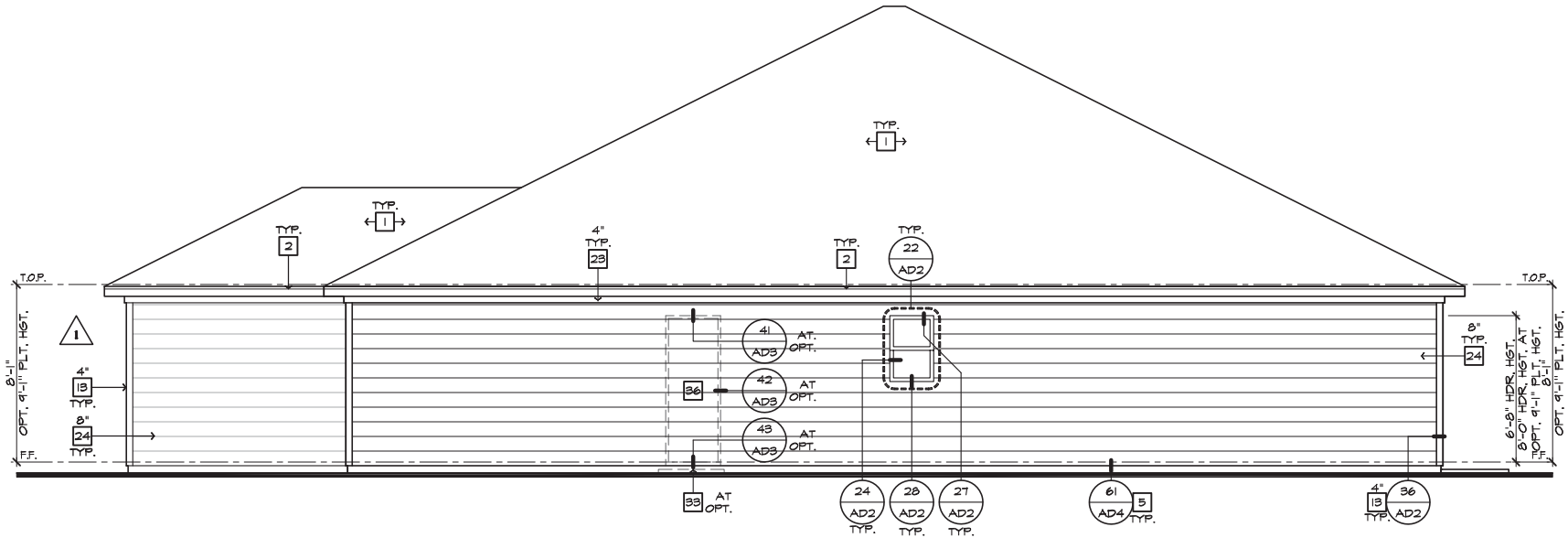
1 BELT LINE TRIM REMOVE 'L'
NC25055NCP-08/28/25-KBA

PLAN:
149.2115-R

SHEET:
3.L1

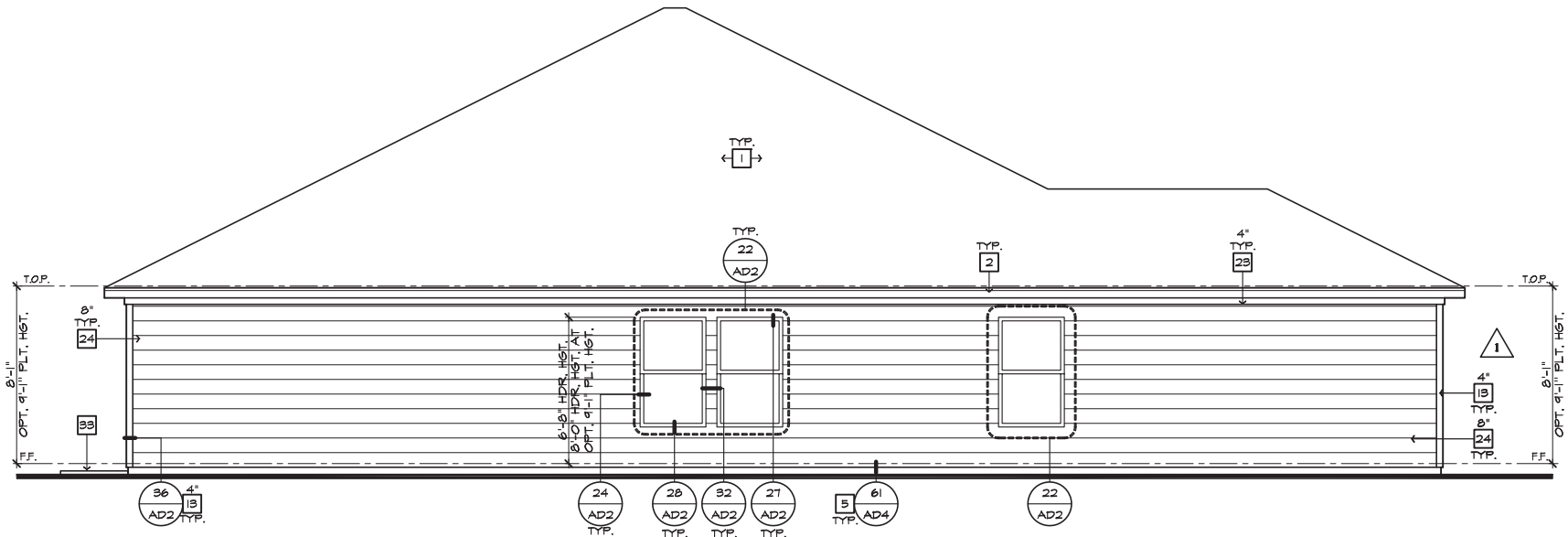
SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

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RIGHT ELEVATION 'L'

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")



LEFT ELEVATION 'L'

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

#	ELEVATION NOTES
NOTE: NOT ALL KEY NOTES APPLY.	
1.	ROOF MATERIAL - REFER TO ROOF NOTES
2.	2X FASCIA/BARGE BOARD WITH FASCIA CAP
3.	6:1 FLASHING
4.	6:1 FLASHING & SADDLE/CRICKET
5.	6:1 DRIP SCREED
6.	24"x24" CHIMNEY
7.	DECORATIVE VENT
8.	DECORATIVE CORBEL, 14/AD1
9.	DECORATIVE SHUTTERS
10.	PEDIMENT, SEE ELEVATION FOR TYPE
11.	RECESSED ELEMENT
12.	DECORATIVE TRIM FYFON OR EQ. SEE ELEVATION FOR TYPE
13.	TRIM PER SPEC-- SEE ELEVATION FOR SIZE
14.	EXTERIOR FIBER CEMENT PANEL (BEADED OR SMOOTH)
15.	PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYFON OR EQ. SURROUNDING STRUCTURAL POST.
16.	SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE
17.	STRAIGHT SHAKE SIDING SEE SPECS
18.	STONE VENEER PER SPECS
19.	BRICK/MASONRY VENEER PER SPECS
20.	BUILT UP BRICK COLUMN
21.	SOLDIER COURSE
22.	ROWLOCK COURSE
23.	FRIEZE BOARD
24.	SIDING PER SPECS
25.	P.T. POST IV/ WRAP - SEE STRUCTURAL FOR SIZE
26.	PRE-FAB DECORATIVE TRIM
27.	LIGHT WEIGHT PRECAST STONE TRIM
28.	P.T. LUMBER RAILINGS (486" U.N.O.)
29.	FIBER-CEMENT SMOOTH BOARD SEE SPECS
30.	DECORATIVE WINDOW/DOOR TRIM - FYFON OR EQ. SEE ELEVATION FOR SIZE.
31.	BRACKET OR KICKER - FYFON OR EQ.
32.	ENTRY DOOR
33.	CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN.
34.	SECTIONAL GARAGE DOOR PER SPECS
35.	ALUMINUM WRAP
36.	OPTIONAL DOOR/WINDOW - REFER TO PLAN OPTIONS
37.	RESERVED
38.	KEYSTONE
39.	SOLDIER CROWN
40.	JACK SOLDIER COURSE
41.	WATER TABLE
42.	ATRIUM DOOR
43.	PILASTER - SEE ELEVATION FOR TYPE



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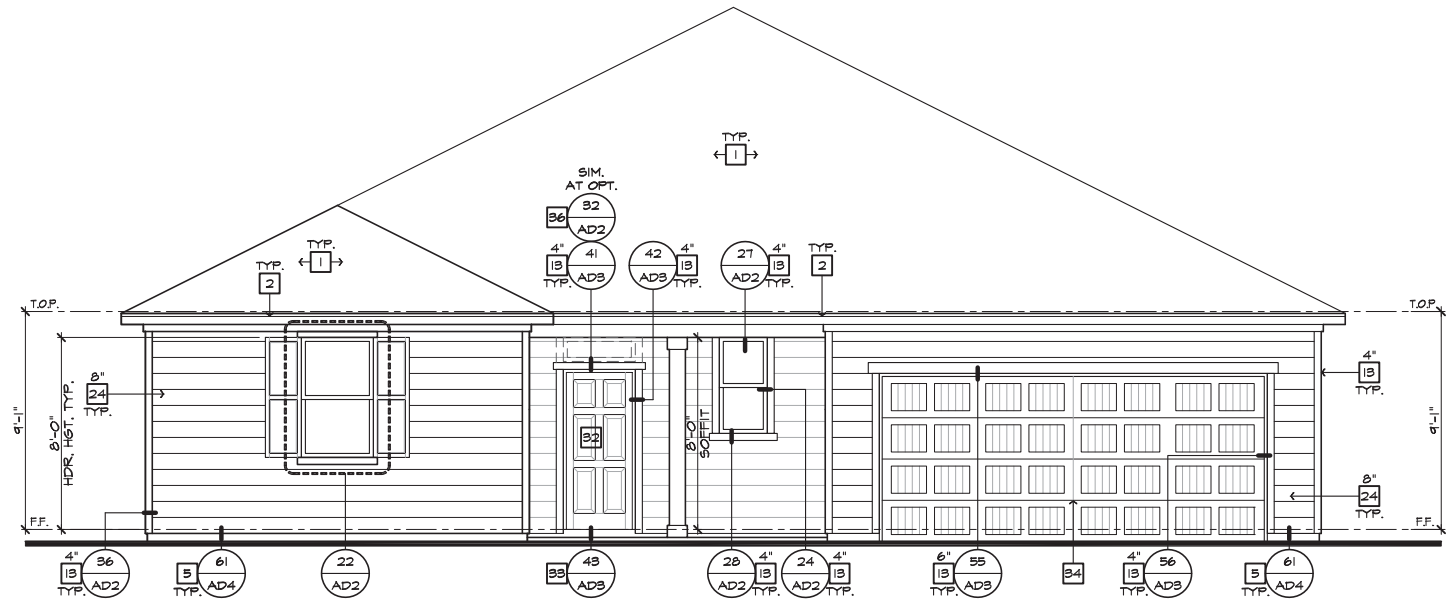
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REVISIONS: SEE BELOW

1 BELT LINE TRIM REMOVE 'L'
NC25055NCP-08/28/25-KBA

PLAN:
149.2115-R

SHEET:
3.L2

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES



FRONT ELEVATION 'L'
AT OPTIONAL 9'-1" PLT. HGT.

SCALE 1/4"=1'-0" (22'X34') - 1/8"=1'-0" (11'X17')

#	ELEVATION NOTES
NOTE: NOT ALL KEY NOTES APPLY.	
1.	ROOF MATERIAL - REFER TO ROOF NOTES
2.	2X FASCIA/BARGE BOARD WITH FASCIA CAP
3.	6:1. FLASHING
4.	6:1. FLASHING & SADDLE/CRICKET
5.	6:1. DRIP SCREED
6.	24"x24" CHIMNEY
7.	DECORATIVE VENT
8.	DECORATIVE CORBEL, 14/AD1
9.	DECORATIVE SHUTTERS
10.	PEDIMENT, SEE ELEVATION FOR TYPE
11.	RECESSED ELEMENT
12.	DECORATIVE TRIM FYFON OR EQ. SEE ELEVATION FOR TYPE
13.	TRIM PER SPEC- SEE ELEVATION FOR SIZE
14.	EXTERIOR FIBER CEMENT PANEL (BEADED OR SMOOTH)
15.	PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYFON OR EQ. SURROUNDING STRUCTURAL POST.
16.	SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE
17.	STRAIGHT SHAKE SIDING SEE SPECS
18.	STONE VENEER PER SPECS
19.	BRICK/MASONRY VENEER PER SPECS
20.	BUILT UP BRICK COLUMN
21.	SOLDIER COURSE
22.	ROWLOCK COURSE
23.	FRIEZE BOARD
24.	SIDING PER SPECS
25.	P.T. POST W/ WRAP - SEE STRUCTURAL FOR SIZE
26.	PRE-FAB DECORATIVE TRIM
27.	LIGHT WEIGHT PRECAST STONE TRIM
28.	P.T. LUMBER RAILINGS (486" U.N.O.)
29.	FIBER-CEMENT SMOOTH BOARD SEE SPECS
30.	DECORATIVE WINDOW/DOOR TRIM - FYFON OR EQ. SEE ELEVATION FOR SIZE.
31.	BRACKET OR KICKER - FYFON OR EQ.
32.	ENTRY DOOR
33.	CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN.
34.	SECTIONAL GARAGE DOOR PER SPECS
35.	ALUMINUM WRAP
36.	OPTIONAL DOOR/WINDOW - REFER TO PLAN OPTIONS
37.	RESERVED
38.	KEYSTONE
39.	SOLDIER CROWN
40.	JACK SOLDIER COURSE
41.	WATER TABLE
42.	ATRIUM DOOR
43.	PILASTER - SEE ELEVATION FOR TYPE



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1 BELT LINE TRIM REMOVE 'L'
NC25055NCP-08/28/25-KBA

PLAN:
149.2115-R

SHEET:
3.L4

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

NOTE:
REFER TO BASIC ELEVATIONS FOR INFORMATION NOT
SHOWN HERE



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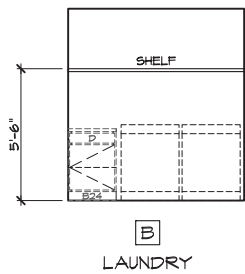
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CAROLINA STATE
BUILDING
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ISSUE DATE: 12/06/24
 ■ PROJECT No.: 1350999:57 ■
 DIVISION MGR.: DS
 ■ REVISIONS: ■

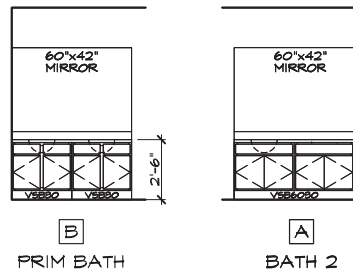
PLAN:
149.2115-R

SHEET:
4.1

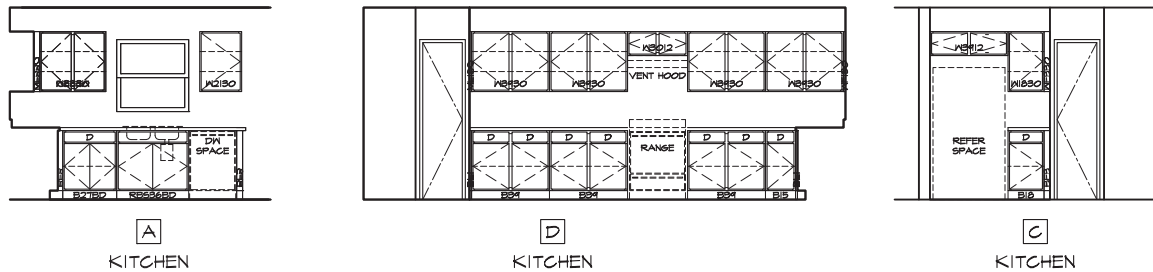
SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES



LAUNDRY CABINETS



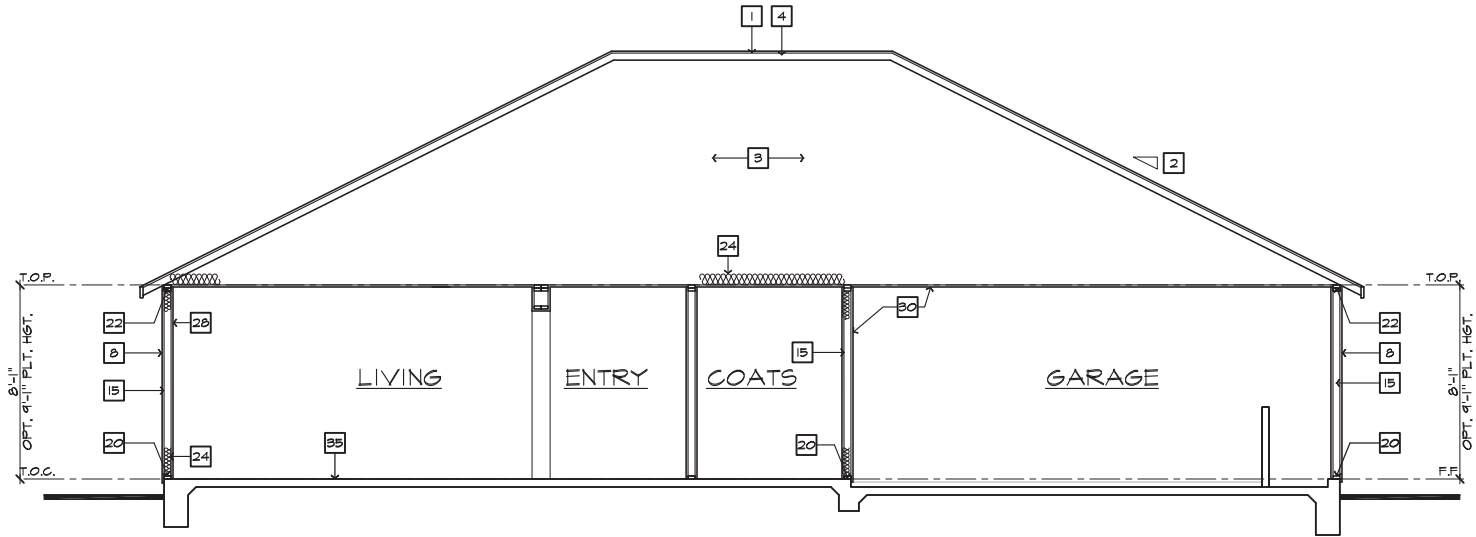
BATH CABINETS



KITCHEN CABINETS

STANDARD INTERIOR ELEVATIONS

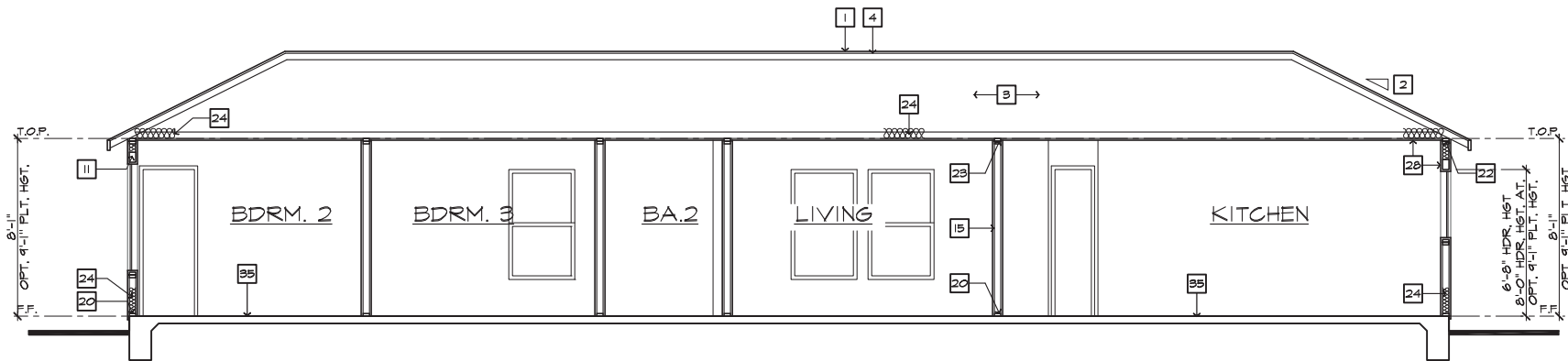
SCALE: 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")



SECTION "A"

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

AT SLAB-ON-GRADE



SECTION "B"

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

AT SLAB-ON-GRADE

#	SECTION NOTES
NOTE: NOT ALL KEY NOTES APPLY.	
1.	ROOF MATERIAL - REFER TO ROOF NOTES
2.	ROOF PITCH - REFER TO ROOF NOTES
3.	PRE-MANUFACTURED WOOD ROOF TRUSS SYSTEM - SEE STRUCTURAL & TRUSS CALCS
4.	ROOF SHEATHING PER STRUCTURAL
5.	2x FASCIA/BARGE BOARD
6.	CONT. SOFFITED EAVE W/ VENTING
7.	G.I. FLASHING - ROOF TO WALL
8.	EXTERIOR FINISH PER ELEVATIONS
9.	FLOOR FRAMING PER STRUCTURAL
10.	FLOOR SHEATHING PER STRUCTURAL
11.	HEADER PER STRUCTURAL
12.	FLUSH BEAM PER STRUCTURAL
13.	DROPPED BEAM PER STRUCTURAL
14.	FLAT/ ARCHED SOFFIT PER PLAN
15.	2x4 STUD WALL
16.	2x6 STUD WALL
17.	2x6 BALLOON FRAMED WALL PER STRUCTURAL
18.	DBL. 2x4 WALL PER PLAN
19.	2x CRIPPLES @ 16" O.C.
20.	2x PRESSURE TREATED SILL PLATE
21.	2x SOLE PLATE
22.	DBL. 2x TOP PLATE @ EXTERIOR & BEARING WALLS
23.	1x OVER 2x TOP PLATE @ INTERIOR & NON-BEARING WALLS
24.	INSULATION MATERIAL PER ENERGY CALCULATIONS
25.	MIN. 36" HIGH GUARD - SEE PLAN FOR HEIGHT
26.	LOW WALL - SEE PLAN FOR HEIGHT
27.	STAIR TREADS AND RISERS PER PLAN: - MIN. 10" TREAD & MAX. 7 3/4" RISER
28.	INTERIOR FINISH: - MIN. 1/2" GYP. BD. @ WALLS & SAG RESISTANT OR 5/8" DRYWALL @ CEILING
29.	MIN. 1/2" GYP. BD. ON CEILING & WALLS @ USEABLE SPACE UNDER STAIRS.
30.	GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ITS ATTIC AREA BY NOT LESS THAN 1/2" GYP. BD. @ GARAGE SIDE WALLS & 5/8" UNDER LIVING AREA U.N.O.
31.	MATERIAL TO UNDERSIDE OF ROOF SHEATHING
32.	INTERIOR SHELF - MIN. 1/2" GYP. BD. OVER 5/8" PLY WD.
33.	CONCRETE PATIO/ PORCH SLAB PER STRUCTURAL - SLOPE 1/4" PER FT. MIN.
34.	CONCRETE GARAGE SLAB PER STRUCTURAL - SLOPE 2" MIN.
35.	CONCRETE FOUNDATION PER STRUCTURAL
36.	LINE OF OPTIONAL TRAY CEILING/ STEP CEILING
37.	LINE OF OPTIONAL VOLUME CEILING
38.	PROFILE OF OPTIONAL COVERED PATIO
39.	EXTERIOR SOFFIT MATERIAL - REFER TO ELEVATIONS.
40.	8" BLOCK WALL
41.	5/8" TYPE-X DRYWALL @ GARAGE CEILING
42.	WHEN THERE IS USABLE SPACE ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY IN A SINGLE-FAMILY DWELLING, DRAFT STOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED 1000 SQUARE FEET. DRAFTSTOPPING SHALL DIVIDE THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS.



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ISSUE DATE: 12/06/24
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PLAN:
149.2115-R

SHEET:
4.2

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

UTILITY LEGEND		208 N.C. 2017 S.E.C.
	120V DUPLEX CONVENIENCE RECEPTACLE ARC FAULT (AFCI) AND TAMPER RESISTANT (TR) 12" ABV. FIN. FLR. TYPICAL U.N.O.	
	120V (TR) RECEPTACLE W/ GFI CIRCUIT W/ WATER RESISTANT HOUSING	
	120V (TR) RECEPTACLE W/ GFI CIRCUIT	
	FUSED DISCONNECT	
	120V (AFCI & TR) RECESSED FLOOR RECEPTACLE W/ COVER	
	120V (AFCI & TR) DUPLEX CONVENIENCE RECEPTACLE SWITCH CONTROLLED, 1/2 HOT	
	220V SINGLE CONVENIENCE RECEPTACLE HEIGHT NOTED AS PER PLAN	
	TWO-POLE LIGHT SWITCH AT 42" ABV. FIN. FLR. 8" ABOVE COUNTER U.N.O.	
	THREE-POLE LIGHT SWITCH	
	FOUR-POLE LIGHT SWITCH	
	WALL MOUNTED LIGHT FIXTURE W/ WATER RESISTANT HOUSING	
	WALL MOUNTED INCANDESCENT LIGHT FIXTURE	
	WALL MOUNTED FLUORESCENT LIGHT FIXTURE	
	CEILING MOUNTED INCANDESCENT LIGHT FIXTURE	
	CEILING MOUNTED FLUORESCENT LIGHT FIXTURE	
	HANGING INCANDESCENT LIGHT FIXTURE	
	RECESSED INCANDESCENT DIRECTIONAL LIGHT FIXTURE (EYE BALL)	
	RECESSED INCANDESCENT LIGHT FIXTURE	
	LIGHTING - TRAVERSE II LED FIXTURE - PER SPECS	
	RECESSED INCANDESCENT LIGHT FIXTURE W/ WATER RESISTANT HOUSING	
	RECESSED FLUORESCENT LIGHT FIXTURE	
	RECESSED EXHAUST FAN	
	RECESSED EXHAUST FAN / INCANDESCENT LIGHT COMBINATION	
	RECESSED EXHAUST FAN / FLUORESCENT LIGHT COMBINATION	
	INCANDESCENT WALL SCONCE	
	ILLUMINATED ADDRESS SIGN - VISIBLE FROM STREET	
	24"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED)	
	12"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED)	
	OPTIONAL PRE-WIRED CEILING FAN AND SWITCH - LOCATED IN CENTER OF ROOM U.N.O.	
	CEILING MOUNTED JUNCTION BOX	
	WALL MOUNTED JUNCTION BOX	
	DOOR CHIME	
	CATV RECEPTACLE	
	PUSH BUTTON	
	PHONE OUTLET	
	SERVICE BOX	
	HOSE BIB	
	HOSE BIB W/ S.O.V.	
	WATER STUB FOR ICE MAKER	
	APPROVED CEILING MOUNTED SMOKE DETECTOR TO BE HARD WIRED WITH BATTERY BACK-UP AND INTERCONNECT	
	APPROVED CARBON MONOXIDE ALARM/ SMOKE DET.	
	THERMOSTAT (VERIFY LOCATION W/ HVAC PLAN)	
	GAS TAP	
	GAS KEY - FIREPLACE GAS VALVES SHALL BE LOCATED OUTSIDE OF REQUIRED HEARTH AREA, BUT NO MORE THAN 48" FROM GAS OUTLET	
		24" MIN. SEPARATION OF ELECTRICAL BOXES AS SHOWN BELOW
NOTES		
1. MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT. ALL HEIGHTS SHOWN ARE TO CENTERLINE OF FIXTURE.		
2. PROVIDE SWITCH, LIGHT, 120V (AFCI & TR) DUPLEX RECEPTACLE & FUEL GAS STUB OR 220V RECEPTACLE IN ATTIC FOR F.A.U. - PER COMMUNITY SPECIFICATIONS.		
3. SMOKE DETECTORS IN ROOMS WITH VOLUME CEILING TO BE LOCATED AT HIGHEST POINT OF CEILING		
4. 20 FOOT #4 REBAR FOR UFER GROUND AND ADDITIONAL COLD WATER GROUND. REFER TO SLAB INTERFACE PLAN FOR LOCATION.		
5. 200 AMP ELECTRICAL PANEL (DEFAULT). ELECTRICAL PLAN CHECK PERMIT REQUIRED IF LOAD EXCEED 400 AMPS.		

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50' SERIES

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PLAN:
149.2115-R

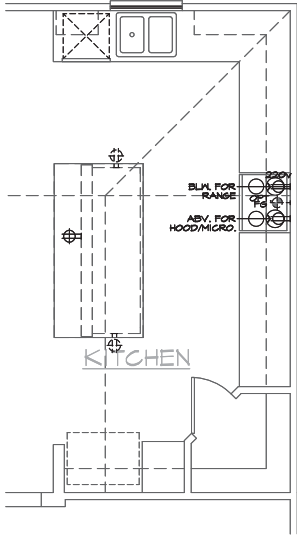
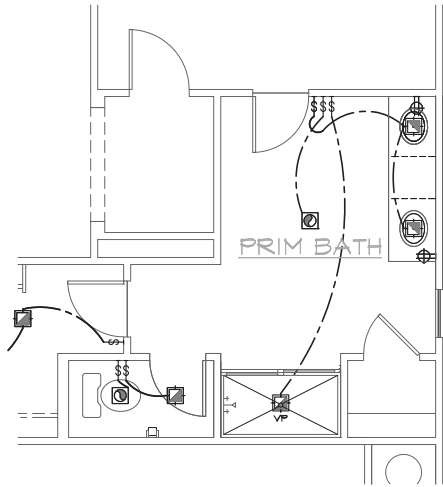
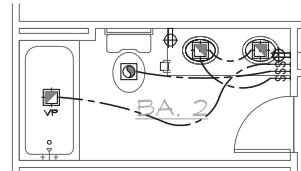
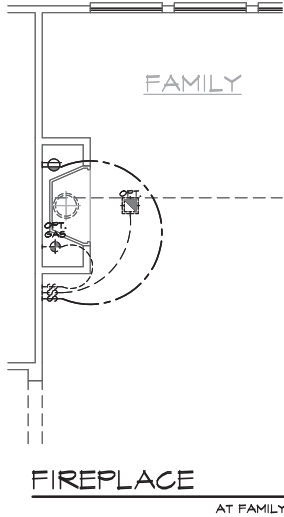
SHEET:
5.1

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES



FIRST FLOOR UTILITY PLAN OPTIONS

SCALE 1/4"=1'-0" (22"x34") - 1/8"=1'-0" (11"x17")



NOTE:
REFER TO BASIC UTILITY PLAN FOR INFORMATION NOT
SHOWN HERE

UTILITY LEGEND	
	120V DUPLEX CONVENIENCE RECEPTACLE
	12V ABV, FTI(AFCI) AND TAMPER RESISTANT(1R) 12" ABV, FIN. FLR, TYPICAL U.N.O.
	120V (TR) RECEPTACLE W/ 6FI CIRCUIT W/ WATER RESISTANT HOUSING
	120V (TR) RECEPTACLE W/ 6FI CIRCUIT
	FUSED DISCONNECT
	120V (AFCI & TR) RECESSED FLOOR RECEPTACLE W/ COVER
	120V (AFCI & TR) DUPLEX CONVENIENCE RECEPTACLE SWITCH CONTROLLED, 1/2 HOT
	220V SINGLE CONVENIENCE RECEPTACLE HEIGHT NOTED AS PER PLAN
	TWO-POLE LIGHT SWITCH AT 42" ABV, FIN. FLR, 8" ABOVE COUNTER U.N.O.
	THREE-POLE LIGHT SWITCH
	FOUR-POLE LIGHT SWITCH
	WALL MOUNTED LIGHT FIXTURE W/ WATER RESISTANT HOUSING
	WALL MOUNTED INCANDESCENT LIGHT FIXTURE
	WALL MOUNTED FLUORESCENT LIGHT FIXTURE
	CEILING MOUNTED INCANDESCENT LIGHT FIXTURE
	CEILING MOUNTED FLUORESCENT LIGHT FIXTURE
	HANGING INCANDESCENT LIGHT FIXTURE
	RECESSED INCANDESCENT DIRECTIONAL LIGHT FIXTURE (EYE BALL)
	RECESSED INCANDESCENT LIGHT FIXTURE
	LIGHTING - TRAVERSE II LED FIXTURE - PER SPECS
	RECESSED INCANDESCENT LIGHT FIXTURE W/ WATER RESISTANT HOUSING
	RECESSED FLUORESCENT LIGHT FIXTURE
	RECESSED EXHAUST FAN
	RECESSED EXHAUST FAN/ INCANDESCENT LIGHT COMBINATION
	RECESSED EXHAUST FAN/ FLUORESCENT LIGHT COMBINATION
	INCANDESCENT WALL SCONCE
	ILLUMINATED ADDRESS SIGN - VISIBLE FROM STREET
	24"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED)
	12"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED)
	OPTIONAL PRE-WIRED CEILING FAN AND SWITCH - LOCATED IN CENTER OF ROOM U.N.O.
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX
	DOOR CHIME
	CATV RECEPTACLE
	PUSH BUTTON
	PHONE OUTLET
	SERVICE BOX
	HOSE BIB
	HOSE BIB W/ S.O.V.
	WATER STUB FOR ICE MAKER
	APPROVED CEILING MOUNTED SMOKE DETECTOR TO BE HARD WIRED WITH BATTERY BACK-UP AND INTERCONNECTED
	APPROVED CARBON MONOXIDE ALARM/ SMOKE DET.
	THERMOSTAT (VERIFY LOCATION W/ HVAC PLAN)
	GAS TAP
	GAS KEY - FIREPLACE GAS VALVES SHALL BE LOCATED OUTSIDE OF REQUIRED HEARTH AREA, BUT NO MORE THAN 48" FROM GAS OUTLET
	SWITCHING FOR ROOMS W/ CLG. FAN OPTIONS
	24" MIN. SEPERATION OF ELECTRICAL BOXES AS SHOWN BELOW

NOTES

- MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS ARE SHOWN FOR INTENT ONLY. THESE SYSTEMS SHALL BE ENGINEERED BY OTHERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND PLACEMENT. ALL HEIGHTS SHOWN ARE TO CENTERLINE OF FIXTURE.
- PROVIDE SWITCH, LIGHT, 120V (AFCI & TR) DUPLEX RECEPTACLE & FUEL GAS STUB OR 220V RECEPTACLE IN ATTIC FOR F.A.U. - PER COMMUNITY SPECIFICATIONS.
- SMOKE DETECTORS IN ROOMS WITH VOLUME CEILING TO BE LOCATED AT HIGHEST POINT OF CEILING
- 20 FOOT #4 REBAR FOR UPER GROUND AND ADDITIONAL COLD WATER GROUND. REFER TO SLAB INTERFACE PLAN FOR LOCATION.
- 200 AMP ELECTRICAL PANEL (DEFAULT). ELECTRICAL PLAN CHECK PERMIT REQUIRED IF LOAD EXCEED 400 AMPS.



NORTH CAROLINA
50' SERIES

KB HOME
NORTH CAROLINA DIVISION

4506 S. MIAMI BLVD.
SUITE 180
DURHAM, NC 27703
TEL: (919) 768-7980
FAX: (919) 544-2928

2018 NORTH
CAROLINA STATE
BUILDING
CODES

ISSUE DATE: 12/06/24
PROJECT No.: 1350999:57
DIVISION MGR.: DS
REVISIONS:

FOR INTERNAL USE ONLY	
REVIEWED BY:	
1.	
2.	
3.	
4.	
5.	
6.	

PLAN:
149.2115-R

SHEET:
5.2

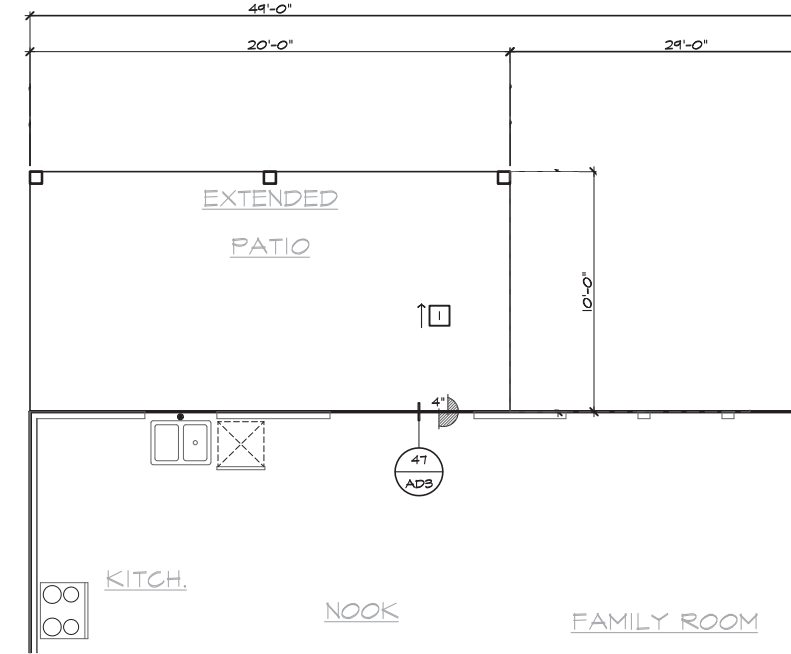
SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

EXTENDED PATIO SLAB 'L'

SCALE 1/4"=1'-0" (22'x34") - 1/8"=1'-0" (11'x17')

PARTIAL SLAB INTERFACE PLAN

SCALE 1/4"=1'-0" (22'x34") - 1/8"=1'-0" (11'x17')



#	ELEVATION NOTES	208.16-8
NOTE: NOT ALL KEY NOTES APPLY.		
1.	ROOF MATERIAL - REFER TO ROOF NOTES	
2.	2X FASCIA/BARGE BOARD WITH FASCIA CAP	
3.	6.1. FLASHING	
4.	6.1. FLASHING & SADDLE/CRICKET	
5.	6.1. DRIP SCREED	
6.	24"x24" CHIMNEY	
7.	DECORATIVE VENT	
8.	DECORATIVE CORBEL, 14/ADI	
9.	DECORATIVE SHUTTERS	
10.	PEDIMENT, SEE ELEVATION FOR TYPE	
11.	RECESSED ELEMENT	
12.	DECORATIVE TRIM FYFON OR EQ. SEE ELEVATION FOR TYPE	
13.	TRIM PER SPEC-- SEE ELEVATION FOR SIZE	
14.	EXTERIOR FIBER CEMENT PANEL (BEADED OR SMOOTH)	
15.	PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYFON OR EQ. SURROUNDING STRUCTURAL POST.	
16.	SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE	
17.	FIBER-CEMENT STRAIGHT SHAKE SIDING SEE SPECS	
18.	STONE VENEER PER SPECS	
19.	BRICK/MASONRY VENEER PER SPECS	
20.	BUILT UP BRICK COLUMN	
21.	SOLDIER COURSE	
22.	ROWLOCK COURSE	
23.	FRIEZE BOARD	
24.	FIBER-CEMENT SIDING PER SPECS	
25.	P.T. POST IV/ WRAP - SEE STRUCTURAL FOR SIZE	
26.	PRE-FAB DECORATIVE TRIM	
27.	LIGHT WEIGHT PRECAST STONE TRIM	
28.	P.T. LUMBER RAILINGS (486" U.N.O.)	
29.	FIBER-CEMENT SMOOTH BOARD SEE SPECS	
30.	DECORATIVE WINDOW/DOOR TRIM - FYFON OR EQ. SEE ELEVATION FOR SIZE.	
31.	BRACKET OR KICKER - FYFON OR EQ.	
32.	ENTRY DOOR	
33.	CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN.	
34.	SECTIONAL GARAGE DOOR PER SPECS	
35.	ALUMINUM WRAP	
36.	OPTIONAL DOOR/WINDOW - REFER TO PLAN OPTIONS	
37.	OPTIONAL STANDING SEAM METAL ROOF	
38.	KEYSTONE	
39.	SOLDIER CROWN	
40.	JACK SOLDIER COURSE	
41.	WATER TABLE	
42.	ATRIUM DOOR	
43.	PILASTER - SEE ELEVATION FOR TYPE	

#	PARTIAL PLAN NOTES	208.16-8
NOTE: NOT ALL KEY NOTES APPLY.		
27.	WATER HEATER LOCATION - FOR GAS - LOCATE ON 18" HIGH PLATFORM - FOR INTERIOR LOCATION - PROVIDE PAN & DRAIN (REFER TO DETAILS)	
28.	WATER HEATER W/ VENT TO OUTSIDE AIR	
29.	MAIN LINE SHUT-OFF VALVE AND TEMP. & PRESSURE RELIEF VALVE	
30.	LINE OF WALL BELOW	
31.	LINE OF FLOOR ABOVE	
32.	LINE OF FLOOR BELOW	
33.	MIN. 36" HIGH GUARDRAIL (REFER TO DETAIL SHEETS)	
34.	A/C PAD LOCATION	
35.	LOW WALL - REFER TO PLAN FOR HEIGHT	
36.	2x6 STUD WALL	
37.	DBL. 2x4 WALL PER PLAN	
38.	INTERIOR SHELF - REFER TO PLAN FOR HEIGHT	
39.	FLAT SOFFIT	
40.	ARCHED SOFFIT	
41.	OPT. DOOR/ WINDOW	
42.	PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYFON OR EQ. SURROUNDING STRUCTURAL POST.	
43.	BRICK / STONE VENEER - REFER TO ELEVATIONS	
44.	SECTIONAL GARAGE DOOR PER SPECS	
45.	3" DIAM. CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 12" EMBEDMENT INTO CONCRETE. (NOT REQUIRED AT ELECTRIC WATER HEATERS OR FOR APPLIANCES LOCATED OUT OF THE VEHICLE'S NORMAL TRAVEL PATH).	
46.	P.T. POST IV/ WRAP.	
47.	EGRESS WINDOW	
48.	WINDOW LEDGE - HEIGHT & WIDTH OF OPENING TO EXTEND 6" BEYOND WINDOW(S) ON ALL SIDES U.N.O.	
49.	SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE	
50.	CONCRETE SLAB. SLOPE 1/4" PER FT. MIN. SEE PLAN FOR SIZE	

#	SLAB PLAN NOTES	208.16-8
NOTE: NOT ALL KEY NOTES APPLY.		
1.	CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE 1/4" PER FT. MIN.	
2.	CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE 1/8" PER 1'-0" MIN. TOWARD DOOR OPENING.	
3.	CONCRETE FOUNDATION PER STRUCTURAL.	
4.	CONCRETE STOOP, 36"x36" STANDARD SLOPE 1/4" PER FT. MIN.	
5.	CONCRETE DRIVEWAY SLOPE 1/4" PER FT. MIN. AWAY FROM GARAGE DOOR OPENING.	
6.	PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND. VERIFY LOCATION.	
7.	5" BRICK LEDGE FOR MASONRY VENEER.	
8.	3" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 12" EMBEDMENT INTO CONCRETE.	
9.	REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.	
10.	VERIFY ALL PLUMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB	
11.	4" MIN. Ø 1/4" MAX. TO HARD SURFACE.	
12.	A/C PAD. VERIFY LOCATION.	
13.	36" WIDE WALKWAY- SLOPE 1/4" PER FT. MIN.	

NOTE: REFER TO BASIC ROOF PLAN FOR INFORMATION NOT SHOWN HERE	NOTE: REFER TO BASIC ELEVATIONS FOR INFORMATION NOT SHOWN HERE	NOTE: REFER TO BASIC FLOOR PLAN FOR INFORMATION NOT SHOWN HERE	NOTE: REFER TO BASIC SLAB PLAN FOR INFORMATION NOT SHOWN HERE
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NORTH CAROLINA
50' SERIES

KB HOME
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CAROLINA STATE
BUILDING
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ISSUE DATE: 12/06/24
PROJECT No.: 1350999:57
DIVISION MGR.: DS
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3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

PLAN:
149.2115-R

SHEET:
8.L3

SPEC. LEVEL 1
RALEIGH-DURHAM
50' SERIES

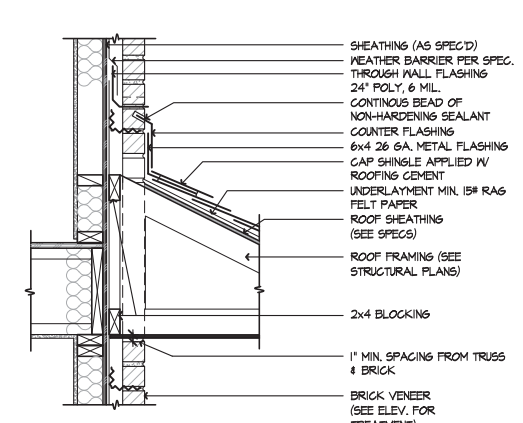


40' SERIES

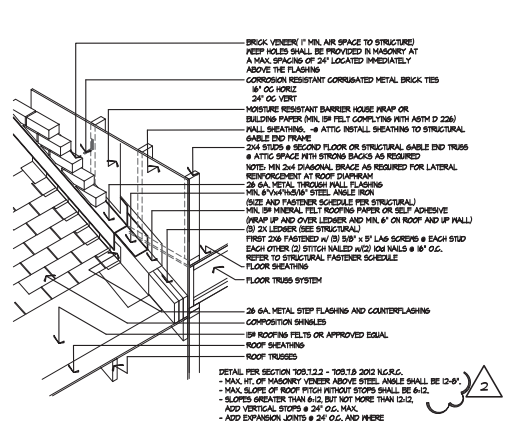
KB HOME
NORTH CAROLINA DIVISION
1800 PERIMETER DRIVE
SUITE 140
MORRISVILLE, NC 27560
TEL: (919) 768-7969

ISSUE DATE:
PROJECT No.: 1350999:56
DIVISION MGR.: DS
REVISIONS: SEE BELOW

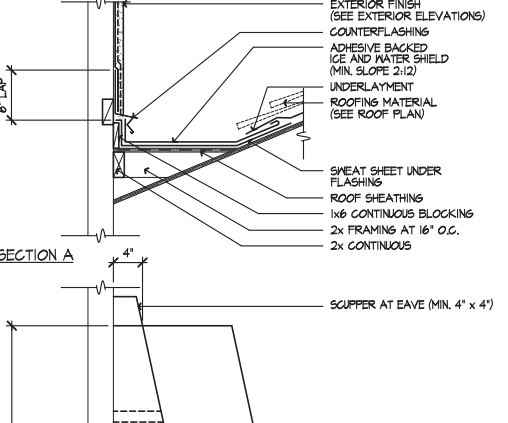
PLAN:
SHEET:
AD1
SPEC. LEVEL 1
RALEIGH-DURHAM
DETAILS



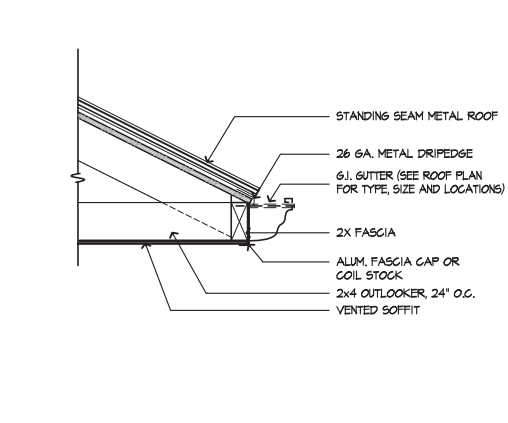
BRICK THROUGH ROOF
SCALE 1"=1'-0"
SE-01017a



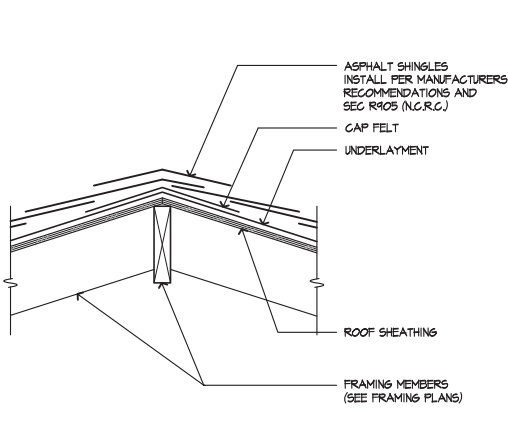
BRICK OVER ROOF
SCALE NTS
SE-2D 150



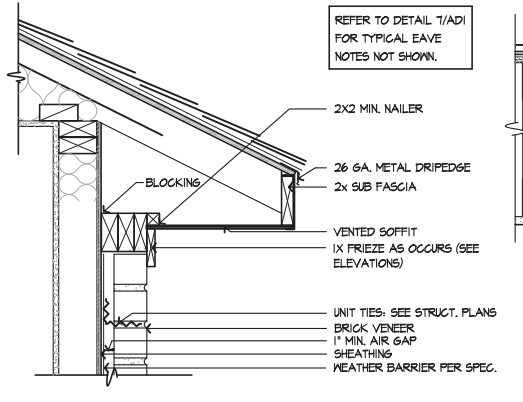
EAVE @ METAL ROOF
SCALE 1 1/2"=1'-0"
SE-05097a



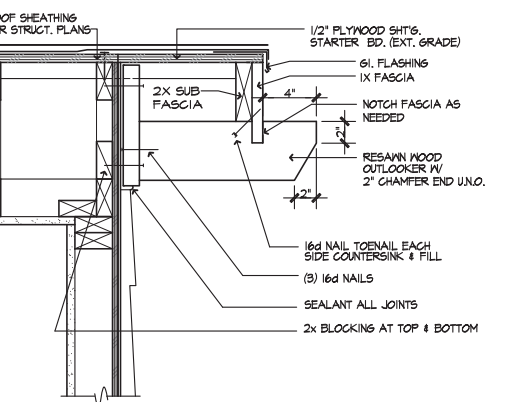
RIDGE
SCALE 1 1/2"=1'-0"
SE-01001a



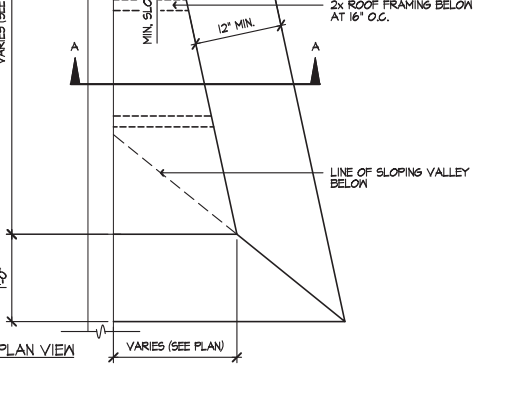
40' SERIES
SCALE 1 1/2"=1'-0"
SE-01001a



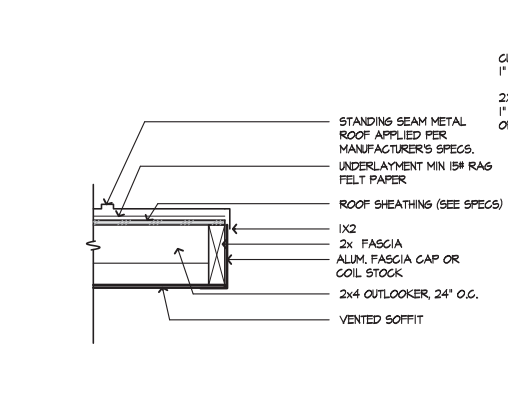
EAVE - BRICK
SCALE 1 1/2"=1'-0"
SE-01018b



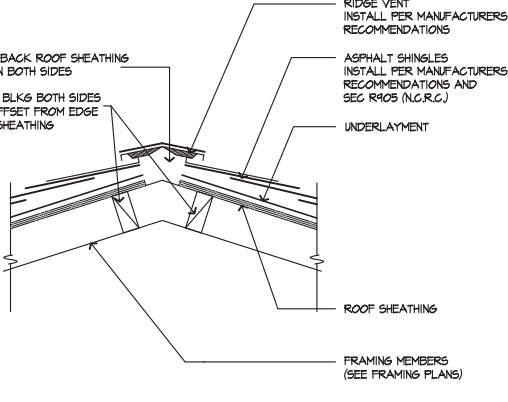
CORBEL AT RAKE
SCALE 1 1/2"=1'-0"
0420-3TE (MOD)



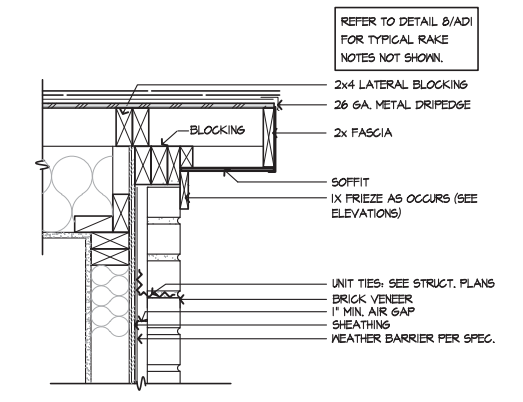
CRICKET
SCALE 1"=1'-0"
0732-10



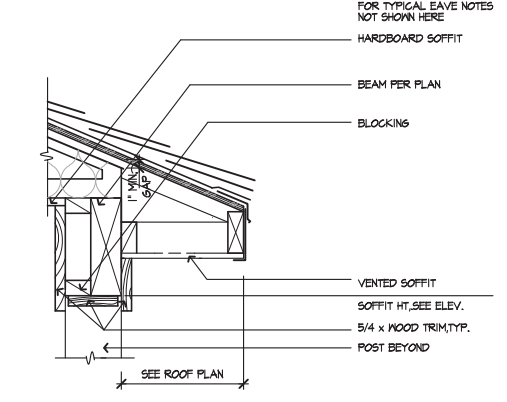
RAKE @ METAL ROOF
SCALE 1 1/2"=1'-0"
SE-05098a



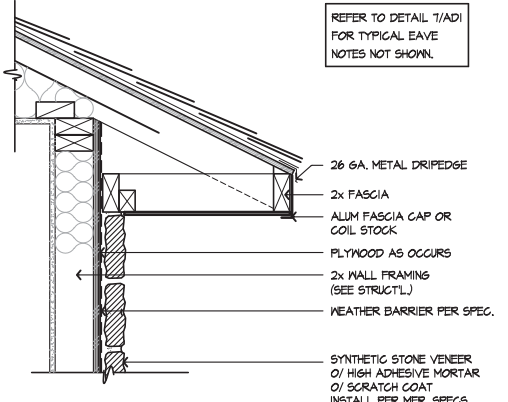
RIDGE VENT
SCALE 1 1/2"=1'-0"
SE-01002a



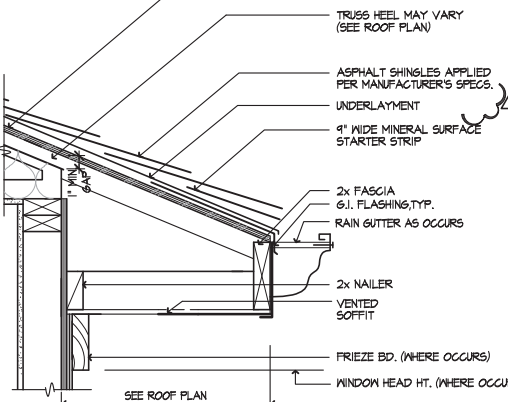
RAKE - BRICK
SCALE 1 1/2"=1'-0"
SE-01019b



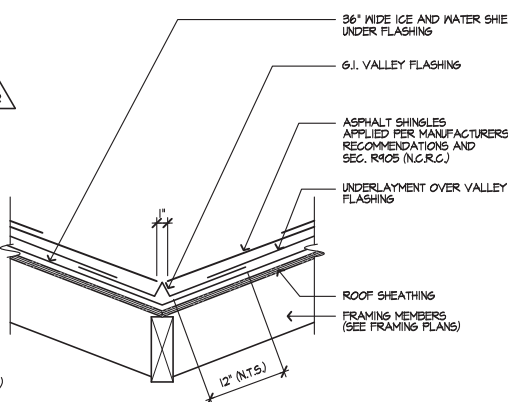
PORCH EAVE
SCALE 1 1/2"=1'-0"
EVPRCH



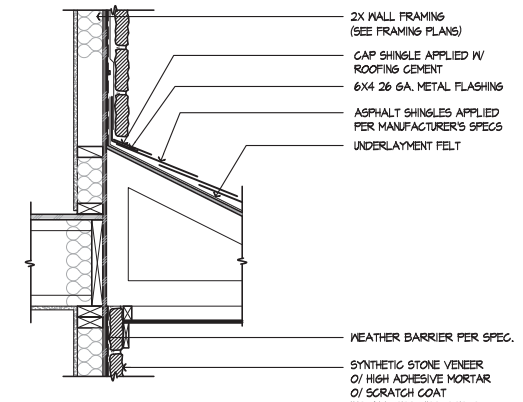
EAVE - STONE
SCALE 1 1/2"=1'-0"
SE-01011a



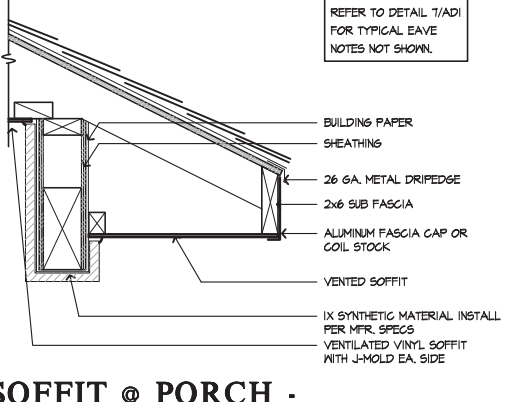
EAVE
SCALE 1 1/2"=1'-0"
0732-13q



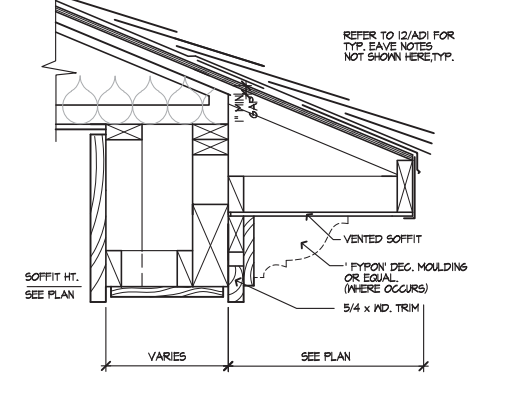
VALLEY
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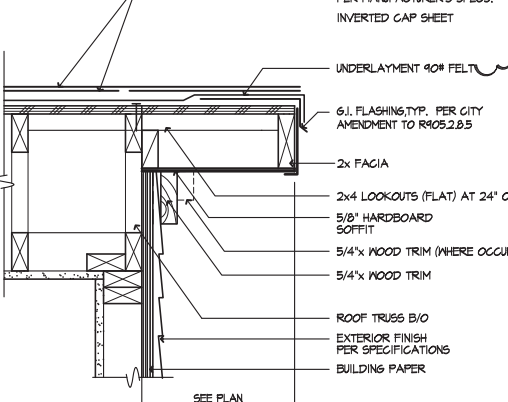
STONE TO ROOF
SCALE 1"=1'-0"
SE-01020a



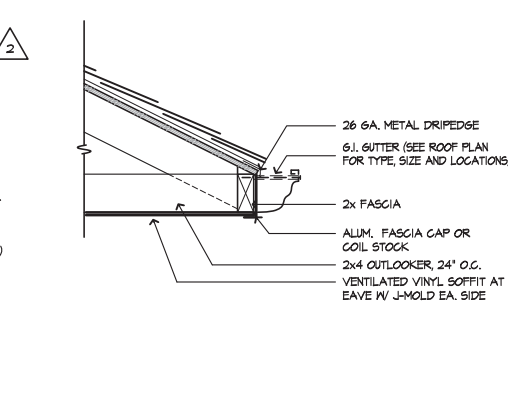
SOFFIT @ PORCH - SYNTHETIC MATERIAL
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SE-01016b



EAVE AT PORCH
SCALE 1 1/2"=1'-0"
EVPRCH2

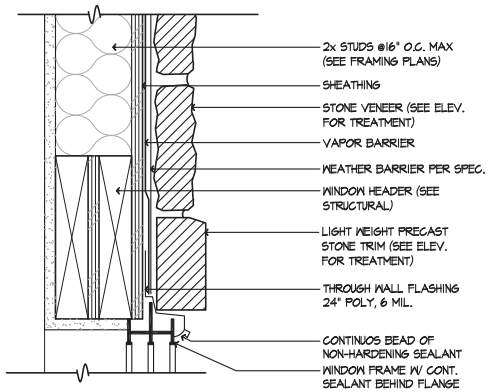


RAKE
SCALE 1 1/2"=1'-0"
0732-04q

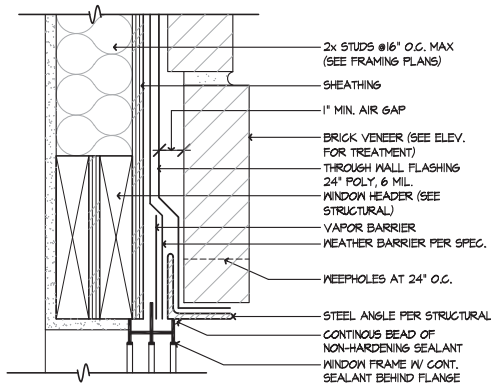


TYPICAL EAVE GUTTER
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SE-01004a

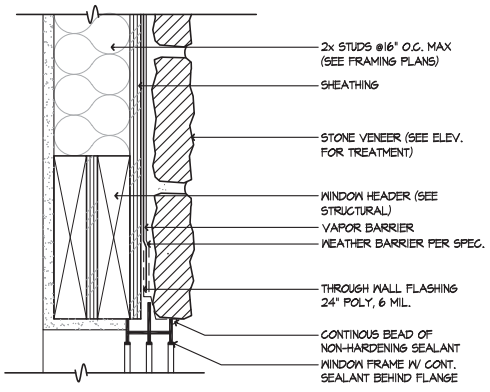
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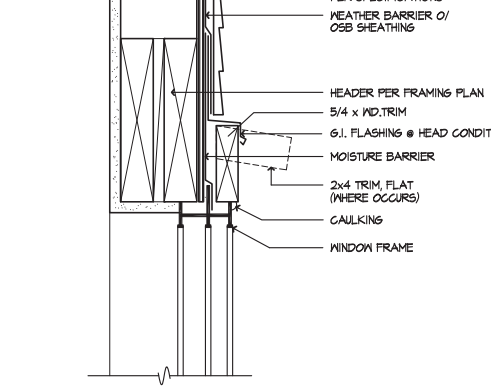
WINDOW HEAD - STONE
SCALE 3"=1'-0"



WINDOW HEAD - BRICK
SCALE 3"=1'-0"



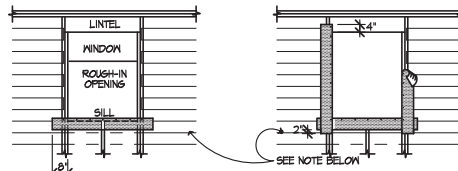
WINDOW HEAD - STONE
SCALE 3"=1'-0"



WINDOW HEAD
SCALE 3"=1'-0"

WINDOW FLASHING

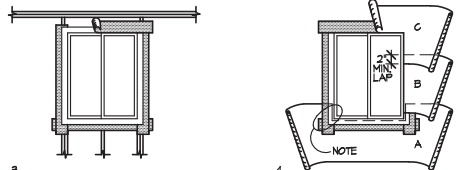
EXTERIOR OPENINGS EXPOSED TO THE WEATHER SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE THEM WATERPROOF.



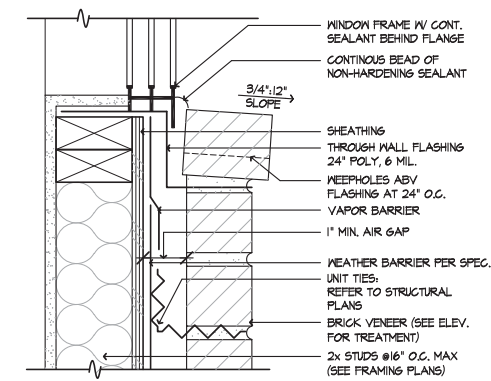
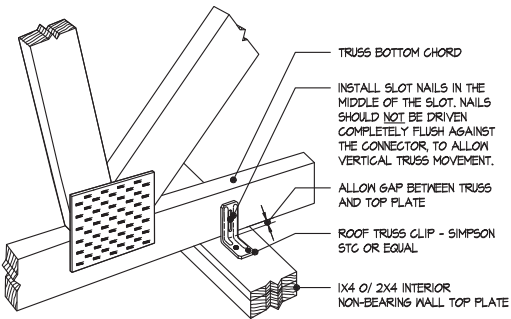
1. ATTACH SILL STRIP WITH TOP EDGE LEVEL WITH ROUGH SILL - EXTEND BEYOND EDGE OF ROUGH OPENING AT LEAST 8". SECURE ALL MOISTOP (OR EQUAL) WITH GALVANIZED NAILS OR POWER-DRIVEN STAPLES.
2. ATTACH JAMB STRIP WITH SIDE EDGE EVEN WITH ROUGH-JAMB FRAMING. START STRIP 1" BELOW LOWER EDGE OF SILL STRIP AND EXTEND 4" ABOVE LOWER EDGE OF LINTEL OR POWER-DRIVEN STAPLES.

NOTE: LINE-WIRE, WHEN USED AS BACKING TO SUPPORT BUILDING PAPER BENEATH WIRE LATH (NETTING) FOR PORTLAND CEMENT PLASTER (STUCCO), SHALL BE INSTALLED AS FOLLOWS:

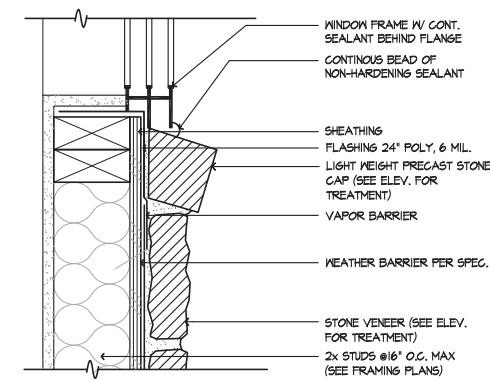
1. WIRE GAUGE, SPACING, AND ATTACHMENT SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF BUILDING NEWS ITEM 25-1.
2. PERIPHERAL FLASHINGS AT ALL EDGES OF WALL OPENINGS, MUST COVER THE WIRE BACKING.
3. NO ATTACHMENT DEVICES NOR THE WIRE BACKING SHALL COVER OR PENETRATE THE FLASHING MATERIAL.



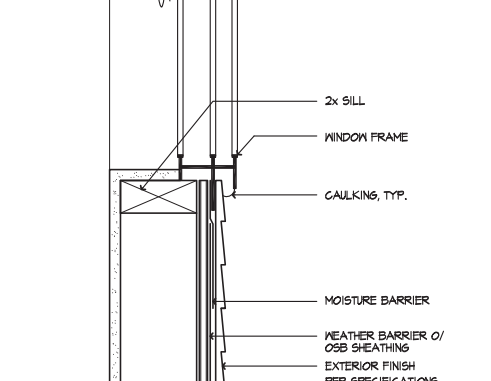
3. INSTALL WINDOW JAMB NAILING FLANGES OVER A CONTINUOUS BEAD OF SEALANT ON THE MOISTOP (OR EQUAL). INSTALL THE WINDOW HEAD MOISTOP (OR EQUAL) ON A CONTINUOUS BEAD OF SEALANT APPLIED TO THE WINDOW HEAD NAILING FLANGE.
4. COMMENCING AT THE BOTTOM (SOLE PLATE) OF THE WALL, LAY BUILDING PAPER UNDER SILL STRIP. NOTE: CUT ANY EXCESS BUILDING PAPER THAT MAY EXTEND ABOVE THE SILL FLANGE LINE ON EACH SIDE OF (SHOWN AS SHORT DASHED LINES). DO NOT SLICE BUILDING PAPER HORIZONTALLY, SO THAT THE PAPER WILL LAP OVER THE JAMB STRIPS. INSTALL SUCCESSIVE LINES OF BUILDING PAPER (B.C.D ETC.) OVER JAMB AND HEAD FLANGES, LAPPING EACH COURSE.



WINDOW SILL - BRICK
SCALE 3"=1'-0"



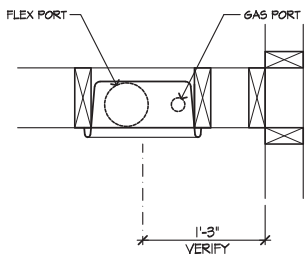
WINDOW SILL - STONE
SCALE 3"=1'-0"



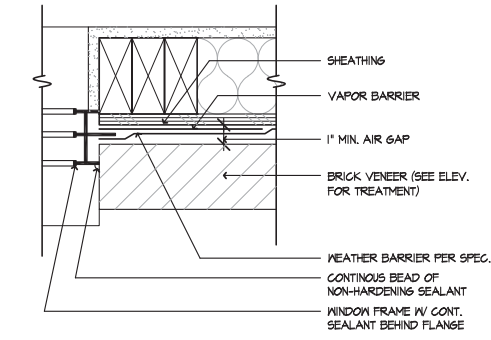
WINDOW SILL
SCALE 3"=1'-0"

VAPOR BARRIER
SCALE 1/4"=1'-0"

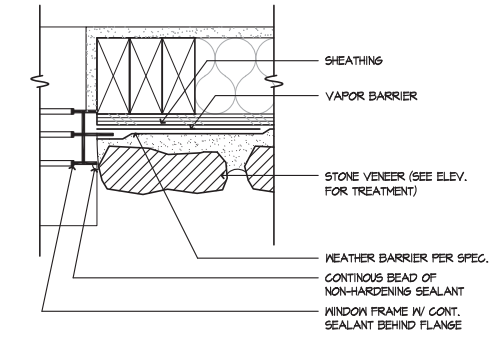
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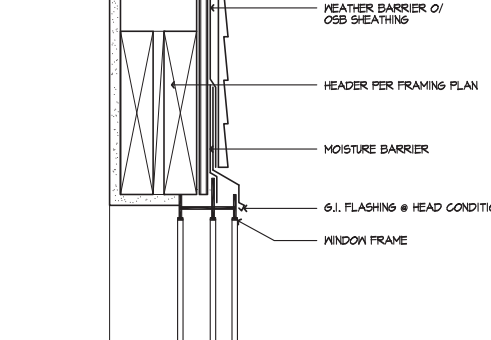
PLAN VIEW



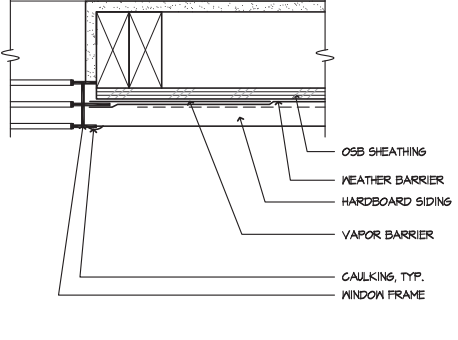
WINDOW JAMB - BRICK
SCALE 3"=1'-0"



WINDOW JAMB - STONE
SCALE 3"=1'-0"

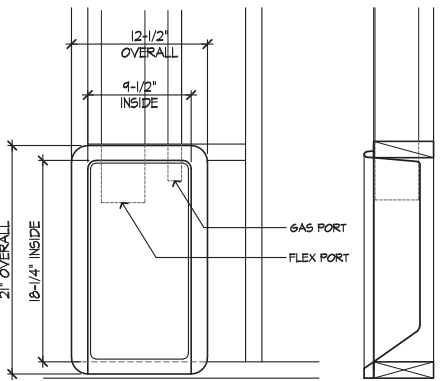


WINDOW HEAD
SCALE 3"=1'-0"

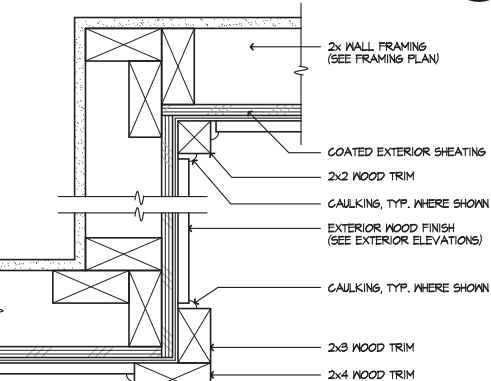


WINDOW JAMB
SCALE 3"=1'-0"

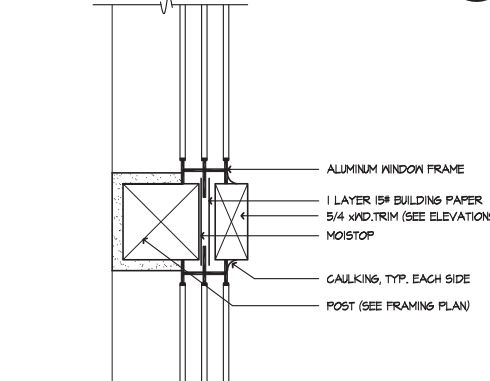
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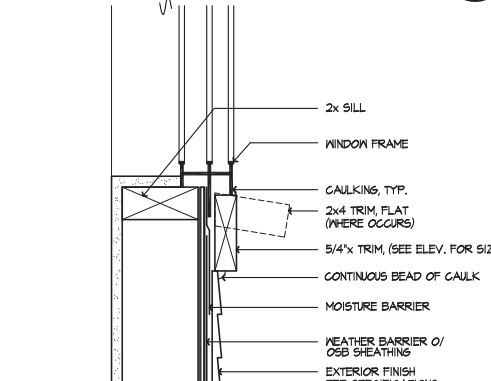
DRYER BOX DETAIL
SCALE: N.T.S.



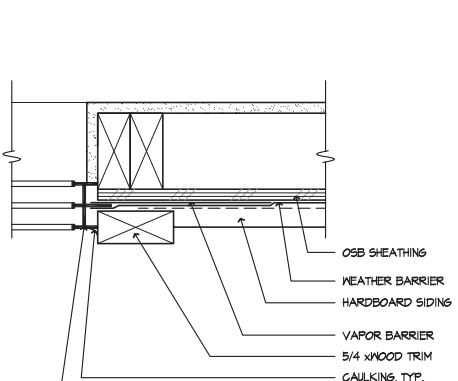
SIDING - CORNER. TRIM
SCALE 3"=1'-0"



VERT. WINDOW MULL.
SCALE 3"=1'-0"



WINDOW SILL
SCALE 3"=1'-0"



WINDOW JAMB
SCALE 3"=1'-0"

24



40' SERIES

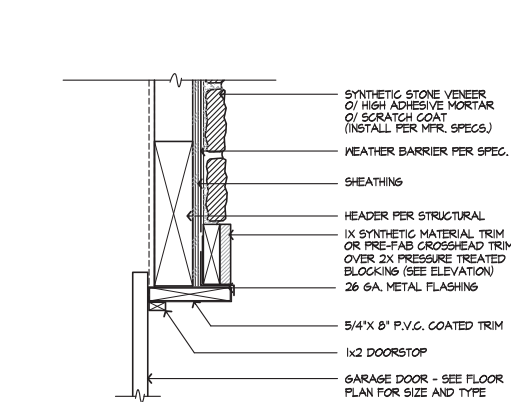
KB HOME
NORTH CAROLINA DIVISION
1800 PERIMETER DRIVE
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MORRISVILLE, NC 27560
TEL: (919) 768-7969

ISSUE DATE:
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DIVISION MGR.: DS
REVISIONS: SEE BELOW

PLAN:

SHEET:
AD2

SPEC. LEVEL 1
RALEIGH-DURHAM
DETAILS



GARAGE DOOR HEAD - STONE

SCALE 1 1/2"=1'-0"

SE-03057b

57

DOOR HEAD - BRICK

SCALE 3"=1'-0"

SE-03053a

53

DOOR HEAD - STONE

SCALE 3"=1'-0"

SE-03049a

49

SLIDING DR. HEAD

SCALE 3"=1'-0"

0340-03b

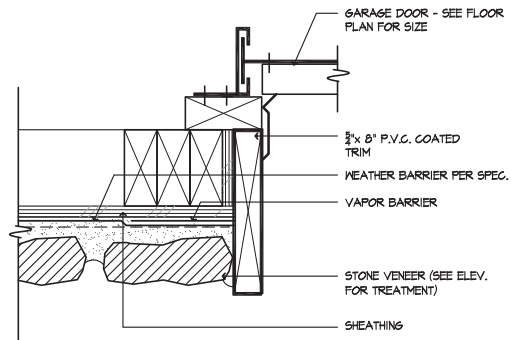
45

DOOR HEAD

SCALE 3"=1'-0"

0340-01b

41



GARAGE DOOR JAMB - STONE

SCALE 3"=1'-0"

SE-03058b

58

DOOR JAMB - BRICK

SCALE 3"=1'-0"

SE-03054a

54

DOOR JAMB - STONE

SCALE 3"=1'-0"

SE-03050a

50

SLIDING DOOR JAMB

SCALE 3"=1'-0"

0340-03c

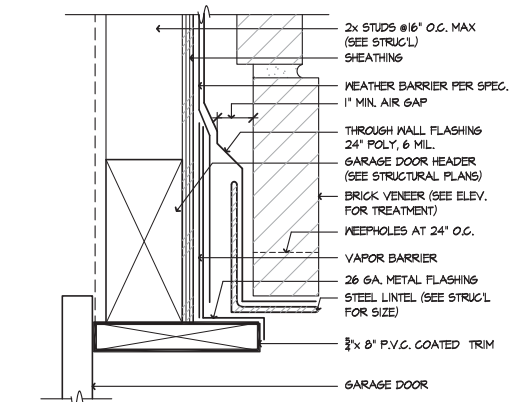
46

DOOR JAMB

SCALE 3"=1'-0"

0340-01c

42



GARAGE DOOR HEAD - BRICK

SCALE 3"=1'-0"

SE-03058a

59

GARAGE DOOR HEAD

SCALE 1 1/2"=1'-0"

0420-39c

55

TRIM @ CANTILEVER

SCALE 1 1/2"=1'-0"

04CANTMP

51

SLDg. DOOR THRESHOLD

SCALE 3"=1'-0"

SE-03047a

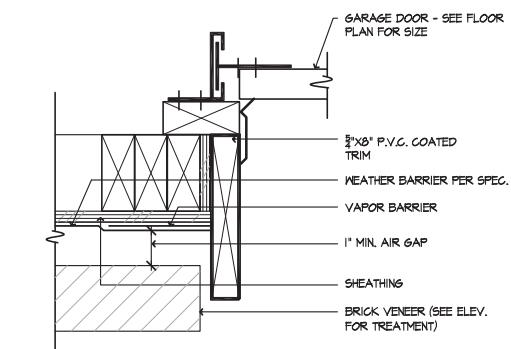
47

SWING DOOR THRESHOLD

SCALE 3"=1'-0"

SE-03043a

43



GARAGE DOOR JAMB - BRICK

SCALE 3"=1'-0"

SE-03060a

60

GARAGE DOOR JAMB

SCALE 1 1/2"=1'-0"

0745-01

56

SOFFIT @ PORCH - BRICK

SCALE 1 1/2"=1'-0"

SE-03052c

52

SOFFIT @ PORCH - STONE

SCALE 1 1/2"=1'-0"

RA-01026a

48

EAVE AT PORCH

SCALE 1 1/2"=1'-0"

EVPRCH2

44



40' SERIES

KB HOME
NORTH CAROLINA DIVISION
1800 PERIMETER DRIVE
SUITE 140
MORRISVILLE, NC 27560
TEL: (919) 768-7969

ISSUE DATE:
PROJECT No.: 1350999:56
DIVISION MGR.: DS
REVISIONS: SEE BELOW

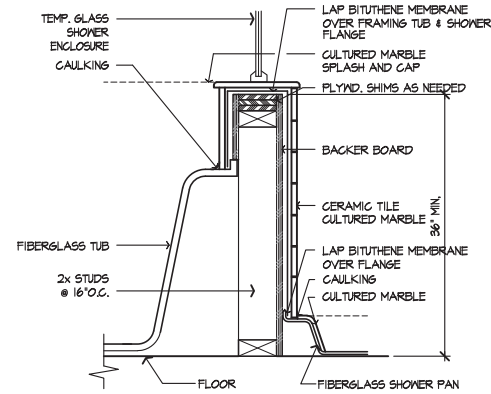
PLAN:
SHEET:
AD3

SPEC. LEVEL 1
RALEIGH-DURHAM
DETAILS

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TUB/SHOWER WALL

SCALE 1 1/2"=1'-0"

SE-04071a

77

DBL./SGL. POLE & SHELF

SCALE 3/4"=1'-0"

SE-04073a

73

BRICK LEDGE AT SLAB

SCALE 3"=1'-0"

SE-04069a

69

SYN. STONE SCREED

SCALE 3"=1'-0"

SE-04065a

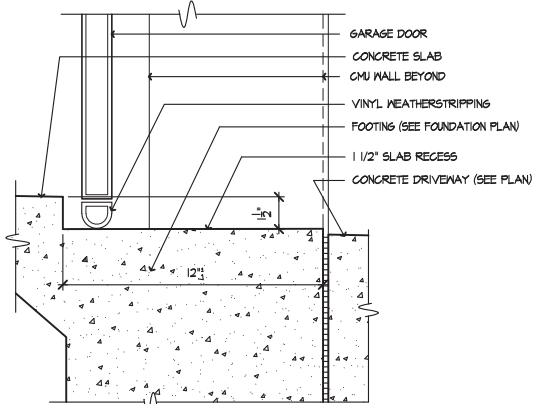
65

SIDING AT SLAB

SCALE 3"=1'-0"

SE-04061a

61



GARAGE SLAB RECESS

SCALE 1 1/2"=1'-0"

0810-01

78

WARDROBE DOOR JAMB

SCALE 3"=1'-0"

SE-04074a

74

SIDING TO BRICK

SCALE 3"=1'-0"

SE-04070a

70

SIDING TO STONE

SCALE 3"=1'-0"

SE-04066a

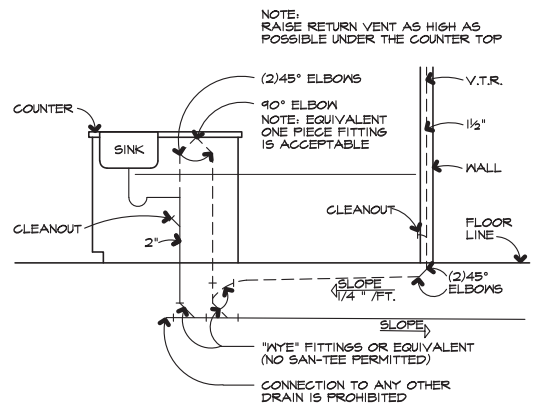
66

WINDOW SHUTTER

SCALE 1 1/2"=1'-0"

SE-04062a

62



KITCHEN ISLAND

SCALE 1/2"=1'-0"

SE-04079a

79

WATER HEATER

SCALE 1/2"=1'-0"

SE-04075a

75

BRICK CAP @ SIDING

SCALE 1 1/2"=1'-0"

SE-04071a

71

STONE CAP @ SIDING

SCALE 1 1/2"=1'-0"

SE-04067a

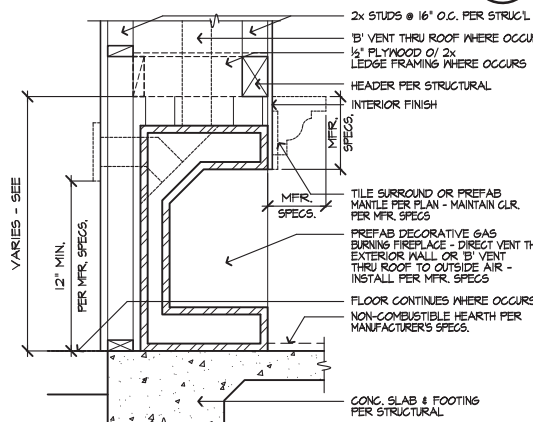
67

BRICK TIES

SCALE 1 1/2"=1'-0"

SE-04063a

63



DECORATIVE GAS APPLIANCE

SCALE 1"=1'-0"

SE-04080a

80

ATTIC ACCESS

SCALE 3"=1'-0"

SE-04076a

76

PONY WALL

SCALE 3"=1'-0"

SE-04072a

72

COLUMN BASE W/ STONE

SCALE 1 1/2"=1'-0"

SE-04068a

68

COLUMN BASE W/ BRICK

SCALE 1 1/2"=1'-0"

SE-04064a

64

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ISSUE DATE:
PROJECT No.: 1350999:56
DIVISION MGR.: DS
REVISIONS: SEE BELOW

PLAN:
SHEET:
AD4

SPEC. LEVEL 1
RALEIGH-DURHAM
DETAILS



40' SERIES

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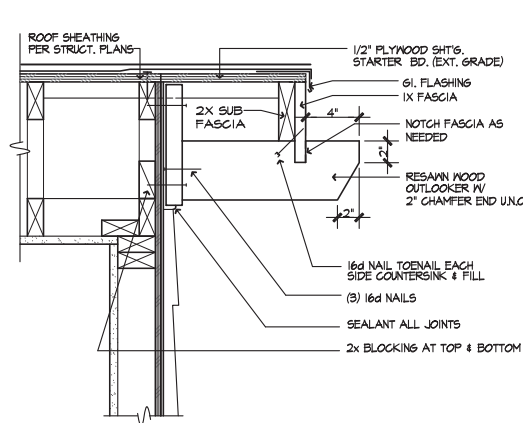
ISSUE DATE:
PROJECT No.: 1350999-56
DIVISION MGR.: DS
REVISIONS: SEE BELOW

PLAN:

SHEET:
AD5

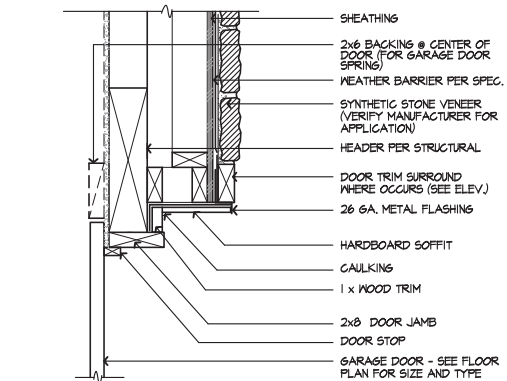
SPEC. LEVEL 1

RALEIGH-DURHAM
DETAILS



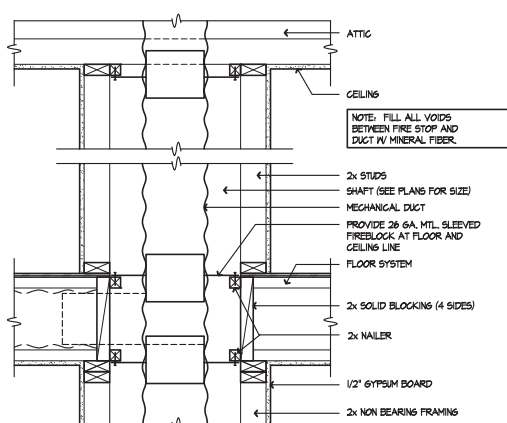
CORBEL AT RAKE

SCALE 1/2"=1'-0"



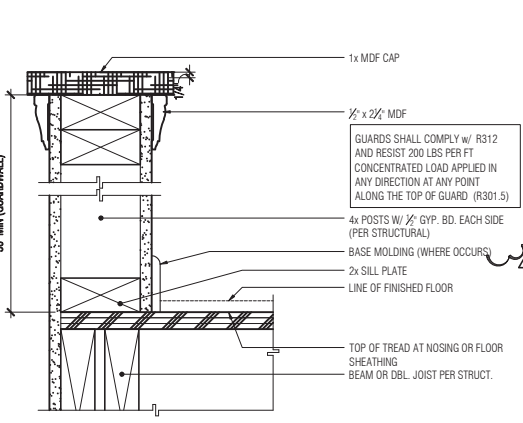
GARAGE DOOR HEAD - STONE

SCALE 1/2"=1'-0"



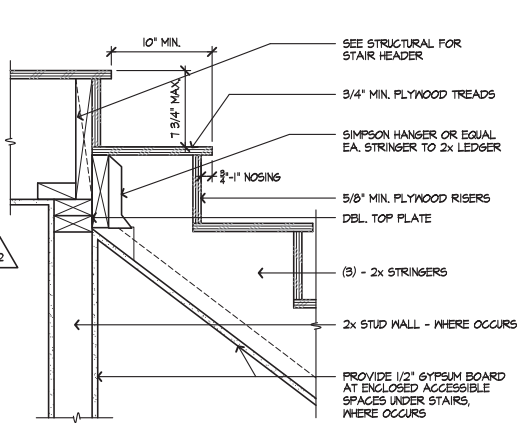
TYP. SHAFT AT 2nd FLR.

SCALE 1"=1'-0"



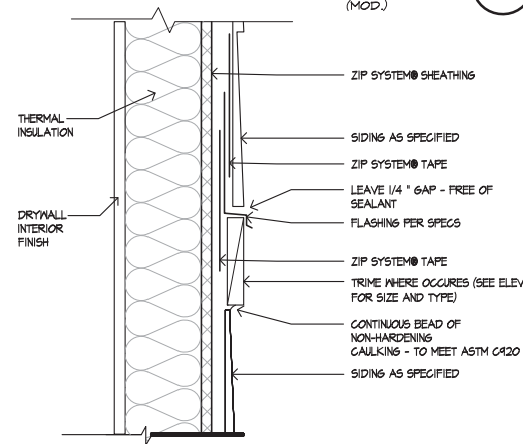
GUARDWALL AT FLOOR

SCALE 3/4"=1'-0"



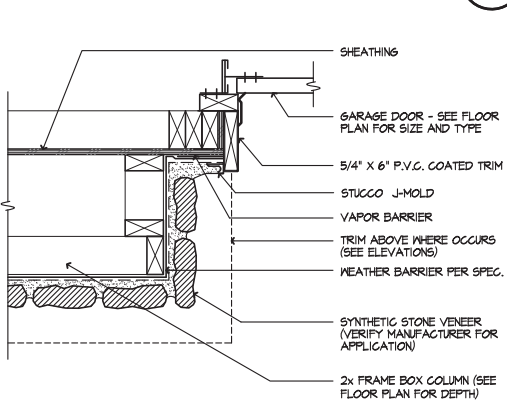
STAIR AT LANDING

SCALE 1/2"=1'-0"



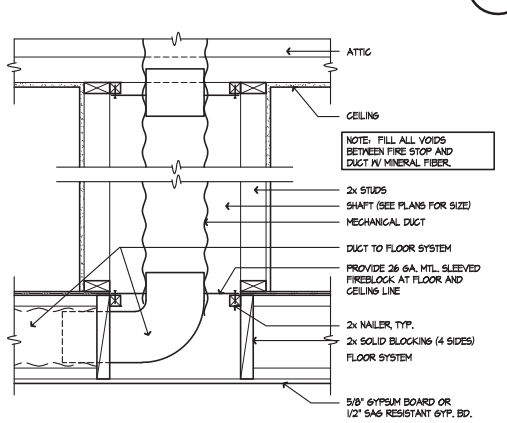
Trim Band

SCALE 3/4"=1'-0"



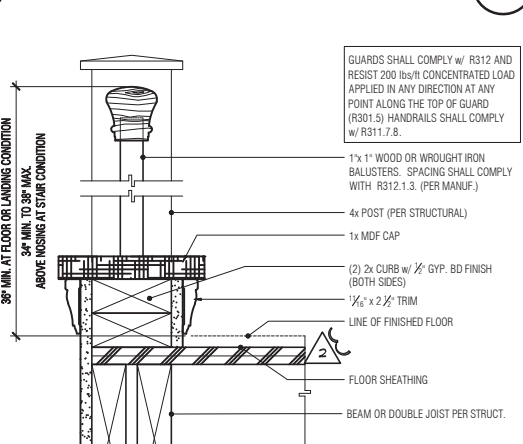
GARAGE DOOR JAMB - STONE

SCALE 1/2"=1'-0"



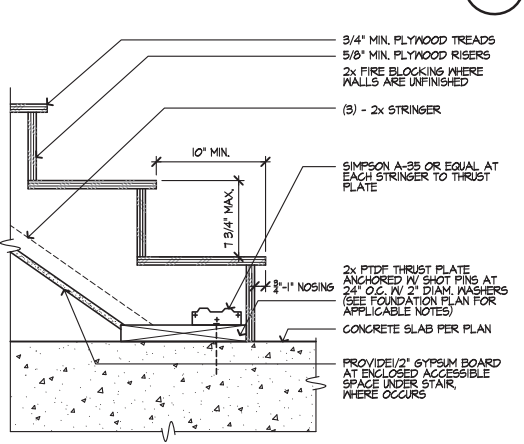
TYP. SHAFT AT 2nd FLR.

SCALE 1"=1'-0"



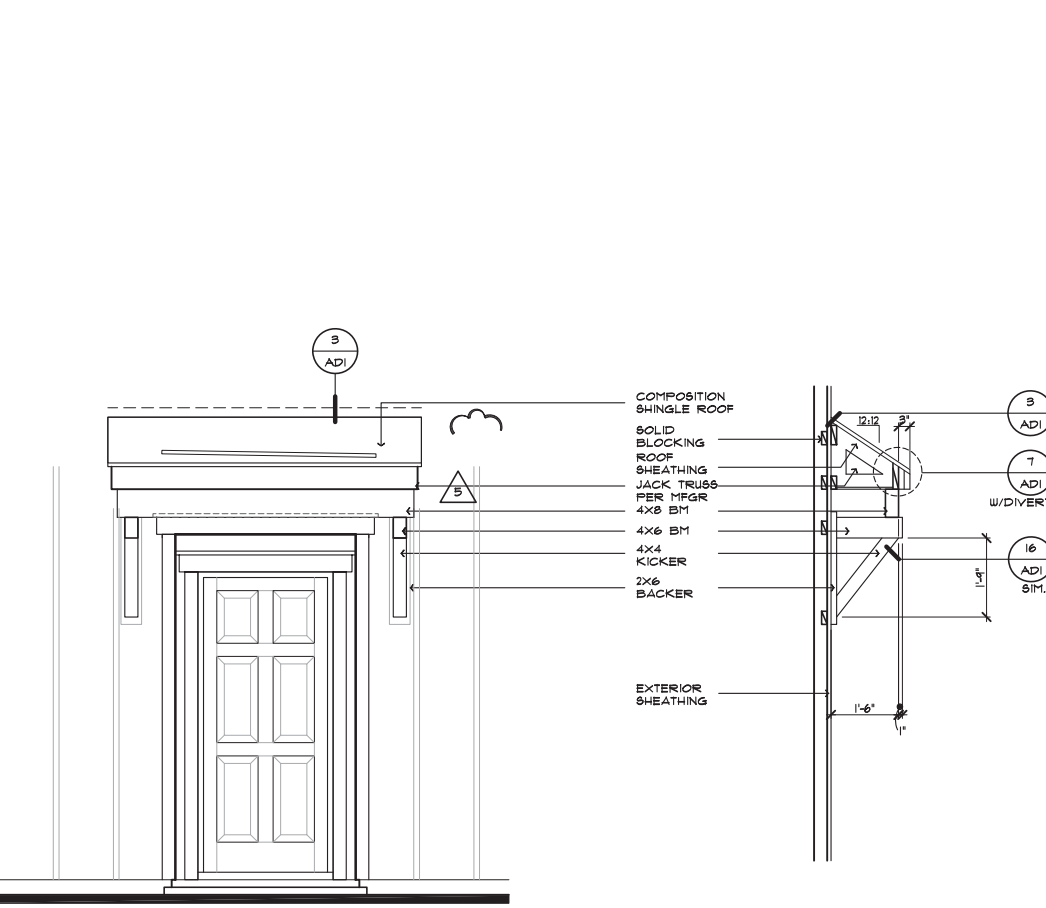
GUARDRAIL

SCALE 3/4"=1'-0"



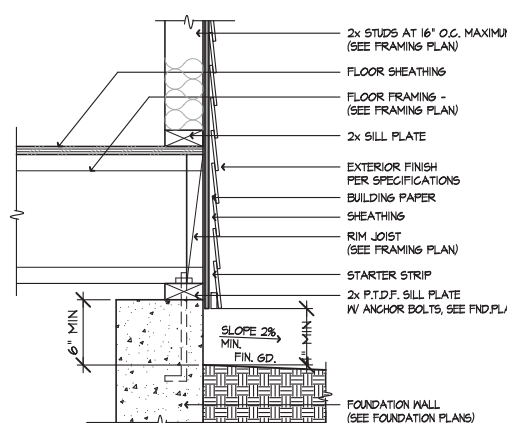
STAIR AT CONC. FLOOR

SCALE 1/2"=1'-0"



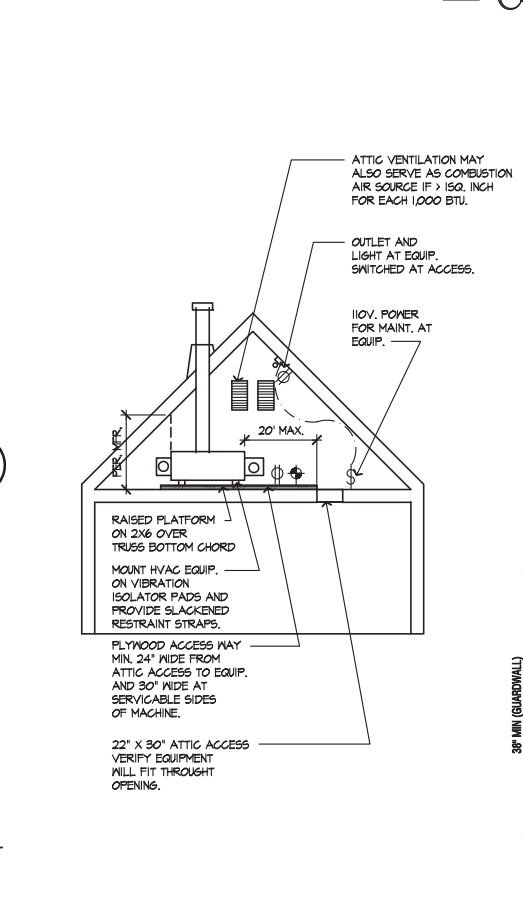
EYEBROW ROOF

SCALE 1/2"=1'-0"



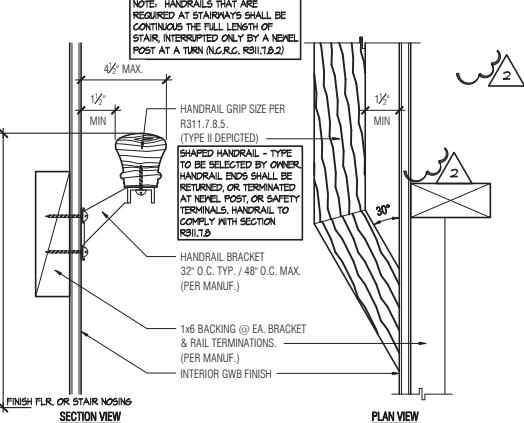
SIDING AT RAISED FLOOR

SCALE 1/2"=1'-0"



F.A.U. IN ATTIC

SCALE 1/2"=1'-0"



HANDRAIL AT WALL

SCALE 3/4"=1'-0"

TRAY CEILING

SCALE 1"=1'-0"

GUARDWALL AT STAIRS

SCALE 3/4"=1'-0"

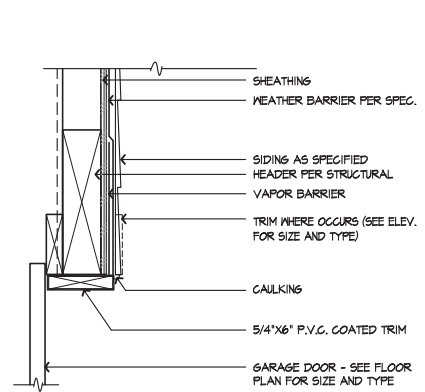
GUARDWALL AT STAIRS

SCALE 3/4"=1'-0"

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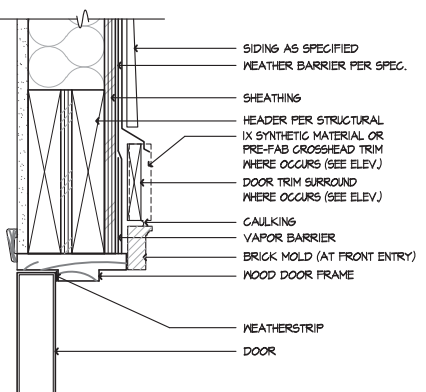
GARAGE DOOR HEAD -SIDING

SCALE 1 1/2"=1'-0" SE-06117a



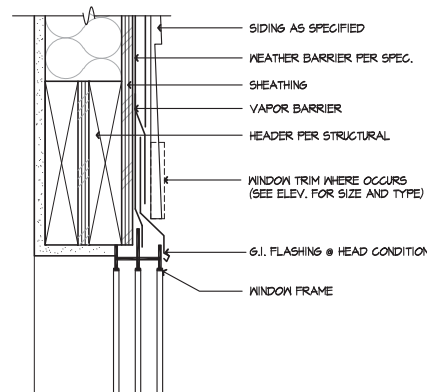
DOOR HEAD - SIDING

SCALE 3\"/>



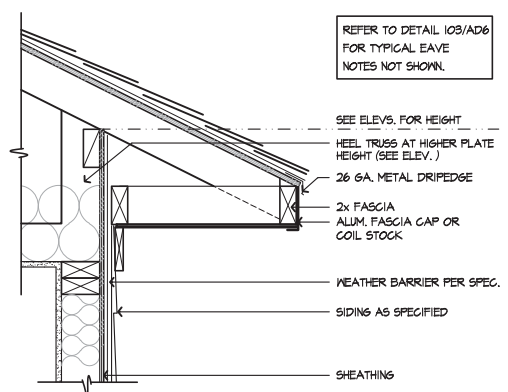
WINDOW HEAD - SIDING

SCALE 3\"/>



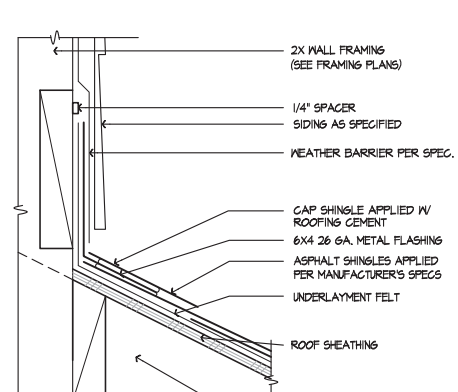
HEEL TRUSS -SIDING

SCALE 1 1/2"=1'-0" SE-06109a



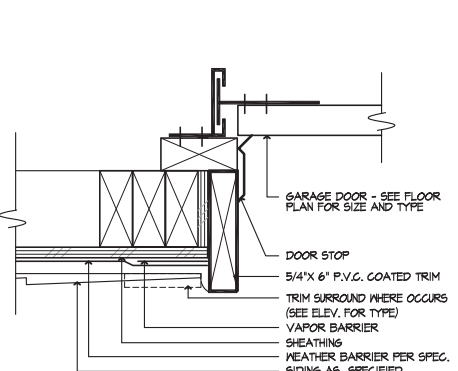
ROOF TO WALL

SCALE 3\"/>



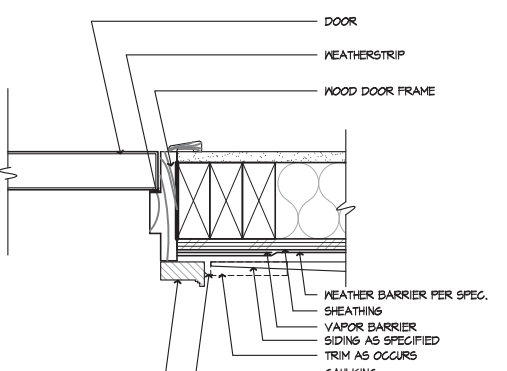
GARAGE DOOR JAMB - SIDING

SCALE 3\"/>



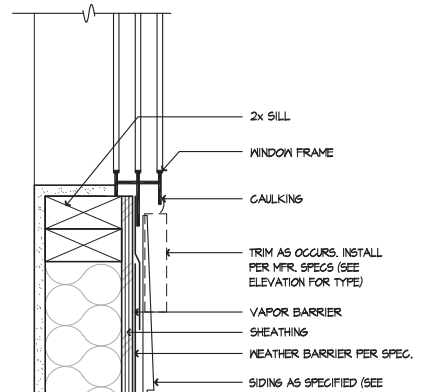
DOOR JAMB - SIDING

SCALE 3\"/>



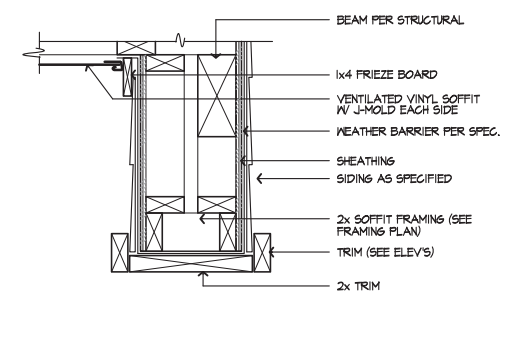
WINDOW SILL - SIDING

SCALE 3\"/>



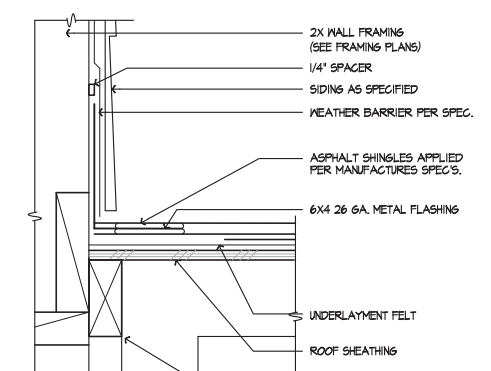
SOFFIT @ PORCH

SCALE 1 1/2"=1'-0" SE-06106a



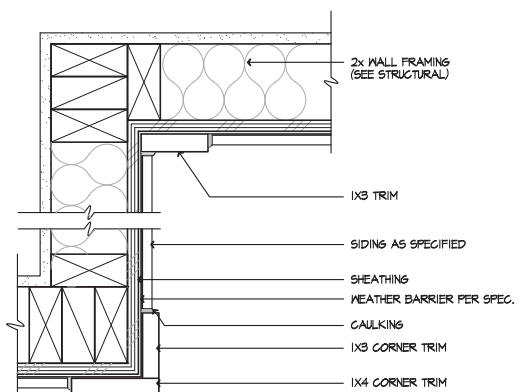
ROOF TO WALL

SCALE 3\"/>



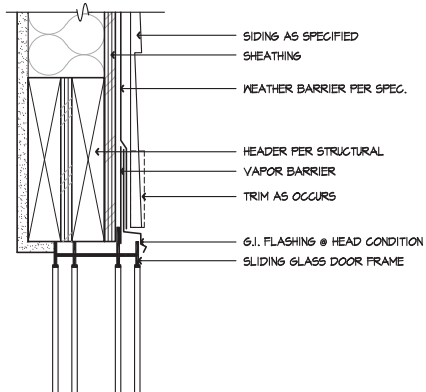
CORNER TRIM - SIDING

SCALE 3\"/>



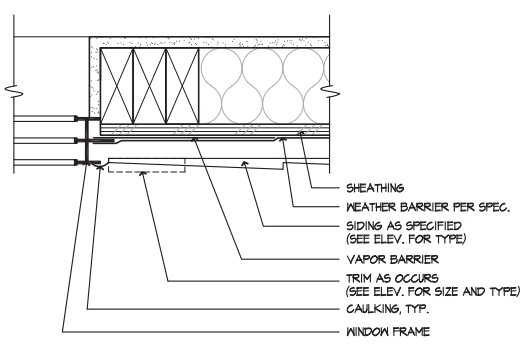
SLDG. DOOR HEAD-SIDING

SCALE 3\"/>



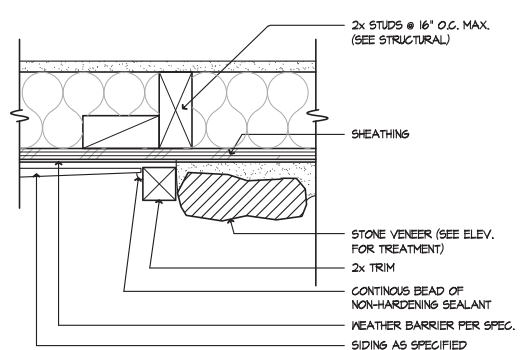
WINDOW JAMB - SIDING

SCALE 3\"/>



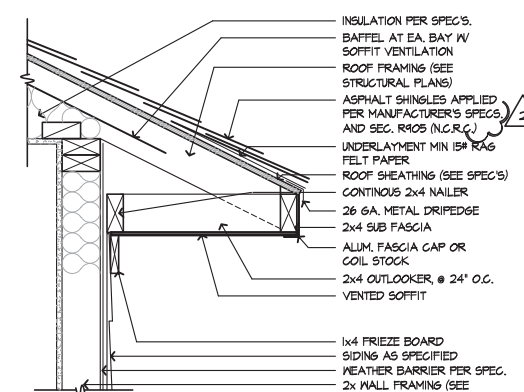
SIDING TO STONE

SCALE 3\"/>



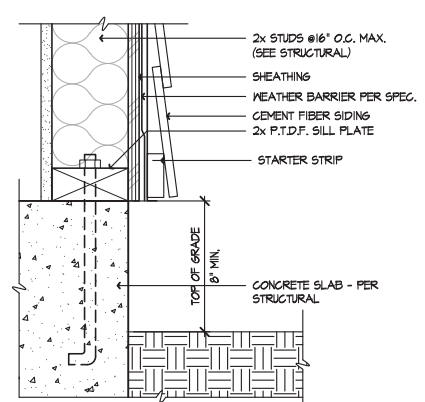
EAVE

SCALE 1 1/2"=1'-0" SE-010091b



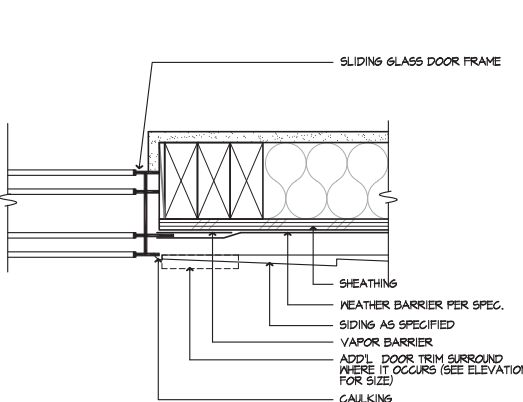
SIDING AT SLAB

SCALE 3\"/>



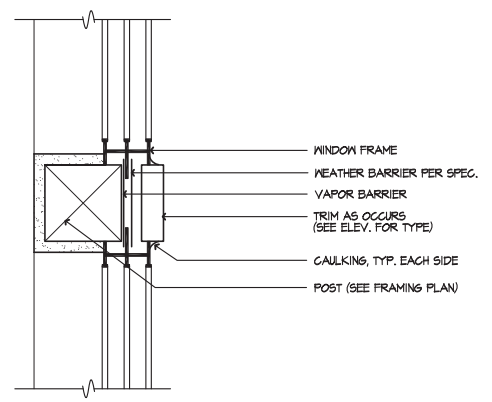
SLDG. DOOR JAMB-SIDING

SCALE 3\"/>



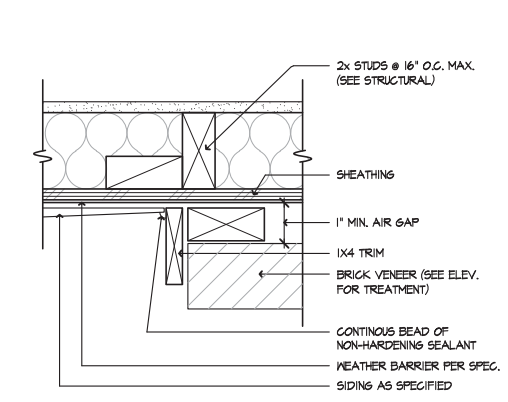
VERT. WDW. MULL.-SIDING

SCALE 3\"/>



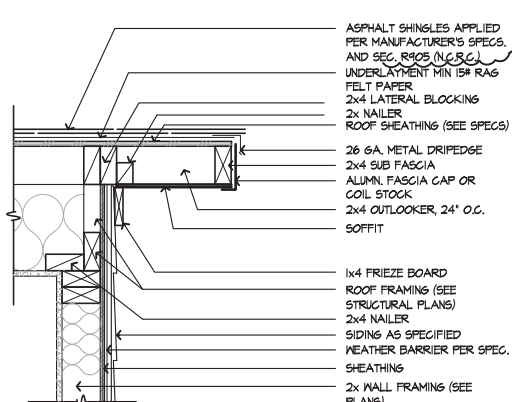
SIDING TO BRICK

SCALE 3\"/>



RAKE

SCALE 1 1/2"=1'-0" SE-06104a



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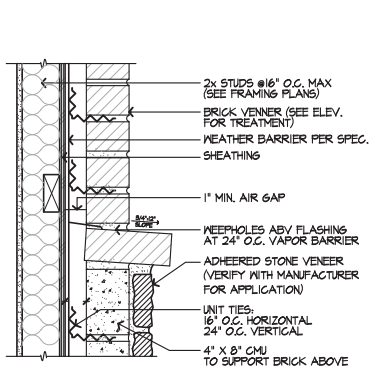
PLAN:

SHEET:
AD6

SPEC. LEVEL 1

**RALEIGH-DURHAM
DETAILS**

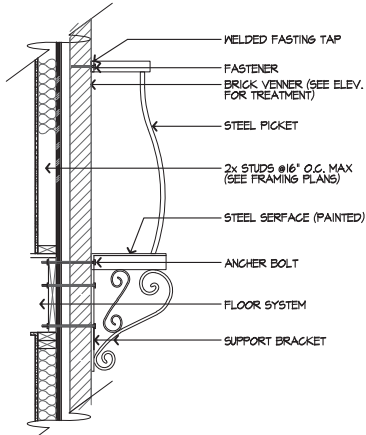
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BRICK OVER STONE

NOT TO SCALE

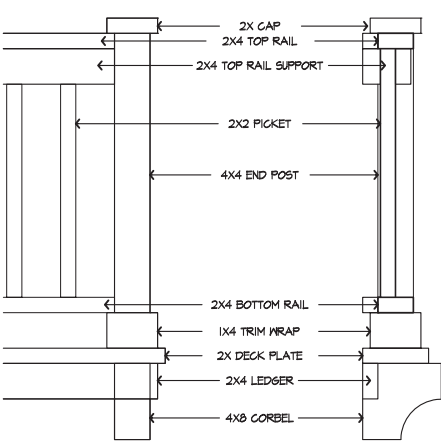
129
AD7



RAILING

NOT TO SCALE

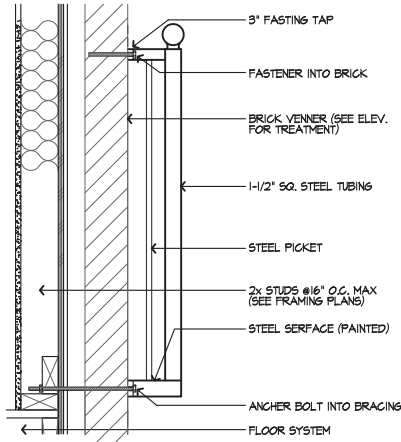
130
AD7



WOOD RAILING

NOT TO SCALE

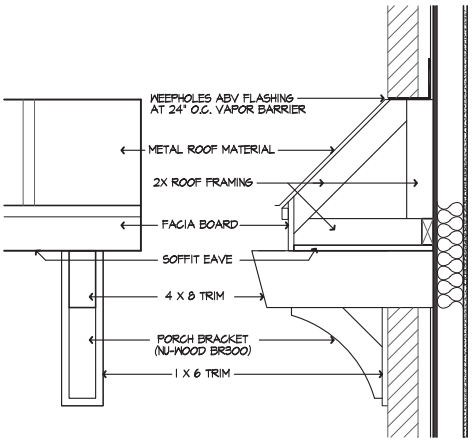
131
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RAILING

NOT TO SCALE

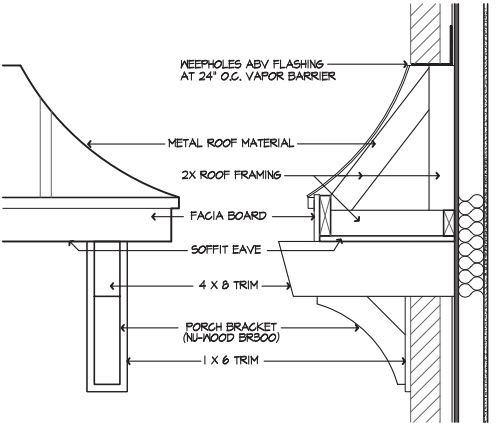
132
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SHED ROOF

NOT TO SCALE

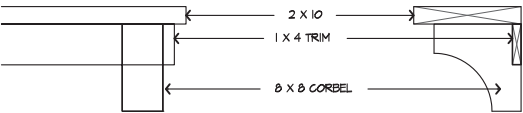
133
AD7



CURVED SHED ROOF

NOT TO SCALE

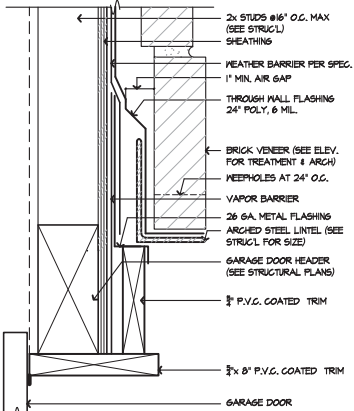
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AD7



WINDOW LEDGE

NOT TO SCALE

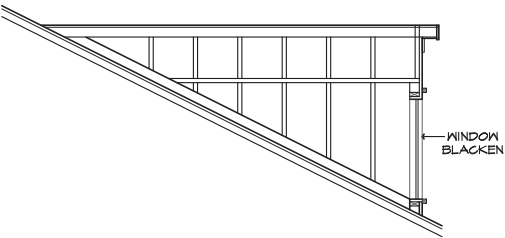
136
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**GARAGE DOOR HEAD
W/ ARCHED BRICK**

NOT TO SCALE

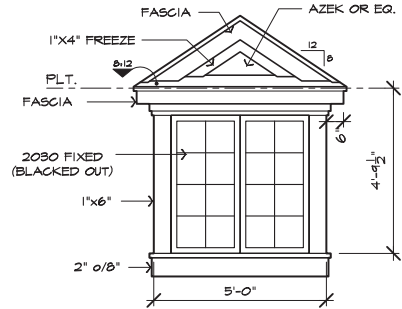
138
AD7



TYP. DORMER

NOT TO SCALE

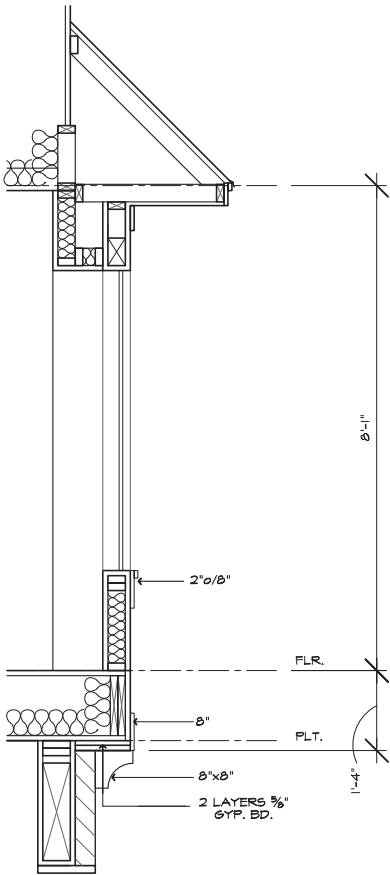
137
AD7



EYEBROW DORMER

NOT TO SCALE

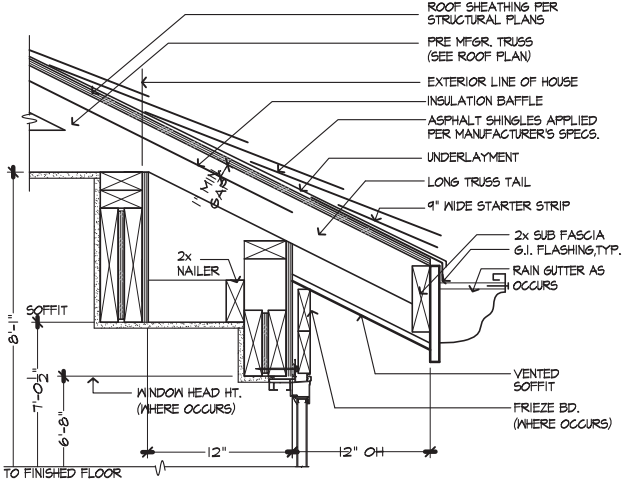
139
AD7



BAY

NOT TO SCALE

135
AD7

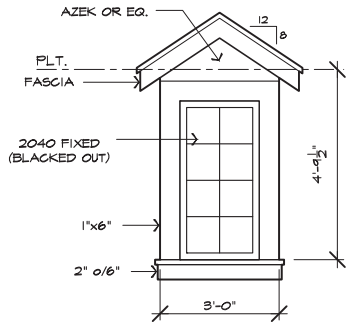


EAVE at BAY WINDOW

SCALE 1 1/2\"/>

0732-13q BAY

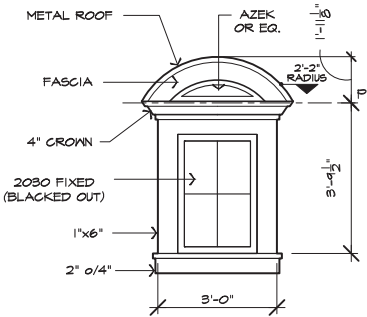
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AD7



GABLE ROOF DORMER

NOT TO SCALE

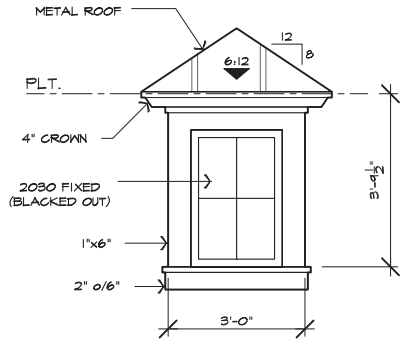
140
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ARCHED ROOF DORMER

NOT TO SCALE

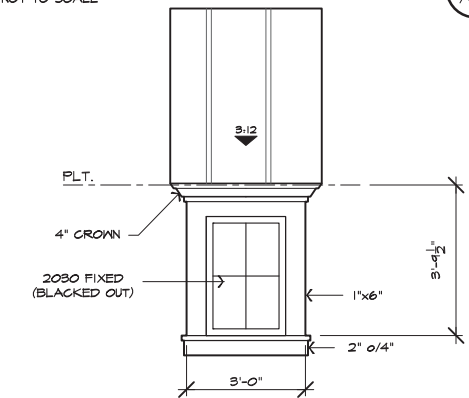
142
AD7



TYP. HIP DORMER

NOT TO SCALE

141
AD7



TYP. SHED ROOF DORMER

NOT TO SCALE

143
AD7



40' SERIES

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DIVISION MGR.: DS
REVISIONS: SEE BELOW

PLAN:

SHEET:
AD7

SPEC. LEVEL 1
RALEIGH-DURHAM
DETAILS

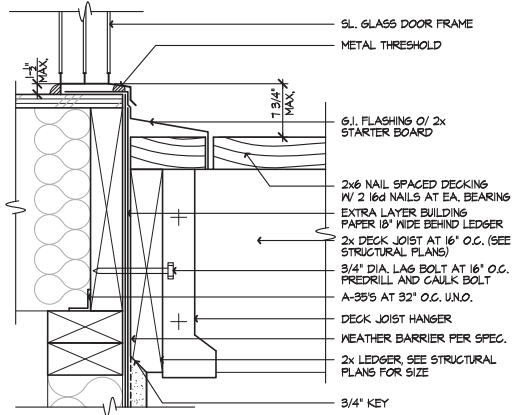


40' SERIES

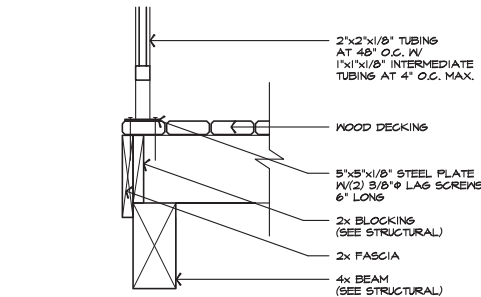
KB HOME
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ISSUE DATE:
PROJECT No.: 1350999:56
DIVISION MGR.: DS
REVISIONS: SEE BELOW

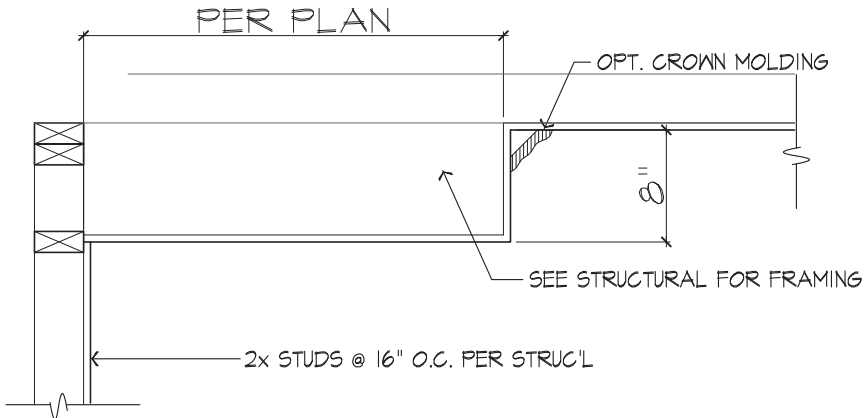
PLAN:
SHEET:
AD8
SPEC. LEVEL 1
RALEIGH-DURHAM
DETAILS



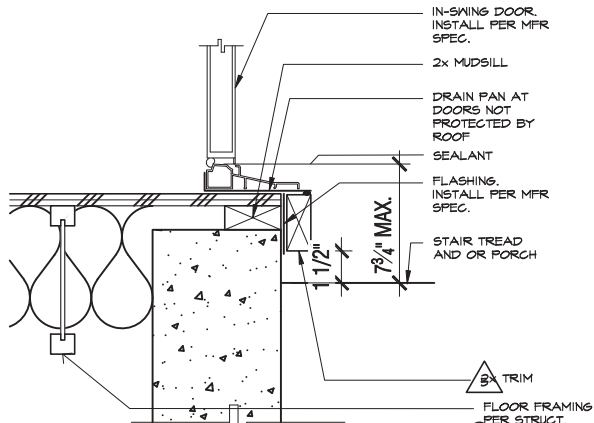
SL. DR. TRESHOLD @ DECK
SCALE 3/4"=1'-0"
0910-02



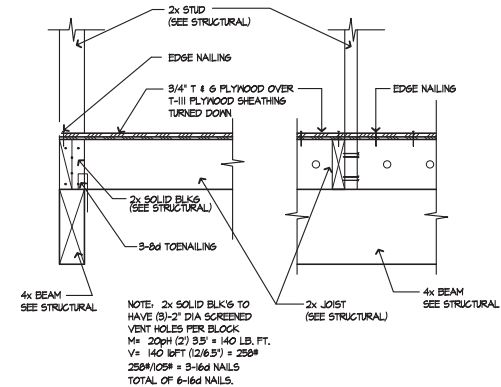
DECK FRAMING
SCALE 1"=1'-0"
150
ADB



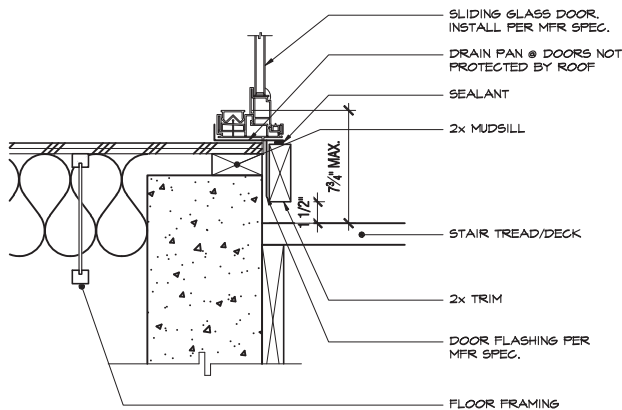
BOX TRAY CEILING
NOT TO SCALE
148
ADB



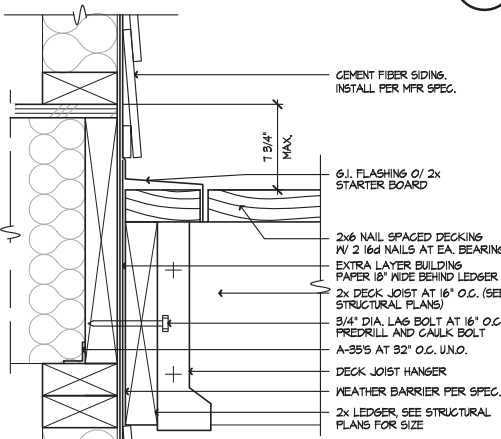
SWING DOOR THRESHOLD
SCALE 3/4"=1'-0"
AT CRAWL SPACE
156
ADB



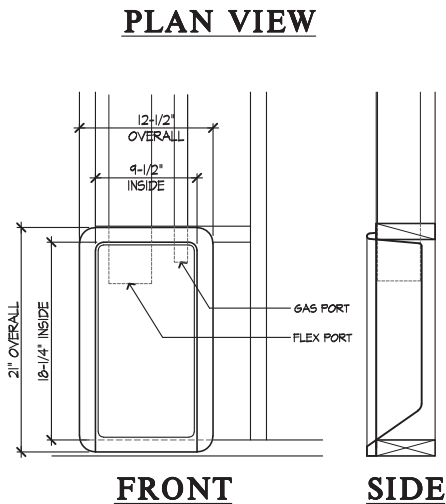
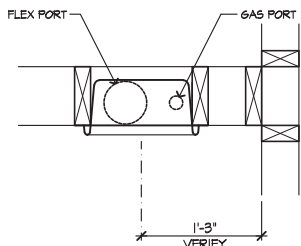
DECK FRAMING
SCALE 1"=1'-0"
151
ADB



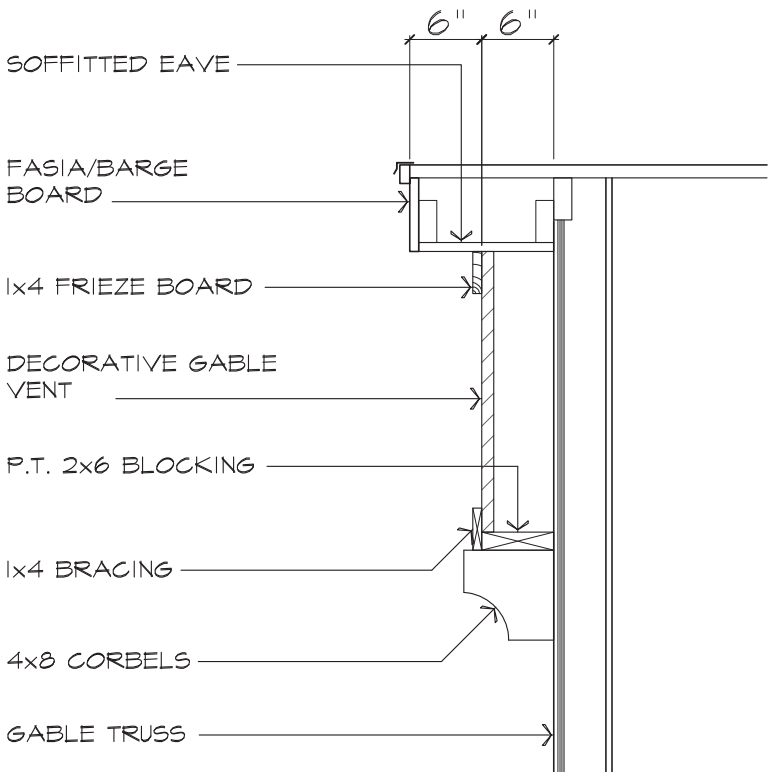
SLIDING GLASS DOOR
SCALE 1"=1'-0"
AT CRAWL SPACE
157
ADB



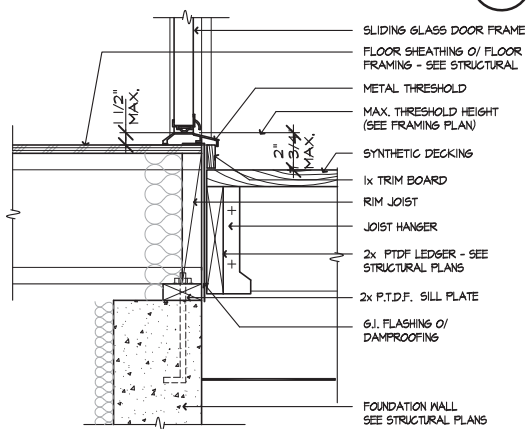
WALL @ DECK
SCALE 3/4"=1'-0"
ADB-152
152
ADB



FRONT SIDE
DRYER BOX DETAIL
SCALE: N.T.S.
ADB-149
149
ADB



GABLE VENT DETAIL
NOT TO SCALE
147
ADB



SWING DOOR THRESHOLD
SCALE 1 1/2"=1'-0"
0820-01c
153
ADB

STRUCTURAL PLANS FOR:



149.2115 - RH GARAGE

PLAN RELEASE / REVISIONS

[illegible]

NOTES

1. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT, INCLUDING ROOF GEOMETRY. JDS CONSULTING, PLLC ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. ENGINEER TO BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
2. DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS.
3. PLANS MUST HAVE SIGNED SEAL TO BE VALID AND ARE LIMITED TO THE FOLLOWING USES:
 - A. IF THESE PLANS ARE ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR 18 MONTHS FROM THE DATE ON THE SEAL, UNLESS ANY CODE-REQUIRED UPDATES ARE PLACED IN EFFECT BY THE MUNICIPALITY.
 - B. IF THESE PLANS ARE NOT ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR A CONDITIONAL, ONE-TIME USE FOR THE LOT OR ADDRESS SPECIFIED ON THE TITLE BLOCK.

CODE

**ALL CONSTRUCTION, WORKMANSHIP,
AND MATERIAL QUALITY AND
SELECTION SHALL BE PER:**

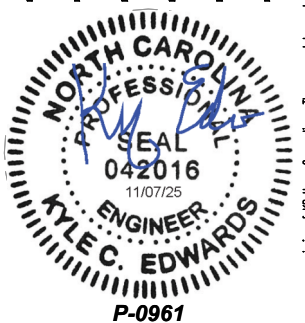
**2018
NORTH CAROLINA
STATE BUILDING CODE:
RESIDENTIAL CODE**

ENGINEER OF RECORD

JDS Consulting, PLLC
ENGINEERING · DESIGN · ENERGY
543 PYLON DR.
RALEIGH, NC 27606
FIRM LIC. NO: P-0961
PROJECT REFERENCE: 25903044



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JDS Consulting, PLLC HAS STRUCTURALLY DESIGNED AND APPROVED THESE PLANS. THE STRUCTURAL COMPONENTS COMPLY WITH THE 2018 NORTH CAROLINA RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS FOR NC PLAN REVIEW. DEVIATION OF ANY STRUCTURAL REQUIREMENTS OF THESE PLANS WITHOUT THE APPROVAL OF THE EOR IS PROHIBITED.



PROJECT NO.: 25903044

DATE: 11/03/2025

PLAN:
149.2115

TITLE SHEET

T

NOTE: ALL CHAPTERS, SECTIONS, TABLES, AND FIGURES CITED WITHOUT A PUBLICATION TITLE ARE FROM THE APPLICABLE RESIDENTIAL CODE (SEE TITLE SHEET).

GENERAL

1.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FURTHERMORE, CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND SAFETY ON SITE. NOTIFY JDS Consulting, PLLC IMMEDIATELY IF DISCREPANCIES ON PLAN EXIST.
2.

BRACED-WALL DESIGN IS BASED ON SECTION R602.10 - WALL BRACING. PRIMARY PRESCRIPTIVE METHOD TO BE CS-WSP. SEE WALL BRACING PLANS AND DETAILS FOR ADDITIONAL INFORMATION.
- ALL NON-PRESCRIPTIVE SOLUTIONS ARE BASED ON GUIDELINES ESTABLISHED IN THE AMERICAN SOCIETY OF CIVIL ENGINEERS PUBLICATION ASCE 7 AND THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC.
3.

SEISMIC DESIGN SHALL BE PER SECTION R301.2.2 - SEISMIC PROVISIONS, INCLUDING ASSOCIATED TABLES AND FIGURES, BASED ON LOCAL SEISMIC DESIGN CATEGORY.

DESIGN LOADS

ASSUMED SOIL BEARING-CAPACITY	2,000 PSF
	LIVE LOAD
ULTIMATE DESIGN WIND SPEED	120 MPH, EXPOSURE B
GROUND SNOW	15 PSF
ROOF	20 PSF
RESIDENTIAL CODE TABLE R301.5	LIVE LOAD (PSF)
DWELLING UNITS	40
SLEEPING ROOMS	30
ATTICS WITH STORAGE	20
ATTICS WITHOUT STORAGE	10
STAIRS	40
DECKS	40
EXTERIOR BALCONIES	60
PASSENGER VEHICLE GARAGES	50
FIRE ESCAPES	40
GUARDS AND HANDRAILS	200 (pounds, concentrated)

COMPONENT AND CLADDING LOADS, INCLUDING THOSE FOR DOORS AND WINDOWS, SHALL BE DERIVED FROM TABLES R301.2(2) AND R301.2(3) FOR A BUILDING WITH A MEAN ROOF HEIGHT OF 35 FEET, LOCATED IN EXPOSURE B.

ABBREVIATIONS

ABV	ABOVE	KS	KING STUD COLUMN
AFF	ABOVE FINISHED FLOOR	LVL	LAMINATED VENEER LUMBER
ALT	ALTERNATE	MAX	MAXIMUM
BRG	BEARING	MECH	MECHANICAL
BSMT	BASEMENT	MFTR	MANUFACTURER
CANT	CANTILEVER	MIN	MINIMUM
CJ	CEILING JOIST	NTS	NOT TO SCALE
CLG	CEILING	OA	OVERALL
CMU	CONCRETE MASONRY UNIT	OC	ON CENTER
CO	CASED OPENING	PT	PRESSURE TREATED
COL	COLUMN	R	RISER
CONC	CONCRETE	REF	REFRIGERATOR
CONT	CONTINUOUS	RFG	ROOFING
D	CLOTHES DRYER	RO	ROUGH OPENING
DBL	DOUBLE	RS	ROOF SUPPORT
DIAM	DIAMETER	SC	STUD COLUMN
DJ	DOUBLE JOIST	SF	SQUARE FOOT (FEET)
DN	DOWN	SH	SHELF / SHELVES
DP	DEEP	SHTG	SHEATHING
DR	DOUBLE RAFTER	SHW	SHOWER
DSP	DOUBLE STUD POCKET	SIM	SIMILAR
EA	EACH	SJ	SINGLE JOIST
EE	EACH END	SP	STUD POCKET
EQ	EQUAL	SPEC'D	SPECIFIED
EX	EXTERIOR	SQ	SQUARE
FAU	FORCED-AIR UNIT	T	TREAD
FDN	FOUNDATION	TEMP	TEMPERED GLASS
FF	FINISHED FLOOR	THK	THICK(NESS)
FLR	FLOOR(ING)	TJ	TRIPLE JOIST
FP	FIREPLACE	TOC	TOP OF CURB / CONCRETE
FTG	FOOTING	TR	TRIPLE RAFTER
HB	HOSE BIBB	TYP	TYPICAL
HDR	HEADER	UNO	UNLESS NOTED OTHERWISE
HGR	HANGER	W	CLOTHES WASHER
JS	JACK STUD COLUMN	WH	WATER HEATER
		WWF	WELDED WIRE FABRIC
		XJ	EXTRA JOIST

MATERIALS

1.

INTERIOR / TRIMMED FRAMING LUMBER SHALL BE #2 SPRUCE PINE FIR (SPF) WITH THE FOLLOWING DESIGN PROPERTIES (#2 SOUTHERN YELLOW PINE MAY BE SUBSTITUTED):
- Fb = 875 PSI

Fv = 70 PSI

E = 1.4E6 PSI
2.

FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING DESIGN PROPERTIES:
- Fb = 975 PSI

Fv = 95 PSI

E = 1.6E6 PSI
3.

LVL STRUCTURAL MEMBERS TO BE LAMINATED VENEER LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
- Fb = 2600 PSI

Fv = 285 PSI

E = 1.9E6 PSI
4.

PSL STRUCTURAL MEMBERS TO BE PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
- Fb = 2900 PSI

Fv = 290 PSI

E = 2.0E6 PSI
5.

LSL STRUCTURAL MEMBERS TO BE LAMINATED STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:
- Fb = 2250 PSI

Fv = 400 PSI

E = 1.55E6 PSI
6.

STRUCTURAL STEEL WIDE-FLANGE BEAMS SHALL CONFORM TO ASTM A992. Fy = 50 KSI
7.

REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615, GRADE 60.
8.

POURED CONCRETE COMPRESSIVE STRENGTH TO BE A MINIMUM 3,000 PSI AT 28 DAYS. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN AMERICAN CONCRETE INSTITUTE STANDARD ACI 318 OR ASTM C1157.
9.

CONCRETE SUBJECT TO MODERATE OR SEVERE WEATHERING PROBABILITY PER TABLE R301.2(1) SHALL BE AIR-ENTRAINED WHEN REQUIRED BY TABLE R402.2.
10.

CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE PUBLICATION 530: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES AND THE MASONRY SOCIETY PUBLICATION TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES.
11.

MORTAR SHALL COMPLY WITH ASTM INTERNATIONAL STANDARD C270.
12.

INDICATED MODEL NUMBERS FOR ALL METAL HANGERS, STRAPS, FRAMING CONNECTORS, AND HOLD-DOWNS ARE SIMPSON STRONG-TIE BRAND. EQUIVALENT USP BRAND PRODUCTS ARE ACCEPTABLE.
13.

REFER TO I-JOIST EQUIVALENCE CHART ON I-JOIST DETAIL SHEET FOR SUBSTITUTION OF MANUFACTURER SERIES.

BEAM DESIGNATION DEFINITIONS:

FLUSH - THIS DEFINES THE BEAM TO BE FLUSH WITH THE BOTTOM AND THE TOP OF THE FLOOR SYSTEM.

FLUSH TOP - THIS DEFINES THE BEAM TO HAVE THE TOP OF THE BEAM FLUSH WITH THE TOP OF THE FLOOR SYSTEM. THIS GENERALLY MEANS THE TOP PLATE WOULD BE CUT TO RECEIVE THE BEAM.

FLUSH BOTTOM - THIS DEFINES THE BEAM TO HAVE THE BOTTOM OF THE BEAM FLUSH WITH THE BOTTOM OF THE FLOOR SYSTEM. THIS GENERALLY MEANS THE BEAM WILL SIT ON THE TOP PLATE LIKE THE FLOOR SYSTEM.

DROPPED - THIS DEFINES THE TOP OF THE BEAM TO BE SET BELOW THE FLOOR SYSTEM. THIS GENERALLY MEANS THE TOP OF THIS BEAM TO BE FLUSH WITH THE TOP PLATE OR JUST UNDER THE TOP PLATE, OR AS NOTED.

FOUNDATION

1.

MINIMUM ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 PSF. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL BEARING CAPACITY IF UNSATISFACTORY CONDITIONS EXIST.
2.

CONCRETE FOUNDATION WALLS TO BE SELECTED AND CONSTRUCTED PER SECTION R404 OR AMERICAN CONCRETE INSTITUTE STANDARD ACI 318.
3.

MASONRY FOUNDATION WALLS TO BE SELECTED AND CONSTRUCTED PER SECTION R404 AND/OR AMERICAN CONCRETE INSTITUTE PUBLICATION 530: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES AND/OR THE MASONRY SOCIETY PUBLICATION TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES.
4.

CONCRETE WALL HORIZONTAL REINFORCEMENT TO BE PER TABLE R404.1.2(1) OR AS NOTED OR DETAILED. CONCRETE WALL VERTICAL REINFORCEMENT TO BE PER TABLES R404.1.2(3 AND 4) OR AS NOTED OR DETAILED. ALL CONCRETE WALLS SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 6.
- A.

TABLES ASSUME THAT WALLS HAVE PERMANENT LATERAL SUPPORT AT THE TOP AND BOTTOM.
- B.

FOUNDATION DRAINS ARE ASSUMED AT ALL WALLS PER SECTION R405.
5.

PLAIN-MASONRY WALL DESIGN TO BE PER TABLE R404.1.1(1) OR AS NOTED OR DETAILED. MASONRY WALLS WITH VERTICAL REINFORCEMENT TO BE PER TABLES R404.1.1 (2 THROUGH 4) OR AS NOTED OR DETAILED. ALL MASONRY WALLS SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 6.
- A.

TABLES ASSUME THAT WALLS HAVE PERMANENT LATERAL SUPPORT AT THE TOP AND BOTTOM.
- B.

WALL REINFORCING SHALL BE PLACED ACCORDING TO FOOTNOTE (c) OF THE TABLES (REINFORCING IS NOT CENTERED IN WALL).
- C.

FOUNDATION DRAINS ARE ASSUMED AT ALL WALLS PER SECTION R405.
6.

WOOD SILL PLATES TO BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" OC AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. INSTALL MINIMUM (2) ANCHOR BOLTS PER SECTION. SEE SECTION R403.1.6 FOR SPECIFIC CONDITIONS.
7.

THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED, HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
8.

CENTERS OF PIERS TO BEAR IN THE MIDDLE THIRD OF THE FOOTINGS, AND GIRDERS SHALL CENTER IN THE MIDDLE THIRD OF THE PIERS.
9.

ALL FOOTINGS TO HAVE MINIMUM 2" PROJECTION ON EACH SIDE OF FOUNDATION WALLS (SEE DETAILS).
10.

ALL REBAR NOTED IN CONCRETE TO HAVE AT LEAST 2" COVER FROM EDGE OF CONCRETE TO EDGE OF REBAR.
11.

FRAMING TO BE FLUSH WITH FOUNDATION WALLS.
12.

WITH GROUP I SOILS (GW GP SW SP GM SM) FROM THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS), THE CRUSHED STONE BASE UNDER THE SLAB MAY BE OMITTED.

FRAMING

1.

ALL BEARING HEADERS TO BE (2) 2x6 SUPPORTED W/ MIN (1) JACK STUD AND (1) KING STUD EACH END, UNO.
2.

ALL NON-BEARING HEADERS TO BE (2) 2x4, UNO.
3.

NON-BEARING INTERIOR WALLS NOT MORE THAN 10' NOMINAL HEIGHT AND NOT SHOWN AS BRACED WALLS MAY BE FRAMED WITH 2x4 STUDS @ 24" OC.
4.

SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
5.

ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
6.

ALL EXTERIOR WALLS TO BE FULLY SHEATHED WITH 7/16" OSB.
7.

PORCH / PATIO COLUMNS TO BE 4x4 MINIMUM PRESSURE-TREATED LUMBER.
- A.

ATTACH PORCH COLUMNS TO SLAB / FDN WALL USING ABA, ABU, ABW, OR CPT SIMPSON POST BASES TO FIT COLUMN SIZES NOTED ON PLAN -OR- ANY OTHER COLUMN CONNECTION WITH 500# UPLIFT CAPACITY.
- B.

ATTACH PORCH COLUMNS TO PORCH BEAMS USING AC OR BC SIMPSON POST CAPS TO FIT COLUMN SIZES NOTED ON PLAN -OR- ANY OTHER COLUMN CONNECTION WITH 500# UPLIFT CAPACITY.
- C.

TRIM OUT COLUMN(S) AND BEAM(S) PER BUILDER AND DETAILS.
8.

ALL ENGINEERED WOOD PRODUCTS (LVL, PSL, LSL, ETC.) SHALL BE INSTALLED WITH CONNECTIONS PER MANUFACTURER SPECIFICATIONS.
9.

ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS:
- A.

SHOP DRAWINGS FOR THE SYSTEMS SHALL BE PROVIDED TO THE ENGINEER OF RECORD FOR REVIEW AND COORDINATION BEFORE CONSTRUCTION.
- B.

TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER.
- C.

INSTALLATION OF THE SYSTEMS SHALL BE PER MANUFACTURER'S INSTRUCTIONS.
- D.

TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN IN THESE DRAWINGS.
10.

ALL BEAMS TO BE CONTINUOUSLY SUPPORTED Laterally AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED, WITH A MINIMUM OF THREE STUDS, UNO.
11.

ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MIN BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR TWO 1/2" x 4" LAG SCREWS, UNO.
12.

STEEL FLITCH BEAMS TO BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM 307) WITH WASHERS PLACED UNDER THE THREADED END OF THE BOLT. BOLTS TO BE SPACED AT 24" OC (MAX) AND STAGGERED TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH TWO BOLTS TO BE LOCATED AT 6" FROM EACH END OF FLITCH BEAM.
13.

WHEN A 4-PLY LVL BEAM IS USED, ATTACH WITH (1) 1/2" DIAMETER BOLT, 12" OC, STAGGERED TOP AND BOTTOM, 1 1/2" MIN FROM ENDS. ALTERNATE EQUIVALENT ATTACHMENT METHOD MAY BE USED, SUCH AS SDS, SDW, OR TRUSSLOK SCREWS (SEE MANUFACTURER SPECIFICATIONS).
14.

FOR STUD COLUMNS OF 4-OR-MORE STUDS, INSTALL SIMPSON STRONG-TIE CS16 STRAPS ACROSS STUDS @ 30" OC, 6" MAX FROM PLATES, ON INSIDE FACE OF COLUMN (EXTERIOR WALL), ON BOTH FACES OF COLUMN (INTERIOR WALL).
15.

FLOOR JOISTS ADJACENT AND PARALLEL TO THE EXTERIOR FOUNDATION WALL SHALL BE PROVIDED WITH FULL-DEPTH SOLID BLOCKING, NOT LESS THAN TWO (2) INCHES NOMINAL IN THICKNESS, PLACED PERPENDICULAR TO THE JOIST AT SPACING NOT MORE THAN FOUR (4) FEET. THE BLOCKING SHALL BE NAILED TO THE FLOOR SHEATHING, THE SILL PLATE, THE JOIST, AND THE EXTERIOR RIM JOIST / BOARD (REQUIRED WHEN YOU HAVE A BASEMENT OR TALL CRAWL SPACE).
16.

BRACED WALL PANELS SHALL BE FASTENED TO MEET THE UPLIFT-RESISTANCE REQUIREMENTS IN CHAPTERS 6 AND 8 OF THE APPLICABLE CODE (SEE TITLE SHEET). REQUIREMENTS OF THE STRUCTURAL DRAWINGS THAT EXCEED THE CODE MINIMUM SHALL BE MET.



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PROJECT NO.: 25903044

DATE: 11/03/2025

PLAN:
149.2115

GENERAL NOTES

GN1.0

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FASTENER SCHEDULE		
CONNECTION	3" x 0.131" NAIL	3" x 0.120" NAIL
JOIST TO SILL PLATE	(4) TOE NAILS	(4) TOE NAILS
SOLE PLATE TO JOIST / BLOCKING	NAILS @ 8" OC (typical) (4) PER 16" SPACE (at braced panels)	NAILS @ 8" OC (typical) (4) PER 16" SPACE (at braced panels)
STUD TO SOLE PLATE	(4) TOE NAILS	(4) TOE NAILS
TOP OR SOLE PLATE TO STUD	(3) FACE NAILS	(4) FACE NAILS
RIM JOIST OR BAND JOIST TO TOP PLATE OR SILL PLATE	TOE NAILS @ 6" OC	TOE NAILS @ 4" OC
BLOCKING BETWEEN JOISTS TO TOP PLATE OR SILL PLATE	(4) TOE NAILS	(4) TOE NAILS
DOUBLE STUD	NAILS @ 8" OC	NAILS @ 8" OC
DOUBLE TOP PLATES	NAILS @ 12" OC	NAILS @ 12" OC
DOUBLE TOP PLATES LAP (24" MIN LAP LENGTH)	(12) NAILS IN LAPPED AREA, EA SIDE OF JOINT	(12) NAILS IN LAPPED AREA, EA SIDE OF JOINT
TOP PLATE LAP AT CORNERS AND INTERSECTING WALLS	(3) FACE NAILS	(3) FACE NAILS
OPEN-WEB TRUSS BOTTOM CHORD TO TOP PLATES OR SILL PLATE (PARALLEL TO WALL)	NAILS @ 6" OC	NAILS @ 4" OC
BOTTOM CHORD OF TRUSS TO TOP PLATES OR SILL PLATE (PERPENDICULAR TO WALL)	(3) TOE NAILS	(3) TOE NAILS

SEE TABLE R602.3(1) FOR ADDITIONAL STRUCTURAL-MEMBER FASTENING REQUIREMENTS.

DETAILS AND NOTES ON DRAWINGS GOVERN.

BALLOON WALL FRAMING SCHEDULE (USE THESE STANDARDS UNLESS NOTED OTHERWISE ON THE FRAMING PLAN SHEETS)		
FRAMING MEMBER SIZE	MAX HEIGHT (PLATE TO PLATE) 120 MPH ULTIMATE DESIGN WIND SPEED	
2x4 @ 16" OC	10'-0"	
2x4 @ 12" OC	12'-0"	
2x6 @ 16" OC	15'-0"	
2x6 @ 12" OC	17'-9"	
2x8 @ 16" OC	19'-0"	
2x8 @ 12" OC	22'-0"	
(2) 2x4 @ 16" OC	14'-6"	
(2) 2x4 @ 12" OC	17'-0"	
(2) 2x6 @ 16" OC	21'-6"	
(2) 2x6 @ 12" OC	25'-0"	
(2) 2x8 @ 16" OC	27'-0"	
(2) 2x8 @ 12" OC	31'-0"	

- a. ALL HEIGHTS ARE MEASURED SUBFLOOR TO TOP OF WALL PLATE.
- b. WHEN SPLIT-FRAMED WALLS ARE USED FOR HEIGHTS OVER 12', THE CONTRACTOR SHALL ADD 6' MINIMUM OF CS16 COIL STRAPPING (FULLY NAILED), CENTERED OVER THE WALL BREAK.
- c. FINGER-JOINTED MEMBERS MAY BE USED FOR CONTINUOUS HEIGHTS WHERE TRADITIONALLY MILLED LUMBER LENGTHS ARE LIMITED.
- d. FOR GREATER WIND SPEED, SEE ENGINEERED SOLUTION FOR CONDITION IN DRAWINGS.

ROOF SYSTEMS

TRUSSED ROOF - STRUCTURAL NOTES

- PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.
-  DENOTES OVER-FRAMED AREA
- MINIMUM 7/16" OSB ROOF SHEATHING
- TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.
- PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.

STICK-FRAMED ROOF - STRUCTURAL NOTES

- PROVIDE 2x4 COLLAR TIES AT 48" OC AT UPPER THIRD OF RAFTERS, UNLESS NOTED OTHERWISE.
- FUR RIDGES FOR FULL RAFTER CONTACT.
- PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.
-  DENOTES OVER-FRAMED AREA
- MINIMUM 7/16" OSB ROOF SHEATHING
- PROVIDE 2x4 RAFTER TIES AT 16" OC AT 45° BETWEEN RAFTERS AND CEILING JOISTS. USE (4) 16d NAILS AT EACH CONNECTION. RAFTER TIES MAY BE SPACED AT 48" OC AT LOCATIONS WHERE NO KNEE WALLS ARE INSTALLED.
- PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH RAFTER-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.

BRICK VENEER LINTEL SCHEDULE		
SPAN	STEEL ANGLE SIZE	END BEARING LENGTH
UP TO 42"	L3-1/2"x3-1/2"x1/4"	8" (MIN. @ EACH END)
UP TO 72"	L6"x4"x5/16"* (LLV)	8" (MIN. @ EACH END)
OVER 72"	L6"x4"x5/16"* (LLV) ATTACH LINTEL w/ 1/2" THRU BOLT @ 12" OC, 3" FROM EACH END	

* FOR QUEEN BRICK: LINTELS AT THIS CONDITION MAY BE 5"x3-1/2"x5/16"

NOTE: BRICK LINTELS AT SLOPED AREAS TO BE 4"x3-1/2"x1/4" STEEL ANGLE WITH 16D NAILS IN 3/16" HOLES IN 4" ANGLE LEG AT 12" OC TO TRIPLE RAFTER. WHEN THE SLOPE EXCEEDS 4:12 A MINIMUM OF 3"x3"x1/4" PLATES SHALL BE WELDED AT 24" OC ALONG THE STEEL ANGLE.

USE OF WELDED WIRE FABRIC (WWF) IN TURNED DOWN OR STEM WALL SLABS.

ALTHOUGH THE USE OF WWF IN STRUCTURAL SLABS IS NOT REQUIRED BY THE BUILDING CODE IT IS RECOMMENDED TO REDUCE CRACKING AND TO REDUCE FLEXURE FROM SETTLEMENT OF SHIFTING SOIL BELOW THE SLAB. ACI 318 STATES A MINIMUM REQUIREMENT OF 0.0018 Ag REINFORCING FOR GRADE 60 REINFORCING. JDS RECOMMENDS THAT ALL SLABS HAVE A MINIMUM W2.9 x W2.9. WWF INSTALLED IN THE MIDDLE THIRD OF THE SLAB UNLESS GREATER IS NOTED. FOR SLABS IN SEISMIC DESIGN CATEGORY D OR IN HIGH WINDS ZONES OF 130 OR GREATER, JDS RECOMMENDS THE INSTALLATION OF W4.0 xW4.0 WWF. HOWEVER, THE BUILDER MAY OMIT WWF WITH THE UNDERSTANDING THAT THERE IS A GREATER RISK OF CRACKING AND DIFFERENTIAL SETTLEMENT THAT WILL BE THE RESPONSIBILITY OF THE BUILDER.

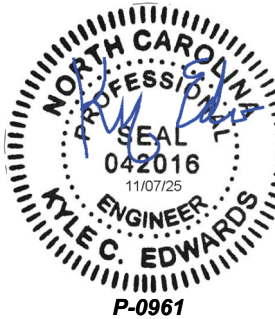
USE OF SYNTHETIC FIBER MIX IN CONCRETE SLABS:

FIBER MESH IS NOT A SUBSTITUTION FOR WWF IN STRUCTURAL CONCRETE SLABS, BUT IT MAY BE USED IN ADDITION TO WWF IN STRUCTURAL SLABS OR WITHOUT WWF IN NON-STRUCTURAL SLABS. FIBER MESH IS ONE METHOD FOR SHRINKAGE AND CRACKING CONTROL IN THE SLAB DURING THE CURING PHASE. ON THESE DRAWINGS NON STRUCTURAL SLABS ARE EXTERIOR PATIOS AND PORCH SLABS. ALL OTHER SLABS ARE CONSIDERED STRUCTURAL IF ANY CONDITIONS LISTED BELOW APPLIES. IF NONE OF THE CONDITIONS LISTED BELOW APPLY, THE BUILDER MAY USE FIBER MESH IN LIEU OF WWF. FIBER MIX VOLUMES MUST BE FOLLOWED PER THE MANUFACTURERS SPECIFICATION AND MIXED AT THE PLANT, NOT ON SITE. SEE EOR AND PLANS FOR ADDITIONAL REQUIREMENTS AS NECESSARY.

- IN SLABS INSTALLED ON RAISED METAL DECKING
- IN SLABS WITH GRADE BEAMS UNLESS A REBAR MAT IS INSTALLED
- BASEMENT SLABS
- HIGH WINDS ZONES (ABOVE 130 MPH Vult)
- SEISMIC DESIGN CATEGORY OF D OR GREATER
- IF ANY SOILS HAVE BEEN FOUND TO BE EXPANSIVE SOILS ON SITE
- FOR SLAB POURED DIRECTLY ON GRADE; A 4" BASE MATERIAL OF CRUSHED STONE OR WELL DRAINING CLEAN SAND IS REQUIRED FOR USE
- FOR ANY SITES WITH A DCP BLOW COUNT OF 10 OR LESS.



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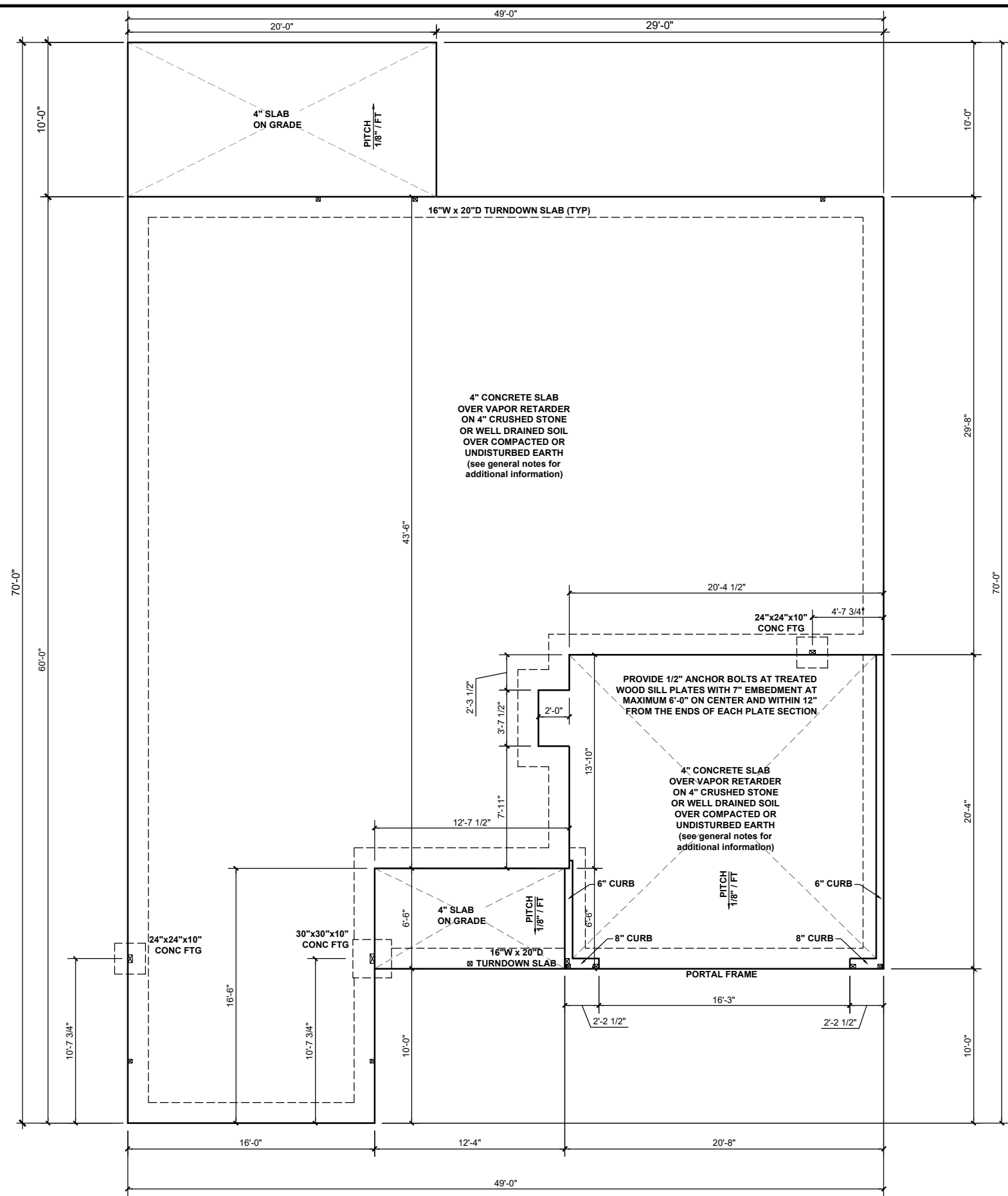
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149.2115

GENERAL NOTES
GN1.1

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SLAB FOUNDATION PLAN - 'L'
SCALE: 1/8"=1'-0"

BEAM & POINT LOAD LEGEND

- INTERIOR LOAD BEARING WALL
- ROOF RAFTER / TRUSS SUPPORT
- DOUBLE RAFTER / DOUBLE JOIST
- STRUCTURAL BEAM / GIRDER
- WINDOW / DOOR HEADER
- POINT LOAD TRANSFER
- POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

(1) #4 REBAR @ CENTER OF ALL PERIMETER AND INTERNAL LOAD BEARING FOOTINGS. (3" C.C. MIN)

ALL CONCRETE CURBS SUPPORTING PORTAL FRAMED OR ENGINEERED OPENINGS IN GARAGES WITH A PONY WALL OVER 24" ABOVE THE GARAGE DOOR HEADER SHALL BE REQUIRED TO BE AT LEAST 8" WIDE.

VAPOR RETARDER REQUIREMENT
SLAB VAPOR RETARDER TO BE 6 MIL. CLASS C

PLUMBING LINES MAY PASS PERPENDICULARLY THROUGH THE BOTTOM THIRD OF A FOOTING IF INSTALLED WITH APPROPRIATE SLEEVE AND (2) 48" LONG #4 REBAR ARE INSTALLED CENTERED OVER THE SLEEVE.

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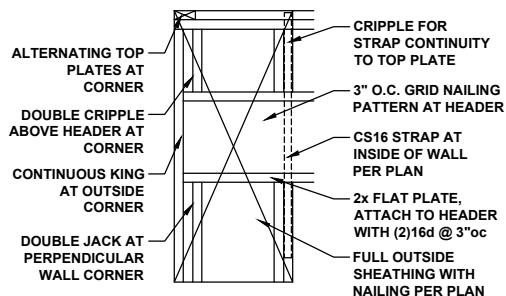
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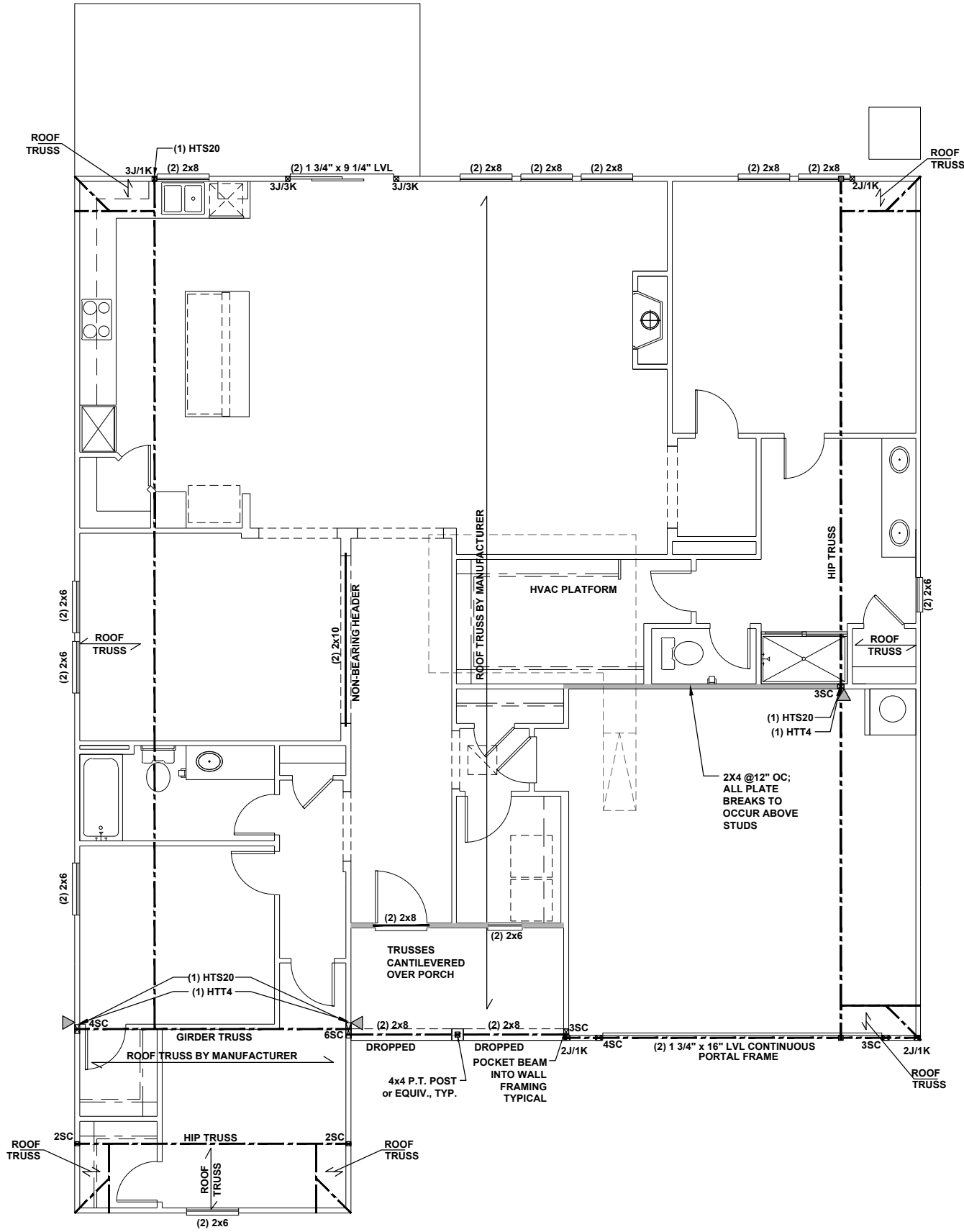
SLAB
FOUNDATION PLAN
S.10L

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PORTAL FRAMED OR
ENGINEERED OPENING
OUTSIDE CORNER DETAIL

NTS



FIRST FLOOR CEILING FRAMING PLAN - 'L'
SCALE: 1/8"=1'-0"

BEAM & POINT LOAD LEGEND	
	INTERIOR LOAD BEARING WALL
	ROOF RAFTER / TRUSS SUPPORT
	DOUBLE RAFTER / DOUBLE JOIST
	STRUCTURAL BEAM / GIRDER
	WINDOW / DOOR HEADER
	POINT LOAD TRANSFER
	POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

- STRUCTURAL FRAMING NOTES - (SEE GENERAL NOTES SHEET FOR ADDITIONAL REQUIREMENTS.)
- ALL FRAMING TO BE #2 SPF MINIMUM.
 - ALL BEARING HEADERS TO BE (2) 2x6 SUPPORTED w/ MIN (1) JACK AND (1) KING EACH END, UNO.
 - EXTERIOR WALL OPENINGS TO HAVE KING STUDS AS PER TABLE R602.7.5 OR AS NOTED ON PLAN.
 - ALL NON-BEARING HEADERS TO BE (2) 2x4 (1) J / (1) K, UNO.
 - PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.
 - ALL HANGERS AND CONNECTORS SPECIFIED ARE TO BE SIMPSON STRONG-TIE OR EQUIVALENT.
 - ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION. MINIMUM BEAM SUPPORT IS (1) 2x4 STUD.
 - ALL EXTERIOR WALLS TO BE FULLY SHEATHED WITH 7/16" OSB.
 - FRONT PORCH COLUMNS TO BE MIN 4x4 PT ATTACHED AT TOP AND BOTTOM USING SIMPSON (OR EQUIV) COLUMN BASE OR SST A24 BRACKETS. TRIM OUT PER BUILDER.
 - PORCH COLUMNS TO BE MIN 4x4 PT ATTACHED AT BOTTOM USING SIMPSON (OR EQUIVALENT) ABA44 AND AT TOP USING CS 16 STRAPPING (12" MIN) TO PORCH HEADER / BAND.
 - WHEN A 4-PLY LVL IS USED, ATTACH WITH (1) 1/2" Ø BOLT 12" oc STAGGERED, TOP AND BOTTOM, 1-1/2" MIN FROM ENDS. ALTERNATE ATTACHMENT EQUIVALENT METHOD MAY BE USED, SUCH AS SDW OR TRUSSLOK SCREWS (SEE MANUFACTURER'S SPECIFICATIONS).
 - FOR STUD COLUMNS OF 4 OR MORE, INSTALL SST CS16 STRAPS @ 30" oc, 6" MAX FROM PLATES, ON INSIDE FACE OF COLUMN (EXTERIOR WALL), ON BOTH FACES OF COLUMN (INTERIOR WALL).

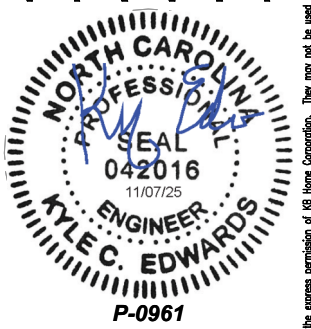
ALL FLUSH BEAMS TO BE DIRECTLY SUPPORTED BY (2) 2X STUDS UNLESS OTHERWISE NOTED. STUD COLUMNS TO BE SUPPORTED BY SOLID BLOCKING TO FOUNDATION OR TO BEARING COMPONENT BELOW.

SC STUD REFERENCES AT INTERIOR WALL OPENINGS REPRESENT THE NUMBER OF JACK STUDS REQUIRED AT EACH SIDE OF THE INTERIOR WALL OPENING

- CS16 STRAP FROM STUD, CROSS HEADER, TO WALL TOP PLATE, 36" LONG MINIMUM
- SIMPSON HTT4 HOLD DOWN FOR ATTACHMENT TO CONCRETE OR MSTA18 STRAP FOR WOOD CONNECTIONS.



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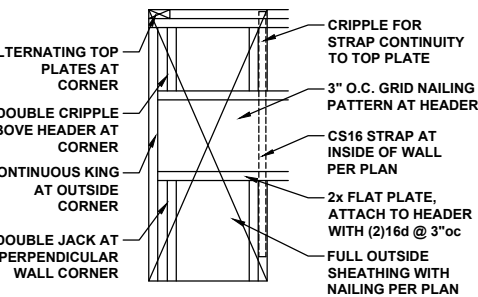


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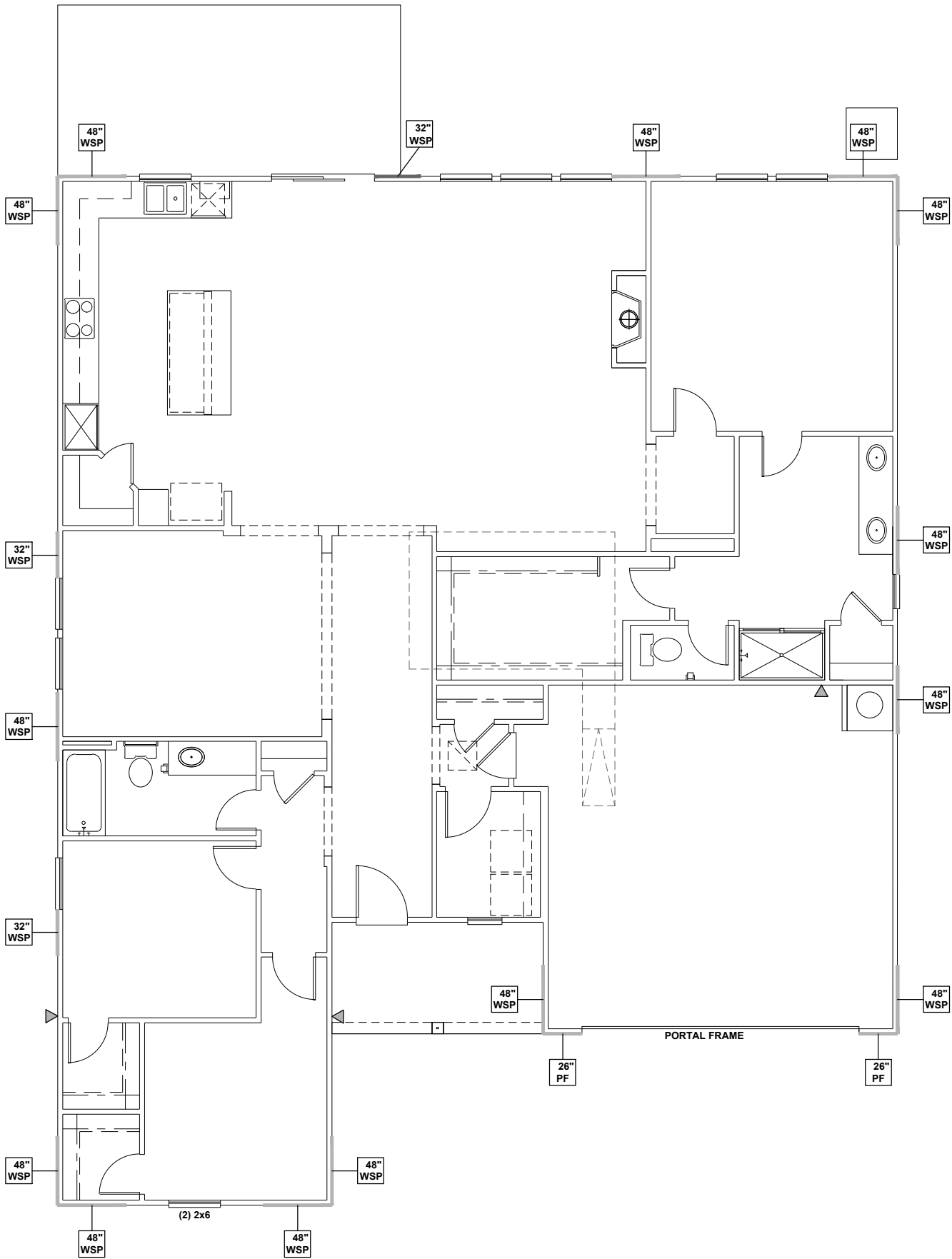
FIRST FLOOR
CEILING FRAMING PLAN
S1.0L

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PORTAL FRAMED OR
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OUTSIDE CORNER DETAIL

NTS



FIRST FLOOR WALL BRACING PLAN - 'L'

SCALE: 1/8"=1'-0"

WALL BRACING REQUIREMENTS

- MINIMUM PANEL WIDTH IS 24"
- FIGURES BASED ON THE CONTINUOUS SHEATHING METHOD USING THE RECTANGLE CIRCUMSCRIBED AROUND THE FLOOR PLAN OR PORTION OF THE FLOOR PLAN. IF NO RECTANGLE IS NOTED, THE STRUCTURE HAS BEEN FIGURED ALL WITHIN ONE RECTANGLE.
- ALL WSP NOTED ON PLAN ARE TO BE CONSIDERED CS-WSP
- PANELS MAY SHIFT UP TO 36" EITHER DIRECTION FOR EASE OF CONSTRUCTION (NAILING & BLOCK REQUIREMENTS STILL APPLY).
- FOR ADDITIONAL WALL BRACING INFORMATION, REFER TO WALL BRACING DETAIL SHEET(S).
- SCHEMATIC BELOW INDICATES HOW SIDES OF RECTANGLE ARE TO BE INTERPRETED IN BRACING CHART WHEN APPLIED TO STRUCTURE:

REAR
LEFT
FRONT
RIGHT

- ◆ CS16 STRAP FROM STUD, CROSS HEADER, TO WALL TOP PLATE, 36" LONG MINIMUM
- SIMPSON MSTA15 HOLD DOWN CAPACITY OF 970 POUNDS PER ANCHOR WITH (12) 10d NAILS. STRAP TO BE LOCATED AT EDGE OF BRACED WALL PANEL. (CS16 STRAPPING MAY BE SUBSTITUTED w/ SIMILAR LENGTH AND NAILING PATTERN.) USE HTT4 FOR ATTACHMENT TO CONCRETE.

SCALED LENGTH OF WALL PANEL AT LOCATION
24" WSP
NUMERICAL LENGTH OF PANEL
PANEL TYPE

WALL BRACING NOTE:

WALLS WITH PROVIDED LENGTH LISTED AS "N/A" DO NOT MEET THE REQUIREMENTS OF PRESCRIPTIVE WALL BRACING FOUND IN THE NCRC. THESE WALLS ARE ENGINEERED DESIGN BASED ON DESIGN GUIDELINES ESTABLISHED IN ASCE-07 AND THE NDS: WIND & SEISMIC PROVISIONS SUPPLEMENT.

WALL BRACING: RECTANGLE 1

SIDE	REQUIRED LENGTH	PROVIDED LENGTH
FRONT	11.0 FT.	14.5 FT.
RIGHT	13.0 FT.	16.0 FT.
REAR	11.0 FT.	14.6 FT.
LEFT	13.0 FT.	18.6 FT.



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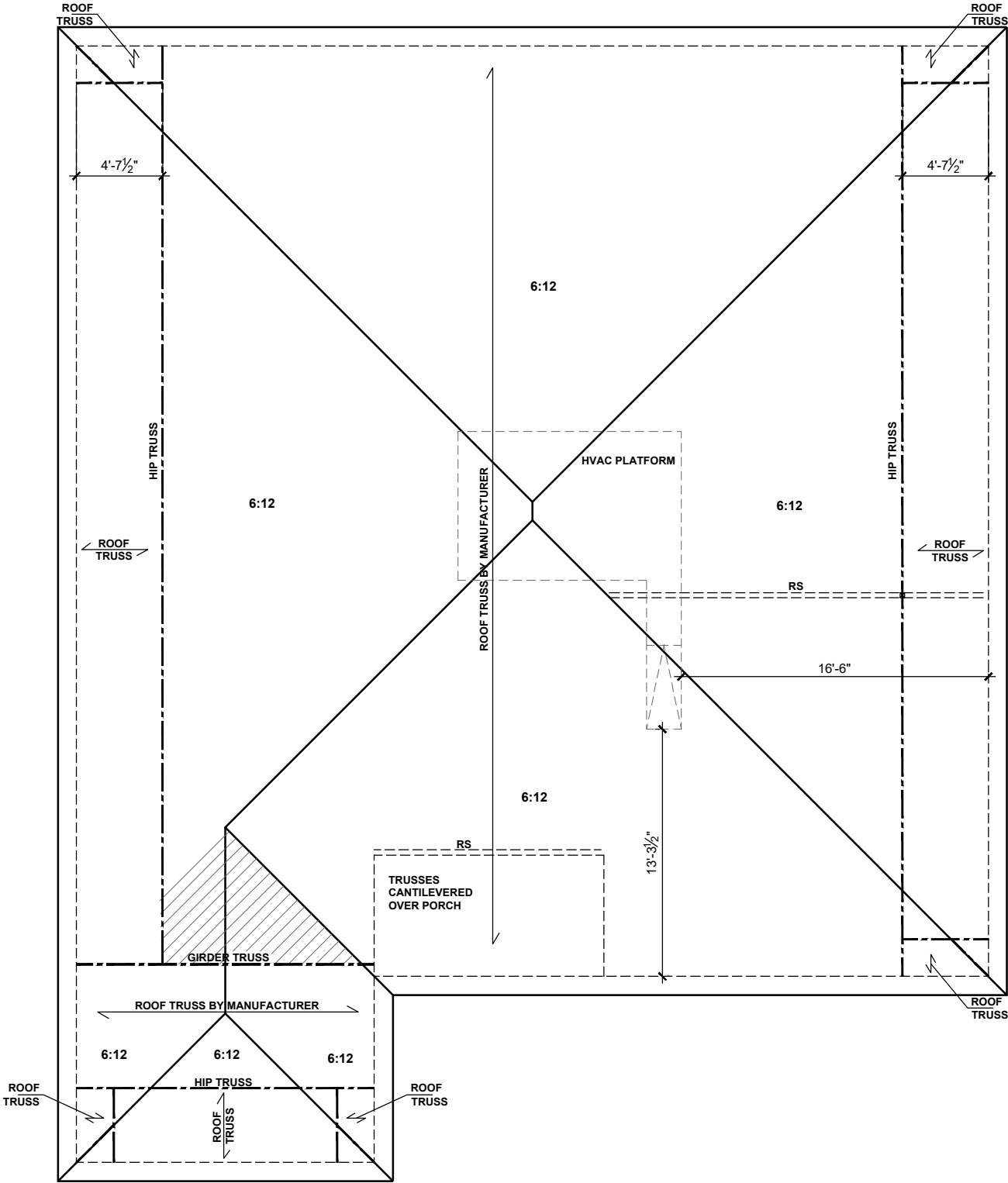
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FIRST FLOOR
WALL BRACING PLAN

S4.0L

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ROOF FRAMING PLAN - 'L'
SCALE: 1/8"=1'-0"

BEAM & POINT LOAD LEGEND

- INTERIOR LOAD BEARING WALL
- ROOF RAFTER / TRUSS SUPPORT
- DOUBLE RAFTER / DOUBLE JOIST
- STRUCTURAL BEAM / GIRDER
- WINDOW / DOOR HEADER
- POINT LOAD TRANSFER
- POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

TRUSSED ROOF - STRUCTURAL NOTES

- PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.
- DENOTES OVER-FRAMED AREA
- MINIMUM 7/16" OSB ROOF SHEATHING
- TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.
- PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.

SDWC AND SDPW SCREWS MAY BE SUBSTITUTED FOR HTC AND STS CONNECTORS

TRUSS UPLIFT CONNECTORS: EXPOSURE B, 120 MPH, ANY PITCH, 24" O.C. MAX ROOF TRUSS SPACING

TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT RESISTANCE. CONTINUOUS OSB WALL SHEATHING BELOW PROVIDES CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES SUPPORTED BY INTERMEDIATE SUPPORT WALLS, KNEEWALLS, OR BEAMS SHALL BE ATTACHED TO SUPPORTING MEMBER PER SCHEDULE:

ROOF PLAN UP TO 28'	CONNECTOR NAILING PER TABLE 602.3(1) NCRBC 2018 EDITION
OVER 28'	(1) SIMPSON H2.5A HURRICANE CLIP TO DBL TOP PLATE OR BEAM OR (1) SIMPSON H3 CLIP TO SINGLE 2x4 PLATE

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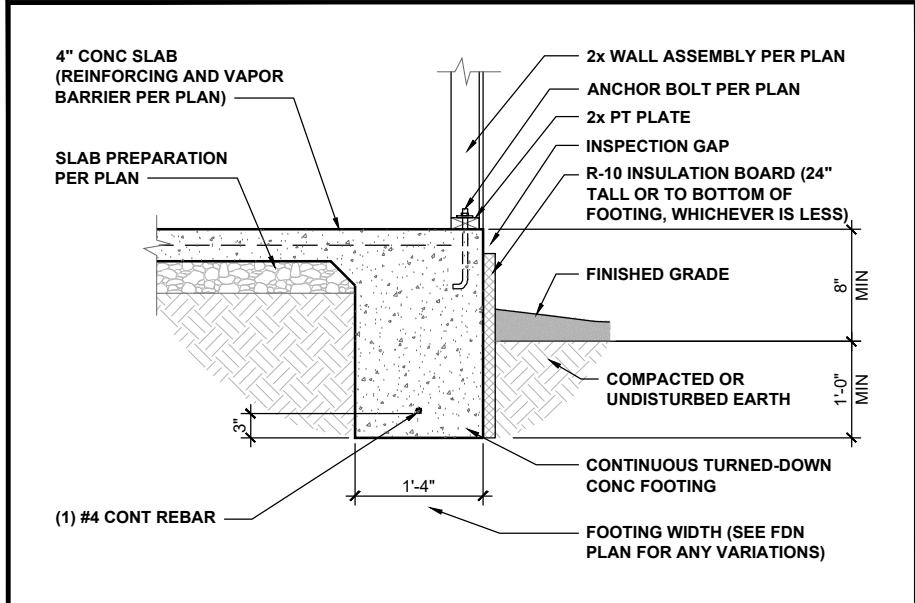
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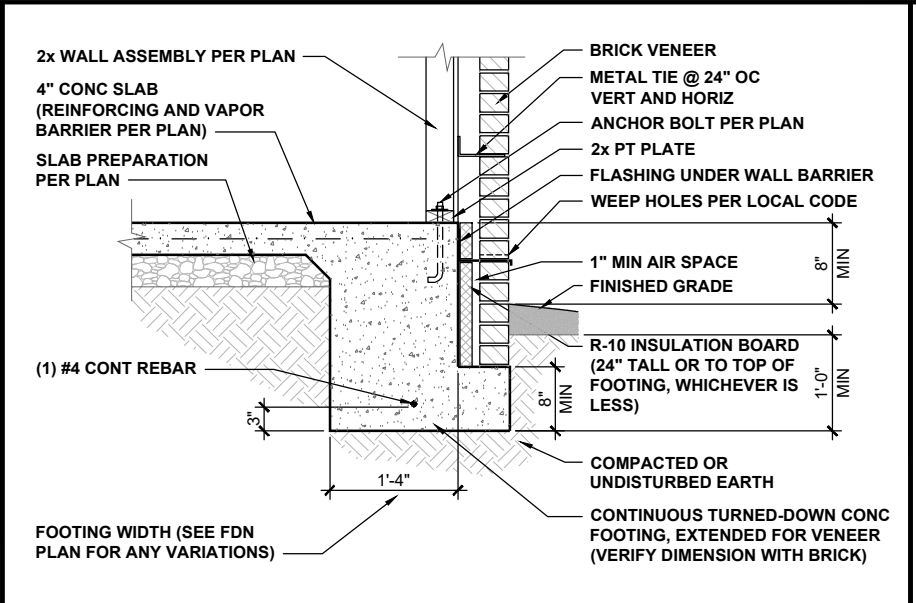
ROOF FRAMING PLAN

S7.0L

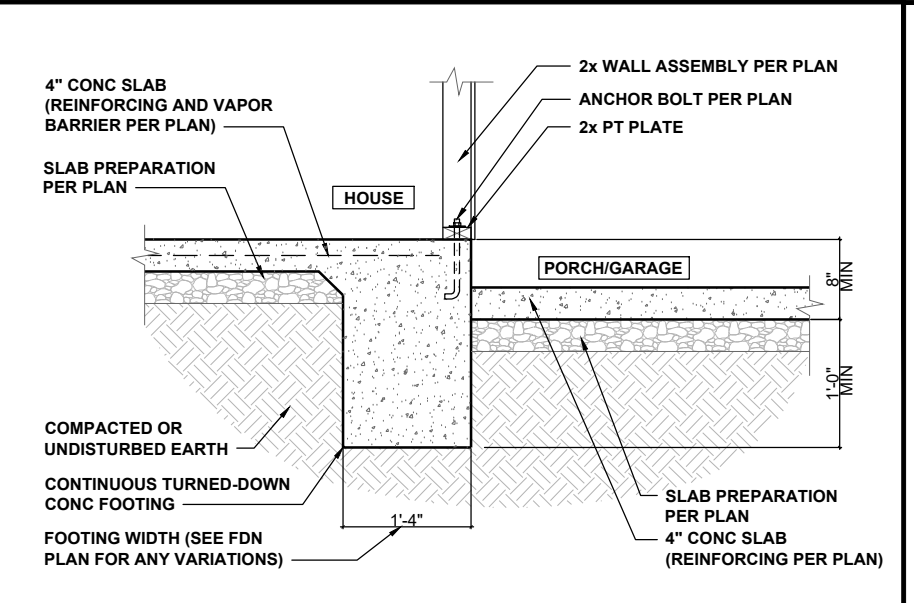
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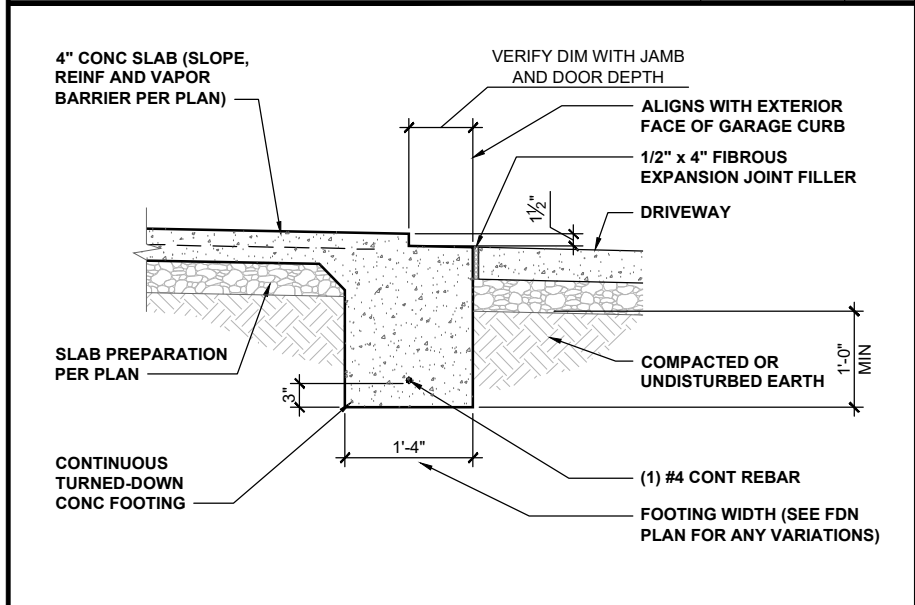
TURNED-DOWN CONC SLAB FOOTING 1/2" = 1'-0" **1**



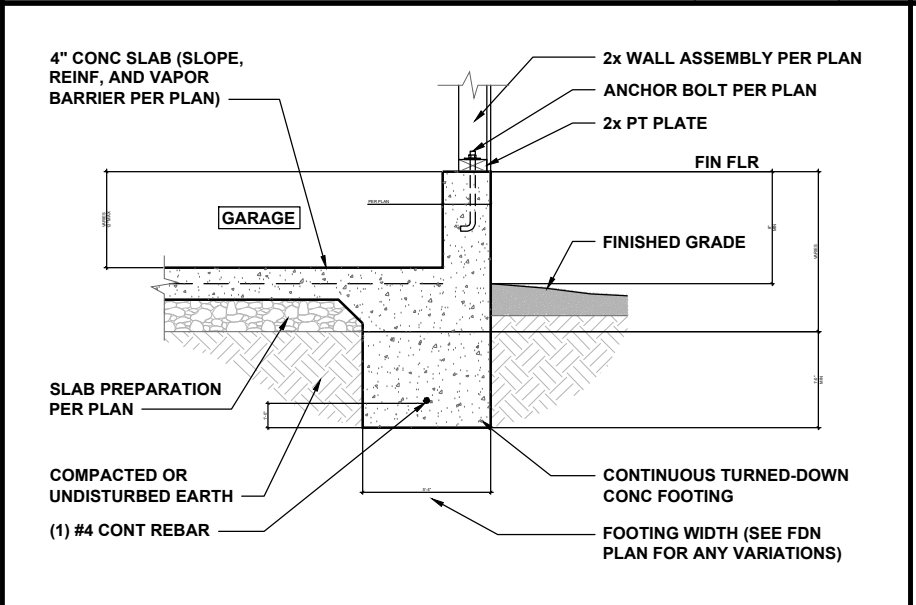
TURNED-DOWN FOOTING w/ BRICK 1/2" = 1'-0" **2**



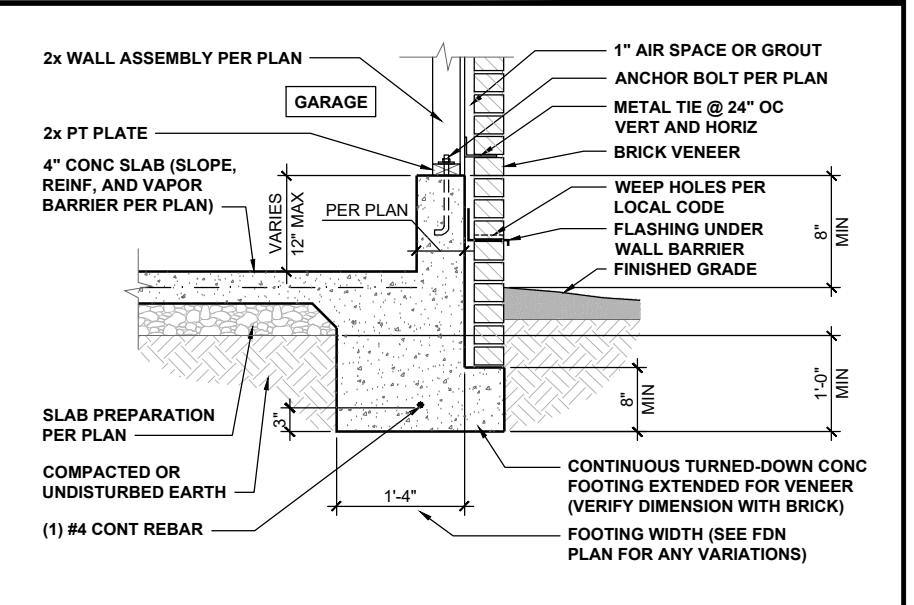
HOUSE / GARAGE FOOTING 1/2" = 1'-0" **3**



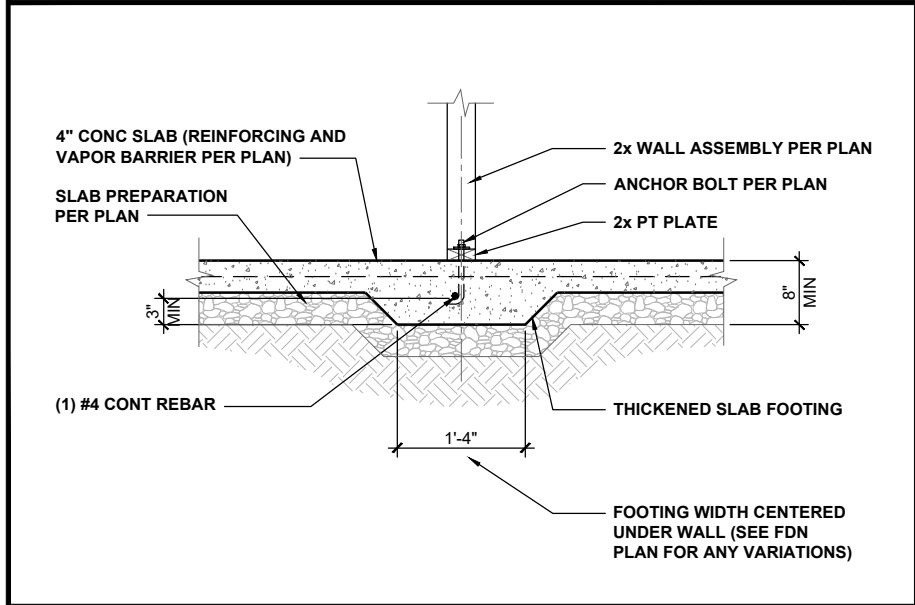
GARAGE DOORWAY FOOTING 1/2" = 1'-0" **4**



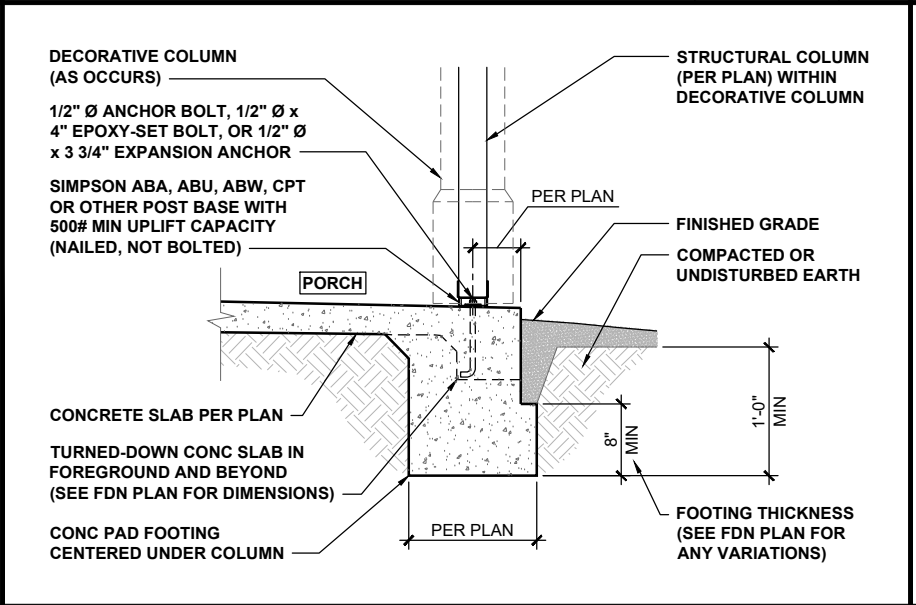
GARAGE FOUNDATION 1/2" = 1'-0" **5**



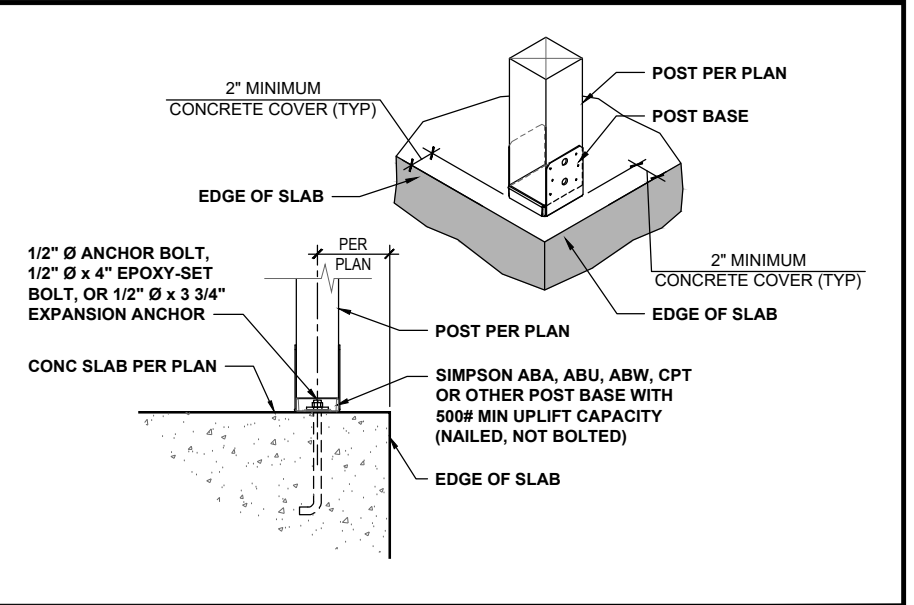
GARAGE FOUNDATION WITH BRICK 1/2" = 1'-0" **6**



INTERIOR FOOTING 1/2" = 1'-0" **7**



PORCH COLUMN FOUNDATION 1/2" = 1'-0" **8**



PORCH COLUMN 3/4" = 1'-0" **9**

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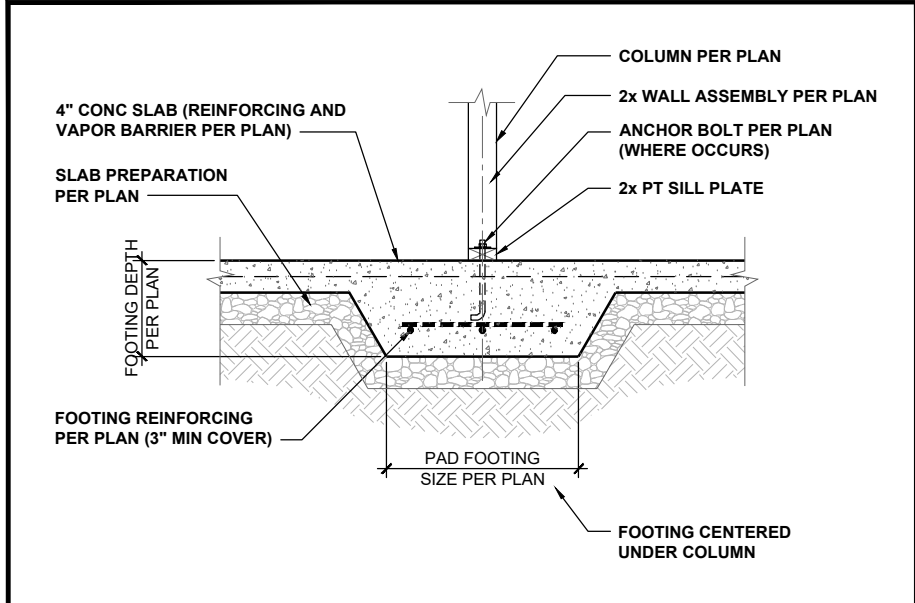
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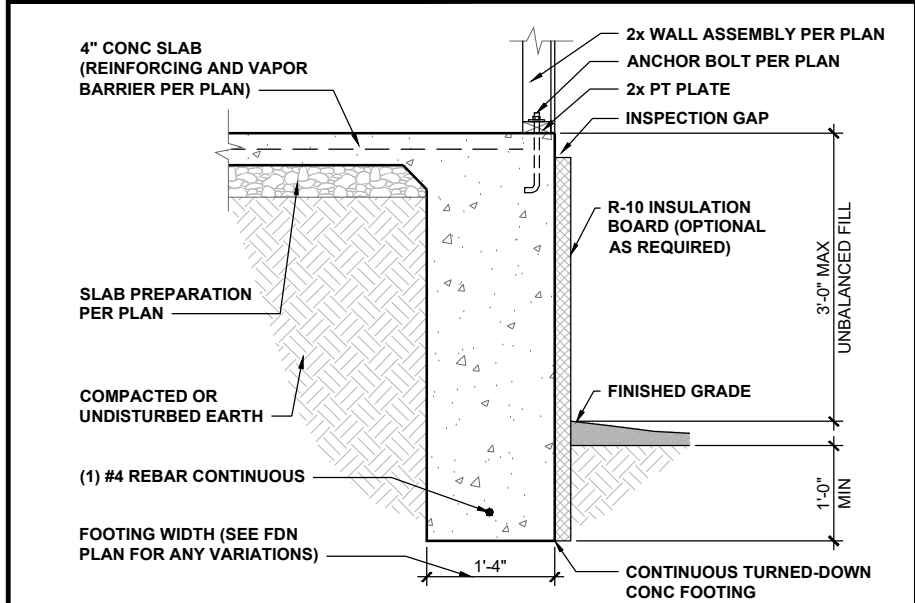
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TURNED-DOWN SLAB
FOUNDATION DETAILS
D1.0

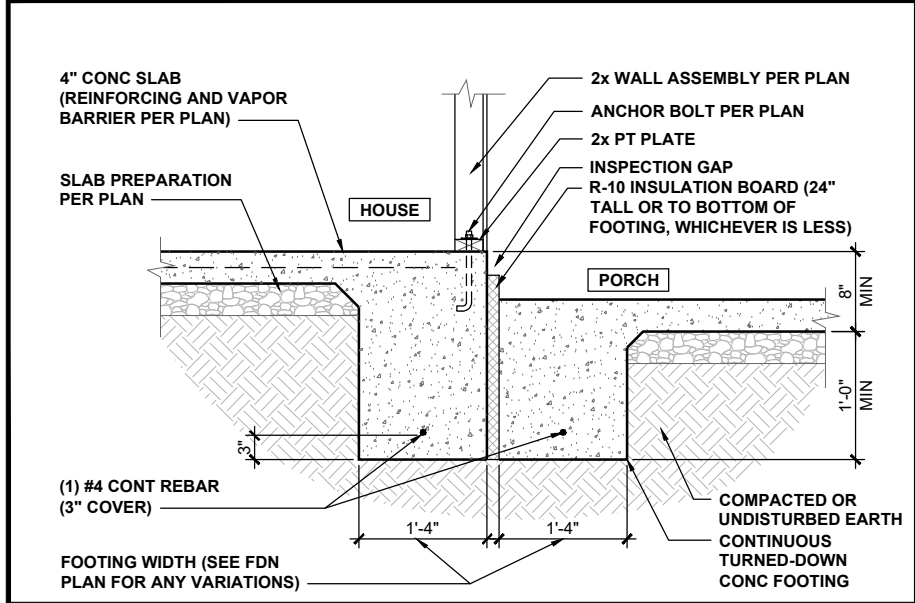
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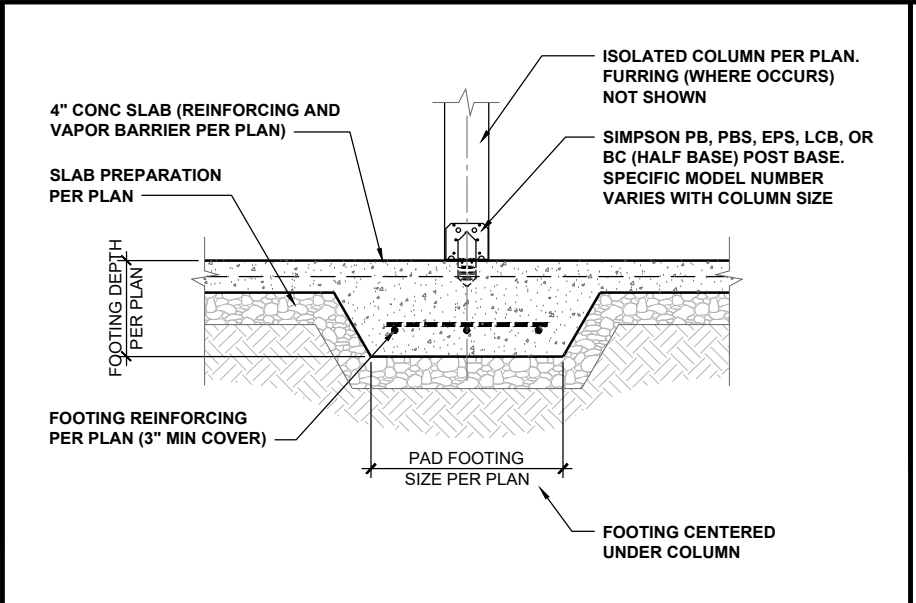
INT POINT-LOAD FOOTING SECTION 1/2" = 1'-0" **1**



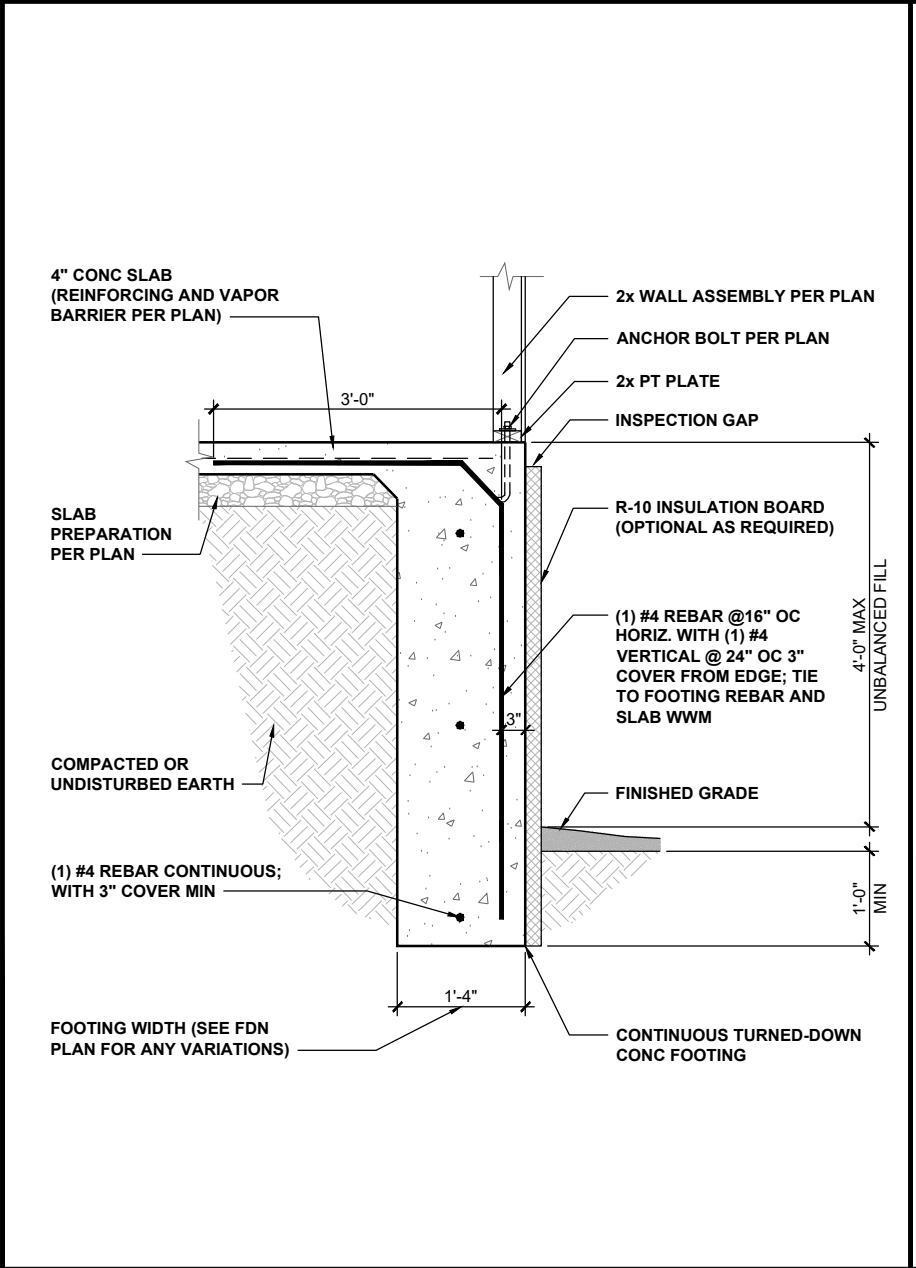
3' EXTENDED TURNED DOWN FOOTING 1/2" = 1'-0" **4**



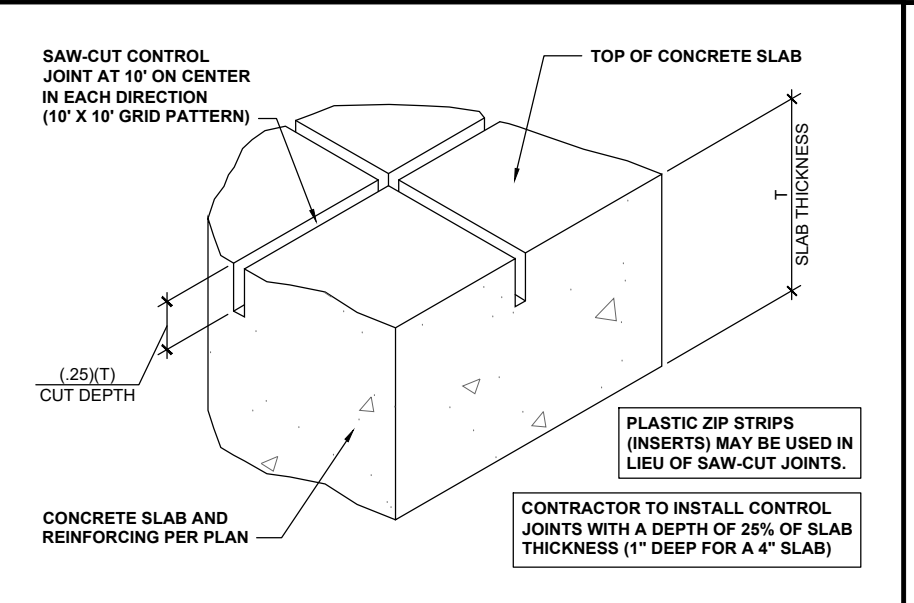
FOOTING AT HOUSE/PORCH 1/2" = 1'-0" **5**



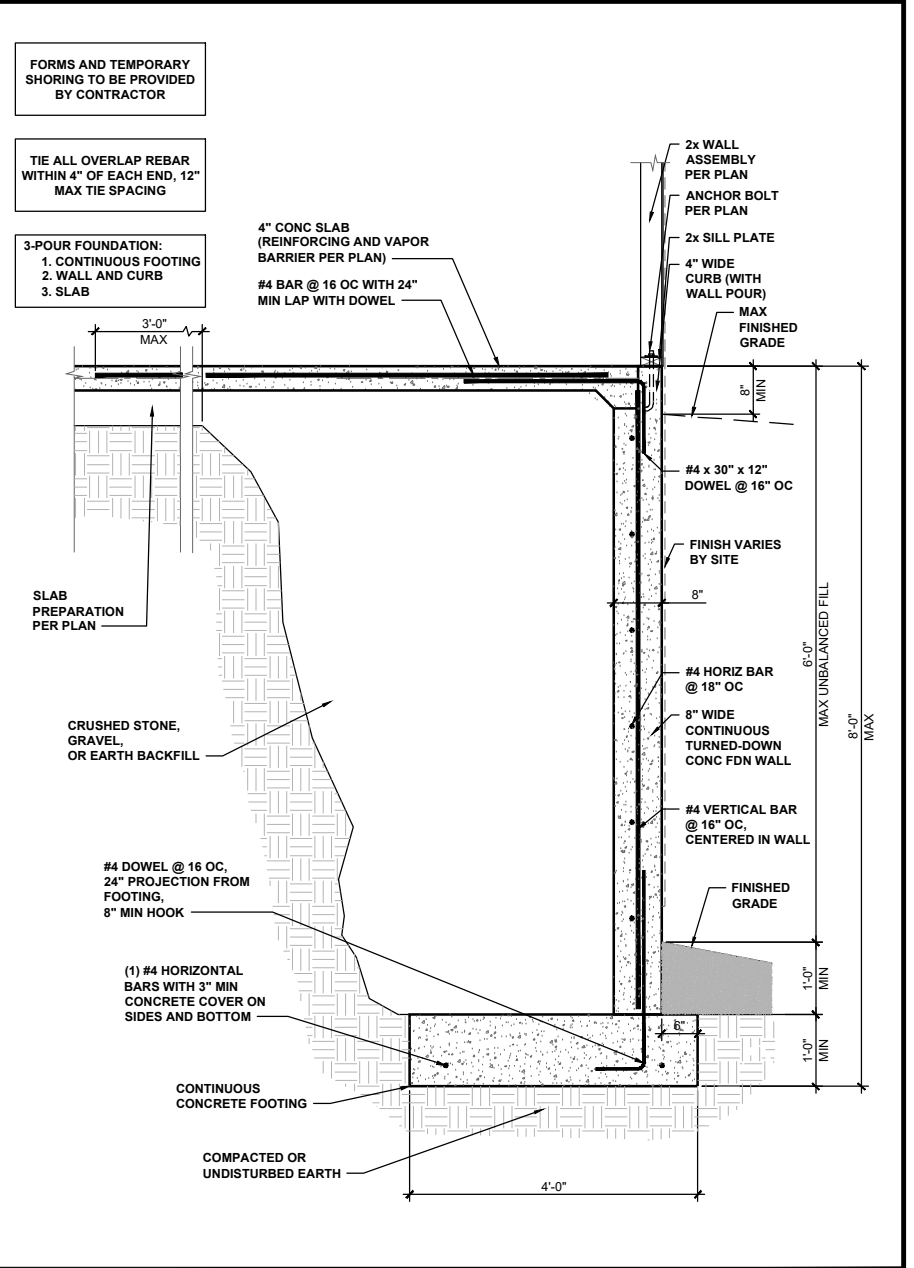
ISOLATED COLUMN FOOTING 1/2" = 1'-0" **2**



4' EXTENDED RETAINED FOOTING 1/2" = 1'-0" **6**



CONCRETE SLAB CONTROL JOINTS 3" = 1'-0" **3**



6' EXTENDED REINFORCED FOOTING 1/2" = 1'-0" **7**

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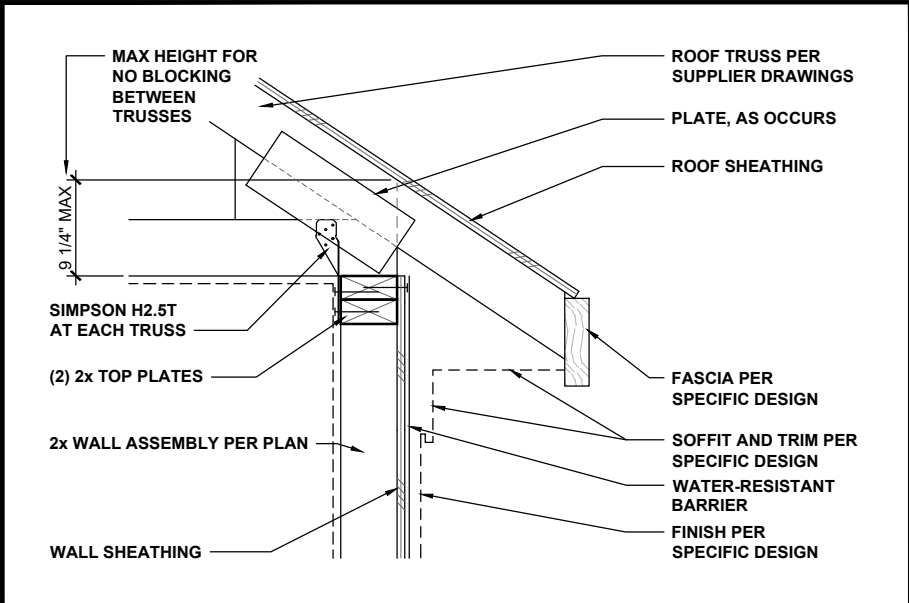
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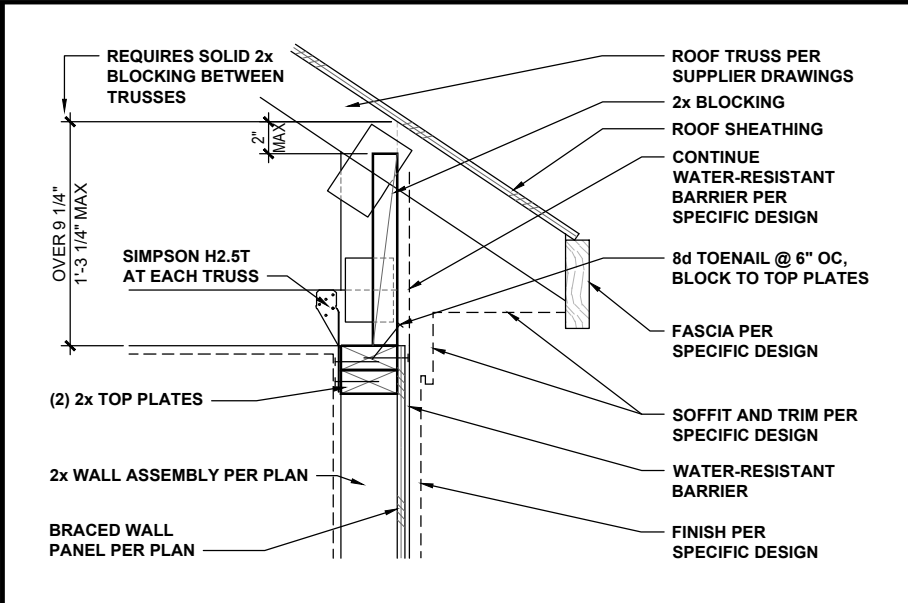
PLAN:
149.2115

TURNED-DOWN SLAB
FOUNDATION DETAILS
D2.0

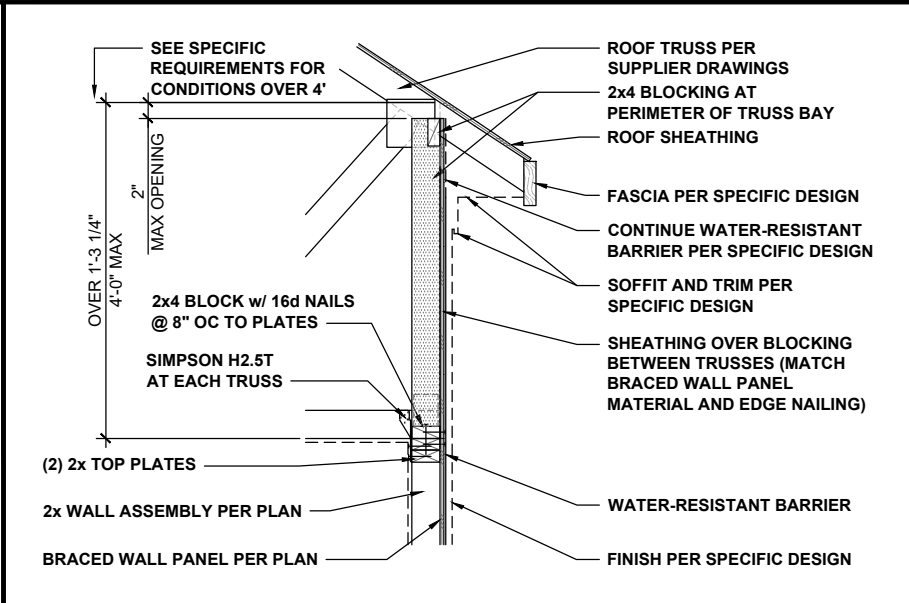
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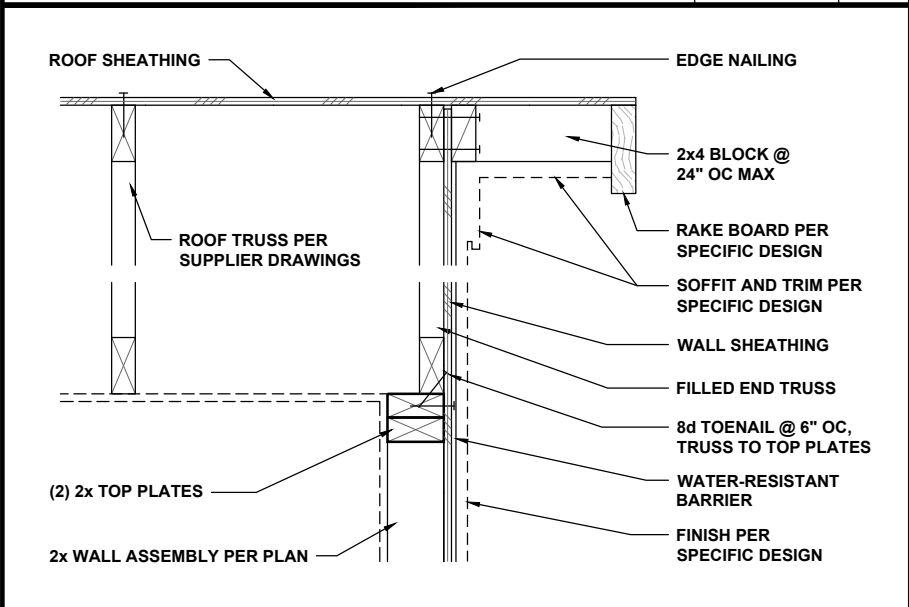
LOW-HEEL TRUSS AT WALL 1" = 1'-0" 1



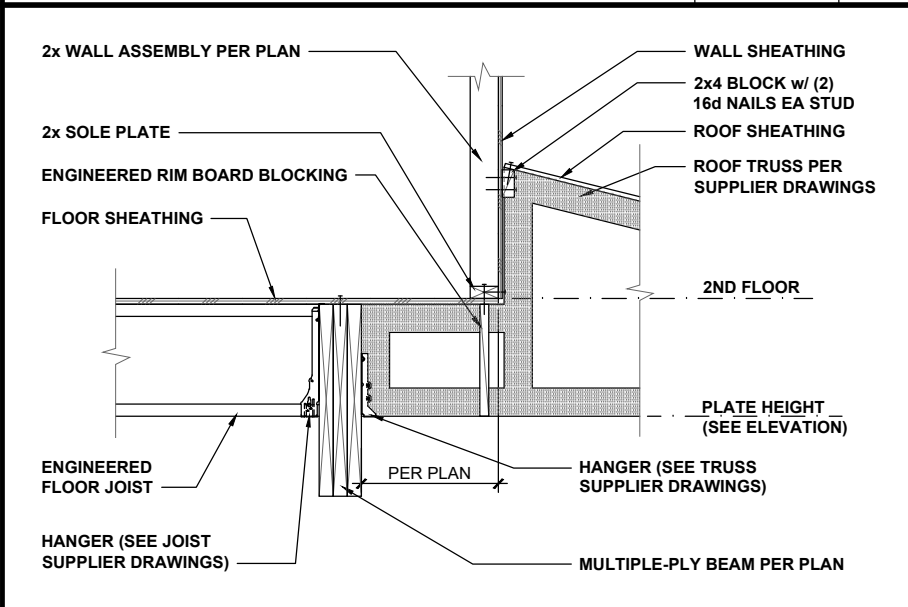
TYPICAL TRUSS AT BRACED WALL 1" = 1'-0" 2



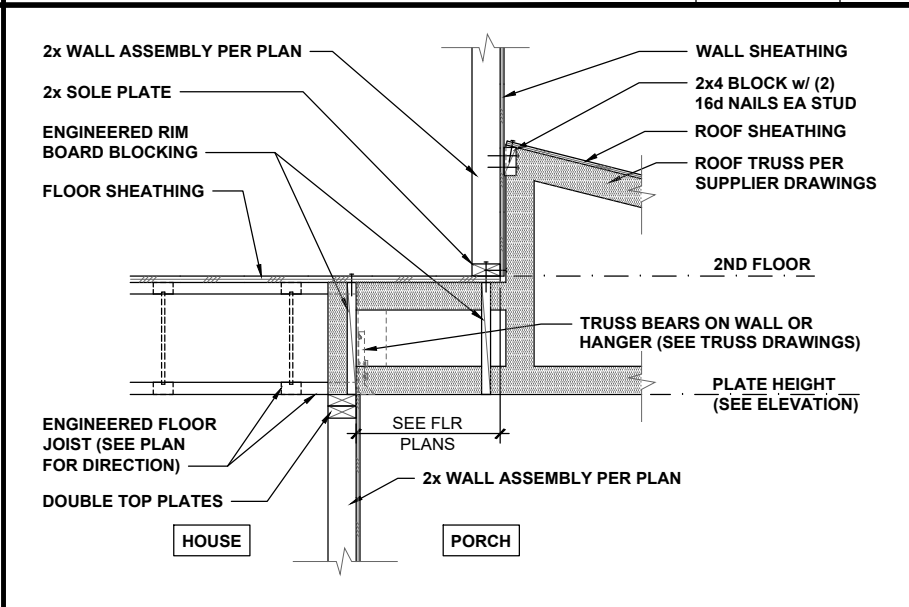
HIGH-HEEL TRUSS AT BRACED WALL 1/2" = 1'-0" 3



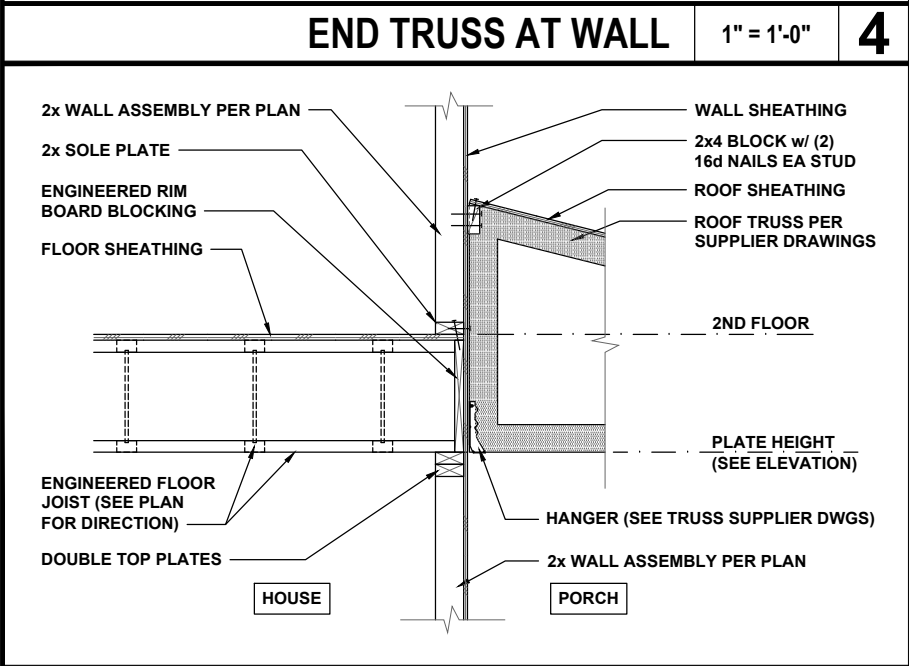
END TRUSS AT WALL 1" = 1'-0" 4



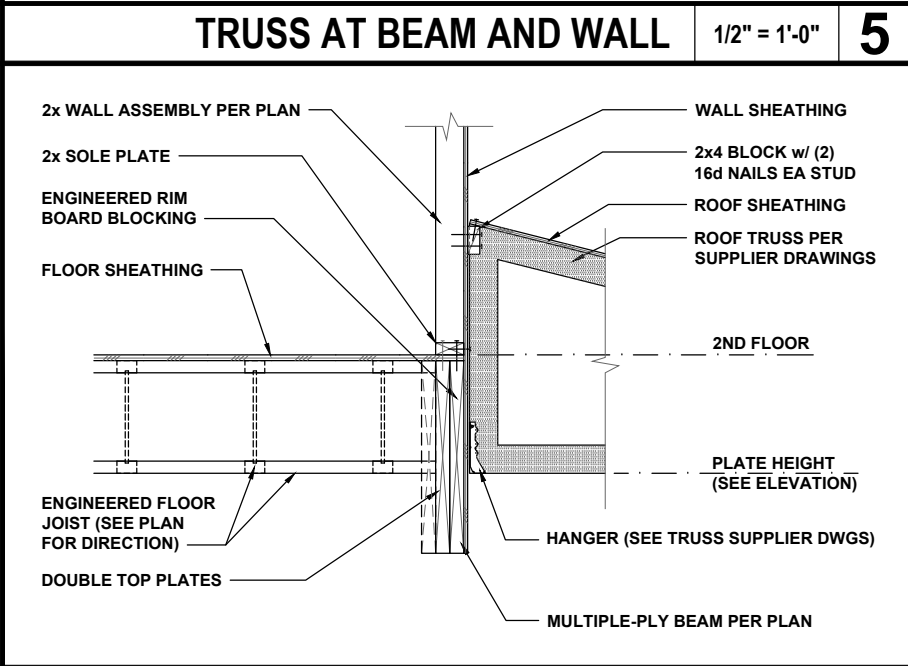
TRUSS AT BEAM AND WALL 1/2" = 1'-0" 5



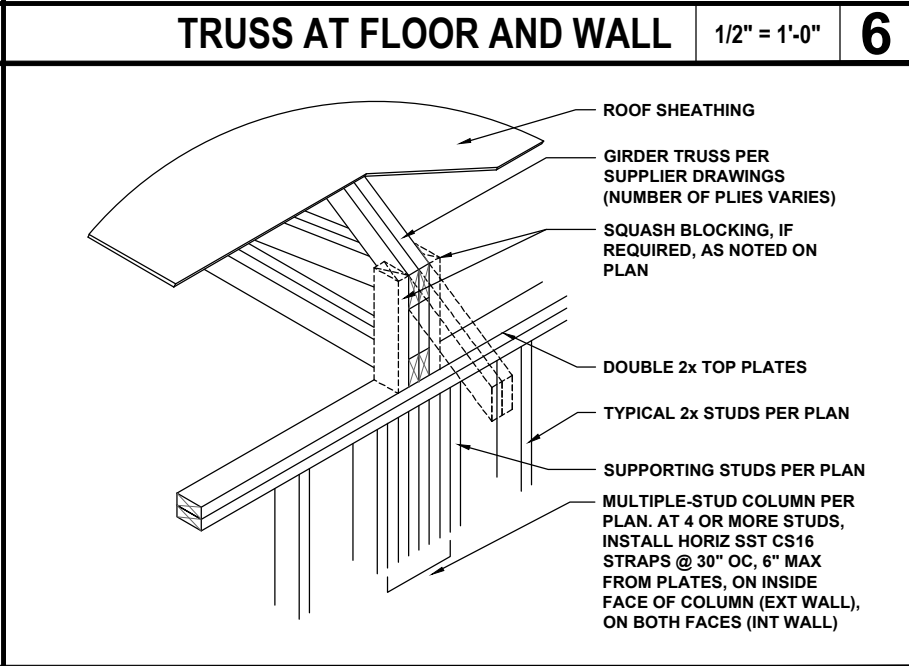
TRUSS AT FLOOR AND WALL 1/2" = 1'-0" 6



TRUSS AT FLOOR AND WALL 1/2" = 1'-0" 7



TRUSS AT BEAM AND WALL 1/2" = 1'-0" 8



GIRDER TRUSS AT WALL 1/2" = 1'-0" 9

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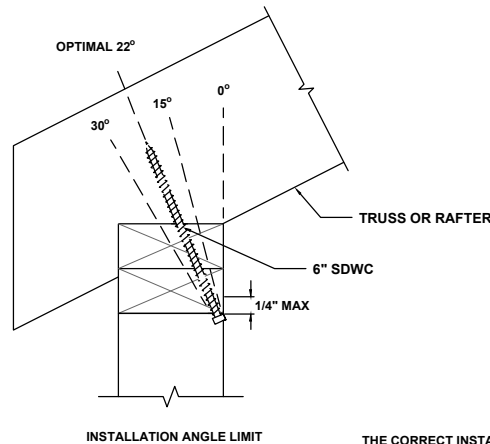
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ROOF TRUSS
FRAMING DETAILS
D3.0

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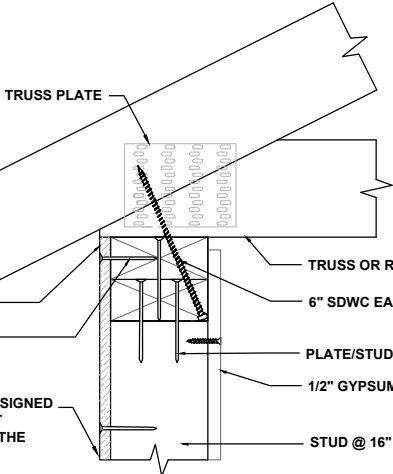


THE CORRECT INSTALLATION OF THESE SCREWS AS NOTED HERE ARE A SUBSTITUTE FOR THE HURRICANE TIES H2.5A OR EQUIVALENT TIES.

WOOD STRUCTURAL PANEL (WSP) SHEATHING MUST EXTEND TO TOP OF DOUBLE TOP PLATES PER AWC 2021 OR 2015 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC (SDPWS)

WSP NAILING PATTERN PER DESIGNER IN ACCORDANCE WITH 2021 OR 2015 SDPWS

WSP SHEATHING, 7/16" MIN. DESIGNED AND CONSTRUCTED TO RESIST UPLIFT IN ACCORDANCE WITH THE AWC 2021 OR 2015 SDPWS



THE CORRECT INSTALLATION OF THESE SCREWS AS NOTED HERE ARE A SUBSTITUTE FOR THE HURRICANE TIES H2.5A OR EQUIVALENT TIES.

SDWC SCREW INSTALLATION ANGLE

3/4" = 1'-0"

1

SDWC SCREW WALL ASSEMBLY

3/4" = 1'-0"

2



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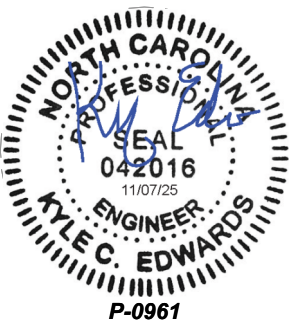
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ROOF TRUSS
FRAMING DETAILS
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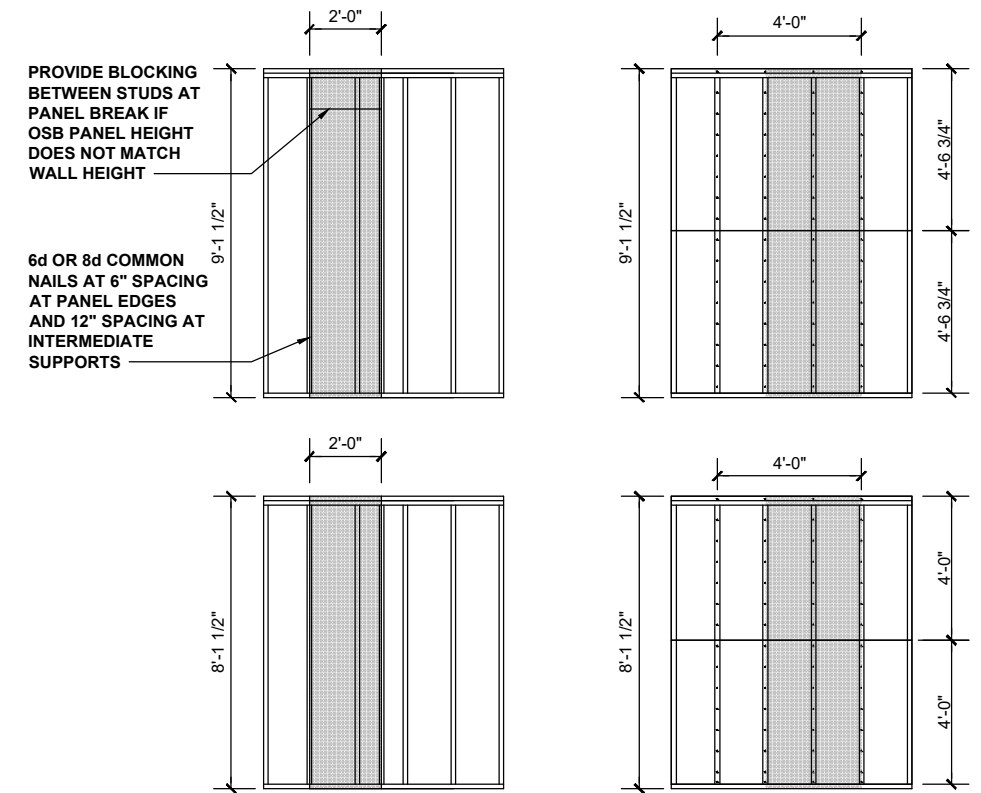
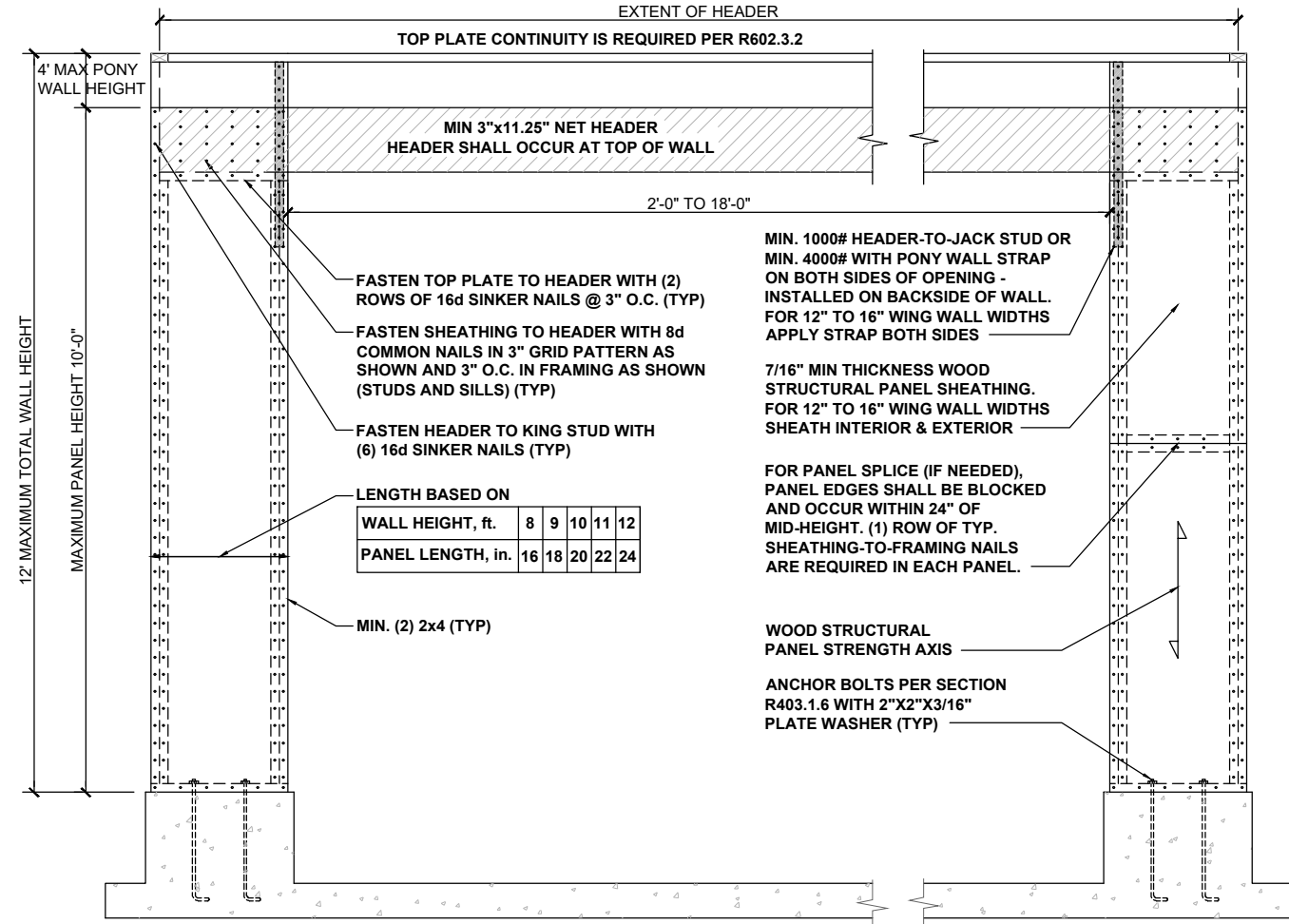
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WALL BRACING DETAILS

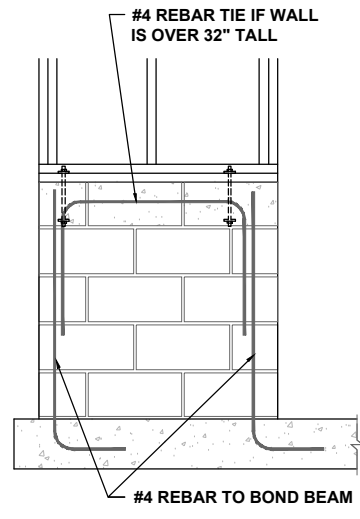
D5.0

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HIGH-SPEED WIND ZONES

FOR LOCATIONS OF 130 MPH OR MORE ULTIMATE DESIGN WIND SPEED (110 MPH OR MORE BASIC WIND SPEED IN VIRGINIA AND GEORGIA), WALLS SHALL BE BRACED PER THE LATEST ADOPTED EDITION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS PUBLICATION ASCE 7 OR STANDARD FOR RESIDENTIAL CONSTRUCTION IN HIGH-WIND REGIONS (ICC 600).



GARAGE WING WALL AT CRAWL

SEE R602.10 - MASONRY STEM WALL SUPPORTING BRACED WALL PANELS FIGURES

METHOD PF: PORTAL FRAME PANEL CONSTRUCTION		3/8" = 1'-0"	1	BRACING METHODS		3/16" = 1'-0"	2
BRACED WALL HOLD-DOWN		NTS	3	CORNER FRAMING FOR CONTINUOUS SHEATHING		1/4" = 1'-0"	4

** IN LIEU OF THE CORNER RETURN, A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE CORNER STUD AND TO THE FOUNDATION OR FRAMING BELOW.