

NORTH CAROLINA 50' SERIES PLAN 150.1910

LOT 16 MASON POINTE -ELEVATION B

F BOX IS I" SQ. THEN SCALE IS 1/4" = 1'-0"

IF BOX IS 1/2" SQ. THEN SCALE IS 1/8" = 1'-0"

ADJ.

RADIUS

RE-SAWN

RETURN AIR GRILL REFRIGERATOR

R.A.G.

RE/S

FLOOR MATERIAL CHANGE

FOOTING

GAUGE GAR, DISP, GARBAGE DISPOSAL

FTG

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UTILITY PLANS
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UTILITY PLAN OPTIONS

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AD2 ARCHITECTURAL DE
AD3 ARCHITECTURAL DE
AD4 ARCHITECTURAL DE
AD5 ARCHITECTURAL DE
AD6 ARCHITECTURAL DE
AD7 ARCHITECTURAL DE
AD6 ARCHITECTURAL DE
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NORTH CAROLINA SERIES

HOME

NORTH CAROLINA DIVISION 4506 S. MIAMI BLVD.

SUITE 100 DURHAM, NC 27703 TEL: (919) 768-7980

2018 NORTH **CAROLINA STATE BUILDING**

CODES

09/26/19

M.P.

ABBREVIATIONS ARCH. SYMBOLS CONSULTANTS **SQUARE FOOTAGE CODE INFORMATION** PLAN 150,1910 ISSUE DATE: ABOVE GROUND-FAULT CIRCUIT INTERRUPTER ROUGH OPENING CODE ABBREVIATIONS **OWNER:** APPLICABLE CODES: AIR CONDITIONING 5 # P SHELF AND POLE PROJECT No.: 1350999:57 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE, INCLUDING REFERENCED KB HOME NORTH CAROLINA DIVISION 4506 S. MIAMI BLVD., SUITE IOO DURHAM, NC 27703 TEL. (919) 768-7980 N.C.-R. NORTH CAROLINA RESIDENTIAL CO N.C.-B. NORTH CAROLINA BUILDING CODE SOLID CORE ADJUSTABLE GALVANIZED IRON S.C. TOTAL AREA BUILDING SECTION 1910 SQ. F1 DIVISION MCR · ALTERNATE SMOKE DETECTOR GLASS GARAGE AREA PORCH AREA(S) SECTION INDICATOR N.C.-M. NORTH CAROLINA MECHANICAL CODE REVISIONS: AMPERAGE SECTION GYPSUM BOARD N.C.-P. NORTH CAROLINA PLUMBING CODE BOARD SINGLE HUNG HOLLOW CORE ##+ ELEVATION 'B' 114 130 N.C.-F. NORTH CAROLINA FUEL GAS CODE N.C.-E. NORTH CAROLINA ELECTRICAL ARCHITECT CENTER LINE SHEET ELEVATION 'C' 5Q. F1 HEADER SHEATHING SHOWER CABINET KB HOME 5L05 PACIFIC CONCOURSE DRIVE, SUITE 330 5L05 ANGELES, CA 90045 TEL. (424) 294-3700 FAX. (424) 297-2611 N.C-E.C. NORTH CAROLINA ENERGY CODE HGT / H HEIGHT DETAIL REFERENCE CEILING HEADER HEIGHT NATIONAL ELECTRICAL CODE 100 240 100 CLEAR SIMILAR I.C.B.O. INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS HORIZONTAL SLIDER DETAIL NUMBER EXTENDED COVERED PATIO CONC CONCRETE SLIDING SCREENED-IN COVERED PATIO PROJECT DESCRIPTION: A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS CARPET CERAMIC TILE IN LIEU OF SLIDING GLASS KTENDED SCREENED-IN COV. PATIO INSUL. INSULATION STD. STANDARD N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION INTERIOR SHEET VINYL EXTENDED OPEN DECK 288 144 KEYNOTE REFERENCE A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE DOUBLE LAMINATED TEMP. TEMPERED GLASS SCREENED-IN DECK DUAL GLAZED LAV. LAVATORY OCCUPANCY: I.E.C.C. INTERNATIONAL ENERGY CONSERVATION CODE TOP OF CURB DIAMETER LUMINOUS T.O.C. REFERENCE NUMBER INTERNATIONAL CODE COUNCIL DIM. DISP. MEDICINE CABINET T.O.P. TOP OF PLATE UNDERWRITERS LABORATORIES, INC. MFR. DISPOSAL MANUFACTURER T.O.S. TOP OF SLAB CONSTRUCTION TYPE: DIVIDED LIGHT MINIMUM TYPICAL OFFSET REFERENCE DEEP MTD. MOUNTED U.N.O. UNLESS NOTED OTHERWISE OR FINISH SURFACE NOT IN CONTRACT V.P. VAPOR PROOF **REVISION LIST** DOWNSPOUT N.I.C. WASHER DETAIL N.T.S. NOT TO SCALE REVISION REFERENCE DISHMASHER OVER MOOD DELTA DATE SHEETS REVISED LOG NUMBE ON CENTER REVISION NUMBER EA. ELEV. MINDOM ELEVATION OPTIONAL MATER HEATER OUTSIDE AIR WROUGHT IRON EXHAUST PROPERTY LINE EXTERIOR FORCED AIR UNIT PHONE SCALE NOTE FUEL GAS PLYWD. PLYWOOD PR. P.T.D.F. FLOOR FLOOR LINE FLUOR. FLUORESCENT RISER

150.1910

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

TS

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 JARISDICTION OVER OWNER, CONTRACTOR, ANY SUBCONTRACTOR, THE PROJECT, THE PROJECT, THE PROJECT, THE PROJECT SITE, THE MORK, OR THE PROSECTION OF THE MORK.
- B. THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT AND ALL OTHER APPLICABLE CODE REQUIREMENTS RELATING TO SAFETY.
- C. THE FAIR HOUSING AMENDMENTS ACT, THE AMERICANS MITH 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 OWNERS REPRESENTATIVE ANY ERRORS, INCONSISTENCIES, OR OMISSIONS IN THE CONSTRUCTION DOCU-MENTS OR INCONSISTENCIES WITH APPLICABLE CODE REQUIREMENTS OBSERVED BY THE CONTRACTOR.
- I. IF CONTRACTOR PERFORMS WORK WHICH HE KNOWS OR SHOULD KNOW IS CONTRARY TO APPLICABLE CODE REQUIREMENTS, WITHOUT THE ASREEMENT 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.
- 6. 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 OWNEY.
- CONTRACTOR SHALL PROMPTLY NOTIFY OWNER'S REPRESENTATIVE IF CONTRACTOR BECOMES AWARE DURING THE PERFORMANCE OF THE WORK THAT THE CONSTRUCTION DOCUMENTS ARE NOT IN COM-PLIANCE WITH APPLICABLE CODE REQUIREMENTS.
- BY SUBMITTAL OF BID, CONTRACTOR WARRANTS TO OWNER THAT ALL MATTERIALS AND EQUIPMENT TO BE FURNISHED ARE NEW UNLESS NOTED OTHERWISE AND ALL WORK WILL BE OF GOOD QUALITY AND FREE FROM FAULTS AND DEFECTS.
- I. 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-CONTRACTORS STERRORMANCE. SUB-CONTRACTORS AND SUPPLIERS ARE HEREBY MOTHER DIFFLOR THAT THEY ARE TO CONTER AND COPPERATE FULLY WITH EACH OTHER DURING THE ECOURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OYERLAP OF EACH OTHER'S WORK AND TO SUCCESSIFULLY COMPLETE THE EXECUTION OF THE WORK, ALL SUB-CONTRACTOR WORKMANSHIP SHALL BE OF GUALLITY OF PASS INSPECTIONS BY LOCAL AUTHORITIES, LENDING INSTITUTIONS, ARCHITECT OR BUILDER, MY ONE OR ALL OF THE ABOVE MENTIONED INSPECTORS MAY INSPECT WORKMANSHIP AT ANY TIME, AND CORRECTIONS NEEDED TO ENHANCE THE GUALLITY OF BUILDING WILL BE DONE IMMEDIATELY, EACH SUB-CONTRACTOR, UNLESS SPECIFICALLY EXEMPTED BY THE TERMS OF HIS/HERS SUB-CONTRACT AGREEMENT, SHALL BE RESPONSIBLE FOR CLEANING IP AND REMOVING FROM THE JOB SITE ALL TRASH AND DEBRIS NOT LEFT BY OTHER SUB-CONTRACTORS. BUILDER MILL DETERMINE HOW SOON AFTER SUB-CONTRACTOR COMPLETES EACH PHASE OF HIS WORK THAT TRASH AND DEBRIS WILL DE REMOVED FROM THE SITE.
- IO. 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 ALBIENCATION.
- 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.
- 12. ALL TRADE NAMES AND BRAND NAMES CONTAINED HEREIN ESTABLISH QUALITY STANDARDS. SUBSTITUTIONS ARE PERMITTED, NITH PRIOR APPROVAL BY THE ONNER'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.
- IB. CONSTRUCTION DOCUMENTS IDENTIFIED AS "BID SET" ON ANY OR ALL SHEETS MAY BE SUBJECT TO REVIEW. THIS REVIEW MAY RESULT IN CHANGES MHICH 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 CONSTRUCT ON 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.
- 15. TYPICAL DETAILS AND SPECIFICATIONS ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE.
- 6. 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 MECHANICA DRAWINGS FOR PITS, TRENCHES, ROOF OPENINGS, DEPRESSIONS, ETC. NOT SHOWN ON THE OTHER DRAWINGS.
- iö. THE CONSTRUCTION DOCUMENTS AND ALL COPIES THEREOF FURNISHED TO CONTRACTOR ARE THE PROPERTY OF THE ARCHITECT AND ARE NOT TO BE USED ON OTHER MORK.

SITE WORK

- CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERIS, FOUNDATIONS, ETC., AND BURIED ARTIFACTS SUCH AS INDIAN OR DINOSAUR BONES, IF ANY SUCH ITEMS ARE FOUND THE ARCHITECT, CIVIL DENINEER, AND SOILS ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO FULLY PROTECT ADJACENT PROPERTIES.
- 3. REFER TO THE SOILS REPORT AS PREPARED BY THE GEOTECHNICAL ENGINEER
- 4. REFER TO CIVIL ENGINEER'S CURRENT GRADING 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.
- 8. EXCAVATIONS SHALL BE KEPT FREE OF STANDING WATER.
- WHERE EXCAVATIONS ARE MADE TO A DEPTH GREATER THAN INDICATED, SIJCH ADDITIONAL DEPTH SHALL BE FILLED WITH CONCRETE AS SPECIFIED FOR FOOTINGS.
- IO. FILL MATERIALS SHALL BE FREE FROM DEBRIS, VEGETABLE MATTER AND OTHER FOREIGN SUBSTANCES.
- IL. ALL FINISH GRADES TO DRAIN AWAY FROM THE BUILDING FOOTINGS.
- 12. THERE SHALL BE NO ON-SITE WATER RETENTION.
- 13. THERE SHALL BE NO DRAINAGE TO ADJACENT PROPERTY.
- 14. FOR ONSITE CONTSRUCTION, PLANS TO COMPLY WITH NECESSARY INSPECTIONS APPROVED BY THE BUILDING OFFICIAL.
- 15. THE REQUIREMENTS IN THESE NOTES ARE THE MINIMUM THAT SHALL BE MET. REQUIREMENTS OF THE STRUCTURAL DRAININGS 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.
- 5. THE CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318, SECTION 5.II.
- 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 316, 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
- IO. TOP OF CONCRETE SLABS TO BE A MINIMUM 4" W MASONRY VENEER 6" ELSEWHERE (6" H.J.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.
- 12. ALL REINFORCEMENT, CONDUIT, OUTLET BOXES, ANCHORS, HANGERS, SLEEVES, BOLTS OR OTHER EMBEDDED MATERIALS AND ITEMS MUST BE SECURED AND APPROPRIALLY FASTENDED IN THEIR PROPER LOCATIONS PRIOR TO THE PLACEMENT OF CONCRETE. SUBCONTRACTOR SHALL VERIEY INSTALLATION OF HOLD-DOWNS, ANCHOR BOLTS, PA STRAPS, AND OTHER ANCHORAGE MATERIAL AND ITEMS PRIOR TO PLACEMENT OF CONCRETE.
- IS. POST-TENSION SLABS, IF APPLICABLE:
 - A. POINT AND LINE LOADS FROM STRUCTURE ABOVE TO BE PROVIDED TO POST-TENSION ENGINEER PRIOR TO POST-
- B. 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 530/ASCE 5.711/6 402.
- 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.
- 4. MORTAR FOR USE IN MASONRY CONSTRUCTION SHALL COMPLY WITH ASTM C 270. THE TYPE OF MORTAR SHALL BE IN ACCORDANCE NITH THE N.C. FR AND SHALL MEET THE PROPORTION SPECIFICATIONS OR THE PROPERTY SPECIFICATIONS OF ASTM C 270
- GROUT SHALL CONSIST OF FIDER CEMENT MATERIAL AND AGGREGATE IN ACCORDANCE WITH ASTM C 476 AND THE PROPORTION SPECIFICATIONS FPR THE NC. 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).
- 7. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO A.S.T.M. C 150.
- 8. 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.
- IO. 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.
- 2. ALL STRUCTURAL STEEL SHALL CONFORM TO AISC/CRED
- 3. 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 WHATERIAL 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
- 4. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED ZING COATED GALVANIZED STEEL, STAINLESS STEEL, SILCON BRONZE OR COPPER, VERIFY ACCEPTABLE FASTENERS PER CHEMICALS USED IN PRESSURE PRESERVITIVELY TREATED WOOD W N.C.-R. FASTENINGS FOR WOOD FOUNDATIONS SHALL BE AS REGUIRED IN AFPA TECHNICAL REPORT NO. 7.

WOOD & FRAMING

UMBER

- 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 DIRELLINGS AND ACCESSORY BUILDINGS SHALL COMPLY MITH TABLE R802.1.
- ALL LUMBER SHALL MEET THE STANDARDS OF QUALITY AS STATED IN THE N.C.-R
- 4. LIMBER AND PLYMOOD REQUIRED TO BE PRESSURE PRESERVATIVELY TREATED IN ACCORDANCE WITH THE N.C. R. AND SHALL BEAR THE QUALITY MARK OF AN APPROVED INSPECTION ASENCY 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.
- E. GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED AS REQUIRED IN AITC AIGO. I AND ASTM D 3737.

PROTECTION AGAINST DECAY & TERMITE

- IN AREAS SUBJECT TO DECAY DAMAGE AS ESTABLISHED BY THE N.C.-R 2.
 THE FOLLOWINS LOCATIONS SHALL REQUIRE THE USE OF NATURALLY
 DURABLE MODD OR MODD THAT IS PRESERVATIVE TREATED
 IN ACCORDANCE WITH AMPA UI FOR THE SPECIES, PRODUCT, PRESERVATIVE
 AND END USE, PRESERVATIVES SHALL BE LISTED IN SECTION 4 OF AMPA UI
- WOOD JOISTS OR THE BOTTOM OF WOOD FLOOR WHEN CLOSER THAN 16 INCHES, OR WOOD GIRDERS WHEN CLOSER THAN 12 INCHES TO THE EXPOSED GROUND IN CRANL SPACES OR UNEXCAYATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
- ALL EXTERIOR SILLS &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
- THE ENDS OF WOOD GIRDERS ENTERING EXTERIOR MASONRY OR CONCRETE WALLS HAVING CLEARANCES OF LESS THAN 0.5 INCH ON TOPS, SIDES AND ENDS.
- 5. WOOD SIDING AND SHEATHING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND.
- MOOD 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 19 APPLIED BETWEEN THE WALL AND THE FURRING STRIPES OR EPANING 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 MOULD PREVENT MOSTURE OR WATER ACCUMULATION ON THE SURFACE OR AT JOINTS BETWEEN MEMBERS ARE ALLOWED.
- 3. IN AREAS SUBJECT TO DAMAGE FROM TERMITES METHODS OF PROTECTION SHALL BE ONE OF THE METHODS LISTED IN THE N.C.-R.
- 4. UNDER-FLOOR AREAS SHALL BE VENTILATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE N.C.-R

MOOD & 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.
- 3. 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 DIAPHRAM NAILING AND ADHESIVE REQUIREMENTS.
- ALL VERTICAL JOINTS OF PANEL SHEATHING 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 MINIMAN OF I 1/2 INCH THICKNESS.
- b. WHERE APPLICABLE, REFER TO THE SHEAR WALL SCHEDULE FOR REQUIRED STRENGTH, GRADE, AND THICKNESS OF PLYMOOD SHEAR PANELS AND FOR REQUIRED SHEAR WALL NAILING SCHEDULE.
- 9. IN ONE- AND THO-FAMILY DMELLING CONSTRUCTION USING HARD BOARD OR ALUMINM AS A SOFFIT MATERIAL, THE SOFFIT MATERIAL SHALL BE SECURELY ATTACHED TO FRAMING MEMBERS AND USE AN INDERLAYMENT MATERIAL OF EITHER FIRE RETARDANT TREATED WOOD, 23/32 INCH WOOD SHEATHINS OR 3/6 INCH GYPSUM BOARD, VENTING REQUIREMENTS APPLY TO BOTH SOFFIT AND UNDERLAYMENT AND SHALL BE PER SECTION ROSO OF THE NORTH CARGUINA RESIDENTIAL CODE. WHERE THE PROPERTY LINE IS IO 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.

OOF FRAMING

- ROOF FRAMING SHALL BE BY PRE-MANUFACTURED ROOF TRUSSES SPACED AT 24 INCHES ON CENTER UNLESS NOTED OTHERWISE.
- 2. 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 (20 RS 9 POINT BEASTING), VOLUME CEILING OPTIONS, AND SHEAR TRANSFER, PRIOR TO FABRICATION.
- 4. THE BRACING OF MOOD TRUSSES SHALL COMPLY TO THEIR APPROPRIATE ENGINEERED DESIGN. PER THE N.C.-R
- 5. TRUSS MEMBERS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT THE APPROVAL OF A REGISTRED DESIGN PROFESSIONAL. ALTERATIONS RESULTING IN THE ADDITION OF LOAD (E.G. HIVAC EQUIPMENT, NATER 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 LOADING.
- ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED BY A PROPESSIONAL 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
- 2. 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.
- 4. MOOD STUD MALLS SHALL BE CAPPED WITH A DOUBLE TOP PLATE INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND INTERSECTION INTH 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.
- 5. WHERE JOISTS, TRUSSES OR RAFTERS ARE SPACED MORE THAN 16 INCHES ON CENTER AND THE BEARING STUDG BELOW ARE SPACED 24 INCHES ON CENTER, SUCH MEMBERS SHALL BEAR WITHIN 5 INCHES OF THE STUDG BENEATH, SEE EXCEPTIONS.
- STUDS SHALL HAVE FULL BEARING ON NOMINAL 2 BY OR LARGER PLATE OR SILL HAVING A WIDTH AT LEAST EQUAL TO THE WIDTH OF THE STUDS.
- 7. INTERIOR NONBEARING WALLS SHALL BE PERMITTED TO BE CONSTRUCTED WITH 2-INCH-BY-3-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 IG INCHES ON CENTER, INTERIOR NONBEARING WALLS SHALL BE CAPPED WITH AT LEAST A SINGLE TOP PLATE, INTERIOR NONBEARING WALLS SHALL BE SHALL BE FIREID COCKED IN ACCORDANCE WITH THE NO. R.

MOOD & FRAMING

(continued)

- DRILLING AND NOTHCING OF STUDS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
 - NOTHCING, ANY STUD IN AN EXTERIOR WALL OR BEARING PARTITION MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH, STUDS 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.
 - 2. DRILLING, ANY STUD MAY BE BORED OR DRILLED, PROVIDED THAT THE DIAMETER OF THE RESULTING HOLE IS NO MORE THAN 60 PERCENT OF THE 9TUD WIDTH, THE EDGE OF THE HOLE IS NO MORE THAN 50,9 INCH TO THE EDGE OF THE STUD, AND THE HOLE SHALL NOT BE CLOSE THAN 6 INCHES FROM AN ADJACENT HOLE ON MOTCH. HOLES NOT EXCEEDING 3/4 INCH DIAMETER CAN BE AS CLOSE AS I I/2 INCHES ON CENTER SPACING, STUDS LOCATED IN EXTERIOR NALLS 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.
 - 9. 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.

 (a) 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 PURTHER OR HE FLOOR TO CEILING AND AT LEAST ONE STUD PURTHER OR SHE SIDE OF THE SECTION THAT HAS BEEN NOTCHED OR CUT.

 (b) 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 PURTHER ON EACH SIDE OF THE SECTION THAT HAS BEEN NOTCHED OR CUT.
- 9. MHEN PIPING OR DICTMORK IS PLACED IN OR PARTIALY IN AN EXTERIOR OR INTERIOR LOAD-BEARING WALL, NECESSITATION CUTTINS, DRILLING OR NOTCHING OF THE TOP PLATE B MORE THAN 50 PERCENT OF ITS WIDTH A GALVANIZED METAL TIE OF NOT LESS THAN 0.054 INCH THICK AND I 1/2! INCHES WIDE SHALL BE FASTENED ACROSS AND TO THE PLATE AT EACH SIDE OF THE OPENING NITH NOT LESS THAN EIGHT IO'D NAILS HAVING A MINIMM LENGTH OF I 1/2 INCHES (30 MM) AT EACH SIDE OR EQUIVALENT. THE METAL TIE MUST EXTEND A MINIMM OF 6 INCHES PAST THE OPENING.
- IO. HEADERS SHALL MEET THE REQUIREMENTS OF THE N.C.-R
- PROVIDE LATERAL BRACING PER THE N.C.-R
- IB. FOUNDATION CRIPPLE WALLS SHALL MEET THE REQUIREMENTS OF THE N.C.-R. CODE
- 14. WOOD STUD WALLS SHALL BE BRACED AS REQUIRED BY THE N.C.-R
- 15. INLESS COVERED DY INTERIOR OR EXTERIOR MALL COVERINGS OR SHEATHING MEETING THE MINIMAM REQUIREMENTS OF THIS CODE, ALL STUD PARTITIONS OR MALLS MITH STUDS HAVING A HEIGHT-TO-LEAST THICKNESS RATIO EXCEEDING SO SHALL HAVE BRIDGING NOT LESS THAN 2 INCHES IN THICKNESS AND OF THE SAME MIDTH AS THE STUDS FITTED SINGLY 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
- 2. FIRE BLOCKING SHALL CONSIST OF 2 INCHES NOMINAL LUMBER, OR TWO THICKNESSES OF I-INCH NOMINAL LUMBER WITH BROKEN LAP JOINTS, OR ONE THICKNESS OF 23/32-INCH WOOD STRUCTURAL PANELS WITH JOINTS BACKED BY 29/32-INCH WOOD STRUCTURAL PANELS OR ONE THICKNESS OF 3/4-INCH PARTICLEBOARD WITH JOINTS BACKED BY 3/4-INCH PARTICLEBOARD, I/2-INCH 67/95OM BOARD, OR 1/4-INCH CEMENT-BASED
- 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.
- 4. BATTS OR BLANKETS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIALS SHALL BE PERMITTED FOR COMPILANCE MITH THE IO FOOT HORIZONTAL FIREBLOCKING IN WALLS CONSTRUCTED USING PARALLEL ROWS OF STUDS OR STAGGETED STUDS. LOOSE FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIREBLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEVIONSTRATE IT'S ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND TOT GASSETS.
- 5. WHEN THERE IS USABLE SPACE BOTH ABOVE AND BELOW THE CONCEALED SPACE OF A FLOOR/CELING ASSEMBLY, DRAFTSTOPS SHALL BE INSTALLED SO THAT THE AREA OF THE CONCEALED SPACE DOES NOT EXCEED JODO 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.
- I. CEILING IS SUSPENDED UNDER THE FLOOR FRAMING.
- FLOOR FRAMING IS CONSTRUCTED OF TRUSS-TYPE OPEN-WEB OR PERFORATED MEMBERS.

HANDRAII AND GIARDRAI

- . 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

KB HOME NORTH CAROLINA DIVISION

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2018 NORTH CAROLINA STATE BUILDING

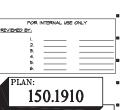
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THERMAL & MOISTURE PROTECTION

- PROVIDE ALL FLASHING, COUNTER-FLASHING, BITUTHENE, MEMBRANE FING, SHEET METAL, CAULKING, SEALANTS, ELASTOMERIC
- "CORROSION RESISTANCE" SHALL MEAN THE ABILITY OF A MATERIAL TO WITHSTAND DETERIORATION OF IT'S SURFACE OR IT'S PROPERTIES WHEN EXPOSED TO IT'S ENVIRONMENT
- BALCONIES, LANDINGS, EXTERIOR STAIRWAYS, OCCUPIED ROOFS AND SIMILAR SURFACES EXPOSED TO THE MEATHER AND SEALED UNDER-NEATH SHALL BE WATERPROOFED AND SLOPED A MINIMUM OF 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL (2% SLOPE) FOR DRAINAGE.
- PROVIDE A MINIMUM 2 INCH DROP FROM FINISHED INTERIOR FLOOR ELEVATION TO THE HIGHEST FLOOR ELEVATION OF ANY ADJOINING DECK OR BALCONY.
- ELASTOMERIC OR MEMBRANE DECK COATINGS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AT DECKS AND BALCONIES COLOR, FINISH, AND DETAILING SHALL BE APPROVED BY OWNER
- UNLESS DESIGNED TO DRAIN OVER DECK EDGES, DRAINS AND OVERFLOWS OF ADEQUATE SIZE SHALL BE INSTALLED AT THE LOW POINTS OF THE DECK OR BALCONY.
- FOUNDATION WALLS WHERE THE OUTSIDE GRADE IS HIGHER THAN THE INSIDE GRADE SHALL BE WATER-PROOFED AND DAMPPROOFED IN ACCORDANCE WITH THE N.C.-R
- PARAPET WALLS SHALL BE PROPERLY COPED WITH NONCOMBUSTIBLE, WEATHERPROOF MATERIALS OF A WIDTH NO LESS THAN THE THICKNESS OF THE PARAPET WALL. PARAPET COPING SHALL EXTEND 2" MINIMUM DOWN THE FACES OF THE PARAPET.

- APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL 12. CAVITY OR PENETRATION OF MATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS, SELF-ADHERED MEMBRANES USED AS FLASHING SHALL COMPLY WITH AAMA II, FUID-APPLIED MEMBRANES USED AS FLASHING IN EXTERIOR WALLS SHALL COMPLY WITH AAMA TIA. THE FLASHING SHALL STRUCTURAL SHALL COMPLY WITH AAMA TIA. THE FLASHING SHALL STRUCTURAL OF THE EXTERIOR WALL FINISH ALUMINAM FLASHING SHALL NOT BE USED IN CONTACT NITH FLOR COMPANY AND THE SUPPONY OF CONTROL FROM THE SUPPONY OF CONTROL FROM THE SUPPONY OF CONTROL FROM THE SUPPONY OF THE SUPPO
- ALL BEAMS, OUTLOOKERS, CORBELS, ETC. PROJECTED THROUGH EXTERIOR WALLS OR PENETRATING EXTERIOR FINISHES SHALL BE FLASHED WITH A MINIMUM O.OIM-INCH (NO. 26 SHEET METAL GAGE) CORROSION-RESISTANT METAL AND CAULKED.
- ALL SHEET METAL WORK SHALL BE PERFORMED IN ACCORDANCE ALL SHEET METICAL WORK SHALL BE MERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS AND STANDARDS OF THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION (SMACNA). THE ARCHITECTURAL SHEET METAL MANUAL, AND SEALANT, WATERPROOFING AND RESTORATION INSTITUTE'S (SWR.II.) GUIDE - "SEALANTS." THE PROFESSIONAL'S GUIDE".
- SHEET METAL SHALL BE STEEL SHEET, HOT-DIPPED, TIGHT COATED AND GALVANIZED, CONFORMING TO AS.T.M. A525 AND SHALL BE A NUMBER 24 SHEET METAL GAGE UNLESS OTHERWISE NOTED IN THESE NOTES, PLANS, OR MANUFACTURER'S SPECIFICATIONS.
- FABRICATE SHEET METAL WITH FLAT LOCK SEAMS AND SOLDER WITH TYPE AND FLUX RECOMMENDED BY MANUFACTURER. SEAL ALUMINUM SEAMS WITH EPOXY METAL SEAM CEMENT. WHERE REQUIRED FOR STRENGTH, RIVET SEAMS AND JOINTS.
- SHOP FABRICATE TO THE GREATEST EXTENT POSSIBLE IN ACCORDANCE WITH APPLICABLE STANDARDS TO PROVIDE A PERMANENTLY MATER-PROOF, WEATHER RESISTANT INSTALLATION.
- ASPHALT SHINGLES SHALL HAVE SELF-SEAL STRIPS OR BE INTERLOCKING, AND COMPLY WITH ASTM D 225 OR D 8462.
- BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS, BASE FLASHING SHALL BE OF EITHER CORROSION-RESISTANT METAL OF MINIMAY NOMINAL O.OM-INCH THICKNESS OR MINERAL SURFACE ROLL ROOFING MEIGHING A MINIMAM OF TI POUNDS PER IOO SQUARE FIEET, CAP FLASHING SHALL BE CORROSION-RESISTANT METAL OF MINIMAM NOMINAL O.OM-INCH THICKNESS
- VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED AS STATED FER THE N.C.-R.
- A CRICKET OR SADDLE SHALL BE INSTALLED ON THE RIDGE SIDE OF ANY ACHINEY OR PENETRATION MORE THAN 30 INCHES NIDE AS MEASURED PERPENDICULAR TO THE SLOPE, CRICKET OR SADDLE COVERINGS SHALL BE SHEET METAL OR OF THE SAME MATERIAL AS THE ROOF COVERING, PROVIDE FLASHING AT THE INTERSECTION OF CRICKET OR SADDLE AND
- FLASHING AGAINST A VERTICAL SIDEWALL SHALL BE BY THE STEP-FLASHING METHOD PER NC-R.
- ASHING AGAINST A VERTICAL FRONT WALL, AS WELL AS SOIL STACI NT PIPE AND CHIMNEY FLASHING, SHALL BE APPLIED ACCORDING TO PHALT SHINGLE MANUFACTURER'S PRINTED INSTRUCTIONS.
- AT THE JUNCTURE OF ROOF VERTICAL SURFACES, FLASHING AND COUNTERFLASHING SHALL BE PROVIDED IN ACCORDANCE WITH THE N.C.-R AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WHERE OF METAL, SHALL NOT BE LESS THAN O.O.II INCH (NO. 26 GALVANIZED
- 16. VALLEY FLASHING FOR CONCRETE TILE ROOFS SHALL BE AS REQUIRED

ROOFING MATERIALS

- ROOF COVERINGS SHALL BE APPLIED IN ACCORDANCE WITH THE N.C.-R. AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, INSTALLATION OF ROOF COVERINGS SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE N.C.-R.
- ROOFS AND ROOF COVERINGS SHALL BE OF MATERIALS THAT ARE COMPATIBLE WITH EACH OTHER AND WITH THE BUILDING OR STRUCTURE TO WHICH THE MATERIALS ARE APPLIED.
- ROOF COVERING MATERIALS SHALL CONFORM TO THE APPLICABLE STANDARDS LISTED IN THE N.C.-R. IN THE ABSENCE OF APPLICABLE STANDARDS OR WHERE MATERIALS ARE OF QUESTIONABLE SUITABILITY, TESTING BY AN APPROVED TESTING AGENCY SHALL BE REQUIRED BY THE BUILDING OFFICIAL TO DETERMINE THE CHARACTER, QUALITY, AND LIMITATIONS OF APPLICATION OF THE MATERIALS.

THERMAL & MOISTURE PROTECTION (continued)

- ROOF COVERING MATERIALS SHALL BE DELIVERED IN PACKAGES BEARING THE MANUFACTURER'S IDENTIFYING MARKS AND APPROVED TESTING LABELS WHEN REQUIRED, BULK SHIPMENTS OF MATERIALS SHALL BE ACCOMPANIED BY THE SAME INFORMATION ISSUED IN THE FORM OF A CERTIFICATE OR ON A BILL OF LADING BY THE MANUFACTURER
- COMPOSITION ROOFING SHINGLES SHALL BE OF ASPHALT OR APPROVED RELATED MATERIALS AND MEET THE REQUIREMENTS OF THE N.C.-R
- UNDERLAYMENT FOR ASPHALT SHINGLES SHALL CONFORM TO ASTM D 226 TYPE I, ASTM D 4869, TYPE I, OR ASTM D 6757. SELF-ADHERING POLYMER MODIFIED BITIMEN SHEET SHALL COMPLY WITH ASTM D 1970
- ASPHALT SHINGLES SHALL COMPLY WITH ASTM D 225 OR ASTM D 3462.
- FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED STEEL, STAINLESS STEEL, ALIMINIM, OR COPPER ROOFING NAILS, MINIMM 12 GAGE SHANK MITH A MINIMM 3/6 INCH DIAMETER HEAD, ASTM F 1667, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIALS AND A MINIMM 0F 3/4 INCH INTO THE ROOF SHEATHING. WHERE THE ROOF SHEATHING IS LESS THAN 3/4 INCH THICK, THE FASTENERS SHALL PENETRATE THROUGH THE SHEATHING. FASTENERS SHALL COMPLY WITH AGTUS LIGHT.
- UNDERLAYMENT FOR ASPHALT SHINGLES SHALL BE APPLIED IN ACCORDANCE WITH THE N.C.-R
- THE INSTALLATION OF CLAY AND CONCRETE TILE SHALL COMPLY WITH THE PROVISIONS OF N.C.-R CLAY ROOF TILE SHALL COMLY WITH ASTM C. 167.
- CONCRETE AND CLAY TILE SHALL BE INSTALLED ONLY OVER SOLID SHEATHING OR SPACED STRUCTURAL SHEATHING BOARDS.
- CLAY AND CONCRETE ROOF TILE SHALL BE INSTALLED ON ROOF SLOPES OF 2 1/2 UNITS VERTICAL. IN 12 UNITS HORIZONTAL. (2-1/2.12) OR GREATER FOR ROOF SLOPES FROM 2 1/2 UNITS VERTICAL. IN 12 UNITS HORIZONTAL. (2-1/2.12) TO FOUR UNITS VERTICAL. IN 12 UNITS HORIZONTAL. (4-1/2.) DOUBLE UNDERLAYMENT APPLICATION IS REQUIRED IN ACCORDANCE WITH THE N.C.-R.
- UNDERLAYMENT FOR CLAY AND CONCRETE TILE SHALL CONFORM WITH ASTM D 226, TYPE II; ASTM D 2626 TYPE I; OR ASTM D 6380 CLASS I MINERAL SURFACED ROLL ROOFING.
- CONCRETE ROOF TILE SHALL COMPLY WITH ASTM C 1492.
- NAILS SHALL BE CORROSION-REGISTANT AND NOT LESS THAN IL GAGE NAILS SHALL BE CORNOSION-RESISTANT AND NOT LESS THAN II GAGE, 51/6-INCH HEAD, AND OF SYFFICIENT LENGTH TO PENTRATE THE DECK, A MINIMUM OF 3/4-INCH OR THROUGH THE THICKNESS OF THE DECK, WHICHEVER IS LESS. ATTACHING WIRE FOR CLAY OR CONCRETE TILE SHALL NOT BE SMALLER THAN O.028-INCH. PERIMETER PASTENING AREAS INCLUDE THREE TILE COURSES BUT NOT LESS THAN 36 INCHES FROM EITHER SIDE OF HIPS OR RIDGES AND EDGES OF EAVES AND GABLE RAKES.
- 17. CLAY AND CONCRETE ROOF TILES SHALL BE FASTENED IN ACCORDANCE WITH THE N.C.-R
- TILE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, BASED ON CLIMATIC CONDITIONS, ROOS SLOPE, UNDERLAYMEN SYSTEM, AND TYPE OF TILE BEINS INSTALLED PER THE N.C.-R
- THE INSTALLTION OF BUILT-UP ROOFS SHALL COMPLY WITH THE N.C.-R
- 20. BUILT-UP ROOFS SHALL HAVE A DESIGN SLOPE OF A MINIMUM OF ONE-FOUTH UNIT VERTICAL IN I2 UNITS HORIZONTAL (2-PERCENT SLOPE) FOR DRAINAGE, EXCEPT FOR COAL-TAR BUILT-UP ROOFS THAT SHALL HAVE A DESIGN SLOPE OF A MINIMUM ONE-BIGHTH UNIT VERTICAL IN
- 21. BUILT-UP ROOF COVERING MATERIALS SHALL COMPLY WITH THE

EXTERIOR WALL COVERINGS

- SEE FINISHES IN THESE GENERAL NOTES FOR EXTERIOR PLASTER.
- MATERIALS USED FOR THE CONSTRUCTION OF EXTERIOR WALLS SHALL COMPLY WITH THE PROVISIONS OF THE N.C.-R
- EXTERIOR WALLS SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE TASHING. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE TASHING. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF MATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED AND A MEANS OF DRAINING WATER THAT ENTERS THE ASSEMBLY TO THE EXTERIOR. PROTECTION AGAINST CONDENSATION IN THE EXTERIOR WALL ASSEMBLY SHALL BE PROVIDED.
- ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS. ONE LAYER OF NO. 15 ASPHALT FELT, FREE FROM HOLES AND BREAKS, COMPLYING NITH ASTM D 226 FOR TYPE I FELT OR OTHER APPROVED MATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS, SUCH FELT OR MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2 INCHES, WHERE JOINTS OCCUR, FELT SHALL BE LAPPED NOT LESS THAN 6 INCHES, THE FELT OR OTHER APPROVED MATERIAL SHALL BE CONTINUOUS TO THE TOP OF WALLS AND TERMINATED AT PENETRATIONS AND BUILDING APPENDAGES IN A MANNER TO MEET THE REQUIREMENTS OF THE EXTERIOR WALL ENVELOPE.
- Fiber coment SIDING CONFORMING TO THE REQUIREMENTS OF THE N.C.-R AND COMPLYING WITH ASTM D 3649 SHALL BE PERMITTED ON EXTERIOR WALLS OF BUILDINGS OF TYPE V CONSTRUCTION LOCATED IN AREAS WHERE THE ULTIMATE WIND SPEED SPECIFIED DOES NOT EXCEED 100 MILES PER HOUR AND THE BUILDING HEIGHT IS LESS THAN 40 FEET IN EXPOSURE C. WHERE CONSTRUCTION IS LOCATED IN AREAS WHERE THE ULTIMATE WIND SPEED EXCEEDS ISO MILES PER HOUR OR BUILDING HEIGHTS ARE IN EXCESS OF 40 T. DATA INDICATING COMPLIANCE MUST BE SUBMITTED. FIDER
- Fiber cement SIDING SHALL BE APPLIED OVER SHEATHING OR MATERIALS LISTED IN NATIONAL STANDARDS INSTITUTE A.S.T.M. E236-73 WITH A PRESSURE NEATHER RESISTIVE BARRIER REQUIREMENTS HIS COMPORAM HITH THE LISTED SHALL BE APPLIED TO CONFORM HITH THE CAST ME236-73 WITH A PRESSURE NEATHER RESISTIVE BARRIER REQUIREMENTS HIS DING AND COSTORM SHALL BE NEATHER RESISTIVE BARRIER REQUIREMENTS HIS DIP COMPONDED ACCESSORIES SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED MANUFACTURER'S INSTRUCTIONS.
- r cement SIDING FASTENERS AND ACCESSORIES SHALL MEET THE BUIREMENTS OF THE N.C.-B
- EXTERIOR WALLS OF WOOD CONSTRUCTION SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE N.C.-R

THERMAL & MOISTURE PROTECTION (continued)

- HARDBOARD SIDING SHALL CONFORM TO THE REQUIREMENTS OF AHA A1356 AND, WHERE USED STRUCTURALLY, SHALL BE SO IDENTIFIED BY THE LABEL OF AN APPROVED AGENCY.
- WOOD VENEERS ON EXTERIOR WALLS OF BUILDINGS OF TYPES I, II, III, AND IV CONSTRUCTION SHALL BE NOT LESS THAN I-INCH NOMINAL THICKNESS, 0.438-INCH EXTERIOR HARDBOARD SIDING OR 0.375-INCH EXTERIOR-TYPE WOOD STRUCTURAL PANELS OR PARTICLE-BOARD AND SHALL CONFORM TO THE REQUIREMENTS OF THE N.C.-R
- FIBER-CEMENT LAP SIDING HAVING A MAXIMUM MIDTH OF 12 INCHES SHALL COMPLY WITH THE REQUIREMENTS OF ASTM CIBE, TYPE A, MINIMUM GRADE II LAP SIDING SHALL BE LAPPED A MINIMUM OF II/4 INCHES (32 MM) AND LAP SIDING NOT HAVING TONGUE-AND-SROOVE END JOINTS SHALL HAVE THE ENDS SEALED WITH CAULKING, INSTALLED WITH AN H-SECTION JOINT COVER, LOCATED OVER A STRIP OF FLASHING OR SHALL BE DESIGNED TO COME WITH KC-R. LAP SIDING COURSES MAY BE INSTALLED WITH THE FASTENER HEADS EXPOSED OR CONCEALED, ACCORDING TO NC-R OR APPROVED MANUFACTURERS INSTALLATION INSTRUCTIONS.

- INSULATING MATERIALS, INCLUDING FACINGS, SUCH AS VAPOR INSULATING MATTERIALS, INCLUDING FACINGS, SUCH AS VAPOR RETARDERS OR VAPER-PERMEABLE HEMBERANES, INSTALLED WITHIN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES, WALL-ASSEMBLIES, CRANL SPACES AND ATTICS SHALL HAVE A FLAME-SPREAD INDEX NOT TO EXCEED 25 WITH AN ACCOMPANYING SMOKE-DEVELOPED INDEX NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 123.
- DUCT INSULATION MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS OF THE N.C.-R
- INSULATION AND COVERING ON PIPE AND TUBING SHALL HAVE A FLANE-SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 450. SEE EXCEPTIONS.
- ALL EXPOSED INSULATION MATERIALS INSTALLED ON ATTIC FLOORS SHALL CENTIMETER PER N.C.-R TESTS FOR CRITIAL RADIANT FLUX SHALL BE MADE IN ACCORDANCE WITH ASTM E 970.
- THE USE OF ABOVE DECK THERMAL INSULATION SHALL BE PERI PROVIDED SUCH INSULATION IS COVERED WITH AN APPROVED ROOF COVERING AND PASSES FM 4450 OR UL 1256 PER N.C.-R.
- CELLULOSE LOOSE-FILL INSULATION SHALL COMPLY WITH CPSC 16 CFR, PARTS 1209 AND 1404. EACH PACKAGE OF SUCH INSULATING MATERIAL SHALL BE CLEARLY LABELED IN ACCORDANCE WITH CPSC 16 CFR, PARTS 1209 AND 1404.
- INSULATION IN FLOOR-CEILING ASSEMBLIES, ROOF-CEILING ASSEMBLIES, MALLS, CRANL SPACES OR ATTICS SHALL BE EITHER OF THE BLOWN-IN CELLULOSE TYPE OR FIBERGLASS BATTS OR BLANKET TYPE PER BUILDER'S SPECIFICATIONS.
- THE ENERGY EFFICIENCY REQUIREMENTS INCLUDING LEGG. BUT NOT IMITED TO INSULATION RY VALUES, PERCENTAGE OF GLAZING TO AUDITOR OF SHALL BE DETERMINED BY THE ADOPTED STATE AND LOCAL ENERGY CODE EQUIREMENTS, REFER TO MECHANICAL PLANS FOR SPECIFICATIONS
- THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED WITH AN AIR BARRIER SYSTEM TO LIMIT INFILTRATION. THE SEALING METHODS BETMEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXAMSION AND CONTRACTION. FOR ALL HOMES, MERRE PRESENT, THE FOLLOWING SHALL BE CAULKED, SASKETED, MEATHERSTRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL OR SOLID MATERIAL CONSISTENT WITH APPENDIX E-23 AND E-24 OF THE MC-8. II BLOCKING AND SEALING FLOOR/CEILING SYSTEMS AND UNDER KNEE MALLS OPEN TO UNCONDITIONED OR EXTERIOR SPACE.

 2. CAPPING AND SEALING SHAFTS OR CHASES, INCLUDING FLUE SHAFTS. 3. CAPPING AND SEALING SOFFIT OR DROPPED CEILING AREAS
- FRAMED CAVITY WALLS, THE EXTERIOR THERMAL ENVELOPE WALL INSULATION SHALL BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH THE BUILDING ENVELOPE AIR BARRIER, INSULATION SHALL BE SUBSTANTIALLY FREE FROM INSTALLATION GAPS, VOIDS, OR COMPRESSION. FOR FRAMED WALLS, THE CAVITY INSULATION SHALL BE ENCLOSED ON ALL SIDES WITH A RIGID MATERIAL OR AN AIR BARRIEM MATERIAL, MALL INSULATION SHALL BE ENCLOSED AT THE FOLLOWING LOCATIONS WHEN INSTALLED ON EXTERIOR WALLS PRICE TO BEING COVERED BY SUBSEQUENT CONSTRUCTION, CONSISTENT WITH APPENDIX E-2.3 AND E-2.4 OF NC-R:
- SHOWERS
- S. STAIRS
 4. FIREPLACE UNITS
 ENCLOSURE OF WALL CAVITY INSULATION ALSO APPLIES TO WALLS THAT ADJOIN ATTIC SPACES BY PLACING A RIGID MATERIAL OR AIR BARRIER MATERIAL ON THE ATTIC SIDE.

DOORS & WINDOWS

- SEE ELOOR PLANS AND ELEVATIONS FOR SIZES AND TYPES OF DOORS AND WINDOWS AND FOR ANY DIVIDED LITE PATTERNS. COLORS SHALL BE APPROVED BY THE BUILDER AND ARCHITECT
 - OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED OF SLEPTING PURPOSES SHALL NOT BE FERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHAIL NOT BE FERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHAIN 13/6 INCHES IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 13/6 INCHES THICK, OR 20-MINITE FIRE-RATED DOORS.
- NO DOUBLE FRENCH DOORS SHALL BE USED UNLESS THERE IS A SUFFICIENT OVERHANS OR COVERED PATIO COVERING THESE DOORS. NO DOUBLE WOOD FRENCH DOORS SHALL BE USED IN
- ALL AUTOMATIC GARAGE DOOR OPENERS REQUIRE THE INCLUSION OF A PHOTOELECTRIC SENSOR, EDGE SENSOR OR SOME OTHER SIMILAR DEVICE FOR REMOTE OPPERATION AND AS A SAFETY PRE-CAUTION TO PREVENT THE DOOR FROM CLOSING WHEN SOMETHING IS BLOCKING THE PATH OF THE DOOR. SEE MANUFACTURER'S INSTALL TICK INSTITUTE INSTALL TICK INSTITUTE.

- WHERE EMERGENCY ESCAPE AND RESCUE OPENINGS ARE PROVIDED THEY SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR.
- EMERGENCY ESCAPE AND RESCUE OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL.

DOORS & WINDOWS (continued)

- IO. ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEET IN THE CASE OF A GROUND FLOOR LEVEL WINDOW AND NOT LESS THAN 5.7 SQUARE FEET IN THE CASE OF AN UPPER STORY WINDOW.
- ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING HEIGHT OF 24 INCHES.
- ALL EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING WIDTH OF 20 INCHES.
- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE.
- THE MINIMUM HORIZONTAL AREA OF THE WINDOW WELL SHALL BE 9 SQUARE FEET, MITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES THE AREA OF THE MINDOW WELL SHALL ALLOW EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED PER THE N.C.-R. THE LADDER OR STEPS REQUIRED SHALL BE PERMITTED TO ENCROACH A MAXIMUM OF 6" INTO THE REQUIRED DIMENSIONS OF THE WINDOW WELL
- WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OF STEPS USABLE WITH THE WINDOW IN THE FULLY OPEN POSITION.
- BARS, GRILLES, COVERS, SCREENS OR SIMILAR DEVICES ARE PERMITTED TO BE PLACED OVER EMERGENCY ESCAPE AND RESCUE OPENINGS, BLICHEAD ENCLOSURES, OR WINDOW WELLS THAT SERVE SUCH OPENINGS, PROVIDED THE MINIMM NET CLEAR OPENING SIZE COMPLIES WITH THE NC.-R AND SUCH DEVICES SHALL BE RELEASABLE OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR FORCE GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION OF THE FSCAPE AND RECKLE OPENING
- ALL INTERIOR EGRESS DOORS AND A MINIMUM OF ONE EXTERIOR EGRESS DOOR SHALL BE READILY OPENABLE FROM THE SIDE FROM WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR

GLAZING & SAFETY GLAZING

- HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS, NATURAL VENTILATION SHALL BE THROUGH KINDOMS, SKYLIGHTS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR. SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS, THE OPENABLE AREA TO THE OUTDOORS SHALL BE NOT LESS THAN 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.
- BATHROOMS WATER CLOSET COMPARTMENTS AND OTHER SIMIL AS DATIFECOMO, PATER CLOSE! COMPARTIMENTS AND OTHER SIMILAR ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREAS! WINDOWS OF NOT LESS THAN 3 SQUARE FEET, ONE-HALF OF WHICH MUST BE OPENABLE.
- EXCEPT AS INDICATED, EACH PANE OF GLAZING INSTALLED IN HAZARDOUS EXCEPT AS INDICATED, EACH PANE OF GLAZING INSTALLED IN HAZARDOUS LOCATIONS SHALL BE PROVIDED WITH ANAPHACTURER'S DESIGNATION SPECIFYING WHO APPLIED THE DESIGNATION, DESIGNATING THE TYPE OF GLASS AND THE SAFETY GLAZING STANDARD WITH HAIGH IT COMPLIES, WHICH IS VISIBLE IN THE FINAL INSTALLATION. THE DESIGNATION SHALL BE ACID ETCHED, SANDBLASTED, CERAMIC-PIRED, LASER ETCHED, DEPOSSED, OR BE OF A TYPE WHICH ONCE APPLIED CANNOT BE REMOVED WITHOUT SELVE DESIGNATION.
- LOCATIONS SHALL PASS THE TEST REQUIREMENTS OF CPSC 16 CFR, PART 1201. GLAZING SHALL COMPLY WITH CPSC 16.
- THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING:
- GLAZING IN ALL FIXED AND OPERABLE PANELS OF SWINGING SLIDING AND BIFOLD DOORS
- SALDING AND DITULAL PLOYAGE AND OFFICE PANEL IN THE SAME PLANE AS A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN 24-INCHES OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SIMPLAY
- GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
- 3.I EXPOSED AREA OF AN INDIVIDUAL PANE LARGER THAN 9 SQUARE
- 3.2 BOTTOM EDGE LESS THAN IS INCHES ABOVE THE FLOOR
- 3.3 TOP EDGE MORE THAN 36 INCHES ABOVE THE FLOOR 9.4 ONE OR MORE WALKING SURFACES MITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.
- GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE.
- GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS. SALNAS, STEAM ROOMS, BATHTUBS AND SHOWERS, GLAZING ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE.
- GLAZING IN WALLS AND FENCES ENCLOSING INDOOR AND OUTDOOR SMIMMING POOLS, HOT TUBS AND SPAS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A MALKING SURFACE AND WITHIN 60 INCHES HORIZONTALLY OF THE MATERS EDGE. THIS SHALL APPLY TO SINGLE GLAZING AND ALL PANES IN MULTIPLE
- GLAZING ADJACENT TO STAIRWAYS, LANDINGS AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE MHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
- GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF STAIRWAYS WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60-INCH HORIZONTAL ARG LESS THAN ISO DEGREES FROM THE BOTTOM TREAD NOSING.
- HINGED SHOWER DOORS SHALL OPEN OUTWARD.
- GLAZING SHALL BE IN ACCORDANCE WITH ENERGY COMPLIANCE CALCULATIONS BASED ON A LOCALLY ADOPTED ENERGY CODE, THE MODEL ENERGY CODE OR THE INTERNATIONAL ENERGY
- IN DWELLING UNITS, WHERE THE OPENING OF AN OPERABLE MINDOM IS LOCATED MORE THAN 12 INCHES (1824 MM) ABOVE THE FINISHED GRADE OR SURFACE BELOW, THE LOVEST PART OF THE CLEAR OPENING OF THE MINDOM SHALL BE A MINIMUM OF 24 INCHES (610 MM) ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOM IS LOCATED. OPERABLE SECTIONS OF WINDOMS SHALL NOT PERMIT OPENINGS THAT ALLOM PASSAGE OF A 4 INCH (102 MM) DIAMETER SPHERE WHERE SUCH OPENINGS ARE LOCATED OPENINGS ARE LOCATED WITHIN 24 INCHES (610 MM) OF THE FINISHED FLOOR.

FINISHES

- GYPSUM MALLBOARD SHALL BE INSTALLED IN CONFORMANCE WITH THE CURRENT EDITION OF THE NORTH CAROLINA RESIDENTIAL CODE AND ALL STATE AND LOCAL BUILDING CODES, THE MOST STRINGENT
- MATERIALS. ALL SYPSUM BOARD MATERIALS AND ACCESSORIES SHALL CONFORM TO ASTM C 22, C 4 TS, C 514, C 1002, C 1041, C 1117, C 1117, C 1118, C 1278, C 1346, OR C 1658 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE N.C.-R. ADHESIVES FOR THE INSTALLATION OF GYPSUM BOARD SHALL CONFORM TO ASTM C 551.
- GYPSUM BOARD MATERIALS SHALL CONFORM TO THE APPROPRIATE STANDARDS LISTED IN THE N.C.-R WHERE REQUIRED FOR FIRE PROTECTION, CONFORM TO THE N.C.-R
- INTERIOR GYPSUM BOARD SHALL NOT BE INSTALLED WHERE IT IS DIRECTLY EXPOSED TO THE WEATHER OR TO WATER.
- ALL EDGES AND ENDS OF GYPSUM BOARD SHALL OCCUR ON THE ALL EDGES AND ENDS OF GYPSYM BOARD SHALL OCCUR ON THE FRAMING MEMPERS, EXCEPT THOSE EDGES AND ENDS THAT ARE PERRENDICULAR TO THE FRAMING MEMBERS. EDGES AND ENDS OF GYPSYM BOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CO. CEALED SPACES WHERE FIRE-RESISTACE-RATED CONSTRUCTION, SHEAR RESISTANCE, OR DIAPHRAGM ACTION IS NOT REQUIRED. CEALED SPACES WHERE FIRE-RESISTACE-RATED CONSTRUCTION.
- FASTENERS AT THE TOP AND BOTTOM PLATES OF VERTICAL ASSE
- GYPSUM BOARD USED AS THE BASE OR BACKER FOR ADHESIVE APPLICATION OF CERAMIC TILE OR OTHER REQUIRED NON-ABSORBENT FINISH MATERIAL SHALL CONFORM TO ASTM C 1946, C 1176 OR C1276. USE OF WATER-RESISTANT GYPSUM BACKING BOARD SHALL BE PERMITTED ON CEILINGS WHERE FRAMING SPACING DOES NOT EXCEED 12 INCHES ON CENTER FOR 1/2-INCH-THICK OR 16 INCHES FOR 5/8-INCH-THICK GYPSUM BO WATER-RESISTANT GYPSUM BOARD SHALL NOT BE INSTALLED OVER A VAPOR RETARDER IN A SHOWER OR TUB COMPARTMENT. CUT OR EXPO EDGES, INCLUDING THOSE AT WALL INTERSECTIONS, SHALL BE SEALED AS RECOMMENDED BY THE MANUFACTURER.
- MATER RESISTANT GYPSUM BACKING BOARD SHALL NOT BE USED MHERE THERE MILL BE DIRECT EXPOSURE TO MATER, OR IN AREAS SUBJECT TO CONTINUOUS HIGH HUMIDITY.
- WHEN APPLYING A MATER-BASED TEXTURE MATERIAL, THE MINIMM GYPSUM BOARD THICKNESS SHALL BE INCREASED FROM 3/6 INCH TO 1/2 INCH FOR I6-INCH ON CENTER FRAMING, AND FROM 1/2 INCH TO 5/6 INCH FOR 24-INCH ON CENTER FRAMING OR 1/2 INCH SAG-RESISTANT GYPSUM CEILING BOARD SHALL BE USED.

EXTERIOR LATH

- ALL LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-
- BACKING OR A LATH SHALL PROVIDE SUFFICIENT RIGIDITY TO PERMIT PLASTER APPLICATION.
- WHERE LATH ON VERTICAL SURFACES EXTENDS BETWEEN RAFTERS OR OTHER SIMILAR PROJECTING MEMBERS, SOLID BACKING SHALL BE INSTALLED TO PROVIDE SUPPORT FOR LATH AND ATTACHMENTS.
- GYPSUM LATH OR GYPSUM BOARD SHALL NOT BE USED, EXCEPT THAT ON HORIZONTAL SUPPORTS OF CEILINGS OR ROOF SOFFITS IT MAY BE USED AS BACKING FOR METAL LATH OR WIRE FABRIC LATH AND CEMENT PLASTER.
- UNLESS SPECIFIED OTHERWISE, ALL MALL COVERINGS SHALL BE SECURELY FASTENED PER THE N.C.-R. OR WITH OTHER APPROVED ALLMINUM, STAINLESS STEEL, ZINC-COATED OR OTHER APPROVED CORROSION-RESISTIVE FASTENERS, MEIRE THE BASIC NIND SPEED IS 110 MILES PER HOUR OR HIGHER, THE ATTACHMENT OF MALL COVERINGS SHALL BE DESIGNED TO RESIST THE COMPONENT AND CLADDING LOADS SPECIFIED AND ADJUSTED FOR HEIGHT AND EXPOSURE
- A MINIMO O. 014-INCH (NO. 26 GALVANIZED SHEET GAGE),
 CORROSION-REDISTANT WEEP SCREED OR PLASTIC NEEP SCREED, WITH A
 MINIMAM VERTICAL ATTACHMENT FLANGE OF 91/2 INCHES SHALL BE
 PROVIDED AT OR BELION THE FOUNDATION FLATE LINE ON EXTERIOR STUD
 WALLS IN ACCORDANCE WITH ASTIN C 926. THE NEEP SCREED SHALL BE
 PLACED A MINIMUM OF 4 INCHES ABOVE THE BARTH OR 2 INCHES ABOVE
 PAVED AREAS AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED
 WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE
 WEATHER-RESISTANT BARRIER SHALL LAP THE ATTACHMENT FLANGE. THE
 EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE
 OF THE WEEP SCREED.

EXTERIOR PLASTER

PLASTERING WITH PORTLAND CEMENT PLASTER SHALL BE NOT LESS THAN PLASTERING WITH PORTLAND CEMENT PLASTER SHALL BE NOT LESS THAN INTREE COATS WHEN APPLIED OVER METAL LATH OR WIRE LATH AND SHALL BE NOT LESS THAN TWO COATS WHEN APPLIED OVER MASONRY, CONCRETE, PRESSURE-RRESERVATIVE TREATED WOOD OR DECAY-RESISTANT WOOD OR SYFSMY BACKING. IF THE PLASTER SUPPACE IS COMPLETELY COVERED BY VENEER OR OTHER FACING MATERIAL OR IS COMPLETELY CONCEALED. PLASTER APPLICATION NEED BE ONLY TWO COATS, PROVIDED THE TOTAL THICKNESS IS AS SET FORTH PER THE N.C.-R

ON WOOD-FRAME CONSTRUCTION WITH AN ON-GRADE FLOOR SLAB SYSTEM, EXTERIOR PLASTER SHALL BE APPLIED TO COVER, BUT NOT EXTEND BELOW LATH, PAPER AND SCREED.

THE PROPORTION OF AGGREGATE TO FIDER CEMENT MATERIALS SHALL BE AS SET FORTH PER THE N.C.-R

- ONLY APPROVED PLASTICITY AGENTS AND APPROVE AMOUNTS THEREOF MAY BE ADDED TO PORTLAND CEMENT. WHEN PLASTIC CEMENT IS USED, NO ADDITIONAL LIME OR PLASTICIZERS SHALL BE ADDED. HYDRATED LIME OR THE EQUIVALENT AMOUNT OF LIME PUTTY USED AS A PLASTICIZER MAY BE ADDED TO CEMENT PLASTER OR CEMENT AND LIME PLASTER IN AN AMOUNT NOT TO EXCEED THAT
- GYPSUM PLASTER SHALL NOT BE USED ON EXTERIOR SURFACES.
- PLASTER COATS SHALL BE PROTECTED FROM FREEZING FOR A PERIOD OF NOT LESS THAN 24 HOURS AFTER SET HAS OCCURRED. PLASTER SHALL BE APPLIED MIEN THE AMBIENT TEMPERATURE IS HIGHER THAN 40 DEGREES of (4 DEGREES O,) UNLESS PROVISIONS ARE MADE TO KEEP CEMENT PLASTER WORK ABOVE 40 DEGREES (4 DEGREES O,) PRIOR TO & DURING APPLICATION AND 48 HOURS THEREAFTER.
- COLOR AND FINISH TO BE SELECTED AND APPROVED BY OWNER BUILDER AND ARCHITECT. A I-COAT EXTERIOR PLASTER SYSTEM SICH AS "MAGNA WALL
- A I-CUAT EXTERIOR PLASTER STSTEM SUCH AS MAGNA MALL I.C.C. NO. ER-4TT6, "EXPO FIBREMALL" I.C.C. NO. ER-4366, OR APPROVED EQUAL MAY BE USED IN LIEU OF A 3-COAT EXTERIOR



.

NORTH CAROLINA 50' SERIES

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2018 NORTH **CAROLINA STATE BUILDING** CODES

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MECHANICAL & PLUMBING

- ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ALL MATERIALS AND CONSTITUCTION FOR THE PART BE IN CONTORNANCE 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 64S 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 DIVELLING 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 (18 C) OR UP TO 85 DEG. F (29 C).
- ALL DUCTWORK SHALL CONFORM TO THE REQUIREMENTS OF THE
- 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 BI CONSTRUCTED OF A MINIMUM NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL HAVE NO OPENINGS INTO THE
- 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.
- IO. UNDER-FLOOR INSTALLATION. SUSPENDED EQUIPMENT SHALL BE A MINIMUM OF 6 INCHES ABOVE THE ADJOINING GRADE.
- CRANL SPACE SUPPORTS. IN A CRANL SPACE, A MINIMUM OF 2-INCH THICK SOLID BASE, 2-INCH (5) MM) THICK FORMED CONCRETE, OR STACKED MASONRY UNITS HELD IN PLACE BY MORTAR OR OTHER APPROVED METHOD. THE IMATER 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 SUMP PUMP. FOR PIT REQUIREMENTS REFER TO N.C.-M

- IN LIEU OF REQUIRED EXTERIOR OPENINGS FOR NATURAL VENTILATION THEREOF, A MECHANICAL VENTILATION SYSTEM MAY BE PROVIDED. THE MINIMAM VENTILATION RATES SHALL BE SO CFM FOR INTERMITTENT VENTILATION OR 20 CFM FOR CONTINUOUS VENTILATION. VENTILATION AR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTSIDE
- AUST DUCTS SHALL TERMINATE OUTSIDE THE BUILDING AND SHALL 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 IGHT, SHALL BE EQUIPPED HITH 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 THINSTALLATION COMPLIES WITH ALL OF THE FOLLOWING 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 I INCH ABOVE THE INDOOR CONCRETE FLOOR SURFACE.
- THE PVC DUCT SHALL EXTEND NOT GREATER THAN I INCH ABOVE GRADE OUTSIDE THE BUILDING.
- E. THE PVC DUCTS SHALL BE SOLVENT CEMENTED.
- EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CPM SHALL BE PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATE, EQUAL TO THE EXHAUST AIR RATE HAT IS IN EXCESS OF 400 CUBIC FEPER MINUTE, SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPMED WITH EMANS 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 B' VENT AND COMPLY WITH THE REQUIREMENTS OF THE NC.-M

- A POTABLE WATER SUPPLY SYSTEM SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN SUCH A MANNER SO AS TO PREVENT CONTAINIATION FROM NONPOTABLE LIGIDIDS, SOLIDS OR 6ASES BEING INTRODUCED INTO THE POTABLE WATER SUPPLY THROUGH CROSS-CONBECTIONS OR ANY OTHER PIPING CONNECTIONS TO THE SYSTEM, BACKFLOW PRE- VENTER APPLICATIONS SHALL CONFORM TO NOLES.
- 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 AII 2.18.1.

MECHANICAL & PLUMBING (continued)

- ALL DEVICES, APPLITENANCES, APPLIANCES AND APPARATUS INTENDED TO SERVE SOME SPECIAL FUNCTION, SUCH AS STERILIZATION, DISTILLATION, PROCESSINS, COOLINS, OR STORAGE OF ICE OR FOODS, AND THAT CONNECT TO THE WATER SUPPLY SYSTEM, SHALL BE PROVIDED WITH PROTECTION AGAINST BACKELON AND CONTAMINATION OF THE MATER SUPPLY SYSTEM. WATER PUMPS, FILTERS, SOFTENERS, TANKS AND ALL OTHER APPLIANCES AND DEVICES THAT HANDLE OR TREAT POTABLE WATER SHALL BE PROTECTED AGAINST CONTAMINATION.
- WATER SERVICE PIPING SHALL BE PROTECTED IN ACCORDANCE WITH N.C.-P SECTIONS AND EXCEPTIONS)
- FIXTURE FITTINGS, FAUCETS AND DIVERTERS SHALL BE CONNECTED TO THE MATER 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 AII2.18.1 IN ADDITION TO THE REQUIREMENTS IN N.C.-P
- THE INSTALLATION OF A WATER SERVICE OR WATER DISTRIBUTION PIPE 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 ACERTAIN THE ACCEPTAIN THE WATER SERVICE OR WATER DISTRIBUTION PIPING MATERIAL FOR THE SPECIFIC INSTALLATION, WHERE DETRIMENTAL CONDITIONS EXIST, APPROVED ALTERNATIVE MATERIALS OR ROUTING SHALL BE REQUIRED.
- WATER DISTRIBUTION PIPE SHALL CONFORM TO NSF 61 AND SHALL CONFORM TO ONE OF THE STANDARDS LISTED IN N.C.-PLUMBING. WATER DISTRIBUTION PIPE AND TUBING SHALL HAVE A MINIMM PRESSURE RATING OF 100 PSI AT 180 DESPREES F.
- PIPE PASSING THROUGH CONCRETE OR CINDER WALLS AND FLOORS OR OTHER CORROSIVE MATERIAL SHALL BE PROTECTED AGAINS EXTERNAL CORROSION BY A PROTECTIVE SHEATHING OR WRAPPING OR OTHER MEANS THAT WILL WITHSTAND ANY REACTION FROM THE LIME 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.
- WATER 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 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-55 INSULATION DETERMINED AT 75 DEG. F IN ACCORDANCE WITH ASTM CITT OR HEAT OR BOTH.

 EXTERIOR WATER SUPPLY SYSTEM PIPING SHALL BE INSTALLED NOT LESS THAN 12 INCHES BELOW THE FROST LINE AND NOT LESS THAN 12 INCHES BELOW GRADE.
- BUILDING SEWER PIPE SHALL CONFORM TO ONE OF THE STANDARDS
- BUILDING SEMER PIPE FITTINGS SHALL BE APPROVED FOR INSTALLATION MITH THE PIPING MATERIAL INSTALLED AND SHALL CONFORM TO THE RESPECTIVE PIPE STANDARDS OR ONE OF THE STANDARDS LISTED IN
- WHERE WASTE LINE DROPS OCCUR IN A LOCATION WHERE THE SOUND OF 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.
- 16. CLEANOUTS ON BUILDING SEWERS SHALL BE LOCATED AS SET FORTH IN
- THE MAXIMUM WATER CONSUMPTION FLOW RATES AND QUANTITIES FOR ALL PLUMBING FIXTURES SHALL BE IN ACCORDANCE WITH N.C.-R.
- GAS AND ELECTRIC WATER HEATERS HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN IS INCHES ABOVE THE GARAGE FLOOR. REPER TO N.C.-R FOR EXCEPTION.
- 20. WATER HEATERS, (USING SOLID, LIQUID OR GAS FUEL) WITH THE EXCEPTION WATER HEATERS, (USING SOLID, LIQUID OR ASS 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, HONEVER, 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, DI AND D2 AND TOWNHOUSES IN SEISMI DESIGN CATEGORY C, WATER HEATERS SHALL BE ANCHORED OR STRAPPEL IN THE UPPER ONE—THIRD AND IN THE LOWIER ONE—THIRD OF THE APPLIANCE TO RESIST A HORIZONTAL FORCE EQUAL TO ONE—THIRD OF THE OPERATING WEIGHT OF THE MATER HEATER, ACTING IN ANY HORIZONTAL DIRECTION, OR IN ACCORDANCE WITH THE APPLIANCE MANUFACTURER'S RECOMMENDATIONS
- 22. APPLIANCES LOCATED IN A GARAGE OR CARPORT SHALL BE PRO-TECTED FROM IMPACT BY A MOVING VEHICLE.
- 23. WHERE WATER HEATERS OR HOT WATER STORAGE TANKS ARE INSTALLED IN. MERCE VALEN FRAILES ON TO MAILED IN:
 REMOTE LOCATIONS SUCH AS SUSPENDED CEILING, ATTICS, ABOVE OCCUPIED
 SPACES, OR UNVENTILATED CRANL 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 WOULD CAUSE DAMAGE, A GALVANIZED STEEL PAN HAVING A MINIMAN THICKNESS OF 24 GAGE, OR OTHER PANS APPROVED FOR SUCH USE SHALL BE PROVIDED.

MECHANICAL \$ PLUMBING (continued)

- 25. 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 PRESGURE-AND-TEMPERATURE RELIEF VALVE. RELIEF VALVES SHALL HA MINIMUM RATED CAPACITY FOR THE EQUIPMENT SERVED AND SHALL CONFORM TO ANSI 22122. 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 AII2.1.9 OR AII2.1.2 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 MITHOUT A FOOD-MASTE DISPOSER, SHALL BE SERVED BY A TRAP OF NOT LESS THAN II/2 INCHES (36 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 MYE FITTING IN THE SINK TAILPIECE.

- FACTORY-BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF LISTING. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH JL. 127.
- 2. 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.
- ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE RECEPTACLES INSTALLED IN THE LOCATIONS SPECIFIED BELOW SHALL HAVE GROUND-FAULT CIRCUIT-INTERRIPTER PROTECTION FOR PERSONNEL. THE GROUND-FAULT CIRCUIT-INTERRIPTER SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
 - A. 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.

 - 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.
- 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 YOLTS INSTALLED IN CRAWL SPACES.
- APPLIANCE RECEPTAGLE 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 DIMELLING 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 CUTLET IN THAT SPACE, INCLIDING ANY HORIZONTALLY, FROM AN OUTLET IN THAT SPACE, INCLIDING ANY WALL SPACE 2 FIET OR MORE IN MIDTH (INCLIDING SPACE MEASURED AROUND CORNERS). AND UNBROKEN ALONG THE FLOOR RINE BY DOORWAYS AND SIMILAR OPENINGS, FIREPLACES, AND THE WALL SPACE OCCUPIED BY FIXED PAVELS IN EXTERIOR WALLS, BUT EXCLIDING SALIDING PANELS IN EXTERIOR WALLS, BUT EXCLIDING SALIDING PANELS IN EXTERIOR WALLS. BY EXCLIDING SALIDING PANELS IN EXTERIOR WALLS. THE WALL SPACE AFFORDED BY FIXED ROOM DIVIDERS, SICH AS FREESTANDING BAR-TYPE CONTERS OR RAILINGS, SHALL BE INCLIDED IN THE 6 FOOT MEASUREMENT.
- IN THE KITCHEN PANTRY BREAKFAST ROOM DINING ROOM OR SIMILAR AREA OF A DIRELLING UNIT, THE TWO OR MORE 20-AMPERE SMALL-APPLIANCE BRANCH CIRCUITS REQUIRED SHALL SERVE ALL MALL AND FLOOR RECEPTACLE OUTLETS, ALL COUNTERTOP OUTLETS, AND MORE SMALL-APPLIANCE BRANCH CIRCUITS SHALL HAVE NO OTHER OUTLETS.
- IN KITCHENS, PANTRIES, BREAKFAST ROOMS, DINING ROOMS AND SIMILAR AREAS OF DIRELLING 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 IZ INCHES OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE MALL LINE IS MORE THAN 24 INCHES MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.

ELECTRICAL (continued)

- (2) AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTER SPACE NITH 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 PERFENDICULAR WALL.
- COUNTERTOP SPACES SEPARATED BY RANGE TOPS, REFRIGER-ATORS, OR SINKS SHALL BE CONSIDERED AS SEPARATE COUNTER-TOP SPACES IN APPLYING THE REQUIREMENTS OF (I), (2), AND (3) ABOVE. IF A RANGE, COUNTER-MOUNTED COOKING UNIT, OR SINK ABOVE. IF A RANSE, CONTINUED ACCORNING UNIT, OR SINK IS INSTALLED IN AN ISLAND OR PENINSULAR CONTINERTOP AND THE DEPTH OF THE COUNTER BEHIND THE ITEM IS LESS THEN IS INCHES. IT WILL BE CONTERED SPACE INCHES. THE COUNTERTOP SPACE INCHES. THE COUNTERTOP SPACE INCHES. SHALL COMPLY WITH A PELICABLE REQUIREMENTS.
- RECEPTACLE OUTLETS SHALL BE LOCATED NOT MORE THAN 20 INCHES ABOVE THE COUNTEROP. 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 OF FACE OF THE BASIN CABINET NOT MORE
- IN DWELLING UNITS, AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN AREAS DESIGNATED FOR THE INSTALLATION OF LAUNDRY EQUIPMENT.
- IN EACH ATTACHED SARAGE AND IN EACH DETACHED SARAGE WITH ELECTRIC POWER, THE BRANCH CIRCUIT SUPPLYTHIS THIS RECEPTACLE(S) SHALL NOT SUPPLY OUTLETS CUTSIDE OF THE SARAGE. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN EACH VEHICLE BAY.
- 15. RECEPTACLES IN DAMP OR MET LOCATIONS.
- A. A RECEPTAGLE INSTALLED OUTDOORS IN A LOCATION PROTECTED PROM NEATHER OR IN OTHER DAMP LOCATIONS SHALL HAVE AN ENCLOSURE FOR THE RECEPTACLE THAT IS MEATHERROOF MENTHE RECEPTACLE IS COVERED, (AITACHMENT PLUE CAP NOT INSERTED AND RECEPTACLE COVERS CLOSED.)
- ALL IS- AND 20- AMPERE, I25- AND 250-VOLT RECEPTACLES INSTALLED IN A WET LOCATION SHALL HAVE AN ENCLOSURE THAT IS MEATHER PROOF WHETHER OR NOT THE ATTACHMENT PLUG CAP IS MERETRED. AN OUTLET BOX HOOD INSTALLED FOR THIS PURPOSE SHALL BE LISTED AND SHALL BE IDENTIFIED AS "EXTRA DUTY". ALL IS- AND 20- AMPERE, I25- AND 250-VOLT NONLOCKING RECEPTACLES SHALL BE LISTED WEATHER RESISTANT TYPE.
- LIGHT FIXTURES WITHIN CLOTHES CLOSETS SHALL BE INSTALLED IN
- ALL 120-VOLT, SINGLE PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS ALL 120-VOLT, SINGLE PHASE, IS- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DIRELLING WITH FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS SHALL BE FROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTERS) 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.
- 20. TAMPER-RESISTANT RECEPTACLES IN DWELLING UNITS IN ALL AREAS, ALL NON-LOCKING TYPE I25-VOLT I5-AND 20-AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. EXCEPTIONS LISTED BELOW:
 - I. RECEPTACLES LOCATED MORE THAN 51 ABOVE THE FLOOR
 - 2. RECEPTACLES THAT ARE PART OF A LUMINAIRE OR APPLIANCE. 3. 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-PLUS CONNECTED.
 - 4. NON-GROUNDING RECEPTACLES USED FOR REPLACEMENTS.
- DIMMER-CONTROLLED RECEPTACLES. A RECEPTACLE SUPPLYING LIGHTING LOADS SHALL NOT BE CONNECTED TO A DIMMER UNLESS THE PLUS/RECEPTACLE COMPINATION IS A NONSTANDARD CONFEINATION TYPE THAT IS SPECIFICALLY LISTED AND IDENTIFIED FOR EACH SUCH

SMOKE DETECTORS

- SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S INSTRUCTIONS AND NC-R R314
- 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 WARRING EQUIPMENT PROVISIONS OF NPPA 12.

HOUSEHOLD FIRE ALARM SYSTEMS INSTALLED IN ACCORDANCE WITH NPPA 12 THAT INCLUDE SMOKE ALARMS, OR A COMBINATION OF SMOKE DETECTOR AND AUDIEL NOTIFICATION DEVICE INSTALLED AS REQUIRED BY THE INC-R RSI43 FOR SMOKE ALARMS, SHALL BE PERMITTED. THE HOUSEHOLD FIRE ALARM SYSTEM SHALL PROVIDE THE SAME LEVEL OF SMOKE DETECTION AND ALARM AS REQUIRED BY THE INC-R 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 MITH THE NC-R R3143

ELECTRICAL (continued)

CARBON MONOXIDE ALARMS

- CARBON MONOXIDE ALARMS IN DMELLING UNITS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE INMEDIATE VICINITY OF THE BEDROOMS, WHERE A FUEL-BURNING APPLIANCE IS LOCATED MITHIN A BEDROOM OR ITS ATTACHED BATHROOM, A CARBON MONOXIDE ALARM SHALL BE INSTALLED
- SINGLE STATION CARBON MONOXIDE ALARMS SHALL BE LISTED AS COMPLYING WITH UL 2034 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE NC-R 9315 AND THE MANUFACTURER'S NSTALLATION INSTRUCTIONS.
- COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF INDIVIDUAL CARBON MONOXIDE OR SMOKE ALARMS.

DRYER VENT

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NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD. SUITE 180 DURHAM, NC 27703 TEL: (919) 768-7988 FAX: (919) 472-0582

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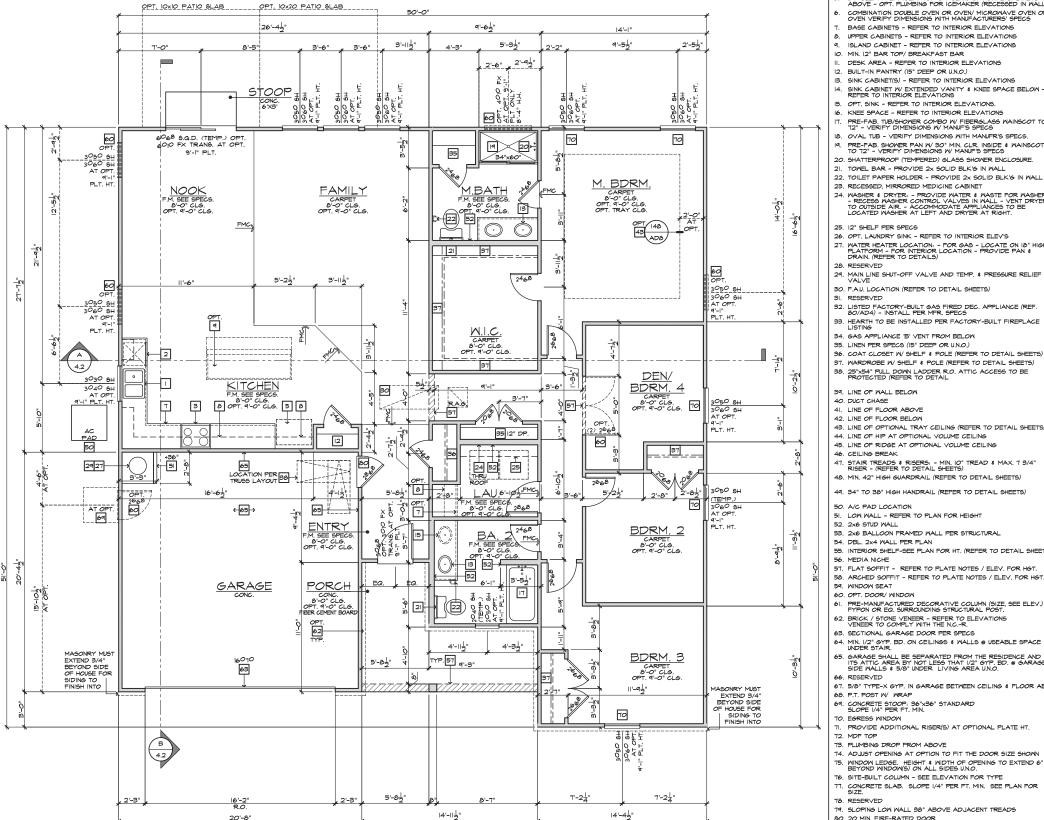
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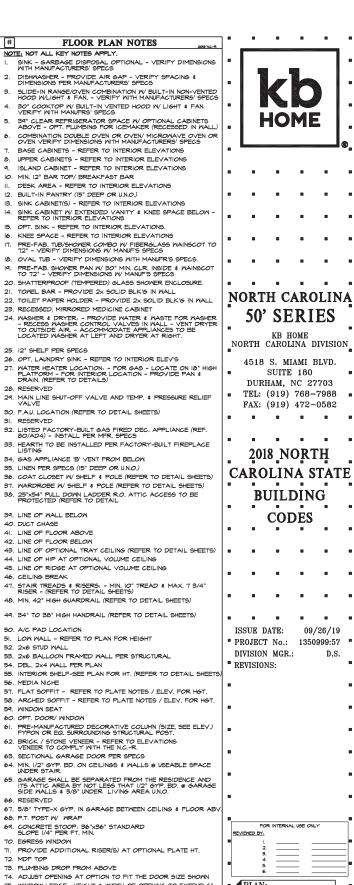
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50'-0"



NORTH CAROLINA DIVISION

27. WATER HEATER LOCATION: - FOR GAS - LOCATE ON 16" HIGH PLATFORM - FOR INTERIOR LOCATION - PROVIDE PAN & DRAIN, (REFER TO DETAILS)

29. MAIN LINE SHUT-OFF VALVE AND TEMP. & PRESSURE RELIEF VALVE

30. F.A.U. LOCATION (REFER TO DETAIL SHEETS)

FLOOR PLAN NOTES

DISHMASHER - PROVIDE AIR GAP - VERIFY SPACING & DIMENSIONS PER MANUFACTURERS' SPECS

30" COOKTOP W BUILT-IN VENTED HOOD W LIGHT & FAN VERIFY WITH MANUFRS' SPECS

34" CLEAR REFRIGERATOR SPACE W OPTIONAL CABINETS ABOVE - OPT. PLUMBING FOR ICEMAKER (RECESSED IN WAL

BASE CABINETS - REFER TO INTERIOR ELEVATIONS

UPPER CABINETS - REFER TO INTERIOR ELEVATIONS

ISLAND CABINET - REFER TO INTERIOR ELEVATIONS

SINK CABINET(S) - REFER TO INTERIOR ELEVATIONS

DESK AREA - REFER TO INTERIOR ELEVATIONS

KNEE SPACE - REFER TO INTERIOR ELEVATIONS

PRE-FAB. TUB/SHOWER COMBO W/ FIBERGLASS WAINSCOT 72" - VERIFY DIMENSIONS W/ MANUF'S SPECS

NOTE: NOT ALL KEY NOTES APPLY.

3I. RESERVED

32. LISTED FACTORY-BUILT GAS FIRED DEC. 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 DETAIL SHEETS) 37. WARDROBE W/ SHELF & POLE (REFER TO DETAIL SHEETS) 38. 25"x54" PULL DOWN LADDER R.O. ATTIC ACCESS TO BE PROTECTED (REFER TO DETAIL

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 SHEETS)

44. LINE OF HIP AT OPTIONAL VOLUME CEILING 45. LINE OF RIDGE AT OPTIONAL VOLUME CEILING

46. CEILING BREAK

47. STAIR TREADS & RISERS: - MIN. IO" TREAD & MAX. 7 3/4" RISER - (REFER TO DETAIL SHEETS)

48. MIN. 42" HIGH GUARDRAIL (REFER TO DETAIL SHEETS)

49 34" TO 38" HIGH HANDRAIL (REEER TO DETAIL SHEETS)

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. (REFER TO DETAIL SHEETS

56. MEDIA NICHE 57. FLAT SOFFIT - REFER TO PLATE NOTES / ELEV. FOR HGT.

58. ARCHED SOFFIT - REFER TO PLATE NOTES / 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. I/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 THAT 1/2" GYP, BD, @ GARAGE SIDE WALLS & 5/8" INDER LIVING AREA UN.O. 66. RESERVED

67. 5/8" TYPE-X GYP. IN GARAGE BETWEEN CEILING & FLOOR AB 68. P.T. POST W WRAP

69. CONCRETE STOOP: 36"x36" STANDARD SLOPE I/4" PER FT. MIN.

PROVIDE ADDITIONAL RISER(S) AT OPTIONAL PLATE HT.

73. PLUMBING DROP FROM ABOVE 14. 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
17. CONCRETE SLAB. SLOPE I/4" PER FT. MIN. SEE PLAN FOR SIZE.

78. RESERVED

79. SLOPING LOW WALL 38" ABOVE ADJACENT TREADS

80. 20 MIN. FIRE-RATED DOOR

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

150.1910

1.1

FLOOR PLAN 'A' SCALE I/4"=1'-0" (22"X34") - I/6"=1'-0" (II"XI7")

20'-8"

INTERIOR KEY

SOUARE FOOTAGE

PLAN 150,1910

1910 SQ. FT

50. FT. 50. FT. 50. FT. 50. FT.

SQ. FT

5Q. FT. 5Q. FT. 5Q. FT.

288 144

288

6'-8" U.N.O. 6'-8" (TEMP.) 7'-4" U.N.O. 1" RISE INTO TRUSS U.N.O. 6'-8" U.N.O.

FIRST FLOOR AREA

TOTAL AREA

ELEVATION 'A'

FI EVATION 'B

ELEVATION 'C ELEVATION 'D

COVERED PATIO

EXTENDED COVERED PATIO

SCREENED-IN DECK EXTENDED SCREENED-IN DECK

MINDOM HEADER HEIGHT:
2nd FLOOR MINDOM HDR. HEIGHT:
ENTRY DOOR HEIGHT:
SLIDING 6L ASS DOOR HEIGHT:
TRAY CELLING
THERICR SOFFIT HEIGHT:
TRAY CELLING
WITERIOR DOOR HEIGHT:
FA SE SE STATE OF THE HEIGHT:
TRAY CELLING
WITERIOR DOOR HEIGHT:

1 - 4 UNO.

EXTENDED OPEN DECK

EXTENDED SCREENED-IN COV. PATIO

PLATE NOTES

8'-I" PLATE NOTES

9'-I" PLATE NOTES

MINDON HEADER HEIGHT 1st FL.:
MINDON HEADER HEIGHT 1st FL.:
MINDON HEADER HEIGHT 2nd FL.
AOID MINDON OVER TUB HDR HGT.
ENTRY DOOR HEIGHT:
SILDING 6LASS DOOR HEIGHT:
INTERIOR SOFFIT HEIGHT:
TRAY CEILING:
INTERIOR DOOR HEIGHT:

GENERAL PLAN NOTES

ALL CEILING HEIGHTS PER SECTION AND ELEVATION PLATHEIGHTS, U.N.O.

ALL INTERIOR DOORS TO BE HOLLOW CORE | 3/6" THICK, UNO (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 | 3/4" THICK (REFER TO PLAN FOR SIZE).

STAIR DATA NOTES FIRST FLOOR WITH \$1° PLATE HEIGHT:
14" DEEP T.J.I. FLOOR JOISTS WITH 3/4" T&G DECKING.
14 TREADS AT 10" EACH
15 RISERS AT 1-71/6" EACH

ALL FLOOR MATERIAL CHANGES TO OCCUR AT CENTER OF DOOR JAMBS, U.N.O.

FIRST FLOOR WITH 94" PLATE HEIGHT:

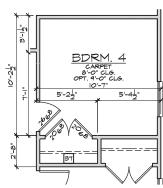
14" DEEP T.II. FLOOR JOISTS WITH 3/4" T&G DECKING.

IS TREADS AT IO" EACH IG RISERS AT 7-3/4" EACH

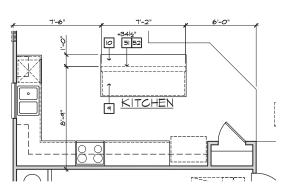
ALL GARAGE SERVICE DOORS TO BE HOLLOW CORE EXTERIOR GRADE (REFER TO PLAN FOR SIZE).

PORCH AREA(S)

OPTIONS: PATIO AREA(S)



Bdrm. 4

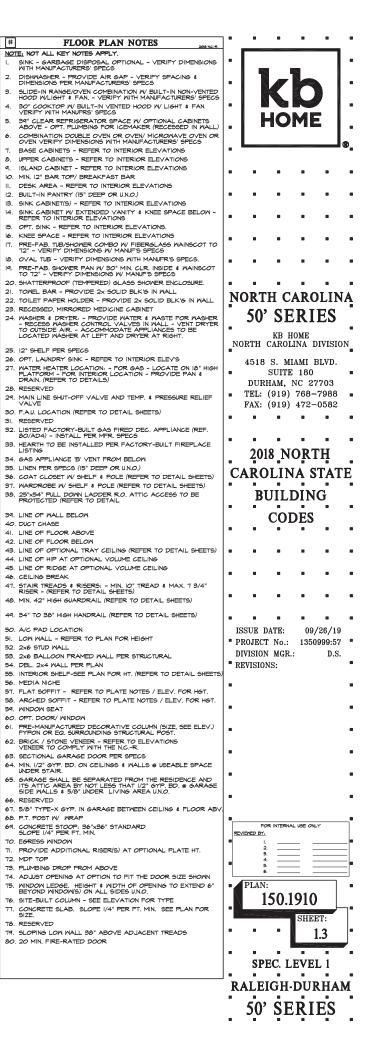


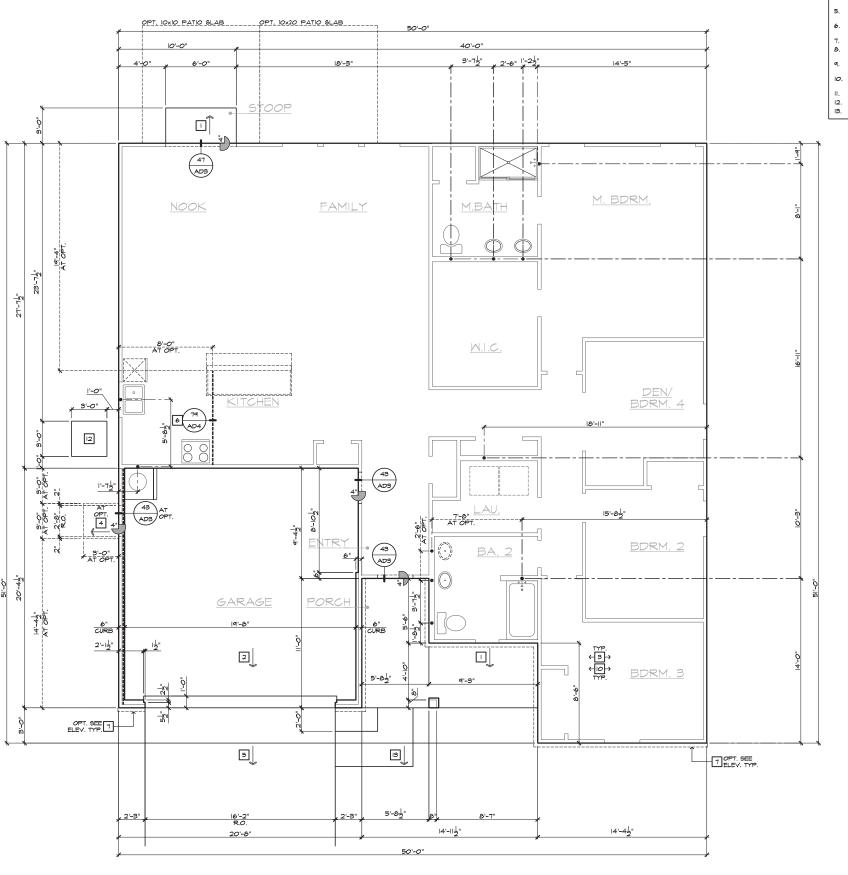
Island

AT KITCHEN

FLOOR PLAN OPTIONS

SCALE: |/4"=|'-0" (22"x34") - |/8"=|'-0" (||"x|7")





SLAB PLAN
NOTE: NOT ALL KEY NOTES APPLY. SLAB PLAN NOTES

CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE I/4" PER FT. MIN.

CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE 1/8" PER. 1'-0" MIN. TOWARD DOOR OPENING.

CONCRETE FOUNDATION PER STRUCTURAL.
CONCRETE 5TOOP; 36"x36" STANDARD
SLOPE 1/4" PER FT. MIN.

CONCRETE DRIVEWAY SLOPE 1/4" PER FT. MIN. AWAY FROM GARAGE DOOR OPENING. PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND. VERIFY LOCATION.

VERIFY LOCATION.

5" BRICK LEDGE FOR MASONRY VENEER.

5" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 12" EMBEDMENT INTO CONCRETE.

REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.

IO. VERIFY ALL PLUMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB.

11. 4° MIN. 8 I/4° MAX. TO HARD SURFACE.
12. A/C PAD. VERIFY LOCATION.
13. 96° MIDE WALKWAY- SLOPE I/4° PER FT. MIN.

HOME

NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4506 S. MIAMI BLVD. SUITE 100 DURHAM, NC 27703 ■ TEL: (919) 768-7980 ■

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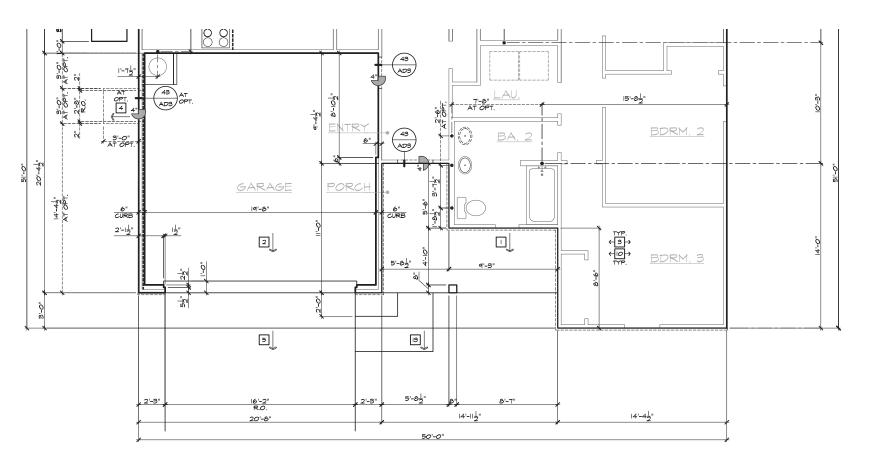
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PARTIAL SLAB INTERFACE PLAN 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

BASIC PLAN AT SLAB-ON-GRADE

SLAB PLAN NOTE: NOT ALL KEY NOTES APPLY. SLAB PLAN NOTES

- CONCRETE PATIO/PORCH SLAB PER STRUCTURAL- SLOPE I/4" PER FT. MIN.
- CONCRETE GARAGE SLAB PER STRUCTURAL- SLOPE 1/8" PER. 1'-0" MIN. TOMARD DOOR OPENING.
- CONCRETE FOUNDATION PER STRUCTURAL.
 CONCRETE STOOP: 36"x36" STANDARD
 SLOPE I/4" PER FT. MIN.
- CONCRETE DRIVEWAY SLOPE 1/4" PER FT. MIN. AWAY FROM GARAGE DOOR OPENING.
- HYDM GARAGE DOOR OFENING.

 PROVIDE ELECTRICAL CONDUIT UNDER SLAB AT ISLAND.

 VERIFY LOCATION.

 1. 5" BRICK LEPGE FOR MASONRY VENEER.

 3" DIAMETER CONCRETE FILLED PIPE BOLLARD 36" HIGH MITH MIN. 12" EMBEDMENT INTO CONCRETE.

 4. REFER TO CIVIL DRAWINGS FOR ALL FINISH SURFACE ELEVATIONS.

- IO. VERIFY ALL PLUMBING STUB DIMENSIONS SHOWN HERE PRIOR TO POUR OF SLAB.
- FRIOR 10 FOUR 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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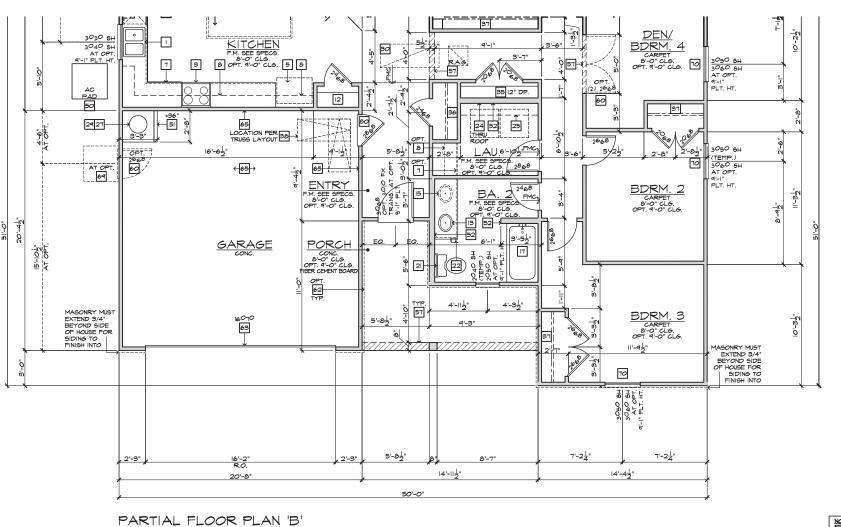
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2.2



SCALE I/4"=1'-0" (22"X34") - I/8"=1'-0" (II"XI7")

PARTIAL PLAN NOTES

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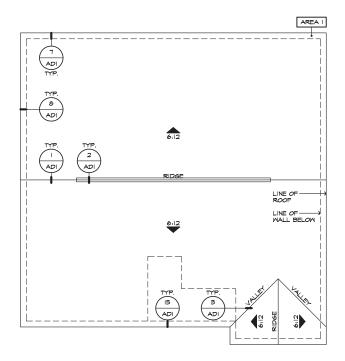
150.1910 SHEET:

3.**B**1

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

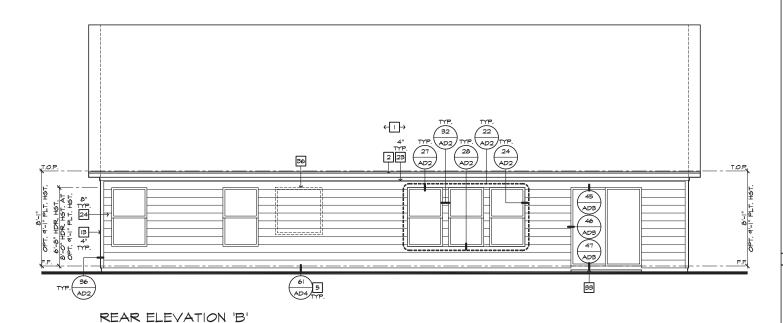
NOTE: REFER TO BASIC FLOOR PLAN FOR INFORMATION NOT SHOWN HERE

BASIC PLAN

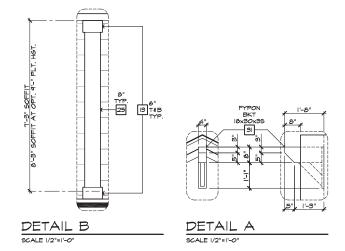


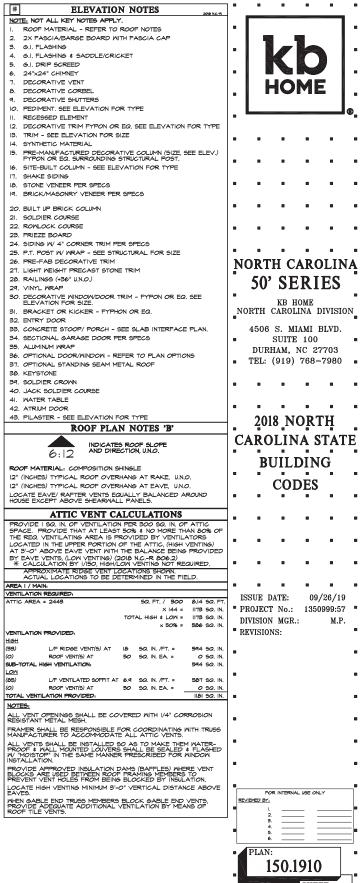
ROOF PLAN 'B'

SCALE I/8"=I'-0" (22"X34") - I/I6"=I'-0" (II"XI7")



SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XIT")





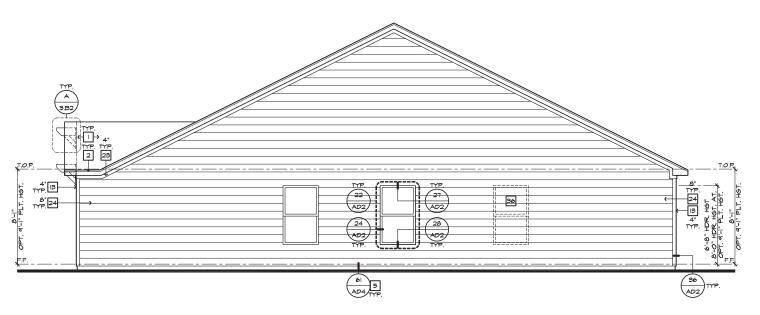
09/26/19

3.**B**2

SPEC. LEVEL 1

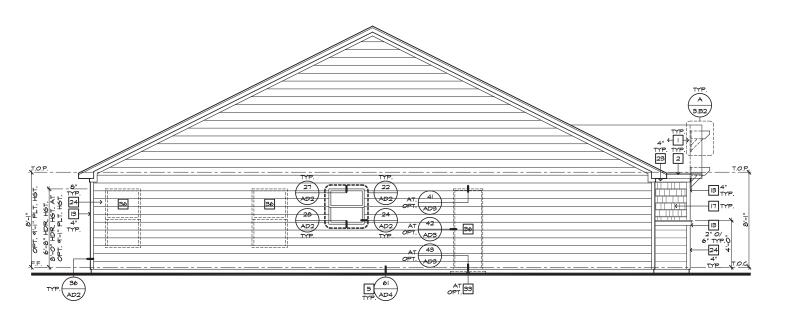
RALEIGH-DURHAM 50' SERIES

M.P.



RIGHT ELEVATION 'B'

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7")



LEFT ELEVATION 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

ELEVATION NOTE: NOT ALL KEY NOTES APPLY. **ELEVATION NOTES** ROOF MATERIAL - REFER TO ROOF NOTES 2. 2X FASCIA/BARGE BOARD WITH FASCIA CAP 3. G.I. FLASHING 4. G.I. FLASHING & SADDLE/CRICKET 5. G.I. DRIP SCREED 6. 24"x24" CHIMNEY DECORATIVE VENT DECORATIVE CORBEL 9. DECORATIVE SHUTTERS 10. PEDIMENT. SEE ELEVATION FOR TYPE II. RECESSED ELEMENT 12. DECORATIVE TRIM FYPON OR EQ. SEE ELEVATION FOR TYPE IS. TRIM - SEE ELEVATION FOR SIZE 14. SYNTHETIC MATERIAL PRE-MANIFACTURED DECORATIVE COLUMN (GIZE, SEE ELEV.) PYPON OR EQ. SURROUNDING STRUCTURAL POST. I6. SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE IT. SHAKE SIDING STANE SIDING STONE VENEER PER SPECS BRICK/MASONRY VENEER PER SPECS 20. BUILT UP BRICK COLUMN 21. SOLDIER COURSE 22. ROWLOCK COURSE 23. FRIEZE BOARD 24. SIDING W 4" CORNER TRIM PER SPECS 25. P.T. POST W WRAP - SEE STRUCTURAL FOR SIZE 26. PRE-FAB DECORATIVE TRIM **NORTH CAROLINA** 27. LIGHT WEIGHT PRECAST STONE TRIM 28. RAILINGS (+36" U.N.O.) 29. VINYL WRAP 30. DECORATIVE WINDOWDOOR TRIM - FYPON OR EQ. SEE ELEVATION FOR SIZE. KB HOME NORTH CAROLINA DIVISION 31. BRACKET OR KICKER - FYPHON OR EQ. 32. ENTRY DOOR 33. CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN. 34. SECTIONAL GARAGE DOOR PER SPECS 35. ALUMINUM MRAP 36. OPTIONAL DOOR/WINDOM - REFER TO PLAN OPTIONS

37. OPTIONAL STANDING SEAM METAL ROOF 38. KEYSTONE

43. PILASTER - SEE ELEVATION FOR TYPE

39. SOLDIER CROWN 40. JACK SOLDIER COURSE 41. WATER TABLE 42. ATRIUM DOOR

2018 NORTH **CAROLINA STATE** BUILDING CODES

50' SERIES

4506 S. MIAMI BLVD. SUITE 100

DURHAM, NC 27703

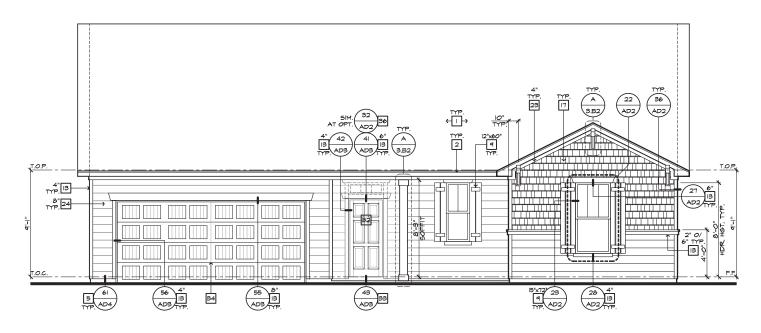
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FRONT ELEVATION 'B' AT OPTIONAL 9'-1" PLT. HGT.

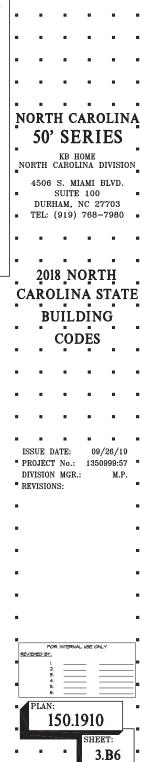
SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

ELEVATION NOTES NOTE: NOT ALL KEY NOTES APPLY. ROOF MATERIAL - REFER TO ROOF NOTES 2. 2X FASCIA/BARGE BOARD WITH FASCIA CAP 3. G.I. FLASHING 4. G.I. FLASHING & SADDLE/CRICKET 5. G.I. DRIP SCREED 6. 24"x24" CHIMNEY 7. DECORATIVE VENT 8. DECORATIVE CORBEL 9. DECORATIVE SHUTTERS 10. PEDIMENT. SEE ELEVATION FOR TYPE II. RECESSED ELEMENT 12. DECORATIVE TRIM FYPON OR EQ. SEE ELEVATION FOR TYPE I3. TRIM - SEE ELEVATION FOR SIZE 14. SYNTHETIC MATERIAL PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYPON OR EQ. SURROUNDING STRUCTURAL POST. 16. SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE IT. SHAKE SIDING 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 W/ 4" CORNER TRIM PER SPECS 25. P.T. POST W WRAP - SEE STRUCTURAL FOR SIZE 26 PRE-FAB DECORATIVE TRIM 27. LIGHT WEIGHT PRECAST STONE TRIM 28. RAILINGS (+36" U.N.O.) 29. VINYL WRAP 30. DECORATIVE WINDOWDOOR TRIM - FYPON OR EQ. SEE ELEVATION FOR SIZE. 31. BRACKET OR KICKER - FYPHON OR EQ. 32. ENTRY DOOR 33. CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN. 34. SECTIONAL GARAGE DOOR PER SPECS 35. ALUMINUM MRAP 36. OPTIONAL DOOR/WINDOM - REFER TO PLAN OPTIONS

37. OPTIONAL STANDING SEAM METAL ROOF

43. PILASTER - SEE ELEVATION FOR TYPE

38. KEYSTONE
39. SOLDIER CROWN
40. JACK SOLDIER COURSE
41. WATER TABLE
42. ATRIUM DOOR



SPEC. LEVEL 1
RALEIGH-DURHAM

50' SERIES

HOME

NOTE: REFER TO BASIC ELEVATIONS FOR INFORMATION NOT SHOWN HERE



NORTH CAROLINA 50' SERIES

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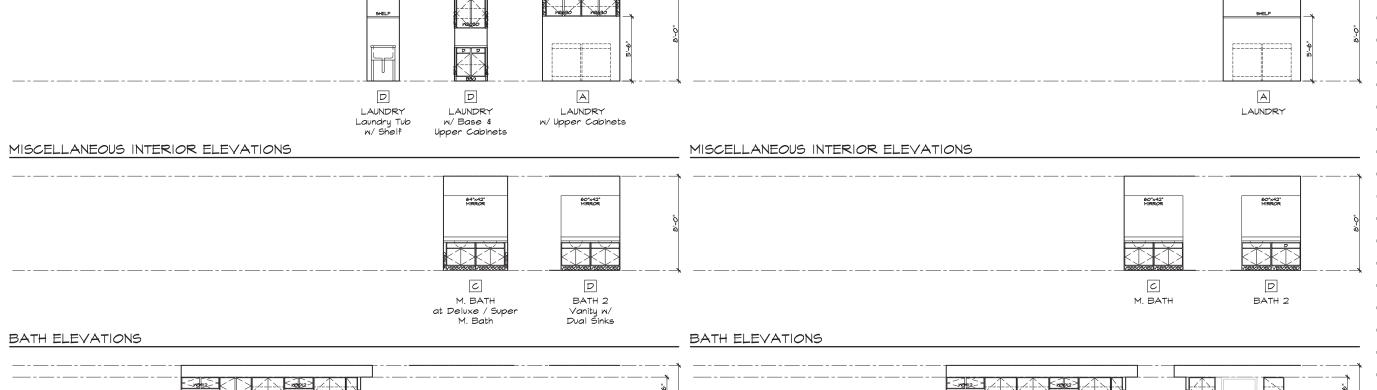
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D

KITCHEN

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES



KITCHEN ELEVATIONS

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7")

STANDARD INTERIOR ELEVATIONS

REFER SPACE

C

KITCHEN

CORBEL-

В

KITCHEN

Island

Α

KITCHEN

Island

REFER SPACE

KITCHEN ELEVATIONS

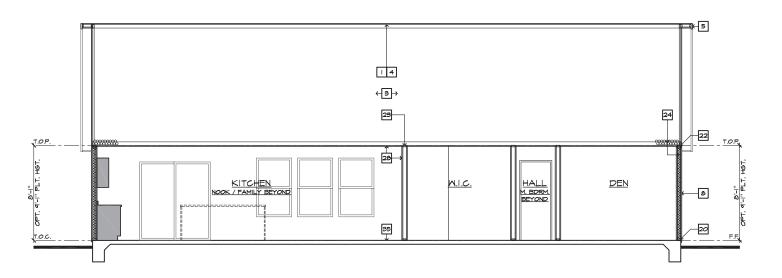
SCALE 1/4"=1'-0" (22"X34") - 1/8"=1'-0" (11"X17")

OPTIONAL INTERIOR ELEVATIONS

C

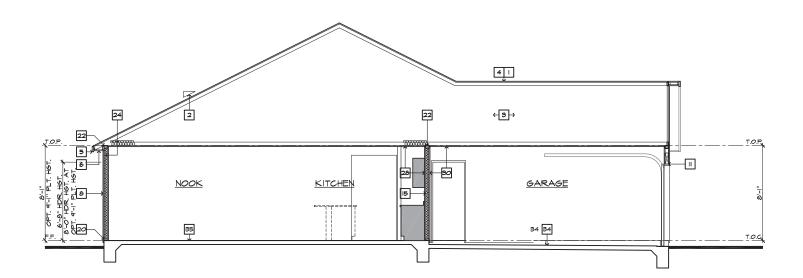
KITCHEN

Gourmet Kitchen



SECTION 'A'

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



SECTION 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

AT SLAB-ON-GRADE

AT SLAB-ON-GRADE

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34. CONCRETE GARAGE SLAB PER STRUCTURAL - SLOPE 2" MIN. 35. CONCRETE FOUNDATION PER STRUCTURAL

SECTION NOTES

PRE-MANUFACTURED WOOD ROOF TRUSS SYSTEM - SEE STRUCTURAL & TRUSS CALCS

NOTE: NOT ALL KEY NOTES APPLY.

 ROOF SHEATHING PER STRUCTURAL
 2x FASCIA/BARGE BOARD CONT. SOFFITED EAVE W VENTING G.I. FLASHING - ROOF TO WALL

EXTERIOR FINISH PER ELEVATIONS
FLOOR FRAMING PER STRUCTURAL IO. FLOOR SHEATHING PER STRUCTURAL

II. HEADER PER STRUCTURAL 12. FLUSH BEAM PER STRUCTURAL
13. DROPPED BEAM PER STRUCTURAL 14. FLAT/ ARCHED SOFFIT PER PLAN 15. 2x4 STUD WALL

IØ. DBL. 2x4 WALL PER PLAN I9. 2x CRIPPLES @ I6" O.C. 20. 2x PRESSURE TREATED SILL PLATE
21. 2x SOLE PLATE

16. 2x6 STUD WALL 17. 2x6 BALLOON FRAMED WALL PER STRUCTURAL

22. DBL. 2x TOP PLATE @ EXTERIOR & BEARING WALLS
23. IX 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
21. STAIR TREADS AND RISERS PER PLAN: - MIN. IO" TREAD

§ MAX. 7 9/4" RISER
29. INTERIOR FINISH: - MIN. I/2" GYP. BD. @ WALLS § SAG
RESISTANT OR 5/6" DRYYMALL @ CELLING
29. MIN. 12" GYP. BD. ON CEILING § WALLS © USEABLE SPACE
UNDER STAIRS.

WIDER STAIRS,

30. GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND
ITS ATTIC AREA BY NOT LESS THAT 1/2" GYP. BD. @ GARAGE
SIDE WALLS & 5/8" WIDER LIVING AREA U.N.O.

51. MATERIAL TO WIDERSIDE OF ROOF SHEATHING

32. INTERIOR SHELF - MIN. I/2" GYP. BD. OVER 3/8" PLY MD.

33. CONCRETE PATIO/ PORCH SLAB PER STRUCTURAL - SLOPE $1/4^{\circ}$ PER FT. MIN.

26. LOW WALL - SEE PLAN FOR HEIGHT

ROOF MATERIAL - REFER TO ROOF NOTES ROOF PITCH - REFER TO ROOF NOTES

36. LINE OF OPTIONAL TRAY CEILING/ STEP CEILING 37. LINE OF OPTIONAL VOLUME CEILING

38. PROFILE OF OPTIONAL COVERED PATIO 34. EXTERIOR SOFFIT MATERIAL - REFER TO ELEVATIONS.

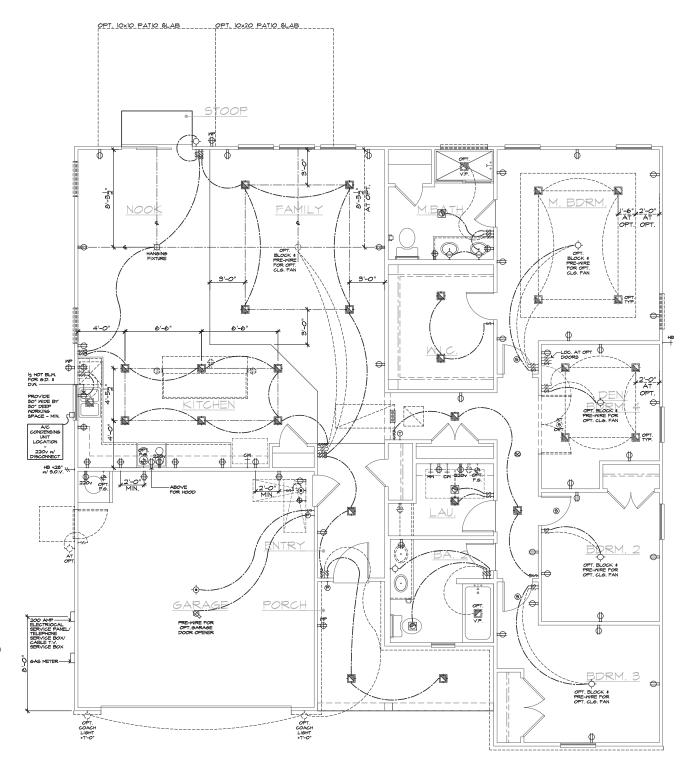
39. EXTERIOR SOFFIT MATERIAL - REFER TO ELEVATIONS.
40. 8° BLOCK MALL
41. 5/8° TYPE-X DRYWALL ® GARAGE
CEILING
42. WHEN THERE IS USABLE SPACE ABOVE AND BELOW THE
CONCEALED SPACE OF A FLOOR-CEILING ASSEMBLY IN A
SINGLE-FAMILY DWELLING, DRAFT STOPPS SHALL BE INSTALLED
50 THAT THE AREA OF THE CONCEALED SPACE DOES NOT
EXCEED I/OO 500/ARE FIET: DRAFTSTOPPING SHALL DIVIDE
THE CONCEALED SPACE INTO APPROXIMATELY EQUAL AREAS.

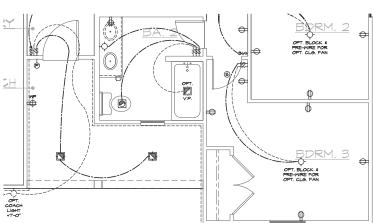
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PARTIAL UTLITY PLAN 'B'

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

UTLITY PLAN 'A'

BASIC PLAN

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

120V DUPLEX CONVENIENCE RECEPTACLE ARC FAULT(AFCI) AND TAMPER RESISTANT(TR) 12" ABV. FIN. FLR. TYPICAL U.N.O. HE MP 6FI 120V (TR) RECEPTACLE W/ 6FI CIRCUIT W/ WATER RESISTANT HOUSING III MP € 6FI 120V (TR) RECEPTACLE W 6FI CIRCUIT FUSED DISCONNECT 120v (AFCI & TR) RECESSED FLOOR RECEPTACLE W COVER \Longrightarrow 220 \vee 220 \vee SINGLE CONVENIENCE RECEPTACLE HEIGHT NOTED AS PER PLAN TWO-POLE LIGHT SWITCH AT 42" ABV. FIN. FLR. 6" ABOVE COUNTER U.N.O. FOUR-POLE LIGHT SMITCH CEILING MOUNTED FLUORESCENT LIGHT FIXTURE HANGING INCANDESCENT LIGHT FIXTURE ı **(** RECESSED INCANDESCENT DIRECTION LIGHT FIXTURE (EYE BALL) RECESSED INCANDESCENT LIGHT FIXTURE NORTH CAROLINA DIVISION LIGHTING - TRAVERSE II LED FIXTURE - PER SPECS Ø M.P. RECESSED FLUORESCENT LIGHT FIXTURE TEL: (919) 768-7980 RECESSED EXHAUST FAN RECESSED EXHAUST FAN/ INCANDESCENT LIGHT COMBINATION RECESSED EXHAUST FAN/ FLUORESCENT LIGHT COMBINATION INCANDESCENT WALL SCONCE 2018 NORTH ILLUMINATED ADDRESS SIGN - VISIBLE FROM STREET **CAROLINA STATE** BUILDING CODES CEILING MOUNTED JUNCTION BOX MALL MOUNTED JUNCTION BOX DOOR CHIME ISSUE DATE: CATY RECEPTACLE PROJECT No.: 1350999:57 DIVISION MGR.: PHONE OUTLET REVISIONS: SERVICE BOX HOSE BIB W/ S.O.V. WATER STUB FOR ICE MAKER APPROVED CARBON MONOXIDE ALARM/ SMOKE DET. THERMOSTAT (VERIFY LOCATION W/ HVAC PLAN) DWELLING 2'-0" GFI MASTER NOTES MECHANICAL, ELECTRICAL AND PLIMBING 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.

HOME

NORTH CAROLINA 50' SERIES кв номе

4506 S. MIAMI BLVD. SUITE 100 DURHAM, NC 27703

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UTILITY LEGEND

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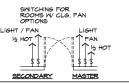
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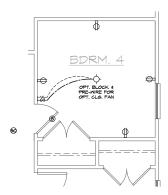
200 AMP ELECTRICAL PANEL (DEFAULT). ELECTRICAL PLAN CHECK PERMIT REQUIRED IF LOAD EXCEED 400 AMPS.

BASIC PLAN

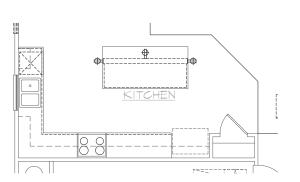
FOR INTERNAL USE ONLY 150.1910

5.1 SPEC. LEVEL 1

RALEIGH-DURHAM 50' SERIES



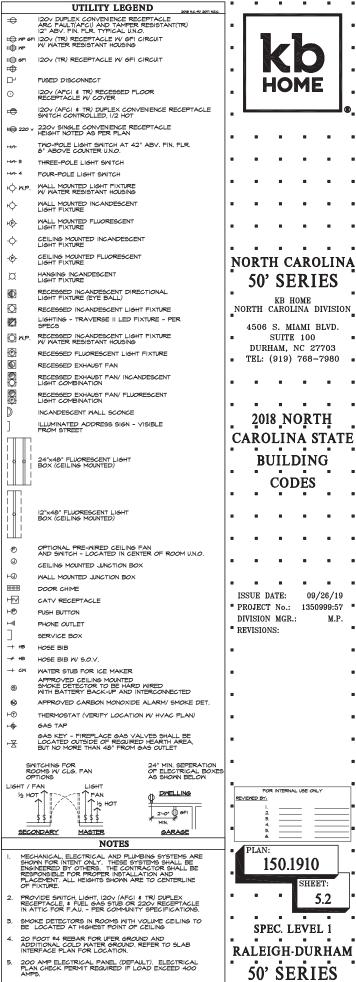
Bdrm. 4



Island

AT KITCHEN

UTILITY PLAN OPTIONS SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")



HOME

NORTH CAROLINA 50' SERIES кв номе

4506 S. MIAMI BLVD. SUITE 100 DURHAM, NC 27703 TEL: (919) 768-7980

CODES

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150.1910

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

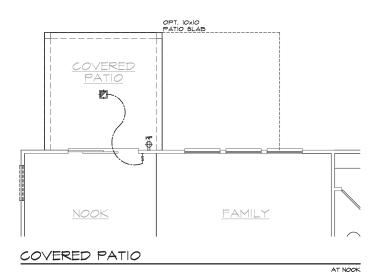
5.2

NOTE: REFER TO BASIC <u>UTILITY PLAN</u> FOR INFORMATION NOT SHOWN HERE III MP ㅁ 0 \Rightarrow Ø \bigcirc **®** € +

UTILITY LEGEND 2019 N.G.-R/ 2011 N.E.G. 120V DUPLEX CONVENIENCE RECEPTACLE ARC FAULT(AFCI) AND TAMPER RESISTANT(TR) 12" ABV. FIN. FLR. TYPICAL U.N.O. HO WE OF I 120V (TR) RECEPTACLE W OF I CIRCUIT W MATER RESISTANT HOUSING € 6FI 120v (TR) RECEPTACLE W 6FI CIRCUIT FUSED DISCONNECT 120v (AFCI & TR) RECESSED FLOOR RECEPTACLE W COVER 120v (AFCI & TR) DUPLEX CONVENIENCE RECEPTACLE SMITCH CONTROLLED, 1/2 HOT ## 220 v SINGLE CONVENIENCE RECEPTACLE HEIGHT NOTED AS PER PLAN TWO-POLE LIGHT SWITCH AT 42" ABV. FIN. FLR. 8" ABOVE COUNTER U.N.O. FOUR-POLE LIGHT SWITCH M.P. WALL MOUNTED LIGHT FIXTURE WY WATER RESISTANT HOUSING WALL MOUNTED INCANDESCENT LIGHT FIXTURE CEILING MOUNTED INCANDESCENT LIGHT FIXTURE CEILING MOUNTED FLUORESCENT LIGHT FIXTURE NORTH CAROLINA HANGING INCANDESCENT LIGHT FIXTURE 50' SERIES RECESSED INCANDESCENT DIRECTIONAL LIGHT FIXTURE (EYE BALL) RECESSED INCANDESCENT LIGHT FIXTURE NORTH CAROLINA DIVISION LIGHTING - TRAVERSE II LED FIXTURE - PER SPECS 4506 S. MIAMI BLVD. M.P. RECESSED INCANDESCENT LIGHT FIXTURE W/ WATER RESISTANT HOUSING DURHAM, NC 27703 RECESSED FLUORESCENT LIGHT FIXTURE TEL: (919) 768-7980 RECESSED EXHAUST FAN RECESSED EXHAUST FAN/ INCANDESCENT LIGHT COMBINATION RECESSED EXHAUST FAN/ FLUORESCENT LIGHT COMBINATION INCANDESCENT WALL SCONCE 2018 NORTH ILLUMINATED ADDRESS SIGN - VISIBLE FROM STREET **CAROLINA STATE** 12"x48" FLUORESCENT LIGHT BOX (CEILING MOUNTED) CEILING MOUNTED JUNCTION BOX WALL MOUNTED JUNCTION BOX DOOR CHIME ISSUE DATE: CATY RECEPTACLE PUSH BUTTON DIVISION MGR.: PHONE OUTLET REVISIONS: SERVICE BOX HOSE BIB W/ S.O.V. WATER STUB FOR ICE MAKER APPROVED CARBON MONOXIDE ALARM/ SMOKE DET. THERMOSTAT (VERIFY LOCATION W/ HVAC PLAN) 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 IGHT / FAN ₱ PMELLING 2'-0" 6FI SECONDARY MASTER NOTES MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS ARE SHONN 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 SPEC. LEVEL 1

20 FOOT #4 REBAR FOR UFER 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.



FIRST FLOOR UTILITY PLAN OPTIONS

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

PROJECT No.: 1350999:57

HOME

кв номе

SUITE 100

BUILDING CODES

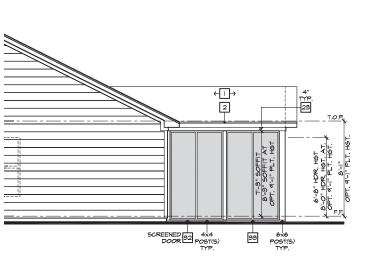
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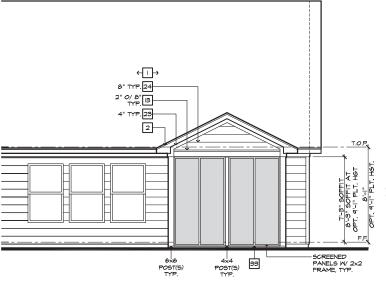
150.1910

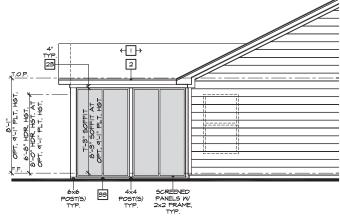
RALEIGH-DURHAM

50' SERIES

5.3







PARTIAL RIGHT ELEVATION

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

PARTIAL REAR ELEVATION

SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7"

PARTIAL LEFT ELEVATION

SCALE |/4"=|'-0" (22"X34") - |/8"=|'-0" (||"X|7")

ROOF PLAN NOTES 'B'



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

ROOF MATERIAL: COMPOSITION SHINGLE 12" (INCHES) TYPICAL ROOF OVERHANG AT RAKE, U.N.O. 12" (INCHES) TYPICAL ROOF OVERHANG AT EAVE. U.N.O. LOCATE EAVE/ RAFTER VENTS EQUALLY BALANCED AROUND HOUSE EXCEPT ABOVE SHEARWALL PANELS.

ATTIC VENT CALCULATIONS

PROVIDE I SO, IN. OF VENTLATION PER 300 SO, IN. OF ATTIC SPACE. PROVIDE THAT AT LEAST 50% & NO MORE THAN 80% OF THE RED, VENTLATING AREA IS PROVIDED BY VENTLATINGS 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 NO VENTING NOT REQUIRED.

APPROXIMATE RIDGE VENT LOCATIONS SHOWN.
ACTUAL LOCATIONS TO BE DETERMINED IN THE FIELD.

AREA I / MAIN W IOXIO SCREENED COVERED PATIO.

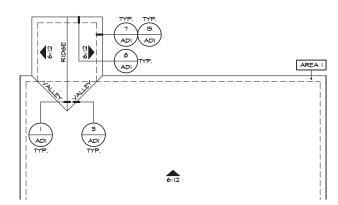
VENTILATION REQUIRED.

ATTIC AREA = 2548 SQ. FT. 5Q, FT. / 300 8.48 5Q, F

X 144 = 1221 5Q. IN.

TOTAL HIGH \$ LOW = 1221 5Q. IN.

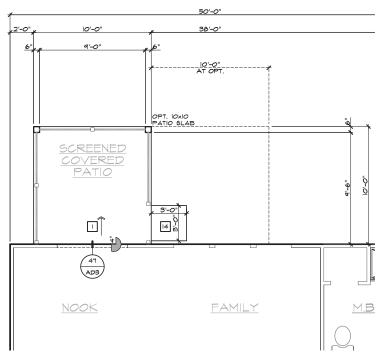
x 50% = 610 5Q. IN. VENTILATION PROVIDED L/F RIDGE VENT(S) AT IS SQ. IN. /FT. = 50 SQ. IN. EA. = 0 SQ. IN (O) ROOF VENT(S) AT SUB-TOTAL HIGH VENTILATION:



612 SQ. IN

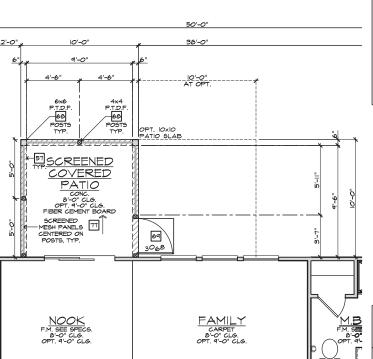
PARTIAL ROOF PLAN

SCALE I/8"=1'-0" (22"X34") - I/I6"=1'-0" (II"XI7")



PARTIAL SLAB INTERFACE PLAN SCALE I/4"=1'-0" (22"X34") - I/8"=1'-0" (II"XI7".

PARTIAL FIRST FLOOR PLAN SCALE I/4"=I'-0" (22"X34") - I/8"=I'-0" (II"XI7")





NORTH CAROLINA 50' SERIES

KB HOME NORTH CAROLINA DIVISION

4506 S. MIAMI BLVD. SUITE 100 DURHAM, NC 27703 TEL: (919) 768-7980

2018 NORTH

09/26/19

M.P.

PROJECT No.: 1350999:57

DIVISION MCR ·

REVISIONS:

36. OPTIONAL DOOR/WINDOW - REFER TO PLAN OPTIONS 37. OPTIONAL STANDING SEAM METAL ROOF

30. DECORATIVE WINDOW/DOOR TRIM - FYPON OR EQ. SEE ELEVATION FOR SIZE.

33. CONCRETE STOOP/ PORCH - SEE SLAB INTERFACE PLAN

ELEVATION NOTES

RECESSED ELEMENT DECORATIVE TRIM FYPON OR EQ. SEE ELEVATION FOR TYPE

PRE-MANUFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.) FYPON OR EQ. SURROUNDING STRUCTURAL POST.

SITE-BUILT COLUMN - SEE ELEVATION FOR TYPE

NOTE: NOT ALL KEY NOTES APPLY.

4. G.I. FLASHING & SADDLE/CRICKET

TRIM - SEE ELEVATION FOR SIZE SYNTHETIC MATERIAL

BRICK/MASONRY VENEER PER SPECS

24 SIDING W/ 4" CORNER TRIM PER SPECS 25. P.T. POST W WRAP - SEE STRUCTURAL FOR SIZE

27. LIGHT WEIGHT PRECAST STONE TRIM 28. RAILINGS (+36" U.N.O.)

31. BRACKET OR KICKER - FYPHON OR EQ.

34. SECTIONAL GARAGE DOOR PER SPECS

STONE VENEER PER SPECS

26 PRE-FAB DECORATIVE TRIM

20 BUILT UP BRICK COLUMN

SOLDIER COURSE 22. ROWLOCK COURSE 23. FRIEZE BOARD

29. VINYL WRAP

32. ENTRY DOOR

3 GI FI ASHING

5. G.I. DRIP SCREED 6. 24"x24" CHIMNEY DECORATIVE VENT

SHAKE SIDING

DECORATIVE CORBEL DECORATIVE SHUTTERS IO. PEDIMENT, SEE ELEVATION FOR TYPE

ROOF MATERIAL - REFER TO ROOF NOTES 2X FASCIA/BARGE BOARD WITH FASCIA CAP

38. KEYSTONE 39. SOLDIER CROWN

35. ALUMINUM WRAP

40. JACK SOLDIER COURSE 41. WATER TABLE

42. ATRIUM DOOR

43. PILASTER - SEE ELEVATION FOR TYPE

PARTIAL PLAN NOTES ***DOTE, NOT ALK KEY NOTES APPLY.** 21. MATER HEATER LOCATION. - FOR GAS - LOCATE ON 18" HIGH PLATFORM. - FOR INTERIOR LOCATION. - FOR ONLY PROVIDE PAN 8 DRAIN. (REFER TO DETAILS). 22. MATER HEATER BY VENT TO QUISIDE AIR. 23. MAND INE SHUT-OFF VALVE AND TEMP. 8 PRESSURE RELIEF. 34. LINE OF BLOOK ABOVE. 42. LINE OF FLOOK BELOW. 43. MIN. SSLIPHOR CHARD PRAIL (REFER TO DETAIL SHEETS). 43. MIN. SSLIPHOR SHELOW. 43. MIN. SSLIPHOR SHELOW. 44. LINE OF FLOOK BELOW. 45. MIN. SSLIPHOR SHELOW. 46. MIN. SSLIPHOR SHELOW. 57. LOW WALL. - REFER TO PLAN FOR HEIGHT. 58. ARCHEOLOS STIPHOR. 60. MIN. STIPHOR SHELOW. 61. PRE-MANFACTURED DECORATIVE COLUMN (SIZE, SEE ELEV.). 62. PRICK / STONE VENERS. - REFER TO BLEVATIONS. 63. SECTIONAL GARAGE DOOR PER SPECS. 64. ST. DIAM. CONCRETE FILLED PIPE BOLLARD 36" HIGH WITH MIN. 2" EMBEDMENT INTO CONCRETE. (NOT REGUIRED AT ELECTRIC WATER HEATERS OR FOR APPLIANCES LOCATED OUT OF THE VEHICLE'S NORMAL. 66. P.T. ROST NIN'MY WARAP. 10. ERRESS MINDOW. 11. SITE-BUILT COLUMN. SEE ELEVATION FOR TYPE. 12. SEPECHON WINDOW. 13. MINDOW LEDGE. HEIGHT & MIDTH OF OPENING TO EXTEND 6" BEYOND WINDOW.) 14. DEPT. SEE PLAN FOR THE SEE PLAN FOR TYPE. PARTIAL PLAN NOTES

CAROLINA STATE BUILDING CODES ISSUE DATE:

> FOR INTERNAL USE ONLY REVIEWED BY:

THE CRAWL SPACE IS TO BE CONDITIONED PER NC-R SECTION R409.
THE CRAWL SPACE VAPOR RETARDER (BARRIER) IS TO BE PER NC-R SECTION R409.2.

NOTE: REFER TO BASIC ROOF PLAN FOR INFORMATION NOT SHOWN HERE NOTE: REFER TO BASIC <u>ELEVATIONS</u> FOR INFORMATION NOT SHOWN HERE

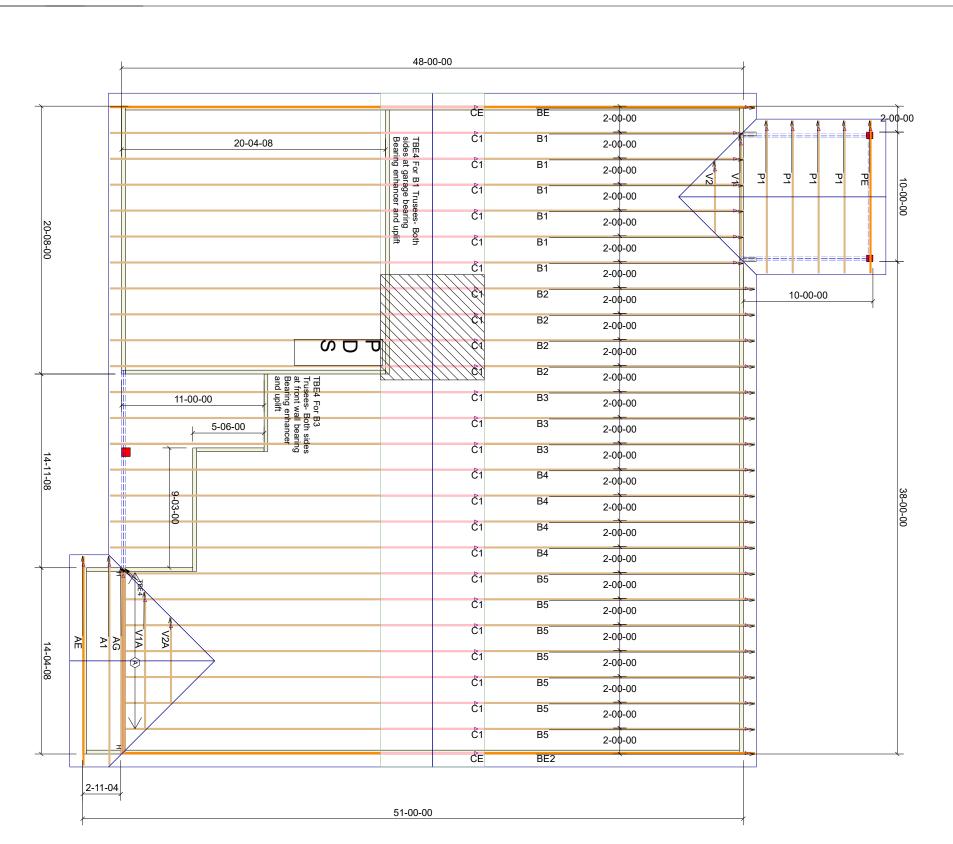
NOTE: REFER TO BASIC FLOOR PLAN FOR INFORMATION NOT SHOWN HERE

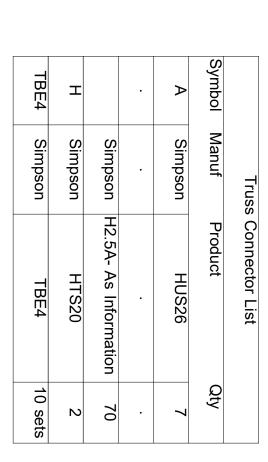
8.B5

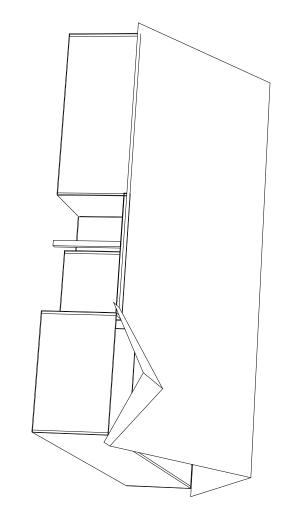
150.1910

SPEC. LEVEL 1 RALEIGH-DURHAM 50' SERIES

SCREENED-IN PATIO 'B' SCALE I/4"=1'-0" (22"X34") - I/8"=1'-0" (II"XI7")







PROJECT: Lot 16 @ Mason Pointe WIND SPD: 130 MPH **BOTM DEAD: 10 PSF** PER ANSI TPI 1-2002 THE TRUSS ENGINEER IS RESPONSIBLE FOR TRUSS TO TRUSS CONNECTIONS AND TRUSS PLY TO PLY CONNECTIONS. THIS TRUSS PLACEMENT PLAN RECCOMENDS TRUSS TO BEAM CONNECTIONS AND TRUSS TO BEAM CONNECTIONS WHICH SHALL BE REVIEWED BY THE BUILDING DESIGNER. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO RESOLVE ALL ROOF FORCES ADEQUATELY TO THE FOUNDATION. TRUSSES ARE SPACED 24" ON CENTER UNLESS NOTED OTHERWISE. TOP DEAD: 10 PSF DO NOT CUT OR MODIFY TRUSSES. REFER TO THE INDIVIDUAL TRUSS
DESIGN DRAWINGS FOR THE LOCATION
OF LATERAL BRACING AND MULTI-PLY
CONNECTION REQUIREMENTS. TOP LIVE: 20 PSF CUSTOMER **KB HOME** 150.1910 "B" x 10x10 CP GOL SCALE: NOT TO SCALE 22858A PO# DRAWN BY: 12/12/19 MWMXXXXX#####



DEDICATED TO QUALITY AND EXCELLENCE 200 EMMETT ROAD DUNN, NORTH CAROLINA 28334 PHONE: 910-892-8400 FAX: 910-892-8384

THIS LAYOUT IS INTENDED FOR THE PURPOSE OF TRUSS LOCATION AND PLACEMENT ONLY. REFER TO THE BUILDING PLANS FOR ACTUAL BUILDING CONSTRUCTION.

STRUCTURAL PLANS FOR:



150.1910 - LH GARAGE

PLAN RELEASE / REVISIONS			
REV DATE	ARCH PLAN VERSION	REVISION DESCRIPTION	DRFT
12/12/2019	1910-150 LH 2019.12.02	INITIAL SETUP OF LAYOUT	CAR
12/12/2019	1910-150 LH 2019.12.02	CREATED LOT-SPECIFIC STRUCTURAL LAYOUT FROM MASTER PLAN AND EWP LAYOUT	CAR

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 & DESIGN, 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 & DESIGN, PLLC
ENGINEERING, BUILDING DESIGN, & CONSTRUCTION
CONSULTING SERVICES
8600 'D' JERSEY COURT
RALEIGH, NC 27617
PROJECT REFERENCE: 19902369



KB HOME
NORTH CAROLINA DIVISION

4518 S. MIAMI BLVD.
SUITE 180
DURHAM, NC 27703
TEL: (919) 768-7988
FAX: (919) 472-0582

P-0961



PROJECT NO.: 19902369 DATE: 12/12/2019

. . . .

PLAN: 150.1910

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

- 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 & DESIGN, PLLC IMMEDIATELY IF DISCREPANCIES ON PLAN EXIST.
- BRACED-WALL DESIGN IS BASED ON <u>SECTION R602.10 WALL</u> <u>BRACING.</u> 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.
- 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	115 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		KS	KING STUD COLUMN
7.55.		LVL	LAMINATED VENEER
ABV	ABOVE		LUMBER
AEE	ABOVE FINISHED FLOOR ALTERNATE	MAX	MAXIMUM
ALT	AL TERNATE	MECH	MECHANICAL
BRG	BEARING	MFTR	MANUFACTURER
BSMT	BASEMENT	MIN	MINIMUM
	CANTILEVER	NTS	NOT TO SCALE
CJ		OA	OVERALL
	CEILING	ОС	ON CENTER
	CONCRETE MASONRY UNIT	PT	PRESSURE TREATED
	CASED OPENING	R	RISER
	COLUMN	REF	REFRIGERATOR
CONC		RFG	ROOFING
CONT		RO	ROUGH OPENING
D	CLOTHES DRYER	RS	ROOF SUPPORT
DBL	DOUBLE	SC	STUD COLUMN
DIAM	DIAMETER	SF	SQUARE FOOT (FEET)
DJ	DOUBLE JOIST	SH	SHELF / SHELVES
DN	DOWN	SHTG	SHEATHING
DP	DEEP	SHW	SHOWER
DR	DOUBLE RAFTER	SIM	SIMILAR
DSP	DOUBLE STUD POCKET	SJ	SINGLE JOIST
EA	EACH	SP	
EE	EACH END		SPECIFIED
EQ	EQUAL	SQ	SQUARE
EX	EXTERIOR	Т	TREAD
FAU	FORCED-AIR UNIT	TEMP	TEMPERED GLASS
FDN	FOUNDATION	THK	THICK(NESS)
FF	FINISHED FLOOR	TJ	TRIPLE JOIST
FLR	FLOOR(ING)	TOC	TOP OF CURB / CONCRETE
FP	FIREPLACE	TR	TRIPLE RAFTER
FTG	FOOTING	TYP	TYPICAL
НВ	HOSE BIBB	UNO	
HDR	HEADER	W	CLOTHES WASHER
HGR	HANGER	WH	WATER HEATER
JS	JACK STUD COLUMN		WELDED WIRE FABRIC
		XJ	EXTRA JOIST

MATERIALS

 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

 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

 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

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

FOUNDATION

- 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 EVIST
- CONCRETE FOUNDATION WALLS TO BE SELECTED AND
 CONSTRUCTED PER SECTION R404 OR AMERICAN CONCRETE
 INSTITUTE STANDARD ACI 348.
- 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.
- 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.
- CENTERS OF PIERS TO BEAR IN THE MIDDLE THIRD OF THE FOOTINGS, AND GIRDERS SHALL CENTER IN THE MIDDLE THIRD OF THE PIERS.
-). 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 CLASS 1 SOILS, VAPOR BARRIER AND CRUSHED STONE MAY BE OMITTED.

FRAMING

- 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.
- SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- 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.
- . 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.
- 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
- I3. 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.
- 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.: 19902369 DATE: 12/12/2019

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GENERAL NOTES

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GN1.0

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) 115 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 @ 16 OC (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.
- 2.
 - DENOTES OVER-FRAMED AREA
- 3. MINIMUM 7/16" OSB ROOF SHEATHING
- 4. 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.
- 5. MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.
- 6. PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- 7. 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.
- 2. FUR RIDGES FOR FULL RAFTER CONTACT.
- PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.



DENOTES OVER-FRAMED AREA

- 5. 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.
- 8. 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.



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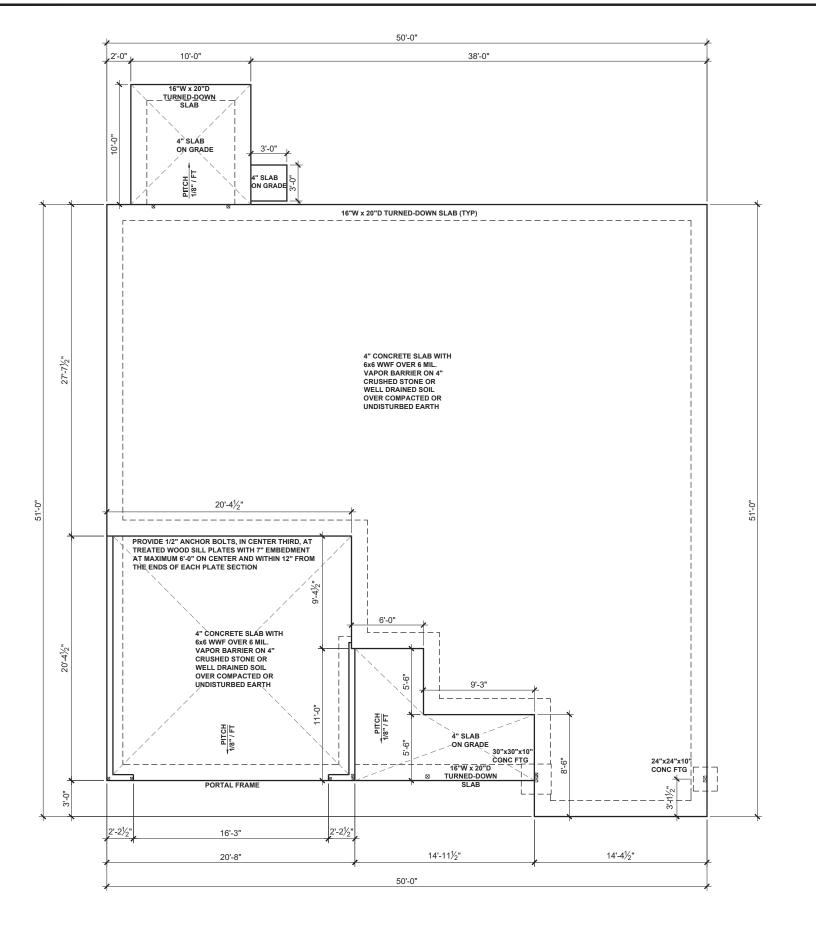
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PLAN: 150.1910

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GENERAL NOTES

GN1.1



SLAB FOUNDATION PLAN - 'B'

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

BEAM & POINT LOAD LEG

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) #5 REBAR @ CENTER OF ALL PERIMETER AND INTERNAL LOAD BEARING FOOTINGS. (2" C.C. MIN)



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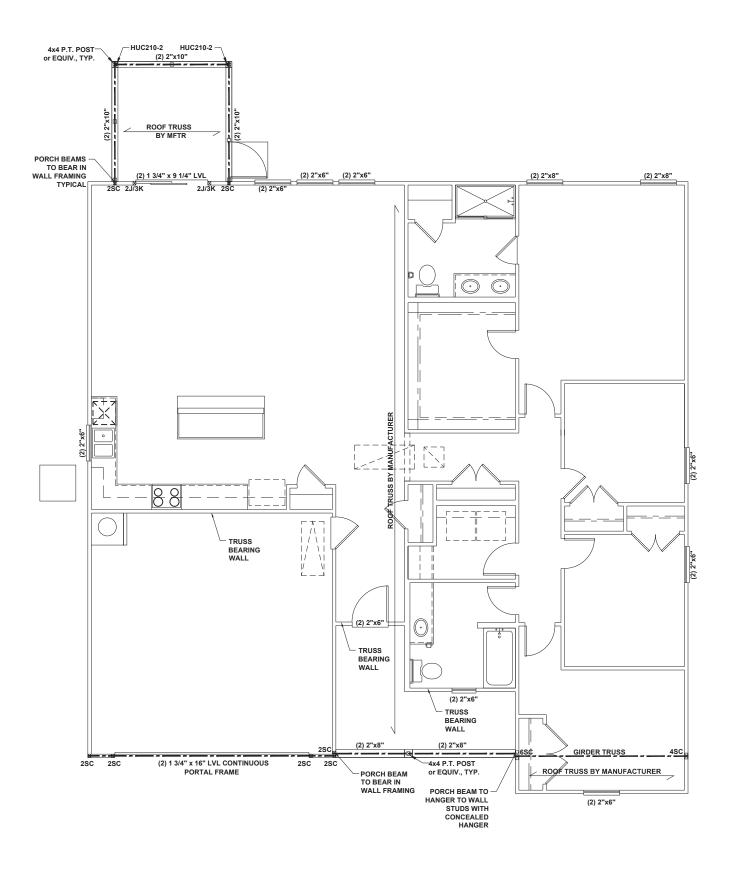
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SLAB FOUNDATION PLAN

S.10B



BEAM & POINT LOAD LEGE

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.
- B. EXTERIOR WALL OPENINGS OVER 3' TO HAVE MULTIPLE KING STUDS 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.
- 6. ALL HANGERS AND CONNECTORS SPECIFIED ARE TO BE SIMPSON STRONG-TIE OR EQUIVALENT.
- ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY.
 LARGER MEMBERS MAY 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
- D. 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 EQUIV) 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).
- 2. 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).



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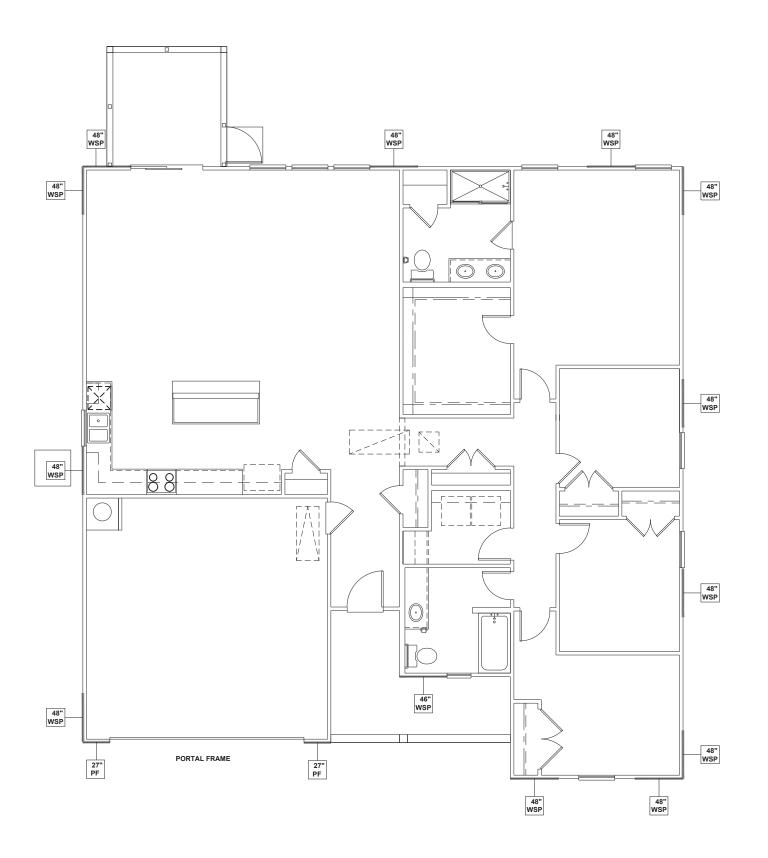
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FIRST FLOOR CEILING FRAMING PLAN

S1.0B

FIRST FLOOR CEILING FRAMING PLAN - 'B'

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.
 PANELS MAY SHIFT UP TO 36" EITHER DIRECTION
- 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:



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) 100 MAILS. STRAP TO BE LOCATED AT EDGE OF BRACED WALL PANEL. (CS16 STRAPPING MAY BE SUBSTITUTED W/ SIMILAR LENGTH AND NAILING PATTERN.) USE HT14 FOR ATTACHMENT TO CONCRETE.

SCALED LENGTH OF WALL PANEL AT LOCATION NUME LENG OF PA

LENGTH
OF PANEL

-- PANEL TYPE

WALL BRACING: RECTANGLE 1

SIDE	REQUIRED LENGTH	PROVIDED LENGTH		
FRONT	6.5 FT.	17.0 FT.		
RIGHT	6.5 FT.	16.0 FT.		
REAR	6.5 FT.	12.0 FT.		
LEFT	6.5 FT.	12.0 FT.		



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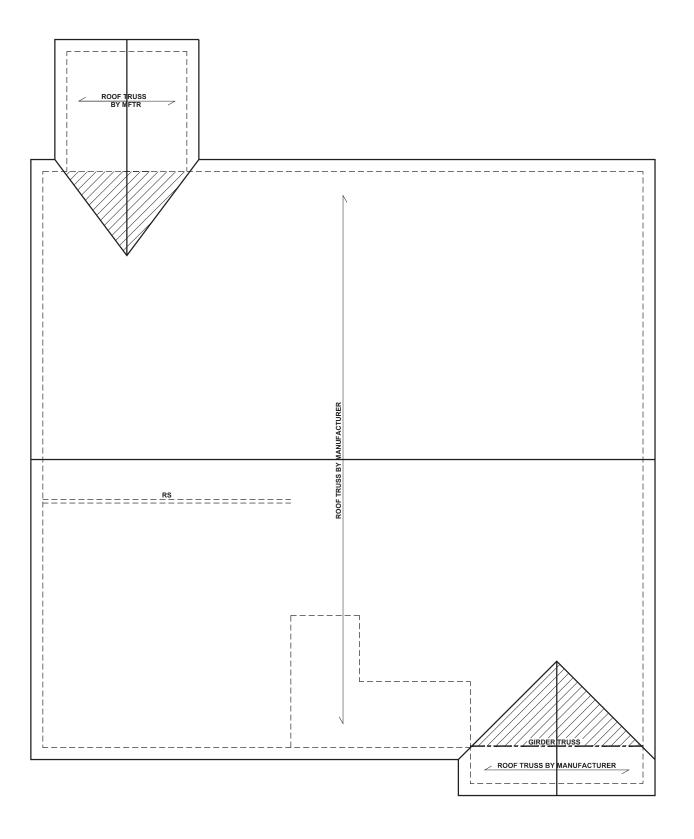
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FIRST FLOOR WALL BRACING PLAN

S4.0B

FIRST FLOOR WALL BRACING PLAN - 'B'

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



ROOF FRAMING PLAN - 'B'

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

1. PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.

DENOTES OVER-FRAMED AREA

3. MINIMUM 7/16" OSB ROOF SHEATHING

4. 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.

5. 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

UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.

TRUSS UPLIFT CONNECTORS: EXPOSURE B, 115 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 SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS.

CONNECTOR NAILING PER TABLE 602.3(1)

(1) SIMPSON H2.5A HURRICANE **OVER 28'**

CLIP TO DBL TOP PLATE OR

OR (1) SIMPSON H3 CLIP TO SINGLE 2x4 PLATE

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ROOF FRAMING PLAN

S7.0B

