



1 AND 2 FAMILY DWELLING REQUIREMENTS

PLAN REQUIREMENTS:

All residential plans including additions and attached garages shall be designed to the current edition of the International Residential Code.

Plans are to be drawn in a clear and concise manner to engineers scale. If you are unable to provide this you will have to have your plans drawn by a draftsman or engineer. **There are no exceptions to this requirement.**

The following is a guideline for submittal of plans for review. This is only to be used as a guide. Actual location of property may require additional requirements.

2-copies each of site plans and building plans are required. Site plans shall show location of proposed construction to all property lines giving dimensions from exterior wall of proposed construction to each property line. SC DHEC's notification form for sites less than one acre must be submitted to DHEC. A copy of this form with instructions is available on the City of Orangeburg's website on the building department's webpage.

Elevation Plan:

1. Show all home elevations
2. Indicate roof height
3. Indicate flood plain where applicable

Foundation Plan:

1. Depth and width of foundation
2. Rebar requirements
3. Bond beams and rebar requirements
4. Type of hold-down strapping and placement
5. Pier placement sizing, and foundation requirements

Stem wall construction:

1. Height and width
2. Reinforcement (including vertical, horizontal, and embedment)
3. Hold-down requirements
4. Crawl space ventilation location
5. Bond beam requirements



Floor system:

1. Type of materials: wood, concrete, or steel
2. Anchoring of floor system to the foundation for uplift, as well as lateral movement
3. Specific sizes, brands and fastening requirements of anchoring system
4. Spacing, spans and sizes of framing members
5. Size and type and location of beams, girders
6. Window schedule denoting size and location

Floor plan:

1. Shows all rooms with dimensions
2. Egress doors and sizes
3. Window and door location and fenestration NFRC U-Factor and NFRC SHGC
4. Braced wall lines, types and amounts of required bracing
5. Electrical plan may be on the floor plan if shown with sufficient clarity
 - Location of all devices, panel diagram and identification of circuit type (AFCI/GFCI) required
6. Plumbing plan may be on floor plan if shown with sufficient clarity
 - Location of plumbing fixtures, supply, vent and drain sizing and location required

Walls:

1. If masonry or concrete, location of reinforcement, bond beams, and lintels
2. Type of material
3. Height of wall
4. Gable end wall detail depicting bracing
5. Wall sheathing and siding materials
6. Hold-down requirements, placement, length and type.
7. If two-story construction, type of floor-to-floor uplift connections

Roof/ceiling:

1. Type of material
2. Anchoring of roof system for wind uplift
3. Framing details to include size and spacing of dimensional lumber, engineered lumber, valley, king, jack rafters, collar ties, and ridge beam construction and bracing



Mechanical Requirements:

1. Manual J and Manual D information shall be included with all plan submittals.
2. Manually computed Manual J forms are not acceptable.
3. Floor plans showing sizing of all duct work including branch lines to individual rooms shall be shown
4. CFM loading shall be shown for each individual room
5. Indicate sizing, type and location of equipment to be used

Energy Requirements:

Construction documents shall be drawn to scale on suitable material and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, systems and equipment as governed by the IECC. Details shall include, but are not limited to, insulation materials and their R-values; fenestration U-factors and SHGCs; system and equipment efficiencies, types, sizes and controls; duct sealing, insulation and location; and air sealing details.

INSPECTIONS:

There is a 24 hour notice required for inspections. Inspections may be performed on an emergency basis with less notice circumstances permitting.

The information you will need when calling in:

1. Address
2. Permit Number
3. Type of inspection you are requesting
4. Contractor name
5. Contact phone number

SEQUENTIAL LISTING OF INSPECTION TYPES:

A set of approved plans shall be on-site for review during the inspection process. Permits shall be posted in a conspicuous location. The following is a guideline and actual inspections will vary depending on the specific job.

Foundation:

1. Footing inspection shall have all required rebar in place.
2. Ufer Ground must be in place.



3. Vertical reinforcement shall be bent in an “L” configuration and the short bend section of the “L” shall be tied in place to the top of the main runners. All rebar shall maintain 3” clearance between earth and the rebar.
4. Rebar is prohibited from being used as grade stakes.
5. Wood, PVC, or completely coated metal grade stakes are acceptable.
6. Footing shall be cleared of all roots, vegetation, and water.
7. Clay brick shall not be used to support main runners of rebar. Cement brick is acceptable.
8. Manufacturers (Simpson and USB) require that foundation straps be inserted into hollow masonry block.

Slabs:

1. Area where slab is to be placed shall be free and clear of all vegetation.
2. Compaction results will have to be furnished as applicable.
3. Six-mil vapor barrier is required for dwelling slabs.
4. If slab is to have electrical or plumbing installed within, then an electrical or plumbing slab inspection will have to be performed prior to the building slab. Once these trade inspections have been performed, the affected area shall be covered up and compacted.
5. Form work for the slab shall be in place and secure.
6. Area shall be treated for termites.

Pier and/or CMU Wall Inspections:

1. This inspection applies only to crawl space construction.
2. All piers and CMU wall shall be inspected prior to pour.
3. All hold down strapping applications for the floor system shall be complete at this time.

Rough-in Inspection:

The following rough-in inspections are intended to be performed at the same time where feasible

Framing:

1. Roofing material installed
2. House wrap may be installed; however braced wall panel areas may require removal for inspection.
3. All windows shall be installed (Exception: Two-story house a window may be left out for the delivery of sheet rock.)



4. All hold down devices shall be installed and ready for inspection.
5. Regardless of hold down method used, all strapping, anchor bolts, and similar products shall be visible for inspection.
6. All framing shall be complete.
7. All fire blocking where required shall be in place.
8. If brick, ties must be installed.
9. Brick shall not be installed before framing inspection.

Electrical Rough-In

1. All branch circuits are to be installed and terminate in approved boxes, stapled, protected with nail guards where required and inserted into panel with approved connectors. Grounding conductors shall be made on all receptacles and switches.
2. All smoke detectors boxes shall be installed and inner-connected to each other.
3. Draft stopping of all penetrations shall be sealed.

Plumbing Rough-In

1. All PVC joints shall be cleaned with cleaner prior to making glue joints.
2. Nail guards in top and bottom plates shall be in place.
3. Head Pressure and Water pressure tests shall be performed for inspection.
4. Waste lines shall have proper slope
5. Draft stopping of penetrations shall be sealed.
6. Piping shall be sleeved when passing through masonry slabs, foundations or walls.
7. Vent piping shall extend through the roof.

Gas Rough-In

1. Installing CCST piping, no unapproved joints shall be in concealed locations.
2. CCST yellow plastic jacket shall be removed prior to insertion into a firebox of a fireplace.
3. CCST shall be sleeved when passing through masonry walls.
4. CCST piping shall be grounded as required.
5. Proper nail guards shall be used when required at all notches or boring.
6. Emergency cut-offs shall be installed at all gas appliance locations.
7. Pressure test shall be provided at the time of inspection.
8. All gas piping shall be complete.
9. Means of bonding the gas line shall be installed.
10. All draft stopping shall be complete.
11. Pressure test for natural gas is 10psi; pressure test for LP gas is 20psi.
12. Draft stopping shall be complete at the time of inspection.



Mechanical Rough-In

1. All ductwork shall be complete to include boots. (UL 181 approved tape or tape and mastic)
2. Air handlers shall be installed
3. Return air boxes shall be installed
4. Refrigerant lines shall be roughed-in.
5. Dryer venting shall be installed
6. Condensate lines shall be roughed-in
7. All draft stopping shall be complete

Insulation Inspection:

1. Floor cavities = R-19
2. Walls = R-13
3. Ceilings = R-30

Temporary Power:

1. All electrical devices and wiring shall be complete.
2. Fixtures that are back-ordered may be electrically secured and installed prior to final inspection. This applies to fixtures only.

Final Inspection:

Commonly referred to as the C.O. inspection (certificate of occupancy)

1. All construction is complete. Electrical, mechanical, plumbing and building contractors are complete in their contractual obligations.
2. Exception: Cosmetic applications are not required to be complete prior to final inspection.
 - a. Paint
 - b. Carpet
 - c. Vinyl flooring
 - d. All other items shall be complete in their entirety.

Additional information may be found at www.orangeburg.sc.us on the building inspection page.