Orangeburg County
1&2 Family Dwelling Requirements

Orangeburg County Plan Submittal Guidelines
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.

Design criteria to be submitted with plans:
All plans shall be designed for the geographical location to which they are to be placed
Include type and R-value of insulation to be used
Your specific region shall be noted on your plans as shown above
You will need to submit two sets of construction plans and site plans including all information shown in this outline. Failure to do so will result in your plans being rejected.

Site Plan:
Site plans shall either be drawn to scale with scale used furnished or all dimensions shown. Distances to property line must be shown.
Buildings shall be shown correctly oriented as to how they will be constructed on the property
Include other structures on property if any and the distances to the new project
Indicate North Arrow reference
Show utility easements with dimensions

Foundation Plan:
Show perimeter layout of foundation including all porches, garages, fireplaces
Include details showing horizontal reinforcement and vertical reinforcement, Stem wall, pier curtain wall, monolithic slab, Slab above grade
Show all exterior and interior pier placement with spacing dimensions or drawn to scale
Indicate elevations for foundation walls
Indicate type and placement of wind up lift anchorage
Indicate foundation vent size and placement

Floor Framing Plan:
Show the nominal dimension, spacing, and direction of all floor joists
Show girder placement and all nominal dimensions and required thickness of ply members
Show detail for mud sill, and rim joist to include all nominal dimensions
If this is an addition show how attachment is to be made to home
**Note - Manufactured home additions are to be designed as free standing and shall not be attached to the home. Two single manufactured homes cannot be joined in any way to form a double wide.

Floor Plan:
Drawn to scale or show building dimensions
Include window and door schedules
Show placement of types of windows and door locations on plans
Indicate Solar Heat Gain Coefficients and U-Factors for all fenestration
Label all rooms and include dimensions for rooms (if not drawn to scale)
Show electrical panel location and thermostat location
Include all porches and garages, decks and patios

Elevation Plan:
Show all elevations of home North, South, East and West
Show mean roof height
If built in a flood zone indicate area that is one foot above flood plane

**Roof Framing Plan:**

- Show all rafter spacing to include nominal dimensions
- Show all ceiling joists with spacing and nominal dimensions
- Show location of all valley and hip rafters
- Show all beams and locations to include beam sizes
- Indicate size and placement of collar ties

**Mechanical Requirements (HVAC):**

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

**Required guidelines and inspections when performing residential construction work in Orangeburg County:**

Homeowners obtaining their own permits for construction may utilize family members, not friends, to aid in the construction process. However, when entering into a contract with an individual, that person will have to be licensed for the full dollar amount of the contract. An individual licensed as a specialty contractor is only licensed to perform work up to $5,000.00 no more. Entering into a contract with an unlicensed contractor is not a binding contract by definition of South Carolina Law.

**SCHEDULING AN INSPECTION:**

Orangeburg County requires a 24 hour notice to perform an inspection. (I.E. you call for an inspection on Monday the inspection will be performed on Tuesday.)

The information you will need when calling in:

- Address
- Tax map number or permit number
- Type of inspection you are requesting
- Contractor name
- Contact phone number

We cannot guarantee a given time for your inspection. We can tell you if your inspection will be before lunch or after.

**SEQUENTIAL LISTING OF INSPECTION TYPES:**

The following is a listing of the inspections to be performed when building residential occupancies in Orangeburg County. This listing is sequential. Orangeburg County approved plans shall be on-site for review during the inspection process. Permits shall be posted for the job duration.

**Foundation:**

- Permit is to be posted in a conspicuous area. Not subject to the weather.
- Orangeburg County approved plans are to be on-site for review.
- Footing inspection shall have all required rebar in place.
- 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.
- Rebar is prohibited from being used as grade stakes.
- Wood, PVC, or completely coated metal grade stakes are acceptable.
- Footing shall be cleared of all roots, vegetation, and water.

Building Inspection Department  
County of Orangeburg  
1437 Amelia St. P.O. Box 9000  
Orangeburg SC 29115  
Phone: 803-533-6173 Fax: 803-533-6048
Clay brick shall not be used to support main runners of rebar. Cement brick is acceptable. Termite treatment shall be accomplished prior to pour. If some post approved method of termite treatment is to be used, this information shall be provided at the time of scheduling an inspection.

**Slabs:**
Orangeburg County only inspects structural slabs. Garage slabs that do not support any wall, roof, or floor load are omitted from the inspection process. Area where slab is to be placed shall be free and clear of all vegetation. Compaction results will have to be furnished to Orangeburg County for review. Six-mil vapor barrier is required for dwelling slabs. 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. Form work for the slab shall be in place and secure. Area shall be treated for termites.

**Pier and/or CMU Wall Inspections:**
This inspection applies only to crawl space construction. All piers and CMU wall shall be inspected prior to pour. All hold down strapping applications for the floor system shall be complete at this time.

**Wall/Roof Sheathing:**
Orangeburg County is in a high wind region. Specific nailing patterns as well as hold-down-requirements have to be met and inspected. Inspection shall take place prior to any felt or building wrap being applied to the structure. Exceptions: Roof felt may be installed, but spot areas will need to be cut for inspection purposes.

**Rough-in Inspection:**
Orangeburg County will inspect the following as one inspection under the heading of rough-in inspection.

**Electrical Rough-In**
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.
All smoke detectors boxes shall be installed and inner-connected to each other.
Draft stopping of all penetrations shall be sealed with great stuff foam or other approved means.
NM cable passing through masonry walls shall be sleeved.
Branch circuits exposed to the weather shall be UF cable or placed in approved conduit.

**Plumbing Rough-In**
All PVC joints shall be cleaned with cleaner prior to making glue joints.
Nail guards in top and bottom plates shall be 5”x8” in size.
Head Pressure and Water pressure tests shall be performed for inspection.
Waste lines shall have proper slope.
Draft stopping of penetrations shall be sealed with great stuff foam or other approved means.
PVC, PEX, or copper tubing shall be sleeved when passing through masonry walls.
Vent piping shall extend through the roof.

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

Mechanical Rough-In
All ductwork shall be complete to include boots. (UL 181 approved tape or tape and mastic)
Air handlers shall be installed
Return air boxes shall be installed
For central air conditioning and/or heat pump systems, 6 square inches per 1000 Btu’s per nominal cooling output rating shall be utilized for sizing of return ducts.
Refrigerant lines shall be roughed-in.
Dryer venting shall be installed
Condensate lines shall be roughed-in
All draft stopping shall be complete

Framing:
Roofing material installed
All windows shall be installed (Exception: Two-story house a window may be left out for the delivery of sheet rock.)
All hold down devices shall be installed and ready for inspection.
When using anchor bolts, a 3”x3” square washer is required in D0, D1 and D2 seismic zones.
Regardless of hold down method used, all strapping, anchor bolts, and similar products shall be visible for inspection.
All framing shall be complete, including decks and porches.
All fire blocking where required shall be in place.

Insulation Inspection:
Floor cavities = R-19
Walls = R-13
Ceilings = R-30

Temporary Power:
All electrical devices and wiring shall be complete.
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):
All construction is complete. Electrical, mechanical, plumbing and building contractors are complete in their contractual obligations. All submittals turned in. (Duct Leakage Affidavit, Energy Certificate, and Termite Letter)

Exception:
Cosmetic applications are not required to be complete prior to final inspection.
Paint
Carpet
Vinyl flooring (Kitchen and bathroom areas shall be sealed)
All other items shall be complete in their entirety.

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