

Florence County, South Carolina
Planning, Engineering, and Building Inspection Department

Minimum Standards for Site and Building Plans

Five sets of site plans and three sets of building plans and specifications submitted to the Planning Department should be of sufficient nature to clearly describe the project with appropriate emphasis on the following:

1. Site layout
2. Structural Integrity
3. Life Safety
4. Accessibility
5. Energy Efficiency
6. Building codes compliance
7. Definition of scope of work

The type and number of drawings will depend greatly upon the size, nature and complexity of the project and the method of project delivery. The following is the recommended standard for most building projects. Additions and renovations, and some other project types may not require all of the following components for plan submittal and review for permit.

Cover Sheet:

1. Project Identification
2. Project address and location map
3. Listing of Design professionals to include name, address, telephone numbers, and fax numbers.
4. The design professional in responsible charge to include name, address, telephone and fax numbers. The design professional that is responsible for project coordination. All communications will be directed through this individual.
5. Scope of work.
6. Design Criteria List
 - a. Occupancy group(s)
 - b. Type(s) of construction
 - c. Square footage/Allowable area for each floor and occupancy (area modification calculations, if applicable)
 - d. Height and number of stories (height modification calculations, if applicable)
 - e. Occupant load for each floor in include mezzanines.
 - f. Capacity of means of egress
 - g. Fire sprinkler requirements (if applicable)
 - h. Plumbing fixture compliance calculations

Site Plan: Show proposed new structure and any existing buildings or structures, property lines with dimensions, streets, easements and setbacks. Show distance to structures of adjacent properties. Show water, sanitary/storm sewer, and electrical points of connection. Identify location of proposed or existing fire hydrants, fire access roadway routes and existing utilities on the site. Show required parking (to include handicapped accessible parking), handicapped accessible route(s) of entry, placement of site lighting, proposed signage, drainage and grading information (with reference to finish floor and adjacent streets). Show drainage inflow and outflow locations. Provide site plans in 1:20 scale. Show elevation changes with contour lines and provide contour interval in the site plan legend. Indicate northern orientation.

Floor Plan: Show all floor levels including basement, mezzanines, and useable attic space. Indicate rooms with their primary use, overall dimensions and locations of doors, windows, and structural elements. Provide door, door hardware and window schedules. Provide interior finish schedules (floor, base, wall, and ceiling). Indicate the fire resistance rating of shaft enclosures, walls, partitions, occupancy separations, opening protectives, and exterior walls should be shown with UL or GA design numbers or other design data from a nationally recognized testing laboratory. Show details and dimensions of handicapped accessibility features.

Foundation Plan: Indicate size, locations, and thickness of foundations and footings. Provide required construction documentation specified in **IBC Section 107** which includes the compressive strength of concrete, specified strength and grade(s) for reinforcement, placement requirements for reinforcement, and detailing requirements for reinforcement (splices, anchorage, mechanical connections, etc). Show location of construction, control, and isolation joints. Show imbedded anchoring such as anchor bolts, hold-downs, seismic straps and column base plates. Provide geotechnical report and assumptions used for foundation design as required by **IBC Section 1803**.

NOTE: All foundations associated with pre-engineered buildings must be designed, signed, and sealed by a South Carolina registered professional engineer.

Structural Plans: Provide live load and other load data used in the structural design as required by **IBC Section 1603**. Provide size and location of structural elements, method of attachment, and material specifications. Provide specified strength and grade(s) for vertical reinforcement, placement requirements for vertical reinforcement, and detailing requirements for vertical reinforcement (splices, anchorage, mechanical connections, etc). Provide framing plan for the roof structure. Provide method for support of openings.

Structural Design Criteria:

- A site specific geotechnical report must be performed in the footprint of the proposed structure for all commercial projects that are 5,000 sq ft or greater, over 30' tall, or more than 1 story. The report must include the seismic design category for the site. In lieu of a geotechnical report the structure and foundation may be designed for Seismic Design Category F. The site class and seismic design category must be listed in the design criteria.
- Typical wind speed design is 125-130mph per **IBC Figure 1609.3**. Actual wind speed should be verified based on the actual location of the project. Wind speed shall be based on the following risk categories:
 - Risk Category I (examples include agriculture and temporary structures)
 - Risk Category II (This category includes all structures that do not fall under a specific category. Most standard structures will be Risk Category II)
 - Risk Category III (examples include buildings with high occupant loads, correctional facilities, etc.)
 - Risk Category IV (Essential Facilities: examples include Fire, Rescue, and Police Stations, emergency shelter, large hospitals, etc.)
- Wind Exposure Category must be listed. Exposure C should be assumed unless the project meets the conditions of another exposure category as detailed in **IBC Section 1609.4.3**. Other categories may require additional documentation.

Exterior Elevations: Show all elevations to include roof plan. Indicate vertical dimensions and heights. Show dimensions of openings. Roof plan must show the location of exhaust terminations, sanitary sewer vent outlets, and intakes.

Building Sections and Wall Sections: Construction documentation for the exterior wall envelope must comply with **IBC Section 107.2.4**. Show dimensions of all heights. Identify construction materials, non-rated and fire rated assemblies and fire rated penetrations. Provide UL or GA design numbers or other design data from a nationally recognized testing laboratory for fire rated partitions, firewalls, floor/ceiling assemblies and ceiling/roof assemblies. Provide UL system numbers for penetrations in rated assemblies. Provide the UL fire resistant joint system numbers. Identify all exterior wall covering materials and means of fastening or attachment. Provide type(s) of wall covering, floor coverings, and ceiling finish materials. Provide specifications for the roofing materials to include fasteners, roof covering, underlayment, flashings, sheathing, and drip-edge materials.

HVAC System: Indicate the heating, ventilation/exhaust and air conditioning systems to include commercial hood systems and passive and active smoke control systems. Provide equipment schedule that includes type units, cooling/heating capacity (Btu/Hr), fan capacity (cfm), and heating type. Provide duct material type, sizes, mounting details, means of attachment, and air device sizes. Show or describe means of support for ducts and equipment, condensation drainage systems, fan shutdown requirements and connection to gas piping. Show location of termination of exhaust systems and distance to fresh air intakes.

Plumbing System: Show points of connection to septic tanks, public sanitary/storm sewer systems, water supply lines and other applicable utilities. Provide a water distribution diagram and sanitary sewer isometric. Provide a plumbing floor plan. Provide specifications for fixtures, piping, shutoff valves, slopes, materials and sizes. Provide specifications and location of water heater. Show water heater T/P relief valve and auxiliary pan drain lines, thermal expansion device, check valves and connection to gas piping (if applicable). Provide specifications and installation details for backflow device(s). Provide specifications and installation details for traps and interceptors.

Electrical System: Show point of connection to utility. Provide an electrical riser diagram. Provide conductor type, wire insulation type and wire gauge. Provide conduit type(s), size(s), and conditions for use. Show branch and feeder circuiting. Show service means of disconnection, grounding electrode system details and specifications, equipment means of disconnection and grounding details and specifications. Provide electrical panel specifications, ratings, and schedules, single line diagrams, and electrical fixture schedules.

Gas Systems: Show point of connection to utility. Provide a detailed piping plan. Show pipe size(s) and all outlets. Provide the type(s) of material to be used for piping. Provide method of support and bracing of gas piping. Show location(s) and provide specifications for gas shutoff valves. Provide gas equipment specifications to include input and output Btu/h or Mbtu and required installation clearances. Provide confined/unconfined space calculations and combustion air requirements. Provide types, sizes, and clearances for draft hoods, vents, and vent connectors.

Specifications: Either on the drawings or in booklet form further defines construction components, covering materials, finishes and all pertinent equipment.

Addenda and Changes: It is the responsibility of the prime professional to provide notification of changes throughout the project. **Any material substitutability or alternate methods of construction must be approved by the architect or engineer of record and indicated on plans, specification booklet, or sealed and signed letter issued on corporate letterhead. Significant changes may require additional permit and plan review fees.**

Revisions: For clarity, all revisions should be appropriately identified. **Please accompany revisions to plans with a written explanation in the same order as our comments. This will allow us to quickly identify changes and expedite the plan review process**

Pre-Engineered Buildings and Structural Components: Signed and sealed plans from the manufacturer/fabricator should be submitted with projects that use pre-engineered buildings and structural components. Design information provided should include data required in **IBC Section 1603**.

Additional Information:

- ◆ Florence County will enforce the 2018 International Building, Existing Building, Plumbing, Mechanical, and Fire Codes; the 2017 National Electrical Code; the 2017 ICC/ANSI A117.1; and the 2009 International Energy Conservation Code effective January 1, 2020; as mandated by the South Carolina Building Code Council.
- ◆ Plan review fee must be submitted prior to the review process.
- ◆ The initial plan review will normally be completed in a minimum of 10 working days.

- ◆ Architects and professional engineers are required to design, sign, and seal drawings, specifications and accompanying data for the following buildings and structures per Sections 40-3-290 (architecture law) and 40-22-280 (engineering law) of the Code of Laws of South Carolina:
 1. All Group A, E, H and I occupancies.
 2. Buildings and structures three or more stories in height.
 3. Buildings and structures 5,000 square feet or more in area.
- ◆ The individual architect's seal, firm seal, and signature must appear as an original (wet seal) on each print of the drawings and index sheet as well as specifications and accompanying data.
- ◆ Architects must indicate if they will be retained for construction administration in accordance with South Carolina Architecture Board Regulation 11-12.
- ◆ The seal of the individual professional engineer, signature, and certificate of authorization must appear on each print of drawings, specifications and accompanying data requiring an engineering discipline, i.e. mechanical, electrical, plumbing, fire sprinkler, and structural.
- ◆ Site and development plans requiring a land surveyor must have an original (wet seal) individual seal, certificate of authorization, signature, and raised embossed seal on all drawings.
- ◆ A fire sprinkler specification sheet is required to be submitted prior to the issuance of permits per Section 40-10-250 of the Code of Laws of South Carolina.

Legal information about the South Carolina State statutes pertaining to the submission plans should be addressed to the following agencies:

Board of Architectural Examiners
 P. O. Box 11419
 Columbia, SC 29211-1419
 Telephone: (803) 896-4408
 Fax: (803) 896-4410

Board of Registration for Professional
 Engineers and Land Surveyors
 P. O. Box 11597
 Columbia, SC 29211-1597
 Telephone: (803) 896-4422
 Fax: (803) 896-4427

Information about requirements for the submission of plans for fire protection sprinkler systems should be addressed to:

Division of Fire and Life Safety
 141 Monticello Trail
 Columbia, SC 29203
 Telephone: (803) 896-9800
 Fax: (803) 896-9806

Designers and contractors should be aware of the Fair Housing Law. Questions concerning the Fair Housing Law should be addressed to:

Raymond Buxton, II, Commissioner
 Fair Housing Division
 SC Human Affairs Commission
 2611 Forest Drive
 Columbia, SC 29204
 Telephone: (803) 737-7800 or 1-800-521-0725

Our mailing address and telephone/fax numbers are as follows.

Florence County Planning, Engineering and Building Inspection Department
518 South Irby Street
Florence, SC 29501

Telephone: (843) 676-8600

Fax: (843) 676-8667

◆ Primary points of contact.

Zoning and site plans: Derrick Singletary (843) 676-8600.

Permits and permit fees: Janice Richardson and Kelley Rinehart (843) 676-8600.

Plan review, code, and technical information: Jonathan Atkinson (843) 676-8600.

Florence County Storm Water Approval: Woody Powell (843) 676-8600.

◆ Listing of local fire officials by fire department.

<u>Department</u>	<u>Chief</u>	<u>Telephone</u>	<u>Fax</u>
Hannah-Salem-Friendfield VFD	Monty Tedder	(843) 493-2260	(843) 493-5362
Howe Springs VFD	Billy Dillon	(843) 669-4196	(843) 669-1557
Town of Johnsonville FD	Henry Humphries	(843) 386-2500	(843) 386-2282
Town of Olanta FD	Jimmy Coker	(843) 396-4301	(843) 396-4414
Sardis-Timmons ville VFD	Jeff Dennis	(843) 346-5555	Same
South Lynches FD	John Baker	(843) 374-8690	(843) 347-0025
West Florence VFD	Howard Worrell	(843) 665-8857	(843) 665-1112
Windy Hill VFD	John DeLung Jr	(843) 662-2050	(843) 663-7173
City of Florence	Randy Osterman	(843) 665-3231	(843) 662-3298

◆ South Carolina state agencies.

<u>Agency</u>	<u>Telephone</u>
State Fire Marshal	803-896-9800 (Jonathan Jones)
Building Codes Council	803-896-4688 (Molly Price)
Modular Buildings	803-896-4688 (Maggie Smith)
Contractor's Licensing Board	803-896-4686 (Molly Price)
DHEC Storm Water Permitting	803-898-4234 (Angela Kennedy)
DHEC Bureau of Water	803-734-5300 (Public Swimming Pool Applications/Approvals)
DHEC Restaurant Inspections	(843) 661-4835 (Ronnie Herring - Florence District)