PLAN REVIEW CHECK LIST

REQUIREMENTS

FOR

COMMERCIAL BUILDING PERMITS

Plan Review Coordinator
Kris Brannon
864-596-3180
### Applicable Codes/Regulations

<table>
<thead>
<tr>
<th>Description</th>
<th>Edition</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Building Code</td>
<td>Current</td>
</tr>
<tr>
<td>International Building Code – Building</td>
<td>2018</td>
</tr>
<tr>
<td>International Building Code – Mechanical</td>
<td>2018</td>
</tr>
<tr>
<td>National Electrical Code</td>
<td>2017</td>
</tr>
<tr>
<td>International Building Code – Plumbing</td>
<td>2018</td>
</tr>
<tr>
<td>International Building Code – Gas</td>
<td>2018</td>
</tr>
<tr>
<td>International Fire Prevention Code</td>
<td>2018</td>
</tr>
<tr>
<td>International Energy</td>
<td>2009</td>
</tr>
</tbody>
</table>

### General Requirements

**Construction Documents**  
See IBC, Section 107

**Design Professional**  
See IBC, Section 107.3 & .4

If the design professional is an architect or engineer legally registered under the laws of this state regulating the practice of architecture or engineering, then he/she shall affix his official seal to said drawings, specifications and accompanying data, as required by the State of South Carolina.

### Application Package

Please be advised that engineered roof trusses, energy code compliance forms and manufacturer’s data for windows, exterior doors, skylights, and roofing materials are required to be submitted at the time of the application. This applies to all commercial buildings 5000 sqft or more or if they are a place of Assembly, Educational or Hazardous use.

### Construction Plans/Drawings

- All drawings must be drawn to scale, showing dimensions with sufficient clarity and detail to indicate the nature and character of the work. (1/4” scale is recommended)
- Floor plans are acceptable when drawn at 1/8” minimum scale if the information provided is clear.
- Recommended drawing size is 24” x 36”, maximum size 30” x 42”
- Design criteria shall comply with International Building Code 2015
- Requirements for wind loads shall be clearly indicated on plans in compliance with the specific provisions of the code.
- Architects/ Engineer drawings shall bear a certification of compliance with the State Law of South Carolina. Including a raised seal, date, and signature.
- Architect/ Engineer Drawings shall bear: seal, logo, names, signatures, dates, licenses, addresses, phone and fax numbers
- Contractor’s Drawings (if applicable) shall bear: Contractor name, signatures, dates, licenses, addresses, phone, and fax numbers.
- Plans for all buildings shall indicate how the required structural and fire resistance integrity (if applicable) will be maintained.

### Cover/Index Sheet

- Architects/ Engineers; names, addresses, phone and fax numbers, licenses number (as applicable).
- Contractors; names, addresses, phone and fax numbers, licenses number, contractor certification (if applicable).
- Index to Drawings: Architectural, structural, plumbing, mechanical (HVAC), electrical, etc.
- Abbreviations, symbols legend and general notes.
**Code Compliance Summary Sheet**

Indicate design criteria and codes compliance summary:

<table>
<thead>
<tr>
<th>Edition of Building Codes used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicated building area tabulation: living / non-living, total area under roof</td>
</tr>
<tr>
<td>Occupancy classification: Single occupancy, mixed occupancy</td>
</tr>
<tr>
<td>Special occupancy (if applicable)</td>
</tr>
<tr>
<td>General Building Limitations: Allowable height and building areas.</td>
</tr>
<tr>
<td>Building Height and area</td>
</tr>
</tbody>
</table>

**Provide a summary of itemized building areas on a matrix format as follows:**

<table>
<thead>
<tr>
<th>Living/non-living areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total areas; per unit, per floor, per building</td>
</tr>
<tr>
<td>Number of stories</td>
</tr>
<tr>
<td>Sprinkled / Un-sprinkled: On Buildings with sprinkler systems, specify system</td>
</tr>
<tr>
<td>Construction Types:</td>
</tr>
<tr>
<td>Building Construction type, protected/ unprotected, fire resistance ratings for structural members and exterior walls.</td>
</tr>
<tr>
<td>Fire separation distance on exterior walls</td>
</tr>
<tr>
<td>Fire resistant separations</td>
</tr>
<tr>
<td>Protection of openings</td>
</tr>
</tbody>
</table>

**Provide a summary of itemized occupant loads on a matrix format as follows:**

<table>
<thead>
<tr>
<th>Occupant load on each room or tenant space and each occupancy classification on buildings with mixed uses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total occupant load per floor.</td>
</tr>
<tr>
<td>Capacity of Means of Egress</td>
</tr>
<tr>
<td>Travel distance, dead-end length, exit and means of egress width.</td>
</tr>
<tr>
<td>Arrangement and number of exits separation, exits remoteness, minimum number of exits</td>
</tr>
<tr>
<td>Stairway protection</td>
</tr>
<tr>
<td>Enclosed stairways</td>
</tr>
<tr>
<td>Exterior exit way stairs, stairs separation</td>
</tr>
</tbody>
</table>

**Life Safety Plans**

Life safety drawings shall be required for all assembly occupancies and any other occupancy with an occupant load exceeding 50 people. Provide life safety drawings per floor indication the following:

<table>
<thead>
<tr>
<th>Exit access corridors between required exits.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire rated walls along the exit access corridor (if applicable)</td>
</tr>
<tr>
<td>Fire rated walls required for occupancy separations, tenant separations, exits, exits discharge and horizontal exits,</td>
</tr>
<tr>
<td>Travel distance along the path of travel from the most remote location to the exit on each floor.</td>
</tr>
<tr>
<td>Fire rated windows</td>
</tr>
<tr>
<td>Fire shutters</td>
</tr>
<tr>
<td>Fire exit/ panic hardware</td>
</tr>
<tr>
<td>Fire department access panels</td>
</tr>
</tbody>
</table>

**Stair Floor Plans and Details:**

Floor Plans, enlarged plans; dimensions, elevations and sections

| Railings: Guard rails, hand rails; dimensions, elevations, sections, height, posts spacing. |

**Roof Plan:**

Draft stopping, attic access and ventilation (if applicable)

| Indicate roof slopes |

**Accessibility by Handicapped Persons:**

Site requirements

<table>
<thead>
<tr>
<th>Accessible route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical accessibility</td>
</tr>
<tr>
<td>Toilet and bathing facilities</td>
</tr>
<tr>
<td>Drinking fountains</td>
</tr>
<tr>
<td>Special occupancy requirements</td>
</tr>
<tr>
<td>Fair housing requirements</td>
</tr>
</tbody>
</table>
**Swimming Pool:** (if applicable)
Submit a copy of drawings approved by the Department of Health and Environmental Engineering.
A separate permit applications is required

**Shop Drawings**
Shop drawing for any material, equipment or installations to be incorporated in the building shall be stamped, signed and approved by the architect or engineer of record responsible for the design.
A copy of approved shop drawings shall be made available at the job site for inspections.

**Structural Drawings:**
Index sheet: Abbreviations, symbols legend, general notes, design criteria
Soil Analysis
Termite protection
Threshold inspection plan (if applicable)
Design loads
Wind requirements
Foundation plans, sections and details
Bearing Walls and columns, sections and details.
Indicate path of travel with and arrow or shaded area showing the actual distance
Occupant load on each room or tenant space and total load at each exit door.
Indicate the aggregate of the occupant load along the path of travel
Exits: Indicate number of exits, exit width and exit capacity. Location of exit signs
Location of emergency lights
Diagonal of the building and separation distance between exits or stairs

**Energy Efficiency**
Provide code compliance energy forms (energy calculations) for all conditioned areas.
Indicate details of insulation on floors, walls, floor/ceiling, ceiling/roof assemblies.

**Architectural Drawings**
Provide building elevations and sections

**Wall elevations, sections, details:**
Architectural drawings shall provide designations, specifications, sections and details for fire rated assemblies and penetrations through those assemblies (wall, floor/ceiling, ceiling/roof assemblies)
Specify appropriate fire resistant materials and construction
Indicate details for fire resistance ratings of structural members (if applicable)
Indicate location, identification or designation of tenant separation and fire rated walls on floor plans:
Indicate tenant separation and fire rated walls (sections, details, finishes at top of wall)
Provide specific details where tenant separation walls intersect other walls, floors or roof deck.
Fire rated assemblies designation and details: walls floor/ceiling, ceiling/roof assemblies
Fire rated penetrations, designation and details: walls, floor/ceiling, ceiling/roof assemblies
Fire stopping: Details and code compliance notes
Draft stopping: Location on roof plans, details and code compliance notes

**Fire Dampers:**
Provide code compliance notes on architectural drawing for required fire dampers
Fire dampers shall be provided in ducts penetrating walls or partitions having a fire resistance rating of one hour or more.
Fire dampers shall be installed in accordance with manufacturers’ installations instructions
Mechanical drawings shall provide designations, specifications and details for fire dampers
Location of fire dampers on designated fire rated wall must be shown on mechanical floor/ceiling plans

**Doors and Hardware Schedules:**
Provide door and hardware schedules (as applicable) for opening protective on fire rated walls and emergency exits as follows:
Fire rated doors
Fire rated windows
Floor framing/structural plans and details
Stairs structural plans and details
Roof framing/structural plans and details
**Plumbing Drawings**

**Minimum Requirements:** Shall comply with International Plumbing code; Section 106.3.1 - Plumbing

- Minimum plumbing facilities
- Fixture requirements
- Water supply piping
- Sanitary drainage
- Water Heaters
- Vents
- Roof Drainage
- Back Flow prevention
- Irrigation
- Location of water supply line
- Grease traps
- Environmental requirements (if applicable)
- Plumbing riser

**Mechanical Drawings**

**Minimum Requirements:** Shall comply with International Mechanical code; Section 106.3.1 - Mechanical

- Provide a compliance note indicating compliance with International Building Code 2015 - Mechanical
- Design criteria shall comply with International Building Code – Mechanical, ASHRAE standards and reference standards
- Provide an index sheet including a code summary, general notes, abbreviations and symbols legend
- Provide fire dampers in ducts penetrating walls or partitions having a fire resistance rating of one hour or more (if applicable)
- Fire dampers shall be installed in accordance with manufacturers installation instructions
- A copy of the manufacturer installation instructions shall be made available at the job site for inspections
- Location of fire dampers on designated fire rated walls must be shown on mechanical floor plans.
- Mechanical drawings shall provide designations,
- Specify UL designations and details for penetrations of ductwork and piping through fire rated assemblies (walls, floor/ceiling assemblies, ceiling/roof assemblies.)
- HVAC floor/ceiling Plans shall indicate as applicable any ductwork, air devices, diffuser/return grilles, duct sizes, CFM’s dampers, fire/smoke dampers, vents, A/C units, fans controls; piping, refrigerant and condensate lines lay out.
- Show any HVAC equipment (as applicable). Include air handling units, condensing units, split systems, roof top units, ventilation or exhaust fan units, heaters, pumps; locations, schedules, tables and capacities.
- Show installation methods for equipment, connections, ductwork, piping, etc
- Indicate methods of securing HVAC equipment to building structure, floors, and roof
- Indicate equipment shut down devices as per SMC and NFPA

**Electrical Drawings**

**Minimum requirements:** Shall comply with IBC Section 110.1 – Electrical

- Electrical wiring and services
- Feeders and branch circuits
- Over current Protection
- Grounding
- Wiring methods and materials
- GFGIs
- Equipment
- Special Occupancies
- Emergency systems
- Communication systems (if applicable)
- Low – voltage (if applicable)
- Load calculations

**Specific requirements:**

- Provide a code compliance note indicating compliance with the National Electrical Code 2014
- Provide an electrical site plan showing exterior lighting
- Electrical power riser diagram: Show location and size of main service, meter, disconnect switch, panels, conduits, conductors and grounding
- Indicate locations of service meter, disconnect switches, panels, equipment, receptacles, and outlets.
- Indicate locations of lights, switches, fans, smoke detectors, exit and emergency lights
- Panel schedules: Show branch circuits and sizes of conduits, conductors and devices for over current protection
- Provide load calculations for service and panels.