

*SPARTANBURG COUNTY
BUILDING CODES DEPARTMENT*

PLAN REVIEW CHECK LIST



REQUIREMENTS
FOR
COMMERCIAL BUILDING PERMITS

Plan Review Coordinator
Kris Brannon
864-596-3180

<i>Applicable Codes/Regulations</i>	
<i>Description</i>	<i>Edition</i>
International Building Code	Current
International Building Code – Building	2006
International Building Code – Mechanical	2006
National Electrical Code	2005
International Building Code – Plumbing	2006
International Building Code – Gas	2006
International Fire Prevention Code	2006
International Energy	2006

<i>General Requirements</i>	
<i>Construction Documents</i>	<i>See IBC, Section 106</i>
<i>Design Professional</i>	<i>See IBC, Section 106 .3 & .4</i>
<p>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.</p>	
<i>Application Package</i>	
<p>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.</p>	

<i>Construction Plans/Drawings</i>	
	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 2006
	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.

<i>Code Compliance Summary Sheet</i>
Indicate design criteria and codes compliance summary:
Edition of Building Codes used
Indicated building area tabulation: living / non-living, total area under roof
Occupancy classification: Single occupancy, mixed occupancy
Special occupancy (if applicable)
General Building Limitations: Allowable height and building areas.
Building Height and area
Provide a summary of itemized building areas on a matrix format as follows:
Living/non-living areas.
Total areas; per unit, per floor, per building
Number of stories
Sprinkled / Un-sprinkled: On Buildings with sprinkler systems, specify system
Construction Types:
Building Construction type, protected/ unprotected, fire resistance ratings for structural members and exterior walls.
Fire separation distance on exterior walls
Fire resistant separations
Protection of openings
Provide a summary of itemized occupant loads on a matrix format as follows:
Occupant load on each room or tenant space and each occupancy classification on buildings with mixed uses.
Total occupant load per floor.
Capacity of Means of Egress
Travel distance, dead-end length, exit and means of egress width.
Arrangement and number of exits separation, exits remoteness, minimum number of exits
Stairway protection
Enclosed stairways
Exterior exit way stairs, stairs separation
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:
Exit access corridors between required exits.
Fire rated walls along the exit access corridor (if applicable)
Fire rated walls required for occupancy separations, tenant separations, exits, exits discharge and horizontal exits,
Travel distance along the path of travel from the most remote location to the exit on each floor.
Fire rated windows
Fire shutters
Fire exit/ panic hardware
Fire department access panels
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
Accessible route
Vertical accessibility
Toilet and bathing facilities
Drinking fountains
Special occupancy requirements
Fair housing requirements

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
	Provide a code compliance note indication compliance with International Building Code 2006 –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 2006 - Mechanical
	Design criteria shall comply with International Building Code – Mechanical, ASHRAW 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 106.3.5 – 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 2005
	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.