

TABLE 5-1 FLOOD HAZARD INFORMATION and FLOOD LOADS		
FLOOD HAZARD AREA		
Base Flood Elevation _____	MSL	NGVD or FIRM
Design Flood Elevation _____	MSL	IBC 1612.3 and ASCE 24
NON HIGH-VELOCITY WAVE ACTION		
Elevation of Lowest Proposed Floor _____	MSL	Meet ASCE 24 Section 2.6.2.1
Dry floodproofing _____	<input type="checkbox"/> no <input type="checkbox"/> yes	per ASCE 24
HIGH-VELOCITY WAVE ACTION		
Elevation of bottom of Lowest Horizontal Structural Member of lowest floor _____	MSL	
Flotation resistant <input type="checkbox"/> no <input type="checkbox"/> yes		per ASCE 24
Breakaway wall <input type="checkbox"/> no <input type="checkbox"/> yes		per ASCE 24
IBC 1612 and SE-900, as applicable		

ZONING CERTIFICATION	
"I hereby certify that, to the best of my knowledge, these plans comply with applicable zoning ordinances, and that plans have been submitted to appropriate authority for their review and/or approval."	
Signed: _____	_____
Architect/Engineer	Date

If the project does not require a National Pollution Discharge Elimination System (NPDES) permit from SCDHEC, include the following certification on the Site Plan(s):

EROSION AND SEDIMENT REDUCTION/STORMWATER MANAGEMENT	
Designer's Certification:	
"I hereby certify that the measures in this plan are designed to control erosion, retain sediment on the site, and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased, that all structural measures are designed to the minimum standards for health and safety, and that all the provisions of the plan are in compliance with the Regulations contained in Chapter 72, Article 2, SC Code of Regulations (Erosion and Sediment Reduction and Stormwater Management Regulations)."	
Signed: _____	_____
Engineer or Registered Landscape Architect (Circle one)	Date

TABLE 5-2 SOILS & SITE		
SOILS INVESTIGATION (If available)		
	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC 1802.2
SOILS CLASSIFICATION		
Site Class (seismic class)	_____	per IBC 1613.5.2
Classes Soil of Materials (UCS System)	_____	per IBC 1802.3
Allowable Footing Bearing Pressure	_____ psf	
MINIMUM DESIGN SOIL BEARING LOAD		
	_____ psf	per IBC table 1804.2.1
COMPACTION		
Subgrade _____ Percent	<input type="checkbox"/> ASTM D698 <input type="checkbox"/> ASTM D1557 <input type="checkbox"/> AASHTO (only for paving & roads)	
Base _____ Percent	<input type="checkbox"/> ASTM D698 <input type="checkbox"/> ASTM D1557 <input type="checkbox"/> AASHTO(only for paving & roads)	
Other _____ Percent	<input type="checkbox"/> ASTM D698 <input type="checkbox"/> ASTM D1557 <input type="checkbox"/> AASHTO(only for paving & roads)	
MINIMUM DESIGN SOIL LATERAL LOAD		
	_____ psf	per IBC 1610.1
FOOTINGS		
Undisturbed footings	<input type="checkbox"/> no <input type="checkbox"/> yes	
Compacted Fill Material	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC 1803.5
ELEVATIONS		
Elevation of Water Table	_____ MSL	
Elevation of lowest footing	_____ MSL	
Elevation of lowest floor or basement	_____ MSL	

NOTE: Where a fire wall is necessary to separate buildings, each building is to be provided individual code criteria tables 5-3 through 5-14. See IBC 503.1.2.

TABLE 5-3 BASIC BUILDING CODE INFORMATION			
CONSTRUCTION CLASSIFICATION	Type _____ (IBC 602)		
OCCUPANCY GROUP (indicate all) (Note IBC 506.4.1)	_____ (IBC 302)		
OCCUPANCY GROUP (indicate most restrictive)	_____ (IBC Table 503)		
Does building require Incidental Use Area Separation?	<input type="checkbox"/> no <input type="checkbox"/> yes	(IBC 508.2.2)	
Does building have Accessory Occupancy (ies)? What percent of story is accessory occupancy?	<input type="checkbox"/> no <input type="checkbox"/> yes	(IBC 508.3.1)	_____ SF _____ %
Mixed Occupancy	<input type="checkbox"/> no <input type="checkbox"/> yes	(IBC 508.3)	
Non separated	<input type="checkbox"/> no <input type="checkbox"/> yes	(IBC 508.3.2)	
Separated	<input type="checkbox"/> no <input type="checkbox"/> yes	(IBC 508.3.3) (IBC506.4.1)	
OTHER FIRE PROTECTION SYSTEMS, DEVICES or FEATURES If the building has any special or notable fire protection or safety feature or hazard the designers should list them here, describe the performance characteristics and refer to locations in construction documents. (e.g. fire extinguishers, smoke- evacuation/control/compartments. Note IBC §414.1.3.)			

TABLE 5-4 BUILDING AREA	
AREA LIMIT BY TABLE 503 OF IBC (Do not indicate increases for sprinklers & street frontage.)	_____ SF (area limitation per story)
AREA MODIFICATION FROM EQUATION 5-1 OF IBC (Insert equation from IBC 506.1 with completed calculations in this box) (Equation 5-1) $Aa = At + [At \times If] + [At \times Is]$ <p>Aa = Allowable area per floor (square feet). At = Tabular area per floor in accordance with Table 503 If = Area increase factor due to frontage (percent) as calculated in accordance with Section 506.2. Is = Area increase due to sprinkler protection as calculated in accordance with Section 506.3.</p> (Repeat equation for each story of differing occupancies, IBC 506.4.1) Note: footnote "e." from table 601	_____ SF (maximum modified area per story)
	_____ SF (maximum area per story)
Total Allowed Area of Building (summary of all stories)	_____ SF
AREA AS DESIGNED PER STORY (Repeat for each story)	_____ SF (area per story)
Total Designed Area of Building	_____ SF

TABLE 5-5 BUILDING HEIGHT				
	AS DESIGNED		AS ALLOWED BY IBC	
	In Feet	In Stories	In Feet	In Stories
Without any Allowable Increase (per IBC Table 503)				
Allowable Height Increase (per IBC 504.2)				
Total Height including any Allowable Increase				

TABLE 5-6 BUILDING DESIGN OCCUPANT LOAD					
		A	B	C	D
Stories & Levels	Function of Space ¹	Floor Area ² (specify NSF or GSF)	Max Area allowed /Occupant ³ (specify NSF or GSF)	Persons on floor for this Function ⁴	Design Occupant Load
	(1)	(2)	(3)	(4)	
-	<i>(Add additional rows as needed for each Function Type on this story)</i>				
	Subtotal Design Occupant Load for This Story				(5)
	(1)	(2)	(3)	(4)	
-	<i>(Add additional rows as needed for each Function Type on this story)</i>				
	Subtotal Design Occupant Load for This Story				(5)
	(1)	(2)	(3)	(4)	
-	<i>(Add additional rows as needed for each Function Type on this story)</i>				
	Subtotal Design Occupant Load for This Story				(5)
<i>Add or delete rows as needed for each story & level of building (including mezzanine)</i>					
Total Building Design Occupant Load					(6)
Footnotes: 1 Provide the complete name of the Function of space using the left column of Table 1004.1.1 of the IBC. 2. Design Area per each occupant of this function on this floor in either Gross or Net square footage 3. Allowed Floor Areas in SF per Occupant per right column in Table 1004.1.1 of the IBC 4. Divide Column A (2) by Column B (3) for each function and enter the result, rounded up to the nearest whole person (4) 5 Subtotal all Column C values for this floor to yield the Design Occupant Load, (5) 6. Total Building Design Occupant Load –sum of all Column D value (6)					

TABLE 5-7 GENERAL FIRE PROTECTION REQUIREMENTS		
SEPERATIONS		
Fireblocking Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Section 717
Draftstopping Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Section 717
Smoke Control System Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Section 909
Smoke Barriers Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Sections 407 and 408
Smoke Partitions Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Sections 407
Fire Partition Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Section 419
Fire Barrier Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IBC Section 706
ALARM & DETECTION		
Fire Alarm System Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC Section 907
Emergency Alarm System Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC 908
SUPPRESSION		
Standpipes Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC Section 905
Sprinklers Required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC Section 903
Sprinklers Provided	<input type="checkbox"/> no <input type="checkbox"/> yes	
Portable extinguishers required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC 906
Other suppression systems required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC 904
Smoke & heat vents required	<input type="checkbox"/> no <input type="checkbox"/> yes	per IFC 910
Other: <i>(Indicate other provided fire and life safety features not listed above, if any)</i>		

TABLE 5-8 FIRE RESISTANCE RATING OF BUILDING ELEMENTS				
BUILDING ELEMENT	Rating As Required (in hours)	Rating As Designed (in hours)	Testing Agency & Design No. (UL, FM, etc)	Designers Wall/Partition Key Code
Structural Frame (per IBC Table 601)				
Bearing Walls Exterior Interior (per IBC Table 601)				
Nonbearing Walls & Partitions Exterior Interior (per IBC Table 601 & 602)				
Floor Construction including supporting beams & joists (per IBC Table 601)				
Roof Construction including supporting beams & joists (per IBC Table 601)				
Fire Walls (per IBC Section 705)				
Fire Barriers (per IBC Section 706)				
Shaft Enclosures (per IBC Section 707)				
Fire Partitions (per IBC Section 708)				
Opening & Protective Listing by Category (fire shutters, doors, etc. per IBC Section 715)				
Others as required by Designer)				

TABLE 5-9 STRUCTURAL DESIGN INFORMATION			
OCCUPANCY CATEGORY(IES)		<i>IBC Table 1604.5</i>	
LIVE LOADS			
Floor Live Load	$F_{ll} =$	PSF	<i>List the F_{ll} for each occupancy</i>
Roof Live Load	$R_{ll} =$	PSF	
Ground Snow Load	$p_g =$	PSF	<i>IBC (Figure 1608.2)</i>
WIND LOADS			
Analysis Procedure	_____		<i>ASCE 7</i>
Basic Wind Speed	$V_{3S} =$ _____	MPH	<i>3 sec gust IBC Fig 1609</i>
Exposure Category	_____		
Wind Importance Factor		$I_w =$ _____	<i>ASCE 7(Table 6.1)</i>
Internal Pressure Coefficient		$GC_{pi} =$ _____	<i>ASCE 7</i>
External Pressure Coefficient		$GC_p =$ _____	<i>ASCE 7</i>
SEISMIC LOADS			
Seismic Importance Factor		$I =$ _____	<i>ASCE 7</i>
Soil Class	_____		<i>IBC 1613.5.2</i>
Mapped Spectral Response Accelerations			$S_s =$ _____ $S_1 =$ _____
Design Spectral Response Acceleration Parameters			$S_{DS} =$ _____ $S_{D1} =$ _____
Seismic Use Group	_____		<i>ASCE 7 (Seismic Occupancy Category IBC)</i>
Seismic Design Category	_____		<i>IBC Tables 1613.5.6(1) & 1613.5.6(2)</i>
Basic Seismic Force Resisting System	_____		
Design Base Shear		_____ KIPS	
Seismic Response Coefficient(s)		$C_s =$ _____	<i>ASCE 7</i>
Response Modification Factor(s)		$R =$ _____	<i>ASCE 7</i>
Analysis Procedure	_____		
ARCHITECTURAL-MECHANICAL-ETC. LOADS		<i>Provide as applicable: architectural items, mechanical, plumbing, etc. per ASCE 7</i>	
SPECIAL LOADS		<i>Provide as applicable: abnormal items, moving loads, impact, hoisting, etc. per ASCE)</i>	

**per IBC Chapter 16 and ASCE 7 -- Information may be shown on initial Structural Sheet of the drawings or on Sheet with other code information. List floor design loads on structural plans.*

Table 5-10 PLUMBING INFORMATION				
WATER SYSTEM				
Service Line Size		Inches		
Peak		GPM		
Total Demand		No. Fixture Units		
SANITARY SEWER SYSTEM				
Loading		GPD		
Service Line Size		Inches		
Slope		min inches/ft		
MINIMUM PLUMBING FIXTURES REQUIRED/PROVIDED			per IPC Section 403 & Table 403.1	
	Male-Required	Male-Provided	Female-Required	Female-Provided
Water Closets				
Lavatories				
Urinals*				
OTHER FIXTURES		Required	Provided	per IPC Section 403 & Table 403.1
Drinking Fountains				
Unisex toilet				
Service Sink				
Others (list) _____				

* Urinals – See IPC 419.2

Where mixed Occupancies occur within buildings, expand this table to indicate Occupant loads for each
The minimum required toilet fixtures are calculated for the total Design Occupant Load indicated in Table 5-6

TABLE 5-12 MECHANICAL INFORMATION		
AIR COMFORT SYSTEMS		
Overall Thermal Transfer Value (OTTV): _____		
Building Heating Load	_____ SF / Ton	
Building Cooling Load	_____ BTU / SF	
OTHER LOADING FEATURES		
Glass	U Factor _____	Window to wall ratio _____
Insulation Values	Roof _____	Exterior Walls _____
Outside Air minimum while occupied	_____ CFM	_____ Occupants
MECHANICAL SYSTEMS, SERVICE SYSTEMS & EQUIPMENT		
Briefly describe mechanical system:		

(The above data shall be considered a minimum and any special attribute required to meet the mechanical codes.)

TABLE 5-13 ELECTRICAL INFORMATION			
SERVICE TRANSFORMER	<input type="checkbox"/> By Utility Co.	<input type="checkbox"/> By Agency (if by Agency)	_____ KVA Primary _____ Voltage/Phase
ELECTRICAL SERVICE INFORMATION			
Service Voltage/Phase	_____ Amperes		
Service Entrance Conductors Size	_____ Quantity per Phase		
Total Connected Load	_____ KVA		
Estimated Maximum Demand	_____ KVA		
Available Fault Current in Symmetrical Amperes	_____		
Interrupting Capacity of Service Overcurrent Device	_____		
GROUNDING ELECTRODE SYSTEM COMPONENTS:			(NEC 250)
EMERGENCY SERVICE INFORMATION			
Emergency Generator	<input type="checkbox"/> No <input type="checkbox"/> Yes	_____ KVA	Voltage/Phase _____ Fuel _____
Exit/Emergency Lights Backup Power		<input type="checkbox"/> Integral Battery	<input type="checkbox"/> Generator
Fire Alarm System	<input type="checkbox"/> Manual <input type="checkbox"/> Automatic	<input type="checkbox"/> Addressable	<input type="checkbox"/> Class A <input type="checkbox"/> Class B
LIGHTNING PROTECTION PROVIDED	<input type="checkbox"/> No <input type="checkbox"/> Yes		
COMMUNICATIONS COORDINATED	<input type="checkbox"/> Not Required <input type="checkbox"/> Yes	Contact Chief Information Office for applicability (803) 898-8172	

TABLE 5-14 DESIGN-RELATED CONSTRUCTION PERMITS/APPROVALS			
The following list is not all-inclusive of every, permit and standards applicable to each project. Agencies and A/Es must delete non-applicable listings and add others for each specific project.			
Type of Development	SC Law or Reg.	Where to Obtain Permit/Approval	Status
Air pollutant discharge	48-1-100, R61-62.1	SCDHEC - Air Quality Control	
Ambulatory surgical facilities	R61-91	SCDHEC - Health Facilities Construction	
Asbestos abatement	R61-86.1	SCDHEC - Air Quality Control	
Building construction, Zoning	6-7-830, 6-9-110	Local Authority	
Community residential care facilities	R61-84	SCDHEC - Health Facilities Construction	
Construction in critical coastal areas	48-39-10, 130, 190	SCDHEC - Ocean & Coastal Res. Mgmt.	
Construction in navigable waters	49-1-16	SCDHEC - Water Pollution Control	
Dams and reservoirs	49-11-200, R72-1, 2, 3	SCDHEC - Water Pollution Control	
Demolition of Real Property	R61-86.1	SCDHEC - Air Quality Control	
Design Review Board (BARs, SC Dept Archives & History, etc.)	Various local	Various local	
Educational facilities (K through 12)	59-23-40	SC Department of Education – Office of District Facilities Management	
Elevators	14-16-90	SC Department of Labor, Licensing & Regulation	
Fire Department (Local)	Various local & State	Servicing Fire Department	
Fire Protection Sprinkler	23-45	State Fire Marshal	
Fire suppression systems	R19-300.7	State Fire Marshal	
Floodplains, construction in	Exec. Order 82-19	Office of State Engineer	
Food service establishments	R61-25	SCDHEC – Local County Health Dept.	
Historical building rehabilitation	R12-125, 126	Archives and History, Local Authority	
Hospitals & infirmaries	R61-16	SCDHEC – Health Facilities Construction	

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The following list is not all-inclusive of every, permit and standards applicable to each project. Agencies and A/Es must delete non-applicable listings and add others for each specific project.			
Type of Development	SC Law or Reg.	Where to Obtain Permit/Approval	Status
Road encroachment, local	57-7-60	Local City or County Authority	
Road encroachment, state	57-5-1080	Local SCDOT Maintenance Office	
Sanitary sewer; treatment & disposal	R61-56, 57	SCDHEC – Domestic Wastewater	
Storm water discharge, erosion and sediment control	R61-9; R72-100-108	SCDHEC – Water Pollution Control; State Engineer; Local Authority	
Swimming areas, natural public	R61-50	SCDHEC – Water Supply Construction	
Swimming pools, public	R61-51	SCDHEC – Water Supply Construction	
Underground storage tanks	R61-92	SCDHEC – Groundwater Protection	
Waste discharge (sewage, industrial waste, etc.)	48-1-100, 110, R61-9	SCDHEC – Water Pollution Control	
Water supply	44-55-40, R61-57, 58	SCDHEC – Water Supply Construction	
Wells, Underground injection	R61-71, 87	SCDHEC – Groundwater Protection	
Zoning(Municipal, County or District)	Various		

For completion of this Table in the Bid Documents Stage it must indicate the status of each permit by insertion of “approved” and date in the status column. If not approved, indicate pending approval, phased approval and who (A/E, Agency, Contractor or Other) is to provide that documentation and anticipated date.

