

CITY OF RALEIGH
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
NC 2012 BUILDING CODE
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2.)

Name of Project: _____

Address: _____ Suite #: _____

Owner or Authorized Agent: _____ Phone: _____

Email: _____ Fax: _____

Owned By: Privately City/County State

Code Enforcement Jurisdiction: City County City/County

Name of Jurisdiction: _____ City of Raleigh _____

PROJECT SUMMARY:

Building Description:

Scope of Work:

Code Compliance Summary:

Alternative Means of Compliance Request:

Lead Design Professional/Project Coordinator: _____

DESIGNER	FIRM	NAME	LICENSE	TELEPHONE
Architectural: _____	_____	_____	_____	_____
Civil: _____	_____	_____	_____	_____
Electrical: _____	_____	_____	_____	_____
Fire Alarm: _____	_____	_____	_____	_____
Plumbing: _____	_____	_____	_____	_____
Mechanical: _____	_____	_____	_____	_____
Sprinkler-Standpipe: _____	_____	_____	_____	_____
Structural: _____	_____	_____	_____	_____
Precast: _____	_____	_____	_____	_____
Trusses: _____	_____	_____	_____	_____
Retaining Walls >5' High: _____	_____	_____	_____	_____
Other: _____	_____	_____	_____	_____

Note: Special Inspections and Inspectors to be listed at end of this document.

- Building Code: 2012 North Carolina State Building Code (NCSBC)
 2009 North Carolina State Building Code (NCSBC)
 2006 North Carolina State Building Code (NCSBC)
 2009 NC Rehab 2006 NC Rehab
 2009 Chapter 34 (Attach Summary) 2006 Chapter 34 (Attach Summary)
 1995 Existing Building Code Volume 9

- New Building: New Building Shell Building First Time Interior Completion
 Addition Alteration to Shell

Accessibility Compliance Form (when applicable)

- Existing Building: Renovation Interior Completion Tenant Alteration
 Reconstruction Repair Alteration to Shell
 Change of Use Tenant Space Change of Occupancy

Note: Zoning Review May Be Required for Change of Use or Occupancy

Original Occupancy: _____

Proposed Occupancy: _____

OCCUPANCY INFORMATION

- Primary Occupancies:** Assembly: A-1 A-2 A-3 A-4 A-5
 Business Educational Factory-Industrial: F-1 F-2
High-Hazard: H-1 H-2 H-3 H-4 H-5
Institutional: I-1 I-2 I-3 I-4
I-3 USE CONDITION: 1 2 3 4 5
 Mercantile Residential: R-1 R-2 R-3 R-4
Storage: S-1 S-2 High-piled
S-1 SPECIAL CONDITION: Repair Garage (406.6)
S-2 SPECIAL CONDITION -- Parking Garage: Open (406.3) Enclosed (406.4)
 Utility and Miscellaneous

Other Uses:

Accessory Uses (Indicate Percentages): _____

Incidental Uses: _____

- Special Occupancies:** 402 403 404 405 406 407 408
 409 410 411 412 413 414 415
 416 417 418 419 420 421

Mixed Occupancy: No Yes Separation: _____

Exception: _____

Non-Separated Mixed Occupancy (508.3.2)

Separated Mixed Occupancy (508.3.3)

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

ALLOWABLE AREA AND HEIGHT CALCULATIONS
THIS SECTION FOR NEW, ADDITION, CHANGE OF USE, AND INTERIOR COMPLETIONS

EXTERIOR WALL	ACTUAL LENGTH		OPEN LENGTH		WIDTH OF PUBLIC WAY OR OPEN SPACE	
North						
South						
East						
West						
Total		P		F		W

INCREASE FRONTAGE _____ %

SPRINKLERS _____ %

FRONTAGE INCREASE FORMULA ALLOWABLE AREA FORMULA

$$I_f = 100 \left(\frac{F}{P} - 0.25 \right) \frac{W}{30}$$

BOTH BUILDING AND TENANT MUST BE INDICATED ON CHART BELOW

STORY NO.	OCCUPANCY	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503 ⁵ AREA	(C) % OPEN SPACE INCREASE ¹	(D) % SPRINKLER INCREASE ²	(E) ALLOWABLE FLOOR AREA OR UNLIMITED ³	RATIO OF ACTUAL /ALLOWABLE	(F) MAXIMUM BUILDING AREA ⁴	SEPARATION RATING REQUIRED

¹ Open space area increases from Section 506.2 are computed thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ ft (F)
- b. Total Building Perimeter = _____ ft (P)
- c. Ratio (F/P) = _____ (F/P)
- d. W = Minimum width of public way = _____ ft (W)
- e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30 = \text{_____ } (\%)$

² The sprinkler increase per Section 506.3 is as follows:

- a. Multistory building $I_s = 200$ percent
- b. Single story building $I_s = 300$ percent

³ Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507.1, 507.2, 507.3, 507.4, 507.7);

FIRE PROTECTION REQUIREMENTS
THIS SECTION REQUIRED FOR ALL PROJECTS

Life Safety Plan Sheet #, if Provided _____

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
		REQ'D*	PROVIDED (W/____ HR* REDUCTION)				
Bearing walls Exterior							
North							
East							
West							
South							
Interior Bearing Walls							
Nonbearing walls Exterior							
North							
East							
West							
South							
Interior Non Bearing Walls							
Structural frame, including columns, girders, trusses							
Floor construction, including supporting beams and joists. List construction type.							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof construction, including supporting beams and joists **							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shafts – Exit Enclosures							
Shafts – Other (describe)							
Shafts – Other (describe)							
Corridor Separation							
Occupancy Separation							
Party/Fire Wall Separation							
Incidental Use Separation							
Dwelling/Sleeping unit Separation							
Smoke Barrier Separation							
Tenant Separation							

* Indicate section number permitting reduction

** Indicated if using Table 601 Note C exception

PERCENTAGE OF WALL OPENING CALCULATIONS

THIS SECTION FOR ADDITIONS, NEW AND CHANGE OF USE

Allowable openings per Table 704.8

WALL LEGENDS

THIS SECTION REQUIRED FOR ALL PROJECTS

CHECK IF THE FOLLOWING ARE PRESENT AND INDICATE BY A **WALL LEGEND** ON ALL PLANS

- Fire Partitions 708 Fire Walls 705 Fire Barriers 706 Smoke Partitions 710
 Smoke Barriers 709 Shaft Enclosure 707

LIFE SAFETY SYSTEM REQUIREMENTS

THIS SECTION REQUIRED FOR ALL PROJECTS

- Emergency Lighting: No Yes
Exit Signs: No Yes
Fire Alarm: No Yes
Smoke Detection Systems: No Yes
Panic Hardware: No Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

THIS SECTION REQUIRED FOR ALL PROJECTS

FLOOR, ROOM AND/OR SPACE DESIGNATION	MINIMUM ² NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ^{1,3} (SECTION 1015.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS

¹ Corridor dead ends (Section 1017.3)
² Single exits (Section 1015.1; Section 1019.2)
³ Common Path of Egress Travel (Section 1014.3)

Structural Design Loads

Structure Conforms to "Conventional Light Frame Provisions of 2308

1	__Yes, continue __No, Go to Line 9		
2	Roof Live Load =	<input type="text"/>	PSF
3	Floor Live Load =	<input type="text"/>	PSF
4	Ground Snow Load (Pg) =	<input type="text"/>	PSF
5	Basic Wind Speed, 3 sec. Gust =	<input type="text"/>	MPH
6	Seismic Site Class =	<input type="text"/>	
7	Seismic Design Category =	<input type="text"/>	
8	<u>Go to Line 44</u>		
9	Live Loads		Area
10	Floor Live Load (indicate area) =	<input type="text"/>	PSF
11	Floor Live Load (indicate area) =	<input type="text"/>	PSF
12	Floor Live Load (indicate area) =	<input type="text"/>	PSF
13	Live Load Reduction used in Design	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Roof Live Load =	<input type="text"/>	PSF
15	Roof Snow Load Data		
16	Flat-Roof Snow Load (Pf) =	<input type="text"/>	PSF
17	Snow Exposure Factor (Ce) =	<input type="text"/>	
18	Snow Importance Factor (Is) =	<input type="text"/>	
19	Thermal Factor (Ct) =	<input type="text"/>	
20	Wind Design Data		
21	Basic Wind Speed, 3 sec. Gust =	<input type="text"/>	MPH
22	Wind Importance Factor (Iw) =	<input type="text"/>	
23	Wind Exposure	<input type="text"/>	(If multiple exposures are used indicate directions)
24	Internal Pressure Coefficient	<input type="text"/>	
25	Components and Cladding Loads =	<input type="text"/>	(If elements are not designed by the registered design professional)
26	Wind Base Shear, Wx	<input type="text"/>	KIPS
27	Wind Base Shear, Wyx	<input type="text"/>	KIPS
28	Earthquake Design Data		
29	Seismic Important Factor (Ie) =	<input type="text"/>	
30	Occupancy Category	<input type="text"/>	
31	Mapped Spectral Response Acceleration Ss	<input type="text"/>	
32	Mapped Spectral Response Acceleration S1	<input type="text"/>	
33	Site Class	<input type="text"/>	(Provide soils report if Site Class is not "D")
34	Spectral Response Coefficient, Sds =	<input type="text"/>	
35	Spectral Response Coefficient, Sd1 =	<input type="text"/>	
36	Seismic Design Category =	<input type="text"/>	
37	Building (Structural) System	<input type="text"/>	
38	Basic Seismic Force Resisting System	<input type="text"/>	
39	Seismic Response Coefficient (Cs) =	<input type="text"/>	
40	Response Modification Factor, R =	<input type="text"/>	

- 41 Analysis Procedure Used =
- 42 Seismic Base Shear, Sx KIPS
- 43 Seismic Base Shear, Sy KIPS
- 44 **Soil Data**
- 45 Presumptive Soil Bearing Pressure = PSF
- 46 Bearing Pressure per Soils Report PSF
- 47 Deep Foundation Type
- 48 Deep Foundation Allowable Loads TONS, downward
- 49 Uplift KIPS
- 50 Lateral KIPS

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL					

SPECIAL APPROVALS

(Describe special approvals from local jurisdictions, County or State Department of Health, NC Department of Insurance, International Code Council, etc.)

ENERGY SUMMARY

THIS SECTION FOR NEW, ADDITIONS CHANGE OF USE, AND INTERIOR COMPLETION

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If energy cost budget method, state the annual energy cost budget vs. allowable annual energy cost budget.

THERMAL ENVELOPE

Method of Compliance:

Prescriptive Performance Energy Cost Budget

Roof/ceiling Assembly (each assembly)

Description of assembly _____

U-Value of total assembly _____

R-Value of insulation _____

Skylights in each assembly

 U-Value of skylight _____

 Total square footage of skylights in each assembly _____

Exterior Walls (each assembly)

Description of assembly _____

U-Value of total assembly _____

R-Value of insulation _____

Openings (windows or doors with glazing)

 U-Value of assembly _____

 Shading coefficient _____

 Projection factor _____

 Low-e required, if applicable _____

Door R-Values _____

Walls adjacent to unconditioned space (each assembly)

Description of assembly _____

U-Value of total assembly _____

R-Value of insulation _____

Openings (windows or doors with glazing)

 U-Value of assembly _____

 Low-e required, if applicable _____

Door R-Values _____

Walls below grade (each assembly)

Description of assembly _____

U-Value of total assembly _____

R-Value of insulation _____

Floors over unconditioned space (each assembly)

Description of assembly _____

U-Value of total assembly _____
R-Value of insulation _____

Floors slab on grade (each assembly)

Description of assembly _____

U-Value of total assembly _____
R-Value of insulation _____
Horizontal/Vertical requirement _____
Slab heated _____

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

THIS SECTION REQUIRED FOR ALL PROJECTS THAT INCLUDE ELECTRICAL DESIGN

Method of Compliance:

Prescriptive Performance Energy Cost Budget

Lighting Schedule

Lamp type required in fixture _____
Number of lamps in fixture _____
Ballast type used in the fixture _____
Number of ballasts in fixture _____
Total wattage per fixture _____
Total interior wattage specified vs. allowed _____
Total exterior wattage specified vs. allowed _____

Equipment schedules with motors (not used for mechanical systems)

Motor horsepower _____
Number of phases _____
Minimum efficiency _____
Motor type _____
No. of poles _____

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

THIS SECTION REQUIRED FOR ALL PROJECTS THAT INCLUDE MECHANICAL DESIGN

Method of Compliance:

Prescriptive Performance Energy Cost Budget

Thermal zone

Winter dry bulb _____
Summer dry bulb _____

Interior design conditions

Winter dry bulb _____
Summer dry bulb _____
Relative humidity _____

Building heating load

Building cooling load

Mechanical Spacing Conditioning System

Unitary _____
Description of unit _____
Heating efficiency _____
Cooling efficiency _____
Heat output of unit _____
Cooling output of unit _____

Boiler _____

Total boiler output. If oversized, state reason _____

Chiller _____

Total chiller capacity. If oversized, state reason _____

List equipment efficiencies

Equipment schedules with motors (mechanical systems)

Motor horsepower _____

Number of phases _____

Minimum efficiency _____

Motor type _____

of poles _____

Shell Variable Form

Required for all Shell, Alteration to Shell and Interior Completion Permits

Check each applicable line to match scope of work. Edit as necessary to provide clear detail of installation.

Reproduce on Cover Sheet

Mechanical

- No work
- Equipment set __ with __ without power
- Trunk line installed __ with __ without outlets
- Gas Line
- Install complete operational system
- Other _____

Plumbing

- No work
- Install water service and sewer
- Install building drain __ and __ or water distribution main __ with __ without branches
- Install complete plumbing system
- Other _____

Sprinkler

- Install complete sprinkler system

Building

- Install slab __ partial __ complete
- Install demising walls
- Install interior partitioning __ partial __ complete
- Install Ceilings
- White box (additional interior completion permits are required for Certificate of Occupancy and power)
- Other _____

Electrical

- House panel
- Service laterals to meter centers/panels located on buildings
- Demise wall and ceilings only
- Conduit, duct, raceway in slab
- Power and lighting circuits to "J" Box
- Install light fixtures
- Install __ Heat/Ac __ Elevator __ Generator __ Parking lot lighting
- Install complete system

Other _____

Please provide full information on any alternate methods and means incorporated into the design of this project. Provide specific details and incorporate into plan submittal any supporting documents or agreement letters.

Special Inspections Chapter 17

SPECIAL INSPECTIONS SHALL BE CONDUCTED ON ALL PROJECTS THAT FALL WITHIN BUILDING CATEGORIES AND/OR CONTAIN ELEMENTS SUBJECT TO SPECIAL INSPECTIONS AS PRESCRIBED BY REVISED SECTION 1704.

To schedule a **required** pre-construction meeting with the City of Raleigh, please call [Steve Luxton](#) at (919) 516-2183 or [Willis Stancil](#) at (919) 516-2187. The main line number for the [Development Services Customer Service Center](#) is (919) 516-2495.

List whom will inspect the required special inspections:

Fabricator of load bearing components

Soil tests

Concrete, caissons, piles, piers, pre-cast

Post tension concrete

Modular construction

Steel and connections, welds, bolts, anchors

Fire spray tests

Smoke control

Seismic, wind designs, Quality Assurance

Retaining walls

Masonry

Wood

Alternate Methods

EFIS

Other (describe)

Other (describe)

Owner or agent