

**CITY OF RALEIGH**  
**BUILDING CODE SUMMARY**  
**FOR ALL COMMERCIAL PROJECTS**  
**NC 2009 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:  2009 North Carolina State Building Code (NCSBC)  
 2006 North Carolina State Building Code (NCSBC)  
 2009 NC Rehab  2006 NC Rehab  
 2006 Chapter 34 (Attach Summary)  1995 Existing Building Code Volume 9  
 2009 Chapter 34 (Attach Summary)

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

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						
<b>Total</b>		<b>P</b>		<b>F</b>		<b>W</b>

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 <sup>5</sup> AREA	(C) % OPEN SPACE INCREASE <sup>1</sup>	(D) % SPRINKLER INCREASE <sup>2</sup>	(E) ALLOWABLE FLOOR AREA OR UNLIMITED <sup>3</sup>	RATIO OF ACTUAL /ALLOWABLE	(F) MAXIMUM BUILDING AREA <sup>4</sup>	SEPARATION RATING REQUIRED

<sup>1</sup> 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  $I_f = 100 [ F/P - 0.25 ] \times W/30 = \text{_____ } (\%)$

<sup>2</sup> 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

<sup>3</sup> 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)				
<b>Bearing walls Exterior</b>							
North							
East							
West							
South							
Interior Bearing Walls							
<b>Nonbearing walls Exterior</b>							
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 <sup>2</sup> NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS <sup>1,3</sup> (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

<sup>1</sup> Corridor dead ends (Section 1017.3)  
<sup>2</sup> Single exits (Section 1015.1; Section 1019.2)  
<sup>3</sup> 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 style="width: 40px; height: 20px;" type="text"/>	PSF
3	Floor Live Load =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
4	Ground Snow Load (Pg) =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
5	Basic Wind Speed, 3 sec. Gust =	<input style="width: 40px; height: 20px;" type="text"/>	MPH
6	Seismic Site Class =	<input style="width: 40px; height: 20px;" type="text"/>	
7	Seismic Design Category =	<input style="width: 40px; height: 20px;" type="text"/>	
8	<u>Go to Line 44</u>		
9	<b>Live Loads</b>		Area
10	Floor Live Load (indicate area) =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
11	Floor Live Load (indicate area) =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
12	Floor Live Load (indicate area) =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
13	Live Load Reduction used in Design	Yes    No	
14	Roof Live Load =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
15	<b>Roof Snow Load Data</b>		
16	Flat-Roof Snow Load (Pf) =	<input style="width: 40px; height: 20px;" type="text"/>	PSF
17	Snow Exposure Factor (Ce) =	<input style="width: 40px; height: 20px;" type="text"/>	
18	Snow Importance Factor (Is) =	<input style="width: 40px; height: 20px;" type="text"/>	
19	Thermal Factor (Ct) =	<input style="width: 40px; height: 20px;" type="text"/>	
20	<b>Wind Design Data</b>		
21	Basic Wind Speed, 3 sec. Gust =	<input style="width: 40px; height: 20px;" type="text"/>	MPH
22	Wind Importance Factor (Iw) =	<input style="width: 40px; height: 20px;" type="text"/>	
23	Wind Exposure	<input style="width: 40px; height: 20px;" type="text"/>	(If multiple exposures are used indicate directions)
24	Internal Pressure Coefficient	<input style="width: 40px; height: 20px;" type="text"/>	
25	Components and Cladding Loads =	<input style="width: 40px; height: 20px;" type="text"/>	(If elements are not designed by the registered design professional)
26	Wind Base Shear, Wx	<input style="width: 40px; height: 20px;" type="text"/>	KIPS
27	Wind Base Shear, Wyx	<input style="width: 40px; height: 20px;" type="text"/>	KIPS
28	<b>Earthquake Design Data</b>		
29	Seismic Important Factor (Ie) =	<input style="width: 40px; height: 20px;" type="text"/>	
30	Occupancy Category	<input style="width: 40px; height: 20px;" type="text"/>	
31	Mapped Spectral Response Acceleration Ss	<input style="width: 40px; height: 20px;" type="text"/>	
32	Mapped Spectral Response Acceleration S1	<input style="width: 40px; height: 20px;" type="text"/>	
33	Site Class	<input style="width: 40px; height: 20px;" type="text"/>	(Provide soils report if Site Class is not "D")
34	Spectral Response Coefficient, Sds =	<input style="width: 40px; height: 20px;" type="text"/>	
35	Spectral Response Coefficient, Sd1 =	<input style="width: 40px; height: 20px;" type="text"/>	
36	Seismic Design Category =	<input style="width: 40px; height: 20px;" type="text"/>	
37	Building (Structural) System	<input style="width: 40px; height: 20px;" type="text"/>	
38	Basic Seismic Force Resisting System	<input style="width: 40px; height: 20px;" type="text"/>	
39	Seismic Response Coefficient (Cs) =	<input style="width: 40px; height: 20px;" type="text"/>	
40	Response Modification Factor, R =	<input style="width: 40px; height: 20px;" 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	
<b>TOTAL</b>					

---



---

**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 \_\_\_\_\_