# CHATHAM COUNTY BUILDING CODE SUMMARY

# FOR ALL COMMERCIAL PROJECTS

(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project:					
Address:				Zip Code:	
Authorized Agent:			e:		
Owned By:	City/County	Private		State	
CONTACT:					
DESIGNER	FIRM	NAME	LICENSE #	PHONE #	E-MAIL
Architectural					
Civil					
Electrical					
Fire Alarm					
Plumbing					
Mechanical					
Sprinkler-Sandpipe					
Structural					
Retaining Walls > 5'					
High					
Other ("Other"	should include firms and	1			
( Other	should include firms and	i individuais such as	russ, precast, pre-eng	gineered, interior d	esigners, etc.)
2018 NC BUILDING COI	DE: 🗌 New Con	struction	Addition	Renovat	ion
1 <sup>st</sup> Time Interior Com	pletion 🗌 Shell/C	ore	Phased Construction	on – Shell/Core	Renovation
2018 NC EXISTING BUI	LDING CODE:	Prescriptive	Repa	ir 🗌	Chapter 14
		Level I			Level III
CONCEPTIONED (1)		Historic Property	•		
CONSTRUCTED(dat					
RENOVATED(date):		PROPOSED OC	CUPANCY(S) (C	h. 3):	
RISK CATEGORY (Table	e 1604.5): Current:	I I II		IV	
	Pro	posed: 🗌 I		III 🗌 IV	
BASIC BUILDING DAT					<b>T</b> 7 A
<b>Construction Type:</b> (check all that apply)	□ I-A □ □ I-B □			IV 🗌 V-B	V-A
Sprinklers: No	Partial	Yes	NFPA 13	NFPA 1	3R 🗌 NFPA 13D
Standpipes: No	☐ Yes		I П П		Wet Dry
_					
Fire District: No	Yes (Pr	imary)	Flood Hazard	Area:	Io Yes

# **Gross Building Area Table**

Floor	Existing (SQ FT)	New (SQ FT)	Sub-Total
3 <sup>rd</sup> Floor			
2 <sup>nd</sup> Floor			
Mezzanine			
1 <sup>st</sup> Floor			
Basement			
TOTAL			

		ALLO	WABLE AREA		
Primary Occupa	ncy Classification: <u>SEI</u>	LECT ONE			
Assembly Business Educational	□ A-1 □ A	A-2 A-3	3 🗌 A-4	□ A-5	
Factory Hazardous Institutional	□       F-1 Moderate         □       H-1 Detonate         □       I-1 Condition         □       1-2 Condition         □       1-3 Condition         □       1-4	☐ F-2 Low H-2 Deflagrate 1 ☐ 2 1 ☐ 2 1 ☐ 2 1 ☐ 2 ☐	H-3 Combust	☐ H-4 Health ☐	] Н-5 НРМ
Mercantile Residential Storage	R-1         F           S-1         S-1		2 Low 🔲 High-pi		
Utility and M	Parking Garage	Open	Enclosed Repa	air Garage	
Accessory Occup	pancy Classification(s):				
Incidental Uses (					
Special Uses (Ch	apter 4 – List Code Secti	ons):			
Special Provision	ns: (Chapter 5 – List Cod	le Sections):			
Mixed Occupano	cy: 🗌 No 🗌	Yes Separat	ion: Hr. Except	tion:	
The requir the applic entire bui Separated See belov	cable occupancies to the e	entire building. The reach story, the area	most restrictive type of a of the occupancy shall	f construction, so det l be such that the sun	
	<u>l Area of Occupancy A</u> le Area of Occupancy A		<u>ea of Occupancy B</u> rea of Occupancy B		
		+		=	≤ 1.00
STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>4</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1,5</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2,3</sup>
					+
			1		

<sup>1</sup> Frontage area increases from Section 506.3 are computed thus:

a. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_(F)

Total Building Perimeter = \_\_\_\_\_\_ Ratio  $(F/P) = _____(F/P)$ \_\_\_\_(P) b.

c.

- d. W = Minimum width of public way = \_\_\_\_(W)
- e. Percent of frontage increase  $I_f = 100[\overline{F/P} 0.25] \times W/30 =$  (%)
- <sup>2</sup> Unlimited area applicable under the conditions of Section 507.
- <sup>3</sup> Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
- $^{\rm 4}$  The maximum area of open parking garages must comply with Table 406.5.4.
- $^{5}$  Frontage increase is based on the un-sprinkle red area value in Table 506.2.

# ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE <sup>1</sup>
Building Height in Feet (Table 504.3) <sup>2</sup>			
Building Height in Stories (Table 504.4) <sup>3</sup>			

<sup>1</sup> Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

<sup>2</sup> The maximum height of air traffic control towers must comply with Table 412.3.1.

<sup>3</sup> The maximum height of open parking garages must comply with Table 406.5.4.

Structural Frame,       including columns, girders,         trusses       including columns, girders,         Bearing Walls       including columns, girders,         Exterior       including columns, girders,         North       including columns, girders,         East       including columns, girders,         West       including columns, girders,         West       including columns, girders,         South       including columns, girders,         Interior       including columns, girders,         Norbarring Walls and       including columns, girders,         Partitions       including columns, girders,         Exterior walls       including columns, girders,         North       including columns, girders,         East       including columns, girders,         West       including columns, girders,         South       including columns, girders,         Interior walls and partitions       including columns, girders, gi	BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (W/* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Exterior       Image: Construction including supporting beams and joists       Image: Construction including supporting Roof         Floor Construction, including supporting Roof       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Columns Supporting Roof       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures - Exit       Image: Construction including supporting Roof       Image: Construction including supporting Roof         Shaft Enclosures	including columns, girders,							
North	Bearing Walls							
East       Image: Construction of the second s	Exterior							
West       Image: Construction of the second s	North							
SouthImage: south of the source o	East							
Interior       Image: Construction of the second of the seco	West							
Nonbearing Walls and Paritions       Image: Construction in the image: Construst in the image: Constarce in the image: Construct in the image:	South							
Partitions       Image: starting st	Interior							
NorthImage: state in the image: state in	Partitions							
EastImage: construction of the second se								
WestImage: construction of the second se								
Interior walls and partitions       Image: Construction of the second seco								
Interior walls and partitions       Image: Construction of the second seco	South							
Floor Construction       Including supporting beams         and joists       Image: Construction including         Floor Ceiling Assembly       Image: Construction including         Columns Supporting Floors       Image: Construction including         Roof Construction, including       Image: Construction including         supporting beams and joists       Image: Construction including         Roof Ceiling Assembly       Image: Construction including         Columns Supporting Roof       Image: Construction including         Shaft Enclosures - Exit       Image: Construction including         Shaft Enclosures - Other       Image: Construction including         Corridor Separation       Image: Construction including         Occupancy/Fire Barrier Separation       Image: Construction including         Smoke Barrier Separation       Image: Construction including         Smoke Partition       Image: Construction including         Tenant/Dwelling Unit/       Image: Construction including								
Columns Supporting FloorsImage: Columns Supporting beams and joistsImage: Columns Supporting beams and joistsRoof Ceiling AssemblyImage: Columns Supporting RoofImage: Columns Supporting RoofColumns Supporting RoofImage: Columns Supporting RoofImage: Columns Supporting RoofShaft Enclosures - ExitImage: Columns Supporting RoofImage: Columns Supporting RoofShaft Enclosures - OtherImage: Columns Supporting RoofImage: Columns Supporting RoofCorridor SeparationImage: Columns Supporting RoofImage: Columns Supporting RoofSmoke Barrier SeparationImage: Columns Supporting RoofImage: Columns Supporting RoofSmoke Barrier SeparationImage: Columns Supporting RoofImage: Columns Supporting RoofSmoke PartitionImage: Columns Supporting RoofImage: Columns Supporting RoofTenant/Dwelling Unit/Image: Columns Supporting RoofImage: Columns Supporting Roof	Including supporting beams and joists							
Roof Construction, including supporting beams and joistsImage: Construction of the second se								
supporting beams and joistsImage: supporting keams and joistsImage: supporting keams and joistsRoof Ceiling AssemblyImage: supporting keams and joistsImage: keams and joistsColumns Supporting RoofImage: supporting keams and joistsImage: support and joistsShaft Enclosures - ExitImage: support and joistsImage: support and joistsShaft Enclosures - OtherImage: support and joistsImage: support and joistsCorridor SeparationImage: support and joistsImage: support and joistsOccupancy/Fire Barrier SeparationImage: support and joistsImage: support and joistsParty/Fire Wall SeparationImage: support and joistsImage: support and joistsSmoke Barrier SeparationImage: support and joistsImage: support and joistsSmoke PartitionImage: support and joistsImage: support and joistsTenant/Dwelling Unit/Image: support and joistsImage: support and joists	Columns Supporting Floors							
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Shaft Enclosures - Exit       Image: Construction of the second sec	Roof Ceiling Assembly							
Shaft Enclosures - OtherImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationOccupancy/Fire Barrier SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationParty/Fire Wall SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationSmoke Barrier SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationSmoke PartitionImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationSmoke PartitionImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationImage: Corridor SeparationTenant/Dwelling Unit/Image: Corridor SeparationImage: Corridor SeparationImage: Corridor Separation	Columns Supporting Roof							
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Occupancy/Fire Barrier Separation       Image: Comparison       Image: Comparison </td <td>Shaft Enclosures - Other</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Shaft Enclosures - Other							
Party/Fire Wall Separation								
Smoke Barrier Separation	Occupancy/Fire Barrier Separati	ion						
Smoke Partition	Party/Fire Wall Separation							
Tenant/Dwelling Unit/	Smoke Barrier Separation							
	Smoke Partition							
	Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation	Incidental Use Separation							

# FIRE PROTECTION REQUIREMENTS

\* Indicate section number permitting reduction

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# PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	Degree of openings Protection (Table 705.8)	Allowable area (%)	ACTUAL SHOWN ON PLANS (%)

# LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	No	Yes	
Exit Signs:	No	Yes	
Fire Alarm:	No	Yes	
Smoke Detection Systems:	No	Yes	Partial
Carbon Monoxide Detection:	No	Yes	

# LIFE SAFETY PLAN REQUIREMENTS

Life S	Safety Plan Sheet #:
	Fire and/or smoke rated wall locations (Chapter 7)
	Assumed and real property line locations (if not on the site plan)
	Exterior wall opening area with respect to distance to assumed property lines (705.8)
	Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
	Occupant loads for each area
	Exit sign locations (1013)
	Exit access travel distances (1017)
	Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
	Dead end lengths (1020.4)
	Clear exit widths for each exit door
	Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
	Actual occupant load for each exit door
	A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy
	separation
	Location of doors with panic hardware (1010.1.10)
	Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
	Location of doors with electromagnetic egress locks (1010.1.9.9)
	Location of doors equipped with hold-open devices
	Location of emergency escape windows (1030)
	The square footage of each fire area (202)
	The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
	Note any code exceptions or table notes that may have been utilized regarding the items above

## ACCESSIBLE DWELLING UNITS (SECTION 1107)

Unit	TOTAL	ACCESSIBLE	ACCESSIBLE	TYPE A	TYPE A	TYPE B	TYPE B	TOTAL
CLASSIFICATION	UNITS	Units	Units	Units	Units	Units	Units	ACCESSIBLE
		REQUIRED	Provided	REQUIRED	PROVIDED	Required	PROVIDED	Units
								PROVIDED

# ACCESSIBLE PARKING

(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PA	RKING SPACES	# OF ACCESSIBLE S	PACES PROVIDED	TOTAL # ACCESSIBLE
	REQUIRED	PROVIDED	96" SPACES 132" SPACES		PROVIDED
TOTAL					

# PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

τ	JSE	WATERCLOSETS		URINALS	LAVATORIES		SHOWERS	DRINKING	FOUNTAINS		
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE	EXIST'G										
	NEW										
	REQ'D										

## SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

#### **ENERGY SUMMARY**

North Carolina Energ	<b>MENTS:</b> The following data shall be considered minimum and any special attribute required to meet the <b>conservation Code</b> shall also be provided. Each Designer shall furnish the required portions of the project a data sheet. If performance method, state the annual energy cost for the standard reference design vs annual posed design.
Existing building envel	ope complies with code: No Yes (The remainder of this section is not applicable)
Exempt Building:	No Yes (Provide Code or Statutory reference):
Climate Zone Method of Co	: 3A 4A 5A mpliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here)
THERMAL ENVELO	OPE (Prescriptive method only)
Roof	/ceiling Assembly (each assembly)
U-Va R-Va Skyli	ription of assembly:
Exte	rior Walls (each assembly)
U-Va R-Va	ription of assembly:
Wall	s below grade (each assembly)
U-Va	ription of assembly:
Floor	s over unconditioned space (each assembly)
U-Va	ription of assembly:
Floor	rs slab on grade
U-Va R-Va Horiz	ription of assembly:

# CHATHAM COUNTY BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

## **DESIGN LOADS:**

Importance Factors:	Snow (Is) Seismic (I <sub>E</sub> )			
Live Loads:	Roof Mezzanine Floor		psf	
Ground Snow Load:psf		psf		
Wind Load:	Ultimate Wind Speed Exposure Category	Select		h (ASCE-7)
SEISMIC DESIGN CATEGORY:	A	В	C	D
Provide the following Seismic Design Paran	neters:			
Occupancy Category (Table 1604	l.5) 🗌 I	II 🗌	🗌 III	🗌 IV
<b>Spectral Response Acceleration</b>	S <u>s</u>	%g	S1	%g
Site Classification (ASCE 7)	□ A □ B	□ C	D	🗌 E 🗌 F
Data Source:	Field Test	Presumpti		Historical Data
Basic structural system Analysis Procedure:	<ul> <li>Bearing Wall</li> <li>Building Frame</li> <li>Moment Frame</li> <li>Simplified</li> </ul>	<ul> <li>Dual w/Special Moment Frame</li> <li>Dual w/Intermediate R/C or Special Steel</li> <li>Inverted Pendulum</li> <li>Equivalent Lateral Force</li> <li>Dynamic</li> </ul>		
Architectural, Mechanical, Com		Yes		
LATERAL DESIGN CONTROL:		ind		
SOIL BEARING CAPACITIES:				
	de copy of test report)			
Presumptive Bea				
Pile size, type, a	nd capacity			

# CHATHAM COUNTY BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

## MECHANICAL SUMMARY

### MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone		
winter dry bulb:summer dry bulb:		
Interior design conditions		
winter dry bulb:		
Building heating load:		
Building cooling load:		
Building cooling load: Mechanical Spacing Conditioning System		
Mechanical Spacing Conditioning System		
Mechanical Spacing Conditioning System Unitary description of unit:		
<b>Mechanical Spacing Conditioning System</b> Unitary		
Mechanical Spacing Conditioning System Unitary description of unit: heating efficiency: cooling efficiency:		
Mechanical Spacing Conditioning System Unitary description of unit: heating efficiency:		
Mechanical Spacing Conditioning System Unitary description of unit:		
Mechanical Spacing Conditioning System Unitary description of unit: heating efficiency: cooling efficiency: size category of unit: Boiler		

# CHATHAM COUNTY BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

#### ELECTRICAL SUMMARY

#### ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code:	Prescriptive   Performan     ASHRAE 90.1:   Prescription	_
Lighting schedule (each fixture type)		
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. allo	owed (whole building or space by space)_	
total exterior wattage specified vs. all	owed	
Additional Efficiency Package Options		
(When using the 2018 NCECC; not required	l for ASHRAE 90.1)	

C406.2 More Efficient HVAC Equipment Performance

C406.3 Reduced Lighting Power Density

C406.4 Enhanced Digital Lighting Controls

C406.5 On-Site Renewable Energy

C406.6 Dedicated Outdoor Air System

C406.7 Reduced Energy Use in Service Water Heating