

Town of Forest City Code Enforcement Dept 128 N Powell St, PO Box 728 Forest City, NC 28043

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

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

Name of Project:					
Address:			Zip Cod	le	
Owner/Authorized Agent:	Phone # () -		~	
	y/County		_		
	y		_		
Code Emoreement Juristiction.	y			C	
CONTACT:					
DESIGNER FIRM	NAME	LICENSE#	TELEPHONE #	E-MAIL	
Architectural			()		
Civil			()		
Electrical Fire Alarm				-	
Plumbing					
Mechanical					
Sprinkler-Standpipe			()		
Structural Retaining Walls >5' High			()		
Other					
("Other" should include firms and individu	als such as truss, p	precast, pre-engine	ered, interior desig	mers, etc.)	
2018 NC BUILDING CODE: New Building Addition Renovation 1st Time Interior Completion Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements Phased Construction - Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements Phased Construction - Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements Phased Construction - Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements 2018 NC EXISTING BUILDING CODE: EXISTING: Prescriptive Repair Chapter 14 Alteration: Level I Level II Level III Historic Property Change of Use CONSTRUCTED: (date) CURRENT OCCUPANCY(S) (Ch. 3): RENOVATED: (date) PROPOSED OCCUPANCY(S) (Ch. 3): RISK CATEGORY (Table 1604.5): Current: I II III IV IV Proposed: I III IV IV Proposed: I IV IV IV Proposed: I IV IV Proposed					
BASIC BUILDING DATA Construction Type:	s I I II Flood Hazard A Yes (Contact to	☐ III ☐ We Area: ☐ No	t Dry Yes jurisdiction for ad	□ V-A □ V-B PA 13D	

Gross Building Area Table
FLOOR EXISTING (SQ FT) NEW (SQ FT) SUB-TOTAL
3 rd Floor
2 nd Floor
Mezzanine
1 st Floor
Basement
TOTAL
ALLOWABLE AREA
Primary Occupancy Classification(s):
Assembly \square A-1 \square A-2 \square A-3 \square A-4 \square A-5
Business
Educational
Factory F-1 Moderate F-2 Low
Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
Institutional I-1 Condition 1 2
I-2 Condition 1 2
\square I-3 Condition \square 1 \square 2 \square 3 \square 4 \square 5
Mercantile
Residential R-1 R-2 R-3 R-4
Storage S-1 Moderate S-2 Low High-piled
Parking Garage Open Enclosed Repair Garage
Utility and Miscellaneous
Accessory Occupancy Classification(s):
Incidental Uses (Table 509):
Special Uses (Chapter 4 – List Code Sections):
Special Provisions: (Chapter 5 – List Code Sections):
Mixed Occupancy: No Yes Separation: Hr. Exception:
☐ Non-Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☐ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall
be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.
<u>Actual Area of Occupancy A</u> + <u>Actual Area of Occupancy B</u> ≤ 1
Allowable Area of Occupancy A Allowable Area of Occupancy B
<u> </u>

STORY	DESCRIPTION AND	(A)	(B)	(C)	(D)
NO.	USE	BLDG AREA PER	TABLE 506.2 ⁴	AREA FOR FRONTAGE	ALLOWABLE AREA PER
		STORY (ACTUAL)	AREA	INCREASE ^{1,5}	STORY OR UNLIMITED ^{2,3}

¹ 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)
- b. Total Building Perimeter = ____(P)
- c. Ratio (F/P) = (F/P)
- d. W = Minimum width of public way = (W)
- e. Percent of frontage increase $I_f = 100[F/P 0.25] \times W/30 =$ (%)
- ² Unlimited area applicable under conditions of Section 507.
- ³ Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
- ⁴ The maximum area of open parking garages must comply with Table 406.5.4.

ALLOWABLE HEIGHT

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

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

⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

² The maximum height of air traffic control towers must comply with Table 412.3.1.

³ The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

	FIRE		RATING	DETAIL#	DESIGN#	SHEET # FOR	SHEET #
	SEPARATION	REQ'D	PROVIDED	AND	FOR	RATED	FOR
	DISTANCE		(W/* REDUCTION)	SHEET #	RATED	PENETRATION	RATED
C. 1F	(FEET)		in Decision,		ASSEMBLY		JOINTS
Structural Frame,							
including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction							
Including supporting beams							
and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy/Fire Barrier Separati	on						
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

^{*} Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE	DEGREE OF OPENINGS	ALLOWABLE AREA	ACTUAL SHOWN ON PLANS
(FEET) FROM PROPERTY LINES	PROTECTION	(%)	(%)
	(TABLE 705.8)		

LIFE SAFETY SYSTEM REQUIREMENTS nergency Lighting: No Yes Yes He Alarm: No Yes
LIFE SAFETY PLAN REQUIREMENTS
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
1

ACCESSIBLE DWELLING UNITS

(SECTION 1107)

Unit	Total	ACCESSIBLE	ACCESSIBLE	Түре А	Түре А	Түре В	Түре В	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 PARKING SPACES		# OF ACCESSIBLE S	PACES PROVIDED	TOTAL # ACCESSIBLE	
	REQUIRED	PROVIDED	96" SPACES	132" SPACES	PROVIDED	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

U	JSE	WATER CLOSETS		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

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 performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)
Exempt Building: No Yes (Provide code or statutory reference):
Climate Zone: 3A 4A 5A
Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here)
THERMAL ENVELOPE (Prescriptive method only)
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: Solar heat gain coefficient: projection factor: 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 Description of assembly: U-Value of total assembly: R-Value of insulation: Horizontal/vertical requirement: slab heated:

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

STRUCTURAL DESIGN

(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESI	GN	LO	AD	S:

Importance Facto	Snow (I_S) Seismic (I_E)
Live Loads:	RoofpsfMezzaninepsfFloorpsf
Ground Snow Loa	d: psf
Wind Load:	Ultimate Wind Speed mph (ASCE-7) Exposure Category
SEISMIC DESIGN CATE	GORY: A B C D
Provide the following Seism Risk Category (Ta Spectral Response	ble 1604.5) 🔲 I 💢 III 🔲 IIV
Site Classification	, , — — — — —
Da Basic structural sy	☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel ☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedur	— · — · — ·
Architectural, Me	chanical, Components anchored?
LATERAL DESIGN CON	TROL: Earthquake Wind Wind
SOIL BEARING CAPACI Field Test (provide Presumptive Bearin Pile size, type, and	copy of test report) psf g capacity psf



2018 APPENDIX B 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:	
summer dry bulb:	
relative humidity:	
<u> </u>	
Building heating load:	
Building cooling load:	
Mechanical Spacing Conditioning System	
Unitary	
description of unit:	
heating efficiency:	
cooling efficiency:	
size category of unit:	
Boiler	
Size category. If oversized, state reason.:	
Chiller	
Size category. If oversized, state reason.:	
List equipment efficiencies:	

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT ☐ Prescriptive **Method of Compliance:** Energy Code Performance ASHRAE 90.1 Performance ☐ Prescriptive **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. allowed (whole building or space by space) total exterior wattage specified vs. allowed **Additional Efficiency Package Options** (When using the 2018 NCECC; not required 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