

**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 Code: \_\_\_\_\_  
Owner/Authorized Agent: \_\_\_\_\_ Phone # (\_\_\_\_\_) \_\_\_\_\_ E-Mail: \_\_\_\_\_  
Owned By:  City/County  Private  State  
Code Enforcement Jurisdiction:  City  County  State

**CONTACT:**

DISCIPLINE	TEAM	NAME	ADDRESS	TELEPHONE #	E-MAIL
Architectural					
Civil					
Electrical					
Fire Alarm					
Plumbing					
Mechanical					
Sprinkler-Standpipe					
Structural					
Retaining Walls >3' High					
Other					

**2018 NC CODE FOR:**  New Construction  Addition  Renovation  
 1<sup>st</sup> Time Interior Completion  
 Shell-Core  
 Phased Construction - Shell-Core  
 Renovation

**2018 NC EXISTING BUILDING CODE:**  Prescriptive  Repair  Chapter 34  
Alteration:  Level I  Level II  Level III  
 Historic Property  Change of Use

CONSTRUCTED (date): \_\_\_\_\_ ORIGINAL OCCUPANCY(S) (Ch. 3): \_\_\_\_\_  
RENOVATED (date): \_\_\_\_\_ CURRENT OCCUPANCY(S) (Ch. 3): \_\_\_\_\_

**RISK CATEGORY (table 1604.5):** Current:  I  II  III  IV  
Proposed:  I  II  III  IV

**BASIC BUILDING DATA**

Construction Type:  I-A  I-B  II-A  II-B  III-A  III-B  IV  V-A  V-B  
(check all that apply)

Sprinklers:  No  Partial  Yes  NFPA 13  NFPA 13R  NFPA 13D

Standpipes:  No  Yes Class:  I  II  III  West  Dry

Fire District:  No  Yes (Primary)  Flood Hazard Area:  No  Yes

Special Inspections Required:  No  Yes

**2018 NC Administrative Code and Policies** Appendix B for Building

FLOOR	EXISTING (SQ FT)	NEW (SQFT)	RENO/ALTER (SQ.FT.)	SUB-TOTAL
0 <sup>th</sup> Floor				
1 <sup>st</sup> Floor				
2 <sup>nd</sup> Floor				
3 <sup>rd</sup> Floor				
4 <sup>th</sup> Floor				
5 <sup>th</sup> Floor				
Mezzanine				
1 <sup>st</sup> Floor				
Basement				
TOTAL				

**ALLOWABLE AREA**

Primary Occupancy Classification: **SELECT ONE**

Assembly:  A-1  A-2  A-3  A-4  A-5

Business:  B-1  B-2  B-3  B-4  B-5

Educational:  E-1  E-2  E-3  E-4

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  I-2 Condition 2  I-3 Condition 3  I-4 Condition 4  I-5

Mercantile:  M-1  M-2  M-3  M-4

Residential:  R-1  R-2  R-3  R-4

Storage:  S-1 Moderate  S-2 Low  High-piled

Utility and Miscellaneous:  U-1  U-2  U-3  U-4

**Accessory Occupancy Classifications:** \_\_\_\_\_

**Incidental Uses (Table 509):** \_\_\_\_\_

**Special Uses (Chapter 4 - List Code Sections):** \_\_\_\_\_

**Special Provisions (Chapter 5 - List Code Sections):** \_\_\_\_\_

**Mixed Occupancy:**  No  Yes Separation:  H  Description: \_\_\_\_\_

Non-Separated Use (508.4)  
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.

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

STORY NO.	DESCRIPTION AND USE	(A) RELATIVE PERCENTAGE OF OCCUPANCY	(B) TABLE 506.2.1 AREA	(C) AREA PERMITTED UNDER SECTION 506.2.1	(D) PERCENT OF PERMITTED AREA	(E) PERCENT OF PERMITTED AREA

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) = (FP)  
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 (maximum 3 stories) (506.2)  
4 The maximum area of open parking garages must comply with Table 406.5.4  
5 Frontage increase is based on the unsprinklered area value in Table 506.2.

**ALLOWABLE HEIGHT**

ALLOWABLE HEIGHT (TABLE 504.3)	HEIGHT OR FLOOR	CODE REFERENCE
Building Height in Feet (Table 504.3)		
Building Height in Stories (Table 504.4)		

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

BUILDING ELEMENT	FIRE SEPARATION (FEET)	TYPE	RATING (BY REFERENCE)	DETAIL # AND SYMBOL	SECTION # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	SECTION # FOR RATED JOINTS
Structural frame, including columns, girders, trusses							
Exterior 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							
Column Separation Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Column Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation							
Occupancy Fire Barrier							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

\* Indicate section number or permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION EXCEPT FROM PROPERTY LINES	DIGRESS 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 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 types for each area as it relates to occupant load calculation (Table 101.2)  
 Occupant loads for each area  
 Exit access travel distances (1017)  
 Common path of travel distances (1006.2.1 & 1006.3.2(1))  
 Dead end lengths (1020.4)  
 Clear exit widths for each exit door  
 Maximum calculated occupant load for each exit door and common path based on egress width (1005.3)  
 Actual occupant load for each exit door  
 A separate schematic plan including which fire rated ceiling and/or roof structure is provided for purposes of occupancy separation and support of construction for a fire barrier/fire partition/smoke barrier  
 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 electromagnetized door locks (1010.1.9.9)  
 Location of doors equipped with hold-open devices  
 Location of emergency escape windows (1030)  
 The square footage for each fire area (202)  
 Square footage for each smoke compartment for Occupancy Classification I-2 (407.5)  
 Any code exceptions or table notes that may have been utilized regarding the items above

Section/Title/Note	Title

**ACCESSIBLE DWELLING UNITS (SECTION 1107)**

Total Units	Accessible Units	Percentage	Type A Units	Type A Percentage	Type B Units	Type B Percentage	TOTAL ACCESSIBLE UNITS

**ACCESSIBLE PARKING (SECTION 1106)**

TYPE OF FACILITY	TOTAL # OF SPACES PROVIDED	# OF SPACES PROVIDED	TOTAL # OF SPACES PROVIDED

**PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)**

FLOOR	EXIST'G	SINKS/STOVE			SINKS/STOVE			SINKS/STOVE	SINKS/STOVE
		REQUIRE	PROVIDE	REQUIRE	PROVIDE	REQUIRE	PROVIDE		

**SPECIAL APPROVALS**

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

**ENERGY REQUIREMENTS**

The following data shall be considered minimum and any special additions required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall forward 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 (Use separate sheets if not applicable)

Exempt building:  No  Yes (Provide Code or Statutory reference)

Climate Zone:  3A  4A  5A

Method of Compliance: Energy Code  Performance  Prescriptive  
ASPR 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: \_\_\_\_\_  
Sightlines in each assembly: \_\_\_\_\_  
U-Value of sightline: \_\_\_\_\_  
Total square footage of sightlines 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 Ventilation Requirement: \_\_\_\_\_  
Slab U-Value: \_\_\_\_\_

**STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)**

**DESIGN LOADS:**

Importance Factors: Snow (fs) \_\_\_\_\_ Seismic (fs) \_\_\_\_\_

Roof \_\_\_\_\_ psf  
Mezzanine \_\_\_\_\_ psf  
Floor \_\_\_\_\_ psf

Ground Snow Load: \_\_\_\_\_ psf

Wind Load: Ultimate Wind Speed \_\_\_\_\_ mph (ASCE-7)  
Exposure Category: \_\_\_\_\_

**SEISMIC DESIGN CATEGORY:**  A  B  C  D

Provide the following Seismic Design Parameters:  
**Occupancy Category (Table 1604.5):**  I  II  III  IV  
**Spectral Response Acceleration:**  $S_s$  \_\_\_\_\_ %g  $S_1$  \_\_\_\_\_ %g  
**Site Classification (ASCE 7):**  A  B  C  D  E  
Data Source:  Field Test  Presumptive  Historical Data  
 Bearing Wall  Dual w/ Special Moment Frame

**Basic structural system:**  
 Building Frame  Dual w/ Intermediate R/C or Special Steel  
 Moment Frame  Inverted Pentadrum  
 Simplified  Equivalent Lateral Force  Dynamic

**Analysis Procedure:**  Simplified  Dynamic  
**Architectural, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:** Seismic  Wind

**SOIL BEARING CAPACITIES:**

Field Test (provide copy of test report) \_\_\_\_\_ psf  
Presumptive bearing capacity \_\_\_\_\_ psf  
Pie size, type, and capacity \_\_\_\_\_

**MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)**

**MECHANICAL SUMMARY (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)**

**ELECTRICAL SUMMARY**

Architect:  
**archSTUDIO7, PLLC**  
301 N. MAIN STREET, SUITE 1201  
Winston-Salem, NC 27101  
Tel: 336.793.9600  
www.archstudio7.com  
Copyright Reserved  
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to archSTUDIO7, PLLC without delay. The Copyrights to all designs and drawings are the property of archSTUDIO7, PLLC. Reproduction or use for any purpose other than that authorized by archSTUDIO7, PLLC is forbidden.

Consultants:  
Structural:  
**Jerry W. Moorefield PE**  
University Commercial Center  
7990 North Point Boulevard  
Winston-Salem, NC 27106  
Ph: 336.593.9623

Permit - Seal:

**NOT FOR CONSTRUCTION**

Client:  
**Fourstore LLC**

Project:  
**Storage Facility**  
Country Club Rd.  
Winston-Salem, NC

**BUILDING CODE SUMMARY & LIFE SAFETY PLAN**

Date: \_\_\_\_\_  
Project No.: \_\_\_\_\_ Drawn by: \_\_\_\_\_  
Sheet: **G-001**