

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: 18201 STARBUCKS SHELL  
Address: 350 BLOWING ROCK BOULEVARD LENOIR, NC Zip Code 28645  
Owner/Authorized Agent: NRD Phone # ( 919 ) 544 - 0087 E-Mail: RHELMANN@MHT.COM  
Owned By:  City/County  Private  State  
Code Enforcement Jurisdiction:  City LENOIR  County  State

DESIGNER FIRM	NAME	LICENSE #	TELEPHONE # E-MAIL
Architectural	NRD	FAMMY DAVIS 13688	(919) 544-0087 FD@MHT.COM
Civil	NRD	RAY THORNTON 17561	(919) 544-0087 RTHORNTON@MHT.COM
Electrical	NRD	SHAWN SLYTER 32076	(919) 544-0087 SLYTER@MHT.COM
Fire Alarm	NRD	JOSEPH MOREAN 040760	(919) 544-0087 JMORGAN@MHT.COM
Plumbing	NRD		
Mechanical	NRD		
Sprinkler Standpipe	NRD		
Structural	NRD		
Retaining Walls >5' High	NRD		
Other	NRD		

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

2018 NC EXISTING BUILDING CODE: EXISTING:  Prescriptive  Repair  Chapter 14  
Alteration:  Level I  Level II  Level III  
 Historic Property  Change of Use

CONSTRUCTED (date) N/A CURRENT OCCUPANCY(S) (Ch. 3): N/A  
RENOVATED (date) N/A PROPOSED OCCUPANCY(S) (Ch. 3): A2 - RESTAURANT

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

**BASIC BUILDING DATA**  
Construction Type:  I-A  II-A  III-A  IV  V-A  
(check all that apply)  I-B  II-B  III-B  V-B  
Sprinklers:  No  Partial  Yes  NFPA 13  NFPA 13R  NFPA 13D  
Standpipes:  No  Yes Class  I  II  III Wet  Dry  
Fire District:  No  Yes Flood Hazard Area:  No  Yes  
Special Inspections Required:  No  Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		2,507	2,507
Basement			
TOTAL			2,507

**ALLOWABLE AREA**  
Primary Occupancy Classification(s): Select one Select one Select one Select one Select one  
Assembly  A-1  A-2  A-3  A-4  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  I-2  I-3  I-4  
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: N/A 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.  
Actual Area of Occupancy A + Actual Area of Occupancy B ≤ 1  
Allowable Area of Occupancy A Allowable Area of Occupancy B

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY INSTALLED	(B) TABLE 506.2A AREA PER STORY INSTALLED	(C) RATIO (A)/(B)
1	ASSEMBLY A-2	2,507 SQ. FT.	6,000 SQ. FT.	0.418

1 Frontage area increases from Section 506.3 are computed thus:  
a. Perimeter which fronts a public way or open space having 20-foot minimum width = N/A (F)  
b. Total Building Perimeter = N/A (P)  
c. Ratio (F/P) = N/A (F/P)  
d. W = Minimum width of public way = N/A (W)  
e. Percent of frontage increase If = 100(F/P - 0.25) x W/30 = N/A (%)

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) (508.2).  
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	1 (MAXIMUM)	2 (MAXIMUM)	3 (MAXIMUM)
Building Height in Feet (Table 504.3) 2	40'-0"	22'-6"	50'
Building Height in Stories (Table 504.4) 3	1	1	50'

1 Provide code reference if the "Show no 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 DISTANCE (FEET)	RATED JOINT (PER INCH)	DETAIL AND SHEET	DESIGN FOR RATED ASSEMBLY	MINIMUM PENETRATION	SHEET FOR RATED JOINTS
Structural Frame, including columns, girders, trusses						
Bearing Walls						
Exterior	N/A	0	N/A	N/A	N/A	N/A
North	N/A	0	0	N/A	N/A	N/A
East	N/A	0	0	N/A	N/A	N/A
West	N/A	0	0	N/A	N/A	N/A
South	N/A	0	0	N/A	N/A	N/A
Interior						
Nonbearing Walls and Partitions						
Exterior walls	>30'	0	0	N/A	N/A	N/A
North	>30'	0	0	N/A	N/A	N/A
East	>30'	0	0	N/A	N/A	N/A
West	>30'	0	0	N/A	N/A	N/A
South	>30'	0	0	N/A	N/A	N/A
Interior	N/A	0	0	N/A	N/A	N/A
Floor Construction						
Including supporting beams and joists	0	0	N/A	N/A	N/A	N/A
Floor Ceiling Assembly	0	0	N/A	N/A	N/A	N/A
Ceiling Supporting Floors	0	0	N/A	N/A	N/A	N/A
Roof Construction, including supporting beams and joists	0	0	0	N/A	N/A	N/A
Roof Ceiling Assembly	0	0	N/A	N/A	N/A	N/A
Ceiling Supporting Roof	0	0	N/A	N/A	N/A	N/A
Shaft Enclosures - Exit	0	0	N/A	N/A	N/A	N/A
Shaft Enclosures - Other	0	0	N/A	N/A	N/A	N/A
Corridor Separation	0	0	N/A	N/A	N/A	N/A
Escalator/Travel Elevator Separation	0	0	N/A	N/A	N/A	N/A
Party/Fire Wall Separation	0	0	N/A	N/A	N/A	N/A
Smoke Barrier Separation	0	0	N/A	N/A	N/A	N/A
Smoke Partition	0	0	N/A	N/A	N/A	N/A
Traveling Elevator	0	0	N/A	N/A	N/A	N/A
Sleeping Unit Separation	0	0	N/A	N/A	N/A	N/A
Incidental Use Separation	0	0	N/A	N/A	N/A	N/A

\* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINE	PERCENTAGE OF WALL OPENING	ALLOWABLE AREA (SQ FT)	ACTUAL AREA (SQ FT)
N/A	N/A	N/A	N/A

**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 #: G101  
 Fire and/or smoke rated wall locations (Chapter 7)  
 Assumed and real property line locations (not on the site plan)  
 Exterior wall opening area with respect to distance to assumed property line (705.8)  
 Occupancy Use for each area with respect to design load calculation (Table 1004.1.2)  
 Occupant loads for each area  
 Exit access travel distance (101)  
 Common path of travel distances (Tables 1005.2.1 & 1006.3.2(1))  
 Exit and egress width  
 Maximum capacity for each exit door  
 Actual occupant loads for each exit door  
 A separate egress plan indicating where fire rated floor/ceiling and/or roof structure is provided for purpose 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 (1010.1.9.8)  
 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 1-2 (407.5)  
 Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)							
TOTAL UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A	TYPE B	TYPE C	TYPE D	TOTAL ACCESSIBLE UNITS PROVIDED	MINIMUM ACCESSIBLE UNITS REQUIRED
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING (SECTION 1106) REFER TO CIVIL DRAWINGS BY OTHERS			
TYPE OF PARKING AREA	TOTAL # OF SPACES PROVIDED	# OF SPACES PROVIDED WITH ACCESSIBLE SPACES WITH	TOTAL # ACCESSIBLE SPACES PROVIDED
TOTAL			

**PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)** N/A - COLD DARK SHELL

SPACE	WATER CLOSETS			SINKS			SHOWERS			FIXTURES		
	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	TUBS	REGULAR	ACCESSIBLE	REGULAR	ACCESSIBLE	
EXISTG	0	0	0	0	0	0	0	0	0	0	0	
NEW	0	0	0	0	0	0	0	0	0	0	0	
REQD	0	0	0	0	0	0	0	0	0	0	0	

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

**ENERGY REQUIREMENTS:**  
The following data shall be considered minimum and any special attributes 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): N/A

Climate Zone:  3A  4A  5A  
Method of Compliance: Energy Code  Performance  Prescriptive  Com-Check UNDER 90.1  
ASHRAE 90.1  Performance  Prescriptive  Com-Check (If "Other" specify source here)

**THERMAL ENVELOPE (Prescriptive method only)**

**Roof/Ceiling Assembly (each assembly) WOOD ROOF TRUSSES, WOOD DECK, RIGID CONTINUOUS INSULATION**  
Description of assembly: WOOD ROOF TRUSSES, WOOD DECK, RIGID CONTINUOUS INSULATION  
U-Value of total assembly: 0.32  
R-Value of insulation: R-30  
Skylights in each assembly: N/A  
U-Value of skylight: N/A  
total square footage of skylights in each assembly: N/A  
**Exterior Walls (each assembly) 1/2" EXTERIOR SHEATHING, 2" RIGID CONTINUOUS INSULATION, 1/2" GYPSUM BOARD**  
Description of assembly: 1/2" EXTERIOR SHEATHING, 2" RIGID CONTINUOUS INSULATION, 1/2" GYPSUM BOARD  
U-Value of total assembly: 0.07  
R-Value of insulation: R-19  
Openings (windows, doors with glazing) in each assembly:  
U-Value of opening: 0.29  
Solar heat gain coefficient: 0.29  
Selection factor: VARIES (SEE WINDOW-CHECK REPORT)  
Description of opening: N/A  
U-Value of total opening: N/A  
R-Value of insulation: N/A  
**Windows over unconditioned space (each assembly)**  
Description of assembly: N/A  
U-Value of total assembly: N/A  
R-Value of insulation: N/A  
**Floors slab on grade (each assembly)**  
Description of assembly: N/A  
U-Value of total assembly: N/A  
R-Value of insulation: N/A  
**Floors slab on grade**  
Description of assembly: NO SLAB - COLD DARK SHELL  
U-Value of total assembly: N/A  
R-Value of insulation: N/A  
Horizontal/vertical requirement: N/A  
slab heated: N/A

**2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**  
STRUCTURAL DESIGN  
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

**DESIGN LOADS:**

Importance Factors: Snow (IS) 1.0  
Seismic (IE) 1.0  
Live Loads: Roof 20 psf  
Mezzanine N/A psf  
Floor N/A psf  
Ground Snow Load: 15 psf  
Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)  
Exposure Category B

**SEISMIC DESIGN CATEGORY:**  A  B  C  D  
Provide the following Seismic Design Parameters:  
Risk Category (Table 1604.5)  I  II  III  IV  
Spectral Response Acceleration SS 23% %g S1 0.09% %g

Site Classification (ASCE 7)  A  B  C  D  E  F  
Data Source:  Field Test  Presumptive  Historical Data  
**Basic structural system**  
 Bearing Wall  Dual w/Special Moment Frame  
 Building Frame  Dual w/Intermediate R/C or Special Steel  
 Moment Frame  Inverted Pendulum  
**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic  
**Architectural, Mechanical, Components anchored?**  Yes  No

**LATERAL DESIGN CONTROL:** Earthquake  Wind

**SOIL BEARING CAPACITIES:**  
Field Test (provide copy of test report) N/A psf  
Presumptive Bearing Capacity 2000 psf  
Pile size, type, and capacity N/A

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 4e**  
winter dry bulb: 20.0F  
summer dry bulb: 82.4F  
**Interior design conditions**  
winter dry bulb: 20.0F  
summer dry bulb: 74.0F  
relative humidity: 60% RH  
**Building heating load:** SHELL ONLY  
**Building cooling load:** SHELL ONLY

**Mechanical Spacing Conditioning System**  
Unitary Description of system: Unitary Heating and Cooling System  
heating efficiency: 85%  
cooling efficiency: 95%  
size category of unit: 10 TON  
boiler Description of system: None  
size category, if needed, state reason: N/A  
boiler Description of system: None  
size category, if over sized, state reason: N/A  
List minimum efficiencies: SEE SCHEDULES ON SHEET M121

2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
ELECTRICAL DESIGN  
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

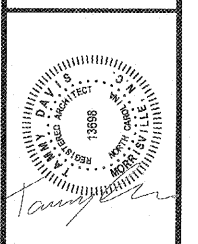
**ELECTRICAL SUMMARY**

**ELECTRICAL SYSTEM AND EQUIPMENT**  
Method of Compliance: Energy Code  Performance  Prescriptive  
ASHRAE 90.1  Performance  Prescriptive

**Lighting schedule (each fixture type)**  
lamp type required in fixture: SEE LUMINAIRE SCHEDULE ON "E" SHEETS  
number of lamps in fixture: SEE LUMINAIRE SCHEDULE ON "E" SHEETS  
ballast type used in the fixture: SEE LUMINAIRE SCHEDULE ON "E" SHEETS  
number of ballasts in fixture: SEE LUMINAIRE SCHEDULE ON "E" SHEETS  
total wattage per fixture: SEE LUMINAIRE SCHEDULE ON "E" SHEETS  
total interior wattage specified vs. allowed (whole building or space by space) N/A VS. N.A.  
total exterior wattage specified vs. allowed 112 WATTS VS 1,682 WATTS

**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

PROJECT: STARBUCKS SHELL BUILDING  
350 BLOWING ROCK BOULEVARD  
LENOIR, NC 28645  
DRAWING: APPENDIX B  
18201 STARBUCKS SHELL  
3505 Carverington Mill Blvd  
Lenoir, NC 28645  
Phone: 919.544.0087  
FAMMY DAVIS ARCHITECTS  
REGISTERED ARCHITECT



Digitally signed  
by Tammy Davis  
Date: 2019.04.11  
13:27:05 -04'00'

Revisions	
REVISION	DATE

PROJECT DATE: 03/26/2019  
Drawn By: MTP  
Checked By: TD  
Sheet No. G102

