

**2012 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: Taco Bell Drive-Thru Restaurant  
Address: 101 Montgomery Crossing, Biscoe N.C. Zip Code 27209  
Proposed Use: Drive-Thru Restaurant  
Owner/Authorized Agent: Bob Lacht Phone # (317) 507-2881 E-Mail:  
Owned By:  City/County  Private  State  
Code Enforcement Jurisdiction:  City/County  County Montgomery  State

**LEAD DESIGN PROFESSIONAL:** Mark Gettemeyer

DISCIPLINE	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	M2 Architecture Studio, LLC	Mark J. Gettemeyer	12951	(314) 241-8282	mark@gettemeyer.com
Civil	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Electrical	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Fire Alarm	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Plumbing	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Mechanical	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Sprinkler-Standpipe	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Structural	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Retaining Walls >5' High	Adams & Associates	William J. Adams	024709	(314) 772-1782	bill@adams-engineering.com
Other					

**2012 EDITION OF NC CODE FOR:**  New Construction  Addition  Upfit  
**EXISTING:**  Reconstruction  Alteration  Repair  Renovation  
**CONSTRUCTED:** (date) \_\_\_\_\_ **ORIGINAL USE(S)** (Ch. 3): \_\_\_\_\_  
**RENOVATED:** (date) \_\_\_\_\_ **CURRENT USE(S)** (Ch. 3): \_\_\_\_\_  
**PROPOSED USE(S)** (Ch. 3): Taco Bell Drive-Thru Restaurant

**BASIC BUILDING DATA**

Construction Type:  I-A  II-A  III-A  IV  V-A  
 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 (Primary) **Flood Hazard Area:**  No  Yes

Building Height: (feet) 24.5

**Gross Building Area:**

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6 <sup>th</sup> Floor			
5 <sup>th</sup> Floor			
4 <sup>th</sup> Floor			
3 <sup>rd</sup> Floor			
2 <sup>nd</sup> Floor			
Mezzanine			
1 <sup>st</sup> Floor	0 sq. ft.	2,653 sq. ft.	2,653 sq. ft.
Basement			
<b>TOTAL</b>	0 sq. ft.	2,653 sq. ft.	2,653 sq. ft.

**ALLOWABLE HEIGHT**

Occupancy:  Assembly  A-2  A-3  A-4  A-5  
 Business  Educational  Factory  Hazardous  Institutional  L-3 Condition  Mercantile  Residential  Storage  Utility and Miscellaneous

**Accessory Occupancies:**  Assembly  Business  Educational  Hazardous  Institutional  Mercantile  Residential  Storage  Utility and Miscellaneous

**Incidental Uses (Table 508.2.5):**  
 Furnace room where any piece of equipment is over 400,000 Btu per hour input  
 Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower  
 Refrigerant machine room  
 Hydrogen cutoff rooms, not classified as Group H  
 Incinerator rooms  
 Paint shops, not classified as Group H, located in occupancies other than Group F  
 Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy  
 Laundry rooms over 100 square feet  
 Group I-3 cells equipped with padded surfaces  
 Group I-2 waste and linen collection rooms  
 Waste and linen collection rooms over 100 square feet  
 Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies  
 Rooms containing fire pumps  
 Group I-2 storage rooms over 100 square feet  
 Group I-2 commercial kitchens  
 Group I-2 laundries equal to or less than 100 square feet  
 Group I-2 rooms or spaces that contain fuel-fired heating equipment

**Special Uses:**  402  403  404  405  406  407  408  409  410  411  412  
 413  414  415  416  417  418  419  420  421  422  423  424  
 425  426  427

**Special Provisions:**  509.2  509.3  509.4  509.5  509.6  509.7  509.8  509.9

**Mixed Occupancy:**  No  Yes Separation: \_\_\_\_\_ Hr. Exception: \_\_\_\_\_  
 Incidental Use Separation (508.2.5)  
This separation is not exempt as a Non-Separated Use (see exceptions).  
 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** / **Allowable Area of Occupancy A** + **Allowable Area of Occupancy B** ≤ 1

STORY NO.	DESCRIPTION AND USE	(A) PERMITTED AREA (SQUARE FEET)	(B) TABLE 507 AREA (SQUARE FEET)	(C) AREA FOR OCCUPANCY SEPARATION (SQUARE FEET)	(D) AREA FOR NON-SEPARATED USE (SQUARE FEET)	(E) ALLOWABLE AREA (SQUARE FEET)
1	A-2	2,653	6,000			6,000

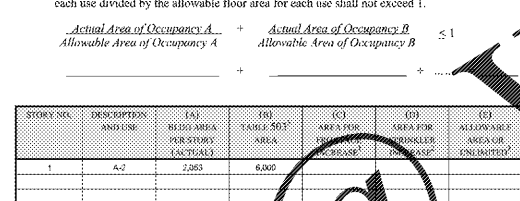
1. Frontage area increases from Section 506.2 are computed thus:  
a. Perimeter which fronts a public way or open space having a 20-foot minimum width (F)  
b. Total Building Perimeter (P)  
c. Ratio (F/P) = \_\_\_\_\_ (F/P)  
d. W = Minimum width of public way = \_\_\_\_\_ (W)  
e. Percent of frontage increase = 100 \* (F/P - 0.5) \* W = \_\_\_\_\_ (F/P)

2. The sprinkler increase per Section 506.3 is as follows:  
a. Multi-story building = 200 percent  
b. Single-story building = \_\_\_\_\_ percent

3. Unlimited building height is permitted by Section 507.

4. Maximum building area = total number of stories in the building x E (506.4).

5. The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2.



**BUILDING AREA AND OCCUPANT LOAD**

TYPE	AREA	FACTOR	OCCUPANTS
ASSEMBLY UNCONCENTRATED	540.67 S.F.	1.15 SF	36
ASSEMBLY STANDING	114.02 S.F.	1.5 SF	22.8
COMMERCIAL KITCHEN	911.53 S.F.	1,200 SF	4.56
<b>TOTAL:</b>			<b>64</b>

**ALLOWABLE HEIGHT**

Type of Construction	ALLOWABLE HEIGHT (Table 503)	INCREASE FOR SPIRINDERS (Table 503.1)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet	40	Feet = H + 20"	24	
Building Height in Stories	1	Stories + 1 =	1	

**FIRE PROTECTION REQUIREMENTS**

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	BOX #	RATING PROVIDED (BY MANUFACTURER)	RE-TASK #	POSITION # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DISCREP # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	0	0	0				
Bearing Walls							
Exterior							
North	>=0	0	0				
East	>=0	0	0				
West	>=0	0	0				
South	>=0	0	0				
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions	0	0	0				
Floor Construction	0	0	0				
Including supporting beams and joists							
Roof Construction	0	0	0				
Including supporting beams and joists							
Shaft Enclosures - Exit	N/A						
Shaft Enclosures - Other	N/A						
Corridor Separation	N/A						
Occupancy Separation	N/A						
Party Fire Wall Separation	N/A						
Smoke Barrier Separation	N/A						
Tenant Separation	N/A						
Incidental Use Separation	N/A						

**SAFETY SYSTEM REQUIREMENTS**

Emergency Lighting:  No  Yes  
Exit Signs:  No  Yes  
Fire Alarm:  No  Yes  
Smoke Detection Systems:  No  Yes  
Panic Hardware:  No  Yes

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Code Section: 703.1

Fire and smoke rated wall locations (Chapter 7)  
 Assumed and actual property line locations  
 Exterior wall opening area with respect to distance to assumed property lines (705.8)  
 Existing structures within 30' of the proposed building  
 Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)  
 Occupant loads for each area  
 Exit access travel distances (1016)  
 Common path of travel distances (1014.3 & 1028.8)  
 Dead end lengths (1018.4)  
 Clear exit widths for each exit door  
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)  
 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 (1008.1.10)  
 Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)  
 Location of doors with electromagnetic egress locks (1008.1.9.8)  
 Location of doors equipped with hold-open devices  
 Location of emergency escape windows (1029)  
 The square footage of each fire area (902)  
 The square footage of each smoke compartment (407.4)  
 Note any code exceptions or table notes that may have been utilized regarding the items above

**DESIGN LOADS:**

**Importance Factors:** Wind (I<sub>w</sub>) 1.0  
Snow (I<sub>s</sub>) 1.0  
Seismic (I<sub>e</sub>) 1.0

**Live Loads:** Roof 20 psf  
Mezzanine 100 psf  
Floor 100 psf

**Ground Snow Load:** 10 psf

**Wind Load:** Basic Wind Speed 110 mph (ASCE-7)  
Exposure Category B  
Wind Base Shears (for MWFRS) V<sub>x</sub> = 24.0 psf V<sub>y</sub> = 8.6 psf

**STRUCTURAL DESIGN**

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

Provide the following Seismic Design Parameters:  
Occupancy Category (Table 1613.5)  I  II  III  IV  
Spectral Response Acceleration S<sub>s</sub> 21.7 %g S<sub>1</sub> 2.7 %g S<sub>2</sub> 2.7 %g  
Site Classification (Table 1613.5.2)  A  B  C  D  E  F  
Data Source:  Field Test  Presumptive  Historical Data

**Basic structural system (check one):**  
 Bearing Wall  Dual w/Special Moment Resisting Frame  
 Building Frame  Dual w/Interior Core R.C. Moment Resisting Frame  
 Moment Frame  Inverted Pyramidal R.C. Moment Resisting Frame

**Seismic base shear:** V<sub>s</sub> = 1029.0 psf V<sub>1</sub> = 877.0 psf  
**Analysis Procedure:**  Simplified  Equivalent Lateral Force  Dynamic  
**Architectural, Mechanical, Components required?**  No  Yes

**LATERAL DESIGN CONTROL:** Earthquake  Wind

**SOIL BEARING CAPACITY:** Field test (provide copy of test report) \_\_\_\_\_ psf  
Presumptive Bearing Capacity \_\_\_\_\_ psf  
Pile shape, size, and capacity \_\_\_\_\_

**SEISMIC INSPECTIONS REQUIRED:**  Yes  No

**PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)**

SPACE	EXISTING	NEW	REMOVED	WATER FIXTURES TO BE INSTALLED	WATER FIXTURES TO BE REMOVED	WATER FIXTURES TO BE INSTALLED	WATER FIXTURES TO BE REMOVED
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2

**SPECIAL APPROVALS**

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

PER SECTION 1704.14 EXTERIOR INSULATION AND FINISH SYSTEMS: A SPECIAL INSPECTION IS REQUIRED

PER SECTION 1704.14.1 WATER RESISTIVE BARRIER COATING: A SPECIAL INSPECTION IS REQUIRED

**MECHANICAL SUMMARY**

**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**

**Thermal Zone**  
winter dry bulb: 22.0  
summer dry bulb: 26.0

**Interior design conditions**  
winter dry bulb: 65.1  
summer dry bulb: 77.8  
relative humidity: 80%

**Building heating load:** 98.3 MBH  
**Building cooling load:** 206.2 MBH

**Mechanical Spacing Conditioning System**  
Unitary  
description of unit: DX package  
heating efficiency: 80% @ 18% AFUE  
cooling efficiency: 12.5 EER @ 18% AFUE  
size category of unit: 7.5 ton / 12.5 ton  
Boiler  
Size category. If oversized, state reason: \_\_\_\_\_  
Chiller  
Size category. If oversized, state reason: \_\_\_\_\_

**List equipment efficiencies:** 12.5 EER @ 18% AFUE

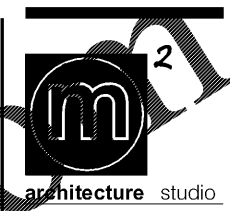
**ELECTRICAL SUMMARY**

**ELECTRICAL SYSTEM AND EQUIPMENT**

**Method of Compliance:**  
Energy Code:  Prescriptive  Performance  
ASHRAE 90.1:  Prescriptive  Performance

**Lighting schedule (each fixture type)** See sheet EA.0 for lighting schedule and all information  
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 Prescriptive Compliance**  
 506.2.1 More Efficient Mechanical Equipment  
 506.2.2 Reduced Lighting Power Density  
 506.2.3 Energy Recovery Ventilation Systems  
 506.2.4 Higher Efficiency Service Water Heating  
 506.2.5 On-Site Supply of Renewable Energy  
 506.2.6 Automatic Daylighting Control Systems

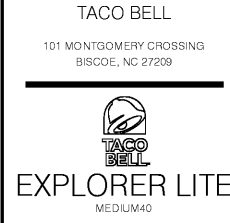


1232 washington ave.  
suite 310  
st. louis, mo 63103  
p: 314.241.6262  
f: 314.241.6263  
www.m2astudio.com



Mark J. Gettemeyer, Architect

**PERMIT/CONSTRUCTION SET**  
DATE: MAY 4, 2018  
CONTRACT DATE: XX XX XX  
BUILDING TYPE: EXPLORER LITE 40  
PLAN VERSION: DECEMBER 2017  
SITE NUMBER: XXX XXX  
STORE NUMBER: XXXXX



**APPENDIX B**  
**T1.1**  
PLOT DATE:

Order Plans @ WWW.IDRAWIT.COM