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: Clemmons First Baptist
Address: 3530 Clemmons Road, Clemmons NC Zip Code 27012
Proposed Use: A3- Assembly - Church
Owner/Authorized Agent: Clarence Groce Phone # (336) 414 - 1575 E-Mail crgroce820@gmail.com
Owned By: ☐ City/County ■ Private ☐ State
Code Enforcement Jurisdiction: ■ City Winston Salem ☐ County ☐ State

LEAD DESIGN PROFESSIONAL:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	Ramsey Burgin Smith Architects	William R. Burgin	3513	(704) 633-3121	bill@rbsarch.com
Civil				( )	
Electrical	Design Engineering	David Smith	11207	(336) 224-0100	DSMITHS@LEXCOMNC.NET
Fire Alarm				( )	
Plumbing				( )	
Mechanical				( )	
Sprinkler-Standpipe				( )	
Structural	Interface for Consulting Engineers	Sterling Smith	4205	(704) 599-8811	S.SMITH@ICES-PA.COM
Retaining Walls >5' High				( )	
Other				( )	

2012 EDITION OF NC CODE FOR: ☐ New Construction ■ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair ☐ Renovation
CONSTRUCTED: (date) 1965 **ORIGINAL USE(S)** (Ch. 3): A3 - Assembly
RENOVATED: (date) ____ **CURRENT USE(S)** (Ch. 3): ____
PROPOSED USE(S) (Ch. 3): ____

BASIC BUILDING DATA
Construction Type: (check all that apply) ☐ I-A ☐ I-B ☐ II-A ■ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ 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) 36'
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor	2270	0	2270
Mezzanine			
1st Floor	7,464	305	7,769
Basement	7,464	0	7,464
TOTAL	14,928	305	17,503

ALLOWABLE AREA

Occupancy:
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 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 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 Occupancies:
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 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 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 ☐

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.

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

____ + ____ + ... = ____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503[5] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
Second	A3 - Assembly	2,270	9,500	3,230	0	12,730	
First	A3 - Assembly	7,769	9,500	3,230	0	12,730	
Basement	A3 - Assembly	7,464	9,500	3,230	0	12,730	

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 252' (F)
b. Total Building Perimeter = 427' (P)
c. Ratio (F/P) = .59 (F/P)
d. W = Minimum width of public way = 30 (W)
e. Percent of frontage increase I_f = 100 [F/P - 0.25] x W/30 = 34 (%)

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent
b. Single story building I_s = 300 percent

[3] Unlimited area applicable under conditions of 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.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type II-B		Type II-B	
Building Height in Feet	55'	Feet = H + 20' = ____	36'	
Building Height in Stories ✱	2	Stories + 1 = ____	1	

✱ BASEMENT LEVEL NOT COUNTED AS STORY

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ REDUCTION)*	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Bearing Walls							
Exterior		0					
North		0					
East		0					
West		0					
South		0					
Interior		0					
Nonbearing Walls and Partitions							
Exterior walls							
North		0					
East		0					
West		0					
South		0					
Interior walls and partitions		0					
Floor Construction including supporting beams and joists		0					
Roof Construction including supporting beams and joists		0					
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation		0					
Occupancy Separation		0					
Party/Fire Wall Separation		1hr	U404 - 1hr	4/C1.2			
Smoke Barrier Separation		0					
Tenant Separation		0					
Incidental Use Separation		0					

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☑ Yes
Exit Signs: ☐ No ☑ Yes
Fire Alarm: ☐ No ☑ Yes
Smoke Detection Systems: ☐ No ☑ Yes ☐ Partial ____
Panic Hardware: ☐ No ☑ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: C1.2
■ Fire and/or smoke rated wall locations (Chapter 7)
■ Assumed and real 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

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

THIS IS AN EXISTING BUILDING.
ACCESSIBLE DWELLING UNITS NOT APPLICABLE

ACCESSIBLE PARKING
(SECTION 1106)

NOT APPLICABLE
THIS IS AN EXISTING BUILDING.
ACCESSIBLE PARKING WILL NOT BE MODIFIED

STRUCTURAL DESIGN

DESIGN LOADS:
Importance Factors: Wind (I_W) 1.0; Snow (I_S) 1.0; Seismic (I_E) 1.25
Live Loads: Roof 20 psf; Mezzanine - psf; Floor 100 psf
Ground Snow Load: 15 psf

Wind Load: Basic Wind Speed 90 mph (ASCE-7)
Exposure Category C
Wind Base Shears (for MWFRS) Vx = 5.9 kips N/S Vy = 7.5 kips E/W

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 0.227 %g S_1 0.086 %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 Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
■ Moment Frame ☐ Inverted Pendulum
Seismic base shear: V_X = 10.8 kips N/S V_Y = 10.8 kips E/W
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) ____ psf
Presumptive Bearing capacity 2000 psf
Pile size, type, and capacity ____

SPECIAL INSPECTIONS REQUIRED: ☑ Yes ☐ No

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

NOT APPLICABLE
THIS IS AN EXISTING BUILDING.
PLUMBING FIXTURE WILL NOT BE MODIFIED

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, 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.

Climate Zone: ☐ 3 ■ 4 ☐ 5

Method of Compliance:
■ Prescriptive (Energy Code)
☐ Performance (Energy Code)
☐ Prescriptive (ASHRAE 90.1)
☐ Performance (ASHRAE 90.1)

THERMAL ENVELOPE

Roof/ceiling Assembly (each assembly)
Description of assembly: Steel framing, exterior sheathing, fiberglass batt insulation / Steel framing, metal deck, rigid insulation, single ply
U-Value of total assembly: 0.033
R-Value of insulation: R-49 (appr. 5 R-30 at eve)
Skylights in each assembly: n/a
U-Value of skylight: n/a
total square footage of skylights in each assembly: ____

Exterior Walls (each assembly)
Description of assembly: 4" brick masonry, rigid insulation, 4/6" metal stud, gypsum board / EIFS, exterior sheathing, 4/6" metal stud, batt insulation, gypsum board
U-Value of total assembly: .046
R-Value of insulation: R-13 + 7.5ci
Openings (windows or doors with glazing)
U-Value of assembly: 0.45
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: Concrete slab on grade, vapor barrier, 4" stone fill gravel
U-Value of total assembly: ____
R-Value of insulation: R15
Horizontal/vertical requirement: 24"
slab heated: n/a

MECHANICAL SUMMARY
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

NOT APPLICABLE
THIS IS AN EXISTING BUILDING.
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT WILL NOT BE MODIFIED

ELECTRICAL SUMMARY
ELECTRICAL SYSTEM AND EQUIPMENT

NOT APPLICABLE
THIS IS AN EXISTING BUILDING.
ELECTRICAL SYSTEMS AND EQUIPMENT WILL NOT BE MODIFIED

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Appendix B

CLEMMONS FIRST BAPTIST CHURCH NARTHEX ADDITION

WILLIAM R. BURGIN · REGISTERED ARCHITECT · NORTH CAROLINA · SALISBURY, N.C.

PLC	DRAWN BY
WRB	CHECKED BY
AUGUST 2017	DATE
51701	COMM. NO.

SHEET NO. C1.1 OF 3