



ARCHITECTURE
LANDSCAPE ARCHITECTURE
PLANNING
INTERIOR DESIGN
PO BOX 1308
300 SOUTH DAWSON STREET
RALEIGH, NORTH CAROLINA 27602
919.821.5547
www.hagersmith.com

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ASSOCIATES /
BNK
BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
6310 CHAFFI HILL ROAD
RAIFIGH, NC 27607
PHONE: 919.851.4422
FAX: 919.851.8968

PROJECT 555-019

BILTMORE HILLS
COMMUNITY
CENTER
RENOVATIONS
2615 FITZGERALD DR
RALEIGH, NC 27610

CLIENT



222 W. HARGETT ST - 6TH FLOOR
RALEIGH, NC

DRAWING TITLE
CODE SUMMARY

Table with columns: NUMBER, DESCRIPTION, DATE. Includes drawing info: DRAWN BY BDG, CHECKED BY BDG, DATE ISSUED 10/15/18, OF G-101.

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 information for the plan data sheet.
If performance method, note 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:
U-Value of total assembly:
R-Value of insulation:
Skylight: in each room:
U-Value of skylight:
Total square footage of skylights in each assembly:

Exterior Wall Assembly (each assembly):
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Window:
Description of window:
U-Value of window:
R-Value of window:
Operating window doors with glazing:
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Door:
Description of door:
U-Value of total assembly:
R-Value of insulation:
Floor:
Description of floor:
U-Value of total assembly:
R-Value of insulation:
Slab on grade:
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Horizontal/vertical requirement:
slab on grade:

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 on grade:

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:
Heating heating load:
Building cooling load:
Mechanical Service 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:

ELECTRICAL SUMMARY

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

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 fixture wattage specified vs. allowed (whole building or space by space):
total exterior wattage specified vs. allowed:

Additional Prescriptive Compliance:
IRC 211 More Efficient Mechanical Equipment
IRC 212 Reduced Lighting Power Density
IRC 213 Energy Recovery Ventilation Systems
IRC 214 Higher Efficiency Service Water Heating
IRC 215 On-Site Supply of Renewable Energy
IRC 216 Automatic Daylighting/Control Systems

2012 NC Administrative Code and Policies

- Exterior wall opening area with respect to distance to adjacent property lines (705.3)
Existing structures within 20' of the proposed building
Occupancy types for each area as relates to occupant load calculations (Table 104.1.1)
Occupant loads for each area
Exit access travel distances (1016)
Circulation path of travel distances (1014.3 & 1028.3)
Door and lintel height (1018.4)
Clear exit widths for each exit door
Minimum estimated occupant load capacity each exit door based on egress width (1045.1)
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 (1009.1.1.1)
Location of doors with delayed egress locks and the amount of delay (1009.1.1.2)
Location of doors with electromagnetic egress locks (1009.1.1.3)
Location of doors equipped with hold-open devices
Location of emergency escape windows (1029)
The square footage of each fire area (903)
The square footage of each smoke compartment (407.4)
Note any code exceptions or table notes (if any) have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107) table with columns for Total Units, Accessible Units, etc.

ACCESSIBLE PARKING (SECTION 1106) table with columns for Total Spaces, Accessible Spaces, etc.

DESIGN LOADS:
Importance Factors: Wind, Snow, Earthquake, etc.
Live Loads: Roof, Mezzanine, Floor, etc.
Ground Snow Load: 20 psf
Wind Load: Basic Wind Speed 100 mph (ASCE 7)
Exposure Category: B
Wind Directional Suction Coefficients: Cs = 1.0, Cs = 0.7

SEISMIC DESIGN CATEGORY:
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5)
Spectral Response Acceleration Sa
Site Classification (Table 1613.3.2)
Basic structural system (check one):
Piercing Wall, Dual or Intermediate R/C or Special Steel, Moment Resisting Frame, Inverted Pentadrum
Seismic base shear: Vs =
Analysis Procedure: Simplified, Equivalent Lateral Force, Dynamic
Architectural, Mechanical, Components anchored? Yes/No

LATERAL DESIGN CONTROL:
Barbriquet Wind
SOIL BEARING CAPACITIES:
Field Test (provide copy of test report)
Presumptive Bearing capacity: 2000 psf
Pile size, type, and capacity

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) table with columns for Year, Demographic, etc.

SPECIAL INSPECTIONS REQUIRED: Yes/No

SPECIAL APPROVALS table with columns for Year, Demographic, etc.

Special approval: (Local jurisdiction, Department of Insurance, CSO, IML, DHS, DOJ, etc., describe below)

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This operation is not exempt as a Non-Separated Use (see exemptions).
Non-Separated Use (208.3)
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, as determined, shall apply to the entire building.
Separated Use (208.4) - 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 area divided by the allowable floor area for each use shall not exceed 1.

Actual Area of Occupancy A, Allowable Area of Occupancy A
Actual Area of Occupancy B, Allowable Area of Occupancy B

Table with columns for Building Area, Floor Area, etc.

Permitted area increases from Section 502.2 are computed based on:
A. Perimeter which forms a public way or upon space having 20' feet minimum width = .546' (F)
B. Total Building Footprint
C. State 502.2 = 1 (F)
D. W = Minimum width of public way = 30' (W)
E. Percent of footage increase = 100 [(1/F) + 0.2] x (W/30) = .75% (M)
F. The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building: 1 = 300 percent
b. Single-story building: 1 = 300 percent
G. Unlimited area applicable under conditions of Section 507.
H. Maximum Building Area = total number of stories in the building x 506.4.
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 411.1.2.

ALLOWABLE HEIGHT table with columns for Type of Construction, Building Height in Feet, etc.

FIRE PROTECTION REQUIREMENTS

Table with columns for Fire Protection System, Fire Alarm, etc.

LIFE SAFETY SYSTEM REQUIREMENTS
Emergency Lighting: No/Yes
Exit Signs: No/Yes
Fire Alarms: No/Yes
Smoke Detection Systems: No/Yes/Partial
Panic Hardware: No/Yes

LIFE SAFETY PLAN REQUIREMENTS
Life Safety Plan Sheet #: G-102
Fire and/or smoke rated wall locations (Chapter 7)
Assured area and property line locations

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2012 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS

Project Name: BILTMORE HILLS COMMUNITY CENTER RENOVATIONS
Address: 2615 FITZGERALD DR, RALEIGH NC
City/County: RALEIGH NC
State: NC
Zip Code: 27610

LEAD DESIGN PROFESSIONAL:
Name: BRYAN GIBSON
Address: 11338 ...
City/County: RALEIGH NC
State: NC
Zip Code: 27610

2012 EDITION OF NC CODE FOR:
New Construction Addition Eject
Existing: Renovation Alteration Repair Renovation
Constructed: (date) 1960/1970 ORIGINAL USE(S) (Ch. 3): ASSEMBLY, A-3
Renovated: (date) CURRENT USE(S) (Ch. 3): ASSEMBLY, A-3
PROPOSED USE(S) (Ch. 3): ASSEMBLY, A-3

BASIC BUILDING DATA
Construction Type: A A-1 A-2 A-3 A-4 A-5
Sprinklers: No/Partial/Yes
Standpipes: No/Yes
Fire District: No/Yes
Building Height (feet):

Table with columns for Floor, Footprint (sq ft), New (sq ft), etc.

ALLOWABLE AREA
Occupancy: A-1 A-2 A-3 A-4 A-5
Business:
Educational:
Factory:
Hazardous:
Institutional:
Mercantile:
Residential:
Storage:
Utility and Miscellaneous:

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

Incidental Uses (Table 508.2.5):
Furniture rooms where any piece of equipment is over 400/100 Btu per hour input
Rooms with boilers where the largest piece of equipment is over 13 psf 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 H or I-2 occupancy
Lobby rooms over 100 square feet
Group I-3 and equipped with polished 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 maximum capacity of 1,000 amp-hours used for facility standby power, emergency power, or uninterruptible power supplies

Special Users: 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
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