# 2018 APPENDIX B
# BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

**NAME OF PROJECT:** Home2 Suites Belmont

**ADDRESS:** Hawley Ave., Belmont, North Carolina **ZIP CODE:** 28012

**PROPOSED USE:** Residential (Hotel with 107 Rooms, 125 Beds)

**OWNER / AUTHORIZED AGENT:** Warren Norman Company **PHONE #:** (803) 366-8141

**E-MAIL:** wnorman@warrennormaninc.com

**OWNED BY:** ☐ City / County ☒ Private ☐ State

**CODE ENFORCEMENT JURISDICTION:** ☐ City ☒ County Gaston ☐ State

**LEAD DESIGN PROFESSIONAL:** Ragona Architecture & Design, PLLC

| DESIGNER | FIRM | NAME | LICENSE# | TELEPHONE# | EMAIL |
|---|---|---|---|---|---|
| ARCHITECTURAL | Ragona Architecture & Design, PLLC | Matt Todd Ragona | 9810 | (704) 943-9091 | mragona@rad-arch.com |
| CIVIL | Henson Foley | Tim Foley | 23557 | (704) 875-1615 | tim@hensonfoley.com |
| ELECTRICAL | Wave Engineering | Michael Senuta | 037734 | (980) 256-7728 | info@wave-engineering.com |
| FIRE ALARM | Wave Engineering | Michael Senuta | 037734 | (980) 256-7728 | info@wave-engineering.com |
| PLUMBING | Wave Engineering | Michael Senuta | 037734 | (980) 256-7728 | info@wave-engineering.com |
| MECHANICAL | Wave Engineering | Michael Senuta | 037734 | (980) 256-7728 | info@wave-engineering.com |
| SPRINKLER - STANDPIPE | - | - | - | - | - |
| STRUCTURAL | Fitzpatrick Engineering Group | Douglas G. Fitzpatrick | 12965 | (704) 987-9114 | dhorner@fegstructural.com |
| RETAINING WALLS > 5' HIGH | Fitzpatrick Engineering Group | Douglas G. Fitzpatrick | 12965 | (704) 987-9114 | dhorner@fegstructural.com |
| INTERIORS | American Hotel Register Company | Reilly Michaelson | - | (847) 743-1557 | rmichaelson@americanhotel.com |

**2018 NC BUILDING CODE:** ☒ New Construction ☐ Addition ☐ Upfit
☐ 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:** ☐ Prescriptive ☐ Repair ☐ Chapter 14
**Alteration:** ☐ Level I ☐ Level II * ☐ Level III
☐ Historic Property ☐ Change of Use

**CONSTRUCTED: (date)** ____ **CURRENT OCCUPANCY(S)** (Ch. 3): ____

**RENOVATED: (date)** ____ **PROPOSED OCCUPANCY(S)** (Ch. 3): ____

**OCCUPANCY CATEGORY (Table 1604.5):** Current: ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ☐ II ☐ III ☐ IV

**BASIC BUILDING DATA:**

**Construction Type:** (Table 601) (check all that apply) ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV-HT ☒ V-A ☐ V-B

**Sprinklers:** (Section 903) ☐ No ☐ Partial ☒ Yes ☒ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

**Standpipes:** (Section 905) ☐ No ☒ Yes Class ☒ I ☐ II ☐ III ☒ Wet ☐ Dry ☒ NFPA 14

**Fire District:** ☐ No ☒ Yes (Primary) **Flood Hazard Area:** ☒ No ☐ Yes

**Special Inspections - (If applicable to this project)**

**SCHEDULE OF SPECIAL INSPECTIONS**

☐ No special inspections required for this project ☒ Special inspections required

The following sheets comprise the required schedule of Special Inspections for this project. The construction divisions which require special inspections for this project are as follows:

☒ IT-1 Verification of Soils
☒ IT-2 Excavation and Fill
☐ IT-3 Piling and Drilling Piers
☐ IT-4 Modular Retaining Walls
☒ IT-5 Reinforced Concrete
☐ IT-6 Post Tension Slab
☒ IT-7 Pre-cast Concrete Erection
☒ IT-8 Pre-stressed Concrete
☒ IT-9 Inspection of Pre-Cast Fabrications
☒ IT-10 Inspection of Structural Steel Fabricators
☒ IT-11 Structural Masonry
☒ IT-12 Welding
☒ IT-13 High Strength Bolts & Steel Framing Insp.
☒ IT-14 Sprayed Fire-Resistance Materials
☒ IT-15 Exterior Insulation and Finish system
☐ IT-16 Seismic Resistance
☐ IT-17 Smoke Control
☐ IT-18 Detention Basin
☐ IT-19 Special Cases

Check the above boxes for the special inspection required for this project and list below specific special inspections required under Chapter 17. For questions regarding Special Inspections please see www.Meck-SI.com.

**Building Height:** (feet) (Table 503) See table below for height calculation. **Stories / Height:** 4 Story @ 53 Feet

Definition (502.1): The vertical distance from grade plane to the average height of the highest roof surface.

**Grade Plane:** (spot elevation feet) Definition (502.1): A reference plan representing the average of finished ground level adjoining the building at exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 feet from the building, between the building and a point 6 feet from the building.

**Basement:** ☒ N/A ☐ No ☐ Yes per the following questions and calculations:

A Basement is considered a Basement and not a story if the following two questions are answered with a "Yes" based on the calculations above:

☒ N/A ☐ No ☐ Yes Is the Finished Floor above the Basement more than or equal to 6 feet above Grade Plane?

☒ N/A ☐ No ☐ Yes Is the Finished Floor above the Basement more than or equal to 12 feet above the finished ground level at any point (the lowest grade spot elevation)?

**Gross Building Area:**

| GROSS BUILDING AREA | |
|---|---|
| **FLOOR** | **GROSS AREA** |
| 4TH FIN-FLR | 15,794 SF |
| 3RD FIN-FLR | 15,794 SF |
| 2ND FIN-FLR | 15,794 SF |
| 1ST FIN-FLR | 15,826 SF |
| | 63,207 SF |

**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: ☐

**Seperated / 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 509)

☐ 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: Covered Mall and Open Mall Buildings
☐ 403: High-rise Buildings
☐ 404: Atriums
☐ 405: Underground Buildings
☐ 406: Motor-vehicle-related Occupancies
☐ 407: Group I-2
☐ 408: Group I-3
☐ 409: Motion Picture Projection Rooms
☐ 410: Stages and Platforms
☐ 411: Special Amusement Buildings
☐ 412: Aircraft-related Occupancies
☐ 413: Combustible Storage
☐ 414: Hazardous Materials
☐ 415: Groups H-1, H-2, H-3, H-4, and H-5
☐ 416: Application of Flammable Finishes
☐ 417: Drying Rooms
☐ 418: Organic Coatings
☐ 419: Live/work Units
☒ 420: Groups I-1, R-1, R-2, R-3
☐ 421: Hydrogen Cutoff Rooms
☐ 422: Ambulatory Health Care Facilities
☐ 423: Storm Shelters
☐ 424: Temporary Overflow Emergency Shelters for the Homeless
☐ 425: Licensed Residential Care Facility
☐ 426: Licensed Adult and Child Day Care
☐ 427: Private and Public Schools

**Special Provisions:** (If Applicable)
☐ 510.2: Horizontal building separation allowance.
☐ 510.3: Group S-2 enclosed parking garage with Group S-2 open parking garage above.
☐ 510.4: Parking beneath Group R.
☐ 510.5: Group R-1 and R-2 buildings of Type IIIA construction.
☐ 510.6: Group R-1 and R-2 buildings of Type IIA construction.
☐ 510.7: Open parking garage beneath Groups A, I, B, M, and R.
☐ 510.8: Group B or M with Group S-2 open parking garage.
☐ 510.9: Multiple buildings above Group S-2 parking garages.

**ALLOWABLE AREA TABLE 506.2 FOR THIS PROJECT**

| OCCUPANCY CLASSIFICATION | BUILDING DESCRIPTION | ALLOWABLE AREA (SF) FOR TYPE VA CONSTRUCTION |
|---|---|---|
| A-2 | NS | 11,500 |
| | SM | 34,500 |
| A-3 | NS | 11,500 |
| | SM | 34,500 |
| B | NS | 18,000 |
| | SM | 54,000 |
| R-1 | NS | 12,000 |
| | SM | 36,000 |
| S-1 | NS | 14,000 |
| | SM | 42,000 |

NS: Buildings not equipped throughout with an automatic sprinkler system.NS values are provided in table above for use in the Mixed Use Calculation Table below.

SM: Buildings two or more stories above grade plane equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

**Mixed Occupancy:** ☐ No ☒ Yes Separation: 1 Hr. Exception: ____

☒ **Incidental Use Separation** (509)(See Table Selections)
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.

☐ **Accessory Occupancy** (508.2.3)
See below for percent area calculations
Aggregate accessory occupancies shall not occupy more than 10 percent of the building area of the story in which they are located and shall not exceed the tabular values in Table 503, without building area increases in accordance with Section 506 for such accessory occupancies.

**ACCESSORY AREA CALCULATIONS**

| Area Type (Main / Accessory) | Area | Percent of Area | Comments |
|---|---|---|---|
| 1ST FLR | | | |
| ACCESSORY | 6122 SF | 39% | Note 1 |
| MAIN | 9734 SF | 61% | Note 1 |
| | 15856 SF | 100% | |
| 2ND - 4TH FLRS | | | |
| ACCESSORY | 387 SF | 2% | Note 2 |
| MAIN | 15724 SF | 98% | Note 2 |
| | 16111 SF | 100% | |

**SEPARATED USE CALCULATIONS**

Shall Not Exceed 1.00 Per 508.4.2 (Refer to Note 3)

| Occupancy Type | Area | Allowable Area (Separated Use) | Area / Allowable Area |
|---|---|---|---|
| 1ST FLR | | | |
| ASSEMBLY (A-2) | 748 SF | 34,500 SF | 0.02 |
| ASSEMBLY (A-3) | 3,467 SF | 34,500 SF | 0.10 |
| BUSINESS (B) | 966 SF | 54,000 SF | 0.02 |
| RESIDENTIAL (R-1) | 9,734 SF | 36,000 SF | 0.27 |
| STORAGE (S-1) | 941 SF | 42,000 SF | 0.02 |
| | 15,856 SF | | 0.43 |
| 2ND - 4TH FLRS | | | |
| RESIDENTIAL (R-1) | 15,724 SF | 36,000 SF | 0.44 |
| STORAGE (S-1) | 387 SF | 42,000 SF | 0.01 |
| | 16,111 SF | | 0.45 |

**MIXED USE CALCULATIONS**

Shall Not Exceed 3.00 Per 506.2.4 (Refer to Note 4)

| Occupancy Type | Area | (At) Tabular Area SM | (NS) Tabular Area NS | (If) Area Factor Increase | (Aa) Allowable Area | Actual Area / Allowable Area (Aa) |
|---|---|---|---|---|---|---|
| 1ST FLR | | | | | | |
| ASSEMBLY (A-2) | 748 SF | 34,500 SF | 11,500 SF | 0 | 34,500 SF | 0.02 |
| ASSEMBLY (A-3) | 3,467 SF | 34,500 SF | 11,500 SF | 0 | 34,500 SF | 0.10 |
| BUSINESS (B) | 966 SF | 54,000 SF | 18,000 SF | 0 | 54,000 SF | 0.02 |
| RESIDENTIAL (R-1) | 9,734 SF | 36,000 SF | 12,000 SF | 0 | 36,000 SF | 0.27 |
| STORAGE (S-1) | 941 SF | 42,000 SF | 14,000 SF | 0 | 42,000 SF | 0.02 |
| | 15,856 SF | | | | | 0.43 |
| 2ND - 4TH FLRS | | | | | | |
| RESIDENTIAL (R-1) | 15,724 SF | 36,000 SF | 12,000 SF | 0 | 36,000 SF | 0.44 |
| STORAGE (S-1) | 387 SF | 42,000 SF | 14,000 SF | 0 | 42,000 SF | 0.01 |
| | 16,111 SF | | | | | 0.45 |
| | 31,967 SF | | | | | 0.88 |

Notes:
1. 1st Floor Exceeds the 10% Limit per Section 508.2.3; therefore, Occupancies on the 1st Floor are Separated Use and are Separated per Requirements of Table 508.4 by 1-hr Fire Barriers, Refer to Life Safety Plans.
2. Accessory Occupancies meet section 508.2.3 on 2nd - 4th Floors only and are not required to be separated per 508.2.4. Because of other code requirements these spaces are still required to have fire rated separations; therefore, Separated Use is still implemented for consistency.
3. Refer to the "Separated Use Calculations" Table for compliance with 508.4.2 for Separated Occupancies Allowable Building Area where in each story, the building area shall be such that the sum of the ratios of the actual building area of each separated occupancy divided by the allowable building area of each separated occupancy shall not exceed 1.
4. Refer to the "Mixed Use Calculations" Table for compliance with 506.2.4 Mixed-occupancy, multistory buildings. Each story of a mixed-occupancy building with more than one story above grade plane shall individually comply with the applicable requirements of Section 508.1. For buildings with more than three stories above grade plane, the total building area shall be such that the aggregate sum of the ratios of the actual area of each story divided by the allowable area of such stories, determined in accordance with the Equation 5-3 based on the applicable provisions of Section 508.1, shall not exceed three.

Equation 5-3: Aa = [At + (NS x If)]

where:

Aa = Allowable Area (SF)
At = Tabular allowable area factor (NS, S13R, or SM value, as applicable) in accordance with Table 506.2.
NS = Tabular allowable area factor in accordance with Table 506.2 for a nonsprinklered building (regardless of whether the building is sprinklered).
If = Area factor increase due to frontage (percent) as calculated in accordance with Section 506.3 (see below).

(1) Frontage area increases from Section 506.3 are computed thus: Use frontage increase? ____
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) = ____ (F/P)
d. W = Minimum width of public way = ____ (W)
e. Percent of frontage increase: If = 100 [ F/P - 0.25] x W/30 = ____ (%)

(2) The sprinkler increase per Section 506.2 is as follows:
a. Multi-story building Is = 200 percent; Does this building have fire sprinklers? ____
b. Single story building Is = 300 percent; Is this building single story? ____

(3) Unlimited area applicable under conditions of Section 507.
(4) Maximum Building Area = total number of stories in the building x E.

**Percentage of Wall Opening Calculations - (New Construction, Addition and Change of Use)**

(Table 705.8)

| Fire Separation Distance (Feet) From Property Lines | Degree of Openings Protection (Table 705.8) | Allowable Area (%) | Actual Shown on Plans (%) |
|---|---|---|---|
| > 30' | Unprotected, Sprinklered (UP, S) | Not Required | Not Required |
| | | | |
| | | | |

**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 #s: G.101 G.102

☒ 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 calculations (Table 1004.1.2)
☒ Occupant loads for each area
☒ Exit access travel distance (1016)
☐ Common path of travel distance (1006.2.1 and 1029.8)
☒ Dead end lengths (1020.4)
☒ Clear exit widths for each exit door
☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3.2)
☒ 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 (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 (1010.1.9.9)
☒ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (901.7)
☐ The square footage of each smoke compartment (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

**WALL LEGENDS**

Check if the following are present and indicated by a wall legend on all plans.
☒ Fire Walls 706 ☒ Fire Barriers 707 ☒ Shaft Enclosures 712 ☒ Fire Partitions 708 ☐ Smoke Barriers 709
☐ Smoke Partitions 710 ☐ No rated walls are present

**ACCESSIBLE DWELLING UNITS**
(SECTION 1107)

| UNIT TYPE DESCRIPTION | TOTAL UNITS | ACCESSIBLE UNITS REQUIRED | ACCESSIBLE UNITS PROVIDED | TYPE A UNITS REQUIRED | TYPE A UNITS PROVIDED | TYPE B UNITS REQUIRED | TYPE B UNITS PROVIDED | TOTAL ACCESSIBLE UNITS PROVIDED |
|---|---|---|---|---|---|---|---|---|
| SLEEPING UNIT | 107 | 7 | 7 | 0 | 0 | 0 | 0 | 7 |

| UNIT TYPE DESCRIPTION | ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS REQUIRED | ACCESSIBLE UNITS WITHOUT ROLL-IN SHOWERS PROVIDED | ACCESSIBLE UNITS WITH ROLL-IN SHOWERS REQUIRED | ACCESSIBLE UNITS WITH ROLL-IN SHOWERS PROVIDED |
|---|---|---|---|---|
| SLEEPING UNIT | 5 | 5 | 2 | 2 |

**Allowable Height (Chapter 5) - (Required for Additions, New Construction)**

| ☒ APPLICABLE TO THIS PROJECT | ALLOWABLE (TABLE 503) | INCREASE FOR SPRINKLERS | | SHOWN ON PLANS | CODE REFERENCE |
|---|---|---|---|---|---|
| | | ☒ Yes | ☐ No | | |
| Type of Construction | Type: V-A | | | Type: V-A | 504 |
| Building Height in Feet | 50' - 0" | Feet = H + 20' = | 70' - 0" | 53' - 0" | 504.3 / 504.4 |
| Building Height in Stories | 3 | Stories + 1 = | 4 | 4 | 504.3 / 504.4 |

**Fire Protection Requirements (Chapter 7)**

| BUILDING ELEMENT | APPLICABLE(*0) | FIRE SEPARATION DISTANCE (FEET) | RATING REQ'D | RATING PROVIDED (W/___(*1) REDUCTION) | DETAIL #(*2) AND SHEET # | DESIGN # FOR RATED ASSEMBLY | DESIGN # FOR RATED PENETRATION | DESIGN # FOR RATED JOINTS |
|---|---|---|---|---|---|---|---|---|
| Structural Frame, including columns, girders, trusses | ☒ | N/A | 1 Hr | 1 Hr | G.301/G.302 | U906/K912 | N/A | N/A |
| | | N/A | - | - | - | - | - | - |
| | | N/A | - | - | - | - | - | - |
| Bearing Walls (see section 601 - 602 if rated) | | | | | | | | |
| Exterior - North | ☒ | 30' - 0" | 1 Hr | 1 Hr | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| Exterior - East | ☒ | 30' - 0" | 1 Hr | 1 Hr | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| Exterior - West | ☒ | 30' - 0" | 1 Hr | 1 Hr | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| Exterior - South | ☒ | 30' - 0" | 1 Hr | 1 Hr | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| Bearing Walls Interior | ☒ | N/A | 1 Hr | 1 Hr | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| | | N/A | - | - | - | - | - | - |
| | | N/A | - | - | - | - | - | - |
| Nonbearing Walls and Partitions - (see section 601 - 602 if rated) | | | | | | | | |
| Exterior - North (*4) | ☒ | 30' - 0" | 2 Hr | 0 Hr | N/A | N/A | N/A | N/A |
| Exterior - East (*4) | ☒ | 30' - 0" | 2 Hr | 0 Hr | N/A | N/A | N/A | N/A |
| Exterior - West (*4) | ☒ | 30' - 0" | 2 Hr | 0 Hr | N/A | N/A | N/A | N/A |
| Exterior - South (*4) | ☒ | 30' - 0" | 1 Hr | 0 Hr | N/A | N/A | N/A | N/A |
| Interior walls & partitions | ☒ | N/A | 0 Hr | 0 Hr | N/A | N/A | N/A | N/A |
| | | N/A | - | - | - | - | - | - |
| | | N/A | - | - | - | - | - | - |
| Floor Construction Including supporting beams and joists | ☒ | N/A | 1 Hr | 1 Hr | G.301/G.304 | J957 / L545 | G.305 / G.306 | G.305 / G.306 |
| | | N/A | - | - | - | - | - | - |
| | | N/A | - | - | - | - | - | - |
| Roof Construction Including supporting beams and joists | ☒ | N/A | 1 Hr | 1 Hr | G.302 | P518 | G.302 / G.305 / G.306 | G.302 / G.305 / G.306 |
| Shaft Enclosures - Exit | ☒ | N/A | 2 Hr | 2 Hr 713.4 | G.301 | U906 | - | - |
| Shaft Enclosures - Other | ☒ | N/A | 2 Hr | 2 Hr 713.4 | G.302 | U419 | - | - |
| | | N/A | 1 Hr | 1 Hr 713.4 | G.302 | U419 | - | - |
| Corridor Separation(*3) | ☒ | N/A | 1/2 Hr | 1/2 Hr T1020.1 | G.302 | U419 | G.305 / G.306 | G.305 / G.306 |
| Occupancy Separation | ☒ | N/A | 1 Hr | 1 Hr 508.4 | G.302 | U419 | G.305 / G.306 | G.305 / G.306 |
| Party/Fire Wall Separation | ☐ | | | | | | | |
| Smoke Barrier Separation | ☐ | | | | | | | |
| Sleeping Unit Separation | ☒ | N/A | 1 Hr | 1 Hr 708.1 | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| Incidental Use Separation | ☒ | N/A | 1 Hr | 1 Hr 509 | G.301/G.303 | U419 / U906 | G.305 / G.306 | G.305 / G.306 |
| | | N/A | | | | | | |

(*0) Boxes checked in the "Applicable" column indicate fire protection requirements that are applicable to this project.
(*1) Indicate section number permitting reduction
(*2) Detail #'s are indicated in the Design # columns and on the G-Series Sheets for UL Design and Calculated Fire Resistance Details
(*3) Exit access corridors are required to be 1/2-hr rated. 1-hr wall assemblies are provided, penetrations and openings are based on 1/2-hr rating.
(*4) Typical Exterior Nonbearing Walls are rated 0-hour. Chart above references special conditions where Exterior Nonbearing Walls are required to be rated. Refer to the Life Safety Plans for locations.

**ACCESSIBLE PARKING**
(SECTION 1106)

| LOT OR PARKING AREA | TOTAL # OF PARKING SPACES REQUIRED | TOTAL # OF PARKING SPACES PROVIDED | # OF ACCESSIBLE SPACES PROVIDED: REGULAR 5' ACCESS AISLE | VAN SPACES WITH 132" ACCESS AISLE | VAN SPACES WITH 8' ACCESS AISLE | TOTAL # ACCESSIBLE PROVIDED |
|---|---|---|---|---|---|---|
| Hotel Parking Lot | 107 | 112 | 2 | 0 | 5 | 7 |

| Classification (Plumbing) | Occupant Load | MF Split | Water Closets Male | Water Closets Female | Lavatories Male | Lavatories Female | Bathtubs / Showers | Drinking Fountains | Service Sinks |
|---|---|---|---|---|---|---|---|---|---|
| ASSEMBLY (A-2) | 22 | 11 | 0.146667 | 0.146667 | 0.055 | 0.055 | | 0.044 | 1 |
| ASSEMBLY (A-3) | 404 | 204 | 1.632 | 3.138462 | 1.02 | 1.02 | | 0.808 | 1 |
| BUSINESS (B) | 11 | 7 | 0.28 | 0.28 | 0.175 | 0.175 | | 1 | 1 |
| STORAGE (S-1) | 8 | 8 | 0.08 | 0.08 | 0.08 | 0.08 | | 0.008 | 1 |
| TOTAL REQUIRED | | | 3 | 4 | 2 | 2 | 0 | 2 | 5 |
| TOTAL PROVIDED | | | 3 | 4 | 2 | 2 | 0 | 2 | 5 |
| RESIDENTIAL (R-1) | 1 per Guestroom | | 107 | | 107 | | 107 | | 1 |

Plumbing Fixture Calculations are per the following:
A-2: Water Closets (M) at 1 per 75; Water Closets (F) at 1 per 75; Lavatories (M/F) at 1 per 200, and Drinking Fountains at 1 per 500

A-3: Water Closets (M) at 1 per 125; Water Closets (F) at 1 per 65; Lavatories (M/F) at 1 per 200, and Drinking Fountains at 1 per 500

B: Water Closets (M/F) at 1 per 25 for first 50 and 1 per 50 for remaining; Lavatories (M/F) at 1 per 40 for first 80 and 1 per 80 for remaining; and Drinking Fountains per 25-100 = 1, 101-250 = 2, 251-500 = 3, and 1 per 500 exceeding 500.

R-1: Male & Female WC = 1 per guestroom; Male & Female Lavatories = 1 per guestroom; Bathtubs / Showers = 1 per guestroom; Service Sinks = 1

S: Water Closets (M/F) at 1 per 100 and Lavatories (M/F) at 1 per 100, and Drinking Fountains 1 per 1,000.

Note: Residential (R-1) is shown in the Plumbing Fixture Requirements Table above for reference but is not included in the total required / provided calculations. Total required / provided calculations are indicated for additional plumbing fixtures required outside of the guestrooms.

**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) ☐ Prescriptive (ASHRAE 90.1)
☐ Performance (Energy Code) ☐ Performance (ASHRAE 90.1)

**THERMAL ENVELOPE:**

**Roof / ceiling Assembly** (each assembly)
Description of assembly: Conc. Plank w/ Insulation Above
U-Value of total assembly: U-0.039
R-Value of insulation: R-25ci
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)
Description of assembly: Mtl Studs / CMU, Brick or EIFs, Ins., & GWB
U-Value of total assembly (Mass): U-0.104
U-Value of total assembly (Framed): U-0.064
R-Value of insulation (Mass): R-9.5ci
R-Value of insulation (Framed): R-13 + R-7.5ci
Openings (windows or doors with glazing):
Framing Materials other than Metal: U-0.45
Curtain Wall / Storefront U-Value: U-0.45
Operable Windows, Fixed Windows, and Non-Entrance Doors U-Value: U-0.45
Solar Heat Gain Coefficient: 0.25
Projection Factor: 0
Entrance Door U-Value: U-0.77
Swinging Opaque Doors: U-0.50
Roll-up or Sliding Doors: U-0.50

**Wall below grade** (each assembly)
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A

**Floors over unconditioned space** (each assembly)
Description of assembly: Conc. Plank with Insulation
U-Value of total assembly: U-0.064
R-Value of insulation: R-12.5

**Floors slab on grade**
Description of assembly: 4" Concrete Slab
U-Value of total assembly: F-0.540
R-Value of insulation: R-10
Horizontal / vertical requirement: 24"
slab heated: N/A

NOTE: Refer to Civil, Structural, Mechanical, Plumbing, Electrical, and Fire Protection Drawings for Additional Code Summaries and Requirements.

## ADA ROOM SCHEDULE

**INDICATES ADA ACCESSIBLE GUESTROOMS**
LEVEL 1 = 2 LEVEL 2 = 3
LEVEL 3 = 2 LEVEL 4 = 0*

**PER 2015 NCBC TABLE 1107.6.1.1:**
TOTAL = (7) REQUIRED, (7) PROVIDED
(2) ROLL-IN SHOWERS REQUIRED, (2) PROVIDED

**INDICATES COMMUNICATION FEATURES**
LEVEL 1 = 2 LEVEL 2 = 5
LEVEL 3 = 5 LEVEL 4 = 0*

**PER ADA 2010 TABLE 224.4:**
TOTAL = (12) REQUIRED, (12) PROVIDED

* PER 1009.2.1: IN BUILDINGS WHERE A REQUIRED ACCESSIBLE FLOOR IS FOUR OR MORE STORIES ABOVE OR BELOW A LEVEL OF EXIT DISCHARGE, NOT LESS THAN ONE REQUIRED ACCESSIBLE MEANS OF EGRESS SHALL BE AN ELEVATOR COMPLYING WITH SECTION 1009.4. ADA ROOMS ARE DISTRIBUTED ON FLOORS 1-3 ONLY; THEREFORE, SECTION 1009.2.1 AND 1009.4 IS NOT REQUIRED.

**ROOM MATRIX - TOTAL**

| Name | Count |
|---|---|
| GUEST ROOM - ADA | |
| DBL QUEEN STUDIO ADA (TUB) | 2 |
| KING STUDIO ADA (RIS) | 1 |
| KING STUDIO ADA (TUB) | 1 |
| KING SUITE ADA (RIS) | 1 |
| KING SUITE ADA (TUB) | 2 |
| 7 | |
| GUEST ROOM - DBL QUEEN STUDIO | |
| DBL QUEEN STUDIO | 9 |
| DBL QUEEN STUDIO CONN | 3 |
| DBL QUEEN STUDIO LG | 3 |
| DBL QUEEN STUDIO LG CONN | 1 |
| 16 | |
| GUEST ROOM - KING STUDIO | |
| KING STUDIO | 63 |
| KING STUDIO CONN | 10 |
| KING STUDIO WIDE | 2 |
| 75 | |
| GUEST ROOM - KING SUITE | |
| KING SUITE | 1 |
| KING SUITE END UNIT | 8 |
| 9 | |
| 107 | |

**ROOM MATRIX - COUNT & % (BY TYPE)**

| Room Type | Room Count | Bed Count | Percentage |
|---|---|---|---|
| DBL QUEEN STUDIO | 9 | 18 | 8% |
| DBL QUEEN STUDIO ADA (TUB) | 2 | 4 | 2% |
| DBL QUEEN STUDIO CONN | 3 | 6 | 3% |
| DBL QUEEN STUDIO LG | 3 | 6 | 3% |
| DBL QUEEN STUDIO LG CONN | 1 | 2 | 1% |
| KING STUDIO | 63 | 63 | 59% |
| KING STUDIO ADA (RIS) | 1 | 1 | 1% |
| KING STUDIO ADA (TUB) | 1 | 1 | 1% |
| KING STUDIO CONN | 10 | 10 | 9% |
| KING STUDIO WIDE | 2 | 2 | 2% |
| KING SUITE | 1 | 1 | 1% |
| KING SUITE ADA (RIS) | 1 | 1 | 1% |
| KING SUITE ADA (TUB) | 2 | 2 | 2% |
| KING SUITE END UNIT | 8 | 8 | 7% |
| | 107 | 125 | 100% |

**ROOM MATRIX - COUNT & % (OVERALL)**

| Room Type | Room Count | Bed Count | Percentage |
|---|---|---|---|
| DBL QUEEN STUDIO | 18 | 36 | 17% |
| KING STUDIO | 77 | 77 | 72% |
| KING SUITE | 12 | 12 | 11% |
| | 107 | 125 | 100% |

**ROOM MATRIX - TOTAL BEDS**

| Name | Room Count | Bed Count |
|---|---|---|
| GUEST ROOM - ADA | | |
| DBL QUEEN STUDIO ADA (TUB) | 2 | 4 |
| KING STUDIO ADA (RIS) | 1 | 1 |
| KING STUDIO ADA (TUB) | 1 | 1 |
| KING SUITE ADA (RIS) | 1 | 1 |
| KING SUITE ADA (TUB) | 2 | 2 |
| 7 | | 9 |
| GUEST ROOM - DBL QUEEN STUDIO | | |
| DBL QUEEN STUDIO | 9 | 18 |
| DBL QUEEN STUDIO CONN | 3 | 6 |
| DBL QUEEN STUDIO LG | 3 | 6 |
| DBL QUEEN STUDIO LG CONN | 1 | 2 |
| 16 | | 32 |
| GUEST ROOM - KING STUDIO | | |
| KING STUDIO | 63 | 63 |
| KING STUDIO CONN | 10 | 10 |
| KING STUDIO WIDE | 2 | 2 |
| 75 | | 75 |
| GUEST ROOM - KING SUITE | | |
| KING SUITE | 1 | 1 |
| KING SUITE END UNIT | 8 | 8 |
| 9 | | 9 |
| 107 | | 125 |


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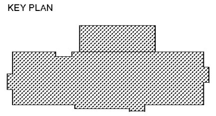
HOME2 SUITES BY HILTON

# HOME 2 SUITES BELMONT

HAWLEY AVE
BELMONT, NC 28012

KEY PLAN



| Revisions | | |
|---|---|---|
| # | Date | Description |

Project Number: 18021
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Issue Date: 2019-06-07

DRAWING TITLE
CODE SUMMARY

SHEET NUMBER
G.002


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