

Code Compliance Review based on currently adopted International Building Code 2009

Building Overview
Type of Construction, Type VA that is fully Automatic Sprinklered. Maximum area and height limitations with area and height increases are 4 stories, 70'-0" height and 24,000 sq. ft./floor.
Actual Building Height, 4 Stories 56'-6" above lowest Fire Department Vehicle access.

Chapter 3 Use and Occupancy.

Main Occupancy R1 Hotel.
Areas per floor/Occupancy
First Floor: 13,008 sq. ft. with R1 (Bedrooms, Reception, Vestibule, Lobby and Misc spaced) 7,752 sq. ft., A-2 (Dining) 946 sq. ft., A-3 (Fitness and Meeting) 1,282 sq. ft. and B (Admin, Office, etc.) 275 sq. ft.
S2 (Storage) 1,723 sq. ft., F1 (Kitchen, Laundry) 917 sq. ft. occupancies
Second Floor 12,289 sq. ft. with R1 and 408 sq. ft. with S2 occupancy.
Third Floor 12,448 sq. ft. with R1 and 408 sq. ft. with S2 occupancy.
Fourth Floor 12,448 sq. ft. with R1 and 408 sq. ft. with S2 occupancy.

Chapter 4 Special detailed requirements based on Occupancy.

403.6 Fire service elevator is required in buildings with an occupied floor 75'-0" above the lowest fire department vehicle access. Not applicable.

420.2 Walls separating bedrooms/bedrooms and other rooms/spaces are to be constructed as fire partitions per section 709 and corridors per section 1018.
420.3 Floors/ceilings separating bedrooms/bedrooms and other rooms/spaces are to be constructed as horizontal assemblies per section 712.

Chapter 5 Building heights and areas.

Table 503 Allowable heights and areas.
For a R1 Hotel occupancy of 4 story in height less than 70'-0" above lowest Fire Department Vehicle (56'-6") and less than 24,000 sq. ft. Construction Type VA is applicable.
504.2 Automatic sprinkler system permits height increase by one floor and 20'-0". R occupancies maximum height cannot exceed 4 stories and 60'-0".
504.3 Non-habitable roof structures are permitted to project 20'-0" beyond the allowable building height.
506.3 Automatic sprinkler system permits area increase of 200% for buildings with more than one story.

Using Automatic sprinkler system increases the Construction Type VA is applicable.

Highrise buildings are those with an occupied floor 120'-0" above the lowest fire department vehicle access. Not applicable.

508.2.4 Combined, both A-2 (Dining) and B (Admin, Office, etc.) occupancies does not exceed 10% maximum allowance as an accessory space. They are not considered separate occupancies requiring separation.

Table 508.2.5 Incidental accessory Furnace/Boiler, Laundry, waste and linen rooms are required to be 1 Hr separated, automatic sprinkler system exception can not be taken.

Table 508.4 Occupancy separation
R to A requires 1 hour fire barrier separation.
R to B requires 0 hour fire barrier separation.
A to B requires 1 hour fire barrier separation.

No occupancy separation is required, occupancies exceed 10% maximum allowance as an accessory space. Exception, A-3 occupancies Fitness and Pool exceed the 10% accessory space and must be separated with the 1 hour barrier.

Chapter 6 Types of Construction.

Table 601 Fire resistive construction for building elements

Primary structural frame requires 1 hour fire protection for Type VA construction.
Exterior bearing walls require 1 hour fire protection for Type VA construction.
Interior bearing walls require 1 hour fire protection for Type VA construction.
Floor construction and secondary members require 1 hour fire protection for Type VA construction.
Roof construction and secondary members require 1 hour fire protection for Type VA construction.

602.3 Type VA construction requires exterior and interior load bearing elements to be of any material permitted by the code.

Chapter 7 Fire and Smoke Protection Features.

713.4 Shafts shall have a fire resistive rating of not less than 2 hours where connection 4 or more stories, 1 hours where connection 3 or less stories.

713.13 Refuse and Laundry chutes.
Chutes shall be enclosed in a 2 Hr shaft and provided with chute access and termination rooms which have a min 1 hour fire barrier rating.

713.14.1 Elevator lobby shall be provided with enclosing fire partitions at each floor where the elevator shaft connects more than 3 stories.
Exception 1, Elevator lobby is not required at street level.
Exception 4, Elevator lobby is not required in buildings with a automatic sprinkler system.

708.3 Fire partitions shall have a fire resistive construction of not less than 1 hour or that required for occupancy separation.
Exception 2, dwellings and sleeping unit separations in Type IIB, IIBB and VB construction requires only 1/2 hour ratings in buildings with an automatic sprinkler system.

711.3 Horizontal assemblies shall have a fire resistive construction of not less than 1 hour.
Exception 2, dwellings and sleeping unit horizontal separations in Type IIB, IIBB and VB construction requires only 1/2 hour ratings in buildings with an automatic sprinkler system.

Chapter 8 Interior Finishes.

Table 803.9 Interior finish classification in buildings with an automatic sprinkler system.
Exit enclosure and passage ways Class B.
Corridors Class C.
Rooms and enclosed spaces Class C.

Chapter 9 Fire Protection Systems.

Building is fully Automatic sprinklered in compliance with chapter 9 and NFPA 13.

Chapter 10 Means of Egress.

1003.2 minimum ceiling height 7'-6" with projections minimum 6'-8" per 1003.3.1.

Table 1004.1.1 Occupant load factor.
R1 Residential 200 sq. ft./occupant.
A2 Assembly unconcentrated 15 sq. ft./occupant.
B Business office 100 sq. ft./occupant.

1005.1 Egress width vertical 0.3"/occupant and horizontal 0.2"/occupant.

1005.2 Doors cannot reduce egress width more than 7" when fully opened.

1007 Accessible means of egress.
Stairways if used as accessible means of egress are required to be 48" wide and provided with an area of refuge if not sprinklered.
Elevators if used as accessible means of egress are required to be accessible from the area of refuge. Not applicable, stair used as accessible means of egress.

1009 Stairways.
Minimum width 44", 36" if occupant load is less than 50, 48" is used as an accessible means os egress. Landing width to match stair width.
Riser heights are to be uniform between 4" to 7".
Riser run maximum 12'-0".
Treads are to be uniform and minimum 11" wide excluding 1" toe space.

1012 Handrails
Handrail height to be between 34" to 38" above floor, landing and tread nosing. Handrail grasping size to be 1 1/4" to 2" diameter with wall clearance of 1 1/2".
Handrail shall be continuous or provide extensions that return to the wall or guardrail, extend horizontally 12" at the top and continue to slope for one tread at the bottom.

1013 Guards
Guardrails are required where vertical drop exceeds 30" to a floor or 36" at grade and level below, minimum 42" heights and prevent the passage of a 4" dia sphere.

1015 Exit Access, two means of egress is required. Table 1015.1 spaces with one means of egress are permitted in R1 occupancy where occupant load is 10 or less.

1016 Exit travel distance, in R1 occupancy is 200' without sprinklers and 250' with sprinklers.

1018 Corridors, in R1 occupancy with occupant load greater than 10 with sprinklers requires 1/2" hour fire partitions.

1021 Number of Exits, Table 1021.1 2 exits are required where occupant load is 1 to 500.

1022 Exit enclosure, 1021.1 2 hour fire barrier is required for buildings 4 or more stories and 1 hour fire barrier is required for buildings 3 or less stories.

1022.9 Smoke proof and pressurized stairways are required in buildings defined as high rise by 403 or an Atrium by 404 and where the top floor is 75' above the lowest fire department vehicle access. Not applicable.

Chapter 11 Accessibility.

1101.2 requires compliance with ICC A117.1.

1103.2.9 Equipment and maintenance spaces are exempt from accessibility requirements.

1106 Parking spaces, Table 106.1 for 76 to 100 numbers of parking spaces provided 4 are required to be accessible. 5 accessible spaces are provided.
1106.5 Van accessible parking spaces, for every 6 required accessible space one shall be van accessible. 1 van accessible accessible spaces are provided.

1107.2 Dwelling and Sleeping units shall comply with Chapter 10 of the ICC A117.1.

1107.6 Table 1107.6.1.1 for buildings with 76 to 100 Dwelling and Sleeping units require 4 non roll in accessible showers and 1 roll in type accessible shower.
Buildings with 101 to 150 Dwelling and Sleeping units require 5 non roll in accessible showers and 2 roll in type accessible shower. 5 accessible units are provided, all are combined roll in/non-roll in type. Required 5 accessible rooms shall be type A units, all other shall be type B units only if intended to be occupied as a residence.

1109.2 Toilet and Bathing facilities, in each accessible toilet and bathing room at least one of each fixture type shall be accessible.
Exception 2, not required for Dwelling and sleeping units complying with 1107. All public/staff bathrooms are accessible where fittings and fixtures are accessible compliant.

1109.2.2 Water Closet compartments. Where six or more water closets or urinals are required, one additional accessible water closet compartment shall be provided. All public/staff bathrooms are accessible where fittings and fixtures are accessible compliant.

1109.2.3 Lavatories. Where six or more Lavatories are required one additional accessible Lavatories shall be provided. All public/staff bathrooms are accessible where fittings and fixtures are accessible compliant.

1109.4 Kitchens and Kitchenettes shall be accessible in accessible spaces or rooms. Kitchenettes is accessible.

1109.5 Drinking Fountains. No fewer than 2 drinking fountains shall be provided in accessible spaces, one for standing people and one for people in wheelchairs.
Exception, one drinking fountain that complies with the requirements of both people standing and in wheelchairs. One drinking fountain is provided and accessible complaint.

Chapter 12 Interior Environment.

1203, Ventilation is provide through the mechanical ventilation system.

1205 Natural light equal to 8% or the room floor or artificial light providing an average of 10 foot candles (107 Lux) measured at 30" above the floor.

1207 Sound Transmission. Common interior walls, floors and ceilings between dwelling units and adjacent areas or rooms shall be not less than STC 50. Owner requests STC 50.

1208 Interior Space Dimensions. Habitable spaces shall have the following minimum dimensions.
Width 7'-0". Kitchens 3'-0".
Ceiling height 7'-6". Kitchens, Bathrooms, Toilets, Storage and Laundries, 7'-0".
Furred Ceilings, 7'-0".

1210 Surrounding Materials.
1210.1 Floors in Toilets, Bathing and Showers shall have a smooth, hard and none absorbing surface including a 4" wall base.

1210.2 Walls and partitions within 2'-0" of toilets and urinals shall have a smooth, hard and none absorbing surface extending up 4'-0" above the floor.
Exception 1 and 2, Dwelling and Sleeping Units, and toilet rooms not accessible to the public that do not contain more than one water closet.

1210.3 Showers shall have a smooth, hard and non absorbing surface extending up 70" above the drain inlet.

Chapter 13 Energy Efficiency.

Compliance with the International Energy Code is required.

Chapter 14 Exterior Walls.

Exterior Walls shall have an approved weather covering and class I, II or III vapor barrier depending on the cladding system.

Chapter 15 Roof Assemblies and Rooftop Structures.

Roof assemblies shall have an approved roof covering class C for type IIIB construction type or class B for type IV or VA construction types.

Membrane roof minimum slope is 1/4" per 1'-0".

Roof insulation classification to comply with Table 1508.2 material standard for roof insulation.

Chapter 25 Gypsum Board and Plaster.
Compliance to be determined once final materials and locations to be determined.

Chapter 26 Plastics.
Compliance to be determined once final materials and locations to be determined.

Chapter 29 Plumbing Systems.

Table 2902.1 Required Plumbing Fixtures.
R1 occupancy requires 1 water closet and bathtub/shower per sleeping unit, Drinking fountain is not applicable and 1 service sink.
A-2 occupancy requires 1.75 male water closets, 1.75 male water closets, 1:200 lavatories, 1:500 drinking fountains and 1 service sink.
B occupancy requires 1.25 then 1:50 water closets, 1:40 then 1:80 lavatories, 1:100 drinking fountains and 1 service sink.

2902.2 Separate facilities shall be provided for each sex. Exception, dwelling and sleeping units, where occupant load is less than 15.

2903.1 Separate water closet compartments shall be provided. Exception, single water closet rooms.

2903.2 Urinal partitions shall be provided to provide privacy. Partitions shall be at least 18" off the wall or 6" beyond the urinal outer most lip and 12" to 60" off the floor.
Exception, single water closet rooms provided with a urinal.

Chapter 30 Elevators and Conveying Systems.

3002.2 Where 4 or more elevators serve the all or the same portion of the building, they shall be separated into 2 hoist ways. No more than 4 elevators are permitted to occupy the same shaft.

3002.4 Elevators in buildings 4 or more stories, at least one elevator shall provide for fire department emergency access to all floors. The elevator car shall be design for an ambulance stretcher 24" wide by 84" long with 5" radius corners.

3004.1 Hoist way venting is required for elevators servicing more than 3 stories.
Exception 1, Hoist way venting is not required for R1 occupancies with an automatic sprinkler system.

3007 Fire Service Elevators are required in buildings per 403.6.1 exceeding 120' in height. Not applicable.

Chapter 31 Special Construction, not applicable.

Wall and floor fire rated construction.

Typical Wood Floor Framing.
ICC File No. ER-3433 1 Hour Fire Rating provided

Typical Roof Framing
UL P522 1 Hour Fire Rating provided

Typical Exterior walls (1 hour fire rating required at load bearing exterior walls).
UL U356 1 Hour Fire Rating Wood Studs provided
UL U902 4 Hour Fire Rating CMU Block wall with face bricks or EIFS provided
UL U906 2 Hour Fire Rating CMU Block wall with Stucco provided

Typical Corridor walls.
UL U337 1 Hour Fire Rating Wood Studs bearing wall provided

Typical Demising Walls between guestrooms/guestrooms and bathrooms/bathrooms.
UL U311 1 Hour Fire Rating Wood Studs bearing wall provided

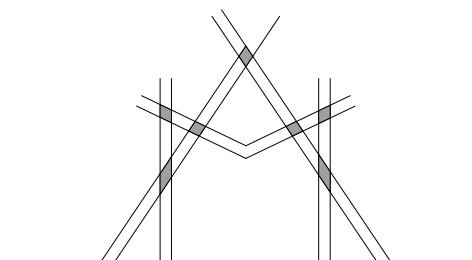
Interior CMU Bearing Walls.
UL U914 3 Hour Fire Rating CMU block provided

MUA and linen shafts 2 hour rated per UL U334 provided

Structural to determine locations on plywood/OSB building bracing, where required they are in addition to the defined partition types.

Additional code compliance requirements:
ICC ANSI A117.1 and ADA 2010. Guestrooms with communication features per table 224.4 requires 9 rooms be provided, dispersed equally among each room type. 1 is permitted to be combined with a mobility accessible room.

Owner furnished systems, equipment and furniture must be accessible compliant where required.



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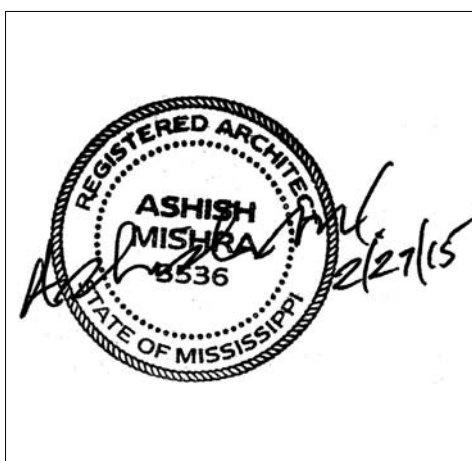
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REVISIONS		
No.	Date	Description

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KEY PLAN

Shiva Southaven
Inc.

Holiday Inn Express
& Suites

Lot 16 (Rev Lot 3) Southcrest
Pkw.
Southcrest Subdivision
Southaven, MS 38671

Drawing Title		
Code Information		
Phase		
Construction Documents		
Project No.	14-081	Sheet No.
Prepared by	Author	T001
Checked by	Checker	
Date	Feb. 27, 2015	
Review		