



Guest Room Count Matrix

ROOM TYPE	1ST FLOOR	2ND FLOOR	3RD FLOOR	4TH FLOOR	TOTAL	%
KING	2	4	4	4	14	17%
ACC. KING	-	1	-	-	1	1%
KING SOFA	-	1	2	2	5	6%
ACC. KING SOFA	-	1	-	-	1	1%
KING STUDIO	3	6	5	5	19	23%
ACC. KING STUDIO	1	-	-	-	1	1%
DOUBLE QUEEN	-	11	14	14	39	47%
ACC. DOUBLE QUEEN	-	-	1	1	2	2%
DOUBLE QUEEN STUDIO	-	-	1	1	2	2%
TOTAL	6	24	27	27	84	100%

Accessible Guest Room Count Matrix

	ROOM TYPE	PROVIDED	REMARKS
	ROLL-IN KING SUITE	1	RM # 127
	ACC. KING	1	RM # 217
	ACC. DOUBLE QUEEN	2	RM # 312 & 412
	ACC. KING SOFA	1	RM # 212
	TOTAL	5	
5 REQUIRED, 5 PROVIDED			
	KING	2	RM # 219, 324
	KING SOFA	2	RM # 320, 420
	DOUBLE QUEEN	3	RM # 205, 305, 417
	KING STUDIO	1	RM # 303
	ACC. KING SOFA	1	RM # 212
	TOTAL	9	
9 REQUIRED, 9 PROVIDED			

Guest Room Sizes

KING	14' - 0"	x	23' - 8"
ACCESSIBLE KING	14' - 0"	x	26' - 8"
KING SOFA	14' - 0"	x	26' - 8"
ACCESSIBLE KING SOFA	16' - 0"	x	28' - 6"
KING STUDIO	22' - 0"	x	19' - 10"
ACCESSIBLE KING STUDIO	22' - 0"	x	23' - 8"
DOUBLE QUEEN	12' - 0"	x	26' - 8"
ACCESSIBLE DOUBLE QUEEN	16' - 0"	x	28' - 6"
DOUBLE QUEEN STUDIO	22' - 0"	x	23' - 8"

NOTE: MIN. CLEAR DIMENSIONS
SEE ENLARGED PLANS AND ELEVATIONS ROOM TYPE DIMENSIONS.

Building Areas

4 STORY, 84 ROOM HOTEL				
MAIN AREA	SUB AREA	UNITS	SF	HOTEL PROGRAM
GROSS AREA	GROUND FLOOR	1	15,650	15,650
	GUESTROOM FLOORS	3	13,530	40,590
	TOTAL GROSS AREA	4		56,240
GUEST ROOMS	KING	14	331	4,634
	ACC. KING	1	373	373
	KING SOFA	5	373	1,865
	ACC. KING SOFA	1	456	456
	KING STUDIO	19	436	8,284
	ACC. KING STUDIO	1	520	520
	DOUBLE QUEEN	39	320	12,480
	ACC. DOUBLE QUEEN	2	456	912
	DOUBLE QUEEN STUDIO	2	520	1,040
SUBTOTAL GUEST ROOM				30,564
GUEST ROOM SUPPORT				
	CIRCULATION (GROUND LEVEL)	1	2,480	2,480
	CIRCULATION (UPPER LEVELS)	3	1,725	5,175
	VENDING / ICE	3	70	210
	STAIR A	4	200	800
	STAIR B	4	190	760
	ELEVATOR	4	155	620
SUBTOTAL GUEST ROOM SUPPORT				10,045
PUBLIC SPACE				
	LOBBY	1	480	480
	MARKET	1	135	135
	BREAKFAST AREA	1	945	945
	PANTRY	1	435	435
	MEETING ROOM	1	335	335
	BUSINESS CENTER	1	110	110
	FITNESS ROOM	1	620	620
	POOL	1	1,510	1,510
	PUBLIC RESTROOMS	-	225	225
				4,795
SUBTOTAL PUBLIC SPACE				
BACK-OF HOUSE (BOH)				
	RECEPTION	1	85	85
	OFFICES & WORK AREA	-	520	625
	HOUSEKEEPING (UPPER)	3	50	150
	LAUNDRY	1	875	875
	EMPLOYEE RESTROOM	1	55	55
	FOOD PREP	1	220	220
	MECHANICAL & STORAGE	-	2,055	2,055
SUBTOTAL BOH				4,065
TOTAL NET FLOOR AREA				49,469

Insulation Schedule

INSULATION SCHEDULE	
FOUNDATION WALLS:	R-10, RIGID FOR 24" HORIZ. & 24" VERT.
EXTERIOR WALLS:	R-19, BATT (ASSEMBLY U-VALUE = 0.50) (PER IECC TABLE 502.1.2; 0.51 IS CODE MIN.)
ROOF:	R-13, BATT IN THE CAVITY, R-20 R-20, RIGID ABOVE THE SHEATHING
FLOOR:	3-1/2" MAX., (R-13)
INTERIOR WALLS:	3" MIN., (R-13) FOR ACOUSTICS ONLY

Code Summary

Project: Hampton Inn & Suites, New Stanton

Project Location:
111 Broadway Road
New Stanton, PA 15672

Applicable Codes:
Building Code: 2009 IBC
Plumbing Code: 2009 IPC
Mechanical Code: 2009 IMC
Electrical Code: 2008 NEC
Fire Code: 2009 IFC
Elevator Code: 2000 ASME A17.1 Elevator Code
Accessibility Standards: 2012 ICC Chapter 11 & 2009 ANSI A117.1
Energy Code: 2009 IECC

Building Department Jurisdiction:

New Stanton Borough
P.O. Box 375
318 Paintersville Rd., New Stanton, PA 15672
(724) 925-9700

Chapter 3 - Use Group Classification

Sec: 302 Classification
Residential Use: R-1, Hotels (transient)
Assembly Use: A-2, Lobby, Lounge, Breakfast, Meeting Rooms
Assembly Use: A-3, Fitness Room, Indoor Swimming Pool
Business Use: B, Administration
Factory Use: F-1, Laundry
Storage Use: S2, Storage, Pantry, Linen

Chapter 5 - General Building Heights and Areas

Table 503

Height and Area Occupancy 1-R1

Allowable Building Height and Area for Type VA, R-1			
No. of Stories Allowed	Permitted Increase	Total Number of Stories Permitted	No. of Stories Provided *
3	1	4	4
Allowable Area per Story	Permitted Increase	Maximum Area Allowed per Story	Area Provided per Story
12,000	3.75	45,000	13,530 max.

Height and Area Occupancy 2-A2**

Allowable Building Height and Area for Type VA, A-2**			
No. of Stories Allowed	Permitted Increase	Total Number of Stories Permitted	No. of Stories Provided *
2	1	3	1
Allowable Area per Story	Permitted Increase	Maximum Area Allowed per Story	Area Provided per Story
11,500	3.75	43,125	15,650

Notes:

* Story Height above grade plane.

**Occupancy Area 2 has multiple occupancy types. A-2 is used because it is the most restrictive.

Sec: 504.2 Automatic sprinkler system increase - Height
The building will be equipped throughout with an NFPA-13 sprinkler system. The maximum number of stories is permitted to be increased by one story above grade plane.

Sec: 506 Building Area Modifications

Sec: 506.1 General

(Equation 5-1)

Aa = (At + (A x If)) + (At x Is)

Aa = Allowable building per story

Typical (R-1) Floor

Allowable area, 45,000 sf. = (12,000 x 3.75) + (12,000 x 2)

Increase factor = 3.75

Sec: 506.2 Frontage Increase

(Equation 5-2)

If = (FP - 0.25) / W30

If = Area increase due to frontage

F = Building perimeter that fronts on open space/public way = 730'

P = Perimeter of entire building = 730'

W = Width of open space/public way = Greater than 30', use 30'

If = (730/730 - 0.25) / 30/30 = 75

Sec: 506.3 Automatic sprinkler system increase

The Building Area Limitation is permitted to be increased by 200%

Is = 2

Sec: 508.3 Non-Separated Occupancies

The building is evaluated as a non-separated mixed use building. The ground floor guest rooms will be separated from the balance of the floor by 1-hour fire barriers.

Sec: 508.4.4 Separation

Individual occupancies shall be separated from adjacent occupancies in accordance with table 508.4. Separation between occupancy R and A in a building equipped with an automatic sprinkler system: 1 Hour.

Table 508.2.5 Incidental Accessory Occupancies

Room or Area: Laundry rooms over 100 sq. ft. Req'd Sep/Prot. Provided Spkir.

Chapter 6 - Types of Construction

Table 601

Fire Resistance Rating Requirements for Type VA Construction		
Building Element	Required	Provided
Primary Structural Frame	1	1
Exterior Bearing Walls	1 & Table 602	1
Interior Bearing Walls	1	1
Interior Nonbearing Walls	0 & Table 602	0
Interior Nonbearing Walls and Partitions	0	0 and 1
Floor Construction and Secondary Members	1	1
Roof Construction and Secondary Members	1	1

Table 602 Fire Separation Distances

The entire perimeter of the building is more than 30 feet from a lot line, the centerline of a street, alley, or public way, or an imaginary line between two buildings on the same property.

Chapter 7 - Fire Resistant Construction

Table 705.8 Maximum Area of Exterior Wall Openings

The entire perimeter of the building is more than 30 feet from a lot line, the centerline of street, alley, or public way, or imaginary line between two buildings on the same property. No limit to the size and quantity of unprotected exterior wall openings.

Sec: 708 Shaft Enclosures

708.4 Not less than 2 hours when connecting 4 stories or more. Not less than 1 hour when connecting less than 4 stories. Building is 4 stories, only 2 hr required.

Building Element	Required	Provided
Elevator Shafts	2	2
Linen Chute Shafts	2	2
Mechanical Shafts	1* and 2	2
Exit Stair Shafts	2	2

* Shafts connecting less than 4 stories

Sec: 709 Fire Partitions

709.3 Fire-Resistance Rating: Fire Partitions shall have a fire resistance rating of not less than 1 hour

Exceptions:
1. Corridor walls permitted to have a 1/2-hour fire resistance rating by Table 1018.1.

a. Table 1018.1 Corridor Fire-Resistance Rating (Reductions Permitted with NFPA 13 or NFPA 13R Automatic Sprinkler System for Occupancy R, 1/2-hour.

709.4 Continuity: Fire partitions shall extend from the top of the foundation or floor/ceiling assembly below to the underside of the floor/roof sheathing/slab/deck above or to the fire-resistance rated floor/ceiling or roof/ceiling assembly above. If the partitions are not continuous, the space between the ceiling and the sheathing/deck/slab above shall be fireblocked or draftstopped in accordance with 712.3 at the partition line. The supporting construction shall be protected to afford the required fire-resistance rating of the wall supported, except for walls separating tenant spaces (covered mall), dwelling units, sleeping units, and corridor walls in types IIB, IIIB and VB construction.

6. Fireblocking or draft stopping not required at partition line in buildings protected with an automatic sprinkler system installed in accordance with Section 903.3.1.1 (NFPA 13) or 903.3.1.2 (NFPA 13R), provided the sprinklers installed within the combustible floor/ceiling and roof/ceiling spaces.

712 Horizontal Assemblies

712.3 Fire-resistance rating. The fire-resistance rating of floor and roof assemblies shall be not less than that required by the building construction type. Horizontal assemblies separating dwelling units and sleeping units shall be a minimum of 1-hour fire-resistance rated construction

Chapter 9 - Fire Protection Systems

Sec: 903.3.1.1 NFPA Sprinkler Systems

The entire building will be equipped with an automatic sprinkler system in accordance with NFPA 13.

Sec: 905.3 Standpipe Systems

The standpipe system shall be installed in accordance with NFPA 14.

Sec: 906 Portable Fire Extinguishers

Portable fire extinguishers shall be installed in accordance with section 906.1.

Sec: 907 Fire Alarm and Detection Systems

A fire alarm system will be installed in accordance with section 907.1.

Sec: 907.2.8.1 Manual Fire Alarm system

For Group R-1 Occupancies, a Manual fire alarm system that activates the occupant notification system in accordance with section 907.5 shall be installed throughout all interior corridors serving sleeping units.

Sec: 907.2.8.2 Automatic Smoke Detection System

An automatic smoke detection system that activates the occupant notification system in accordance with section 907.5 shall be installed throughout all interior corridors serving sleeping units.

Sec: 907.2.11.1 Single and Multiple-station smoke alarms - Group R-1

Provide in all sleeping areas, in every room in the path of the means of egress to the door leading from the sleeping unit.

Chapter 10 - Means of Egress

SEE SHEET A-003 LIFE SAFETY PLAN FOR OCCUPANCY LOAD CALCULATIONS.

Tabulated First Floor Occupant Load: 286

Tabulated Second Floor Occupant Load: 50

Tabulated Third Floor Occupant Load: 55

Tabulated Fourth Floor Occupant Load: 55

Sec: 1005 Egress Width

Sec: 1005.1 Minimum required egress width

Allowable area, 43,125 sf. = (11,500 x 3.75) + (11,500 x 2)

Total Occupant Load x 2' for other egress components

First Floor Egress Calculations Door Calculations					
Exit No.	Description	Clear Width	Capacity @ 0.2/inch	Door Load	
Exit 1	Main Entrance	68"	340	220	
Exit 2	Electrical Room	34"	170	2	
Exit 3	*Stair A Exit	34"	170	*160	
Exit 4	Pool Exit	34"	170	50	
Exit 5	Corridor Exit	34"	170	14	
Exit 6	*Stair B Exit	34"	170	*160	
Calculated Floor Load					
Capacity Provided					1360

Note: All swing doors allow 2" for hardware, frame and stops.

* Stair Exit door calculations using occupancy loads from 2nd-4th floor

Corridor Calculations				
Corridor	Description	Clear Width	Capacity @ 0.2/inch	Corridor Load
	Main Corridor	68"	340	
Calculated Floor Load				286
Capacity Provided				340

Second Floor Egress Calculations

Door Calculations				
Exit No.	Description	Clear Width	Capacity @ 0.2/inch	Door Load
Exit 1	Left Stair Door	34"	170	
Exit 2	Right Stair Door	34"	170	
Calculated Floor Load				50
Capacity Provided				340

Corridor Calculations				
Corridor	Description	Clear Width	Capacity @ 0.2/inch	Corridor Load
	Corridor	68"	340	
Calculated Floor Load				50
Capacity Provided				340

Third & Fourth Floor Egress Calculations

Door Calculations				
Exit No.	Description	Clear Width	Capacity @ 0.2/inch	Door Load
Exit 1	Left Stair Door	34"	170	
Exit 2	Right Stair Door	34"	170	
Calculated Floor Load				55
Capacity Provided				340

Corridor Calculations

Corridor	Description	Clear Width	Capacity @ 0.2/inch	Corridor Load
	Corridor	68"	340	
Calculated Floor Load				55
Capacity Provided				340

Sec: 1007 Accessible Means of Egress

Sec: 1007.1 Accessible Means of Egress Required

Number of accessible means of egress required: 2 (Stair A + Elevator)

Chapter 11 - Accessibility

Table 1106.1 Accessible Parking Spaces

Total Parking Spaces Provided	Required Min. No. of Accessible Spaces	No. of Accessible Spaces Provided
95	4	4

Table 1107.6.1.1 Accessible Dwelling and Sleeping Units

Total No. of Units Provided	Required Min. No. of Units W/ Roll-In Showers	Required No. of Units W/ Roll-In Showers	Total Units Provided
84	4	1	5

Chapter 29 - Plumbing Systems