

# HOTEL BUILDINGS



HOTEL BUILDINGS						
1.0	GENERAL REQUIREMENTS		The requirements of this chapter shall apply to buildings or portions thereof used as hotel occupancies.			
	A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals.					
	Apartment Hotel	Inn	Motel	Bed and Breakfast	Other Structure meeting the definition of Hotel	
1.1	GENERAL CONDITIONS & BUILDING LIMITS					
	Building Category		Building Height (m)		Floor Area (m²)	Basement Levels
1.1.1	LOW-RISE Hotel Building		< 15.0 m Habitable Height			
1.1.2	MID-RISE Hotel Building		≥ 15 m to < 28 m Habitable Height		No Limit [in Floor Area]	No Limit [in Floor/Fire Area, Depth or Levels]
1.1.3	HIGH-RISE Hotel Building		≥ 28 m Habitable Height			
FIRE AND LIFE SAFETY REQUIREMENTS						
Item	Fire Safety Provisions		Minimum Requirements		Low-rise	Mid-rise
1.2	CLASSIFICATION OF OCCUPANCIES					
1.2.1	MULTIPLE OCCUPANCIES		Guest rooms and guest suites of hotels shall be permitted to have their sole means of egress pass through a non-residential occupancy in the same building, provided that the sole means of egress from the dwelling unit shall not pass through a high hazard contents area.		Required	Required
1.3	OCCUPANT LOAD		The occupant load shall be determined on the basis of the occupant load factors (OLF) that are characteristic of the use of the space.		Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
1.3.1	OCCUPANT LOAD FACTOR (OLF)	The occupant load shall be not less than the number of persons determined by dividing the floor area assigned to that use by the occupant load factor of 18.6 m <sup>2</sup> per person.	Required	Required	Required
1.3.2	NON-RESIDENTIAL OCCUPANCIES in Hotel buildings	The occupant load calculations for areas of hotels used for non-residential purposes shall be based on the occupant load factors (OLF) applicable to the use of the area.	Required	Required	Required
1.4	CLASSIFICATION OF HAZARD OF CONTENTS	The contents of Residential Hotel Buildings shall be classified as Ordinary Hazard.	Required	Required	Required
1.5	MINIMUM CONSTRUCTION REQUIREMENTS.	Construction shall be in accordance with NFPA 5000 Chapters 7-8, 13-14, 31, and 35-40.	Required	Required	Required
1.6	ACCESSIBILITY.	Accessibility shall be in accordance with NFPA 5000 Chapter 12 and as modified in Chapter 6.0 and Chapter 7.0 of this Hotel Occupancies FLS Occupancy Chapter.	Required	Required	Required
1.7	(Reserved).				
<b>2.0</b>	<b>MEANS OF EGRESS REQUIREMENTS</b>	<b>Means of egress shall comply with NFPA 101 Chapter 7, and as modified in item 2.0 of this FLS Occupancy Chapter.</b>			
2.1	MEANS OF ESCAPE				
2.1.1	NUMBER OF MEANS OF ESCAPE	In guest room or guest suite of two rooms or more, every sleeping room and every living area shall have not less than one primary means of escape and one secondary means of escape.	Required	Required	Required
2.1.1.1	Exemptions	A secondary means of escape shall not be required where the sleeping room or living area has a door leading directly to the outside of the building at or to the finished ground level.	Permitted	Permitted	Permitted



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
2.1.2	PRIMARY MEANS OF ESCAPE	The primary means of escape shall be a door, stairway, or ramp providing a means of unobstructed travel to the outside of the guest room or guest suite at street or the finished ground level.	Required	Required	Required
2.1.3	SECONDARY MEANS OF ESCAPE	The secondary means of escape, shall be one of the following means:	Required	Required	Required
2.1.3.1		It shall be a door, stairway, passage, or hall providing a way of unobstructed travel to the outside of the dwelling at street or the finished ground level that is independent of and remote from the primary means of escape.	Required	Required	Required
2.1.3.2		It shall be a passage thru an adjacent nonlockable space, independent of & remote from the primary means of escape, to any approved means of escape.	Required	Required	Required
2.1.3.3		It shall be an outside window or door operable from the inside without the use of tools, keys, or special effort and shall provide a clear opening of not less than 0.53 m <sup>2</sup> .	Required	Required	Required
2.1.3.4		The width shall be not less than 510 mm, and height not less than 610 mm. The bottom of the opening shall be not more than 1120 mm above the floor.	Required	Required	Required
2.1.4	TWO (2) PRIMARY MEANS OF ESCAPE	Any guest room or any guest suite of rooms in excess of 185 m <sup>2</sup> shall be provided with not less than two exit access doors remotely located from each other.	Required	Required	Required
2.1.5	ARRANGEMENT OF MEANS OF ESCAPE within a Guest room or Guest Suite	Any required path of travel from any room to the outside shall not pass thru another room not under the immediate control of the occupant of the first room or thru a bathroom or other space subject to locking.	Required	Required	Required
2.1.6	DOORS (Width) within a Guest room or Guest Suite	Doors in the path of travel of a means of escape, other than bathroom doors and doors serving a room not exceeding 6.5 m <sup>2</sup> shall be not less than 710 mm wide.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
2.1.6.1	Bathroom Doors (Width)	Bathroom doors and doors serving a room not exceeding 6.5 m <sup>2</sup> shall be not less than 610 mm wide.	Required	Required	Required
2.1.6.2	Doors (Height)	Doors (within guest rooms, guest suites) nominal height shall be not less than 1980 mm.	Required	Required	Required
2.1.7	HALLWAYS (Width)	Hallways within a guest room or guest suite shall be not less than 915 mm	Required	Required	Required
2.1.7.1	Hallways (Height) within a Guest room or Guest Suite	Nominal height of hallways with clearance below projections from the ceiling of not less than 2030 mm shall be not less than 2135 mm.	Required	Required	Required
2.2	MEANS OF EGRESS COMPONENTS	Components of means of egress shall be limited to the types described in 2.2.	Required	Required	Required
2.2.1	GENERAL	Exit enclosures shall have a minimum 2-hour fire resistance rating, and doors shall have a minimum 1.5-hours fire protection rating.	Required	Required	Required
2.2.2	DOORS	Doors shall be in accordance with NFPA 101 section 7.2.1, and the requirements in 2.2.2.1 and 2.2.2.2.	Required	Required	Required
2.2.2.1	Installed Security Measures	No door in any means of egress shall be locked against egress when the building is occupied.	Required	Required	Required
		Locks, if provided, must not require the use of a key, a tool, or special knowledge or effort for operation from the egress side of the building.	Required	Required	Required
2.2.2.2	Revolving Doors	Revolving door assemblies, whether used or not used in the means of egress, complying with NFPA 101 section 7.2.1.10.	Permitted	Permitted	Permitted
2.2.3	STAIRS	Stairs complying with NFPA 101 section 7.2.2.	Required	Required	Required
2.2.3.1	Spiral Stairs	Spiral stairs used as a component in the means of egress.	NP	NP	NP
2.2.3.2	Windings	Windings in stairs used as a component in the means of egress.	NP	NP	NP
2.2.4	SMOKE PROOF ENCLOSURES	Smokeproof enclosures complying with NFPA 101 section 7.2.3.	Permitted	Permitted	Permitted



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
2.2.5	HORIZONTAL EXITS	Horizontal exits complying with NFPA 101 section 7.2.4.	Permitted	Permitted	Permitted
2.2.6	RAMPS	Accessible ramps and ramps used as a component in the means of egress shall conform with the general requirements for ramps in NFPA 101 7.2.5.	Required	Required	Required
2.2.7	EXIT PASSAGEWAY	Exit passageways complying with NFPA 101 section 7.2.6	Permitted	Permitted	Permitted
2.2.8	AREA OF REFUGE	Areas of refuge complying with NFPA 101 7.2.12, as modified in Chapter 6.0 and Chapter 7.0 of this Hotel Occupancies FLS Occupancy Chapter.	Required	Required	Required
2.3	CAPACITY OF MEANS OF EGRESS	The capacity of means of egress shall be in accordance with NFPA 101 section 7.3 and as modified in 2.3.2.	Required	Required	Required
2.3.1	STREET FLOOR EXIT	Street floor exits shall be sufficient for the occupant load of the street floor plus the required capacity of stairs and ramps discharging onto the street floor.	Required	Required	Required
2.3.2	CORRIDORS	Corridors, other than those within individual guest rooms or individual guest suites, shall be of sufficient width to accommodate the required occupant load and shall be not less than 1200 mm.	Required	Required	Required
2.4	NUMBER OF MEANS OF EGRESS	The number of means of egress shall be in accordance with NFPA 101 section 7.4 and as permitted in 2.4.3.	Required	Required	Required
2.4.1	NOT LESS THAN TWO (2)	Not less than two (2) separate exits shall be provided on every story.	Required	Required	Required
2.4.2		Not less than two (2) separate exits shall be accessible from every part of every story.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
2.4.2.1		Exit access, shall be permitted to include a single exit access path for the distances permitted as common paths of travel by 2.5.2.	Permitted	Permitted	Permitted
2.4.3	SINGLE EXIT PROVISIONS	A single exit shall be permitted to serve all floor levels in hotel buildings protected throughout by an approved automatic sprinkler system, provided that all of the conditions for a single exit are met.	Permitted	NP-Not Permitted	NP
2.4.3.1	Floor Area	Gross floor area (GFA) is equal or less than 500 m <sup>2</sup> per floor level .	Required	-	-
2.4.3.2	Common Path	Common path of travel from the entrance door of any guest room or guest suite to an exit does not exceed 15 m.	Required	-	-
2.4.3.3	Enclosures of Exit Stairway	Exit stairway is completely enclosed or separated from the rest of the building by a minimum 2-hour fire resistance rating (1.5-hrs doors) where the exit connects four or more stories.	Required	-	-
2.4.3.4	Number, Depth and Floor Area of Basement	Stairway serve only one (1) basement, that is equal or less than 500 m <sup>2</sup> fire area and only has 6.0 m maximum depth.	Required	-	-
2.4.3.5	Opening Protective	All openings between the exit enclosure and the building are protected with self-closing door assemblies of 1-hour fire protection rating.	Required	-	-
2.4.3.6	Exit Access Corridors	All corridors serving as access to exits have a minimum of 1-hour fire resistance rating.	Required	-	-
2.4.3.7	Exit Discharge	Exits shall terminate directly, at a public way or at an interior exit discharge.	Required	-	-
2.4.3.7(1)		The interior exit discharge in accordance with 2.6.3, shall be within 11 m. from the exit enclosure door to an exterior door leading to the public way.	Required	-	-



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
2.4.3.7(2)		The interior exit discharge shall be separated from the remainder of the level of discharge by fire barriers with a minimum 1-hour fire resistance rating	Required	-	-
2.4.3.8	Subdivisions of Building Spaces	Horizontal and vertical separation of 1.0-hr fire resistance rating is provided between guest room or guest suite.	Required	-	-
2.4.3.9	Smoke Vents	Provisions of fixed or permanent wall openings, automatic opening vents (AOV) at the top of the staircase.	Required	-	-
2.5	ARRANGEMENT OF MEANS OF EGRESS	Access to all required exits shall be in accordance with NFPA 101 section 7.5, as modified by 2.5.1 through 2.5.4.	Required	Required	Required
2.5.1	TRAVEL DISTANCE (TD) TO EXITS	Travel distance within a guest room or guest suite to a corridor door shall not exceed 38 m.	Required	Required	Required
2.5.1.1	TD from Room Door to an Exit	Travel distance from the corridor door of any guest room or guest suite to the nearest exit s shall not exceed 61 m.	Required	Required	Required
2.5.1.2		Travel distance from the corridor door of any guest room or guest suite to the nearest exit, shall not exceed 61 m for exterior ways of exit access.	Required	Required	Required
2.5.2	COMMON PATH OF TRAVEL	Travel within a dwelling unit shall not be included when calculating common path of travel.	Permitted	Permitted	Permitted
2.5.2.1	Common Path Limit	Common path of travel shall not exceed 15 m.	Required	Required	Required
2.5.3	DEAD-END CORRIDOR	Dead-end corridors shall not exceed 15 m.	Required	Required	Required
2.5.4	EXIT ACCESS DOORS	Any guest room or any guest suite in excess of 185 m <sup>2</sup> shall be provided with not less than two exit access doors remotely located from each other.	Required	Required	Required
2.6	DISCHARGE FROM EXITS	Exits shall terminate directly, at a public way or at an interior exit discharge in accordance with NFPA 101 7.7 and in 2.6.1 through 2.6.3.	Required	Required	Required
2.6.1	EXIT DISCHARGE THRU INTERIOR BUILDING AREAS	Any required exit stair that is located so that it is necessary to pass through the lobby or other open space to reach the outside of the building shall be continuously enclosed down to a level of exit discharge.	Permitted	Permitted	Permitted





Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
2.6.1.1		Where open stairways are permitted, the requirements for travel distance to exits shall include the travel on such stairs.	Required	Required	Required
2.6.2		The distance of travel from the termination of the exit enclosure to an exterior door leading to a public way shall not exceed 30 m.	Required	Required	Required
2.6.3		The interior exit discharge shall lead to a free and unobstructed way to the exterior of the building, and such way shall be readily apparent or shall be identifiable by exit signage from the point of discharge from the exit.	Required	Required	Required
2.7	ILLUMINATION OF MEANS OF EGRESS	Means of egress shall be illuminated in accordance with NFPA 101 7.8.	Required	Required	Required
2.8	EMERGENCY LIGHTING	Emergency lighting in accordance with NFPA 101 Section 7.9, and in additional locations in 2.8.1.	Required	Required	Required
2.8.1	ADDITIONAL LOCATIONS	In common areas and corridors within any multiple rooms' guest room or guest suite.	Required	Required	Required
2.8.2	Exemptions	The requirement for emergency lighting shall not apply where each guest room or guest suite has an exit direct to the outside of the building at street or the finished ground level.	Permitted	Permitted	Permitted
2.9	MARKINGS OF MEANS OF EGRESS	Means of egress shall have signs in accordance with NFPA 101 section 7.10.	Required	Required	Required
2.9.1	PWD REFUGE AREA MARKING IN HOTEL ROOMS	Refuge area for PWD shall be clearly marked in emergency plans located in all hotel rooms.	Required	Required	Required
2.10	NORMALLY UNOCCUPIED BUILDING SERVICE EQUIPMENT SUPPORT AREAS	Provisions for normally unoccupied service support areas in accordance with NFPA 101 section 7.14.	Not permitted	Not permitted	Not permitted
2.11	(Reserved).				
3.0	PROTECTION.	<b>Protection shall comply with the applicable NFPA codes and standards, QCD FLS Annex and as modified in item 3.0 of this FLS Occupancy Chapter.</b>			



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.1	PROTECTION OF VERTICAL OPENINGS	Vertical openings shall be enclosed or protected in accordance with NFPA 101 section 8.6.	Required	Required	Required
3.1.1	CONVENIENCE OPENINGS	Convenience openings in accordance with NFPA 101 section 8.6.9.1.	Permitted	Permitted	Permitted
3.1.2	WALLS Enclosing Vertical Openings	Walls enclosing vertical openings shall have a min. 1-hour fire resistance rating, and the doors shall have a min. 1-hour fire protection rating.	Required	Required	Required
3.1.3	FLOOR Below the Level of Exit Discharge	No floor below the level of exit discharge used only for storage, heating equipment, or purposes other than residential occupancy shall have unprotected openings to floors used for residential purposes.	Required	Required	Required
3.2	PROTECTION FROM HAZARDS				
3.2.1	GENERAL	Rooms containing high-pressure boilers, refrigerating machinery, transformers, or other service equipment subject to possible explosion shall not be located directly under or directly adjacent to exits & shall be effectively cut off from other parts of the building as specified in NFPA 101 8.7.	Required	Required	Required
3.2.2	HAZARDOUS AREAS	Any hazardous area shall be protected in accordance with NFPA 101 section 8.7 and as specified in 3.2.2.1 through 3.3.2.9.	Required	Required	Required
3.2.2.1	Boiler and fuel-fired heater rooms serving more than a single guest room or guest suite	1 hour and AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.2	Employee locker rooms	AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.3	Gift or retail shops	AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.4	Bulk laundries	1 hour and AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.5	Guest Laundries $\leq 9.3 \text{ m}^2$ outside of rooms/suites	AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.6	Guest Laundries $> 9.3 \text{ m}^2$ outside of rooms/suites	1 hour and AFS-Automatic Sprinkler System	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.2.2.7	Maintenance shops	1 hour and AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.8	Storage Rooms	1 hour and AFS-Automatic Sprinkler System	Required	Required	Required
3.2.2.8.2		Where storage areas not exceeding 2.2 m <sup>2</sup> are directly accessible from the guest room or guest suite, no separation is required.	NR	NR	NR
3.2.2.9	Trash collection rooms	1 hour and AFS-Automatic Sprinkler System. Also see 5.1.	Required	Required	Required
3.3	INTERIOR FINISH	Interior finish shall be in accordance with NFPA 101 Section 10.2.	Required	Required	Required
3.3.1	INTERIOR WALL AND CEILING FINISH	Interior wall and ceiling finish materials shall be permitted as follows:	Required	Required	Required
3.3.1.1		Exit enclosures – Class A	Required	Required	Required
3.3.1.2		Lobbies and corridors – Class A or Class B	Required	Required	Required
3.3.1.3		Other spaces – Class A, Class B, or Class C	Required	Required	Required
3.3.2	INTERIOR FLOOR FINISH	Interior floor finish in exit enclosures and exit access corridors and spaces not separated by walls complying with 3.6 shall be not less than Class II.	Required	Required	Required
3.4	DETECTION, ALARM & COMMUNICATION REQUIREMENTS				
3.4.1	GENERAL	Complete coverage of Fire Detection and Alarm System.	Required	Required	Required
3.4.2	INITIATION	Complete coverage of an Automatic Detection and Manual Initiating Devices.	Required	Required	Required
3.4.3	OCCUPANT NOTIFICATION	Complete coverage of an Occupant notification (audible & visible).	Required	Required	Required
3.4.3.1	Provision for Notification of Hearing impaired	Visible signals in units designed for the hearing impaired. (Refer to item 7.5 ).	Required	Required	Required
3.4.3.2	Emergency Voice Evacuation System	Mass Notification System	Required	Required	Required
3.4.4	SUPPLEMENTARY				
3.4.4.1	Fire Telephone		Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.4.4.2	Graphic Annunciator	Panel or PC based workstation with graphics user interface software	Required	Required	Required
3.5	EXTINGUISHMENT REQUIREMENTS				
3.5.1	AUTOMATIC SPRINKLER SYSTEM	All hotels buildings shall be protected throughout by an approved, supervised automatic sprinkler system.	Required	Required	Required
3.5.2	DRAFT STOPS and CLOSELY SPACED SPRINKLERS in Vertical Openings	The provisions for draft stops and closely spaced sprinklers shall not be required for openings complying with 3.1.1 where the opening is within the guest room or guest suite.	NR- Not required	NR	NR
3.5.4	OPEN PARKING STRUCTURES	Open parking structures complying with the openings requirement for an open parking structure and are contiguous with or adjacent to hotels shall be exempt from the sprinkler requirements.	NR	NR	NR
3.5.5	Fire Hose Reel	Fire hose reels are required in buildings protected by an approved supervised automatic sprinkler system.	Required	Required	Required
3.5.6	Portable Fire Extinguisher	Applicable Portable Fire Extinguishers required in all buildings.	Required	Required	Required
3.5.7	Rising Main (Dry or Wet Standpipe)	Refer to Annex Fire Fighting System Annex_FFS_G1 Revisions 2021	Required	Required	Required
3.6	SMOKE CONTROL / VENTILATION REQUIREMENTS	Legend: NR-Not Required; NA-Not Applicable; NP-Not Permitted			
3.6.1	STAIRWELL/LOBBY PROTECTION	Design conditions per Annex ACMV_N1 Revisions 2021.			
3.6.1.1	Less than 9 m habitable height		No Reqmt	No Reqmt	No Reqmt
3.6.1.2	9 m to 15 m habitable height	Vent at top of stairwell	Required	NA	NA
		Stair ventilation openings at ever floor level (stairs along external walls)	Permitted	NA	NA
		Stairwell Pressurization	NR	NA	NA



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.6.1.3	>15 m to < 28 m habitable height	Vent at top of stairwell	NA	NP	NA
		Stair ventilation openings at ever floor level (stairs along external walls)	NA	Required	NA
		Stairwell Pressurization	NA	Permitted	NA
3.6.1.4	≥28 m habitable height	Vent at top of stairwell	NA	NA	NP
		Stair ventilation openings at ever floor level (stairs along external walls)	NA	NA	NP
		Stairwell pressurization, smoke stop/fire fighting lobby pressurization	NA	NA	Required
	Connecting Basement Levels				
3.6.1.5	Two basement levels or ≤6 m deep, ≤2000 m <sup>2</sup> floor area	Vent at top of stairwell : * Permitted up to five (5) connecting above floors (2B+G+4 or less) or 12 m habitable height ; whichever is less; otherwise next below provisions shall apply.	*Required	NP	NP
		Stair ventilation openings at every floor level (stairs along external walls)	Permitted	Required	NP
		Stairwell pressurization, smoke stop/fire fighting lobby pressurization	Permitted	Permitted	Required
3.6.1.6	Three basement levels or ≤ 9.1m deep, ≤2000 m <sup>2</sup> floor area	Vent at top of stairwell : * Permitted up to three (3) connecting above floors only (3B+G+2 or less) or 6m habitable height, whichever is less; otherwise next below provisions shall apply	*Required	NP	NP
		Stair ventilation openings at every floor level (stairs along external walls)	NA	NA	NA
		Stairwell pressurization, smoke stop/fire fighting lobby pressurization	Permitted	Permitted	Permitted



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.6.1.7	Two basement levels or $\leq 6$ m deep, $>2000$ m <sup>2</sup> floor area	Vent at top of stairwell: * Permitted up to four (4) connecting floors (2B+G+3 or less) or 9 m habitable height ; whichever is less; otherwise next below provisions shall apply.	*Required	NP	NP
		Stair ventilation openings at every floor level (stairs along external walls)	Required	NP	NP
		Stairwell pressurization, smoke stop/fire fighting lobby pressurization	Permitted	Required	Required
3.6.1.8	Three basement levels or $\leq 9.1$ m deep, $>2000$ m <sup>2</sup> floor area, connecting one floor above only	Vent at top of stairwell : * Permitted up to two connecting above floors or 3 m habitable height only (3B+G+1 or less); whichever is less, otherwise next below provisions shall apply	*Required	NP	NP
		Stair ventilation openings at every floor level (stairs along external walls)	NA	NA	NA
		Stairwell pressurization, smoke stop/fire fighting lobby pressurization.	Permitted	Required	Required
3.6.1.9	Lowest basement level $>9.1$ m below ground level, regardless of floor area	Vent at top of stairwell	NP	NP	NP
		Stair ventilation openings at every floor level (stairs along external walls)	NP	NP	NP
		Stairwell pressurization, smoke stop/fire fighting lobby pressurization	Required	Required	Required
3.6.2	ESCAPE CORRIDOR PROTECTION	Design conditions per Annex ACMV_N1 Revisions 2021.			
3.6.2.1	Interior Corridors	Vents (Fixed or Automatic Opening)	Required in specific type of Occupancy: Healthcare Occupancies and in Detention and Correctional Occupancies		
		Mechanical Ventilation of Corridor			
		Pressurization of Corridor			
3.6.2.2	Corridor with side/s located along exterior walls	Vents (Fixed or Automatic Opening)			
		Mechanical Ventilation of Corridor			
		Pressurization of Corridor			
3.6.3	ATRIUM and OTHER FLOOR OPENINGS PROTECTION	Design conditions per Annex ACMV_N1 Revisions 2021.			



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.6.3.1	Malls (with floor openings connecting >2 floors)	Smoke Vents (Fixed or Automatic Opening)	Required	NP	NP
		Mechanical Smoke Exhaust Ventilation System/Engineered	Permitted	Required	Required
3.6.3.2	Other Occupancies (connecting >3 floor levels)	Smoke Vents (Fixed or Automatic Opening)	Required	Permitted	NP
		Mechanical Smoke Exhaust Ventilation System/Engineered	Permitted	Permitted	Required
3.6.4	CAR PARKS/PARKING STRUCTURES PROTECTION	Design conditions per Annex ACMV_N1 Revisions 2021.			
3.6.4.1	Open Parking Structures	The open parking structure shall justify that no smoke stagnation will occur such as from a fire located somewhere in the middle of the car park; otherwise mechanical equipment that will aid in effective dispersal of smoke shall be provided	Required	Required	Required
3.6.4.2	Aboveground Enclosed Car Parks				
3.6.4.2.1	Aggregate floor area of $\leq 2000 \text{ m}^2$	Smoke Vents (Fixed or Automatic)	Required	Required	Permitted
		Mechanical Smoke Purging/Clearance	Permitted	Permitted	Required
		Engineered Smoke Control System	Permitted	Permitted	Permitted
3.6.4.2.2	Aggregate floor area of $> 2000 \text{ m}^2$	Smoke Vents (Fixed or Automatic)	Required	NP	NP
		Mechanical Smoke Purging/Clearance	Permitted	Required	NP
		Engineered Smoke Control System	Required	Permitted	Required
3.6.4.3	Belowground Car Parks		$\leq 6\text{m}$ Deep	$> 6\text{m}$ - $\leq 9.1 \text{ m}$ Deep	$> 9.1 \text{ m}$ Deep
3.6.4.3.1	Aggregate floor area of $\leq 2000 \text{ m}^2$	Smoke Vents (Fixed or Automatic)	Required	NP	NP
		Mechanical Smoke Purging/Clearance	Permitted	Required	Required
		Engineered Smoke Control System	Permitted	Permitted	Permitted
3.6.4.3.2	Aggregate floor area of $> 2000 \text{ m}^2$	Smoke Vents (Fixed or Automatic)	NP	NP	NP
		Mechanical Smoke Purging/Clearance	Required	NP	NP
		Engineered Smoke Control System	Permitted	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
3.7	CORRIDORS	Exit access corridor shall be protected in accordance with 3.7.1 thru 3.7.4	Low-rise	Mid-rise	High-rise
3.7.1	WALLS	Corridor walls shall have a minimum 1/2-hour fire resistance rating.	Required	Required	Required
3.7.2	DOORS	Doors that open onto exit access corridors shall have not less than 30-minute fire protection rating	Required	Required	Required
3.7.2.1	Self-closing/Self-Latching Devices	Doors that open onto exit access corridors shall be self-closing and self-latching.	Required	Required	Required
3.7.3	UNPROTECTED OPENINGS	Unprotected openings, other than those from spaces complying with 3.7.3.1, shall be prohibited in exit access corridor walls and doors.	Not permitted	Not permitted	Not permitted
3.7.3.1	Exemption	Spaces shall be permitted to be unlimited in area and open to the corridor, provided that all of the following criteria are met:	Permitted	Permitted	Permitted
3.7.3.1(1)		The space is not used for guest rooms or guest suites or hazardous areas.	Required	Required	Required
3.7.3.1(2)		The space does not obstruct access to required exits.	Required	Required	Required
3.7.4	TRANSOM, LOUVERS, OR TRANSFER GRILLES	Transoms, louvers, or transfer grilles shall be prohibited in walls or doors of exit access corridors.	Not permitted	Not permitted	Not permitted
3.8	SUBDIVISION OF BUILDING SPACES	Buildings shall be subdivided in accordance with 3.8.1.			
3.8.1	SEPARATION BETWEEN ROOMS	Each hotel guest room, including guest suites, shall be separated from other guest rooms by walls and floors constructed as fire barriers having a minimum 1/2-hour fire resistance rating.	Required	Required	Required
3.8.2	DOORS	Doors in the barriers required by 3.8.1 shall have a fire protection rating of not less than 30 minutes and shall not be required to be self-closing.	Required	Required	Required
3.9	(Reserved).				





Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
<b>4.0</b>	<b>SPECIAL PROVISIONS</b>	<b>Special Provisions for Firefighting and Rescue shall comply with QCD FLS Annex and as modified in item 4.0 of this FLS Occupancy Chapter.</b>			
4.1	FIRE (EMERGENCY) COMMAND CENTER (FCC)	QCD FLS Annex_A5 – Revisions_2021.	Required	Required	Required
4.2	FIREMAN'S ACCESS PANELS/ OPENINGS	QCD FLS Annex_A3 – Revisions_2021	Required	Required	Required
4.3	FIRE LIFTS (FIRE SERVICE ACCESS ELEVATORS)	QCD FLS Annex_A4 – Revisions_2021	Not Required	Not Required	Required
4.3.1		The building basement/s is more than nine (9) meters below the average ground level (grade plane).	Required	Required	Required
4.3.2	FIREFIGHTING LOBBY	QCD FLS Annex_A2 – Revisions_2021	Required	Required	Required
4.3.3	SMOKE-STOP LOBBY	QCD FLS Annex_A2 – Revisions_2021	Required	Required	Required
4.4	AMBULANCE STRETCHER ACCOMMODATION	QCD FLS Annex_A4 – Revisions_2021	Not Required	Required	Required
4.5	EVACUATION LIFT	Evacuation lift in accordance with 7.4, shall be provided in hotel buildings.	Required	Required	Required
4.6	EXTERNAL ACCESS TO SITE AND BUILDINGS	QCD FLS Annex_A3 – Revisions_2021	Required	Required	Required
4.6.1	SITE ACCESS/ACCESS ROAD	For gated facility development a 4.0 m wide access road and 4.5 m clear height vertical clearance entry gate or site access shall be provided.	Required	Required	Required
4.6.2	FIRE ENGINE HARDSTANDING (FEH)	FEH with longer side parallel to the façade of the building shall be provided in buildings exceeding the habitable height of 10 m.	Required	Required	Required
4.7	REFUGE FLOORS	QCD FLS Annex_A1 – Revisions_2021	NA-Not Applicable	NA-Not Applicable	Required
4.8	(Reserved).				



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
<b>5.0</b>	<b>BUILDING SERVICES and FIRE PROTECTION EQUIPMENT</b>	<b>Building Services and Fire Protection Equipment shall comply with the applicable NFPA codes and standards and QCD FLS Annex.</b>			
5..1	ELECTRICAL SYSTEM	Electrical wiring and equipment shall be in accordance with NFPA 70.	Required	Required	Required
5.1.1	ELECTRICAL EQUIPMENT/PANEL ROOMS AND SIMILAR ROOMS/ SPACES	QCD FLS Annex _A7 – Revisions_2021	Required	Required	Required
5.1.2	EMERGENCY GENERATORS AND STANDBY POWER SYSTEMS.	Emergency generators and standby power systems shall be installed, tested, and maintained in accordance with NFPA 110.	Required	Required	Required
5.1.3	STORED ELECTRICAL ENERGY SYSTEMS	Stored electrical energy systems shall be installed, tested, and maintained in accordance with NFPA 111.	Required	Required	Required
5.2	COMMERCIAL COOKING OPERATIONS	Where permitted, commercial cooking operations shall be protected in accordance with NFPA 96.	Required	Required	Required
5.3	ELEVATORS, ESCALATORS, and CONVEYORS	An elevator, shall not be considered a component in a required means of egress and shall be in accordance with NFPA 101 section 9.4.	Required	Required	Required
5.3.1	NUMBER OF CARS	The number of elevator cars permitted in a hoistway shall be not more than three (3).	Required	Required	Required
5.3.2	OPENINGS TO EXIT ENCLOSURES	Conveyors, elevators, dumbwaiters, and pneumatic conveyors serving various stories of a building shall not open to an exit enclosure.	Required	Required	Required
5.4	WASTE/LINEN HANDLING SYSTEM	Waste/Linen chutes and its associated trash collection storage rooms and service opening rooms, when provided shall comply with NFPA 101 9.5.	Required	Required	Required
5.4.1		Approved chutes and transport systems, including gravity waste chutes, full pneumatic waste conveying systems, and gravity pneumatic waste conveying systems, shall comply with the provisions of NFPA 82.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
5.4.1.1	Construction	Waste/linen chutes, shall be separately enclosed by walls or partitions of not less than 2-hrs fire resistance rating and chute intake openings protection of 1.5-hour fire protection rating.	Required	Required	Required
5.4.1.2	Waste/Linen Collection Storage Rooms	Waste/linen chutes, shall have its associated trash collection, service opening rooms separately enclosed by walls of not less than 1-hr fire resistance rating and openings protection of 3/4-hour fire protection rating.	Required	Required	Required
5.4.1.3		The doors of chutes shall open only to a trash collection, service opening room, laundry storage room or to a room that is designed and used exclusively for accessing the chute opening.	Required	Required	Required
5.4.2	GRAVITY CHUTES	A waste/linen chute shall extend (full size) at least 0.92 m. above the roof of a building.	Required	Required	Required
5.4.2.1	Chute Venting	The chute shall be open to the atmosphere, with the opening being the same cross-sectional area as the chute.	Required	Required	Required
5.5	FIRE PUMPS				
5.5.1	FIRE PUMPS ROOM	QCD FLS Annex _A6 – Revisions_2021	Required	Required	Required
5.6	SUBSTATION and SWITCHGEARS	QCD FLS Annex _A8 – Revisions_2021	Required	Required	Required
5.7	(Reserved).				
<b>6.0</b>	<b>EVACUATION MANAGEMENT PLANS</b>				
6.1	EMERGENCY ESCAPE PLAN	Emergency escape plan shall be required for all hotels and should include a specific section containing details for the evacuation of PWDs.	Required	Required	Required
6.2	EVACUATION MANAGEMENT PLAN	An evacuation management plan complimenting the provisions made in the building or premises shall be prepared by the responsible person at the hotel.	Required	Required	Required
6.3		The plan shall include the name of all responsible people for the evacuation of PWDs and clearly indicate the roles of each person.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
6.4		The plan shall include the name of all responsible people for the evacuation of PWDs and clearly indicate the roles of each person.	Required	Required	Required
6.5		The plan shall be constructed with a procedure for a wide range of people with disability including but not limited to: Mobility impairment [including but not limited to: Older people with limited movement ability, Pregnant Women, Inquired persons, Wheelchair users.] Visual impairment, Hearing impairment, Cognitive impairment.	Required	Required	Required
6.6		The plan shall require a mandatory question at check-in to declare the number of people with disability, the type of disability, the contact info for the PWD or their primary care giver, and the room in which they are staying.	Required	Required	Required
6.6.1		All above info shall be recorded and managed by the responsible person at the facility and provided for Qatar Civil Defence Operation Department at request.	Required	Required	Required
6.6.2		PWDs evacuation features and procedures shall be explained to the PWD at check-in.	Required	Required	Required
6.7		It shall be the duty of the responsible person to ensure that all PWDs have been evacuated.	Required	Required	Required
6.8		It shall be the duty of the responsible person to conduct the evacuation of PWDs until the arrival of Qatar Civil Defence Operation Department.	Required	Required	Required
6.9	REFERENCES	Useful reference for preparing an evacuation plan dedicated for PWDs includes but not limited to:	-	-	-
6.9.1		Emergency Evacuation Planning Guide for people with disabilities (NFPA)	-	-	-



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
6.9.2		Fire safety risk assessment means of escape for disabled people (by the UK government)	-	-	-
6.10	(Reserved).				
<b>7.0</b>	<b>PROVISIONS FOR PEOPLE WITH DISABILITIES (PWDs)</b>				
7.1	GENERAL				
7.1.1		These requirements shall apply when referred to by a specific occupancy section.	Required	Required	Required
7.1.2		All buildings shall have emergency escape routes leading to places of safety or refuge that are accessible to all people regardless of their physical conditions. The requirements of emergency escape features shall depend on the size of the building, height or number of floors, as well as the proportion of persons with disabilities (PWDs) that may reasonably be expected to be present in the building at any given time.	Required	Required	Required
7.1.3		The escape routes shall have sufficient space area free from any obstacles or obstructions that may cause tripping hazards and undue delay to people with disabilities during evacuation.	Required	Required	Required
7.1.4		It is recommended that PWDs are given the closest room available to the ground floor of their selected hotel room tier to facilitate evacuation efforts	-	-	-
7.2	ACCESSIBLE REFUGE AREA				
7.2.1	Refuge Area Locations	Refuge area shall be provided in all floors other than floors having direct escape route to a public way, for persons with disabilities (PWDs) to escape to without assistant.	Required	Required	Required
7.2.2	Number of Designated refuge areas per floor level	There shall be at least two (2) designated refuge areas for persons with disabilities (PWDs) on every floor of a building except for building permitted and designed to have single exit staircase.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.2.3	Refuge Area	Refuge area shall be separated from the building floor by both a fire and smoke barrier having at least 60 minutes fire-resistance rating. Doors to the refuge area shall be designed to resist passage of smoke for the same period of the enclosure protection rating.	Required	Required	Required
7.2.4	Persons with disabilities (PWD) Designater Area Marking	The designated space for persons with disabilities (PWDs) shall be marked clearly on the floor.	Required	Required	Required
7.2.5	Refuge Area Configurations	Refuge area shall be served by an exit via an emergency staircase or fire-fighting lift. Same shall be free of obstruction and located in the building according to the following order of priority:	Required	Required	Required
		Note: The Mandatory Requirement of 7.2.5 is to comply with only one of the following as minimum provision 7.2.5.1, 7.2.5.2 or 7.2.5.3 whichever is applicable. (it is not the intent of this item to require on all locations). Refer to item 7.8 for illustrations.	Required	Required	Required
7.2.5.1	Smoke Proof Lobbies	Within a fire fighting lobby or smoke-stop lobby directly adjacent to an exit staircase.	Required	Required	Required
7.2.5.1.1	Fire Fighting Lobby	Where provided within a fire fighting lobby that is adjacent to a protected exit staircase, the designated space for persons with disabilities (PWDs) shall be marked clearly on the floor and shall at least be 500 mm away from the edge of the entrance to the staircase and occupant escape path towards the staircase. The designated space shall likewise not block entrance to the lifts. (See Figure 7.2.5.1.1 on item 7.8)	Required	Required	Required
7.2.5.1.2	Smoke Stop Lobby	Where provided within a smoke stop lobby, the designated space shall not reduce the area required for the smoke-stop lobby. (See Figure 7.2.5.1.2a and 7.2.5.1.2b on item 7.8 )	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.2.5.2	Corridors	Within a corridor positioned at least 2000 mm away from the edge of the entrance door to the exit staircase.(see figure 7.2.5.2a, figure 7.2.5.2b and figure 7.2.5.2c on item 7.8)	Required	Required	Required
7.2.5.3	Exist Staircase	Inside exit staircase, provided there is no firefighting lobby, smoke-stop lobby, or corridor. The designated space for persons with disabilities (PWDs) (or wheelchair) inside the staircase shall be adequately sized to accommodate at least one space measuring 900 mm width and 1200 mm deep, for a wheelchair which shall not encroach on the escape route. Appropriate markings shall be made on the floor to define the space designated for the persons with disabilities (PWDs) to stay and wait for rescue. (see figure 7.2.5.3a & 7.2.5.3b on item 7.8)	Required	Required	Required
7.2.6	Means of Communication / Fire Telephone	Refuge area for persons with disabilities (PWDs) shall be equipped with a telephone or means of communication connected to the Fire Command Centre that is manned on a 24-hour basis.	Required	Required	Required
7.2.6.1	General Installation	Device for means for communication shall comply with the following:	Required	Required	Required
7.2.6.1.1		Located between 800 mm to 1200 mm above the finished floor level.	Required	Required	Required
7.2.6.1.2		Appropriately marked or labelled.	Required	Required	Required
7.2.6.1.3		Provided with prominently displayed and clear instruction of its use and operation.	Required	Required	Required
7.2.6.1.4		Generate visual confirmation signal once activated and distress signal has been relayed to the emergency monitoring and response station or Fire Command Centre.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.2.7	Designated area for wheel chair	Refuge area shall be adequately sized to accommodate at least one space measuring 900 mm width and 1200 mm deep for a wheelchair which shall not encroach on the escape route. Appropriate markings shall be made on the floor to define the space designated for persons with disabilities (PWDs) to stay and wait for rescue. (See Figure 7.2.7 on item 7.8)	Required	Required	Required
7.2.8	Floor Markings	Refuge area for persons with disabilities (PWDs) shall have their locations identified by directional signage labelled with international symbols of accessibility.	Required	Required	Required
7.3	ACCESSIBLE RAMPS				
7.3.1	General	Any component of the means of egress other than the exit staircase containing steps shall be required to have a ramp to facilitate the movement of PWDs.	Required	Required	Required
7.3.2	Ramp Design	Ramps shall be designed to meet the following:	Required	Required	Required
7.3.2.1	Minimum Width	The unobstructed width of a ramp and landing measure between handrails shall not be less than 1000 mm.	Required	Required	Required
7.3.2.2		Ramps shall be constructed of non-slip material. The surface should retain non-slip characteristics even when wet.	Required	Required	Required
7.3.2.3		Ramps shall be constructed of the same or similar materials as the surrounding floor or ground materials.	Required	Required	Required
7.3.2.4	Ramp Slope & Ramp Rise	The max. slope shall be 1:12 and maximum ramp rise shall be 760 mm.	Required	Required	Required
7.3.2.5		Ramps shall have landings at the top and bottom. The minimum length of a straight landing shall be 1200 mm. Landings that incorporates change in direction, 45 degrees or more, shall accommodate a turning circle of 1500 mm in diameter. (See Figure 7.3.2.5 on item 7.8)	Required	Required	Required
7.3.2.6		Cross slope of ramps shall not exceeding 1:48	Required	Required	Required





Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.3.2.7		Handrails shall have a round or oval profile with a minimum outside diameter of 35 mm and a maximum outside diameter of 50 mm. Oval profile handrails should be 50 mm wide and 40 mm deep, with rounded edges with radius of at least 15 mm. (see figure 7.3.2.7 in item 7.8)	Required	Required	Required
7.3.2.8		Clear distance between the edge of the handrail and the walls shall not be less than 50 mm. (see figure 7.3.2.8 in item 7.8)	Required	Required	Required
7.3.2.9		Ramps where crowding or heavy volumes are anticipated, shall additionally have a central handrail where the flight is wider than 3 m.	Required	Required	Required
7.3.2.10		Handrails shall extend at least 300 mm beyond the top of the ramp and 300 mm beyond the bottom of the ramp.	Required	Required	Required
7.3.2.11		Handrails shall be fixed at a height of 900 mm above the walking level of ramps and landings.	Required	Required	Required
7.4	EVACUATION LIFT FOR PWDs				
7.4.1		At least one of the lifts in buildings installed with number of lifts and required to have provisions for evacuation of persons with disabilities (PWDs) shall be designated as evacuation lift.	Required	Required	Required
7.4.2	Locations	Evacuation lift shall be located within a protected lobby such as a smoke stop lobby that is directly adjacent to a protected exit staircase, external passageway or external corridor.	Required	Required	Required



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.4.3	Designated Evacuation Lifts for PWDs	Evacuation lifts shall be required as follow:			
7.4.3.1		If two fire lifts are provided, then one of them can be designated as an evacuation lift for PWDs.	Required	Required	Required
7.4.3.2		If only one fire lift is provided, or the building does not include a provision of a fire left then an ambulance stretcher lift can be designated as an evacuation lift for PWDs.	Required	Required	Required
7.4.3.3		It the building does not include a provision for a fire lift or an ambulance stretcher lift, then an occupant lift can be designated as an evacuation lift for PWDs.	Required	Required	Required
7.4.4	PWD Evacuation Elevator Requirements	Lifts designated as evacuation lifts for PWDs, shall comply with the requirement in item 7.4 of this document as well as NFPA 101-2018 clause 7.15.	Required	Required	Required
7.4.5		The floor of the lift cabin shall be slip resistant and have similar frictional qualities to the floor of the lift landing to decrease the risk of stumbling.	Required	Required	Required
7.4.6	Visible Signage	Readily visible sign marked in english with "FIRE EVACUATION LIFT FOR PERSONS WITH DISABILITY" and in arabic : " مصعد مخصص لإخلاء الأشخاص ذوي الإعاقة ". This shall be affixed adjacent to entrance of an evacuation lift lobby or lift door, in the case of lift not accessed via lobby, at every floor or landing of the evacuation lift.	Required	Required	Required



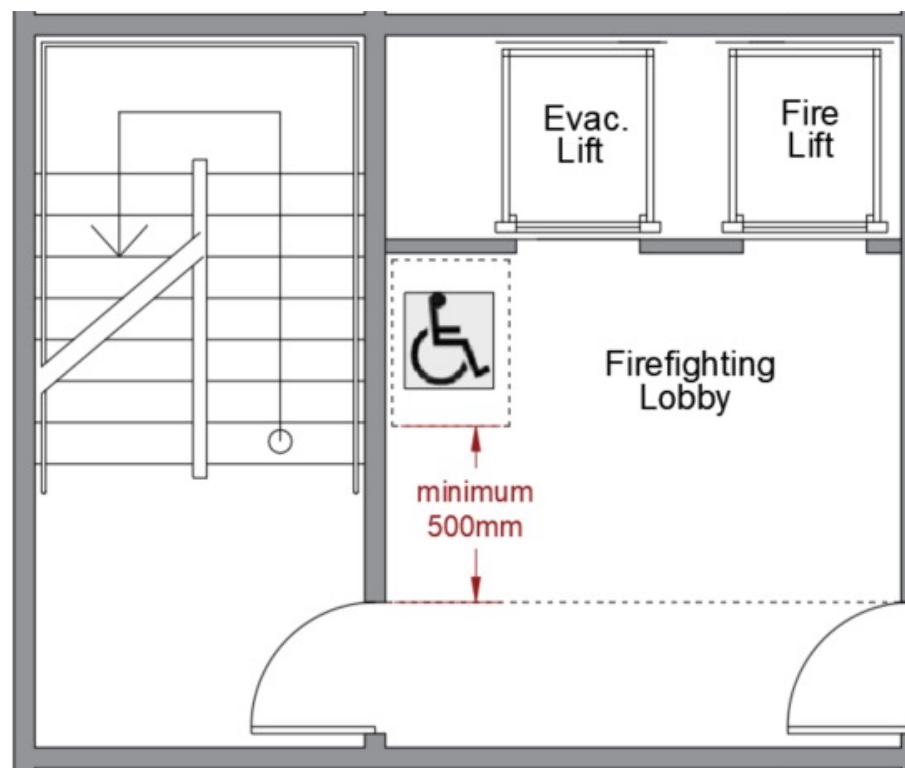
Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.4.7		A visual indicator shall be provided to confirm that an emergency call has been received.	Required	Required	Required
7.4.8		The evacuation lift shall be provided with emergency power supply for continuous operation during power failure and/or fire emergency.	Required	Required	Required
7.5	NOTIFICATION APPLIANCE FOR HEARING IMPAIRED				
7.5.1		Visual notification shall be provided in Hotels to alert hearing impaired person of a fire or emergency.	Required	Required	Required
7.5.2		Visual notification shall be provided in all common areas in the Hotel.	Required	Required	Required
7.5.3		Ten percent (10%) of the hotel rooms shall be provided with visible notification devices for the purpose of notifying people with hearing impairment distributed over different room tiers.	Required	Required	Required
7.5.4		Guest rooms/ Units required to have notification appliances shall have the appliances installed to cover every part of the unit, including but not limited to the living rooms, bathrooms, and kitchens.	Required	Required	Required
7.5.5		The visual alarm shall comply with the visible notification as per NFPA 72.	Required	Required	Required
7.6	EVACUATION CHAIR				



Item	Fire Safety Provisions	Minimum Requirements	Low-rise	Mid-rise	High-rise
7.6.1	Number of evacuation chairs	Evacuation chairs shall be located at every staircase every 5 floors, with 2 evacuation chairs provided as a spare in the fire command center. Note: Alternative stair descent measures (like Emergency Stair Travel Devices) for transporting PWD that are part of evacuation plan.	Required	Required	Required
7.6.2	Signage for Evacuation chair locations	Signages showing the evacuation chair locations shall be provided on each stair level. Such information shall be available indicating the current floor level location and the nearest floor level above and below with wheel chair provisions.	Required	Required	Required
7.6.3		The signages mentioned in item 6.6.2 above shall also be shown on areas of refuge. Near the Designated areas for wheel chair on fire fighting lobby , smoke stop lobby, corridors or inside the stairs	Required	Required	Required
7.7	(Reserved).				



## ILLUSTRATIONS AND FIGURES



**Figure 7.2.5.1.1- Designated space for persons with disabilities (PWDs) adjacent to protected stair case within a Fire Fighting Lobby**

## ILLUSTRATIONS AND FIGURES

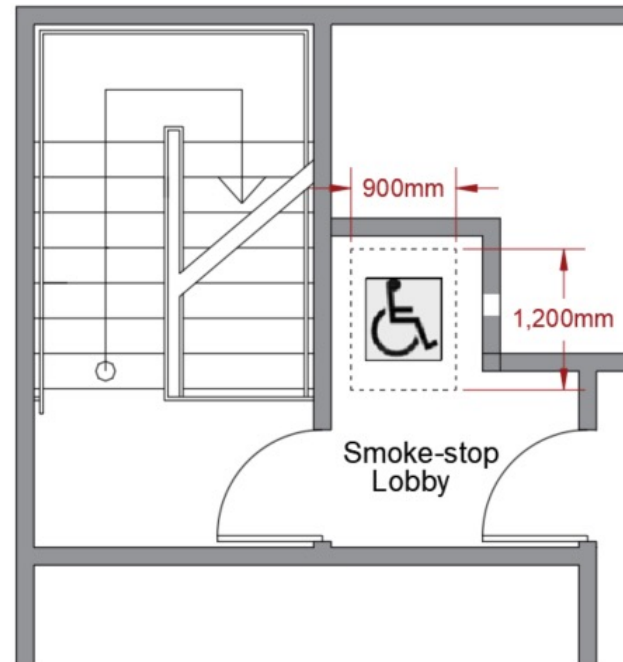


Figure 7.2.5.1.2a

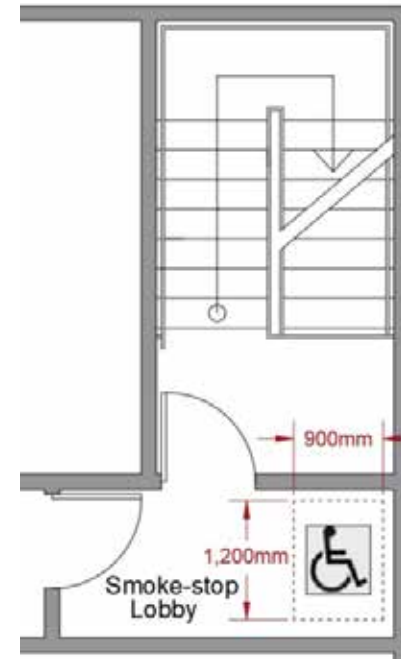
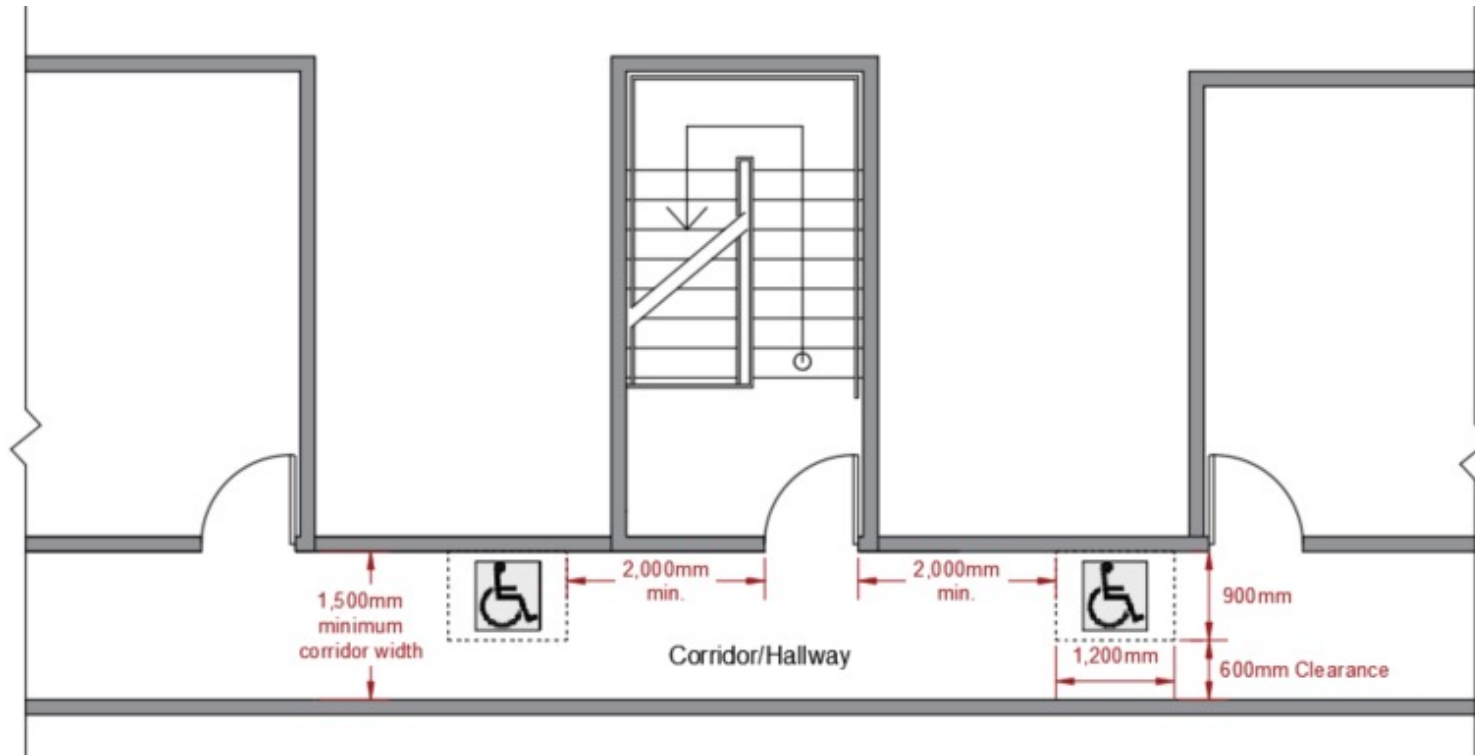


Figure 7.2.5.1.2b

Figure 7.2.5.1.2a and 7.2.5.1.2b - Designated space for persons with disabilities (PWDs) within a Smoke Stop Lobby

## ILLUSTRATIONS AND FIGURES



**Figure 7.2.5.2a - Designated space for persons with disabilities (PWDs) within corridors**

## ILLUSTRATIONS AND FIGURES

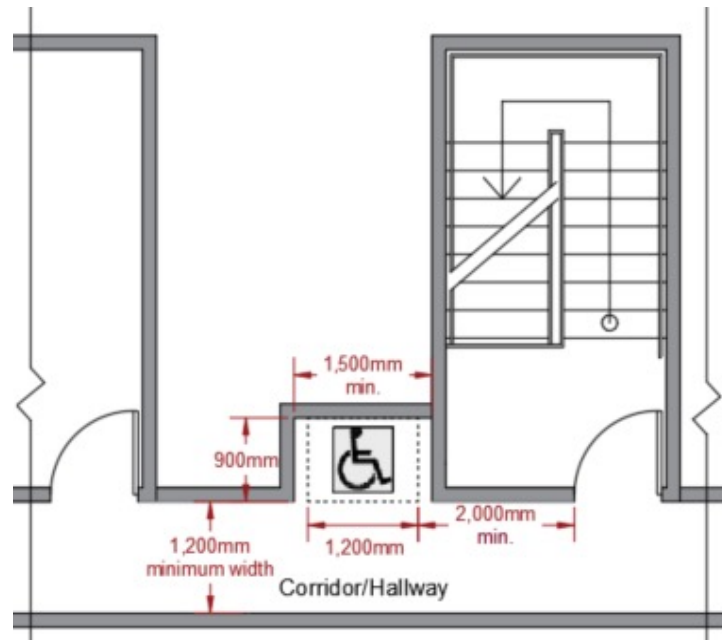


Figure 7.2.5.2b

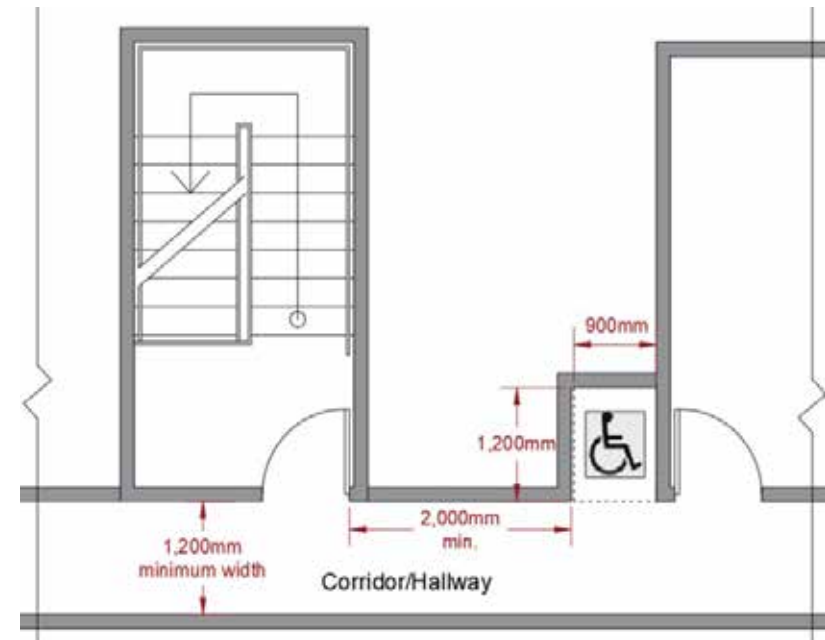


Figure 7.2.5.2c

Figure 7.2.5.2b 7.2.5.2c - Designated space for persons with disabilities (PWDs) within corridors



## ILLUSTRATIONS AND FIGURES

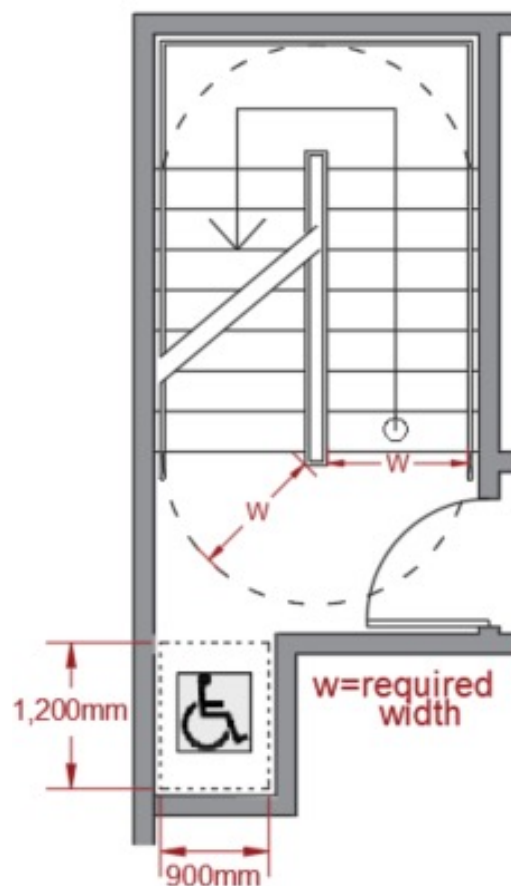


Figure 7.2.5.2b

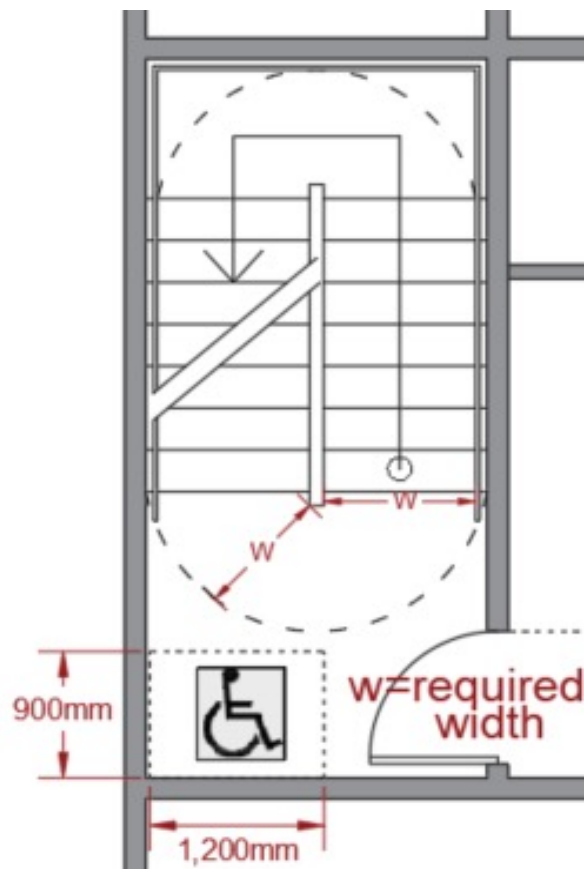


Figure 7.2.5.2b

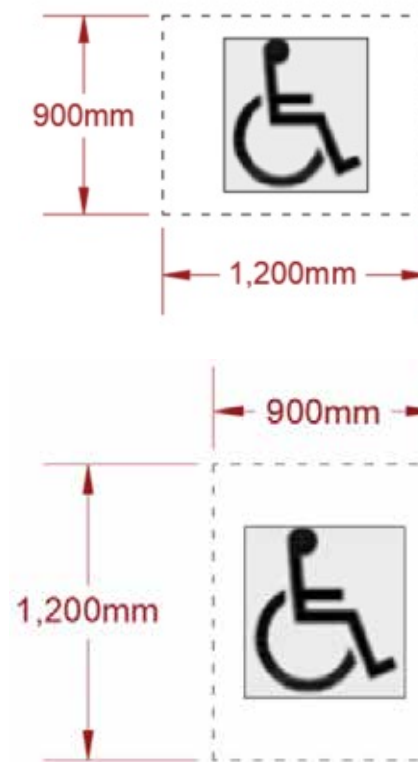
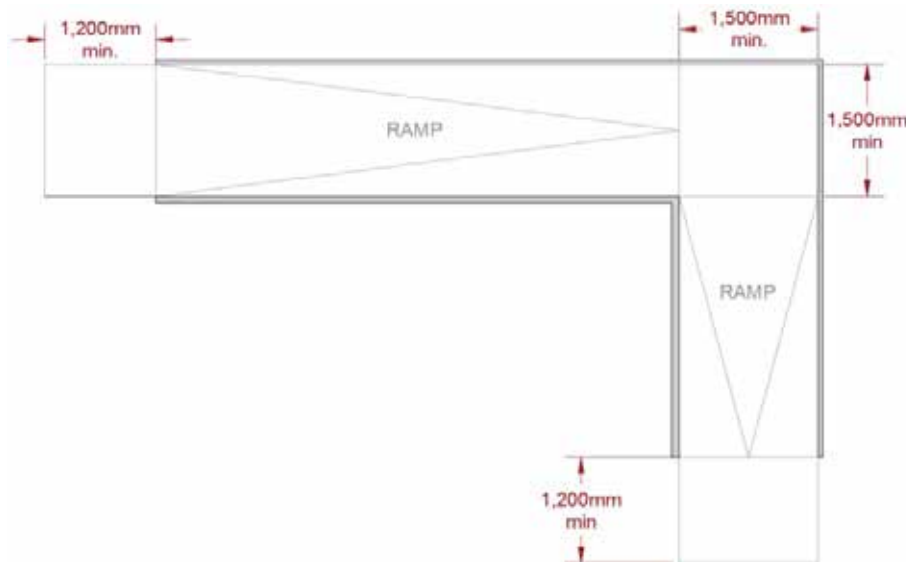


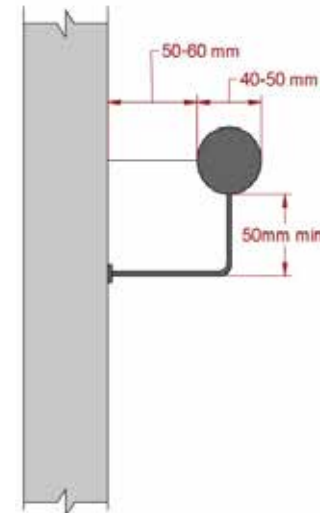
Figure 7.2.5.7 - Minimum Dimension for designated space for persons with disabilities (PWDs)

Figure 7.2.5.3a & Figure 7.2.5.3b Designated space for persons with disabilities (PWDs) within an Exit Staircase

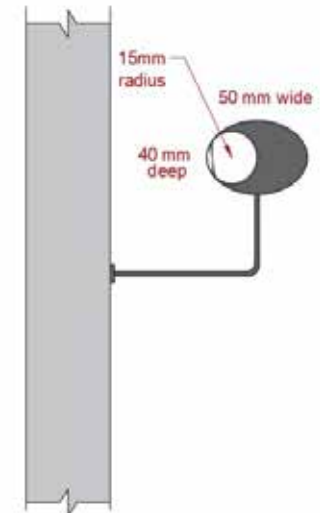
## ILLUSTRATIONS AND FIGURES



**Figure 7.3.2.5- Minimum Width for Ramp Landings**



**Figure 7.3.2.8 - Round Hand Rail detail**



**Figure 7.3.2.7 - Oval profile Hand rail detail**

**Figure 7.2.5.2b 7.2.5.2c - Designated space for persons with disabilities (PWDs) within corridors**