

BUILDING SERVICES

SPPE 3112

BUILDING ACCESSIBILTY SYSTEM

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DEFINITION.....

- **Accessibility** - space that can be accessed according to the standard. (e.g: building, public entrance etc)

CIRCULATION SPACE SPECIFICATION

(source: Department of Urban Development & Housing Ministry of Communications, 2002)

SPACE	DIMENSIONS FOR:	
	RESIDENTIAL BUILDINGS	INSTITUTIONAL AND COMMERCIAL BUILDINGS
Clear width of private corridor or staircase (internal stair serving one residence only)	Min 900mm	N/A
Clear width of common corridor or staircase	Min 1100mm	Min 1500mm (unless calculated to be greater according to fire escape rules)
Height of staircase handrail above pitch line of staircase	Min 900mm	Min 900mm
Staircase riser	Max 190mm	Max 190mm
Staircase tread	Min 250mm	Min 280mm

Height of doors	Min 1800mm	Min 2000mm
Width of door to habitable room	Min 850mm	Min 900mm
Width of door to main entrance	Min 900mm	Min 1000mm
Width of other doors	Min 700mm	Min 850mm
Habitable room floor to ceiling height in high altitude	Min 2450mm	Min 2450mm
Habitable room floor to ceiling height in low altitude	Min 2750mm	Min 2750mm
Water closet, bathroom or store floor to ceiling height	Min 2100mm	Min 2300mm
Mezzanine floor to ceiling height	Min 2100mm	Min 2300mm

EXIT ROUTE

DEFINITION

- A continuous and unobstructed path of exit travel from any place within a building to reach a safe place.

(source: <http://www.alabamacounties.org/wp-content/uploads/2012/01/2012-01-Emergency-Exit-Routes.pdf>)

NO. OF EXIT

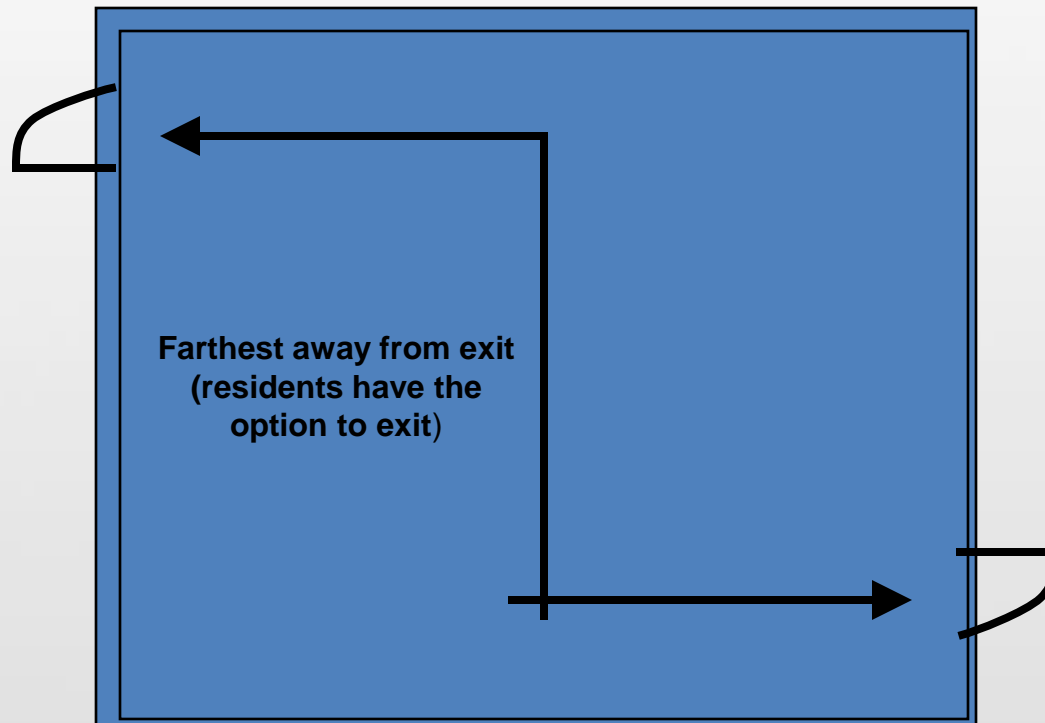
Location	Minimum no. of exit
Basement	2
50 occupant or more	2
500 occupant or more	3
1000 occupant or more	4
Every floor level in a building	2

EXIT ROUTE

- ❖ Exit routes must be permanent parts of the building and able to be used at anytime.
- ❖ Every building must have more than 2 separate exit at every floor level with additional exit.
- ❖ Exits must be separated by fire resistant materials.
- ❖ Exits must be place at the end of linear corridor or at an open space.

A GOOD POSITION OF EXIT

Separate exit and have different way of exit



EXIT & DIRECTIONAL SIGN

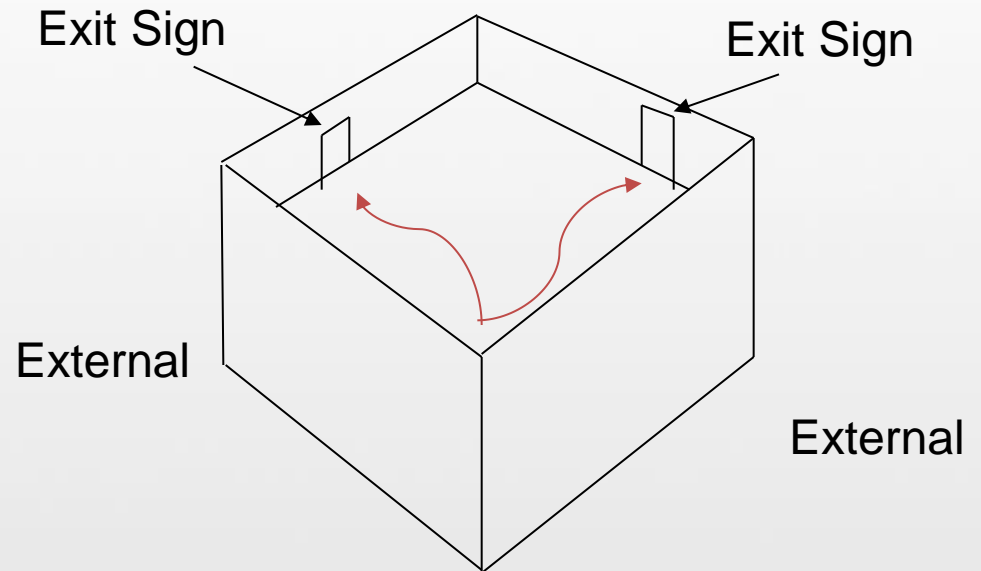
DEFINITION...

An illuminated sign that is permanently fixed in place and used to identify an exit

EXIT SIGN

- Each entrance shall be clearly indicated by an exit sign placed over the exit door. The exit signs shall be placed and clearly visible at all times to the user

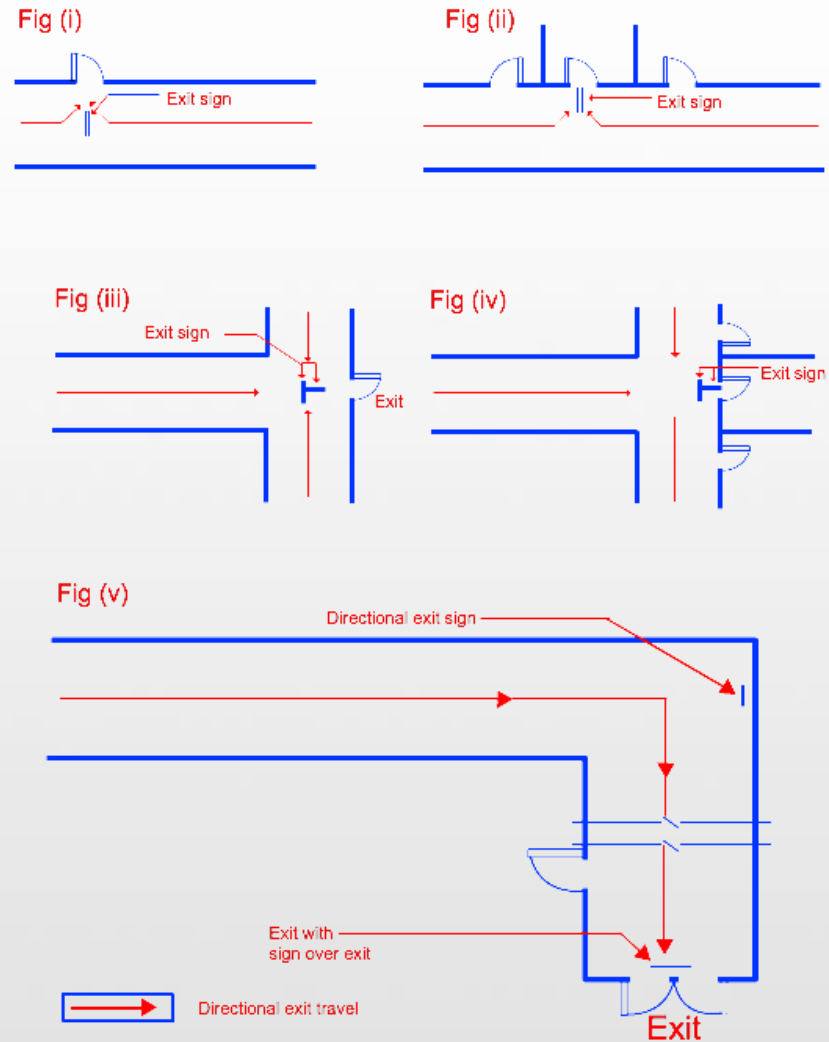
(source:http://www.scdf.gov.sg/content/dam/scdf_inter/Buildings%20Professionals/Publications%20and%20Circulars/Fire%20Code%202013/Chapter%208.pdf?)



DIRECTIONAL SIGN

- location of the exits may not readily visible so, the exit sign shall be provided to guide the user in long corridors or floors.

(source: http://www.scdf.gov.sg/content/dam/scdf_inter/Buildings%20Professionals/Publications%20and%20Circulars/Fire%20Code%202013/Chapter%208.pdf?)



EXIT SIGN DESIGN

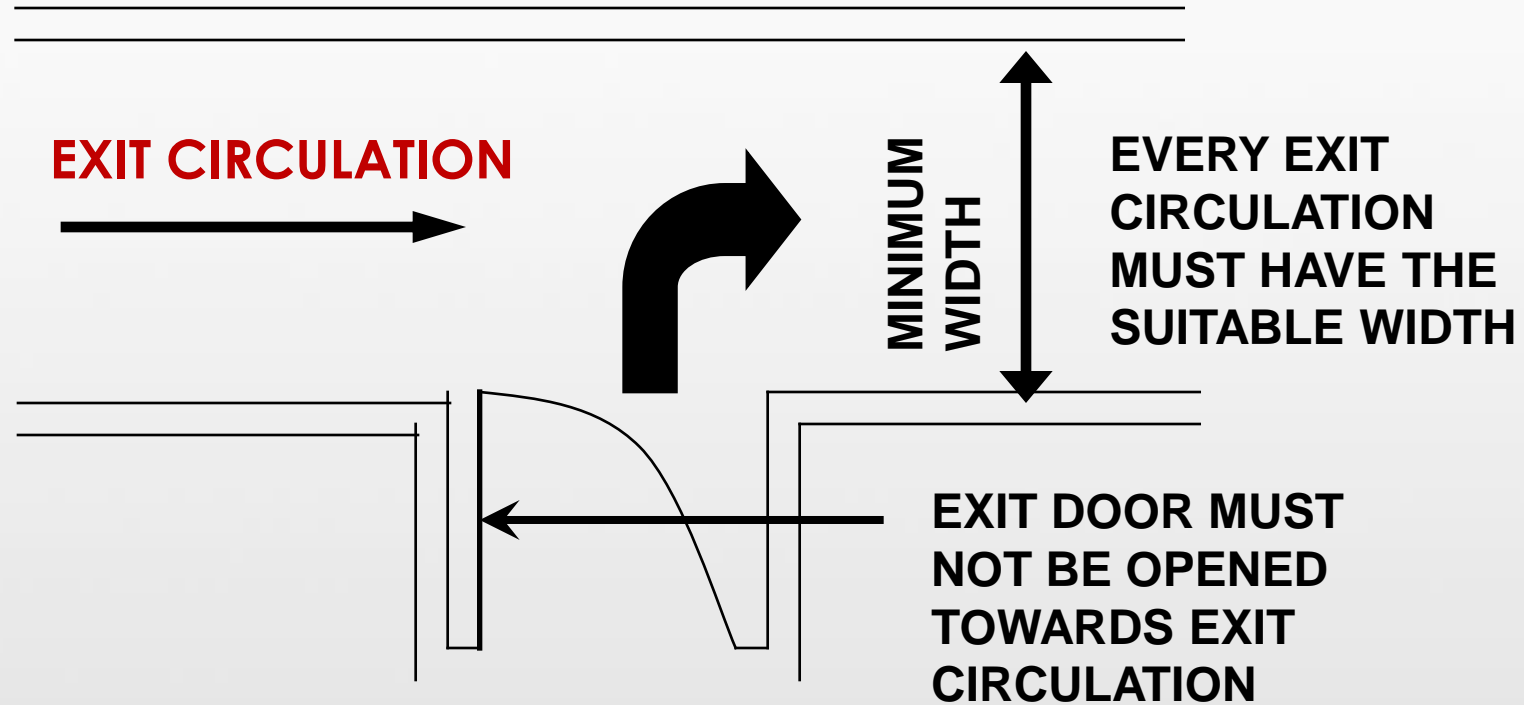
- ✓ Must have the word "EXIT" in lettering not less than 5 inch high with principal strokes of letters of not less than 1/2 inch.
- ✓ Letters color- contrast with the background color
- ✓ Directional signs- shall be lighted with two electric lamps



DOOR

- Doors are part of the enclosing and dividing function of the building and are fitted within walls or partition.
- Exit door mean any door from any floor level or room which lead any floor level or room to outside part of the building

EXIT DOOR



FIRE DOOR

- Fire door must be closed every time.

- The door must be closed by itself after open it or;

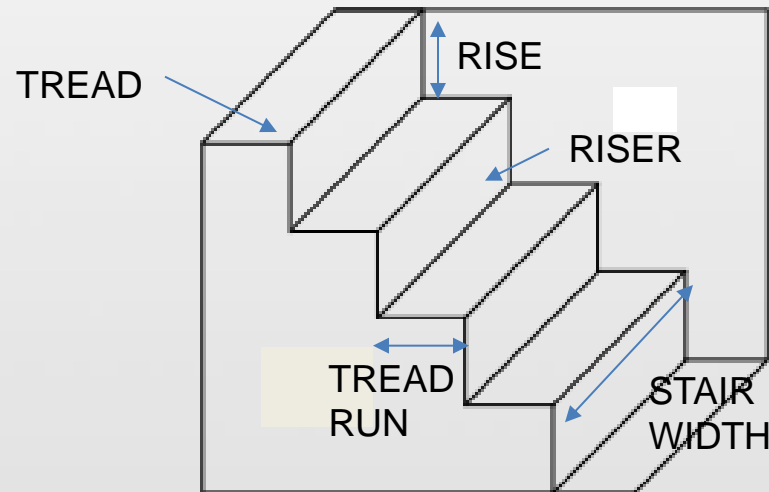
- Fire doors which are held open and automatically closed when:
 - ✓ smoke detectors
 - ✓ The power supply fails;
 - ✓ hand-operated switch activated

STAIRS

A stairs is a series of steps and landings:

- Leading from one level or floor to another

Stairs component



STAIRS REQUIREMENT

- ✓ Every floor level must have exit way at least 2 separate
- ✓ A level landing shall provided at the and bottom of each flight of stair.
- ✓ The unobstructed length of each landing is not less than 1200mm
- ✓ No doors swing across landings
- ✓ Exit door to stairway must be open to outward

