3.3. Stair

3.3.1. Stairs can be used as a component in the means of egress, whether interior or exterior to a building, serve multiple functions, allowing normal occupant movement among floors of building, providing egress during emergencies and fires and facilitating rescue and fire control operations by Fire fighters.

3.3.1. Exit Stair is that part of the means of egress which is separated from all other spaces of a building by a fixed and permanent non combustible construction as required by **Chapter 1**, providing a protected way of travel to the Exit Discharge.

3.3.2. Stair shall comply with **Table 3.1** and **Table 3.5.** However, type of Stair allowed and modifications, if provided by individual occupancies as per **Section 5**, shall override the requirements of **Table 3.4.**

Table 3.4: Stair

ITEMS	REQUIREMENTS
1. STAIR WIDTH	i. The minimum required width of an exit stair serving up to 2000 persons shall not be less than 1200 mm and shall satisfy the egress capacity. ii. The minimum required width of an exit stair serving more than 2000 persons shall not be less than 1420 mm and shall satisfy the egress capacity. iii. Stair width shall not decrease in width along the direction of egress travel. iv. The required width of a stair shall be measured from wall to the clear available width of the step. (See **Figure 3.6.a.**). The maximum projections of handrails allowed in this required width is 100 mm on each side, at a height of 865 mm—965 mm.
2. STAIR RISER HEIGHT	i. Maximum height of riser shall not exceed 180 mm. ii. Minimum height of riser shall not be less than 100 mm. iii. Riser heights shall be uniform throughout each stair flight between landings. iv. Where riser heights are adjusted to comply with acceptable stair treads, flights and arrangements in accordance with **Figure 3.13.a.,** the maximum difference of dimension allowed in a flight is 10 mm.
3. STAIR TREAD DEPTH	i. Minimum stair tread depth shall not be less than 280 mm. ii. The tread slope shall not exceed 21 mm/meter (slope of 1 in 48) iii. Tread depth shall be uniform throughout the stair. The maximum difference of dimension allowed in a flight is 10 mm.
4. MINIMUM HEADROOM	i. Head room on stairs shall not be less than 2030 mm, measured vertically above a plane, parallel to the most forward projection of the stair tread.
5. LANDINGS	i. Maximum height between landings shall not be more than 3660 mm. ii. Every stair shall have landing at the door opening and landing width shall not be less than the required stair width. iii. Maximum landing area a stair door can encroach in its swing is one half of the required landing width. iv. Landing width shall not decrease in width along the direction of egress travel. Landing width shall not be required to exceed 1220 mm in the direction of travel, provided that the stair has a straight run. v. The landing slope shall not exceed 21 mm/meter (slope of 1 in 48).