

Table 3.4: Stair

ITEMS	REQUIREMENTS
7. STAIR SEPARATION FROM REST OF THE BUILDING AREAS	<ul style="list-style-type: none"> i. Every stair serving as an exit in Low depth and Low rise buildings (having height up to 15 m), shall be separated from rest of the building areas by a construction of at least block-work and ensure 2 hour fire resistance rating. ii. Every stair serving as an exit in High depth, Mid rise, (having height more than 15 m), High rise buildings and superhighrise buildings shall be separated from rest of the building areas by a construction of RCC (Reinforced Concrete) and ensure 2 hour fire resistance rating. iii. Separation shall extend vertically from the lowest level of the stair to a point 3 m above the top most landing of the stairs or to the roofline. iv. Elevators shall not be in a common shaft enclosure with stairway.
8. PENETRATIONS INTO STAIR SPACE	<ul style="list-style-type: none"> i. Space within the stair shall not be used for any other purpose than occupant exit and evacuation. ii. Space under the stair shall not be used for any other purpose unless such space is fully isolated from the stair with 2 hour fire resistance construction and entry/exit for such spaces shall not be through the stair enclosure enveloping that space. iii. Only penetrations allowed into Stair enclosure are Fire Hose and Sprinkler Piping, Fire protection piping valves, electrical conduits serving stair enclosure and fire detection and alarm system wiring enclosed in metal conduits. iv. Fire Hose Reel and Landing valve cabinets shall not be located in the stair enclosure. v. Pressurization ducting, AC units, Fan coil units, Ventilation ducts, water piping, heater piping, drainage piping etc., shall not be located in the stair enclosure.
9. ILLUMINATION FOR STAIR	<ul style="list-style-type: none"> i. Exit stair shall be illuminated at all times that the building is occupied. Lighting control devices that turn lighting on and off based on occupant movement or presence shall be permitted. ii. Lighting control devices that dim the lighting levels within the exit enclosure shall not be installed unless they provide a minimum of 1 ft-candle (10.8 lux) of illumination within the exit enclosure measured at the walking surface. iii. Where stair is provided with Photoluminescent strips or marking, the lighting used to charge such Photoluminescent materials shall not be controlled by motion sensors. iv. Where stair is provided with window for illumination, such window pane shall be fixed, 2 hour fire resistance rated and non-operable.
10. HANDRAILS	<ul style="list-style-type: none"> i. Stairs shall have handrails on both sides. ii. Handrails on stairs shall be not less than 865 mm and not more than 965 mm, above the surface of the tread, measured vertically to the top of the rail from the leading edge of the tread. iii. The height of required handrails that form part of a guard shall be permitted to exceed 965 mm, but shall not exceed 1065 mm, measured vertically to the top of the rail from the leading edge of the tread. iv. Handrails shall be installed to provide a clearance of not less than 57 mm between the handrail and the wall to which it is fastened. v. Handrails shall be available within 760 mm of all portions of the required egress width. vi. Where intermediate handrails are provided because of the stair width exceeding 1750 mm, the minimum clear width between such handrails shall be 510 mm. along the natural path of travel.