2.9.4. Fire Lift

a. At least one Fire Lift in a dedicated shaft, as required by **Chapter 1**, **Table 1.9.38.** shall be provided in any building which is 'Highrise' with 23 m or more in height, 'High Depth' with more than 2 basements, Malls and multi storey Amusement Parks. Additional lifts may share the same shaft, provided all the lifts comply with same degree of protection and features as the fire lift.

b. Minimum dimension of a Fire Lift car shall be adequate to accommodate an ambulance stretcher of 610 mm by 2134 mm with not less than 127 mm radius corners, in the horizontal, open position.

c. The fire lift shall have access to every habitable floors within the building. In Super Highrise buildings having height more than 90 m from Fire access level, the fire lift shall be adjacent and accessible to an exit staircase and a fire fighting lobby at each storey as required by **Chapter 1, Table 1.9.38.** and shown in **Figure 2.15.**
Where a fire lift has a second entrance onto a floor, the second entrance is not required to open into a 1 hour lobby.

d. Fire lift shall be provided with an operational feature that would enable firemen to override earlier call which had been inadvertently made to the fire lift during an emergency.

e. This operational feature could be built into the lift control system or alternatively a separate by-pass switch could be provided. If the operational feature is built into the lift control, it is not mandatory to provide a separate by-pass switch.

f. A service lift mainly intended for the transport of goods, such as freight elevators shall not be designated as a fire lift. However, a fire lift complying to this section can be utilized for everyday function, such as passenger lifts or service lifts. Likewise, a service lift which complies with all the requirements of a fire lift as per this section, shall be permitted to be considered as a 'Fire Lift'.

g. The power supply to the lift shall be connected to a sub-main circuit exclusive to the lift and independent of any other main or sub-main circuit.

h. Wires or cables that provide normal and standby power, control signals, communication with the car, lighting, heating, air-conditioning, ventilation, and fire detecting systems to fire lift shall be protected by construction having a minimum 1-hour fire resistance rating or shall be circuit integrity cable having a minimum 1-hour fire resistance rating.

i. In a fire emergency when a fire detection devices or fire alarm systems is activated, if the ground floor is compromised with fire, all the passenger lifts shall be brought to the ground floor or egress level or alternative floor. Furthermore lift doors shall remain open.

j. Every Fire Lift shall be equipped with 2-way communication devices to be used by Fire fighters during emergencies.

k. Where elevators are used for evacuation, such elevators shall have features as per **Chapter 3, Section 3.9.**

l. All fire lifts must be provided with water management, Protection of electrical equipment against water, Control and power supplies, and Civil Defence Communications systems in accordance with sections 5.3 and 5.6-5.12 of BS EN 81-72 current edition.