3.8. Area of Refuge

- **3.8.1.** Area of Refuge is not mandated by Civil Defence. However, for super high rise buildings (having height more than 90 m), or any large complex buildings, if the overall fire strategy demands an area of refuge as part of the means of egress and an area of refuge for disabled occupants, the area of refuge shall comply with this section.
- **3.8.2.** Area of Refuge is intended to provide temporary point of safety to allow delayed egress travel from any level in the building and also serve disabled occupants to have temporary refuge.
- 3.8.3. Area of Refuge used as means of egress shall comply with Table 3.1 and Table 3.10.

| Table 3.10: Area of Refuge | |
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| ITEMS | REQUIREMENTS |
| 1. SEPARATION | i. Area of refuge shall be separated from remainder of the storey by a fire barrier having minimum of 1 hour fire resistance rating. ii. Ducts penetrating such barrier shall be provided with smoke actuated dampers. |
| 2. DOORS | Doors serving area of refuge shall be 45 minutes fire rated, air leak proof, self closing or automatic closing. |
| 3. EXITS | i. An Area Of Refuge shall have protected stair access leading to an accessible storey that is one or more stories above or below a storey of exit discharge of the building, available which is not the same as access into to area of refuge, such that egress continues from area of refuge without requiring return to the building spaces through which travel to the area of refuge occurred. ii. The width of the protected stair required from area of refuge shall accommodate the occupant load that the area of refuge is designed. But in no case less than 1200 mm. |
| 4. AREA | i. Area of refuge in a building shall be based on a clear fire strategy or a minimum area calculated based on occupants of 3 floors. ii. Area of refuge shall be sized to accommodate one wheelchair space of 760 mm × 1220 mm for every 200 occupants, or portion thereof, based on the occupant load served by the area of refuge. iii. Such wheelchair spaces shall maintain the width of a means of egress to not less than that required for the occupant load served and to not less than 915 mm. |
| 5. FIRE SYSTEMS | i. Area of refuge is preferred to be in fully sprinkler protected building. ii. Each elevator landing shall be provided with a two-way communication system, complete with using instructions in Arabic and English to seek assistance, contact numbers etc., for communication between the elevator landing and the fire command center or a central control point. Two way communication system shall have both audio and visual signals. |
| 6. ELEVATOR | i. If area of refuge has an elevator and provides access from area of refuge to a public way, it shall be a fire fighter's lift in smokeproof shaft with fire fighters emergency operations as per ASME A17.1/CSA B44, Safety Code for Elevators and Escalators. ii. The power supply to elevator shall be protected against interruption from fire. |
| 7. HORIZONTAL EXIT | i. If area of refuge is created by horizontal exit as per Table 3.6., smokeproof enclosure for elevator shaft is not required. |
| 8. SIGNAGE | i. Every Area of refuge shall be identified by a sign, both in Arabic and English as "AREA OF REFUGE" |