

## SUPPLEMENTARY PAPER ON REMEDIATION GUIDANCE ELEVATOR OR LIFT SHAFT OPENING IN EXIT ENCLOSURES

### 1. Background

Lift openings are not acceptable within the stair enclosure for factory buildings which are constructed and occupied from 24 November 2013 and prior to 11 February 2021. This non-conformity is directly related to life safety and shall be remediated with proper engineering alternatives. This supplementary paper provides the technical specification with implementation guidance on elevator or lift shaft openings within exit enclosures.

### 2. Standard Requirement

Openings into an exit enclosure other than unprotected exterior walls shall be limited to those necessary for exit access to the enclosure. For building construction from 24 November 2013 and prior to 11 February 2021; elevators shall not directly open into an exit enclosure.

### 3. Implementation Guidance

Buildings which are constructed from 24 November 2013 and prior to 11 February 2021; elevators shall not directly open into an exit enclosure or meet the requirements for opening protectives given below-

- A. Cargo/ passenger lifts within the fire rated exit enclosures will be treated with certified fire rated opening protectives complying ASTM E119 or UL 263 or similar approved standard.
- B. Door assemblies shall conform to NFPA 252, BS 476 Part 22, EN 1634-1, EN 81- 58: 2003, GB 12955-2008, or IS 3614 Part II or similar approved standard.
- C. Fire barriers shall be classified as 1, 2 or 3 hours fire resistive rated construction. Fire rating of lift shaft enclosure shall be identified in accordance with the number of storeys of the building.
- D. Openings in fire resistance rated barrier shall be protected in accordance with below arrangement.
  - 1) 3 hours fire barriers protected with 3 hours fire protective opening assemblies.
  - 2) 2 hours fire barriers protected with 1.5 hours fire protective opening assemblies.
  - 3) 1 hour fire barriers protected with ¾ hour fire protective opening assemblies.
  - 4) 1 hour exit enclosures and vertical shafts protected with 1 hour fire protective opening assemblies.
- E. There is a variety of opening protective types i.e., fire rated lift landing doors, fire doors with vestibules, fire rated curtain combination for both heat & smoke control with credible integration mechanism with automatic fire alarm & detection system. The fire rated curtains may be accepted satisfying the following conditions:



- 1) Curtains are being installed in such a location that does not affect the flow of continuation towards the emergency path of egress.
- 2) Comply with both heat & smoke controls.
- 3) Integration mechanism with Fire Alarm Control Panel (FACP) & lift landing doors are well enough to ensure proper notification & unobstructed evacuation.

#### 4. References

RSC Technical Guidelines (Standard)  
 Accord Building Standard V1.1  
 ASTM E119 or UL 263  
 NFPA 72 National Fire Alarm and Signaling Code

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