

Fire Evacuation Elevators

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Lives matter, and we prioritize them above all. Our Fire Evacuation Elevators are meticulously designed to ensure your safe exit during emergencies.

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01 Importance of Fire Evacuation Lifts

- **1. Facilitating Rapid Evacuation:** Fire evacuation lifts ensure the swift and safe evacuation of people of all ages and abilities during emergencies.
- 2. Critical Support for Firefighters: These lifts provide a safe and efficient way for firefighters to reach fire-affected floors in the shortest possible time, enhancing rescue and containment efforts.
- **3. Uninterrupted Functionality:** Equipped with four power sources—Primary, DG (Diesel Generator), Automatic Rescue Device (ARD), and External DG—these lifts remain operational even under severe fire conditions.

4. Regulatory Mandates:

- Recognizing the frequency of fire incidents in Mumbai, the Chief Fire Officer (CFO) issued a circular, approved by the Honorable Municipal Commissioner in February 2018, mandating the installation of fire evacuation lifts to save lives.
- o The Unified Development Control and Promotion Regulations (UDCPR-2020) also mandate the inclusion of fire evacuation lifts in high-rise buildings.

5. Superior Safety Compared to Alternatives:

- o No other evacuation devices offer the same level of safety and efficiency in high-rise buildings during fire emergencies.
- o Devices like lowering systems and ascending-descending devices lack standardized guidelines and practical feasibility for universal use.
- o Evacuation chutes face limitations in accommodating people of all ages, individuals with physical challenges, and other complexities during emergencies.

Fire evacuation lifts stand as the most reliable and inclusive solution for ensuring the safety of occupants in high-rise buildings during fire emergencies.



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Key Features and Benefits of Fire Evacuation Lifts

1. Compliance with CFO Requirements: The fire evacuation lift meets all the criteria outlined by the Chief Fire Officer (CFO), ensuring regulatory adherence and safety.

2. Fire Resistance:

- o The lift car is lined with ceramic wool, providing heat resistance and a 2-hour fire rating.
- o This feature ensures the safety of occupants and the lift's structural integrity during fire emergencies.

3. Emergency Rescue Design:

- o An emergency trap door allows for the safe rescue of trapped passengers.
- o A vision panel enables occupants to assess smoke and fire conditions on the floor before stepping out, avoiding potential hazards.
- **4. Risk-Free Evacuation:** Occupants can be evacuated without entering risk areas, minimizing exposure to danger.
- **5. Seamless Communication:** Occupants inside the lift can communicate with the operator or firefighters, ensuring timely assistance during emergencies.

6. Uninterrupted Power Supply:

- o Equipped with multiple power sources, the lift can operate even during power failures. These include:
 - 1. Primary power
 - 2. Diesel Generator (DG)
 - 3. Automatic Rescue Device (ARD)
 - 4. External DG for operation in critical scenarios where all internal power sources fail.
- o Instant battery power activation (within 10 Seconds) ensures a jerk-free experience during power transitions.
- **7. Life-Saving Apparatus:** Specifically designed to protect lives in fire emergencies, the lift is a critical safety tool for high-rise buildings.
- **8. IoT Integration:** Real-time data connectivity with users, Original Equipment Manufacturers (OEMs), and the fire brigade enhances monitoring and response efficiency.

9. Advanced Technology:

- o Features a highly efficient gearless traction system, enabling high-speed performance.
- o Sirens alert occupants to fire emergencies and indicate the activation of firemen mode.

Fire evacuation lifts represent cutting-edge technology combined with lifesaving features, ensuring a safer and more efficient response during fire emergencies.



03 Fire Evacuation Lift Vs Fire Lift

Fire Evacuating Lifts

Designed as per Fire Lift Standards complying all norms of CFO & PWD Department of Lifts.

The lift car is insulated with ceramic wool, providing robust fire resistance and ensuring 2-hour fire protection to enhance occupant safety during emergencies.

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A trap door is installed on the roof of the lift car to facilitate emergency exit.

The landing and car doors are equipped with a 2-hour fire rated vision panels.



Fire Lifts

Fire Lifts are designed complying only PWD Department of Lifts norms.

Regular fire lifts lack insulation and do not offer protection against heat or fire exposure.



No such provision of Trap door in Fire Lifts.



No Vision panel is provided.



Fire Evacuating Lifts

Fire Lifts

No Intercom or regular intercom is provided.

Intercom is provided inbuilt on every floor. Communication can be made within Lift car and any floor.



In case of fire, Fire Evacuation Lifts are best to be used.





In case of fire these lifts must not be used.



Fire evacuation lifts are designed to ensure safe and efficient evacuation during emergencies, especially for individuals with mobility challenges. Unlike regular lifts, these are fire-rated, have independent power supplies, and are managed by trained personnel or automated systems. Always follow designated procedures and signage, and prioritize the lift for those who need it most. Regular maintenance and drills ensure they remain reliable when needed.



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05 Reference Standard

Description	Standard
The Bombay Lifts Rules 1958	CFO Guide lines for Firemen Evacuation Lift
	The Bombay Lifts Rules 1958
	The Maharashtra lifts, Escalators and Moving walks Act, 2017
	IS 14665, Electric Traction Lifts, Part-2-Code of practice for installation, operation and maintenance, section 1
	IS 14665, Electric Traction Lifts, Part-3-Safety rules, section 1
ElectricalSafety	EN60304-1
Oil Buffer	IS 14665 Part 4, Section-1
Guide Rails and Guide Shoes	IS 14665 Part 4, Section-2, ISO 7465:2007, En-81-20, En-81-50
Car frame, Car, Counterweight and Suspension	IS 14665 Part 4, Section 3
Safety Gears and Governors	IS 14665 Part 4, Section 4
Retiring Cam	IS 14665 Part 4, Section 5
Doors and Locking Devices and Contacts	IS 14665 Part 4, Section 6
Machines and Brakes	IS 14665 Part 4, Section 7
Wire Ropes	IS 14665 Part 4, Section 8
Controller and Operating Devices	IS 14665 Part 4, Section 9
2 hr fire rated panels	BS 476
@ hr. fire rated Glass	EN 13024

The **"Fire Evacuation Lift"** is designed to be housed within a separate core, ensuring enhanced safety. Each landing is connected to the common lobby through a smoke-check lobby, secured by a fire-resistant door with a 2-hour fire rating. This setup effectively prevents the spread of smoke and fire, ensuring a safe evacuation route





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