

Elevator Safety Is Everyone's Job

Anyone who has been on a stalled elevator even for a moment can attest to an uneasy feeling, followed perhaps by panic. For the relatively few who have been trapped in an elevator for any length of time, there was likely a sense of overwhelming dread.

Elevators, actually, are one of the safest forms of mechanized transportation. The 660,000 elevators in service in the United States and 5.5 million units worldwide normally function without incident. Elevators are designed, installed, tested, maintained and inspected according to the stringent guidelines of the American Society of Mechanical Engineers (ASME International) and other dedicated groups.

Problems with elevators can and do occur and a more common one is an electric power outage in a building causing the elevator car to stall between floors. In this situation, passengers are advised to ring the alarm button, which alerts building personnel to the problem. Passengers then should wait for instructions, stay clear of the elevator door and, above all, remain calm.

“Ninety percent of cases in which an elevator stalls are not life-threatening,” notes R. Dennis Chandler of Continental Hoisting Consultants, Inc., who teaches elevator safety and evacuation procedure to property managers, engineers, and fire departments.

Chandler, who bases his instruction on the ASME A17.4 Guide for the Evacuation of Passengers from Elevators, advises rescue personnel to communicate with stranded passengers to reassure their safety and inform them steps are being taken to evacuate them from the elevator car. If the building has an emergency power source equipped to operate the elevators, the rescue team brings the stalled elevators to the landing on the main floor, where the passengers exit. Otherwise, the first course of action for evacuation personnel is to turn off the mainline disconnect switch, which renders the elevator immovable.

With an elevator immobile between floors, emergency rescuers resort to a set of prescribed procedures for reaching passengers and bringing them to safety, depending on specific conditions. Rescue personnel are taught methods for opening hoistway doors and positioning ladders among other tasks.

Accidents on elevators, like emergency situations, are rare. According to Chandler, about 35 percent of accidents on elevators result from trips and falls. Riders are advised to look down when entering and exiting an elevator to ascertain that the car stops level with the floor landing. Passengers are also advised to keep hands off the elevator doors. Other common sense for elevator safety is to avoid suspicious persons and situations and avoid elevators altogether in fires, in which cases building occupants should use steps.

Elevators are amazing workhorses, conveying billions of people each day, and remarkable examples of engineering performance and reliability. Safety always has been a foremost concern at ASME, the elevator manufacturing companies, and the numerous other organizations and agencies that play a role in the continuing health, vitality and integrity of the industry.

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