

ELEVATOR and ESCALATOR SAFETY



Elevators and escalators are one of the safest modes of transportation in the world. Virtually all multi level buildings are equipped with at least one of these transport modes. But even though they have several built in safety features and are mandated to be inspected yearly by Cal-OSHA, accidents still happen. On average 17,000 people are injured in elevator/escalator accidents in the United States alone. On average 30 are killed.

The most frequent cause of an injury to elevator passengers is an elevator door closing on a body part. 75% of escalator injuries were caused by falls, while 20% were caused by getting stuck at the bottom or

on top of the escalator – usually due to footwear or clothing getting entangled. There are more severe accidents with escalators than elevators. Most of the accidents on escalators are caused by user behavior and not following safety guidelines. We often see children playing on or near escalators and walkways without the supervision of their parents, despite clear warnings. Children trolleys and prams are also often seen on escalators, which is absolutely unsafe.

There are many beliefs about lift safety that are greatly misconceived. For example, some people fear that elevator ropes may snap, plummeting them to the ground. However, this is only known to have happened once in the time of the modern elevator, in the Empire State Building, after a small plane collided with the elevator cable in 1941. Even in this instance, the emergency safety gear (an automatically activated safety brake gripping the guide rails) was able to prevent the lift car from freefalling. Here are some elevator and escalator safety tips that could help you in an emergency.

Elevator Safety Tips

When waiting for elevators:

- *Know your destination.*
- *Push the elevator call button once for the direction you want to go in.*
- *Look and listen for the signal announcing your car's arrival.*
- *Be aware of health conditions that could contribute to falls or accidents.*
- *Stand clear of the elevator doors and stand aside for exiting passengers.*
- *If the arriving car is full, wait for the next car.*
- *Don't attempt to maneuver in or stop closing doors, wait for the next car.*
- *In the event of a fire or other situation that could lead to a disruption in electrical services, take the stairs.*

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When boarding elevators:

- *Watch your step – the elevator car may not be perfectly level with the floor.*
- *Stand clear of the doors – keep clothes and carry-ons away from the opening.*
- *Hold children and pets firmly.*
- *Passengers nearest to the doors should move first when the car arrives.*
- *Push and hold the DOOR OPEN button if doors need to be held open, or ask someone to push the button for you.*
- *Never try to stop a closing door, wait for the next car.*
- *Once on board, quickly press the button for your floor and move to the back of the car to make room for other passengers. When riding elevators:*
- *Hold the handrail, if available.*
- *Stand next to the elevator wall, if available.*
- *Pay attention to the floor indications.*
- *If the doors do not open when the elevator stops, push the DOOR OPEN button.*



When exiting elevators:

- *Exit immediately at your floor. Do not wait for others behind you..*
- *Do not push the people in front of you when exiting.*
- *Watch your step – the elevator car may not be perfectly level with the floor.*

In the event of an elevator emergency:

- *If the elevator should ever stop between floors, do not panic. There is plenty of air in the elevator.*
- *Never climb out of a stalled elevator.*
- *Use the ALARM or HELP button, the telephone or the intercom to call for assistance.*
- *Above all, wait for qualified help to arrive and never try to leave an elevator that has not stopped normally.*
- *Emergency lighting will come on in the event of a power failure.*



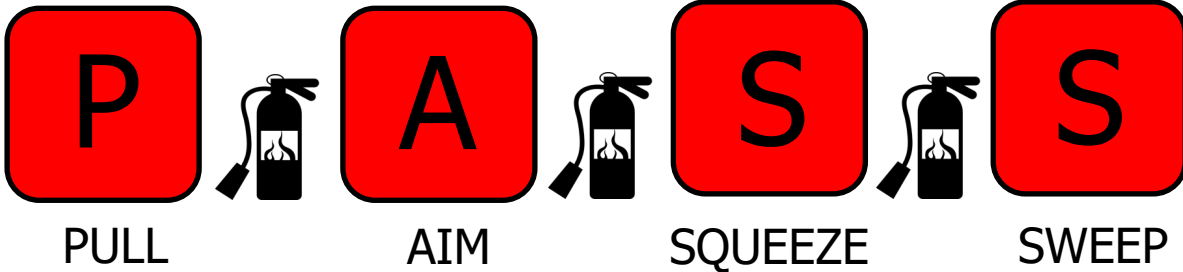
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What to Do if you are Stalled in an Elevator

1. Push the "Door Open" Button
 - If you are near the landing the door will open. You can slowly and carefully step out of the elevator. Be sure to watch your step as the elevator floor may, or may not, be level with the landing.
2. Remain Calm
 - If the door does not open, you are still safe. Do not try to exit the elevator. Wait for trained emergency personnel to arrive. Even if the air temperature feels warm, there is plenty of air circulating in the elevator and its hoist-way.
3. Press the Alarm or Help Button, and Use Any Available Communication Systems
 - There will be a "PHONE" or "HELP" button this will place a call to a party that is trained to take action (i.e. elevator company, alarm company, etc.). It will give the exact location of the building and elevator you are in. Trained emergency personnel will answer the call for service.
 - Some elevators have a two-way speaker system or telephone that will allow for communication between you and the building or rescue personnel.
4. Relax, and DO NOT Try to Extract Yourself from the Elevator
 - NEVER try to exit a stalled elevator car. It is extremely dangerous. ALWAYS wait for trained emergency personnel.
 - Your best course of action is to relax, get comfortable, and wait for professional assistance.
 - You may be inconvenienced but you are SAFE.

ESCALATOR TIPS:

- Watch the direction of the moving step and step on and off with extra care.
- Take care if you are wearing bifocals or similar eyewear.
- Hold children firmly with one arm or hold child's free hand.
- Hold small packages firmly in one hand, but always leave one hand available to hold the handrail.
- Grasp the handle as you step onto the moving step.
- Do not go in the opposite direction of the escalator.
- Do not take wheelchairs, electric scooters, strollers, hand carts, on the escalator.
- When riding escalators: Keep loose clothing clear of steps and sides.
- Wear closed-toed and hard-soled shoes
- Stand clear of the sides of the escalator.
- Face forward and keep firm grip on the handrail.
- Reposition your hand slowly if the handrail moves ahead or behind the steps.
- Don't climb onto or ride the handrail.
- Do not let children sit on steps or stand too close to sides.
- When exiting escalators: Don't hesitate and step off promptly.
- Make sure to step over the comb fingers; don't let your feet slide off the end of the escalator.
- Immediately move clear of the escalator exit area; don't stop to talk or look around since other passengers may be behind you.



PULL: Place a finger inside the safety pin loop and pull the pin **FIRMLY!**



AIM: Remove the nozzle and point it at the base of the fire

SQUEEZE:

Place your hand on the bottom of the handle, leaving your thumb free to depress the top lever. Pressing down will activate the extinguisher.

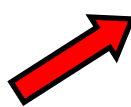


SWEEP: Activate the extinguisher and make a sweeping motion at the base of the fire. Try to use short bursts so that you don't waste the fire retardant.



ALWAYS REMEMBER:

Don't get caught by the fire, have your back to the exit and if it grows rapidly **GET OUT!**. If you don't believe you can perform the task, don't deploy the extinguisher. Only use the an extinguisher on the type of fire it is intended for.



Class of Fire	Type of Fire	Type of Extinguisher	Extinguisher Identification	Symbol
A	Ordinary combustibles: wood, paper, rubber, fabrics, and many plastics	Water, Dry Powder, Halon		
B	Flammable Liquids and Gases: gasoline, oils, paint, lacquer, and tar	Carbon Dioxide, Dry Powder Halon		
C	Fires involving Live Electrical Equipment	Carbon Dioxide, Dry Powder Halon		
D	Combustible Metals or Combustible Metal Alloys	Special Agents		No Picture Symbol
K	Fires in Cooking Appliances that involve Combustible Cooking Media: Vegetable or Animal Oils and Fats			

LADDER SAFETY

Ladders are tools. Many of the basic safety rules that apply to most tools also apply to the safe use of a ladder:

- *If you feel tired or dizzy, or are prone to losing your balance, stay off the ladder.*
- *Do not use ladders in high winds or storms.*
- *Wear clean slip-resistant shoes. Shoes with leather soles are not appropriate for ladder use since they are not considered sufficiently slip resistant.*
- *Before using a ladder, inspect it to confirm it is in good working condition.*
- *Ladders with loose or missing parts must be rejected. Rickety ladders that sway or lean to the side must be rejected.*
- *The ladder you select must be the right size for the job.*
- *The Duty Rating of the ladder must be greater than the total weight of the climber, tools, supplies, and other objects placed upon the ladder. The length of the ladder must be sufficient so that the climber does not have to stand on the top rung or step.*
- *When the ladder is set-up for use, it must be placed on firm level ground and without any type of slippery condition present at either the base or top support points.*
- *Only one person at a time is permitted on a ladder unless the ladder is specifically designed for more than one climber (such as a Trestle Ladder).*
- *Ladders must not be placed in front of closed doors that can open toward the ladder. The door must be blocked open, locked, or guarded.*
- *Read the safety information labels on the ladder.*
- *The on-product safety information is specific to the particular type of ladder on which it appears. The climber is not considered qualified or adequately trained to use the ladder until familiar with this information.*

When climbing a ladder, it is safest to utilize Three Points-of-Contact because it minimizes the chances of slipping and falling from the ladder. At all times during ascent, descent, and working, the climber must face the ladder and have two hands and one foot, or two feet and one hand in contact with the ladder steps, rungs and/or side rails. In this way, the climber is not likely to become unstable in the event one limb slips during the climb. It is important to note that the climber must not carry any objects in either hand that can interfere with a firm grip on the ladder. Otherwise, Three Points-of-Contact with the ladder cannot be adequately maintained and the chance of falling is increased in the event a hand or foot slip occurs.

- *Although the user's weight or size typically does not increase the likelihood of a fall, improper climbing posture creates user clumsiness and may cause falls. Reduce your chances of falling during the climb by:*
- *Wearing slip-resistant shoes with heavy soles to prevent foot fatigue;*
- *Cleaning the soles of shoes to maximize traction;*
- *Using towlines, a tool belt or an assistant to convey materials so that the climbers hands are free when climbing;*
- *Climbing slowly and deliberately while avoiding sudden movements;*
- *Never attempting to move a ladder while standing on it;*
- *Keeping the center of your belt buckle (stomach) between the ladder side rails when climbing and while working. Do not overreach or lean while working so that you don't fall off the ladder sideways or pull the ladder over sideways while standing on it.*



POWERED INDUSTRIAL TRUCKS



Powered industrial trucks, commonly called forklifts or lift trucks, are used in many industries, primarily to move materials. They can also be used to raise, lower, or remove large objects or a number of smaller objects on pallets or in boxes, crates, or other containers. Powered industrial trucks can either be ridden by the operator or controlled by a walking operator. Over-the-road haulage trucks and earth-moving equipment that has been modified to accept forks are not considered powered industrial trucks.

What are the hazards associated with operating powered industrial trucks?

There are many types of powered industrial trucks. Each type presents different operating hazards. For example, a sit-down, counterbalanced high-lift rider truck is more likely than a motorized hand truck to be involved in a falling load accident because the sit-down rider truck can lift a load much higher than a hand truck. Workplace type and conditions are also factors in hazards commonly associated with powered industrial trucks. For example, retail establishments often face greater challenges than other worksites in maintaining pedestrian safety. Beyond that, many workers can also be injured when (1) lift trucks are inadvertently driven off loading docks; (2) lifts fall between docks and an unsecured trailer; (3) they are struck by a lift truck; or (4) they fall while on elevated pallets and tines. It is a violation of Federal law for anyone UNDER 18 years of age to operate a forklift or for anyone OVER 18 years of age who is not properly trained and certified to do so.

What can be done to reduce the hazards related to powered industrial trucks?

Determining the best way to protect workers from injury largely depends on the type of truck operated and the worksite where it is being used. Employers must ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified in 29 CFR 1910.178(l) (1). Safely operating a forklift requires preparation, anticipation and careful attention in order to maintain control of the vehicle at all times. Recommended practices associated with safe operations include:

Pre-Operation

- *Inspect and maintain the forklift before use.*

Traveling and Maneuvering

- *Use good operating practices to prevent accidents.*

Load Handling

- *Identify the hazards and recommended practices for each step in the load handling process (including an in-depth discussion on Load Composition).*



Most fatalities occur when a worker is crushed by a forklift that has overturned or fallen from a loading dock. NIOSH investigations of forklift-related deaths indicate that many workers and employers:

- *May not be aware of the risks of operating or working near forklifts*
- *Are not following the procedures set forth in the OSHA standards, consensus standards, or equipment manufacturer's guidelines.*