

KYLINES -- November/December 1997

Reprinted with permission from Skylines® magazine, published by the Building Owners and Managers Association (BOMA) International

GOING UP?

BE SURE TO HAVE A SAFE ESCALATOR/ELEVATOR RIDE

By Ray Lapierre

About 210 billion times a year, people in the United States and Canada ride the estimated 660,000 elevators and 33,000 escalators that move 325 million elevator passengers and 245 million escalators passengers daily. Excluding automobiles, that's more than the total of riders of any other form of transportation combined.

Building owners and managers have their work cut out when it comes to ensuring that those rides are uneventful. Proper installation and ongoing maintenance and inspection are a must, but that's not all. Managers also need to be sure that their employees, tenants and visitors know the proper riding procedures and how to recognize improper behavior. A proactive approach to safety education is a way of reducing exposure. The equipment, designed with safety in mind, has many built-in safety features. However, like any other piece of moving machinery, people must treat it with respect. The two most at-risk groups, according to a study commissioned by the elevator industry, are young children and seniors citizens. As a result, the majority of owner's attention should be directed toward these individuals.

SAFE USE OF ESCALATORS

Children pose a serious challenge for building owners. Small children should never ride alone. Young children do not always know to keep their feet away from the sides of the escalator, and a shoe could get pulled in. This can be avoided by ensuring that the child's feet are in the center of the step.

When children sit down on an escalator, loose clothing can get pulled into the moving steps. The machinery will continue to pull and tug, unless the child is freed from the clothing or the escalator is turned off.

Also, avoid maneuvering a cart, stroller or large packages on an escalator because this does not allow you to hold the handrail. In getting off, you could cause a backup that becomes unsafe to other riders.

Due to the results of aging (poor eyesight, less mobility and coordination, etc.), senior citizens are another group of riders needing special attention. Seniors and individuals with walkers, canes or wheelchairs should never ride the escalator. Instead, they should ride the elevator. Also, those who are unsteady on their feet, taking medicine or those who have an illness that affects eyesight, mobility or balance should be elevator-bound.

ESCALATOR SAFETY RULES

The best way to identify the safety tips for senior citizens and others is to separate the ride

into "before entering," "entering," "riding" and "exiting."

Before entering escalators:

- No canes, walkers or wheeled vehicles. No barefoot riding or loose shoelaces.
- Check the direction of the moving steps.

When entering escalators:

- Step on and off promptly. Take extra care if you are wearing bifocals.
- Hold children or small packages firmly with one hand, and grasp the handrail as you step promptly onto the moving step.

When riding escalators:

- Stand toward the middle of the step -- away from the sides -- and face forward.
- Keep loose clothing clear of steps and sides.
- Keep a firm grip on the handrail. Reposition your hand slowly if the handrail moves ahead or behind the steps,
- Don't rest your handbag or parcels on the handrail.
- Pay Attention. Don't window-shop while riding, and don't lean against the sides.

When exiting escalators:

- Don't hesitate -- step off promptly. Immediately move clear of the escalator exit area. Don't stop to talk or look around. Other passengers may be behind you.



ELEVATOR SAFETY RULES

When you approach the elevator:

- Stand aside for exiting passengers, and wait for the next car if the elevator is full.
- Don't try to stop a closing door with anything, including hands, feet, canes briefcases, etc. Wait for the next elevator.
- Take the stairs if there is a fire in the building.

When you enter and leave the elevator:

- Enter and exit carefully. Watch your step. Hold children's hands firmly.
- Stand clear of the doors. Keep clothes and carry-on items away from the opening.
- Push and hold the Door Open button if doors need to be held open, or ask someone to push the Door Open button for

you.

When riding on the elevator:

- Stand away from the doors and pay attention to the floor indications.
- If the doors are stuck, use the emergency call button (or phone, if available) and wait for trained professionals. Stay calm. Do not attempt to leave the car unless directed by trained personnel.

SAFE USE OF ELEVATORS

When passengers approach a closing elevator door, they should leave it alone and wait for the next elevator. Don't extend a hand or anything else to stop a closing door. Not all elevator doors will reopen, and your arm could get caught between two heavy sets of moving doors. Also, to avoid tripping, check the floor at the entrance to make sure that

the elevator is level.

It's important to post safety instructions and advise tenants of proper procedures. For example, if passengers become stuck in an elevator, advise them to stay calm. Show them how to use the emergency phone to call for help, and to follow the instruction of trained professionals (elevator or building maintenance, firemen or police). Passengers need to know that there is plenty of air in the elevator. Caution them never to climb out of an elevator. There have been cases where people have fallen down the shaft trying to climb out of an elevator.

HOW DO THEY WORK?

Escalators. Escalators consist of an endless chain of moving steps. Balustrades (or skirts) are mounted on either side of the steps, and an endless moving belt traveling on the top of each balustrade forms the handrail. Safety features include brakes that are automatically applied when the drive motor stops for any reason, and an automatic shut-off if the speed is too fast or slow. There are also emergency stop buttons located at the top and bottom of the stairways.

The most common myth about escalators is that they don't require much attention. In truth they are six-ton moving machines with more parts than a Swiss clock.

Many also believe that escalators can reach out and grab passengers. No part of an escalator can actually do this; however, passengers must be mindful of loose clothing, untied and long shoelaces, high heels, long hair or jewelry, etc. These items can easily be caught between the skirt panel and side of the step or in the combplate at the top and bottom of some escalators.

Elevators. An elevator consist of an enclosed cab (elevator car) fastened to one end of steel cables. The cables travel up and over a grooved drive wheel (sheave) and down to a counterweight of cast iron blocks that counterbalance the weight of the car. An electric motor supplies power to move both the car and counterweight guided between steel guide rails in an enclosed shaftway.

Many believe that elevators are held by only one rope. Actually, elevators are supported by multiple steel cables, which, individually, can support a fully loaded car. In fact, according to record, the only elevator fall, due to a complete cable system failure, occurred when the cables inside an elevator at the Empire State Building were severed by an airplane in the 1940s.

Some also believe that the hall doors will open when an elevator is not there. The truth is that the elevator car controls the opening of the hall doors. If the car is not at the landing, the hall doors can't open.

ELEVATOR ESCALATOR SAFETY FOUNDATION

The elevator industry recognized the need to educate the general public on safe riding practices to help avoid accidents. In 1989, leaders met to discuss funding a study of how the public could be



better informed. As a result, the Elevator Escalator Safety Council was formed. The foundation's mission is to educate the public on the safe and proper use of elevators, escalators and moving walks through informational programs.

In 1990, the *Safe-T Rider*© classroom program was developed for second graders. The foundation has also developed several other programs, including:

A Safe Ride for adults and senior citizens. This new program is dedicated to helping adults clearly understand the importance of properly using elevators and escalators. The program consists of a 12-minute video about elevators and escalators. Future brochures will be developed for the general public and for building owners and managers.

Safety Awareness Week. The foundation sponsors National Elevator Escalator Safety Awareness Week during the second full week in November to spread important safety messages and to celebrate the industry's contributions to quality of life. The foundation offers a comprehensive planning guide to interested companies that offers ideas on how to celebrate.

For more information, contact the Elevator Escalator Safety Foundation at P. O. Box 6273; Mobile, Ala. 36660-0273; phone: (888) RIDE SAFE; fax: (334) 479-7099; e-mail: eesf@earthlink.net. Or visit its Web site at <http://www.eesf.org>.

Ray Lapierre is the executive director of the Elevator Escalator Safety Foundation.