U.S. Fire Administration / National Fire Academy

## Coffee Break Training

## **Topic:** Fire Escape Stairs

**Learning objective:** The student shall be able to explain the fundamental requirements for fire escape stairs on existing buildings.

Fire escape stairs may provide an alternate means of egress for existing buildings where the construction of new interior or exterior stairs is impractical. Fire escape stairs are not permitted on new buildings.

Generally, fire escape stairs should be made from steel or other approved non-combustible material. They should be designed to support the dead load of the stair system plus a live load of at least 100 pounds per square foot (4788 Pa).

The number and arrangements of doors and windows opening onto the fire escape must be adequate to provide easy access, but not located so a fire impinges on the stairs or on persons escaping a building.

Access to a fire escape should not pass through an intervening room, and should be directly to a balcony, landing, or platform. These should be no higher than the floor or windowsill level, and may not be more than 8 inches (205 mm) below the floor level or 18 inches (455 mm) below the windowsill.



Openings near the fire escape should be protected with approved fire door or fire window assemblies having a minimum 45-minute fire-resistance rating. The distance and arrangement of opening protectives varies by the different codes.

The fire code official is authorized to require periodic load testing to assure the fire escape stairs maintain their structural integrity.

There are differences among the model building and fire code regulations for fire escape stairs, so the inspector always should refer to the locally-adopted code in his or her jurisdiction.

For additional information, refer to NFPA 1, Uniform Fire Code<sup>®</sup>, Chapter 14; International Fire Code<sup>®</sup>, Chapter 10; International Building Code<sup>®</sup>, Chapter 34; or NFPA 101<sup>®</sup>, Life Safety Code<sup>®</sup>, Chapter 7.

