



# Coffee Break Training - Fire Protection Series

## Building Construction: Refuse, Recycling and Laundry Chute Construction

No. FP-2014-42 October 21, 2014

**Learning Objective:** The student will be able to explain the fire safety construction requirements for refuse and linen chutes.

**T**all buildings provide a maintenance challenge for workers and tenants: moving trash, soiled linen, and other used or waste combustibles to where they can be discarded, cleaned or recycled. To reduce the amount of handling and increase convenience, refuse and linen chutes are often installed so that these materials can simply be dumped into a collection point.

Since refuse and linen chutes often communicate among numerous floor levels, they must be constructed of adequate fire resistance to prevent a fire in the chute or collection point (called the “termination” room) from spreading beyond the chute’s physical boundaries. (See Coffee Break Training FP-2009-32 for an explanation of the fire sprinkler requirements for refuse and linen chutes.)

For refuse, recycling and linen chute construction, current building codes require:

- The shaft enclosure for the chute may not be used for any other purpose, and it must have a two-hour fire resistance rating for shafts connecting four or more stories and a one-hour rating for shafts connecting fewer than four stories.
- Openings into the shaft must be protected with listed fire resistance-rated assemblies suitable for the hourly shaft rating (90 minutes for two-hour shafts, 60 minutes for one-hour shafts). Doors must be self- or automatic-closing upon the actuation of a smoke detector.
- Openings into chutes may not be located in corridors. Access openings must be located in rooms or compartments enclosed by not less than one-hour fire barriers or horizontal assemblies or both.
- Openings into the access rooms must be protected by self- or automatic-closing protectives that have a fire protection rating of not less than 45 minutes.
- Refuse, recycling and laundry chutes must terminate in an enclosed room separated from the remainder of the building by fire barriers or horizontal assemblies or both.
- Openings into the termination room must be protected by opening protectives that have a fire protection rating equal to the protection required for the shaft enclosure. Doors must be self- or automatic-closing upon the detection of smoke.
- Refuse chutes may not terminate in an incinerator room.

For more information, consider enrolling in the National Fire Academy (NFA) course “Fire Protection for the Built Environment” (R/N0135). Information and applications can be obtained at <http://apps.usfa.fema.gov/nfacourses/catalog/details/645>. The course is available at the NFA in Emmitsburg, Maryland, or through your state fire service training agency.



Refuse and linen chutes must be constructed to prevent the spread of fire products, including fire-resistive opening protectives, as illustrated here from an older version of a building code. Openings into corridors are not permitted in current codes.



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