Evacuation of Mobility Impaired Students

As a life-safety feature, many elevators are required to be automatically recalled to the ground floor and remain unavailable when fire conditions are detected within an elevator lobby, hoistway or equipment room. Because of this, the potential exists for mobility impaired occupants to be located on floor levels where the only available evacuation route would require ascending or descending stairs. This document provides guidance and reference materials for schools to consider when developing fire safety and evacuation plans for the mobility impaired.

Emergency evacuation plan development

The National Fire Protection Association (NFPA) has published two documents that schools may find helpful when developing emergency evacuation plans.

- Emergency Evacuation Planning Guide for people with disabilities
- Personal Emergency Evacuation Planning Tool for students with disabilities

Emergency evacuation plans should be developed with input from:

- School officials.
- The local fire chief and/or fire code official.
- The school's assigned State Fire Marshal Division (SFMD) school inspector (where applicable).
- The county's emergency manager.
- The student's parent(s) or guardian(s).

Staging strategies

The NFPA Emergency Evacuation Planning Guide recommends school officials develop a plan designating one or more refuge areas where occupants can stage and await evacuation assistance by trained professionals.

When a temporary staging strategy is employed, the emergency plan must include an assigned staff member whose duty is to meet with the first-responding fire department unit and communicate essential information such as whether evacuation assistance is necessary, the number of occupants needing rescue, staging locations, etc.

Schools will also need to develop a backup plan for instances where immediate evacuation is necessary due to life-threatening conditions, and when trained rescue personnel are not immediately available. A backup plan may include the use of evacuation chairs, slings, or similar devices, along with trained staff to assist with the evacuation.

Created August 2017

Recommended staging locations include (in order of priority):

- A horizontal exit or fire area separation.
- An area of refuge complying with the State Building Code.
- An exit stairway enclosure landing.
- An approved rescue area.
    - Rescue area recommendations for sprinklered buildings:
        - Designed to resist the passage of smoke.
        - Closeable openings and full height room partitions.
        - An available exterior window for emergency rescue (openable preferred).
        - Located as close as possible to a stairway enclosure.
        - Reliable method of two-way communication.
        - A signaling device or sign to indicate occupants needing assistance.
        - Approved room labeling – “refuge area” or “rescue area.”
    - Rescue area recommendations for non-sprinklered buildings:
        - Room separation via one-hour smoke barrier construction.
        - An available exterior window for emergency rescue (openable preferred).
        - Located as close as possible to a stairway enclosure.
        - Reliable method of two-way communication.
        - Signaling device/sign to indicate occupants needing assistance.
        - Approved room labeling – “refuge area” or “rescue area.”

Elevator use during a fire emergency

It should be noted that NFPA does not recommend the use of elevators during a fire emergency, although the Emergency Evacuation Planning Guide does state that “when elevation differences are involved, an elevator or other evacuation device may be used.” However, it’s recommended that elevator evacuation only be considered for students where assisted stairway evacuation could cause injury due to health conditions.

School districts considering elevator use should make this decision with input from the student’s parents or guardians, local fire officials, and the school’s assigned SFMD school inspector (where applicable).

An important consideration is that many elevators will be automatically recalled to the ground floor and rendered unusable when an elevator-assigned heat or smoke detector activates. This is a life-safety feature intended to prevent occupants from being sent to the fire-floor or becoming trapped in the elevator during a fire emergency. This feature also allows the fire department to control the elevator for fire suppression and rescue operations.

Since elevators may not always be available, it's necessary for schools to develop a backup evacuation plan for cases when the elevator has gone into recall mode and is rendered unusable.

When school officials, parents/guardians, and local fire officials determine that elevator evacuation is appropriate, the following is recommended at a minimum:

- The elevator is equipped with compliant Phase I and II recall and emergency operations.
    - If the elevator is not available due to recall, the students will move to an approved staging area to await evacuation assistance.
- There is no shunt-trip system or sprinkler protection within the elevator shaft or equipment room.
- An approved plan to:
    - Confirm there is no sprinkler water-flow threatening the elevator shaft or mechanical room via:
        - Fire alarm control panel or annunciator, and
        - Visual confirmation
    - Confirm that the elevator landing at the level of exit discharge, and at all intervening levels, is free from smoke and fire.
        - This will require a reliable means of communication between assigned staff to verify conditions.

Written emergency plans, training and practice drills

Fire safety and evacuation plans for mobility impaired students must be maintained in written format. Those involved in the plan's implementation must receive annual training (at a minimum), and plans must be practiced in the form of fire evacuation drills at least five times per school year. For questions or additional information regarding this document, please email us at fire.code@state.mn.us.