

U.S. Fire Administration / National Fire Academy

Warning: Hot Coffee!**Topic: Fire Door Inspections**

Learning objective: The student shall be able to identify components of a fire door inspection and test.

Fire doors, or “opening protectives,” are an essential component in maintaining the integrity of fire-resistive barriers that have openings. Investigators have found that several of the required overhead fire doors installed in the Super Sofa Store failed to operate during the June 18 fire in Charleston, SC where nine firefighters died.

Fire codes require that fire door assemblies are inspected and tested not less than once each year. Functional tests — especially so-called “drop tests” of overhead coiling steel doors — should be conducted only by trained and competent persons who are familiar with the door assemblies being tested.

For fire door inspections, check that:

- The fire door assembly rating label is visible and legible. It may be located on the upper surface above the top rail.
- The door is not damaged or modified improperly, and the view window (if it has one) is secure and contains the correct glazing.
- Cables, chains, rollers, fusible links, and other moving parts are not painted or otherwise damaged. Fusible links that have been painted should be replaced.
- Cables and/or chains on sliding doors are in good condition and operate properly.
- There are no obstructions that may interfere with the door’s operation.
- The closer and latch work.
- Swinging door hinges are secure.
- The door coordinator for multiple doors works.
- Tin-clad or Kalamein doors have no dry rot.
- Hinges on swinging doors and rollers on sliding doors have been lubricated.
- Sash chains used in rolling fire door release assemblies are the manufacturer’s original equipment.
- Cables and chains in overhead coiling steel door assemblies do not make more than a 90-degree bend.

Written records of the inspection and functional tests — and any repairs that were made — should be signed by the inspecting agency and kept for the fire code official to review.

For additional information, refer to *International Fire Code*[®], Chapter 7; NFPA 1, *Uniform Fire Code*[™], Chapter 12; or NFPA 80, *Standard for Fire Doors and Other Opening Protectives*.

This fire door assembly failed during the Super Sofa Store June 18, 2007 fire. Photo courtesy NIST Building and Fire Research Laboratory.

