OPERATION AND MAINTENANCE PROCEDURES
CURTAIN TYPE FIRE DAMPERS
MODEL SERIES: (D)0100, 0200, 0300 AND (D)0500

Dampers are an essential part of the fire protection system in a building. The IFC requires fire dampers to be maintained and inspected in accordance with NFPA 80. NFPA 80 requires fire dampers be tested periodically to verify the operational abilities of each installed damper. For full up-to-date details and procedures on maintenance and inspection standards for Fire Dampers, please refer to the latest version of NFPA 80, Standard for Fire Doors and Other Opening Protectives.

Key NFPA 80 2025 Details:

20.1.5.1.1 Damper opening shall be kept clear of anything that could obstruct or interfere with the free operation of the damper.

20.3.2.1 Fire Dampers. After the installation of a damper is completed, an operational test shall be conducted.

20.3.2.1.5 The operational test shall verify that there is full and unobstructed access to the fire damper and all listed components.

20.3.2.1.7 The fusible link operating temperature shall be in accordance with NFPA 90A and UL 33.

20.3.3.5.1 Acceptance testing of dampers designed to close via a spring(s) or by gravity shall be conducted by removing the fusible link and confirming that the damper closes properly.

20.3.3.5.3 The fusible link shall be reinstalled or replaced.

20.3.4.1.1 Each damper shall be tested and inspected 1 year after acceptance testing.

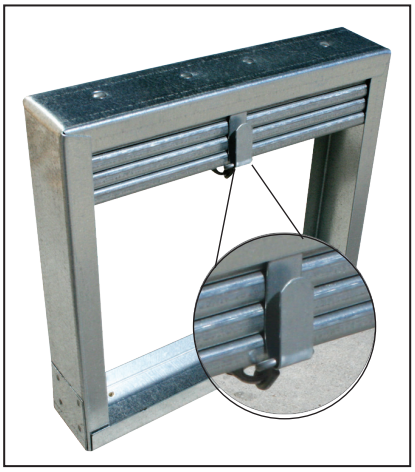
20.3.4.1.2 After the inspection and test required by 20.3.4.1.1, the test and inspection frequency for dampers shall comply with one of the following:

(1) Every 4 years

(2) Every 6 years, in buildings containing hospitals

CAUTION:

Some curtain fire dampers utilize high torque springs under tension; ensure HVAC fans are turned off. Testing spring assisted fire dampers under airflow conditions is **NOT RECOMMENDED** and may severely damage or destroy ductwork. Use protective eyewear or safety glasses. Keep hands out of the blade path, as this can cause serious injury. Keep any hard objects or tools out of the blade path as they can damage the blades when closing.



Detail 1

Periodic Inspection, Testing and Maintenance

Consult your local building code to verify whether there is a required maintenance and testing schedule. Most local jurisdictions reference NFPA 80 for Fire Dampers. Per NFPA 80, each damper should be tested and inspected 1 year after installation and then every 4 years, expect for hospitals, where the frequency is every 6 years.

1. Remove any obstructions, dirt, rust, corrosion, or other observed conditions that could impede proper damper operation.
2. Check closure springs (if applicable). If damaged or defective, repair or replace.

3a. Non-Spring Assisted Dampers

Bend metal straps away from damper frame so that they are straight. Remove fusible link and allow the blade package to drop and close naturally by the force of gravity. See Detail 1. Use caution, keeping fingers, hands, arms and tools out of the blade path.

3b. Dynamic Rated or Spring Assisted Dampers

AS SOON AS THE LINK HAS REMOVED, THE SPRING WILL FORCE THE BLADES TO CLOSE INSTANTANEOUSLY. THE BLADE PATH MUST BE KEPT CLEAR.

4. Ensure the damper closes completely, without assistance. If the damper design incorporates a locking ramp to hold the damper in the fully closed position, confirm that the ramp locks properly.

5. Clean damper blades and other moving parts if necessary. Use of a mild detergent or solvents is recommended for any cleaning required. Lubricate moving parts with a dry lubricant (such as T.F.E. Dry Lube). Never use a regular lubricating oil on dampers, as it will attract dirt and grit.
6. Lift the blade package to the top of the damper to reopen and replace the fusible link. Take care not to rack, deform or damage the blades when reopening.
7. Slide the replacement fusible link onto the metal straps. When replacing the fusible link, make sure it is the same temperature rating of the link you are replacing. If a different temperature, contact factory. Install fusible link so that the temperature rating is facing outward and is visible.
8. Bend the metal straps up to hold the fusible link in place.

Receiving, Storage, Preparation

Upon delivery, inspect shipping containers and contents closely. Note any damages on freight carrier's delivery receipt.

Store dampers in a cool, dry and safe location in an orderly manner away from construction site, warehouse traffic, other materials, etc. Cover with plastic sheeting to protect from excessive moisture, dirt and debris.

Inspect dampers prior to installation. Dampers must be cleaned per procedures outlined in this document prior to installation if dirt, rust or corrosion is observed.

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