

FIRE DAMPER INSTALLATION

ONTARIO BUILDING CODE

3.1.8.1. General Requirements

- (1) Any wall, partition or floor assembly required to be a fire separation shall,
 - (a) except as permitted by Sentence (2), be constructed as a continuous element, and
 - (b) as required in this Part, have a fire-resistance rating as specified. (See Appendix A.)
- (2) Openings in a fire separation shall be protected with closures, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.18. and Subsection 3.1.9. and 3.2.8.

3.1.8.7. Fire Dampers

- (1) Except as permitted by Article 3.1.8.8., a duct that connects penetrates an assembly required to be a fire separation shall be equipped with a fire damper.

3.1.8.9. Installation of Fire Dampers

- (1) A fire damper shall be arranged to close automatically upon the operation of a fusible link conforming to ULC-S505, "Standard for Fusible Links for Fire Protection Service", or other heat-actuated or smoke actuated device.
- (2) A heat-actuated device referred to in Sentence (1) shall

- (a) be located where it is readily affected by an abnormal rise of temperature in the duct, and
- (b) have a temperature rating approximately 30 °C (54° F) above the maximum temperature that would exist in the system either with the system in operation or shut down.
- (3) A fire damper shall be installed in the plane of the fire separation so as to stay in place should the duct be dislodged during a fire.
- (4) A fire damper tested in the vertical or horizontal position shall be installed in the manner in which it was tested.
- (5) A tightly fitted access door shall be installed for each fire damper to provide access for the inspection of the damper and the resetting of the release device.

OBJECTIVE

Fire dampers are intended to act as a barrier to fires and prevent the spread from one side of a fire separation to the other. For this purpose fire dampers must close automatically when the fusible link is melted by a fire in the ductwork. The fire damper must be installed on the same plane of the fire separation to ensure the continuity of the separation. All sides of the opening where the duct passes through the rated partition must be lined with gypsum board to ensure the continuity and integrity of the fire separation. Refer to the sketch below for detail.

