



Fire Damper Installation

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

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 in conformance with Article 3.1.8.3., and
 - (b) as required in this Part, have a fire-resistance rating as specified. (See Note A-3.1.8.1.(1)(b))
- (2) Openings in a fire separation shall be protected with closures, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.20. and Subsection 3.1.9. and 3.2.8. (See Note A-3.1.8.1.(2))

3.1.8.7. Location of Fire Dampers and Smoke Dampers

- (1) Except as permitted by Article 3.1.8.8., a fire damper having a fire-protection rating conforming to Sentence 3.1.8.4.(2) shall be installed in conformance with Article 3.1.8.10. in ducts or air-transfer openings that penetrate an assembly required to be a fire separation.

3.1.8.10. Installation of Fire Dampers

- (1) A fire damper shall be installed in the plane of the fire separation so as to stay in place should the duct become dislodged during a fire. (See Note A-3.1.8.10.(1))
- (2) A fire damper shall be arranged so as to close automatically upon the operation of a fusible link conforming to ULC-S505, "Standard for Fusible Links for Fire Protection Services", or other heat-actuated or smoke-actuated device.
- (3) A heat-actuated device referred to in Sentence (2) 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 above the maximum temperature that would exist in the system either with the system in operation or shut down.

(4) A fire damper tested in the vertical or horizontal position shall be installed in the position 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. (See Note A-3.1.8.10.(5))

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.

