



Fire Damper Facts and Definitions

Fire Damper: A device designed to impede the spread of fire through walls, floors and partitions. Its construction includes a galvanized steel frame and a fusible link, a heat sensitive device (usually set at 165° F). When the fusible link opens it releases the damper components to close. When the damper components close the damper will restrict the migration of fire. Fire damper products are listed with hourly ratings, see "Fire Rating" below. They are also listed as standard (static) dampers or dynamic dampers.

Standard Fire Damper: A fire damper that is listed and approved for use in duct systems where the HVAC system blower will be cycled off during an alarm (probably turned off by means of an automatic fire detector). Also referred to as a static fire damper.

Dynamic Fire Damper: A fire damper that is listed and approved for applications where the HVAC system blower may continue to run during an alarm. Dynamic fire dampers are rated to close against moving air measured in feet-per-minute (fpm) velocity.

Fire Damper Installation:

Fire dampers are required in the penetrations of fire-rated walls, floors and partitions. All fire dampers must be sleeved and all sleeves must be secured in place with retaining angles (and break away connections when attached to duct systems). See installation instructions for detailed information.

Fire Rating of 1.5 Hours: Fire dampers must have a rating that is at least 75% of the rating of the barrier so a 1.5 hour-rated damper can be installed in a fire barrier rated for 2 hours or less.

Fire Rating of 3 Hours: Fire dampers with a 3-hour rating can be installed in fire barriers rated at 4 hours or less.