



## Fire Dampers

What U.L. ratings does a Fire Damper require?

*Fire dampers carry the Standard for Fire Dampers U.L. 555 rating including the Static and Dynamic requirements.*

Where does this get installed?

Fire dampers are installed in rated fire barriers which could be either floor/ceiling assemblies or rated wall assemblies as determined in the U.L. Fire Resistance Directory based on completed, passed and U.L. Classified U.L. Fire testing.

Types:

- *Static Fire Dampers* – Designed for use in Static Systems, as their name implies, and are used in duct systems or penetrations of fire rated barriers that have been designed to have zero or near zero airflow when the damper is expected to cycle closed during a fire. There are both 1-½" and 3 hour rated versions of these dampers.
- *Dynamic Fire Dampers* – Designed for use in Dynamic Systems, as their name implies, and are used in duct systems or penetrations of fire rated barriers that have been designed to have pressurized

airflow when the damper is expected to cycle closed during a fire. There are both 1-½" and 3 hour rated versions of these dampers.

### Installation Questions/ Troubleshooting:

Each damper manufacturer requires installation instructions specific to how their dampers were tested and passed the Standard for Fire Dampers U.L. 555 requirements, and that information can be found in the manufacturers installation instructions for the specific model of damper.

The most common problem found in non-working installations is that the damper is installed in an "out of square" or racked condition. (See Installation Instructions.)

### Purpose:

Fire dampers are utilized to slow the spread of flames throughout a building where air ducts penetrate fire barriers, theoretically providing occupants additional time to vacate the building in the event of fire. Slowing the spread of flames also makes it easier for fire fighters to get the fire under control quickly, find trapped victims faster and get them to safety. A fire barrier is defined as a fire-resistant-rated vertical or horizontal assembly of material designed to restrict the spread of fire through which openings are protected.

### Ongoing Maintenance Requirements:

- Maintenance should include periodically removing any debris that builds up around the damper and surrounding areas so it does not get blown into the damper by airflow in the duct
- Manual cycling of the Fire Damper with a Fusible Link as contained within NFPA 80 and referenced by the IBC and other building codes

