

CFD4 CEILING FIRE DAMPER UL Classified Radiation Dampers

APPLICATION

UL Fire Rated Floor/Ceiling Assemblies and Roof/Ceiling Assemblies require specially tested and classified Ceiling Dampers (also called Ceiling Fire Dampers or Radiation Dampers) to provide fire and heat protection where HVAC components penetrate the ceiling membrane. **Standard 1½ and 3 hr. primary fire dampers DO NOT provide the necessary protection.**

Ruskin model CFD4 is UL Classified to provide protection to HVAC penetrations larger than 324 sq. in. and up to 576 sq. in. through UL fire rated assemblies with fire resistance ratings of 3 hours or less. For smaller penetrations, see model CFD(R)2 or CFD(R)3. The quantity and frequency of permissible HVAC ceiling penetrations are described in the UL Fire Resistance Directory.

STANDARD CONSTRUCTION

FRAME

24 gauge (.7) galvanized steel. Frame depths are as shown in following chart.

FRAME STYLE	B DIMENSION	FRAME DEPTH
Standard	All sizes	3 1/8" (79)
Extended	14" to 20" (356 to 508)	6 5/16" (160)
	21" to 24" (533 to 610)	8 1/8" (206)

BLADE

24 gauge (.7) galvanized steel, with UL Classified insulation as required.

FUSIBLE LINK

165°F (74°C) is standard. 212°F (100°C) is available at no additional cost.

MINIMUM SIZE (Inside Dimension)

14"w x 24"h (356 x 607) or 24"w x 14"h (607 x 356). For smaller sizes, see CFD2 and 3.

MAXIMUM UL CLASSIFIED SIZE

(Inside Dimension)

576 sq. in. Maximum A and B dimension 24" (610).

OPTIONS

- VA Volume Adjust to balance airflow.

WOOD TRUSS CEILING APPLICATION

The Ruskin CFD7T ceiling fire damper is the ceiling fire damper to use if the application is a wood truss ceiling. The CFD7T is UL approved for use in wood truss ceiling design L586 which is similar to wood truss ceiling designs like L528, L521, L534, L546, L550, etc.

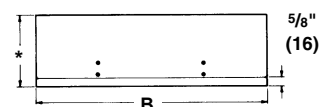
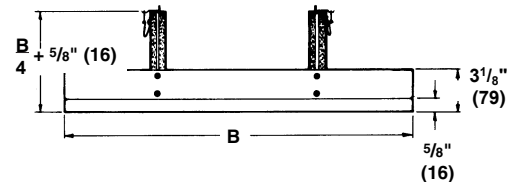
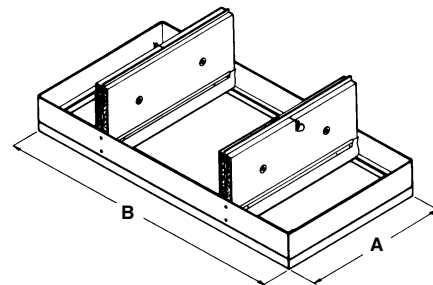
UL CLASSIFIED ULC LISTED

UL555C Listing R8039

Model CFD4 meets the requirements for fire/radiation dampers established by:

- **National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B, and 101.**
- **ICC International Building Codes**
- **CSFM California State Fire Marshal Listing (3225-0245:0101)**

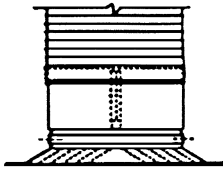
NOTE: Dimensions shown in parentheses () indicate millimeters.



Extended Frame

ORDERING INFORMATION

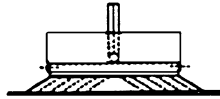
FLEX DUCT INSTALLATIONS



Flex Duct Installation

Order "actual size" with **extended** frame. Damper installs over diffuser neck; flex duct installs over damper.

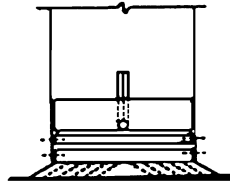
DUCTLESS INSTALLATIONS



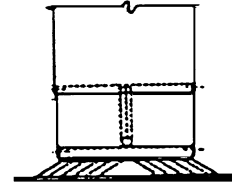
Ductless Installation

Order "actual size" with **standard** frame. Damper installs over diffuser neck.

STEEL DUCT DROP INSTALLATIONS



OR



Steel Duct Installation

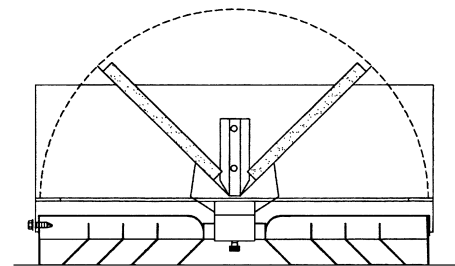
Order "deduct 1/4" (6)" with **standard** frame. Damper installs inside duct. Duct connects to diffuser neck.

Steel Duct Installation

Order "actual size" with **extended** frame. Damper installs over diffuser neck. Duct connects to damper.

UL Listed Fusible Volume Adjustment Option

The standard, fusible link can be replaced with a simple mechanism that permits adjustment of damper blades to balance airflow. A standard 3/16" (5) hex (Allen) wrench is used for adjustment. In fire conditions, the damper closes regardless of volume setting. This feature must be added to the damper at fabrication. 165°F or 212°F (74°C or 100°C) (specify temperature) fusible volume adjustment options are available. **Caution: Volume Adjust hangs below a rectangular damper 1 1/8" (29). Volume Adjust hangs below a round damper 3/8" (10).**



CFD4 with Fusible Volume Adjustment