

CFD(R)5

Ceiling Fire Dampers

UL Classified Radiation Dampers



APPLICATION

Underwriters Laboratories has classified hundreds of specific Floor/Ceiling (F/Cs) and Roof/ Ceiling (R/Cs) and established Fire Resistance Ratings for each design ranging from 1/2 to 5 hours. The majority of designs are rated at 2 or 3 hours. Most F/Cs and R/Cs allow ceiling penetrations for HVAC on a limited and specific basis, typically one 12" diameter hole every 100 sq. ft. This hole must be protected in a very specific manner. Most ceiling diffusers (particularly diffusers designed to "lay in" exposed T-bar grid systems) cannot be used as they require an opening larger than permitted in any F/C or R/C design. Ruskin CFD(R)5 solves this problem. It permits any manufacturer's lay-in style steel ceiling diffuser (subject to gauge and dimension limitations) to be installed in UL Classified F/C or R/C assembly with Fire Resistance Ratings of 3 hours or less.

WOOD TRUSS CEILING APPLICATION

The Ruskin CFD7, CFDR7T and CFD7T series ceiling fire dampers are designed for wood construction floor/ceiling or roof/ceiling assemblies. Standard CFD(R)5 does not have the same fire resistance rating for wood construction and should not be used.

STANDARD CONSTRUCTION

	Galvanized steel (in gauges required by UL listing R8039). See chart below for sizing details:			
	Damper Model	Frame Style	B Dimension or D Dimension	Frame Depth
Frame	CFD5	Standard	All sizes	3 1/8" (79)
		Extended	5" to 10" (127 to 254)	6 5/16" (160)
	11" to 14" (279 to 356)		8 1/8" (206)	
	15" to 24" (381 to 607)	11 1/8" (283)		
CFDR5	Standard	All sizes	3 5/8" (92)	
	Extended	5" to 15" (127 to 381)	6 3/4" (171)	
over 15" to 20" (to 508)		11 3/4" (298)		
Blade	Galvanized steel (in gauges required by UL listing R8039).			
Fusible Link	165°F (74°C) is standard. 212°F (100°C) is available at no additional cost.			
Thermal Insulation Blanket	Mineral wool is standard. 1/2" (13) Refractory Ceramic Fiber (RCF) is available at additional cost.			
Minimum Size (Inside Dimension)	Diffuser neck – 4"w x 5"h (102 x 127) or 5" (127) diameter.			
Maximum Size (Inside Dimension)	Ceiling opening – 24" x 24" (610 x 610). Diffuser neck – 20" (508) diameter or 18" x 18" (457 x 457).			
Diffuser Pan Limitation	24 gauge (.6) steel minimum.			

OPTIONS

VA Volume Adjust to balance airflow.

Model CFD(R)5 meets the requirements for fire/radiation dampers established by:

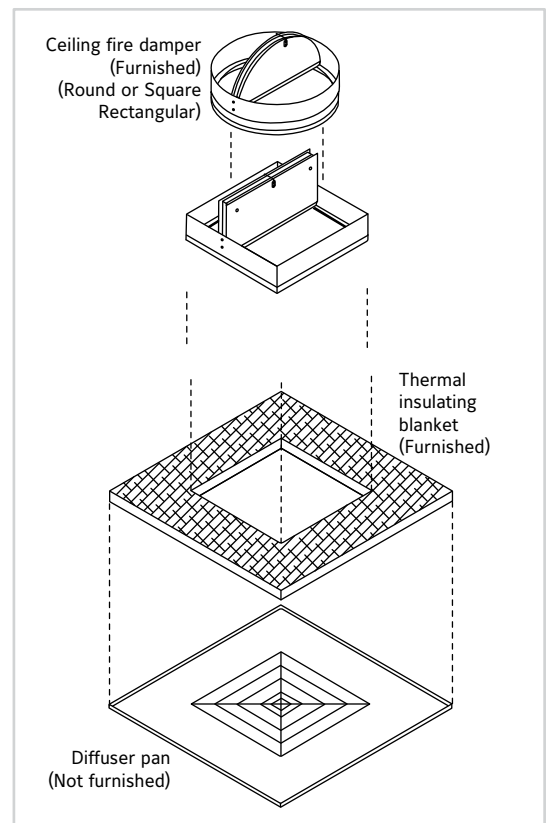
- ▶ National Fire Protection Association NFPA Standards 80, 90A, 92A, 92B, and 101.
- ▶ ICC International Building Codes.
- ▶ CSFM California State Fire Marshal Listing (3225-0245:0101)

UL CLASSIFIED & ULC LISTED

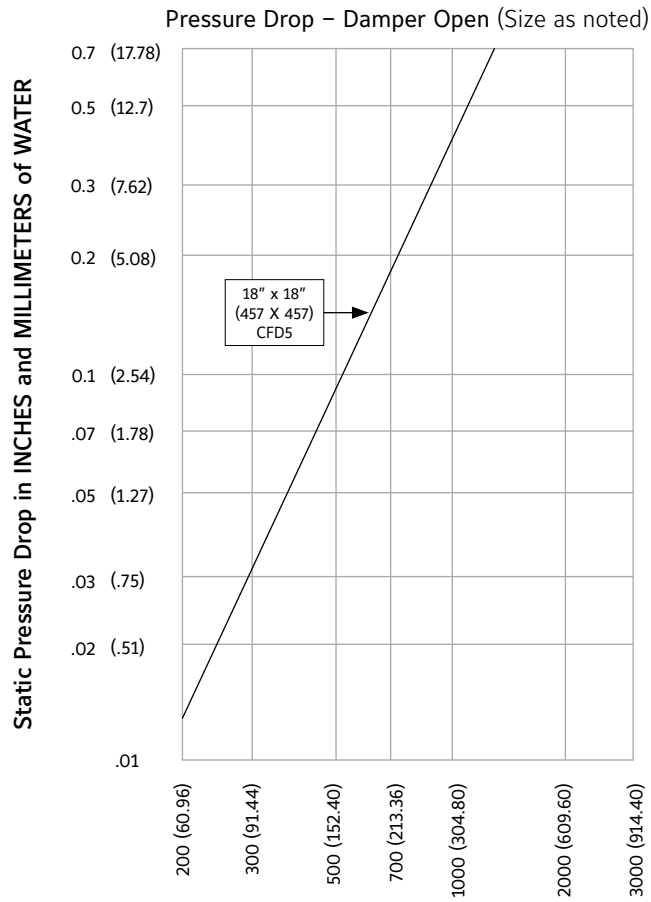
UL555C Classification R8039

NOTE:

- Dimensions in parentheses () indicate millimeters.



PERFORMANCE DATA



Air Velocity in **FEET** and **METERS** per minute through **FACE AREA**.
Tested per AMCA Std. 500, Fig. 5.2, ductwork upstream.

i LINKS TO IMPORTANT DOCUMENTS

Document Title

Installation instructions



3900 Doctor Greaves Road
Grandview, MO 64030
Website: www.ruskin.com
Phone: (816) 761-7476