

## FDR25 ROUND FIRE DAMPER

1½ HOUR UL555 RATING FOR USE IN DYNAMIC AND STATIC SYSTEMS

### APPLICATION

Ruskin FDR25 is a true round fire damper designed for use in fire rated walls and floors and is the perfect choice when using round duct.

The FDR25 is rated for maximum velocity of 2,000 fpm and 4" w.g. static pressure. The integral frame and unique "cinch plate" design provides a low cost, high performing damper. When the FDR25 reaches a job site nothing else is required in order to install the damper. The FDR25 now has UL approval for plate on one-side of metal stud or concrete walls.

### STANDARD CONSTRUCTION

#### FRAME/SLEEVE

20 gage (.9) galvanized steel, standard 14" (356) integral sleeve and retaining "cinch" plates.

#### BLADES

Single skin 14 gage (1.9) equivalent thickness galvanized steel.

#### BEARINGS

Stainless steel sleeve, pressed into frame.

#### AXLE

½" (13) diameter.

#### FUSE LINK

165°F (74°C) is standard. 212°F (100°C) or 285°F (141°C) available at additional cost.

#### DAMPER WEIGHT

Approximately 2 lbs. per inch "D" dimension.

### DAMPER SIZES

#### MINIMUM SIZE

6" (152) diameter.

#### MAXIMUM SIZE

Vertical/Horizontal – 24" (610) diameter.

### OPTION

- **FM Approvals** as Specification Tested Product.
- **Sleeve/Frame** of various lengths to insure field compliance with UL installation requirements.

### NOTES

1. Units furnished approximately 1/8" (3) smaller than given size.
2. Dimensions shown in parentheses ( ) indicate millimeters.

### MINIMUM SLEEVE LENGTH

Wall/Floor Thickness	Min. Sleeve Length
4" (102)	14" (356)
5" (127)	14" (356)
6" (152)	14" (356)
7" (178)	17" (432)
8" (203)	17" (432)
9" (229)	17" (432)
10" (254)	20" (508)
12" (305)	20" (508)
Over 12" (305) Thru 24" (609)	Add 1" (25) for every inch of wall/floor depth

Note: 36" (914) maximum sleeve length.

Model FDR25 meets the requirements for fire dampers established by:

- **National Fire Protection Association NFPA Standards** 90A, 92A, 92B and 101
- **ICC International Building Codes**
- **CSFM California State Fire Marshal Fire Damper Listing** (#3225-245:102)
- **New York City (BSA Listing #176-82-SM)**



SEE COMPLETE MARKING ON PRODUCT

UL555 Classification R5531

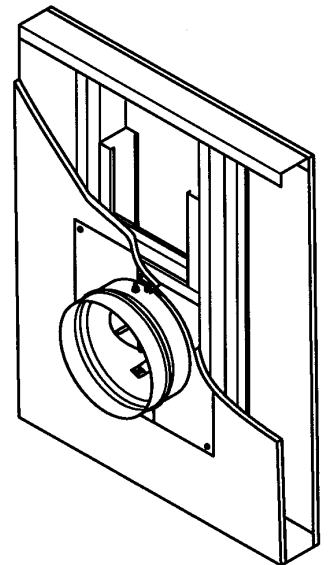
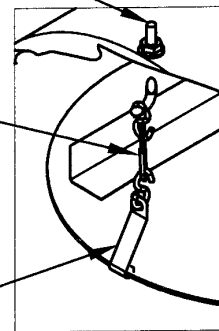
### FM Approvals

Specification Tested Product (Option)

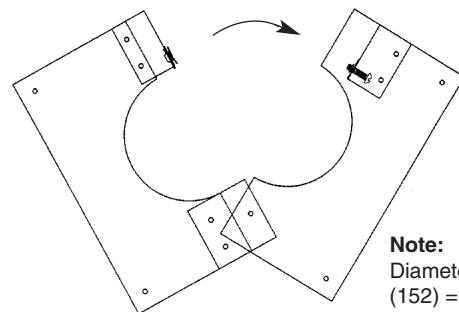
Adjustment Bolt

Fuse Link

Release Lever



### RETAINING "CINCH" PLATES

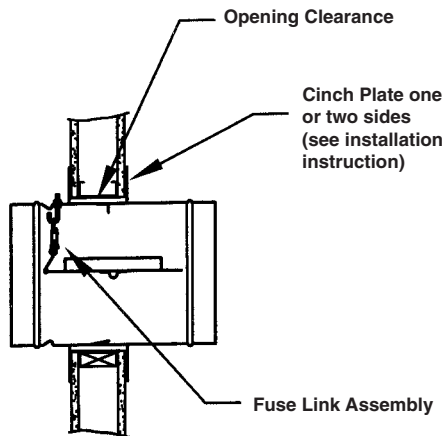


**Note:**  
Diameter + 6" (152) = plate size

REFER TO THE FDR25 INSTALLATION INSTRUCTIONS FOR COMPLETE INSTALLATION DETAILS.

## GENERAL INSTALLATION INFORMATION

### METAL/ WOOD/MASONRY WALL OR CONCRETE FLOOR INSTALLATION



A **square** opening in wood or metal stud walls or masonry walls and floors shall be a minimum of 1" (25) and a maximum of 2 1/2" (64) larger than the damper diameter. See wood stud and metal stud framing for fire dampers installation instructions supplement for complete framing details. A **round** opening in masonry walls or floors shall be a minimum of 1" (25) and a maximum of 2 1/2" (64) larger than the damper diameter.

Factory supplied retaining "cinch" plates hold the damper within the wall opening. The plates must overlap the opening a minimum of 1/2" (13). The plate fits snugly around the integral sleeve. The plates are fastened directly to the wall or floor.

## SUGGESTED SPECIFICATION

Furnish and install at locations shown on plans, or as described in schedules constructed and tested in accordance with UL Safety Standard 555 that meet or exceed the following specifications. Fire Dampers shall be produced in an ISO 9001 certified factory.

Damper shall be a minimum of 20 (.9) gage galvanized steel and blade shall be one piece 14 (1.9) gage minimum galvanized. Bearings shall be stainless steel sleeve pressed in the frame. Damper must have an integral sleeve and 20 (.9) gage retaining cinch plates for damper mounting.

Each round fire damper shall be 1 1/2 hour fire protection rating and shall be supplied with a 165°F (74°C) or 212°F (100°C) fusible link. Fire dampers shall be approved for vertical or horizontal mounting as required by the location shown and shall be installed using cinch plate installation in accordance with the damper manufacturer's installation

instructions. Submittal information shall include the fire protection, maximum velocity and pressure ratings and the manufacturer's UL installation instructions.

Each fire damper shall be labeled for use in dynamic or static systems. The damper shall be rated for dynamic closure at 2000 fpm (10.2 m/s) and 4" w.g. (1 kPa) static pressure and shall be tested and rated to close with airflow in either direction. Vertical and horizontal dampers installed in walls or floors.

### Optional FM Approvals Specification

Each fire damper shall be listed in Factory Mutual (FM) Approvals Specification Tested Product and labeled accordingly.

Fire dampers shall be Ruskin model FDR25.

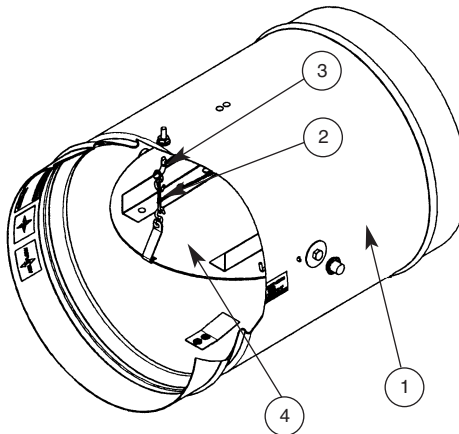
(Consult [www.ruskin.com](http://www.ruskin.com) for electronic version of this "Quick" spec as well as for complete 3-part CSI MasterFormat Specifications)

## FUSE LINK ADJUSTMENT

### To test or replace fuse link

1. Loosen the nuts on the J-bolt (do not remove nuts all together).
2. Remove fuse link and continue to hold blade.
3. Let go of blade and let it cycle shut.
4. Reset blade to open position and reattach fuse link.
5. Tighten down nuts on the J-Bolt.

ITEM	DESCRIPTION
1.	Round Fire Damper
2.	Fuse Link
3.	J-Bolt
4.	Damper Blade



**CAUTION**  
Damper assembly is under spring tension. Care should be taken to avoid bodily injury or damage to the damper assembly.

# RUSKIN®

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