

INSTALLATION INSTRUCTIONS MODEL DFSDR1 ROUND CORRIDOR DAMPER 1 HOUR CLASSIFIED RATING

APPLICATION

The DFSDR1 is a true round combination fire/smoke dampers designed for installation in the ceiling penetration of "tunnel type" corridors constructed from metal studs. The DFSDR1 may be installed on the neck of any diffuser, and is designed to fail close upon loss of power.

DAMPER SIZES

6" (152), 8" (203), 10" (254) and 12" (305) diameter.

GENERAL INSTALLATION

1. Ceiling Construction

The minimum ceiling partition construction will consist of metal studs on 24" (610) center to center. UL classified 5/8" (16) gypsum will be attached to the studs with 1 1/8" (29) drywall screws at 12" (305) centers.

2. Diffuser or Grille

The steel diffuser or grille, minimum 24 gage (.6) is supplied by others and is sized to overlap on the bottom edges of the ceiling partition opening a minimum of 3/4" (19) and fit snugly against the ceiling material. The damper must be fastened to the diffuser or grille using No. 8 (M4) screws, 3/16" (5) tubular steel rivets, or 1/4" (6) minimum tack welds spaced 6" (152) O.C. Use a minimum of three screws, rivets or welds equally spaced.

3. Mounting Angles

The mounting angles shall be 1 1/2" x 1 1/2" x 16 ga. (38 x 38 x 1.6) (min.) by 27 1/2" (674) long and shall be secured to the top of the ceiling rated partition with No. 8 x 1 5/8" (M4 x 41) screws, one placed at each end of the angle (minimum). Screws must penetrate metal studs. The damper frame will then be secured at the center to the mounting angles by No. 8 (M4) sheet metal screws, two per side.

4. Damper Sleeves

The 20 gage (.9) sleeve is integral to the damper and shall be equal to or heavier than the gage of the duct connecting as described in NFPA90A and as defined by the appropriate SMACNA duct construction standard.

5. Duct Connections

Round break-away connections must consist of a steel clamp, 16 gage (1.6) steel wire or 3 - #10 sheet metal screws spaced equally around the circumference of the duct. If flex duct is used the connections shall be a steel clamp, plastic strap or minimum 18 gage steel wire.

Note: When optional sealing of these joints is desired, the following sealants may be applied in accordance with the sealant manufacturer's instruction.

Hardcast Inc. – Iron Grip 601
Precision – PA2084T
Eco Duct Seal 44-52
Design Polymerics – DP 1010

6. Actuator Connection

Electric and pneumatic actuators are to be connected in accordance with wiring and piping diagrams developed in compliance with applicable codes, ordinances and regulations.

7. Installation and Maintenance

To ensure optimum operation and performance, the damper must be installed so it is round and free from racking. Do not compress or stretch the damper frame into the duct or opening. Lift or handle the damper using sleeve or frame. Do not lift damper using blades or actuators. Each fire/smoke dampers should be examined on a

regular basis to ensure it is not rusted or blocked. It is recommended the damper be operated (the actuator cycled) at least once every 6 months. Care should be exercised to ensure that such tests are performed safely and do not cause system damage.

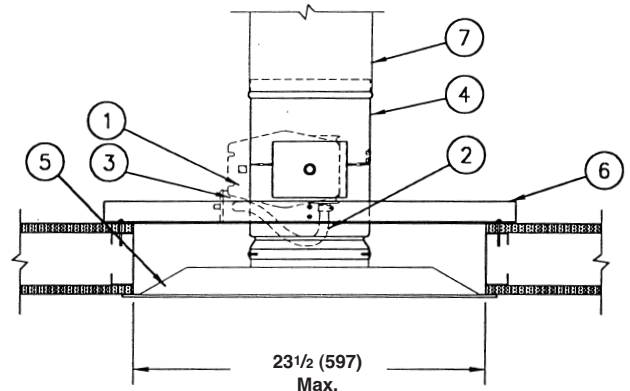
Dimensions shown in parentheses () indicate millimeters.

INSTALLATION SUPPLEMENTS

Refer to the appropriate Ruskin installation instruction supplements for special requirements.

- Motor Operated TS150 FireState System with High Limit Temperature Sensor
- Motor Operated EFL Electric Resettable Link
- PFL Pneumatic Fuse Link
- SP100 on Fire and Leakage Rated Dampers

ITEM	DESCRIPTION
1.	Actuator (location may vary)
2.	Flex Conduit
3.	TS150 FireStat, EFL (electric fuse link) or PFL (pneumatic fuse link) (location may vary)
4.	Integral Sleeve Damper Frame
5.	Steel Surface Mount Ceiling Diffuser (supplied by others)
6.	Mounting Angles and Fasteners
7.	Duct (Flexible or Hard)



California State Fire Marshal Listing No. 3225-0245:0101.

California State Fire Marshal Listing No. 3230-0245:0114.

FRAMING DETAIL

STEEL STUD CONSTRUCTION

