

3900 Dr. Greaves Rd.

Kansas City, MO 64030

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FSD60OW, FSD60-2OW, FSD60-VOW, FSD36OW, FSD35OW "OUT OF THE WALL AND FLOOR" THROUGH PENETRATION COMBINATION FIRE/SMOKE DAMPERS 11/2 HOUR UL555 RATED, UL555S LEAKAGE RATED

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STANDARD CONSTRUCTION

FRAME

16 (1.6) gage, galvanized, hat-shaped channel, structurally superior to 13 (2.3) gage channel frame.

BLADES

Airfoil or triple vee groove shaped (refer to specific model, e.g. FSD60 or FSD36) and approximately 6" (152) on center.

SLEEVE

20" x 20 gage (508 x 1.0) galvanized steel with 3/4" (19) flange on one end and factory installed thermal insulation on four sides.

SEALS

Blade edge is silicone material for smoke seals to $450^{\circ}F$ (232°C) and galvanized steel for flame seal to $1900^{\circ}F$ (1038°C). Jamb is stainless steel flexible metal compression type. The FSD35GA is not equipped with blade seals.

LINKAGE

Concealed in frame.

CONTROLLED CLOSURE DEVICE (HEAT-ACTUATED)

165°F (74°C) standard. 212°F (100°C) or 285°F (141°C) are also available at no additional cost.

DAMPER SIZES

MINIMUM SIZES

8"w x 7"h (203 x 178).

MAXIMUM UL CLASSIFIED SIZES

FSD60OW, FSD60-2OW – 32"w x 48"h (813 x 1219). FSD60-VOW – 48"w x 32"h (1219 x 813). FSD35OW, FSD36OW – 36"w x 48"h (914 x 1219).

OPTIONS

- "Out-of-Wall and Floor" Grille Access Damper (See FSDGA Spec Sheet)
- **TS150 FireStat** for reopenable operation in dynamic smoke management systems.
- DSD Duct Smoke Detector.
- SP100 Switch Package to remotely indicate damper blade position.
- **Sleeve** of various lengths and gages to insure field compliance with UL installation requirements.
- Access Door factory mounted in common sleeve to insure compliance with UL installation requirements.
- MCP control panels for test purposes or smoke management systems.

NOTES

- Damper furnished approximately ¹/4" (6) smaller than given opening dimensions.
- 2. Dimensions shown in parentheses () indicate millimeters

These dampers meets the requirements for fire, smoke and combination fire smoke dampers established by:

- National Fire Protection Association NFPA Standards 90A, 92A, 92B and 101
- BOCA National Building Codes
- ICBO Uniform Building Codes
- SBCCI Standard Building Codes
- ICC International Building Codes
- CSFM California State Fire Marshal (refer to standard spec sheet)
- New York City (refer to standard spec sheet)

UL CLASSIFIED

UL555 Listing R5531, UL555S Listing R10525

FEATURES

- The "Out of the Wall and Floor" Through Penetration Fire/Smoke dampers offer:
- · Easy installation from one side.
- EFL (Electric Fuse Link) or PFL (Pneumatic Fuse Link) heatactuated release devices permit controlled (rather than instantaneous) closure through the damper actuator. The EFL and PFL allow the damper to automatically reopen after a test, smoke detection or power failure conditions.
- · EFL is standard on dampers with electric actuators.
- · PFL is standard on dampers with pneumatic actuators.
- EFL's may be ordered on dampers with pneumatic actuators but require an additional EP switch (consult factory).





Wall/Floor Opening

The opening in the wall or floor shall be sized to accommodate the overall size of the damper, sleeve and insulation assembly. No expansion gap is required.

For proper installation, frame and finish the opening so it is 1/2" (13) larger in width and 1/2" (13) larger in height than the duct size.

For example a 24" w x 20"h (610 x 508) (deduct ¹/4" [6]) damper requires a wall opening of $24^{1}/2$ " w x $20^{1}/2$ "h (622 x 521). The damper/sleeve to duct connection remains 24" w x 20"h (610 x 508) (deduct ¹/4" [6]) and is the dimension used for grille considerations.

Sleeve Length

- 1. Ruskin standard sleeve length is 20" (508) based on a wall/floor depth of 4" (102).
- Add 1" (25) to sleeve length for every 1" (25) of additional wall/floor depth. For example, a 5" (127) wall requires a minimum sleeve length of 21" (533).
- 3. Consult Ruskin if sleeve lengths less than 20" (508) are required or if installations other than the one depicted are needed.

Actuators and Accessories

Actuators and accessories are mounted on opposite sides of the sleeve on dampers less than 10" (102) high with EFL's and less than 21" (533) high with TS150 or SP100.





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