

FSD36OW AND FSD35OW

"OUT OF THE WALL OR FLOOR" THROUGH PENETRATION COMBINATION FIRE AND SMOKE DAMPERS
1½ HOUR UL555 RATED, UL555S LEAKAGE CLASS 2, 3 RATED

APPLICATION

The FSD36OW (Leakage Class 2), and FSD35OW (Leakage Class 3) combination fire/smoke dampers are designed for vertical or horizontal installation. They can be installed up to 8" (203) outside the fire rated barrier in HVAC systems with airflow in either direction. They have been tested for operation to 2,000 fpm and 4" w.g.

STANDARD CONSTRUCTION

FRAME

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

BLADES

6" (152) wide galvanized steel. Triple vee groove shaped approximately 6" (152) on center.

SLEEVE

20 (1.0) gage galvanized steel factory installed with thermal insulation on four sides.

SEALS

Blade edge is silicone material for smoke seals to 450°F (232°C) and galvanized steel for flame seal to 1900°F (1038°C). Jamb is stainless steel flexible metal compression type. The FSD35OW is not equipped with blade seals.

LINKAGE

Concealed in frame.

CONTROLLED CLOSURE DEVICE (HEAT-ACTUATED)

EFL (Electric Fuse Link) - 165°F (74°C) standard. 212°F (100°C), 250°F (121°C), 350°F (177°C) available.

PFL (Pneumatic Fuse Link) - 165°F (74°C) standard. 212°F (100°C), 285°F (141°C).

DAMPER SIZES

MINIMUM SIZES

FSD36OW – 8"w x 6"h (203 x 152)

FSD35OW – 5"w x 6"h (127 x 152)

MAXIMUM SIZES

FSD36OW and FSD35OW – 36"w x 36"h (914 x 914).

OPTIONS

- **FM Approved** as Specification Tested Product.
- **"Out-of-Wall" Grille Access Damper** (See FSDGA Spec Sheet)
- **TS150 FireStat** for reopenable operation in dynamic smoke management systems.
- **DSD Duct Smoke Detector** (Low-flow rated)
- **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

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

The FSD36OW and FSD35OW meet the requirements for 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 Fire Damper Listing** (#3225-0245:005) and Smoke Damper Listing (#3230-0245:109)
- **New York City** (BSA Listing #176-82-SM)

UL CLASSIFIED

UL555 Listing R5531, UL555S Listing R5531



SEE COMPLETE
MARKING
ON PRODUCT

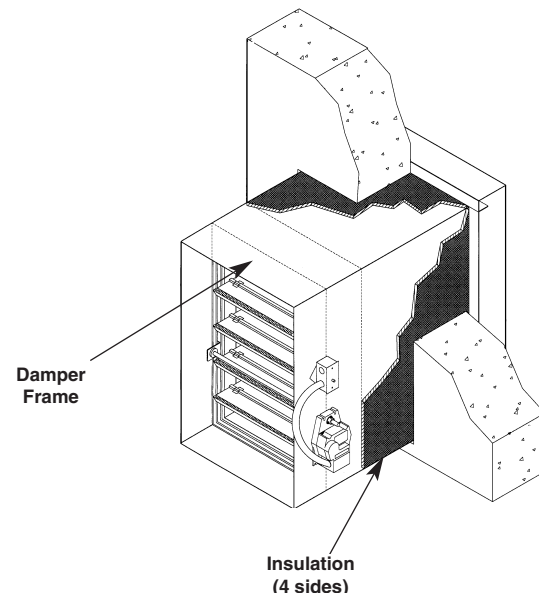


SPECIFICATION
TESTED PRODUCT
(OPTION)

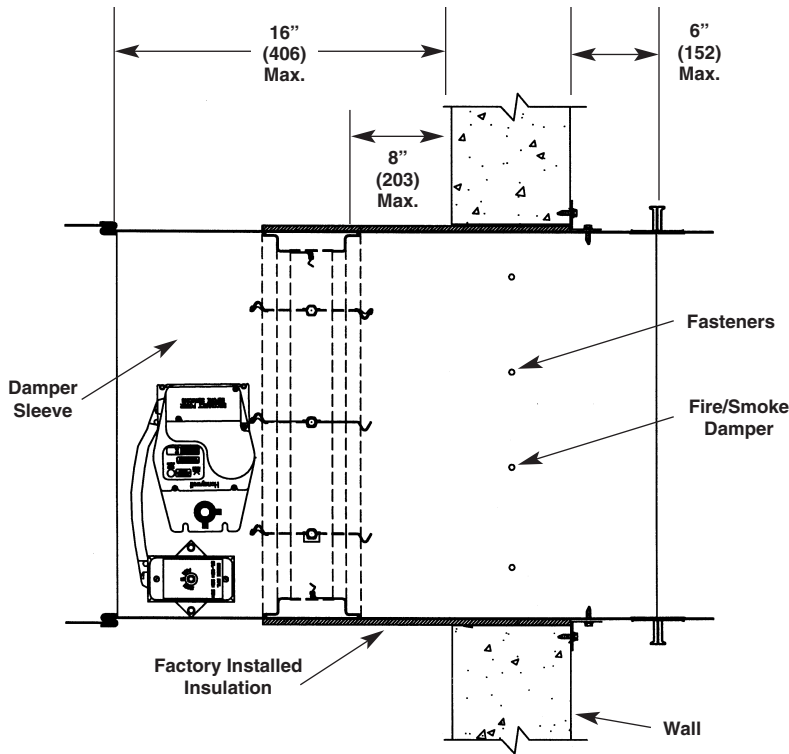
FEATURES

The FSD36OW and FSD35OW offer:

- EFL (Electric Fuse Link) or PFL (Pneumatic Fuse Link) heat-actuated 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).



TYPICAL INSTALLATION



Expansion Clearance and Opening Preparation

No expansion clearance is required. The opening in the wall or floor shall be sized to accommodate the overall size of the damper, sleeve and insulation assembly. Size the opening minimum of 1/4" (6) and maximum of 1/2" (13) larger than the nominal damper size for ease of installing the assembly into the opening.

For example a 16"w x 20"h (406 x 508) damper assembly, the opening needs to be sized to a minimum 16 1/4"w x 20 1/4"h (413 x 514).

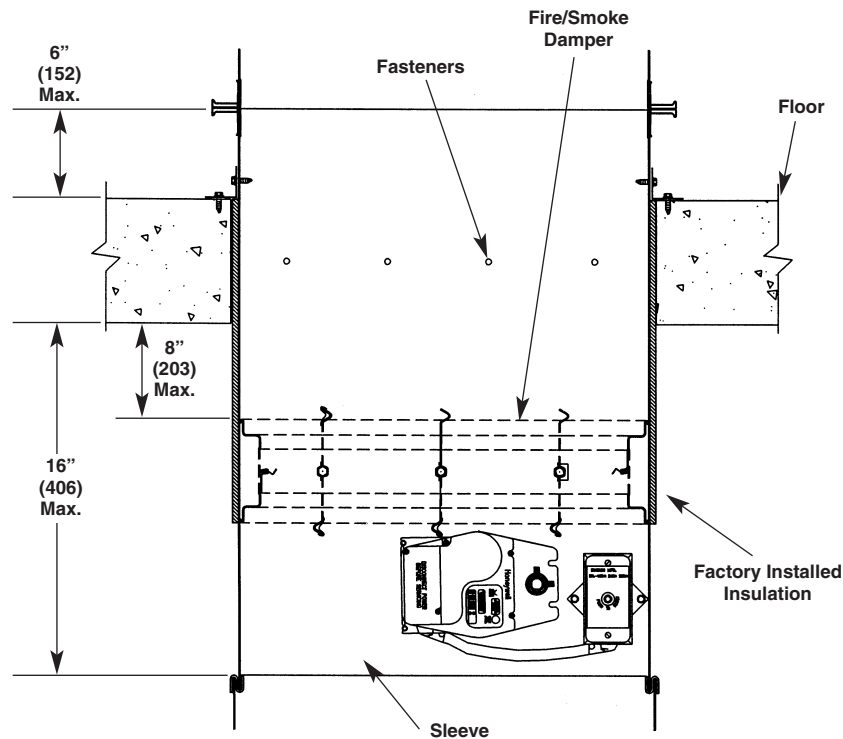
Sleeve Length

Ruskin standard sleeve length is based on a 4" (102) thick wall or floor. The minimum sleeve lengths are 18" (457) or 21" (533) depending upon the options supplied with the damper.

Longer sleeve lengths are available for wall and floors thicker than 4" (102). The damper can be mounted up to 8" (203) away from the wall or floor but the duct connection can be no further than 16" (406) from the face of the wall or floor on the actuator side and no further than 6" (152) on the non-actuator side.

Consult Ruskin for other applications.

TYPICAL WALL INSTALLATION



TYPICAL FLOOR INSTALLATION

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