

INSTALLATION INSTRUCTIONS

FSD-EX

COMBINATION FIRE AND SMOKE DAMPER FOR EXHAUST APPLICATIONS

1½ HOUR UL555 RATED, UL555S CLASS 1 CLASSIFIED

APPLICATION

The FSD-EX is a round "plunger" type combination fire and smoke damper designed for application with a rectangular grille. The FSD-EX is designed for vertical installation in a wall and is ideal for "exhaust" applications. It installs easily from one side of the wall and fails close upon the loss of power.

FSD-EX MAXIMUM UL CLASSIFIED SIZES –

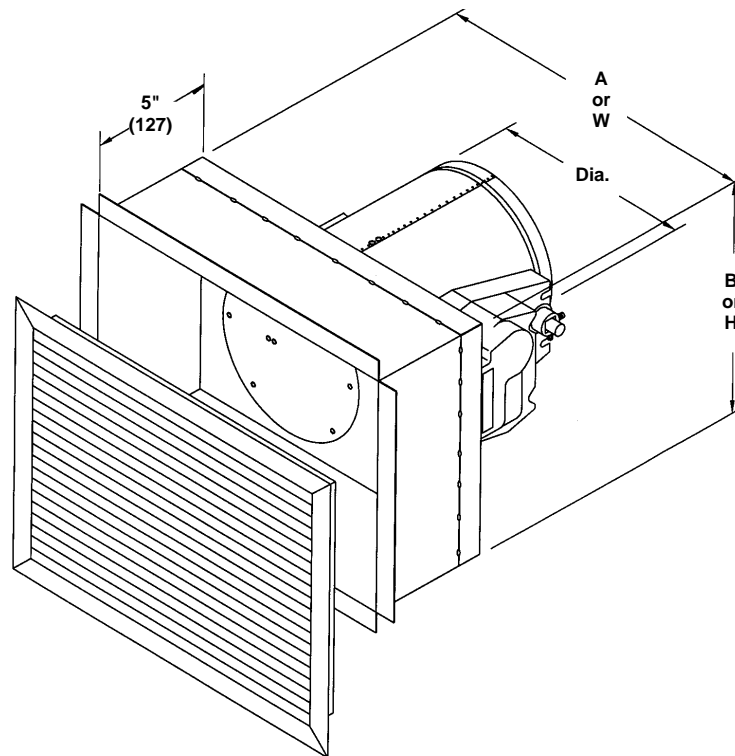
Diameter – 5" (127), 6" (152), 8" (203).

Dimensions shown in parentheses () indicate millimeters.

INSTALLATION SUPPLEMENTS

Refer to the appropriate Ruskin installation instructions supplements for additional information or special requirements:

- Optional Sealant of Dampers in Fire Rated Wall or Floor Openings
- Cavity Shaft Wall Metal Stud Framing
- EFL Electric Resettable "Fuse" Link



SEE COMPLETE MARKING
ON PRODUCT

1. Opening Clearance

The opening should be framed and finished so it is maximum 1/4" (6) larger in width and 1/4" (6) larger in height than the grille box.

2. Installation and Fasteners

Use the following fasteners, screwed to the inside of the opening and spaced 12" (306) c-to-c, minimum 1 per side.

- In metal or wood stud drywall partitions, use minimum #10 screws.
- In metal stud shaftwalls use minimum # 10 screws.
- In masonry wall construction use minimum #10 self-tapping concrete anchors.

3. Damper Orientation

Use "Mount With Arrow Up" label as a guide for proper damper orientation.

4. Duct/Sleeve Connections

a. Round Break-away Connections

Round break-away connections must use either a 4" (102) wide drawband or #10 (M5) sheet metal screws spaced equally around the circumference of the duct as follows:

- Duct diameters 22" (559) and smaller – maximum 3 screws.

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

Hardcast, Inc. – Iron Grip 601

Precision – PA2084T

Eco Duct Seal 44-52

Design Polymerics – DP 1010

b. Non-Break-away Duct/Sleeve Connections

If other duct/sleeve connections are used, the sleeve shall be a minimum of 16 gage (1.6).

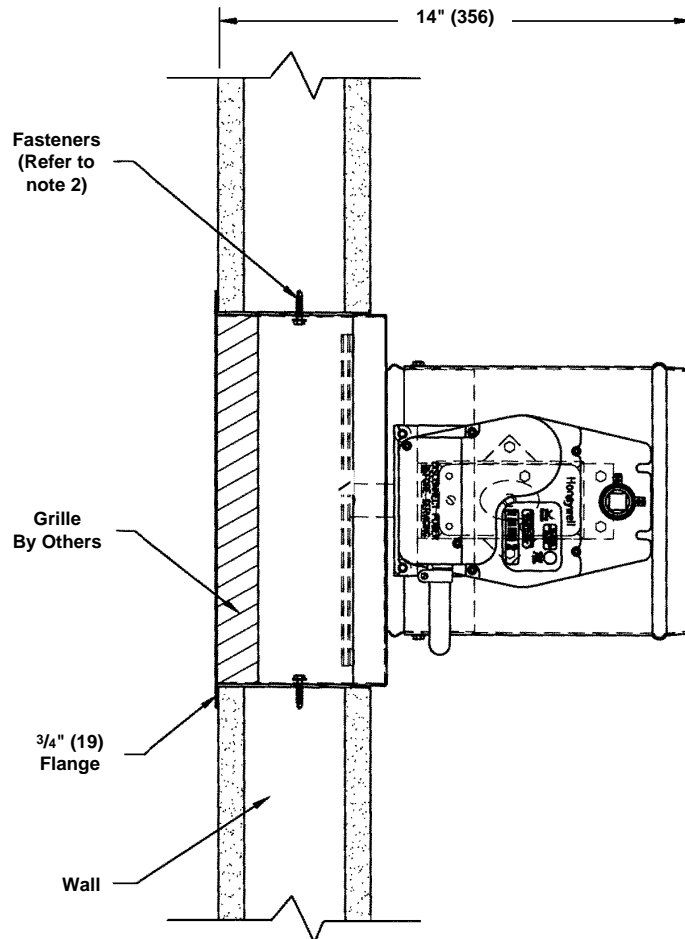
5. Actuator Connections

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

6. Installation and Maintenance

To ensure optimum operation and performance, the damper must be installed so it is square and free from racking. Each fire/smoke damper should be maintained, cycled and tested at intervals not less than every six months and in accordance with the latest editions of NFPA 90A, 92A, UL864, local codes and in accordance with actuator manufacturer recommendations. Care should be exercised to ensure that such tests are performed safely and do not cause system damage.

TYPICAL INSTALLATION



RECOMMENDED FRAMING FOR OPENINGS IN WOOD AND METAL STUD WALLS

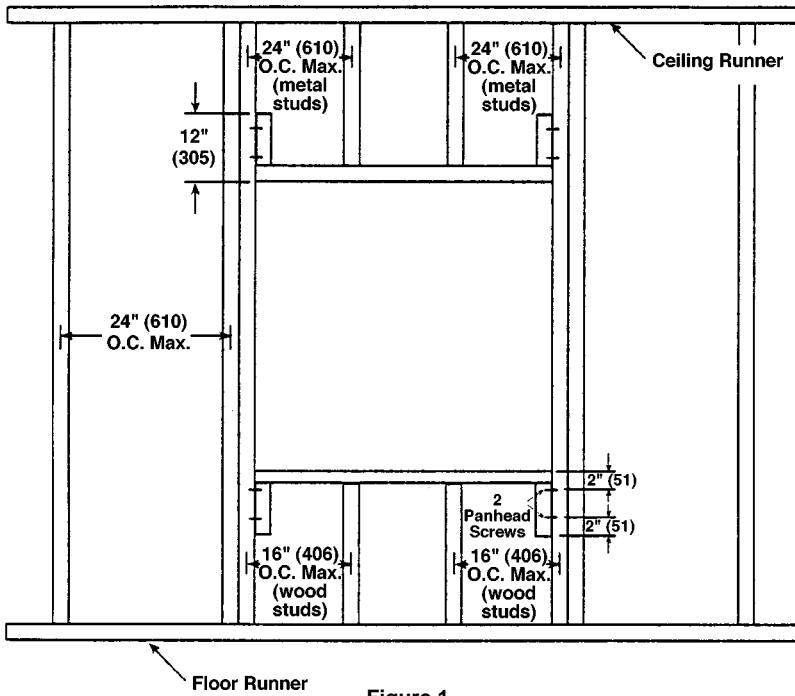


Figure 1

INSTRUCTIONS

1. Frame wall openings as shown.
2. Double vertical studs are not required for openings 36" w x 36" h (914 x 914) or smaller.
3. All construction and fasteners must meet the requirements of the appropriate wall design and/or local codes.
4. Consult the authority having jurisdiction for other acceptable framing methods.

NOTE:

The Metal Stud Construction and Wood Stud Construction figures at the bottom of the page depict mounting angles installed on both sides of the partition. A single angle may be sufficient. Refer to the instructions for single angle installation requirements.

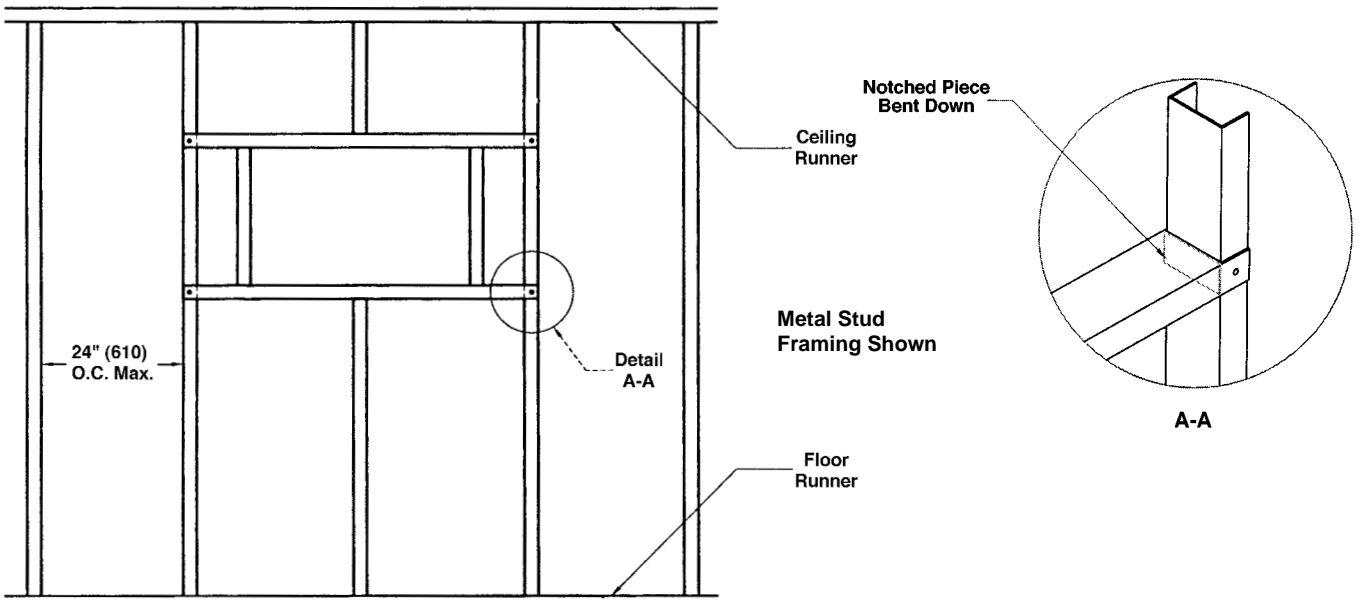
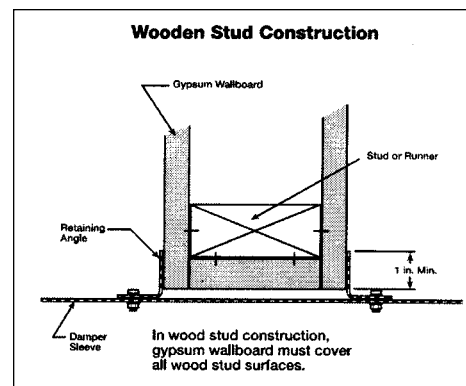
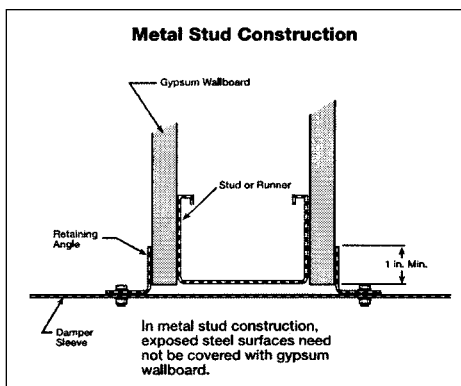


Figure 2



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