

**Modulating Fire/Smoke Damper – Model 772M & 772M-3 CLASS II**  
**\*772M (1-1/2 hr.) rated    \*772M-3 (3 hr.) rated**

**Features** – U.L. rated for dynamic closure & leakage CLASS II @ 350°F (176°C), for use in a 2 hour wall or partition. Meets NFPA 90A & UL555 & UL555S. Meets California State Fire Marshal requirements.

**STANDARD CONSTRUCTION**

**FRAME**

4-5/16" (110) deep, 16 gauge (1.6) galvanized steel

**BLADES**

6" (152) wide, 16 gauge (1.6) galvanized steel  
 (Bottom blade width may vary depending on damper height)

**BLADE AXLES & BEARINGS**

AXLES – 7/16"(11) Plated hex  
 BEARINGS – Bronze oil impregnated

**LINKAGE**

Plated steel in opposed blade configuration, concealed inside of jamb.  
 Operator shaft is 1/2" (13) steel rod extending 4-1/2" (114) from damper side

**SEALS**

Silicone blade edge and stainless steel jamb seals

**MAXIMUM UL CLASSIFIED LEAKAGE CLASS II SIZES**

**772** - 36" W x 48"H (914 x 1219)

**772-3** – 36"W x 36"H (914 x 914)

**MULTIPLE SECTIONS**

Maximum Multiple Size is 144"w x 48"h (3658 x 1219) in one common sleeve with one actuator on each section (Dynamic Rated)  
 Available also in 144"w x 96"h (3658 x 2438) (Static Rated)

**MINIMUM UL CLASSIFIED LEAKAGE CLASS II SIZE**

8"W x 6"H (203 x 152)

**SLEEVE**

20 ga. x 16" (1.3 x 406) deep galvanized steel

**UNDERSIZED**

1/4" (102) under ordered size unless specified Exact or Actual

**FINISH**

Galvanized

**FUSIBLE LINK ASSEMBLY**

165° F (73°C)

**OPERATOR**

Pneumatic

**OPTIONAL CONSTRUCTION**

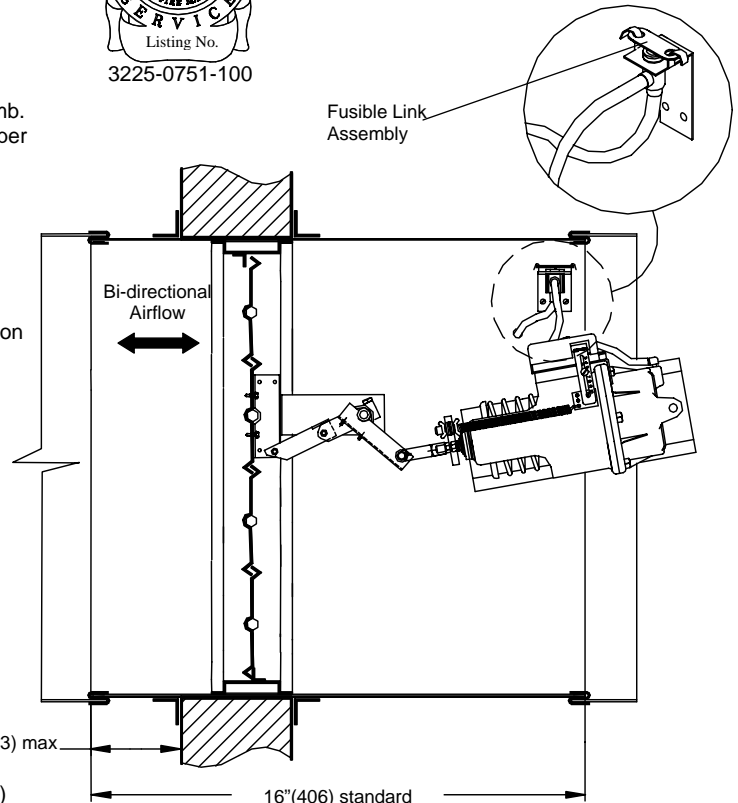
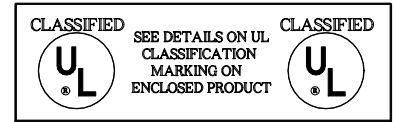
**SPECIFIED MATERIAL** – Available in Stainless

**SLEEVE AND DUCTWORK CONNECTION** – 10 ga.(3.5) to 20 ga.(1.0) galvanized steel to 30" (762) in length. – Transitions available in: round, oval, rectangular or custom. Factory can install access door, retaining angles, or flange connections.

\*Dampers 11" (279) high and under will be a single blade, and extend from the frame proportionately

**ACCESSORIES**

- Smoke Detector
- Indicator Switches
- Monitoring Station



**APPROVED ACTUATOR**

332-2792 Pneumatic - Siemens

|         |           |   |   |             |
|---------|-----------|---|---|-------------|
| DATE    | ARCHITECT |   |   | ENGINEER    |
| PROJECT |           |   |   |             |
| ITEM    | QTY       | W | H | DESCRIPTION |
|         |           |   |   |             |
|         |           |   |   |             |
|         |           |   |   |             |
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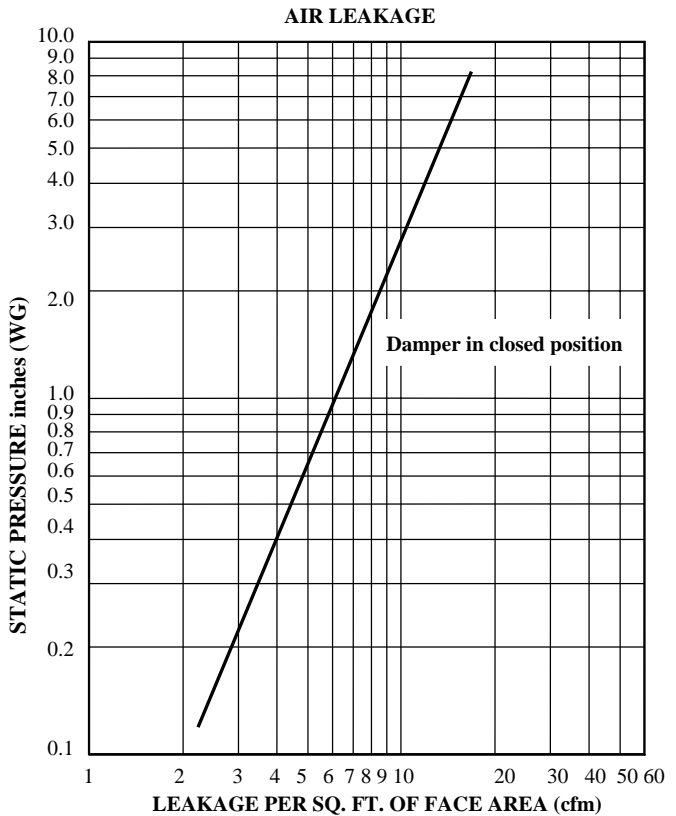
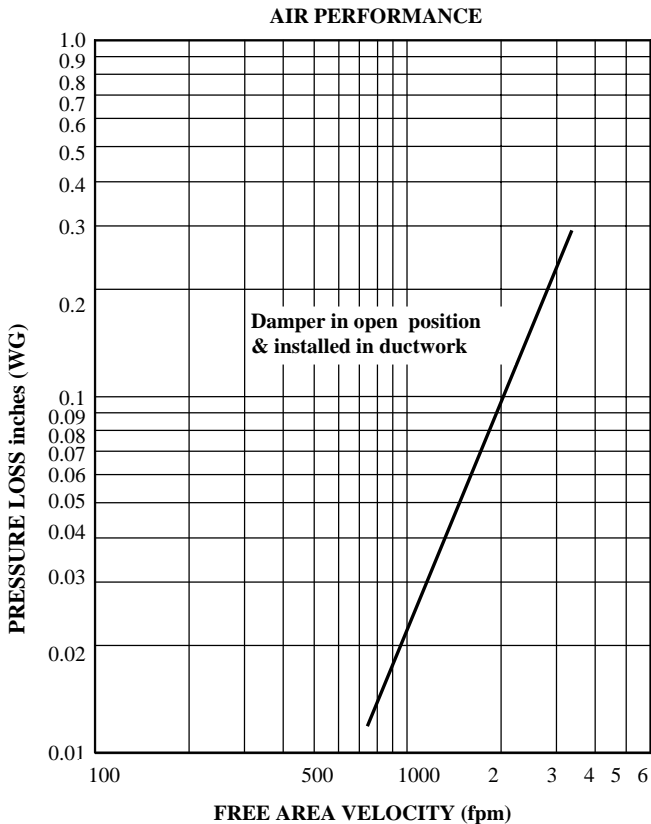
DEPENDABLE PRODUCTS SINCE 1955

**SAFE-AIR OF ILLINOIS, INC.**

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The graph above shows the results of a 36" W x 48"H (914 x 1219) test sample.

**CALCULATING PRESSURE LOSS:**

Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the "air performance graph, knowing the sq. ft. of free area of the damper. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the "air performance" graph.

\_\_\_\_\_ in. W.C. Max. Pressure Loss Intake or Exhaust  
 \_\_\_\_\_ FPM (Free Area Velocity From "Air Performance" Graph)  
 \_\_\_\_\_ CFM / \_\_\_\_\_ FPM Free Area Velocity = \_\_\_\_\_ Sq. Ft. Free Area

**Model 772M (1-1/2 hr.) rated CLASS II**  
**Model 772M-3 (3 hr.) rated CLASS II**

**FREE AREA CALCULATIONS IN SQ. FT.**

|        |      | WIDTH |      |      |      |      |      |      |
|--------|------|-------|------|------|------|------|------|------|
|        |      | 12    | 16   | 20   | 24   | 28   | 32   | 36   |
| HEIGHT | 12   | 0.56  | 0.78 | 1.00 | 1.22 | 1.44 | 1.67 | 1.89 |
|        | 16   | 0.83  | 1.17 | 1.50 | 1.83 | 2.17 | 2.50 | 2.83 |
|        | 20   | 1.06  | 1.48 | 1.91 | 2.33 | 2.75 | 3.18 | 3.60 |
|        | 24   | 1.28  | 1.80 | 2.31 | 2.83 | 3.34 | 3.85 | 4.37 |
|        | 28   | 1.51  | 2.11 | 2.72 | 3.32 | 3.93 | 4.53 | 5.14 |
|        | 32   | 1.79  | 2.50 | 3.22 | 3.93 | 4.65 | 5.36 | 6.08 |
|        | 36   | 2.01  | 2.82 | 3.63 | 4.43 | 5.24 | 6.04 | 6.85 |
|        | 40   | 2.37  | 3.30 | 4.23 | 5.17 | 6.10 | 7.04 | 7.97 |
|        | 44   | 2.60  | 3.63 | 4.66 | 5.68 | 6.71 | 7.74 | 8.77 |
| 48     | 2.84 | 3.96  | 5.08 | 6.20 | 7.32 | 8.44 | 9.56 |      |

**U. L. CLASSIFIED DYNAMIC CLOSURE RATING**

Our maximum recommended operating for this damper is 2000 fpm @ 4" static pressure. This damper has been tested in accordance with the U.L. requirements for closure under installed " system in operation " conditions, (Dynamic closure).