

Fire/Smoke Damper – Model 771 OP CLASS I

Features – U.L. rated for dynamic closure & leakage CLASS I @ 350°F (176°C), for use in a 2 hour wall or partition. Meets NFPA 90A & UL555 & UL555S. Seismic and Fragility tested. 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 mechanically fastened to blade
BEARINGS – Bronze oil impregnated

LINKAGE

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

SEALS

Extruded Silicone blade seals and stainless steel jamb seals

SLEEVE

20 ga. x 18" deep (1.3 x 483) galvanized steel

CERAMIC BLANKET

Lytherm 550

MAXIMUM UL CLASSIFIED LEAKAGE CLASS I SIZE

(1-1/2 hour rated) 36" W x 42"H (914 x 1066) single section

MINIMUM UL CLASSIFIED LEAKAGE CLASS I SIZE

8" W x 6" H (203 x 152)
(Internal motor min height: 10")

FINISHED SIZE

Actual I.D.

Note: Wall Opening must be oversized by 1/2" to accommodate blanket thickness

FINISH

Galvanized

HEAT SENSOR

165°

OPERATOR

Refer to UL approved actuator chart
(Specify external or internal mounting)

OPTIONAL CONSTRUCTION

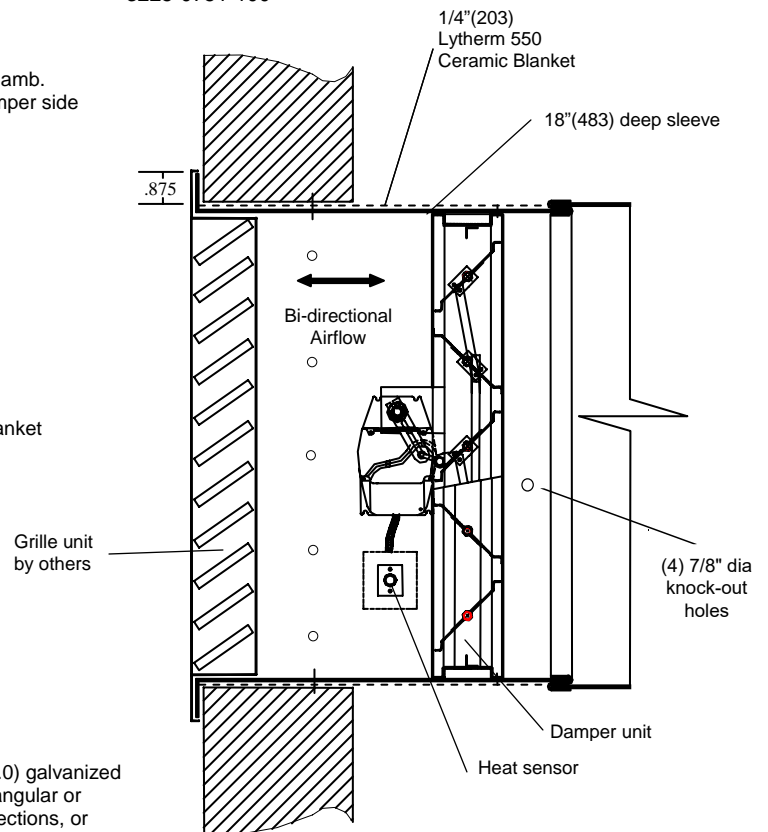
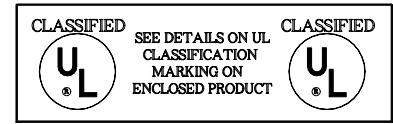
HEAT SENSOR - 212°F, 250°F, or 350° F

SPECIFIED MATERIAL – Available in stainless steel

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, flange connections, or security bars.



3225-0751-100



TYPICAL VERTICAL MOUNT

*Damper 11" (279) high and under will be single blade, and extend from the blade proportionately

MAX SINGLE SECTION FREE AREA
36"W x 42"H
8.77 SQFT

ACCESSORIES

- Smoke Detector
- Indicator Switches
- Monitoring Station
- Dual Sensors

DATE	ARCHITECT			ENGINEER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



DEPENDABLE PRODUCTS SINCE 1955

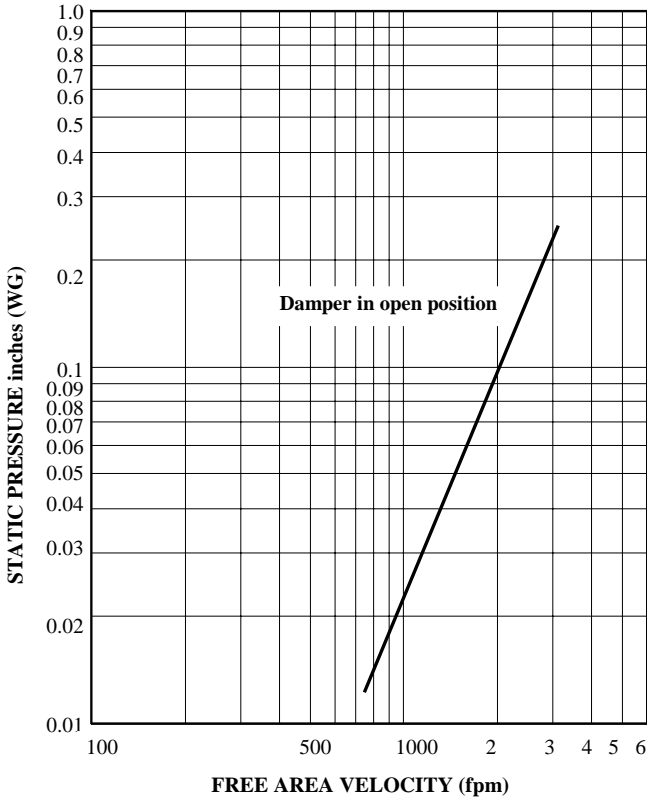
SAFE-AIR OF ILLINOIS, INC.

Engineering and General Offices

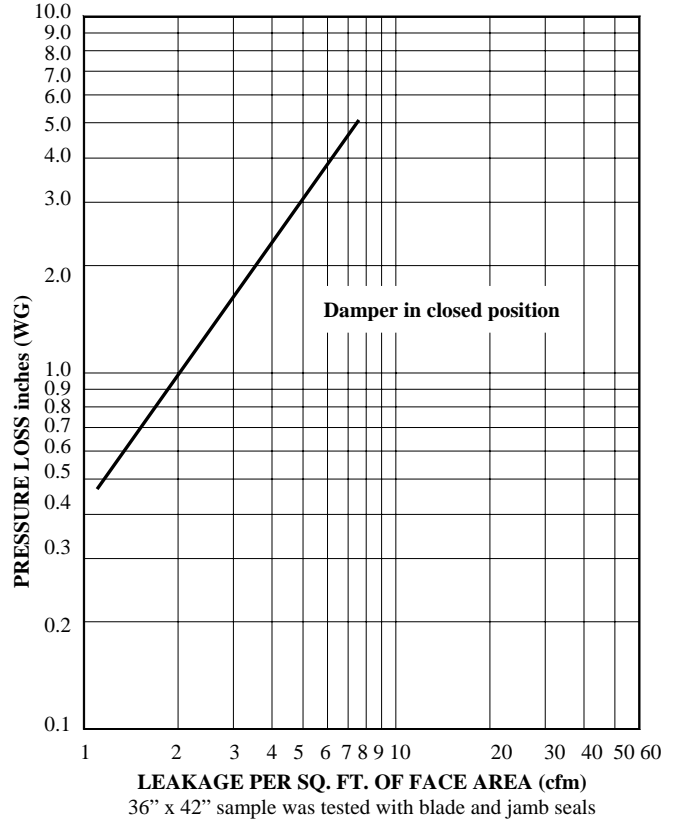
1855 South 54th Avenue, Cicero, Illinois 60804

Phone 708-652-9100 FAX 708-652-9158

AIR PERFORMANCE



AIR LEAKAGE



LEAKAGE PER SQ. FT. OF FACE AREA (cfm)
36" x 42" sample was tested with blade and jamb seals

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

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). Single sections 36" w x 42" h have been tested capable to close, mounted either vertical or horizontal, at 3000 fpm. @ 8" static pressure.

Model 771 OP (1-1/2 hr.) rated CLASS I
Model 771-3 OP (3 hr.) rated CLASS I

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
	42	2.60	3.63	4.66	5.68	6.71	7.74	8.77