

Fire/Smoke Damper – Model 771 & 771-3 CLASS I
771 (1-1/2 hr.) rated 771-3 (3 hr.) rated

Features – U.L. rated for static/dynamic closure & leakage CLASS I @ 350° F, for use in a 2 hour walls or floors in the HVAC systems with velocities to 2000 FPM and pressure to 4" W.G. Meets NFPA 90A & UL555 & UL555S. Seismic and Fragility tested. Meets California State Fire Marshal requirements.

STANDARD CONSTRUCTION

FRAME

4-5/16" deep, 16 gauge galvanized steel

BLADES

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

BLADE AXLES & BEARINGS

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

LINKAGE

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

SEALS

Extruded Silicone blade seals and stainless steel jamb seals

MAXIMUM UL CLASSIFIED LEAKAGE CLASS I SIZES

Single section assemblies:

- 771 (36" x 48")
- 771-3 (36" x 36")

MULTIPLE ASSEMBLIES

Multiple assemblies: (made of sections no larger than above sizes)

- 771 (144" x 96") vertical or horizontal mount
- 771-3 (144" x 36" max.) vertical or horizontal mount

MINIMUM UL CLASSIFIED LEAKAGE CLASS I SIZE

- 771 8"W x 6"H
- 771-3 8"W x 6"H

SLEEVE

18 ga. x 16" deep galvanized steel

UNDERSIZED

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

FINISH

Galvanized

HEAT SENSOR

165°F standard.

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. to 20 ga. galvanized steel to 30" in length. – Transitions available in: round, oval, rectangular or custom.
 Factory can install access door, retaining angles, flange connections, or security bars

Dampers 11" high and under will be single blade, and extend from the frame proportionately

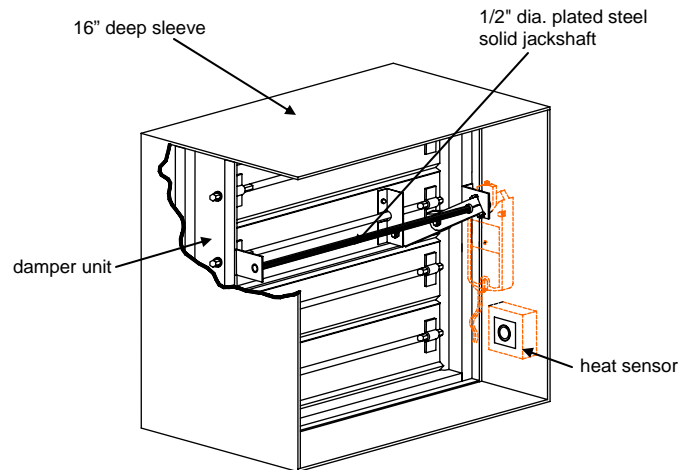
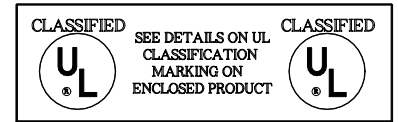
ACCESSORIES

Smoke Detector
Monitoring Station

Indicator Switches
Dual Sensors



03225-0751-100



APPROVED ACTUATORS

Honeywell Siemens Belimo

	Honeywell	Siemens	Belimo
24 Vac -	ML 8115	GND121.1U	FSNF24 US*
	MS 8209	GND126.1U	
	MS 8120	GGD121.1U	
120 Vac -	ML 4115	GND221.1U	FSNF120 US*
	MS 4209	GND226.1U	
	MS 4120	GGD221.1U	
230 Vac -		GND321.1U	
		GGD321.1U	
Pneumatic – (8-13 PSI)		331-2961	
		331-3060	
		331-4826	

* Only for dampers up to 24" x 24"

DATE	ARCHITECT			ENGINEER		
PROJECT						
ITEM	QTY	W	H	DESCRIPTION		



DEPENDABLE PRODUCTS SINCE 1955

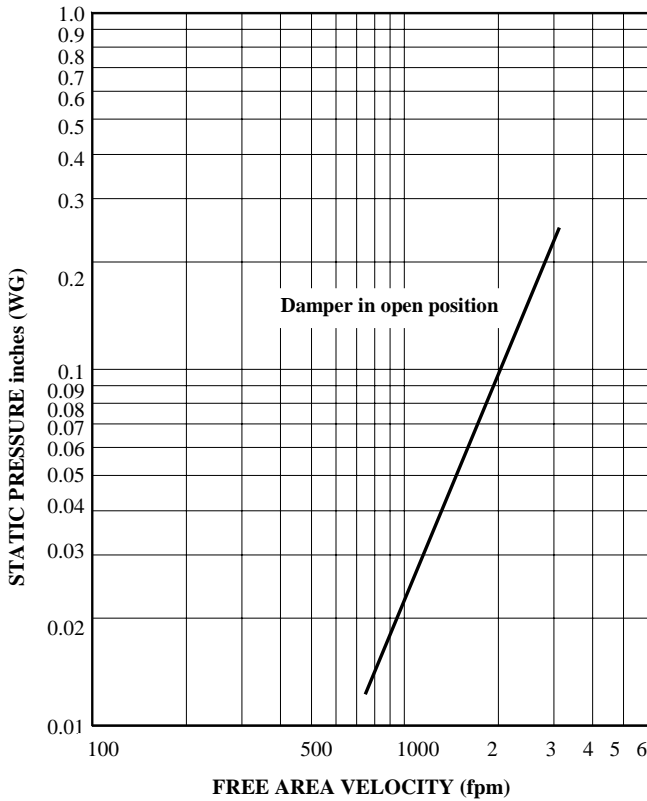
SAFE-AIR OF ILLINOIS, INC.

Engineering and General Offices

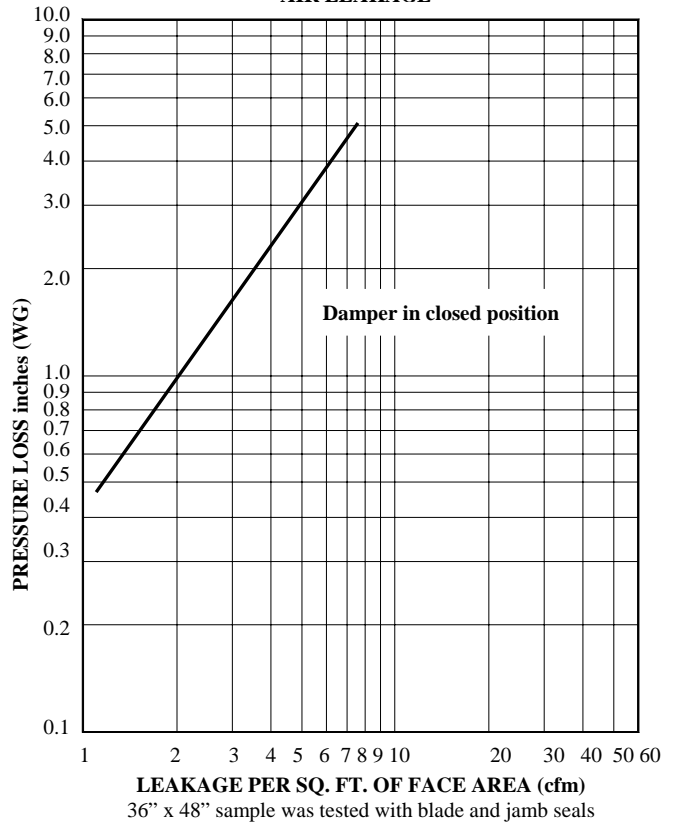
1855 South 54th Avenue, Cicero, Illinois 60804

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

AIR PERFORMANCE



AIR LEAKAGE



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 48" h have been tested capable to close, mounted either vertical or horizontal, at 3000 fpm. @ 8" static pressure.

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