

**Fire/Smoke Damper Airfoil Blade – Model 781 & 781-3 CLASS I**  
**\*781 (1-1/2 hr.) rated \*781-3 (3 hr.) rated**

**Features** – U.L. rated for dynamic closure & leakage CLASS I @ 250°F (176°C), for use in a 2 hour (781 Model) or 4 hour (781-3 Model) 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 1/2" (165) wide, double wall 20 gauge (1.0) galvanized steel in airfoil shape, equivalent to a 14-gauge (1.9) single skin blade. (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

**MAXIMUM UL CLASSIFIED LEAKAGE CLASS I SIZES**

Single section assemblies:

**781, 781-3** 32"W x 48"H Vertical  
 32"W x 36"H Horizontal

**MULTIPLE SECTIONS**

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

**781** (128" x 96") (3251 x 2438) vertical or horizontal mount  
**781-3** (128" x 48" max.) (3251 x 1219) vertical or horizontal mount

**MINIMUM UL CLASSIFIED LEAKAGE CLASS I SIZE**

12"W x 8"H (305 x 203)

**SLEEVE**

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

**UNDERSIZED**

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

**FINISH**

Galvanized

**HEAT SENSOR**

160° (73° C)

**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

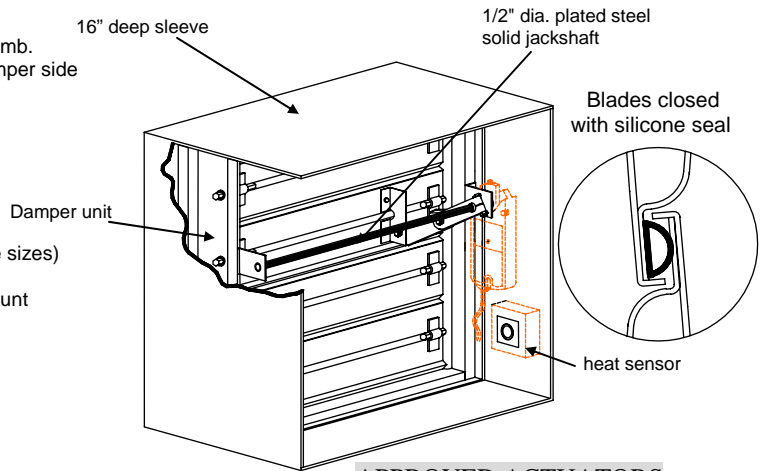
**SLEEVE AND DUCTWORK CONNECTION** – 10 ga.(3.5) to 20 ga. (1.0) galvanized steel to 30" (762) in length. – Transitions available in: round, oval, rectangular or custom. Factory can install access door, retaining angles, flange connections, or security bars

**SPECIAL PURPOSE CONSTRUCTION**

- Full welded corner assembly
- Security bars (mounted in sleeve)
- Filter Racks
- Face and Bypass dual mixing damper configuration



03225-0751-106



**APPROVED ACTUATORS**

	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 -		331-2961	
		331-3060	
		331-4826	

\* Only for dampers up to 24" x 24"

**ACCESSORIES**

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

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

DATE	ARCHITECT			ENGINEER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



DEPENDABLE PRODUCTS SINCE 1955

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

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