

**Bladed Fire Damper – Model D-175 & D-175-3**

**Design Features** – U.L. rated for dynamic closure, Model D-175 is a 1-1/2 hour fire damper, Model D-175-3 is a 3-hour fire damper.  
Meets NFPA 90A and UL 555. Meets California State Fire Marshal Requirements

**STANDARD CONSTRUCTION**

**FRAME**

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

**BLADES**

6" wide, 16 gauge 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.

**FUSIBLE LINK**

165 °F (73°C) standard – (others available)

**MAXIMUM SIZE UL CLASSIFIED**

36" w x 36" h - 175 (1-1/2 hour rated) (Vertical and Horizontal)  
36" w x 36" h - 175-3 (3 hour rated) (Vertical and Horizontal)

**MINIMUM SIZE UL CLASSIFIED**

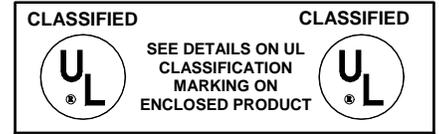
8" w x 6" h

**UNDERSIZED**

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

**FINISH**

Galvanized



**OPTIONAL CONSTRUCTION**

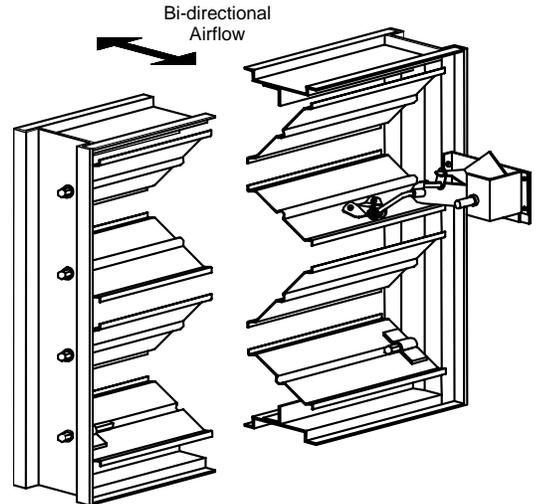
**SPECIFIED MATERIAL** – Available in stainless steel

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

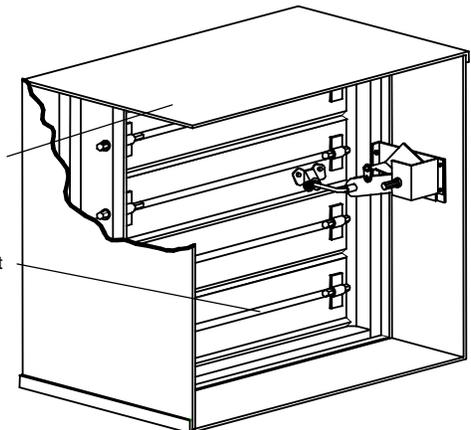
**ACCESSORIES**

Indicator Switches  
Monitoring Station



12" deep x 20 ga. (305 x 1.0) standard sleeve

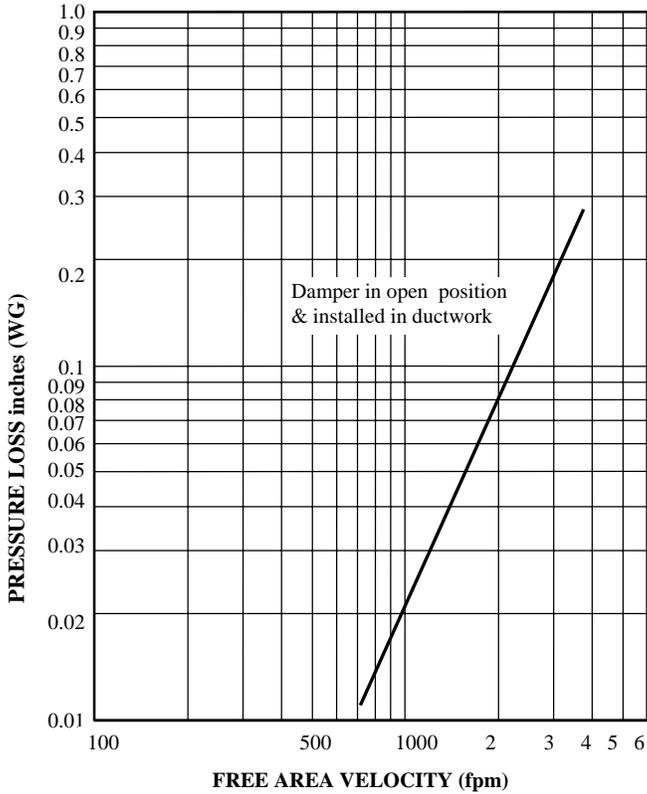
damper unit



**Damper Unit with Optional Sleeve**

DATE	ARCHITECT / ENGINEER			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

### AIR PERFORMANCE



Model 175 rated 1-1/2 hour U. L. classified damper  
 Model 175-3 rated 3 hour U. L. classified damper

### 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

### FREE AREA CALCULATIONS IN SQ. FT.

#### WIDTH

Inches	12	16	20	24	28	32	36
<b>12</b>	0.56	0.78	1.00	1.22	1.44	1.67	1.89
<b>16</b>	0.83	1.17	1.50	1.83	2.17	2.50	2.83
<b>20</b>	1.06	1.48	1.91	2.33	2.75	3.18	3.60
<b>24</b>	1.28	1.80	2.31	2.83	3.34	3.85	4.37
<b>28</b>	1.51	2.11	2.72	3.32	3.93	4.53	5.14
<b>32</b>	1.79	2.50	3.22	3.93	4.65	5.36	6.08
<b>36</b>	2.01	2.82	3.63	4.43	5.24	6.04	6.85

### PERFORMANCE DATA

Damper Width Inches	Maximum Static Pressure (W.G.)	Maximum Velocity
12 (305)	6"	2000 FPM
18 (457)	5.5"	2000 FPM
24 (610)	5.5"	2000 FPM
30 (762)	5"	2000 FPM
36 (914)	5"	2000 FPM

