

## Insulated Blade Louver in 6" thick frame design Model AFI - 06

**Design Features** – Adjustable insulated blade design for added thermal protection or sound reduction. Adjustable feature is useful on systems requiring periodic operation or a means of further deterring the outside element of water penetration, which is made possible when the louver is closed.

### STANDARD CONSTRUCTION

**FRAME**

16 gauge (1.6) galvanized steel in style #3

**BLADES**

Double skin 20 gauge (1.0) galvanized steel with fiberglass insulation, approx. spacing is 6" (152) oc. @ 90 degrees.

**BLADE AXLES & BEARINGS**

Axles – 1/2" (13) stub shaft, plated steel  
Bearings – 1/2" (13) dia. bronze oilite

**LINKAGE**

Plated steel mounted at the center point of blades

**SEALS**

Polyurethane foam blade and aluminum jamb seals

**MAXIMUM SIZE**

Unlimited, with mullions, structural bracing supplied by others

**MAXIMUM SINGLE SECTION**

48" W x 72"H (1219 X 1829)

**MINIMUM SIZE**

12" x 12" (305 X 305)

**MULLION**

Visible

**UNDERSIZED**

1/4" (6) under ordered size unless specified Exact or Actual

**SCREEN**

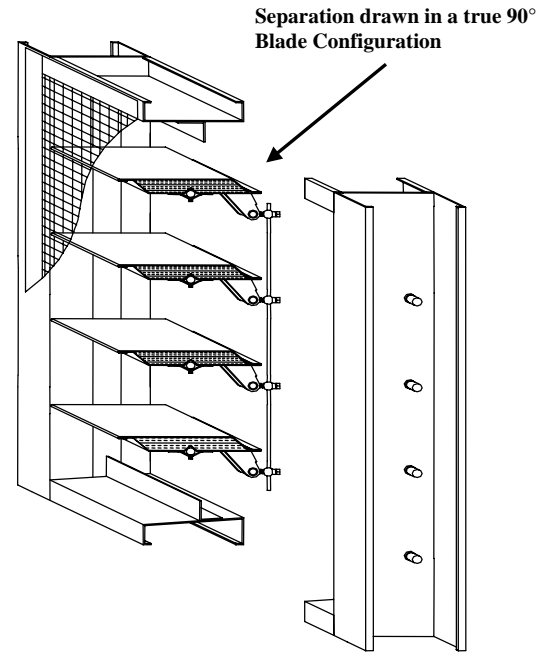
1/2" (13) wire mesh 19 gauge (1.1) galvanized bird screen in frame on face

**FINISH**

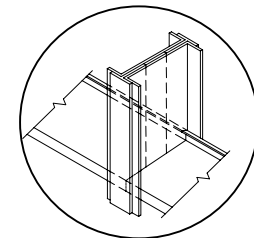
Mill

**OPERATOR**

Wing-nut type adjustable



**MULLION STYLE**



Visible

### OPTIONAL CONSTRUCTION

**FRAME** – Available in a heavier material up to 10 gauge (3.5)

**BLADES** - Available in a heavier material up to 12 gauge (2.7)

**BLADES & JAMB SEALS** – Polyurethane blade edge and / or sstl jamb seals

**SCREEN** - Many styles available please consult screen listing

**LINKAGE** – Concealed in the jamb

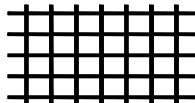
**FINISH** – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.

**OPERATOR** – Manual, Electric or Pneumatic

### SPECIAL PURPOSE CONSTRUCTION

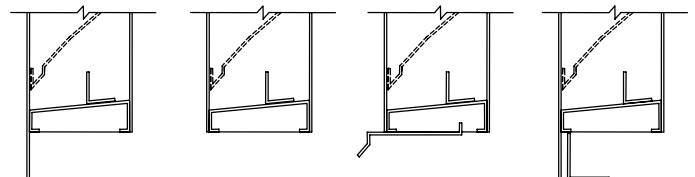
- Burglar Bars
- Filter racks
- Sleeved for ductwork connection
- Jackshaft when required

### TYPICAL SCREEN STYLES



Wire Mesh  
Standard

### FRAME STYLES



(1) - Flange  
1-1/2"

(3) - Box  
Standard

(8) - Box and  
Sill Extension

(9) - Flange  
w/ sub frame

DATE	ARCHITECT/ENGINEER			CUSTOMER	
PROJECT					
ITEM	QTY	W	H	DESCRIPTION	



DEPENDABLE PRODUCTS SINCE 1955

**SAFE-AIR OF ILLINOIS INC.**

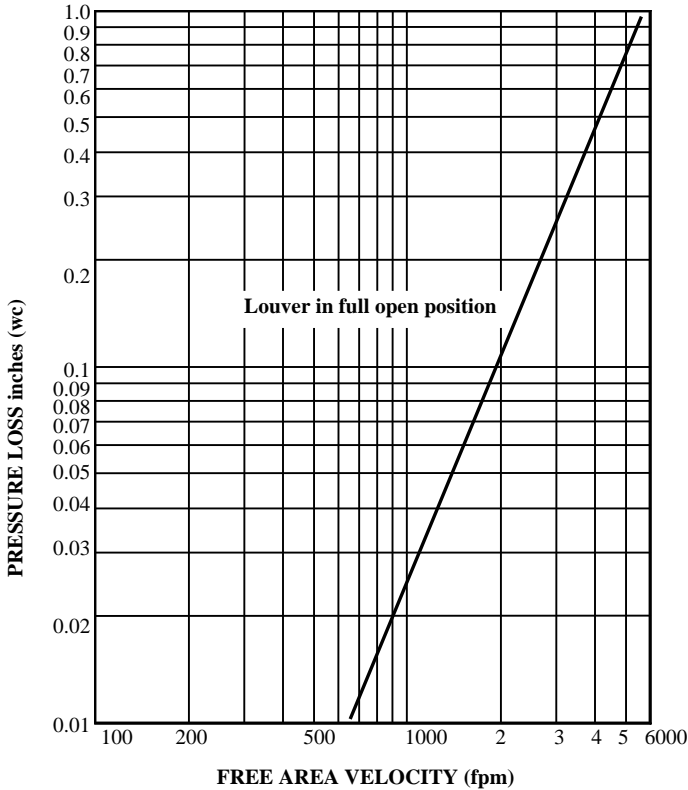
*Engineering and General Offices*

1855 South 54<sup>th</sup> Avenue, Cicero, Illinois 60804

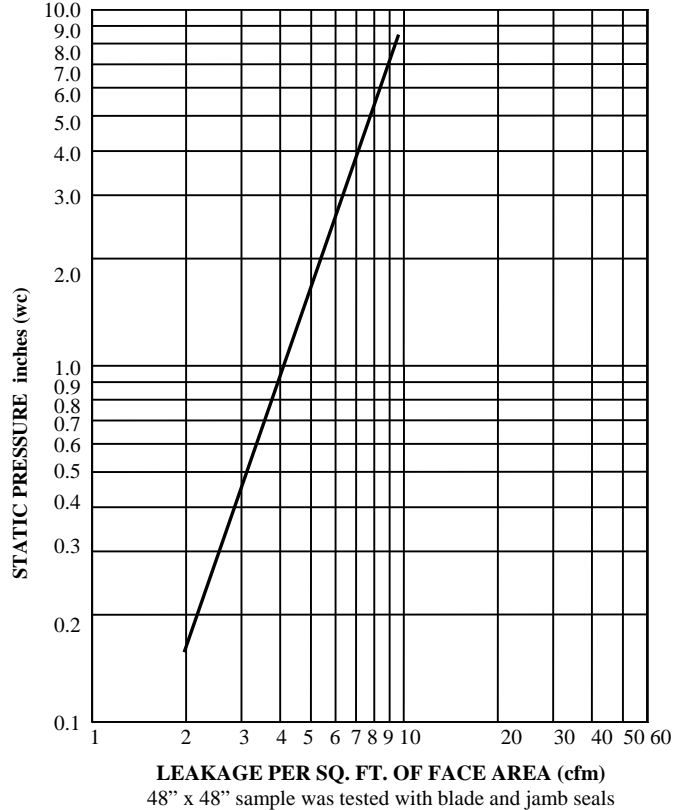
Phone 708-652-9100 FAX 708-652-9158

All tests performed at an independent laboratory and based on AMCA standards for air performance.

**AIR PERFORMANCE**



**AIR LEAKAGE**



FREE AREA VELOCITY (fpm)

LEAKAGE PER SQ. FT. OF FACE AREA (cfm)  
48" x 48" 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

**TO MINIMIZE LEAKAGE**

The Leakage performance of a louver will improve with size and varies with aspect ratio. Leakage may always be minimized by selecting louvers as tall as possible, minimizing width. Testing was performed at an independent laboratory using test procedures based on Industry Standards for air leakage, on a 48" x 48" (1219 x 1219) test sample.

MAXIMUM SINGLE SECTION SIZE – 48"W x 72"H (1219 x 1829)  
 MINIMUM SINGLE SECTION SIZE – 12"W x 12"H (305 x 305)

Inches	12	16	20	24	28	32	36	40	44	48	52	56	60
12	0.5	0.72	0.94	1.17	1.39	1.61	1.83	2.06	2.28	2.5	2.72	2.94	3.17
16	0.69	0.99	1.3	1.6	1.91	2.22	2.52	2.83	3.13	3.44	3.74	4.05	4.35
20	0.88	1.26	1.65	2.04	2.43	2.82	3.21	3.6	3.99	4.38	4.76	5.15	5.54
24	1.13	1.63	2.13	2.63	3.13	3.63	4.13	4.63	5.13	5.63	6.13	6.63	7.13
28	1.31	1.9	2.48	3.06	3.65	4.23	4.81	5.4	5.98	6.56	7.15	7.73	8.31
32	1.5	2.17	2.83	3.5	4.17	4.83	5.5	6.17	6.83	7.5	8.17	8.83	9.5
36	1.75	2.53	3.31	4.08	4.86	5.64	6.42	7.19	7.97	8.75	9.53	10.31	11.08
40	1.94	2.8	3.66	4.52	5.38	6.24	7.1	7.97	8.83	9.69	10.55	11.41	12.27
44	2.13	3.07	4.01	4.96	5.9	6.85	7.79	8.74	9.68	10.63	11.57	12.51	13.46
48	2.38	3.43	4.49	5.54	6.6	7.65	8.71	9.76	10.82	11.88	12.93	13.99	15.04
52	2.56	3.7	4.84	5.98	7.12	8.26	9.4	10.53	11.67	12.81	13.95	15.09	16.23
56	2.81	4.06	5.31	6.56	7.81	9.06	10.31	11.56	12.81	14.06	15.31	16.56	17.81
60	3	4.33	5.67	7	8.33	9.67	11	12.33	13.67	15	16.33	17.67	19
64	3.19	4.6	6.02	7.44	8.85	10.27	11.69	13.1	14.52	15.94	17.35	18.77	20.19
68	3.44	4.97	6.49	8.02	9.55	11.08	12.6	14.13	15.66	17.19	18.72	20.24	21.77
72	3.63	5.24	6.85	8.46	10.07	11.68	13.29	14.9	16.51	18.13	19.74	21.35	22.96
76	3.81	5.51	7.2	8.9	10.59	12.28	13.98	15.67	17.37	19.06	20.76	22.45	24.15
80	4.06	5.87	7.67	9.48	11.28	13.09	14.9	16.7	18.51	20.31	22.12	23.92	25.73
84	4.25	6.14	8.03	9.92	11.81	13.69	15.58	17.47	19.36	21.25	23.14	25.03	26.92
88	4.44	6.41	8.38	10.35	12.33	14.3	16.27	18.24	20.22	22.19	24.16	26.13	28.1
92	4.69	6.77	8.85	10.94	13.02	15.1	17.19	19.27	21.35	23.44	25.52	27.6	29.69
96	4.88	7.04	9.21	11.38	13.54	15.71	17.88	20.04	22.21	24.38	26.54	28.71	30.88