

Adjustable Drainable Blade Louver Model A-DBE-04 & A-DBE-06

Design Features – High performance adjustable design variation of our patented drainable blade configuration. 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

ALL MATERIAL – EXTRUDED ALUMINUM 6063-T5 (KB-45)

FRAME

A-DBE-04, 4" (102) deep x .081" (2.1) extruded aluminum in style #3
 A-DBE-06, 6" (152) deep x .081" (2.1) extruded aluminum in style #3

BLADES

A-DBE-04, are .081" (2.1) extruded aluminum, 39°
 A-DBE-06, are .081" (2.1) extruded aluminum, 36°

BLADE AXLES & BEARINGS

Axles – 7/16" (11) plated steel hex
 Bearings – 1/2" (13) dia. bronze oilite

LINKAGE

Plated steel concealed in jamb

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM SINGLE SECTION

60" W x 96"H (1524 X 2438)

MINIMUM SIZE

12"W x 12"H (305 X 305)

MULLION

Visible

UNDERSIZED

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

SCREEN

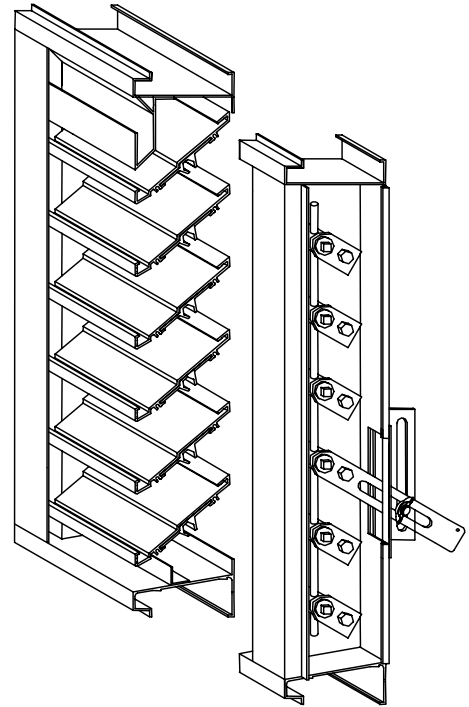
3/4" x .051" (19 X 1.3) flattened expanded aluminum bird screen in frame mounted in the interior side.

FINISH

Mill

OPERATOR

Wing-nut type adjustable



OPTIONAL CONSTRUCTION

FRAME – Available in a heavier extrusion of .125" (3.2)

BLADES - Available in a heavier extrusion of .125" (3.2)

BLADE & JAMB SEALS – Vinyl blade edge and / or flexible metal jamb seals
 (Note: With seals daylight shall still be visible between blades and on the sides.)

SCREEN - Many styles available please consult screen listing

LINKAGE – Blade mounted

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

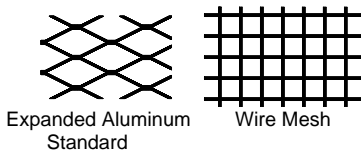
OPERATOR – Electric or Pneumatic

SPECIAL PURPOSE CONSTRUCTION

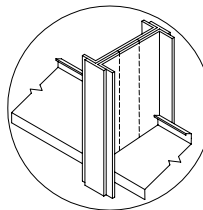
Security bars
 Filter racks
 Sleeved for ductwork connection
 Jackshaft when required

(Consult SAFE-AIR/DOWCO for additional technical information.)

TYPICAL SCREEN STYLES



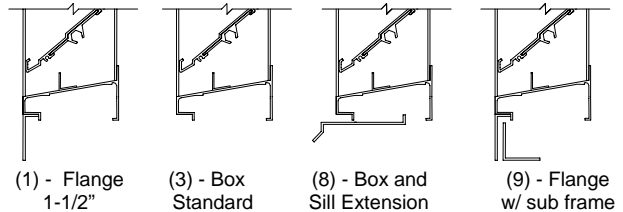
MULLION STYLE



Visible

PERFORMANCE	
A-DBE 04	Pt. of Water Penetration 1016 fpm
	Free Area 57% 48 x 48 unit size
A-DBE 06	Pt. of Water Penetration 970 fpm
	Free Area 59% 48 x 48 unit size

FRAME STYLES



DATE	ARCHITECT/ENGINEER			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR OF ILLINOIS INC.

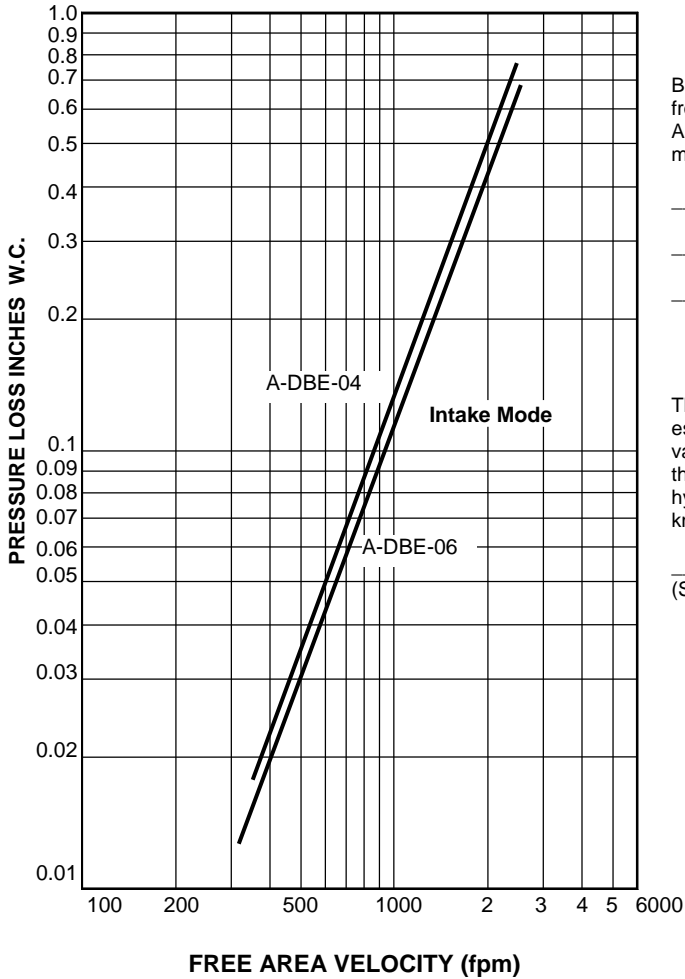
Engineering and General Offices

1855 South 54th Avenue, Cicero, Illinois 60804

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

All tests performed at an independent laboratory and based on AMCA standard – 500 for air performance and water penetration.

AIR PERFORMANCE



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

CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

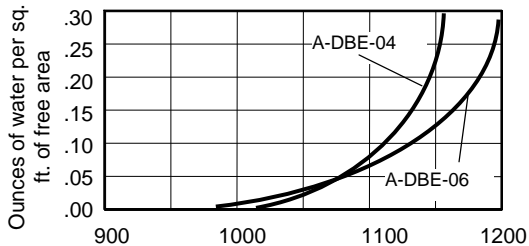
The "free area flow rate" at which water penetration commences (.01 oz. of water) is established at, 1016 (310) fpm for A-DBE-04 and 970 (296) fpm for A-DBE-06, and will vary depending upon actual weather conditions. The "water penetration" graph illustrates the results of actual laboratory test on a 48" x 48" (1219 x 1219) test sample subjected to hypothetical rainfall conditions. To determine the free area (in sq. ft.) based on upon a known volumetric flow rate in CFM;

_____ CFM / _____ FPM = _____ SQ. FT. FREE AREA
 (System Requirements)

FREE AREA CALCULATIONS IN SQ.

		WIDTH								
		12	18	24	30	36	42	48	54	60
12 - 4"	6"	0.29	0.5	0.71	0.92	1.13	1.34	1.55	1.76	1.97
	6"	0.28	0.49	0.7	0.91	1.12	1.32	1.53	1.74	1.95
18 - 4"	6"	0.53	0.92	1.32	1.71	2.1	2.5	2.89	3.29	3.68
	6"	0.55	0.96	1.36	1.77	2.18	2.59	3	3.4	3.81
24 - 4"	6"	0.77	1.34	1.91	2.48	3.05	3.62	4.2	4.77	5.34
	6"	0.76	1.33	1.9	2.47	3.04	3.61	4.18	4.74	5.31
30 - 4"	6"	0.97	1.7	2.42	3.14	3.87	4.59	5.32	6.04	6.77
	6"	1	1.74	2.49	3.23	3.97	4.72	5.46	6.21	6.95
36 - 4"	6"	1.19	2.07	2.96	3.84	4.73	5.62	6.5	7.39	8.27
	6"	1.26	2.21	3.15	4.1	5.04	5.98	6.93	7.87	8.81
42 - 4"	6"	1.45	2.53	3.61	4.7	5.78	6.86	7.95	9.03	10.11
	6"	1.52	2.66	3.8	4.93	6.07	7.21	8.35	9.48	10.62
48 - 4"	6"	1.66	2.9	4.13	5.37	6.61	7.85	9.09	10.33	11.57
	6"	1.71	2.99	4.27	5.55	6.83	8.11	9.39	10.67	11.95
54 - 4"	6"	1.86	3.25	4.64	6.04	7.43	8.82	10.21	11.6	13
	6"	1.98	3.46	4.94	6.42	7.9	9.38	10.86	12.34	13.82
60 - 4"	6"	2.1	3.68	5.25	6.83	8.4	9.98	11.55	13.13	14.7
	6"	2.24	3.92	5.6	7.28	8.96	10.64	12.32	14	15.68
66 - 4"	6"	2.34	4.09	5.85	7.6	9.35	11.11	12.86	14.61	16.36
	6"	2.47	4.32	6.17	8.01	9.86	11.71	13.56	15.41	17.26
72 - 4"	6"	2.55	4.45	6.36	8.26	10.17	12.08	13.98	15.89	17.79
	6"	2.69	4.71	6.72	8.74	10.76	12.77	14.79	16.8	18.82
78 - 4"	6"	2.76	4.83	6.9	8.96	11.03	13.1	15.16	17.23	19.3
	6"	2.96	5.17	7.39	9.61	11.82	14.04	16.25	18.47	20.68
84 - 4"	6"	3.02	5.29	7.55	9.82	12.08	14.34	16.61	18.87	21.14
	6"	3.22	5.64	8.05	10.47	12.88	15.3	17.71	20.13	22.54
90 - 4"	6"	3.23	5.65	8.07	10.49	12.91	15.33	17.75	20.17	22.59
	6"	3.42	5.98	8.54	11.1	13.65	16.21	18.77	21.33	23.89
96 - 4"	6"	3.44	6.01	8.58	11.15	13.73	16.3	18.87	21.45	24.02
	6"	3.67	6.42	9.18	11.93	14.68	17.43	20.18	22.93	25.68

Water Penetration Graph
 in oz. of water per sq. ft. of
 free area over a 15 min. test period



FREE AREA VELOCITY (fpm)
 (A-DBE-04) 1016 fpm beginning of water penetration
 (A-DBE-06) 970 fpm beginning of water penetration