

Combination Louver with Integral Shutter in 4" thick frame design Model AEO

Design Features – Integral shutter blade acts as a back draft damper. –USE AS EXHAUST ONLY

STANDARD CONSTRUCTION

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

FRAME

AEO – 04" (102) thick, is .081 (2.1) extruded aluminum in style #3.

BLADES

Fixed – .081" (2.1) extruded aluminum, apx. spacing is 4 (102) @ 45°

Shutter – .050" (1.3) extruded aluminum

BLADE AXELS

3/16" (5) Diameter "delrin" pivot pin

SEALS

Polyurethane Foam blade edge seal

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM FACTORY ASSEMBLY SIZE

120" w x 96 H" or 96" w x 120" H (3048 x 2438) or (2438 x 3048)

(allows for best handling)

(Type of finish may limit maximum single section)

MULLION

Visible

MINIMUM SIZE

12" w x 20" H (305 x 508)

UNDERSIZED

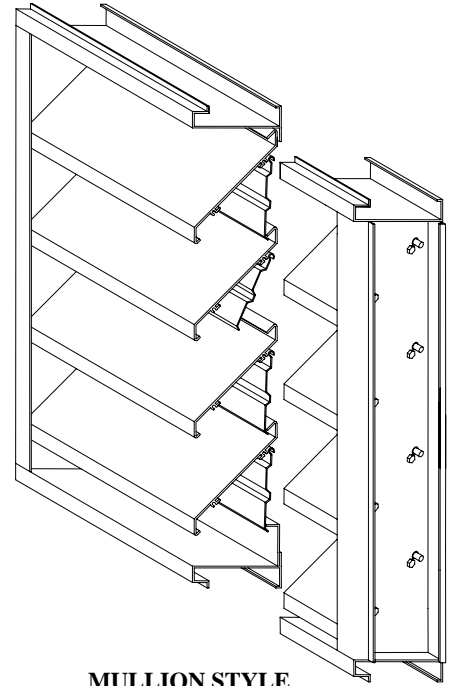
1/4" (6) under ordered size unless specified Exact or Actual

SCREEN

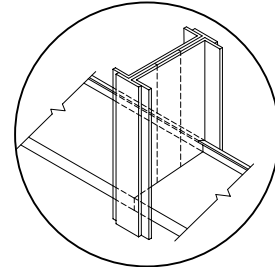
3/4" .051" (19 x 1.3) flattened expanded aluminum bird screen no frame

FINISH

Mill



MULLION STYLE



Visible

OPTIONAL CONSTRUCTION

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

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

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy, Anodize or Kynar

SPECIAL PURPOSE CONSTRUCTION

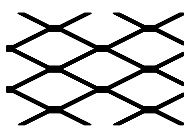
Fully welded construction

Security bars

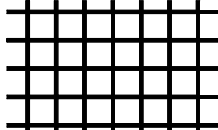
Filter racks

Sleeved for ductwork connection

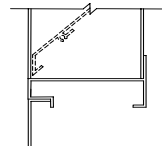
TYPICAL SCREEN STYLES



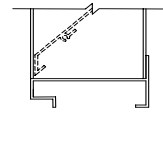
Expanded Aluminum Standard



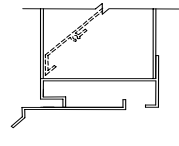
Wire Mesh



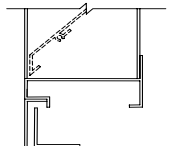
1- Flange (1.5")



3 - Box



8- Box with Sill Extension



9 - Flange with Sub Frame

FRAME STYLE

DATE	ARCHITECT			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR OF ILLINOIS INC.

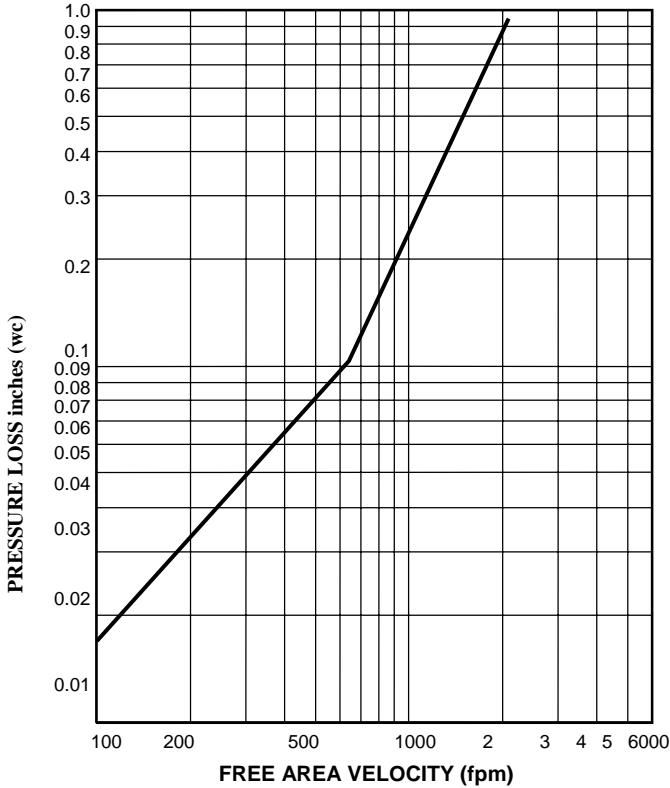
Engineering and General Offices

1855 South 54th Avenue, Cicero, Illinois 60804

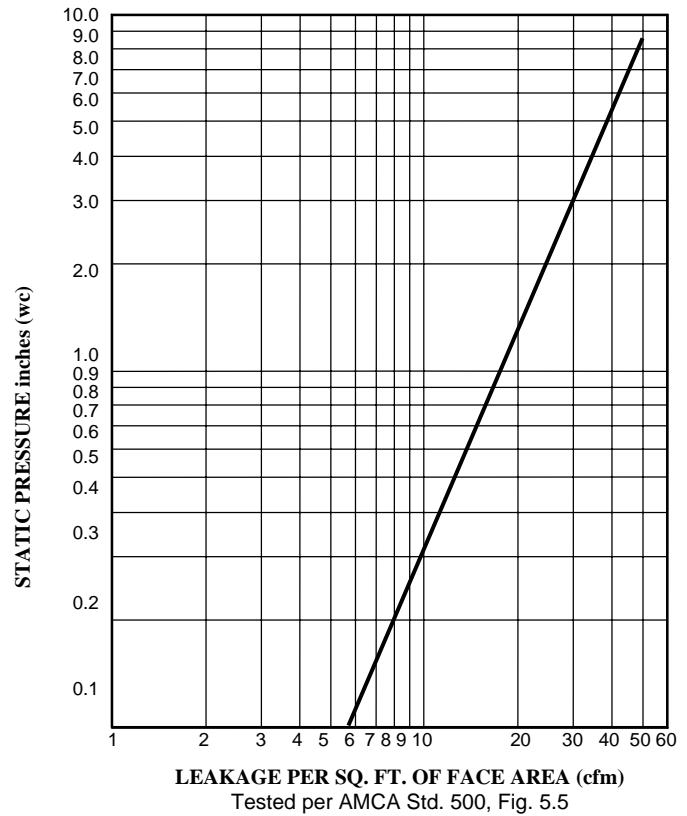
Phone 708-652-9100 FAX 708-652-9158

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

AIR PERFORMANCE



AIR LEAKAGE



Tested per AMCA Std. 500, Fig. 5.5

AEO-04 Performance Data				
Damper Width Inches	Max. Pressure	Maximum System Velocity	Blades start to open	Blades fully open
60"	.5" w.g.	1000 fpm		
48"	1" w.g.	1000 fpm		
24"	2.5" w.g.	1000 fpm	.02" wg.	.06" wg.
12"	3.5" w.g.	1000 fpm		

TO MINIMIZE LEAKAGE

The Leakage performance of a damper will improve with size and varies with aspect ratio. Leakage may always be minimized by selecting dampers as tall as possible, minimizing width. Testing was performed at an independent laboratory using test procedures based on Industry Standards for air leakage.

FREE AREA CALCULATIONS

		WIDTH								
		12	18	24	30	36	42	48	54	60
HEIGHT	12	0.19	0.33	0.48	0.62	0.76	0.91	1.05	1.19	1.34
	18	0.35	0.61	0.87	1.13	1.39	1.65	1.91	2.17	2.43
	24	0.46	0.81	1.16	1.51	1.85	2.20	2.55	2.90	3.24
	30	0.65	1.15	1.64	2.13	2.62	3.11	3.60	4.09	4.58
	36	0.81	1.42	2.03	2.63	3.24	3.85	4.46	5.07	5.68
	42	0.93	1.62	2.32	3.01	3.71	4.40	5.10	5.79	6.49
	48	1.12	1.96	2.79	3.63	4.47	5.31	6.15	6.99	7.82
	54	1.27	2.23	3.19	4.14	5.10	6.05	7.01	7.96	8.92
	60	1.39	2.43	3.47	4.52	5.56	6.60	7.64	8.69	9.73
	66	1.58	2.77	3.95	5.14	6.32	7.51	8.70	9.88	11.07
	72	1.74	3.04	4.34	5.65	6.95	8.25	9.56	10.86	12.16
	78	1.85	3.24	4.63	6.02	7.41	8.80	10.19	11.58	12.97
84	2.04	3.58	5.11	6.64	8.18	9.71	11.24	12.78	14.31	
90	2.20	3.85	5.50	7.15	8.80	10.45	12.10	13.75	15.40	
96	2.32	4.05	5.79	7.53	9.27	11.00	12.74	14.48	16.21	
102	2.51	4.39	6.27	8.15	10.03	11.91	13.79	15.67	17.55	
108	2.66	4.66	6.66	8.66	10.66	12.65	14.65	16.65	18.65	
114	2.78	4.86	6.95	9.03	11.12	13.20	15.29	17.37	19.46	
120	2.97	5.20	7.43	9.65	11.88	14.11	16.34	18.57	20.80	