

Hurricane Drainable Blade Louver

Model EA 403

Design Features – High performance patented drainable blade design allowing maximum airflow with minimum outside element or water penetration. Miami-Dade County approved capable to withstand hurricanes up to Category 5.

STANDARD CONSTRUCTION

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

FRAMES

Channel, .081" extruded aluminum 6063-T5

BLADES

.081" extruded aluminum 6063-T5, approx., spacing is 4" @ 45°

ASSEMBLY

3/16" plated steel screw and welded construction

SCREEN.

.050" x 3/4" expanded aluminum without frame

MULLIONS

Visible

MINIMUM SIZE

6" x 6"

MAXIMUM SINGLE SECTION

120" x 84" or 84" x 120"

MAXIMUM SIZE

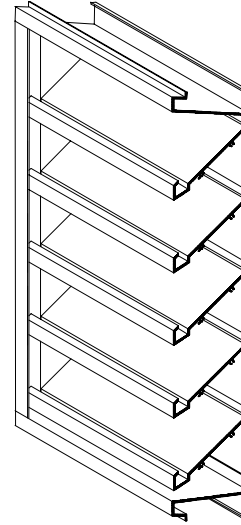
Unlimited structural supports as directed by Safe-Air/Dowco

UNDERSIZED

1/4" under opening sizes

FINISH

Mill



PERFORMANCE

Wind Pressure
120 psf (220 mph)

Free area
48 x 48 section
57%

Water Penetration
960 fpm

OPTIONAL CONSTRUCTION

FRAME – Available in a heavier extrusion of .125"

BLADES – Available in a heavier extrusion of .125"

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, epoxy, or enamel. Anodize or Kynar 500.

SPECIAL PURPOSE CONSTRUCTION

Special Shapes; Round, Triangle, Trapezoid, etc.

Security bars

Filter racks

Hinged as walk through door or for swing out access

Sleeved for ductwork connection

Combined with 600 or 610 Control Damper to attain 100% wind driven rain resistance

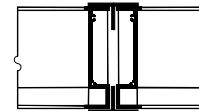
FEATURES

EA 403 is an extruded aluminum louver designed specifically to meet the following Miami Dade County test requirements and protocols such as:

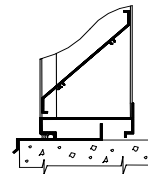
- TAS 201 (Large Missile Impact Test)
- TAS 202 (Uniform Static Air Pressure Test)
- TAS 203 (Cycle Wind Loading Test)



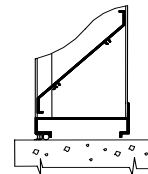
TYPICAL VERTICAL SECTION



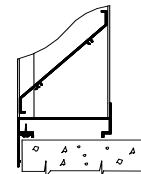
Exposed Mullion



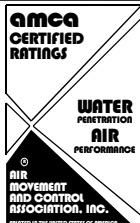
Channel with Sill Extension



Channel



Flanged (1-1/2")

DATE		ARCHITECT / ENGINEER			CUSTOMER	
PROJECT						
ITEM	QTY	W	H	TAG	 <p>Safe-Air Dowco/Air Flow Company certifies that the Model EA 403 louver shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA certified ratings program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings.</p>	



DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR / DOWCO

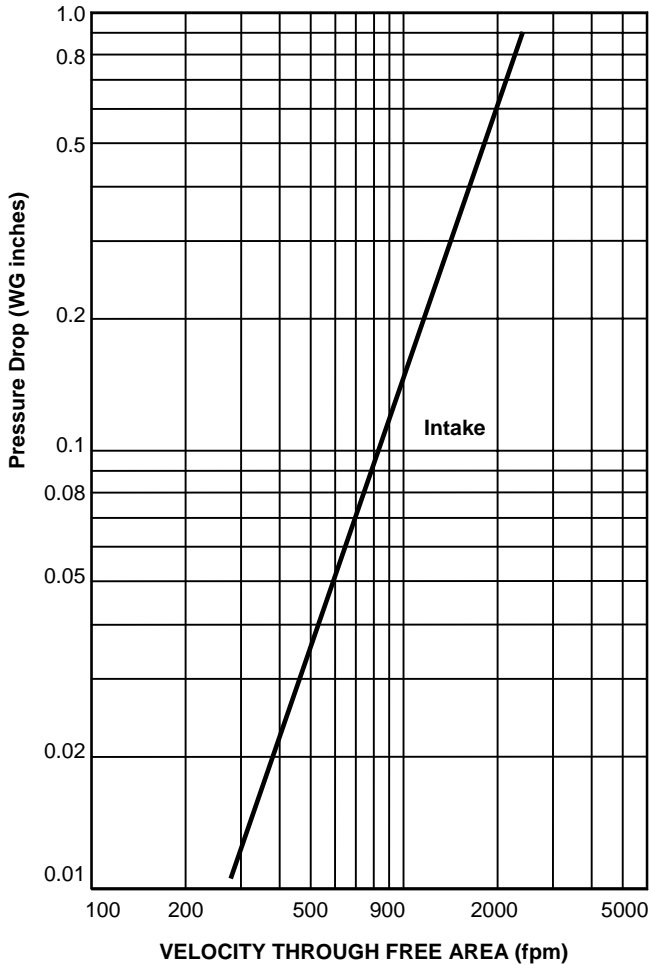
Engineering and General Offices

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 511 – 91 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 louver. 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

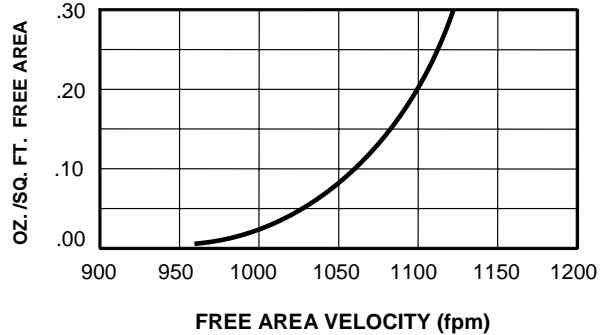
CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The "free area flow rate" at which water penetration commences (.01 oz. of water) is established at, 960 fpm for EA-403, and will vary depending upon actual weather conditions. The "water penetration" graph illustrates the results of actual laboratory test on a 48" x 48" test sample subjected to hypothetical rainfall conditions. To determine the free area (in sq. ft.) based upon a known volumetric flow rate in CFM;

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

Water Penetration

Beginning of water penetration = 960 FPM
 (15 minutes duration)



Free Area Calculations (sq. ft.)

		W I D T H (inches)														
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
H E I G H T (inches)	12	0.33	0.53	0.72	0.92	1.11	1.31	1.50	1.70	1.89	2.09	2.28	2.48	2.67	2.87	3.06
	18	0.58	0.92	1.26	1.60	1.94	2.29	2.63	2.97	3.31	3.65	4.00	4.34	4.68	5.02	5.36
	24	0.88	1.40	1.93	2.45	2.98	3.50	4.03	4.55	5.07	5.60	6.12	6.65	7.17	7.70	8.22
	30	1.16	1.85	2.55	3.24	3.93	4.63	5.32	6.01	6.71	7.40	8.09	8.79	9.48	10.17	10.86
	36	1.41	2.25	3.09	3.93	4.77	5.61	6.45	7.29	8.13	8.97	9.81	10.65	11.49	12.33	13.17
	42	1.67	2.67	3.67	4.68	5.68	6.68	7.68	8.68	9.68	10.68	11.68	12.68	13.68	14.68	15.68
	48	1.99	3.18	4.37	5.56	6.76	7.95	9.05	10.33	11.52	12.71	13.90	15.09	16.29	17.48	18.67
	54	2.24	3.57	4.91	6.25	7.59	8.93	10.27	11.60	12.94	14.28	15.62	16.96	18.29	19.63	20.97
	60	2.48	3.97	5.45	6.94	8.42	9.91	11.39	12.88	14.36	15.85	17.33	18.82	20.30	21.79	23.27
	66	2.78	4.45	6.12	7.79	9.45	11.12	12.79	14.46	16.13	17.79	19.46	21.13	22.80	24.46	26.13
	72	3.07	4.90	6.74	8.57	10.41	12.25	14.08	15.92	17.76	19.59	21.43	23.27	25.10	26.94	28.78
	78	3.31	5.29	7.28	9.26	11.24	13.23	15.21	17.19	19.18	21.16	23.14	25.13	27.11	29.09	31.08
	84	3.58	5.72	7.87	10.01	12.15	14.30	16.44	18.59	20.73	22.87	25.02	27.16	29.31	31.45	33.59
	90	3.90	6.23	8.56	10.90	13.23	15.57	17.90	20.24	22.57	24.91	27.24	29.58	31.91	34.24	36.58
96	4.14	6.62	9.10	11.59	14.07	16.55	19.03	21.51	23.99	26.47	28.96	31.44	33.92	36.40	38.88	
102	4.39	7.01	9.64	12.27	14.90	17.53	20.16	22.79	25.41	28.04	30.67	33.30	35.93	38.56	41.18	
108	4.69	7.50	10.31	13.12	15.93	18.74	21.56	24.37	27.18	29.99	32.80	35.61	38.42	41.23	44.04	
114	4.97	7.95	10.93	13.91	16.89	19.87	22.85	25.83	28.81	31.79	34.77	37.75	40.73	43.71	46.69	
120	5.22	8.34	11.47	14.60	17.72	20.85	23.98	27.10	30.23	33.36	36.48	39.61	42.74	45.86	48.99	