

Combination Fixed / Adjustable Drainable Blade Louver - Model C-DWE-AF

Design Features – Combination feature gives a hidden effect and superior shut off quality to competitive designs. Useful applications are high static pressure systems or where the tightest possible seal is required.

STANDARD CONSTRUCTION

ALL MATERIAL – EXTRUDED ALUMINUM ALLOY (6063-T5), (6063-T6) or (6061-T6)

FRAME

6" Deep, .081" extruded aluminum in style #3

BLADES

Fixed – Drainable .081" extruded aluminum @ 4-1/8" OC. 45°

Adjustable – Airfoil equivalent to 0.162" thk. extruded aluminum

BLADE AXLES & BEARINGS

Axles – 7/16" plated steel hex

Bearings – 1/2" (13) dia. bronze oilite

LINKAGE

Plated steel concealed in jamb

BLADE & JAMB SEALS

Vinyl blade and flexible aluminum jamb seals

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM SINGLE SECTION

60" W x 96"H (Type of finish may limit maximum single section)

MULLION

Visible

MINIMUM SIZE

12"w x 12"h

UNDERSIZED

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

SCREEN

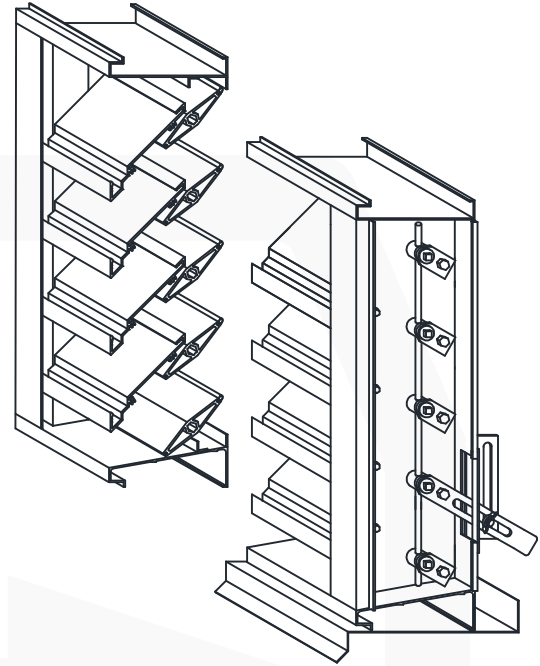
3/4" x .051" flattened expanded aluminum bird screen in frame

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

Fully welded construction

Security bars

Filter racks

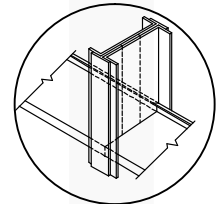
Jackshaft when required

Sleeved for ductwork connection

PERFORMANCE

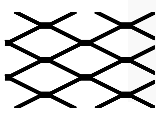
Point of
water penetration
937 fpm (286)
Free area
48 x 48 section
49%

MULLION STYLES

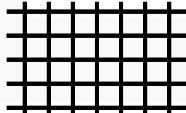


Visible

TYPICAL SCREEN STYLES



Expanded Aluminum
Standard

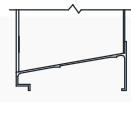


Wire Mesh

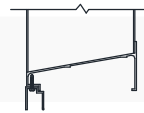
FRAME STYLE



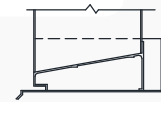
1- Flange (1.5")



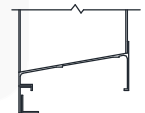
3 - Box



4 - Glazing
Adapter



8- Box with
Sill Extension



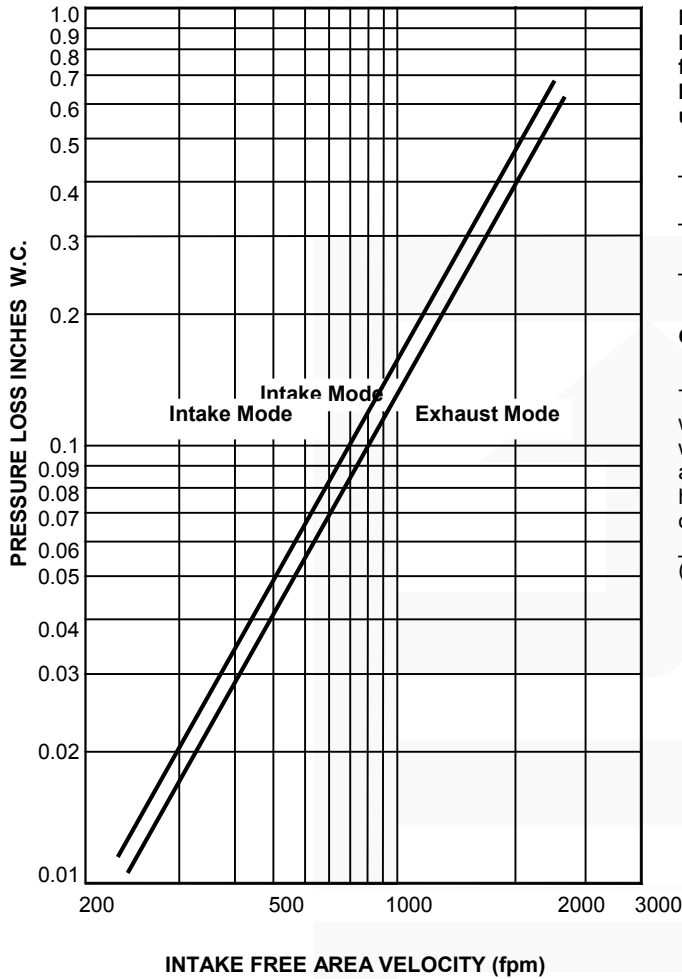
9 - Flange
w/ Sub Frame

DATE		ARCHITECT/ENGINEER			CUSTOMER	
PROJECT						
ITEM	QTY	W	H	DESCRIPTION		

C-DWE-AF PERFORMANCE SPECIFICATIONS

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.

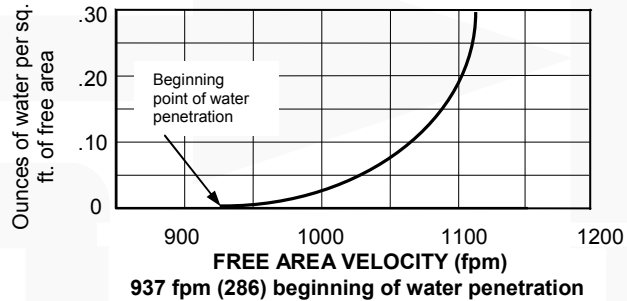
_____ in. W.C. Max. Pressure Loss Intake or Exhaust
 _____ FPM (Free Area Velocity from "Air Performance" Graph)
 _____ CFM / _____ FPM Free Area Velocity = _____ Sq. Ft. Free Area

CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The "free area flow rate" at which water penetration commences (.01 oz. of water) is established at, 937 fpm (286), 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)

Water Penetration Graph
 in oz. of water per sq. ft. of _____ .01 .02 .05 .1 .2 .3 (H2O)
 free area over a 15 min. test period 937 975 1027 1076 1105 1123 (fpm)



FREE AREA CALCULATIONS IN SQ. FT.

WIDTH										
Inches	12	18	24	30	36	42	48	54	60	HEIGHT
12	0.19	0.33	0.47	0.61	0.74	0.88	1.02	1.16	1.29	
18	0.41	0.70	0.99	1.28	1.57	1.86	2.15	2.45	2.74	
24	0.63	1.07	1.52	1.96	2.40	2.85	3.29	3.73	4.18	
30	0.85	1.44	2.04	2.64	3.23	3.83	4.43	5.02	5.62	
36	1.06	1.81	2.56	3.31	4.06	4.81	5.56	6.31	7.06	
42	1.28	2.18	3.09	3.99	4.89	5.79	6.70	7.60	8.50	
48	1.50	2.55	3.61	4.66	5.72	6.78	7.83	8.89	9.95	
54	1.71	2.92	4.13	5.34	6.55	7.76	8.97	10.18	11.39	
60	1.93	3.29	4.65	6.02	7.38	8.74	10.10	11.47	12.83	
66	2.15	3.66	5.18	6.69	8.21	9.72	11.24	12.76	14.27	
72	2.36	4.03	5.70	7.37	9.04	10.71	12.38	14.04	15.71	
78	2.58	4.40	6.22	8.05	9.87	11.69	13.51	15.33	17.15	
84	2.80	4.77	6.75	8.72	10.70	12.67	14.65	16.62	18.60	
90	3.01	5.14	7.27	9.40	11.53	13.65	15.78	17.91	20.04	
96	3.23	5.51	7.79	10.07	12.36	14.64	16.92	19.20	21.48	

