

Combination Fixed / Adjustable Drainable Blade Louver Model C-DWE-46

Design Features – Traditional straight architectural design with blades fixed at 45° angles. Louver construction conforms to SMACNA and ASHRAE standards.

STANDARD CONSTRUCTION

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

FRAME

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

BLADES

Fixed – Drainable .081" extruded aluminum @ 5-1/2" OC. 45°

Adjustable - .125" thk. extruded aluminum

BLADE AXLES & BEARINGS

Axles – 7/16" plated steel hex

Bearings – 1/2" 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

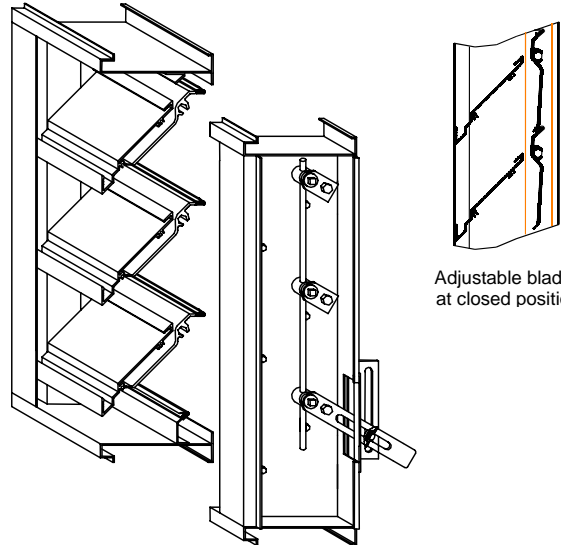
3/4" x .051" flattened expanded aluminum bird screen in frame

FINISH

Mill

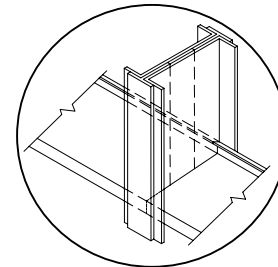
OPERATOR

Wing-nut type adjustable



Adjustable blades at closed position

MULLION STYLE



Visible

PERFORMANCE

Point of water penetration
929 fpm
Free area
48 x 48 section
49%

OPTIONAL CONSTRUCTION

FRAME – Available in a heavier extrusion of .125"

BLADES - Available in a heavier extrusion of .125"

JAMB SEALS – Stainless steel jamb seals

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 – Manual, Electric or Pneumatic

SPECIAL PURPOSE CONSTRUCTION

Security bars

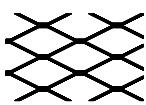
Filter racks

Sleeved for ductwork connection

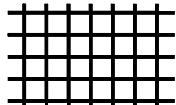
Jackshaft when required

** Consult SAFE-AIR/DOWCO for additional technical information.

TYPICAL SCREEN STYLES

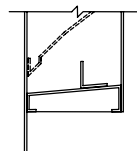


Expanded Aluminum Standard

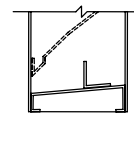


Wire Mesh

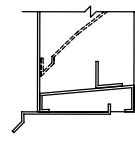
FRAME STYLES



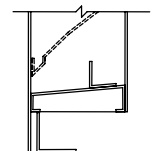
(1) - Flange 1-1/2"



(3) - Box Standard



(8) - Box and Sill Extension

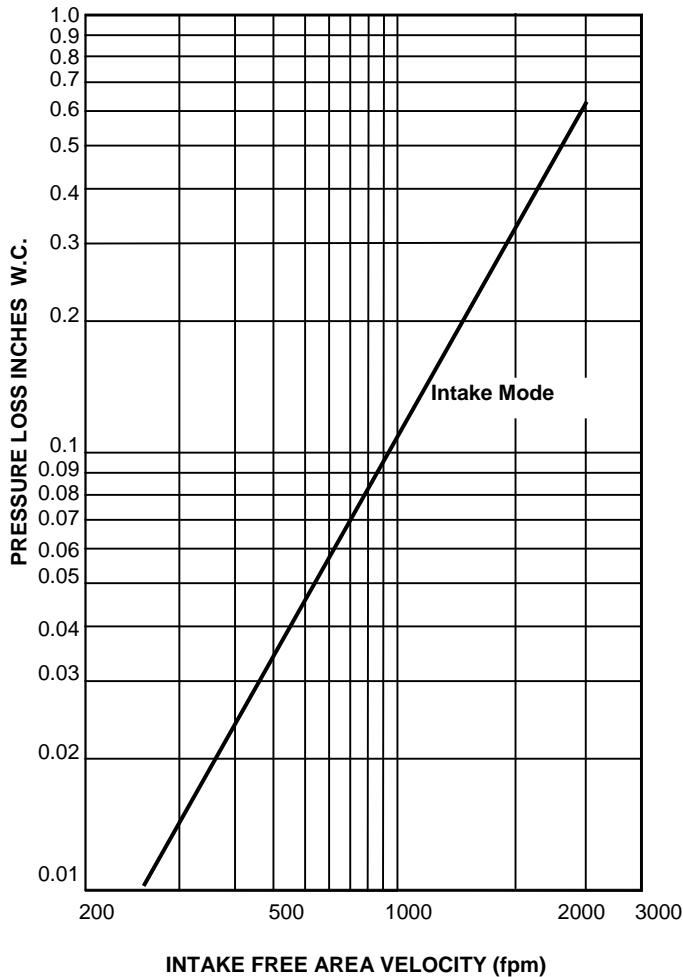


(9) - Flange w/ sub frame

DATE		ARCHITECT		CUSTOMER	
PROJECT					
ITEM	QTY	W	H	<p>SAFE-AIR/DOWCO certifies that the CDWE-46 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>	

All tests performed at an independent laboratory and based on AMCA standard 511 – 91 for air performance and water penetration.

AIR PERFORMANCE

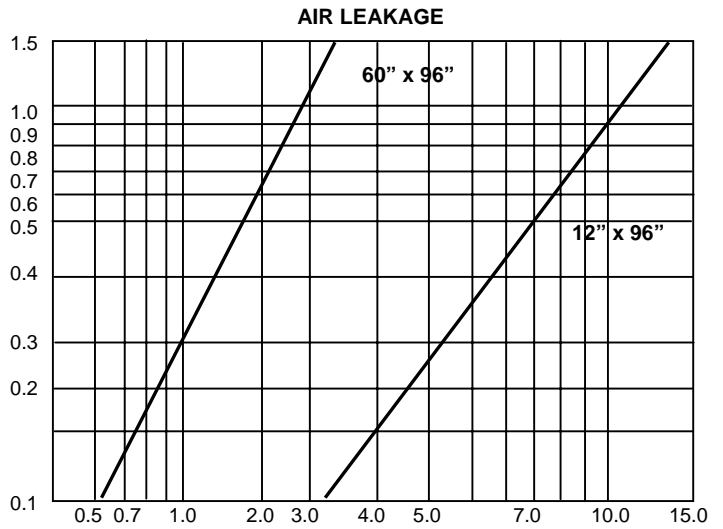


FREE AREA CALCULATIONS IN SQ. FT.

WIDTH

HEIGHT

Inches	12	18	24	30	36	42	48	54	60
12	0.19	0.33	0.47	0.61	0.74	0.88	1.02	1.16	1.29
18	0.41	0.7	0.99	1.28	1.57	1.86	2.15	2.45	2.74
24	0.63	1.07	1.52	1.96	2.4	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	6.7	7.6	8.5
48	1.5	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	10.1	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	5.7	7.37	9.04	10.71	12.38	14.04	15.71
78	2.58	4.4	6.22	8.05	9.87	11.69	13.51	15.33	17.15
84	2.8	4.77	6.75	8.72	10.7	12.67	14.65	16.62	18.6
90	3.01	5.14	7.27	9.4	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	19.2	21.48



AIR LEAKAGE
60" x 96"
12" x 96"
Air Leakage (cfm) Per Sq. Ft. of face area
With blade and iamb 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 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 980 fpm for C-DWE-44, 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 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
free area over a 15 min. test period

.01 .02 .05 .1 .2 .3 (H2O)
929 967 1017 1055 1093 1115 (fpm)

