

Drainable Blade Louver in 2" thick frame design - Model DWE-02

Design Features – High Performance patented design allowing maximum airflow with minimum outside element or water penetration.

STANDARD CONSTRUCTION

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

FRAME

DWE – 02" thick, is .063 extruded aluminum in style #3.

BLADES

DWE – 02" are .063" extruded aluminum, apx. spacing is 2" @ 45°

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM FACTORY ASSEMBLY SIZE

120" w x 72" H" or 72" w x 120" H

(allows for best handling)

(Type of finish may limit maximum single section)

MULLION

Invisible

MINIMUM SIZE

6" w x 6" H

UNDERSIZED

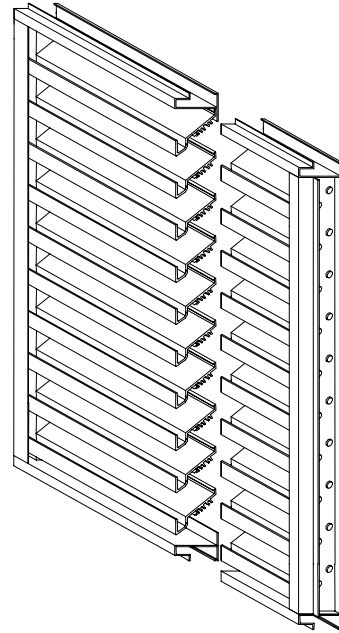
1/4" under ordered size unless specified Exact or Actual

SCREEN

3/4" .051" flattened expanded aluminum bird screen no frame

FINISH

Mill



PERFORMANCE

Point of water penetration
510 fpm

Free area
48 x 48 section
48%

OPTIONAL CONSTRUCTION

SCREEN - Many styles available please consult screen listing

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

MULLION – Visible for architectural preference

SPECIAL PURPOSE CONSTRUCTION

Special Shapes; Triangle, Trapezoid, etc.

Fully welded construction

Security bars

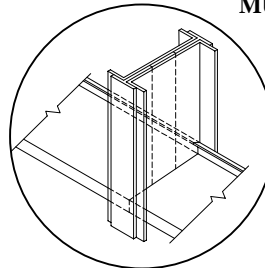
Filter racks

Hinged as walk through door or for swing out access

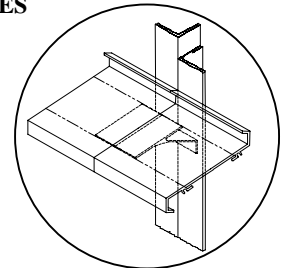
Sleeved for ductwork connection

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

MULLION STYLES

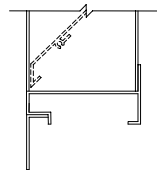


Visible

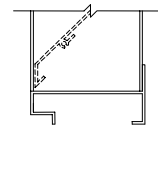


Invisible

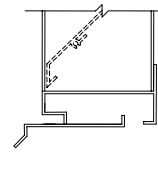
FRAME STYLE



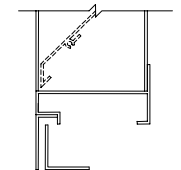
1- Flange (1.5")



3 – Box

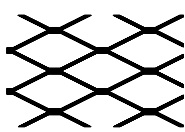


8- Box with Sill Extension

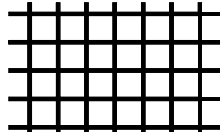


9 - Flange with Sub Frame

TYPICAL SCREEN STYLES



Expanded Aluminum Standard



Wire Mesh

DATE		ARCHITECT			CUSTOMER	
PROJECT						
ITEM	QTY	W	H	DESCRIPTION		



DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR OF ILLINOIS INC.

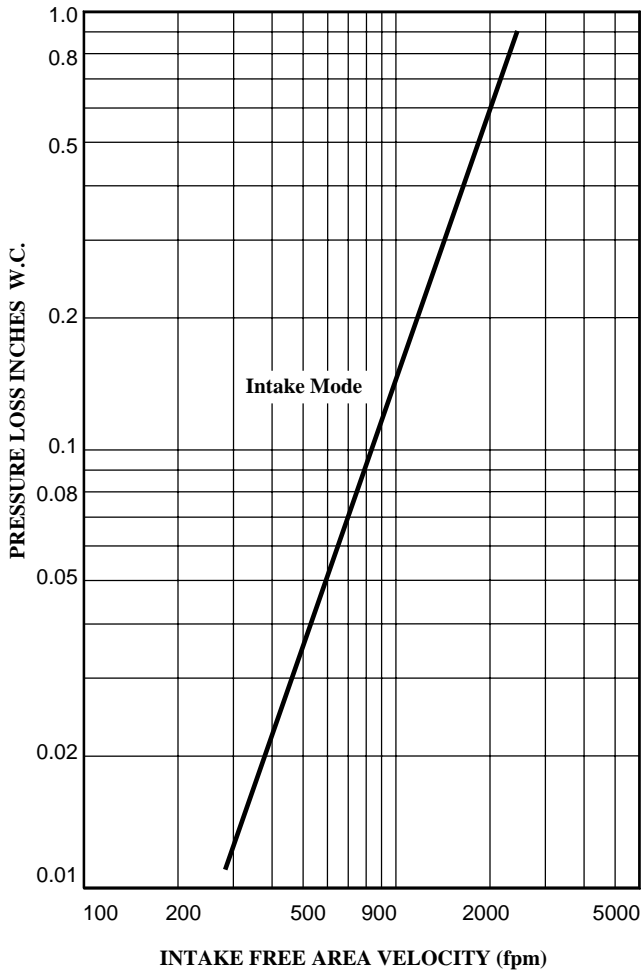
Engineering and General Offices

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 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)

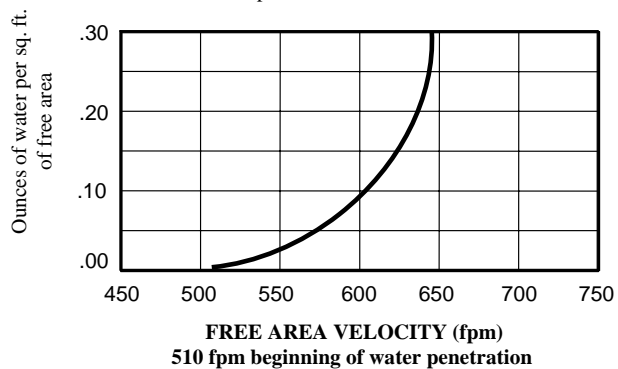
_____ CFM / _____ FPM Free Area Velocity = _____ Sq. Ft. Free Area

CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The "free area flow rate" at which water penetration commences (.01 oz. of water) is established at, 510 fpm for DWE-02, 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) 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



FREE AREA CALCULATIONS IN 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	0.34	0.54	0.74	0.94	1.14	1.34	1.54	1.74	1.94	2.14	2.34	2.54	2.74	2.94	3.14
	18	0.56	0.90	1.23	1.56	1.90	2.23	2.57	2.90	3.24	3.57	3.90	4.24	4.57	4.91	5.24
	24	0.79	1.25	1.72	2.19	2.66	3.13	3.59	4.06	4.53	5.00	5.47	5.93	6.40	6.87	7.34
	30	1.01	1.61	2.21	2.81	3.42	4.02	4.62	5.22	5.82	6.43	7.03	7.63	8.23	8.83	9.44
	36	1.23	1.97	2.70	3.44	4.17	4.91	5.65	6.38	7.12	7.85	8.59	9.33	10.06	10.80	11.53
	42	1.45	2.32	3.19	4.06	4.93	5.80	6.67	7.54	8.41	9.28	10.15	11.02	11.89	12.76	13.63
	48	1.68	2.68	3.68	4.69	5.69	6.70	7.70	8.70	9.71	10.71	11.71	12.72	13.72	14.72	15.73
	54	1.90	3.04	4.18	5.31	6.45	7.59	8.73	9.86	11.00	12.14	13.28	14.41	15.55	16.69	17.83
	60	2.12	3.40	4.67	5.94	7.21	8.48	9.75	11.02	12.29	13.57	14.84	16.11	17.38	18.65	19.92
	66	2.35	3.75	5.16	6.56	7.97	9.37	10.78	12.18	13.59	14.99	16.40	17.80	19.21	20.62	22.02
	72	2.57	4.11	5.65	7.19	8.73	10.27	11.80	13.34	14.88	16.42	17.96	19.50	21.04	22.58	24.12
	78	2.79	4.47	6.14	7.81	9.49	11.16	12.83	14.50	16.18	17.85	19.52	21.20	22.87	24.54	26.22
	84	3.02	4.82	6.63	8.44	10.24	12.05	13.86	15.66	17.47	19.28	21.09	22.89	24.70	26.51	28.31
	90	3.24	5.18	7.12	9.06	11.00	12.94	14.88	16.82	18.77	20.71	22.65	24.59	26.53	28.47	30.41
	96	3.46	5.54	7.61	9.69	11.76	13.84	15.91	17.99	20.06	22.13	24.21	26.28	28.36	30.43	32.51
102	3.69	5.89	8.10	10.31	12.52	14.73	16.94	19.15	21.35	23.56	25.77	27.98	30.19	32.40	34.60	
108	3.91	6.25	8.59	10.94	13.28	15.62	17.96	20.31	22.65	24.99	27.33	29.68	32.02	34.36	36.70	
114	4.13	6.61	9.08	11.56	14.04	16.51	18.99	21.47	23.94	26.42	28.89	31.37	33.85	36.32	38.80	
120	4.36	6.97	9.58	12.19	14.80	17.41	20.02	22.63	25.24	27.85	30.46	33.07	35.68	38.29	40.90	