

## Dual Drainable Blade Louver in 4" thick frame design - Model D-DBE-04

**Features** – High performance dual drain design allowing maximum airflow with minimum outside element or water penetration.

### STANDARD CONSTRUCTION

All MATERIAL-EXTRUDED ALUMINUM 6063-TS (KB-45)

**FRAME**

4" (102) thick, is .081" (2.1) Extruded aluminum in style #3

**BLADES**

.081" (2.1) Extruded aluminum, apx. spacing is 3.5" (89) @ 4°

**MAXIMUM SIZE**

Unlimited, with mullions, structural bracing supplied by others

**MAXIMUM SINGLE SECTION**

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 required may limit max single section size)

**MULLIONS**

Invisible

**MINIMUM SIZE**

12" W x 12" H (305 x 305)

**UNDERSIZED**

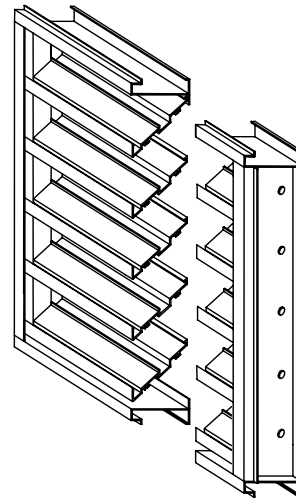
1/4" (6) under ordered size unless specified Exact or Actual

**SCREEN**

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

**FINISH**

Mill



PERFORMANCE
Point of water penetration 1051 fpm (320)
Free area 48 x 48 section 53%

### OPTIONAL CONSTRUCTION

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

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

**SCREENS** - Many styles available please consult screen listing

**MULLIONS** – Visible for architectural preference

**FINISH** – Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy or enamel. Anodize or Kynar ( Kynar limitations on steel.)

### SPECIAL PURPOSE CONSTRUCTION

Special shapes; Triangle, Trapezoid, etc.

Fully welded assembly

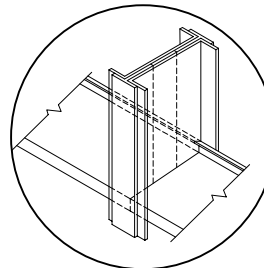
Security bars

Filter racks

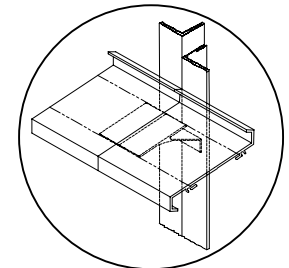
Hinged as walk through door or for swing out access

Sleeved for ductwork connection

### MULLION STYLES



Visible

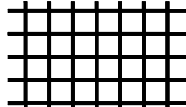


Invisible

### TYPICAL SCREEN STYLE

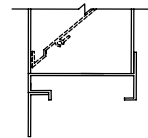


Expanded Aluminum Standard

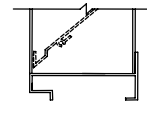


Wire Mesh Standard

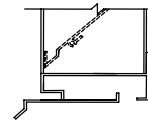
### FRAME STYLES



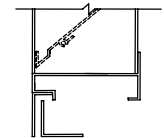
1- Flange (1.5")




3 - Box



8- Box with Sill Extension



9 - Flange with Sub Frame

DATE	ARCHITECT			ENGINEER
PROJECT				
ITEM	QTY	W	H	 <p>SAFE-AIR/DOWCO certifies that the D-DBE-04 louver shown herein are 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 OF ILLINOIS INC.**

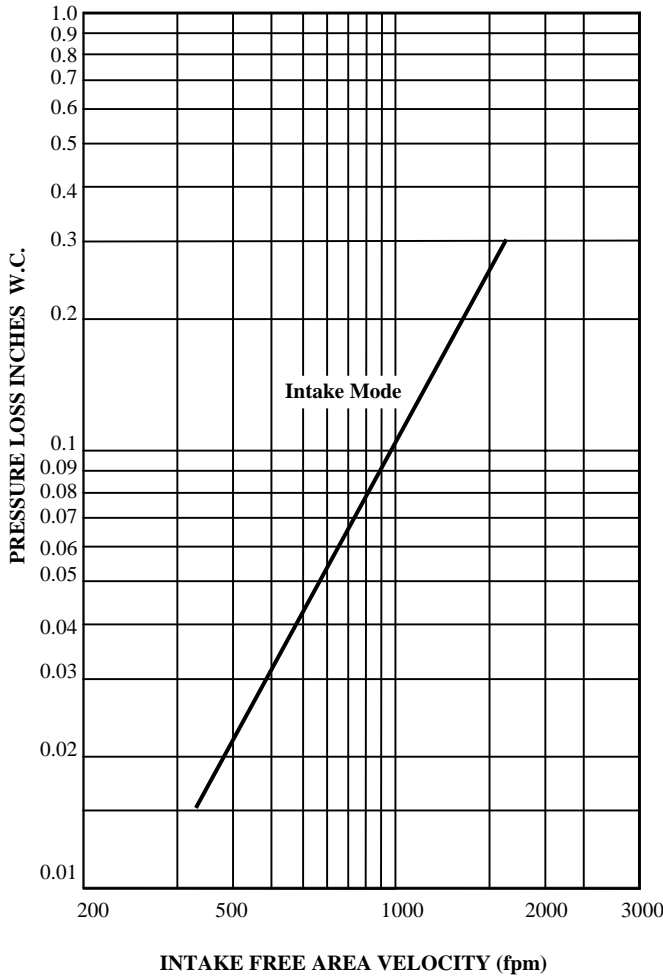
Engineering and General Offices

1855 South 54<sup>th</sup> 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

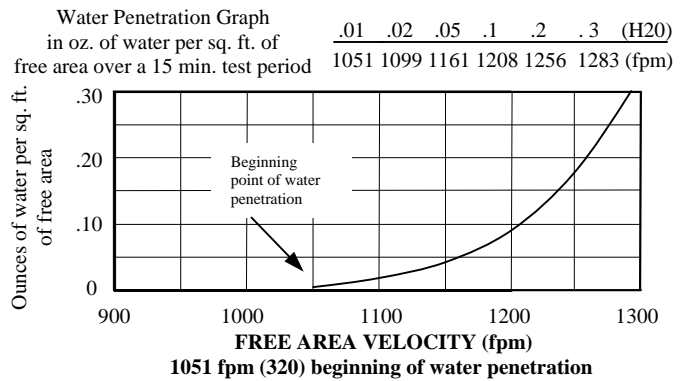
Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the “air performance” graph, knowing the sq. ft. of free area of the louver. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the “air performance” 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, 1051 fpm (320) for D-DBE-04, 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)



### FREE AREA CALCULATIONS IN SQ. FT.

WIDTH

INCHES	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
12	.34	.54	.74	.94	1.14	1.35	1.55	1.75	1.95	2.15	2.36	2.56	2.76	2.96	3.16	3.37	3.57	3.77	3.97
18	.56	.90	1.24	1.58	1.92	2.26	2.60	2.94	3.27	3.61	3.95	4.29	4.63	4.97	5.31	5.65	5.98	6.32	6.66
24	.80	1.28	1.75	2.23	2.71	3.19	3.67	4.15	4.63	5.10	5.58	6.06	6.54	7.02	7.50	7.98	8.45	8.93	9.41
30	1.10	1.76	2.42	3.08	3.73	4.39	5.05	5.71	6.37	7.03	7.69	8.35	9.01	9.66	10.32	10.98	11.64	12.30	12.96
36	1.35	2.16	2.98	3.79	4.60	5.41	6.22	7.04	7.85	8.66	9.47	10.28	11.09	11.91	12.72	13.53	14.34	15.15	15.96
42	1.58	2.53	3.48	4.43	5.37	6.32	7.27	8.22	9.17	10.12	11.07	12.01	12.96	13.91	14.86	15.81	16.76	17.70	18.65
48	1.85	2.96	4.07	5.18	6.29	7.40	8.51	9.62	10.73	11.84	12.95	14.06	15.17	16.28	17.39	18.50	19.61	20.72	21.83
54	2.14	3.43	4.71	6.00	7.28	8.57	9.85	11.13	12.42	13.70	14.99	16.27	17.56	18.84	20.13	21.41	22.70	23.98	25.27
60	2.37	3.79	5.21	6.63	8.06	9.48	10.90	12.32	13.74	15.16	16.58	18.01	19.43	20.85	22.27	23.69	25.11	26.53	27.96
66	2.60	4.16	5.72	7.29	8.85	10.41	11.97	13.53	15.09	16.65	18.22	19.78	21.34	22.90	24.46	26.02	27.58	29.15	30.71
72	2.90	4.64	6.39	8.13	9.87	11.61	13.35	15.10	16.84	18.58	20.32	22.06	23.80	25.55	27.29	29.03	30.77	32.51	34.26
78	3.16	5.05	6.95	8.84	10.74	12.63	14.52	16.42	18.31	20.21	22.10	24.00	25.89	27.79	29.68	31.58	33.47	35.36	37.26
84	3.39	5.42	7.45	9.48	11.51	13.54	15.57	17.60	19.64	21.67	23.70	25.73	27.76	29.79	31.82	33.85	35.89	37.92	39.95
90	3.65	5.85	8.04	10.23	12.43	14.62	16.81	19.01	21.20	23.39	25.58	27.78	29.97	32.16	34.36	36.55	38.74	40.94	43.13
96	3.95	6.31	8.68	11.05	13.42	15.70	18.15	20.52	22.89	25.25	27.62	29.99	32.36	34.73	37.09	39.46	41.83	44.20	46.56

HEIGHT