

## Drainable Blade Louver in 6" thick frame design - Model DWE-06

**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 – 06" (152) thick, is .081 (2.1) extruded aluminum in style #3.

#### BLADES

DWE – 06" (152) are .081" (2.1) extruded alum. approx. spacing is 6 1/2 (165) @ 45°

#### MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

#### MAXIMUM SINGLE SECTION

120" w x 84" h or 84" w x 120" h  
(allows for best handling)

(Type of finish may limit maximum single section)

#### MULLIONS

Invisible

#### MINIMUM SIZE

12" w x 12" H (305 x 305)

#### UNDERSIZED

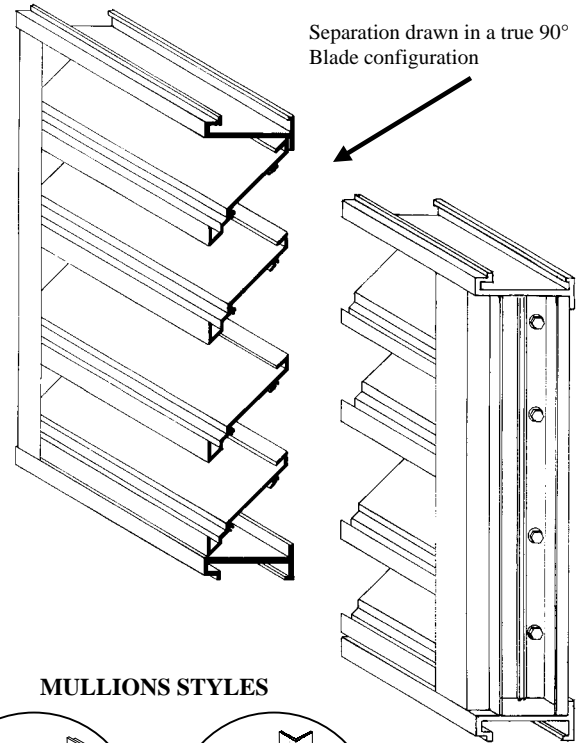
1/4" (6) under ordered size unless specified Exact or Actual

#### SCREEN

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

#### FINISH

Mill



### OPTIONAL CONSTRUCTION

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

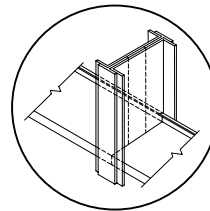
**BLADES** – Available in a heavier extrusion of .125" (3.2)

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

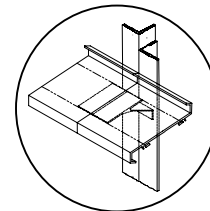
**FINISH** – Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy, Anodize or Kynar

**MULLIONS** – Visible for architectural preference

### MULLIONS STYLES



Visible



Invisible

### PERFORMANCE

Point of  
water penetration  
939 fpm (286)

Free area  
48 x 48 section  
55%

### SPECIAL PURPOSE CONSTRUCTION

Special Shapes; Triangle, Trapezoid, etc.

Fully welded construction

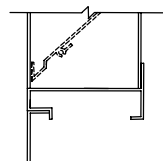
Security bars

Filter racks

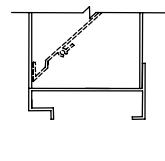
Hinged as walk through door or for swing out access

Sleeved for ductwork connection

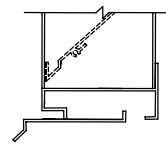
### FRAME STYLES



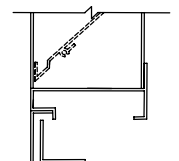
1- Flange (1.5")



3 – Box

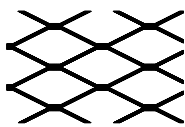


8- Box with  
Sill Extension

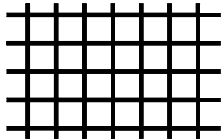


9 - Flange  
with Sub Frame

### 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.**

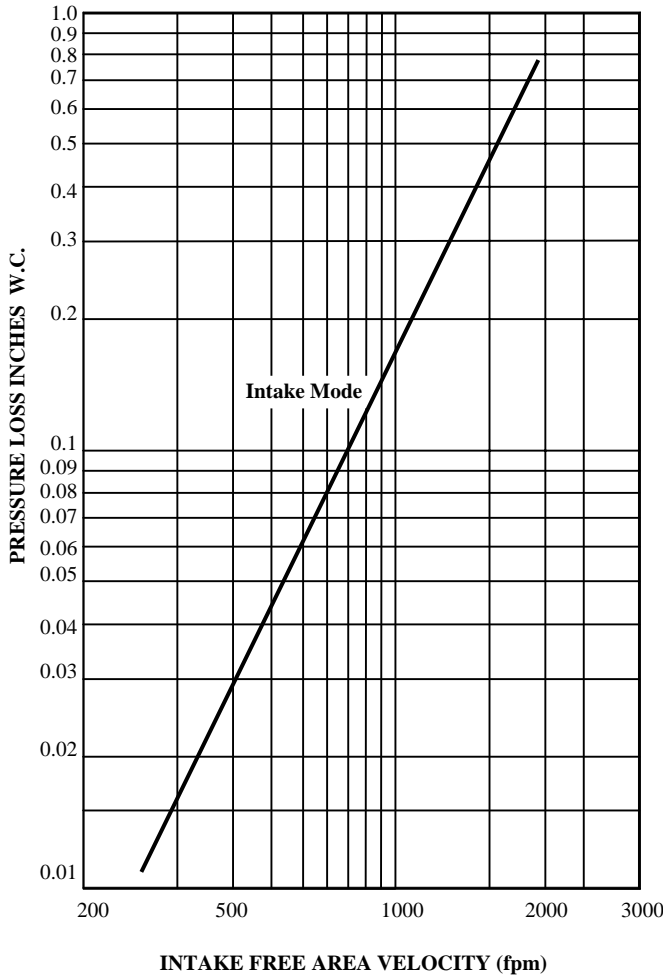
Engineering and General Offices

1855 South 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

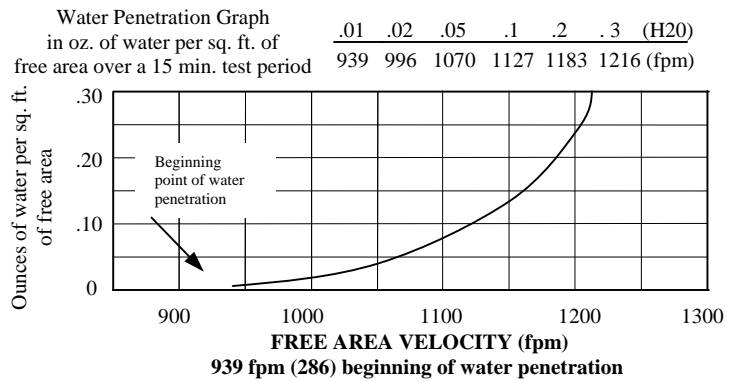
Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the “air performance” graph, knowing the sq. ft. of free area of the louver. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the “air performance” 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, 939 fpm (286) for DWE-06, 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     | .20  | .32  | .44  | .56   | .68   | .80   | .92   | 1.04  | 1.16  | 1.28  | 1.40  | 1.52  | 1.64  | 1.76  | 1.88  | 2.01  | 2.13  | 2.25  | 2.37  |
| 18     | .47  | .74  | 1.02 | 1.30  | 1.58  | 1.86  | 2.14  | 2.42  | 2.70  | 2.98  | 3.26  | 3.54  | 3.82  | 4.10  | 4.38  | 4.66  | 4.93  | 5.21  | 5.49  |
| 24     | .76  | 1.21 | 1.67 | 2.12  | 2.58  | 3.03  | 3.49  | 3.94  | 4.40  | 4.85  | 5.30  | 5.76  | 6.21  | 6.67  | 7.12  | 7.58  | 8.03  | 8.49  | 8.94  |
| 30     | 1.05 | 1.68 | 2.31 | 2.94  | 3.57  | 4.20  | 4.83  | 5.46  | 6.09  | 6.72  | 7.35  | 7.98  | 8.61  | 9.24  | 9.87  | 10.50 | 11.13 | 11.76 | 12.39 |
| 36     | 1.34 | 2.15 | 2.95 | 3.76  | 4.56  | 5.37  | 6.18  | 6.98  | 7.79  | 8.59  | 9.40  | 10.20 | 11.01 | 11.81 | 12.62 | 13.42 | 14.23 | 15.04 | 15.84 |
| 42     | 1.63 | 2.62 | 3.60 | 4.58  | 5.56  | 6.54  | 7.52  | 8.50  | 9.48  | 10.46 | 11.44 | 12.42 | 13.41 | 14.39 | 15.37 | 16.35 | 17.33 | 18.31 | 19.29 |
| 48     | 1.92 | 3.07 | 4.22 | 5.37  | 6.52  | 7.67  | 8.82  | 9.97  | 11.12 | 12.27 | 13.42 | 14.57 | 15.72 | 16.87 | 18.02 | 19.17 | 20.32 | 21.47 | 22.62 |
| 54     | 2.17 | 3.48 | 4.78 | 6.08  | 7.39  | 8.69  | 10.00 | 11.30 | 12.60 | 13.91 | 15.21 | 16.52 | 17.82 | 19.12 | 20.43 | 21.73 | 23.04 | 24.34 | 25.64 |
| 60     | 2.43 | 3.89 | 5.34 | 6.80  | 8.26  | 9.72  | 11.17 | 12.63 | 14.09 | 15.55 | 17.00 | 18.46 | 19.92 | 21.38 | 22.83 | 24.29 | 25.75 | 27.21 | 28.66 |
| 66     | 2.68 | 4.30 | 5.91 | 7.52  | 9.13  | 10.74 | 12.35 | 13.96 | 15.57 | 17.18 | 18.79 | 20.41 | 22.02 | 23.63 | 25.24 | 26.85 | 28.46 | 30.07 | 31.68 |
| 72     | 2.94 | 4.71 | 6.47 | 8.23  | 10.00 | 11.76 | 13.53 | 15.29 | 17.06 | 18.82 | 20.59 | 22.35 | 24.11 | 25.88 | 27.64 | 29.41 | 31.17 | 32.94 | 34.70 |
| 78     | 3.20 | 5.11 | 7.03 | 8.95  | 10.87 | 12.79 | 14.70 | 16.62 | 18.54 | 20.46 | 22.38 | 24.29 | 26.21 | 28.13 | 30.05 | 31.97 | 33.88 | 35.80 | 37.72 |
| 84     | 3.45 | 5.52 | 7.60 | 9.67  | 11.74 | 13.81 | 15.88 | 17.95 | 20.02 | 22.10 | 24.17 | 26.24 | 28.31 | 30.38 | 32.45 | 34.53 | 36.60 | 38.67 | 40.74 |
| 90     | 3.71 | 5.93 | 8.16 | 10.38 | 12.61 | 14.83 | 17.06 | 19.28 | 21.51 | 23.73 | 25.96 | 28.18 | 30.41 | 32.63 | 34.86 | 37.08 | 39.31 | 41.53 | 43.76 |
| 96     | 3.97 | 6.36 | 8.74 | 11.13 | 13.51 | 15.89 | 18.28 | 20.66 | 23.05 | 25.43 | 27.81 | 30.20 | 32.58 | 34.97 | 37.35 | 39.73 | 42.12 | 44.50 | 46.89 |

HEIGHT