

Drainable Blade Louver in 4" or 6" thick frame design Model A - DBF

Features – High performance adjustable design to satisfy systems requiring periodic operation.

STANDARD CONSTRUCTION

FRAME

A-DBF-04" thick, is 18 gauge galvanized steel in style #3
 A-DBF-06" thick, is 18 gauge galvanized steel in style #3

ADJUSTABLE BLADES

A-DBF-04", are 20 gauge galvanized steel @ 39°
 A-DBF-06", are 20 gauge galvanized steel @ 36°

BLADES AXLES & BEARINGS

BEARINGS- ½" Bronze oil impregnated
 AXLES- Plated shaft

LINKAGE

Mounted on blades at center point of width dimension

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM SINGLE SECTION

60"w x 96"H (allows for best handling)

MULLIONS

Visible

MINIMUM SIZE

12" W x 12" H

UNDERSIZED

3/8" under ordered size unless specified Exact or Actual

SCREEN

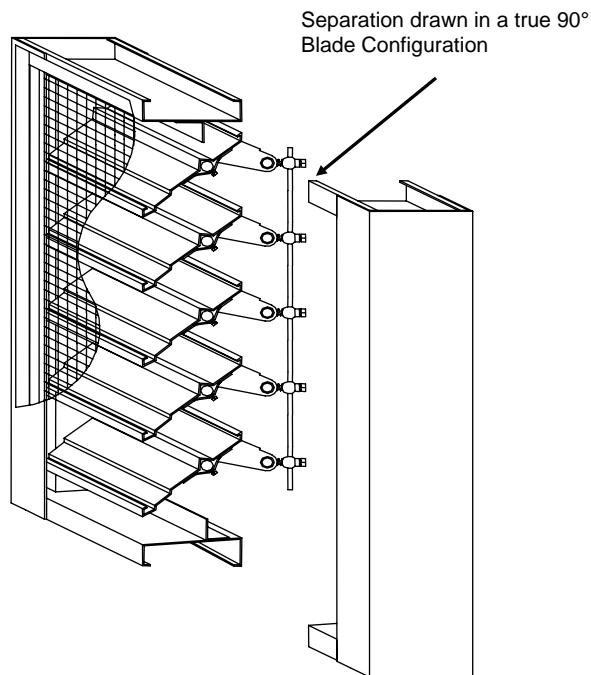
½" wire mesh 19 gauge galvanized bird screen in frame on face

FINISH

Mill

OPERATOR

Wingnut Adjustment



OPTIONAL CONSTRUCTION

FRAME – Available in a heavier construction up to 10 gauge

BLADES - Available in a heavier construction up to 16 gauge

SPECIFIED MATERIAL – Aluminum, Stainless or as requested

SCREENS - Many styles available please consult screen listing

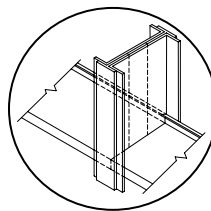
LINKAGE – Concealed in jamb

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

OPERATOR - Manual, electric or pneumatic

BLADE & JAMB SEALS – Neoprene blade edge and/or flexible metal jamb seals

MULLION STYLE



Visible

PERFORMANCE

| | |
|-----------------|--|
| | Pt. of Water Penetration 973 fpm |
| A-DBF-04 | Free Area 56% 48 x 48 unit size |
| | Pt. of Water Penetration 1010 fpm |
| A-DBF-06 | Free Area 58% 48 x 48 unit size |

SPECIAL PURPOSE CONSTRUCTION.

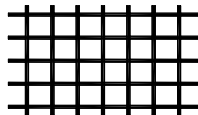
Security bars

Filter racks

Hinged as walk through door or for swing out access

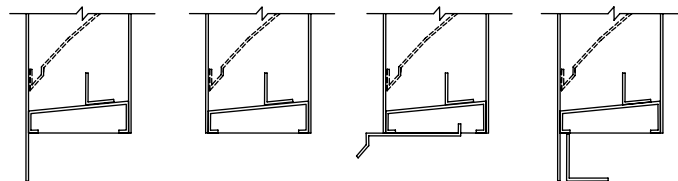
Sleeved for ductwork connection

TYPICAL SCREEN STYLE



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 | DESCRIPTION | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
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DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR OF ILLINOIS INC.

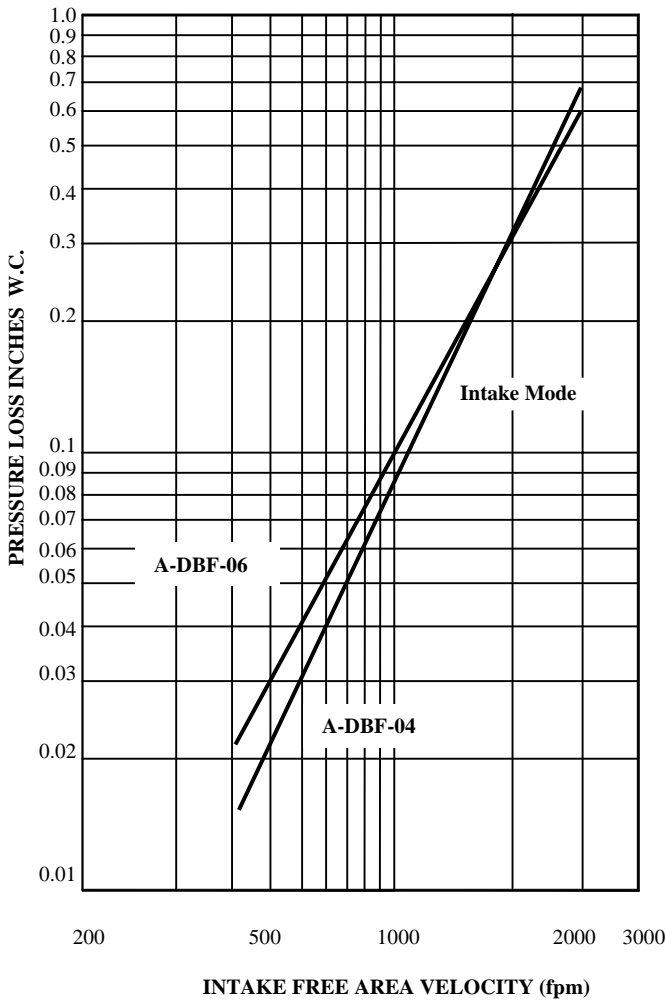
Engineering and General Offices

1855 South 54th Avenue, Cicero, Illinois 60804

Phone 708-652-9100 FAX 708-652-9158

All free area calculations made in accordance with AMCA standards.

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, 973 fpm for A-DBF-04 and 1010 fpm for A-DBF-06, 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 upon a known volumetric flow rate in CFM;

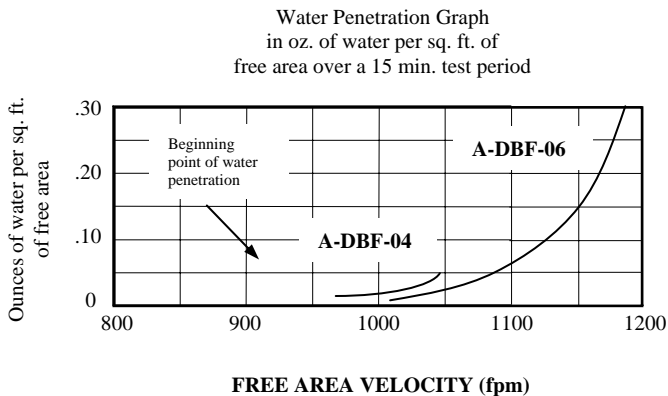
_____ CFM / _____ FPM = _____ SQ. FT. FREE AREA
 (System Requirements)

FREE AREA CALCULATIONS IN SQ. FT.

WIDTH

| INCHES | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
|--------------|------|------|------|-------|-------|-------|-------|-------|-------|
| 12-04 | .29 | .46 | .63 | .81 | .98 | 1.15 | 1.32 | 1.50 | 1.67 |
| -06 | .30 | .47 | .64 | .82 | .99 | 1.16 | 1.34 | 1.51 | 1.70 |
| 18-04 | .56 | .90 | 1.25 | 1.58 | 1.92 | 2.27 | 2.60 | 2.94 | 3.28 |
| -06 | .60 | .95 | 1.31 | 1.68 | 2.03 | 2.39 | 2.74 | 3.10 | 3.47 |
| 24-04 | .85 | 1.35 | 1.86 | 2.36 | 2.87 | 3.37 | 3.88 | 4.38 | 4.90 |
| -06 | .90 | 1.43 | 1.96 | 2.50 | 3.04 | 3.57 | 4.10 | 4.64 | 5.18 |
| 30-04 | 1.12 | 1.79 | 2.47 | 3.14 | 3.81 | 4.49 | 5.15 | 5.83 | 6.50 |
| -06 | 1.15 | 1.85 | 2.54 | 3.23 | 3.92 | 4.62 | 5.31 | 6.00 | 6.70 |
| 36-04 | 1.40 | 2.24 | 3.08 | 3.91 | 4.75 | 5.60 | 6.44 | 7.28 | 8.11 |
| -06 | 1.43 | 2.28 | 3.13 | 3.99 | 4.85 | 5.70 | 6.55 | 7.41 | 8.27 |
| 42-04 | 1.68 | 2.69 | 3.69 | 4.70 | 5.70 | 6.70 | 7.71 | 8.71 | 9.72 |
| -06 | 1.75 | 2.81 | 3.87 | 4.91 | 5.97 | 7.03 | 8.08 | 9.13 | 10.18 |
| 48-04 | 1.95 | 3.12 | 4.30 | 5.48 | 6.65 | 7.82 | 8.99 | 10.16 | 11.33 |
| -06 | 2.02 | 3.23 | 4.44 | 5.65 | 6.86 | 8.08 | 9.29 | 10.50 | 11.70 |
| 54-04 | 2.23 | 3.57 | 4.91 | 6.25 | 7.59 | 8.93 | 10.27 | 11.61 | 12.94 |
| -06 | 2.28 | 3.65 | 5.02 | 6.38 | 7.75 | 9.12 | 10.49 | 11.86 | 13.22 |
| 60-04 | 2.51 | 4.02 | 5.52 | 7.03 | 8.53 | 10.04 | 11.54 | 13.05 | 14.56 |
| -06 | 2.58 | 4.13 | 5.69 | 7.24 | 8.79 | 10.34 | 11.90 | 13.45 | 14.99 |
| 66-04 | 2.79 | 4.46 | 6.13 | 7.81 | 9.48 | 11.15 | 12.82 | 14.50 | 16.17 |
| -06 | 2.89 | 4.61 | 6.34 | 8.07 | 9.80 | 11.52 | 13.26 | 14.98 | 16.71 |
| 72-04 | 3.07 | 4.90 | 6.74 | 8.58 | 10.42 | 12.27 | 14.10 | 15.94 | 17.78 |
| -06 | 3.14 | 5.03 | 6.91 | 8.80 | 10.69 | 12.57 | 14.46 | 16.34 | 18.23 |
| 78-04 | 3.34 | 5.35 | 7.35 | 9.36 | 11.37 | 13.37 | 15.38 | 17.38 | 19.39 |
| -06 | 3.41 | 5.47 | 7.51 | 9.56 | 11.61 | 13.66 | 15.70 | 17.75 | 19.80 |
| 84-04 | 3.62 | 5.79 | 7.96 | 10.14 | 12.31 | 14.49 | 16.66 | 18.83 | 21.00 |
| -06 | 3.74 | 5.99 | 8.24 | 10.49 | 12.73 | 14.98 | 17.22 | 19.47 | 21.71 |
| 90-04 | 3.90 | 6.24 | 8.58 | 10.91 | 13.26 | 15.60 | 17.93 | 20.28 | 22.61 |
| -06 | 4.01 | 6.41 | 8.81 | 11.22 | 13.62 | 16.03 | 18.43 | 20.83 | 23.24 |
| 96-04 | 4.18 | 6.69 | 9.19 | 11.77 | 14.20 | 16.70 | 19.21 | 21.71 | 24.23 |
| -06 | 4.27 | 6.83 | 9.39 | 11.95 | 14.51 | 17.08 | 19.64 | 22.19 | 24.75 |

HEIGHT



| | .01 | .02 | .05 | .1 | .2 | .3 (H20) |
|-----------------|------|------|------|------|------|------------|
| A-DBF-04 | 973 | 1004 | 1046 | n/a | n/a | n/a (fpm) |
| A-DBF-06 | 1010 | 1045 | 1090 | 1125 | 1159 | 1179 (fpm) |