

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

**Features** — Combination feature gives a hidden effect and superior shut off quality to competitive designs. Useful applications are high static pressure systems or where the tightest possible seal is required.

#### STANDARD CONSTRUCTION

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

#### FRAME

06" thick .081" extruded aluminum in style #3

#### BLADES

Fixed — Drainable design .081" extruded alum, apx. spacing is 5 1/2" @ 45°

Adjustable — .125" extruded aluminum

#### BLADE AXELS & BEARINGS

Axles — 7/16" Plated hex

Bearings — Bronze oilite

#### LINKAGE

Concealed in jamb

#### BLADE & JAMB SEALS

Vinyl blade edge and flexible metal jamb seals

#### MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

#### MAXIMUM SINGLE SECTION

60" w x 96" h

(Over 60" wide will have double linkage)

#### MULLIONS

Visible

#### MINIMUM SIZE

12" w x 12" h

#### UNDERSIZED

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

#### SCREEN

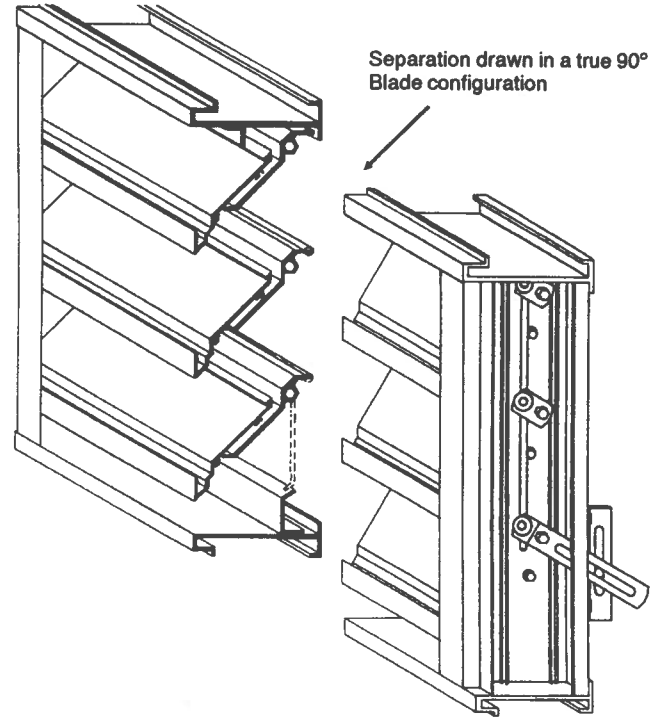
3/4" .051" Flattened expanded aluminum bird screen in frame

#### FINISH

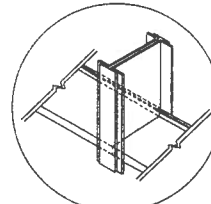
Mill

#### OPERATOR

Wingnut adjustable



#### MULLION STYLE



Visible

#### OPTIONAL CONSTRUCTION

FRAME - Available in a heavier extrusion of .125"

BLADES - Available in a heavier extrusion of .125"

SCREENS - Many styles available please consult screen listing

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

OPERATORS - Manual, electric or pneumatic

#### SPECIAL PURPOSE CONSTRUCTION

Welded linkage

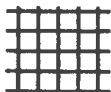
Security bars

Filter racks

Sleeved for ductwork connection

Jackshaft when required

#### TYPICAL SCREEN STYLES

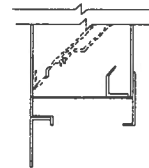


Wire Mesh

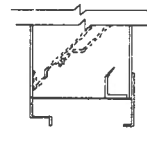


Expanded Aluminum - Standard

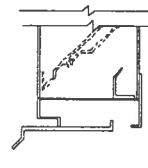
#### FRAME STYLES



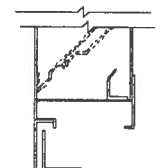
1 - Flange (1.5")



3 - Box



8 - Box with Sill Extension



9 - Flange with Sub Frame

#### PERFORMANCE

Point of water penetration  
929 fpm

Free area  
48 x 48 section  
49%

DATE	ARCHITECT			ENGINEER
PROJECT				
ITEM	QTY	W	H	

**AMCA CERTIFIED RATINGS**

WATER PENETRATION  
AIR PERFORMANCE

AND MOVEMENT AND CONTROL ASSOCIATION INC.

DOWCO PRODUCTS GROUP Certifies that the C-DWE louvers 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 and water penetration ratings only.



# DOWCO®

DEPENDABLE PRODUCTS SINCE 1955

**DOWCO Products Group**

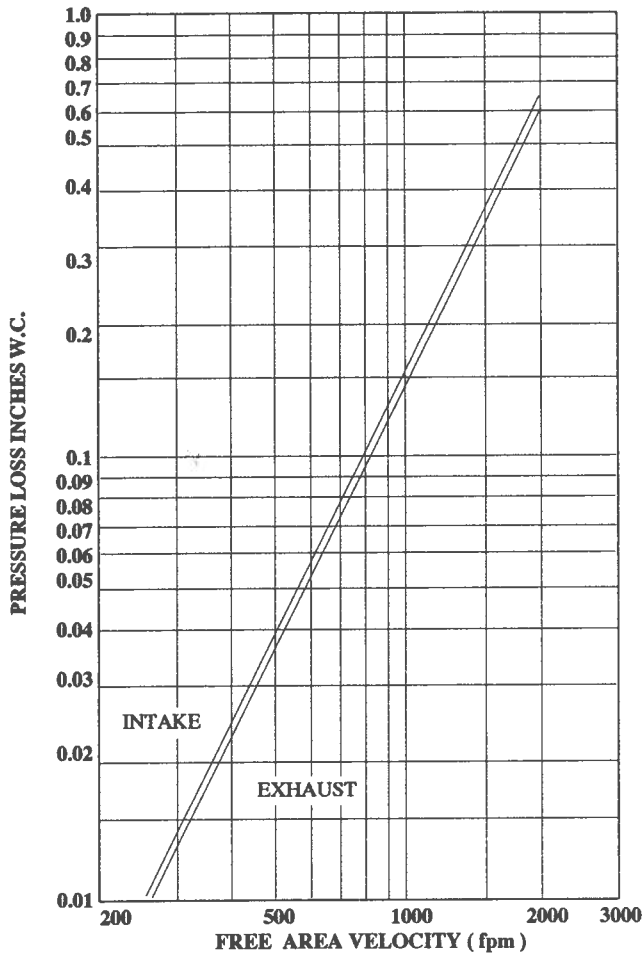
*Engineering and General Offices*

1855 South 54th Avenue, Cicero, Illinois 60804

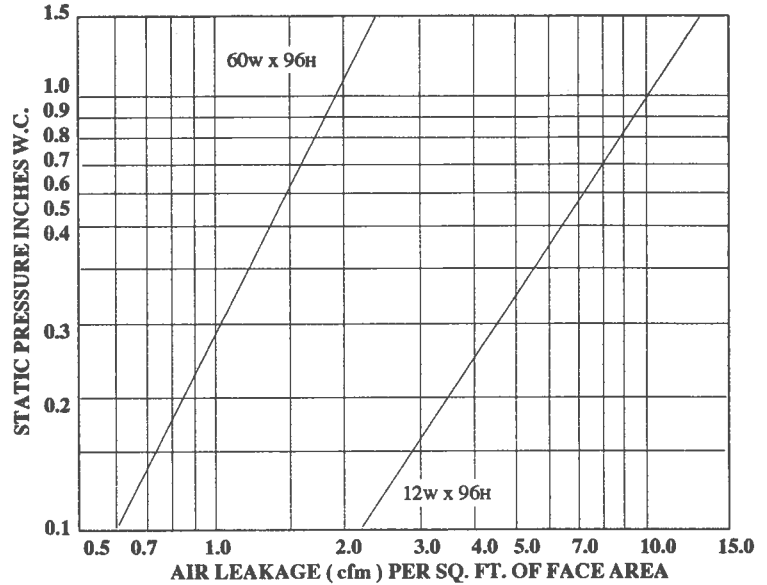
Phone 708-652-9100 FAX 708-652-9158

# DOWCO C-DWE - 46 PERFORMANCE SPECIFICATIONS

## AIR PERFORMANCE



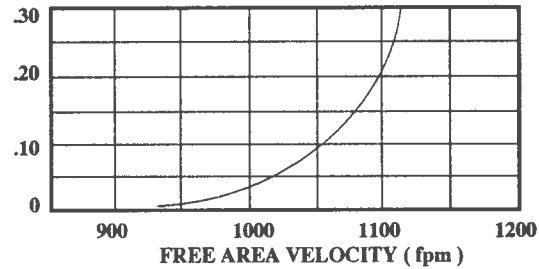
## AIR LEAKAGE



Water Penetration Graph  
 in oz. of water per sq. ft. of  
 free area over a 15 min. test period

Actual test results in oz. of water carryover  
 .01 .02 .05 .1 .2 .3 (H<sub>2</sub>O)

C-DWE-46 929 967 1017 1055 1093 1115 (fpm)



### CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The "free area flow rate" at which water penetration commences (.01 oz. of water) is estimated at, 929 fpm for C-DWE-46, and will vary depending upon actual weather conditions. The "water penetration" graph illustrates the results of actual laboratory tests on a 48" x 48" test sample subjected to hypothetical rainfall conditions. To determine the free area (in sq. ft.) based upon a known volumetric flow rate in CFM;

$$\frac{\text{CFM}}{\text{FPM}} = \text{SQ. FT. FREE AREA}$$

(System Requirements) (929 Max)

### 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;

$$\text{IN. W.C. Max. Pres. Loss Intake or Exhaust}$$

$$\text{FPM (Free Area Velocity From "Air Performance" Graph)}$$

$$\text{CFM} / \text{FPM Free Area Velocity} = \text{Sq. Ft. Free Area}$$

### WIDTH FREE AREA CALCULATIONS IN SQ. FT.

Inches	12	18	24	30	36	42	48	54	60
12	.19	.33	.47	.61	.74	.88	1.02	1.16	1.29
18	.41	.70	.99	1.28	1.57	1.86	2.15	2.45	2.74
24	.63	1.07	1.52	1.96	2.40	2.85	3.29	3.73	4.18
30	.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	6.70	7.60	8.50
48	1.50	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	10.10	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	5.70	7.37	9.04	10.71	12.38	14.04	15.71
78	2.58	4.40	6.22	8.05	9.87	11.69	13.51	15.33	17.15
84	2.80	4.77	6.75	8.72	10.70	12.67	14.65	16.62	18.60
90	3.01	5.14	7.27	9.40	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	19.20	21.48

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