

# WIND DRIVEN RAIN LOUVER

# Drainable / Sightproof Louver in 5" thick frame design Model DEM-05

Design Features - Drainable blade vision proof design.

#### STANDARD CONSTRUCTION

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

#### **FRAME**

5" deep, is .081 extruded aluminum in style #3.

#### **BLADES**

.081" extruded aluminum, approx. spacing is 2" @ 30°

#### **MAXIMUM SIZE**

Unlimited, with mullions, structural bracing supplied by others

## **MAXIMUM FACTORY ASSEMBLY SIZE**

120" w x 96 H" or 96" w x 120" H

(allows for best handling)

(Type of finish may limit maximum single section)

## MULLIÓN

Invisible

#### MINIMUM SIZE

12" w x 12" H

# **UNDERSIZED**

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

#### SCREEN

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

#### **FINISH**

Mill

## **OPTIONAL CONSTRUCTION**

FRAME - Available in a heavier extrusion of .125"

BLADES - Available in a heavier extrusion of .125'

SCREEN - Many styles available please consult screen listing

FINISH - Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy, Anodize or Kynar 500

**MULLION** – Visible for architectural preference

# SPECIAL PURPOSE CONSTRUCTION

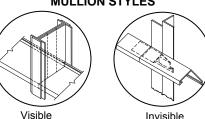
Fully welded construction Security bars Filter racks

Hinged as walk through door or for swing out access

Sleeved for ductwork connection

# Separation drawn in a true 90° Blade configuration 0 0 0 0

## **MULLION STYLES**

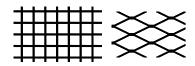


Point of water penetration 1121 fpm

PERFORMANCE

Free area 48 x 48 section 57%

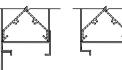
#### **TYPICAL SCREEN STYLES**



Wire Mesh

**Expanded Aluminum** Standard

# FRAME STYLES



1 - Flange (1.5")



3 - Box



8 - Box with Sill Extension



9 - Flange with Sub Frame

(DEM-05) October 2013

DATE		ARCHITECT			CUSTOMER
PROJECT	Г				
ITEM	QTY	v W	н	OMCO CERTIFIED RATINGS WAT PERFORMAN WIND	accordance with AMCA Pull 511 and comply with the re-
	-	_		O DRIVEN R	nn Program. The AMCA Certifi



ouver shown he AMCA re based on rmed in ublication equirements ings ified Ratings Seals applies to Air Performance ratings, Water Penetration and Wind Driven Rain ratings.



DEPENDABLE PRODUCTS SINCE 1955

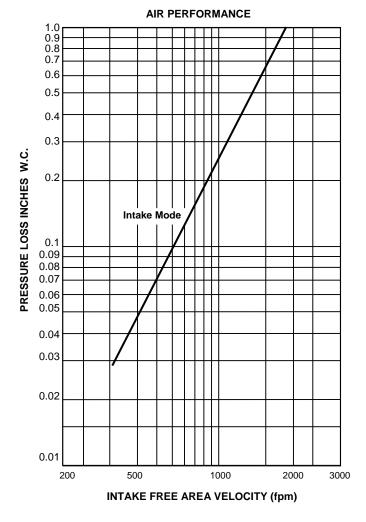
# SAFE-AIR OF ILLINOIS INC.

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 AMCA laboratory and based on AMCA 511 - 91 for air performance, water penetration and wind driven rain.



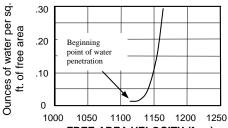


# SAFE AIR / DOWCO

certified that the DEM-05 louver shown herein is 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 Seals applies to Air Performance ratings, Water Penetration and Wind Driven Rain ratings.

#### **Water Penetration Graph**

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



FREE AREA VELOCITY (fpm)
1121 fpm (374) beginning of water penetration

# Wind Driven Rain Performance

The louver test was based on a 39.37" x 39.37" core area unit tested at a rainfall rate of 3" per hour and with a wind directed to the face of the louver at a velocity of (29.1) mph as well as a rainfall rate of 8" per hour and wind a wind velocity of (50) mph. The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

Class	Discharge Loss Coefficient							
1	0.4 and above							
2	0.3 to 0.399							
3	0.2 to 0.299							
4	0.199 and below							

WIND DRIVEN RAIN PERFORMANCE			0.99	B = 0.989	to 0.95	C= 0.94	9 to 0.80	D = 0.799 to 0		
3" per hour Rainfall Rate @ 29 mph Wind Velocity	Core Ventilation Rate (FPM)	0	124	198	285	378	471	585	674	
	Water Penetraction Effectiveness	99%	97.3%	96.7%	95.7%	94.2%	92.3%	88.7%	82.3%	
	Water Penetraton Classification	Α	В	В	В	С	С	С	С	
8" per hour Rainfall Rate @ 50 mph Wind Velocity	Core Ventilation Rate (FPM)	0	95	195	283	408	491	575	674	
	Water Penetraction Effectiveness	96.2%	94.7%	93.2%	91.1%	86.7%	82.8%	80.6%	72.3%	
	Water Penetraton Classification	В	С	С	С	С	С	С	D	

	FREE AREA CALCULATION						WIDTH													
	Inches	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	12	0.36	0.56	0.76	0.97	1.17	1.37	1.58	1.78	1.98	2.19	2.39	2.59	2.80	3.00	3.20	3.41	3.61	3.81	4.02
	18	0.63	1.00	1.36	1.72	2.08	2.44	2.81	3.17	3.53	3.89	4.25	4.62	4.98	5.34	5.70	6.06	6.43	6.79	7.15
	24	0.91	1.43	1.95	2.47	2.99	3.52	4.04	4.56	5.08	5.60	6.12	6.64	7.16	7.68	8.20	8.72	9.24	9.77	10.29
	30	1.19	1.87	2.55	3.23	3.91	4.59	5.27	5.95	6.63	7.31	7.99	8.66	9.34	10.02	10.70	11.38	12.06	12.74	13.42
-	36	1.47	2.31	3.14	3.98	4.82	5.66	6.50	7.34	8.17	9.01	9.85	10.69	11.53	12.37	13.20	14.04	14.88	15.72	16.56
표	42	1.74	2.74	3.74	4.74	5.73	6.73	7.73	8.72	9.72	10.72	11.72	12.71	13.71	14.71	15.70	16.70	17.70	18.70	19.69
9	48	2.06	3.24	4.41	5.59	6.77	7.94	9.12	10.30	11.47	12.65	13.83	15.00	16.18	17.36	18.53	19.71	20.89	22.06	23.24
Ш	54	2.30	3.62	4.93	6.24	7.56	8.87	10.19	11.50	12.82	14.13	15.45	16.76	18.08	19.39	20.70	22.02	23.33	24.65	25.96
ד	60	2.58	4.05	5.53	7.00	8.47	9.95	11.42	12.89	14.37	15.84	17.31	18.79	20.26	21.73	23.21	24.68	26.15	27.63	29.10
	66	2.86	4.49	6.12	7.75	9.38	11.02	12.65	14.28	15.91	17.54	19.18	20.81	22.44	24.07	25.71	27.34	28.97	30.60	32.23
	72	3.13	4.92	6.72	8.51	10.30	12.09	13.88	15.67	17.46	19.25	21.04	22.83	24.62	26.41	28.21	30.00	31.79	33.58	35.37
	78	3.41	5.36	7.31	9.26	11.21	13.16	15.11	17.06	19.01	20.96	22.91	24.86	26.81	28.76	30.71	32.66	34.61	36.55	38.50
	84	3.69	5.80	7.91	10.01	12.12	14.23	16.34	18.45	20.56	22.66	24.77	26.88	28.99	31.10	33.21	35.31	37.42	39.53	41.64
	90	3.97	6.23	8.50	10.77	13.04	15.30	17.57	19.84	22.10	24.37	26.64	28.91	31.17	33.44	35.71	37.97	40.24	42.51	44.77
	96	4.25	6.67	9.10	11.52	13.95	16.37	18.80	21.23	23.65	26.08	28.50	30.93	33.36	35.78	38.21	40.63	43.06	45.48	47.91