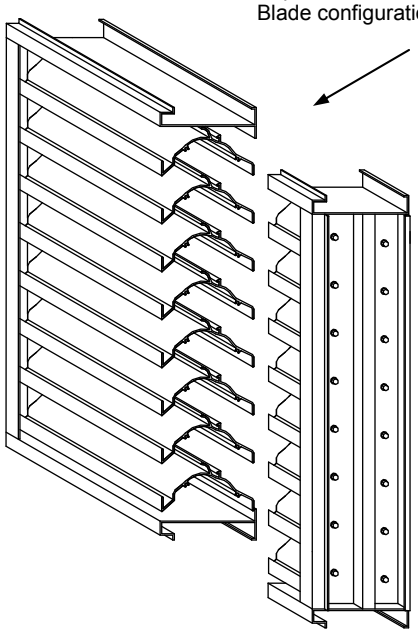
WIND DRIVEN RAIN LOUVER

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

Design Features – Drainable blade vision proof design.

Separation drawn in a true 90° Blade configuration



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 2.50” @ 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)
MULLION
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

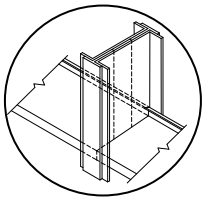
OPTIONAL CONSTRUCTION

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

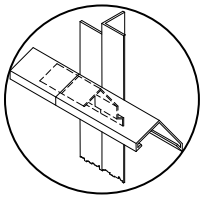
SPECIAL PURPOSE CONSTRUCTION

Fully welded construction
Security bars
Filter racks
Hinged as walk through door or for swing out access
Sleeved for ductwork connection

MULLION STYLES



Visible

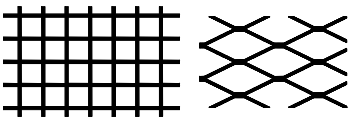


Invisible

PERFORMANCE

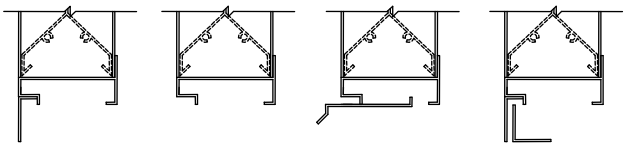
Point of water penetration
1121 fpm
Free area
48 x 48 section
57%

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

DATE	ARCHITECT	CUSTOMER
PROJECT		

ITEM	QTY	W	H

amca CERTIFIED RATINGS — WATER PENETRATION — AIR PERFORMANCE — WIND DRIVEN RAIN — AIR MOVEMENT AND CONTROL ASSOCIATION, INC.

SAFE AIR / DOWCO certifies 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.

DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR OF ILLINOIS INC.

Engineering and General Offices

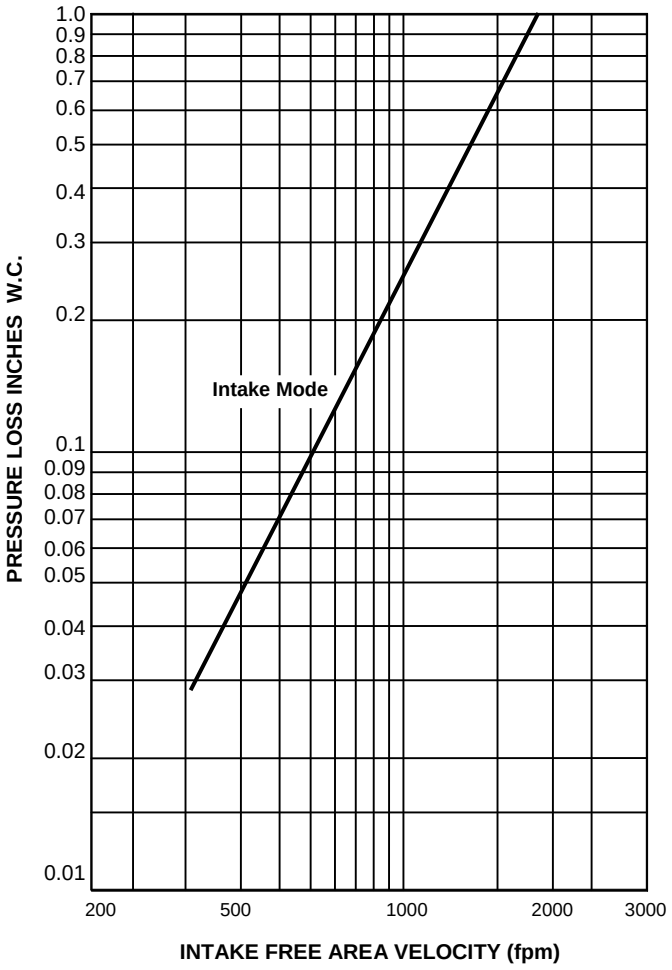
1855 South 54th Avenue, Cicero, Illinois 60804

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

DEM-05 PERFORMANCE SPECIFICATIONS

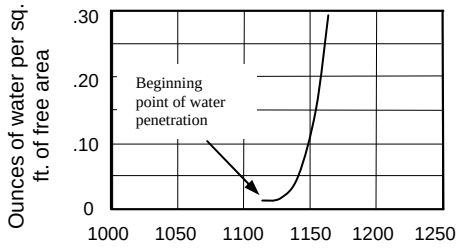
All tests performed at AMCA laboratory and based on AMCA 511 – 91 for air performance, water penetration and wind driven rain.

AIR PERFORMANCE



SAFE AIR / DOWCO
certifies 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



1121 fpm 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) mph as well as a rainfall rate of 8" per hour and with a wind velocity of (50) mph. The test data 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		A = 1 to 0.99		B = 0.989 to 0.95		C= 0.949 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	A	B	B	B	C	C	C	C
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	B	C	C	C	C	C	C	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
HEIGHT	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
	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
	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
	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
	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