

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

Design Features . Drainable blade vision proof design.

STANDARD CONSTRUCTION

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

FRAME

5+(127) thick, is .081 (2.1) extruded aluminum in style #3.

BLADES

.081+(2.1) extruded aluminum, apx. spacing is 2+(51)

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 (3048 x 2438) or (2438 x 3048)

(allows for best handling)

(Type of finish may limit maximum single section)

MULLION

Invisible

MINIMUM SIZE

12+w x 12+H (305 x 305)

UNDERSIZED

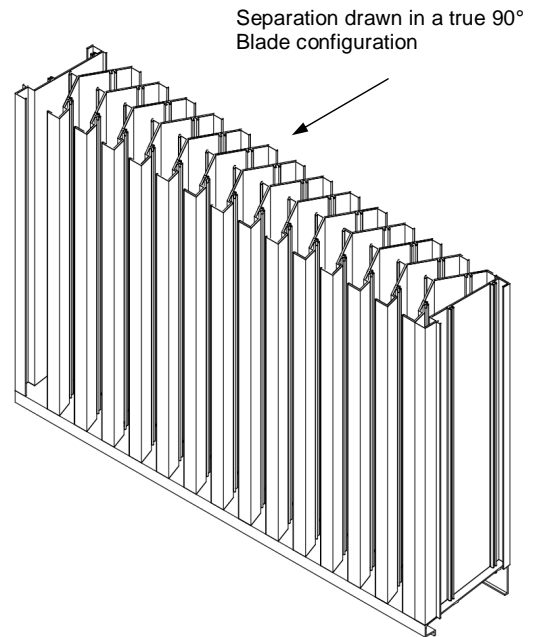
1/4+(6) under ordered size unless specified Exact or Actual

SCREEN

3/4+x .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)

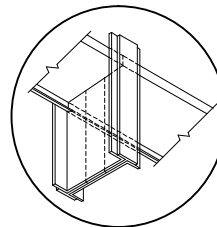
BLADES – Available in a heavier extrusion of .125+(3.2)

SCREEN - Many styles available please consult screen listing

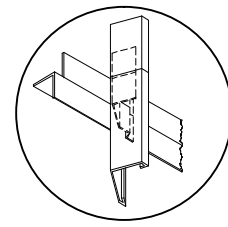
FINISH . Air-dry primer, polyurethane, epoxy, or enamel. Baked epoxy, Anodize or Kynar

MULLION – Visible for architectural preference

MULLION STYLES



Visible



Invisible

PERFORMANCE

Point of water penetration
1121 fpm (342)
Free area
48 x 48 section
57%

SPECIAL PURPOSE CONSTRUCTION

Fully welded construction

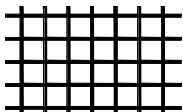
Security bars

Filter racks

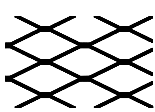
Hinged as walk through door or for swing out access

Sleeved for ductwork connection

TYPICAL SCREEN STYLES

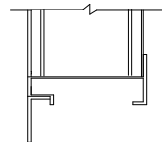


Wire Mesh

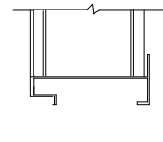


Expanded Aluminum Standard

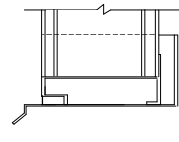
FRAME STYLES



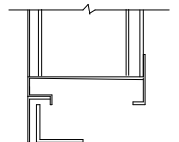
1 - Flange (1.5+)



3 . Box



8 . Box with Sill Extension



9 . Flange with Sub Frame

DATE		ARCHITECT		CUSTOMER	
PROJECT					
ITEM	QTY	W	H	DESCRIPTION	



DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR OF ILLINOIS INC.

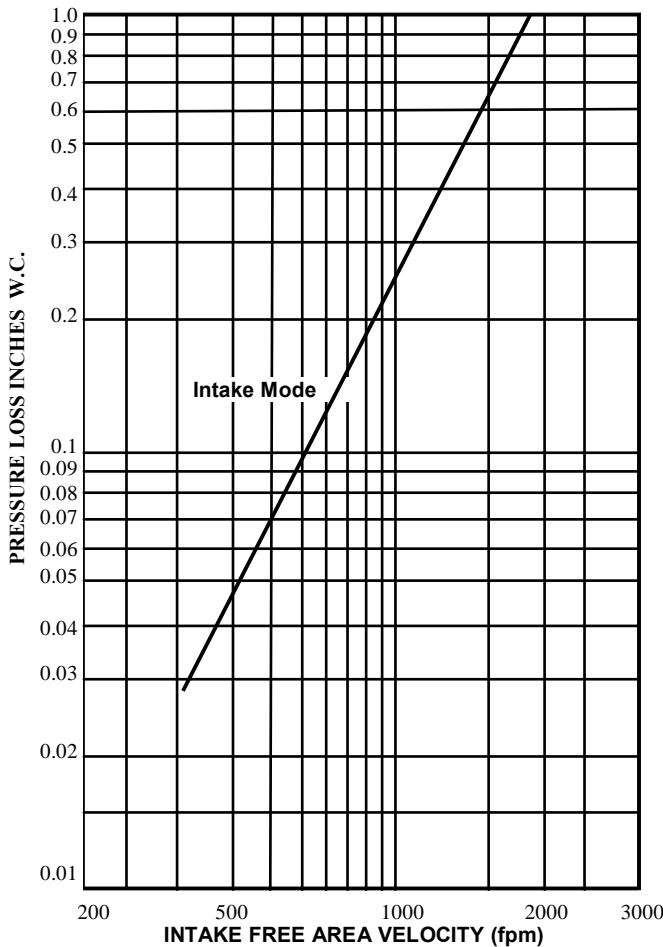
Engineering and General Offices

1855 South 54th Avenue, Cicero, Illinois 60804

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

All tests performed at an independent laboratory and based on AMCA standard 511 – 91 for air performance and water penetration.

AIR PERFORMANCE



CALCULATING PRESSURE LOSS

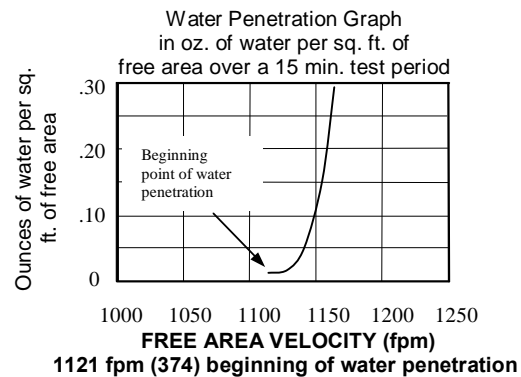
Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the "air performance" graph, knowing the sq. ft. of free area of the louver. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss. Utilizing the "air performance" 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, 1121 fpm (374) for V-DEM-05, 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)



This test was produced on a wind velocity of 50 mph (23.3 m/s) directly at the face of the louver, with a rainfall rate of 3" per hour (75 mm/hr). The data illustrates the water penetration effectiveness rating at their given ventilation rate.

WIND DRIVEN RAIN PERFORMANCE

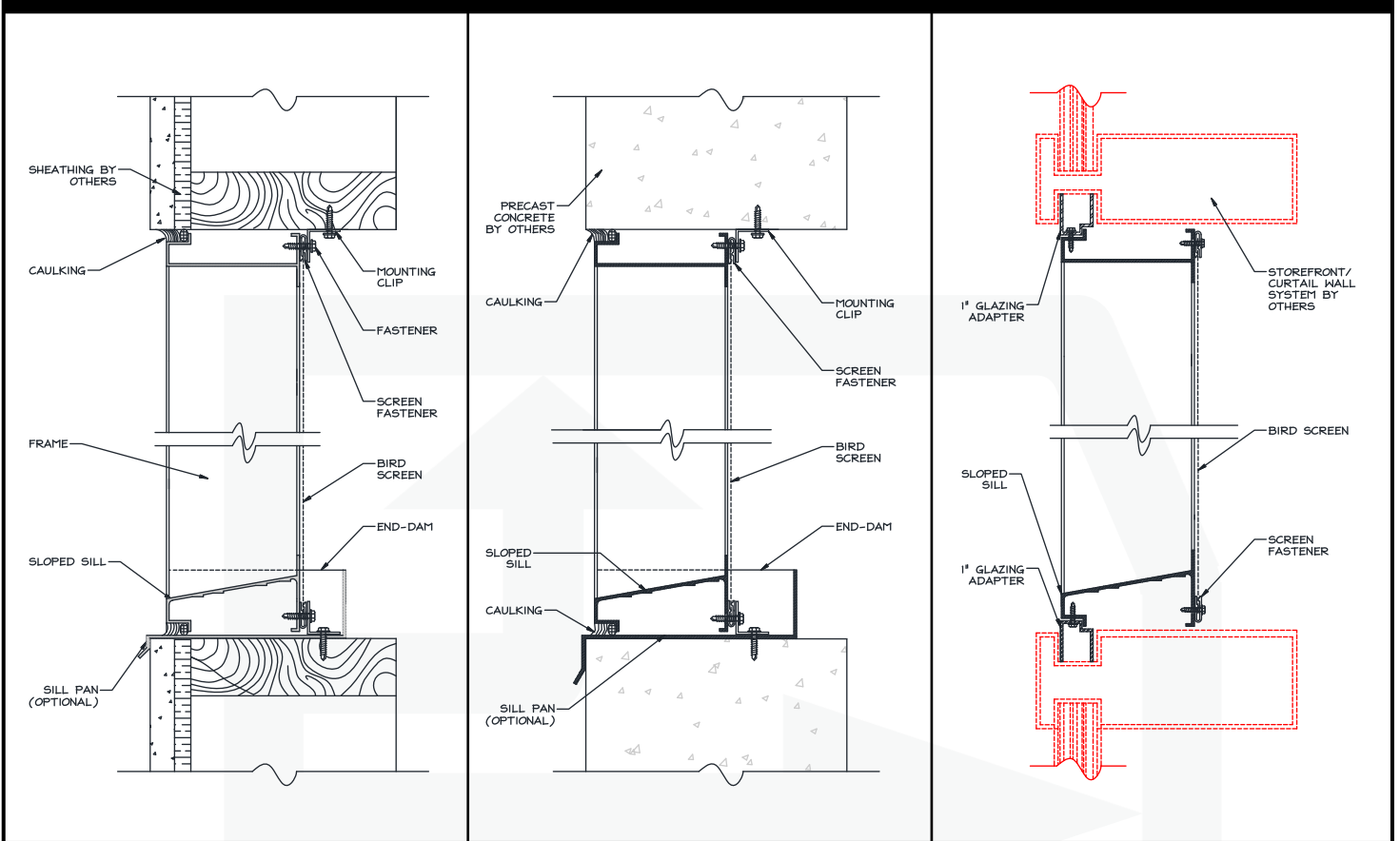
Ventilation Air Velocity (m/s)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Core Ventilation Rate (ft/min)	0	131	195	288	381	475	560	680	778	864	989
Free Area Ventilation Rate (ft/min)	0	290	431	600	720	865	998	1155	1299	1455	1967
Rating Effectiveness	A	A	A	A	A	A	A	A	A	B	C
Effectiveness Rating	A = 1 - 0.99		B = 0.989 - 0.95			C = 0.949 - 0.80			D = 0.80 - 0		

WIDTH

FREE AREA CALCULATIONS IN SQ. FT.

INCHES	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
12	.36	.58	.79	1.01	1.22	1.44	1.66	1.87	2.09	2.31	2.52	2.74	2.95	3.17	3.39	3.60	3.82	4.04	4.25
18	.63	1.01	1.39	1.77	2.14	2.52	2.90	3.28	3.66	4.04	4.41	4.79	5.17	5.55	5.93	6.30	6.68	7.06	7.44
24	.90	1.44	1.98	2.52	3.06	3.60	4.14	4.68	5.22	5.76	6.30	6.85	7.39	7.93	8.47	9.01	9.55	10.09	10.63
30	1.17	1.87	2.58	3.28	3.98	4.68	5.39	6.09	6.79	7.49	8.20	8.90	9.60	10.30	11.01	11.71	12.41	13.11	13.82
36	1.44	2.31	3.17	4.04	4.90	5.76	6.63	7.49	8.36	9.22	10.09	10.95	11.82	12.68	13.55	14.41	15.28	16.14	17.01
42	1.71	2.74	3.76	4.79	5.82	6.85	7.87	8.90	9.93	10.95	11.98	13.01	14.03	15.06	16.09	17.11	18.14	19.17	20.19
48	1.98	3.17	4.36	5.55	6.74	7.93	9.12	10.30	11.49	12.68	13.87	15.06	16.25	17.44	18.63	19.82	21.00	22.19	23.38
54	2.25	3.60	4.95	6.30	7.66	9.01	10.36	11.71	13.06	14.41	15.76	17.11	18.46	19.82	21.17	22.52	23.87	25.22	26.57
60	2.52	4.04	5.55	7.06	8.57	10.09	11.60	13.11	14.63	16.14	17.65	19.17	20.68	22.19	23.71	25.22	26.73	28.25	29.76
66	2.79	4.47	6.14	7.82	9.49	11.17	12.84	14.52	16.19	17.87	19.55	21.22	22.90	24.57	26.25	27.92	29.60	31.27	32.95
72	3.06	4.90	6.74	8.57	10.41	12.25	14.09	15.92	17.76	19.60	21.44	23.27	25.11	26.95	28.79	30.62	32.46	34.30	36.14
78	3.33	5.33	7.33	9.33	11.33	13.33	15.33	17.33	19.33	21.33	23.33	25.33	27.33	29.33	31.33	33.33	35.33	37.32	39.32
84	3.60	5.76	7.93	10.09	12.25	14.41	16.57	18.73	20.90	23.06	25.22	27.38	29.54	31.70	33.87	36.03	38.19	40.35	42.51
90	3.87	6.20	8.52	10.84	13.17	15.49	17.82	20.14	22.46	24.76	27.11	29.43	31.76	34.08	36.41	38.73	41.05	43.38	45.70
96	4.14	6.63	9.12	11.60	14.09	16.57	19.06	21.54	24.03	26.52	29.00	31.49	33.97	36.46	38.95	41.43	43.92	46.40	48.89

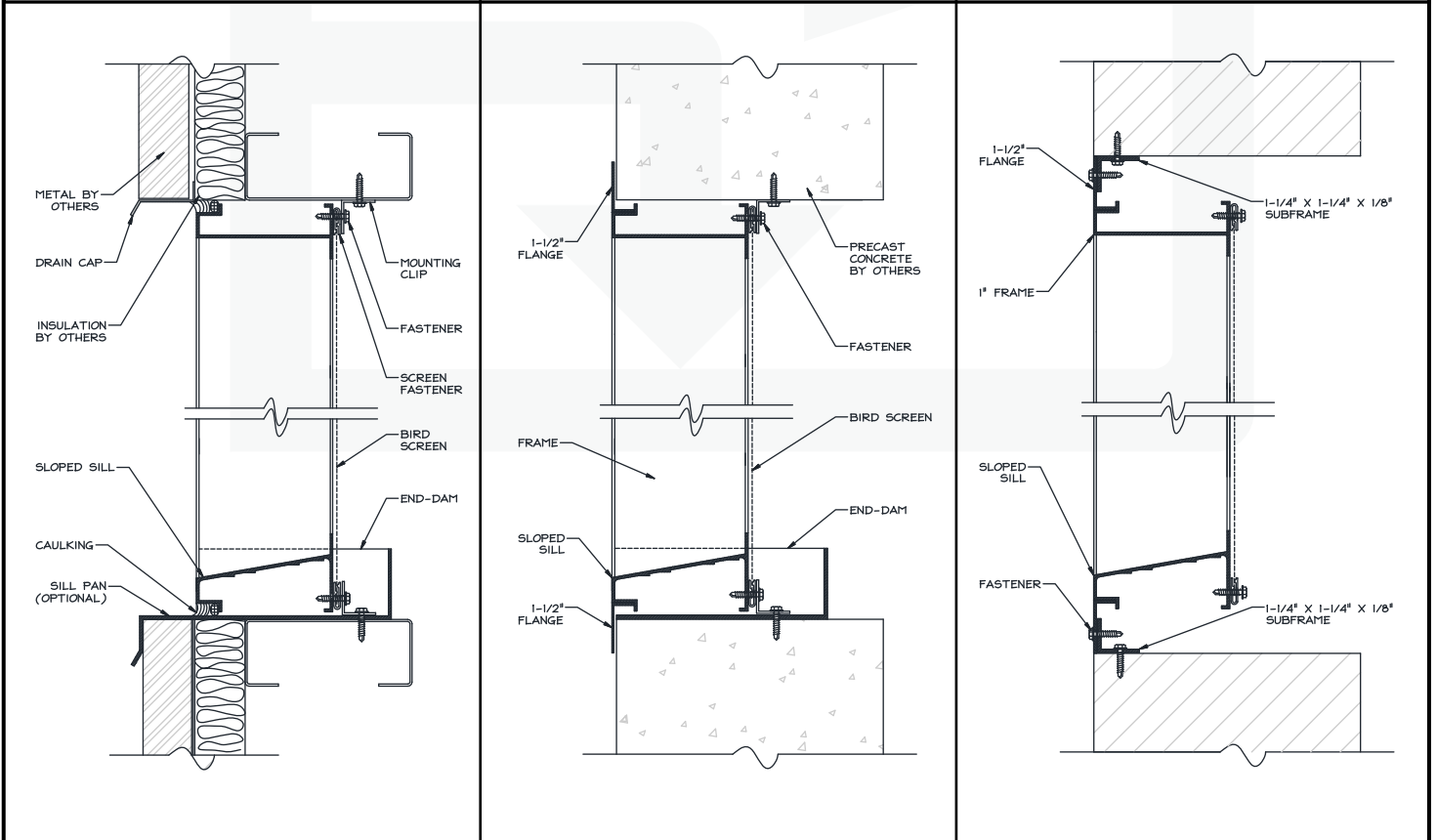
HEIGHT



WOOD

CONCRETE

GLAZING ADAPTER



METAL PANEL WALL

FLANGE

FLANGE W/ SUBFRAME