

Hurricane Proof Louver in 6" thick design Model HDL-06

Design Features – High performance patented blade design capable to withstand positive or negative wind pressure up to 250 mph.

STANDARD CONSTRUCTION

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

FRAME

HDL-06 – 6" deep, .081" wall thickness
extruded aluminum in style #3.

BLADES

HDL-06 – 6" deep, .081" wall thickness extruded
aluminum and spaced approx. 5-1/2" on center.

FABRICATION

Fully welded construction and concealed mechanical fastener

MAXIMUM FACTORY ASSEMBLY SIZE

120" x 84" or 84" x 120"

MULLION

Visible

MAXIMUM SIZE

Unlimited, with mullions and structural bracing

MINIMUM SIZE

12" x 12"

UNDERSIZED

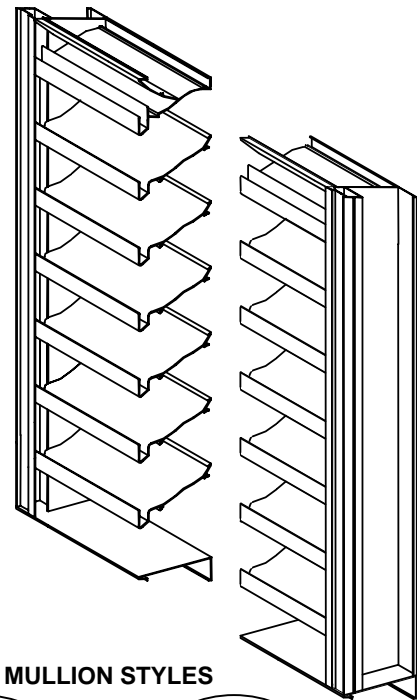
1/4" under ordered size unless specified Exact or Actual

SCREEN

3/4" x .051" flattened expanded aluminum bird
screen in extruded aluminum frame.

FINISH

Mill



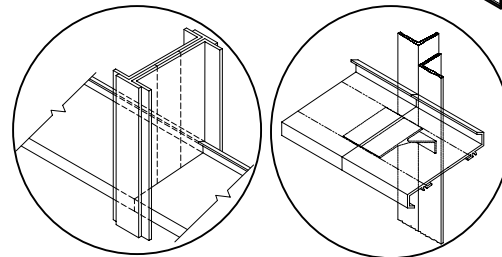
MULLION STYLES

OPTIONAL CONSTRUCTION

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or
enamel, Kynar, or Powder coat.

MULLION – Visible for architectural preference



Visible

Invisible

PERFORMANCE

Point of
water penetration
625 fpm (191)

Free area
48 x 48 section
67%

SPECIAL PURPOSE CONSTRUCTION

Special shapes: Triangle, Round, Trapezoid, etc.

Fully welded construction

Security bars

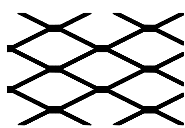
Hinged as walk through door or swing out access

Filter racks

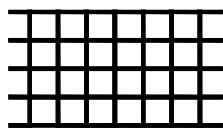
Sleeved for ductwork connection

** Consult SAFE-AIR/DOWCO for additional technical information.

TYPICAL SCREEN STYLES

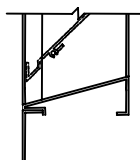


Expanded Aluminum
Standard

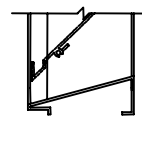


Wire Mesh

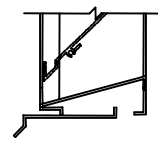
FRAME STYLES



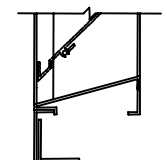
1 – Flange (1-1/2")



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.

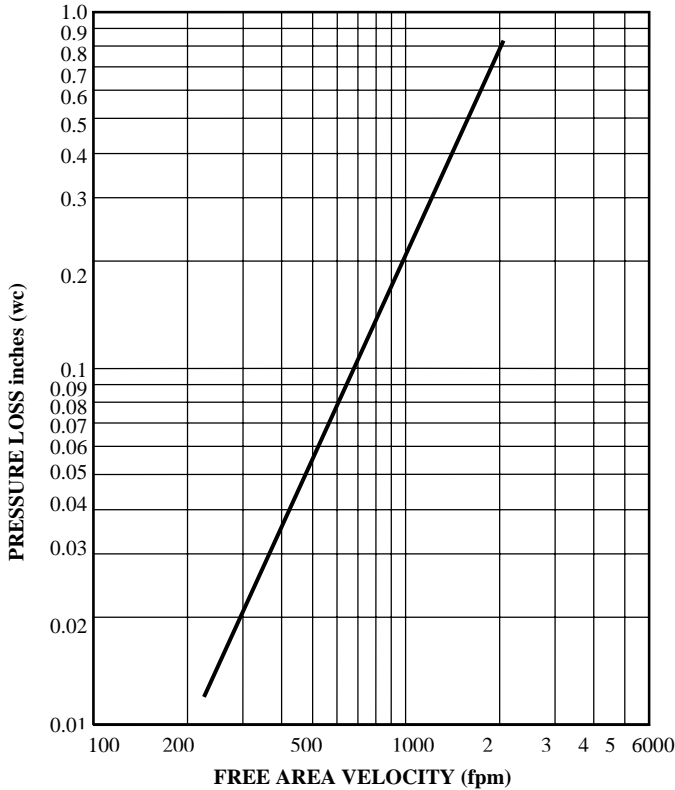
Engineering and General Offices

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 standards for air performance.

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.

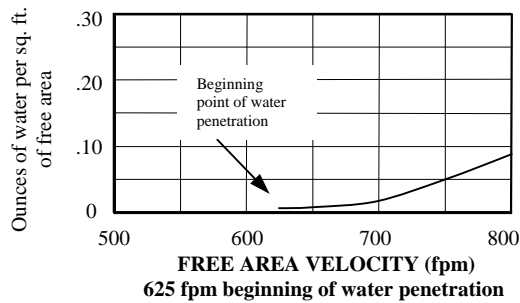
_____ in. W.C. Max. Pressure Loss Intake or Exhaust
 _____ FPM (Free Area Velocity From "Air Performance" Graph)
 _____ CFM / _____ FPM Free Area Velocity = _____ Sq. Ft. Free Area

CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The "free area flow rate" at which water penetration commences (.01 oz. of water) is established at, 625 fpm for HDL-06, and will vary depending upon actual weather conditions. The "water penetration" graph illustrates the results of actual laboratory test on a 48" x 48" 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)

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



WIDTH

FREE AREA CALCULATIONS

INCHES	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
12	.60	.99	1.37	1.75	2.13	2.51	2.89	3.27	3.66	4.04	4.42	4.80	5.18	5.56	5.95	6.33	6.71	7.09	7.47
18	.67	1.09	1.51	1.94	2.36	2.78	3.20	3.63	4.05	4.47	4.89	5.32	5.74	6.16	6.58	7.01	7.43	7.85	8.27
24	.98	1.60	2.22	2.84	3.47	4.09	4.71	5.33	5.95	6.57	7.19	7.81	8.43	9.05	9.67	10.29	10.91	11.54	12.16
30	1.30	2.12	2.93	3.75	4.57	5.39	6.21	7.03	7.85	8.67	9.49	10.31	11.12	11.94	12.76	13.58	14.40	15.22	16.04
36	1.61	2.63	3.64	4.66	5.68	6.70	7.71	8.73	9.75	10.77	11.78	12.80	13.82	14.83	15.85	16.87	17.89	18.90	19.92
42	1.92	3.14	4.36	5.57	6.79	8.00	9.22	10.43	11.65	12.86	14.08	15.29	16.51	17.72	18.94	20.15	21.37	22.59	23.80
48	2.23	3.64	5.05	6.46	7.87	9.28	10.69	12.10	13.51	14.92	16.33	17.74	19.15	20.56	21.97	23.38	24.79	26.20	27.61
54	2.51	4.10	5.68	7.27	8.85	10.44	12.03	13.61	15.20	16.78	18.37	19.96	21.54	23.13	24.71	26.30	27.89	29.47	31.06
60	2.79	4.55	6.31	8.08	9.84	11.60	13.36	15.13	16.89	18.65	20.41	22.17	23.94	25.70	27.46	29.22	30.99	32.75	34.51
66	3.08	5.02	6.97	8.91	10.86	12.80	14.74	16.69	18.63	20.58	22.52	24.47	26.41	28.35	30.30	32.24	34.19	36.13	38.07
72	3.39	5.53	7.68	9.82	11.96	14.10	16.25	18.39	20.53	22.67	24.82	26.96	29.10	31.24	33.39	35.53	37.67	39.81	41.96
78	3.71	6.05	8.39	10.73	13.07	15.41	17.75	20.09	22.43	24.77	27.11	29.45	31.79	34.13	36.47	38.82	41.16	43.50	45.84
84	4.02	6.56	9.10	11.64	14.18	16.71	19.25	21.79	24.33	26.87	29.41	31.95	34.49	37.03	39.56	42.10	44.64	47.18	49.72
90	4.33	7.07	9.81	12.55	15.28	18.02	20.76	23.49	26.23	28.97	31.70	34.44	37.18	39.92	42.65	45.39	48.13	50.86	53.60
96	4.65	7.58	10.52	13.45	16.39	19.32	22.26	25.20	28.13	31.07	34.00	36.94	39.87	42.81	45.74	48.68	51.61	54.55	57.48
102	4.96	8.10	11.23	14.36	17.50	20.63	23.76	26.90	30.03	33.16	36.30	39.43	42.56	45.70	48.83	51.97	55.10	58.23	61.37
108	5.28	8.61	11.94	15.27	18.60	21.93	25.27	28.60	31.93	35.26	38.59	41.93	45.26	48.59	51.92	55.25	58.58	61.92	65.25
114	5.58	9.11	12.63	16.16	19.69	23.21	26.74	30.26	33.79	37.32	40.84	44.37	47.89	51.42	54.95	58.47	62.00	65.52	69.05
120	5.86	9.56	13.27	16.97	20.67	24.37	28.08	31.78	35.48	39.18	42.89	46.59	50.29	53.99	57.69	61.40	65.10	68.80	72.50