

## Weather Protective Blade Louver in 2" thick frame design Model LEH-02

**Design Features** – Narrow profile multipurpose design. Stormproof blade shape to deter water and offer a clean appearance.

### STANDARD CONSTRUCTION

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

#### FRAME

.063" extruded aluminum in style #3

#### BLADES

.063" extruded aluminum, approx spacing is 2" o.c. @ 30°

#### FASTENERS

Plated steel, tek screw

#### MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

#### MAXIMUM FACTORY ASSEMBLY SIZE

120" w x 84 h" or 84" w x 120" h

(allows for best handling)

(Type of finish may limit maximum single section)

#### MULLION

Visible

#### 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, no frame

#### FINISH

Mill

### 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** – Invisible for architectural preference

### SPECIAL PURPOSE CONSTRUCTION

Special shapes: Triangle, Round, Trapezoid, etc.

Fully welded construction

Security bars

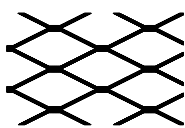
Filter racks

Hinged as walk through door or for swing out for access

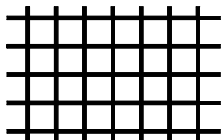
Sleeved for ductwork connection

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

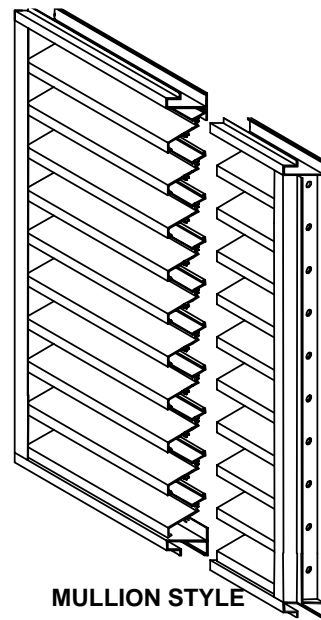
### TYPICAL SCREEN STYLES



Expanded Aluminum Standard

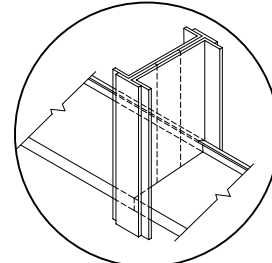


Wire Mesh



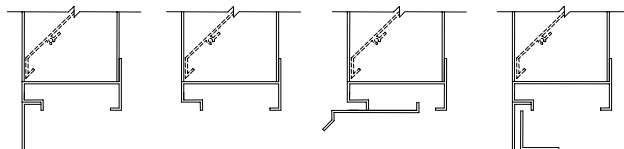
Exterior side

MULLION STYLE



Visible

FRAME STYLE



(1) - Flange 1-1/2"

(3) - Box Standard

(8) - Box and Sill Extension

(9) - Flange w/ sub frame

### LOUVER PERFORMANCE

Free Area: 49% - 48" x 48" unit  
Point of Water Penetration – 420 fpm  
Pressure Drop: @ 1000 fpm - .12" w.g.

DATE	ARCHITECT			CUSTOMER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION



DEPENDABLE PRODUCTS SINCE 1955

**SAFE-AIR OF ILLINOIS INC.**

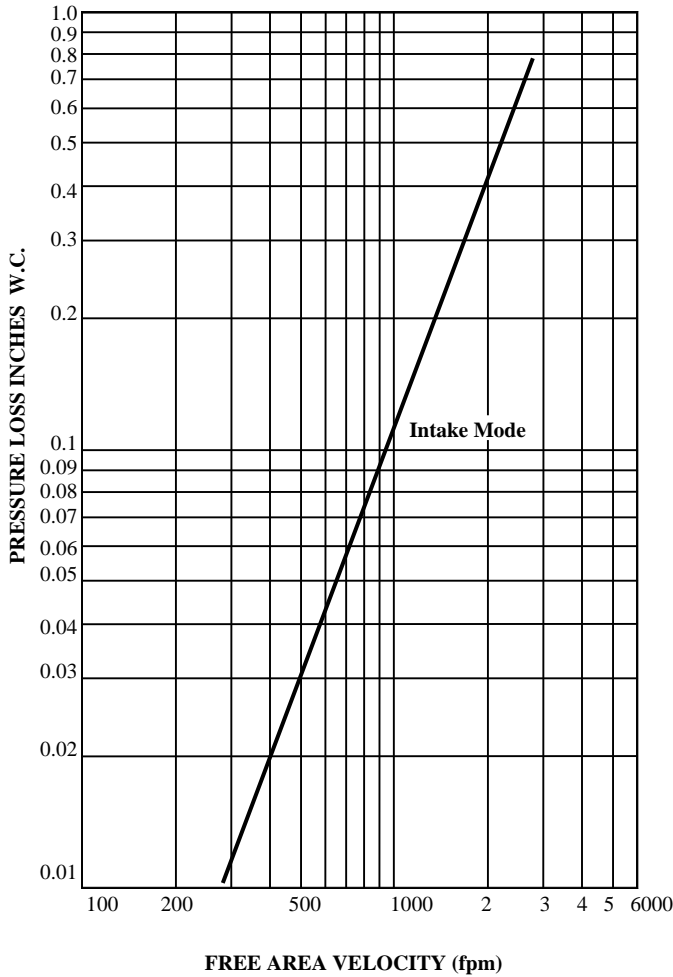
Engineering and General Offices

1855 South 54<sup>th</sup> Avenue, Cicero, Illinois 60804

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

All tests performed at an independent laboratory and based on AMCA standard – 500 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 damper. 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

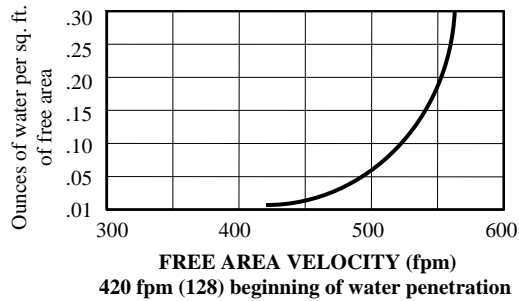
### CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The “free area flow rate” at which water penetration commences (.01 oz. of water) is established at, 420 fpm (128) for LEH-02, 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)

### Water Penetration Graph

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



### FREE AREA CALCULATIONS IN SQ. FT.

#### WIDTH

Inches	WIDTH																		
	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	1.38	1.58	1.78	1.99	2.19	2.40	2.60	2.80	3.01	3.21	3.42	3.62	3.82	4.03
18	0.59	0.93	1.27	1.61	1.94	2.28	2.62	2.96	3.29	3.63	3.97	4.31	4.65	4.98	5.32	5.66	6.00	6.34	6.67
24	0.83	1.30	1.77	2.24	2.71	3.19	3.66	4.13	4.60	5.07	5.54	6.02	6.49	6.96	7.43	7.90	8.38	8.85	9.32
30	1.06	1.67	2.27	2.88	3.48	4.09	4.70	5.30	5.91	6.51	7.12	7.72	8.33	8.94	9.54	10.15	10.75	11.36	11.97
36	1.29	2.03	2.77	3.51	4.25	4.99	5.73	6.47	7.21	7.95	8.69	9.43	10.17	10.91	11.65	12.39	13.13	13.87	14.61
42	1.53	2.40	3.28	4.15	5.02	5.90	6.77	7.65	8.52	9.39	10.27	11.14	12.01	12.89	13.76	14.64	15.51	16.38	17.26
48	1.76	2.77	3.78	4.79	5.79	6.80	7.81	8.82	9.83	10.83	11.84	12.85	13.86	14.86	15.87	16.88	17.89	18.90	19.90
54	2.00	3.14	4.28	5.42	6.56	7.71	8.85	9.99	11.13	12.27	13.42	14.56	15.70	16.84	17.98	19.12	20.27	21.41	22.55
60	2.23	3.51	4.78	6.06	7.34	8.61	9.89	11.16	12.44	13.71	14.99	16.26	17.54	18.82	20.09	21.37	22.64	23.92	25.19
66	2.47	3.88	5.29	6.70	8.11	9.52	10.92	12.33	13.74	15.15	16.56	17.97	19.38	20.79	22.20	23.61	25.02	26.43	27.84
72	2.70	4.24	5.79	7.33	8.88	10.42	11.96	13.51	15.05	16.59	18.14	19.68	21.22	22.77	24.31	25.86	27.40	28.94	30.49
78	2.94	4.61	6.29	7.97	9.65	11.32	13.00	14.68	16.36	18.03	19.71	21.39	23.07	24.74	26.42	28.10	29.78	31.45	33.13
84	3.17	4.98	6.79	8.60	10.42	12.23	14.04	15.85	17.66	19.47	21.29	23.10	24.91	26.72	28.53	30.34	32.15	33.97	35.78
90	3.40	5.35	7.30	9.24	11.19	13.13	15.08	17.02	18.97	20.91	22.86	24.80	26.75	28.70	30.64	32.59	34.53	36.48	38.42
96	3.64	5.72	7.80	9.88	11.96	14.04	16.12	18.20	20.27	22.35	24.43	26.51	28.59	30.67	32.75	34.83	36.91	38.99	41.07
102	3.87	6.09	8.30	10.51	12.73	14.94	17.15	19.37	21.58	23.79	26.01	28.22	30.43	32.65	34.86	37.07	39.29	41.50	43.71
108	4.11	6.46	8.80	11.15	13.50	15.84	18.19	20.54	22.89	25.23	27.58	29.93	32.28	34.62	36.97	39.32	41.67	44.01	46.36
114	4.34	6.82	9.31	11.79	14.27	16.75	19.23	21.71	24.19	26.67	29.16	31.64	34.12	36.60	39.08	41.56	44.04	46.53	49.01
120	4.58	7.19	9.81	12.42	15.04	17.65	20.27	22.88	25.50	28.11	30.73	33.35	35.96	38.58	41.19	43.81	46.42	49.04	51.65

HEIGHT