

EXTRUDED ALUMINUM, 4" DEEP, FIXED J TYPE BLADE

MODEL LE-49 STANDARD SPECIFICATIONS

FRAME: 4" DEEP CHANNEL, .081" THICK 6063-T5
EXTRUDED ALUMINUM ALLOY.

BLADES: .081" THICK 6063-T5 EXTRUDED ALUMINUM ALLOY.

FINISH: MILL.

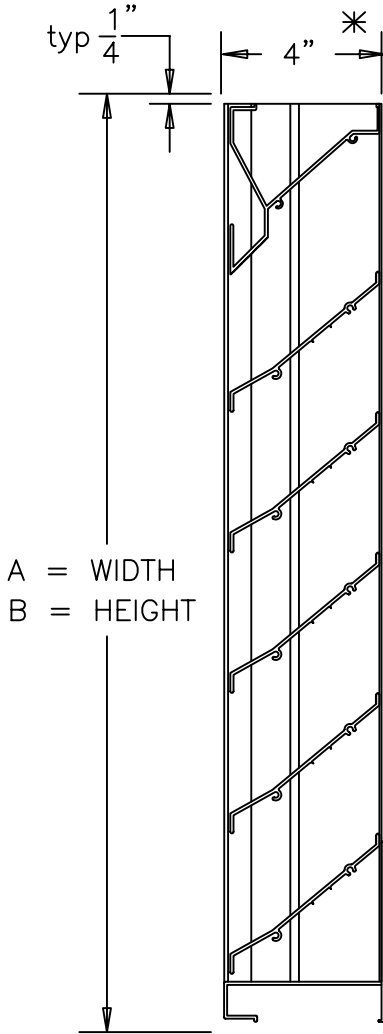
SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD
SCREEN, LOCATED ON INTERIOR.

MAXIMUM PANEL SIZE: 96" X 96".

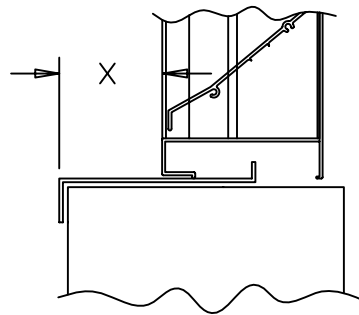
MINIMUM PANEL SIZE: 12" X 12".

DIMENSIONS: "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING
SIZES. LOUVERS ARE MADE 1/2" UNDERSIZE.

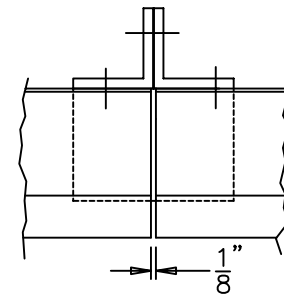
* PANELS OVER 48" WIDE WILL BE 5-1/2" DEEP DUE TO A
VERTICAL INTERIOR BLADE SUPPORT ANGLE.



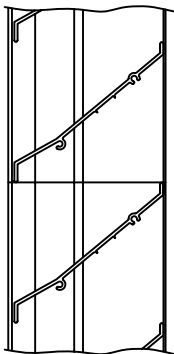
SECTION VIEW



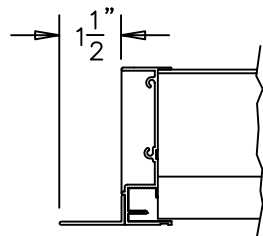
EXTENDED SILL
OPTIONAL



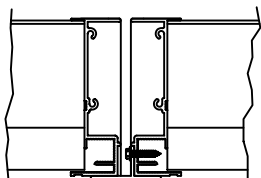
ARCHITECTURAL VERTICAL
MULLION OPTIONAL



STANDARD HORIZONTAL
MULLION



FLANGED FRAME
OPTIONAL
(JAMB SHOWN)



STANDARD VERTICAL
MULLION



American Warming and Ventilating certifies that the model LE-49 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 Seal applies to air performance ratings and water penetration ratings.

awv american warming
and ventilating

A MESTEK COMPANY

7301 INTERNATIONAL DRIVE
Phone (419) 865-5000

HOLLAND, OHIO
Fax (419) 865-1375

LE-49 STATIONARY LOUVER

DRN. BY JVC

DWG. NO.

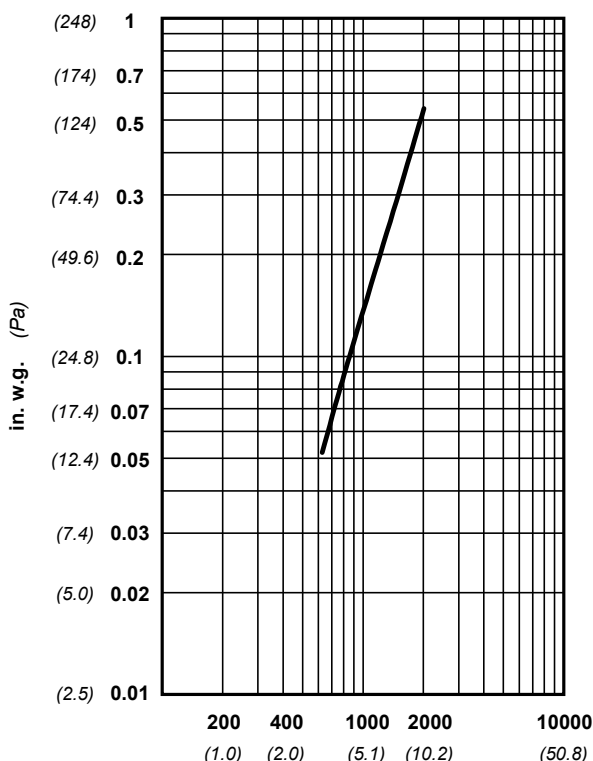
REV.

DATE 8/13/09

LE-49

Water Penetration : 0.01 oz (3.0 g) at 902 fpm (4.58 m/s) recommended free area velocity
Pressure Drop : 0.11 in wg (27.3 Pa.) at 902 fpm (4.58 m/s) and 8271 scfm (3.9 scm/s)
Free Area : 9.17 sq ft (0.852 sq m) = 57.3% for 48" x 48" (1.22m x 1.22m) test size

INTAKE PRESSURE DROP



VELOCITY THROUGH FREE AREA fpm (m/s)

standard air - .075 lbs per cu ft

Ratings do not include the effect of a wire bird screen
 Test based on a 48" x 48" test size per AMCA Standard 511



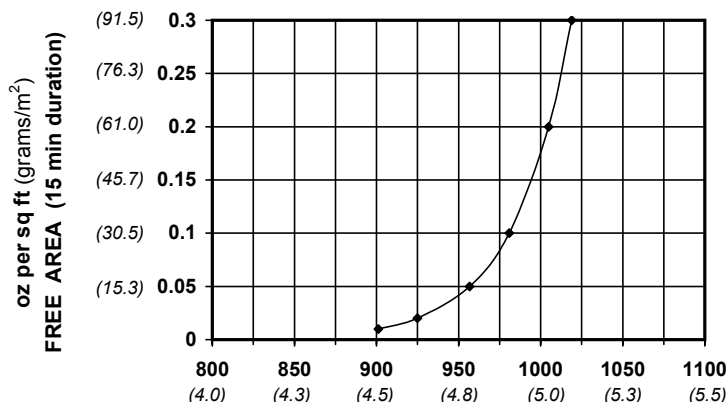
American Warming and Ventilating certifies that the model LE-49 louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings.

LE-49

FREE AREA IN SQUARE FEET (sq meters)

	WIDTH								
	in. mm	12 305	24 610	36 914	48 1219	60 1524	72 1829	84 2134	96 2438
HEIGHT	12 305	0.28 0.026	0.64 0.060	1.00 0.093	1.36 0.127	1.73 0.160	2.09 0.194	2.45 0.228	2.81 0.261
	24 610	0.81 0.075	1.86 0.173	2.92 0.271	3.97 0.369	5.02 0.466	6.07 0.564	7.13 0.662	8.18 0.760
	36 914	1.35 0.125	3.10 0.288	4.86 0.451	6.61 0.614	8.36 0.777	10.12 0.940	11.87 1.102	13.62 1.265
	48 1219	1.87 0.174	4.31 0.400	6.74 0.626	9.17 0.852	11.60 1.078	14.03 1.304	16.47 1.530	18.90 1.755
	60 1524	2.41 0.224	5.53 0.514	8.66 0.804	11.78 1.094	14.91 1.385	18.03 1.675	21.15 1.965	24.28 2.255
	72 1829	2.93 0.272	6.73 0.626	10.54 0.979	14.34 1.332	18.14 1.686	21.95 2.039	25.75 2.392	29.56 2.745
	84 2134	3.46 0.322	7.96 0.739	12.45 1.157	16.94 1.574	21.44 1.991	25.93 2.409	30.42 2.826	34.92 3.244
	96 2438	3.99 0.370	9.16 0.851	14.34 1.332	19.51 1.812	24.69 2.293	29.86 2.774	35.03 3.254	40.21 3.735

WATER PENETRATION



VELOCITY THROUGH FREE AREA fpm (m/s)

Both maximum recommended free area velocity and beginning of water penetration are 902 fpm at standard air - .075 lbs per cu ft. The above water penetration data is based on mill finish, 48" x 48" test size per AMCA Standard 511.

Openings that require multiple louver panels in both width and height will require internal structural supports. It is recommended that large openings be divided with structural members so that the louvers will span either width or height with a single panel. Unusually high wind loading may require structural supports on non-multiple wide and multiple high assemblies. **Structural supports and mounting accessories are not supplied as a standard.**

Example: Given: 15000 CFM design flow

Step #1:

$$\text{min. free area} = \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}} = \frac{15000}{902} = 16.63 \text{ sq ft}$$

Step #2: From the free area table above the approximate louver size is 48" x 84" = (16.94 sq ft)

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 902 fpm (4.58 m/s).

To determine minimum free area required for louver:

Step #1: Divide the required CFM flow by the maximum recommended free area velocity.

Step #2: Select the most desirable louver size, from the free area table, that meets the minimum free area requirement.

Step #3: Compare specified performance to the certified water penetration and pressure drop ratings.