EXTRUDED ALUMINUM, 4” DEEP, FIXED HIGH PERFORMANCE TYPE BLADE

MODEL EL-27
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 60” 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)

AMCA CERTIFIED RATINGS
L&O certifies that the model EL-27 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.

LOUVERS & DAMPERS
A MESTEK COMPANY
7435 INDUSTRIAL ROAD FLORENCE, KY
Phone (859) 647-2299 Fax (859) 647-7810
EL-27 STATIONARY LOUVER
DRN. BY ESS
Dwg. NO.
DATE 01-04-01
EL-27
Water Penetration: .01 oz. (3.0 g.) at 881 fpm (4.48 m/s) recommended free area velocity

Pressure Drop: .13 in. wg. (32 Pa.) at 881 fpm (4.48 m/s) and 7841 SCFM (3.7 scfm/s) Free Area

8.9 sq.ft. (0.827 sq. m.) = 55.6% for 48" x 48" (1.22 m x 1.22 m) test size

**PRESSURE DROP**

**FREE AREA IN SQUARE FEET (sq. meters)**

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VELOCITY THROUGH FREE AREA FPM (meters/sec) standard air -.075 lbs. per cu. ft.
Ratings do not include the effect of a bird screen

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EL-27

Below is an explanation of how to use the AMCA performance data for the recommended free area velocity of 881 fpm (4.48 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.

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WATER PENETRATION

Both maximum recommended free area velocity and begining of water penetration are 881 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.

Example: Given 15,000 CFM design flow

**Step #1:**

\[
\text{min. free area} = \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}}
\]

\[
= \frac{15,000}{881} = 17.0 \text{ sq. ft.}
\]

**Step #2:** From the free area table above the approximate louver size is 96" x 48" = (18.02 sq. ft.)