EXTRUDED ALUMINUM, 6" DEEP,
FIXED DRAINABLE TYPE BLADE

MODEL LE-31
STANDARD SPECIFICATIONS

FRAME: 6" 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 7-1/2" DEEP DUE TO A VERTICAL
INTERIOR BLADE SUPPORT ANGLE.

SECTION VIEW

EXTENDED SILL
OPTIONAL

ARCHITECTURAL VERTICAL
MULLION OPTIONAL

FLANGED FRAME
OPTIONAL
(JAMB SHOWN)

American Warming and Ventilating
certifies that the model LE-31
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.
**Water Penetration**: 0.01 oz (3.0 g) at 1193 fpm (6.06 m/s) recommended free area velocity

**Pressure Drop**: 0.20 in wg (49.8 Pa.) at 1193 fpm (6.06 m/s) and 11023 scfm (5.20 scm/s)

**Free Area**: 9.24 sq ft (0.858 sq m) = 57.8% for 48" x 48" (1.22m x 1.22m) test size

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 1193 fpm (6.06 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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**FREE AREA IN SQUARE FEET (sq meters)**

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<th>WIDTH</th>
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<th>24</th>
<th>36</th>
<th>48</th>
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<td>1829</td>
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**WATER PENETRATION**

**VELOCITY THROUGH FREE AREA fpm (m/s)**

Both maximum recommended free area velocity and beginning of water penetration are 1193 fpm at standard air - 0.075 lbs per cu ft.

The above water penetration data is based on mill finish, 48" x 48" test size per AMCA Standard 511.

**VELOCITY THROUGH FREE AREA fpm (m/s)**

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**: min. free area = \( \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}} \)

\[ \frac{15000}{1193} = 12.57 \text{ sq ft} \]

**Step #2**: From the free area table above the approximate louver size is 36" x 84" (12.28 sq ft)

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**LE-31**