EXTRUDED ALUMINUM, 4" DEEP, FIXED SIGHT PROOF HORIZONTAL Y TYPE BLADE

MODEL LE–81H
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 72" WIDE WILL BE 5–1/2" DEEP DUE TO A VERTICAL INTERIOR BLADE SUPPORT ANGLE.

A = WIDTH
B = HEIGHT

SECTION VIEW

EXTENDED SILL
OPTIONAL

AMERICAN WARMING AND VENTILATING CERTIFIES THAT THE MODEL LE–81H 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 PERMANENT RATINGS AND WATER PENETRATION RATINGS.

AMERICAN WARMING AND VENTILATING
A MESTEK COMPANY
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LE–81H STATIONARY LOUVER

DRN. BY: JVC DWG. NO.: LE–81H REV.
DATE: 1/18/10
Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 691 fpm (3.51 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.

### Water Penetration

- 0.01 oz (3.0 g) at 691 fpm (3.51 m/s) recommended free area velocity
- 0.25 in wg (62.3 Pa.) at 691 fpm (3.51 m/s) and 3158 scfm (1.49 scm/s)
- 4.57 sq ft (0.42 sq m) = 28.6% for 48" x 48" (1.22m x 1.22m) test size

### Pressure Drop

- Free Pressure Drop
- Water Penetration

### Free Area

- Form No. AWVLE81H January 2010
- Based on 48" x 48" test size per AMCA Standard 511.

### AMCA Certified Ratings

American Warming and Ventilating certifies that the model LE-81H 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 and water penetration ratings. LE-81H

### Free Area in Square Feet (sq meters)

<table>
<thead>
<tr>
<th>WIDTH</th>
<th>HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>in.</td>
<td>mm</td>
</tr>
<tr>
<td>12</td>
<td>305</td>
</tr>
<tr>
<td>24</td>
<td>610</td>
</tr>
<tr>
<td>36</td>
<td>914</td>
</tr>
<tr>
<td>48</td>
<td>1219</td>
</tr>
<tr>
<td>60</td>
<td>1524</td>
</tr>
<tr>
<td>72</td>
<td>1829</td>
</tr>
<tr>
<td>84</td>
<td>2134</td>
</tr>
<tr>
<td>96</td>
<td>2438</td>
</tr>
</tbody>
</table>

### Water Penetration

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 691 fpm (3.51 m/s). 

**Opening 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: 5000 CFM design flow

**Step #1:**

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

\[
= \frac{5000}{691} = 7.24 \text{ sq ft}
\]

**Step #2:** From the free area table above the approximate louver size is 72" x 48" (6.99 sq ft)