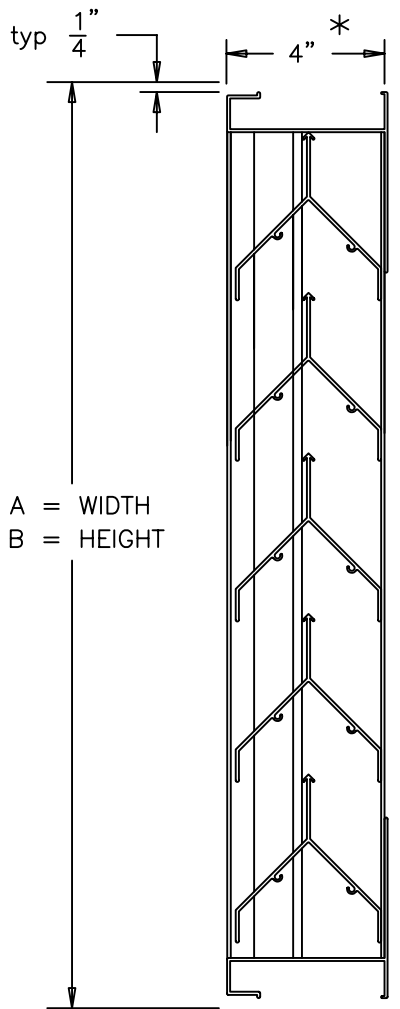


EXTRUDED ALUMINUM, 4" DEEP, FIXED SIGHT PROOF HORIZONTAL Y TYPE BLADE



SECTION VIEW

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.

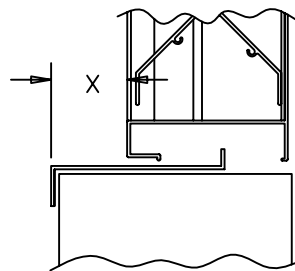
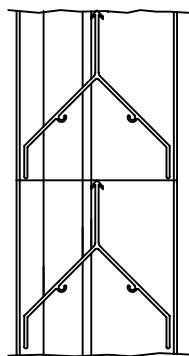
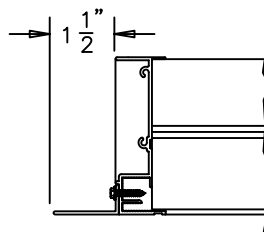
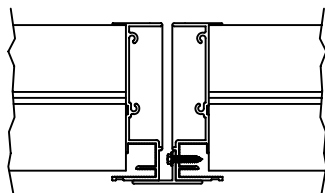
SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON INTERIOR.

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.

EXTENDED SILL
OPTIONALSTANDARD HORIZONTAL
MULLIONFLANGED FRAME
OPTIONAL
(JAMB SHOWN)STANDARD VERTICAL
MULLION

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 ratings and water penetration ratings.

awv american warming
and ventilating

A MESTEK COMPANY

7301 INTERNATIONAL DRIVE

HOLLAND, OHIO

Phone (419) 865-5000

Fax (419) 865-1375

LE-81H STATIONARY LOUVER

DRN. BY JVC

DWG. NO.

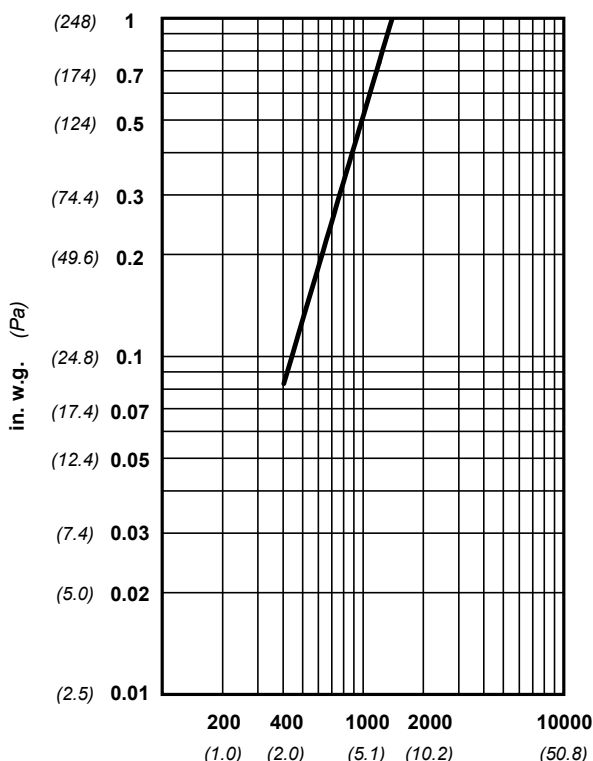
REV.

DATE 1/18/10

LE-81H

Water Penetration : 0.01 oz (3.0 g) at 691 fpm (3.51 m/s) recommended free area velocity
Pressure Drop : 0.25 in wg (62.3 Pa.) at 691 fpm (3.51 m/s) and 3158 scfm (1.49 scm/s)
Free Area : 4.57 sq ft (0.42 sq m) = 28.6% 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



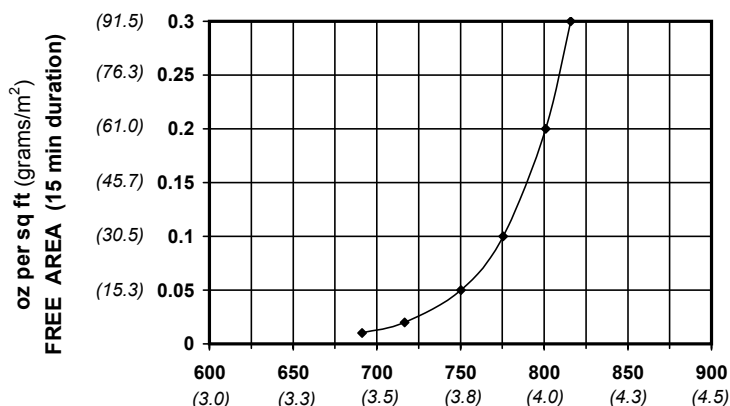
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LE-81H

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	0.09 0.008	0.21 0.020	0.34 0.032	0.46 0.043	0.58 0.054	0.70 0.065	0.82 0.076	0.94 0.087
	24 610	0.37 0.034	0.86 0.080	1.34 0.124	1.83 0.170	2.31 0.215	2.80 0.260	3.28 0.305	3.76 0.349
	36 914	0.65 0.060	1.50 0.139	2.35 0.218	3.20 0.297	4.04 0.375	4.89 0.454	5.74 0.533	6.59 0.612
	48 1219	0.93 0.086	2.14 0.199	3.36 0.312	4.57 0.425	5.78 0.537	6.99 0.649	8.20 0.762	9.41 0.874
	60 1524	1.21 0.112	2.79 0.259	4.36 0.405	5.94 0.552	7.51 0.698	9.08 0.844	10.66 0.990	12.23 1.136
	72 1829	1.49 0.138	3.43 0.319	5.37 0.499	7.31 0.679	9.24 0.858	11.18 1.039	13.12 1.219	15.05 1.398
	84 2134	1.77 0.164	4.07 0.378	6.37 0.592	8.68 0.806	10.98 1.020	13.28 1.234	15.58 1.447	17.88 1.661
	96 2438	2.05 0.190	4.72 0.439	7.38 0.686	10.04 0.933	12.71 1.181	15.37 1.428	18.04 1.676	20.70 1.923

WATER PENETRATION



VELOCITY THROUGH FREE AREA fpm (m/s)

Both maximum recommended free area velocity and beginning of water penetration are 691 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: 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)

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.