

# EXTRUDED ALUMINUM, 6" DEEP, FIXED DRAINABLE TYPE BLADE

## MODEL LE-33 STANDARD SPECIFICATIONS

FRAME: 6" DEEP CHANNEL, .081" THICK 6063-T5  
EXTRUDED ALUMINUM ALLOY.

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

FINISH: MILL.

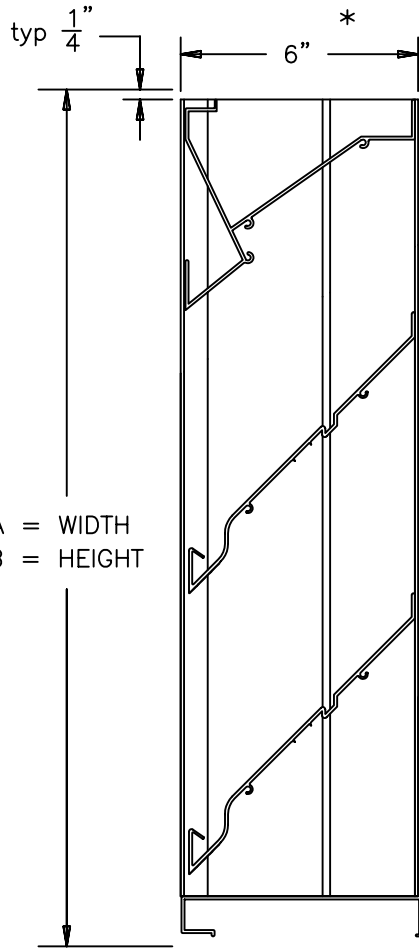
SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD  
SCREEN LOCATED ON INTERIOR.

MAXIMUM PANEL SIZE: 96" X 96".

MINIMUM PANEL SIZE: 12" X 12".

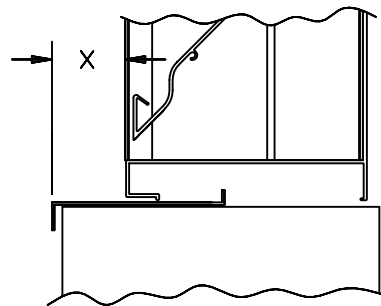
DIMENSIONS: "A" (WIDTH) AND "B" (HEIGHT) ARE OPENING  
SIZES. LOUVERS ARE MADE 1/2" UNDERSIZE.

\* PANELS OVER 48" WIDE WILL BE 7-1/2" DEEP DUE TO A VERTICAL  
INTERIOR BLADE SUPPORT ANGLE.

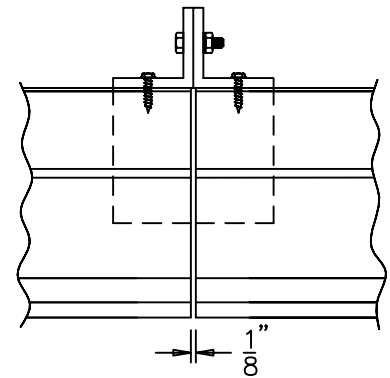


SECTION VIEW

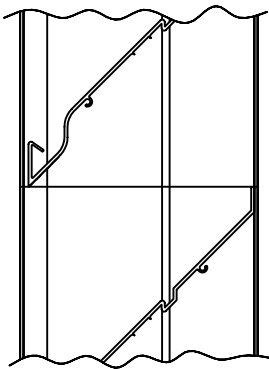
A = WIDTH  
B = HEIGHT



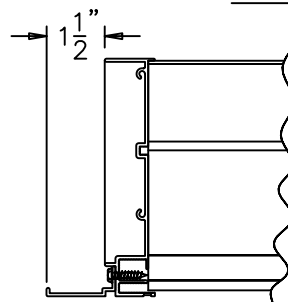
EXTENDED SILL  
OPTIONAL



ARCHITECTURAL VERTICAL



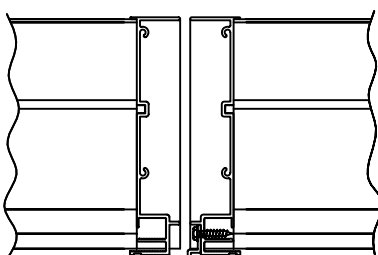
MULLION



FLANGED FRAME  
OPTIONAL  
(JAMB SHOWN)



American Warming & Ventilating certifies that the model LE-33 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.



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and ventilating

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LE-33 STATIONARY LOUVER

DRN. BY JVC

DWG. NO.

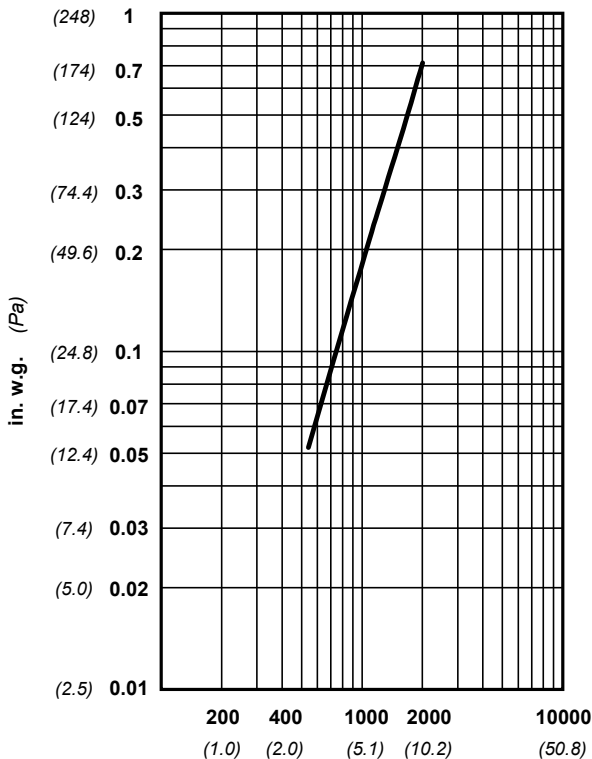
REV.

DATE 5/17/10

LE-33

**Water Penetration** : 0.01 oz (3.0 g) at 1033 fpm (5.25 m/s) recommended free area velocity  
**Pressure Drop** : 0.19 in wg (47.3 Pa.) at 1033 fpm (5.25 m/s) and 8264 scfm (3.90 scm/s)  
**Free Area** : 8 sq ft (0.743 sq m) = 50% 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-33

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 1033 fpm (5.25 m/s).

To determine minimum free area required for louver:

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

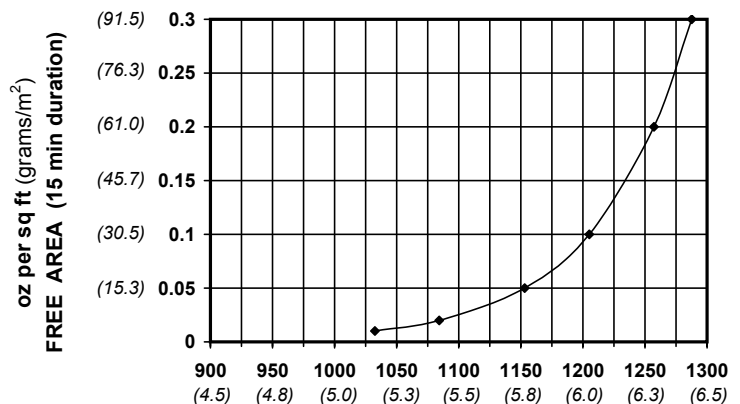
**Step #2:** Select the most desirable louver size, from the free area table, that meets the minimum free area requirement.

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

### 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	0.25 0.023	0.57 0.053	0.89 0.083	1.21 0.112	1.49 0.138	1.81 0.168	2.13 0.198	2.45 0.228
	24 610	0.76 0.071	1.75 0.163	2.74 0.255	3.72 0.346	4.59 0.426	5.58 0.518	6.56 0.609	7.55 0.701
	36 914	1.19 0.111	2.73 0.254	4.27 0.397	5.81 0.540	7.16 0.665	8.70 0.808	10.24 0.951	11.78 1.094
	48 1219	1.63 0.152	3.76 0.349	5.88 0.546	8.00 0.743	9.85 0.915	11.97 1.112	14.09 1.309	16.22 1.506
	60 1524	2.25 0.209	5.18 0.481	8.10 0.753	11.03 1.025	13.59 1.263	16.51 1.534	19.43 1.805	22.36 2.077
	72 1829	2.58 0.240	5.92 0.550	9.26 0.860	12.60 1.171	15.52 1.442	18.86 1.752	22.20 2.062	25.54 2.373
	84 2134	3.07 0.285	7.04 0.654	11.02 1.024	15.00 1.394	18.48 1.717	22.46 2.087	26.43 2.455	30.41 2.825
	96 2438	3.58 0.333	8.22 0.764	12.86 1.195	17.50 1.626	21.56 2.003	26.20 2.434	30.84 2.865	35.48 3.296

### WATER PENETRATION



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

Both maximum recommended free area velocity and beginning of water penetration are 1033 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:**

$$\text{min. free area} = \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}} = \frac{15000}{1033} = 14.52 \text{ sq ft}$$

**Step #2:** From the free area table above the approximate louver size is 84" x 48" = (14.09 sq ft)