

EXTRUDED ALUMINUM, 4" DEEP, FIXED DRAINABLE TYPE BLADE

MODEL LE-21 STANDARD SPECIFICATIONS

FRAME: 4" DEEP CHANNEL, .081" THICK 6063-T5 EXTRUDED ALUMINUM ALLOY.

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

FINISH: MILL.

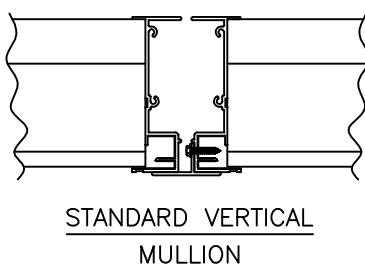
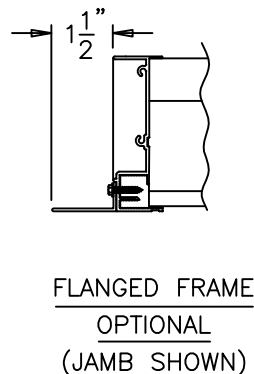
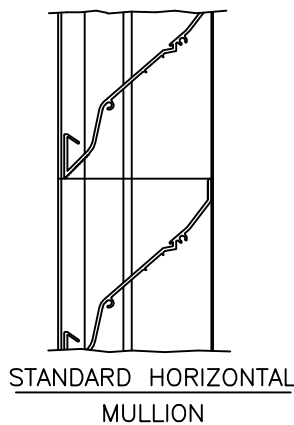
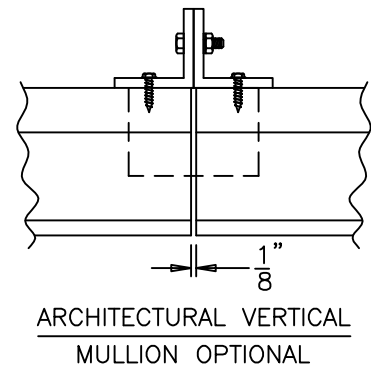
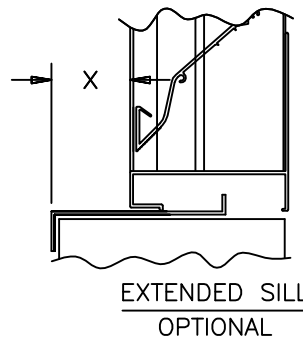
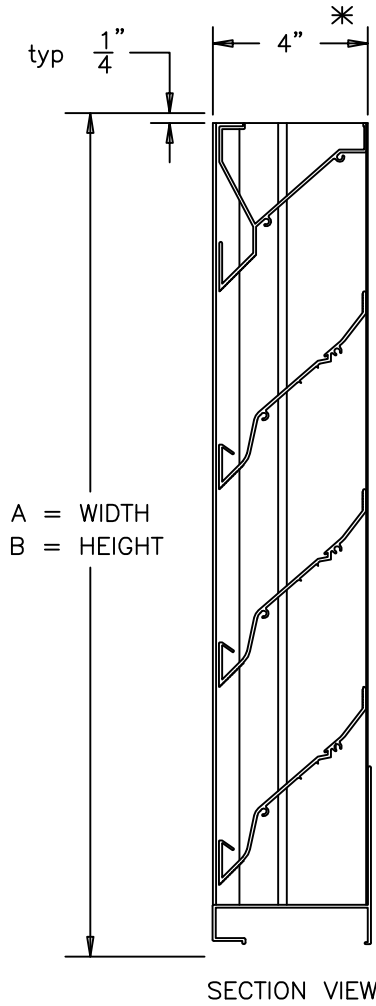
SCREEN: 1/2" REMOVABLE EXPANDED ALUMINUM BIRD SCREEN, LOCATED ON INTERIOR.

MAXIMUM PANEL SIZE: 96" X 96".

MINIMUM PANEL SIZE: 12" X 12".

DIMENSIONS: "A" (WIDTH) "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.



American Warming and Ventilating certifies that the model LE-21 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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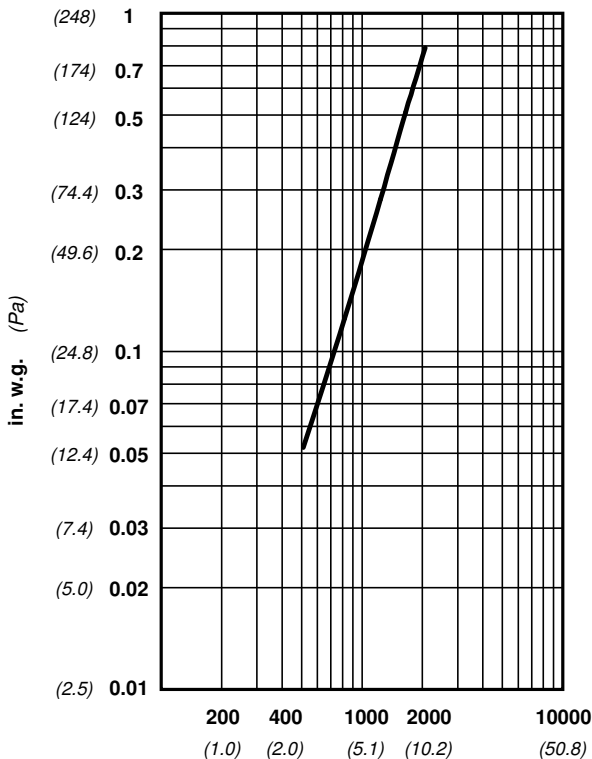
7301 INTERNATIONAL DRIVE HOLLAND, OHIO
Phone (419) 865-5000 Fax (419) 865-1375

LE-21 STATIONARY LOUVER

DRN. BY	ESS	DWG. NO.	REV.
DATE	1/4/12	LE-21	

Water Penetration : 0.01 oz (3.0 g) at 1025 fpm (5.21 m/s) recommended free area velocity
Pressure Drop : 0.20 in wg (49.8 Pa.) at 1025 fpm (5.21 m/s) and 8210 scfm (3.87 scm/s)
Free Area : 8.01 sq ft (0.744 sq m) = 50.1% 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
 Figure 5.5. Data are based on intake performance.



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LE-21

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 1025 fpm (5.21 m/s).

To determine minimum free area required for louver:

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

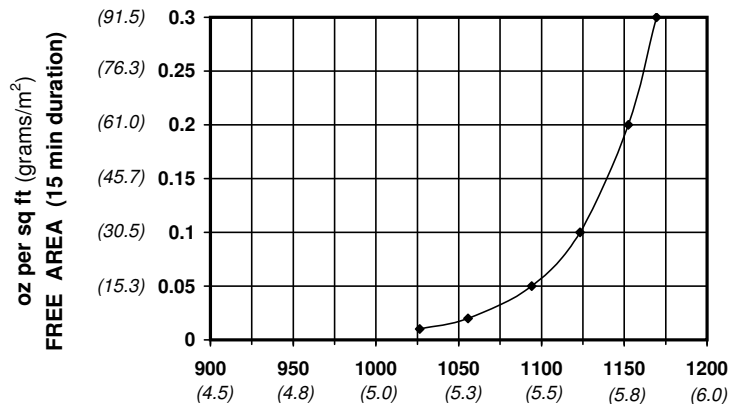
Step #2: Select the most desirable louver size, from the free area table, that meets the minimum free area requirement.

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

FREE AREA IN SQUARE FEET (sq meters)

HEIGHT	WIDTH								
	in.	12	24	36	48	60	72	84	96
	mm	305	610	914	1219	1524	1829	2134	2438
12	0.28	0.65	1.01	1.38	1.74	2.06	2.43	2.79	
305	0.026	0.060	0.094	0.128	0.162	0.191	0.226	0.259	
24	0.68	1.56	2.44	3.32	4.20	4.97	5.85	6.73	
610	0.063	0.145	0.227	0.308	0.390	0.462	0.543	0.625	
36	1.14	2.62	4.10	5.58	7.06	8.35	9.83	11.31	
914	0.106	0.243	0.381	0.518	0.656	0.776	0.913	1.051	
48	1.64	3.76	5.89	8.01	10.14	12.00	14.12	16.25	
1219	0.152	0.350	0.547	0.744	0.942	1.115	1.312	1.509	
60	2.02	4.64	7.26	9.88	12.50	14.79	17.41	20.03	
1524	0.188	0.431	0.674	0.918	1.161	1.374	1.617	1.861	
72	2.50	5.74	8.98	12.22	15.46	18.29	21.53	24.77	
1829	0.232	0.533	0.834	1.135	1.436	1.699	2.000	2.301	
84	2.89	6.65	10.40	14.16	17.91	21.20	24.96	28.71	
2134	0.268	0.618	0.966	1.316	1.664	1.970	2.319	2.667	
96	3.36	7.71	12.06	16.42	20.77	24.58	28.94	33.29	
2438	0.312	0.716	1.120	1.525	1.930	2.284	2.689	3.093	

WATER PENETRATION



VELOCITY THROUGH FREE AREA fpm (m/s)

Both maximum recommended free area velocity and beginning of water penetration are 1025 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:

$$\text{min. free area} = \frac{\text{Design CFM}}{\text{Max. Recommended Velocity}} = \frac{15000}{1025} = 14.6 \text{ sq ft}$$

Step #2: From the free area table above the approximate louver size is 48" x 84" = (14.16 sq ft)