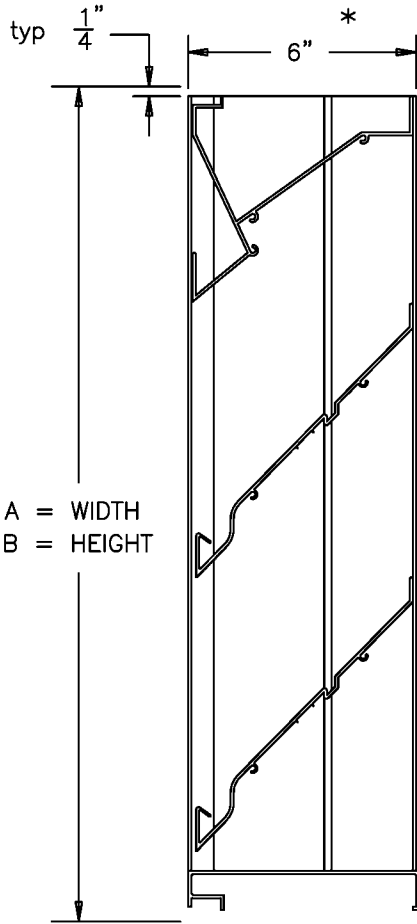


EXTRUDED ALUMINUM, 6" DEEP, FIXED DRAINABLE TYPE BLADE

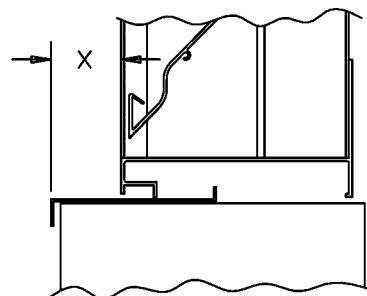


SECTION VIEW

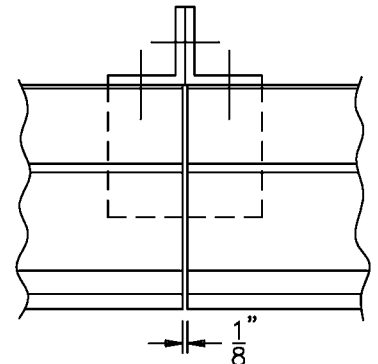
MODEL A645 STANDARD SPECIFICATIONS

- 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.

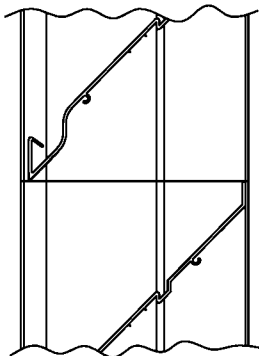
* PANELS OVER 48" WIDE WILL BE 7-1/2" DEEP DUE TO A VERTICAL INTERIOR BLADE SUPPORT ANGLE.



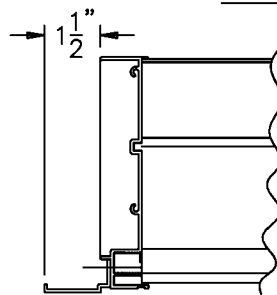
EXTENDED SILL
OPTIONAL



ARCHITECTURAL VERTICAL
MULLION OPTIONAL



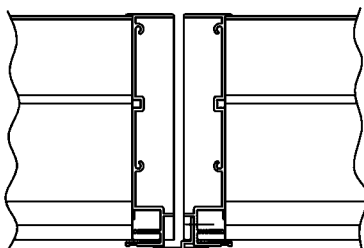
STANDARD HORIZONTAL
MULLION



FLANGED FRAME
OPTIONAL
(JAMB SHOWN)



ABI certifies that the model A645 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.



STANDARD VERTICAL
MULLION

abi air balance

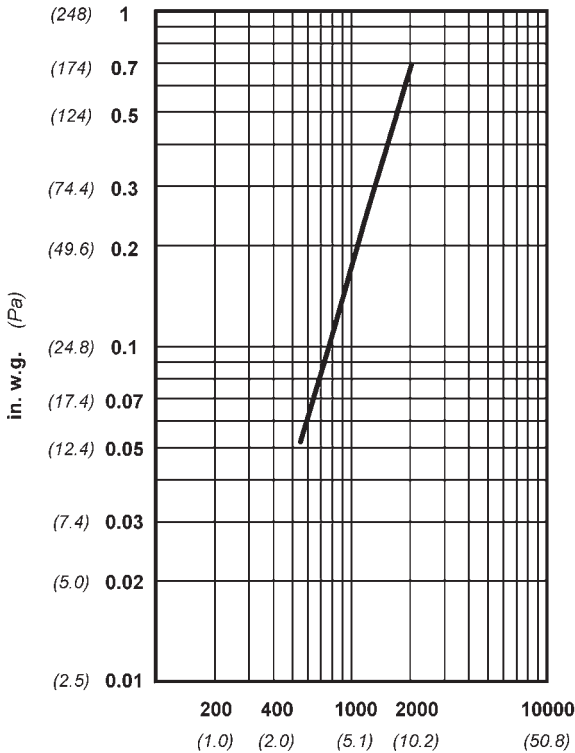
A MESTEK COMPANY
7435 INDUSTRIAL RD. FLORENCE, KY
Phone (419) 865-5000 Fax (419) 865-1375

A645 STATIONARY LOUVER

DRN. BY	ESS	DWG. NO.	REV.
DATE	12-01-02	A645	

Water Penetration : 0.01 oz (3.0 g) at 1029 fpm (5.22 m/s) recommended free area velocity
Pressure Drop : 0.17 in wg (42.1 Pa.) at 1029 fpm (5.22 m/s) and 8232 scfm (3.89 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



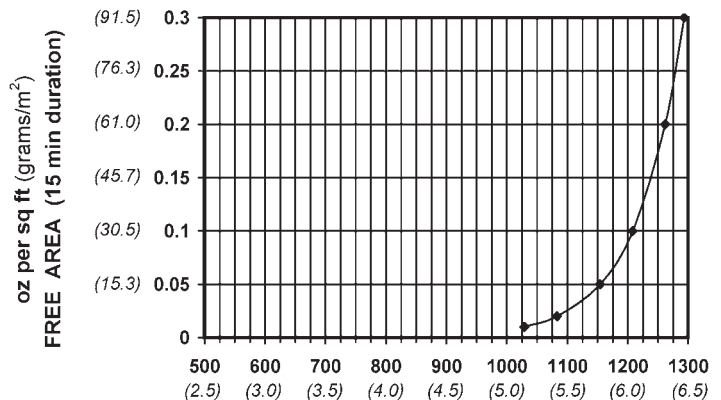
ABI certifies that the model A645 louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance and water penetration ratings.

A645

FREE AREA IN SQUARE FEET (sq meters)

		WIDTH							
		in. mm	12 305	24 610	36 914	48 1219	60 1524	72 1829	84 2134
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 1029 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:
 min. free area = $\frac{\text{Design CFM}}{\text{Max. Recommended Velocity}}$
 = $\frac{15000}{1029}$ = **14.58 sq ft**

Step #2: From the free area table above the approximate louver size is 48" x 84" = (15 sq ft)

Below is an explanation of how to use the AMCA Performance data for the recommended free area velocity of 1029 fpm (5.22 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.