

## Water Penetration Pressure Drop Free Area

.01 oz. (3.0 g.) at 1029 fpm (5.22 m/s) recommended free area velocity
.17 in. wg. (42.2 Pa.) at 1029 fpm (5.22 m/s) and 8232 SCFM (3.88 scm/s)
8.0 sq.ft. (0.743 sq. m.) = 50.% for 48" x 48" (1.22 m x 1.22 m) test size



standard air - .075 lbs. per cu. ft. Ratings do not include the effect of a bird screen



CESCO certifies that the model X6D4 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. X6D4

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.

	WIDTH									
HEIGHT	in.	12	24	36	48	60	72	84	96	
	mm	304	609	914	1219	1524	1828	2133	2438	
	12	.247	.568	.889	1.21	1.49	1.81	2.13	2.45	
	304	.023	.053	.083	.112	.138	.168	.198	.228	
	24	.761	1.75	2.74	3.72	4.59	5.58	6.56	7.55	
	609	.071	.162	.254	.346	.426	.518	.610	.702	
	36	1.19	2.73	4.27	5.81	7.16	8.70	10.24	11.78	
	914	.110	.254	.397	.540	.665	.808.	.951	1.09	
	48	1.63	3.76	5.88	8.00	9.85	11.97	14.09	16.22	
	1219	.152	.349	.546	.743	.915	1.11	1.31	1.51	
	60	2.25	5.18	8.10	11.03	13.59	16.51	19.43	22.36	
	1524	.209	.481	.753	1.024	1.26	1.53	1.81	2.08	
	72	2.58	5.92	9.26	12.60	15.52	18.86	22.20	25.54	
	1828	.239	.550	.860	1.17	1.44	1.75	2.06	2.37	
	84	3.07	7.04	11.02	15.00	18.48	22.46	26.43	30.41	
	2133	.285	.654	1.02	1.39	1.72	2.09	2.46	2.83	
	96	3.58	8.22	12.86	17.50	21.56	26.20	30.84	35.48	
	2438	.332	.763	1.19	1.63	2.00	2.43	2.87	3.30	

**FREE AREA IN SQUARE FEET** (sq. meters)



Both maximum recommended free area velocity and begining 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. Unusally 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 15,000 CFM design flow				
Step #1:					
min. free area =	Design CFM				
	Max. Recommended Velocity				
=	<u>15,000</u> = <b>14.57 sq. ft.</b>				
	1029				
Step #2: From th	ne free area table above the approximate				