

Model PL-4080 7.5" (190.5 mm) Perforated High Performance Louver

Material:

Material:	Louver 6063-T6 Alloy Perforated Sheet 3003 H14 aluminum
Nominal Thickness (heads, sills, jambs, & mullions):	0.10" (2.54 mm)
Nominal Blade Thickness:	0.068" (1.73 mm) & 0.078" (1.98 mm)
Additional Options (at additional cost):	Rear bird or insect screen Continuous clip angles for attachment Sheet blank off, Insulated blank off Sill pans, Flange frames Integrated glazing frames

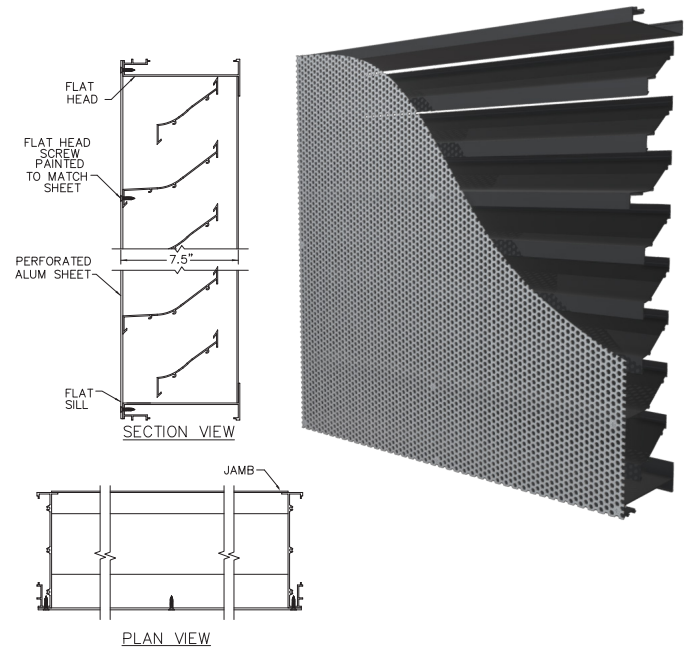
Test Summary:

(All testing conducted by an independent 3rd party agency
in accordance with the referenced AMCA standards)

For a 4 Foot by 4 Foot Unit.

Tested with mill finish and no rear bird or insect screen

- Free area = 7.49 ft² (0.67 m²)
- Percent free area = 46.8%
- Free area velocity at the point of beginning water penetration (@ 0.01 oz. / ft² of free area based on a 15 minute interval test) = 822 FPM (4.18 m/s)
- Intake pressure drop at 822 FPM free area velocity = 0.13 in. H₂O (32.3 Pa)
- To maintain a CLASS C (80%) effectiveness rating* with:
 - a 29.1 mph wind speed an rainfall rate of 3 in/hr
 - Max. intake core velocity 3.0 m/s (591 FPM)
 - Max. intake free area velocity 5.91 m/s (1,163 FPM)



Discharge Coefficient

Intake Cd = 0.27 (Class 3)

Wind Driven Rain Performance: Tested with 1m² core area, mill finish and no rear bird or insect screen*

The louver test was based on a 39.370" (1.0 m) x 39.370" (1.0 m) core area unit tested at a rainfall rate of 3" per hour (75 mm/hr) and with a wind directed to the face of the louver at a velocity of 29.1 mph (13 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

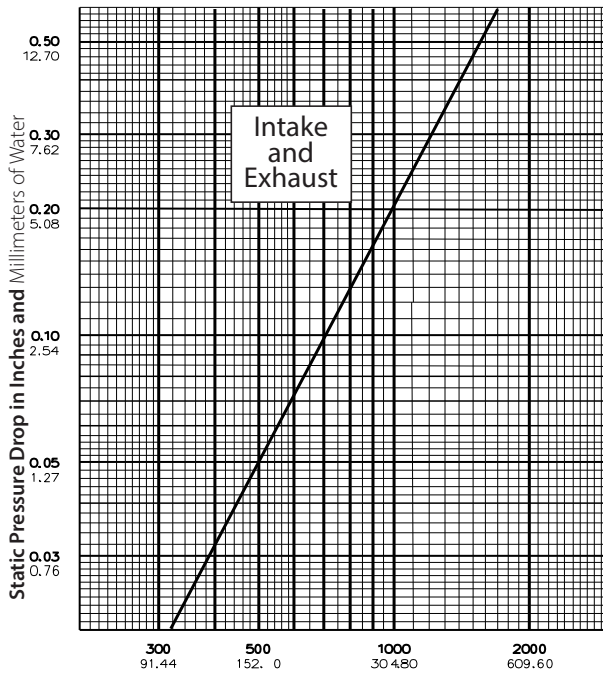
29.1 mph (13 m/s) & 3" (75 mm) rain per hour

Core Velocity Through Cal. Plate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Core Velocity Through Louver (ft/min):	0	98	197	295	394	492	591	689
Free Area Velocity (ft/min):	0	193	387	583	777	970	1163	1360
Rating Effectiveness:	B	C	C	C	C	C	C	D
Effectiveness Ratio (%):	96.2	93.5	91.9	90.8	90.8	88.8	83.1	71.0
Effectiveness Rating:	A = 1 to 0.99		B = 0.989 to 0.95		C = 0.949 to 0.80		D = Below 0.80	



Model PL-4080**7.5" (190.5 mm) Perforated High Performance Louver****Water Penetration Statement**

AMCA defines the point of beginning water penetration as the free area velocity at which the AMCA water test has yielded 0.01 or less ounces of water per square foot of louver free area during a 15-minute test period.

**Air Velocity in Feet and Meters per Minute Through Free Area**

Data corrected to standard air density.

48" x 48" (121.92cm x 121.92cm) louver tested to figure 5.5.

Free Area Table (Free area in **sq. feet** and sq. meters)

For additional sizes, please visit:

<https://www.c-sgroup.com/architectural-louvers/louvers-airflow-tool>

		Width in Inches and Meters							
		18	24	30	36	42	48	54	60
Height in Inches and Meters	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	
	18	0.93	1.30	1.66	2.02	2.39	2.75	3.12	3.48
	0.46	0.09	0.12	0.15	0.19	0.22	0.26	0.29	0.32
	24	1.18	1.65	2.11	2.57	3.03	3.50	3.96	4.42
	0.61	0.11	0.15	0.20	0.24	0.28	0.32	0.37	0.41
	30	1.61	2.23	2.86	3.49	4.12	4.75	5.37	6.00
	0.76	0.15	0.21	0.27	0.32	0.38	0.44	0.50	0.56
	36	1.86	2.59	3.31	4.04	4.77	5.49	6.22	6.95
	0.91	0.17	0.24	0.31	0.38	0.44	0.51	0.58	0.65
	42	2.28	3.17	4.07	4.96	5.85	6.74	7.63	8.53
	1.07	0.21	0.29	0.38	0.46	0.54	0.63	0.71	0.79
	48	2.53	3.53	4.52	5.51	6.50	7.49	8.48	9.47
	1.22	0.24	0.33	0.42	0.51	0.60	0.70	0.79	0.88
	54	2.96	4.11	5.27	6.43	7.58	8.74	9.89	11.05
	1.37	0.27	0.38	0.49	0.60	0.70	0.81	0.92	1.03
	60	3.21	4.46	5.72	6.97	8.23	9.48	10.74	11.99
	1.52	0.30	0.41	0.53	0.65	0.76	0.88	1.00	1.11
	66	3.63	5.05	6.47	7.89	9.31	10.73	12.15	13.57
	1.68	0.34	0.47	0.60	0.73	0.87	1.00	1.13	1.26
	72	3.88	5.40	6.92	8.44	9.96	11.48	13.00	14.52
	1.83	0.36	0.50	0.64	0.78	0.93	1.07	1.21	1.35
	78	4.31	5.99	7.68	9.36	11.04	12.73	14.41	16.10
	1.98	0.40	0.56	0.71	0.87	1.03	1.18	1.34	1.50
	84	4.56	6.34	8.13	9.91	11.69	13.47	15.26	17.04
	2.13	0.42	0.59	0.75	0.92	1.09	1.25	1.42	1.58
	90	4.98	6.93	8.88	10.83	12.77	14.72	16.67	18.62
	2.29	0.46	0.64	0.82	1.01	1.19	1.37	1.55	1.73
	96	5.24	7.28	9.33	11.38	13.42	15.47	17.52	19.56
	2.44	0.49	0.68	0.87	1.06	1.25	1.44	1.63	1.82
	102	5.66	7.87	10.08	12.29	14.51	16.72	18.93	21.14
	2.59	0.53	0.73	0.94	1.14	1.35	1.55	1.76	1.96
	108	5.91	8.22	10.53	12.84	15.15	17.46	19.78	22.09
	2.74	0.55	0.76	0.98	1.19	1.41	1.62	1.84	2.05
	114	6.33	8.81	11.29	13.76	16.24	18.71	21.19	23.67
	2.90	0.59	0.82	1.05	1.28	1.51	1.74	1.97	2.20
	120	6.59	9.16	11.74	14.31	16.89	19.46	22.03	24.61
	3.05	0.61	0.85	1.09	1.33	1.57	1.81	2.05	2.29
	126	7.01	9.75	12.49	15.23	17.97	20.71	23.45	26.19
	3.20	0.65	0.91	1.16	1.41	1.67	1.92	2.18	2.43
	132	7.26	10.10	12.94	15.78	18.62	21.46	24.29	27.13
	3.35	0.67	0.94	1.20	1.47	1.73	1.99	2.26	2.52
	138	7.68	10.69	13.69	16.70	19.70	22.70	25.71	28.71
	3.51	0.71	0.99	1.27	1.55	1.83	2.11	2.39	2.67
	144	7.94	11.04	14.14	17.25	20.35	23.45	26.55	29.66
	3.66	0.74	1.03	1.31	1.60	1.89	2.18	2.47	2.76

Upper Numerals English Units/Lower Numerals Metric Units