Model DCPL-3704 - 3/8" (9.5 mm) Hole Pattern

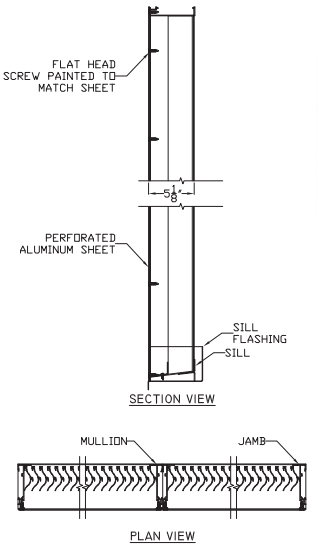
5.375" (136.5 mm) Perforated Vertical Storm Resistant Dade County Hurricane Louver

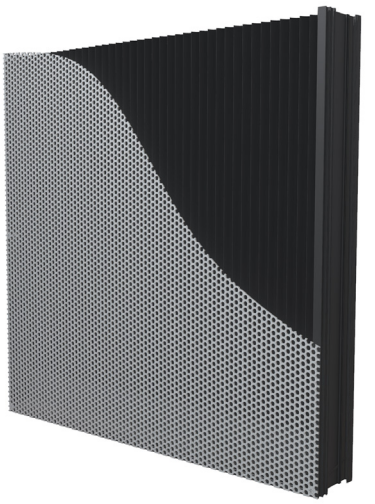
NOA: 24-0926.04
Florida Product Approval: FL-47642
Maximum Design Windload 140 PSF

PATENT PENDING

Material:

Material:	Louver 6063-T6 Alloy Perforated Sheet 3003 H14 aluminum
Nominal Thickness (heads, sills, jambs, & mullions):	0.08" (2.03 mm)
Nominal Blade Thickness:	0.05" (1.27 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:
For a 4 Foot by 4 Foot Unit.
Tested with mill finish and no rear bird or insect screen

- Free area = 7.66 ft² (0.71m²)
- Percent free area = 47.9%
- Intake pressure drop at 1000 FPM free area velocity = 0.18 in. H_2O (44.9 Pa)
- To maintain a CLASS A (99%) effectiveness rating* with:
  - a 50 mph wind speed and rainfall rate of 8 in/hr
    - Max. intake core velocity 5.0 m/s (981 FPM)
    - Max. intake free area velocity 9.8 m/s (1,932 FPM)

Discharge Coefficient
Intake Cd = 0.36 (Class 2)

Application and Design

DCPL-3704 (3/8" holes) was tested utilizing a test protocol derived from AMCA 550 with the exception that the louver was tested with a perforated plate across the airflow, which is not allowed in the standard. Less than 1% of the total water penetrated through the louver and perforated plate throughout the duration of the test.

Dade County Protocols:

TAS-201: Large and small missile impact **(Missile Level E)**
TAS-202: Criteria for testing impact and not impact resistant building envelope components using static uniform air pressure
TAS-203: Criteria for testing products subject to cyclic wind pressure

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 8" per hour (203 mm) and a wind velocity of 50 mph (22.3 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

50 mph (22.3 m/s) & 8" (203 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	4.0	4.5	5.0
Core Velocity Through Louver (ft/min):	0	98	197	295	392	491	588	687	784	883	981
Free Area Velocity (ft/min):	0	194	388	582	772	967	1159	1353	1545	1739	1932
Rating Effectiveness:	A	A	A	A	A	A	A	A	A	A	A
Effectiveness Ratio (%):											100.0

Effectiveness Rating:	A = 1 to 0.99	B = 0.989 to 0.95	C = 0.949 to 0.80	D = Below 0.80

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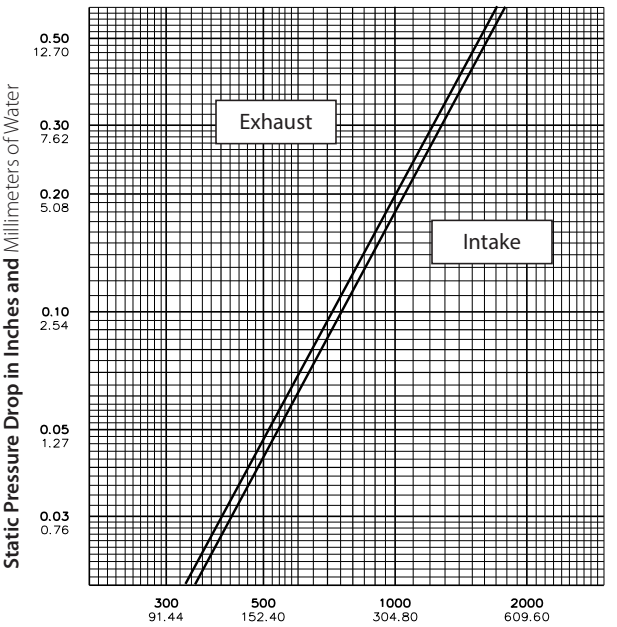

Air Velocity in Feet and Meters per Minute **Through Free Area**

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/louvers-airflow-tool

Width in Inches and Meters

Height in Inches and Meters

	18	24	30	36	42	48	54	60
	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
18	0.85	1.18	1.51	1.84	2.17	2.51	2.77	3.10
0.46	0.08	0.11	0.14	0.17	0.20	0.23	0.26	0.29
24	1.20	1.67	2.14	2.60	3.07	3.54	3.91	4.37
0.61	0.11	0.16	0.20	0.24	0.29	0.33	0.36	0.41
30	1.56	2.16	2.76	3.36	3.97	4.57	5.05	5.65
0.76	0.14	0.20	0.26	0.31	0.37	0.42	0.47	0.52
36	1.91	2.65	3.38	4.12	4.86	5.60	6.18	6.92
0.91	0.18	0.25	0.31	0.38	0.45	0.52	0.57	0.64
42	2.26	3.13	4.01	4.88	5.76	6.63	7.32	8.20
1.07	0.21	0.29	0.37	0.45	0.53	0.62	0.68	0.76
48	2.61	3.62	4.63	5.64	6.65	7.66	8.46	9.47
1.22	0.24	0.34	0.43	0.52	0.62	0.71	0.79	0.88
54	3.02	4.19	5.37	6.54	7.71	8.88	9.80	10.97
1.37	0.28	0.39	0.50	0.61	0.72	0.82	0.91	1.02
60	3.26	4.53	5.79	7.05	8.32	9.58	10.58	11.84
1.52	0.30	0.42	0.54	0.66	0.77	0.89	0.98	1.10
66	3.61	5.01	6.41	7.81	9.21	10.61	11.72	13.12
1.68	0.34	0.47	0.60	0.73	0.86	0.99	1.09	1.22
72	3.97	5.50	7.04	8.57	10.11	11.64	12.86	14.39
1.83	0.37	0.51	0.65	0.80	0.94	1.08	1.19	1.34
78	4.32	5.99	7.66	9.33	11.00	12.67	14.00	15.67
1.98	0.40	0.56	0.71	0.87	1.02	1.18	1.30	1.46
84	4.67	6.48	8.28	10.09	11.90	13.70	15.14	16.94
2.13	0.43	0.60	0.77	0.94	1.11	1.27	1.41	1.57
90	5.02	6.96	8.91	10.85	12.79	14.74	16.27	18.22
2.29	0.47	0.65	0.83	1.01	1.19	1.37	1.51	1.69
96	5.43	7.54	9.64	11.74	13.85	15.95	17.62	19.72
2.44	0.50	0.70	0.90	1.09	1.29	1.48	1.64	1.83
102	5.67	7.87	10.06	12.26	14.46	16.65	18.39	20.59
2.59	0.53	0.73	0.94	1.14	1.34	1.55	1.71	1.91
108	6.02	8.36	10.69	13.02	15.35	17.68	19.53	21.86
2.74	0.56	0.78	0.99	1.21	1.43	1.64	1.81	2.03
114	6.38	8.84	11.31	13.78	16.25	18.71	20.67	23.14
2.90	0.59	0.82	1.05	1.28	1.51	1.74	1.92	2.15
120	6.73	9.33	11.93	14.54	17.14	19.75	21.81	24.41
3.05	0.62	0.87	1.11	1.35	1.59	1.83	2.03	2.27

Upper Numerals English Units/Lower Numerals Metric Units