

Model PL-5700 - 1" (25.4mm) Hole Pattern  
7.5" (190.5 mm) Perforated Vertical Storm Resistant Louvre

Material:

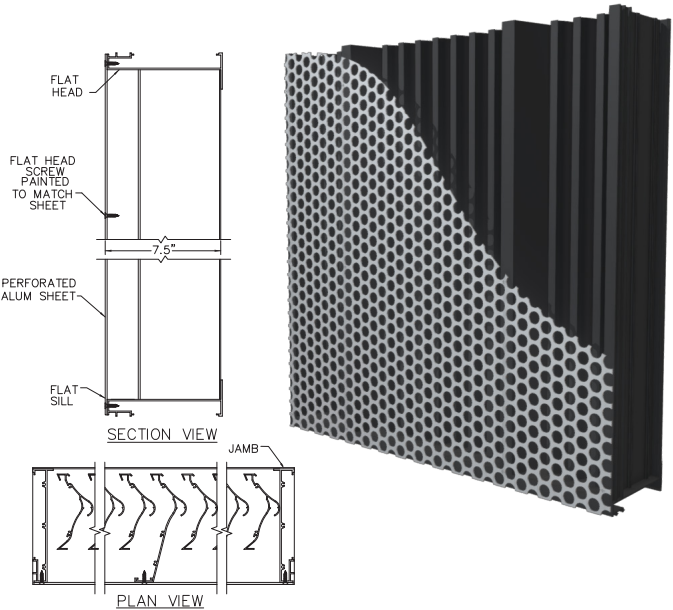
|                                                         |                                                                                                                                                                      |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material:                                               | Louvre 6063-T6 Alloy<br>Perforated Sheet 5005-H34 aluminium                                                                                                          |
| Nominal Thickness<br>(heads, sills, jambs, & mullions): | 0.10" (2.54 mm)                                                                                                                                                      |
| Nominal Blade Thickness:                                | 0.060" (1.52 mm) & 0.075" (1.91 mm)                                                                                                                                  |
| Additional Options<br>(at additional cost):             | Rear bird or insect screen<br>Continuous clip angles for attachment<br>Sheet blank off, Insulated blank off<br>Sill pans, Flange frames<br>Integrated glazing frames |

Test Summary:

For a 4 Foot by 4 Foot Unit (1219mm x 1219mm).

Tested with mill finish and no rear bird or insect screen

- Free (throat) area = 7.12 ft² (0.66 m²)
- Percent free (throat) area = 44.5%
- Intake Pressure Drop at 1,000 FPM free (throat) area velocity 0.17 in H<sub>2</sub>O (41.5 Pa)
- To maintain a CLASS A (99%) effectiveness rating\* with:
  - a 29.1 mph wind speed and rainfall rate of 3 in/hr
    - Max. intake core velocity 5.0 m/s (991 FPM)
    - Max. intake free (throat) area velocity 10.43 m/s (2,055 FPM)
  - a 50 mph wind speed and rainfall rate of 8 in/hr
    - Max. intake core velocity 4.0 m/s (800 FPM)
    - Max. intake free (throat) area velocity 8.42 m/s (1659 FPM)



Discharge Coefficient

Intake Cd = 0.29 (Class 3)

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

The louvre 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 louvre at a velocity of 29.1 mph (13 m/s) as well as a rainfall rate of 8" per hour (203 mm) and a wind velocity of 50 mph (23.3 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

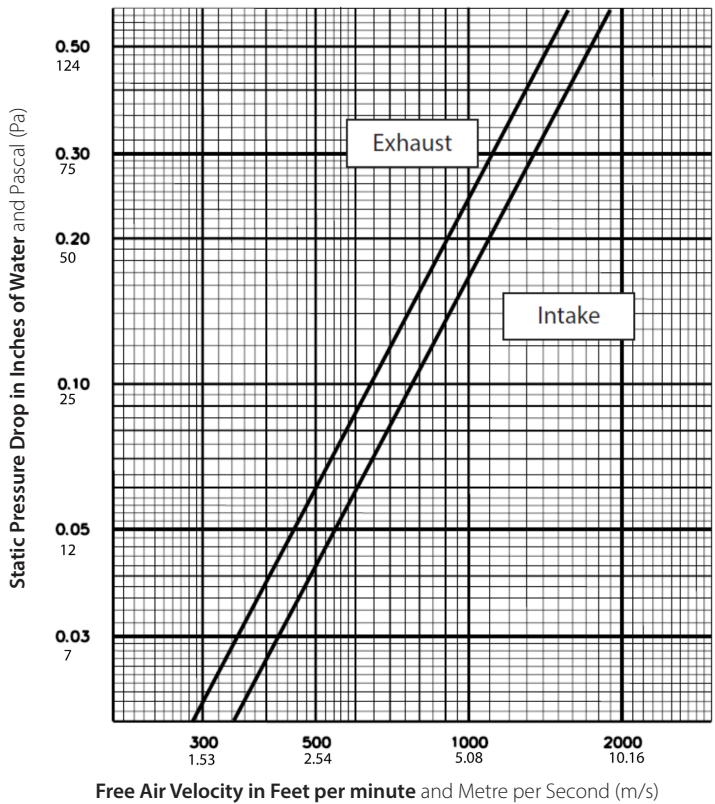
29.1 mph (13 m/s) & 3" (75 mm) rain per hour

|                                         |   |     |     |     |     |      |      |      |      |      |      |
|-----------------------------------------|---|-----|-----|-----|-----|------|------|------|------|------|------|
| Core Velocity Through Cal. Plate (m/s): | 0 | 0.5 | 1.0 | 1.5 | 2.0 | 2.5  | 3.0  | 3.5  | 4.0  | 4.5  | 5.0  |
| Core Velocity Through Louvre (ft/min):  | 0 | 98  | 196 | 294 | 393 | 492  | 590  | 688  | 786  | 892  | 991  |
| Free (throat) area Velocity (ft/min):   | 0 | 203 | 406 | 610 | 815 | 1020 | 1224 | 1427 | 1630 | 1850 | 2055 |
| Rating Effectiveness:                   | A | A   | A   | A   | A   | A    | A    | A    | A    | A    | A    |
| Effectiveness Ratio (%):                |   |     |     |     |     |      |      |      |      | 100  | 99.5 |

50 mph (22.3 m/s) & 8" (203 mm) rain per hour

|                                         |               |     |     |                   |     |     |                   |      |      |                |      |
|-----------------------------------------|---------------|-----|-----|-------------------|-----|-----|-------------------|------|------|----------------|------|
| Core Velocity Through Cal. Plate (m/s): | 0             | 0.5 | 1.0 | 1.5               | 2.0 | 2.5 | 3.0               | 3.5  | 4.0  | 4.5            | 5.0  |
| Core Velocity Through Louvre (ft/min):  | 0             | 96  | 196 | 288               | 396 | 481 | 573               | 697  | 800  | 895            | 1008 |
| Free (throat) area Velocity (ft/min):   | 0             | 199 | 406 | 597               | 821 | 998 | 1188              | 1446 | 1659 | 1856           | 2091 |
| Rating Effectiveness:                   | A             | A   | A   | A                 | A   | A   | A                 | A    | A    | B              | B    |
| Effectiveness Ratio (%):                |               |     |     |                   |     |     | 100               | 99.8 | 99.3 | 98             | 95.4 |
| 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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Data corrected to standard air density.  
48" x 48" (121.92cm x 121.92cm) louvre tested to figure 5.5.

Free (throat) area Table (Free (throat) area in sq. feet and sq. metres)

For additional sizes, please visit:

|  |      | Width in Inches and Metres |      |       |       |       |       |       |       |
|--|------|----------------------------|------|-------|-------|-------|-------|-------|-------|
|  |      | 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   | 0.74                       | 1.06 | 1.38  | 1.69  | 2.01  | 2.33  | 2.65  | 2.96  |
|  | 0.46 | 0.07                       | 0.10 | 0.13  | 0.16  | 0.19  | 0.22  | 0.25  | 0.28  |
|  | 24   | 1.05                       | 1.49 | 1.94  | 2.39  | 2.84  | 3.29  | 3.74  | 4.18  |
|  | 0.61 | 0.10                       | 0.14 | 0.18  | 0.22  | 0.26  | 0.31  | 0.35  | 0.39  |
|  | 30   | 1.35                       | 1.93 | 2.51  | 3.09  | 3.67  | 4.25  | 4.82  | 5.40  |
|  | 0.76 | 0.13                       | 0.18 | 0.23  | 0.29  | 0.34  | 0.39  | 0.45  | 0.50  |
|  | 36   | 1.66                       | 2.37 | 3.07  | 3.78  | 4.49  | 5.20  | 5.91  | 6.62  |
|  | 0.91 | 0.15                       | 0.22 | 0.29  | 0.35  | 0.42  | 0.48  | 0.55  | 0.62  |
|  | 42   | 1.96                       | 2.80 | 3.64  | 4.48  | 5.32  | 6.16  | 7.00  | 7.84  |
|  | 1.07 | 0.18                       | 0.26 | 0.34  | 0.42  | 0.49  | 0.57  | 0.65  | 0.73  |
|  | 48   | 2.27                       | 3.24 | 4.21  | 5.18  | 6.15  | 7.12  | 8.09  | 9.06  |
|  | 1.22 | 0.21                       | 0.30 | 0.39  | 0.48  | 0.57  | 0.66  | 0.75  | 0.84  |
|  | 54   | 2.57                       | 3.67 | 4.77  | 5.87  | 6.98  | 8.08  | 9.18  | 10.28 |
|  | 1.37 | 0.24                       | 0.34 | 0.44  | 0.55  | 0.65  | 0.75  | 0.85  | 0.96  |
|  | 60   | 2.87                       | 4.11 | 5.34  | 6.57  | 7.80  | 9.04  | 10.27 | 11.50 |
|  | 1.52 | 0.27                       | 0.38 | 0.50  | 0.61  | 0.72  | 0.84  | 0.95  | 1.07  |
|  | 66   | 3.18                       | 4.54 | 5.91  | 7.27  | 8.63  | 9.99  | 11.36 | 12.72 |
|  | 1.68 | 0.30                       | 0.42 | 0.55  | 0.68  | 0.80  | 0.93  | 1.06  | 1.18  |
|  | 72   | 3.48                       | 4.98 | 6.47  | 7.96  | 9.46  | 10.95 | 12.44 | 13.94 |
|  | 1.83 | 0.32                       | 0.46 | 0.60  | 0.74  | 0.88  | 1.02  | 1.16  | 1.29  |
|  | 78   | 3.79                       | 5.41 | 7.04  | 8.66  | 10.29 | 11.91 | 13.53 | 15.16 |
|  | 1.98 | 0.35                       | 0.50 | 0.65  | 0.80  | 0.96  | 1.11  | 1.26  | 1.41  |
|  | 84   | 4.09                       | 5.85 | 7.60  | 9.36  | 11.11 | 12.87 | 14.62 | 16.38 |
|  | 2.13 | 0.38                       | 0.54 | 0.71  | 0.87  | 1.03  | 1.20  | 1.36  | 1.52  |
|  | 90   | 4.40                       | 6.28 | 8.17  | 10.05 | 11.94 | 13.83 | 15.71 | 17.60 |
|  | 2.29 | 0.41                       | 0.58 | 0.76  | 0.93  | 1.11  | 1.28  | 1.46  | 1.63  |
|  | 96   | 4.70                       | 6.72 | 8.74  | 10.75 | 12.77 | 14.78 | 16.80 | 18.82 |
|  | 2.44 | 0.44                       | 0.62 | 0.81  | 1.00  | 1.19  | 1.37  | 1.56  | 1.75  |
|  | 102  | 5.01                       | 7.16 | 9.30  | 11.45 | 13.59 | 15.74 | 17.89 | 20.03 |
|  | 2.59 | 0.47                       | 0.66 | 0.86  | 1.06  | 1.26  | 1.46  | 1.66  | 1.86  |
|  | 108  | 5.31                       | 7.59 | 9.87  | 12.14 | 14.42 | 16.70 | 18.98 | 21.25 |
|  | 2.74 | 0.49                       | 0.71 | 0.92  | 1.13  | 1.34  | 1.55  | 1.76  | 1.97  |
|  | 114  | 5.62                       | 8.03 | 10.43 | 12.84 | 15.25 | 17.66 | 20.07 | 22.47 |
|  | 2.90 | 0.52                       | 0.75 | 0.97  | 1.19  | 1.42  | 1.64  | 1.86  | 2.09  |
|  | 120  | 5.92                       | 8.46 | 11.00 | 13.54 | 16.08 | 18.62 | 21.15 | 23.69 |
|  | 3.05 | 0.55                       | 0.79 | 1.02  | 1.26  | 1.49  | 1.73  | 1.97  | 2.20  |

Upper Numerals English Units/Lower Numerals Metric Units