

DESIGN DATA:

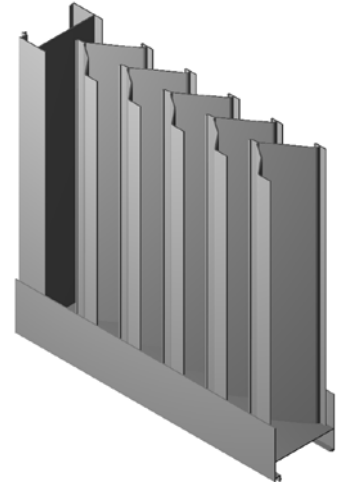
To maintain a **CLASS A (99%) effectiveness** rating with a 29 mph wind speed and a rainfall rate of 3 in/hr

- Maximum intake core velocity 2.9 m/s (571 FPM)
- Maximum intake free area velocity 6.4 m/s (1260 FPM)
- Intake pressure drop 212.2 Pa (0.86 in. H₂O)
- Intake capacity 2.9m³/s (6145 CFM)



To maintain a **CLASS B (95%) effectiveness** rating with a 29 mph wind speed and a rainfall rate of 3 in/hr

- Maximum intake core velocity 3.2 m/s (630 FPM)
- Maximum intake free area velocity 6.9 m/s (1358 FPM)
- Intake pressure drop 249.3 Pa (1.00 in. H₂O)
- Intake capacity 3.2m³/s (6674 CFM)



*louver tested with 1m² core area, mill finish and no screen

SUGGESTED SPECIFICATIONS:

GENERAL: Furnish and install where indicated on the drawings C/S 4" (101.6 mm) STORM RESISTANT FIXED VERTICAL LOUVER **MODEL RS-4600** as manufactured by Construction Specialties, Inc., Cranford, NJ; Mississauga, Ontario. Complete details shall be submitted to the architect for approval prior to fabrication. The supplier must be a member of AMCA or BSRIA.

MATERIAL: Frames and blades to be fabricated from 6063-T6 aluminum alloy. Blades to be minimum 0.060" (1.52 mm) thick extrusions and frames to be a minimum 0.080" (2.03 mm) thick. Louver to be mechanically fastened using stainless steel or aluminum fasteners. Louvers to be supplied with 4" (101.6 mm) high by full depth sill flashing formed from minimum 0.050" (1.27 mm) thick aluminum. Sill flashing to have welded side panels. Louvers and sill flashing to be installed in accordance with the manufacturer's recommended procedures to ensure complete water integrity performance of louver system. Louvers to be furnished with 1/2" (12.7 mm) mesh screen secured within a 12 B & S gauge extruded aluminum frame.

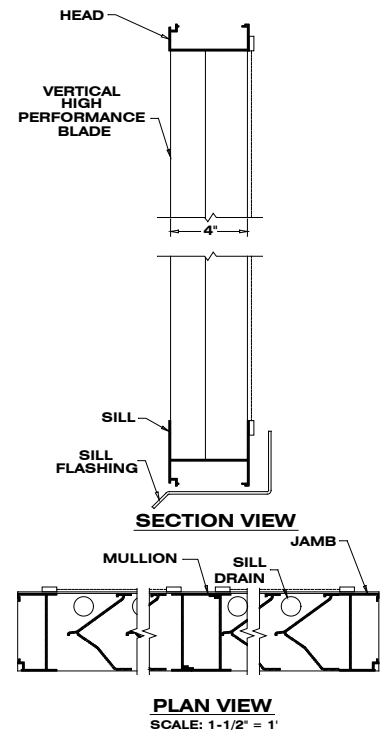
STRUCTURAL DESIGN: Structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than _____psf. (kPa). (Note: If this paragraph is omitted or if the design wind load is not specified, the louvers will be manufactured in self supporting units up to a maximum of 5' (1524 mm) wide by 8' (2438 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.

FINISH: All louvers shall be finished with C/S Powder Coat, a coating to be 1.5 to 3 mil. thick full strength **100% resin Fluoropolymer coating. Finish to allow zero VOCs** to be emitted into facility of application. Finish to adhere to a 4H Hardness rating. All finishing procedures shall be one continuous operation in the plant of the manufacturer. **The coating shall meet or exceed all requirements of AAMA specification 2605-5** "Voluntary Specification for High Performance Organic Coatings on Architectural extrusions and Panels." The louver manufacturer shall supply an industry standard **20-year limited warranty against failure or excessive fading** of the Fluoropolymer Powder Coat finish. This limited warranty shall begin on the date of material shipment.

WIND DRIVEN RAIN PERFORMANCE:

The louver test was based on a 39.370" (1.00 m) x 39.370" (1.00 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 29.1 mph (13 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

| | | | | | | | | |
|--------------------------------------|---------------|-----|-------------------|-----|-------------------|------|---------------|------|
| Core Ventilation Rate (m/s): | 0.0 | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 |
| Core Ventilation Rate (ft/min): | 0 | 98 | 197 | 295 | 394 | 492 | 591 | 689 |
| Free Area Ventilation Rate (ft/min): | 0 | 215 | 433 | 648 | 865 | 1081 | 1298 | 1514 |
| Rating Effectiveness: | A | A | A | A | A | A | A | B |
| Effectiveness Rating: | A = 1 to 0.99 | | B = 0.989 to 0.95 | | C = 0.949 to 0.80 | | D = 0.80 to 0 | |



Discharge Coefficient
Intake Cd = 0.162 (Class 4)
AMCA certifies the coefficient class only

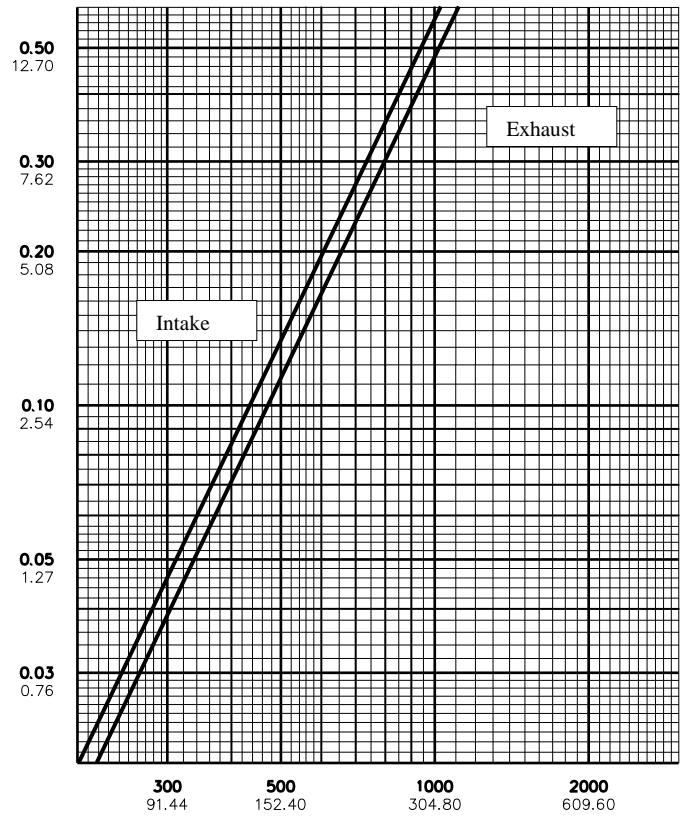
PERFORMANCE DATA MODEL RS-4600

Width in Inches and Meters

| | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 |
|------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | 0.46 | 0.61 | 0.76 | 0.91 | 1.07 | 1.22 | 1.37 | 1.52 | 1.68 | 1.83 |
| 18 | 0.63 | 0.89 | 1.16 | 1.43 | 1.70 | 1.97 | 2.24 | 2.50 | 2.64 | 2.91 |
| 0.46 | 0.06 | 0.08 | 0.11 | 0.13 | 0.16 | 0.18 | 0.21 | 0.23 | 0.25 | 0.27 |
| 24 | 0.94 | 1.34 | 1.74 | 2.15 | 2.55 | 2.95 | 3.35 | 3.76 | 3.96 | 4.36 |
| 0.61 | 0.09 | 0.12 | 0.16 | 0.20 | 0.24 | 0.27 | 0.31 | 0.35 | 0.37 | 0.41 |
| 30 | 1.25 | 1.79 | 2.33 | 2.86 | 3.40 | 3.94 | 4.47 | 5.01 | 5.28 | 5.81 |
| 0.76 | 0.12 | 0.17 | 0.22 | 0.27 | 0.32 | 0.37 | 0.42 | 0.47 | 0.49 | 0.54 |
| 36 | 1.57 | 2.24 | 2.91 | 3.58 | 4.25 | 4.92 | 5.59 | 6.26 | 6.60 | 7.27 |
| 0.91 | 0.15 | 0.21 | 0.27 | 0.33 | 0.39 | 0.46 | 0.52 | 0.58 | 0.61 | 0.68 |
| 42 | 1.88 | 2.68 | 3.49 | 4.29 | 5.10 | 5.90 | 6.71 | 7.51 | 7.92 | 8.72 |
| 1.07 | 0.17 | 0.25 | 0.32 | 0.40 | 0.47 | 0.55 | 0.62 | 0.70 | 0.74 | 0.81 |
| 48 | 2.19 | 3.13 | 4.07 | 5.01 | 5.95 | 6.89 | 7.83 | 8.77 | 9.24 | 10.17 |
| 1.22 | 0.20 | 0.29 | 0.38 | 0.47 | 0.55 | 0.64 | 0.73 | 0.81 | 0.86 | 0.95 |
| 54 | 2.50 | 3.58 | 4.65 | 5.72 | 6.80 | 7.87 | 8.94 | 10.02 | 10.55 | 11.63 |
| 1.37 | 0.23 | 0.33 | 0.43 | 0.53 | 0.63 | 0.73 | 0.83 | 0.93 | 0.98 | 1.08 |
| 60 | 2.82 | 4.03 | 5.23 | 6.44 | 7.65 | 8.86 | 10.06 | 11.27 | 11.87 | 13.08 |
| 1.52 | 0.26 | 0.37 | 0.49 | 0.60 | 0.71 | 0.82 | 0.93 | 1.05 | 1.10 | 1.22 |
| 66 | 3.13 | 4.47 | 5.81 | 7.16 | 8.50 | 9.84 | 11.18 | 12.52 | 13.19 | 14.53 |
| 1.68 | 0.29 | 0.42 | 0.54 | 0.66 | 0.79 | 0.91 | 1.04 | 1.16 | 1.23 | 1.35 |
| 72 | 3.44 | 4.92 | 6.40 | 7.87 | 9.35 | 10.82 | 12.30 | 13.77 | 14.51 | 15.99 |
| 1.83 | 0.32 | 0.46 | 0.59 | 0.73 | 0.87 | 1.01 | 1.14 | 1.28 | 1.35 | 1.49 |
| 78 | 3.76 | 5.37 | 6.98 | 8.59 | 10.20 | 11.81 | 13.42 | 15.03 | 15.83 | 17.44 |
| 1.98 | 0.35 | 0.50 | 0.65 | 0.80 | 0.95 | 1.10 | 1.25 | 1.40 | 1.47 | 1.62 |
| 84 | 4.07 | 5.81 | 7.56 | 9.30 | 11.05 | 12.79 | 14.53 | 16.28 | 17.15 | 18.90 |
| 2.13 | 0.38 | 0.54 | 0.70 | 0.86 | 1.03 | 1.19 | 1.35 | 1.51 | 1.59 | 1.76 |
| 90 | 4.38 | 6.26 | 8.14 | 10.02 | 11.90 | 13.77 | 15.65 | 17.53 | 18.47 | 20.35 |
| 2.29 | 0.41 | 0.58 | 0.76 | 0.93 | 1.11 | 1.28 | 1.45 | 1.63 | 1.72 | 1.89 |
| 96 | 4.70 | 6.71 | 8.72 | 10.73 | 12.75 | 14.76 | 16.77 | 18.78 | 19.79 | 21.80 |
| 2.44 | 0.44 | 0.62 | 0.81 | 1.00 | 1.18 | 1.37 | 1.56 | 1.75 | 1.84 | 2.03 |
| 102 | 5.01 | 7.16 | 9.30 | 11.45 | 13.60 | 15.74 | 17.89 | 20.04 | 21.11 | 23.26 |
| 2.59 | 0.47 | 0.66 | 0.86 | 1.06 | 1.26 | 1.46 | 1.66 | 1.86 | 1.96 | 2.16 |
| 108 | 5.32 | 7.60 | 9.88 | 12.16 | 14.45 | 16.73 | 19.01 | 21.29 | 22.43 | 24.71 |
| 2.74 | 0.49 | 0.71 | 0.92 | 1.13 | 1.34 | 1.55 | 1.77 | 1.98 | 2.08 | 2.30 |
| 114 | 5.64 | 8.05 | 10.47 | 12.88 | 15.30 | 17.71 | 20.13 | 22.54 | 23.75 | 26.16 |
| 2.90 | 0.52 | 0.75 | 0.97 | 1.20 | 1.42 | 1.65 | 1.87 | 2.09 | 2.21 | 2.43 |
| 120 | 5.95 | 8.50 | 11.05 | 13.60 | 16.14 | 18.69 | 21.24 | 23.79 | 25.07 | 27.62 |
| 3.05 | 0.55 | 0.79 | 1.03 | 1.26 | 1.50 | 1.74 | 1.97 | 2.21 | 2.33 | 2.57 |
| 126 | 6.26 | 8.94 | 11.63 | 14.31 | 16.99 | 19.68 | 22.36 | 25.04 | 26.39 | 29.07 |
| 3.20 | 0.58 | 0.83 | 1.08 | 1.33 | 1.58 | 1.83 | 2.08 | 2.33 | 2.45 | 2.70 |
| 132 | 6.57 | 9.39 | 12.21 | 15.03 | 17.84 | 20.66 | 23.48 | 26.30 | 27.71 | 30.52 |
| 3.35 | 0.61 | 0.87 | 1.13 | 1.40 | 1.66 | 1.92 | 2.18 | 2.44 | 2.57 | 2.84 |
| 138 | 6.89 | 9.84 | 12.79 | 15.74 | 18.69 | 21.65 | 24.60 | 27.55 | 29.02 | 31.98 |
| 3.51 | 0.64 | 0.91 | 1.19 | 1.46 | 1.74 | 2.01 | 2.29 | 2.56 | 2.70 | 2.97 |
| 144 | 7.20 | 10.29 | 13.37 | 16.46 | 19.54 | 22.63 | 25.72 | 28.80 | 30.34 | 33.43 |
| 3.66 | 0.67 | 0.96 | 1.24 | 1.53 | 1.82 | 2.10 | 2.39 | 2.68 | 2.82 | 3.11 |
| 150 | 7.51 | 10.73 | 13.95 | 17.17 | 20.39 | 23.61 | 26.83 | 30.05 | 31.66 | 34.88 |
| 3.81 | 0.70 | 1.00 | 1.30 | 1.60 | 1.89 | 2.19 | 2.49 | 2.79 | 2.94 | 3.24 |
| 156 | 7.83 | 11.18 | 14.53 | 17.89 | 21.24 | 24.60 | 27.95 | 31.31 | 32.98 | 36.34 |
| 3.96 | 0.73 | 1.04 | 1.35 | 1.66 | 1.97 | 2.29 | 2.60 | 2.91 | 3.06 | 3.38 |
| 162 | 8.14 | 11.63 | 15.12 | 18.60 | 22.09 | 25.58 | 29.07 | 32.56 | 34.30 | 37.79 |
| 4.11 | 0.76 | 1.08 | 1.40 | 1.73 | 2.05 | 2.38 | 2.70 | 3.02 | 3.19 | 3.51 |
| 168 | 8.45 | 12.08 | 15.70 | 19.32 | 22.94 | 26.57 | 30.19 | 33.81 | 35.62 | 39.24 |
| 4.27 | 0.79 | 1.12 | 1.46 | 1.79 | 2.13 | 2.47 | 2.80 | 3.14 | 3.31 | 3.65 |
| 174 | 8.77 | 12.52 | 16.28 | 20.04 | 23.79 | 27.55 | 31.31 | 35.06 | 36.94 | 40.70 |
| 4.42 | 0.81 | 1.16 | 1.51 | 1.86 | 2.21 | 2.56 | 2.91 | 3.26 | 3.43 | 3.78 |
| 180 | 9.08 | 12.97 | 16.86 | 20.75 | 24.64 | 28.53 | 32.42 | 36.31 | 38.26 | 42.15 |
| 4.57 | 0.84 | 1.20 | 1.57 | 1.93 | 2.29 | 2.65 | 3.01 | 3.37 | 3.55 | 3.92 |
| 186 | 9.39 | 13.42 | 17.44 | 21.47 | 25.49 | 29.52 | 33.54 | 37.57 | 39.58 | 43.60 |
| 4.72 | 0.87 | 1.25 | 1.62 | 1.99 | 2.37 | 2.74 | 3.12 | 3.49 | 3.68 | 4.05 |

Height in Inches and Meters

STATIC PRESSURE DROP IN INCHES AND MILLIMETERS OF WATER



AIR VELOCITY IN FEET AND METERS PER MINUTE THROUGH FREE AREA

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Upper Numerals English Units/Lower Numerals Metric Units