

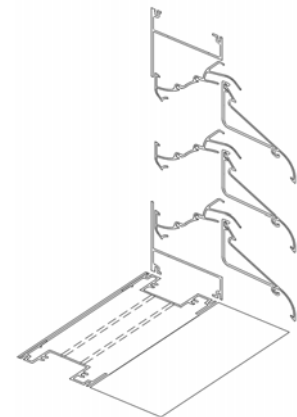
Horizontal Double Bank Louver **MODEL AL150RS-9**

V Global Pte Ltd certifies that Model **AL150RS-9** 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 wind driven rain and air performance ratings only.



DIMESION & APPEARANCE:

| Louver Model | Louver Depth (mm) | Pitch (mm) | Visual Blade Orientation | Visual Impact of Mullions/Jambs |
|--------------|-------------------|------------|--------------------------|---------------------------------|
| AL150RS-9 | 148 | 75 | Horizontal | Hidden |



DESIGN DATA:

To maintain water penetration effectiveness a CLASS A (99%) Effectiveness rating with a 29 mph (13 m/s) wind speed an rainfall rate of 3 in/hr (75mm/hr)

1. Maximum intake core velocity 1.5 m/s (295 FPM)
2. Maximum intake free area velocity 2.88 m/s (567 FPM)
3. Intake pressure drop 14.9 Pa (0.06 in. H₂O)
4. Intake capacity 1.5 m³/s (3178CFM)

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

SPECIFICATION:

GENERAL: Double bank louver **MODEL AL150RS-9** as manufactured by **V Global Pte Ltd**. 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-T5 aluminum alloy. Horizontal Line (no visible mullions) fixed two pieces blade profile designed to collect and drain water at bottom sill to exterior by several gutters in louver blades and channel integrated with jambs and mullions. Head, sills, mullions and jambs to be one piece structural aluminum members. Louvers to be pitched at 75 mm. Total system depth not to exceed 148 mm. Louver panels supplied in modular form with louver clip affixed to back module mullions at 75 mm spacing. Front louver blades, cut to length at works, to be installed on site in accordance with the manufacturer's recommended procedures. Minimum blade extrusion thickness 1.6mm, minimum louver clip(brace) extrusion thickness 2.0mm, minimum framing extrusion thickness 2.0mm.

STRUCTURAL DESIGN: Design all materials to withstand wind (and snow) loads as required by the applicable building code. Maximum allowable deflection for the louver structural members to be L/180 or 19.0 mm, whichever is less. Maximum allowable deflection for the louver blades to be L/120 or 12.5 mm across the weak axis, whichever is less.

FINISHES:

General:

Comply with AAMA 2605-13 ‘Voluntary Specifications for High Performance Organic Coatings on Architectural Extrusions and Panels’. Apply finishes in factory. Protect finishes on exposed surfaces prior to shipment. Remove scratches and blemishes from exposed surfaces that will be visible after completing finishing process. Provide color as indicated or, if not otherwise indicated, as selected by architect.

Fluorocarbon (PVDF) Coating (3-Coat 1-Bake)

- Louvers to be finished with a primer coat with average thickness of 5 to 8 microns, followed by a thermo-cured fluorocarbon top color coat with average thickness of 25 to 30 microns, and a top clear coat with average thickness of 10 to 15 microns. Total dry film thickness to be minimum 40 microns.
- All aluminum shall be thoroughly cleaned, etched and given a chromate conversion pretreatment before application of the Fluorocarbon (PVDF) coating. The coating shall receive a bake cycle in accordance with the paint manufactures specification. All finishing procedures shall be one continuous operation in the approved plant of the manufacturer’s applicator.
- Manufacturer to furnish limited warranty for a period of ten (10) years for the Fluorocarbon (PVDF 3-Coat 1-Bake) coating. This limited warranty shall begin from the date of Certificate of Completion.

WATER PENETRATION CLASSIFICATION:

The louver test was based on a 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 | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 3.5 |
| Effectiveness Ratio | 100% | 99.8% | 99.7% | 99.3% | 98.1% | 95.7% | 81.0% | 64.3% |
| Water penetration classification | A | A | A | A | B | B | C | D |
| Effectiveness Rating | A = 1 to 0.99 | | B= 0.989 to 0.95 | | C= 0.949 to 0.80 | | D= 0.80 to 0 | |

AIR PERFORMANCE:

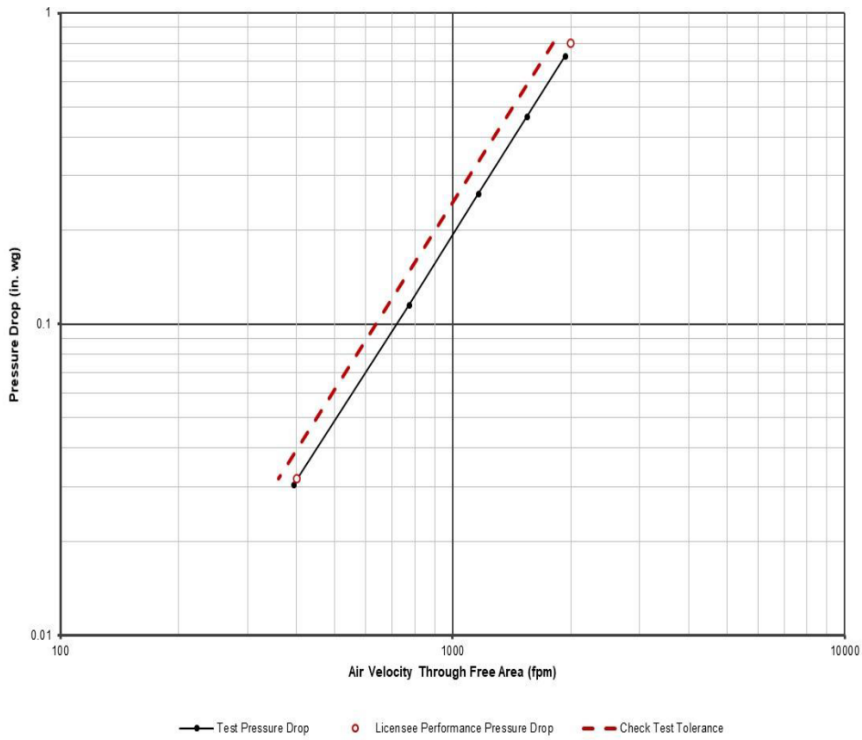
- Free Area Max: 52 %
- Airflow Co-efficient Max: 0.248
- Airflow Co-efficient of Entry: 0.245 (CLASS 3)
- Airflow Co-efficient of Discharge: 0.242(CLASS 3)

Free Area Calculation

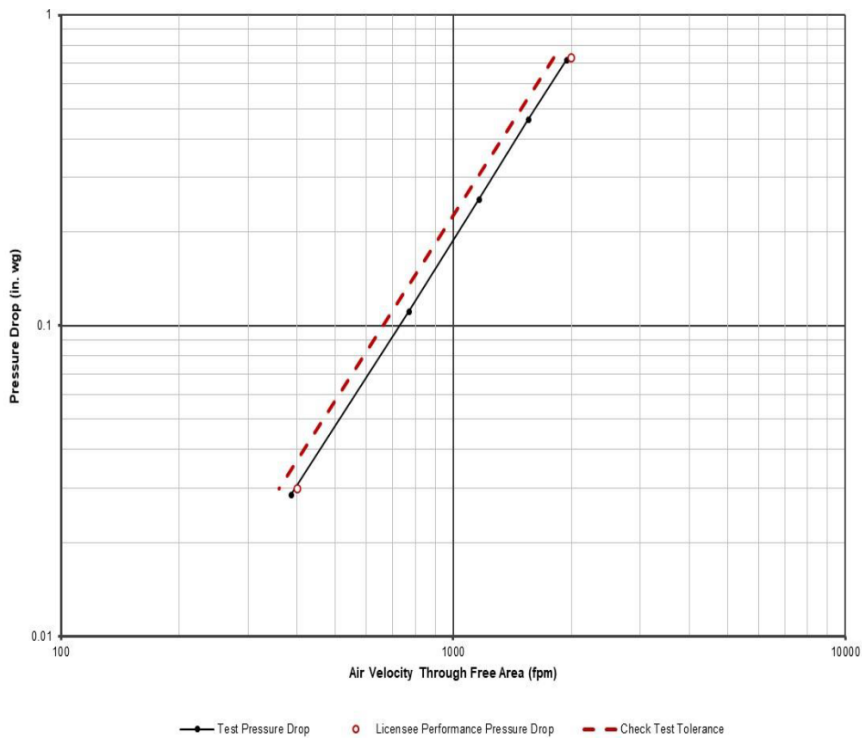
Free Area Calculation (Sq. m.)

| Height (mm) | WIDTH (mm) | | | | | | | | | | | | | | | | | |
|-------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 300 | 450 | 600 | 750 | 900 | 1050 | 1200 | 1350 | 1400 | 1550 | 1700 | 1850 | 2000 | 2150 | 2300 | 2450 | 2600 | 2750 |
| 300 | 0.02 | 0.03 | 0.05 | 0.06 | 0.07 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 | 0.18 | 0.20 | 0.21 | 0.22 | 0.23 |
| 450 | 0.04 | 0.07 | 0.09 | 0.11 | 0.14 | 0.16 | 0.19 | 0.21 | 0.22 | 0.24 | 0.27 | 0.29 | 0.32 | 0.34 | 0.37 | 0.39 | 0.42 | 0.44 |
| 600 | 0.06 | 0.10 | 0.13 | 0.17 | 0.20 | 0.24 | 0.27 | 0.31 | 0.32 | 0.36 | 0.39 | 0.43 | 0.47 | 0.50 | 0.54 | 0.57 | 0.61 | 0.65 |
| 750 | 0.08 | 0.13 | 0.17 | 0.22 | 0.27 | 0.32 | 0.36 | 0.41 | 0.43 | 0.47 | 0.52 | 0.57 | 0.61 | 0.66 | 0.71 | 0.76 | 0.80 | 0.85 |
| 900 | 0.10 | 0.16 | 0.22 | 0.27 | 0.33 | 0.39 | 0.45 | 0.51 | 0.53 | 0.59 | 0.65 | 0.70 | 0.76 | 0.82 | 0.88 | 0.94 | 1.00 | 1.06 |
| 1050 | 0.12 | 0.19 | 0.26 | 0.33 | 0.40 | 0.47 | 0.54 | 0.61 | 0.63 | 0.70 | 0.77 | 0.84 | 0.91 | 0.98 | 1.05 | 1.12 | 1.19 | 1.26 |
| 1200 | 0.14 | 0.22 | 0.30 | 0.38 | 0.46 | 0.54 | 0.62 | 0.71 | 0.73 | 0.81 | 0.90 | 0.98 | 1.06 | 1.14 | 1.22 | 1.30 | 1.38 | 1.47 |
| 1350 | 0.15 | 0.25 | 0.34 | 0.43 | 0.53 | 0.62 | 0.71 | 0.80 | 0.84 | 0.93 | 1.02 | 1.11 | 1.21 | 1.30 | 1.39 | 1.49 | 1.58 | 1.67 |
| 1500 | 0.17 | 0.28 | 0.38 | 0.49 | 0.59 | 0.70 | 0.80 | 0.90 | 0.94 | 1.04 | 1.15 | 1.25 | 1.36 | 1.46 | 1.56 | 1.67 | 1.77 | 1.88 |
| 1650 | 0.19 | 0.31 | 0.42 | 0.54 | 0.66 | 0.77 | 0.89 | 1.00 | 1.04 | 1.16 | 1.27 | 1.39 | 1.50 | 1.62 | 1.73 | 1.85 | 1.97 | 2.08 |
| 1700 | 0.21 | 0.34 | 0.47 | 0.59 | 0.72 | 0.85 | 0.97 | 1.10 | 1.14 | 1.27 | 1.40 | 1.52 | 1.65 | 1.78 | 1.91 | 2.03 | 2.16 | 2.29 |
| 1850 | 0.23 | 0.37 | 0.51 | 0.65 | 0.78 | 0.92 | 1.06 | 1.20 | 1.25 | 1.38 | 1.52 | 1.66 | 1.80 | 1.94 | 2.08 | 2.22 | 2.35 | 2.49 |
| 2000 | 0.25 | 0.40 | 0.55 | 0.70 | 0.85 | 1.00 | 1.15 | 1.30 | 1.35 | 1.50 | 1.65 | 1.80 | 1.95 | 2.10 | 2.25 | 2.40 | 2.55 | 2.70 |
| 2150 | 0.27 | 0.43 | 0.59 | 0.75 | 0.91 | 1.08 | 1.24 | 1.40 | 1.45 | 1.61 | 1.77 | 1.94 | 2.10 | 2.26 | 2.42 | 2.58 | 2.74 | 2.90 |
| 2300 | 0.29 | 0.46 | 0.63 | 0.81 | 0.98 | 1.15 | 1.32 | 1.50 | 1.55 | 1.73 | 1.90 | 2.07 | 2.24 | 2.42 | 2.59 | 2.76 | 2.94 | 3.11 |
| 2450 | 0.31 | 0.49 | 0.67 | 0.86 | 1.04 | 1.23 | 1.41 | 1.60 | 1.66 | 1.84 | 2.02 | 2.21 | 2.39 | 2.58 | 2.76 | 2.94 | 3.13 | 3.31 |
| 2600 | 0.33 | 0.52 | 0.72 | 0.91 | 1.11 | 1.30 | 1.50 | 1.69 | 1.76 | 1.95 | 2.15 | 2.35 | 2.54 | 2.74 | 2.93 | 3.13 | 3.32 | 3.52 |
| 2750 | 0.34 | 0.55 | 0.76 | 0.97 | 1.17 | 1.38 | 1.59 | 1.79 | 1.86 | 2.07 | 2.28 | 2.48 | 2.69 | 2.90 | 3.10 | 3.31 | 3.52 | 3.72 |

Exhaust Pressure Drop(48 inch square O.D. nominal)



Intake Pressure Drop(48 inch square O.D. nominal)



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