

# "We Move Air"

## FIRE-X VERTICAL

LOUVRE BLADED VERTICAL MOUNTED FIRE VENTILATOR



The Curvent Fire-X Vertical fire ventilator is a louvre bladed vertical mounted fire ventilator with a low profile design to enhance the architectural aesthetics of any building. The louvre blades are designed to close individually over each other, providing a waterproof system in the closed position. In the event of fire, the spring loaded louvred blades open automatically to allow hot gasses to exhaust. This will aid in the buildings structural integrity against collapse. The smokeless layer of fresh air created at lower level creates safe evacuation passage for people and assists in fire fighting disciplines. Natural day-to-day ventilation is made possible with the addition of electromechanical or pneumatic operating systems. The ventilator is renowned for its versatility. It provides for large ventilation areas, and can be custom-built to suit most steel structures, cladding profiles and specific design requirements.

### Product Materials Finishes:

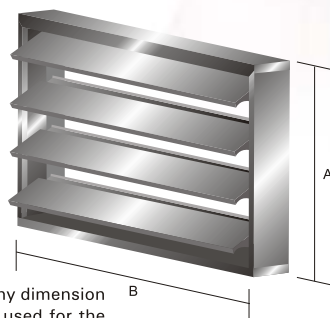
- Galvanised
- Aluminum
- Zinalume
- Stainless Steel
- Powder Paint
- Chromadeck

### Optional Accessories

- Burglar Guards
- Rain Detectors
- Dust Seals
- Electromechanical Operation
- Pneumatic Operation
- Bird Guards

### Product Features

- Fire & Natural Day-to-Day Ventilation
- Standard Fusible Link Operation
- Interchangeable Blade Finishes
- Large Ventilation Capabilities
- 1 Year Product Guarantee
- Low Profile Construction
- Extremely Cost-Effective
- Suit Most Roof Cladding
- Minimal Maintenance
- Robust Construction



The Curvent Fire-X Vertical smoke ventilator is manufactured in standard heights. The width can be manufactured to any dimension ranging between 300mm to 2000mm wide. To standardise the measuring parameters, a 1000mm wide ventilator is used for the technical data compilation. Any alternate ventilator dimension must be calculated individually. To calculate the Aggregate Throat Area, 60mm is deducted from the overall height and 40mm from the overall width. To calculate the Free Measured Throat Area (Av) 15mm over the width of the ventilator must be multiplied with the amount of blades and deducted from the aggregate throat area. To calculate the Aerodynamic Free Area (AvCv) the Free Measured Throat Area (Av) is multiplied by the Coefficient of Discharge (Cv)

Model Type	FXV-3	FXV-4	FXV-5	FXV-6	FXV-7	FXV-8	FXV-9	FXV-10	FXV-11	FXV-12	FXV-13	FXV-14	FXV-15	FXV-16
Overall Height (A) in mm	450	585	720	855	990	1125	1260	1395	1530	1665	1800	1935	2070	2205
Overall Width (B) in mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Aggregate Throat Area	0.37m <sup>2</sup>	0.5m <sup>2</sup>	0.63m <sup>2</sup>	0.76m <sup>2</sup>	0.89m <sup>2</sup>	1.02m <sup>2</sup>	1.15m <sup>2</sup>	1.28m <sup>2</sup>	1.41m <sup>2</sup>	1.54m <sup>2</sup>	1.67m <sup>2</sup>	1.8m <sup>2</sup>	1.93m <sup>2</sup>	2.06m <sup>2</sup>
Free Measured Throat Area (Av)	0.33m <sup>2</sup>	0.44m <sup>2</sup>	0.56m <sup>2</sup>	0.67m <sup>2</sup>	0.79m <sup>2</sup>	0.9m <sup>2</sup>	1.02m <sup>2</sup>	1.13m <sup>2</sup>	1.25m <sup>2</sup>	1.36m <sup>2</sup>	1.48m <sup>2</sup>	1.59m <sup>2</sup>	1.71m <sup>2</sup>	1.82m <sup>2</sup>
Coefficient of Discharge (Cv)	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Aerodynamic Free Area (AvCv)	0.22m <sup>2</sup>	0.29m <sup>2</sup>	0.37m <sup>2</sup>	0.44m <sup>2</sup>	0.52m <sup>2</sup>	0.59m <sup>2</sup>	0.67m <sup>2</sup>	0.75m <sup>2</sup>	0.83m <sup>2</sup>	0.9m <sup>2</sup>	0.98m <sup>2</sup>	1.05m <sup>2</sup>	1.13m <sup>2</sup>	1.2m <sup>2</sup>
Mild Steel Mass (Kg)	11	15	19	23	27	31	35	39	43	47	51	55	59	63
Number of Blades	3	4	5	6	7	8	9	10	11	12	13	14	15	16

#### SPECIFICATION PROCEDURE:

- 1) Select the Model in accordance with the ventilation requirements and girder spacing or wall openings
- 2) Select the ventilator material type (i.e. Aluminium, Chromadeck or Galvanised)
- 3) Select the fusible link activation temperature (Normally 72°C)
- 4) Select a secondary opening system if required (Normally 24V DC Electromechanical)
- 5) Select any accessories required (Dust Seals, Burglar Bars, Rain Detectors etc.)

#### EXAMPLE:

A specification for 11.3m<sup>2</sup> Free Measured Area (Av) smoke ventilation required with 1450mm high by 1055mm wide clear girder or wall opening available, manufactured in Chromadeck material, colour Fish Eagle White, electromechanically operated, with dust seals and burglar bars would be:

#### CALCULATION:

Ventilation required ÷ Free Measured Throat Area (Av)  
11.3m<sup>2</sup> ÷ 1.13m<sup>2</sup> (Av of the FXV-10)

= 10 x Curvent Fire-X Vertical type FXV-10 Ventilators

#### SPECIFICATION DESCRIPTION:

10 x Curvent Fire-X Vertical type FXV-10 vertical mounted louvred smoke ventilators, 1395mm high x 1000mm wide Chromadeck material, colour Fish Eagle White, with fusible links to activate at 72°C, complete with 24V DC electromechanical operating system, dust seals and burglar bars, installed in accordance with the manufacturers detailed instructions:

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