

# CURVENT

## FIRE KING

### Multi-Purpose Ridge Mounted Fire Ventilator

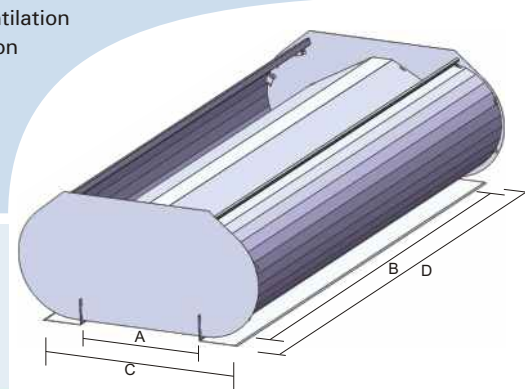


The Curvent Fire King ventilator is a multipurpose fire and natural ventilator. In the event of fire, the ventilator doors automatically open on gravity, causing a "chimney effect" to allow hot gasses to escape, preventing fire spread while protecting the building's structural integrity against building collapse. The smokeless layer of fresh air created at lower level creates safe evacuation passage for people and assists in fire fighting disciplines. Continuous natural ventilation is standard with the assurance of a highly effective fire ventilator, designed to save lives. The patented curved sides enhances the co-efficient capabilities of the ventilator and provides appealing aesthetics that remains the first choice with architects, engineers and specifiers.

**Certificate of Compliance - Tested to BS7346:Part 1:1990.** Curvent International (Pty) Ltd hereby certify that the Curvent Fire King multipurpose ventilator is tested in accordance with BS 7346: Part 1: 1990. Flow measurements (Pitot tube traverse) and pressure measurements was in accordance with BS848:Part1:1980. The results stipulated in this data sheet represent a true record of the measured parameters and the derived values were calculated using scientifically correct formulae. The dimensions and area of the ventilators represent a true record of the measured parameters and is verified by a qualified independent body.

#### Product Features

- Fire & Natural Day to Day Ventilation
- Standard Fusible Link Operation
- Extremely Cost-Effective
- Minimal Maintenance
- Robust Construction
- Superior Aesthetics
- Fully Waterproof



#### Product Materials Finishes:

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

#### Optional Accessories

- Bird Guards
- Burglar Guards
- Roof Closures
- Winter Dampers
- Electromechanical Operation
- Pneumatic Operation

Ridge Mounted Model Type	FK450RC	FK600RC	FK750RC
Aggregate Throat Area (Fire Doors Open)	1.03m <sup>2</sup>	1.37m <sup>2</sup>	1.71m <sup>2</sup>
Free Measured Throat Area (Av)	1.03m <sup>2</sup>	1.37m <sup>2</sup>	1.71m <sup>2</sup>
Coefficient of Discharge (Cv)	0.68	0.68	0.68
Aerodynamic Free Area (AvCv)	0.72m <sup>2</sup>	0.93m <sup>2</sup>	1.16m <sup>2</sup>
Aggregate Throat Dimensions (AxB) in mm	450W x 2280L	600W x 2280L	750W x 2280L
Overall Ventilator Dimensions (Cx D) in mm	1010W x 2400L	1210W x 2400L	1530W x 2400L
Purlin Spacing Required in mm	450	600	750
Mild Steel Mass (Kg)	51	58	73

#### SPECIFICATION PROCEDURE:

- 1) Select the Model in accordance with the ventilation requirements and roof purlin spacing
- 2) Select the ventilator material type (i.e. Aluminium, Chromadek 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 (i.e. Bird Guards, Burglar Bars, Rain Detectors)

#### EXAMPLE:

A specification for 13.7m<sup>2</sup> Free Measured Area (Av) fire ventilation required with 600mm roof purlin spacing available at the apex of the roof, manufactured in Chromadek material, colour Fish Eagle White, electromechanically operated, with bird guards would be:

#### CALCULATION:

Ventilation required ÷ Free Measured Throat Area (Av)  
 13.7m<sup>2</sup> ÷ 1.37m<sup>2</sup> (Av of the Fire King FK600RC)  
 = 10m x Curvent Fire King type FK600RC Ventilators

#### SPECIFICATION DESCRIPTION:

10m x Curvent Fire King type FK600RC ridge mounted multipurpose fire ventilators, Chromadek material, colour Fish Eagle White, with fusible links to activate at 72°C, complete with 24V DC electromechanical operating system and bird guards, installed in accordance with the manufacturers detailed installation specifications. Curvent International (Pty) Ltd, Tel: +27 11 826 5959, Fax: +27 11 826 3275, e-mail: sales@curvent.co.za

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