Firelight 3
Natural casement ventilator

**HIGH AERODYNAMIC, ACOUSTIC AND THERMAL PERFORMANCE**

**DESCRIPTION**

Firelight is natural casement ventilator, suitable for natural day to day ventilation and smoke control. It has high aerodynamic, acoustic and thermal performance, providing extract ventilation for most kinds of industrial and commercial buildings. It is particularly suited for installation into glazing systems. Firelight has either a single or a double flap.

Firelight has been tested according to EN 12101-2 and is CE marked as a smoke and heat exhaust ventilator as well as a window in accordance with EN 14351-1.

**CONSTRUCTION AND FLAPS**

All principal components of the base and flap are manufactured from EN AW-6063-T6 aluminium alloy. Both the outer frame and flap frame are thermally broken. The following kinds of flaps are available:

- Double glazed
- Triple glazed
- Polycarbonate
- Infill panel: either insulated or uninsulated aluminium

Almost any kind of panel can be incorporated into the flap. The only restrictions are the panel thickness (10mm to 50mm) and a maximum panel weight of 60 kg/ m² with a maximum flap area of 5m² and an overall max. weight of 253 kg. Fixing flanges are between 24 and 48mm.

**PRINCIPAL FEATURES AND BENEFITS**

- Wide range of applications
- High performance
- Tested and certified for top performance
- Proven performance
- Efficient and weather resistant
- Easy to install
- Durable
- Low in maintenance

**Top**
FL3 with chain drive controls

**Middle left**
FL3 with side controls

**Middle right**
FL3 with M1.8/4 central controls

**Bottom**
FL3 with control channel controls
**FLAPS / CONTROLS**
- Single flap
- Single flap with side control
- Double single flap
- Hap with side control
- Chain drive, mechanism within the frame
- Controls hidden within control channel

**DIMENSIONS**
From 600 mm to 3000mm in width
From 600mm to 2500mm in length

These are the maximum overall ventilator sizes:
- 5 m² with 24V DC actuator(s) or pneumatic cylinder(s) opposite the hinges.
- 4 m² with 2 electric actuator(s) on the side (side control option).

These dimensions depend upon the type of flap, the geometry of the ventilator and its opening angle.

**INSTALLATION**
Firelight is designed to be installed principally on to a roof at any angle between 0º and 110º to the horizontal plane. Its many different flange types make it easy to install into almost any roofing or glazing system or onto any type of curb.

**FINISHES**
- Mill finish, standard
- Polyester powder paint to a RAL colour, standard 60 mu
- Anodised, standard 20 mu

**CONTROLs**
- Pneumatic (for smoke and day to day ventilation)
- 24V DC linear drive electric (for smoke and day to day ventilation)
- 24V DC chain drive electric (for smoke and day to day ventilation)
- 230V AC electric (for day to day ventilation only)
- Manual (for day to day ventilation only)

Either double-action locking mechanisms, or failsafe open (pneumatic version only).

If used as a smoke ventilator, activation is either by local thermal fuse which opens the unit at a pre-selected temperature, or by responding to an external release signal.

All controls, except the chain drive version, are visible when the ventilator is closed whether the configuration is on the side, on top or underneath.

**PERFORMANCE**
Firelight has been tested to and in compliance with EN 12101-2 and is CE marked.

The performance attributes shown on the table below follow tests to EN 12101-2:2003 (standard for smoke and heat exhaust ventilators) and EN 14351-1:2006 (standard for windows and doors).

The exact performance attribute will depend on the chosen size, controls, and flap type.

**PERFORMANCE DETAILS**

<table>
<thead>
<tr>
<th>Reliability class</th>
<th>Re 1000</th>
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<tbody>
<tr>
<td>Wind load class</td>
<td>Varies with size and options, min WL 1500, Max WL 10000</td>
</tr>
<tr>
<td>Snow load class</td>
<td>Varies with size and options, min SL 125, Max SL 5000</td>
</tr>
<tr>
<td>High temperature class</td>
<td>B 300</td>
</tr>
<tr>
<td>Low temperature class</td>
<td>T(00) to T(-25)</td>
</tr>
<tr>
<td>Materials resistance to fire</td>
<td>E (to EN 13501-1)</td>
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<tr>
<td>U value</td>
<td>Up to 1.0 W/m²K</td>
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<tr>
<td>Aerodynamic coefficient</td>
<td>Up to 0.64</td>
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<tr>
<td>Air permeability</td>
<td>Air permeability Class 4 - Maximum of 0.05 m³/hr/m or 0.1 m³/hr/m³ at 100 Pa (to EN 12207:1999)</td>
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<tr>
<td>Resistance to wind load</td>
<td>Class 5C to EN 12211 - best in class</td>
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<tr>
<td>Water tightness</td>
<td>Class 9 A - No leaks at static pressure of up to and including 600Pa (to EN 12208:1999)</td>
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<tr>
<td>Sound insulation</td>
<td>Weighted sound reduction index R’w up to 42 (-1;-2) dB</td>
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