

Firelight / Firelight DUO / Firelight DUO RN

PRODUCT | FIRELIGHT

NATURAL SMOKE AND DAY TO DAY VENTILATOR

QUALITY, DESIGN AND PERFORMANCE

Firelight Duo provides high performance extract ventilation for most kinds of industrial and commercial buildings.

It provides high aerodynamic, acoustic and thermal performance. It has been designed with ever more stringent demands of the Energy Performance in Buildings Directive in mind.

Polycarbonate and glass versions allow the entry of natural daylight, and a wide range of infill panels are available, including a reduced noise panel. It has the option of either pneumatic or electric linear drives.

It has been tested to and is in compliance with EN 12101-2.

AVAILABLE VARIANTS

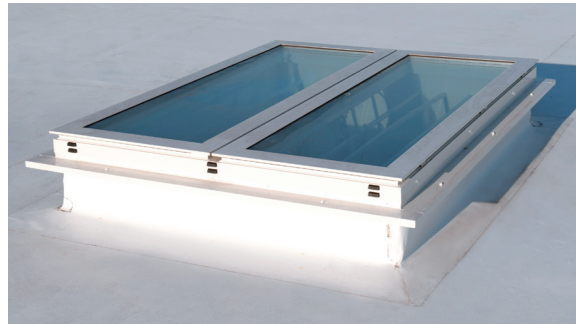
- Firelight (single flap)
- Firelight Side Control
- Firelight Chain Drive
- Firelight DUO (double flap)
- Firelight DUO RN (acoustically attenuated with a noise reduction of R_w 49 dB with a ventilator height of 122mm)

DIMENSIONS

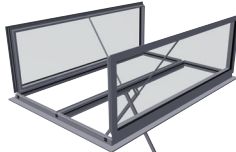
The ventilator is available from 1000mm to 2500mm in the width in 1mm increments (to 2000mm with bracket control option), and from 1000mm to 3000mm in the length in 1mm increments. The maximum dimensions depend on the type of ventilator selected.

Image on the right: Le Vélodrome de Roubaix, France – Glazed Firelight DUO ventilators allow the entry of natural daylight above this new cycling sports hall, as well as provide fire protection.

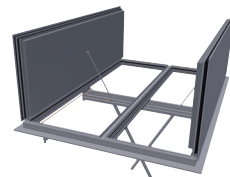
Illustrations below: There is a wide range of Firelight flaps and controls variants available and it is available in many different sizes.



Firelight – single flap



Firelight DUO – double flap



Firelight DUO RN – acoustically attenuated double flap



Middle image: De la Salle apartments, Cuijk, Holland – The residents appreciate the benefits of natural daylight.

“The profile system ensures that there is very low air leakage and U-value, thereby reducing energy costs.”

Image on the right: Colt colleagues Eckbert Wolf and Andreas Mackert demonstrating the new Firelight profile system.



DESIGN

All components of the base and flap are manufactured from aluminium alloy. The frames of both the base and flap are thermally broken.

These flap types are available with thicknesses of up to 50mm:

- Double or triple glass
- Infill panel
- Noise reduction panel
- Polycarbonate

Further details are provided on the right.

Many different flange and connecting profile types are available for easy fixing onto roof sheeting, onto curbs and into glazing.



Firelight brings daylight into the building through its glass or polycarbonate lids.

FINISHES

- Polyester powder paint to a RAL colour
- Mill finish
- Anodised (thickness 20 µm)
- Special finish on request

CONTROLS OPTIONS

Either pneumatic or electric linear drives are available with a number of different variants.

PERFORMANCE

Firelight has been tested and certified to EN 12101-2. Depending on the ventilator configuration, it can achieve the following:

- Aerodynamic coefficient: Up to 0.68
- Reliability class: Re 1000
- Snow load class: Up to 7000 N/m²
- Low temperature class: T(-15) (DUO) / T(-25) (single flap)
- Wind load class: Up to 9000 N/m²
- Materials resistance to fire: B300-E
- U value: Up to 0.5 W/m²K
- Sound insulation (R'_w): Up to 49 dB

FEATURES AND BENEFITS

- High thermal performance by use of highly stable EPDM seals
- Controlled drainage
- Polyamide thermal breaks
- Profile system reduces the risk of condensation
- U value of up to 0.5 W/m²K
- Fixings not visible from the exterior
- Sound insulation (R'_w): Up to 49 dB
- Firelight has been tested in accordance with window and door standards:
 - EN 12207: Air permeability
 - EN 12208: Water tightness
 - EN 12210: Resistance to wind load
- Sound insulation (R'_w): Up to 49 dB

These attributes depend on the type of ventilator selected.

INSTALLATION

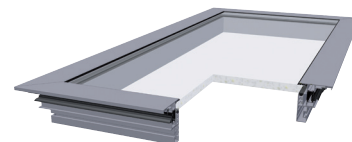
Firelight can be installed at any angle between 0° and 90° from the horizontal. Its many different flange types allow for easy installation.

FLAP TYPES AT A GLANCE

Firelight ventilators are available in a variety of different flap types. Their U values vary from between 1.9 and 0.5 W/m²K.

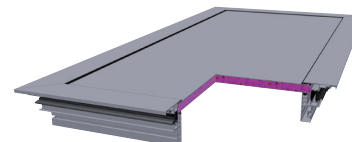
There are four basic types available as standard, but special designs may be available on request.

Glazed



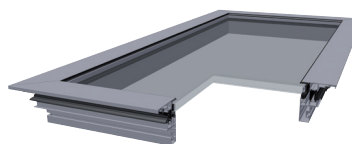
Double glazed with either 28, 30 or 32mm overall thickness as standard, or customer-specific on request, with a weight of up to 60 kg/m².

Insulated aluminium infill panel



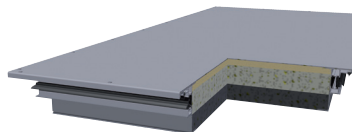
A 2mm thick aluminium external sheet, 25mm thick infill with a mass of 30 kg/m² and heat transfer of 0.03 W/(mK), 2mm thick aluminium internal sheet. 25mm overall thickness as standard.

Polycarbonate



Either clear or opaque, 16 or 25mm overall thickness as standard, or customer-specific on request, with a maximum thickness of 50mm.

Noise reduction panel



Specially developed multi-layer system to achieve up to R'_w = 49 dB.