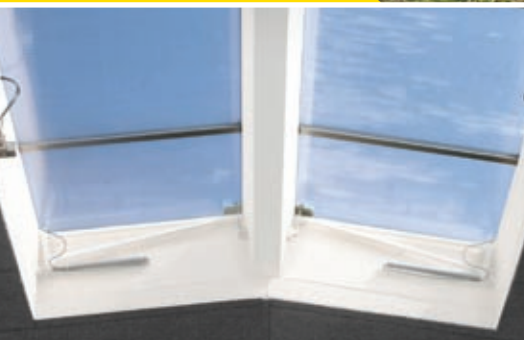




**PROVEN FOR  
ENERGY EFFICIENCY**

CE 0402 - CPD - 49 79 02



# Orion skylights

## POLYCARBONATE PLANE GLASS



Orion skylights are the smart choice for smoke and fire ventilation in industrial, office and storage buildings. Beautifully designed for slanted roofs, they are made from channeled polycarbonate sheets (clear or opaque), and include Primalux's patented fire opening system, SafeSlide. They can also be used for everyday ventilation.

With a U-value approximately 20% lower than traditional skylights, Orion saves you money on heating bills, making it the most economical solution for smoke and fire ventilation. A highly insulated upstand helps to minimize heat loss. Unlike other manufacturers, Primalux will calculate the U-values for using Orion in your specific project, and show you the potential savings on your energy costs (see U-value section below).

We can design Orion's light openings on either side of the ridge according to your needs, so that they let more light into the building. We can also adapt Orion to suit your chosen roof material (e.g. tiles or slates).

This skylight is suitable for double pitched roofs and roof ridges. A special Deluxe version is available with hidden Safeslide systems, for a neat, clean look, suitable for modern architectural design. Orion also comes in a multiple-dome version.



*Primalux products are made in Denmark by Primalux A/S, a European market leader in bespoke roof-light solutions. Our aim is to deliver the best value for skylights, when you compare building costs and consider the energy we save you over a five-year period. We offer you the best-insulated skylights on the market. Our products reduce the amount of insulation needed in your building project, saving you further money. Our skylights go further than simply conforming to national and European standards. We exceed quality and safety demands in U-values, strength against wind load, and effectiveness in fire and smoke resistance. Our vision is to lead the market in skylights through constant product development, and to continue providing our customers with well-designed, effective solutions.*

- For roof angles 0° – 70°.
- Aluminium can be powder-coated in any RAL colour.
- Available with concealed Safeslide opening system.
- Polycarbonate: clear, opaque, black.
- Opening :   Width: 1000 mm – 1900 mm.  
                  Length: From 1000 mm.  
                  Bespoke design, within the limitations mentioned.
- Upstand:    Frame height:  
                  - Upstand (timber): From 450 mm with jumps of 50 mm.  
                  - Frame height is measured vertically.  
                  Thickness of frame:  
                  - 9 mm plywood/45 mm insulation/9 mm plywood.  
                  Low maintenance coatings: powder-coated steel plate in any RAL colour  
                  Vertical upstand: free light opening = roof opening  
                  Vaulted upstand: free light opening = roof opening minus 200 mm.
- Accessories: Motor for day ventilation.  
                  Anti-burglary steel net.
- Smoke flyer possible.

## DOCUMENTATION

### U-Values And Your Project

All parts of buildings release heat to the surrounding environment, with some building materials insulating better than others. Fortunately, we can calculate the amount of energy passing through different materials and compare their insulative capabilities. These calculations help us to design the most energy-efficient skylights possible.

The calculations provide what is called a U-value, which measures how much energy (in Watts) is lost to the surroundings in relation to the product's surface area and the temperature difference between outside and inside.

The U-value on a skylight is affected by a variety of influences – e.g. the size of the total surface area - and the heat lost at every join on the construction. Each time a new material is used, a calculation must be made for that specific material.

Together, these calculations enable the manufacturer to state the total and correct U-value for the specific construction.

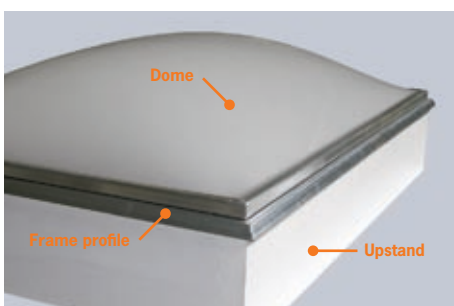
Primalux are happy to supply fully documented calculations for your specific project, thereby showing you the potential energy savings.

CE standards state that manufacturers must be able to specify the U-value on any given finished product in your project, in order for you to calculate your exact heat loss and the overall heat loss for the building.

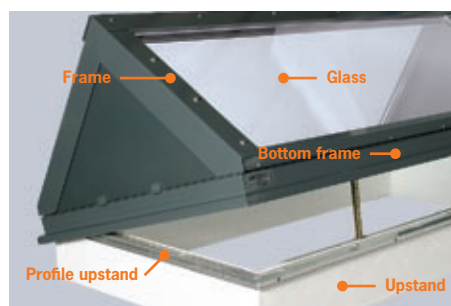
**For more details on Primalux and on specific Primalux products, please contact:**

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Example of where heat loss must be calculated on an acrylic dome skylight



Example of where heat loss must be calculated on a glass skylight



Thermal cross section: Less heat loss indicated by the red colour