



Kingspan Duralite

Sustainable industrial glass rooflight

Data Sheet

Modular glass rooflight under a pitch of 15°



Daylighting Solutions
Natural Ventilation Solutions
Smoke Management Solutions
Service & Maintenance
Building Automation

Application

Kingspan Duralite is an industrial glass rooflight, which can be considered the standard rooflight for industrial buildings both now and in the future. This glazed rooflight, which has a pitch of 15°, is the sustainable alternative to polycarbonate rooflights. The Duralite system is favourably priced, easy to fit and can be supplied including glass.

Thermally broken saddle roof with a pitch of 15°

In response to market demand for more sustainable products, Kingspan Light+Air developed the entirely thermally broken saddle roof with a pitch of 15°. This glazed rooflight was specially developed for industrial applications, while it also makes for highly convenient installation. The Duralite glazed rooflight is available in a range of three modular sizes, with a fixed centre to centre measurement, sandwich panel end pieces, and mill finish aluminium. The double glazing is supplied with laminated safety glass with two interlayers PVB, in clear or matt, additional low-e coating and with a U-value of 1.0 or 1.2 W/m²K. Furthermore, hinged windows, approved in accordance with EN 12101-2, can be seamlessly integrated in the system in an aesthetical manner, for smoke & heat extraction and ventilation purposes.

Energy efficient

The Duralite system was designed in such a manner as to achieve thermal separation throughout the range of profile sections. The system vouches for even distribution of the heat flow, devoid of hot spots. This minimises the occurrence of condensation in normal circumstances.

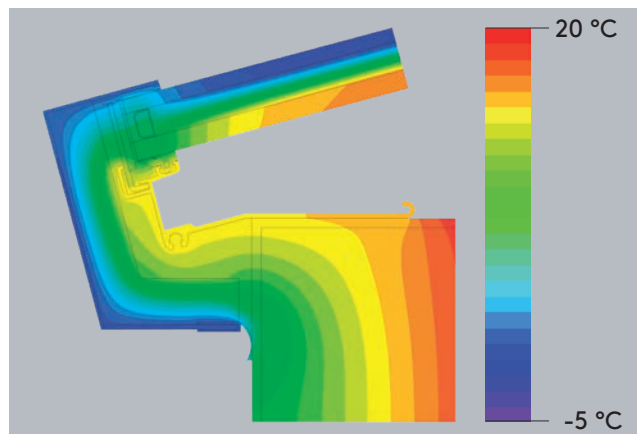
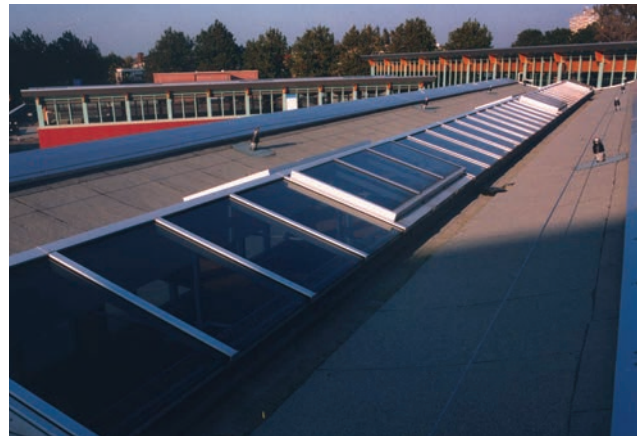


Image shows the heat flow with a temperature variation from -5 °C outdoors to 20 °C indoors.

Technical Specifications

Benefits

- Thermally broken saddle roof with a pitch of 15°
- Trouble-free integration of smoke & heat extraction / ventilation windows
- Favourably priced
- Short delivery time
- Easy installation (system is supplied in kit form, including double glazing and instruction manual)

Advantages of glazed rooflights

- Longer life expectancy
- Higher insulation value
- Consistent performance, ingress of light, insulation and comfort throughout its life span
- Permanently transparent (no discolouration or scratching)
- Resistant to weather conditions
- No noise nuisance during rain / hail showers
- Fall protection
- Optimum integration Smoke & heat extraction / ventilation
- Low maintenance
- Aesthetically pleasing (added value to property)
- Sustainable

Fall protection

The Duralite glazing system is compliant with fall protection standards (SB1200). This saves both time and money, which would otherwise have to be spent on implementing additional measures.

Test results

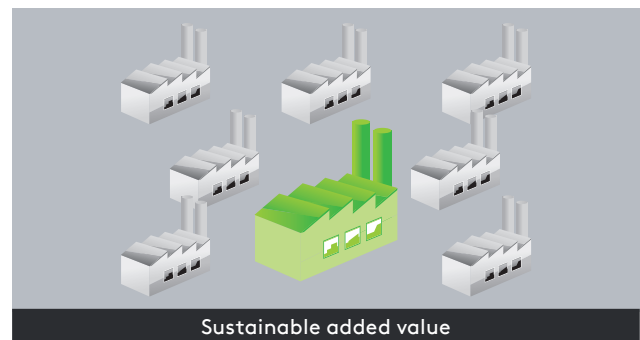
- Air permeability: EN 1026: 600 Pa, EN 12207: Class 4
- Water tightness: EN 1027: 900 Pa, EN 12208: Class E900
- Resistance to varying wind loads: Class B5, 1000 Pa (= P2 deflection < 1/200 in accordance with EN 12210 / EN 12211)
- Impact resistance: SB1200 in accordance with EN 14963:2004
- CWCT Class 2 non-fragility

Improved performance

When it comes to the installation of industrial rooflights in new building and renovation projects, one has the choice of either plastic or glass. In a world in which the demand for sustainable products is growing, the use of glass increasingly applies as standard. Glass lasts twice as long, after all, while it offers excellent resistance to weather conditions (hail and wind), causes no noise nuisance and provides considerably improved and consistent performance in terms of ingress of light, insulation and comfort throughout the useful life of the rooflight. This also lends the property added value.

Total cost of ownership

The Duralite rooflight has a payback period of seven years, while it also yields considerable energy savings in relation to curved polycarbonate rooflights. The Duralite therefore certainly deserves to be given priority when considering the total costs of construction and operation.



Technical Specifications

Dimensions

Dimensions rooflight	Width of upstand	Clear width
Width 2160 mm	80 mm	2000 mm
Width 2660 mm	80 mm	2500 mm
Width 3160 mm	80 mm	3000 mm

Specifications

- Available in three standard clear widths: 2000 / 2500 / 3000 mm
- Standard modular size of 900 mm, aluminium sandwich panel end pieces, and mill finish profiles

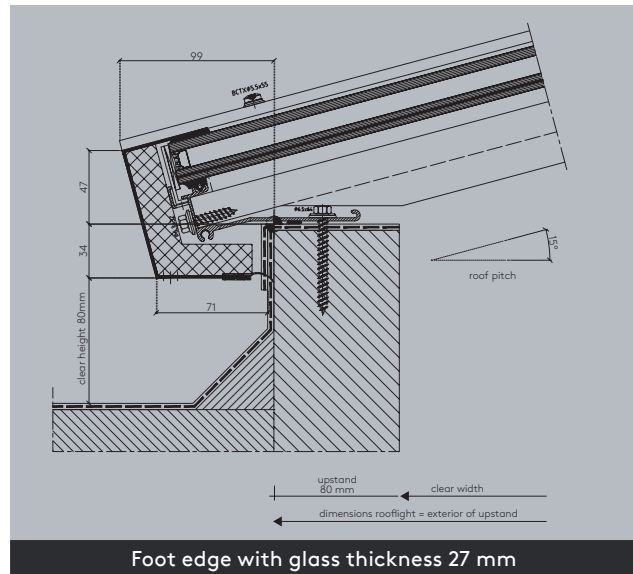
Glass composition	Glass thickness	U-value (W/m ² K) for vertical use
6-12-4.4.2 low-e coating	27 mm	1.2
6-15-4.4.2 low-e coating	30 mm	1.0

Options

- Integration of EN 12101-2 certified smoke & heat extraction windows, ventilation windows or louvred ventilators
- Surface treatment:
 - RAL colour single layer 60µ; optional double layer 110µ (Qualicoat);
 - Anodic treatment blank 20µ, optional 25µ (Qualanod)

Base structure requirements

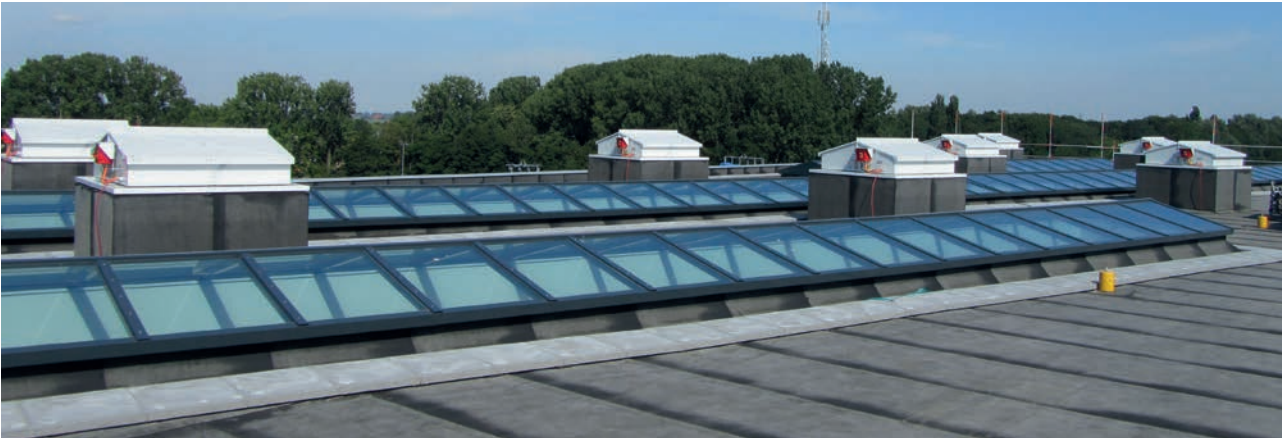
- Can be assembled on wooden or steel builders upstand
- The upstand must be able to withstand thrust forces set out in the corresponding table in accordance with EN 1873 classification



Duralite 15°

Clear width rooflight (mm)	Dimensions rooflight (mm)	Snow load (N/m ²)	Wind suction (N/m ²)	Glass weight (kg/m ²)	Standard modular dimensions (mm)	Glass length (mm)	Pitch 15°	
							Horizontal (KN)	Vertical (KN)
2000	2160	750	1500	35	900	1160	-3.4 / 2.9	-2.0 / 1.5
2500	2660	750	1500	35	900	1420	-4.1 / 3.5	-2.4 / 1.9
3000	3160	750	1500	35	900	1680	-4.9 / 4.2	-2.9 / 2.2

Project Imagery



INTERNATIONAL

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For the product offering in other markets please contact your local sales representative or visit www.kingspanlightandair.com

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