

**Fabrications, Safety  
& Lighting Solutions**

**Product  
Data Sheet**



**Kingspan Day-Lite Klick**  
KS500 DLKK

## Applications

Kingspan Day-Lite Klick is a secret-fix wall light system typically suited for vertical applications. Featuring an innovative joint detail, this flexible wall light system is designed for standalone use where no integration with insulated panels is required, and can also be combined with an extruded aluminium frame to allow for integration with a range of building materials including insulated panels, brick and render.

The system is suitable for all building applications, except where the occupants or processes add significant quantities of water to the air, or where there are internal environments with low temperatures.

## Available Lengths

Kingspan Day-Lite Klick is available in standard lengths of up to 6m. Longer lengths are available upon request.



## Dimensions, Weight & Performance

Product Reference	Thickness (mm)	Weight (kg/m <sup>2</sup> ) <sup>†</sup>	U-value (W/m <sup>2</sup> K)	Light Transmission (%)	Solar Heat Gain Coefficient
KS500 DLKK Clear	40	4.0	1.3	59	0.64
KS500 DLKK Opal	40	4.0	1.3	50	0.57
KS500 DLKK Blue	40	4.0	1.3	20	0.51
KS500 DLKK Green	40	4.0	1.3	46	0.55
KS500 DLKK Purple	40	4.0	1.3	15	0.54
KS500 DLKK Red	40	4.0	1.3	27	0.56
KS500 DLKK Orange	40	4.0	1.3	34	0.59
KS500 DLKK Yellow	40	4.0	1.3	59	0.61
KS500 DLKK IR Green	40	4.0	1.3	38	0.40
KS500 DLKK IR Blue	40	4.0	1.3	23	0.37

### Notes:

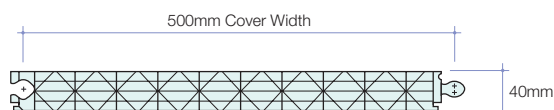
<sup>†</sup> A full system weight, including perimeter extrusions, will depend on project-specific design. Please contact the Kingspan Technical Services Department for more information.

The U-value has been calculated using the method required by the appropriate National Building Regulations.

Light transmission, according to BS EN 410, is as measured on 600mm x 600mm samples.

Solar Heat Gain Coefficient (SHGC), according to BS EN 410, is the total solar energy that enters the interior of a building. Please contact the Kingspan Technical Services Department for more information.

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## Fire

Kingspan Day-Lite products fully satisfy the internal and external requirements of the National Building Regulations, achieving:

- Euro Class B (internal);
- National Class AA and Euro Class BROOF(t4) (external).

All products achieve a minimum classification of B-s2,d0 when tested to EN 13501-1: 2007.

For more information on fire performance please contact the Kingspan Technical Services Department.

## Properties

- Weighted sound reduction: 25dB(A).
- Building air leakage: Less than 3m<sup>3</sup>/m<sup>2</sup>/hr at 50Pa for complete envelope.

## Air Permeability & Weather Performance

	Standard	Result Classification
Air Permeability	BS EN 12152	Class A4 (600Pa)
Watertightness	BS EN 12154	Class R7 (600Pa)
	BS EN 14963	Pass

## Biological

Kingspan Day-Lite Klick wall light panels are resistant to attack from mould, fungi, mildew and vermin. No urea formaldehyde is used in their manufacture, and the panels are not considered deleterious.

## Material

4kg/m<sup>2</sup> multi-wall polycarbonate sheet with a 40mm wall structure x 500mm cover width with an external flat profile. The external face has a proprietary UV protection surface.

## Fillers & Seals

Factory-applied breather tape reduces the risk of condensation and prevents ingress of moisture and insects during transportation and delivery, keeping wall lights clean and optimising performance. If these tapes become damaged, or if panels are cut to length on site, they should be renewed prior to installation.

Kingspan Day-Lite Klick extrusions are supplied with separate rubber gasket seals which must be fitted during site installation in accordance with Kingspan's recommendations. Please contact the Kingspan Technical Services Department, or the facade material manufacturer, for more information.

## Fixing Detail

The polycarbonate material sits within an aluminium extrusion perimeter system, and is then locked in using an aluminium closure profile. A fixkey is situated inbetween the polycarbonate joint which is fixed to the supporting structure. For all fixing details please contact the Kingspan Technical Services Department.

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## Product Tolerance

Cover Width	-2.5mm	+2.5mm
Thickness	-0.8mm	+0.8mm
Weight	-0.2kg/m <sup>2</sup>	+0.2kg/m <sup>2</sup>
Length	-5mm	+5mm
End Squareness	-4mm	+4mm

## Quality & Durability

Kingspan Day-Lite Klick is manufactured from the highest quality materials, using state-of-the-art production equipment to rigorous quality control standards; ensuring long term reliability and service life. Kingspan Day-Lite Klick is fully compliant with ISO 9001 (Quality), ISO 14001 (Environmental) and OHSAS 18001 (Health & Safety).

The polycarbonate material is treated with a barrier to prevent stress cracking when subjected to stress and temperature.

## Guarantee

The Kingspan Guarantee covers the structural and thermal performance for a period of up to 25 years.

## Packing

Kingspan Day-Lite Klick is stacked horizontally. The top, bottom, sides and ends are protected with cardboard and the entire pack is wrapped in plastic.

All Kingspan Day-Lite Klick system components are also protected with cardboard to the top, bottom, sides and ends and wrapped in plastic.

Pack height and number of panels per pack is dependant on wall length, and will be determined on a project-specific basis.

## Safe Storage

To ensure that Kingspan Day-Lite Klick wall light panels remain in prime condition while stored on site, the following precautions should be taken:

- Allocate a safe, trade-free area;
- Prevent personnel from walking over the packs;
- All packs must be kept in packaging and covered with a non-transparent waterproof sheet, to protect from direct sunlight and water ingress, at all times prior to installation (at both ground and roof level);
- Store Kingspan Day-Lite Klick on a slight slope, ensuring any penetrating rainwater drains off.

## Sea Freight

Fully timber crated packs are available on projects requiring delivery by sea freight shipping, at additional cost. Alternatively, steel containers can be used. Special loading charges apply.

## Delivery

All deliveries (unless indicated otherwise) are by road transport to project site. Off-loading is the responsibility of the client.

## Site Installation Procedure

Site assembly instructions are available from the Kingspan Field Services Department.

An allowance for thermal expansion of the system materials must be taken into consideration and is subject to length. Please contact the Kingspan Technical Department for more information.

### Notes:

Like most daylight solutions, it is common for some condensation to form within Kingspan Day-Lite products during the construction phase, in particular as a result of a rise in humidity levels following the pouring of concrete slabs.

Condensation will typically disappear following a full annual temperature cycle, but can be kept to a minimum by following Kingspan's recommendations for safe storage of polycarbonate products on site, ensuring breather tapes are kept in place and undamaged, maintaining air tightness and allowing the building to dry out thoroughly. For more information please contact the Kingspan Technical Services Department.

## Cleaning

Periodic cleaning, using the correct procedure, is recommended to prolong service life. For small surfaces, gently wash sheet with a solution of mild soap and lukewarm water using a soft, grid-free cloth or sponge to loosen any dirt or grime. Do not use any corrosive materials or chemicals.

## Structural Tables

Unfactored load / span tables (use unfactored calculated design wind load values).

### Single Span Condition

Load Type	Uniformly Distributed Loads (kN/m <sup>2</sup> )					
	Span L in Metres					
	1.2	1.4	1.6	1.8	2.0	2.2
Pressure	2.29	1.88	1.45	1.02	0.91	0.80
Suction	2.15	1.77	1.39	1.01	0.90	0.79

### Double Span Condition

Load Type	Uniformly Distributed Loads (kN/m <sup>2</sup> )					
	Span L in Metres					
	1.2	1.4	1.6	1.8	2.0	2.2
Pressure	3.16	2.56	1.96	1.36	1.13	0.90
Suction	1.46	1.35	1.23	1.11	1.07	0.82

#### Notes:

1. Deflection limit for pressure loading is L/50, and for suction loading is L/50.
2. For intermediate values, linear interpolation may be used.

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