

**Light
& Air**

**Product
Data Sheet**



Kingspan Day-Lite Klick
KS500 DLKK & KS1000 DLKK

Kingspan Day-Lite Klick 500

Product Data Sheet

Applications

Kingspan Day-Lite Klick 500 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 aluminum 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 500 is available in standard lengths of up to 20' (6 meters). Longer lengths are available upon request.



Dimensions, Weight and Thermal Performance

Product Reference	Weight*		R-value		U-value		Light Transmission (%)	Solar Heat Gain Coefficient
	(lb/ft ²)	(kg/m ²)	(ft ² °F h/Btu)	(m ² K/W)	(ft ² °F h/Btu)	(W/m ² K)		
KS500 DLKK Clear	0.82	4.0	4.47	0.77	0.22	1.3	59	0.64
KS500 DLKK Opal White	0.82	4.0	4.47	0.77	0.22	1.3	50	0.57
KS500 DLKK Blue	0.82	4.0	4.47	0.77	0.22	1.3	20	0.51
KS500 DLKK Green	0.82	4.0	4.47	0.77	0.22	1.3	46	0.55
KS500 DLKK Purple	0.82	4.0	4.47	0.77	0.22	1.3	15	0.54
KS500 DLKK Red	0.82	4.0	4.47	0.77	0.22	1.3	27	0.56
KS500 DLKK Orange	0.82	4.0	4.47	0.77	0.22	1.3	34	0.59
KS500 DLKK Yellow	0.82	4.0	4.47	0.77	0.22	1.3	59	0.61
KS500 DLKK IR Green	0.82	4.0	4.47	0.77	0.22	1.3	38	0.40
KS500 DLKK IR Blue	0.82	4.0	4.47	0.77	0.22	1.3	23	0.37

Notes:

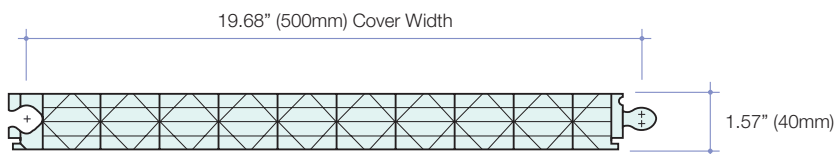
The U-values / R-values have been calculated using the method required by the appropriate North American Building Regulations.

Light transmission, according to BS EN 410, is as measured on 2' x 2' (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. In addition to the standard Kingspan Day-Lite color range, White and White Low SHGC options are available, offering enhanced SHGC performances. Please contact the Kingspan Technical Services Department for more information.

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

Kingspan Day-Lite Klick 500



Product Test Data

Test Criteria	Method	Result Classification / Value
Fire Performance	ASTM D635-06	CC1 Rated
	ASTM E84-09	Class A Rated
R-value	ISO 10077 (EN 673)	4.47 ft ² °F h/Btu
Temperature Resistance	UL 746 BEN	-40 up to 212 °F
Coefficient of Linear Thermal Expansion	DIN 53752	3.75 x 10 ⁻⁵ in/in °F
Hail Impact Resistance	TNO test	Ø 0.79" v ≥ 69 ft/sec

Fire

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

- CC1 Rating in accordance with ASTM D635-06;
- Class A Rating in accordance with ASTM E84-09;
- FSC1 of 70 and SD of 400 tested against CAN/ULC-S102.2-03.

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

Properties

- Weighted sound reduction: 25dB(A).
- Building air leakage: Less than 3m³/m²/hr at 50Pa for complete envelope.

Biological

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

Material

0.82 lb/ft² (4kg/m²) multi-wall polycarbonate sheet with a 1.57" (40mm) wall structure x 19.68" (500mm) cover width with an external flat profile. The external face has a proprietary UV protection surface.

Product Tolerance

Cover Width	-0.1" (-2.5mm)	+0.1" (+2.5mm)
Thickness	-0.031" (-0.8mm)	+0.031" (+0.8mm)
Weight	-0.04lb/ft ² (-0.2kg/m ²)	+0.04lb/ft ² (+0.2kg/m ²)
Length	-0.2" (-5mm)	+0.2" (+5mm)
End Squareness	-0.16" (-4mm)	+0.16" (+4mm)

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 aluminum extrusion perimeter system, and is then locked in using an aluminum closure profile. A fixkey is situated in-between the polycarbonate joint which is fixed to the supporting structure. For all fixing details please contact the Kingspan Technical Services Department.

Kingspan Day-Lite Klick 1000

Product Data Sheet

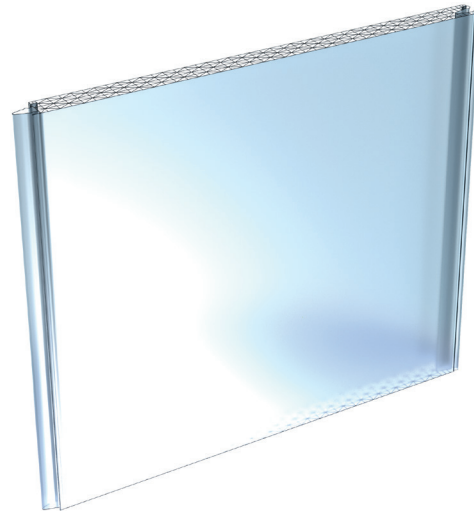
Applications

Kingspan Day-Lite Klick 1000 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 aluminum 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 1000 is available in standard lengths of up to 20' (6 meters). Longer lengths are available upon request.



Dimensions, Weight and Thermal Performance

Product Reference	Weight*		R-value		U-value		Light Transmission (%)	Solar Heat Gain Coefficient
	(lb/ft ²)	(kg/m ²)	(ft ² °F h/Btu)	(m ² K/W)	(ft ² °F h/Btu)	(W/m ² K)		
KS1000 DLKK Clear	1.05	4.8	5.68	1.0	0.18	1.0	59	0.64
KS1000 DLKK Opal White	1.05	4.8	5.68	1.0	0.18	1.0	50	0.57
KS1000 DLKK Blue	1.05	4.8	5.68	1.0	0.18	1.0	20	0.51
KS1000 DLKK Green	1.05	4.8	5.68	1.0	0.18	1.0	46	0.55
KS1000 DLKK Purple	1.05	4.8	5.68	1.0	0.18	1.0	15	0.54
KS1000 DLKK Red	1.05	4.8	5.68	1.0	0.18	1.0	27	0.56
KS1000 DLKK Orange	1.05	4.8	5.68	1.0	0.18	1.0	34	0.59
KS1000 DLKK Yellow	1.05	4.8	5.68	1.0	0.18	1.0	59	0.61
KS1000 DLKK IR Green	1.05	4.8	5.68	1.0	0.18	1.0	38	0.40
KS1000 DLKK IR Blue	1.05	4.8	5.68	1.0	0.18	1.0	23	0.37

Notes:

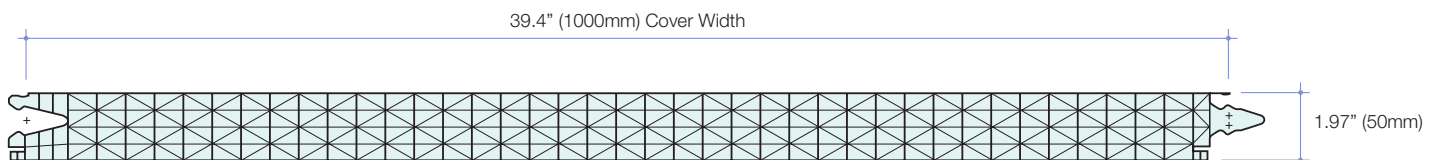
The U-values / R-values have been calculated using the method required by the appropriate North American Building Regulations.

Light transmission, according to BS EN 410, is as measured on 2' x 2' (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. In addition to the standard Kingspan Day-Lite color range, White and White Low SHGC options are available, offering enhanced SHGC performances. Please contact the Kingspan Technical Services Department for more information.

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

Kingspan Day-Lite Klick 1000



Product Test Data

Test Criteria	Method	Result Classification / Value
Fire Performance	ASTM D635-06	CC1 Rated
	ASTM E84-09	Class A Rated
R-value	ISO 10077 (EN 673)	5.68 ft ² °F h/Btu
Temperature Resistance	UL 746 BEN	-40 up to 212 °F
Coefficient of Linear Thermal Expansion	DIN 53752	3.75 x 10 ⁻⁵ in/in °F
Hail Impact Resistance	TNO test	Ø 0.79" v ≥ 69 ft/sec

Fire

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

- CC1 Rating in accordance with ASTM D635-06;
- Class A Rating in accordance with ASTM E84-09;
- FSC1 of 70 and SD of 400 tested against CAN/ULC-S102.2-03.

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

Properties

- Weighted sound reduction: 25dB(A).

Biological

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

Material

1.05 lb/ft² (4.8kg/m²) multi-wall polycarbonate sheet with a 1.97" (50mm) wall structure x 39.4" (1000mm) cover width with an external flat profile. The external face has a proprietary UV protection surface.

Product Tolerance

Cover Width	-0.1" (-2.5mm)	+0.1" (+2.5mm)
Thickness	-0.031" (-0.8mm)	+0.031" (+0.8mm)
Weight	-0.04lb/ft ² (-0.2kg/m ²)	+0.04lb/ft ² (+0.2kg/m ²)
Length	-0.2" (-5mm)	+0.2" (+5mm)
End Squareness	-0.16" (-4mm)	+0.16" (+4mm)

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 aluminum extrusion perimeter system, and is then locked in using an aluminum closure profile. A fixkey is situated in-between the polycarbonate joint which is fixed to the supporting structure. For all fixing details please contact the Kingspan Technical Services Department.

Kingspan Day-Lite Klick 500 & 1000

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 light 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.

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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.

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.

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.

Kingspan Day-Lite Klick 500 & 1000

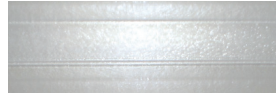
Product Data Sheet

Color Options

A range of color options with UV protected layers that allow high levels of natural light to pass through.



Clear



Opal White



Blue



Green



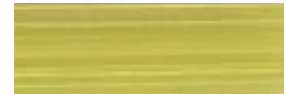
Purple



Red



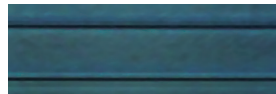
Orange



Yellow



IR Green



IR Blue

Infra-Red (IR) Absorbing Lights

These two colors absorb greater levels of infra-red light which reduces solar gain. This can allow for greater control of ambient temperature within the building providing a possible reduction in HVAC usage.

Notes:

Kingspan Day-Lite Klick is available in Clear and Opal White as standard, but other colors are available subject to stock.

For stock levels, minimum order quantities and/or lead times please contact the Kingspan Quotations Department.

The printed colors are as accurate as possible but are for guidance purposes only. Please request a swatch sample from the Kingspan Marketing Department to view accurate color and texture prior to specification.



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