

Light + Air  
UK & Republic of Ireland

# Introducing the Daylighting Centre of Excellence



# Welcome to the Daylighting Centre of Excellence

Our new Daylighting Centre of Excellence, what we call the DCOE, showcases the best of Kingspan Light + Air. Located in Kingspan's hometown of Kingscourt, Co. Cavan, Ireland, the €22.3million facility is not only home to our new global offices but will also allow our customers and visitors to experience first-hand how our daylighting products are developed and manufactured using the latest techniques and technology. Built using a variety of Kingspan Light + Air daylighting, ventilation, and smoke management products from across the globe, the building itself is also a showcase for what our products can achieve.

February 2015

First polycarbonate extrusion line to produce Day-Lite Trapezoidal is installed.

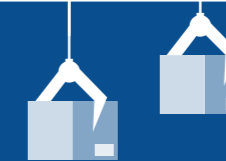


February 2017

Day-Lite Trapezoidal is produced for Joris Ide Insulated Panels.

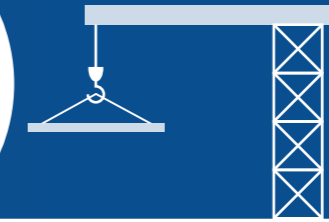
May 2017

Second polycarbonate extrusion line to produce Kingspan Light + Air multiwall products is installed.



August 2019

Plans are signed off to create the Daylighting Centre of Excellence, including three new polycarbonate extrusion lines and Kingspan Light + Air global offices.



Construction on the Daylighting Centre of Excellence begins.

January 2020

January 2021

The Daylighting Centre of Excellence goes live. Covering 7,000 m<sup>2</sup>, it features five polycarbonate extrusion lines with the capability to produce 15,000 tonnes of product.



## The journey to excellence

# High capacity

The DCOE is fitted with five cutting edge polycarbonate extrusion lines. This allows us to produce high volumes of sheeting very efficiently and to a high quality, meeting our customers' and our own needs and deadlines.



The DCOE can produce 15,000 tonnes of polycarbonate annually—the equivalent weight of around 1,000 Truckloads\*



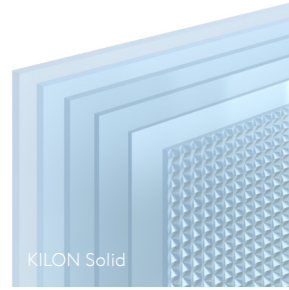
15,000 tonnes



1,000 Truckloads

\*based on our average truckload of 15 tonnes of material

# Our polymer sheet technology



KILON Solid

## KILON Solid Polycarbonate

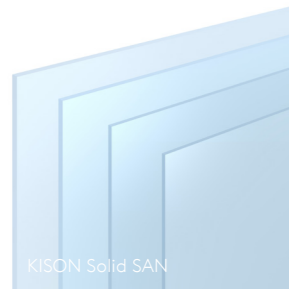
KILON Solid Polycarbonate is a clear glazing material that is half the weight of glass whilst being up to 200 times stronger. KILON Solid is easy to process and can be thermoformed or cold curved on site for use in all kinds of glazing applications. Its high impact resistance also makes it an attractive product for screening, visors, guards, safety glazing and specialist roofing products. Our extra wide extrusion line allows us to produce sheets with a maximum width of up to 2700 mm, available in 2-6 mm thicknesses.



KILON MultiWall Opal

## KILON MultiWall Opal Polycarbonate

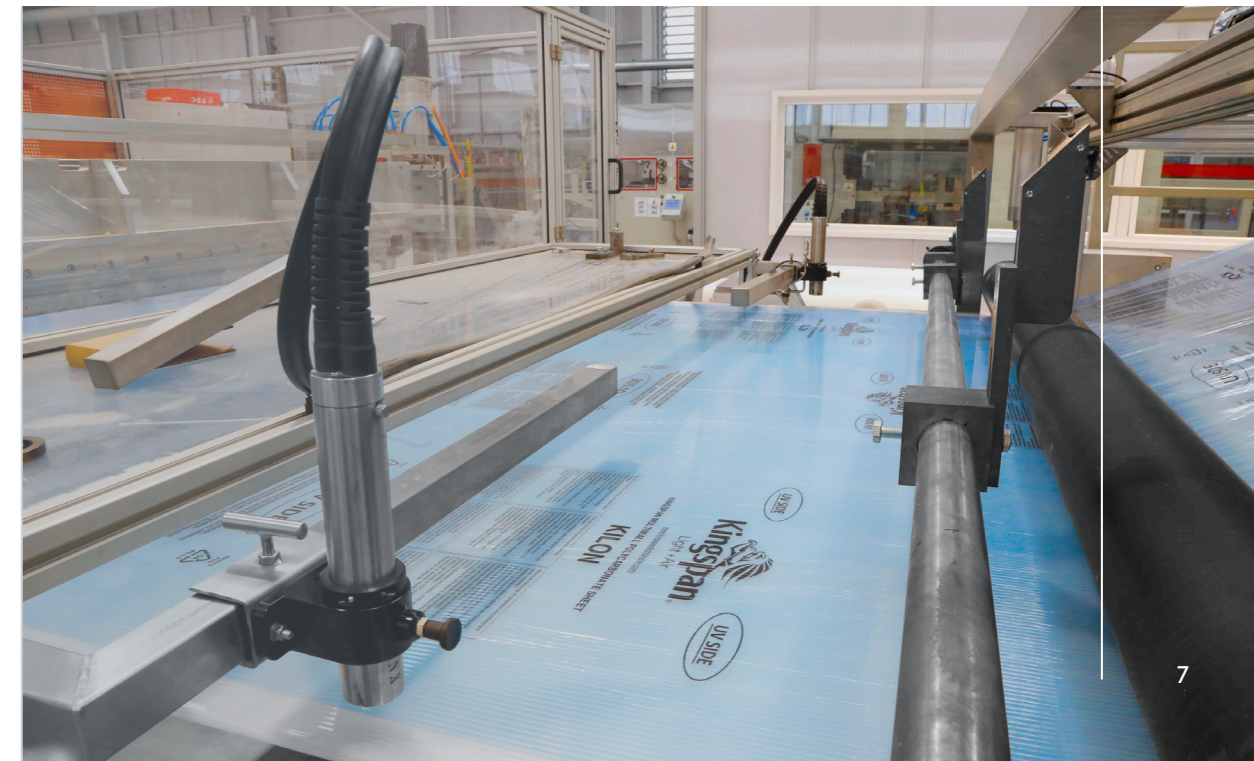
KILON MultiWall sheets are made from high performance polycarbonate resin which offers excellent weather resistance and light transmission. With 4-wall and 7-wall configurations to choose from, they are an ideal glazing choice for projects requiring a durable, lightweight, and thermally efficient solution. Available in 8, 10, 16 and 20 mm thicknesses.



KISAN Solid SAN

## KISAN Solid SAN

KISAN Solid SAN (styrene acrylonitrile) is a clear polymer glazing material offering good chemical resistance, water absorption and UV resistance values. This makes it ideal for applications such as greenhouses, pool covers, industrial gates and other packaging and containers. Our extra wide extrusion line allows us to produce sheets with a maximum width of up to 2700 mm—making it one of the widest sheets on the market—and is available in 2-4 mm thicknesses.

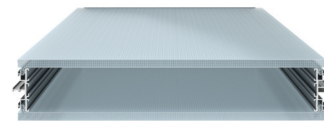




Kingspan Day-Lite Kapture

### Kingspan Day-Lite Kapture Skylight

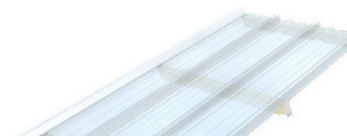
With its uniquely contoured shape, the award-winning Day-Lite Kapture Skylight is designed to maximise light transmission even at low sun angles. Its triple-glazed polycarbonate design incorporates prismatic technology to effectively diffuse the incoming light to eliminate glare, prevent hot spots and to create evenly illuminated spaces. It is available in a range of sizes and can be installed on roofs up to 25°.



UniQuad Wall Light

### UniQuad Wall Light

This versatile two-panel translucent wall system allows architects to achieve the highest levels of building performance without compromising on the aesthetic qualities of their designs. With a wide range of colours and applications available, it shows the real design potential of polycarbonate.



Day-Lite Trapezoidal (DLTR)

### Day-Lite Trapezoidal Panel (KS1000 DLTR)

Designed for integration with Kingspan Trapezoidal Roof systems, the in-plane multiwall polycarbonate rooflight combines excellent light transmission with superior resistance to UV degradation for exceptional long-term performance. It is available in 24 mm and 40 mm thicknesses, achieving U-values of 1.6 and 1.0 W/m<sup>2</sup>K respectively.

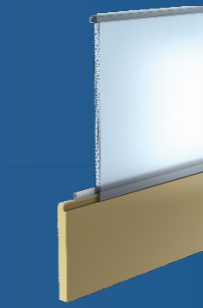


Kingspan MultiWall Louvre

### Kingspan MultiWall Louvre

Our Multiwall Polycarbonate Louvres are made from high performance polycarbonate resin. These lightweight narrow panels offer great light transmission, maximum impact resistance and superior insulation, making them ideal for use in a large range of ventilation systems. The 2 wall and 7 wall configurations offer the best weight, insulating and light transmitting performance.

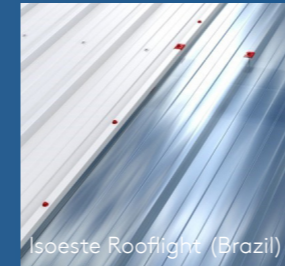
Thicknesses: 9mm, 16mm



KS1000 DLAWP

### Day-Lite Architectural Wall Panel (KS1000 DLAWP)

The secret-fix, translucent multiwall polycarbonate wall light allows natural light to flow into buildings whilst maintaining thermal performance, with a U-value of 1.3 W/m<sup>2</sup>K. An efficient alternative to vertical glazing, it is designed to integrate with the Kingspan Architectural Wall Panel range.



Isoeste Rooflight (Brazil)

### Isoeste Rooflight (Brazil)

The Isoeste in-plane polycarbonate rooflight has been developed for integration with insulated panel roofs. UV resistant, it offers years of excellent light transmission levels without degradation. It is available in a range of thicknesses and lengths.

### Spectrum of options

We can produce the sheets in a range of colours, or with various additives for increased performance e.g. climate control, infrared blocking.

### Applications

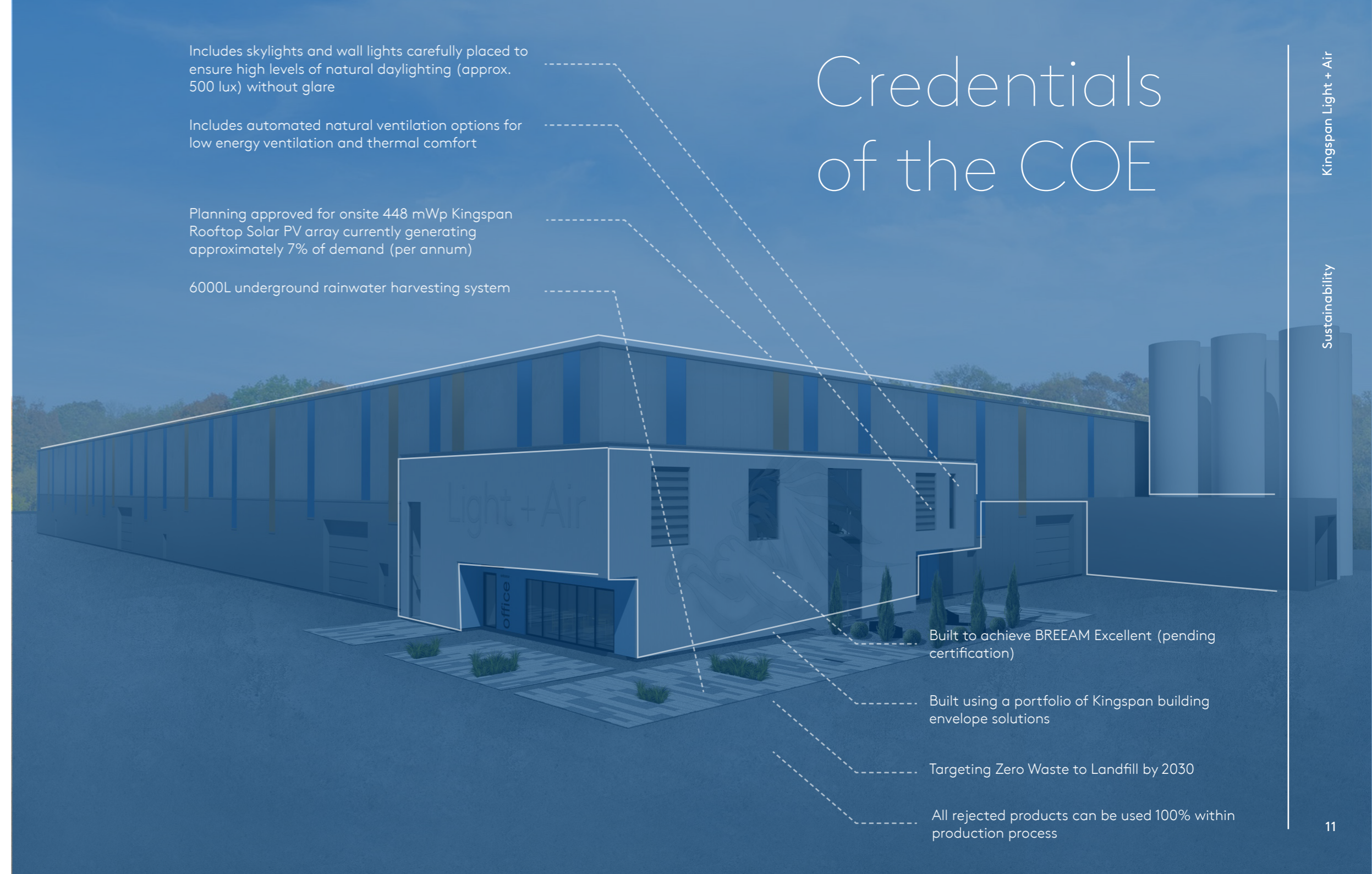
In addition to being used as they are, our polymer sheets can be supplied and used in a multitude of solutions by all kinds of manufacturers. At Kingspan, we use the polycarbonate created at the DCOE in all kinds of solutions produced all over the world, including in-plane roof and wall lights to individual skylight units.

# Being part of something bigger

Sustainability is a vital part of life at Kingspan, and the DCOE is no different. In line with our ten-year Planet Passionate initiative, we are working to ensure both the products we create, and how we make them, have a positive impact on the world around us.



Learn more about our Planet Passionate initiative - <https://www.kingspan.com/group/commitments/planet-passionate>



Includes skylights and wall lights carefully placed to ensure high levels of natural daylighting (approx. 500 lux) without glare

Includes automated natural ventilation options for low energy ventilation and thermal comfort

Planning approved for onsite 448 mWp Kingspan Rooftop Solar PV array currently generating approximately 7% of demand (per annum)

6000L underground rainwater harvesting system

# Credentials of the COE

Built to achieve BREEAM Excellent (pending certification)

Built using a portfolio of Kingspan building envelope solutions

Targeting Zero Waste to Landfill by 2030

All rejected products can be used 100% within production process

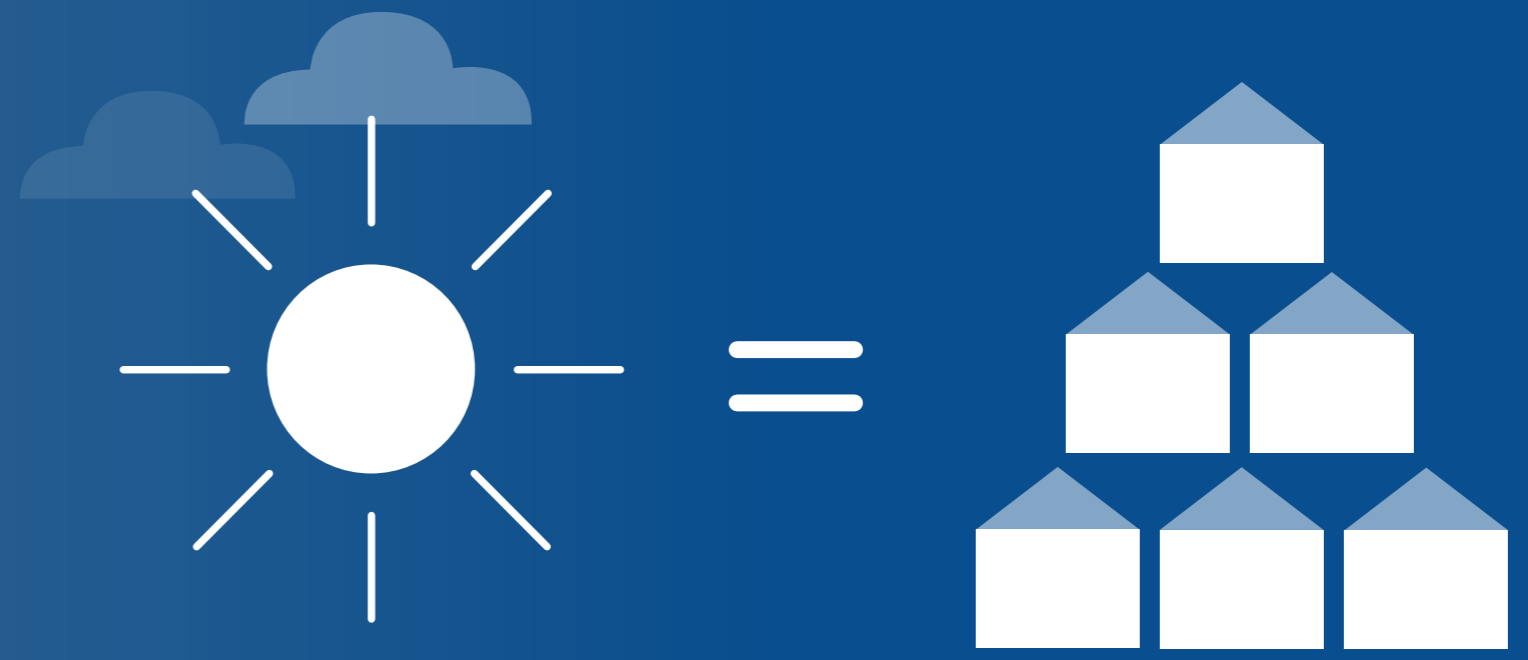
# Quality from the outset



The site has achieved both ISO 9001: Quality Management Systems and ISO 14001 Environmental Management.

**Potential of polycarbonate**  
 In addition to being highly durable and long lasting, polycarbonate is 100% recyclable at end of life and can be remanufactured to create a range of new products with no loss of material quality. This makes it an ideal material solution for the built environment, helping to reduce waste to landfill and take a positive step towards a more circular approach to building.

The daylighting systems we sold in 2020 offer the capacity to provide 9 billion lumens of natural light annually, enough to light approximately 1 million homes\*



9 billion lumens

1 million homes

\*assumes 10 x 60W bulbs per household

## Daylighting Centre of Excellence (DCOE)

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