



*Modernité*  
By CarbonFutureX<sup>®</sup> Group

ARCHITECTURAL PHOTOVOLTAIC GLASS



# Solar facade

A new expression of energy.

Integrated photovoltaic glass for power-generating building façades.

# Architecture, with energy within.

Bring electricity generation into the building envelope. Coordinate vision areas, spandrel panels and external cladding through one considered façade design.



Architectural visualisation from the Modernité collection.

## 01 / VISION

### Light and views

Select light-transmitting glass to balance daylight, outward views and screening.

## 02 / SPANDREL

### A continuous elevation

Use opaque photovoltaic glass within the non-vision areas of the façade.

## 03 / CLADDING

### An active surface

Integrate photovoltaic panels into the external architectural composition.

The selected glazing and supporting façade system are specified to suit the building and its performance requirements.



# Glass to match your architecture.

Choose transparency, depth or colour. Peak photovoltaic output depends on the selected glass.



## 01 / LIGHT-TRANSMITTING

### Natural daylight. Clear views.

A light-transmitting surface for daylight, views and solar generation.

**100** Wp/m<sup>2</sup> PEAK PV OUTPUT, UP TO



## 02 / BLACK OPAQUE

### A sleek, uniform finish.

A deep black architectural surface with the highest listed peak power density.

**150** Wp/m<sup>2</sup> PEAK PV OUTPUT, UP TO



## 03 / GREY COLOURED

### A coordinated palette.

A grey finish that complements the materials and character of the building.

**120** Wp/m<sup>2</sup> PEAK PV OUTPUT, UP TO

Visualisations illustrate appearance. Glass selection determines the final light transmission and output.



# More from the glazed envelope.

Vacuum-insulated photovoltaic glazing combines solar generation with thermal performance. The glazing specification is selected around the needs of the project.



Architectural visualisation.

U-VALUE, AS LOW AS

0.4  $\text{W/m}^2\text{K}$

g-VALUE, AS LOW AS

0.12

Values apply to the selected vacuum-insulated glazing configuration. They do not describe the whole curtain-wall assembly.

## VACUUM-INSULATED EXAMPLE

20.44 mm

6T + 1.52 PVB + 3.2 CdTe + 1.52 PVB  
+ 4TL + 0.2 V + 4T

# The glazing specification.

Select the glass appearance and build-up together. The configurations below reflect the current Solar Facade collection.

## LAMINATED PHOTOVOLTAIC GLASS

### 18.24 mm

6T + 1.52 PVB + 3.2 CdTe + 1.52 PVB + 6T

NOMINAL THICKNESS

### 22.24 mm

8T + 1.52 PVB + 3.2 CdTe + 1.52 PVB + 8T

NOMINAL THICKNESS

## VACUUM-INSULATED EXAMPLE

### 20.44 mm

6T + 1.52 PVB + 3.2 CdTe + 1.52 PVB  
+ 4TL + 0.2 V + 4T

NOMINAL THICKNESS

#### Light transmission

Depends on the selected glass.

#### Panel dimensions

Available sizes to be confirmed for the selected configuration.

#### Appearance

Black opaque · Grey coloured · Light-transmitting

#### Thermal performance

Selected vacuum-insulated configuration:  
U-value as low as 0.4 W/m<sup>2</sup>K; g-value as low as 0.12.

All build-up dimensions are in millimetres. Thicknesses are nominal.

T: toughened glass · TL: toughened low-E glass · V: vacuum cavity · PVB: interlayer

## CERTIFICATION & COMPLIANCE



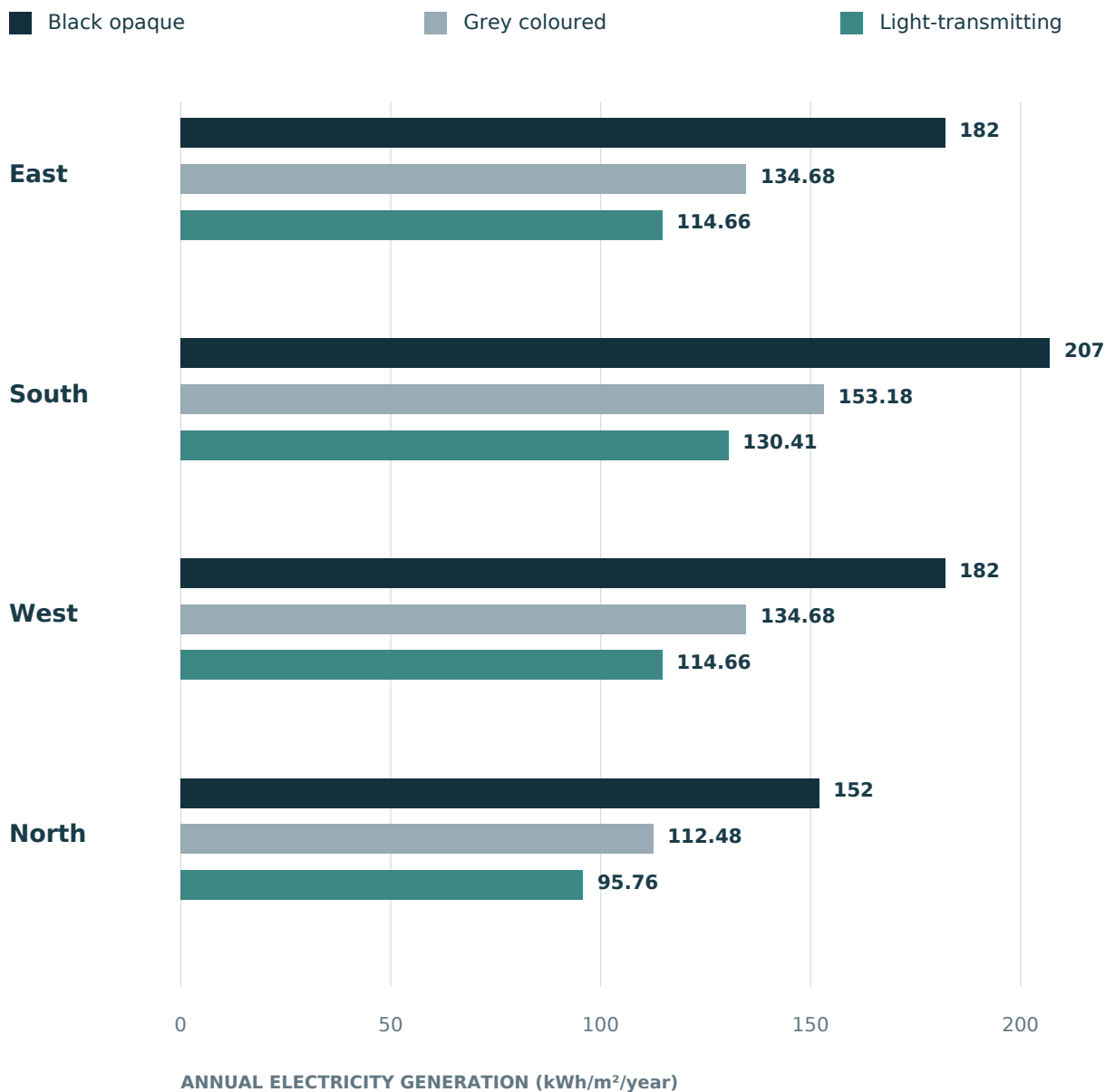
ISO 9001 quality management. UKCA, CE, MCS, TÜV Rheinland and cTUVus marks relate to the applicable photovoltaic products and certified configurations.

View certification details at [modernite.co.uk](https://modernite.co.uk)



# Energy from every elevation.

UK reference figures for CdTe solar glass. Annual electricity generation is shown per square metre of photovoltaic glass.



## YOUR LOCATION. YOUR FACADE.

Generation estimates are tailored to your location, façade orientation, shading and selected glass.

Published website reference estimates, not guaranteed yield. Actual output depends on site conditions and system design.

# Black glass. A confident city presence.

A contemporary office concept set within a British urban streetscape, with black photovoltaic cladding and coordinated vision glazing.



AI-generated architectural visualisation | UK setting

## Architectural depth

A dark, uniform glass finish gives the elevation a composed rhythm of solid panels and clear openings.

## Energy in the envelope

Integrate photovoltaic glass into spandrel and cladding areas as part of the wider façade design.

# A lighter expression for the urban facade.

Grey photovoltaic glass in a London-inspired setting, combining a contemporary elevation with the scale and character of its surroundings.



AI-generated architectural visualisation | UK setting

## A coordinated palette

Grey coloured glass offers an alternative to black, with a finish selected to complement the architecture.

## Considered detailing

Panel dimensions, joints and window positions are coordinated with the selected façade system.

# Daylight, views and new possibilities.

A British campus concept exploring light-transmitting photovoltaic glazing within a contemporary library extension.



AI-generated architectural visualisation | UK setting

## A connection to outside

Consider daylight, views and screening together when selecting the light-transmitting glass.

## An integrated specification

Glazing build-up and thermal performance are selected around the needs of the building and its users.

# New energy for familiar places.

An English canal-side concept pairing traditional brick architecture with a contemporary photovoltaic glass extension.



AI-generated architectural visualisation | UK setting

## A dialogue of materials

The warmth of brick and the depth of black glass offer a clear relationship between existing and new surfaces.

## Designed around context

Coordinate the architectural approach, glazing selection and façade details to suit the setting and the project.

# From architectural intent to glazing specification.

Share the building location, elevations and design priorities to begin a project-specific discussion.

## 01 Define the application

Vision glazing, spandrel panels or external cladding. Identify the proposed photovoltaic areas on the elevations.

## 02 Select the appearance

Light-transmitting, black opaque or grey coloured glass. Discuss the intended balance of daylight, views and privacy.

## 03 Coordinate the performance

Confirm the glazing build-up, nominal thickness, panel dimensions and the thermal requirements of the project.

## 04 Estimate the generation

Provide the location, orientation, surrounding obstructions and shading information for an appropriate yield estimate.

Let's shape your next project.

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**Modernité**  
By CarbonFutureX® Group

WHERE THERE IS LIGHT, THERE IS POWER.



# A new perspective on your facade.

Explore Solar Facade and discuss your next project with the Modernité team.

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## CONTACT

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Product data: [modernite.co.uk/solar-facade](https://modernite.co.uk/solar-facade), September 2026. Images are architectural visualisations. The cover and UK application scenes are AI-generated concepts, not completed project photographs. Final appearance and specifications are confirmed for each project.