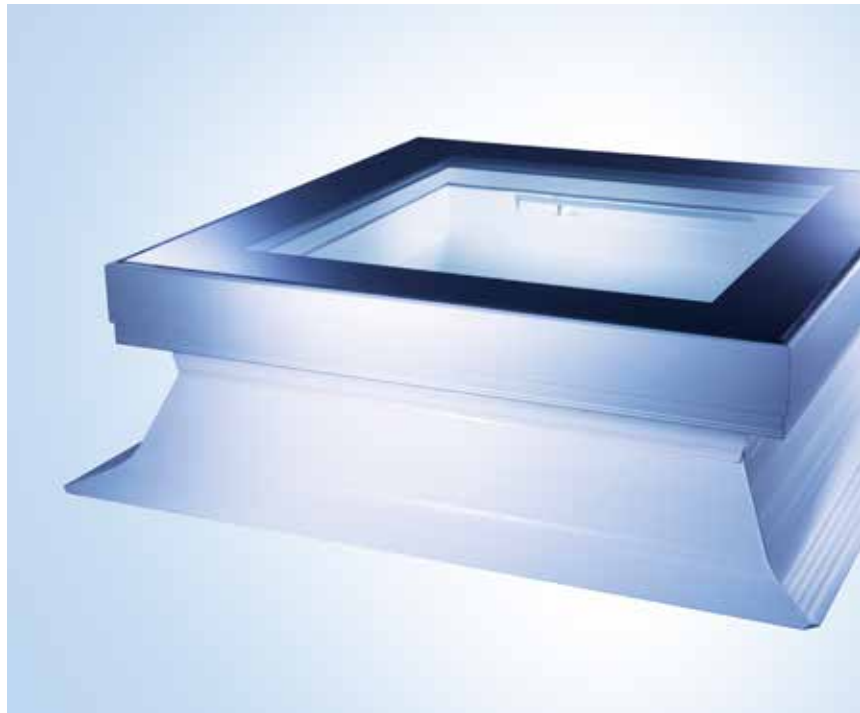




Daylight Systems

**mardome***glass*  
Flat Glass Rooflights





# Release the Energy Saving Benefits of Natural Light

It's no illusion that light, bright interiors are naturally more attractive. Providing immense physiological benefits, daylight has been proven to have a positive impact in terms of increased productivity in the workplace, better concentration levels in schools, increased sales in retail outlets and quicker patient recovery times in hospitals.

Mardome rooflights have been designed to increase the energy saving benefits of natural light by maximising the glazing area to deliver significantly more daylight whilst achieving optimum thermal performance, for light, bright, energy efficient buildings.

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Daylight Systems

# The Natural Choice for Natural Light

Brett Martin Daylight Systems is the UK's largest, most innovative rooflight company and is recognised as an industry specialist in the design and manufacture of superbly engineered rooflight systems.

## Service and Value

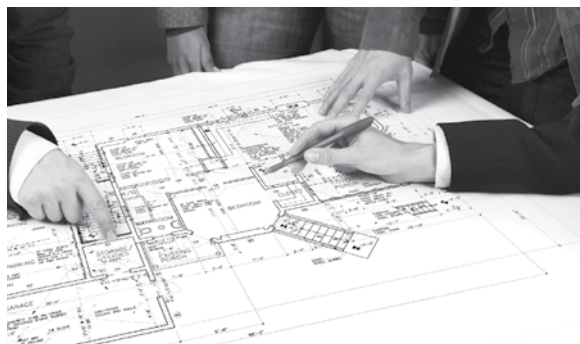
Every Brett Martin Daylight Systems rooflight is made in the company's own environmentally and quality approved factories, to meet and exceed the latest industry and legislative requirements, whilst delivering exceptional functionality, guaranteed performance and contemporary design.

In addition, each rooflight comes with a performance guarantee and the security of dealing with an established company with over 50 years' industry experience.

## Technical Advice and Assistance

With a team of expert technical advisers on hand Brett Martin Daylight Systems provides impartial advice on design, specification and installation, therefore early involvement is key. Offering advice on the regulatory demands for daylighting buildings, our advisors are best placed to offer the best daylighting solutions to achieve regulatory compliance.

Full on-site support is available to satisfy concerns and issues from site inspection through to installation, whilst a dedicated customer support team is with you every step of the way, from order placement to delivery and after-sales support.



# Mardome Glass

Architectural Specification

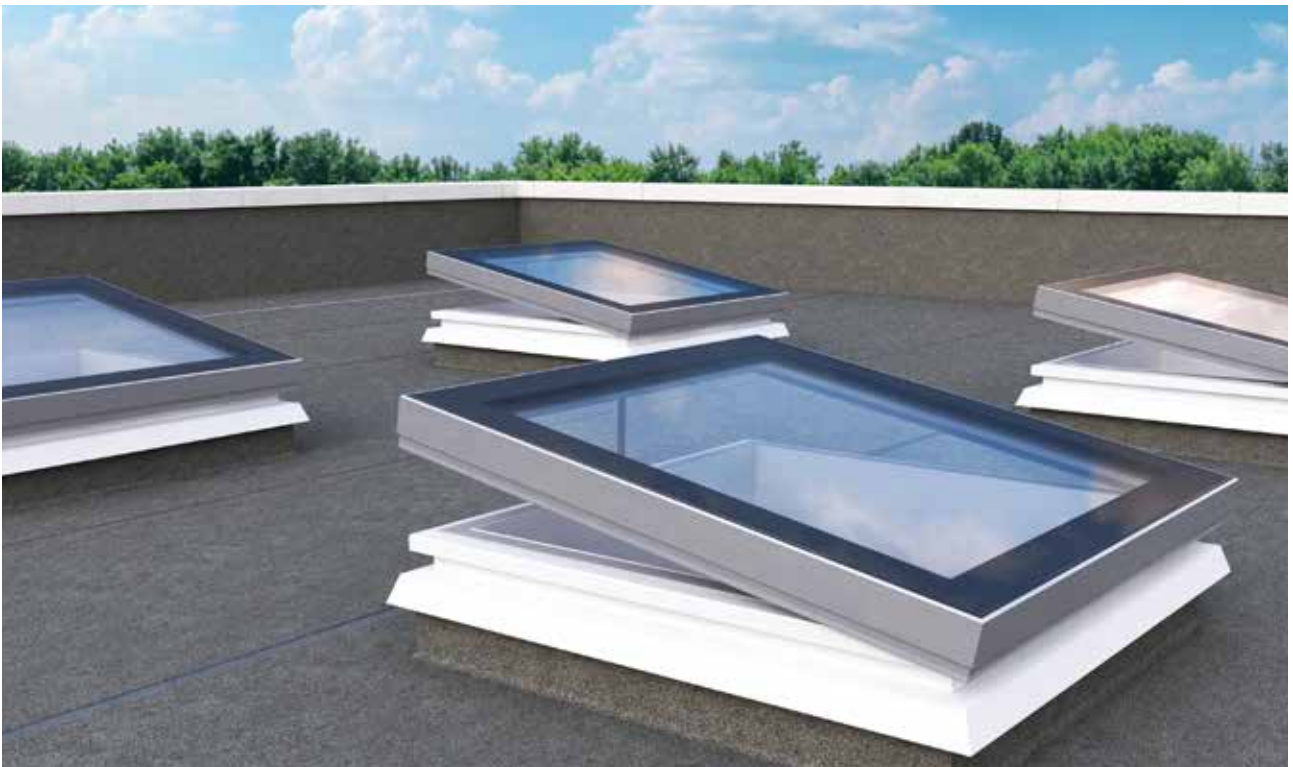


## Intelligent by design, intelligent from every angle

Intelligently designed to combine contemporary styling with exceptional thermal performance and regulatory compliance, Mardome Glass sets the standard in flat glass rooflights.

A sophisticated rooflight choice, Mardome Glass features an ultra-modern flat glass design which allows natural daylight to flood into a building for the lightest, brightest interiors. Ensuring the ultimate in performance, the thermally efficient double glazed unit is framed by a silver anodised aluminium frame, which combines to deliver both high end design and the very best standards in security and safety.

Developed for flat and low pitched roofs of less than 15°, Mardome Glass has been imaginatively designed to offer the widest flexibility possible with a choice of manual or powered opening, ventilation, kerb and fixing options to ease the specification process.



## Key Features



Architectural double glazed flat glass rooflight  
Silver anodised frame which may be powder coated  
Meets CWCT standard for non-fragility of overhead glass

1.1 W/m<sup>2</sup>K centre pane U value<sup>1</sup>

Noise reduction of 39 dB



Manual or powered opening options

Standard or tall PVC kerb and direct fix kerb options  
Ventilation and opening options when supplied with kerb



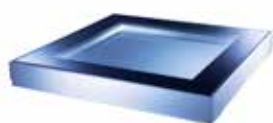
<sup>1</sup>Centre pane U-value is a measure of the thermal efficiency of the glazing type.

TECHNICAL SUPPORT: Further advice on any aspect of Mardome Glass is available from Brett Martin Daylight Systems' Technical Department.





## Mardome Glass Configuration



Mardome Glass on Builder's Upstand - Unventilated Non-Opening



Mardome Glass on a Builder's Upstand - Opening/Ventilated



Mardome Glass Standard Kerb



Mardome Glass Tall Kerb

## Contemporary design

- The flush, flat glass design provides an attractive design feature particularly on overlooked roofs which is highly desirable and in vogue.
- The modern silver anodised frame may be powder coated to standard RAL colours.
- Trickle vents are concealed within the kerb sections where supplied.
- Cabling and actuators on many sizes of mains powered opening variants are concealed within the kerb for a tidy unobstructed internal lightwell (larger sizes require more powerful exposed actuators).

## Robust, durable and secure

- Offering the ultimate in safety the glass specification is non fragile to CWCT TN92 for overhead glass.
- Mardome Glass is also highly secure providing P4A class resistance to burglary and vandalism (P4A to EN 356).
- The glazing frame features a PAS 24:2012 tested secret fix security system.
- Both glazing and sealants demonstrate the ability to withstand thermal shock having undergone rigorous tests simulating repeated heating and cooling cycles to temperature extremes.
- The multi-wall PVC kerb is exceptionally robust and resilient to damage.

## Thermally Insulating

- The thermally efficient double glazed Mardome Glass rooflight provides a centre pane U value<sup>1</sup> of 1.1W/m<sup>2</sup>K.
- The multi-wall kerb features thermally efficient walls which also contributes to high insulation levels.
- The glazing frame is fully thermally broken and minimises the risk of condensation.

## Acoustic performance

- Noise reduction ~39dB (Rw).

## Environmental standards

- Mardome Glass is produced in the UK in Brett Martin Daylight Systems' own environmentally accredited BS EN ISO 14001 factories.
- The aluminium alloy used in the glazing frame contains up to 95% recycled material, and is itself fully recyclable at end of product life as is the glass.

## Product Warranty

- Mardome Glass comes with a 10 year commercial warranty. Please contact Brett Martin Daylight Systems for further details.

<sup>1</sup>Centre pane U-value is a measure of the thermal efficiency of the glazing type.

TECHNICAL SUPPORT: Further advice on any aspect of Mardome Glass is available from Brett Martin Daylight Systems' Technical Department.

# Mardome Glass Product Builder

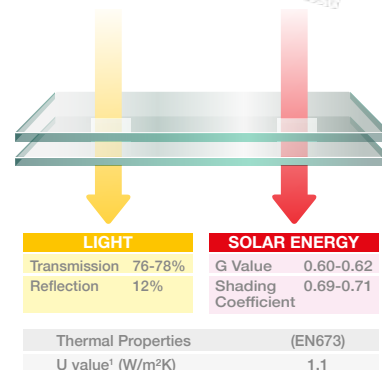
## 1. Models

Flat double glazed glass. Glazing frame profile is fully thermally broken Silver anodised aluminium which may be powder coated to requirements.

## 2. Glazing

### Double glazed glass unit comprising

- Low-E insulated double glazed glass unit with a thickness of 31.5mm.
- 6mm Toughened outer, 90% Argon filled cavity, 9.5mm laminated soft coat Low E inner with 1.5mm PVB interlayer.  
(NB - for very large sizes inner pane increases to 11.5mm)
- Centre pane U value<sup>1</sup> of 1.1W/m<sup>2</sup>K.



## 3. Sizes

### Stocked Sizes

Mardome Glass is available in a range of stocked sizes.

### Non-stocked / Custom sizes

Non-stocked sizes are available on longer lead times in 150mm increments up to 1950 x 1950 square or 3600 x 1650 rectangular.

Custom sizes are available by request, but longer lead times and cost premiums may apply. Please contact Brett Martin Daylight Systems for further information.

### Stocked Sizes Nominal Dome / Kerb Size mm

600x600
750x750
900x600
900x900
1050x1050
1200x600
1200x900
1200x1200

## 4. Kerbs and Fixing

Mardome Glass rooflights can be supplied with a standard or tall PVC kerb for fixing to the roof where there is no builder's upstand in place, or to fit a pre-existing builder's upstand.

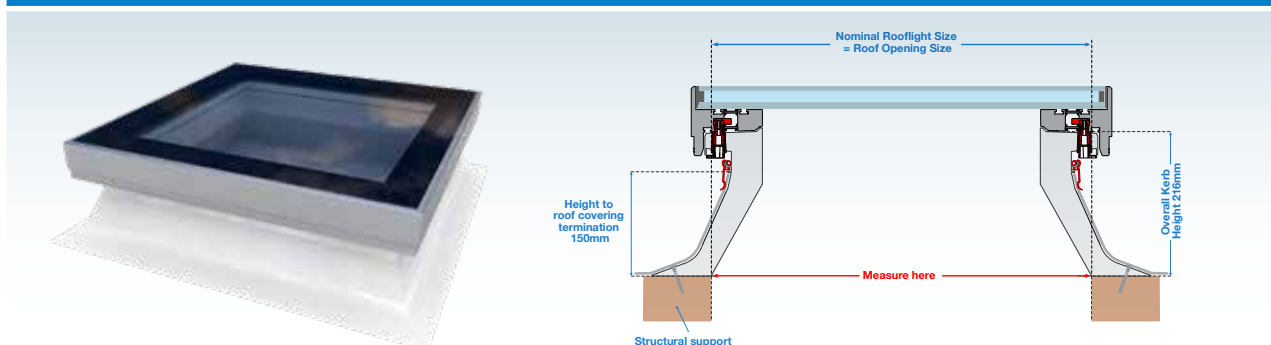
### OPTION 1: Fitting to Mardome Kerb

A factory assembled Mardome kerb is available for projects with no existing upstand and in a range of sizes to match standard and non standard dome sizes. Made from white multiwall PVC the kerb is extremely robust and has been designed to provide maximum insulation whilst its steep sloped walls allow a significantly larger glazing unit on top and providing more daylight into the area beneath. Actuators on many sizes of mains powered opening variants are concealed within the kerb's walls giving a sleek and stylish internal look (larger sizes require more powerful exposed actuators). The specially designed radiused base allows roof coverings to be applied up the kerb without the need for a timber fillet whilst an integral clamp holds roof coverings in place for complete weather tightness and a neat and tidy finish. A choice of two kerb heights is available:

- Standard kerb: Overall height 216mm, ensures roof covering terminates 150mm above roof level - see drawing 1A.
- Tall kerb: Overall height 365mm, ensures roof covering terminates 300mm above the base of the kerb - see drawing 1B.

**IMPORTANT:** When using the Mardome kerb option, nominal rooflight size should normally equal roof opening size.

### OPTION 1A: Standard Kerb: Overall height 216mm

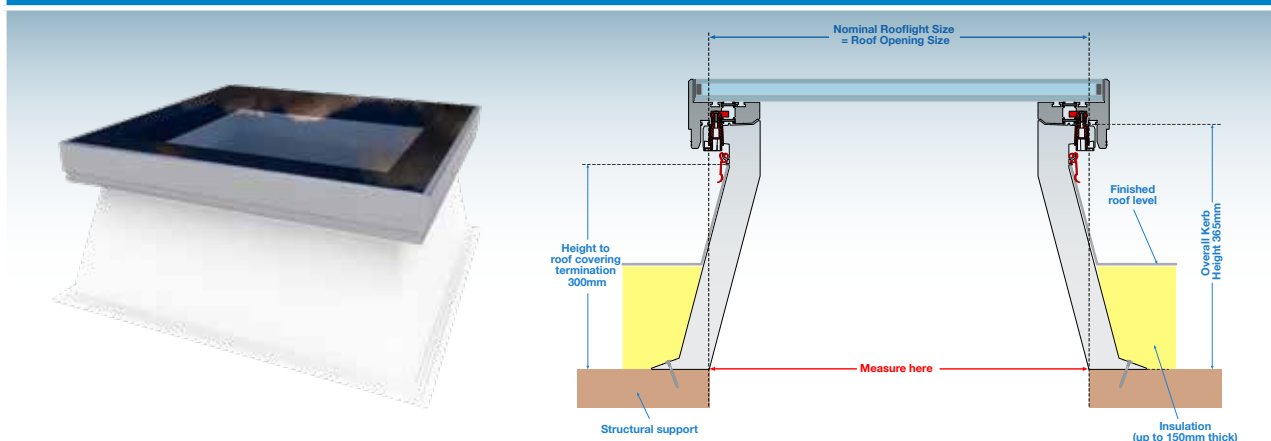


<sup>1</sup>Centre pane U-value is a measure of the thermal efficiency of the glazing type.

TECHNICAL SUPPORT: Further advice on any aspect of Mardome Glass is available from Brett Martin Daylight Systems' Technical Department.



### OPTION 1B: Tall Kerb: Overall height 365mm



- Designed for use where the base of the kerb will be mounted below finished roof level.
- Ideal for refurbishment projects where insulation is being added on top of the existing roof and for tapered insulation projects.

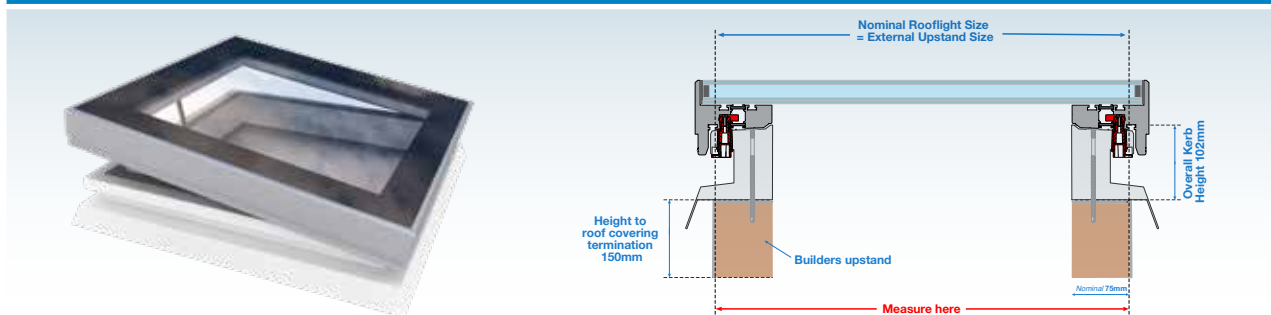
### OPTION 2: Fitting to Builder's Upstands

Mardome Glass rooflights can be fitted to builder's upstands, provided by others, for both new build and refurbishment projects. It is recommended that the upstand measures at least 75mm wide.

- For ventilated or opening Mardome Glass rooflights, a direct fix kerb is supplied as standard to facilitate fixing to the builder's upstand (refer to drawing 2A).
- Unventilated non-opening Mardome Glass rooflights can be fitted directly to a builder's upstand (refer to drawing 2B).

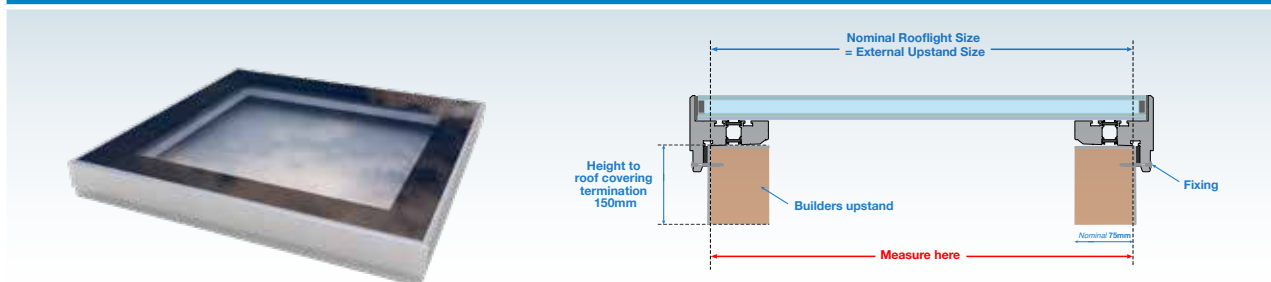
**IMPORTANT:** When using a builder's upstand, nominal rooflight size should normally equal the external size of the upstand.

### 2A Mardome Glass on a Builder's Upstand - Opening/Ventilated



The direct fix kerb is supplied as standard to facilitate fixing to a builder's upstand if ventilated or opening options are specified.

### 2B Mardome Glass on Builder's Upstand - Unventilated Non-Opening

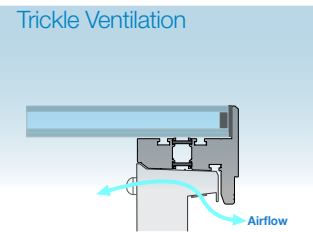


Mardome Glass is available as a glazing only, unventilated non-opening unit for fitting to existing builder's upstands and are mechanically fixed through the side of the profile into the vertical face of the upstand.

## 6. Ventilation

Ventilation can assist in reducing humidity levels immediately adjacent to rooflights and lessen the risk of condensation on the underside of the rooflight. Choose from manual or automatically operated ventilation methods to provide air circulation to the building to meet the required background ventilation standards as set out in Part F of the Building Regulations. Mardome Glass can be supplied with Powervent Extraction Ventilation when used in a kitchen or bathroom environment for example. Fans are neatly integrated into the product's PVC kerb for minimal interruption of the internal light well. Options for multiple fans with 2 speed settings allow for varying levels of extraction depending on requirements and overall product size. Further details available from Brett Martin Daylight Systems.

Ventilation Type	Description	Rating
Trickle Ventilation (Hit and Miss)	Manually operated trickle ventilation provides background ventilation to the interior.	Provides 8400mm <sup>2</sup> Equivalent Area ventilation
Automatic Humidity Controlled Trickle Vent	Humidity controlled trickle ventilation is sensor controlled to open and close in response to room humidity levels.	Provides 7822mm <sup>2</sup> Equivalent Area ventilation and provides superior protection against condensation
Powervent Extraction Ventilation	Powered Extraction Ventilation for use in kitchen and bathroom applications, for example	Min airflow: 55 (m <sup>3</sup> /hr@0pa) Max airflow: 880 (m <sup>3</sup> /hr@0pa)



## 7. Opening options

Mardome Glass can be supplied as a non-opening unit or with a range of powered opening options.

Opening Type	Description	Opening Limits
Manual Opening (MLD)	Manual opening rooflight with worm gear, operated by pole (supplied separately)	300mm nominal
Mains Powered Opening (PCD)	Powered opening rooflight - switch operated (concealed actuators on smaller units, exposed actuators on larger units)	300mm nominal
Mains Powered Opening with Remote Control (PCR)	Powered opening rooflight which is opened and closed using a remote control (included)	300mm nominal
Sensor Controlled Mains Powered Opening (PCS)	Powered opening rooflight with remote control operation (included) and rain sensors for automatic closure	300mm nominal

## 8. Product options

For full details of the specifications and options available for Mardome Glass Rooflights, please contact Brett Martin Daylight Systems.

# Product Standards

## Environmental Impact

Mardome Glass rooflights are manufactured by Brett Martin Daylight Systems which has gained ISO 14001 accreditation.

## Part L Compliance

Mardome Glass rooflights can assist with buildings meeting the CO<sub>2</sub> emissions targets as set out in Part L of the Building Regulations 2013 (England and Wales) especially when combined with artificial lighting controls.

## Industry accreditations

The glass is manufactured to comply with constituent parts of BS EN 1279 for Insulating Glass Panels.

## Warranty

Mardome Glass rooflights come with a 10 year commercial warranty. Please contact Brett Martin Daylight Systems for further details.

## Non-Fragility

Mardome Glass is Class B non-fragile to ACR[M]001, and meets the safety requirements for glass rooflights defined in CWCT TN92 for overhead glass providing safe, robust products which are resilient to impact and accidental damage.

## Weatherability

Mardome Glass has undergone rigorous in-house weather testing that simulates extreme weather conditions to ensure complete weather tightness.

## Security

The glass provides P4A class resistance to burglary and vandalism. The glazing frame features a PAS 24:2012 tested secret fix security system.

## Fire performance

Mardome Glass will meet BS476 Class 1.

## Delivery

Brett Martin Daylight Systems can arrange nation-wide delivery throughout the UK and Ireland. Each Mardome Glass rooflight is packaged to protect the units during transport and labelled with approximate product weights for safe handling.



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