

## Mardome Glass Link

### Product Description

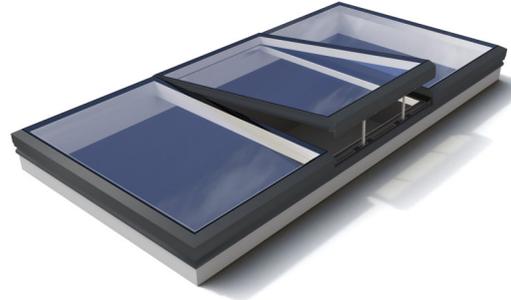
Brett Martin Daylight Systems' Mardome Glass Link modules are a system of premium quality factory assembled glass rooflight units that simply lap together to form continuous rooflights of unlimited length. Modules are constructed from structurally glazed double glazed units in a powder coated, fully thermally broken aluminium frame. The product is designed for simple and rapid installation on roofs of all modern building types to provide natural light, and comfort ventilation where specified. Mardome Glass rooflights are manufactured using systems fully accredited to ISO 9001 and ISO 14001.

### Appearance

Sleek and contemporary design, ideal for both residential and commercial applications. All modules, including opening ones, are flush, providing a seamless aesthetic. Concealed internal fixings and opening mechanisms ensure an elegant finish and mean fixed and opening modules appear almost identical.

### Design Features

- Factory assembled modules simply lap together for a swift installation of unlimited length.
- All modules are flush including opening ones.
- Components of powered opening rooflights are completely concealed for an unobstructed light well.
- Dual colour powder coated as standard, fully thermally broken aluminium framework. Option to powder coat in any single RAL colour
- Spans of up to 3800mm are possible with individual modules of up to 3800x1750mm allowing for large uninterrupted daylight areas.
- Suitable for installation at pitches of 2-35° across span and 15° along length
- U-value of 1.1 W/m<sup>2</sup>K.
- CWCT TN-92 tested (for class 2 roofs) and ACR[M]001 Class B non-fragile.



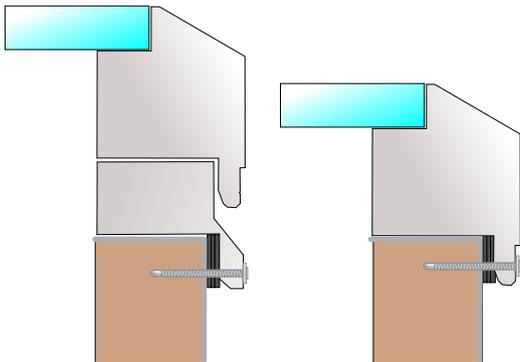
### Product Options Summary (see page 2 onwards for details)

#### Opening Options

- Manual with pole operated worm drive
- Powered with wall-switch (concealed chain actuator)
  - Optional Remote Controlled Operation
  - Optional Rain Sensor Operation

#### Multipane Modules

Large modules can be glazed with multiple panes of glass to avoid the need for heavier and more expensive glass specifications.



Rooflights with opening modules

Fixed only Rooflights

#### Glazing Specification

- Standard specification
  - 6mm toughened outer
  - 16mm Argon spacer
  - 9.5mm laminate with 1.5mm PVB interlayer (for very large sizes inner pane increases to 11.5mm)
- CWCT TN-92 for class 2 roofs
- ACR[M]001 Class B non-fragile
- P4A secure
- Anti sun option
- Self clean option
- Bespoke specifications available on request

#### TECHNICAL SUPPORT:

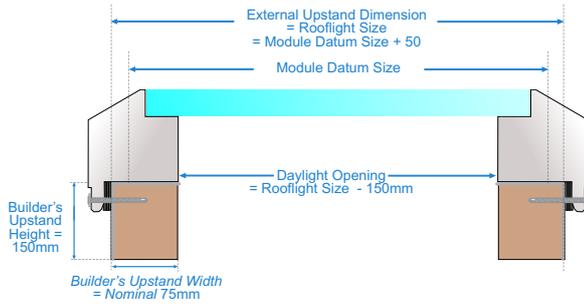
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**Mardome Glass Link**

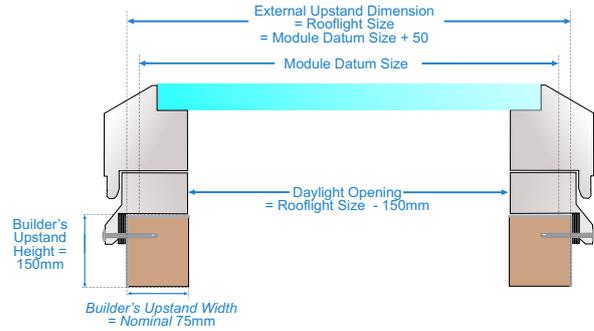
**Product Dimensions**

Mardome Glass Link modular rooflights are designed to be fitted directly to a fully weathered upstand by others.

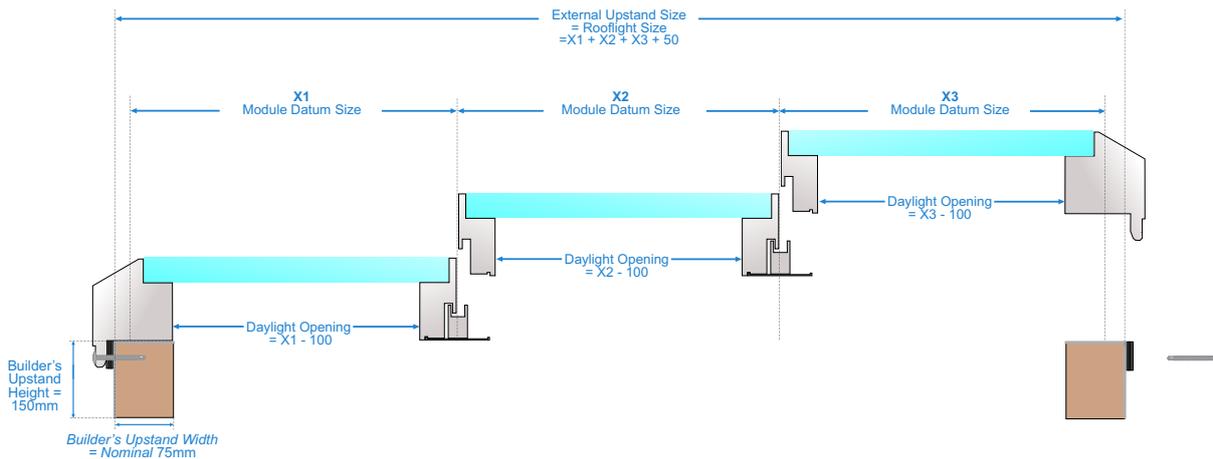
**Fixed Rooflight Span**



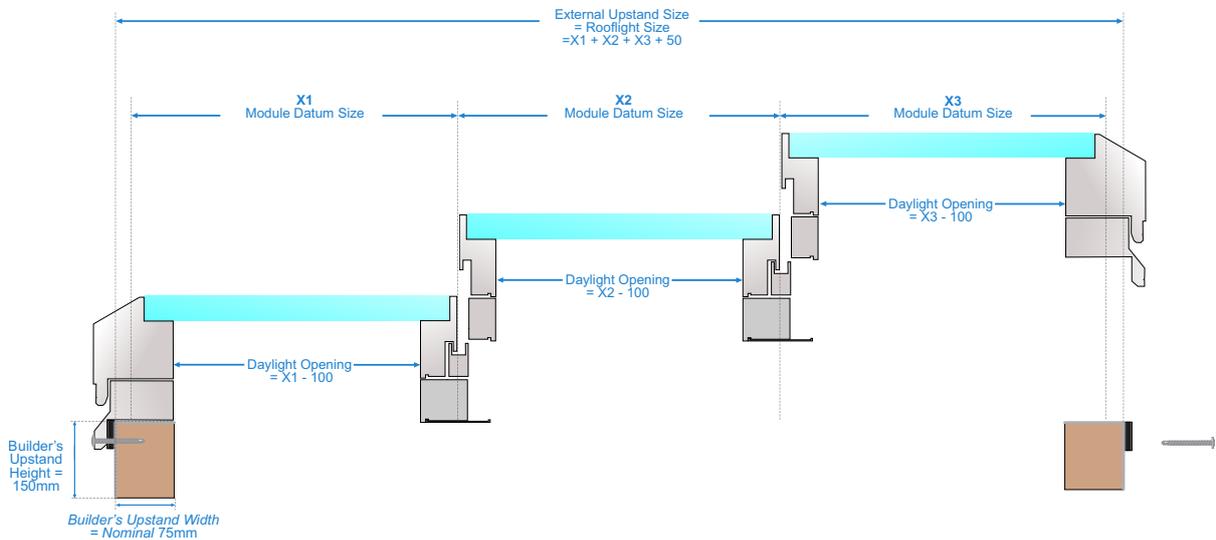
**Opening Rooflight Span**



**Fixed Rooflight Length**



**Opening Rooflight Length**



**TECHNICAL SUPPORT:**

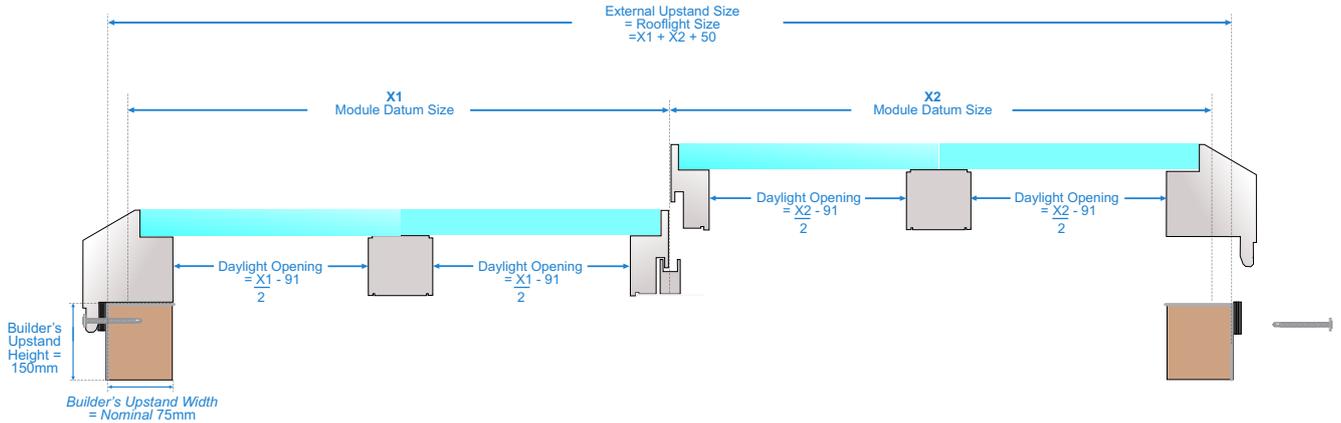
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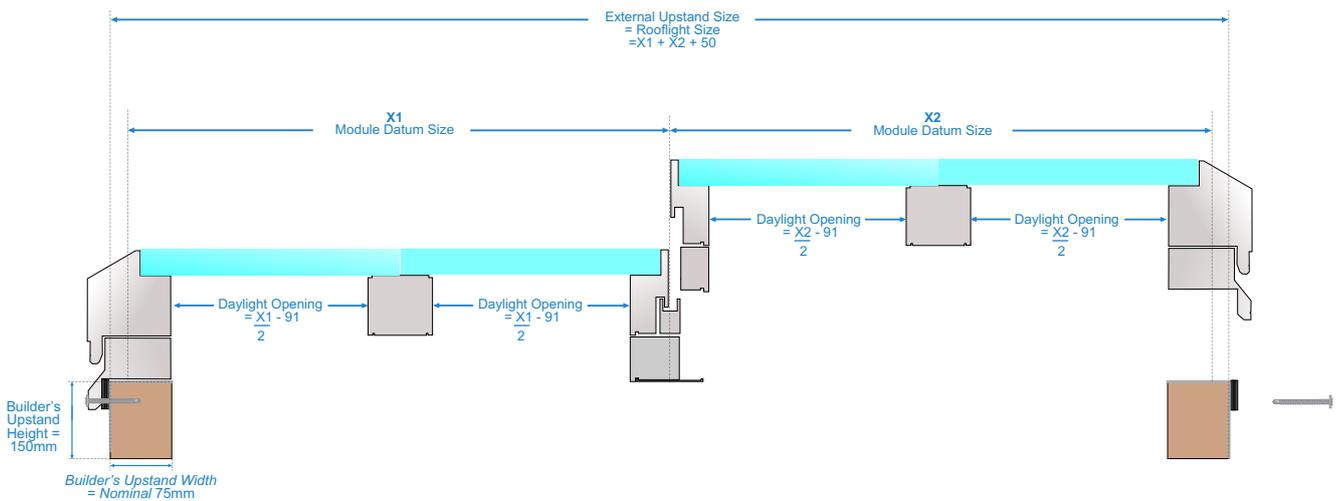
**Multipane Options**

Large modules can be glazed with multiple panes of glass to avoid the need for heavier and more expensive glass specifications.

**Fixed Multipane Rooflight Length**



**Opening Multipane Rooflight Length**



**Opening Options**

Modules can be opened on concealed hinges using manual worm drive or powered actuators to create a large ventilation area. Opening rooflights can contribute to room ventilation as required by Part F of the Building Regulations.

**Size Restrictions for Opening Options:**

Please note that restrictions apply due to size, wind loadings and weight. For opening modules, size is normally restricted to a maximum nominal area of 3.6m<sup>2</sup> for powered opening or 1.44m<sup>2</sup> for manual opening.

Figures stated are a guide. Please contact BMDS for specific details and advice.

**Table 1**  
**Opening Options**

Opening Type	Description
Manual Opening (MLD)	Hinged opening module which is operated manually via a worm gear drive with an extension pole
Powered Opening (PCD/PCR)	Powered hinged opening module with completely concealed operating mechanism. Opened and closed using a control switch or remote control
Sensor Controlled Powered Opening (PCS)	Powered hinged opening module which includes rain sensors for automatic operation

**Table 2**  
**Product Overall Height & Weight**

Description	Nominal Size (mm)		Fixed Rooflight H (mm) W* (Kg)		Opening Rooflight H (mm) W* (Kg)	
	Fixed Module	Min	600 x 600	145	22	N/A
	Max	3800 x 1750	145	315	N/A	N/A
Opening Module	Min	600 x 600	N/A	N/A	205	61
	Max	2800 x 1300	N/A	N/A	205	193

\*Weights for a start/end module  
Contact Brett Martin Daylight Systems for weights of module sizes not listed above

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## Mardome Glass Link

### Composition

The double glazed glass panels are made up of 6mm toughened outer, 90% argon filled cavity, with a 9.5mm laminated inner (inc. 1.5mm PVB interlayer). For larger pane sizes the inner pane thickness is increased to 11.5mm.

The frame is manufactured from extruded aluminium, powder coated in RAL 7016 externally and RAL 9010 internally as standard (other colours are available). It is fully thermally broken to provide excellent thermal performance. Other integral components comprise of ABS and PVC. The Glass, Aluminium, PVC and ABS can all be recycled at the end of useful product life.

### Durability

Mardome Glass rooflights are expected to remain fit for purpose in normal industrial conditions for a period of 20 years (guaranteed for 10 years), i.e. they will not become perforated, lose significant structural integrity or distort to the extent of losing weather-tightness. Electrical equipment (where present), is guaranteed for a period of 1 year; actuators have a design life of at least 10,000 cycles. Insulated glass used in the construction of the rooflight is guaranteed for 5 years.

### Safety Requirements/CDM Regulations

Mardome Glass Link modules achieve CWCT TN-92 non-fragility for class-2 roofs and ACR[M]001 class B non-fragility when new and fully installed in accordance with Brett Martin Daylight Systems' installation guides. Inner glass pane is laminated to protect people inside buildings in accordance with industry guidelines in NARM NTD14. Foot traffic on rooflights should always be avoided; impacts such as foot traffic or a falling person may cause damage which could necessitate rooflight replacement. All glass panels are BS EN12150, BS 14449 and BS 1279 compliant.

### Security

The product is fitted to a builders upstand with self-drilling, anti-tamper security fixings.

### Fire Rating

Building Regulations Approved Document B (2006 edition, incorporating 2010 and 2013 amendments) sets out the rules for fire safety of buildings, which can be met by achieving specific fire ratings to either British (BS476) or European (BS EN 13501) test standards.

Brett Martin Mardome Glass achieves BS476 Class 1

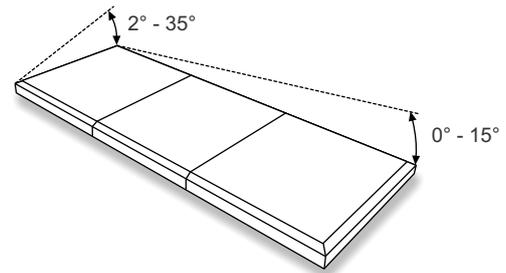
### Thermal Performance

Part L Building Regulations require a U-value of between 1.6 and 2.2 W/m<sup>2</sup>K depending on application.

Mardome Glass Link modules achieve a U-value of 1.1 W/m<sup>2</sup>K which exceeds requirements of Part L Building Regulations.

### Roof Applications:

Mardome Glass Link modules are designed for installation at a longitudinal pitch (along length) of 0-15°, and a lateral pitch (across span) of 2° - 35° to prevent water ponding on the glass (leading to rapid dirt build up) and to ensure drainage between modules. For rooflights with opening modules, hinges should be at the ridge of the rooflight span.



### Acoustic Performance:

Mardome Glass Link modules achieve a direct airborne sound insulation value of 39db (Rw).

### Glazing Options & Transmission Values

Standard glazing specification achieves the following values:

Table 3			
Light		Solar Energy	
Transmission	76% - 78%	g-value	0.60 - 0.62
Reflection	12%	Shading coefficient	0.69 - 0.71

### Wind and Snow Load

Mardome Glass Link modules have been tested to show that when correctly fitted in accordance with our instructions, they will resist wind loads calculated in accordance with BS EN 1991-1-4: 2005, and imposed loads in accordance with BS EN 1873: 2005 as shown in Table 4.

Table 4	
Resistance to Snow and Wind Loads (figures in excess of)	
Snow Load (N.m <sup>2</sup> )	Wind Load (N.m <sup>2</sup> )
600	1200

### Installation, Handling, Maintenance & Storage

Full installation details, maintenance and product care details are available on request.

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