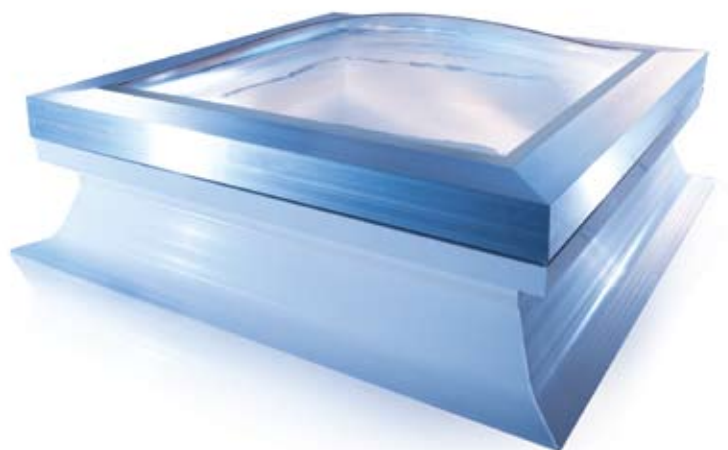




Daylight Systems

mardome
Dome Rooflights







Release the energy saving benefits of natural daylight with Mardome



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For complete peace of mind, every Mardome is BBA approved and backed by a 20 year guarantee



The Natural Choice for Natural Light

When you choose a Mardome rooflight, you choose a superbly engineered rooflight unit designed and manufactured by industry specialists, Brett Martin Daylight Systems, the UK's largest most innovative rooflight company. This means your decision is backed by the security of dealing with an established company with over 50 years industry experience, full technical support from product selection through to installation and complete after-sales back up. It also means that each Mardome rooflight has been developed by an in-house R&D team to deliver exceptional functionality, guaranteed performance and contemporary design. And, to ensure that excellent design translates to an excellent product every-time, each Mardome rooflight is manufactured in the UK in Brett Martin's environmental and quality approved factories and backed by long comprehensive guarantees. That's why Brett Martin Daylight Systems is the natural choice for natural light.





New

Generation Mardomes

New generation Mardomes combine style, choice and exceptional performance



Our Mardome Trade, Ultra and Hilite NEW AUTUMN 2010 rooflights have been completely redesigned to give you superior style with more choices to improve performance than ever before.

Contemporary style

Sleek, contemporary aesthetics inside and out have been central to our design vision for Mardome. The clean lines of the pristine white kerb complement the aerodynamic low rise glazing unit giving the overall impression of a modern, stylish rooflight feature. An architectural aluminium security frame on Mardome Ultra and Hilite conceals the security fixings for a superior finish. Internally, all cabling and actuators are hidden within the kerb on mains powered units for an uninterrupted streamlined lightwell which contributes to the overall design architecture of internal spaces.

High Insulation

We recognise that our rooflights have an important part to play in the energy efficiency of your building. So we've designed the new Mardome to be the most insulating unit ever without compromising on the quality of natural light transmission. A new multi-wall kerb has been incorporated to achieve higher levels of insulation. The unique glazing cassette improves thermal performance and facilitates more energy efficient triple and quad skin glazing options. The overall result is that triple skin Mardome rooflights achieve a centre pane U-value of 1.8 W/m²K and a U_d-value which ranges from 1.25W/m²K for a 600x600mm dome to 1.51W/m²K for a 1200x2400mm dome. Higher performance glazing options can further reduce the U_d-value to as low as 0.95W/m²K, exceeding the requirements of Part L of The Building Regulations 2006 and helping to achieve BREEAM credits¹.

Noise reduction

We thoroughly understand the acoustic requirements for Mardome and have developed an Acoustics Pack for use in applications where rain or external noise are a consideration. Our acoustics solutions may be specified in these instances to provide noise insulation and achieve BREEAM credits.

Ease of installation

Ease of installation has been a key consideration in the redesign of Mardome. Every Mardome is delivered complete and ready to fit. The new multi-wall kerb is robust and resilient to damage during installation. We have incorporated a factory fitted membrane clamp to the kerb, which holds the roofing felt or membrane in-place during installation and acts to prevent peel back of the roof covering once fitted. The kerb foot has also been specially designed to allow the roof covering to be finished without the need for any timber fillets.

¹ Refer to notes on U-values on page 18 under Step 3 Thermal Efficiency.

Mardome is a flexible choice for any application



New Generation Mardomes

Mardome rooflights give you the flexibility to specify the dome you need at the price you want for any application

The new generation makes selection of your Mardome easier. Starting with the standard dome, the Mardome Trade, and stepping up to the architectural Ultra and the top specification Hilite, each model features improved performance and styling.

New Standard Dome

Mardome Trade is the standard specification dome unit in our newly redesigned next generation Mardomes. Providing excellent insulation, triple skin Mardome rooflights achieve a centre pane U-value of 1.8 W/m²K and a U_g-value which ranges from 1.25W/m²K for a 600x600mm dome to 1.51W/m²K for a 1200x2400mm dome. Higher performance glazing options can further reduce the U_g-value to as low as 0.95W/m²K¹.

- New contemporary low rise profile
- Saves energy with options to reduce the U_g-value to as low as 0.95W/m²K¹
- Unique glazing cassette in triple and quad skin domes, minimises the risk of condensation
- All power components are hidden for a streamlined lightwell
- Extensive options to satisfy requirements for acoustics, ventilation and light transmission
- For ease of installation the tapered kerb foot does not require timber fillets and an integral membrane clamp holds the roofing membrane or felt in place



mardometrade
Dome Rooflights

New Architectural Dome

In addition to the standard dome features, the architecturally inspired Mardome Ultra delivers maximum security and high insulation in a sleek, stylish design package. Tamper proof fixings are concealed beneath a modern aluminium security frame, and a secret lock system allows domes to be installed and locked securely into place providing the highest possible security level.

- The contemporary low rise dome design is complemented by a stylish aluminium frame which is available in a silver anodised finish or powder coated to any standard RAL colour
- Security fixings are concealed for maximum security and complete peace of mind
- The secret lock system locks the dome into place and can only be opened with the Mardome security key

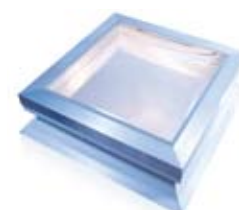


mardomeultra
Dome Rooflights

New Hilite Dome New Autumn 2010

Mardome Hilite is the top specification dome unit. Due to its streamlined internal kerb and low rise dome design, the Hilite provides the largest possible daylight area for the roof opening to maximise light transmission. The Hilite upgrade combines the high security and stylish design features of the Mardome Ultra.

- With an increased daylight area of between 19%-78% Mardome Hilite realises the maximum energy saving benefits of natural daylight
- The internal vertical kerb design allows a larger glazing unit to be fitted for maximum light transmission as well as more streamlined interior design



mardomehilite
Dome Rooflights
NEW AUTUMN 2010

¹ Refer to notes on U-values on page 18 under Step 3 Thermal Efficiency.

Relax, the Brett Martin Daylight Systems team will help you choose the most suitable Mardome options for your project

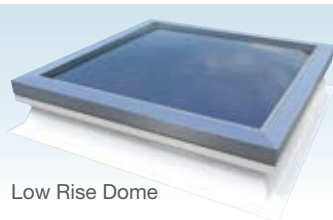


New Generation Configuration

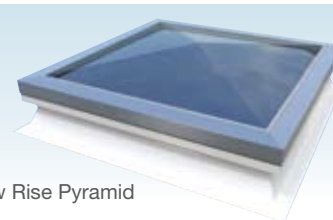
Offering the widest possible flexibility, Mardome Trade, Ultra and Hilitite NEW AUTUMN 2010 rooflights can be individually configured to the required size, in a range of glazing, ventilation and opening options, to satisfy your budget and application.

Size and Shape

Available in standard sizes from 600x600mm up to 1800x1800mm with a choice of low rise dome or low rise pyramid shaped glazing units.



Low Rise Dome



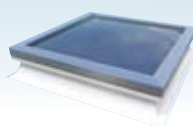
Low Rise Pyramid

Glazing

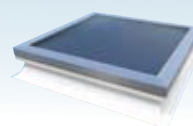
Glazed with Marlon FSX Longlife polycarbonate and available in double, triple and quad skin units depending on the level of thermal insulation required.

Additional glazing options include:

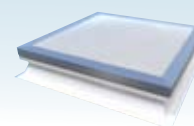
- Double glazed glass inner glazing (standard or argon filled) - improved U_g-values, acoustics and aesthetics
- 25mm structured polycarbonate inner glazing - improved thermal performance



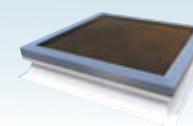
Clear
High Visibility & Light Transmission



Textured
Privacy & Light Transmission



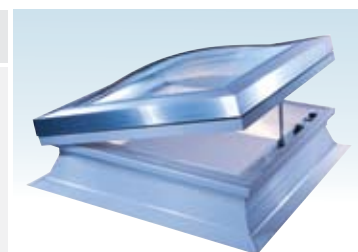
Opal
Privacy. Diffused Light & Solar Control



Bronze
Solar Control

Opening Options

- Manual opening with extension pole
- Powered opening
- Powered opening with RF remote control handset
- Powered opening with RF remote control handset and rain sensor
- SV30 Smoke clearance / AOV unit opens to a nominal 30° (requires 24v system)
- SV90 Smoke clearance / AOV unit opens to a nominal 90° (requires 24v system)
- Access Hatch – Lockable from the inside, this gas strut assisted opening unit can be used to gain access to the roof, used in conjunction with a suitable ladder/other means of access (not supplied)



Ventilation

- Trickle Vents (Manual) - Standard Spec
- Automatic (Humidity Controlled) - Superior Spec

Direct Fix Kerb

Available with a direct fix kerb option for installation directly onto builders upstands.

Accessories

- Kerb adaptor allows standard sized domes to be fitted on non-standard size upstands
- Timber kit for application of mastic asphalt roofing systems
- Security grille
- Telescopic opening poles (to a maximum extension of 3m)
- Mardome GRP soaker available for metal clad roof applications

Acoustics Pack

The Acoustics Pack should be specified where a reduction in rain or external noise transmission is required (not available with ventilated or opening domes).

Options

Standard Sizes mm	Shape	Trickle Vents (Manual) Ventilation	Automatic (Humidity Controlled) Ventilation	Manual Opening	Powered Opening	R/C Powered Opening	R/C Powered Opening with Rain Sensor	SV30	SV90	Access Hatch
600x600	D,P	Y	Y	Y	Y	Y	Y	N	N	N
600x900	D,P	Y	Y	Y	Y	Y	Y	Y	N	N
600x1500	D,P	Y	Y	Y	Y	Y	Y	Y	N	N
750x750	D,P	Y	Y	Y	Y	Y	Y	Y	Y	N
750x900	D,P	Y	Y	Y	Y	Y	Y	Y	Y	N
900x900	D,P	Y	Y	Y	Y	Y	Y	Y	Y	Y
900x1800	D	Y	Y	Y	Y	Y	Y	Y	Y	Y
1050x1050	D,P	Y	Y	Y	Y	Y	Y	Y	Y	Y
1050x1500	D,P	Y	Y	Y	Y	Y	Y	Y	Y	Y
1200x600	D,P	Y	Y	Y	Y	Y	Y	Y	N	N
1200x900	D,P	Y	Y	Y	Y	Y	Y	Y	Y	Y
1200x1200	D,P	Y	Y	Y	Y	Y	Y	Y	Y	Y
1200x1500	D,P	Y	Y	Y	Y	Y	Y	Y	N	N
1200x1800	D	Y	Y	Y	Y	Y	Y	Y	N	N
1200x2400	D	Y	Y	N	N	N	N	N	N	N
1350x1350	D,P	Y	Y	N	N	N	N	N	N	N
1500x1500	D,P	Y	Y	N	N	N	N	N	N	N
1800x1800	D	Y	Y	N	N	N	N	N	N	N

Note All sizes are available as fixed vented or non-vented units
Mardome Hilitite sizes available on request
D: Dome P: Pyramid



A range of Mardomes, for when
the job's a little less ordinary

Special Products

Mardome rooflights comprise a range of special products which have been developed over time to fulfil distinct and specific market requirements that are a little out of the ordinary.



Mardome Premier is our classic aluminium frame dome rooflight, specified for exceptional build quality, strength, reliability and appealing design. We have designed the Mardome Premier with a generous daylight area, extensive ventilation options and the best possible durability for long lasting performance. Premier is particularly suitable for exposed environments such as coastal or high rise locations.

- Robust, durable aluminium kerb
- Secret fix mechanism can be specified for extra security
- Standard aluminium mill finish with option to powder coat to any RAL colour
- Double and triple skin units available

Mardome Premier Options

Standard Sizes mm	Standard Shape	Non Vented	Permanent or Louvre Ventilation	Powered or Manual Opening	Access Hatch
600x600	D,P	Y	Y	Y	N
750x750	D,P	Y	Y	Y	Y
900x600	D,P	Y	Y	Y	N
900x900	D,P	Y	Y	Y	Y
1200x 600	D,P	Y	Y	Y	N
1200x900	D	Y	Y	Y	Y
1050x1050	D,P	Y	Y	Y	Y
1200x1200	D,P	Y	Y	Y	Y
1200x1800	D	Y	Y	Y	N
1800x1800	D	Y	Y	Y	N

Note D: Dome P: Pyramid



TECHNICAL SUPPORT: U-values of rooflights on aluminium kerbs are always poorer than rooflights on PVC kerbs, and U-value for Premier is 2.6-3.1W/m²K, depending on size; care should be taken to ensure that Part L requirements are met. U-values are improved for Premier on insulated upstands or where kerbs are assessed as part of the roof.



Special Products



mardome*circular*
Dome Rooflights

Mardome Circular, as its name suggests is our round glazing unit which is specified for its distinct styling and character. It features a strong and robust GRP kerb.

- Circular dome option
- Robust and weatherable GRP kerb
- Security caps encase fixings for additional security
- Double and triple skin units available

Mardome Circular Options

Standard Sizes Diameter mm	Shape
600	C
750	C
900	C
1050	C
1200	C
1350	C
1500	C
1800	C

Note
C: Circle

mardome*reflex*
Dome Rooflights

Mardome Reflex is a glazing only unit designed specifically for refurbishment projects where the glazing only needs to be replaced. The unit is supplied with a fixing kit including weathertight washers and cover plugs. Manufactured from Marlon FSX Longlife polycarbonate, this glazing unit is up to 200 times stronger than glass. The high resistance to breakage and adverse weather conditions means Mardome Reflex is very safe and reliable.

- Dome, pyramid and circular options
- Can be mechanically fixed to existing kerbs without a kerb adaptor
- Pre-drilled for ease of installation
- Single, double and triple skin units available
- Available with standard 70mm or 100mm wide flange options



Mardome Reflex Options

Standard Sizes mm	Standard Shape	Standard Sizes mm	Standard Shape
600x600	D,P,C	1200x600	D,P
600x900	D,P	1200x900	D,P
600x1500	D,P	1200x1200	D,P,C
750x750	D,P,C	1200x1500	D,P
750x900	D,P	1200x1800	D
900x900	D,P,C	1200x2400	D
900x1800	D	1350x1350	D,P,C
1050x1050	D,P	1500x1500	D,P,C
1050x1500	D,P,C	1800x1800	D,C

Note D: Dome P: Pyramid C: Circular

Access & Smoke Clearance

In providing the complete package, we also offer a selection of access hatches and smoke clearance solutions



Access Hatches

Mardome includes a range of access hatches for each of the Trade, Ultra and Hilite NEW AUTUMN 2010 contemporary rooflight collection and the Premier aluminium dome. Hatches use gas springs to facilitate a 90° opening. The access hatches are configured to match a range of specifier's requirements including insulation, security and light transmission.

Mardome Trade Standard Dome	Mardome Ultra Architectural Dome	Mardome Hilite <small>NEW AUTUMN 2010</small> Maximum Daylight Dome	Mardome Premier Aluminium Dome
Standard Sizes (mm)	Standard Sizes (mm)	Standard Sizes (mm)	Standard Sizes (mm)
900 x 900	900 x 900	900 x 900	750 x 750
900 x 1800	900 x 1800	1050 x 1050	900 x 900
1050 x 1050	1050 x 1050	1200 x 900	1200 x 900
1050 x 1500	1050 x 1500	1200 x 1200	1050 x 1050
1200 x 900	1200 x 900		1200 x 1200
1200 x 1200	1200 x 1200		



Smoke Clearance Domes

In providing the complete rooflight package, our Mardome range includes automatic opening smoke clearance domes which provide an effective means of allowing smoke and hot air to vent out in the event of a fire, particularly when combined with low level vents. Mardome Trade, Ultra and Hilite NEW AUTUMN 2010 can be configured to operate as smoke clearance units. SV30 and SV90 automatic opening domes open to 30° and 90° respectively, to facilitate the maximum possible ventilation. Typically these automatically opening rooflights function as part of a smoke clearance system although they can also be configured to operate manually (e.g. via a wall mounted switch). Actuators operate from a 24v DC supply and are usually connected to a separate control system (for smoke clearance). Polarity to the actuators needs to be reversed to open or close, and the SV90 includes magnetic latches which require a permanent 24v supply.

- 30° and 90° opening units
- Function as part of a smoke clearance system
- Can be configured to operate manually
- Require separate 24v supply

Mardome Trade Standard Dome		Mardome Ultra Architectural Dome		Mardome Hilite <small>NEW AUTUMN 2010</small> Maximum Daylight Dome	
SV30 (mm)	SV90 (mm)	SV30 (mm)	SV90 (mm)	SV30 (mm)	SV90 (mm)
600x900	750x750	600x900	750x750	600x900	750x750
600x1500	750x900	600x1500	750x900	750x750	900x900
750x750	900x900	750x750	900x900	900x900	1050x1050
750x900	900x1800	750x900	900x1800	1050x1050	1200x900
900x900	1050x1050	900x900	1050x1050	1200x600	
900x1800	1050x1500	900x1800	1050x1500	1200x900	
1050x1050	1200x900	1050x1050	1200x900	1200x1200	
1050x1500	1200x1200	1050x1500	1200x1200		
1200x600		1200x600			
1200x900		1200x900			
1200x1200		1200x1200			
1200x1500		1200x1500			
1200x1800		1200x1800			



1. In the event of a fire, actuators open high-level smoke clearance units and low level fresh air inlet vents.



2. This allows cool air into the building forcing the hot air and smoke out via the roof, providing a smoke-free layer for safe escape.



3. The smoke-free layer allows safe access for the fire to be fought and extinguished.

Product Builder

Step 1 Choose a model:

New

Generation



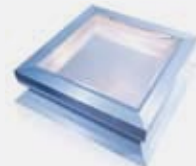
mardometrade
Dome Rooflights

Standard Dome



mardomeultra
Dome Rooflights

Architectural Dome



mardomehilite
Dome Rooflights

Maximum Daylight Dome

Special Products



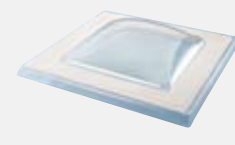
mardomepremier
Dome Rooflights

Aluminium Dome



mardomecircular
Dome Rooflights

Round Dome

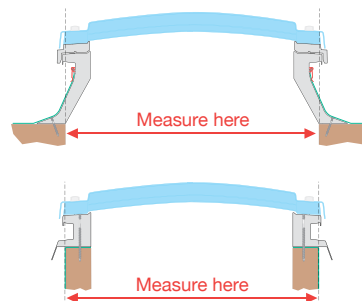


mardomereflex
Dome Rooflights

Glazing only
refurbishment unit

Step 2 Dome and Kerb Dimensions

Measure overall dimensions of the opening (length x width). Standard sizes are detailed in this brochure. All domes in the Mardome range are also available as direct fix glazing units with a direct fix kerb for attachment to an existing builders upstand. The Mardome kerb adaptor enables standard sized domes to be used in non-standard size upstands.



A. Mardome Trade /Ultra Kerb

B. Mardome Trade /Ultra Direct Fix Kerb

Step 3 Thermal Requirements

Select your required level of insulation. In order to achieve varying degrees of insulation Mardomes are available in single, double, triple and quadruple skin polycarbonate glazed units. Options to further improve thermal efficiency include standard glass or argon filled glass inner glazing and 25mm structured polycarbonate inner glazing. An average U-value for the rooflight area of 2.2 W/m²K is required to satisfy Part L Building Regulations 2006. To assist compliance with Part L, Brett Martin Daylight Systems recommend installing no less than triple skin glazed rooflights. New generation triple skin Mardome rooflights achieve a centre pane U-value¹ of 1.8 W/m²K and a U_g-value² which ranges from 1.25W/m²K for a 600x600mm dome to 1.51W/m²K for a 1200x2400mm dome. Higher performance glazing options can further reduce the U_g-value to as low as 0.95W/m²K contributing to a more energy efficient building and BREEAM credits.

New Generation Thermal Efficiency

	Centre Pane U-Value ¹ (W/m ² K)	U _g -Value ² (W/m ² K)	
		600x600mm	1200x2400mm
Triple Skin Polycarbonate	1.8	1.25	1.51
Double Skin Polycarbonate	2.7	1.54	2.09
Quad Skin Polycarbonate	1.4	1.12	1.25
Structured Polycarbonate Inner Glazing	1.2	1.06	1.13
Standard Glass Inner Glazing	1.21	1.06	1.13
Argon filled Glass Inner Glazing	0.9	0.96	

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

² U_g-value is thermal efficiency of the developed rooflight unit (calculated in accordance with NARM Technical Document NTD2 (2009)).

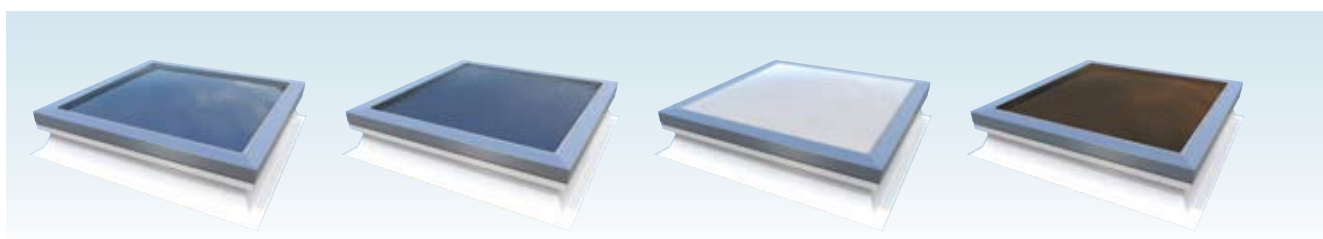


TECHNICAL SUPPORT: Further advice on Part L work is available from Brett Martin Daylight Systems' Technical Department.

Step 4 Glazing

All Mardome rooflights are glazed with impact resistant Marlon FSX Longlife polycarbonate, which is 200 times stronger but less than half the weight of glass. Featuring dual sided UV protection, Marlon FSX prevents up to 98% of damaging UV radiation from penetrating the sheet to the occupants beneath the rooflight. This also provides long-term weatherability. Select from clear, bronze and opal tints depending on your required level of light transmission or textured which allows privacy with good light transmission.

Tint	Lighting Effect	Light Transmission (%) DIN 5036		
		Double Skin	Triple Skin	Quad Skin
Clear	High Visibility	85%	78%	72%
Textured	Privacy	78%	72%	66%
Bronze	Solar Control	39%	36%	33%
Opal	Diffused Light & Solar Control	35%	32%	30%



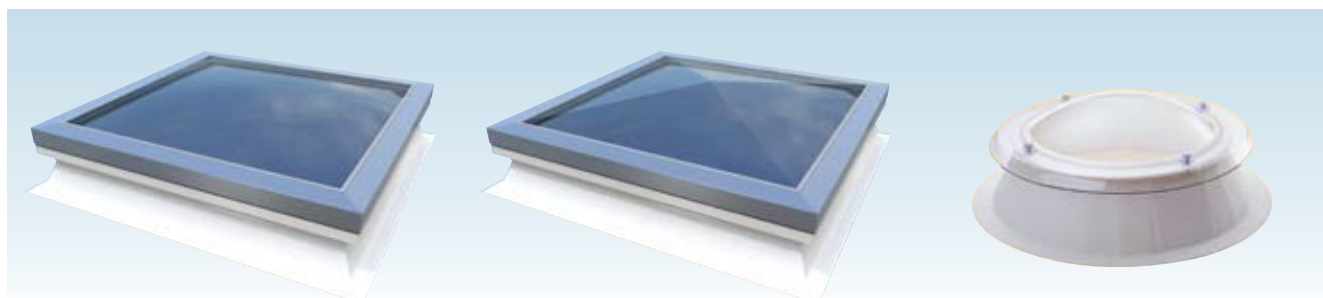
Clear	Textured	Opal	Bronze
<ul style="list-style-type: none"> • Maximum light transmission • Clarity of vision of views and objects through the dome 	<ul style="list-style-type: none"> • Combines privacy with high levels of light transmission • Impairs vision of views and objects through the dome 	<ul style="list-style-type: none"> • Maximised privacy • Soft diffused light transmission • Prevents solar glare and reduces solar heat gain • Impairs vision of views and objects through the dome 	<ul style="list-style-type: none"> • Reduces solar glare and heat gain • Provides a lower light transmission

Step 5 Acoustics

In new generation Mardomes an Acoustics Pack is available for use in applications where rain or external noise are considerations. This is effective in reducing rain penetration noise LiA by over 15dB to 47dB and should be specified to provide noise insulation and achieve BREEAM credits. (Not available with ventilated or opening domes.)

Step 6 Dome Shape

Mardomes are available in a selection of shapes including low rise dome, low rise pyramid or circular.



Low Rise Dome

Low Rise Pyramid

Circular

(Only available in Mardome Circular or Reflex domes)

Step 7 Ventilation

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.

Ventilation Type	Description	Rating
Trickle Ventilation (Louvre* or Hit and Miss)	Manually operated trickle ventilation provides background ventilation to the interior.	Provides 8400mm ² 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 ² Equivalent Area ventilation and provides superior protection against condensation

*Only available on Mardome Premier

Step 8 Opening

Select from a range of manual and powered opening options for high ventilation, smoke clearance and roof access.

Opening Type	Description	Opening Limits
Manual Opening	Hinged opening dome which is operated manually via a worm gear drive with an extension pole.	Opens to 300mm
Powered Opening	Powered hinged opening dome which is opened and closed using a control switch or remote control.	Opens to 300mm
Sensor Controlled Power Opening	Powered hinged opening dome which includes rain sensors for automatic operation.	Opens to 300mm
Smoke Clearance (SV30 and SV90)	Automatically opening rooflights which have been configured to function as part of a smoke clearance system. Requires separate 24v DC power supply.	30° or 90° opening
Access Hatch	To gain entry to a roof for maintenance or as an emergency exit. Unit held open by two gas struts.	90° opening

Industry Standards

Mardome rooflights are manufactured to the following industry standards:

- Mardome achieves Class B non-fragility in accordance with ACR[M]001:2005 providing safe, robust products which are resilient to impact and accidental damage.
- Mardomes can be specified to achieve a thermal performance well in excess of the requirements of Part L of the Building Regulations for a more thermally efficient building, lower carbon emissions and a positive contribution to BREEAM ratings, especially when combined with artificial lighting controls.
- Fully weathertight, the Mardome range is designed to comply with the requirements of BS EN 1873:2005 ensuring reliable all weather performance.
- All Mardomes are fully compliant with the fire requirements as set out in the UK Building Regulations. Please contact the Technical Department for specific details and fire certification.
- Mardome hit and miss trickle ventilation meets the requirements of BS EN 13141 Part 1 2004 for air flow, air leakage and weather tightness. A range of options including both background and purge ventilation can assist in satisfying the requirements of Part F as set out in the UK Building Regulations.
- The Mardome range has full BBA Approval. Refer to www.bbacerts.co.uk, certificate No.06/4385 for full details or a copy may be requested from the Technical Department.





Daylight Systems

UK and Ireland Sales Enquiries

Brett Martin Daylight Systems Ltd,
Sandford Close,
Aldermans Green Industrial Estate,
Coventry, West Midlands CV2 2QU
Tel: +44 (0) 24 7660 2022
Fax: +44 (0) 24 7660 2745
Email: daylight@brettmartin.com

For the latest information
visit the company's website:
www.daylightsystems.com



All reasonable care has been taken in the compilation of the information contained within this literature. All recommendations on the use of our products are made without guarantee as conditions of use are beyond the control of Brett Martin. It is the customer's responsibility to ensure that the product is fit for its intended purpose and that the actual conditions of use are suitable. Brett Martin pursues a policy of continuous product development and reserves the right to amend specifications without prior notice.