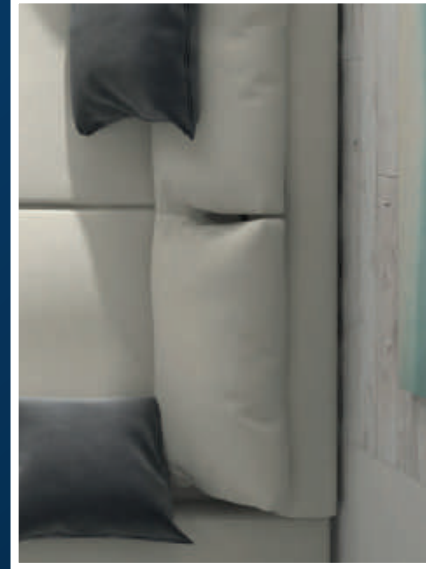
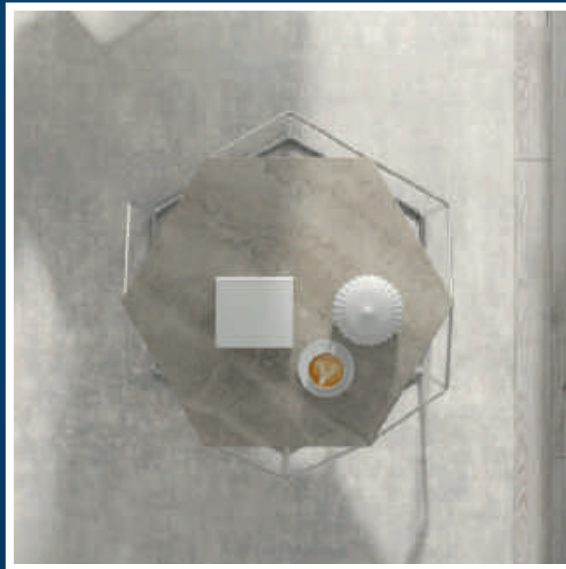
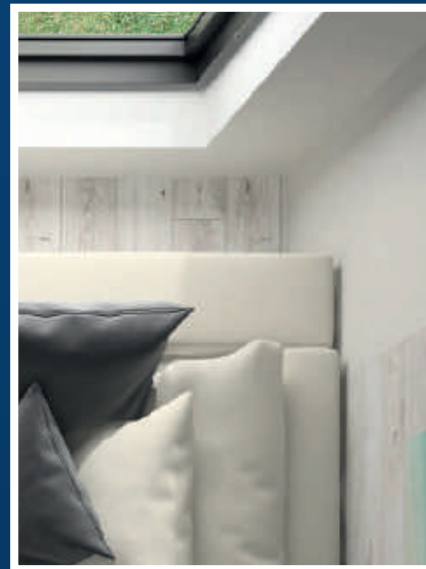
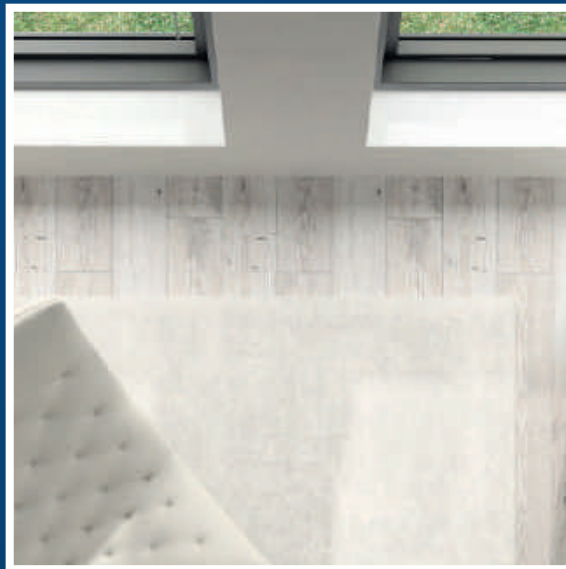


ROOFLIGHTS | SMOKE VENTS | ACCESS HATCHES

CATALOGUE

2020



RELEASE THE ENERGY SAVING BENEFITS OF NATURAL DAYLIGHT WITH MARDOME

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.

These rooflights, glazed in triple skin polycarbonate exceed the thermal requirements as set out in Part L of the Building Regulations, and can assist buildings meet their CO₂ emissions targets, especially when combined with artificial lighting controls to turn the artificial lighting down or off when there is adequate daylight levels, making sound business and environmental sense.



Daylight Systems

DESIGNED AND MANUFACTURED IN THE UK

Service and Value

Every Permardoor 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.

The Mardome Endorsement

The complete Mardome rooflight range is independently accredited by the British Board of Agrément (BBA) or by EN 12101 assessment, and is CE marked in accordance with BS EN 1873 or EN 12101, testifying Mardome's compliance with Building Regulations and good industry practice.

Technical Advice and Assistance

With a team of expert technical advisers on hand Permardoor 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.

THAT'S WHY PERMAROOF IS THE NATURAL CHOICE FOR ROOFLIGHTS.



MARDOME IS A FLEXIBLE CHOICE FOR THE FLAT ROOFING MARKET

Mardome dome rooflights are designed specifically for installation on flat and low pitched or curved roof structures where the roof pitch does not exceed 15°. Ideal for both new build and refurbishment projects, Mardome's extensive product range will satisfy every specification requirement and budget on projects from schools and hospitals to leisure centres, commercial buildings and residential properties. Designed to be compatible with a range of roofing systems including single ply, bituminous, metal and liquid applied; Mardome rooflights offer a range of kerb and fixing options ensuring there's a Mardome for every flat roofing application.



MARDOME TRADE STANDARD SPECIFICATION

Mardome Trade is the standard specification dome in the range and comes complete with a host of features and benefits as standard to satisfy a range of projects and budgets.

Contemporary design

- Sleek, contemporary aesthetics inside and out
- Aerodynamic low rise glazing unit
- Cabling and actuators hidden within the kerb on mains powered units

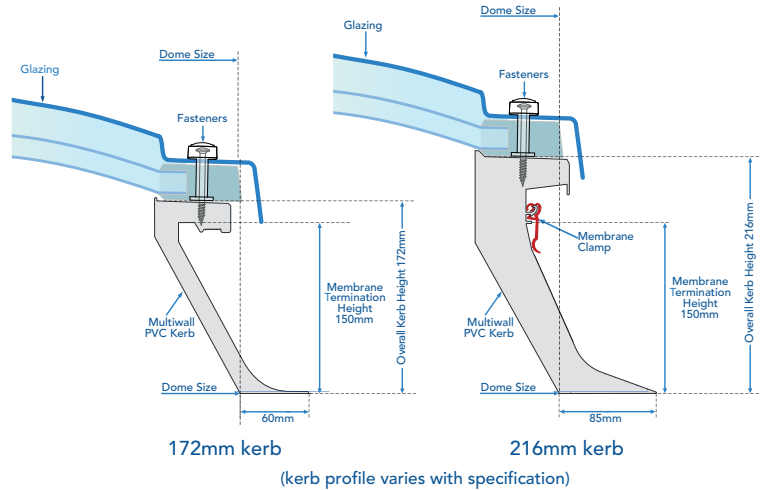
Maximum daylight

- Side walls of the Mardome kerb are designed with a steep slope to allow a larger glazing unit to be fitted for maximum daylight area



Thermally insulating

- Standard triple skin polycarbonate glazing option exceeds the thermal requirements of Part L with a centre pane U-value of 1.8 W/m²K and a U_d-value (thermal efficiency of the dome and kerb) as low as 1.26 W/m²K for a 600 x 600mm dome to 1.52 W/m²K for a 2400 x 1800mm dome.
- Higher performance glazing options (see page 17) can further reduce the U_d-value to as low as 0.96 W/m²K
- Multi-wall kerb contributes to the high insulation levels
- Full insulation across the whole width of the rooflight (including the fixing flange) on triple skin and better glazing variants to minimise risk of condensation



Mardome Trade
with Standard Kerb Cross Sections

Easy to install

- Delivered to site complete and ready to fit in robust packaging for easy handling
- Other kerb and fixing options available to suit project requirements
- Mardome kerb foot radius facilitates easy application of roof covering to the termination point without the need for timber fillets

Robust, durable and secure

- Secure fixings with tamper-proof caps
- Multi-wall Mardome PVC kerb is robust and resilient to damage during installation
- Marlon FSX Longlife polycarbonate, with UV protection for weatherability and an impact resistance 200 times greater than glass

Available in a range of standard sizes from 450 x 450 up to 2400 x 1800
– refer to the standard dome sizes table on page 14.

Options to meet every
specification and budget

mardometrade
Dome Rooflights

Designed to offer the widest flexibility available, a range of additional options means Mardome Trade and Ultra can be configured to meet every specification and budget:

- Maximum insulation
- Improved acoustics
- Increased ventilation
- Opening requirements

MARDOME TRADE PRODUCT BUILDER

This product builder will assist you choose the correct options to ensure your Mardome Trade and Ultra rooflights meet the specification for your application. All Mardome Trade and Ultra variants are available for both new build and refurbishment projects.

Step 1 Choose a model:



Step 2 Shape and standard size options



Shapes

All variants of Mardome Trade are available with the contemporary, low rise dome or low rise pyramid shaped glazing unit.

Standard sizes

A range of standard sizes is available as shown in the table below. [It's important to read the information in Step 3 to accurately measure rooflight and kerb size, if applicable, for your project.](#)

Standard Dome Sizes (mm) and Daylight Areas (m²)														
Nominal Dome Size mm	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
450	0.09	-	-	-	-	-	-	-	-	-	-	-	-	-
600	-	0.20	0.27	0.34	0.41	0.47	0.54	0.61	0.68	0.74	-	-	-	-
750	-	-	0.36	0.45	0.54	0.63	0.72	0.81	0.90	0.99	1.08	-	-	-
900	-	-	-	0.56	0.68	0.79	0.90	1.01	1.13	1.24	1.35	1.46	-	-
1050	-	-	-	-	0.81	0.95	1.08	1.22	1.35	1.49	1.62	1.76	1.89	-
1200	-	-	-	-	-	1.10	1.26	1.42	1.58	1.73	1.89	2.05	2.21	2.36
1350	-	-	-	-	-	-	1.44	1.62	1.8	1.98	2.16	2.34	2.52	2.7
1500	-	-	-	-	-	-	-	1.82	2.03	2.23	2.43	2.63	2.84	3.04
1650	-	-	-	-	-	-	-	-	2.25	2.48	2.70	2.93	3.15	3.38
1800	-	-	-	-	-	-	-	-	-	2.72	2.97	3.22	3.47	3.71

Non-Standard Sizes

Bespoke dome rooflight sizes and kerbs are also available to match the exact size of any opening, however a price premium and a longer lead time will apply. The simplest option for non-standard sizes is to oversail the existing opening by selecting the next standard size up of rooflight and kerb if fitting to a Mardome kerb - see Step 3, Option 1; or if fitting to a builders upstand, next standard size up of rooflight with the kerb adapter – see Step 3, Option 2b.

Step 3 Kerb and fixing options

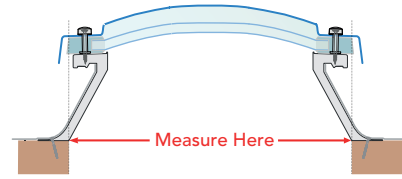
Each Mardome Trade rooflight can be supplied with a Mardome kerb or to fit a builders upstand.

Option 1 Fitting to Mardome Kerb

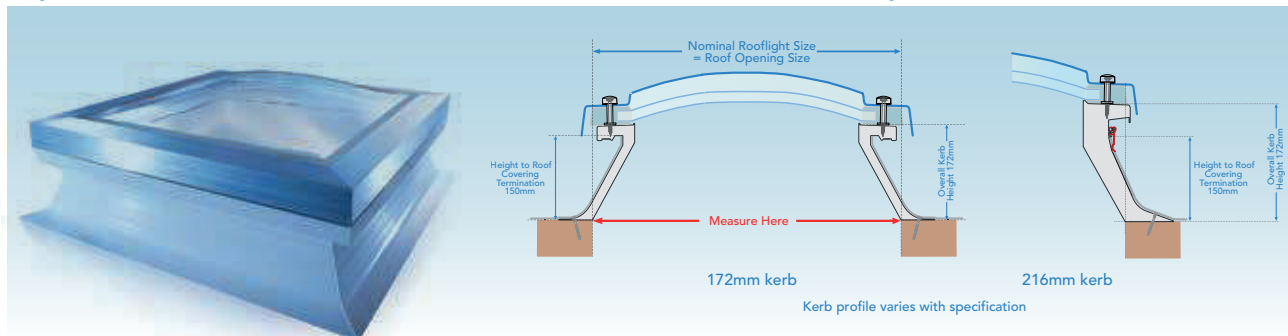
Important: When using the Mardome kerb option, nominal rooflight size should normally equal roof opening size.

Factory assembled Mardome kerbs in two waterproofing height options, 150mm and 300mm, are available for projects with no existing upstand and in a range of sizes to match 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 for a significantly larger glazing on top providing more daylight into the area beneath. All actuators on mains powered units are concealed within the kerb's walls giving a sleek and stylish internal look. The specially designed radiused base allows roof coverings to be applied to the kerb without the need for timber fillets.

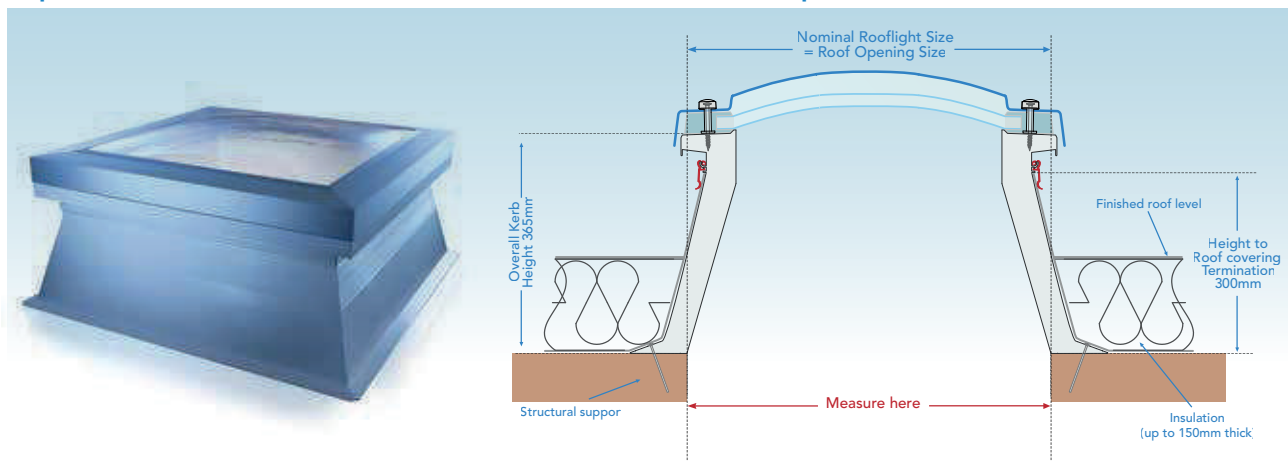
Measuring guidelines for fitting to Mardome kerb



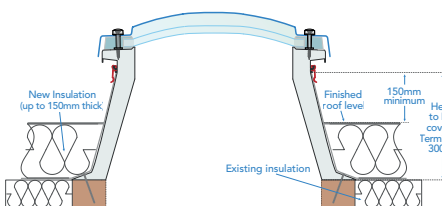
Option 1A - Mardome Standard Kerb - 150mm waterproofing height



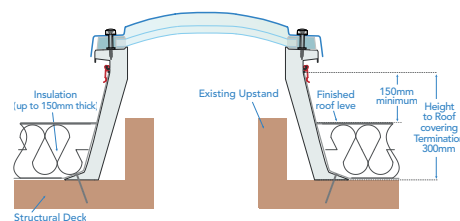
Option 1B - Mardome Tall Kerb - 300mm waterproofing height



- 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.



Refurbishment - When insulation thickness is increased



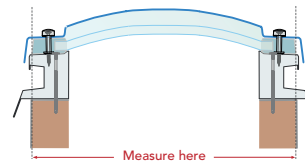
Refurbishment - Oversailing existing rooflight upstand

Option 2 Fitting to builders upstands

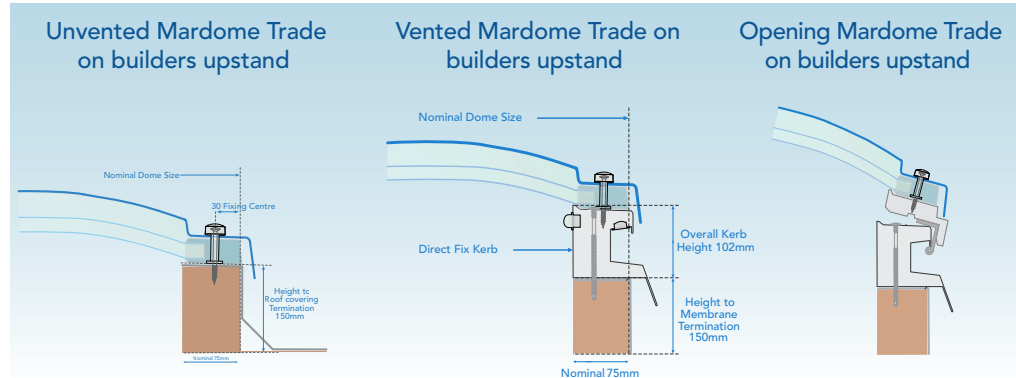
All Mardome Trade and Ultras can be fitted to builders upstands, provided by others, for both new build and refurbishment projects. It is recommended that the upstand measures at least 75mm wide.

Important: When using a builders upstand, nominal rooflight size should normally equal the external size of the upstand.

Measuring guidelines for fitting to builders upstand

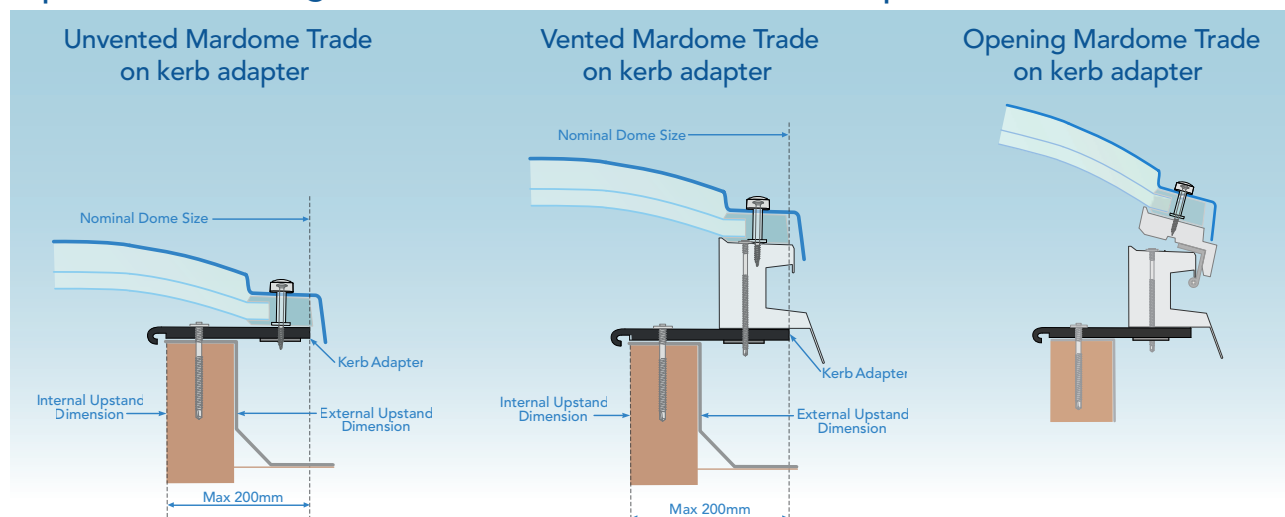


Option 2A - Fitting to standard sized builders upstands



An unvented Mardome Trade can be fitted directly to a builder's upstand. For vented or opening Mardome Trades and all Mardome a direct fix kerb is supplied as standard to facilitate fixing to the builders upstand.

Option 2B - Fitting to non-standard sized builders upstands



If nominal rooflight size (roof opening + builders upstand width) is a non-standard dome size then a Mardome Kerb Adapter can be supplied to allow standard sized domes to be fitted. The kerb adapter extends up to 200mm from the internal upstand dimension to accommodate a larger dome size. An unvented Mardome Trade can be fitted directly to the kerb adapter. For vented Mardome Trades and all Mardome Ultras, the direct fix kerb, supplied as standard, fits directly on to the kerb adapter.

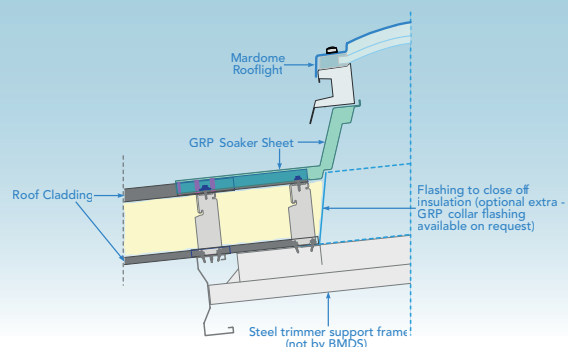
Option 3 Fitting to profiled metal roofs

Mardome Soaker

- Corrugated GRP unit with insulated upstand for fixing to most metal roofing profiles
- Available in 5 square sizes from 600x600 to 1200x1200
- Non-vented and non-opening domes fixed directly to soaker
- All vented and opening domes supplied with lower frame and fixed directly to soaker



Mardome Trade with Mardome soaker



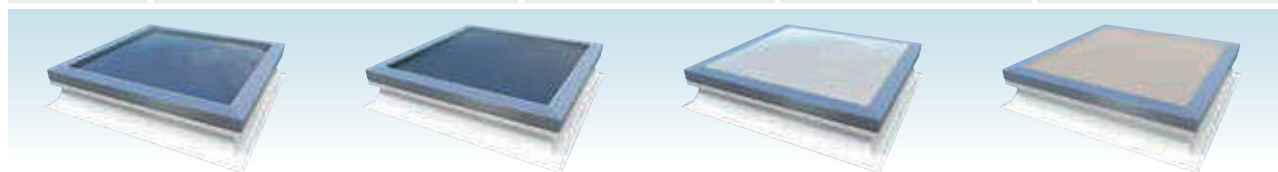
Step 4 Glazing options - light transmission and thermal performance

A range of glazing options is available to achieve the required light transmission and thermal insulation whilst a glass glazing option can also improve aesthetics as well as acoustic performance.

Light Transmission

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, protecting occupants beneath the rooflight whilst also ensuring long-term weatherability. The outer skin is available in a choice of finishes, Clear, Textured, Opal and Bronze as shown in the table below.

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%



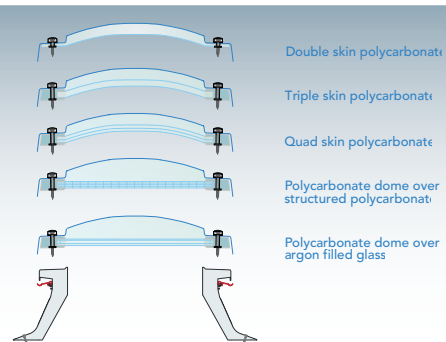
Clear	Textured	Opal	Bronze
<ul style="list-style-type: none"> Maximum light transmission Maximum clarity of vision of views and objects through the dome 	<ul style="list-style-type: none"> Combines privacy with high levels of light transmission Diffused daylight Impairs vision of views and objects through the dome 	<ul style="list-style-type: none"> Combines privacy with high levels of 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

Thermal Insulation

In order to achieve the required degree of insulation Mardomes are available in single, double, triple and quadruple skin polycarbonate glazed units, with each offering progressively better insulation. Part L of the Building Regulations 2013 specify a worst case average U-value for the rooflight area of 2.2 W/m²K and Brett Martin Daylight Systems recommends installing at least triple skin glazing to ensure compliance in both new build and refurbishment applications. Mardome Trade and Ultra triple skin rooflights have a centre-pane U-value* of 1.8 W/m²K and a U_a-value# as low as 1.26 W/m²K for a 600 x 600mm dome, and 1.52 W/m²K for a 2400 x 1800mm dome depending on specification.

Further options to improve thermal insulation are available offering a U_a-value as low as 0.96 W/m²K contributing to a more energy efficient building and assisting with BREEAM credits. A structured polycarbonate inner option improves insulation very cost effectively whilst an argon filled glass double glazed inner unit not only provides outstanding thermal insulation, but improved aesthetics and acoustic performance.

Thermal Efficiency			
	Centre Pane U-Value* (W/m ² K)	U _a -Value# (W/m ² K)	
		600x600mm	2400x1800mm
Double Skin Polycarbonate	2.7	1.55	2.10
Triple Skin Polycarbonate	1.8	1.26	1.52
Quad Skin Polycarbonate	1.4	1.13	1.26
Structured Polycarbonate Inner Glazing	1.2	1.06	1.13
Argon Filled Glass Inner Glazing~	0.9	0.96	



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

#U_a-value is a measure of the thermal efficiency of the whole rooflight (calculated in accordance with NARM Technical Document NTD2).

~ Glass glazing option is not available with the access hatch option and limits other opening options depending on size – see Step 7.

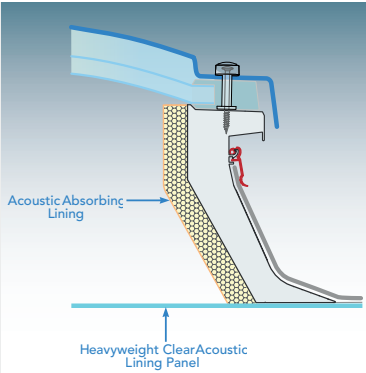
TECHNICAL SUPPORT: Further advice on Part L work is available Permaroof's Technical Department.

Step 5 Acoustic options

For applications where acoustic performance is particularly important the Mardome acoustic pack is an option. The acoustic pack is not available with opening or vented products, but is suitable for use with all other variants and has a positive contribution on acoustic attenuation levels and rain penetration noise and can assist in achieving BREEAM credits.

For a triple skin polycarbonate glazed Mardome Trade rain noise penetration tests give a reading of LiA = 62dB; when the acoustic pack is added this reduces transmission of rain noise by approximately two-thirds to 47dB (a reduction of 15dB, when every 10dB represents a halving of noise levels).

Note: An alternative to the acoustic pack is to specify a dome with the argon filled double glazed glass inner option. This gives acoustic performance of LiA=54dB – so 8dB better than a triple skin polycarbonate dome. Whilst not as effective as the Acoustic Pack, this option is available in conjunction with ventilation, and in some opening options, if required.



Step 6 Ventilation options

It's important to balance the thermal requirements of Part L with those relating to adequate air ventilation, covered by Part F of the Building Regulations, to control internal room temperature and maintain a comfortable indoor environment for building occupants and reducing the risk of mould growth from condensation build up. See further notes on condensation on page 23.

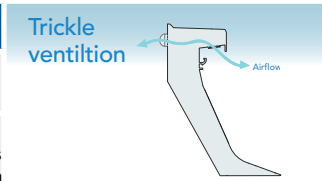
Mardome Trade and Ultra offer a range of ventilation options to meet all requirements in domestic and commercial buildings, from minimal air circulation through to purge ventilation and high extraction of airborne moisture and pollutants.

Background ventilation

All variants of Mardome Trade and Ultra can be specified with integral trickle ventilation, with an option of either “hit-and-miss” which can be manually opened and closed or automatic humidity controlled which automatically open the vents when humidity beneath the rooflight increases to a given level.

Mardome trickle vents meet the requirements of BS EN 13141 Part 1 2004 for air flow, air leakage and weather tightness. The vents are incorporated discreetly within the Mardome kerb or into a direct fix kerb adapter which is supplied as standard with any ventilated Mardome fitted to a builders upstand.

Ventilation Type	Description	Rating
Trickle Ventilation (Hit and Miss)	Manually operated trickle ventilation provides background ventilation to the interior.	Provides 8400mm² 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 7822mm² Equivalent Area ventilation and provides superior protection against condensation



Purge Ventilation

Adequate purge ventilation may be achieved by specifying manual or powered opening Mardome units. Please see Step 7

High extraction ventilation

Mardome Trade can also be specified with mechanical extraction ventilation to remove airborne moisture and pollutants from bathrooms, kitchens and working areas. Keeping with Mardome’s sleek looks the powered ventilation component has been integrated into the kerb with minimal obtrusion and perfectly complements Mardome’s streamlined internal styling.

Depending on the level of ventilation required, up to 4 fans can be fitted into the kerb on non-opening domes. Featuring single or double speed options, the ventilation units are controlled by wall switch and single speed fans can be fitted with a humidistat for automatic ventilation once humidity reaches a given level.

This high extraction ventilation option is only available on non-opening dome sizes 750 x 600 up to 2400 x 1800 and cannot be used in conjunction with the acoustic pack.

No of Fans	Speeds	Standard Control Method	Optional Control Method	Extract rate (m³/h @ 0Pa)	
				HIGH	LOW
1	High	On / off switch	Humidistat	220	-
1	High & Low	3 position switch (High / low / off)	-	220	50
2	High	On / off switch	Humidistat	440	-
2	High & Low	3 position switch (High / low / off)	-	440	110
3	High	On / off switch	Humidistat	660	-
4	High	On / off switch	Humidistat	880	-

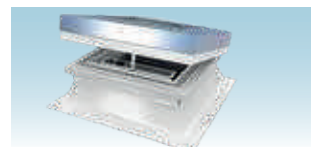


Step 7 Opening options

Mardome Trade can be supplied with a range of manual, electrically operated and solar powered opening options as well as access hatches. All opening options are available for both Mardome kerb or builders kerb options and in conjunction with trickle ventilation.

Opening Type	Description	Opening Limits
Manual Opening	Hinged opening dome which is operated manually via a worm gear drive with an extension pole.	300mm nominal
Mains Powered Opening (PCD)	Powered opening dome with completely concealed actuators, switch operated.	300mm nominal
Mains Powered Opening with Remote Control (PCR)	Powered opening dome which is opened and closed using a remote control (included)	300mm nominal
Sensor Controlled Mains Powered Opening (PCS)	Powered opening dome with remote control operation (included) and rain sensors for automatic closure in inclement weather.	300mm nominal
Solar Powered Opening with remote control or wireless sensor control	Solar powered opening with solar panel and actuators.	250mm nominal
Access Hatch	To gain entry to a roof for maintenance or as an emergency exit. Unit held open by two gas struts.	90 degree nominal

The solar powered opening option is ideal where energy conservation is important or for refurbishment projects since no electrical installation is required. Depending on the size of the dome, single or tandem opening actuators are factory fitted to the kerb and strategically positioned to absorb the sun's rays.



Mardome Trade Opening Options

Nominal Dome Size mm	600	750	900	1050	1200	1350	1500	1650	1800
600	600 x 600	600 x 750	600 x 900	600 x 1050	600 x 1200	600 x 1350	600 x 1500	600 x 1650	600 x 1800
750	-	750 x 750	750 x 900	750 x 1050	750 x 1200	750 x 1350	750 x 1500	750 x 1650	750 x 1800
900	-	-	900 x 900	900 x 1050	900 x 1200	900 x 1350	900 x 1500	900 x 1650	900 x 1800
1050	-	-	-	1050 x 1050	1050 x 1200	1050 x 1350	1050 x 1500	1050 x 1650	1050 x 1800
1200	-	-	-	-	1200 x 1200	1200 x 1350	1200 x 1500	1200 x 1650	1200 x 1800
1350	-	-	-	-	-	1350 x 1350	1350 x 1500	1350 x 1650	1350 x 1800
1500	-	-	-	-	-	-	1500 x 1500	1500 x 1650	1500 x 1800
1650	-	-	-	-	-	-	-	1650 x 1650	1650 x 1800
1800	-	-	-	-	-	-	-	-	1800 x 1800

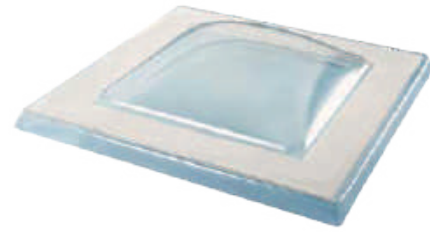
KEY	Mains Powered Opening (PCD, PCR & PCS)*	Manual Opening*	Solar Powered Opening**	Access Hatch**
	✓	✓	✓	✓
	✓	✓	✓	-
	✓	-	-	-

*Additional size restrictions if ordered with double glazed glass inner

**Not available with double glazed glass inner

Step 8 Accessory options

Security grille	Powered Pleated blinds	Manual opening pole
Steel security grille in white powder coated finish to suit dome size	Range of powered pleated blinds to suit dome size	Opening pole, extendable to 3m, for manual opening domes
		



MARDOME RELAX GLAZING ONLY

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 or pyramid option
- Can be mechanically fixed to existing kerbs
- Single, double and triple skin units available
- Available with standard 70mm or 100mm wide flange options to accommodate varying upstand sizes



Mardome Reflex Size Range

Nominal Dome Size mm	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
450	450 x 450	-	-	-	-	-	-	-	-	-	-	-	-	-
600	-	600 x 600	600 x 750	600 x 900	600 x 1050	600 x 1200	600 x 1350	600 x 1500	600 x 1650	600 x 1800	-	-	-	-
750	-	-	750 x 750	750 x 900	750 x 1050	750 x 1200	750 x 1350	750 x 1500	750 x 1650	750 x 1800	750 x 1950	-	-	-
900	-	-	-	900 x 900	900 x 1050	900 x 1200	900 x 1350	900 x 1500	900 x 1650	900 x 1800	900 x 1950	900 x 2100	-	-
1050	-	-	-	-	1050 x 1050	1050 x 1200	1050 x 1350	1050 x 1500	1050 x 1650	1050 x 1800	1050 x 1950	1050 x 2100	1050 x 2250	-
1200	-	-	-	-	-	1200 x 1200	1200 x 1350	1200 x 1500	1200 x 1650	1200 x 1800	1200 x 1950	1200 x 2100	1200 x 2250	1200 x 2400
1350	-	-	-	-	-	-	1350 x 1350	1350 x 1500	1350 x 1650	1350 x 1800	1350 x 1950	1350 x 2100	1350 x 2250	1350 x 2400
1500	-	-	-	-	-	-	-	1500 x 1500	1500 x 1650	1500 x 1800	1500 x 1950	1500 x 2100	1500 x 2250	1500 x 2400
1650	-	-	-	-	-	-	-	-	1650 x 1650	1650 x 1800	1650 x 1950	1650 x 2100	1650 x 2250	1650 x 2400
1800	-	-	-	-	-	-	-	-	-	1800 x 1800	1800 x 1950	1800 x 2100	1800 x 2250	1800 x 2400



MARDOME CIRCULAR DOME

Mardome Circular, as its name suggests is our round glazing unit which is specified for it's distinct styling and character. It is available as a glazing only option or complete with a strong and robust GRP kerb.

- Circular dome option
- Robust and weatherable GRP kerb
- Single, double and triple skin units available
- Non-opening and non-venting

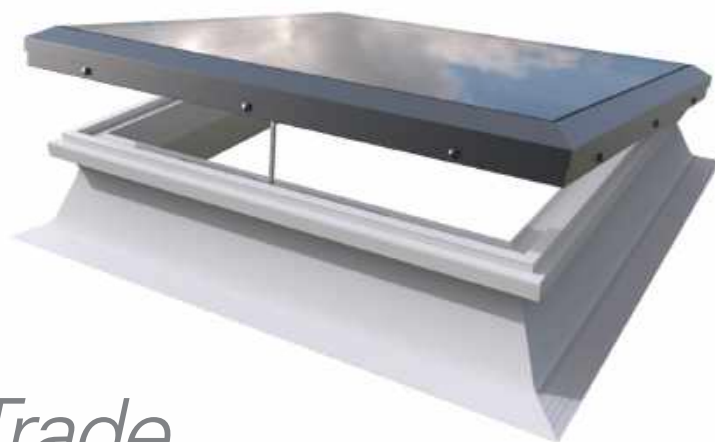
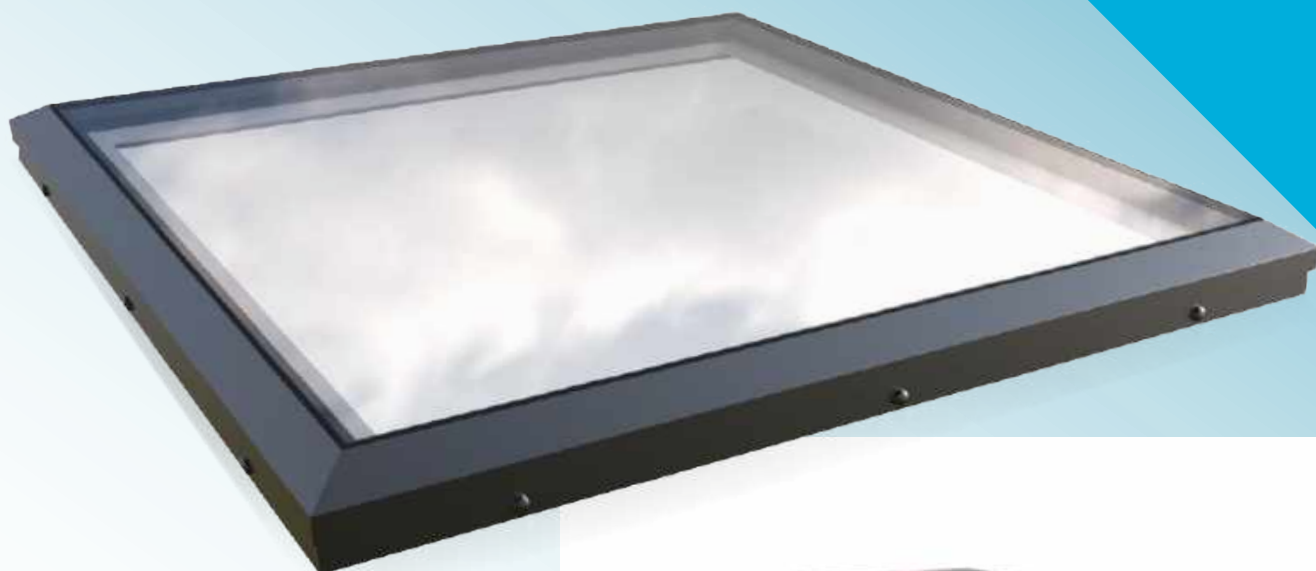


Mardome Circular	
Nominal dome size (diameter mm)	
	600
	750
	900
	1050
	1200
	1350
	1500
	1800





Daylight Systems



mardome*glassTrade*
Flat Glass Rooflights

Elegant, affordable daylight...*fast!*

Mardome Glass Trade is the latest addition to the extensive range of Mardome modular rooflights, manufactured in Coventry in the heart of the UK. This elegant flat glass rooflight provides quality features at highly competitive prices, with some variants delivered in as little as 48 hours from order.

Designed with both the building owner and installer in mind and to cater for the large and growing trend for flat roofed home extensions and light, bright open plan living. Mardome Glass Trade is also equally at home on larger commercial property developments giving homeowners, independent trades people and larger construction trades alike the ability to quickly and confidently bring stylish daylighting to all types of buildings.

Premium features

Being thermally broken and non-fragile as standard, with an array of opening, ventilation and fixing options to suit a multitude of requirements, Mardome Glass Trade is an efficient, safe, and versatile flat glass rooflight that can be relied upon.

Affordable and fast

Mardome Glass Trade has been designed for rapid, efficient manufacture and installation, delivering a quality flat glass rooflight in the budget and time frame that modern construction projects demand.

Performance and Design Features

Standard sizes in mm (Other/custom sizes also available)	600 x 600 750 x 750 900 x 600	900 x 900 1000 x 1000 1200 x 600	1200 x 900 1200 x 1200 1500 x 1000
Pitch	Suitable for mounting at pitches of 2–15°		
Framework	Aluminium frame Powder coated to RAL 7016 anthracite grey		
Glazing	6mm toughened outer, argon filled cavity, 9.5mm laminated inner		
Thermal Performance	Standard centre pane U-value of 1.1 W/m²K Thermally broken construction		
Non-fragility	Non-fragile to CWCT TN-92 (for class 2 roofs)		
Opening options	Manual worm drive operated via pole Powered via wall switch or optional remote and rain sensor		
Ventilation options	Manual or automatic hit and miss trickle ventilation Powered extraction ventilation		
Fixing options	Direct to builders upstand (includes additional uPVC frame if opening/ventilated) With 150mm uPVC kerb for fixing at roof surface level With 300mm uPVC kerb for fixing below insulation		

Glazed unit simply screw fixes to existing builders upstand or optional uPVC kerb.



Standard uPVC kerb provides 150mm roof membrane termination height.



Tall uPVC kerb provides 300mm membrane termination height for refurbishment jobs where extra insulation is being added to existing roof.



Manual opening option.



Powered opening option with concealed actuators.



MODULAR DOME ROOFLIGHTS

Designed to make optimum use of natural daylight, Em-Dome rooflights provide up to three times more daylight through a flat roof than a similar sized window in a vertical plane.



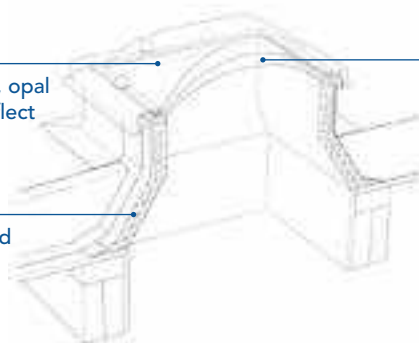
KEY FEATURES

- Over 40 sizes available from stock
- Competitively priced
- Next-day nationwide delivery on stock sizes
- Patented high-security factory fitted screw bolts as standard
- Now with white screw caps
- Range of insulated upstands
- Clear or opal diffused glazing stocked
- Polycarbonate Em-Domes are certified 'Non-Fragile'
- Wide range of ventilation options
- Delivery direct to customer's yard or site if required
- Available in single, double, triple or quad skin
- Square, rectangular and circular units in stock
- CE certified to EN1873
- Comprehensive range of proprietary accessories available

Available in clear, opal
diffused, heat reflect
or bronze finish

Range of insulated
upstands

Available in single,
double, triple or
quad skin



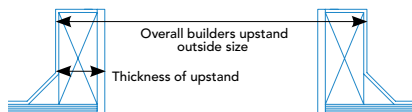
CHOOSING YOUR EM-DOME ROOFLIGHT

1 | UPSTAND

If there is an existing upstand, please provide:

External dimensions of the upstand

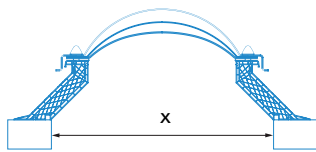
The thickness of the upstand



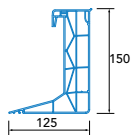
If a new upstand is required, please provide:

Roof opening size (Figure 'x')

Choice of upstand

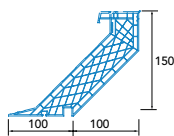


Upstand options



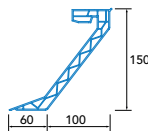
Em-Curb PVC 150mm ECO vertical upstand

- Good insulation and thermally broken
- Suitable for most flat roof waterproofing systems



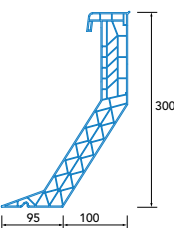
Em-Curb PVC 150mm ECO splayed upstand

- Most popular choice
- Economical
- Insulated and thermally broken
- Can accommodate controllable trickle ventilation in side walls
- Pre-finished internally
- Suitable for most flat roof waterproofing systems



Em-Curb PVC 150mm standard splayed upstand

- Good insulation and thermally broken
- Suitable for most flat roof waterproofing systems



Em-Curb PVC 300mm ECO splayed upstand

- For use on insulated roofs (up to 150mm insulation)
- Excellent insulation and thermally broken
- Can accommodate controllable trickle or rotating ventilation in side walls
- Suitable for most flat roof waterproofing systems

2 | GLAZING

What material?

Polycarbonate

- Recommended choice
- Impact tested to 1,200 Joules
- Highest fire rating available
- Certified 'Non-Fragile'

How many layers of glazing?



Single skin

- Suitable for unheated areas
- Specify with caution



Double skin

- Economical
- U-Value (2.68W/m²K)



Triple skin

- High insulation (U-Value of 1.78W/m²K)
- Better sound insulation
- Complies with all Building Regulations



Quad skin - SPECIAL ORDER

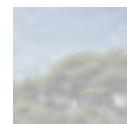
- Best insulation (U-Value of 1.24W/m²K)
- Excellent acoustic rating
- Complies with all Building Regulations

What type of glazing?



Clear

- Very high light transmission – up to 83%
- Direct light to area below
- Care needed to prevent 'solar-overheating'
- Same price as opal diffused



Opal diffused

- Maintains high light transmission (up to 58%) whilst evenly diffusing light to area below
- Increased privacy due to translucent finish
- Same price as clear



HeatReflect finish -SPECIAL ORDER

- Reflects 100% ultraviolet light
- Solar transmission as low as 37%
- Reflects up to 63% solar energy
- Options for pearl diffused, neutral clear and neutral diffused glazing
- Enquire for prices



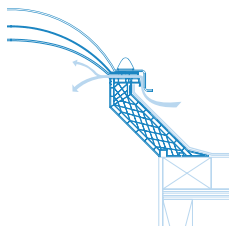
Pyramid design -SPECIAL ORDER

- 30° pyramid (trapezoidal when rectangular)
- Available in most square and rectangular sizes
- Enquire for prices
- Some sizes available from stock

CHOOSING YOUR EM-DOME ROOFLIGHT

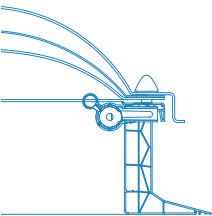
3 | VENTILATION

Are any ventilation options required?



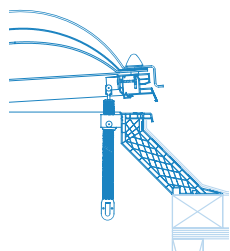
Permanent ventilation

- Spacer washer in Em-Dome fixings
- Economical option
- 5-10mm perimeter airspace
- Provides permanent background ventilation



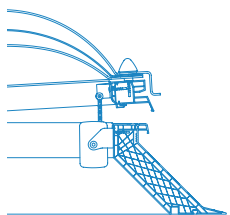
Controllable rotating trickle vents

- Easily adjustable
- Innovative fully insulated design
- Fitted to two sides of Em-Curb upstand or adaptors
- 8,000mm² ventilation area per pair of vents



Manual hinged opening

- Up to 300mm
- Proprietary design



Electric hinged opening

- Opens to 400 - 600mm
- Proprietary design
- Smoke ventilator range available



The Em-Dome ECO range features our most environmentally friendly rooflights yet. Maximum light with minimal heat and energy loss. We've boosted thermal and acoustic performance and maintained impressive light transmission, all without compromising on strength, security and aesthetic appeal.

Look for our **eco** symbol....!

4 | ACCESSORY OPTIONS

Are accessories required?



Operating rod

For controllable trickle ventilation or manual hinged opening.



Security grid

Providing extra strength to the completed installation whilst acting as a deterrent to potential intruders.



Powered extract fans

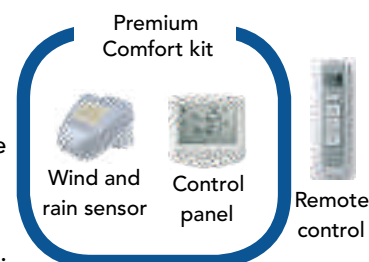
For when natural ventilation is insufficient.

Comfort controls

Providing advanced switching options to control comfort ventilation for electrically opening rooflights.

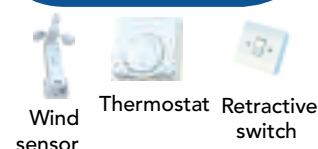
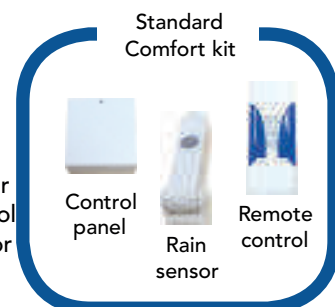
Premium Comfort Kit

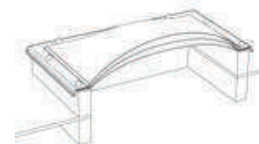
- For electric opening
- Wireless controls which include wireless open/close manual switch and internal and external temperature
- Wireless weather station which includes wind and rain sensor
- Option of hand held remote



Standard Comfort Kit

- For electric opening
- Option of retractive switch or comfort kit including a control panel, remote and rain sensor
- Further comfort control options available on request





DOMES ONLY. TO SUIT BUILDER'S UPSTAND

			Polycarbonate				Ventilation options (additional cost)			
	Size ref	To suit external upstand size (min 50mm thickness) (mm)		Double skin (£)	Triple skin (£)	Pyramid* available from stock in Triple Skin Diffused	Permanent ventilation space fixings (£)	Controllable rotating trickle vents (£)	Manual hinged opening (£)	Electric hinged opening (£)
Square	S1	500x500		149	193	▲	9	236	301	618
	S2	600x600		190	248	▲	9	248	315	631
	S3	650x650		210	276		9	252	329	645
	S4	700x700		226	293	▲	9	258	336	653
	S5	800x800		267	346	▲	9	269	355	672
	S6	850x850		292	379		9	275	365	682
	S7	900x900		298	387	▲	9	280	377	693
	S8	1000x1000		369	478	▲	9	292	397	713
	S9	1100x1100		418	540	▲	9	301	409	726
	S10	1150x1150		454	588		9	308	419	736
	S10a	1200x1200		484	625	▲	9	313	433	750
	S11	1300x1300		604	783		9	324	454	770
	S12	1400x1400		679	885		9	335	476	793
	S13	1500x1500		769	998		9	345	684	1636
	S15a	1800x1800		946	1227		9	380	740	1691
Rectangular	R3	500x800		193	251	▲	9	253	325	641
	R3a	500x1100		250	322		9	262	348	664
	R4	600x900		224	291		9	264	347	664
	R4a	600x1200		294	384	▲	9	281	378	694
	R4b	600x1800		461	618		9	312	433	749
	R5	700x1000		323	419		9	275	363	679
	R6	700x1300		439	572		9	292	384	700
	R7	800x1100		331	432	▲	9	286	378	695
	R7a	800x1400		438	565		9	301	410	726
	R7b	800x1700		538	701		9	318	443	759
	R10a	900x1200		405	527		9	297	404	721
	R11	900x1400		531	691		9	307	418	735
	R11a	900x1800		611	794		9	328	438	754
	R16	1000x1300		591	768		9	307	419	735
	R16a	1000x1600		599	779		9	324	454	770
	R17	1100x1400		579	754		9	318	443	760
	R17a	1100x1600		616	798		9	328	455	772
	R18	1100x1700		597	776		9	335	463	780
	R20	1100x2300		959	1245		9	368	720	1672
	R22b	1200x1800		675	876		9	345	646	1598
	R22c	1200x2400		950	1233		9	380	739	1691
Circular	C1	500 Ø		175	227		9	N/A	N/A	N/A
	C2	600 Ø		237	307		9	N/A	N/A	N/A
	C3	700 Ø		282	367		9	N/A	N/A	N/A
	C4	800 Ø		306	397		9	N/A	N/A	N/A
	C5	900 Ø		355	461		9	N/A	N/A	N/A
	C6	1000 Ø		405	527		9	N/A	N/A	N/A
	C7	1100 Ø		498	644		9	N/A	N/A	N/A
	C8	1200 Ø		575	745		9	N/A	N/A	N/A

Many other sizes available to order

All prices indicate stock items unless shown in blue, which are available for special order



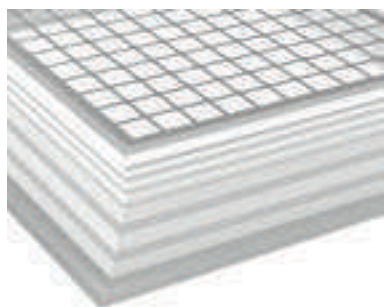
DOMES WITH 150MM STANDARD SPLAYED UPSTAND

			Polycarbonate				Ventilation options (additional cost)			
	Size ref	To suit roof opening size (mm)	Single skin (£)	Double skin (£)	Triple skin (£)	Pyramid* available from stock in Triple Skin Diffused	Permanent ventilation space fixings (£)	Controllable rotating trickle vents (£)	Manual hinged opening (£)	Electric hinged opening (£)
Square - PVC upstand	S1	600x600	212	253	296	▲	9	39	146	462
	S2	700x700	248	303	362	▲	9	39	149	465
	S3	750x750	270	325	391		9	39	157	473
	S4	800x800	282	345	412	▲	9	39	159	476
	S5	900x900	330	406	486	▲	9	39	168	483
	S6	950x950	351	436	524		9	39	171	487
	S7	1000x1000	366	446	535	▲	9	39	177	494
	S8	1100x1100	420	527	636	▲	9	39	186	503
	S9	1200x1200	457	584	706	▲	9	39	188	505
	S10	1250x1250	489	628	762		9	39	192	509
	S10a	1300x1300	516	662	803	▲	9	39	201	517
	S11	1400x1400	596	793	971		9	39	211	528
	S12	1500x1500	700	884	1089		9	39	223	539
	S13	1600x1600	813	988	1217		9	39	420	1,372
	S15a	1900x1900	901	1,201	1482		9	39	441	1,393
Rectangular - PVC upstand	R3	600x900	253	306	364	▲	9	39	152	469
	R3a	600x1200	318	389	461		9	39	167	483
	R4	700x1000	295	357	424		9	39	165	481
	R4a	700x1300	354	438	528	▲	9	39	177	493
	R4b	700x1900	500	630	787		9	39	201	518
	R5	800x1100	364	462	558		9	39	169	486
	R6	800x1400	465	597	730		9	39	173	490
	R7	900x1200	381	479	580	▲	9	39	174	490
	R7a	900x1500	479	605	732		9	39	189	506
	R7b	900x1800	563	719	882		9	39	206	523
	R10a	1000x1300	434	571	693		9	39	188	504
	R11	1000x1500	592	705	865		9	39	193	509
	R11a	1000x1900	619	811	994		9	39	189	506
	R16	1100x1400	579	765	942		9	39	193	510
	R16a	1100x1700	602	796	976		9	39	211	528
	R17	1200x1500	571	760	934		9	39	206	523
	R17a	1200x1700	619	817	999		9	39	207	523
	R18	1200x1800	616	801	980		9	39	209	525
	R20	1200x2400	965	1,206	1493		9	39	434	1,386
	R22b	1300x1900	683	897	1098		9	39	381	1,333
	R22c	1300x2500	959	1,203	1487		9	39	441	1,393
Circular - GRP upstand	C1	650	278	318	369		9	N/A	239	555
	C2	750	347	395	465		9	N/A	262	579
	C3	850	373	454	538		9	N/A	275	592
	C4	950	428	506	597		9	N/A	298	614
	C5	1050	474	566	672		9	N/A	309	625
	C6	1150	531	640	762		9	N/A	315	632
	C7	1250	589	745	892		9	N/A	349	666
	C8	1350	700	850	1020		9	N/A	N/A	N/A

Many other sizes available to order

All prices indicate stock items unless shown in blue, which are available for special order

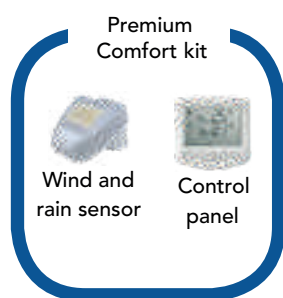
MODULAR ROOFLIGHT ACCESSORIES



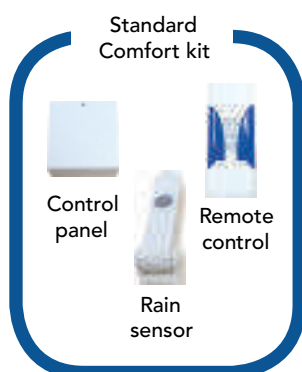
Vent Axia Solo fan



Centrif Duo fan



Premium Comfort kit



Standard Comfort kit



Remote control



Wind sensor



Thermostat



Retractive switch

Operating rods

- Manual spindle necessary for hinged manual opening ventilation
- Length options of 1.5m, 2m and 3m

Item	Price (£)
Operating rod – 1.5m	23
Operating rod – 2m	28
Operating rod – 3m	39

Security grid

- Increased security
- Provides extra strength to complete installation
- Visual deterrent to potential intruders

Item	Price (£)
Security grid	POA

Powered extract fans

- Used where natural ventilation is insufficient
- Designed for ventilating internal bathrooms, WCs and other small rooms
- Mounted in side wall of Em-Curb 300mm upstand
- Vent Axia Solo or Centrif Duo centrifugal options available

Item	Price (£)
Vent Axia Solo fan	299
Centrif Duo fan	445

Comfort control kits

- For electric opening
- Option of retractive switch or comfort kit including a control panel, remote control and rain sensor
- Further comfort control options available on request

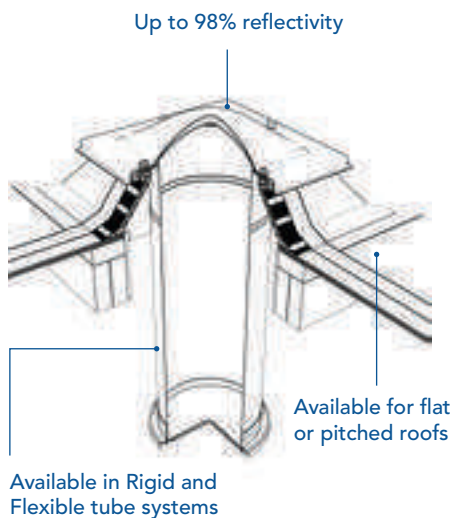
Standard Comfort Controls		Premium Comfort Controls	
Item	Price (£)	Item	Price (£)
Comfort kit	414	Wireless Comfort Control Kit	518
10A Retractive switch	36	Remote Control	235
Thermostat	60		
Wind sensor	220		

FLAT AND PITCHED ROOF TUBULAR SKYLIGHTS

Em-Tube tubular skylights effectively transmit natural daylight to internal rooms or areas that do not receive adequate daylight. Natural daylight is captured at roof level and directed downwards through the rigid or flexible tubes and then diffused at ceiling level.

KEY FEATURES

- An innovative and effective means of transmitting natural daylight to poorly lit areas
- Up to 20 times more light than a 100w bulb
- Improves physical, mental and emotional wellbeing
- Cost effective
- Minimal disturbance to roof and ceiling construction
- Easy to install
- Available in 'Rigid' and 'Flexible' tube systems
- Suitable for most pitched and flat roof types
- Comprehensive range of sizes and accessories available from stock
- Square low profile flat glass unit or polycarbonate dome
- Trickle ventilation option
- 98% reflectivity on Rigid Tube System

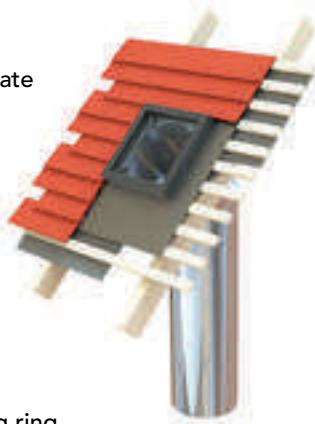


Em-Tube Rigid tube system - flat and pitched roof

Provides up to 1.0m overall length (0.7m for flat roof kit)
Extension sections available

Kit includes:

- Square low profile flat glass unit or polycarbonate dome
- Roof flashing panel
- Upper rigid tube section with bayonet connector
- Adjustable (0-45°) angle adaptor (not included in flat roof kit)
- Straight rigid tube section
- Lower rigid tube section
- Lower tube ceiling mounting ring
- Easy-fit magnetic, double glazed ceiling diffuser with ventilation facility
- Installation fixings pack
- Comprehensive fitting instructions

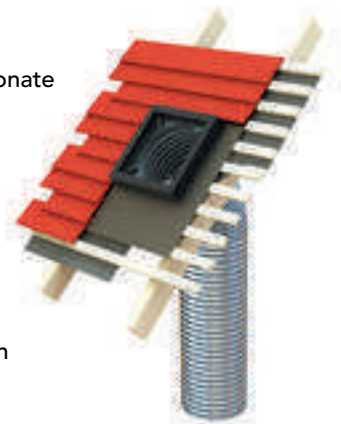


Em-Tube Flexible tube system - flat and pitched roof

Provides up to 3.0m overall length (2m for all flat roof kit sizes and 350mm size of pitched roof kits)

Kit includes:

- Square low profile flat glass unit or polycarbonate dome
- Roof flashing panel
- Flexible tube with bayonet connector
- Lower tube ceiling mounting ring
- Easy-fit magnetic, double glazed ceiling diffuser with ventilation facility
- Installation fixings pack
- Comprehensive fitting instructions



EM-TUBE ACCESSORIES AND GUIDE TO KITS

Which type? Rigid or flexible tube

Rigid tube system - Offers 98% reflection on inner surface. Up to 20 times more light (2200 lux) than a 100w bulb (105 lux). Suitable for longer tube lengths.

Flexible tube system - Provides up to 14 times more light (1500 lux) than a 100w bulb (105 lux). Suitable for shorter tube length. Easier to install.

Which roof type? Flat or pitched

Flat roof kit

Proprietary insulated PVCu Em-Curb – recommended option
To fit to builder's upstand curb

Pitched roof kit

'Slate Roof' kit – for 8-16mm tile thickness

'Tile Roof' kit – for 14-32mm tile thickness

Which size?

Nominal size (mm ø)	Features
350	Suitable for very small rooms – up to 2m x 2m for Flexible Tube System and 3m x 3m for Rigid Tube System. Fits between most conventional rafters/joists – eliminating need for trimming work.
450	Suitable for rooms up to 3.5m x 3.5m for Flexible Tube System and 4.5m x 4.5m for Rigid Tube System.
550	Suitable for rooms up to 5m x 5m for Flexible Tube System and 6m x 6m for Rigid Tube System.

For larger areas, use multiple units of optimum permutation. Transmitted light varies due to position on roof and adjacent trees or buildings.

Overall lengths. Each standard Em-Tube kit accommodates:

Rigid tube system - Up to 1.0m (0.7m for flat roof kits)

Flexible tube system - Up to 3.0m (2.0m for flat roof kits and 350mm size of pitched roof kits)

Extension pieces

625mm + 1250mm extension pieces are available in rigid tube – these are suitable for extending the Flexible and Rigid Tube Systems. Flexible extension tubing is also available.

Accessories

Em-Curb upstand for flat roof applications

- Economical and effective alternative to builder's upstand curb
- Compatible with most flat roof finishes
- Extruded PVC
- 150mm high

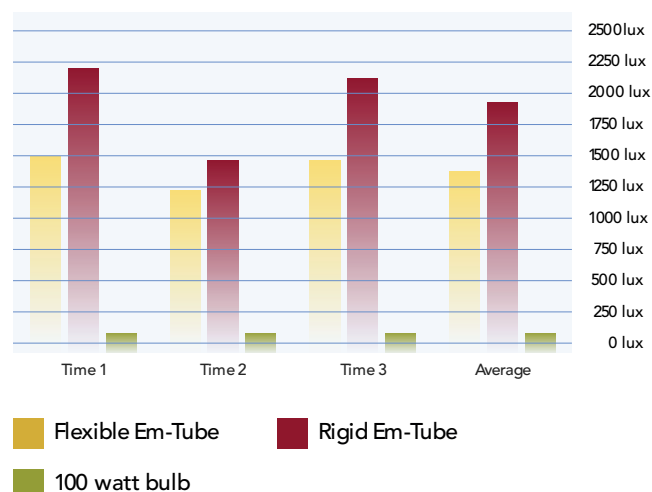


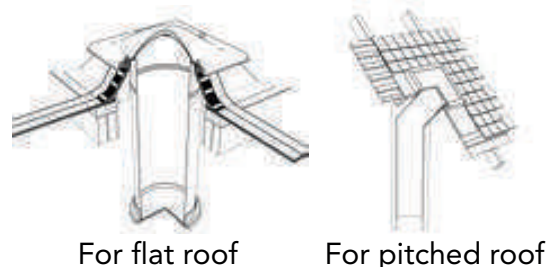
Em-Tube light kit

- Provides 24hrs single light source no need for separate light fitting
- 240V 60watt
- Specially designed for Em-Tubes
- Cost effective



Light intensity at three times during one day





TUBULAR SKYLIGHTS - FLAT ROOF. TO SUIT BUILDER'S UPSTAND

Em-Tube for flat roof

Ref	Nominal size (mm Ø)	External upstand size (mm)	Internal upstand size (mm)	Rigid Tube System (£)	Flexible Tube System (£)
ETF35	350	520 x 520	400 x 400	494	322
ETF45	450	620 x 620	500 x 500	661	383
ETF55	550	670 x 670	550 x 550	795	435

TUBULAR SKYLIGHTS - FLAT ROOF. WITH EM-CURB UPSTAND

Em-Tube for flat roof

Ref	Nominal size (mm Ø)	Roof opening size (mm)	Rigid Tube System (£)	Flexible Tube System (£)
ETF35	350	350	597	450
ETF45	450	460	774	496
ETF55	550	550	909	550

TUBULAR SKYLIGHTS - PITCHED ROOF (TILED OR SLATE)

Em-Tube for pitched roof

Ref	Nominal size (mm Ø)	Space needed between joists/rafters (mm)	Rigid Tube System (£)	Flexible Tube System (£)
ETT35	350	350	566	346
ETT45	450	460	781	383
ETT55	550	550	957	435

TUBULAR SKYLIGHTS - ACCESSORIES

Em-Tube accessories

Ref	Nominal size (mm Ø)	Description	Unit price (£)
ET35R-EXT625	350	625mm long Rigid pipe extension	88
ET35R-EXT1250	350	1250mm long Rigid pipe extension	173
ET35R-AA	350	Angle adaptor	73
ET45R-EXT625	450	625mm long Rigid pipe extension	95
ET45R-EXT1250	450	1250mm long Rigid pipe extension	190
ET45R-AA	450	Angle adaptor	123
ET55R-EXT625	550	625mm long Rigid pipe extension	114
ET55R-EXT1250	550	1250mm long Rigid pipe extension	227
ET55R-AA	550	Angle adaptor	164
ETEL	-	Electric light unit	73

All prices indicate stock items unless shown in blue, which are available for special order

SELF-CLEANING GLASS ROOFLIGHT

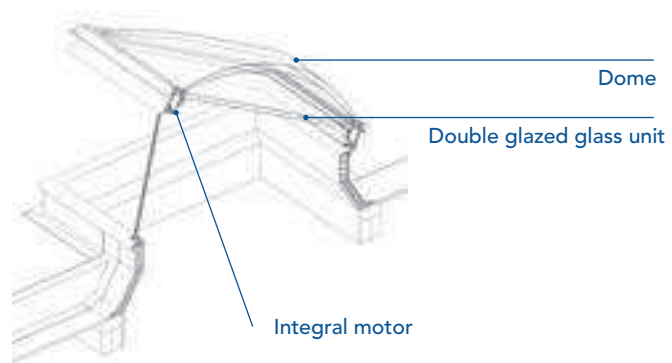
The Em-View incorporates a roof dome and double glazed glass unit securely housed in a PVC frame, providing exceptional sound insulation and thermal value.

The patented Em-View comes in a wide range of sizes and fits the entire Em-Dome and Em-Curb range, making it highly versatile and suitable for most applications.



KEY FEATURES

- Available in 15 sizes from stock
- Fixed, manual, electric or access opening options available
- Range of insulated upstands
- Provides excellent sound insulation from rain and hail
- Highly energy efficient – U-Value of $0.64\text{W/m}^2\text{K}$ with quad skin dome
- Impact resistant
- CE marked to EN1873
- Whitesales 10-year guarantee for rooflights and upstands
- Whitesales 2-year guarantee for electric components



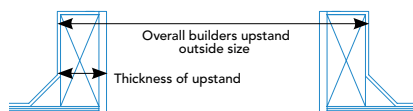
CHOOSING YOUR EM-VIEW ROOFLIGHT

1 | UPSTAND

If there is an existing upstand, please provide:

External dimensions of the upstand

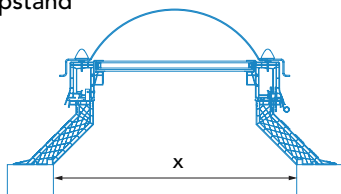
The thickness of the upstand



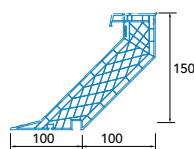
If a new upstand is required, please provide:

Roof opening size (Figure 'x')

Choice of upstand

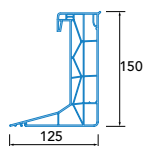


Upstand options



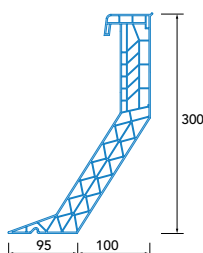
Em-Curb PVC 150mm ECO splayed upstand

- Insulated and thermally broken
- Can accommodate controllable trickle ventilation in side walls
- Pre-finished internally
- Suitable for most flat roof waterproofing systems



Em-Curb PVC 150mm ECO vertical upstand

- Most popular choice
- Provides a vertical internal finish
- Insulated and thermally broken
- Can accommodate controllable trickle vents
- Pre-finished internally
- Suitable for most flat roof waterproofing systems



Em-Curb PVC 300mm ECO splayed upstand

- For use on insulated roofs (up to 150mm insulation)
- Excellent insulation and thermally broken
- Can accommodate controllable trickle or rotating ventilation in side walls
- Suitable for most flat roof waterproofing systems

2 | GLAZING

Glass options



Double glazed

- Good insulation
- Good sound insulation
- Low E argon filled

Polycarbonate Dome options



Single skin

- Recommended choice
- U-Value 0.95W/m²K



Double skin

- Economical
- U-Value 0.82W/m²K



Triple skin

- High insulation
- U-Value 0.72W/m²K



Quad skin -SPECIAL ORDER

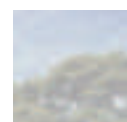
- Market leading insulation values
- U-Value 0.64W/m²K

What type of glazing?



Clear

- Recommended choice
- High light transmission



Opal diffused

- Maintains high light transmission whilst evenly distributing light to area below
- Increased privacy due to translucent finish



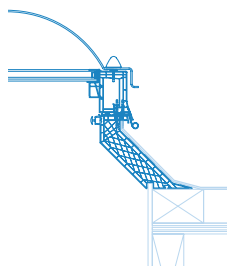
HeatReflect finish -SPECIAL ORDER

- Reflects 100% ultraviolet light
- Solar transmission as low as 34%
- Reflects up to 66% solar energy

CHOOSING YOUR EM-VIEW ROOFLIGHT

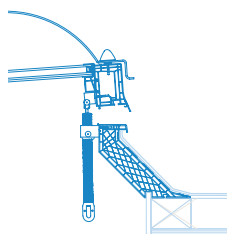
3 | VENTILATION

Are any ventilation options required?



Controllable trickle

- Installed in side wall of upstand or adaptor
- Controllable trickle background ventilation
- Up to 8000mm² ventilation area per pair of vents



Manual hinged opening

- Opens up to 300mm
- Proprietary design
- Maximum ventilation area allows rapid air movement

4 | ACCESSORY OPTIONS

Are accessories required?



Operating rod

For manual hinged opening

SELF-CLEANING ROOFLIGHT TO SUIT BUILDER'S UPSTAND



			Glazing			Ventilation options (additional cost)	
	Size ref	To suit external upstand size (mm)	Double glazed glass with single skin dome (£)	Double glazed glass with double skin dome (£)	Double glazed glass with triple skin dome (£)	Manual hinged opening (£)	Electric hinged opening (£)
Square	S2	700x700	58	614	669	165	N/A
	S4	800x800	59	674	736	165	423
	S5	900x900	71	779	854	175	438
	S7	1000x1000	78	844	927	180	459
	S8	1100x1100	85	1008	1110	186	443
	S9	1200x1200	86	1095	1208	186	423
	S11	1400x1400	99	1459	1625	320	593
	S12	1500x1500	106	1565	1756	N/A	608
	S13	1600x1600	119	1917	2129	N/A	650
Rectangular	R3	600x900	58	618	671	165	N/A
	R5	800x1100	71	908	998	176	418
	R7	900x1200	84	911	1005	186	485
	R11	1000x1500	97	1221	1369	201	500
	R12	1000x2000	111	1754	1954	330	459
	R17a	1200x1700	106	1675	1845	N/A	495

GLASS ROOFLIGHTS ACCESSORIES



Operating rods

- Manual spindle necessary for hinged manual opening ventilation
- Length options of 1.5m, 2m and 3m

Item	Price (£)
Operating rod – 1.5m	23
Operating rod – 2m	28
Operating rod – 3m	39

Standard Comfort control kit

- For electric opening
- Option of retractive switch or comfort kit including a control panel, remote control and rain sensor
- Further comfort control options available on request

Item	Price (£)
Comfort kit	414
10A Retractive switch	36
Thermostat	60
Wind sensor	220

Premium Comfort control kit

- For electric opening
- Wireless controls which include open/close manual switch and internal and external temperature
- Wireless weather station which includes wind and rain sensor
- Option of hand held remote

Item	Price (£)
Wireless Comfort Control kit	518
Remote Control	235

Whitesales Smartphone App

Item	Price (£)
App controls for home automation	POA

Standard Comfort kit



Control panel



Rain sensor



Remote control



Wind sensor



Thermostat



Retractive switch

Premium Comfort kit



Wind and rain sensor



Control panel



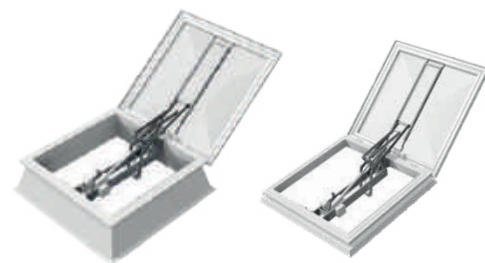
Remote control



SMOKE AND ACCESS

PROVIDES
RELEASE FOR
SMOKE AND
HEAT





MARDOME TRADE SV SMOKE VENT ROOFLIGHT

Mardome Trade Smoke Vent Rooflights are individual polycarbonate domes intended for easy installation on flat roofs of all modern building types to provide natural smoke and heat exhaust, as well as comfort ventilation.

Designed, fully tested and certified in accordance with EN 12101-2, they meet standards for safety, security, non-fragility and fire safety and we offer the full guarantee of an established, accredited UK manufacturer.

Mardome Trade Smoke Vent Rooflights not only allow specifiers to source both rooflight and smoke vent products from a single source, but also offer a contemporary, reliable and robust smoke system which maximises natural light in both new and refurbished buildings.

- Thermal performance – triple skin for optimal thermal performance & resistance to condensation (double skin also available)
- Shape - curved dome or pyramid profile
- Glazing Tint - clear, textured, bronze, opal
- Kerb - available complete with kerb, or with direct fix frame for fitting to builders upstand
- Accessories - control panel, smoke detector, fire switch, fireman's priority switch

Optional wind
deflectors
also available
for improved
aerodynamic
performance

Mardome Trade Smoke Vent Rooflights Size Range

Nominal Dome Size mm	1050	1200	1350	1500	1650	1800
1050	1050 x 1050	1200 x 1050	1350 x 1050	1500 x 1050	1650 x 1050	1800 x 1050
1200	-	1200 x 1200	1350 x 1200	1500 x 1200	1650 x 1200	1800 x 1200
1350	-	-	1350 x 1350	1500 x 1350	1650 x 1350	1800 x 1350
1500	-	-	-	1500 x 1500	1650 x 1500	1800 x 1500
1650	-	-	-	-	1650 x 1650	1800 x 1650
1800	-	-	-	-	-	1800 x 1800

ACCESS HATCHES

The flexibility to tailor Mardome Trade and Ultra rooflights means an access hatch can be specified as the opening option providing safe, easy access to roof spaces for roof maintenance and other utility purposes or to open up roof spaces for terraces or roof gardens.

Mardome Trade and Ultra access hatch rooflights feature internal opening mechanisms incorporating hinged dome unit and gas springs to facilitate a 90° opening. Units come complete and ready to fit. When in the open position, the dome unit is supported by the gas struts.

Mardome access hatches can be configured to meet a range of specification needs including insulation, security and light transmission, and have a variety of kerb options to satisfy installation requirements on site.

The step by step product selector on pages 14 to 17 will assist you in meeting your specification requirements.

Mardome Access Hatches							
Nominal Dome Size mm	900	1050	1200	1350	1500	1650	1800
750	750 x 900	750 x 1050	750 x 1200	750 x 1350	750 x 1500	750 x 1650	750 x 1800
900	900 x 900	900 x 1050	900 x 1200	900 x 1350	900 x 1500	900 x 1650	900 x 1800
1050	-	1050 x 1050	1050 x 1200	1050 x 1350	1050 x 1500	1050 x 1650	-
1200	-	-	1200 x 1200	-	-	-	-



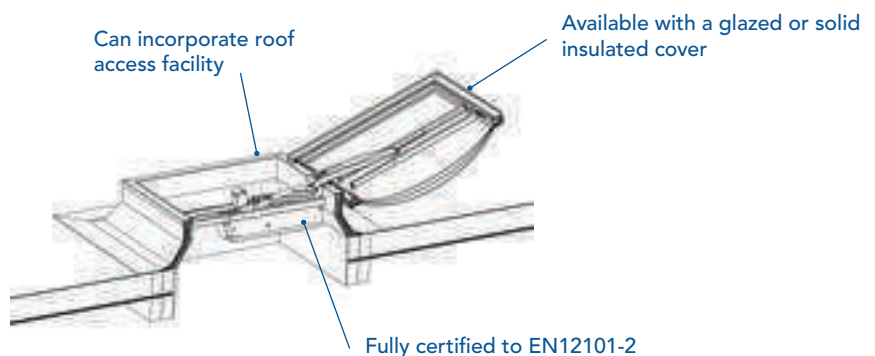
SMOKE VENT

Em-Vent smoke vents are electrically operated smoke vents, fully certified to BS EN 12101-2, that allow the release of smoke and heat from buildings in the case of fire. This ensures key escape routes such as stairwells and corridors stay accessible with minimal smoke build-up.



KEY FEATURES

- 25 sizes available from stock
- Fully certified to BS EN 12101-2
- Compliant with Building Regulation AD B and AD L
- Opens to 160° within 60 seconds
- Can incorporate roof access facility
- Provides natural comfort ventilation
- Impact resistant to EN 1873 1200 Joules and is therefore certified non-fragile
- Available with a glazed or solid insulated lid
- Range of insulated upstands



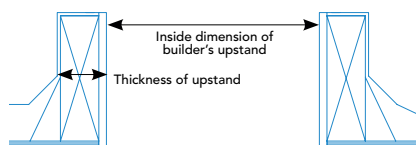
CHOOSING YOUR EM-VENT SMOKE VENT

1 | UPSTAND

If there is an existing upstand, please provide:

Internal dimensions of the upstand

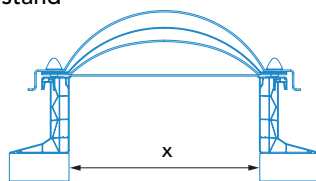
The thickness of the upstand



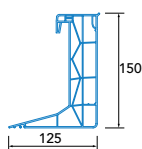
If a new upstand is required, please provide:

Roof opening size (Figure 'x')

Choice of upstand

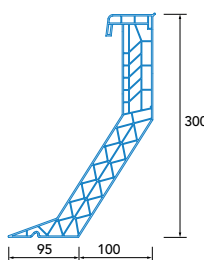


Upstand options



Em-Curb PVC 150mm ECO vertical upstand

- Good insulation and thermally broken
- Suitable for most flat roof waterproofing systems
- Needs to be installed to a builder's upstand of at least 150mm above roof level



Em-Curb PVC 300mm ECO splayed upstand

- For use on insulated roofs (up to 150mm insulation)
- Excellent insulation and thermally broken
- Suitable for most flat roof waterproofing systems

2 | GLAZING

What material?

Polycarbonate

- Allows light to area below
- Impact tested to 1200 Joules
- Highest fire rating available
- Certified 'Non-Fragile'

Aluminium

- Fully insulated 32mm solid panel
- Increased privacy

Glazing options



Double skin polycarbonate

- Economical
- U-Value 2.68W/m²K



Triple skin polycarbonate

- High thermal insulation (1.78W/m²K)
- Good sound insulation
- Complies with all Building Regulations



Solid aluminium insulated cover

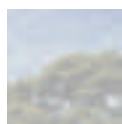
- Fully insulated aluminium cover
- High level of thermal insulation (U-Value of 0.80W/m²K)
- Superior noise insulation

What type of glazing?



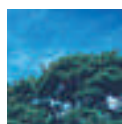
Clear

- Very high light transmission – up to 83%
- Direct light to area below
- Care needed to prevent 'solar-overheating'



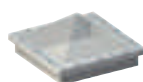
Opal diffused

- Maintains high light transmission (up to 58%) whilst evenly diffusing light to area below
- Increased privacy due to translucent finish



HeatReflect - SPECIAL ORDER

- Reflects 100% ultraviolet light
- Solar transmission as low as 37%
- Reflects up to 63% solar energy
- Options for pearl diffused, neutral clear and neutral diffused glazing



Pyramid design - SPECIAL ORDER

- 30° pyramid (trapezoidal when rectangular design)
- Available in most square and rectangular sizes

CHOOSING YOUR EM-VENT SMOKE VENT

3 | ACCESSORY OPTIONS



Single Zone Control Panel (EVSCP24)

Designed to control the operation of electric opening systems for fire and comfort ventilation. Visual LED indicators and open and close commands to front panel, and 72hr battery back-up. May be networked as part of a building management system (BMS) or as a complete standalone system. Certified in accordance with EN12101-10 2005 Class A (double supply).



Comfort Switch (EVSCS)

Retractive switch with centre off for manual open & close, supplied with a surface mount single box.



Keyswitch (EVSKS)

Designed to control the open & close operation of the smoke vent when used as an access hatch.



Fireman's Priority Switch (EVSFPS)

Developed to provide the highest priority control. Open and close button with visual LED status symbol.



Wind/Rain Sensor (EVSWRS)

Used with a room thermostat to automatically close the smoke vent in the event of rain or high wind speed.



Manual Control Point (EVSMCP)

Visual LED indication of status, sound indicator and reset function. The break glass can be opened to allow the smoke vent system to be tested from any control point.



Smoke Detector (EVSSD)

Early fire detection incorporates a visual LED display when activated.



Thermostat (EVST)

Used for automatic opening and closing of the smoke vent when operating in comfort cooling mode.



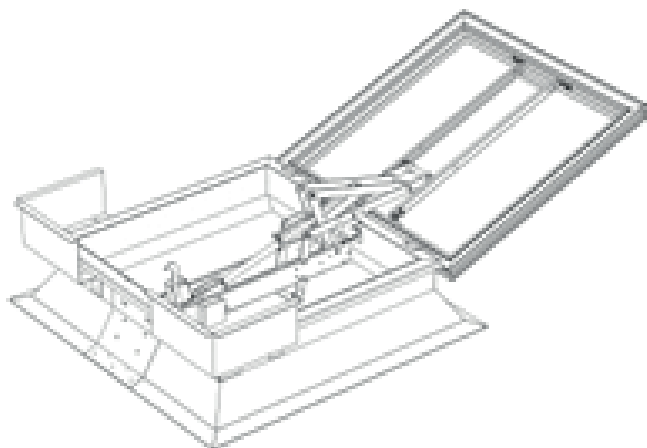
SMOKE VENT TO SUIT BUILDER'S UPSTAND

	Size ref	To suit internal upstand size (mm)	Geometric Area (Av) (m²)	Aerodynamic Free Area (Aa) (m²)*	Glazing			
					Double skin (£)	Triple skin (£)	Solid insulated cover (£)	Pyramid available
Square	S5	700x700	0.49	0.29	2302	2382	2302	3
	S6	750x750	0.56	0.34	2340	2428	2340	3
	S7	800x800	0.64	0.38	2362	2451	2362	3
	S8	900x900	0.81	0.49	2463	2572	2463	3
	S9	1000x1000	1.00	0.61	2389	2502	2389	3
	S10	1050x1050	1.10	0.67	2624	2758	2624	7
	S10a	1100x1100	1.21	0.74	2670	2812	2670	3
	S11	1200x1200	1.44	0.88	2825	3003	2825	3
	S12	1300x1300	1.69	1.03	2938	3144	2938	3
	S13	1400x1400	1.96	1.20	3250	3479	3250	3
Rectangular	R7	700x1000	0.70	0.42	2431	2532	2431	3
	R7a	700x1300	0.91	0.55	2589	2716	2589	7
	R7b	700x1600	1.12	0.67	2737	2900	2737	7
	R7y	700x2200	1.54	0.92	3447	3695	3447	7
	R10a	800x1100	0.88	0.53	2551	2672	2551	3
	R11	800x1300	1.04	0.62	2701	2861	2701	3
	R11a	800x1700	1.36	0.82	2829	3012	2829	7
	R16	900x1200	1.08	0.65	2761	2938	2761	7
	R16a	900x1500	1.35	0.81	2828	3008	2828	7
	R17	1000x1300	1.30	0.79	2782	2956	2782	3
	R17a	1000x1500	1.50	0.92	2856	3038	2856	7
	R18	1000x1600	1.60	0.98	2843	3023	2843	3
	R20	1000x2200	2.20	1.36	3641	3928	3641	3
	R22b	1100x1700	1.87	1.16	3121	3322	3121	3
	R22c	1100x2300	2.53	1.57	3655	3938	3655	7

All prices indicate stock items unless shown in red, which are available for special order

Item	Price (£)
Pair of Aluminium Wind Deflectors	182

*Aerodynamic Free Area (Aa) is the Geometric Area (Av) multiplied by the coefficient of Discharge (Cv). Values given as calculated with wind deflectors. For more information, please request Whitesales white paper on 'Smoke Ventilation and Aerodynamic Free Area'.



SMOKE VENT CONTROL PANELS AND ACCESSORIES



Single Zone Control Panel (EVSCP24)

Designed to control the operation of electric opening systems for fire and comfort ventilation. Visual LED indicators and open and close commands to front panel, and 72hr battery back-up. May be networked as part of a building management system (BMS) or as a complete standalone system. Certified in accordance with EN12101-10 2005 Class A (double supply).

Item	Reference	Price (£)
Control Panel 5 Amp	EVSCP24	678
Control Panel 8 Amp	EVSCP24	746



Fireman's Priority Switch (EVSFPS)

Developed to provide the highest priority control. Open and close button with visual LED status symbol.

Item	Reference	Price (£)
Fireman's Priority Switch	EVSFPS	177



Manual Control Point (EVSMCP)

Visual LED indication of status, sound indicator, and reset function. The break glass can be opened to allow the smoke vent system to be tested from any control point.

Item	Reference	Price (£)
Manual Control Point	EVSMCP	153



Smoke Detector (EVSSD)

Early fire detection incorporates a visual LED display when activated.

Item	Reference	Price (£)
Smoke Detector	EVSSD	51



Comfort Switch (EVSCS)

Retractive switch with centre off for manual open & close, supplied with a surface mount single box.

Item	Reference	Price (£)
Comfort Switch	EVSCS	36



Keyswitch (EVSKS)

Designed to control the open & close operation of the smoke vent when used as an access hatch.

Item	Reference	Price (£)
Key Switch	EVSKS	56



Wind/Rain Sensor (EWSWRS)

Used with a room thermostat to automatically close the smoke vent in the event of rain or high wind speed. cooling mode.

Item	Reference	Price (£)
Wind & Rain Sensor	EWSWRS	463



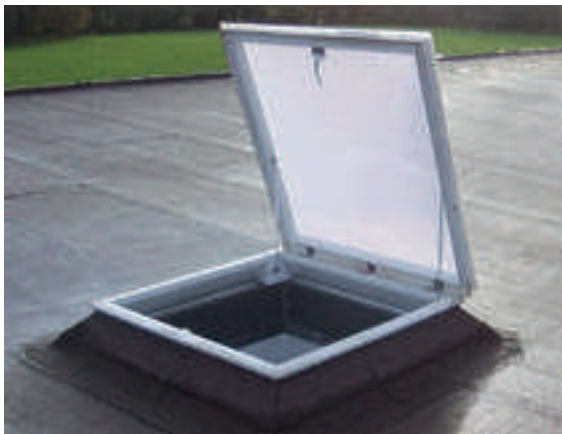
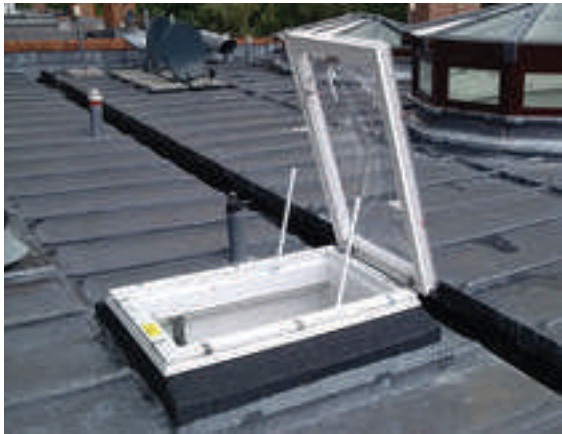
Thermostat (EVST)

Used for automatic opening and closing of the smoke vent when operating in comfort

Item	Reference	Price (£)
Room Thermostat	EVST	60

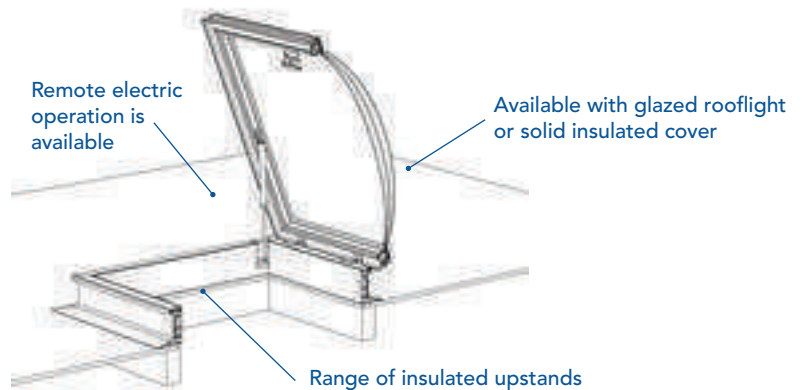
ACCESS HATCH

Em-Hatch roof access hatches provide safe access to and from roof areas and can form part of a fire escape route. They can be supplied with a glazed rooflight or solid insulated cover, and are particularly suited to apartments and commercial property.



KEY FEATURES

- 23 sizes available from stock
- Provides a safe access route
- Available with glazed rooflight or solid insulated cover
- May be installed to existing upstand with Em-Collar
- Range of insulated upstands
- Telescopic gas or friction struts
- Remote electric operation units available



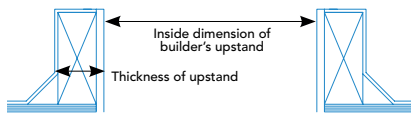
CHOOSING YOUR EM-HATCH ACCESS HATCH

1 | UPSTAND

If there is an existing upstand, please provide:

Internal dimensions of the upstand

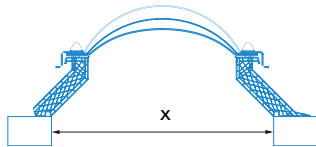
The thickness of the upstand



If a new upstand is required, please provide:

Roof opening size (Figure 'x')

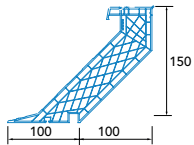
Choice of upstand



Upstand options

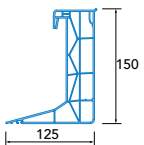
Em-Curb PVC 150mm ECO splayed upstand

- Most popular choice
- Economical
- Insulated and thermally broken
- Pre-finished internally
- Suitable for most flat roof waterproofing systems



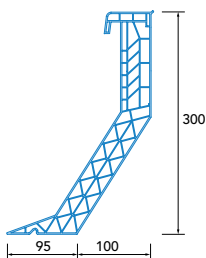
Em-Curb PVC 150mm ECO vertical upstand

- Good insulation and thermally broken
- Suitable for most flat roof waterproofing systems



Em-Curb PVC 300mm ECO splayed upstand

- For use on insulated roofs (up to 150mm insulation)
- Excellent insulation and thermally broken
- Suitable for most flat roof waterproofing systems



2 | GLAZING

What material?

Polycarbonate

- Allows light to area below
- Impact tested to 1200 Joules
- Highest fire rating available
- Certified 'Non-Fragile'

Aluminium

- Fully insulated 32mm solid panel
- Increased privacy

Glazing options



Double skin polycarbonate

- Economical
- U-Value 2.68W/m²K



Triple skin polycarbonate

- High thermal insulation (1.78W/m²K)
- Good sound insulation
- Complies with all Building Regulations



Solid aluminium insulated cover

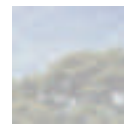
- Fully insulated aluminium cover
- High level of thermal insulation (U-Value of 0.80W/m²K)
- Superior noise insulation

What type of glazing?



Clear

- Very high light transmission – up to 83%
- Direct light to area below
- Care needed to prevent 'solar-overheating'



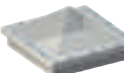
Opal diffused

- Maintains high light transmission (up to 58%) whilst evenly diffusing light to area below
- Increased privacy due to translucent finish



HeatReflect - SPECIAL ORDER

- Reflects 100% ultraviolet light
- Solar transmission as low as 37%
- Reflects up to 63% solar energy
- Options for pearl diffused, neutral clear and neutral diffused glazing



Pyramid design - SPECIAL ORDER

- 30° pyramid (trapezoidal when rectangular design)
- Available in most square and rectangular sizes



MANUAL ACCESS HATCH TO SUIT BUILDER'S UPSTAND

			Glazing			
	Size ref	To suit internal upstand size (minimum 50mm thickness) (mm)	Double skin (£)	Triple skin (£)	Solid insulated cover (£)	Pyramid available
Square	S2	500x500*	562	621	562	3
	S3	550x550	677	743	677	7
	S4	600x600	697	764	697	3
	S5	700x700	755	834	755	3
	S6	750x750	788	875	788	3
	S7	800x800	806	895	806	3
	S8	900x900	896	1005	896	3
	S9	1000x1000	949	1071	949	3
	S10	1050x1050	993	1127	993	7
	S10a	1100x1100	1039	1180	1039	3
Rectangular	R3	400x700	652	709	652	3
	R3a	400x1000	737	809	737	3
	R4	500x800	707	774	707	3
	R4a	500x1100	802	892	802	3
	R4b	500x1700* L	938	1095	938	7
	R5	600x900	814	910	814	3
	R6	600x1200 L	939	1072	939	3
	R7	700x1000	831	932	831	3
	R7a	700x1300 L	969	1096	969	7
	R7b	700x1600 L	1104	1267	1104	7
	R10a	800x1100	934	1056	934	3
	R11	800x1300 L	1070	1230	1070	3
	R16	900x1200 L	1130	1307	1130	7

All prices indicate stock items unless shown in red, which are available for special order

* Friction struts only

L = longest dimension is hinged side

ROOF LANTERNS

THE PERFECT
SOLUTION
FOR EVERY
ROOM





A LANTERN REVOLUTION

The slimline Korniche roof lantern provides a traditional timber look with all the advantages of a thermally broken aluminium construction. Precision engineering, optimisation and modern manufacturing techniques have created a **beautifully proportioned, thermally efficient, strong** and **secure** lantern solution for your home.

Why choose Korniche?

Structural Elegance, Thermal Efficiency, Strong and Secure



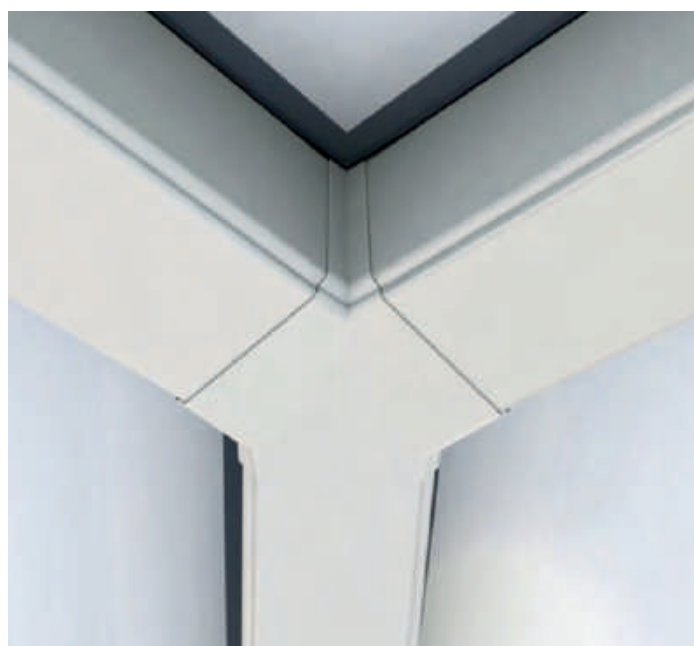
"Korniche for us is the best-looking lantern on the market, for the finishing touch on our orangery nothing else compared. It really is the cherry on the top"

Mr & Mrs Hunter - Kent



Beautiful,
both inside
and out

Aesthetics



Slim Sections

At only 57mm wide, the spas and ridge sections are amongst the slimmest on the market. Coupled with our sculpted bosses they provide a look usually associated with timber construction.

Traditional Meets Modern

Narrow yet deep structural profiles with subtle ogee detailing along the lower edges provide a clean classic feel.

Hidden Fixings

Fully concealed fixings ensure sight lines flow gracefully and uninterrupted throughout bringing unrivalled elegance and balance.



Attention to Detail

Attention to detail is present throughout, from the engineered structure, the bespoke weather seals, the innovative glass locks all the way to the logo embossed endcaps.

The Finishing Touch

Every component used has been developed to work in harmony with the others and enhance the overarching design. Korniche is the best possible finish for your extension.



Range of colours

Our standard colours are Gloss White, Matt Grey and Matt Black. These can be chosen in any combination of inner and outer.

We can also supply your roof in any bespoke colour of your choice. Simply find out its RAL or BS code.



RAL9010
GLOSS



RAL7016
MATT



RAL9005
MATT

*colours are a print
representation only.

Thermal Efficiency

Thermal efficiency of our roof has been guaranteed by the elimination of cold bridging, achieved by isolating of the external profiles from the internal ones. Combined with high performance glazing, the Korniche's ability to reduce heat transfer is in a class of its own.

Keeping the heat in
and the weather out

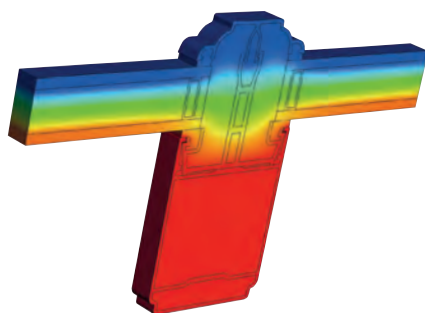


Warmth



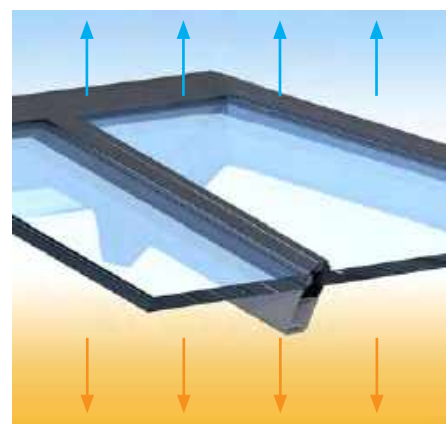
Thermally Broken Eaves Beam

Thermal efficiency starts at the bottom of our roof. Eaves beams are fully thermally broken to create an insulated barrier between the aluminium sections.



Insulating T-bar

Our in-house designed high quality insulating T-bar bridges the gap between the profiles and the aluminium finishing caps to create the largest possible thermal break.



Performance Glazing

Korniche can be supplied with a range of high performance self-cleaning glass options to suit every taste. To complement your new roof you can choose from either blue, aqua, bronze, tinted, neutral or clear and with U Values ranging from 1.0 - 1.2.

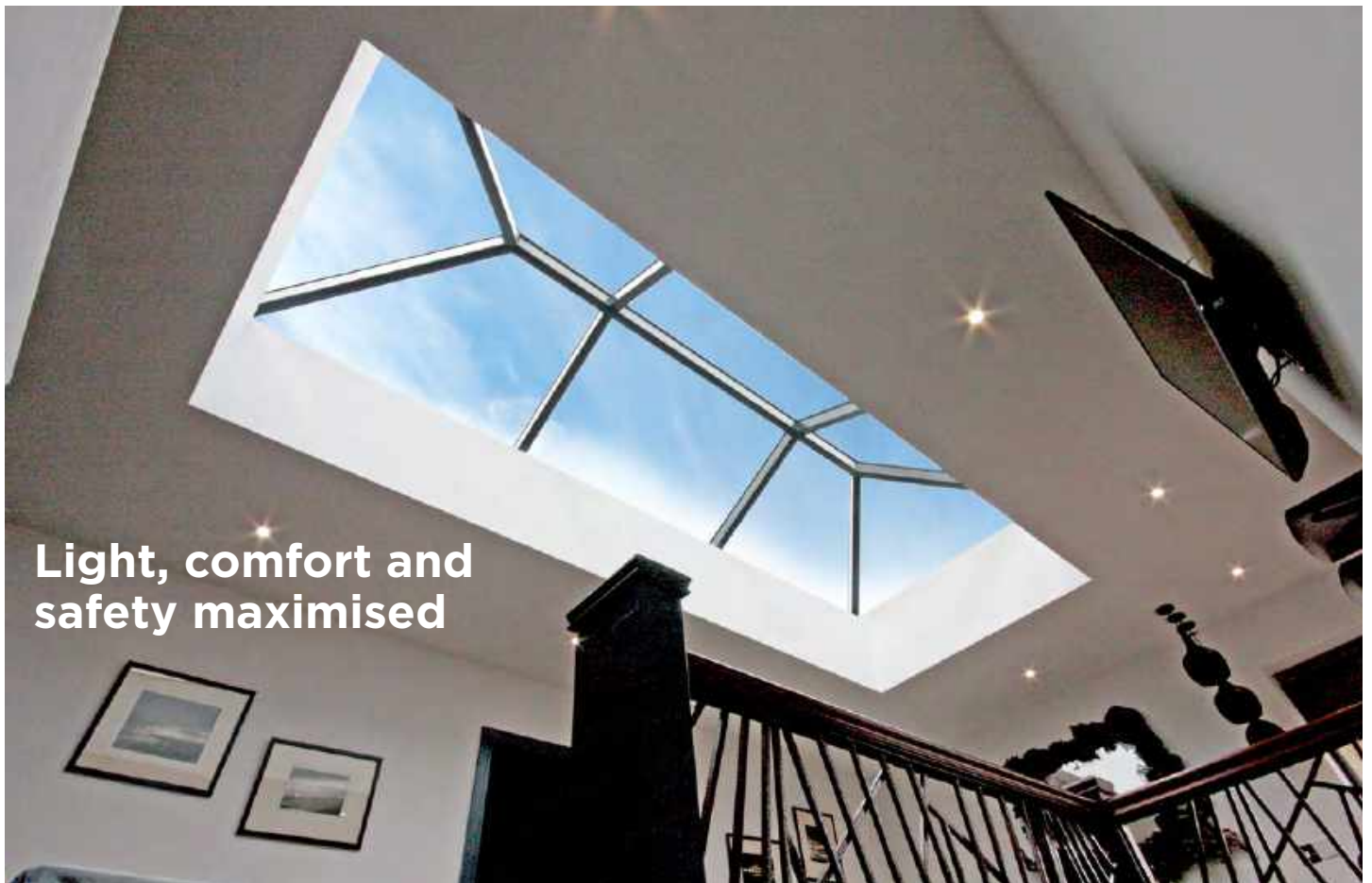
Ambience Glass

	Blue	Aqua	Ultra	Sunshade Blue	Bronze	Neutral
U Value	1.2 w/m²K	1.0 w/m²K	1.0 w/m²K	1.0 w/m²K	1.2 w/m²K	1.2 w/m²K
Solar Heat Reflection	60 %	82 %	91 %	80 %	55 %	60 %
Light Transmission	47 %	30 %	8 %	34 %	38 %	37 %
Self Cleaning	Yes	Yes	No	Yes	Yes	Yes

Strong and Secure

Korniche has been optimised to create the strongest and stiffest roof lantern possible with minimal structure to obscure your view. Unparalleled in strength, the Korniche can survive whatever nature throws at it. Put into perspective a **6m x 4m**. Korniche roof can support over **8 tonnes**.





**Light, comfort and
safety maximised**

Strength



More Glass, Less Roof

Design optimisation ensures that Korniche has the largest glass spans and fewest rafters currently available from any other system on the market.



Highest Quality Weatherproofing

Providing the last word in weather protection Korniche uses the best seals and gaskets available throughout, ensuring complete peace of mind in the most extreme conditions.



Security

Our innovative glass lock system and tamper proof fasteners keep everything tightly in place and once finishing capping's are fitted, there are no visible fasteners anywhere to be seen.

BBA

BBA certification is known in the construction industry as a symbol of quality and reassurance. It can ensure acceptance with specifiers, building control, local authorities and insurers. Working with BBA throughout the design cycle has ensured that the Korniche system exceeds the required specifications.

ROOFLIGHTS | SMOKE VENTS | ACCESS HATCHES

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