Circular Glass

TB426

Brett Martin Circular Glass
Datasheet

Product Description
Circular rooflights are used increasingly by architects to create visual impact in modern interior spaces. Brett Martin Circular Glass is a premium round rooflight specified for its distinct styling and is available in a range of sizes for mounting to builder's upstand or complete with pre-fabricated kerb.

This contemporary glazing unit gives a clean internal appearance, a minimal unobtrusive exterior and allows daylight to spread evenly through an interior space.

THE ONLY SAFE CHOICE FOR OVERHEAD GLAZING
LAMINATED INNER PANE
ENDORSED BY THE ROOFLIGHT ASSOCIATION

Design Features
- Modern and stylish circular flat glass rooflight design
- Elegant aluminium frame powder coated to RAL 7016
- U_r Value as low as 1.16 W/m²K
- Safety of those below the rooflight assured thanks to a laminated inner pane
- Tested to be non-fragile to CWCT TN-67 for class 1 roofs and Class B non-fragile to ACR[M]001 when new and fully installed to Brett Martin Daylight Systems installation guides
- Available in a range of sizes, with 4 standard fixed sizes
- Suitable for mounting direct to a builder's upstand, or with robust insulated GRP kerb for new build and refurbishment applications

Composition
The double glazed glass panel is made up of: 6mm toughened outer, a 90% argon filled cavity, with a laminated inner (including PVB interlayer). All double glazed units include a soft coat Low E coating.

The frame is aluminium, with a powder coating (RAL 7016) to provide a premium appearance and highly appealing finish, and is thermally isolated to provide excellent thermal performance. The Glass and aluminium can be recycled at the end of useful product life.

Durability
Brett Martin Circular Glass units are expected to remain fit for purpose in normal industrial conditions for a period of 20 years (with a warranty availble providing a 10 year guarantee), i.e. they will not become perforated, lose significant structural integrity or distort to the extent of losing weather-tightness. Insulated glass used in the construction of the rooflight is guaranteed for 5 years.

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Safety Requirements and CDM
Brett Martin Circular Glass achieves CWCT TN-67 non-fragility for class 1 roofs and ACR[M]001 class B non-fragility when new and fully installed in accordance with Brett Martin Daylight Systems' installation guides. Foot traffic on rooflights should always be avoided; impacts such as foot traffic or a falling person may cause damage which could necessitate rooflight replaceme

Security
All fixed Brett Martin Circular Glass units are fitted to a structural, insulated builders upstand or GRP kerb using fixings concealed using colour-matched cover caps.

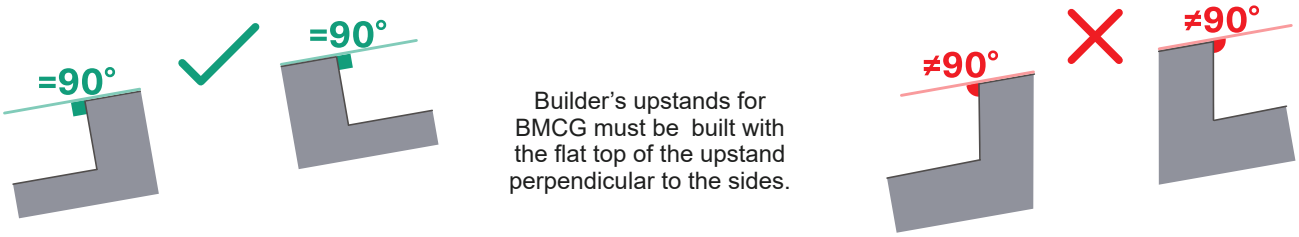
Fire Performance
Glass is designated Class A to EN13501 part 1, as it is included in the list of CWFT (classified without further test) materials published in the Official Journal of the EU (see European Commission Decision 96/603/EC).

These rooflights are glazed with a 6mm toughened outer pane and can therefore be regarded as having a $B_{ROOF}(t4)$ classification as per building regulations.

Roof Applications
Brett Martin Circular Glass units are suitable for flat roof applications with a pitch of 2°-15°.

A minimum pitch of 2° is required to prevent water ponding on the glass leading to rapid dirt build up.

If a roof is less than the minimum recommended pitch, the builder's upstand must be built with a slope to ensure that the installed pitch of the rooflight is the minimum recommended pitch or greater.



Available Sizes

- Available in a range of sizes from 600mmø to 1500mmø
- 4 stocked sizes available*
- Bespoke sizes also available

Rooflight size (mm ø)	Daylight size (mm ø)
***600**	450
750	600
***900**	750
1050	850
***1200**	1050
1350	1200
***1500**	1350

Kerb and Fixing Options

Glazed unit only
Simply screw fixes to existing builder's upstand

Insulated GRP Kerb
Provides 150mm roof membrane termination height

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Glazing Performance

Brett Martin Circular Glass comes with a 7.5mm laminate inner as standard. Other glazing options are available on request. If non-standard glass is used, glazing performance may differ from the table shown.

Overall Glazing Performance			
Light		**Solar Energy**	
Transmission	79%	**G-Value**	0.61
Reflection	12%	**Shading coefficient**	0.71

Thermal Performance (England, Scotland and Wales)

There is currently no method set out for assessing the thermal performance of flat glass rooflights, so the method shown in Rooflight Association (formerly NARM) NTD2 has been adopted as the most appropriate. Thermal transmittance is defined as a U_{rc} value for a rooflight with a GRP kerb and a U_r value for a rooflight fitted to a builders upstand. The thermal transmittance values (assessed horizontally) are shown in the table.

Thermal Performance (England, Scotland and Wales)				
Rooflight Variant		**Size range**	**Surface:area ratio**	**U_r / U_{rc} value W/(m².K)**
Fixed Rooflight on Builders Upstand	(U_r)	ø600	2.12	1.48
		ø1800	1.23	1.64
Rooflight with standard 150mm GRP Kerb	($U_{rc\ 150}$)	ø600	2.09	1.16
		ø1800	1.45	1.39

*The overall thermal performance of rooflights is still referred to as a U_d-value in the building regulations, rather than U_r/U_{rc} value as per the calculation method. Values stated are therefore equivalent to a U_d-value assessed horizontally.

Thermal Performance (Republic of Ireland and Northern Ireland)

The thermal performance of Circular Glass is assessed in the vertical plane and depending on configuration achieves a U_d value as declared in the table shown. (The glazing used in Circular Glass achieves a centre pane U value of 1.1W/m²K).

Thermal Performance (Republic of Ireland, Northern Ireland)		
Rooflight Variant	**Size range**	**U_d value W/(m².K)**
Fixed Rooflight on Builders Upstand	ø600	1.76
	ø1800	1.34
Rooflight with standard 150mm GRP Kerb	ø600	1.19
	ø1800	1.16

Acoustic Performance

Brett Martin Circular Glass units achieve a direct airborne sound insulation value of 38db (Rw).

Wind and Snow Loads

Brett Martin Circular Glass has been tested to show that, when correctly fitted in accordance with our instructions, will resist wind loads calculated in accordance with BS EN 1991-1-4: 2005, and imposed loads in accordance with BS EN 1873: 2005.

Resistance to Snow and Wind Loads (Figures in excess of)	
Snow Load (N.m^2)	1200
Wind Load (N.m^2)	1800

Thermal Fractures

Brett Martin Circular Glass rooflights are manufactured using double glazing which includes an inner pane of annealed, laminated safety glass, which is essential for ensuring the safety of those above the rooflight through non-fragility, and those below the rooflight through the prevention of falling glass from accidental breakage.

In some circumstances, annealed, laminated safety glass can be subject to thermal stress fracture in the event of uneven heat build-up directly under the glass. Installation of blinds, or any other alterations made to the lightwell below the rooflight, must be done so with consideration to the risk of thermal stress fracture. In the case of blinds, the risk of thermal stress fracture can never be fully removed, but it can be reduced by choosing light coloured blinds, positioning them as far away from the glass as possible, and adding ventilation to the rooflight specification.

More detailed guidance can be obtained upon request - please contact the technical department.

Product Dimensions

Brett Martin Circular Glass offers differing kerb options depending on project specification. When the rooflight is to be fitted to an existing upstand, the rooflight can be fitted directly. Where no upstand exists, Brett Martin Circular Glass can be supplied with 150mm GRP kerb (for mounting at roof surface level).

Product Overall Height & Weight			
Rooflight Variant	**Nominal Size**	**Height (mm)**	**Weight (kg)**
Unvented, Fixed Rooflight on Structural, Insulated Builder's Upstand	600 ø	82	17
	1500 ø		87
Rooflight With 150mm Kerb	600 ø	259	22
	1500 ø		99

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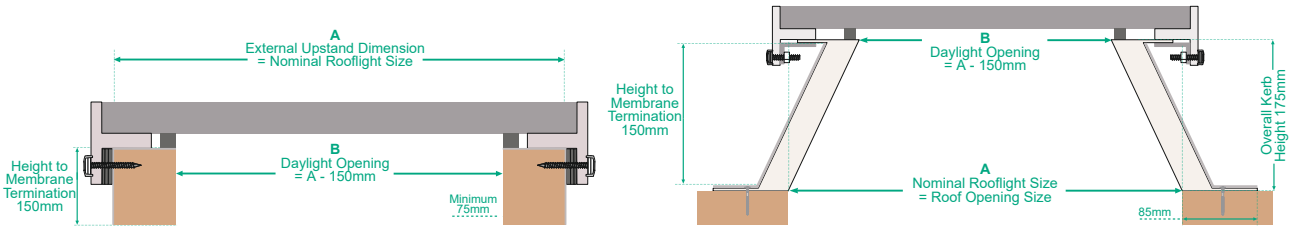

Installation, Handling, Maintenance & Storage
Full installation details, maintenance and product care details are available on request.