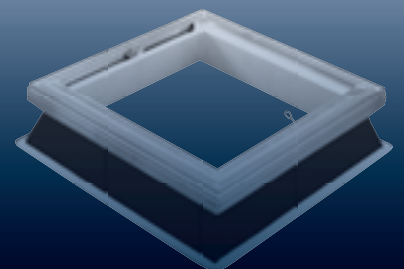
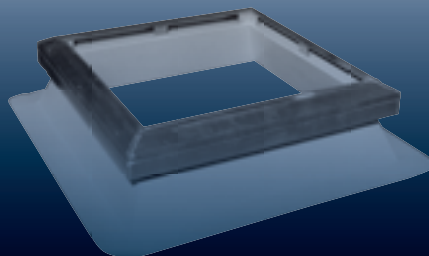


Specialised Rooflights by

ASTROFADE
LIMITED





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APPLY FOR INFORMATION ON OUR
20 YEAR INSURANCE BACKED GUARANTEE

TECHNICAL INFORMATION

FIRE

The thermoplastic glazing materials have been tested in accordance with the relevant British Standards with the following results:

Test	Polycarbonate	Standard Acrylic	PVC
BS 2782: 1970 Method 508 A	Flame retardant	Not flame retardant	Flame retardant
BS 2782: 1970 Method 508 D	Very low flammability	Flammable	Very low flammability
BS 476: Part 7: 1971 Surface spread of flame (or 1987)	Class 1* (see note)	Class 3*	Class 1*
BS 476: Part 8: 1972 Fire resistance of elements of building construction	† Less than 1/2 hour	† Less than 1/2 hour	† Less than 1/2 hour
BS 476: Part 3: 1958 External fire exposure roof tests	Not applicable	DDX	Not applicable
Building Reg. Appendix A Approved Document B	TP(a)*	TP(b)*	TP(a)*

*When tested in 3mm thickness and over † Assumed Results Note: Materials which achieve class IY can be regarded as having a AA designation

WEIGHT

PVC	3mm - 4.5 kg/m ²
Polycarbonate	3mm - 4.5 kg/m ²

RELATIVE IMPACT & BREAKAGE RESISTANCE

6mm Georgian Wired Glass
 3mm Polycarbonate - unbreakable within the limits of the test comparison
 3mm PVC - approximately 50 times stronger than glass.

THERMAL TRANSMISSION (U VALUE)

Polycarbonate/PVC	Single Skin - 3mm - 5.6 w/m ² /°C
	Double Skin - 3mm - 2.7 w/m ² /°C
	Triple Skin - 3mm - 2.2 w/m ² /°C

LIGHT TRANSMISSION

	PVC	POLYCARBONATE	CAST ACRYLIC	GLASS REINFORCED POLYESTER
CLEAR	Approximately 85%	Approximately 90%	Approximately 92%	Approximately 80%
OPAL	Approximately 72%	Approximately 65%	Approximately 78%	

All Astrofade rooflights can be supplied in bronze to control solar gain and glare.

MATERIAL	LIGHT TRANSMISSION	TOTAL SOLAR ENERGY TRANSMISSION
Bronze PVC	60%	69%
Bronze Polycarbonate	59%	55%

TECHNICAL INFORMATION cont.

L2 REGULATIONS

From this notional value, maximum allowable U-values for rooflights for a given area of the roof may be determined, as shown below.

Rooflight U - values per Roof Area.

Opaque Roof Area at U-Value 0.25W/m ² k	Rooflight Area	Rooflight Assembly U-Value W/m ² k
70%	30%	1.5
75%	25%	1.8
80%	20%	2.2
85%	15%	2.8
88%	12%	3.5
90%	10%	4.1

KERB MATERIALS

Aluminium plate/sheet - SI CH4
Galvanised mild steel - Zintec Steel
Glass Fibre Reinforced Polyester

INSULATION

Insulation to metal kerbs where specified as factory applied - 12mm insulation board.

All G.R.P kerbs have 12mm polyurethane foam insulation as standard.

25mm insulation board or polyurethane insulation is available as an option.

STANDARD RANGE OF ROOFLIGHTS

MK1 - Domes, Pyramids, Single, Double or Triple Skin

MK3 - Domes, Pyramids, Single, Double or Triple Skin

MK2 - Domes, Pyramids, Single, Double or Triple Skin

MK5 - Domes, Pyramids, Single, Double or Triple Skin

MATERIALS

PVC	Polycarbonate
Clear	Clear
Opal	Opal
Bronze	Diffused
	Bronze

All MK2 and MK5 units supplied factory glazed.

AS STANDARD

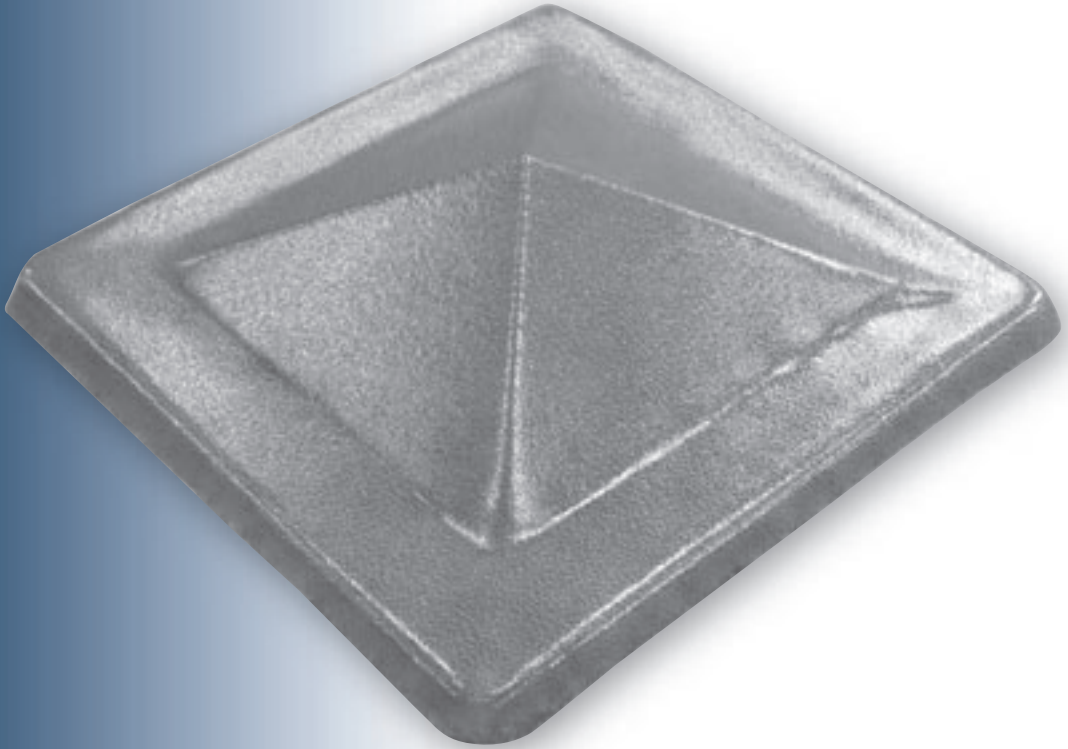
All Polycarbonate Rooflights have UV protection.

All opal or bronze triple and double skin units have an inner skin of clear material.

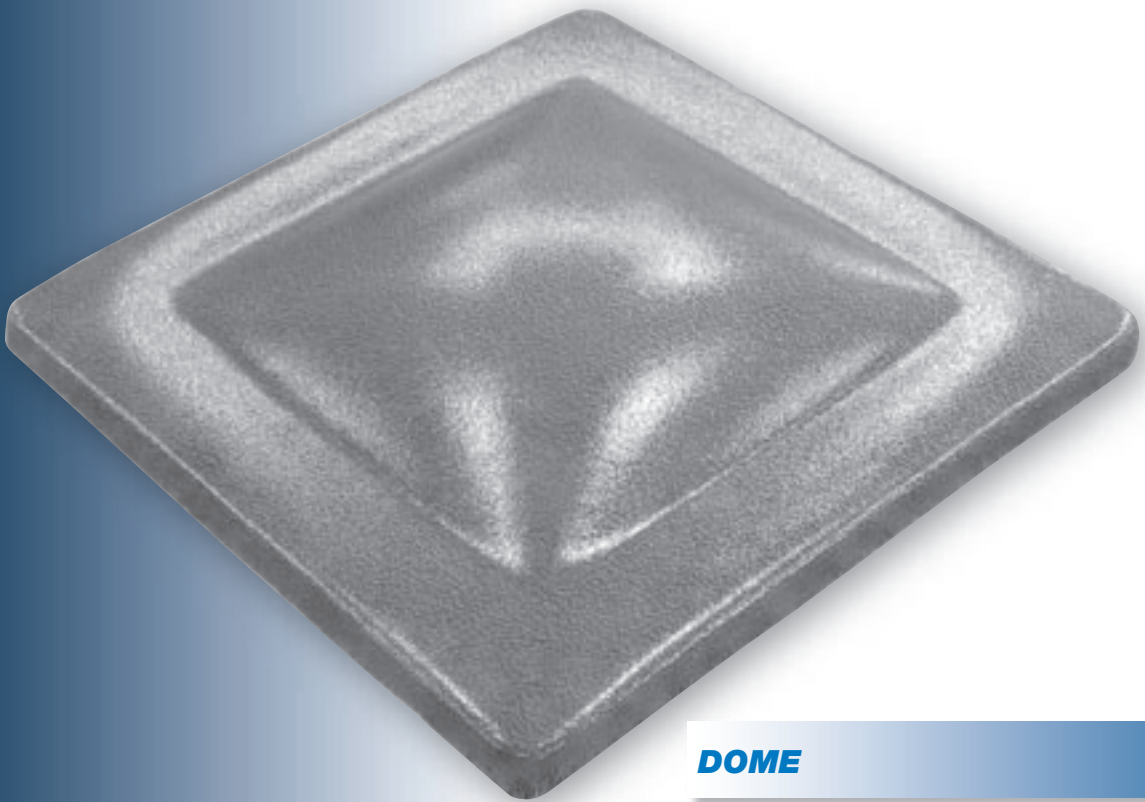
Constant research and development leads to changes of designs and product details, therefore this literature should not be regarded as an infallible guide, nor does it constitute an offer for the sale of any rooflights.

MARK 1

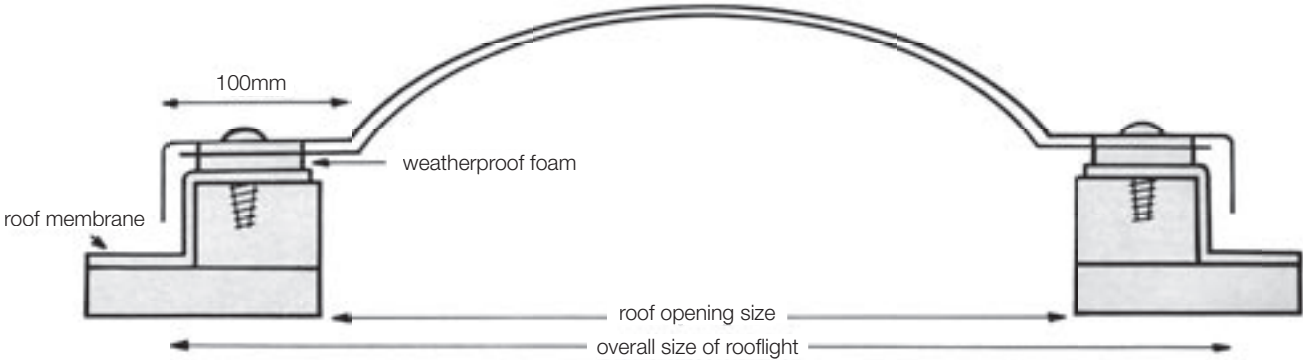
PYRAMID



DOME



Single, Double or Triple Skin Dome or Pyramid



MATERIALS

PVC
 Clear
 Opal
 Bronze

Polycarbonate
 Clear
 Opal
 Diffused
 Bronze

TYPE

Domes
 Pyramids
 Single, Double or Triple Skin

STANDARD SIZES					
Roof Opening Size	Overall Size	Roof Opening Size	Overall Size	Roof Opening Size	Overall Size
300 x 300	500 x 500	750 x 1670	950 x 1850	1200 x 1800	1400 x 2000
450 x 450	650 x 650	900 x 900	1100 x 1100	1200 x 2400	1400 x 2600
450 x 750	650 x 950	900 x 1200	1100 x 1400	1350 x 1350	1550 x 1550
450 x 1050	650 x 1250	900 x 1350	1100 x 1550	1500 x 1500	1700 x 1700
600 x 600	800 x 800	900 x 1500	1100 x 1700	450 dia.	650 dia.
600 x 750	800 x 950	900 x 1800	1100 x 2000	600 dia.	800 dia.
600 x 900	800 x 1100	900 x 2100	1100 x 2300	750 dia.	950 dia.
600 x 1200	800 x 1400	1050 x 1050	1250 x 1250	900 dia.	1100 dia.
750 x 750	950 x 950	1050 x 1650	1250 x 1850	1050 dia.	1250 dia.
750 x 1050	950 x 1250	1050 x 2250	1250 x 2450	1350 dia.	1550 dia.
750 x 1350	950 x 1550	1200 x 1200	1400 x 1400	1500 dia.	1700 dia.

FIXING

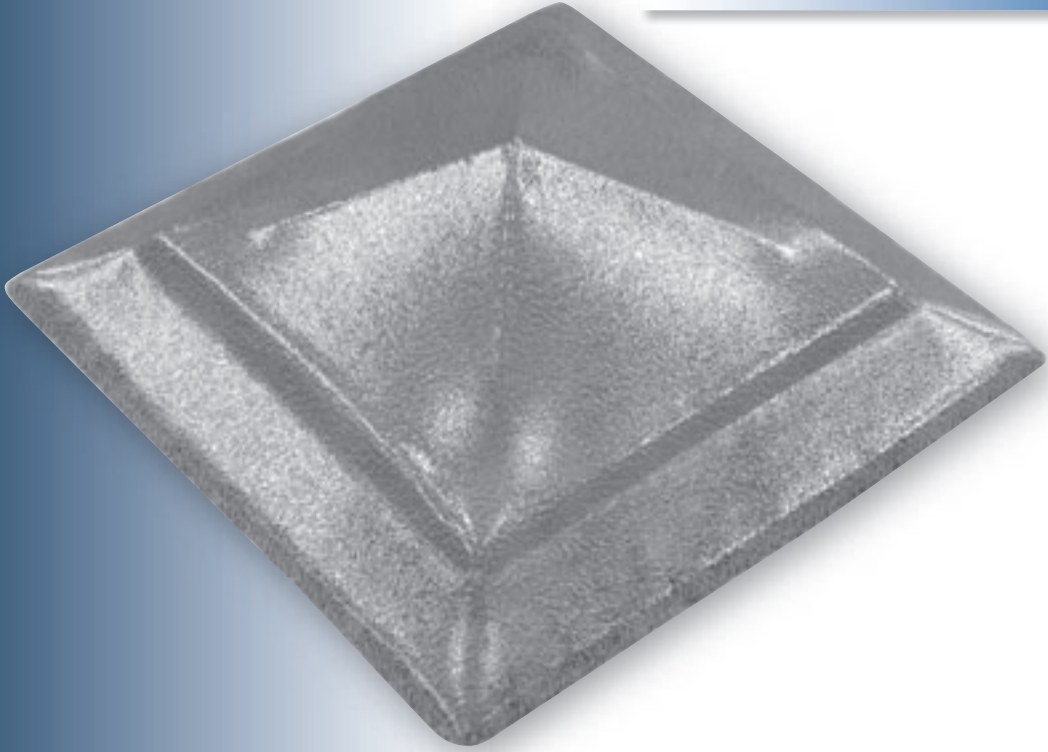
Units are supplied with the weatherseal and undrilled. Site drill through flange. Fixings supplied normally woodscrews, sela cap and washer. Bolt fixings can be supplied on request in lieu of woodscrews.

MATERIALS

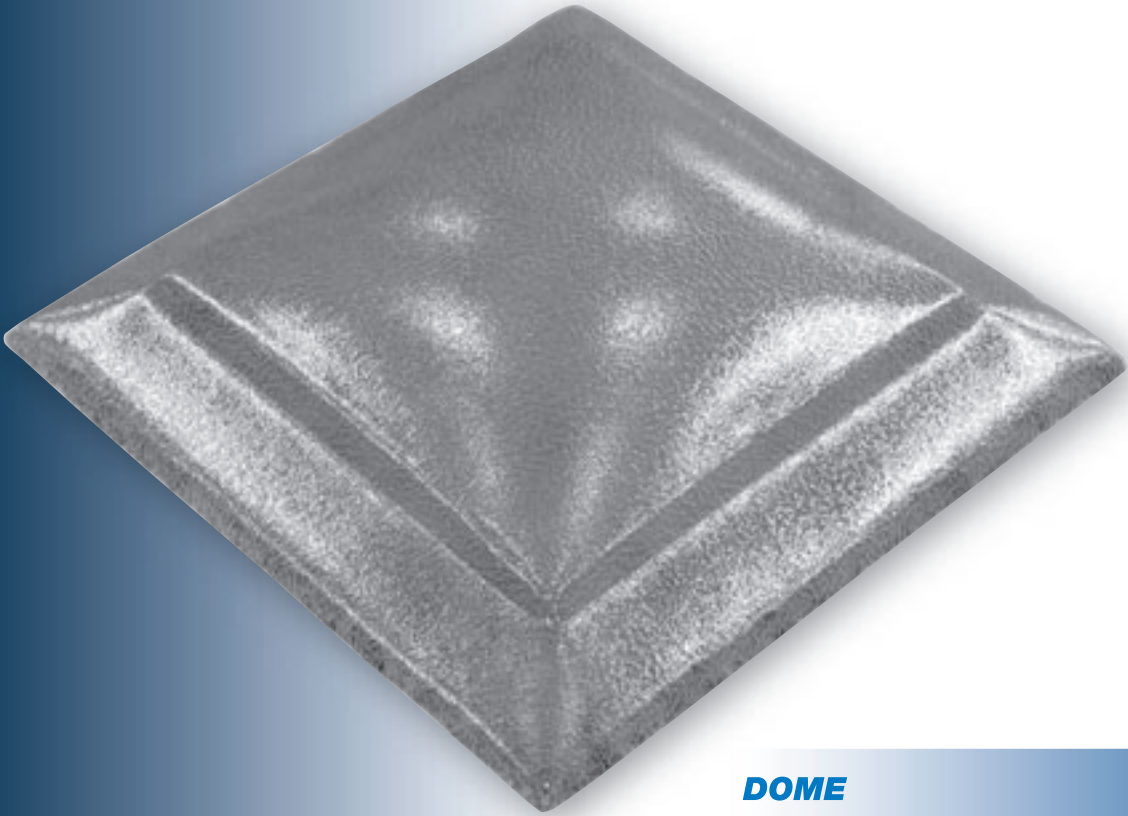
Designed for fitment to existing site kerb either timber, concrete or metal. Where special sizes of this style of rooflight are required please contact our Technical Department.

MARK 3

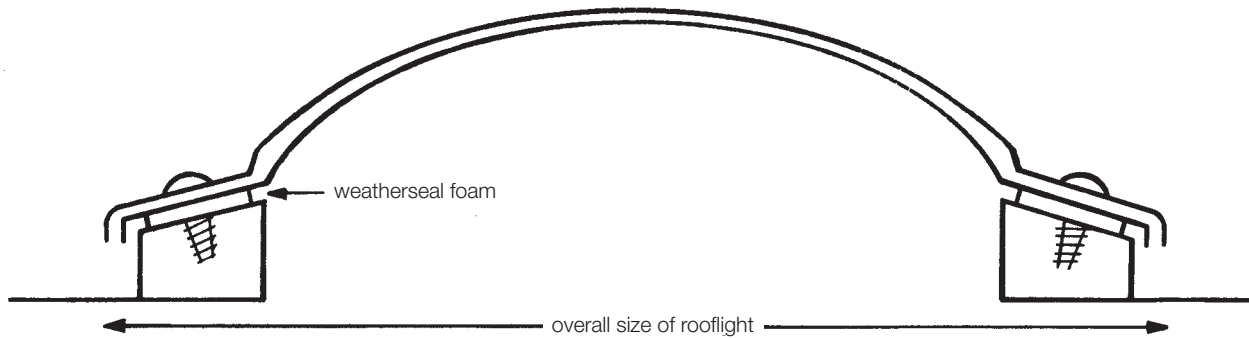
PYRAMID



DOME



Single, Double or Triple Skin Dome or Pyramid



MATERIALS

PVC
Clear
Opal
Bronze

Polycarbonate
Clear
Opal
Diffused
Bronze

TYPE

Domes
Pyramids
Single, Double or Triple Skin

OVERALL SIZE OF ROOFLIGHT					
450 x 450	600 x 1800	900 x 900	1050 x 1500	1200 x 2400	900 dia.
450 x 750	600 x 2400	900 x 1200	1050 x 1650	1350 x 1350	1050 dia.
450 x 1050	750 x 750	900 x 1500	1050 x 2250	1500 x 1500	1200 dia.
600 x 600	750 x 900	900 x 1800	1200 x 1200	1700 x 1700	1350 dia.
600 x 750	750 x 1050	900 x 2100	1200 x 1500	1800 x 1800	1500 dia.
600 x 900	750 x 1200	900 x 2400	1200 x 1800	600 dia.	1800 dia.
600 x 1200	750 x 1350	1050 x 1050	1200 x 2100	750 dia.	

FIXING

Units are supplied with the weatherseal and undrilled. Site drill through flange. Fixings supplied normally woodscrews, sela cap and washer. Bolt fixings can be supplied on request in lieu of woodscrews.

MATERIALS

Designed for fitment to existing site kerb either timber, concrete or metal. Where special sizes of this style of rooflight are required please contact our Technical Department.

MARK 2

Non - Ventilated

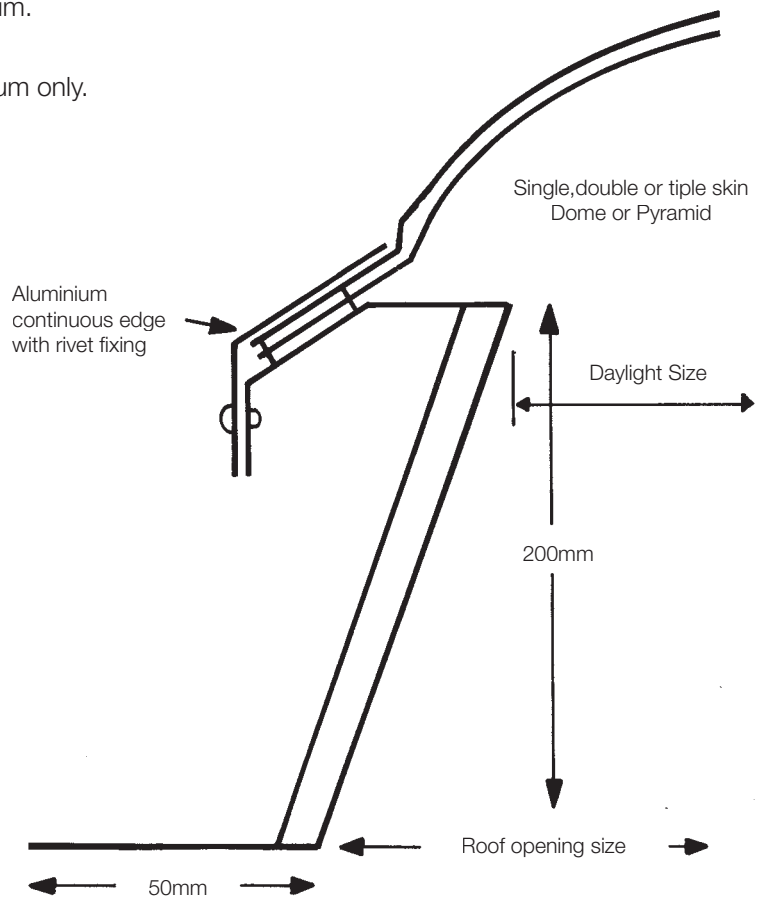


- Rooflights supplied ready glazed to kerbs.
- Insulation standard with G.R.P. Kerbs. Optional extra with G.M.S./Aluminium Kerbs.
- Kerb height 200mm as standard.
- Higher kerbs available in G.M.S./Aluminium.
- G.M.S./Aluminium white P.P.C. internally.
- Adaptor kerb available in G.M.S./Aluminium only.
- Burglar bars in G.M.S. only.

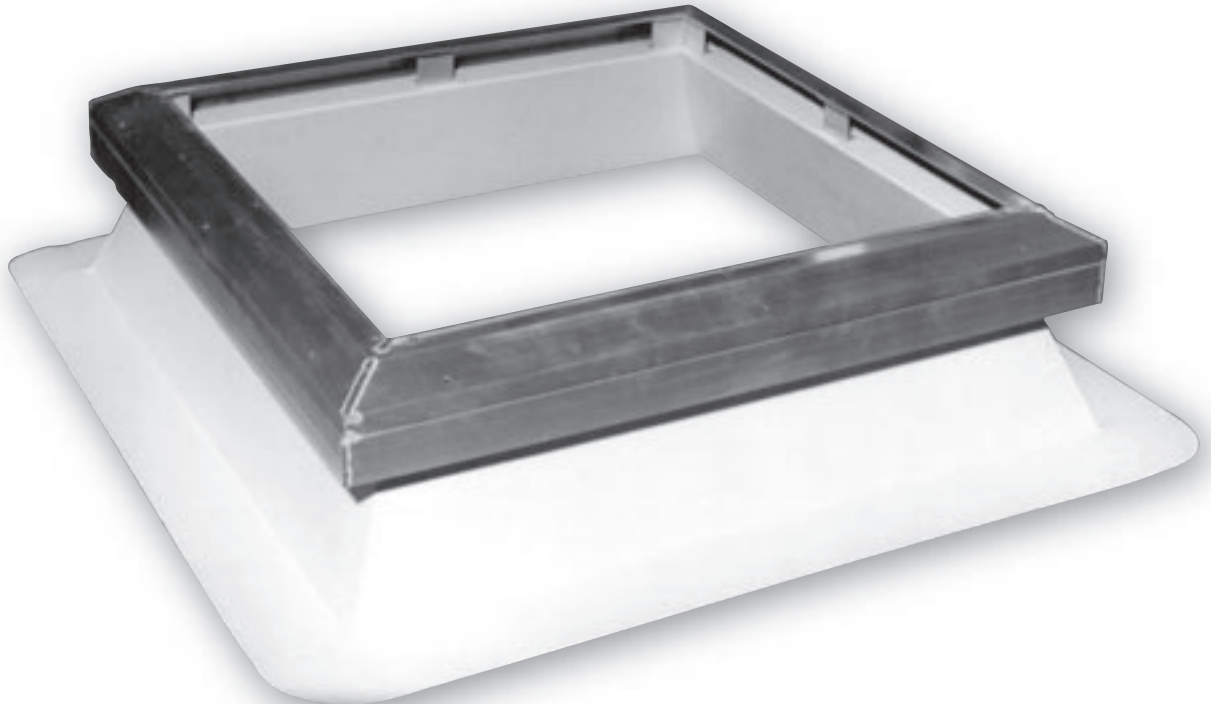
STANDARD ROOF OPENING SIZES AVAILABLE

450 x 450	900 x 2100
600 x 600	1050 x 1050
600 x 900	1050 x 1500
600 x 1200	1050 x 1650
750 x 750	1200 x 1200
750 x 900	1200 x 1500
750 x 1050	1200 x 1800
900 x 900	1200 x 2400
900 x 1200	1350 x 1350
900 x 1500	1500 x 1500
900 x 1800	1800 x 1800

Non-standard sizes in metal kerbs also available on request



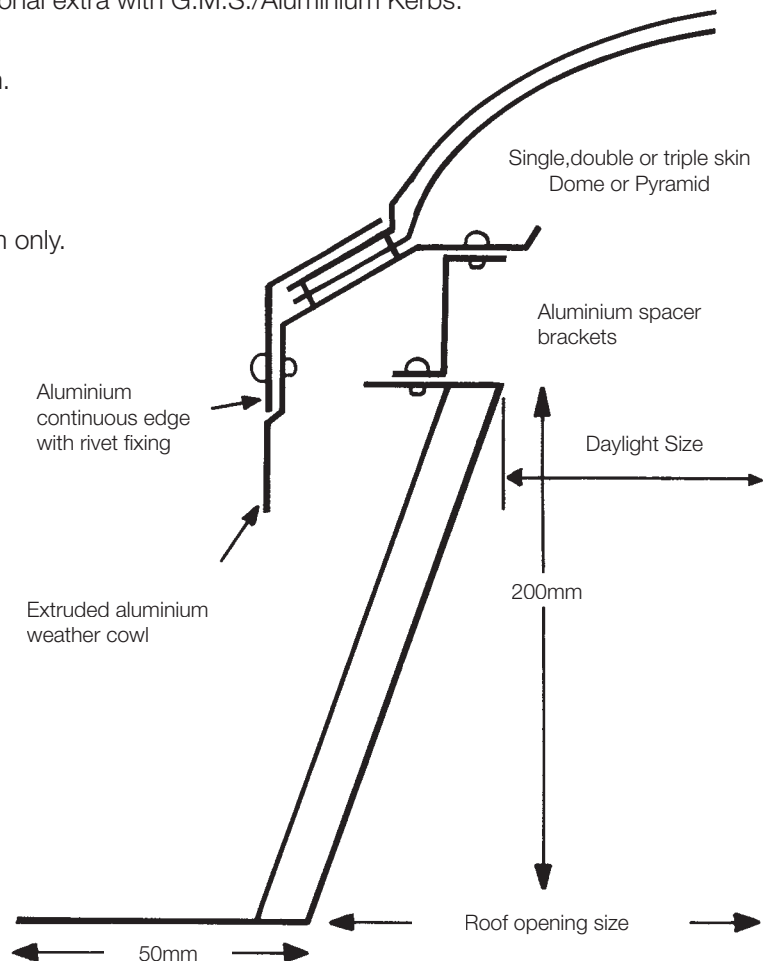
Permanent Vent



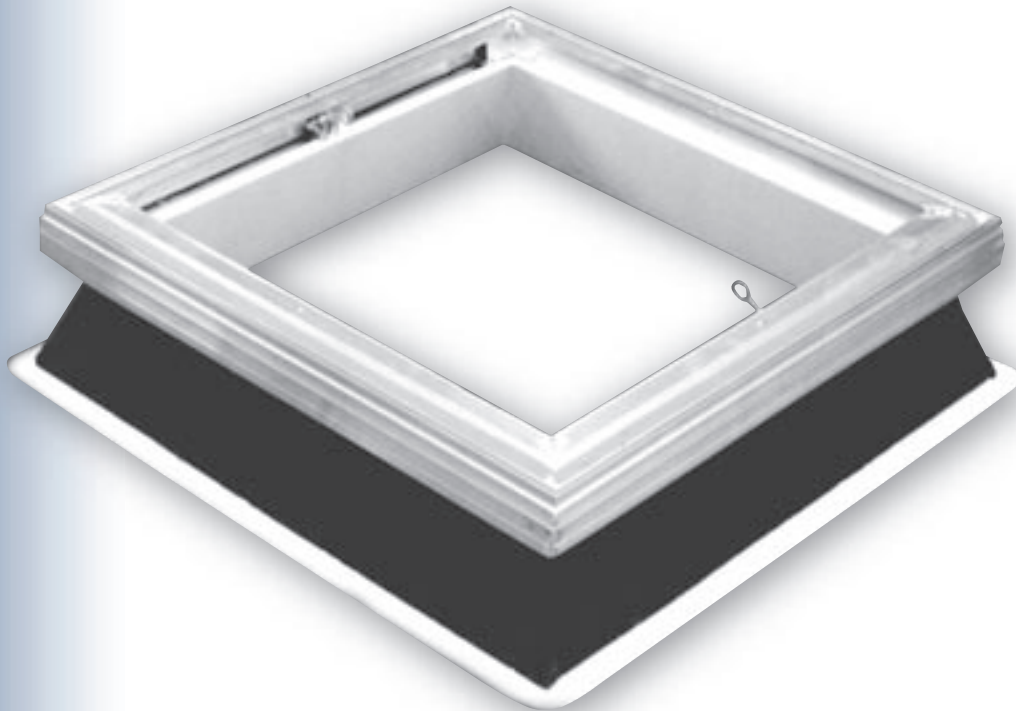
- Rooflights supplied ready glazed to kerbs.
- Insulation standard with G.R.P. Kerbs. Optional extra with G.M.S./Aluminium Kerbs.
- Kerb height 200mm as standard.
- Higher kerbs available in G.M.S./Aluminium.
- G.M.S./Aluminium white P.P.C. internally
- Ventilation 2 sides as standard.
- 4 sides as requested
- Adaptor kerb available in G.M.S./Aluminium only.
- Burglar bars in G.M.S. only.

STANDARD ROOF OPENING SIZES AVAILABLE	
450 x 450	900 x 2100
600 x 600	1050 x 1050
600 x 900	1050 x 1500
600 x 1200	1050 x 1650
750 x 750	1200 x 1200
750 x 900	1200 x 1500
750 x 1050	1200 x 1800
900 x 900	1200 x 2400
900 x 1200	1350 x 1350
900 x 1500	1500 x 1500
900 x 1800	1800 x 1800

Non-standard sizes in metal kerbs also available on request



Controlled Vent

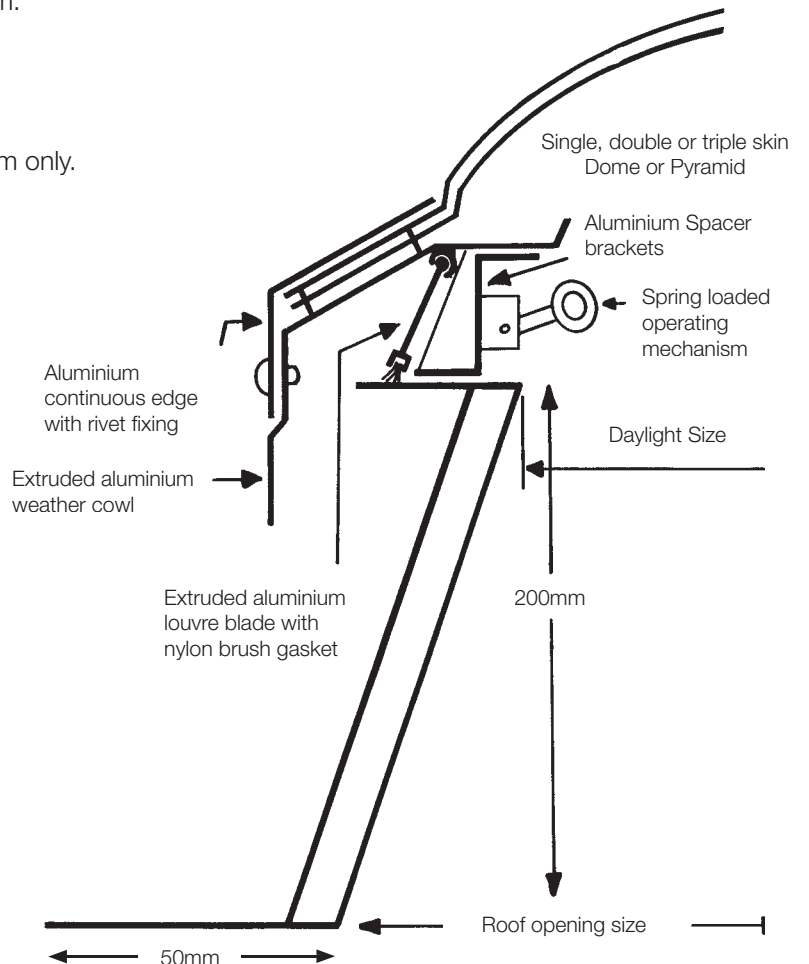


- Rooflights supplied ready glazed to kerbs.
- Insulation standard with G.R.P. Kerbs. Optional extra with G.M.S./Aluminium Kerbs.
- Kerb height 200mm as standard.
- Higher kerbs available in G.M.S./Aluminium.
- G.M.S./Aluminium white P.P.C. internally.
- Ventilation 2 sides as standard.
- 4 sides on request.
- Adaptor kerb available in G.M.S./Aluminium only.
- Burglar bars in G.M.S. only.

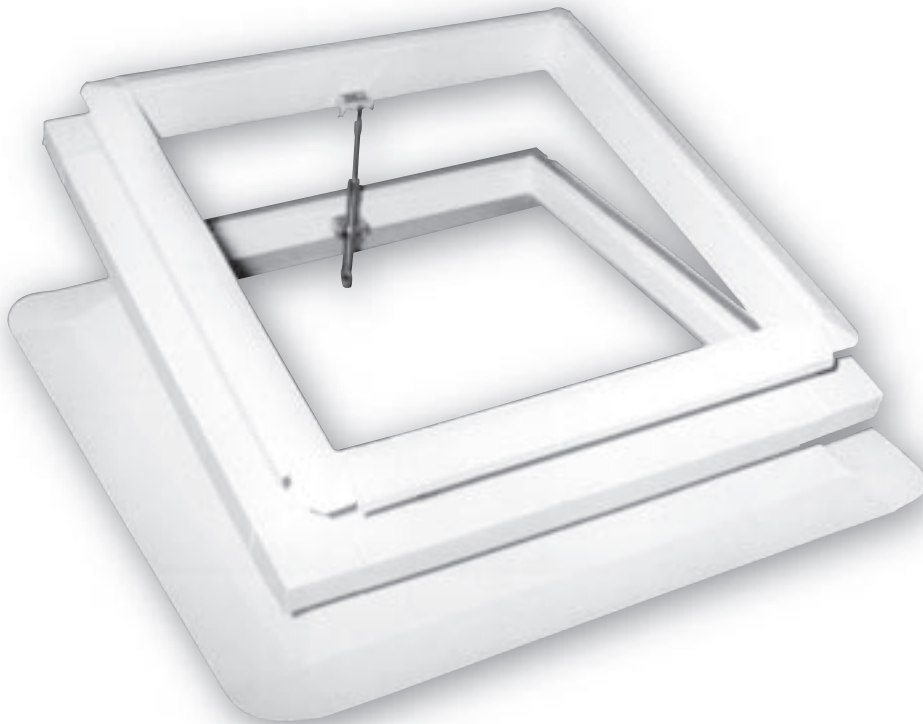
STANDARD ROOF OPENING SIZES AVAILABLE

450 x 450	900 x 2100
600 x 600	1050 x 1050
600 x 900	1050 x 1500
600 x 1200	1050 x 1650
750 x 750	1200 x 1200
750 x 900	1200 x 1500
750 x 1050	1200 x 1800
900 x 900	1200 x 2400
900 x 1200	1350 x 1350
900 x 1500	1500 x 1500
900 x 1800	1800 x 1800

Non-standard sizes in metal kerbs also available on request



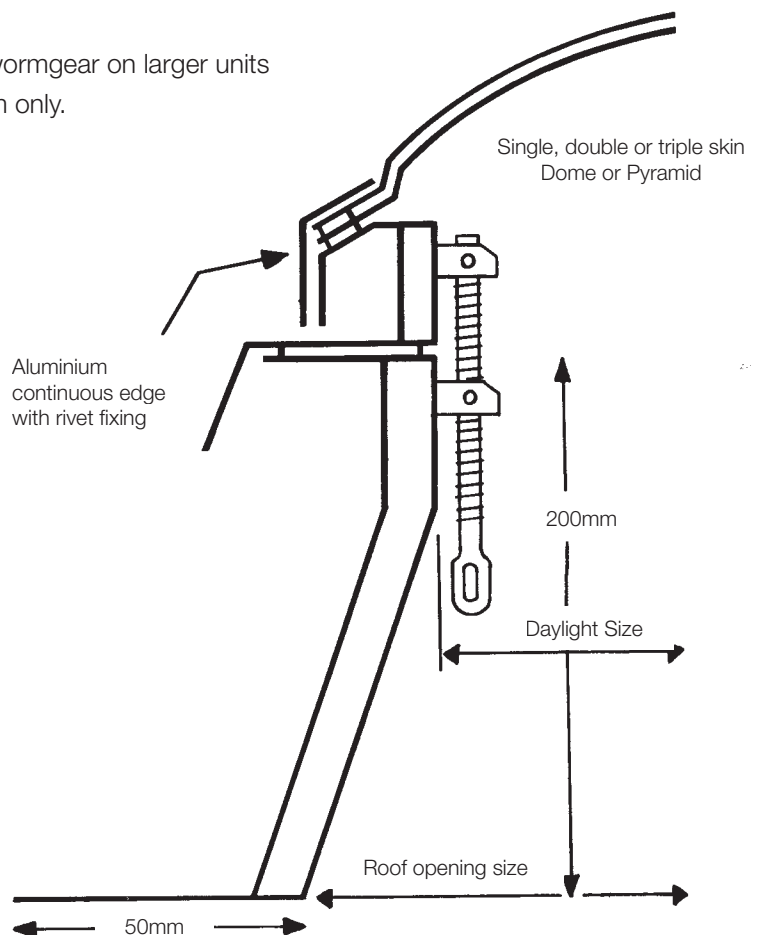
Hinged Opening



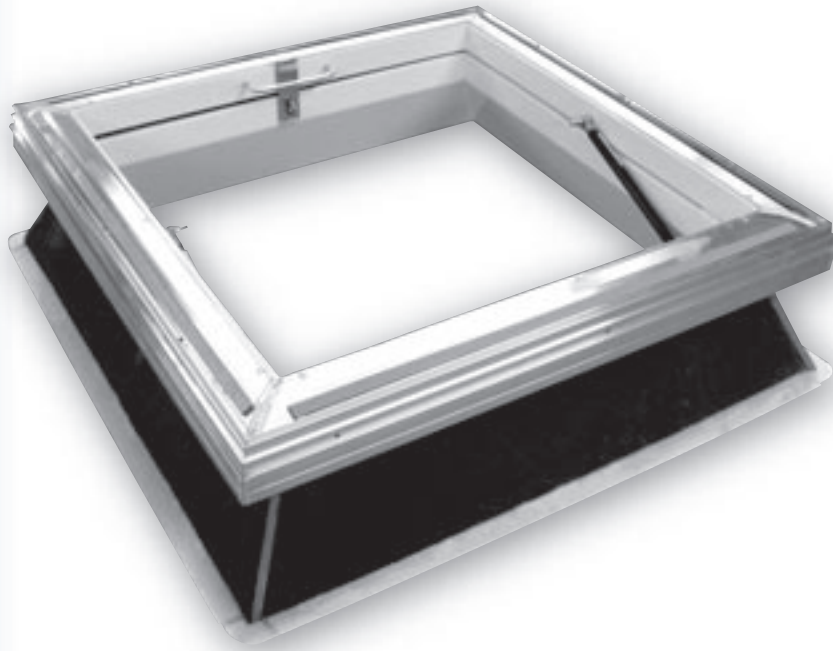
- Rooflights supplied ready glazed to kerbs.
- Insulation standard with G.R.P. Kerbs. Optional extra with G.M.S./Aluminium Kerbs.
- Kerb height 200mm as standard.
- Higher kerbs available in G.M.S./Aluminium.
- G.M.S./Aluminium white P.P.C. internally.
- N.B. Not recommended in G.R.P Double wormgear on larger units
- Adaptor kerb available in G.M.S./Aluminium only.
- Burglar bars in G.M.S. only.

STANDARD ROOF OPENING SIZES AVAILABLE	
450 x 450	900 x 1500
600 x 600	900 x 1800
600 x 900	900 x 2100
600 x 1200	1050 x 1050
750 x 750	1050 x 1500
750 x 900	1050 x 1650
750 x 1050	1200 x 1200
900 x 900	1200 x 1500
900 x 1200	1200 x 1800

Non-standard sizes in metal kerbs also available on request



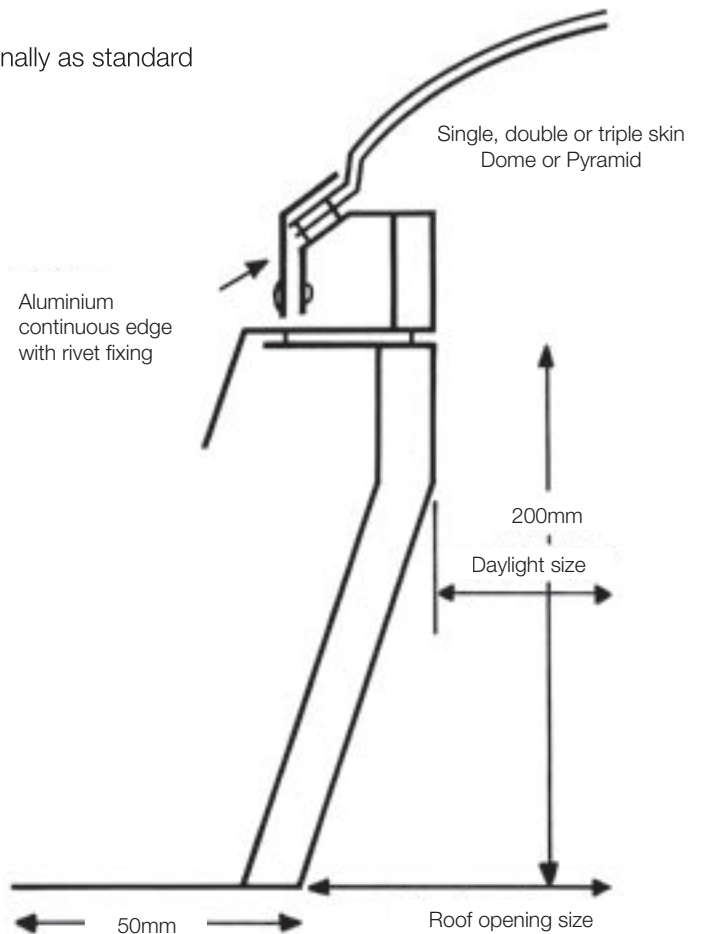
Hinged Access



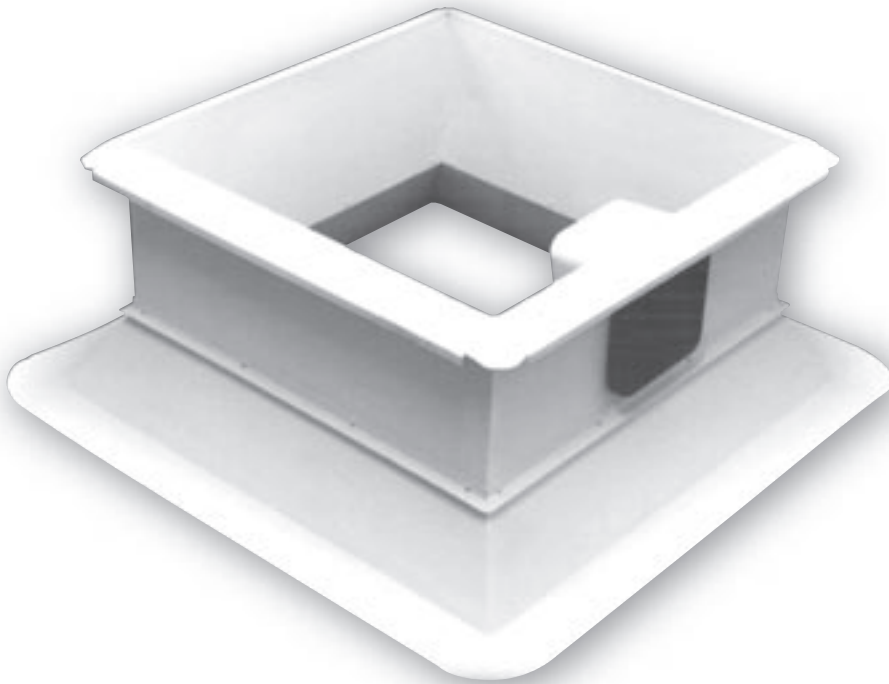
- Rooflights supplied ready glazed to kerbs.
- Kerb in G.M.S. or Aluminium.
- Insulation optional extra.
- Kerbs white P.P.C. internally as standard.
- Maximum recommended size 1200 x 1200.
- Gas Arms, Hasp, Staple and closure handle internally as standard
- Externally fixed on request
- Adaptor kerbs available

STANDARD ROOF OPENING SIZES AVAILABLE
600 x 900
600 x 1200
750 x 750
750 x 900
750 x 1050
900 x 900
900 x 1200
900 x 1500
1050 x 1050
1200 x 1200

Non-standard sizes in metal kerbs also available on request



Power Vent

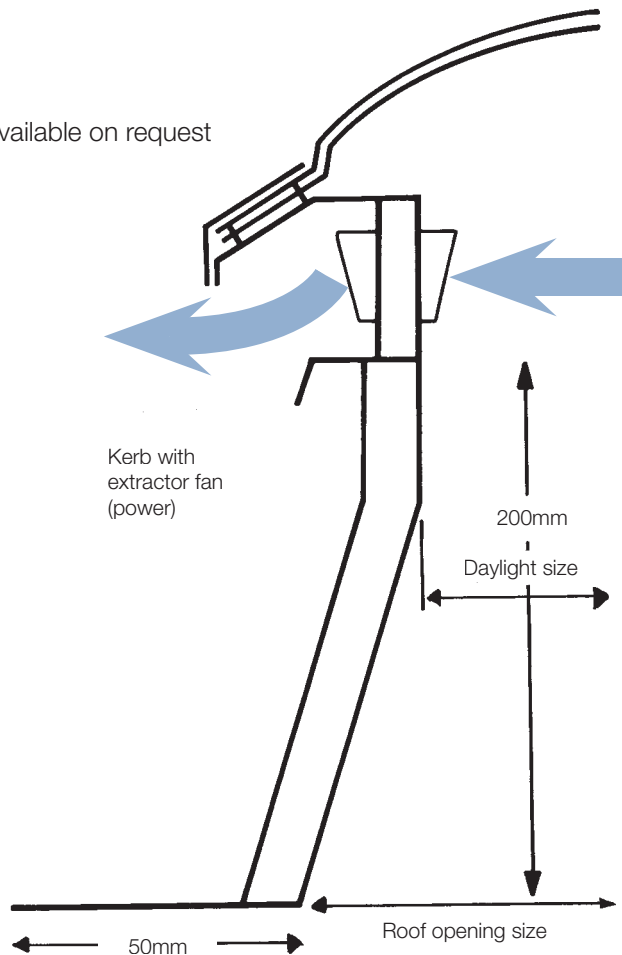


- Rooflights supplied ready glazed to kerbs.
- Insulation. Optional extra with G.M.S./Aluminium.
- Kerb height 200mm as standard.
- Higher kerbs available in G.M.S./Aluminium.
- G.M.S./Aluminium white P.P.C. internally.
- Not available in G.R.P.
- 6" Vent Axia/Xpelair as standard. Other sizes available on request
- Adaptor kerb available
- Burglar bars in G.M.S. only.

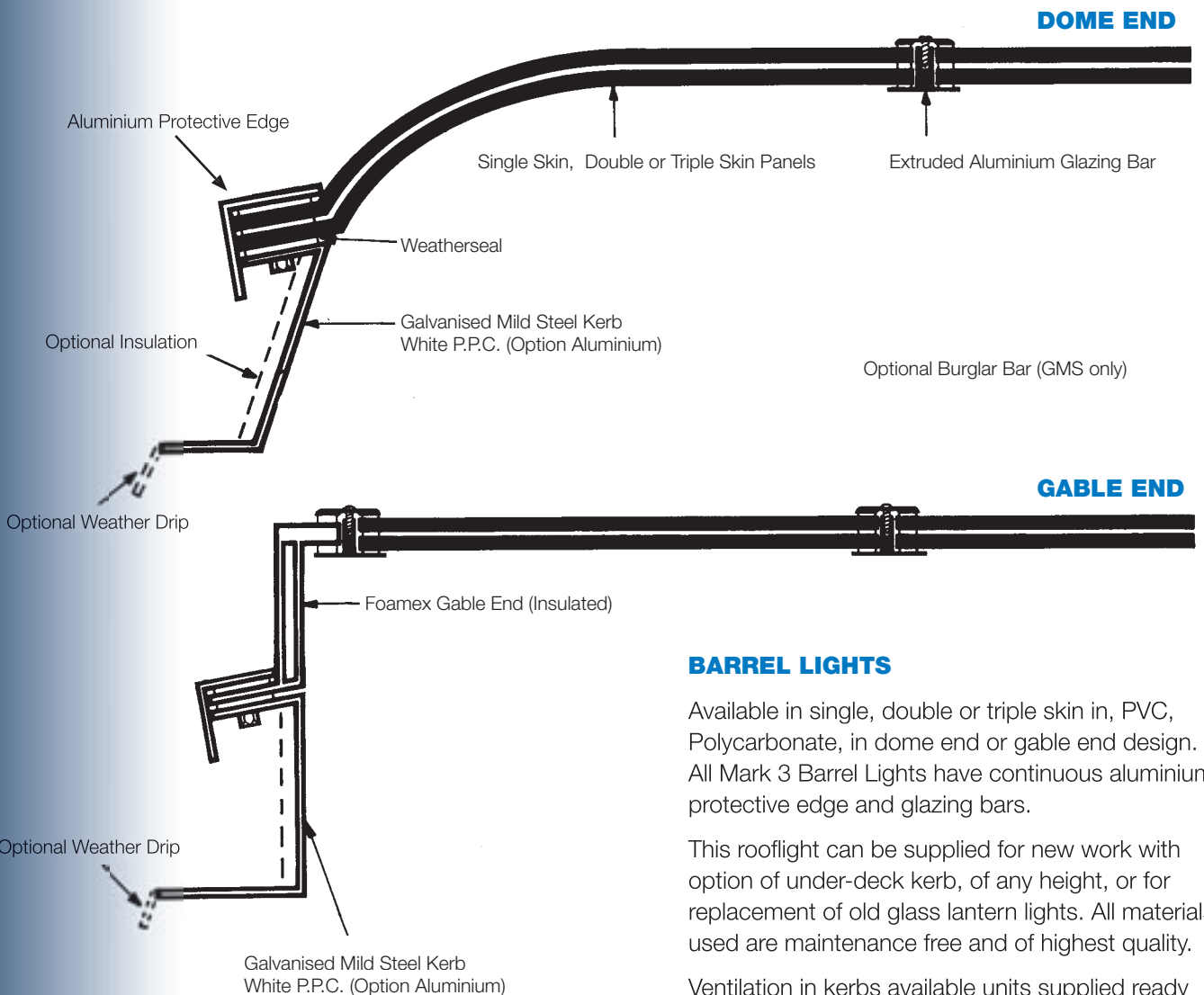
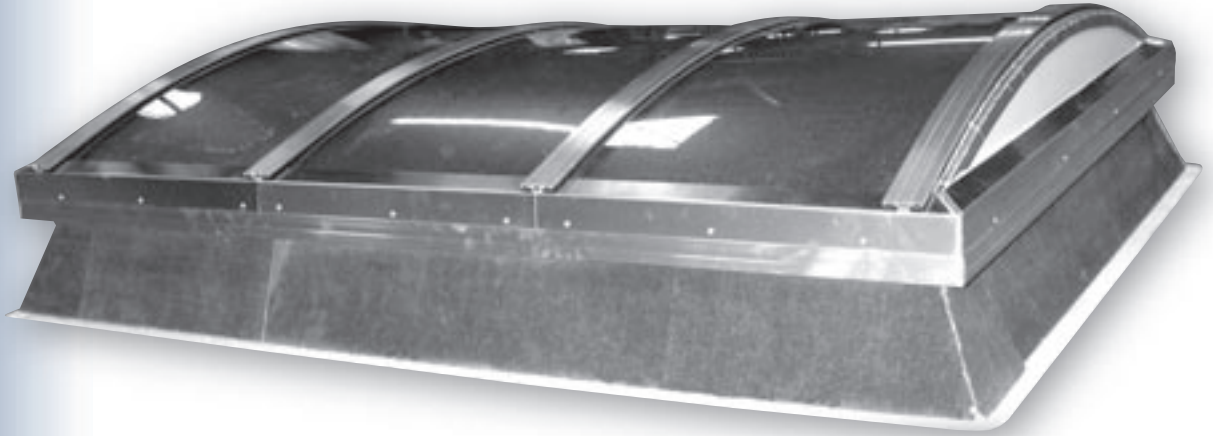
STANDARD ROOF OPENING SIZES AVAILABLE

450 x 450	900 x 1500
600 x 600	900 x 1800
600 x 900	900 x 2100
600 x 1200	1050 x 1050
750 x 750	1050 x 1500
750 x 900	1050 x 1650
750 x 1050	1200 x 1200
900 x 900	1200 x 1500
900 x 1200	1200 x 1800

Non-standard sizes in metal kerbs also available on request



Single, Double, or Triple Skin Continuous Barrel



BARREL LIGHTS

Available in single, double or triple skin in, PVC, Polycarbonate, in dome end or gable end design. All Mark 3 Barrel Lights have continuous aluminium protective edge and glazing bars.

This rooflight can be supplied for new work with option of under-deck kerb, of any height, or for replacement of old glass lantern lights. All materials used are maintenance free and of highest quality.

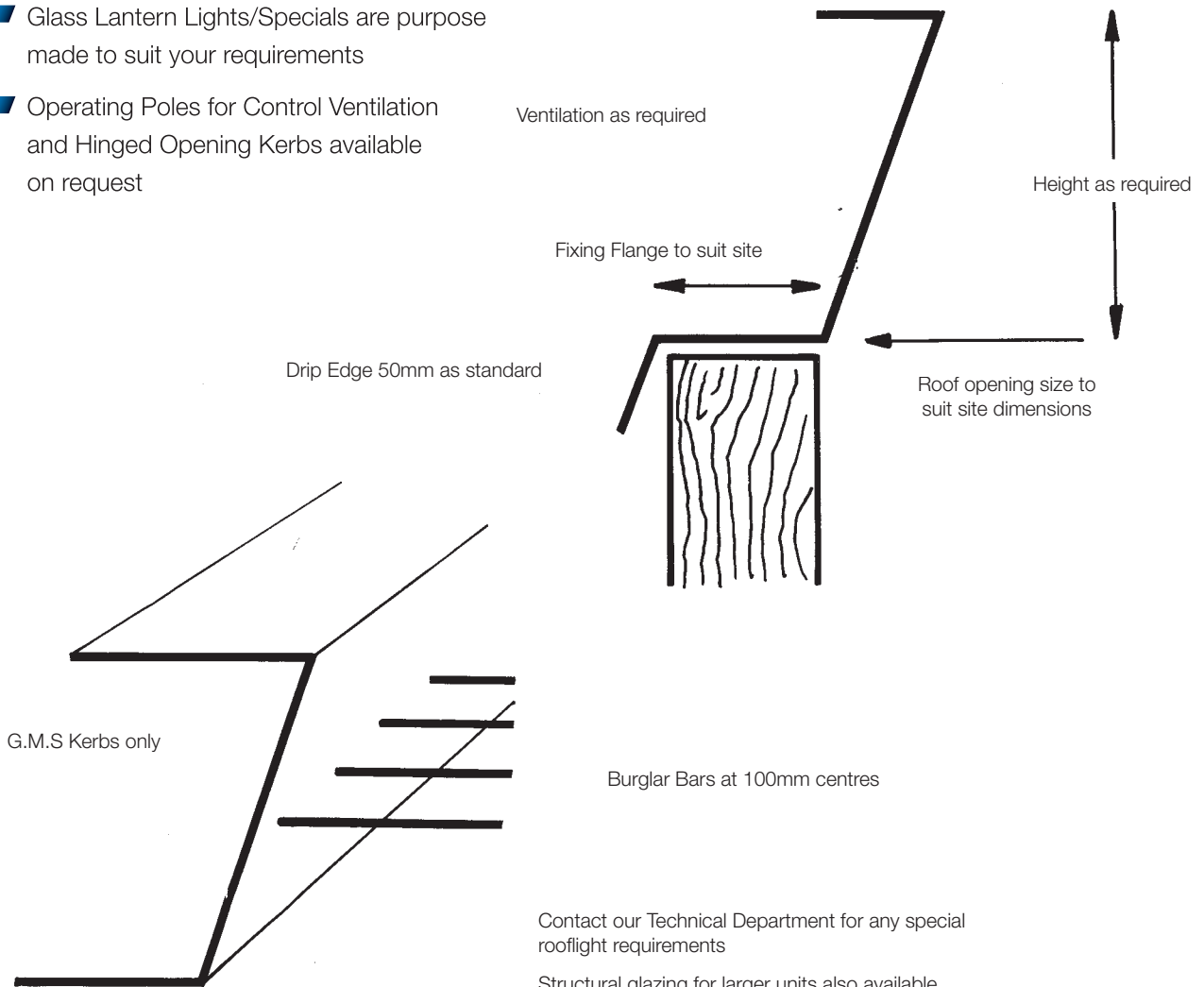
Ventilation in kerbs available units supplied ready glazed whenever possible.

Specials and Accessories



- Glass Lantern Lights/Specials are purpose made to suit your requirements
- Operating Poles for Control Ventilation and Hinged Opening Kerbs available on request

ADAPTOR KERBS

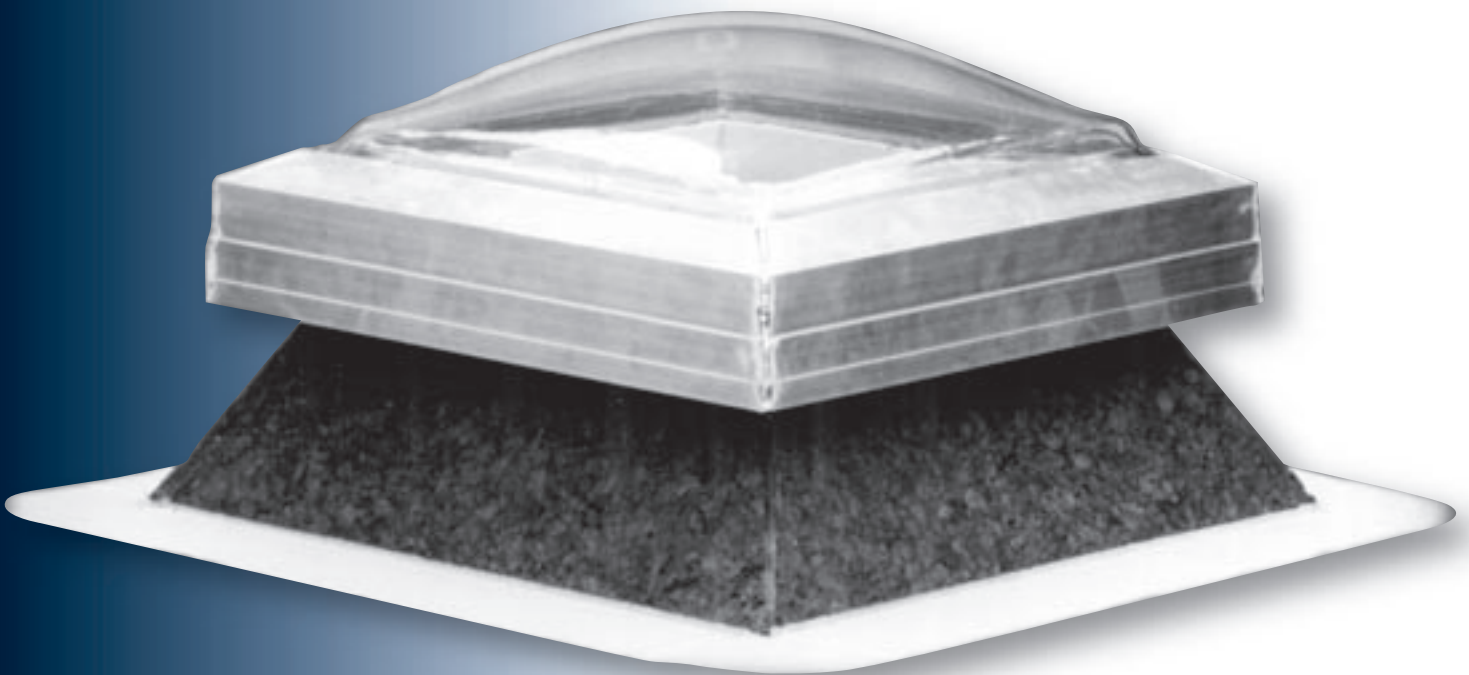


Contact our Technical Department for any special rooflight requirements

Structural glazing for larger units also available.

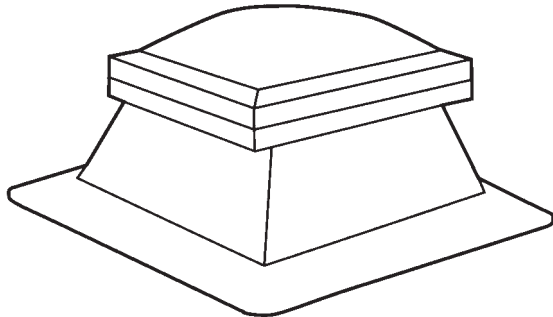
Further information on request

Factory Assembled Security Light



- Designed for installation on flat deck roofs
- Factory glazed with Integral Kerb
- Aluminium security snap in detail
- Can be supplied in single skin, double or triple skin domes or pyramids
- Specified by local authorities.

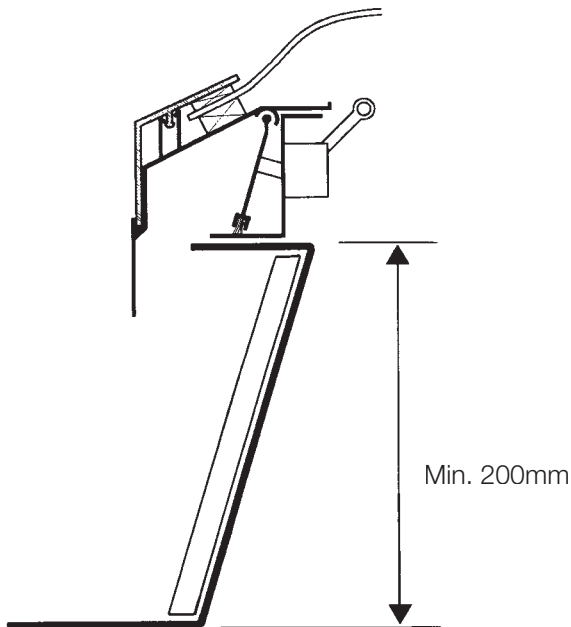
Single, Double or Triple Skin Dome or Pyramid



P.A.G. / Polycarbonate to a range of rectangular and square roof opening sizes
- See chart for details.

Where special sizes of this type are required please contact our Technical Department

Burglar bars can be fitted in G.M.S. Kerbs only, for added security.



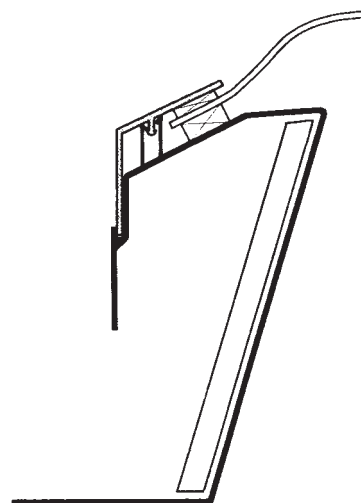
VENTILATION OPTIONS

- Permanent Vent
- Controlled Vent
- Hinged Opening Vent
- Power Vent
- Hinged Access Units Available

Manufacture of non-standard sizes available to special order.

STANDARD ROOF OPENING SIZES AVAILABLE	
450 x 450	900 x 1800
600 x 600	1050 x 1050
600 x 900	1200 x 1200
600 x 1200	1200 x 1800
750 x 750	1200 x 2400
900 x 900	1350 x 1350
900 x 1200	1500 x 1500
900 x 1500	1800 x 1800

Non-standard sizes in metal kerbs also available on request



Handling & Cleaning

HANDLING

Check that all units on delivery note are received in good condition and undamaged. No claims for damage, breakages or shortages can be considered unless marked on delivery note and a written claim made to:- Astrofade Ltd., Kyle Road, Gateshead NE8 2YE.

Stack all units under cover on a flat dry surface. Stack on edge with separating pieces between each unit. Double and triple skin rooflights do not nest. They must not be placed at any time on top of each other.

N.B. Before fixing do not place rooflights flat in full sunshine. Rooflights should be kept in the shade on edge.

CLEANING

When the glazing element of a rooflight requires cleaning the use of a mild household detergent is advised. **Neither** chemical solvents or abrasive cleaners must be used.

Fixing Instructions

MK2 & MK5

These units are supplied with the rooflights already fixed to the kerb as standard, separately on request.

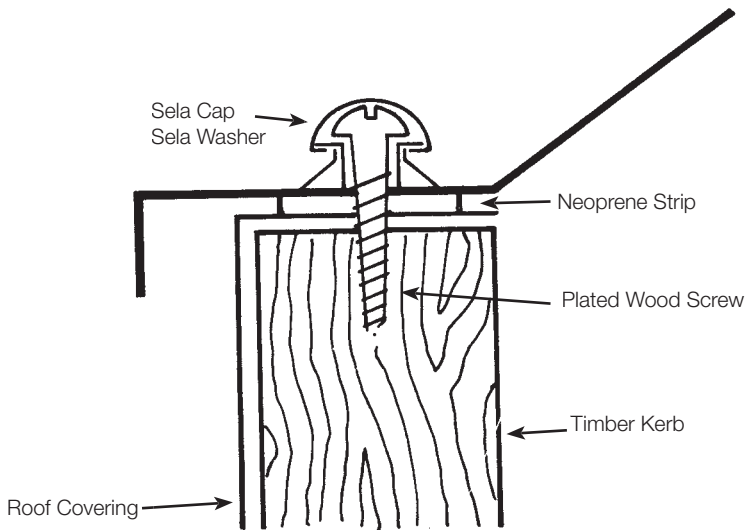
To fix the kerb, seat the bottom flange on the roof deck or roof supporting member, with a bead of good proprietary mastic under the bottom flange. Secure with 60mm x 10g nickel plated wood screws, 6mm roofing bolts or similar fasteners, located approximately 100mm from each corner and approximately 450mm centres (these fixings are not supplied). When fixing kerbs to concrete, insert 60mm rawl plugs or similar, again 100mm from each corner and at 450mm intervals and secure with plated wood screws. Felt or asphalt roof covering should be taken up the sides of the kerb to the underside of top flange. These kerbs are suitable for other types of roof covering, e.g. Trocol. Contact our Technical Department for further information.

N.B. Glassfibre kerbs have textured surface which provides an adequate key for asphalt. Metal kerbs should have expanded metal fixed to give a key when used in conjunction with asphalt (supplied already fixed on request).

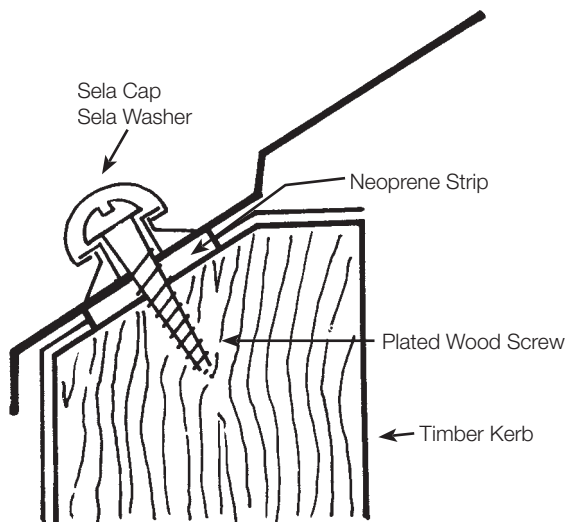
Adaptor Kerbs with Weather Drip

A 40mm wide neoprene foam is supplied separately with the unit, and should be laid on top of the existing kerb. The adaptor kerb should then be seated on top of this, fixing holes drilled, 8mm, and securely fixed down using the screws or bolts, with the sela caps and washers. Clean swarf off after drilling the kerb, otherwise it will cause staining.

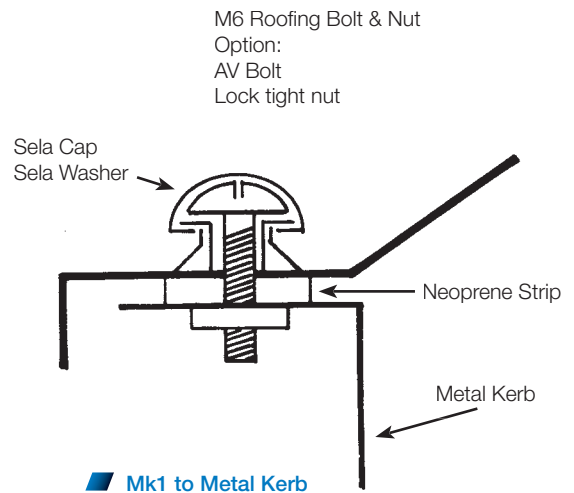
Mk1 and Mk3



■ Mk1 to Timber Kerb



■ Mk3 to Timber Kerb



■ Mk1 to Metal Kerb

Both the Mk1 and Mk3 rooflights are supplied with the foam weatherstrip. Lay the rooflight on the kerb and mark the position of the fixing holes, ideally these should be 100mm from the corner and at 450mm centres. Drill a 8mm hole in the plastic, it is advisable not to use a new drill bit. Fix as shown in diagram.

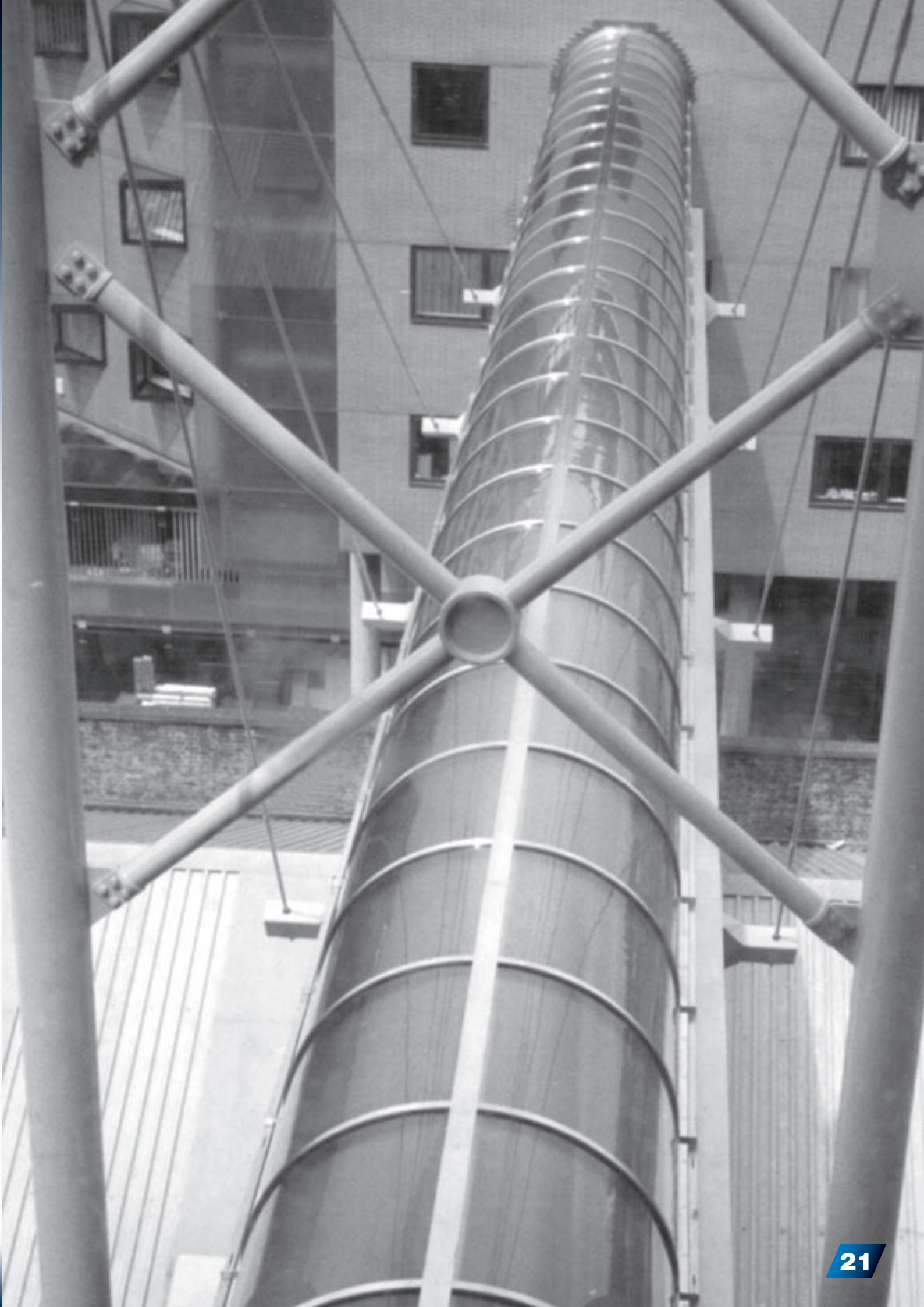


Complete Glazing System for Today's Architectural Environment

A world of experience lies behind the installation of structural glazing designed and manufactured by Astrofade.

Aesthetic quality harmonising with natural light and protection is of paramount importance and has been readily achieved by working in cooperation with architects to produce many outstanding glazing structures in the fields of commerce, industry, education, shopping and leisure centres.





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Sky Tunnel



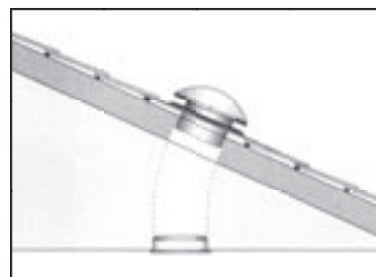
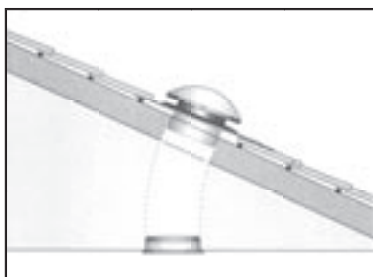
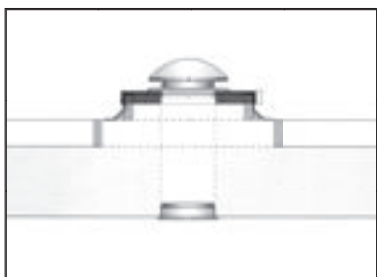
- One-piece flexible tubing - easy to install in any style of house
- Low profile dome, impact resistant and UV stabilized designed to sit with any roof pitch
- Optional venting and night light
- Next day delivery on standard units

Here's why Sky Tunnels are the builder's choice in skylights:

- Easy installation - a Sky Tunnel can be successfully installed in less than two hours.
- Energy efficient - prevents the use of electric lighting during the day.
- Unique flexible tubing can be used in any style of house.
- Durable metal flashing - this Sky Tunnel feature outperforms traditional plastic flashing and is designed to sit with any roof pitch.
- Watertight design - eliminates water build-up



- Low profile dome, impact resistant and UV stabilised.
- One piece flexible tube overcomes the limitations of rigid tubing systems.
- No need for framing, dry lining or painting.
- Optional vented rim under dome allows steam and stale air to escape.
- Adjust Air option allows ventilation to be controlled from inside.
- Optional light unit - inexpensive kit that converts the skylight into a light fixture at night.
- Double-glazed diffuser option - reduces heat loss.



Sky Tunnel Kits

Tile Roof

350 dia.
400 dia.
500 dia.
550 dia.

Slate Roof

350 dia.
400 dia.
500 dia.
550 dia.

Flat Roofs

350 dia.
400 dia.
500 dia.

Accessories

Extra Flexi-tube

350 dia.
400 dia.
500 dia.
550 dia.

Double Glazed Diffuser

350 dia.
400 dia.
500 dia.
550 dia.

Adjust Air Unit

400 dia.
500 dia.

Eclipse Varilight

350 dia.
400 dia.
500 dia.
550 dia.

Electric Light Unit

350 dia.
400 dia.
500 dia.
550 dia.

General Information

MARK 1

A traditional style of rooflight with extended horizontal fixing flange to suit metric/imperial sizes. Ideal as a replacement rooflight and is available in a wide range of squares, rectangles and circles. Normally supplied to fit to flat top existing or builders upstands but can be provided with purpose-made splayed metal kerbs to replace lantern lights.

MARK 2

A high quality composite rooflight supplied factory glazed, to reproduce site and handling costs. [MARK 2](#) incorporates an integral metal or GRP kerb, in fixed or hinged opening options. Permanent or controlled ventilation models can be supplied, as well as power vents and a selection of access hatches.

A continuous aluminium sloping edge trim holds the glazing in place, and helps to reduce water retention and risk of penetration.

MARK 3

A traditional style of rooflight featuring a sloping fixing flange to suit metric/imperial sizes. Edge detail is suitable for standard glass replacements and other applications where a 30° sloped top upstand is present. Available in an extensive range of square, rectangular and circular shapes.

MARK 5

The latest addition to the product range is the new [MARK 5](#) security range of rooflights, at affordable. Factory assembled and ready to fix, this unit is designed to meet the ever demanding need for higher security in buildings. The fully insulated metal kerb is glazed with impact resistant polycarbonate, and retained by a unique specially designed extruded aluminium anti-vandal continuous edge frame, alleviating the need for any exposed fixings. A comprehensive series of options include fixed, permanent or controlled ventilation, manual or electrically operated hinged opening and access hatches. Internal steel burglar bars can also be fitted for those areas that may require added security.

MARK 3 Continuous Rooflight

An arched barrel vault continuous rooflight system, designed to suit standard and non-standard roof opening sizes with spans of up to 2500mm. (Length unlimited). Whenever possible supplied factory glazed to an integral kerb with aluminium protective edge and extruded aluminium glazing bars. Kerb ventilation options are available. This is a very competitive product for new or replacement work.

SKY TUNNEL

Low profile impact resistant Sky Tunnel for pitched and flat roof applications

SPECIAL APPLICATIONS

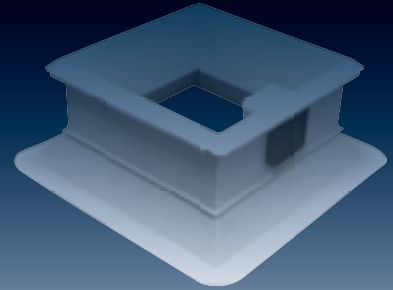
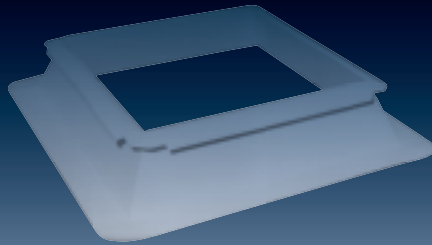
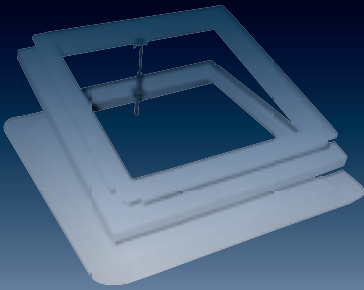
- Structural glazed barrel vault assemblies (for spans greater than 2500mm)
- Architectural Glazed Structures
- Glazed Canopies and Walkways
- Skylights and Lantern Structures

It is recommended that our Design and Technical Department be contracted for these applications and where other forms of specialised glazing is required.

A separate brochure is available on request for Glazed Structures.

CONDENSATION

Condensation formation is caused by environmental conditions outside of our control. Incorrect storage conditions can also promote condensation between skins once the unit is installed. Condensation occurs without there being any inherent fault in the unit itself.



ASTROFADE LIMITED

Kyle Road, Gateshead

Tyne & Wear. NE8 2YE

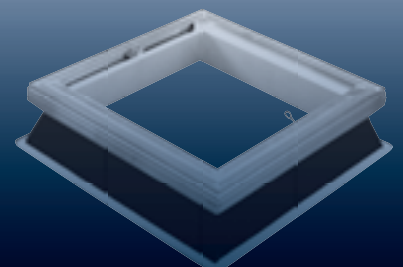
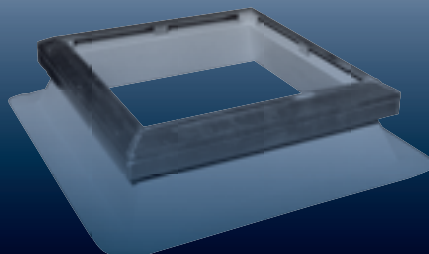
Tel: (0191) 420 0515

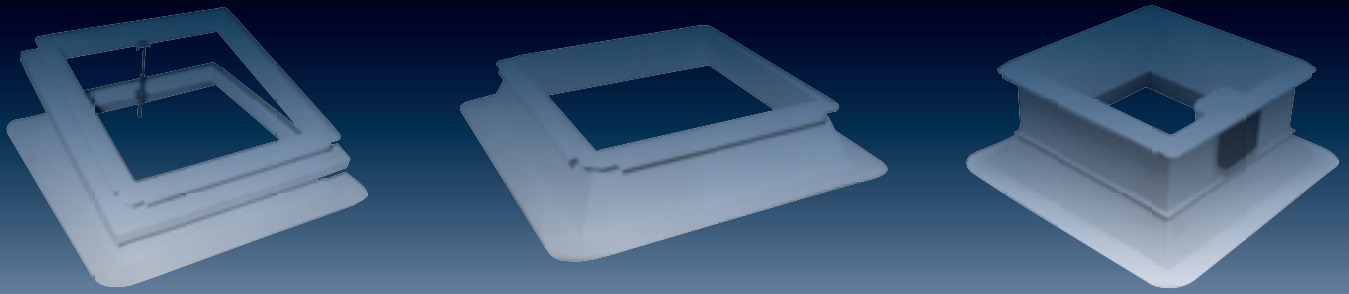
(0191) 460 0642

Fax: (0191) 460 4185

Web: www.astrofade.co.uk

Email: astrofade@aol.com





Specialised Rooflights by

ASTROFADE
LIMITED

