



NATURAL DAYLIGHTING / ROOFLIGHTS

# SKYDÔME® - SKYCLAIR®



**SKYDÔME®**  
La sécurité en toute clarté



SKYDÔME® and SKYCLAIR® rooflight units are designed principally to allow natural daylight into a building. They are used on flat and low slope roofs and on tiled or slate pitched roofs on all types of buildings:

- Public access buildings
- Industrial buildings
- Commercial buildings, offices
- Residential buildings

The difference between SKYDÔME® and SKYCLAIR® units is the glazing. SKYCLAIR® units can be used where large areas of glazing are required.

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### ADVANTAGES

#### SKYDÔME®:

With its thermo-moulded glazing, the SKYDÔME® unit is available in different geometric shapes, dome or pyramid, and so meets architects' aesthetic requirements.

#### SKYCLAIR®:

SKYCLAIR® is fully pre-assembled in the factory, allowing speedy and reliable installation on the roof. With its structured polycarbonate glazing, it is available in a wide range of sizes and offers optimum light transmission surface (up to 5.85 m<sup>2</sup> in standard sized units).

High resistance to corrosion: the galvanised steel kerb is assembled by crimping.

This assembly technique, used in car manufacturing, avoids the use of welding which requires subsequent reconditioning to achieve a level of protection equivalent to galvanisation. SKYDÔME® and SKYCLAIR® units are therefore highly resistant to the effects of weathering and corrosion, even if scratched.

Colour Finish: SKYDÔME® and SKYCLAIR® rooflight units are available in galvanised steel or, upon request, in steel and pre-coated in CLASSIC WHITE colour. They can also be painted after manufacture in one of the main RAL colours (thickness of pre-coating: 25 µ, thickness of final coating: over 25 µ).

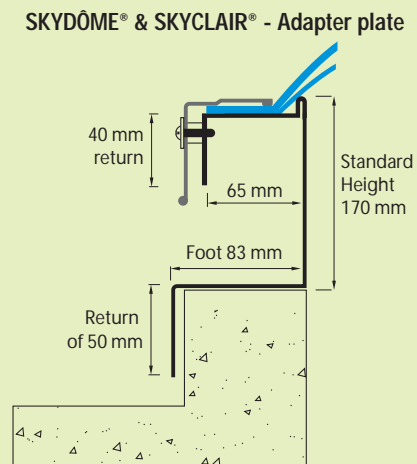
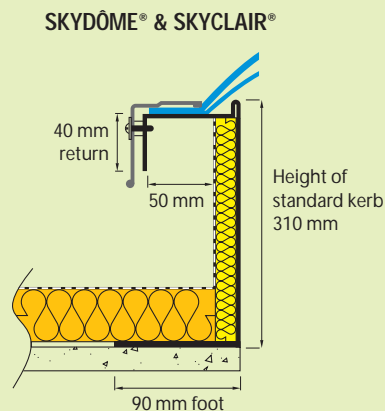
SKYDÔME® and SKYCLAIR® are architectural features of the roof.



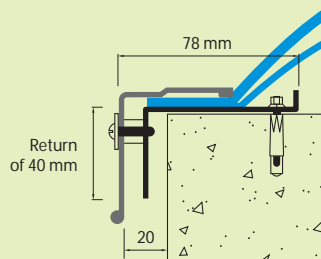
**New work:** Ideal for new roofs. The standard kerb is 310 mm high with a 90 mm foot.

**For refurbishment and renovation works using an existing or new builder's kerb:**

- The adapter plate is 170 mm high with a foot of 83 mm (other sizes are available upon request).
- The SKYDÔME® SC: if an adapter plate or a unit without a kerb is used then this is designed for installation on a builder's kerb (see installation guide).



**SKYDÔME® SC & SKYCLAIR® - without kerb**



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## COMPOSITION

SKYDÔME® and SKYCLAIR® units are made up of the following components:

- **Kerb:** this is the main component of the unit. The standard kerb in galvanised steel is assembled by crimping. The straight sided kerb is covered on the outside by bitumen-surfaced thermal insulation designed to accept torch-on waterproofing membranes. Alternative designs are available for PVC roof membranes. In the Adapter Plate version an insulated kerb is available on request. Fire rating "O":
- **Glazing:**

**SKYDÔME®:** As standard, PMMA double domes (opalescent outer dome and transparent inner dome). The following options are also available: reinforced double domes (1200 joules), single dome, double or single pyramid, polycarbonate domes.

**SKYCLAIR®:** As standard, 10 mm reinforced, structured opalescent polycarbonate sheet (PCA), tested to 1200 joules. The following options are also available: 10 and 16 mm polycarbonate, triple- or quadruple-walled structured polycarbonate sheet for better thermal resistance. All PCA glazing has anti-U.V. treatment. To choose the type of glazing required, see the table entitled "Glazing - Performance".

The positioning of the glazing and the design of the units reduces the build-up of condensation as air circulates between the frame and the kerb.
- **Aluminium beading frame:** fixed by stainless steel screws and nylon washers. This holds the glazing in place and protects edges from lateral impact. It also enhances the aesthetic appeal of SKYDÔME® and SKYCLAIR®.

TYPE OF GLAZING	THERMAL TRANSMISSION U (W/m <sup>2</sup> °C)	LIGHT TRANSMISSION (%)	FIRE CLASSIFICATION	ACOUSTIC PERFORMANCE (DB(A))
Double polycarbonate	3.1	81		
Double domes PMMA (polymethyl methacrylate)	3.1	76		19
10 mm structured polycarbonate - opal	3.1	62		17
10 mm structured polycarbonate - Venetian	3.1	33	M2	17
10 mm structured polycarbonate - Comfort	3.1	55	M2	17
10 mm structured polycarbonate - 4-walled	2.5	55	M2	17
16 mm structured polycarbonate - clear	2.3	79	M2	21
16 mm structured polycarbonate - opal	2.3	57	M2	21
16 mm structured polycarbonate - K clear	2	72	M2	21
16 mm structured polycarbonate - K opal	2	57	M2	21
16 mm structured polycarbonate - K Comfort	2	50	M2	21

For other types of glazing: see the datasheet on Optional Accessories



**SKYDÔME** and **SKYCLAIR**® rooflight units are guaranteed for ten years (when installed and used in accordance with Axtor Ltd's specifications). **SKYDÔME** and **SKYCLAIR**® conform to regulatory standard NFP 37-418.

SKYCLAIR, with its structured polycarbonate glazing, is approved by the CSTB Avis Technique No. 2/03-1027.

Resistance to upward static load: 1000 pa (1000 N/m<sup>2</sup>).

Resistance to downward static load: 1500 pa (1500 N/m<sup>2</sup>).

Fire rating data and 1200 joules test data can be found on our website: [www.skydome-axt.com](http://www.skydome-axt.com) under the heading "Espace Partenaires" (Partner information).

- Steel kerb pre-painted in CLASSIC WHITE
- Steel kerb painted after manufacture in one of the main RAL colours
- Grill tested to 1200 joules
- Painted grill tested to 1200 joules
- Permanent ventilation m<sup>2</sup>
- Permanent ventilation
- Domes 1200 joules
- Domes, pyramid domes
- Quadruple-walled PCA 10, PCA 16, etc.
- Alternative technical solution for roofs with PVC waterproofing

#### Options for Adapter Plates:

- Insulation
- Length of foot can be from 50 to 180 mm (and more on request)



Installation should be carried out in accordance with current regulations. Decks should be sound and resistant and should conform to the requirements of current decking standards and of the installation guide. Maximum roof slope: 25°, i.e. 45%.

**Fixing:** in accordance with the current DTU standards series 43, in the case of a standard kerb, on metal, timber or concrete deck. If an adapter plate or a **SKYDÔME® SC** is used, this is adapted for installation on to an existing kerb or concrete surround (see installation guide).

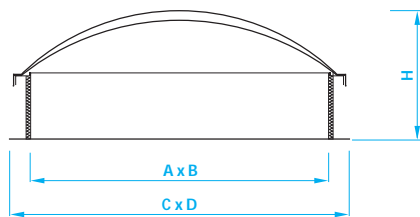
#### Waterproofing seal:

- The bitumen-faced insulation on the standard kerb guarantees a seal with waterproofing detailing material.
- Zinc or lead flashing should be installed in situ to create a seal with roof tiles or slates.
- A co-laminated metal sheet is used for PVC membranes.

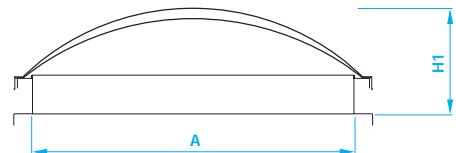
**Maintenance:** Glazing must be washed with soapy water. Corrosive products or solvents must not be used.

DIMENSIONS OF ROOF OPENING A X B* (cm)	LIGHT TRANSMISSION SURFACE (m <sup>2</sup> )	OVERALL DIMENSION C X D (cm)	SKYDÔME®			SKYCLAIR®	
			H (cm)	H1 (cm)	H2 (cm)	H3 (cm)	H4 (cm)
50 x 50	0.25	68 x 68	46	32	17	36	22
85 x 85	0.72	103 x 103	53	39	24	36	22
100 x 100	1.00	118 x 118	55	41	26	36	22
120 x 120	1.44	138 x 138	57	43	28	36	22
140 x 140	1.96	158 x 158	60	46	31	36	22
150 x 150	2.25	168 x 168	65	51	36	36	22
160 x 160	2.56	178 x 178	65	51	36	36	22
180 x 180	3.24	198 x 198	68	54	39	36	22
195 x 200	3.90	213 x 218	--	--	--	36	22
200 x 200	4.00	218 x 218	70	55	40	--	--
70 x 100	0.70	88 x 118	51	37	20	36	22
100 x 150	1.50	118 x 168	55	41	26	36	22
100 x 200	2.00	118 x 218	55	41	26	36	22
120 x 250	3.00	138 x 268	--	--	--	36	22
120 x 300	3.60	138 x 318	--	--	--	36	22
140 x 200	2.80	158 x 218	63	49	34	36	22
150 x 300	4.50	168 x 318	--	--	--	36	22
160 x 250	4.00	178 x 268	--	--	--	36	22
195 x 250	4.88	213 x 268	--	--	--	36	22
195 x 300	5.85	213 x 318	--	--	--	36	22

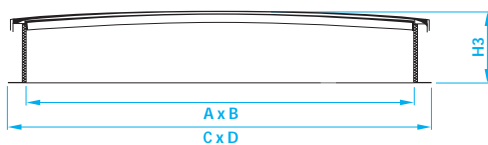
SKYDÔME®



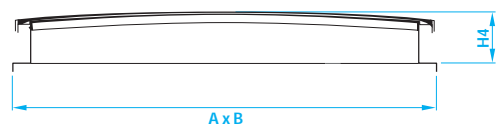
SKYDÔME® ADAPTER PLATE



SKYCLAIR®



SKYCLAIR® ADAPTER PLATE



SKYDÔME® / SKYCLAIR® without kerb

