

**5 OPTIONS**

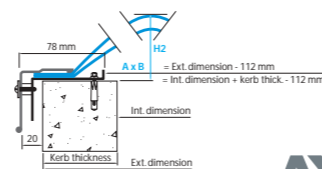
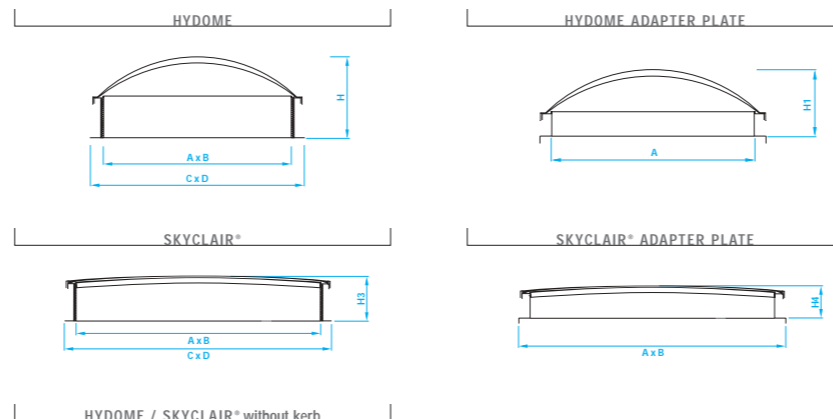
- Steel kerb pre-painted in CLASSIC WHITE
- Steel kerb painted after manufacture in one of the main RAL colours
- Grill tested to 1200 joules
- Painted grill tested to 1200 joules
- Permanent ventilation m<sup>2</sup>
- Permanent aeration
- Domes 1200 joules
- Domes, pyramid domes
- Quadruple-walled 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 180mm (and more on request)

**7 GEOMETRIC DIMENSIONS**

DIMENSIONS OF ROOF OPENING A X B (CM)	LIGHT TRANSMISSION SURFACE (M2)	OVERALL DIMENSION C X D (CM)	HYDOME			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



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**NATURAL DAYLIGHTING / ROOFLIGHTS**

**HYDOME - SKYCLAIR®**





**HYDOME** 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

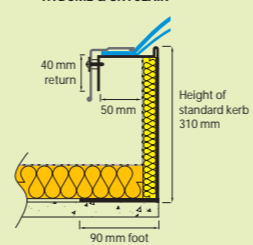
The difference between **HYDOME** and **SKYCLAIR®** units is the glazing. **SKYCLAIR®** units can be used where large areas of glazing are required.

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

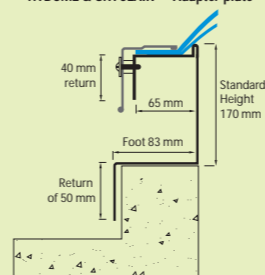
**For refurbishment and renovation works using an existing or new builder's kerb:**

- The adapter plate is 170mm high with a foot of 83mm (other sizes are available upon request).
- The **HYDOME 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).

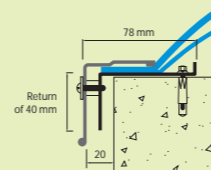
**HYDOME & SKYCLAIR®**



**HYDOME & SKYCLAIR® - Adapter plate**



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



### 3 GLAZING - PERFORMANCE

TYPE OF GLAZING	THERMAL TRANSMISSION U W/M2 °C	LIGHT TRANSMISSION (%)	FIRE CLASSIFICATION (BUILDING REGULATIONS ENGLAND AND WALES 2002)	ACOUSTIC PERFORMANCE (DB(A))
Double polycarbonate	3.1	81	Tp(a)	
Double domes PMMA (polymethyl methacrylate)	3.1	76		19
10mm structured polycarbonate – opal	3.1	62	Tp(a)	17
10mm structured polycarbonate – Venetian	3.1	33	Tp(a)	17
10mm structured polycarbonate – Comfort	3.1	55	Tp(a)	17
10mm structured polycarbonate – 4-walled	2.5	55	Tp(a)	17
16mm structured polycarbonate – clear	2.3	79	Tp(a)	21
16mm structured polycarbonate – opal	2.3	57	Tp(a)	21
16mm structured polycarbonate – K clear	2	72	Tp(a)	21
16mm structured polycarbonate – K opal	2	57	Tp(a)	21
16mm structured polycarbonate – K Comfort	2	50	Tp(a)	21

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

## NATURAL DAYLIGHTING / ROOFLIGHTS

# HYDOME - SKYCLAIR®



### 1 ADVANTAGES

**HYDOME:**

With its thermo-moulded glazing, the **HYDOME** 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 5.85m<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. **HYDOME** and **SKYCLAIR®** units are therefore highly resistant to the effects of weathering and corrosion, even if scratched.

Colour Finish: **HYDOME** 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: 25µ, thickness of final coating: over 25µ).

**HYDOME** and **SKYCLAIR®** are architectural features of the roof.



### 2 COMPOSITION

**HYDOME** 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 '0':

- **Glazing:**

**HYDOME:** As standard, polycarbonate 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, PMMA domes. **SKYCLAIR:** As standard, 10mm reinforced, structured opalescent polycarbonate sheet (PCA), tested to 1200 joules. The following options are also available: 10 and 16mm 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 **HYDOME** and **SKYCLAIR**.

### 4 APPROVAL

**HYDOME** and **SKYCLAIR®** rooflight units are guaranteed for ten years (when installed and used in accordance with Axtel Ltd's specifications). **HYDOME** and **SKYCLAIR®** conform to regulatory standard NFP 37-418. Waterproofing details conform to BS Code of practice BS 8217: 2005.

**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: 1500pa (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)