

For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

AIRDÔME®

CE
EN 1873



Types of filling

- PCA 16
- PCA 16+ Lumira*
- PCA 32
- PCA 32+ Lumira*
- PMMA triple dome
- Acoustik' Light



Upstand

- Straight upstand
- 1.2 mm galvanised steel
- Height 360 mm with a 30 mm bituminous insulating coating



Control

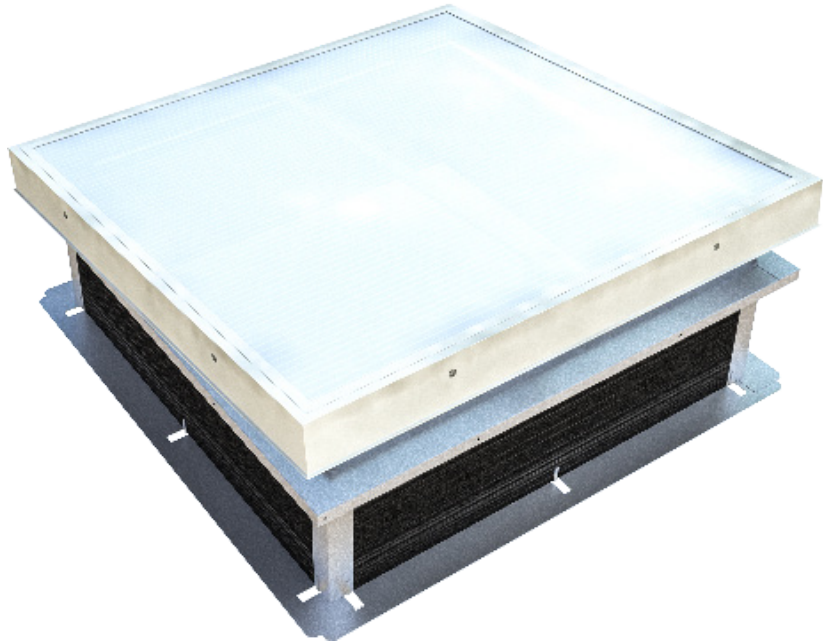
- Manual opening: crank on a 175 mm worm drive
- Electric opening: jack (300 mm stroke) connected to the 220 V mains power supply



THERMIK'

VERSION

The AIRDÔME® is a skylight intended for waterproofed flat roofs on all types of buildings (including public buildings, work premises and industrial buildings).



Also available:



OPTIONS



Types of filling

- Opal PCA 16 IR
- Grey PCA 16
- Transparent PCA 16
- Insulated aluminium cover



Control

- Crank (length: 1.5 m, 2 m, 2.5 m or 3.5 m)
- Switch (ref: XE2102):
3 latching + 2 momentary positions (250 V - 10 A max.)



Upstand

- Upstand height: 410 mm or more
- Lacquered interior (standard RAL colours)
- Colaminated sheet steel top for PVC waterproofing
- Galvanised sheet steel top for PVC waterproofing
- Bare insulation for PVC waterproofing

Capping upstand

See page 6 for details

Available versions



Other information

- 6 mm round bar or 16x16 mm 1200 joule square tube grid, galvanised or lacquered in standard RAL
- Anti-sawing burglar-resistant grid (16x16 mm + R10 tube assembly), galvanised or lacquered in standard RAL
- Pleated blind for horizontal installation in the product, for 100 x 100 cm and 120 x 120 cm dimensions (contact us for other dimensions) with an upstand height of at least 500 mm
- Pneumatic opening: jack with a stroke of 300 mm or 600 mm

Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light surface (m ²)	Product weight (kg)	
		PCA	DD		Man.	Elec.
50 x 50	68 x 68	36	48	0.25	27	29
85 x 85	103 x 103	37	55	0.73	48	50
100 x 100	118 x 118	37	56	1.00	58	60
120 x 120	138 x 138	37	59	1.44	72	74
140 x 140	158 x 158	37	62	1.96	88	90
150 x 150	168 x 168	37	64	2.25	96	98
160 x 160	178 x 178	37	65	2.56	104	106
180 x 180	198 x 198	39	68	3.24	121	123
195 x 200	213 x 218	39	73	3.90	140	142
70 x 100	88 x 118	36	51	0.70	48	50
100 x 140	118 x 158	37	56	1.40	72	74
100 x 150	118 x 168	37	56	1.50	75	77
100 x 200	118 x 218	39	56	2.00	93	95
140 x 200	158 x 218	39	62	2.80	112	114

Contact us for other dimensions.
* For an upstand height of 360 mm

Filling performance

Other filling and filling options: see "Filling" data sheet.

Type of filling	Thermal transmittance factor Ug (W/ m ² .K)	LT D65 ⁽²⁾	SF or g ⁽²⁾	Reaction to fire	R _w (dB) ⁽³⁾	
	U _{hor} ⁽¹⁾					
PCA	Opal 4-wall PCA 16	1.9	45%	46%	B-s1-d0	R _w =21 dB
	Transparent PCA 16 with Lumira™ aerogel	1.5	67%	67%	B-s1-d0	R _w =21 dB
	Opal multi-wall PCA 20	1.6	54 %	47%	B-s2-d0	R _w =21 dB
	Transparent multi-wall PCA 32	1.3	33%	49%	B-s2-d0	ND
	Transparent PCA 32 with 50% Lumira™ aerogel	0.97	43%	45%	ND	ND
Cover	40 mm aluminium cover	0.85	0%	ND	ND	ND
Dome	Opal PMMA triple dome Opal upper dome + transparent lower dome	2.76	ND	ND	ND	ND
Acoustik' Light	Acoustik' Light Transparent PCA 10 & transparent PCA 6	2.1	ND	ND	ND	ND

⁽¹⁾Relative to the horizontal, as per §2.31 of the Th-Bat regulations.

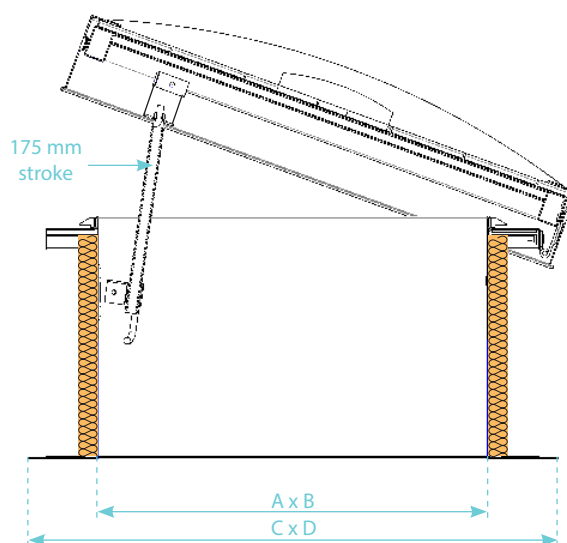
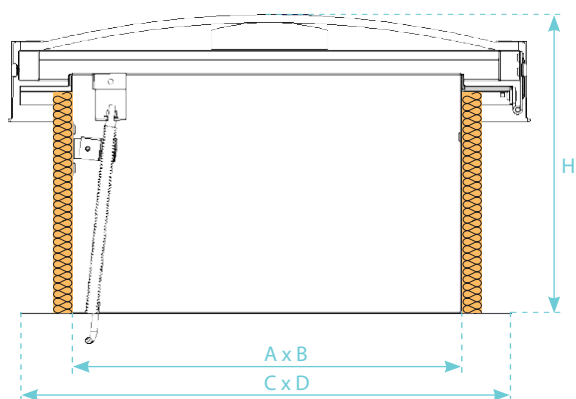
⁽²⁾ Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.

⁽³⁾ Filling insulated against airborne noise R_w, pink noise R_A (environment, airport and industrial activities) and road noise R_{A,lv} laboratory-measured according to NF EN ISO 140.

Technical diagrams

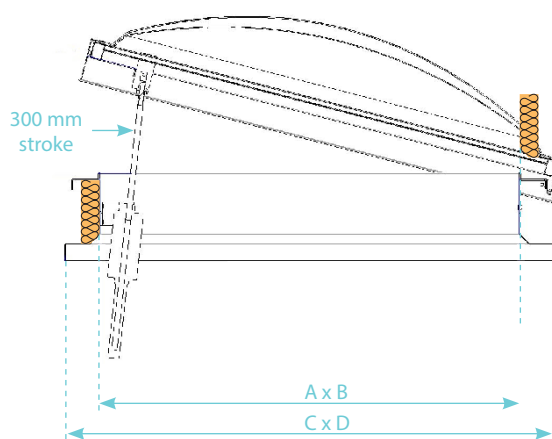
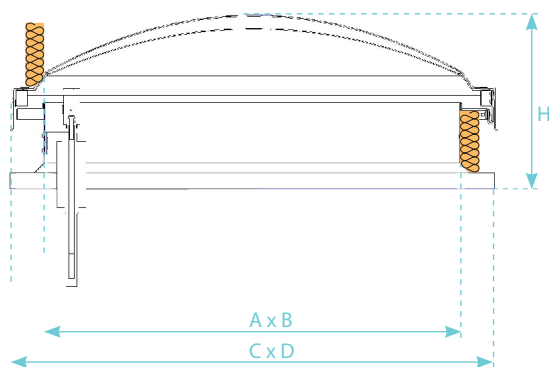
THERMIK' range

AIRDÔME PCA - Manual



ORIGIN' range capping upstand

AIRDÔME triple dome - Electric



COMPLIANCE & INSTALLATION

Compliant with EU standard NF EN 1873.

The product must be fastened and sealed in accordance with the requirements defined in the applicable DTU specifications (series 40 and 43).

Maximum insulation height: as per the DTUs, the sealing flashing must extend to a height of at least 150 mm.

The waterproofing complex (substrate, vapour barrier, insulation and two-layer sealant) must be no thicker than 140 mm for an interior upstand height of 310 mm, or 240 mm for an interior upstand height of 410 mm.

Maximum permissible slope: 25° or 46% (see installation instructions).

DoP available at www.skydome.eu

Trade name

Trade name	Types of filling	Upstand insulation
AIRDÔME	THERMIK' 16	16 mm PCA(Opal PCA)
	THERMIK' 16+	16 mm PCA with LUMIRA (Transparent PCA)
	THERMIK' 20	20 mm PCA (Opal PCA)
	THERMIK' 20+	20+ mm PCA with LUMIRA (Transparent PCA)
	THERMIK' 32	32 mm PCA (Transparent PCA)
	THERMIK' 32+	16 mm PCA + 16 mm PCA with LUMIRA (Transparent PCA)
	THERMIK' 3xD	Triple dome Opal upper dome + transparent intermediate dome + transparent lower dome
	THERMIK' 40 OPAQUE	40 mm aluminium cover
	THERMIK' ACOUSTIK' LIGHT	10 mm PCA + 6 mm solid PC

Upstand height: 360 mm
Insulation:

- on vertical part of upstand
- on upstand top lip

Air permeability and light surface*

Roof opening dimensions A x B (cm)	Air flow (m ³ /h) - Class AP06 ⁽¹⁾		ELS ² (m ²)	
	Less than 4 Pa	Less than 50 Pa	360 mm upstand	410 mm upstand
50 x 50	0.06	0.38	0.07	0.07
85 x 85	0.10	0.65	0.25	0.24
100 x 100	0.12	0.76	0.36	0.35
120 x 120	0.14	0.92	0.54	0.52
140 x 140	0.17	1.07	0.75	0.73
150 x 150	0.18	1.15	0.86	0.85
160 x 160	0.19	1.22	0.99	0.98
180 x 180	0.22	1.38	1.27	1.25
195 x 195	0.24	1.51	1.54	1.52
70 x 100	0.10	0.65	0.24	0.23
100,140	0.14	0.92	0.52	0.51
100 x 150	0.15	0.96	0.56	0.55
100 x 200	0.18	1.15	0.76	0.74
140 x 200	0.20	1.30	1.09	1.07

⁽¹⁾ Air permeability tests carried out at the CSTC test centre as per NF EN 1873 protocols (with reference to the standards NF EN 12152 and NF EN 12153).

² Effective light surface calculated with white lacquered upstand and PCA 16 filling.

* Maximum possible performance (contact us)

Acoustic performance

	PCA 16	PCA 16+	PCA 20	PCA 32	PCA 32 & dome	PCA 32+	PCA 32+ & dome	Opaque 40 mm aluminium cover	Triple dome	Acoustik' Light
Acoustic attenuation (C;C _r) (dB)	17(-2;2)	19(0;-1)	ND	20(-2;-1)	25(-1;-3)	21(0;0)	26(-1;-3)	23(-1;-3)	20(0;-2)	25(-1;-1)
Rain-generated sound intensity Lia (dB)	77	74	ND	75	63	72	61	63	63	66

R_w = acoustic attenuation index laboratory-measured according to EN410 (airborne noise)

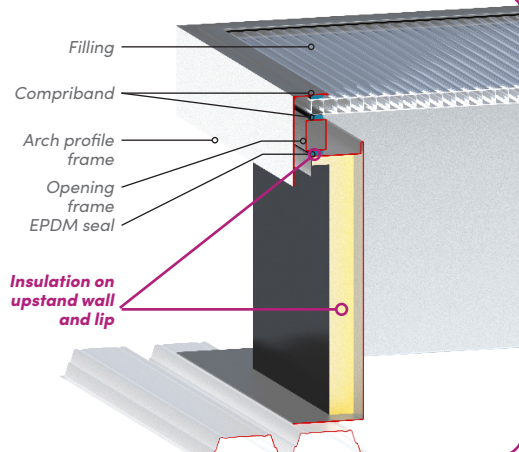
R_A = R_w + C = "pink noise" attenuation index

R_{A,y} = R_w + C_y = "road noise" attenuation index

Filling $U_{RC} : 1.5 \text{ W/m}^2.K^*$

ENHANCED THERMAL INSULATION

- ✓ WIDE RANGE OF FILLING OPTIONS
- ✓ $U_{RC} = 1.5 \text{ W/m}^2.K^*$
- ✓ Compliant with applicable DTU specifications



Thermal performance: U_{RC} ($\text{W/m}^2.K$) and A_{RC} (m^2)

AIRDÔME®																				
Dimensions (cm)	Upstand height: 360 mm									Upstand height: 410 mm										
	U_{RC}									A_{RC}	U_{RC}									A_{RC}
	Acoustik' Light	PCA 16	PCA 16+	PCA 20	PCA 32**	PCA 32+	Opaque 40 mm aluminium cover	Triple dome	Acoustik' Light		PCA 16	PCA 16+	PCA 20	PCA 32**	PCA 32+	Opaque 40 mm aluminium cover	Triple dome			
50 x 50	2.3	2.1	2	2	1.9	1.8	1.7	2.7	1.5	2.2	2.1	2	2	1.9	1.7	1.6	2.7	1.6		
85 x 85	2.3	2.1	2	1.9	1.8	1.7	1.6	2.8	2.5	2.2	2.1	2	1.9	1.9	1.6	1.5	2.7	2.7		
70 x 100	2.3	2.1	2	1.9	1.8	1.7	1.6	2.8	3.1	2.2	2.1	2	1.9	1.9	1.6	1.5	2.7	3.3		
100 x 100	2.3	2.1	2	1.9	1.8	1.7	1.5	2.8	3.8	2.1	2.1	1.9	1.9	1.8	1.6	1.5	2.7	4.1		
120 x 120	2.3	2.1	2	1.9	1.8	1.6	1.5	2.8	4.7	2.1	2	1.9	1.9	1.8	1.5	1.5	2.7	5.0		
140 x 140	2.3	2.1	2	1.9	1.7	1.6	1.4	2.8	5.2	2.1	2	1.9	1.9	1.8	1.5	1.4	2.7	5.5		
150 x 150	2.3	2.1	2	1.8	1.7	1.6	1.4	2.8	5.6	2.1	2	1.9	1.9	1.8	1.5	1.4	2.7	6.0		
160 x 160	2.3	2.1	2	1.8	1.7	1.6	1.4	2.8	6.6	2.1	2	1.9	1.8	1.7	1.5	1.4	2.7	7.0		
180 x 180	2.3	2	2	1.8	1.7	1.5	1.4	2.8	7.6	2.1	2	1.8	1.8	1.7	1.4	1.4	2.7	8.0		
195 x 200	2.3	2	2	1.8	1.7	1.5	1.3	2.8	2.5	2	2	1.8	1.8	1.7	1.4	1.4	2.7	2.7		
100 x 140	2.3	2	2	1.9	1.8	1.6	1.5	2.8	3.8	2.1	2.1	1.9	1.9	1.8	1.5	1.5	2.7	4.0		
100 x 150	2.3	2	2	1.9	1.8	1.6	1.4	2.8	4.0	2.1	2	1.9	1.9	1.8	1.5	1.5	2.7	4.2		
100 x 200	2.3	2.1	2	1.9	1.7	1.6	1.4	2.8	4.9	2.1	2	1.9	1.9	1.8	1.5	1.4	2.7	5.2		
140 x 200	2.3	2	2	1.8	1.7	1.5	1.4	2.8	6.0	2.1	2	1.9	1.8	1.7	1.5	1.4	2.7	6.4		

* For a 180 x 180 cm unit with a 360 mm high upstand and PCA 32+ filling.
 ** Adding a dome has no effect on the unit's thermal conductivity U_{RC} .

FOR RENOVATION AND COMPLIANCE WORKS

The AIRDOME® CAPPING UPSTAND is designed to fit any type of upstand, whether for compliance reasons or to change the unit's purpose **while retaining the existing upstand.**



Types of filling

THERMIK' RANGE:

- PCA 16
- PCA 16+
- PCA 32
- PCA 32+
- PMMA triple dome
- Acoustik'Light



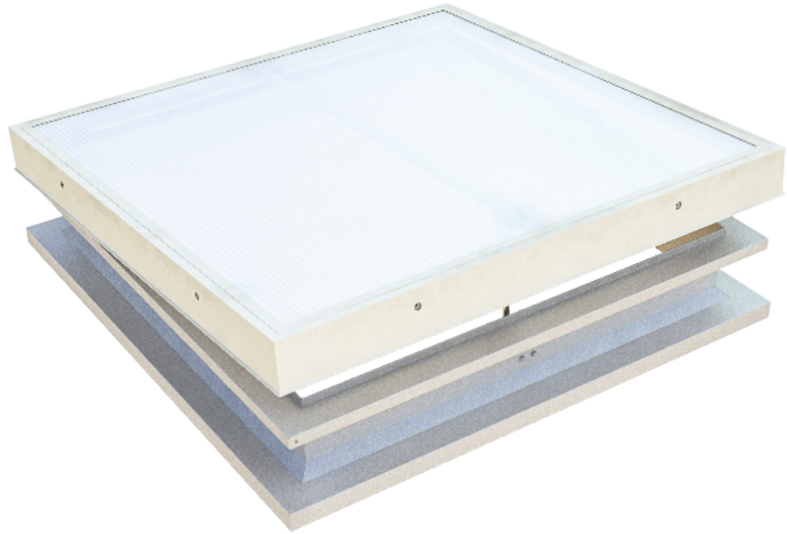
Upstand

- Insulated upstand with galvanised steel protection plate, 84 mm heel and 40 mm overlap
- 1.2 mm galvanised steel
- Height 170 mm



Control

- Manual opening: crank on a 175 mm worm drive
- Electric opening: jack (300 mm stroke) connected to the 220 V mains power supply



Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light surface (m ²)	Product weight (kg)	
		PCA	3xD		Man.	Elec.
50 x 50	67 x 67	22	34	0.25	22	24
85 x 85	102 x 102	23	41	0.73	39	41
100 x 100	117 x 117	23	42	1.00	48	50
120 x 120	137 x 137	23	45	1.44	60	62
140 x 140	157 x 157	23	48	1.96	73	75
150 x 150	167 x 167	23	50	2.25	80	82
160 x 160	177 x 177	23	51	2.56	87	89
180 x 180	197 x 197	25	54	3.24	102	104
195 x 200	212 x 217	25	59	3.90	119	121
70 x 100	87 x 117	22	37	0.70	39	41
100 x 140	117 x 157	23	42	1.40	59	61
100 x 150	117 x 167	23	42	1.50	62	64
100 x 200	117 x 217	25	42	2.00	77	79
140 x 200	157 x 217	25	48	2.80	94	96

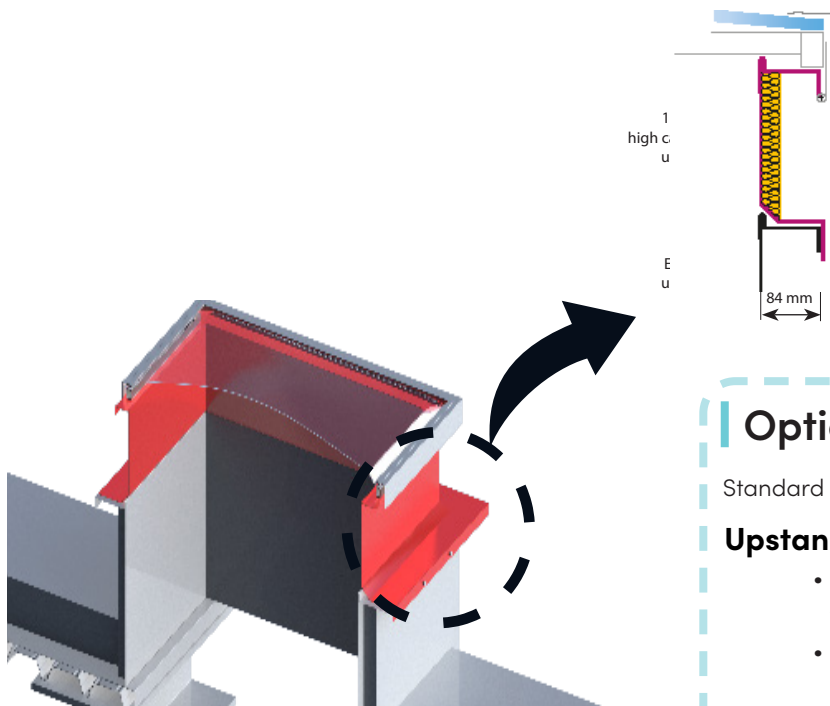
Contact us for other dimensions.
* For an upstand height of 310 mm

Thermal performance: U_{RC} (W/m².K) and A_{RC} (m²)

AIRDÔME® CAPPING UPSTAND								
Dimensions (cm)	THERMIK							A_{RC}
	U_{RC}							
	Acoustik' Light	PCA 16	PCA 16+	PCA 20	PCA 32*	PCA 32+	Opaque 40 mm aluminium cover	
50 x 50	3.6	3.4	3.3	3.1	2.9	2.8	2.7	1.1
85 x 85	3.3	3.1	2.9	2.8	2.5	2.5	2.4	1.8
70 x 100	3.3	3.1	3	2.8	2.5	2.5	2.4	2.3
100 x 100	3.2	3	2.8	2.7	2.4	2.3	2.3	2.9
120 x 120	3.1	2.9	2.7	2.6	2.3	2.3	2.1	3.6
140 x 140	3	2.9	2.6	2.5	2.2	2.2	2	4.0
150 x 150	3	2.8	2.6	2.5	2.2	2.1	2	4.4
160 x 160	2.9	2.8	2.5	2.4	2.2	2	1.9	5.2
180 x 180	2.9	2.7	2.4	2.4	2.1	2	1.9	6.1
195 x 200	2.8	2.7	2.4	2.3	2	1.9	1.8	1.8
100 x 140	3.1	3	2.7	2.6	2.3	2.2	2.2	2.9
100 x 150	3.1	2.9	2.7	2.6	2.3	2.2	2.1	3.0
100 x 200	3	2.9	2.6	2.5	2.3	2.1	2.1	3.7
140 x 200	2.9	2.8	2.5	2.4	2.1	2	1.9	4.7

* Adding a dome has no effect on the unit's thermal conductivity Urc.

Installation diagram



Options

Standard options list p.1

Upstand

- Heel width on request for fitting to existing substrate
- Upstand height on request

Wittenheim in ALSACE



SKYDÔME

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Email: info@skydome.eu
www.skydome.eu

For the product range in other countries, please contact your local representative or visit www.skydome.eu

SKYDÔME reserves the right to modify product specifications without notice. The information and technical details contained in this documentation are provided in good faith and apply to the uses described. The recommendations for use must be checked to ensure they are appropriate and comply with the actual requirements, the specifications and all applicable legislation and regulations.

For other applications and conditions of use, please contact our technical team. Their advice must be sought concerning uses of our products that are not described specifically herein.

Click this link to check that you are seeing the most up-to-date and accurate information about our products:
https://www.skydome.eu/fr/produit/11_airdome.html

AIRDÔME®



Filling

- Opal PCA 10
- PMMA double dome



Upstand

- Straight upstand
- 1.2 mm galvanised steel
- Height 310 mm with a 15 mm bituminous insulating coating



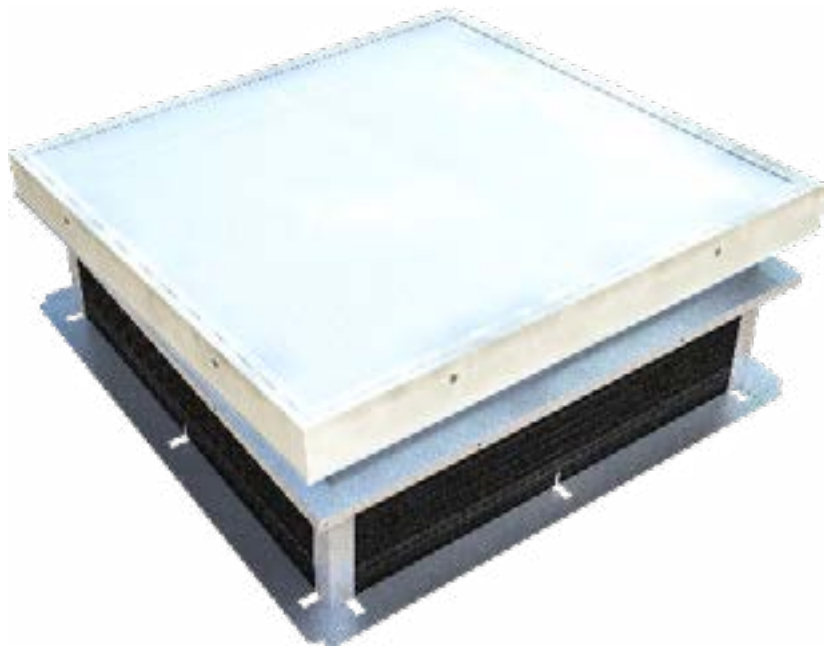
Control

- Manual opening: crank on a 175 mm worm drive
- Electric opening: jack (300 mm stroke) connected to the 220 V mains power supply



VERSION

The AIRDÔME® is a skylight intended for waterproofed flat roofs on all types of buildings (including public buildings, work premises and industrial buildings).



Also available:



OPTIONS



Types of filling

- Transparent PCA 10
- Insulated aluminium cover
- Solid PC double dome



Upstand

- Upstand height: 360 mm, 410 mm or more
- Lacquered interior (standard RAL colours)
- Colaminated sheet steel top for PVC waterproofing
- Galvanised sheet steel top for synthetic waterproofing
- Bare insulation for PVC waterproofing



Other information

- 6 mm round bar or 16x16 mm 1200 joule square tube grid, galvanised or lacquered in standard RAL
- Anti-sawing burglar-resistant grid (16x16 mm + R10 tube assembly), galvanised or lacquered in standard RAL
- Pleated blind for horizontal installation in the product, for 100 x 100 cm and 120 x 120 cm dimensions (contact us for other dimensions) with an upstand height of at least 500 mm
- Pneumatic opening: jack with a stroke of 300 mm or 600 mm



Control

- Crank (length: 1.5 m, 2 m, 2.5 m or 3.5 m)
- Switch (ref: XE2102): 3 latching + 2 momentary positions (250 V - 10 A max.)

Capping upstand

See page 4 for details

Available versions



Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height* (cm)		Light surface (m ²)	Product weight (kg)	
		PCA	DD		Man.	Elec.
50 x 50	68 x 68	36	48	0.25	27	29
85 x 85	103 x 103	37	55	0.73	48	50
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Contact us for other dimensions.
* For an upstand height of 310 mm

Filling performance

Other filling and filling options: see "Filling" data sheet.

Type of filling	Thermal transmittance factor U _g (W/ m ² .K)	LT D65 ⁽²⁾	SF or g ⁽²⁾	Reaction to fire	R _w (dB) ⁽³⁾	
	U _{hor} ⁽¹⁾					
PCA	Opal 4-wall PCA 10	2.9	61%	61%	B-s1-d0	R _w =19 dB
	Transparent PCA 10 with Lumira™ aerogel	ND	ND	ND	ND	ND
Cover	40 mm aluminium cover	0.85	0%	ND	ND	ND
Dome	Opal PMMA double dome Opal upper dome + transparent lower dome	2.89	84%	ND	ND	ND
Acoustik' Light	Acoustik' Light Transparent PCA 10 & transparent PCA 6	2.1	ND	ND	ND	ND

⁽¹⁾Relative to the horizontal, as per §2.31 of the Th-Bat regulations.

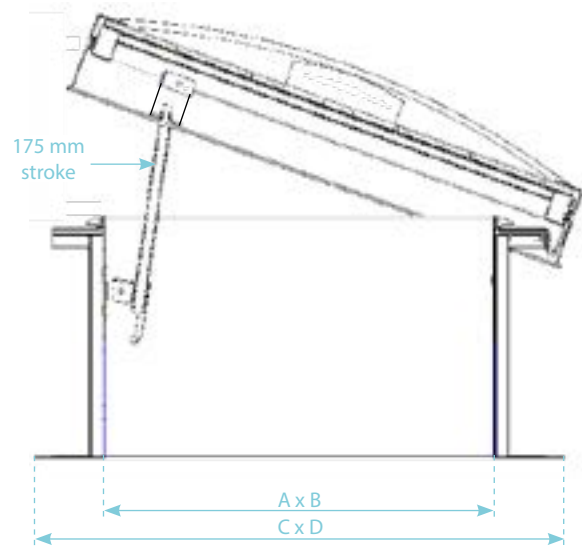
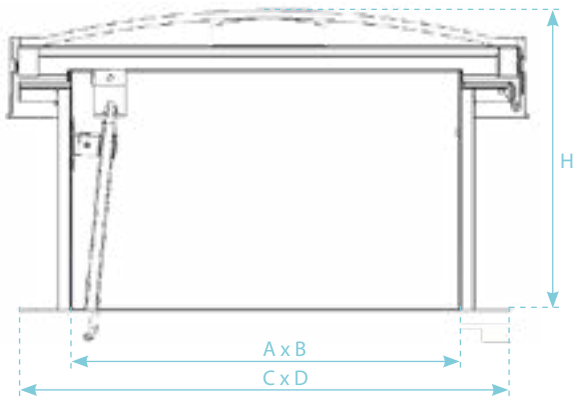
⁽²⁾Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.

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Technical diagrams

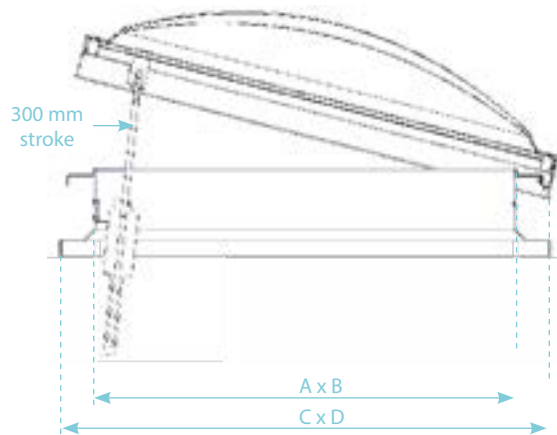
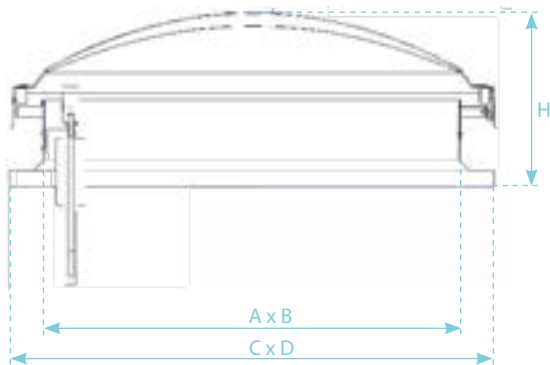
ORIGIN' range

AIRDÔME PCA - Manual



ORIGIN' range capping upstand

AIRDÔME double dome - Electric



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Filling

- Opal PCA 10



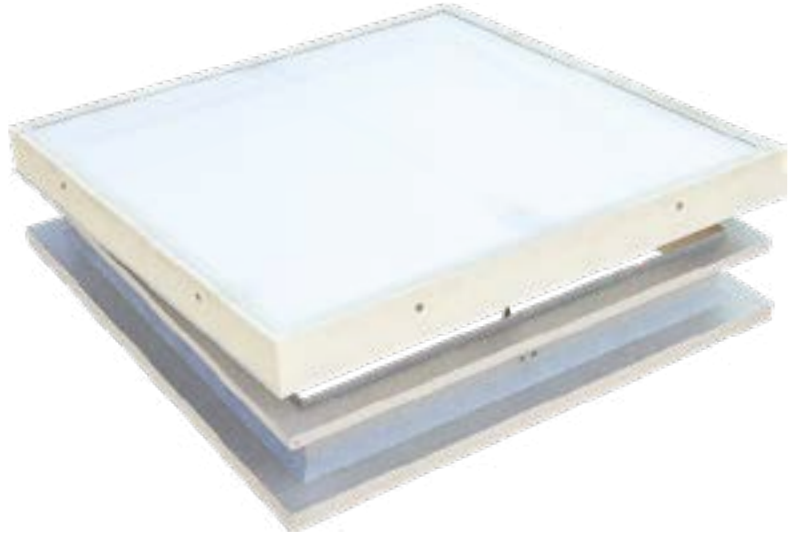
Upstand

- Bevelled adapter upstand with 84 mm heel and 40 mm overlap
- 1.2 mm galvanised steel
- Height 170 mm



Control

- Manual opening: crank on a 175 mm worm drive
- Electric opening: jack (300 mm stroke) connected to the mains power supply

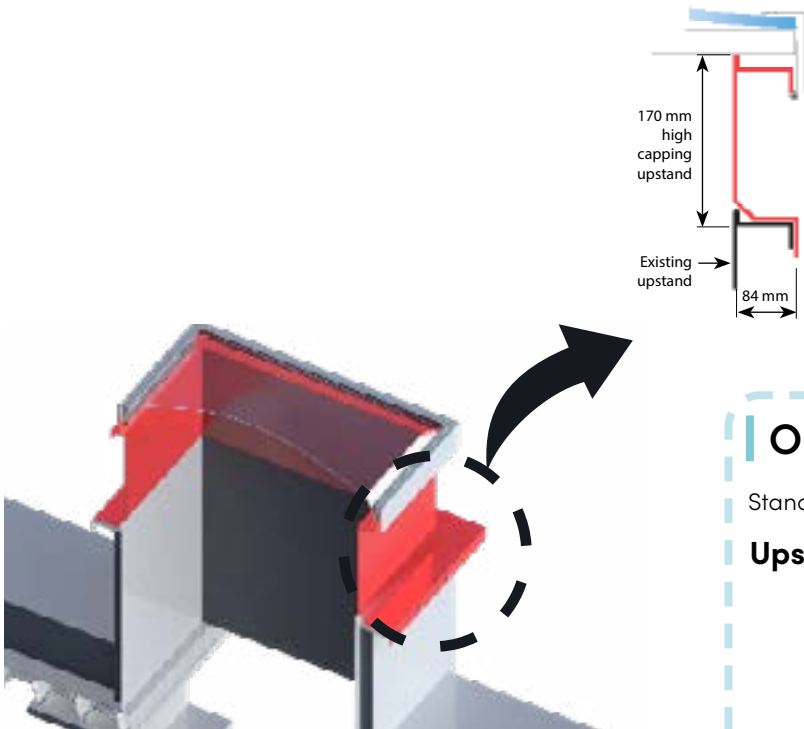


Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light Surface (m ²)	Product weight (kg)	
		PCA	DD		Man.	Elec.
50 x 50	67 x 67	22	34	0.25	22	24
85 x 85	102 x 102	23	41	0.73	39	41
100 x 100	117 x 117	23	42	1.00	48	50
120 x 120	137 x 137	23	45	1.44	60	62
140 x 140	157 x 157	23	48	1.96	73	75
150 x 150	167 x 167	23	50	2.25	80	82
160 x 160	177 x 177	23	51	2.56	87	89
180 x 180	197 x 197	25	54	3.24	102	104
195 x 200	212 x 217	25	59	3.90	119	121
70 x 100	87 x 117	22	37	1.50	39	41
100 x 140	117 x 157	23	42	2.00	59	61
100 x 150	117 x 167	23	42	2.40	62	64
100 x 200	117 x 217	25	42	2.80	77	79
140 x 200	157 x 217	25	48	3.00	94	96

Contact us for other dimensions.
* For an upstand height of 170 mm

Installation diagram



Options

Standard options list p.1

Upstand

- Upstand insulation including a galvanised steel protection plate
- Heel width on request for fitting to existing substrate
- Upstand height on request

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