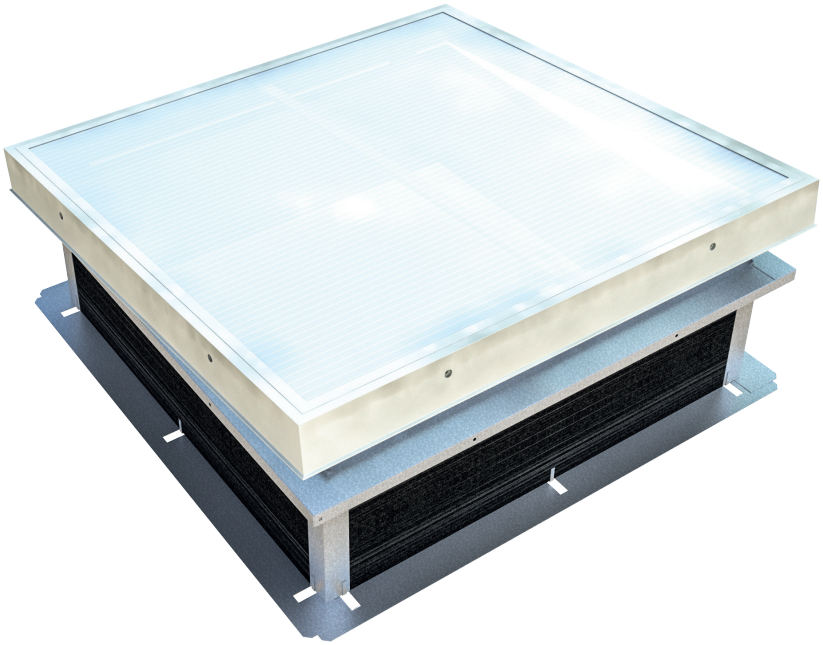
For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

AIRDÔME®

CE
EN 1873

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).



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

Also available:

ORIGIN'

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
ACOUSTIK'

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)	Roof opening 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.

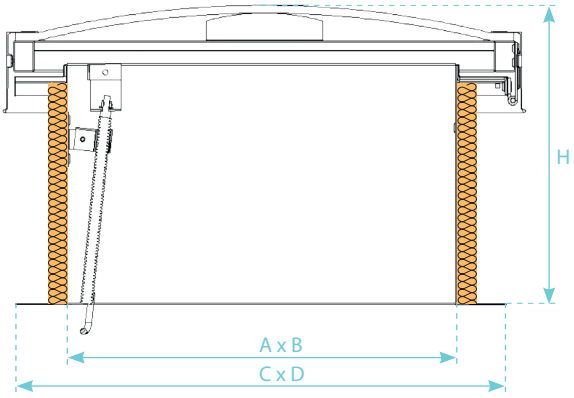
	Type of filling	Thermal transmittance factor Ug (W/ m^2.K) U_{hor} (1)	LT D65(2)	SF or g(2)	Reaction to fire	R_w (dB)(3)
PCA	Opal 4-wall PCA 16	1.9	45%	46%	B-s1-d0	R_w =21 dB
PCA	Transparent PCA 16 with Lumira™ aerogel	1.5	67%	67%	B-s1-d0	R_w =21 dB
PCA	Opal multi-wall PCA 20	1.6	54 %	47%	B-s2-d0	R_w =21 dB
PCA	Transparent multi-wall PCA 32	1.3	33%	49%	B-s2-d0	ND
PCA	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**

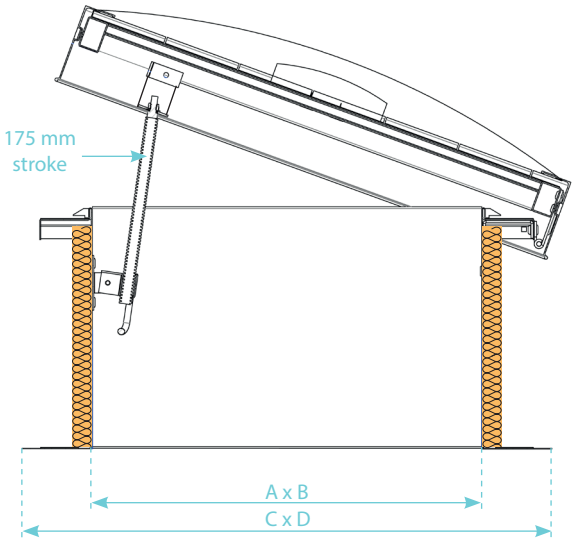
(1) Relative to the horizontal, as per §2.31 of the Th-Bat regulations.
(2) Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.
(3) Filling insulated against airborne noise R_w, pink noise R_A (environment, airport and industrial activities) and road noise $R_{A,tr}$ laboratory-measured according to NF EN ISO 140.

Technical diagrams

THERMIK' range

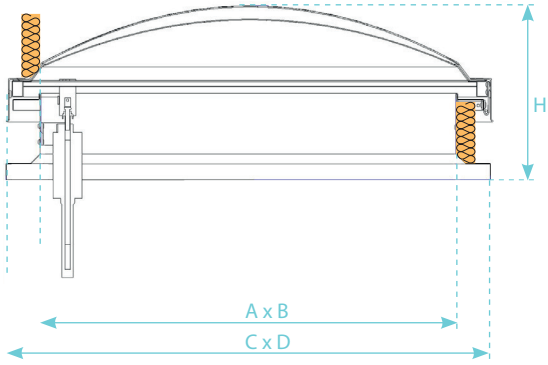
AIRDÔME PCA - Manual

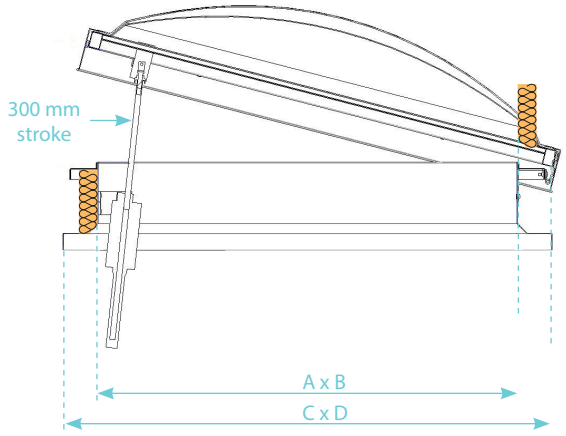




ORIGIN' range capping upstand

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)	Upstand height: **360 mm** Insulation: • **on vertical part of upstand** • **on upstand top lip**
	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**	

Air permeability and light surface*

Roof opening dimensions A x B (cm)	Air flow (m^3/h) - Class AP06 (1)		ELS² (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

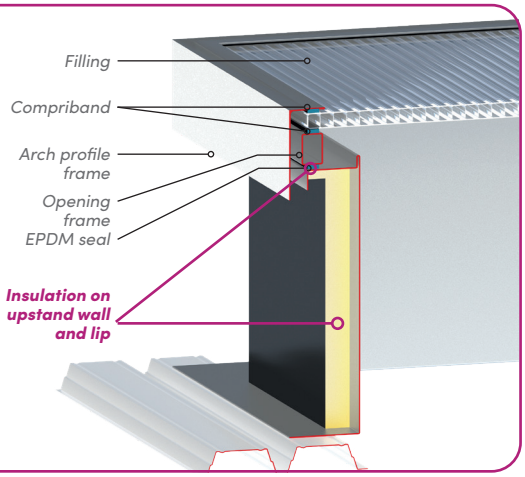
	PCA 16	PCA 16+	PCA 20	PCA 32	PCA 32 & dome	PCA 32+	PCA 32+ & dome	Opaque 40 mm aluminium cover	Triple dome	Acoustik' Light
Acoustic attenuation ($C;C_{Tr}$) (dB)	17(-2;2)	19(0;-1)	ND	20(-2;-1)	25(-1;-3)	21(0;0)	26(-1;-3)	23(-1;-3)	20(0;-2)	**25(-1;-1)**
Rain-generated sound intensity Lia (dB)	77	74	ND	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
$R_{A,Tr} = R_W + C_{Tr}$ = "road noise" attenuation index

Filling U_{RC}: 1.5 W/m².K*

ENHANCED THERMAL INSULATION

- WIDE RANGE OF FILLING OPTIONS
- U_{RC} = 1.5 W/m².K*
- Compliant with applicable DTU specifications



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

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 Urc.

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:

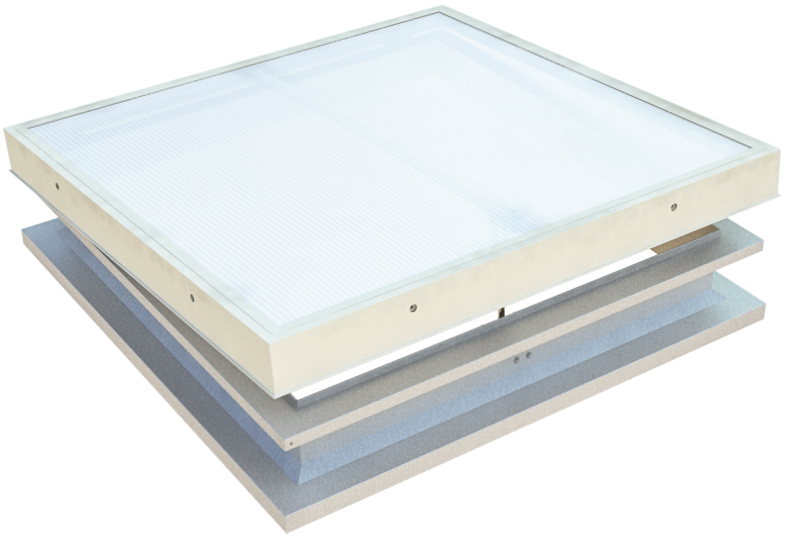
- PCA 16
- PCA 16+
- PCA 32
- PCA 32+
- PMMA triple dome
- Acoustik'Light

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)	Roof opening 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

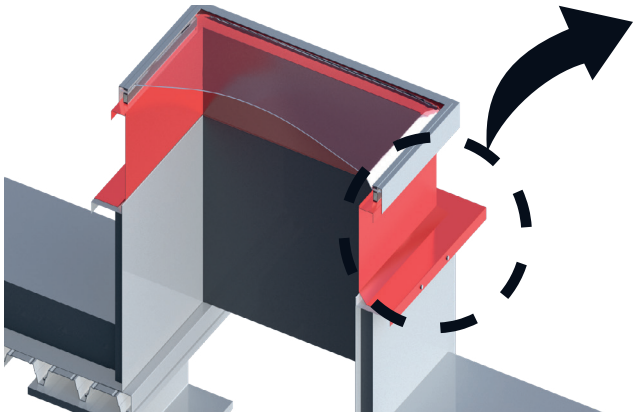
Contact us for other dimensions.
* For an upstand height of 310 mm

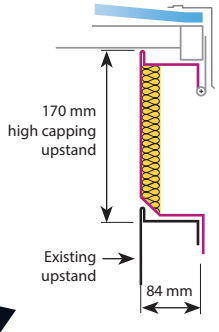
Thermal performance: U_{RC} ($W/m^2.K$) and A_{RC} (m^2)

AIRDÔME® CAPPING UPSTAND								
Dimensions (cm)	THERMIK							
	U_{RC}							A_{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

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

Version 1.1 | 01/2024

SKYDÔME®

For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

AIRDÔME®

CE
EN 1873

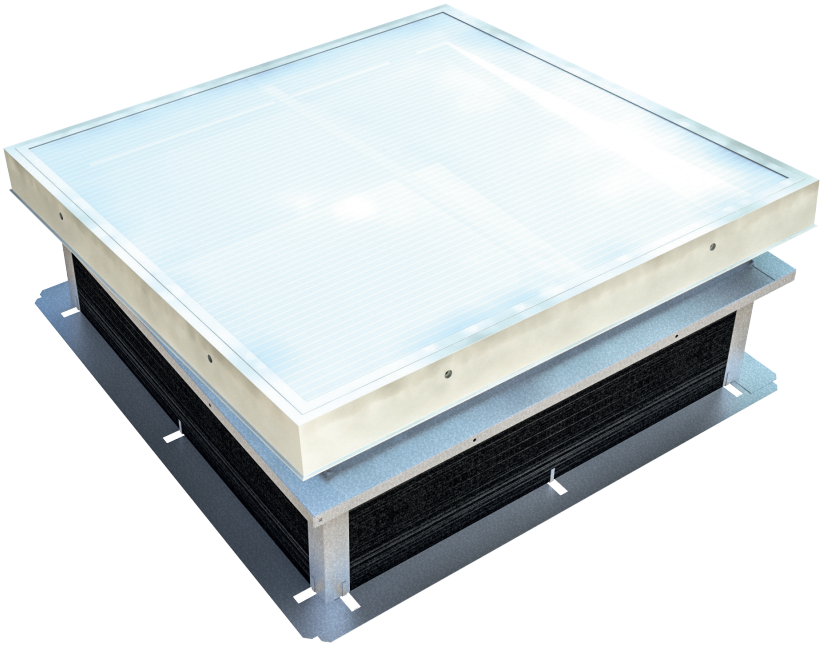
ORIGIN' **VERSION**

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

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:

THERMIK'

OPTIONS

Types of filling
- Transparent PCA 10
- Insulated aluminium cover
- Solid PC double dome

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: 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

Capping upstand
See page 4 for details

Available versions
ACOUSTIK'

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)	Roof opening 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
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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 310 mm

Filling performance

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

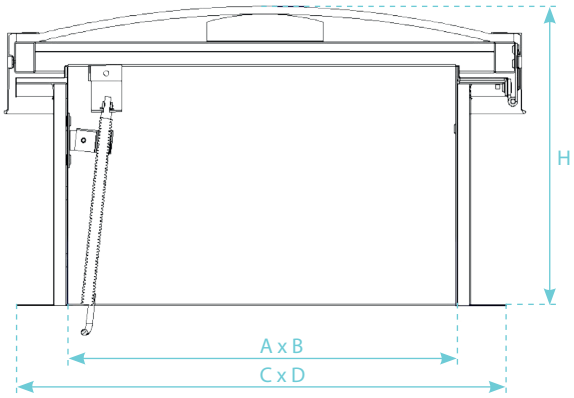
Type of filling		Thermal transmittance factor Ug (W/ m^2.K) U_{hor} (1)	LT D65(2)	SF or g(2)	Reaction to fire	R_w (dB)(3)
PCA	Opal 4-wall PCA 10	2.9	61%	61%	B-s1-d0	R_w=19 dB
PCA	Transparent PCA 10 with Lumira™ aerogel	ND	ND	ND	ND	ND
Cover	40 mm aluminium cover	0.85	0%	ND	ND	ND
Dome	Opal PMMA double 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**

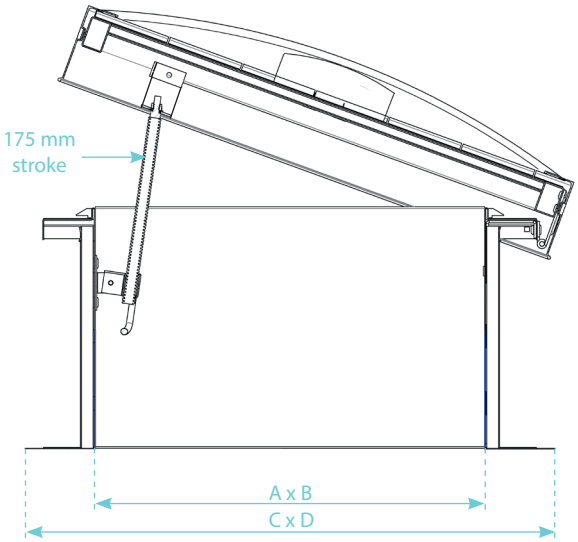
(1) Relative to the horizontal, as per §2.31 of the Th-Bat regulations.
(2) Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.
(3) Filling insulated against airborne noise R_w, pink noise R_A (environment, airport and industrial activities) and road noise $R_{A,tr}$ laboratory-measured according to NF EN ISO 140.

Technical diagrams

ORIGIN' range

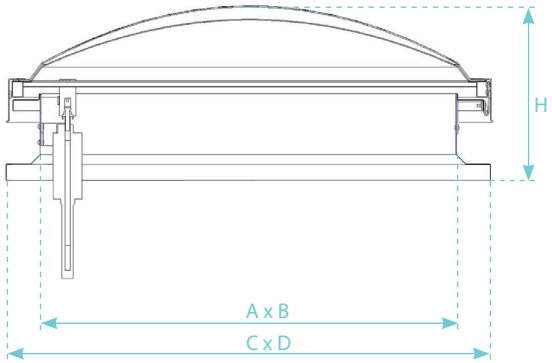
AIRDÔME PCA - Manual

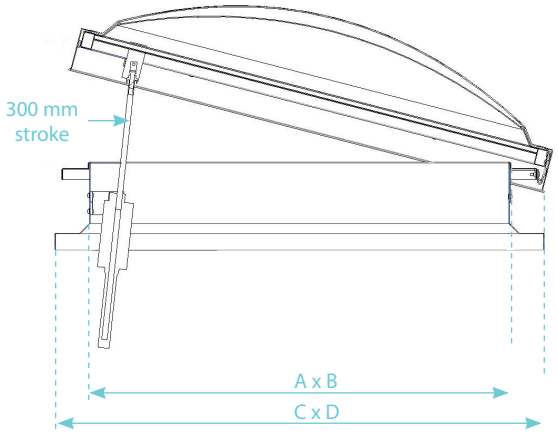




ORIGIN' range capping upstand

AIRDÔME double 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

FOR RENOVATION AND COMPLIANCE WORKS

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

Filling

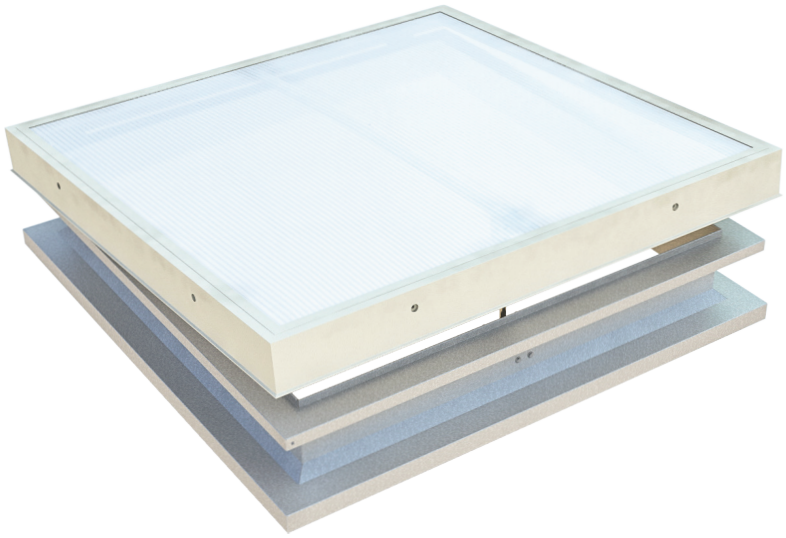
- Opal PCA 10

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

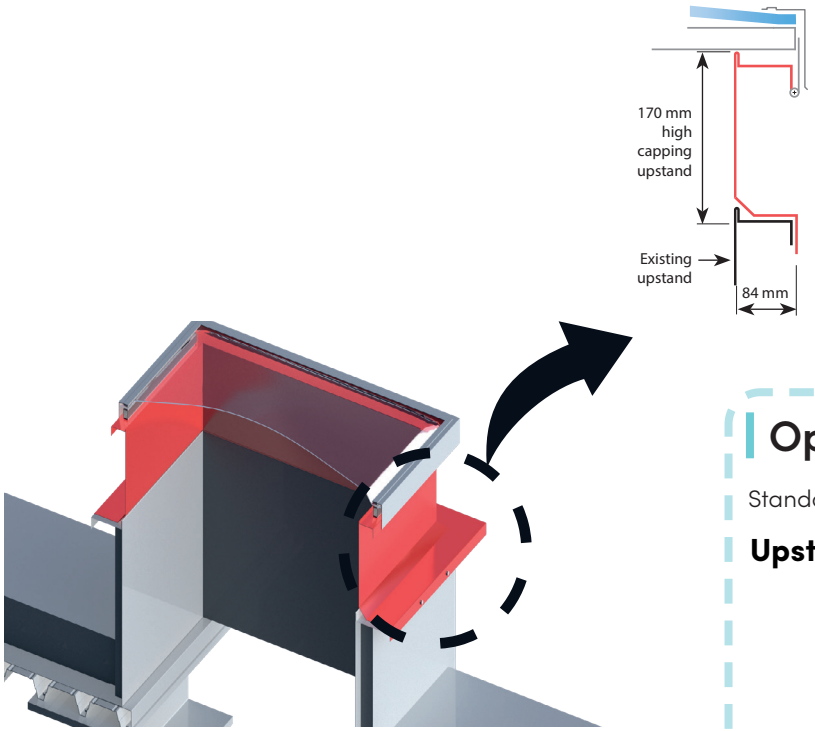


Dimensions

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

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SKYDÔME®