

on a DRY ROOF OR SANDWICH PANEL ROOF

ROOFAÉRATION®

CE
EN 1873 + A1: 2016



VERSION



Types of filling

THERMIK' RANGE

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



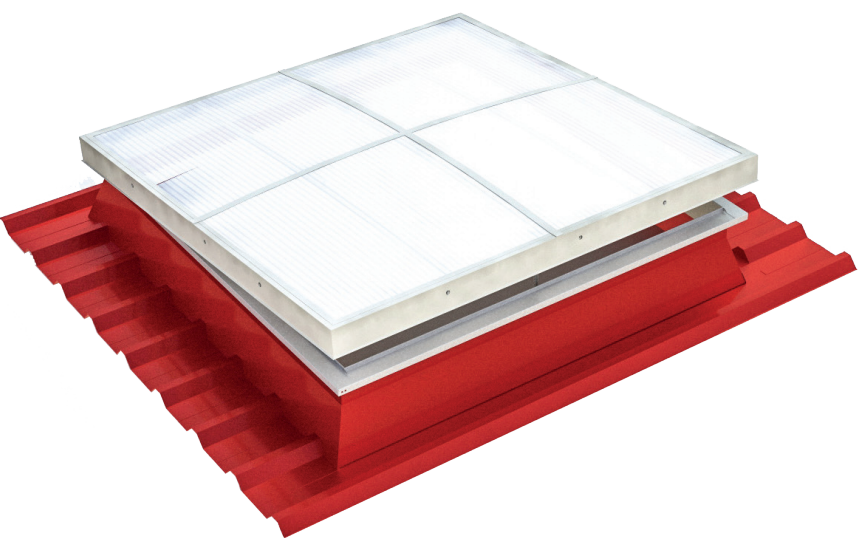
Upstand

- GRP base with skewed insulated roof opening
- THERMIK' RANGE:
- Height 310 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



The ROOFAÉRATION® is a skylight intended primarily for natural ventilation and toplighting. It is suitable for use on dry roofs and steel deck roofs on all types of buildings (including public facilities, work premises and industrial buildings).

Also available:



OPTIONS



Types of filling

- Opal PCA 16 IR
- Grey PCA 16
- Transparent PCA 16
- Insulated aluminium cover
- Solid PC triple dome



Upstand

- Lacquered interior and exterior (standard RAL colours)



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 + R6 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). Either fastened directly into the joist or mounted on a base + upstand
- Variable thickness of insulation on underside

Available versions



RAL colours on exterior surfaces

- Standard colour
- RAL colours at no extra cost**

RAL 9010*

RAL 5008

RAL 7015

RAL 7022

RAL 8012

** Interior colour: RAL 9010 only

** Contact us if you require a different colour

Dimensions

Roof opening dimensions CA x CB (cm)	Roof joist dimensions* (cm)	Height H** (cm)		Light surface (m ²)	Product weight*** (kg)			
					Roofaération manuelle		Roofaération électrique	
		PCA	DD		PCA	DD	PCA	DD
100 x 100	Use the base search engine on the website www.skydome.eu	37	56	1.00	64	66	74	80
120 x 120		37	59	1.44	73	77	85	94
140 x 140		37	62	1.96	81	89	95	109
150 x 150		37	64	2.25	84	94	100	116
160 x 160		37	65	2.56	88	101	105	124
70 x 100		36	51	0.70	55	56	64	68
100 x 150		37	56	1.50	71	76	83	93
100 x 200		39	59	2.00	92	100	107	121
120 x 200		39	59	2.40	97	108	114	122
140 x 200		39	62	2.80	104	118	122	143
120 x 150		39	59	3.00	104	-	124	-

Contact us for other dimensions.

* Stated base dimensions have a tolerance of +/- 5 mm.

** For a base height of 360 mm.

*** Stated weight is for the product on a dry roof

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 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
	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
	Domes	Opal PMMA triple dome Opal PMMA upper dome + transparent PMMA interior dome + transparent PMMA lower dome	2.76	ND	ND	ND
Opal solid PC triple dome Opal solid PC upper dome + transparent solid PC interior dome + transparent solid PC lower dome		2.76	ND	ND	ND	ND
Acoustik' Light	Acoustik' Light Transparent PCA 10 & transparent PCA 6	2.1	ND	ND	ND	ND

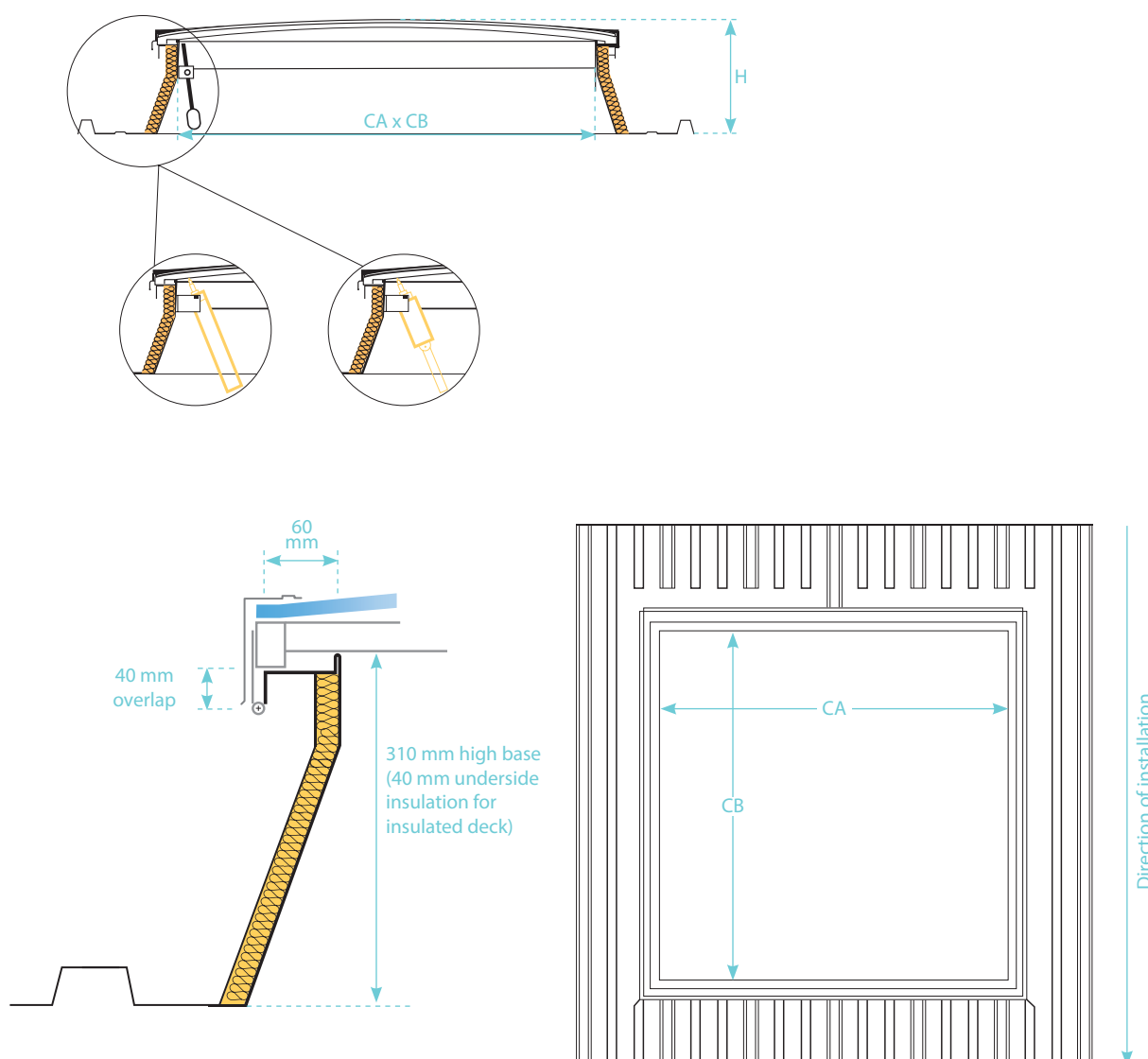
⁽¹⁾ Relative to the horizontal, as per §2.31 of the Th-Bat regulations.

⁽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_{Atr}, laboratory-measured according to NF EN ISO 140.

Technical diagrams

THERMIK' range ROOFAÉRATION PCA



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

Maximum permitted inclination with the hinge parallel to the roof slope:

- If geometric area (A_v) < 2m² → 25° or 46.65%

- If geometric area (A_v) > 2m² → 20° or 36.45%

Maximum permitted inclination with the hinge perpendicular to the roof slope: 3° or 5.24%.

- If geometric area (A_v) > 2m² → 20° or 36.45%

In this case, the hinges must be positioned nearest the bottom of the slope.

Only the security bar option provides guaranteed 1200 joule protection.

Trade name

Trade name	Types of filling	Upstand insulation
ROOFAÉRATION	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 interior dome + transparent lower dome
	THERMIK' 40 OPAQUE	40 mm aluminium cover
	THERMIK' ACOUSTIK' LIGHT	10 mm PCA + 6 mm solid PC

Upstand height: 310 mm
Insulation:
• on vertical part of upstand

Air permeability and light surface*

Dimensions (cm)	Air flow (m ³ /h) - Class AP06 ⁽¹⁾		ELS ² (m ²)
	Less than 4 Pa	Less than 50 Pa	310 mm upstand
100 x 100	0.12	0.76	0.38
120 x 120	0.14	0.91	0.56
140 x 140	0.17	1.06	0.78
150 x 150	0.18	1.14	0.91
160 x 160	0.19	1.22	1.04
70 x 100	0.1	0.65	0.26
100 x 150	0.15	0.95	0.59
100 x 200	0.18	1.14	0.79
120 x 200	0.19	1.22	0.97
140 x 200	0.2	1.29	1.14
120 x 250	0.22	1.41	1.22

⁽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.

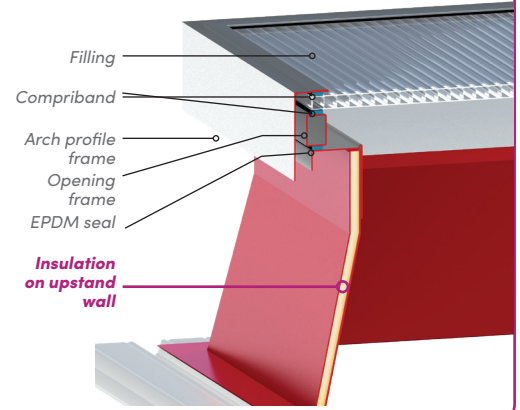
* Contact us regarding the maximum available dimensions.

Filling U_{RC} : 1.5 W/m².K*

ENHANCED THERMAL INSULATION

> On vertical part of upstand

- ✓ **Wide range of filling options** with different thermal insulation, light transmittance and solar factor performance
- ✓ **U_{RC} = 1.5 W/m².K***
- ✓ **SUPERIOR WATERTIGHTNESS**
- ✓ **Compliant with applicable DTU specifications**



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

ROOFAERATION®									
Dimensions (cm)	Upstand height: 360 mm								
	U_{RC}							Triple dome	A_{RC}
	Acoustik' Light	PCA 16	PCA 16+	PCA 20	PCA 32**	PCA 32+	Opaque 40 mm aluminium cover		
100 x 100	2.3	2.1	2	1.9	1.8	1.7	1.5	2.8	2.6
120 x 120	2.3	2.1	2	1.9	1.8	1.6	1.5	2.8	3.4
140 x 140	2.3	2.1	2	1.9	1.7	1.6	1.4	2.8	4.2
150 x 150	2.3	2.1	2	1.8	1.7	1.6	1.4	2.8	4.6
160 x 160	2.3	2.1	2	1.8	1.7	1.6	1.4	2.8	5.1
100 x 150	2.3	2	2	1.9	1.8	1.6	1.4	2.8	3.5
100 x 200	2.3	2.1	2	1.9	1.7	1.6	1.4	2.8	4.4
120 x 200	2.3	2.1	2	1.8	1.7	1.6	1.4	2.8	4.9
140 x 200	2.3	2	2	1.8	1.7	1.5	1.4	2.8	5.5
120 x 250	2.2	2.1	2	1.8	1.7	1.6	1.4	/	5.9

* For a 140 x 200 cm unit with a 310 mm high upstand and PCA 32+ filling.
 ** Adding a dome has no effect on the unit's thermal conductivity U_{RC} .

SKYDÔME

Entre Deux Villes
02270 Sons-Et-Ronchères, France
Tel: +33 (0)3 23 21 79 90
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/25_roofaeration.html

on a DRY ROOF OR SANDWICH PANEL ROOF

ROOFAÉRATION®

CE
EN 1873 + A1: 2016

ORIGIN' VERSION



Filling

- Opal PCA 10
- PMMA double dome



Upstand

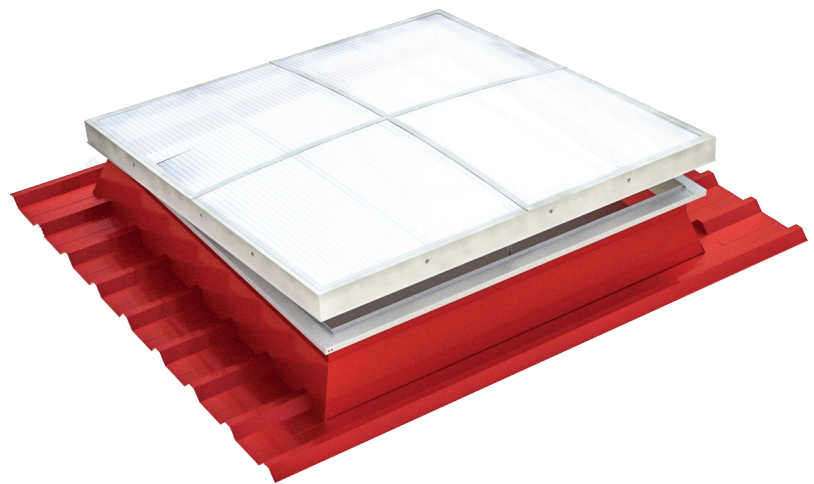
- GRP base with skewed insulated roof opening
- ORIGIN' RANGE:
- Height 310 mm



Control

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

The ROOFAÉRATION® is a skylight intended primarily for natural ventilation and toplighting. It is suitable for use on dry roofs and sandwich board roofs on all types of buildings (including public facilities, work premises and industrial buildings).



Also available:



OPTIONS



Types of filling

- Opal PCA 10 IR
- Grey PCA 10
- Transparent PCA 10
- Insulated aluminium cover



Upstand

- Lacquered interior (standard RAL colours)



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)

Available versions



RAL colours on exterior surfaces

- Standard colour
- RAL colours at no extra cost**

RAL 9010*

RAL 5008

RAL 7015

RAL 7022

RAL 8012

* Interior colour: RAL 9010 only

** Contact us if you require a different colour

Dimensions

Roof opening dimensions CA x CB (cm)	Roof joist dimensions* (cm)	Height H** (cm)		Light surface (m ²)	Product weight*** (kg)			
		PCA	DD		Roofaération manuelle		Roofaération électrique	
					PCA	DD	PCA	DD
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70 x 100		36	51	0.70	55	56	64	68
100 x 150		37	56	1.50	71	76	83	93
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120 x 150		39	59	3.00	104	-	124	-

Contact us for other dimensions.

* Stated base dimensions have a tolerance of +/- 5 mm.

** For a base height of 310 mm.

*** Stated weight is for the product on a dry roof

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 10	2.9	61%	61%	B-s1-d0	R _w =19 dB
	Transparent PCA 10 with Lumira™ aerogel	ND	ND	ND	ND	ND
	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 double dome Opal upper dome + transparent lower dome	2.89	84%	ND	ND	ND

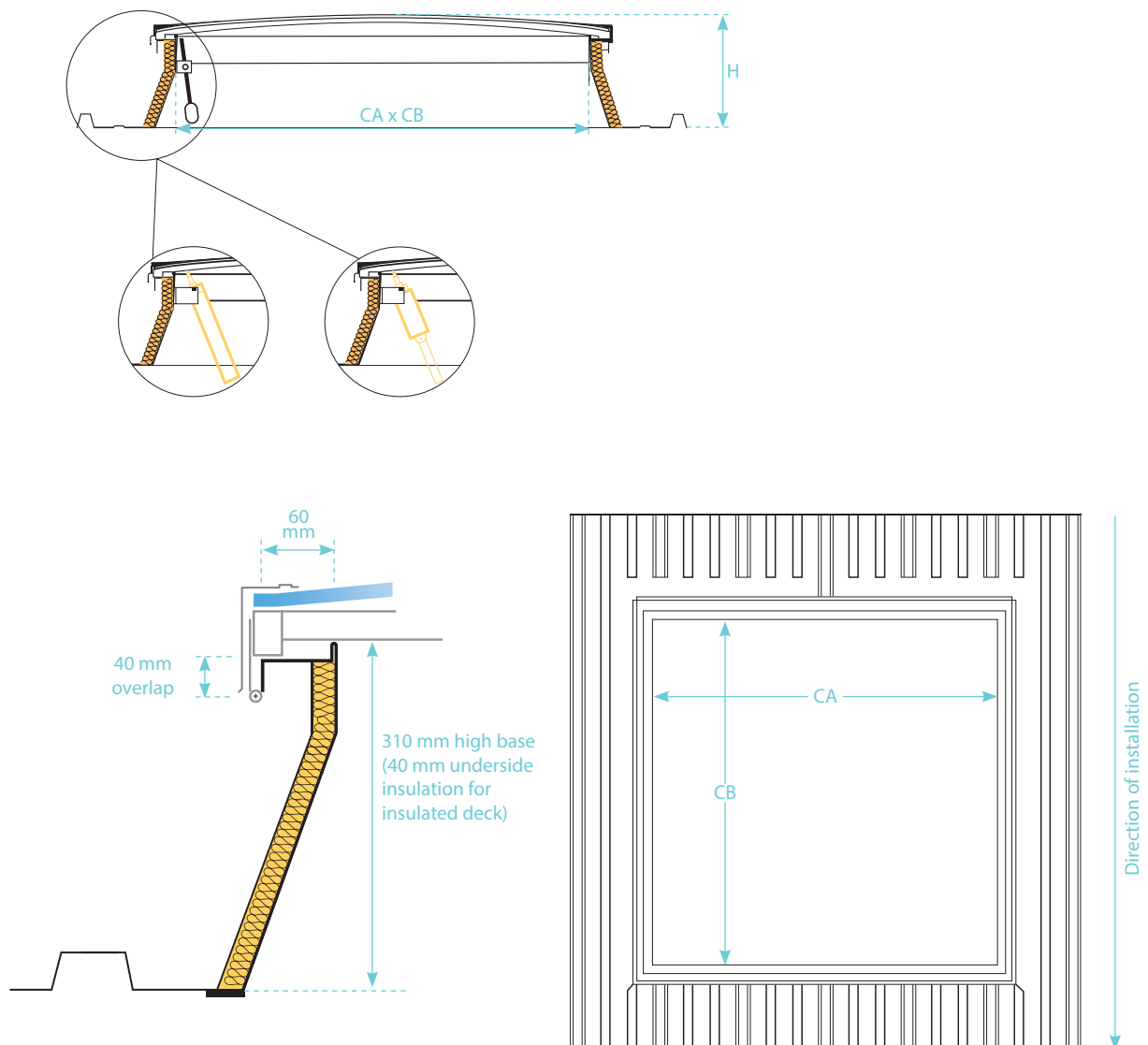
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⁽²⁾ Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.

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

Technical diagrams

ORIGIN' range ROOFAÉRATION PCA



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.

DoP available at www.skydome.eu

Maximum permitted inclination with the hinge parallel to the roof slope:

- If geometric area (A_v) < 2m² -> 25° or 46.65%
- If geometric area (A_v) > 2m² -> 20° or 36.45%

Maximum permitted inclination with the hinge perpendicular to the roof slope: 3° or 5.24%.

- If geometric area (A_v) > 2m² -> 20° or 36.45%

In this case, the hinges must be positioned nearest the bottom of the slope.

Only the security bar option provides guaranteed 1200 joule protection.

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