

For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

# PASSADÔME®

CE  
EN 1873 + A1: 2016



## Types of filling

### THERMIK' RANGE:

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



## Upstand

- Straight upstand
- 1.2 mm galvanised steel

### THERMIK' RANGE:

- Height 360 mm with a 30 mm bituminous insulating coating



## Control

- Gas spring opening and handle-operated manual closing



## VERSION

The PASSADÔME® is a skylight enabling access to waterproofed flat 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

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

### Capping upstand

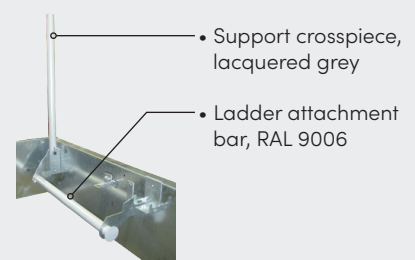
See page 6 for details

### Available versions



### Other information

- Opening system fitted with 16x16 mm 1200 joule security bars, galvanised or lacquered
- This grid may be either padlocked or fitted with a Metaluxe 14/36 lock
- Ladder attachment bar, lacquered grey



## Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light surface (m <sup>2</sup> )	Opening angle	Product weight (kg)		Height to be waterproofed (H)*
		PCA	3xD			PCA	3xD	
85 x 85	103 x 103	42	60	0.72	90°	47	51	320
100 x 100	118 x 118	42	61	1.00	60°	56	62	
120 x 120	138 x 138	42	64	1.44	60°	69	78	
140 x 140	158 x 158	42	67	1.96	60°	81	95	

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 Ug (W/ m <sup>2</sup> .K)	LT D65 <sup>(2)</sup>	SF or g <sup>(2)</sup>	Reaction to fire	R <sub>w</sub> (dB) <sup>(3)</sup>	
	U <sub>hor</sub> <sup>(1)</sup>					
PCA	Opal multi-wall PCA 16	1.9	45%	46%	B-s1-d0	R <sub>w</sub> =21 dB
	Transparent PCA 16 with Lumira™ aerogel	1.5	67%	67%	B-s1-d0	R <sub>w</sub> =21 dB
	Opal multi-wall PCA 20	1.6	54 %	47%	B-s2-d0	R <sub>w</sub> =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 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	R <sub>w</sub> =27 dB

<sup>(1)</sup>As per §2.31 of the Th-Bat regulations.

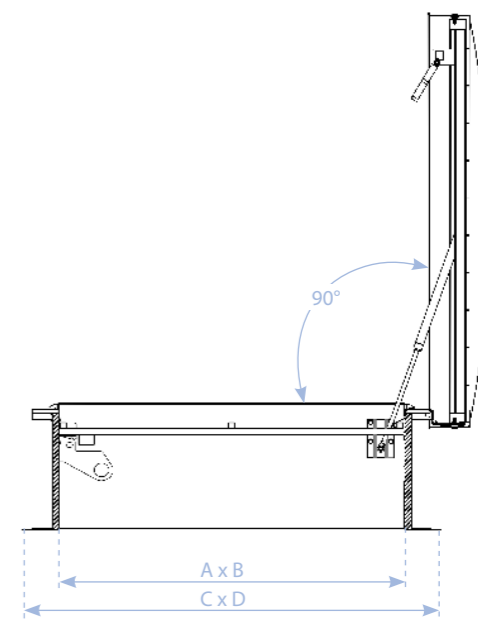
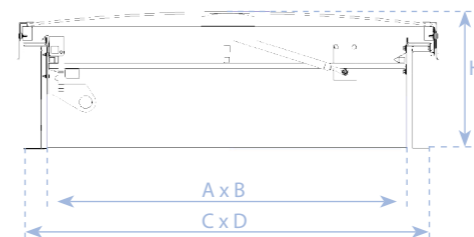
<sup>(2)</sup> Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.

<sup>(3)</sup> Filling insulated against airborne noise R<sub>a</sub>, pink noise R<sub>p</sub> (environment, airport and industrial activities) and road noise R<sub>w</sub>, laboratory-measured according to NF EN ISO 140.

## Technical diagrams

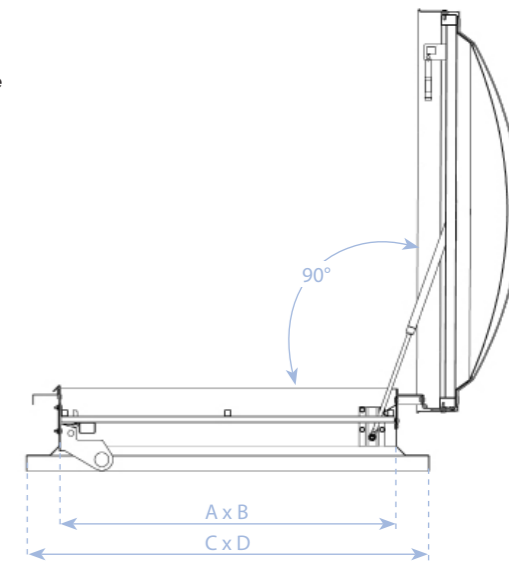
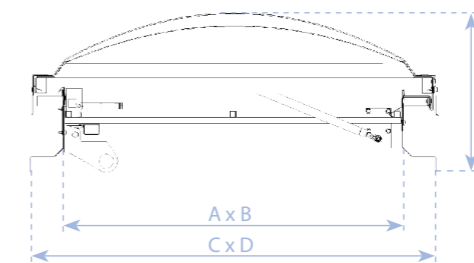
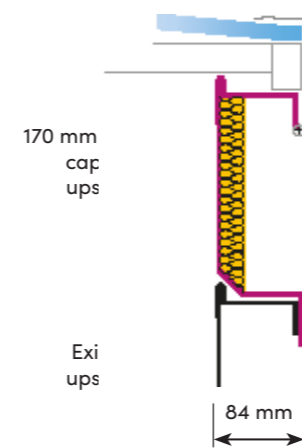
### THERMIK' range PASSADÔME PCA

- Opening < 100 cm: 90° opening angle
- 100 cm ≤ opening < 140 cm: 60° opening angle



### THERMIK' range capping upstand PASSADÔME double dome

- Opening < 100 cm: 90° opening angle
- 100 cm ≤ opening < 140 cm: 60° opening angle



## COMPLIANCE & INSTALLATION

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°, if the hinge is parallel to the roof slope and the geometric area is < 2 m<sup>2</sup> (see installation instructions).

Only the security bar option provides guaranteed 1200 joule protection.

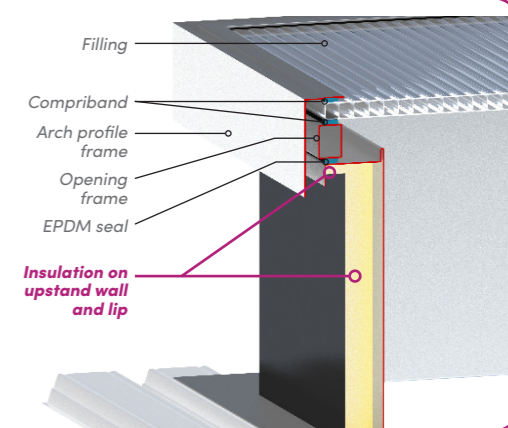
## Trade name

Trade name	Types of filling	Upstand insulation
PASSADÔME	THERMIK' 16	16 mm PCA (Opal PCA)
	THERMIK' 16+	16 mm PCA with LUMIRA (Transparent PCA)
	THERMIK' 20	20 mm PCA (Opal 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' ACOUSTIK' LIGHT	10 mm PCA + 6 mm solid PC	Upstand height: 360 mm Insulation: • on vertical part of upstand • on upstand top lip

Filling  $U_{RC} : 1.6 \text{ W/m}^2.K^*$

THERMAL TRANSMITTANCE  $U_{RC}^*$ :

- ✓ WIDE RANGE OF FILLING OPTIONS
- ✓  $U_{RC} = 1.6 \text{ W/m}^2.K^*$
- ✓ Compliant with DTU specifications



## Air permeability and light surface\*

Roof opening dimensions A x B (cm)	Air flow (m³/h) - Class AP06 <sup>(1)</sup>		ELS² (m²)	
	Less than 4 Pa	Less than 50 Pa	Straight upstand	
			360 mm upstand	410 mm upstand
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

<sup>(1)</sup> 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).  
<sup>(2)</sup> 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 $R_w (C; C_{tr})$ (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 $L_{ia}$ (dB)	77	69	ND	75	63	72	61	63	63	66

$R_w$  = acoustic attenuation index laboratory-measured according to EN410 (airborne noise)  
 $R_p$  =  $R_w + C$  = "pink noise" attenuation index  
 $R_{A,rs}$  =  $R_w + C_{rs}$  = "road noise" attenuation index

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

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			
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	1.8	1.6	1.5	2.7	2.7	
100 x 100	2.3	2.1	2	1.9	1.8	1.7	1.5	2.8	3.1	2.1	2.1	1.9	1.9	1.8	1.6	1.5	2.7	2.7	3.3	
120 x 120	2.3	2.1	2	1.9	1.8	1.6	1.5	2.8	3.8	2.1	2	1.9	1.9	1.8	1.5	1.5	2.7	2.7	4.1	
140 x 140	2.3	2.1	2	1.9	1.7	1.6	1.4	2.8	4.7	2.1	2	1.9	1.9	1.8	1.5	1.4	2.7	2.7	5.0	

\* For a 120 x 120 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 PASSADÔME® 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**

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

**Control**

- Gas spring opening and handle-operated manual closing



Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light surface (m <sup>2</sup> )	Opening angle	Product weight (kg)	
		PCA	DD			PCA	DD
85 x 85	102 x 102	23	41	0.72	90°	47	51
100 x 100	117 x 117	23	42	1.00	60°	56	62
120 x 120	137 x 137	23	45	1.44	60°	69	78
140 x 140	157 x 157	23	48	1.96	60°	81	95

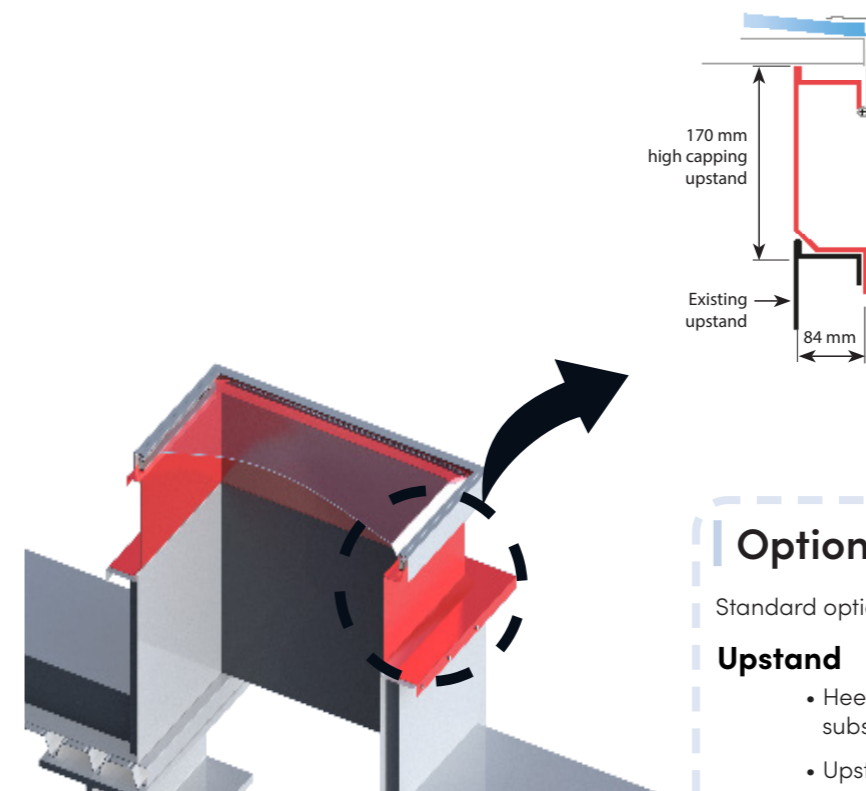
Contact us for other dimensions.  
\* For an upstand height of 170 mm

Thermal performance: U<sub>RC</sub> (W/m<sup>2</sup>.K) and A<sub>RC</sub> (m<sup>2</sup>)

PASSADÔME® capping upstand										
Dimensions (cm)	THERMIK'									
	U <sub>RC</sub>								Triple dome	A <sub>RC</sub>
	Acoustik' Light	PCA 16	PCA 16+	PCA 20	PCA 32**	PCA 32+	Opaque 40 mm aluminium cover			
85 x 85	3.3	3.1	2.9	2.8	2.5	2.5	2.4	3.8	1.8	
100 x 100	2.2	3	2.8	2.7	2.4	2.3	2.3	3.7	2.3	
120 x 120	3.1	2.9	2.7	2.6	2.3	2.3	2.1	3.6	2.9	
140 x 140	3	2.9	2.6	2.5	2.2	2.2	2	3.6	3.6	

\* Adding a dome has no effect on the unit's thermal conductivity U<sub>RC</sub>.

Installation diagram



**Options**

Standard options list p.1

**Upstand**

- 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](http://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:  
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For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

# PASSADÔME®

CE  
EN 1873 + A1: 2016



## Filling

### ORIGIN' RANGE:

- Opal PCA 10



## Upstand

- Straight upstand
- 1.2 mm galvanised steel

### ORIGIN' RANGE:

- Height 310 mm with a 15 mm bituminous insulating coating



## Control

- Gas spring opening and handle-operated manual closing



## VERSION

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



Also available:



## OPTIONS



### Types of filling

- Black and white opque PCA 10
- Transparent PCA 10
- Insulated aluminium cover
- PMMA double dome



### Upstand

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

### Capping upstand

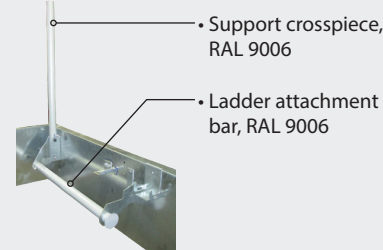
See page 4 for details.

### Available versions



### Other information

- Opening system fitted with 16x16 mm 1200 joule security bars, galvanised or lacquered
- Ladder attachment bar, lacquered grey
- Support crosspiece, lacquered grey
- This grid can be:



## Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light surface (m <sup>2</sup> )	Opening angle	Product weight (kg)		H*
		PCA	DD			PCA	DD	MAX. waterproofing height
<b>85 x 85</b>	<b>103 x 103</b>	37	55	0.72	90°	49	51	340
<b>100 x 100</b>	<b>118 x 118</b>	37	56	1.00	60°	63	62	
<b>120 x 120</b>	<b>138 x 138</b>	37	59	1.44	60°	79	78	
<b>140 x 140</b>	<b>158 x 158</b>	37	62	1.96	60°	91	95	

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 <sup>2</sup> .K)	LT D65 <sup>(2)</sup>	SF or g <sup>(2)</sup>	Reaction to fire	R <sub>w</sub> (dB) <sup>(3)</sup>	
	U <sub>hor</sub> <sup>(1)</sup>					
PCA	Opal 4-wall PCA 10	2.9	61%	61%	B-s1-d0	R <sub>w</sub> =19 dB
	Transparent PCA 10 with Lumira™ aerogel	ND	ND	ND	ND	ND
Cover	40 mm aluminium cover	0.85	0%	ND	ND	ND
Domes	Opal PMMA double dome Opal upper dome + transparent lower dome	2.89	84%	ND	ND	ND

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

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

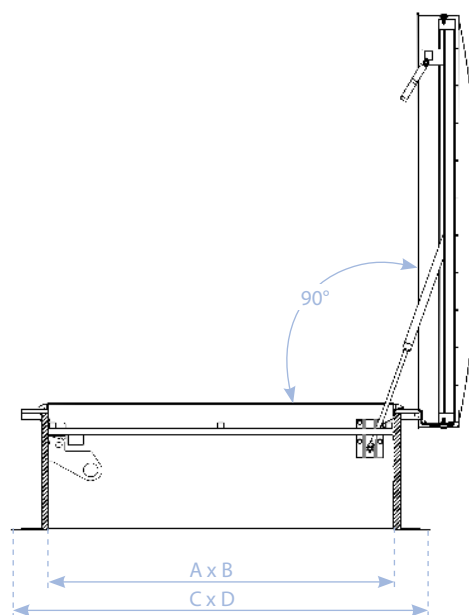
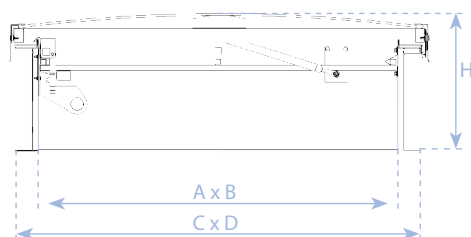
<sup>(3)</sup> Filling insulated against airborne noise R<sub>w</sub>, pink noise R<sub>s</sub> (environment, airport and industrial activities) and road noise R<sub>s,tr</sub>, laboratory-measured according to NF EN ISO 140.

## Technical diagrams

### ORIGIN' range

#### PASSADÔME PCA

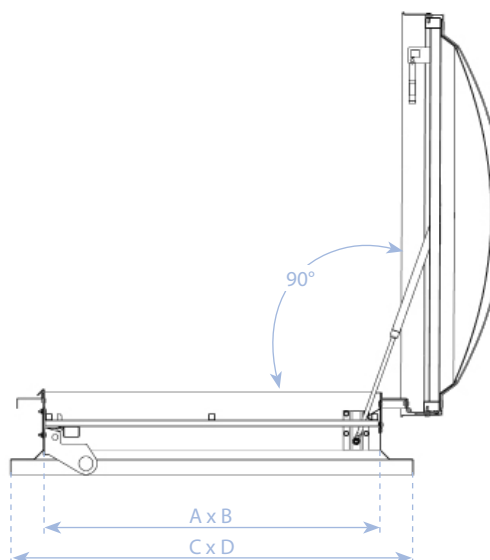
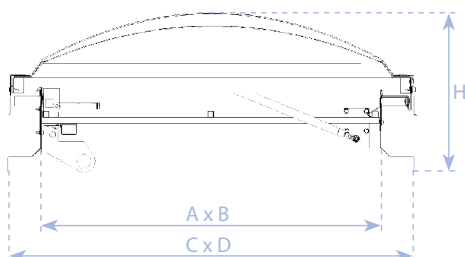
- Opening < 100 cm: 90° opening angle
- $100 \text{ cm} \leq \text{opening} < 140 \text{ cm}$ : 60° opening angle



### ORIGIN' range capping upstand

#### PASSADÔME double dome

- Opening < 100 cm: 90° opening angle
- $100 \text{ cm} \leq \text{opening} < 140 \text{ cm}$ : 60° opening angle



## COMPLIANCE & INSTALLATION

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%, if the hinge is parallel to the roof slope and the geometric area is <math> < 2 \text{ m}^2 </math> (see installation instructions).

Only the security bar option provides guaranteed 1200 joule protection.



## FOR RENOVATION AND COMPLIANCE WORKS

The PASSADÔME® 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**.



### Filling

- Opal PCA 10



### Upstand

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



### Control

- Gas spring opening and handle-operated manual closing

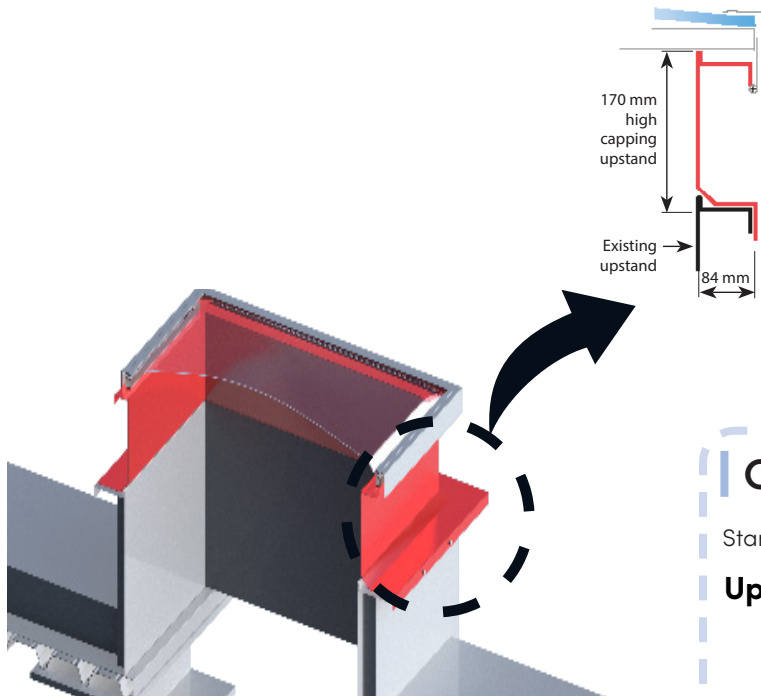


## Dimensions

Roof opening dimensions A x B (cm)	Overall heel dimensions C x D (cm)	Height H* (cm)		Light surface (m <sup>2</sup> )	Opening angle	Product weight (kg)	
		PCA	DD			PCA	DD
<b>85 x 85</b>	<b>102 x 102</b>	23	41	0.72	90°	47	51
<b>100 x 100</b>	<b>117 x 117</b>	23	42	1.00	60°	52	62
<b>120 x 120</b>	<b>137 x 137</b>	23	45	1.44	60°	64	78
<b>140 x 140</b>	<b>157 x 157</b>	23	48	1.96	60°	77	95

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

## Installation diagrams



### 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 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.

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