

For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

PYRODÔME®



NF 537
Actuated safety devices (DAS)
Control devices (DC)



EN 12101-2
EN 1873 + A1: 2016

Évolution Treuil

VERSION THERMIK'



Types of filling

THERMIK' RANGE:

- PCA 16
- PCA 16+ Lumira*
- PCA 32
- PCA 32+ Lumira*
- 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

- Manual opening/closing
- Built-in and offset mechanism for 100x100 cm and 120x120 cm roof opening dimensions

The PYRODÔME® ÉVOLUTION TREUIL is an NSHEV intended primarily for smoke and heat exhaust applications. It is suitable for use on 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



Control

- Limit switch



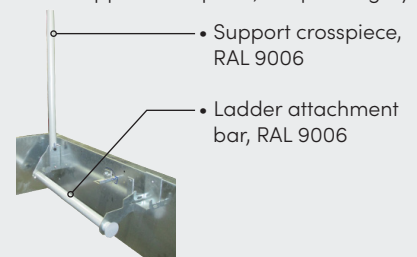
Upstand

- 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
- With or without wind baffles (AD/SD)
- Skewed upstand



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
- 16x16 mm security bars on opening system
- Ladder attachment bar, lacquered grey
- Support crosspiece, lacquered grey



Capping upstand

See page 8 for details.

Available versions



Dimensions & aeraulic performance

| Roof opening dimensions A x B (cm) | | Overall heel dimensions C x D (cm) | | Height H* (cm) | | | | Light surface (m ²) | E (cm) | Product weight (kg) | | | |
|---------------------------------------|----------------------|---------------------------------------|----------------------|---------------------|----|----------------------|----|------------------------------------|--------|---------------------|-----|----------------------|-----|
| Straight upstand | Skewed XL upstand | Straight upstand | Skewed XL upstand | Straight upstand | | Skewed XL upstand | | | | Straight upstand | | Skewed XL upstand | |
| | | | | PCA | DD | PCA | DD | | | PCA | DD | PCA | DD |
| 100 x 100 | 114 x 114 | 118 x 118 | 132 x 132 | 37 | 56 | 37 | 56 | 1.00 | 165 | 63 | 69 | 67 | 73 |
| 120 x 120 | 134 x 134 | 138 x 138 | 152 x 152 | 37 | 59 | 37 | 59 | 1.44 | 186 | 76 | 86 | 81 | 90 |
| 140 x 140 | 154 x 154 | 158 x 158 | 172 x 172 | 37 | 62 | 37 | 62 | 1.96 | 207 | 90 | 103 | 95 | 109 |
| 150 x 150 | 164 x 164 | 168 x 168 | 182 x 182 | 37 | 64 | 37 | 64 | 2.25 | 228 | 96 | 112 | 102 | 118 |
| 160 x 160 | 174 x 174 | 178 x 178 | 192 x 192 | 37 | 65 | 37 | 65 | 2.56 | 240 | 103 | 122 | 109 | 128 |
| 100 x 150 | 114 x 164 | 118 x 168 | 132 x 182 | 39 | 68 | 39 | 68 | 1.50 | 165 | 116 | - | 123 | - |
| 100 x 200 | 114 x 214 | 138 x 218 | 132 x 232 | 39 | 73 | 39 | 73 | 2.00 | 165 | 129 | - | 137 | - |
| 120 x 200 | 134 x 214 | 138 x 218 | 152 x 232 | 37 | 56 | 37 | 56 | 2.40 | 186 | 76 | 86 | 81 | 91 |
| 140 x 200 | 154 x 214 | 158 x 218 | 172 x 232 | 39 | 56 | 39 | 56 | 2.80 | 207 | 90 | 104 | 96 | 110 |

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 multi-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 |
| Acoustik' Light | Acoustik' Light Transparent PCA 10 & transparent PCA 6 | 2.1 | ND | ND | ND | ND |

⁽¹⁾As per §2.31 of the Th-Bat regulations.

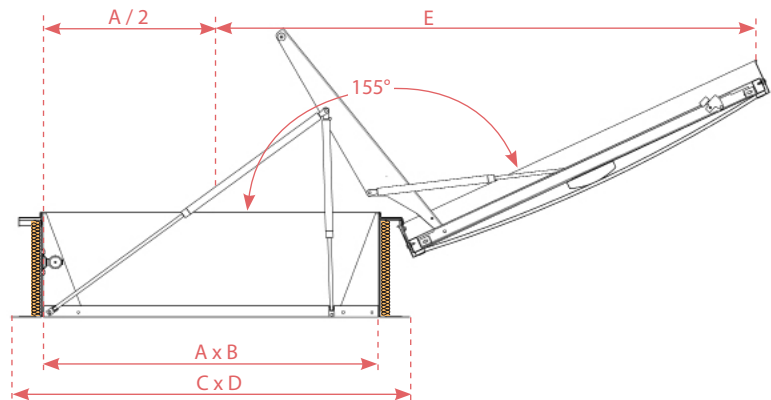
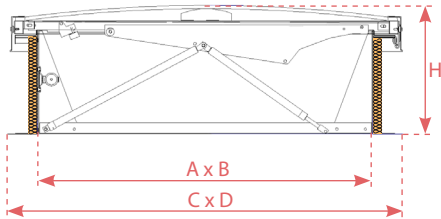
⁽²⁾ Light transmittance LT D65 and solar transmittance SF (TST or g) as per EN 410.

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

Technical diagrams

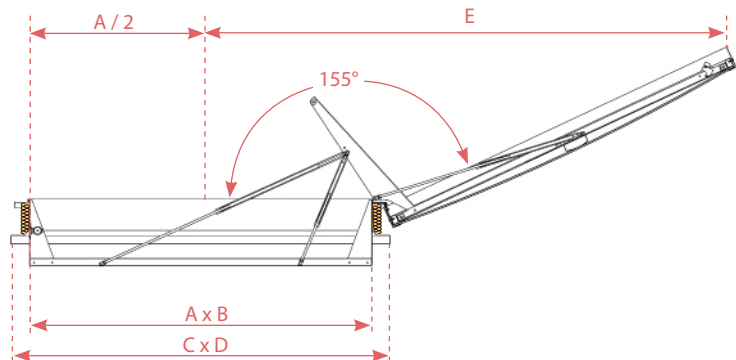
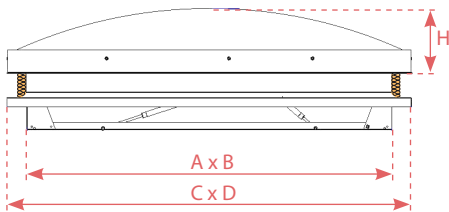
THERMIK' range

PYRODÔME ÉVOLUTION TREUIL PCA



THERMIK' range capping upstand

PYRODÔME ÉVOLUTION TREUIL PCA



PERFORMANCE

- Exhaust ventilator opening: type B (open + close)
- Reliability: Re 300
- Low ambient temperature: T(0°C)
- Resistance to heat: B₃₀₀
- Thermo-fuse set temperature: 90°C as standard
- Resistance to wind load: WL1500
- Opening under load: SL250 or SL500 depending on filling

COMPLIANCE & INSTALLATION

- CE certified NSHEV compliant with **NF EN 12101-2. (Product certification No. 0333 CPR 219016)**
- 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 190 mm for an interior upstand height of 360 mm, or 240 mm for an upstand height of 410 mm.
- Maximum permissible slope: 25° or 46% (see installation instructions).
- Only the security bar option provides guaranteed 1200 joule protection.

DoP available at www.skydome.eu

Trade name

| Trade name | Filling | Upstand insulation |
|---------------------------|--------------------------|---|
| PYRODÔME ÉVOLUTION TREUIL | 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: 360 mm
Insulation:
• on vertical part of upstand
• on upstand 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 | Straight upstand | | Skewed XL upstand | |
| | | | Height 360 mm | Height 410 mm | Height 360 mm | Height 410 mm |
| 100 x 100 | 0.12 | 0.76 | 0.36 | 0.35 | 0.37 | 0.36 |
| 120 x 120 | 0.14 | 0.92 | 0.54 | 0.52 | 0.55 | 0.54 |
| 140 x 140 | 0.17 | 1.07 | 0.75 | 0.73 | 0.77 | 0.75 |
| 150 x 150 | 0.18 | 1.15 | 0.86 | 0.85 | 0.89 | 0.87 |
| 160 x 160 | 0.19 | 1.22 | 0.99 | 0.98 | 1.02 | 1.00 |
| 100 x 150 | 0.15 | 0.96 | 0.56 | 0.55 | 0.57 | 0.56 |
| 100 x 200 | 0.18 | 1.15 | 0.76 | 0.74 | 0.78 | 0.76 |
| 120 x 200 | 0.19 | 1.22 | 0.92 | 0.91 | 0.95 | 0.93 |
| 140 x 200 | 0.20 | 1.30 | 1.09 | 1.07 | 1.12 | 1.10 |

⁽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

* For maximum possible performance, contact us.

Control system

We supply versatile installation kits for controlling the PYRODÔME® ÉVOLUTION TREUIL and PYRODÔME® ÉVOLUTION TREUIL CAPPING UPSTAND. These easy-to-use kits combine a core kit with a range of (mechanical, pneumatic or electrical) satellite kits. See the *Installation Kits* datasheet for a full list of our kits.

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 | 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
 $R_{a,r} = R_w + C_r$ = "road noise" attenuation index

Maximum permissible snow loads SL (Pa)

| Roof opening (cm) | Opening pressure | | | | | | | |
|-------------------|------------------|--------|--------------------------------|--------|---------------|--------|--|--------|
| | PCA 16 / PCA 16+ | | PCA 32 / PCA 32+ / 40 mm cover | | PCA 32 & dome | | PCA 32+ & dome / Triple dome / Acoustik' Light | |
| | SL 250 | SL 500 | SL 250 | SL 500 | SL 250 | SL 500 | SL 250 | SL 500 |
| 100 x 100 | | | | | | | | |
| 120 x 120 | | | | | | | | |
| 140 x 140 | | | | | | | | |
| 150 x 150 | | | | | | | | |
| 160 x 160 | | | | | | | | |
| 100 x 150 | | | | | | | | |
| 100 x 200 | | | | | | | | |
| 120 x 200 | | | | | | | | |
| 140 x 200 | | | | | | | | |

Centred crosspiece

Centred or offset crosspiece (as required)

Dimensions & aeraulic performance

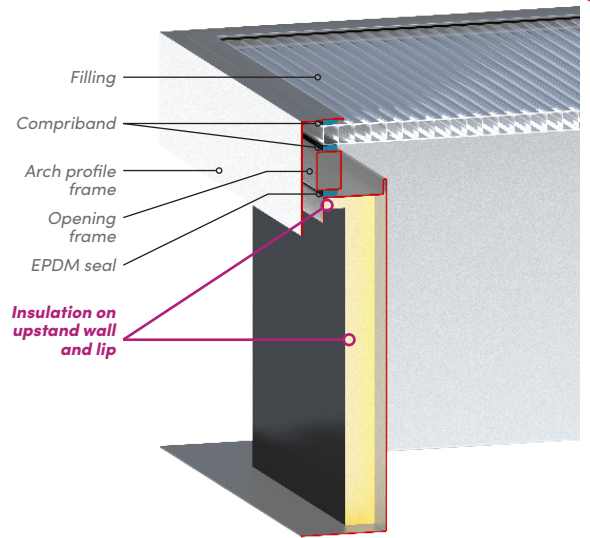
| Roof opening dimensions A x B (cm) | | PYDODÔME ÉVOLUTION TREUIL | | | PYDODÔME ÉVOLUTION TREUIL XL | | |
|---------------------------------------|-------------------|---------------------------|-------------------------|------|------------------------------|-------------------------|------|
| | | A_v (m ²) | A_a (m ²) | | A_v (m ²) | A_a (m ²) | |
| | | | SD | AD | | SD | AD |
| Straight upstand | Skewed XL upstand | | | | | | |
| 100 x 100 | 114 x 114 | 1.00 | 0.55 | 0.68 | 1.30 | 0.70 | 0.87 |
| 120 x 120 | 134 x 134 | 1.44 | 0.78 | 0.96 | 1.80 | 0.97 | 1.20 |
| 140 x 140 | 154 x 154 | 1.96 | 1.04 | 1.28 | 2.37 | 1.27 | 1.60 |
| 150 x 150 | 164 x 164 | 2.25 | 1.18 | 1.45 | 2.69 | 1.43 | 1.82 |
| 160 x 160 | 174 x 174 | 2.56 | 1.34 | 1.63 | 3.03 | 1.61 | 2.05 |
| 100 x 150 | 114 x 164 | 1.50 | 0.81 | 1.00 | 1.87 | 1.01 | 1.25 |
| 100 x 200 | 114 x 214 | 2.00 | 1.00 | 1.33 | 2.44 | 1.32 | 1.64 |
| 120 x 200 | 134 x 214 | 2.40 | 1.21 | 1.59 | 2.87 | 1.45 | 1.95 |
| 140 x 200 | 154 x 214 | 2.80 | 1.42 | 1.85 | 3.30 | 1.68 | 2.24 |

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

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

ENHANCED THERMAL INSULATION:

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



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

PYRODÔME® ÉVOLUTION TREUIL

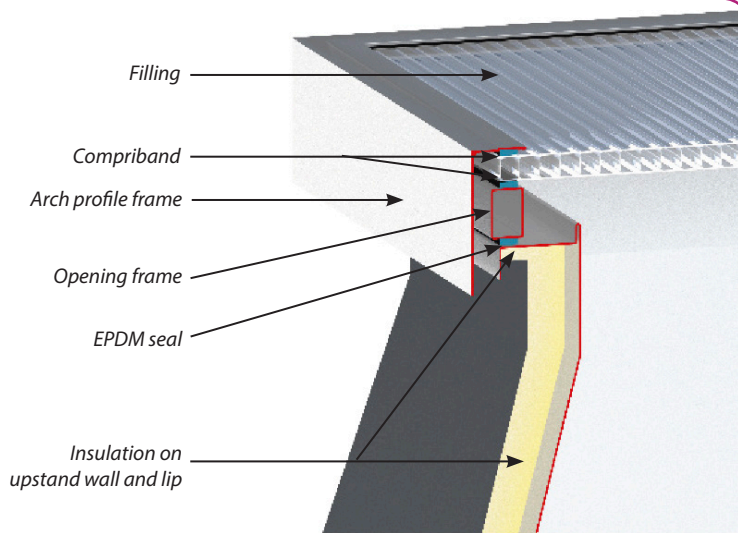
| Dimensions (cm) | Upstand height: 360 mm | | | | | | | | | Upstand height: 410 mm | | | | | | | | | | |
|-----------------|------------------------|--------|---------|--------|----------|---------|------------------------------|-------------|-----------------|------------------------|----------|---------|--------|----------|---------|------------------------------|-------------|-----|--|----------|
| | 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 | | | |
| 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 | 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 | 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 | 5.0 | | |
| 150 x 150 | 2.3 | 2.1 | 2 | 1.8 | 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 | | |
| 160 x 160 | 2.3 | 2.1 | 2 | 1.8 | 1.7 | 1.6 | 1.4 | 2.8 | 5.6 | 2.1 | 2 | 1.9 | 1.8 | 1.7 | 1.5 | 1.4 | 2.7 | 6.0 | | |
| 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 | | |
| 120 x 200 | 2.3 | 2.1 | 2 | 1.8 | 1.7 | 1.6 | 1.4 | 2.8 | 5.5 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.4 | 2.7 | 5.8 | | |
| 140x 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 160 x 160 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} .

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

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} (W/m².K) and A_{RC} (m²)

PYRODÔME® ÉVOLUTION TREUIL XL

| 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 | |
| 100 x 100 | 2.2 | 2 | 1.9 | 1.9 | 1.8 | 1.6 | 1.6 | 2.5 | 3.2 | 2.1 | 2.1 | 1.9 | 1.9 | 1.8 | 1.6 | 1.5 | 2.7 | 3.4 |
| 120 x 120 | 2.2 | 2 | 1.9 | 1.9 | 1.7 | 1.6 | 1.5 | 2.5 | 3.9 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.5 | 2.7 | 4.2 |
| 140 x 140 | 2.2 | 2 | 1.9 | 1.9 | 1.7 | 1.5 | 1.5 | 2.6 | 4.8 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.4 | 2.7 | 5.1 |
| 150 x 150 | 2.2 | 2 | 1.8 | 1.9 | 1.7 | 1.5 | 1.5 | 2.6 | 5.2 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.4 | 2.7 | 5.6 |
| 160 x 160 | 2.2 | 2 | 1.8 | 1.8 | 1.7 | 1.5 | 1.4 | 2.6 | 5.7 | 2.1 | 2 | 1.9 | 1.8 | 1.7 | 1.5 | 1.4 | 2.7 | 6.1 |
| 100 x 150 | 2.2 | 2 | 1.9 | 1.9 | 1.7 | 1.6 | 1.5 | 2.5 | 4.1 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.5 | 2.7 | 4.4 |
| 100 x 200 | 2.2 | 2 | 1.9 | 1.9 | 1.7 | 1.5 | 1.5 | 2.6 | 5.0 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.4 | 2.7 | 5.3 |
| 120 x 200 | 2.2 | 2 | 1.8 | 1.9 | 1.7 | 1.5 | 1.5 | 2.6 | 5.6 | 2.1 | 2 | 1.9 | 1.9 | 1.8 | 1.5 | 1.4 | 2.7 | 5.9 |
| 140 x 200 | 2.2 | 2 | 1.8 | 1.8 | 1.7 | 1.5 | 1.4 | 2.6 | 6.1 | 2.1 | 2 | 1.9 | 1.8 | 1.7 | 1.5 | 1.4 | 2.7 | 6.5 |

* For a 160 x 160 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 PYRODÔME® ÉVOLUTION TREUILCAPPING UPSTAND is designed to fit any type of upstand, whether for compliance reasons or to change the NSHEV's purpose while retaining the existing upstand.



Types of filling

THERMIK' RANGE:

- PCA 16
- PCA 16+ Lumira*
- PCA 32
- PCA 32+ Lumira*
- 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

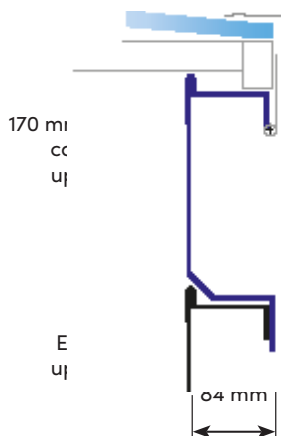
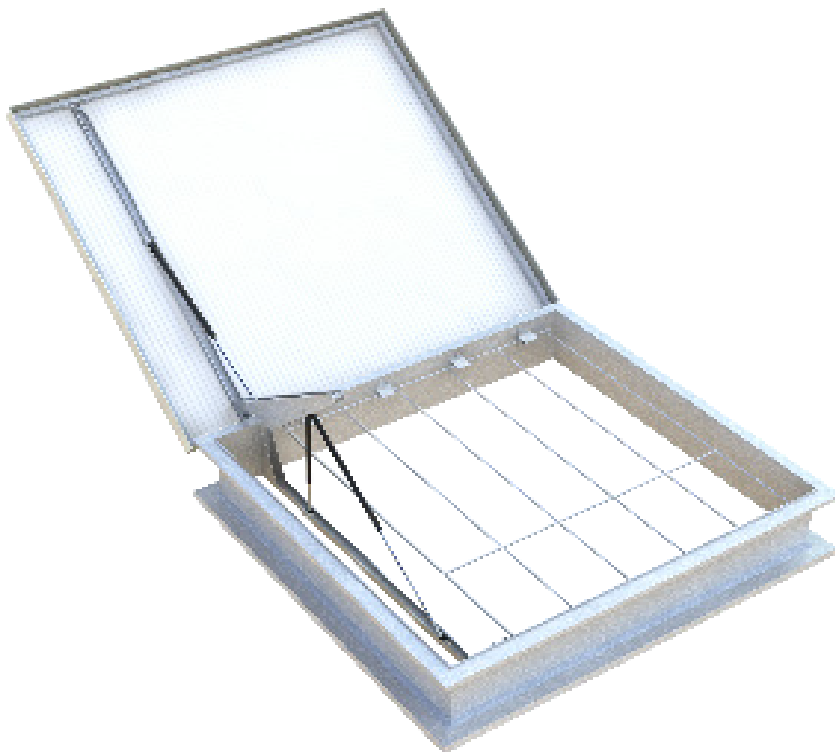
THERMIK' RANGE:

- Height 170 mm

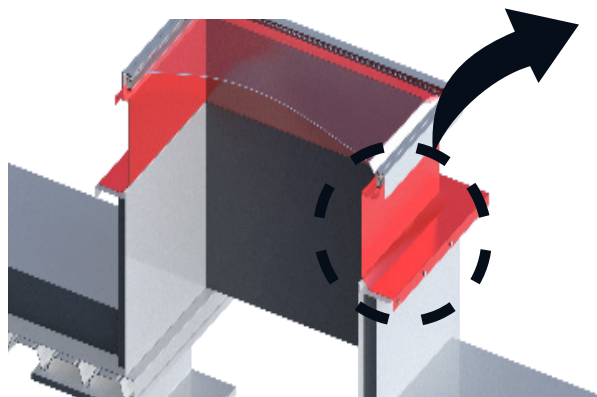


Control

- Manual opening/closing
- Built-in and offset mechanism for 100x100 cm and 120x120 cm roof opening dimensions



Installation diagram



Options

Standard options list p.1

Upstand

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

Dimensions & aeraulic performance

| Roof opening dimensions A x B (cm) | Overall heel dimensions C x D (cm) | Height H* (cm) | Light surface (m ²) | E (cm) | Product weight (kg) | Av (m ²) | Aa (m ²) | |
|---------------------------------------|---------------------------------------|-------------------|------------------------------------|--------|------------------------|----------------------|----------------------|------|
| | | | | | | | SD | AD |
| 100 x 100 | 117 x 117 | 23 | 1.00 | 165 | 51 | 1.00 | 0.57 | 0.68 |
| 120 x 120 | 137 x 137 | 23 | 1.44 | 186 | 61 | 1.44 | 0.77 | 0.97 |
| 140 x 140 | 157 x 157 | 23 | 1.96 | 207 | 72 | 1.96 | 0.97 | 1.30 |
| 150 x 150 | 167 x 167 | 23 | 2.25 | 228 | 78 | 2.25 | 1.08 | 1.48 |
| 160 x 160 | 177 x 177 | 23 | 2.56 | 240 | 83 | 2.56 | 1.18 | 1.67 |
| 100 x 150 | 117 x 167 | 23 | 1.50 | 165 | 61 | 1.50 | 0.85 | 1.01 |
| 100 x 200 | 117 x 167 | 25 | 2.00 | 165 | 73 | 2.00 | 1.15 | 1.33 |
| 120 x 200 | 117 x 217 | 29 | 2.40 | 186 | 79 | 2.40 | 1.29 | 1.57 |
| 140 x 200 | 157 x 217 | 25 | 2.80 | 207 | 86 | 2.80 | 1.40 | 1.83 |

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

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

| PYRODÔME® ÉVOLUTION TREUIL CAPPING UPSTAND | | | | | | | | | |
|--|------------------------|-----------|------------|-----------|-------------|------------|---------------------------------------|----------------|----------|
| Dimensions (cm) | Upstand height: 170 mm | | | | | | | | |
| | U_{RC} | | | | | | | | A_{RC} |
| | Acoustik' Light | PCA 16 | PCA 16+ | PCA 20 | PCA 32** | PCA 32+ | Opaque 40 mm aluminium cover | Triple dome | |
| 100 x 100 | 3.2 | 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 |
| 150 x 150 | 3 | 2.8 | 2.6 | 2.5 | 2.2 | 2.1 | 2 | 3.5 | 4.0 |
| 160 x 160 | 2.9 | 2.8 | 2.5 | 2.4 | 2.2 | 2 | 1.9 | 3.5 | 4.4 |
| 100 x 150 | 3.1 | 2.9 | 2.7 | 2.6 | 2.3 | 2.2 | 2.1 | 3.6 | 3.0 |
| 100 x 200 | 3 | 2.9 | 2.6 | 2.5 | 2.3 | 2.1 | 2.1 | 3.6 | 3.7 |
| 120 x 200 | 3 | 2.8 | 2.5 | 2.5 | 2.2 | 2.1 | 2 | 3.5 | 4.2 |
| 140 x 200 | 2.9 | 2.8 | 2.5 | 2.4 | 2.1 | 2 | 1.9 | 3.5 | 4.7 |

* Adding a dome has no effect on the unit's thermal conductivity U_{RC} .

SKYDÔME

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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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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/21_pyrodome-evolution-treuil.html

For **WATERPROOFED ROOFS OR EXISTING UPSTANDS**

PYRODÔME®

Évolution Treuil



NF 537
Actuated safety devices (DAS)
Control devices (DC)



EN 12101-2
EN 1873 + A1: 2016



VERSION



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

- Manual opening/closing
- Built-in and offset mechanism for 100x100 cm and 120x120 cm roof opening dimensions

The PYRODÔME® ÉVOLUTION TREUIL is an NSHEV intended primarily for smoke and heat exhaust applications. It is suitable for use on waterproofed flat roofs on all types of buildings (including public facilities, work premises and industrial buildings).



Also available:



OPTIONS



Types of filling

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



Control

- Limit switch



Upstand

- Upstand height: 360 mm, 410 mm or more
- Lacquered interior
- Colaminated sheet steel top for PVC waterproofing
- Galvanised sheet steel top for PVC waterproofing
- Bare insulation for PVC waterproofing
- With/without wind baffles (AD/SD)
- Skewed upstand

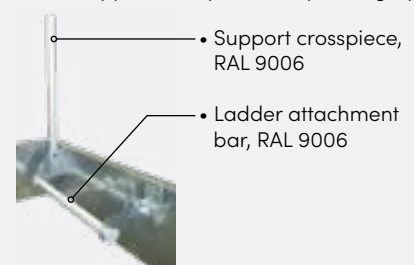
Capping upstand

See page 5 for details.



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
- 16x16 mm security bars on opening system
- Ladder attachment bar, lacquered grey
- Support crosspiece, lacquered grey



Dimensions

| Roof opening dimensions A x B (cm) | | Overall heel dimensions C x D (cm) | | Height H* (cm) | | | | Light surface (m ²) | E (cm) | Product weight (kg) | | | |
|---------------------------------------|-------------------|---------------------------------------|-------------------|------------------|----|-------------------|----|------------------------------------|--------|---------------------|-----|-------------------|-----|
| | | | | Straight upstand | | Skewed XL upstand | | | | Straight upstand | | Skewed XL upstand | |
| Straight upstand | Skewed XL upstand | Straight upstand | Skewed XL upstand | PCA | DD | PCA | DD | | | PCA | DD | PCA | DD |
| 100 x 100 | 114 x 114 | 118 x 118 | 132 x 132 | 37 | 56 | 37 | 56 | 1.00 | 165 | 63 | 69 | 67 | 73 |
| 120 x 120 | 134 x 134 | 138 x 138 | 152 x 152 | 37 | 59 | 37 | 59 | 1.44 | 186 | 76 | 86 | 81 | 90 |
| 140 x 140 | 154 x 154 | 158 x 158 | 172 x 172 | 37 | 62 | 37 | 62 | 1.96 | 207 | 90 | 103 | 95 | 109 |
| 150 x 150 | 164 x 164 | 168 x 168 | 182 x 182 | 37 | 64 | 37 | 64 | 2.25 | 228 | 96 | 112 | 102 | 118 |
| 160 x 160 | 174 x 174 | 178 x 178 | 192 x 192 | 37 | - | 37 | - | 2.56 | 240 | 103 | - | 109 | - |
| 100 x 150 | 114 x 164 | 118 x 168 | 132 x 182 | 37 | 56 | 37 | 56 | 1.50 | 165 | 76 | 86 | 81 | 91 |
| 100 x 200 | 114 x 214 | 138 x 218 | 132 x 232 | 39 | 56 | 39 | 56 | 2.00 | 165 | 90 | 104 | 96 | 110 |
| 120 x 200 | 134 x 214 | 138 x 218 | 152 x 232 | 39 | 54 | 39 | 54 | 2.40 | 186 | 98 | 110 | 105 | 117 |
| 140 x 200 | 154 x 214 | 158 x 218 | 172 x 232 | 39 | 62 | 39 | 62 | 2.80 | 207 | 106 | 119 | 113 | 126 |

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

Dimensions & aeratic performance

| Roof opening dimensions A x B (cm) | | PYRODÔME ÉVOLUTION TREUIL | | | PYRODÔME ÉVOLUTION TREUIL XL | | | PYRODÔME ÉVOLUTION TREUIL UPSTAND | | |
|---------------------------------------|-----------|---------------------------|----------------------|------|------------------------------|----------------------|------|-----------------------------------|----------------------|------|
| | | Av (m ²) | Aa (m ²) | | Av (m ²) | Aa (m ²) | | Av (m ²) | Aa (m ²) | |
| | | | SD | AD | | SD | AD | | AD | SD |
| 100 x 100 | 114 x 114 | 1.00 | 0.55 | 0.68 | 1.30 | 0.70 | 0.87 | 1.08 | 0.57 | 0.68 |
| 120 x 120 | 134 x 134 | 1.44 | 0.78 | 0.96 | 1.80 | 0.97 | 1.20 | 1.54 | 0.77 | 0.97 |
| 140 x 140 | 154 x 154 | 1.96 | 1.04 | 1.28 | 2.37 | 1.27 | 1.60 | 2.07 | 0.97 | 1.30 |
| 150 x 150 | 164 x 164 | 2.25 | 1.18 | 1.45 | 2.69 | 1.43 | 1.82 | 2.37 | 1.08 | 1.48 |
| 160 x 160 | 174 x 174 | 2.56 | 1.34 | 1.63 | 3.03 | 1.61 | 2.05 | 2.69 | 1.18 | 1.67 |
| 100 x 150 | 114 x 164 | 1.50 | 0.81 | 1.00 | 1.87 | 1.01 | 1.25 | 1.60 | 0.85 | 1.01 |
| 100 x 200 | 114 x 214 | 2.00 | 1.00 | 1.33 | 2.44 | 1.32 | 1.64 | 2.12 | 1.15 | 1.33 |
| 120 x 200 | 134 x 214 | 2.40 | 1.21 | 1.59 | 2.87 | 1.45 | 1.95 | 2.53 | 1.29 | 1.57 |
| 140 x 200 | 154 x 214 | 2.80 | 1.42 | 1.85 | 3.30 | 1.68 | 2.24 | 2.94 | 1.40 | 1.83 |

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

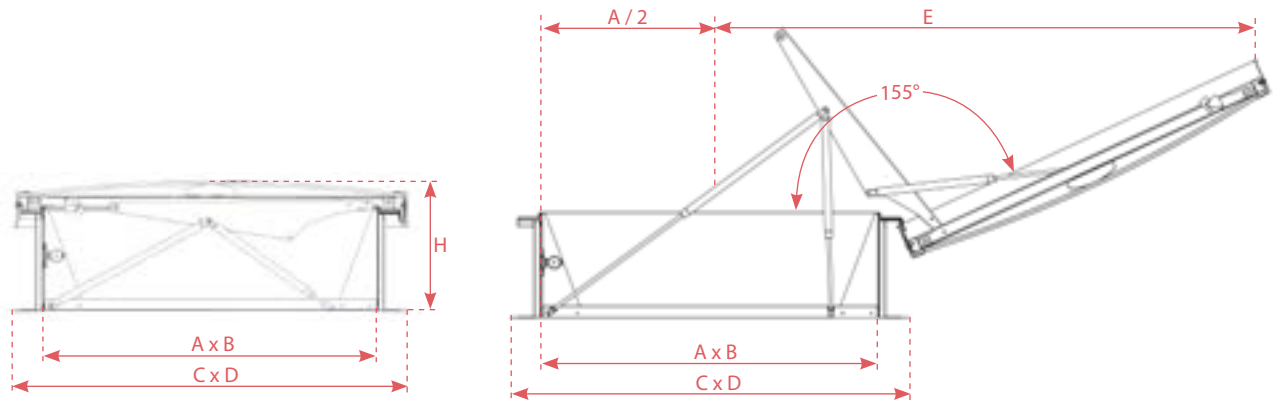
Control system

We supply versatile installation kits for controlling the **PYRODÔME® ÉVOLUTION TREUIL** and **PYRODÔME® ÉVOLUTION TREUIL CAPPING UPSTAND**. These easy-to-use kits combine a core kit with a range of (mechanical, pneumatic or electrical) satellite kits. See the *Installation Kits* datasheet for a full list of our kits.

Technical diagrams

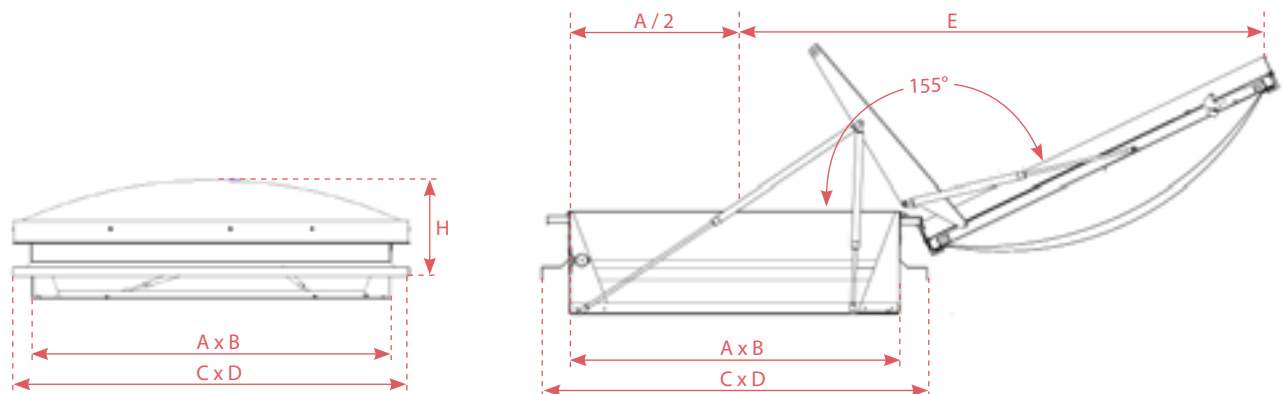
ORIGIN' range

PYRODÔME ÉVOLUTION TREUIL PCA



ORIGIN' range capping upstand

PYRODÔME ÉVOLUTION TREUIL double dome



PERFORMANCE

Exhaust ventilator opening: type B (open + close)

Reliability: Re 300

Low ambient temperature: T(0°C)

Resistance to heat: B₃₀₀

Thermo-fuse set temperature: 93°C as standard

Resistance to wind load: WL1500

Opening under load: SL 250 or SL 500 depending on filling and dimensions

COMPLIANCE & INSTALLATION

CE certified NSHEV compliant with **NF EN 12101-2. (Product certification No. 0333 CPR 219016)**

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).

Only the security bar option provides guaranteed 1200 joule protection.

DoP available at www.skydome.eu

Maximum permissible snow loads SL (Pa)

| Opening (cm) | PCA | | Double dome | | Aluminium cover | |
|--------------|--------|--------|-------------|--------|-----------------|--------|
| | SL 250 | SL 500 | SL 250 | SL 500 | SL 250 | SL 500 |
| 100 x 100 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 120 x 120 | ✓ | ✓ | ✓ | | ✓ | |
| 140 x 140 | ✓ | | ✓ | | ✓ | |
| 150 x 150 | ✓ | | ✓ | | ✓ | |
| 160 x 160 | ✓ | | | | | |
| 100 x 150 | ✓ | | ✓ | | ✓ | |
| 100 x 200 | ✓ | | ✓ | | ✓ | |
| 120 x 200 | ✓ | | ✓ | | ✓ | |
| 140 x 200 | ✓ | | ✓ | | ✓ | |

✓ : disponible

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 |
| 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 |

⁽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_a, pink noise R_k (environment, airport and industrial activities) and road noise R_{rw} laboratory-measured according to NF EN ISO 140.

FOR RENOVATION AND COMPLIANCE WORKS

The **PYRODÔME® ÉVOLUTION TREUIL** is designed to fit any type of upstand, whether for compliance reasons or to change the NSHEV's purpose **while retaining the existing upstand**.



Filling

- Opal multi-wall PCA 10, $U_g = 2.9 \text{ W/m}^2\cdot\text{K}$



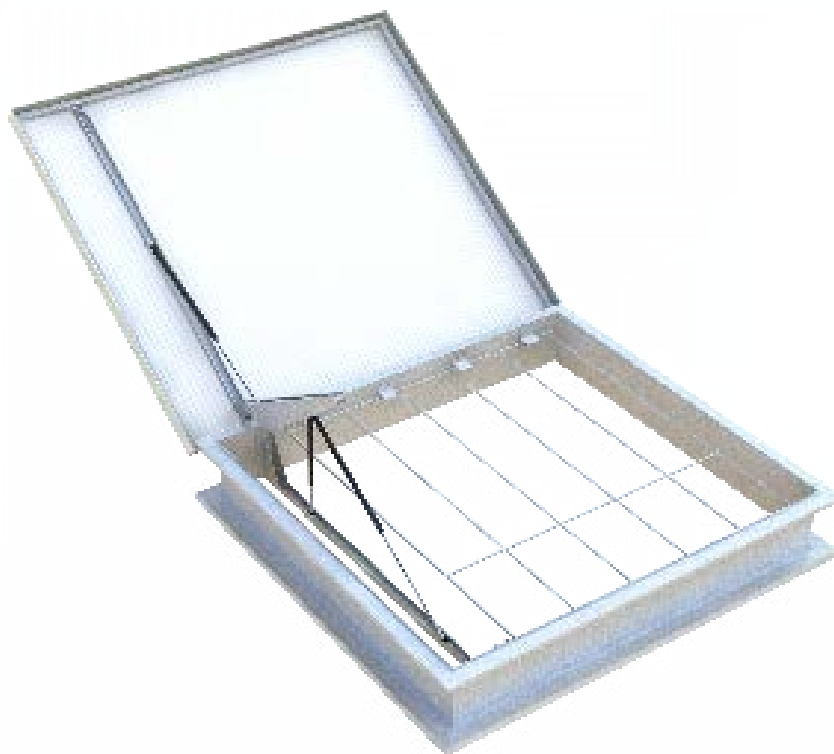
Upstand

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

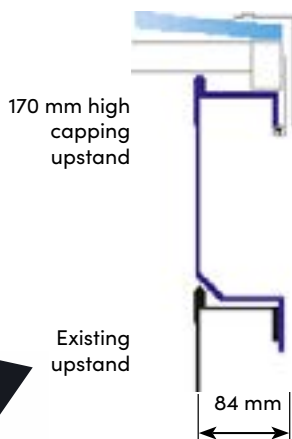
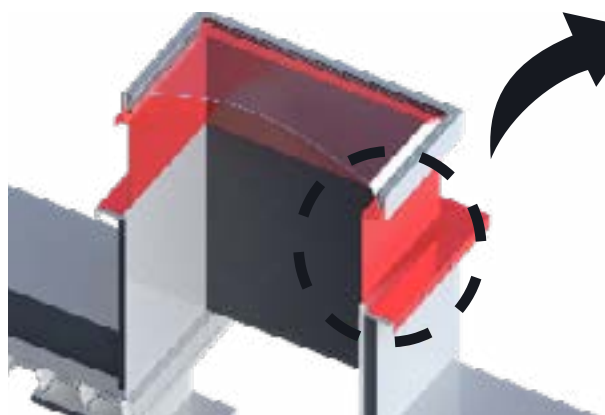


Control

- Manual opening/closing
- Built-in and offset mechanism for 100x100 cm and 120x120 cm roof opening dimensions



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

Dimensions & aeraulic performance

| Roof opening dimensions A x B (cm) | Overall heel dimensions C x D (cm) | 25Height H*(cm)25 | | Light surface (m ²) | E (cm) | Weight (kg) | | Av (m ²) | Aa (m ²) | |
|---------------------------------------|---------------------------------------|----------------------|----|------------------------------------|--------|-------------|-----|-------------------------|----------------------|------|
| | | PCA | DD | | | PCA | DD | | SD | AD |
| 100 x 100 | 117 x 117 | 23 | 42 | 1.00 | 165 | 53 | 59 | 1.00 | 0.57 | 0.68 |
| 120 x 120 | 137 x 137 | 23 | 45 | 1.44 | 186 | 64 | 73 | 1.44 | 0.77 | 0.97 |
| 140 x 140 | 157 x 157 | 23 | 48 | 1.96 | 207 | 75 | 89 | 1.96 | 0.97 | 1.30 |
| 150 x 150 | 167 x 167 | 23 | 50 | 2.25 | 228 | 81 | 97 | 2.25 | 1.08 | 1.48 |
| 160 x 160 | 177 x 177 | 23 | 51 | 2.56 | 240 | 86 | 105 | 2.56 | 1.18 | 1.67 |
| 180 x 180 | 197 x 197 | 25 | 54 | 3.24 | 274 | 97 | - | 3.24 | 1.38 | 2.13 |
| 195 x 200 | 212 x 217 | 25 | 59 | 3.90 | 285 | 108 | - | 3.90 | 1.58 | 2.50 |
| 100 x 150 | 117 x 167 | 23 | 42 | 1.50 | 165 | 63 | 86 | 1.50 | 0.85 | 1.01 |
| 100 x 200 | 117 x 167 | 25 | 42 | 2.00 | 165 | 75 | 104 | 2.00 | 1.15 | 1.33 |
| 120 x 200 | 117 x 217 | 24 | - | 2.40 | 186 | 82 | - | 2.40 | 1.29 | 1.57 |
| 140 x 200 | 157 x 217 | 25 | 48 | 2.80 | 207 | 89 | - | 2.80 | 1.40 | 1.83 |
| 120 x 250 | 137 x 267 | 25 | 45 | 3.00 | 186 | 93 | - | 3.00 | - | - |

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



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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.

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