



TECHNICAL FILE

# Skylux® 160° CE PN

Pneumatic skylight  
for smoke and heat extraction

CE approved according to EN 12101-2  
and in conformity with NBN S21-208\*

  
**SKYLUX**  
*Hello daylight!*

## General product description

The Skylux® 160° CE pneumatic dome consists of:

- An EN approved Skylux® dome\*\* in acrylic or polycarbonate, maximum triple-walled, assembled according to the Skylux® specifications
- A PVC curb (type 16/00, 30/20 or 35/30), polyester (PO30 or PO50), metal (M30 to M50 or more), timber or concrete, with a composed height of at least 300 mm and which is part of the CE agreement for SHEV systems
- A hinging PVC frame (standard, EP or EP25) or a round grp frame
- External support sheets with accessories for PVC curbs (2 per opening mechanism)
- An opening system with one or two actuator(s) with pneumatic cylinders depending on the sizes and the wished dome

Complementary:

- Fail Safe by a fusible link on 70°C and a CO<sub>2</sub> gas bottle
- Two angle spoilers (optional to improve the aerodynamic coefficient Cv)
- Inner spoilers (optional to improve the aerodynamic coefficient Cv)

## Advantages

- Large range of sizes (up to daylight size 160 x 280 cm) and excellent Cv-values decrease the number of appliances needed
- Exceptional insulation ( $U_t$  value\*\*\* up to 0.86 W/m<sup>2</sup>.K)
- 100 % thermal break
- Skylux® quick mounting concept
- Skylux® 160° CE pneumatic is also available in round sizes

\* With the use of a Skycom® master CE and Skycom® slave CE detection unit, the installation is Fail Safe and the Skylux® 160° CE meets the norms NBN S21-208.1 en NBN S21-208.3.

\*\* Skylux® domes are CE marked according to EN 1873:2014+A1:2016.

\*\*\*  $U_t$  (transparent) value or insulation value of the Skylux® dome according to EN 1873:2014+A1:2016 determined according to EN 673

## CE specifications according to EN 12101-2 for Skylux 160° CE pneumatic

time until full opening	< 60 sec
min. functioning temperature (°C)	-15 °C
heat resistance (°C)	B300
snow load (N/m <sup>2</sup> )	SL 850
wind load (N/m <sup>2</sup> )	WL 1500
aerodynamic coefficient**	according to size, type curb and spoilers (until 0.78)
liability SHE	Re 1000
maximum slope	10°

\* except for triple-walled domes with daylight size 130 x 220 cm SL 610 N/m<sup>2</sup> & for 160 x 280 cm SL 770N/m<sup>2</sup>

\*\* Always ask for the aerodynamic coefficient determined by lateral wind

## Product description opening mechanism

The Skylux® 160° CE pneumatic is a dome for smoke and heat extraction with air pressure cylinder(s) combined with a detection unit (optional) on basis of a CO<sub>2</sub> gas bottle. This means that the dome automatically opens as soon at a temperature of 70°C. The dome remains in opened position and can be closed again afterwards (see installation instructions). To set up the system again in operation modus, you have to exchange the fusible link and the CO<sub>2</sub> gas bottle.

The Skylux 160° CE pneumatic is **only suitable for SHE** and has **no comfort ventilation function**.

## Specific characteristics opening mechanism

- Only for stand-alone unit:

	small daylight sizes (see price list, excl 160 x 280)	large daylight sizes (160 x 280 cm)
Number of actuators	1	2
Weight	± 17,5 kg	± 29 kg
Opening angle	160°	
Finish cylinder	diameter 63 mm, course length 375 mm	
Certificate	CE according to EN 12.101-2	
Material	galvanised	
Material cylinder	aluminium and steel	
Detection unit :		
Glass fusible	70°C (red)	
Based on CO <sub>2</sub> gas bottle	33 g	120 g

*If no optional detection unit, you must set up yourself the dimensioning of the CO<sub>2</sub> gas bottle.*

- If different systems are connected to one central CO<sub>2</sub> gas bottle, the CO<sub>2</sub> volume and the circuit must be dimensioned correctly.

## Remark

To avoid heat build-up under the transparent skylight (plastic, hybrid, glass) and therefore possible deformation or damage to the PVC curb, frame, skylight dome or electrical components, it is recommended that no closed surface (e.g. black closed attic hatch) is installed under the skylights. A reflective (e.g. white) surface and/or ventilation is recommended.

## Attestations, certificates and documentation

- CE of the SHEV system according to EN 12.101-2
- In accordance with NBN S21-208\*
- DoP on [www.skylux.be](http://www.skylux.be)
- Mounting instructions on [www.skylux.be](http://www.skylux.be)



*Attention: the CE certification is only valid if the composition, execution and the installation regulations are respected. SKYLUX guarantees the CE conformity as described in the documentation and according the plant regulations of the appliances. Every variance, cancels the CE conformity.*

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ONLY USE ORIGINAL PARTS DELIVERED BY SKYLUX. EVERY GUARANTEE IS CANCELLED IF NON-ORIGINAL PARTS ARE USED. THE SHE DETECTION UNIT MUST BE USED WITH THE RIGHT SHE OPENING SYSTEM. THE USE OF NON-ORIGINAL SHE PARTS CAN LEAD TO DEFECTS OF THE SYSTEM.

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SKYLUX NV  
SPINNERIJSTRAAT 100 - B-8530 STASEGEM  
T +32 (0)56 20 00 00 - F +32 (0)56 21 95 99  
INFO@SKYLUX.BE  
WWW.SKYLUX.BE

