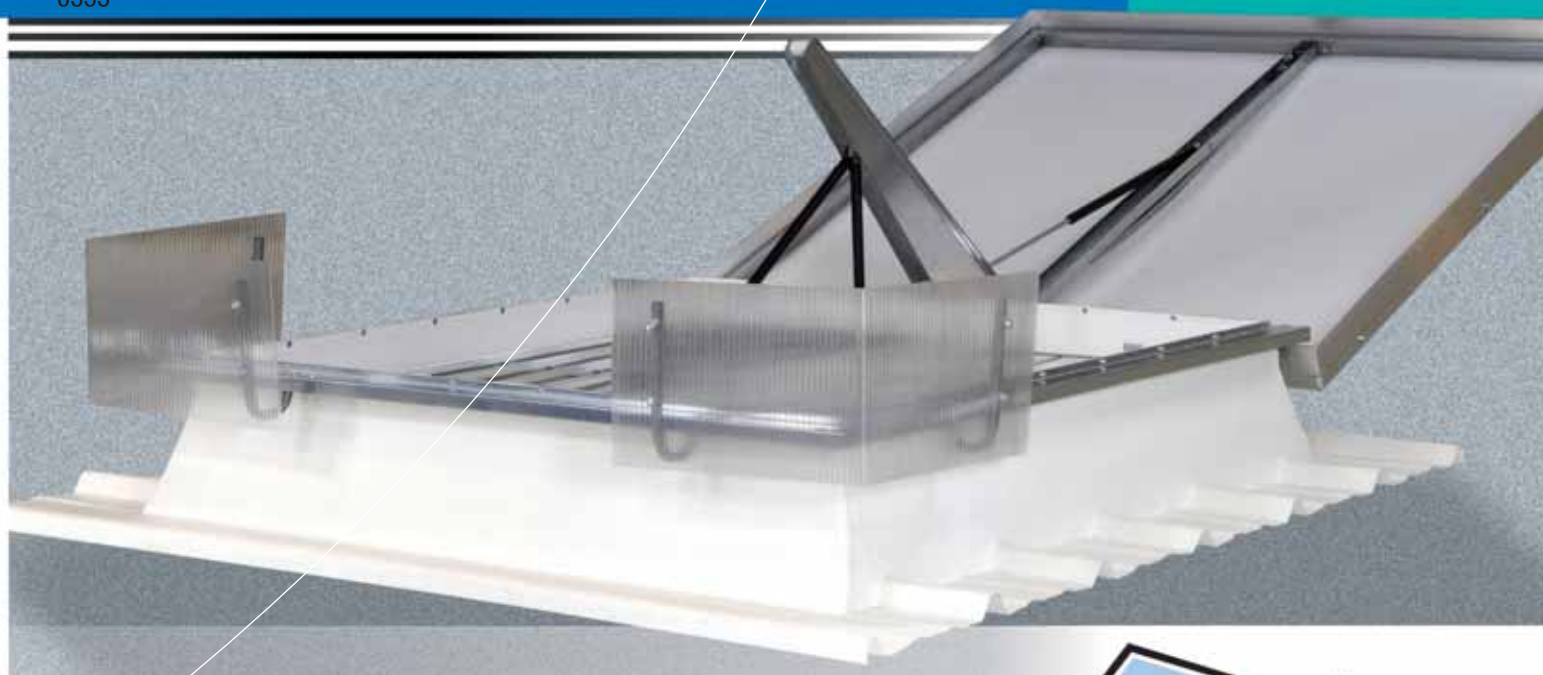


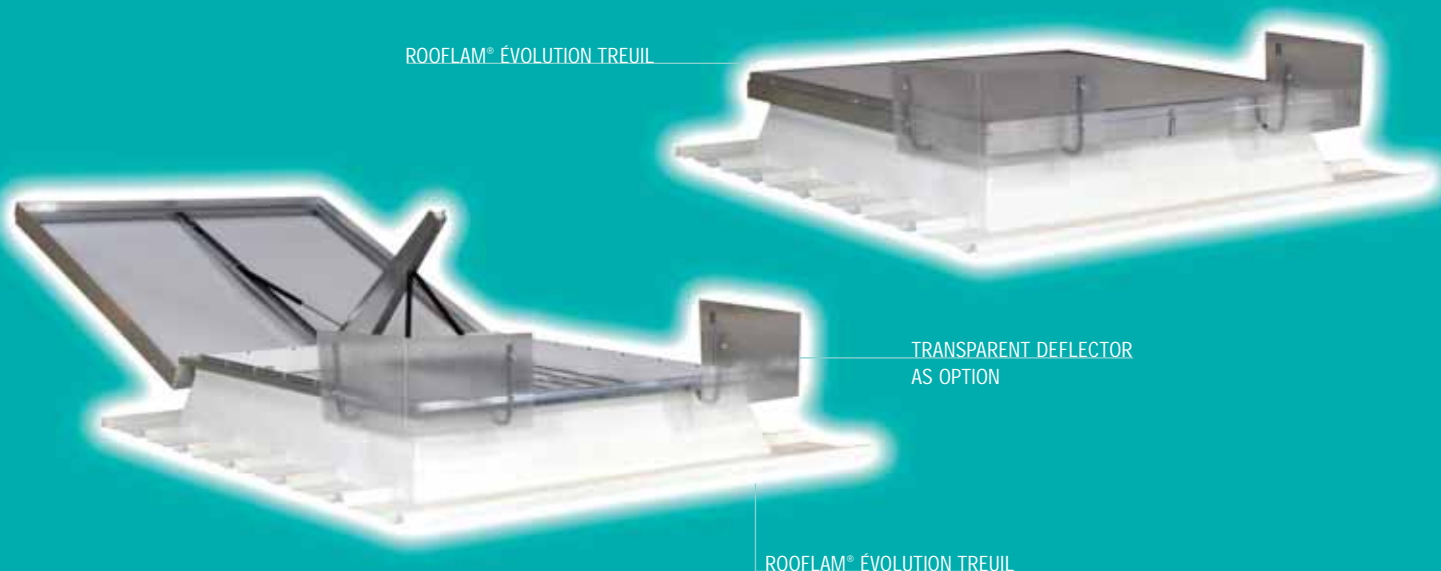
**SMOKE EVACUATION / NATURAL DAYLIGHTING / VENTILATION**

# **ROOFLAM<sup>®</sup> ÉVOLUTION TREUIL**

**CE**  
0333



**SKYDÔME<sup>®</sup>**  
La sécurité en toute clarté



The **ROOFLAM® ÉVOLUTION TREUIL** is a unit used on sheeted roof for all types of natural smoke evacuation, example: public access buildings, industrial buildings, commercial buildings, offices, residential buildings, etc.

The **ROOFLAM® ÉVOLUTION TREUIL** is used to best effect in installations comprising a small number of units of limited size (see dimensions on the Product Range table). For smoke evacuation in large buildings we recommend a pneumatic unit, such as **ROOFLAM® ÉVOLUTION PNEUMATIQUE**.

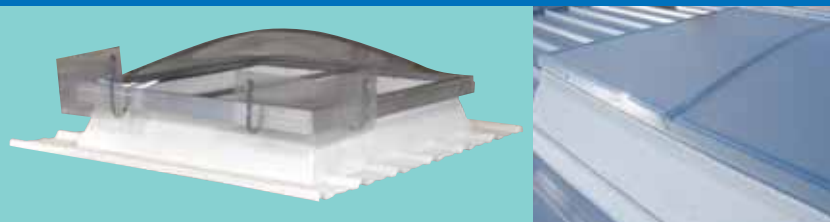
The control of **ROOFLAM® ÉVOLUTION TREUIL** has to be installed on stable elements of the construction, with a maximum of 15 ml of connecting line with steel cable in the best case.

## SMOKE EVACUATION / NATURAL DAYLIGHTING / VENTILATION

# ROOFLAM®

CE  
0333

## ÉVOLUTION TREUIL



### 1 ADVANTAGES

**Integrated mechanisms:** the opening and closing mechanisms of **ROOFLAM® ÉVOLUTION TREUIL** are completely contained within the height of the kerb in both open and closed position. This means that they do not impede the passage of other networks or the use of other equipment under the ceiling.

For opening dimensions **100 x 100** and **120 x 120** the **integrated mechanism** of **ROOFLAM® ÉVOLUTION TREUIL** is **fixed on the side** allowing easy roof access.

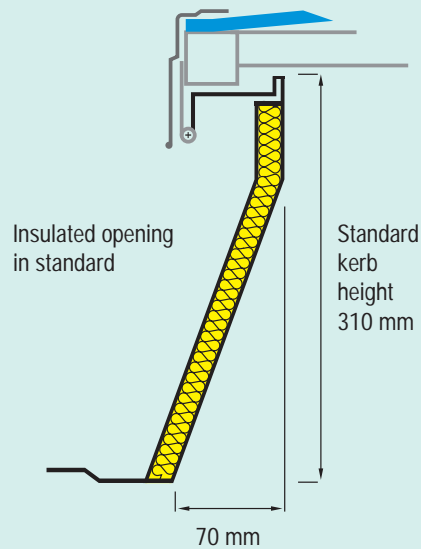
**A wide range of polyester bases:** **SKYDÔME®** has moulds for bases adapted to the main sheeted roof profiles present on the market. The **ROOFLAM® ÉVOLUTION TREUIL** is integrated in the polyester base.

The dimensions and references list of the bases, adapted to each profile, are summarized in the "Bases" brochures.

**Colour finish:** as an option, the **ROOFLAM® ÉVOLUTION TREUIL** can be delivered on a painted base in one of the main RAL colours.



## ROOFLAM® ÉVOLUTION TREUIL



For the dimensions of the units and of the trimmer joist, refer to the brochure "Insulated and non insulated Bases".



The ROOFLAM® ÉVOLUTION TREUIL is made of:

• **A base + a support:**

- A **support** in galvanised steel fixed on the polyester unit. It will contain the opening frame, the mechanisms, the mechanical opening system and gas strut opening system.
- A polyester **base** with an angled insulated opening of 310 mm height. The top part of the base includes a 60 mm part allowing the rain water evacuation.

• **A tubular opening frame in galvanised steel:** the opening frame is equipped with a thermal fuse 93 °C as standard (certified safety option), to which is joined the steel cable link.

• **Glazing:** 10 mm structured opalescent polycarbonate or double dome in standard version. As option, 10 and 16 mm structured polycarbonate, PCA triple- or quadruple-walled for better thermal resistance, anti-UV treated PCA or aluminium cover. **Only the grill option guarantees the "1200 joules" test.** Simple dome or pyramid upon request. All our glazings are anti-UV treated. To choose the type of glazing required, see the table entitled "Glazing-Performance".

• **Aluminium beading frame:** fixed by stainless steel screws and nylon washers. This holds the glazing in place and protects edges from lateral impacts. It also improves the aesthetic appeal of the ROOFLAM® ÉVOLUTION TREUIL.

## 4 FUNCTION

In case of fire, the thermo fusible link and/or the emergency release of the winch causes the **ROOFLAM® ÉVOLUTION TREUIL** to open, in accordance with the type of control used. The force necessary to open the unit is supplied by 3 gas cylinders held under pressure in the closed position. This system allows the unit to open to 155°.

If the unit is opened (apart from melting of the fuse), the unit can and must be closed again from the ground, using a winch. The **ROOFLAM® ÉVOLUTION TREUIL** offers as well a daily ventilation, by handling the control winch.

**The thermal fuse is imposed by the norm NF EN12101-2 on all units, apart of specific restrictions: (contact us).**

## 5 GLAZING-PERFORMANCE

TYPE OF GLAZING	THERMAL TRANSMISSION U (W/m <sup>2</sup> °C)	LIGHT TRANSMISSION (%)	FIRE CLASSIFICATION*	ACOUSTIC (db (A))
Double Domes PMMA (Polymetacrylate methyl)	3.1	76	Test in progress (M4)	19
10 mm structured polycarbonate - Clear	3.1	85	Bs1do	17
10 mm structured polycarbonate - Opal	3.1	62	Bs1do	17
10 mm structured polycarbonate - 4-walled Opal	2.5	55	Bs1do	17
16 mm structured polycarbonate - Opal	2.3	57	Bs1do	21
Aluminium cover 10	3.1	0	Test in progress (M0)	17
Aluminium cover 20	0.98	0	Test in progress (M0)	–
Aluminium cover 60	0.6	0	Test in progress (M0)	24

For other types of glazing: see the datasheet on Optional Functions

\* Euroclass Classification

( ) Former Fire classification

## 6 VENTILATION PERFORMANCE

OPENING cm x cm	A <sub>v</sub> (GEOMETRIC SURFACE) in m <sup>2</sup>	A <sub>a</sub> (OPENING SURFACE) HEIGHT 310 mm in m <sup>2</sup>
100 x 100*	1.30	0.87
120 x 120*	1.80	1.20
140 x 140	2.37	1.60
150 x 150	2.69	1.82
160 x 160	3.03	2.05
100 x 150	1.87	1.25
100 x 200	2.44	1.64
120 x 200	2.87	1.95
140 x 200	3.30	2.24

\* Side fixed mechanism

## 7 APPROVAL

Laboratory tests guarantee that the **ROOFLAM® ÉVOLUTION TREUIL** resistance and performance levels conform to the most stringent current regulatory standards when installed in accordance with the DTU 43-3.

The **ROOFLAM® ÉVOLUTION TREUIL** has the Product certification CE NF EN 12101-2 No 0333 CPD219 018 with all our glazings (see table), including with the safety options.

- Position contacts;
- Thermal Fusible release.

The conformity certifications of the norm NF EN 12101-2, 1200 joules and fire rating data are available on our website: [www.skydome-axt.com](http://www.skydome-axt.com) under the heading "Espace Partenaires" (Partner Information).

## 8 PERFORMANCES

LOADS Kg/m <sup>2</sup>	WIND LOADING (depression test)	RELIABILITY TEST	HEAT RESISTANCE
From 25 to 50 kg/m <sup>2</sup> depending on the glazing	WL 1500	Re 300	B 300

In standard, the **ROOFLAM® ÉVOLUTION** are of type B and T(00)

## 9 MAXIMUM ACCEPTABLE LOADS

OPENING (cm)	PCA		DOUBLE DOME		ALU COVER	
	SL in kg/m <sup>2</sup>	Mechanism	SL in kg/m <sup>2</sup>	Mechanism	SL in kg/m <sup>2</sup>	Mechanism
100 x 100	50	Side	50	Side	50	Side
120 x 120	50	Side	25	Side	25	Side
140 x 140	25	Centre	25	Centre	25	Centre
150 x 150	25	Centre	25	Centre	25	Centre
160 x 160	25	Centre	–	–	–	–
100 x 150	25	Centre	25	Centre	25	Centre
100 x 200	25	Centre	25	Centre	25	Centre
120 x 200	25	Centre	25	Centre	25	Centre
140 x 200	25	Centre	25	Centre	25	Centre

In standard, the **ROOFLAM® ÉVOLUTION** are SL25

### Reminder IT 246: Article 3.8 Characteristics of smoke evacuation units

“The smoke evacuation units of reliability class **Re 300** (300 cycles of security process).

The bi-function units, used for ventilation, are opened 10 000 times during the ventilation tests.

The classification of the snow load is **SL 250** (25 daN/m<sup>2</sup>) for altitudes lower or equal to 400 m...

**SL 500** (50 daN/m<sup>2</sup>) for altitudes over 400 m...

The units are inside temperature class **T00** (0°C) and heat resistance class **B<sub>300</sub> 30** (300° during 30’).”

## 10 OPTIONS

- Grill tested to 1200 joules
- Painted Grill
- Insulated Aluminium cover
- Bases' colours
- Position contacts
- Domes and pyramid domes, PCA 10 black, etc.
- Domes 1200 joules
- Base and opening insulated, adapted for insulated sheeted roofs



## 11 CONTROLS

- Certif. **NF** winch kit with mechanical release (XTC 100 or XTN 100)
- Certif. **NF** winch kit with pneumatic release (XTC 103 or XTN 103)
- Certif. **NF** winch kit with electromagnetic release (24 volts emitting (XTC 101 or XTN 101)/breaking (XTC 102 or XTN102) or 48 volts emitting (XTC 104 or XTN 104)/breaking (XTC 105 or XTN 105))
- Certif. **NF** winch kit with electropneumatic release (24 volts emitting (XTC 141 or XTN 141)/breaking (XTC 142 or XTN142) or 48 volts emitting (XTC 144 or XTN 144)/breaking (XTC 145 or XTN 145))

### Conformity

The connecting line (steel cable) must not be longer than:

- 15 m if it is installed in one place only and if its connection is visible from the ground.
- 8 m in other cases.

The maximum number of returns (return pulley) authorised per connecting line is four.

## 12 INSTALLATION

Installation should be carried out in accordance with current regulations. Decks should be sound and resistant and should conform to the requirements of current decking standards and of the installation guide. Maximum roof slope: 25°, i.e. 45%. The hinged side of the unit must be parallel to the slope for square openings, and perpendicular to the slope for rectangular units (see installation notice).

**Fixing:** in accordance to the current DTU standards and the norm NFP 37.417, the base has to be installed on a trimmer-joist. The straight pulley, cable guide, has to be fixed on the trimmer-joist. The base has to be fixed on wood, by screwing or bolting, on concrete, by pegging, and on steel by screwing.

### Waterproofing seal:

- Through a transverse installation under and above the existing roof, in accordance to the norm NFP 37.417.

**Maintenance:** the installation must be maintained at regular intervals and preventive maintenance check should be scheduled for at least once a year (refer to current regulations for the type of building).

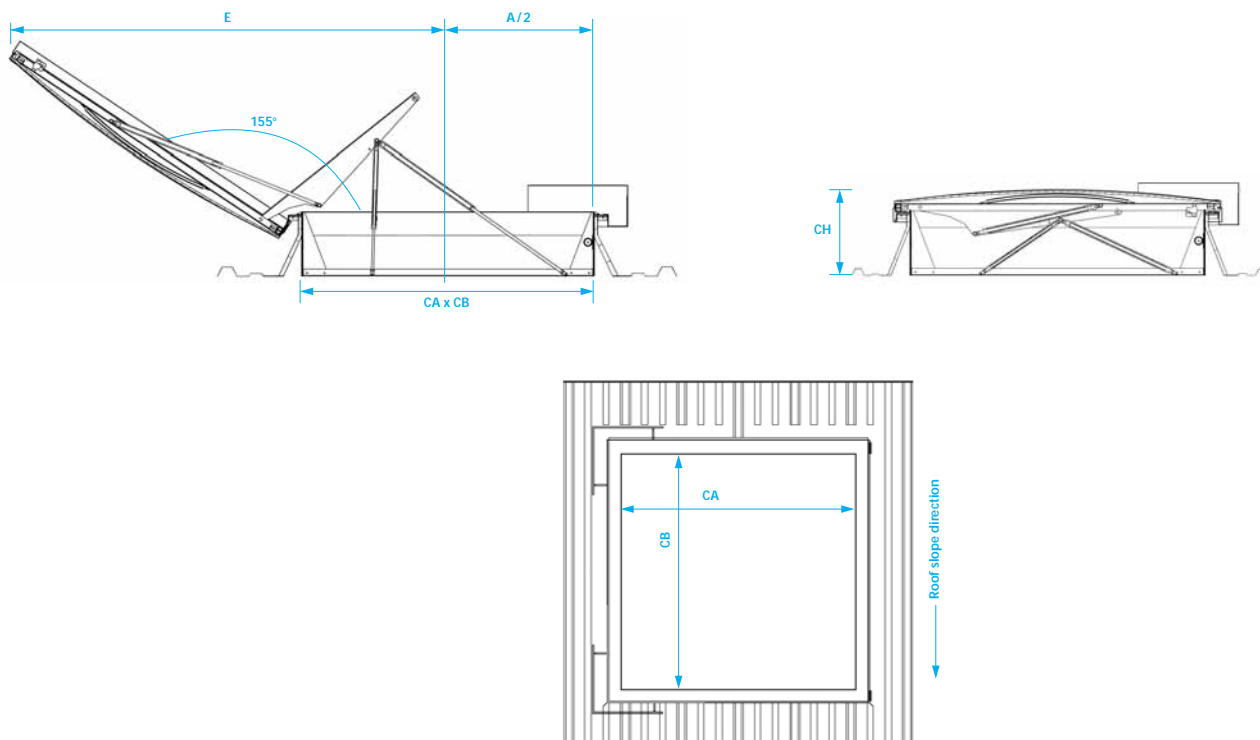
The installation notice of **ROOFLAM® ÉVOLUTION/ÉVOLUTION XL TREUIL** is available on our website: [www.skydome-axt.com](http://www.skydome-axt.com) under the heading "Espace Partenaires" (Partner Information).

## 13 GEOMETRIC DIMENSIONS

DIMENSION OF OPENING CA x CB* (cm)	E (cm)	CH (cm)		WEIGHT WITH GRILL (kg)	
		in DD	in PCA	in DD	in PCA
100 x 100	165	55	41	62	57
120 x 120	195	57	41	73	68
140 x 140	220	60	41	85	82
150 x 150	235	65	41	104	88
160 x 160	250	-	41	-	91
100 x 150	165	67	41	82	72
100 x 200	165	55	41	95	83
120 x 200	195	55	41	118	99
140 x 200	220	63	41	138	119

\*When CA = CB the hinges are on side CB (on right). When CA ≠ CB the hinges are on side CA (on bottom)

### ROOFLAM® ÉVOLUTION TREUIL



DÉPARTEMENT ÉCLAIREMENT ZÉNITHAL ET DÉSENFUMAGE EN CAS D'INCENDIE D'AXTER

"Entre 2 villes" - 02270 Sons-et-Ronchères

Tél. : (33) 03 23 21 79 90 - Fax : (33) 03 23 21 79 76

<http://www.skydome-axt.com> - Email : [info@skydome-axt.com](mailto:info@skydome-axt.com)