

7 OPTIONS

- Steel kerb pre-painted in CLASSIC WHITE
- Steel kerb painted after manufacture in one of the main RAL colours
- Grill tested to 1200 joules
- Opening grill tested to 1200 joules (for sizes 100 x 100 and 120 x 120 only)
- Painted grill tested to 1200 joules
- Opening painted grill tested to 1200 joules, for sizes 100 x 100 and 120 x 120 only
- Position contacts
- Domes 1200 joules
- Domes, pyramid domes
- Permanent ventilation m²
- Permanent aeration
- Structured polycarbonate sheet glazing PCA 10, PCA 16, etc.
- Aluminium cover 10, 20 or 60
- Ladder attachment bar (BAE)
- Grab handle in galvanised steel
- Alternative insulation for roofs with PVC waterproofing

Options for Adapter Plates:

- Insulation
- Length of foot can be from 80 to 180mm

8 CONTROLS

- **NF** certified winch kit with mechanical release: ref. XKT 101
- **NF** certified winch kit with pneumatic release: ref. XKT 102
- **NF** certified winch kit with electromagnetic release (24/48 volts emission/rupture): ref. XKT 103
- **NF** certified winch kit with electropneumatic release: ref. XKT 104

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

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

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



9 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%. When the slope of the roof is less than 25°, the hinged side of the unit must be parallel to the slope.

If the slope is less than 3° there is no restriction.

Fixing: In accordance with the current DTU series 43, in the case of a standard kerb, on metal, timber or concrete deck.

If an adapter plate (or covering kerb) is used, this is adapted for installation on to the existing kerb or concrete surround higher than 140mm. Dimensions (length and width) of the internal opening in the adapter plate must be less than or equal to those of the existing kerb on to which it will be fixed. This is necessary, in order to maintain the ventilation performance characteristics of the adapter plate.

Waterproofing seal:

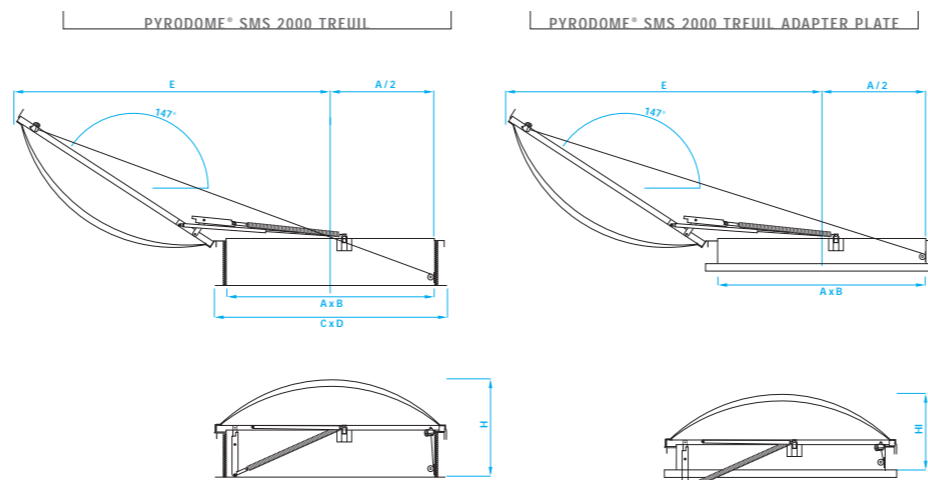
- The bitumen-faced insulation on the standard kerb guarantees a seal with waterproofing detailing material.
- Zinc or lead flashing should be installed in situ to create a seal with roof tiles or slates.
- A co-laminated metal sheet is used for PVC membranes.

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

10 GEOMETRIC DIMENSIONS

DIMENSIONS OF ROOF OPENING A X B* (cm)	LIGHT TRANSMISSION SURFACE (m ²)	OVERALL DIMENSION C X D* (cm)	E (cm)	PYRODOME SMS 2000 TREUIL Cable Operated Unit			
				H (cm)		H1 (cm)	
				With domes	With PCA	With domes	With PCA
100 x 100	1.00	118 x 118	158	60	41	46	27
120 x 120	1.44	138 x 138	185	62	41	48	27
140 x 140	1.96	158 x 158	213	65	41	51	27
150 x 150	2.25	168 x 168	226	70	41	56	27
160 x 160	2.56	178 x 178	240	70	41	56	27
180 x 180	3.24	198 x 198	265	---	41	---	27
100 x 150	1.50	118 x 168	158	60	41	46	27
100 x 200	2.00	118 x 218	158	60	41	46	27
140 x 200	2.80	158 x 218	213	68	41	54	27

* B and D are the longest, hinged sides of the unit.



SMOKE EVACUATION / NATURAL DAYLIGHTING AND VENTILATION

PYRODOME® 
SMS 2000 TREUIL



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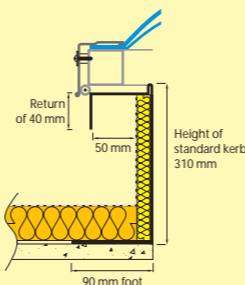
The PYRODOME® SMS 2000 TREUIL Cable Operated Unit is designed principally for smoke and heat evacuation and for the natural ventilation of a roof. It is used on flat and low slope roofs and on tiled or slate pitched roofs for all types of natural smoke evacuation, e.g.: in public access buildings, industrial buildings, stairwells, commercial buildings, offices, etc. PYRODOME® SMS 2000 TREUIL Cable Operated Units are 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 PYRODOME® SMS 2000 Pneumatic or PYROCLAIR® Pneumatic.

New work: This unit is ideal for use on new roofs. The standard kerb is 310mm high with a 90mm base plate.

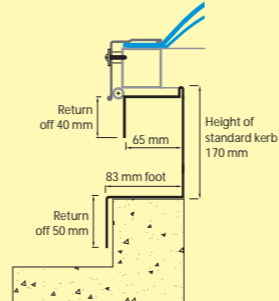
For refurbishment and renovation works using an existing or new builder's kerb with an adapter plate:

- Height 170mm high with a foot of 83mm (other sizes are available upon request). Conforms to NFS 61.937.
- Height 310mm with a foot of 83mm (other sizes are available upon request). NF Certified Smoke Evacuation.

PYRODOME® SMS 2000 TREUIL



PYRODOME® SMS 2000 TREUIL - Adapter plate



SMOKE EVACUATION / NATURAL DAYLIGHTING AND VENTILATION

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SMS 2000 TREUIL



1 ADVANTAGES

Integrated mechanisms: the opening and closing mechanisms of PYRODOME® SMS 2000 TREUIL Cable Operated Units are completely contained within the height of the kerb in both the 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.

High resistance to corrosion: The galvanised steel kerb is either welded or crimped. This method of assembly, used in the car assembly plants, avoids the use of welding techniques which require subsequent reconditioning to achieve a level of protection equal to galvanisation. This means that the PYRODOME® SMS 2000 TREUIL Cable Operated Unit has an excellent resistance to weathering and corrosion, even when scratched.

Colour Finish: PYRODOME® SMS 2000 TREUIL Cable Operated Units are available in galvanised steel or, upon request, in steel and pre-coated in CLASSIC WHITE colour. They can also be painted after manufacture in one of the main RAL colours.

The PYRODOME® SMS 2000 TREUIL Cable Operated Unit is an architectural feature of the roof.



2 COMPOSITION

The PYRODOME® SMS 2000 TREUIL Cable Operated Unit is made up of the following elements:

- **A galvanised steel kerb,** this is the main component of the unit. It carries the opening section and the mechanical and gas strut opening system. The PYRODOME® SMS 2000 TREUIL Cable Operated Unit kerb is fitted with a pulley as standard. The straight sided kerb is covered on the outside by bitumen-surfaced thermal insulation designed to accept torch-on waterproofing membranes. In the Adapter Plate version we can quote for the option of insulation on the kerb. Fire rating: M0.
- **A tubular opening frame in galvanised steel:** the opening frame is equipped with a thermal fuse as standard (NF certified safety option), to which is joined the steel cable link.
- **Glazing:** As standard, 10 mm reinforced, structured opalescent polycarbonate sheet (PCA (tested to 1200 joules). The following options are also available: 10 and 16 mm polycarbonate, triple- or quadruple-walled structured polycarbonate sheet for better thermal resistance, anti-UV treated PCA, or an aluminium cover. To choose the type of glazing required, see the table entitled "Glazing - Performance". The positioning of the glazing and the design of our units reduces the build-up of condensation as air circulates between the frame and the kerb.
- **Aluminium beading frame:** This holds the glazing in place and protects edges from lateral impact. It also improves the aesthetic appeal of the PYRODOME® SMS 2000 TREUIL Cable Operated Unit.

3 FUNCTION

In the case of fire, the thermo fusible link and/or the emergency release of the winch causes the PYRODOME® SMS 2000 TREUIL Cable Operated Unit to open in accordance with the type of control used. The force necessary to open the unit is supplied by two gas cylinders, assisted by two mechanical springs held under pressure in the closed position. This system allows the unit to open to 147°. 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.

4 GLAZING - PERFORMANCE

TYPE OF GLAZING	THERMAL TRANSMISSION U W/M2 °C	LIGHT TRANSMISSION (%)	FIRE CLASSIFICATION (BUILDING REGULATIONS ENGLAND AND WALES 2002)	ACOUSTIC PERFORMANCE (DB(A))
Double polycarbonate domes	3.1	81	Tp(a)	19
Double Domes PMMA (polymethyl methacrylate)	3.1	76	Tp(a)	17
10mm structured polycarbonate - clear	3.1	85	Tp(a)	17
10mm structured polycarbonate - opal	3.1	62	Tp(a)	17
10mm structured polycarbonate - 4-walled, opal	2.5	55	Tp(a)	17
16mm structured polycarbonate - opal	2.3	57	Tp(a)	21
Aluminium cover 10	3.1	0	-	17
Aluminium cover 20	0.98	0	-	...
Aluminium cover 60	0.6	0	-	24

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

5 VENTILATION PERFORMANCE

INTERNAL OPENING DIMENSIONS (A cm X B cm)	GEOMETRIC OPENING SURFACE (G.O.S.) (m²)	FREE AIR SURFACE WITH ROUND TO GRILL OR WITHOUT BARS (m²)	FREE AIR SURFACE WITH SQUARE BAR FITTING (m²)
100 x 100	1.00	0.750	0.730
120 x 120	1.44	1.080	1.051
140 x 140	1.96	1.450	1.411
150 x 150	2.25	1.665	1.620
160 x 160	2.56	1.894	1.843
180 x 180	3.24	2.365	2.300
100 x 150	1.50	1.095	1.065
100 x 200	2.00	1.440	1.400
140 x 200	2.80	2.016	1.960

6 APPROVAL

Laboratory tests guarantee that the PYRODOME® SMS 2000 TREUIL Cable Operated Unit resistance and performance levels conform to the most stringent current regulatory standards, NFS 61.937, NFP 37.418, when installed in accordance with current regulations. Waterproofing details must conform to BS 8217: 2005.

The PYRODOME® SMS 2000 TREUIL Cable Operated Unit is NF certified for smoke evacuation No. 02.01.02 with all glazing options (see Table above) including the following safety options:

- Position contacts
- Fusible thermal release in alloy category 1 (68°) and category 2 (93°), fitted as standard.

NF smoke evacuation certification confirms that the PYRODOME® SMS 2000 TREUIL Cable Operated Unit conforms to NFS 61.937, in fire performance, mechanical tests, ventilation coefficients and quality controls governing manufacture.

Other characteristics:

Resistance to upward static load: 1000 pa (1000 N/m²)

Resistance to downward static load: 1500pa (1500 N/m²)

Details of the NF conformity certification and fire rating data can be found on our website: www.skydome-axt.com under the heading "Espace Partenaires" (Partner information).