

ALUMINIUM FRAMES, FAÇADES AND SKYLIGHTS



EXCLUSIVO
Mecanismo de abertura
extremamente discreto



PETA.ECOVISION EL

Façade window for ventilation and smoke removal with an electric command system



PETA.ECOVISION EL – NATURAL VENTILATION AND SMOKE REMOVAL WINDOWS

PETA.ECOVISION EL Windows can be used for natural smoke removal (certified according to the norm NF EN 12101) as well as for daily ventilation, with no extra cost. Considerably aesthetic, these are meant to be installed in façades, skylights or integrated in SHED systems.

Electrically activated through chain or linear actuators, they can achieve an aperture of up to 60°, depending on dimensions and opening type.

PETA.ECOVISION EL is available in the TBR (ih) and standard (i) versions, which can be applied in broad range of applications. Several types of opening available: inward, outward, English and French.

Diverse glazing types: simple or safety glass, double glass, aluminium “sandwich” panel, cellular polycarbonate (PC) and AeroTech® PC.



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PETA.ECOVISION EL ADVANTAGES:

- Flexibility and adaptability to all support types and configurations.
- High thermal insulation due to the thermal VISA OESTE – e (TBR) frame and AeroTech® glazing.
- Contributes to the buildings bio climate, as required in RCCTE.
- Aluminum frame and finishing of great quality and perfect integration.
- Can be used for natural ventilation with no additional cost.
- Ideal solution for public buildings, commercial buildings and renovations.

DESCRIPTIVE TYPE:

Smoke removal window PETA.ECOVISION EL, certified according to NF EN 12101-2, aluminium frames with or without thermal bridge rupture, colour finishing in natural anodized or RAL colour, glass glazing 44.2/16/44.2 (or other), 24V actuator for open/close functions.

Broad range of applications for new or renovating buildings

- Stair boxes, circulations, atriums and courtyards, integration in SHED systems.
- Buildings with public access (stores, schools and sports locations).
- Commercial and industrial buildings.
- Collective habitation buildings.



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DIMENSIONS AND GLAZING		
FRAMES	GLAZING	DIMENSIONS (W x H)
VERSION i	<ul style="list-style-type: none"> - Cellular polycarbonate (PC) 10 mm and 16 mm; - Simple or safety glass of 6 mm (0,2 in), 8 mm (0,3 in) and 10 mm (0,4 in); - Double glass up to 42 mm (1.7 in); - “Sandwich” aluminium panel with 24 mm (0.9 in); 	<p>Width (W): Min = 500 mm (19,69 in); Max = 2400 mm (94,49 in);</p> <p>Height (H): Min = 500 mm (19,69 in); Max = 2000 mm (78,74 in);</p>
VERSION ih	<ul style="list-style-type: none"> - Cellular polycarbonate (PC) with 25 mm (1 in); - Cellular polycarbonate (PC) with 16 mm (0.6 in) or 25 mm (1 in) + AeroTech®; - Double glass up to 55 mm (2.17 in) (countless options available); 	<p>Width (W): Min = 500 mm (19,69 in); Max = 2400 mm (94,49 in);</p> <p>Height (H): Min = 500 mm (19,69 in); Max = 2000 mm (78,74 in);</p>

OPENING TYPES			
			
Side hung inward (French style)	Side hung outward (English style)	Inward	Outward

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TWO OPENING SYSTEMS AVAILABLE

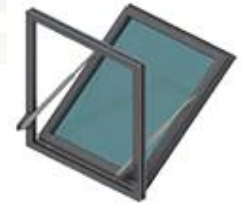
CHAIN ACTUATORS:

Aesthetics and reliability



LINEAR ACTUATORS:

Power and efficiency



Windows are equipped with one or 2 chain actuators. Discretely integrated in the frame, the actuator is installed on top (inward\outward openings) or on the side (for side hung windows).

- Aperture angle up to 60° (depending on window size);
- Opening time less than 60 seconds;
- Consumption: 1A – 3A per window, depending on size;
- Cables integrated in the frame for maximum concealment.

Linear actuators are installed in pairs, in parallel, on the mobile frame.

- Aperture angle up to 60° (depending on window size).
- Consumption: 1,6 – 2A per window, depending on size;
- Cables integrated in the frame for maximum concealment

WD SYSTEMS

AVAILABLE

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The window thermal waste coefficient is selected depending on glazing and frame.

The choice of the ih profile (thermal bridge rupture) ensures the best performance and insulation levels. The ideal solution to achieve the thermal performance objectives.

Multiple combinations available depending on frame and glazing choice, for a result that adapts to your specifications.

The frames that adapt to your needs:



Width: 50mm

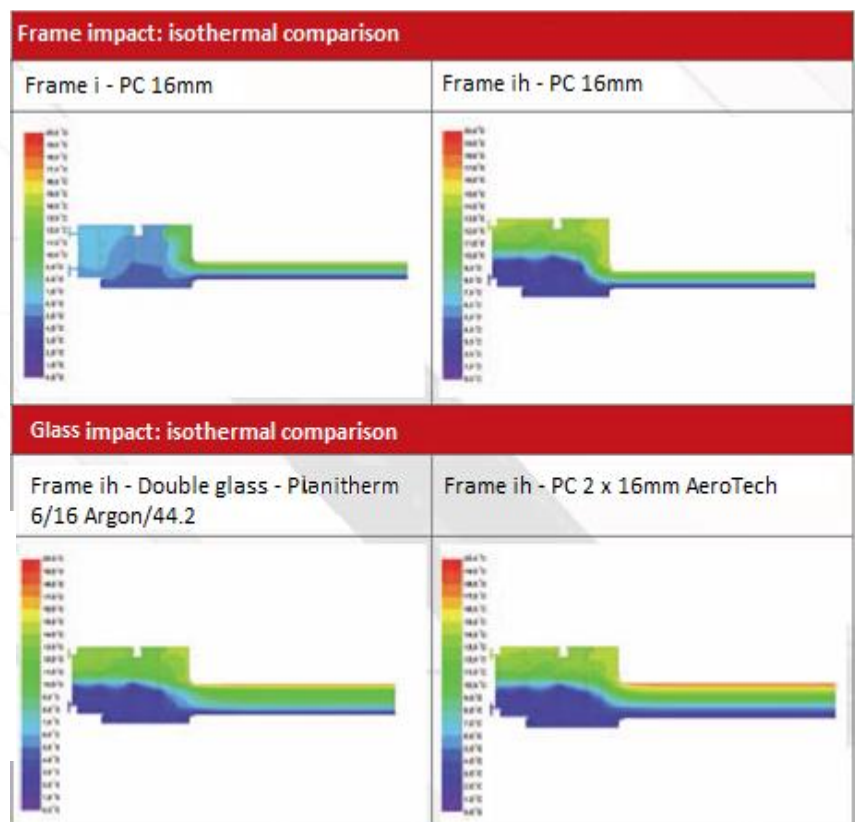
Width: 65mm

Version i:

Version ih:

Standard frame

TBR frame



GLAZING	U _g (glass)	THERMAL TRANSFER COEFFICIENT - U _w (W/m ² .K)			
		W = 1200mm x H = 1200mm		W = 2000mm x H = 1800mm	
		Standard (i)	TBR (ih)	Standard (i)	TBR (ih)
PCA 10mm	2,5	4,5	NA	3,9	NA
PCA 16mm	1,9	4,0	2,6	3,3	2,4
PCA 16mm Aerotech®	1,5	NA	2,3	NA	2,1
2 x PCA 16mm	1,1	NA	2,1	NA	1,7
2 x PCA 16mm Aero-tech®	0,73	NA	1,8	NA	1,5
Double glass 6/16/44.2	2,7	NA	3,2	NA	3,1
COOL-LITE 6 mm + 16 Argon 90 % / 44.2	1,1	NA	2,1	NA	1,7
PLANITHERM 6 mm / 16 Argon 90 % / 44.2	1	NA	2,1	NA	1,8

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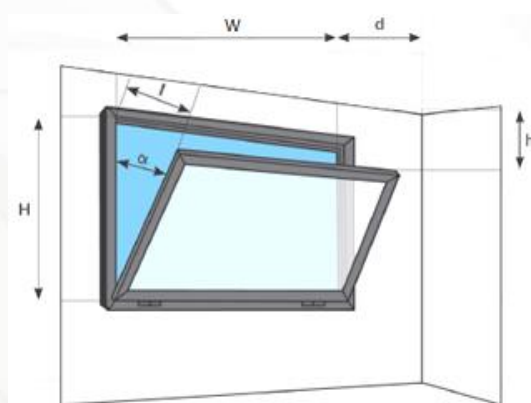
GLAZINGS AND RESPECTIVE PERFORMANCES						
GLAZING TYPE		THICKNESS (IN MM)	U _g (W/m ² .K)	LIGHT TRANSMISSION (%)	SOLAR FACTOR G (%)	WEIGHT (kg/m ²)
CELLULAR POLYCARBONATE (PC)	opaque 10mm / 4P	10	2,6	61	61	1,8
	colorless 10mm / 4P	10	2,6	68	67	1,8
	opaque 16mm / 4P	16	1,9	47	55	2,7
	colorless 16mm / 4P	16	1,9	66	63	2,7
	opaque 16mm AeroTech	16	1,5	56	57	4,0
	colorless 16mm AeroTech	16	1,5	67	67	4,0
	2 x opaque 10mm	20	1,7	36	43	3,5
	2 x colorless 10mm	20	1,7	-	-	3,5
	2 x opaque 16mm	32	1,1	19	22	5,4
	2 x colorless 16mm	32	1,1	36	42	5,4
	2 x opaque 16mm AeroTech	32	0,7	-	-	8,0
	2 x colorless 16mm AeroTech	32	0,7	-	-	8,0
METAL SHEET	Insulated metal sheet	20	-	0	-	2,7
	Simple metal sheet	1 a 3	-	0	-	-
SIMPLE GLASS	colorless tempered Planilux 6mm	6	5,7	89	82	15,2
	colorless tempered Planilux 8mm	8	5,6	88	79	20,2
	colorless tempered Planilux 10mm	10	5,6	88	76	25,3
LAMINATED SAFETY GLASS	STADIP 33.1 colorless	6	5,7	89	77	15,2
	STADIP 33.2 colorless	6	5,7	89	75	15,2
	STADIP 44.1 colorless	8	5,6	88	74	20,2
	STADIP 44.2 colorless	8	5,6	88	72	20,2
	STADIP 55.1 colorless	10	5,6	87	72	25,3
	STADIP 55.2 colorless	10	5,6	87	70	25,3
	STADIP 66.1 colorless	12	5,5	87	70	30,4
	STADIP 66.2 colorless	12	5,5	86	68	30,4
DOUBLE GLASS	4/16/4	24	2,7	82	73	20,2
	4/16/33.2	26	2,7	80	65	25,3
	6/12/33.2	24	2,8	80	63	30,4
	6/16/33.2	28	2,7	80	63	30,4
	6/16/44.2	30	2,7	79	61	35,4
	8/16/44.2	32	2,7	78	59	40,5
	8/16/55.2	34	2,7	78	57	45,5
	8/16/66.2	36	2,6	77	56	50,6
	33.2/16/33.2	28	2,7	79	61	30,4
	44.2/16/44.2	32	2,7	78	57	40,5
SPECIAL GLASS	Cool-lite 6mm/16 Argon 90%/ 44.2	30	1,0	77	48	35,4
	Planitherm 6mm/16 Argon 90%/44.2	30	1,1	59	28	35,4

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AeroTech®, high efficiency technology

The insulant aerogel is injected into the polycarbonate improving light diffusion and reinforcing thermal and acoustic insulation. The aerogel particles, composed mainly by air and amorphous silica, block the heat flux and allow a high thermal efficiency, associated to a homogeneous light diffusion.

PERFORMANCE AND CLASSIFICATION FOR SMOKE REMOVAL (NF EN 12101-2)		
Designation	Class	Description
Function:	B type	Open\close functions from the ground .
Useful surface :	Aa	Surface effectively used for smoke removal, calculated by dimensions and cv coefficient.
Aerolic coefficient :	Cv	Aerolic smoke removal efficiency: varies according to dimensions, opening type, frame, aperture angle and configuration.
Temperature resistant:	B 300	Tested at 300° C
Reliability:	RE 1000 (smoke removal) RE 10 000 (ventilation)	Number of cycles tested (open\close) in ventilation and smoke removal .
Static wind mitigation :	WL 1500	Resistant to wind loads (in N/m2).
Low temperature:	T (00)	System according to french regulation.
Inclination:	0°	Vertical application
AEV classification:	Linear - Outward opening A*3/A*4 - E*6/E7A - V*A3 Chain - Outward opening A*3/A*4 - E*6A/E7A - V*A3	Air permeability: NF EN 12207 and NF EN 1026 Water sealed: NF EN 12208 and NF EN 1027 Wind resistant: NF EN 12210 and NF EN 12211

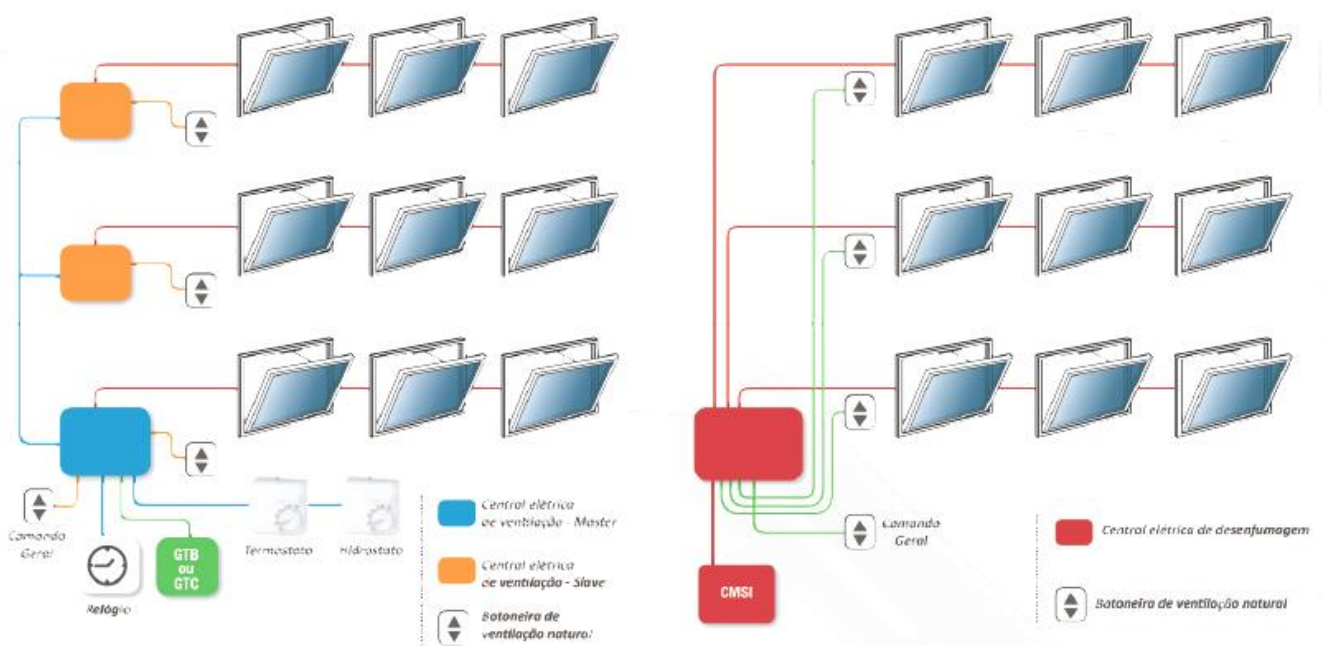


Aerolic performance in natural smoke removal			
CV varies according to size and aperture angle			
Window	Dimensions	Angle	CV
Top hung TBR (ih) - Exterior	1,2 x 1,2	55°	0,58
Top hung TBR (ih) - Interior	1,2 x 1,2	55°	0,54
Top hung TBR (ih) - Exterior	2 x 1,8	40°	0,54
Top hung TBR (ih) - Interior	2 x 1,8	40°	0,49

PETA.ECOVISION EL – NATURAL VENTILATION AND SMOKE REMOVAL WINDOWS

The complete solution for an intelligent management of smoke removal and natural ventilation!

There are countless ways to electrically command ventilation or smoke removal Windows, with command centrals adapted to an effective building control



AVAILABLE OPTIONS

- Lacquering / Anodization: bi-colour interior/exterior possible in TBR frames (ih).
- Positioning sensors: Safety options.
- Special glazing: thermal treatment, anti-heat, among others.
- Anti-pinch protection (WPS): ideal for public access buildings and schools
- Available finishing: raw aluminium, lacquered aluminium and anodized aluminium.

ACCESSORIES

- Finishing frame.
- Gasket cover.
- Dripping protection (water drainage).