THERMAL BRIDGE BREAK TECHNOLOGY

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HATCH/HP

Smoke exhaust solutions with the highest thermal and air-tightness performance with motorised hatch

CLASSIFICATIONS AND CERTIFICATIONS

AIR TIGHT CLASS 4 IN ACCORDANCE WITH EN 12207 RAINPROOF EQUIVALENT TO CLASS E 1500 IN ACCORDANCE WITH EN 12208 FIREPROOF CERTIFIED IN ACCORDANCE WITH EN 12101-3 SNOW LOAD SL1000 CERTIFIED IN ACCORDANCE WITH EN 12101-3

The entire assembly is F300 and F400 certification tested

EFFICIENT SOLUTIONS FOR SUSTAINABLE BUILDINGS

The global concern derived from the climate crisis, which continues getting worse each year, has generated a trend in sustainable construction to reduce energy consumption and consequently, CO₂ emissions.

At SODECA we meet this demand with efficient solutions for sustainable buildings, where energy savings is one of the most important factors

The installation of efficient solutions on the roofs of buildings for extracting heat and pollutants, as well as the ventilation of the building itself, are the most widely used systems for these types of applications.

Using roof-mounted motorised hatch systems with an F-400 or F-300 certificate for fire protection is one of the most efficient ways to comply with the smoke exhaust regulation in buildings as well as the energy efficiency regulations implemented by the official institutions of each country.

These HATCH/HP solutions are certified to withstand high temperatures and exhausting smoke in the event of a fire, but also to remove heat and/or pollutants and for the ventilation of the building itself. With this versatility we are able to optimise the installation as much as possible, as a single unit covers all ventilation needs.







ENERGY **SAVINGS**





01. AIR-TIGHTNESS

Maintains the air conditioning of the building and at the same time prevents outside air from entering inside the building.



02. INSULATION

Heat loss due to heat transfer when the extract system is not being used is practically null.



03. WATER-TIGHTNESS

Unit completely water-tight, preventing water from leaking inside the unit.



ADVANTAGES OF HATCH/HP SOLUTIONS

System completely free of thermal bridges and built using cutting-edge materials.



01. SMOKE EXHAUST CERTIFICATES

Using roof-mounted motorised hatch systems with an F-400 or F-300 certificate for fire protection is one of the most efficient ways to comply with the smoke exhaust regulation as well as the energy efficiency regulations of each country.



02. VERSATILITY

Solution suitable for smoke exhaust in the event of a fire, but also to remove heat and/or pollutants and for the ventilation of the building itself. With this versatility we are able to optimise the installation as much as possible, as a single unit covers all ventilation needs.



03. THERMAL BRIDGE BREAK

Metal components that communicate the exterior with the interior of the unit are equipped with a thermal bridge break to avoid heat loss and any possible condensation.



04. EXTREME ROBUSTNESS AND WIND RESISTANCE

The unit's housing has a high structural strength, which guarantees its stability under severe weather conditions.



CUTTING-EDGE MATERIALS







MAINTENANCE CUT-OFF INSIDE THE CASING

We recommend installing maintenance switches inside the casing to:





Ensure complete impermeability and water-tightness

Avoid unauthorised manipulation of the switches



Increase the useful service life of the maintenance switches

* For models with F300/2h and F400/2h certifications, the fan maintenance switch is temperature resistant.



THERMAL TRANSMITTANCE

The U coefficient indicates how much thermal energy per unit of time and unit of area is transmitted through a solid object at a temperature difference of the fluids of 1 Kelvin (1 °C).

This U value is also called thermal transmittance. The greater the value of U, the more heat will flow through the casing during a specific amount of time and the lower the insulation.

The lower the value of U, the better the thermal insulation properties

The use of materials with a low thermal conductivity minimises the transfer of heat and cold through the casing, which will decrease the thermal transmittance rate (U value) and increase the energy efficiency of the building.



The new **HATCH/HP** has an extraordinarily low thermal transmittance coefficient:

 $U = 0.39 W/m^2 \cdot K$

To calculate the value of U, a heat transfer has been considered by induction as well as convection and of the different areas: profiles, panels and cover.



THERMAL BRIDGE BREAK TECHNOLOGY

Thermal bridge break technology is essential for units that are built using metal elements that communicate the outside with the inside of a building.

This technology consists of cutting the thermal conductivity of these metal components with a material with less conductivity.

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THERMAL BREAK BRIDGE

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To provide excellent thermal performance and prevent possible condensation from forming inside, all metal components that communicate the exterior with the interior of the unit are equipped with a thermal bridge break.

- Sandwich panel made of pre-finished steel with a 60-mm-thick polyurethane core.
- 2 Air-tightness seals.
- 3 Thermal bridge break.
- Pyramid cover.
- 5 Aluminium profile.



CLASSIFICATIONS AND CERTIFICATIONS



AIR TIGHT CLASS 4 IN ACCORDANCE WITH EN 12207

Air tightness is a fundamental property for reducing the air conditioning losses of a building. Air conditioning loss is the leaking of air towards the inside or outside through unintended gaps or holes on the casing.

The outer casing of the HATCH/HP is completely sealed to prevent the entry or exit of air while the hatch is closed. Also, the hatch is equipped with two air-tight seals; one vertical and one horizontal, that guarantees an excellent seal between the hatch and the casing.



RAINPROOF

EQUIVALENT TO CLASS E 1500 IN ACCORDANCE WITH EN 12208

The outside of the unit is completely impermeable to prevent outside water from entering. There are no orifices that communicate the outside with the inside and all joints are sealed.

Unit completely impermeable, preventing water from leaking inside the unit.

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RESISTANCE TO FIRE

CERTIFIED IN ACCORDANCE WITH 12101-3

The main purpose of this solution is the extract smoke in the event of a fire. For this reason, all HATCH/HP models are subjected to different robustness tests under extreme snow load and wind conditions, as well as fire resistance certification tests in accordance with standard EN-12101-3.



SNOW LOAD SL1000

CERTIFIED IN ACCORDANCE WITH 12101-3

Thanks to a powerful actuator and a completely rigid structure, a snow load resistance of 1000 Pa is achieved in all sizes.

This unit has been tested and this snow load performance has been certified in accordance with EN 12101-3 by an accredited laboratory.

	Certifications in accordance with EN-12101-3	Classification	Open time	Wind load (WL)	Snow load (SL)
. set	HATCH/HP	F400/2h — F300/2h	<30 sec	200 Pa + 3 cycles	SL-1000



WALL SYSTEM





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