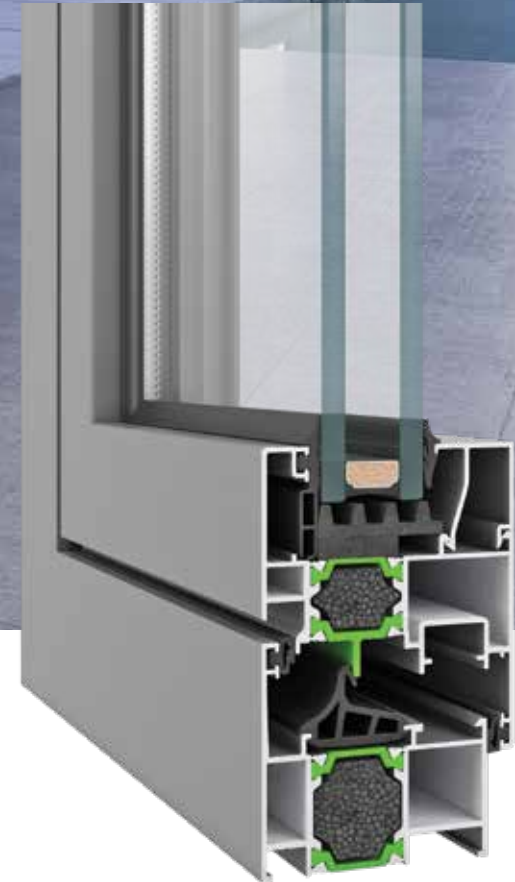




W450

Tilt & Turn Thermal Insulating System
Maximum energy saving.



System Identity

The W450 system belongs to the thermal insulation systems generation and has been designed with attention to detail in order to meet contemporary architectural needs for energy efficiency and safety.

This line's wide range of profiles offer numerous innovative solutions, from flat to curved sections, as well as the ability to apply complex typologies such as "aller-retour" doors, rotating windows and opening frames with hidden sash in order to achieve a high-level aesthetics.

The available profiles collaborate perfectly with high-quality components and mechanisms which underline the system's multi-faceted and ergonomic nature.

The system's non-negotiable priority for maximum energy savings and high safety is ensured due to the possibility of perimeter locking and the use of 24 mm reinforced polyamides offering a Thermal insulation Index $U_f=2.2-2.6$ W/m²K and a Sound Reduction Index R_w of 43 dB.

Features & Benefits

- The maximum security provided by the use of multiple locking combined with the high performance of thermal and sound insulation guarantee excellent quality, functionality and significant energy saving.
- Use of glass reinforced polyamides (PA66 GF25) of 24 mm.
- Multi-chamber central gasket that secures optimum impermeability preventing energy loss.
- Option of using mechanisms CAMERA EUROPEA & CAMERA ALU 16 (stainless steel locking mechanism on perimetric system).
- Manufacturing capabilities with bead cutting of 45° and snap-joined bead for excellent aesthetic result to the inside of frames.
- "Curtain" gaskets that deliver extra thermal insulation.

Configurations

Casement windows

1Leaf - 2Leaf - 3Leaf - 4Leaf - Pivot

Casement-awning windows: 1Leaf - 2Leaf

Shutters: 1Leaf - 2Leaf - 3Leaf - 4Leaf

Doors: 1Leaf - 2Leaf - Aller Retour - Tilt & Slide (VW)

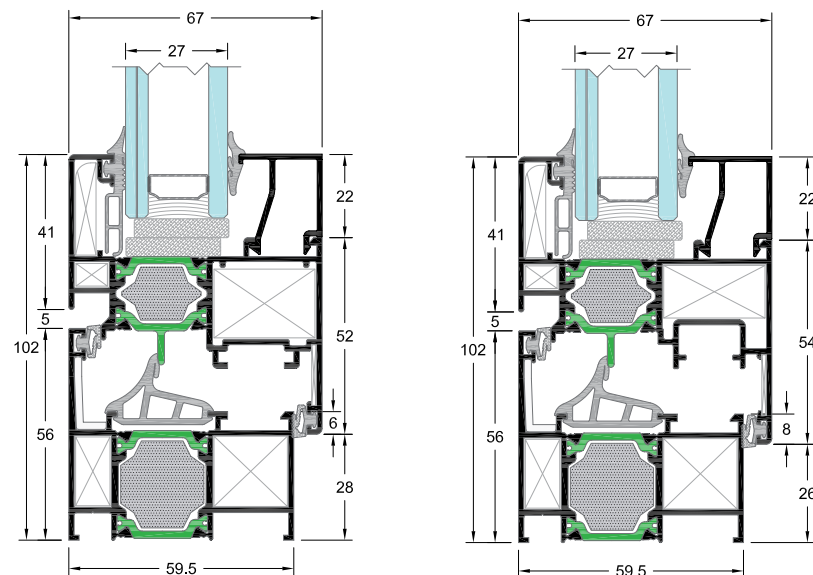
Angular structure: 90°-224°

Fixed-picture windows

Combinations

2Leaf sliding SL200 & SL2450 with opening W450

2Leaf sliding with insect screen SL200 with opening W450



HARDWARE

CAMERA	CE	ALU 16
--------	----	--------

INSULATION

POLYAMIDES mm	24	24
FOAM	■	■

SYSTEM PROFILE DIMENSIONS

MIN. FRAME DEPTH mm	59.5	59.5
MIN. FACE HEIGHT mm	102	102
GLASS THICKNESS mm	15-51	15-51

CONSTRUCTION DIMENSIONS

SASH WIDTH mm	365-1600	360-1490
SASH HEIGHT mm	360-2400	450-2360
MAX. SASH DIMENSIONS mm (WxH)	1600x2100 / 1300x2400	1490x2100 / 1300x2360
MAX. SASH WEIGHT Kg	130, 150*, 200**	130, 150*, 200**

CERTIFICATES/PERFORMANCES

AIR PERMEABILITY EN 12207	Class 4	Class 4
WATER TIGHTNESS EN 12208	Class 6A	Class 8A
RESISTANCE TO WIND LOAD EN 12210	Class C3/B3	Class C5/B5
SOUND REDUCTION R_w (C;C _{tr}) EN ISO 140-3	43 (-2;-7) dB	43 (-2;-7) dB
THERMAL INSULATION U_f EN ISO 10077-2	2.2-2.6 W/m ² K	2.2-2.6 W/m ² K

*Reinforced Tilt and Turn | **Hinged with heavy duty hinges



Rate of Insulation

$$U_w = 1.4 \text{ W/m}^2\text{K}$$

Thermal conductivity coefficient has been calculated for the construction:
1600x2400 with $U_g=0.6$ W/m²K
Glass type: 5/16 (ARGON) / 3+3



FLAT CURVED