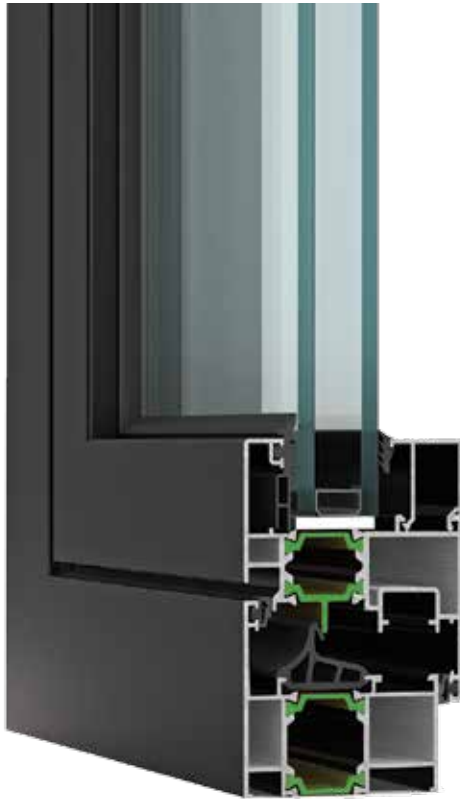


# W450

## Tilt & Turn Thermal Insulating System

for 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 (PA66 GF25) offering a Thermal insulation Index  $U_f=2.2-2.6$  W/m<sup>2</sup>K and a Sound Reduction Index  $R_w$  of 43 dB.

Thanks to its innovative features, the W450 system is extremely efficient, user-friendly, unique in its kind.

## 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) 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 perimeter system).
- Manufacturing capabilities with bead cutting of 45° degrees 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

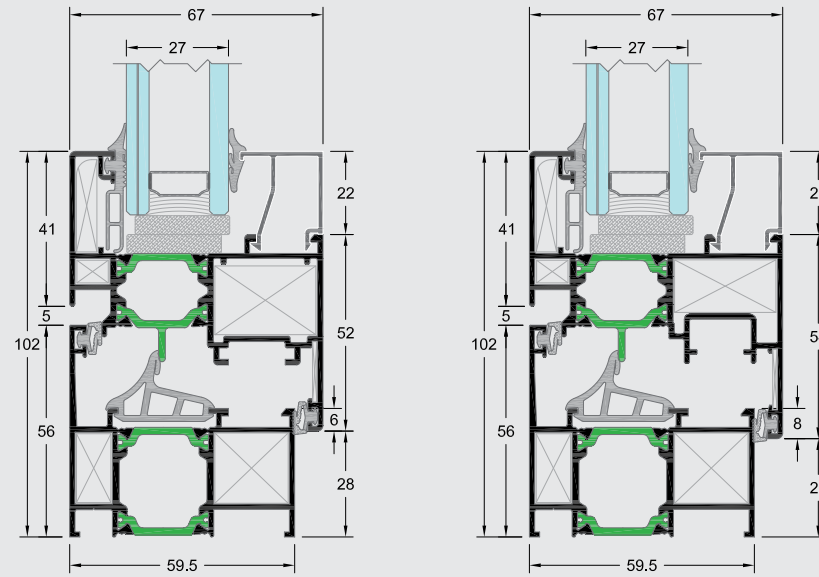
#### Combinations

2Leaf sliding SL200 & SL220 with opening W450

2Leaf sliding with insect screen SL200 with opening W450



FLAT CURVED



### HARDWARE

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

<b>POLYAMIDES mm</b>	24	24
----------------------	----	----

### 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 mm Kgr	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
BURGLAR RESISTANCE	RC2	RC2
SOUND REDUCTION $R_w$ EN 140-3	43 dB (-2;-7)	43 dB (-2;-7)
THERMAL INSULATION $U_f$ EN ISO 10077-2	$U_f=2.2-2.6$ W/m <sup>2</sup> K	$U_f=2.2-2.6$ W/m <sup>2</sup> K

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



### Rate of Insulation

# $U_w=1.84$ W/m<sup>2</sup>K

Thermal conductivity coefficient has calculated for the construction:  
1400x2200 with  $U_g=1.1$  W/m<sup>2</sup>K  
Glass type: 5/16 (ARGON) / 3+3