



**W4900**

**Tilt & Turn Thermal Insulating System**

Innovative concept with a passive house certification.



## System Identity

The ALUMINCO W4900 aluminium window system has been certified by the Passive House Institute (PHI) in order to meet the high requirements of passive houses.

It incorporates all the well-known benefits of aluminium windows such as stability and high structural requirements with a superior level of thermal insulation value of  $U_w=0.78 \text{ W/m}^2\text{K}$  and the greatest possible degree of architectural design freedom.

## Features & Benefits

- Unique thermal insulation for aluminium windows in accordance with the passive house certification standard.
- Innovative insulation system thanks to 54 mm polyamides offering  $U_f$  value =  $0.76 \text{ W/m}^2\text{K}$  with 102 mm face width.
- Increased sound reduction
- Multi-chamber central gasket that ensures optimum impermeability preventing energy loss.
- Superior safety due to the multiple perimetric locking
- Vast selection of profiles in straight and curved cross sections.
- For all typologies of casements and patio doors.

## Configurations

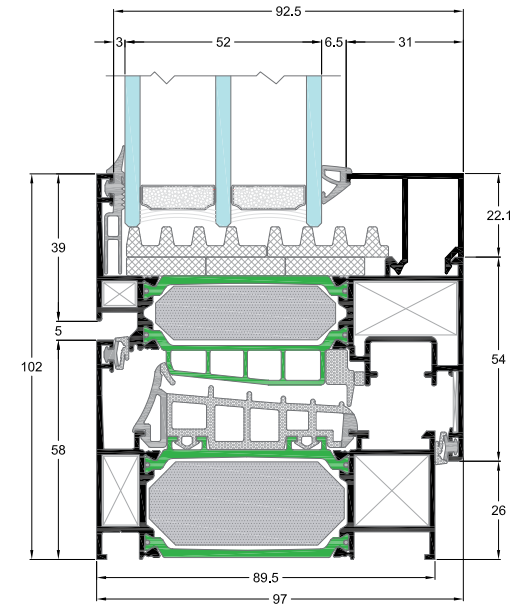
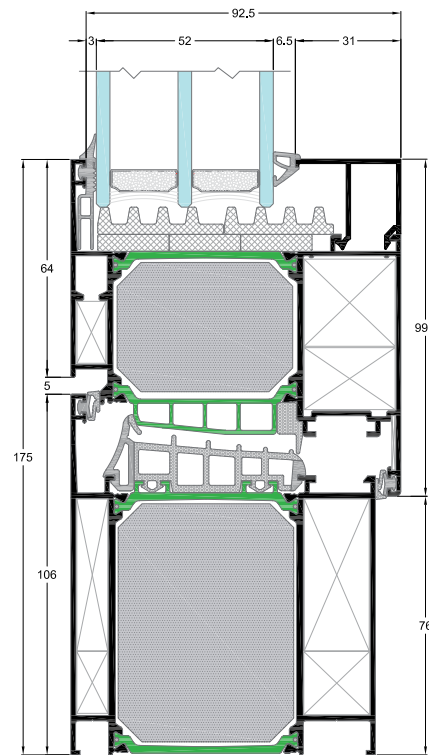
### Casement windows

1Leaf - 2Leaf - 3Leaf - 4Leaf

### Casement-awning windows

1Leaf - 2Leaf

### Fixed-picture windows



### HARDWARE

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

### INSULATION

|               |    |    |
|---------------|----|----|
| POLYAMIDES mm | 54 | 54 |
| FOAM          | ■  | ■  |

### SYSTEM PROFILE DIMENSIONS

|                     |       |       |
|---------------------|-------|-------|
| MIN. FRAME DEPTH mm | 89.5  | 89.5  |
| MIN. FACE HEIGHT mm | 175   | 102   |
| GLASS THICKNESS mm  | 46-81 | 46-81 |

### 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                                       | N/A                         | Class 3                     |
| WATER TIGHTNESS                                        | N/A                         | Class 6A                    |
| RESISTANCE TO WIND LOAD                                | N/A                         | Class C4                    |
| SOUND REDUCTION $R_w$ (C;C <sub>tr</sub> ) ISO 10140-2 | 52 (-2;-4) dB               | 52 (-2;-4) dB               |
| THERMAL INSULATION $U_f$ EN ISO 10077-2                | 0.76 $\text{W/m}^2\text{K}$ | 0.76 $\text{W/m}^2\text{K}$ |

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



### Rate of Insulation

## $U_w=0.78 \text{ W/m}^2\text{K}$

Thermal conductivity coefficient has been calculated for the construction: 1230x1480 with  $U_g=0.7 \text{ W/m}^2\text{K}$  Glass type: 48 mm=4+18+4+18+4