

# 1 WICONA

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## 1.1 WICLINE 75 evo

### Construction section

#### WICLINE 75 evo windows

#### 9.x WICLINE 75 evo windows

#### (Technical specification)

#### Preliminary remarks:

The subject of the tender is the manufacture, supply and installation of thermally insulated aluminium windows as specified below.  
The options available within the system regarding permitted sash sizes, sash weights and the infill thicknesses for sashes and fixed glazing are specified in the system manufacturer's technical documentation.

#### The following technical requirements must be met:

### Profile technology

Frame depth: 75 mm  
Total depth of the profile system: 85 mm

Exterior face widths:  
Frame profiles from 48 mm to 155 mm  
Transom profiles from 73 mm to 290 mm  
Sash profiles from 34 mm to 71 mm

### Construction characteristics

Continuous insulation level in frames, sashes and infills, with insulating strips flush to the rebate  
Main profile as four-chamber hollow profile, edge radius  $\leq 0.5$  mm. Overlapping sash with 5 mm

overlap and rounded edges at overlap.

Centre seal of co-extruded EPDM foam, all-round with no mitred corner joints; centrally sealed at the top and adhesive-free with abutment.

Alternative versions of the centre seal

- with EPDM moulded gasket angles, sealed and with adhesive-free abutment
- Vulcanised gasket frame

EPDM glazing gaskets, continuous on the inside and outside.

Frame connections

Mitred corner with system-specific, cavity-filling cast aluminium corner angles, mechanically secured with expansion function and bonded by limited volume glue injection procedure from one side.

Butt joints

with system-specific, cavity-filling aluminium profile connectors, limited volume glue injection. Open joint cross-section in the blunt connection insulation zone must be sealed closed using system-specific moulded parts and injection moulding technology.

## Construction options

"Classic design" option

The external glazed crosspieces have a 30° bevel.

Double casement with twin sash windows, optionally with

- thermally insulated double casement profiles, with no insulation level staggering, or
- special double casement sash profile.

In both options, the upper connection joint from the meeting stiles of the sashes to the frame are covered using polyamide formed components.

Thermally insulated crossbar system

Composite profile in identical design and at identical level as the main profiles of the system.

## Thermal insulation

Heat transition coefficient of the profile system:

**$U_f \geq 1.2$  to  $1.9 \text{ W/(m}^2\text{K)}$  in compliance with EN ISO 10077: 2003**

Thermal insulation with continuous PA 6.6 (plastic) insulating strips, flush with the face of the rebate, with 25% glass fibre content and an inlay consisting of hot melt wire on the face.

The U values included in the tender must be achievable without inserting additional insulation into the profile cavities.

## Proofs and certifications

The suitability of the profile bonding (insulation web) must be proven by way of a national technical approval test certificate.

Proof of the stability of metal/plastic composite profiles in accordance with the Institute for Building Technology guideline (IfBt-Richtlinie).

Composite profile manufacture is exclusively carried out at the factory. The system manufacturer, profile press plant and manufacturer of the composite materials are all certified in accordance with the ISO 9000 series of standards.

The composite profile system comes with quality assurance and a manufacturer's guarantee, also covering subsequent surface treatments (anodising, wet and powder coating).

System testing of the window system with an ift product passport as the basis for CE labelling in compliance with DIN EN 14351-1 and fulfilment of the minimum requirements for the RAL quality label RAL-GZ 695.

Airborne sound insulation as per DIN EN 20140-3.

## **Fittings technology**

System-related branded fittings

Basic fittings are supplemented by additional parts in accordance with the size of sash and wind load. Their field of application as well as permitted sash formats depending on infill weights per unit area are specified in the technical system documentation.

The opening type options for this system series are listed under the heading "Fittings", in which the required fitting components are specified.

## **Processing**

Drainage and air pressure equalisation

Glazing rebate bottom ventilation secured with bridging blocks designed specifically for this system. Front cavity drainage or air pressure equalisation via externally visible drainage covers.

Alternatively, front cavity drainage or air pressure equalisation and drainage in the glazing rebate with no externally visible drainage covers.

The stated specifications are based on the design characteristics, materials and processes of the **WICONA - window system WICLINE 75 evo** in accordance with the enclosed system description; these are contractually binding performance requirements.