



window system

KW90



- ▶ Modern aluminium system designed for the construction of windows with increased thermal insulation, meets the requirements of the Passive House Institute certificate for structures with thermal insulation $U_w < 0.8 \text{ W/m}^2\text{K}$.
- ▶ **The system is designed to meet the highest thermal requirements for shop windows and window installations, worldwide. It meets the requirements for components used in passive construction. The KW90 system is certified by the Passive House Institute in Darmstadt (PHI).**
- There are 3 thermal variants available:
 - standard (no insulation)
 - "i" version, insulation around the glass pane
 - "i+" version with insulation inside the profiles and around the glass pane
- The solution uses a 55 high chamber-type thermal spacer made of a material with increased thermal insulation performance.
- The central gasket is available in 2 versions: standard and equipped with a thermal insert (made of heat resistant XPET material).
- Available very narrow profiles with 15 mm high glazing beads.
- The system offers a large number of profiles of frames, sashes, posts adapted to static requirements.
- The maximum height of window sashes is 3 m, with the maximum weight of the sashes of 180 kg.
- Available different types of window profiles integrated with window sills, possibility of using concealed drainage for frames, sashes and batten plates.
- Wide range of different types of extensions; available reinforcements that are screwed to or integrated with profiles, expansion joint profiles.
- It is possible to use "Euro-groove" hardware, with a hinged part visible or concealed, compatible with hardware available in stock and from other manufacturers.

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- Available profiles with a PVC hardware groove (9 mm axis and axis 10 mm axis, for hardware available on the market).
- Minimised number of accessories during prefabrication, availability of presses facilitating/accelerating production.
- It is possible to use all angular solutions: available variable-angle, diagonal profiles, all-glass corners, etc.
- The solution is compatible with sun protection systems from the Aliplast offer: roller shutters, blinds (Sunfas), zip screen.
- The system offers solutions dedicated to the specific needs of European markets (e.g. Dutch frames, frames with concealed drainage, renovation French solutions, narrow movable post).
- Wide range of colours – RAL palette (Qualicoat 1518), texture colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodised colour (Qualanod 1808), bi-colour.

technical specification

system	material	depth of frame	depth of leaf	glazing range	type of windows
KW90 window	aluminium/polyamid	90 mm	99 mm	fix 16 mm - 74 mm, window 20 mm - 83 mm	FIX, R, U, RU

performance

system	thermal insulation U_f^*	air permeability	windload resistance	watertightness
KW90	U_f from 0,57 W/m ² K	Class 4; EN 12207	C3/B3 (1200 Pa); EN 12210	E1200 (1200Pa); EN 12208

* Thermal insulation is dependent on a combination of profiles and thickness of the filling.

Example isotherm distribution for the combination of a frame and a window sash in the system.

