

Outward opening window system with thermal break MB-70(HI) Casement is part of the system MB-70 and is intended for the fabrication of the external architectural enclosures, such as various types of water and air-tight fixed and outward opening windows, entrance enclosures, store fronts and spatial structures of a good thermal and sound insulation performance. This system meets the energy saving and environmental protection-related requirements. The performances of MB-70(HI) Casement-based windows meet the requirements of applicable standards and regulations.

## MB-70(HI) CASEMENT CHARACTERISTICS

- The structural depth of the window profiles is 70 mm (frame) and 79 mm (casement). Such depths of casement and frame profiles give the effect of one single plane from the inside, once the window is closed.
- System profiles have a three-chambered structure, their central part being an insulation chamber between thermal breaks of a width of 34 mm.
- The system allows to obtain, without changing the basic profiles and accessories, 2 design variants that differ in their thermal insulation performance. The first variant (MB-70 Casement), with an empty central chamber inside the composite profiles between thermal breaks has lower thermal insulation performance. The variant (MB-70HI Casement) with central chamber filled with a special insulating inserts has high isolation performance. The variability of construction enables to meet the diverse needs of users while maintaining low cost of production and storage of the system elements.
- High water and air tightness performance and an excellent thermal insulation can be achieved through a specially-shaped 2-component central gasket (with a cellular isolation element), and through glazing & edging gaskets.
- Most gaskets (e.g. glazing and external edging gaskets) are mounted in a continuous manner, without cutting to size at the corners, by joining the ends of the gaskets in the middle of the length of the upper transoms of the window frames. Central gasket is cut at an angle of 45° and glued in the corners or cut at an angle of 90° and glued to the rubber corner. A central gasket in the form of a vulcanized frame is also available. This way of mounting ensures an excellent resistance to water and air infiltration.
- Possible ranges of glazing thickness are: for the window frame – from 14,5 to 53,5 mm, for the casement – from 23,5 to 62 mm. The wide range of glazing allows the installation of all types of double and triple glazing units, including acoustic or burglary-resistant units commercially available.
- The use of typical “Euro” grooves in hardware allows the installation of most of the available hardware intended both for outward opening aluminum and PVC windows. Profiles without grooves in the frame are used for knife hinges.
- System-based windows can use knife hinges (invisible) or traditional rotating hinges (visible).
- The drainage of the profiles can be performed on invisible or visible variant with a decorative cap.
- Composite profiles of the version K51XXXXX can undergo powder coating and anodizing process, while the profiles of the version K61XXXXX must be painted and anodized before crimping the thermal breaks.
- The corners are offered as elements made from extruded profiles, which enable to use, during the crimping or studding process, a 2-composant adhesive Coralglue.
- Windows can use systemic on-glass mullions.
- The construction technology is maximally simplified in order to reduce the fabrication time.
- Instrumentation (drilling templates, press or punches) can be used to perform most workings. All the elements of the instrumentation for the system MB-70(HI) Casement are described in the section “Instrumentation”.
- MB-70(HI) Casement is compatible with other Aluprof systems, in particular with MB-60, MB-70. This makes many elements are applicable in more than one system, for instance, glazing beads, gaskets, hardware and most accessories.

