The MB-70US system is a part of a door and window system MB-70 with a thermal barrier manufactured by ALUPROF S.A. This state of the art aluminium system has found applications in execution of elements of architectural external development where good thermal and acoustic insulation performance is required.

A characteristic feature of windows based on the elements of this system is a sash hardly visible on the external side of the development. In the assembly of adjacent fixed and active windows it is impossible to tell them apart. The width of window frames seen from the outside is very small, hence the construction gives an impression of being slender and light. The MB-70US system features a low value of overall heat transfer coefficient U thanks to the application of special thermal breaks and gaskets, which is of prime importance in the times of ever growing demand for energy-efficient and environmentally friendly products. Moulded thermal breaks applied in the system, 34 mm wide in the shape of omega letter, are made of polyamide reinforced with fibreglass. Such shape of breaks enhances rigidity of profiles as compared to flat breaks and it facilitates deflection of water from profiles. Thermal breaks are additionally tightened on the borderline between a profile and a break as well as projections separating the chamber between internal and external profile into three parts. The central gasket is made of two-component synthetic rubber EPDM: solid and cellular, which features very good thermal insulation performance. Other gaskets are made of solid EPDM. The space between a windowpane and frame is additionally filled with polyethylene cord whose purpose is to insulate and seal. The constructional depth of window profiles equals: 70 mm (frame), 79 mm (sash). Window profiles are equipped with grooves of such dimensions as to enable fixing of envelope fittings (multicam locking system) and connecting members in accordance with the EURO standard. An essential feature of MB-59S system is the possibility of bending profiles, which renders possible execution of different arches and arch constructions. Working required in connecting profiles is reduced to a minimum thanks to the use of aluminium connecting members and auxiliary accessories provided with the system. Corner cleats of “L” type are executed by trimming the ends of frame or leaf profiles at the angle of 45° followed by kneading or pinning and gluing (with CORALGLUE® - two-component glue) to aluminium corners embedded in the inner chambers of profiles. Application of glue ensures high rigidity and tightness of the joint, whereas cleats secure perpendicularity of the joined profiles. Crosswise joints of the “T” type are performed by pinning lacings with embedded corner cleats and gluing with CORALGLUE®. Glass panels and other types of infills are fitted in by means of glazing beads and gaskets. The system allows the application of glazing units of thickness ranging between 18 mm and 54 mm in window sashes and between 9 mm and 45 mm in fixed windows. Each construction built in the MB-70US system must be equipped with an efficient ventilation and drainage system, deflecting water from the pane chamber as well as from the space between the sash and the frame. Ventilation and drainage holes are covered from the outside with a plastic sheath.

In the event of any queries or doubts, ALUPROF S.A. specialists are always ready with their assistance and advice.