MB-70 INDUSTRIAL HI

MB-70 is a modern aluminum system intended for realizations of exterior architectural building elements requiring thermal and acoustic insulation, such as: various types of windows, doors, vestibules, display windows or spatial structures.

The system profiles have a three-chamber structure. The structural depth of the window sections is equal to 70 mm (frames) and 79 mm (casement), and for doors: 70 mm and 70 mm respectively. Such assumed depths of casement and frame sections give the effect of one surface from the exterior side after closing - in the case of the window, and the facing effect to the surface of casement and frames - in the case of doors. Shape of the profiles allows achieving slender and resistant window and door structures. Using the MB-70 system, it is also possible to make windows with the so-called “hidden casement” MB-70US and the MB-70 “Industrial”, finding its application during modernizations of post-industrial historic and monumental buildings.

The MB-70 system is characterized by a very low value of the overall heat-transfer coefficient U, thanks to the application of the thermal breaks and gaskets. This is of a great significance in the times of growing demand for the energy conservation and the environment protection. The value of heat transfer coefficient for structures made using the MB-70 system - depending on the applied profiles and accessories ‐ ranges between 1.5 and 2.39 W/(m2 *K). In this system, the profiled "omega"-shaped thermal breaks are applied, of a width equal to 34 mm (windows) and 24 mm (doors), made from polyamide reinforced with fiberglass. The offered shape of thermal breaks increases the profile rigidity as compared to flat breaks and facilitates the section drainage, ensuring the appropriate thermal insulation in all atmospheric conditions at the same time. The thermal breaks applied in the windows have additional gaskets at the joining point with the sections, as well as tongues dividing the chamber between the internal and external aluminum sections into three parts.

Thanks to the application of, among others, thermal breaks of such shapes, it is not necessary to fill the space between them with polyurethane foam or foamed styrene inserts, in order to increase their thermal insulation. The tightness is ensured thanks to using the special gaskets made of two-component EPDM synthetic rubber: solid and cellular, which guarantees its ageing resistance during the long-lasting exploitation, as well as very good thermal insulation. MB-70 is the first system in which this type of material was used for creating the central gasket.

The system allows application of sets of glass panel of the thickness equal from 21 mm to 57 mm in window casements, and from 12 mm to 48 mm in fixed windows and door leafs. Such a wide thickness range of infill guarantees the possibility to apply all typical and untypical glass panels.

A wide choice of colors in the standard palette makes it possible to meet the needs of our most discerning customers.

The MB-70 system forms the basis for solutions featuring enhanced thermal insulation performance, such as: MB-70HI, MB-70US HI and for a curtain wall based on MB-70CW HI windows.

If you have any queries or doubts, ALUPROF S.A. specialists are always ready to provide any assistance and advice.