

## MB-60

Window-door system with a thermal barrier

MB-60 is a modern aluminium 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 60 mm (frames) and 69 mm (casements), and for doors 60 mm and 60 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 surfaces of casement and the frames - in the case of doors. Shape of the profiles allows achieving slender and resistant window and door structures.

There exists a possibility to bend profiles, such as frames, casements and lacings what allows achieving various types of arches and arch structures.

The MB-60 system is characterised by a low value of the overall heat-transfer coefficient U, thanks to application of the thermal breaks and gaskets. This system profiles meet the thermal requirements for the material group 2.1 in the case of windows, and 2.2 in the case of doors according to DIN 4108. In the systems, there are profiled "omega"-shaped thermal breaks applied of the width equal to 24 mm (windows) and 14 mm (doors) made from polyamide reinforced with fibreglass. Shape of the breaks increases the rigidity of profiles as compared to flat breaks, and also facilitates section drainage, ensuring the appropriate thermal insulation in all atmospheric conditions at the same time. The threshold made of HPVC and the EPDM gaskets guarantee good thermal insulation of the door leaves as well as air and water tightness.

The characteristic feature of this system is its close relation to the window/door MB-45, MB-59S and MB-70 systems. Adapting such a constructional design allowed achieving and applying many compatible elements in these systems, e.g. common glazing beads, corner joints, sealing strips, glazing and closing gaskets, common hardware, closing devices, hinges, and many identical technological processes such as pinning of connecting elements of lacings and crossbars, gluing corners joints, cutting out various recesses, etc. One of the effects of this standardization is that both the external and the internal appearance of the products such as windows, doors, etc. produced with various exterior and interior building systems are almost identical.

The MB-60 system serves as a base for solutions with an improved thermal insulation: MB-60HI, MB-60US HI, MB-60E HI, MB-60EF HI.

