

The MB-59SE system with a thermal barrier is a part of the MB-59S door & window system manufactured by ALUPROF S.A. The MB-59SE system is a modern construction designed to execute cost-efficient doors and door and window constructions featuring good functional properties which require thermal and acoustic insulation.

The constructional depths of profiles equals 50 mm. The surface of leaves is aligned with the door frame both as seen from the outside and inside. The door of the MB-59SE system features a low value of heat transfer coefficient U due to the application of special thermal breaks 16 mm wide made of polyamide strengthened with glass fibre and gaskets. The profiles in this system meet thermal requirements for the material group 2.1 or 2.2. according to DIN 4108. The system can accommodate hardware manufactured by renowned companies.

Another essential advantage of the system is the possibility of bending profiles, which allows performance of different arches and arched constructions. Working required to connect profiles is reduced to the minimum thanks to the application of aluminium connecting members and auxiliary accessories provided with the system. Corner connections of "L" type are made by trimming the ends of door frame or leaf profiles at the angle of 45°, followed by kneading or pinning and gluing them (with two-component glue known as CORALGLUE®) to aluminium cleats inserted into the inner chambers of profiles. Application of glue ensures high rigidity and tightness of the joint, while the cleats make it possible to maintain perpendicularity of the profiles being connected. Crosswise joints of "T" type are performed in the same way as in the MB-59S system. Installation of door thresholds is carried out in such a way as to enable their dismantling without having to unscrew other door elements. The threshold made of HPVC and double gaskets guarantee very good thermal insulation performance and tightness to water and air infiltration.

Glass panes or other infills are installed by means of glazing beads and gaskets. The system allows for the application of glazing units of thickness ranging between 4.5 mm and 31.5mm. Glazing and closing gaskets are made of EPDM synthetic rubber. External and internal pre-cut glazing gaskets are fitted as continuous stripping, without corner trimming, by joining gasket ends in mid-length of the upper crossbar of the door frame. Such system of glazing secures perfect tightness of the constructions and considerably reduces the installation time. Each door leaf must be equipped with an efficient drainage system deflecting water from the chamber under the pane. The drainage holes are covered from the outside with plastic sheaths.

A characteristic feature of the MB-59S system is its close compatibility with the MB-59S door and window system. Adopting such a constructional assumption allowed to apply a number of common profiles, e.g. window frames and lacings, glazing beads, corners, weather stripping and many identical technological processes, such as pinning of connecting members in lacings and crossbars, pinning or kneading of corners, cutting out different holes, etc.

Should there arise any queries or doubts, ALUPROF S.A. specialists are always ready with their assistance and advice. The doors of the MB-59SE system have been subjected to a number of tests carried out in conformance with the EN standards and have achieved very good results.

