

The system of fire-proof walls MB-78EI can be used to execute internal or external partitions with single and double doors and technical windows of fire-proof class EW15, EW30, EI15, EI30, EI45 or EI60 or EI90, as provided under the following standard: PN-EN 13501-2+A1:2010. The system has been classified as non-fire propagating (NFP). It may also be applied for the purpose of building smoke-proof constructions.

The application of glazed fireproof barriers in building industry should be subject to the technical documentation of the building, designed in accordance with Technical Approval awarded by the ITB Institute [Building Research Institute], applicable standards and relevant regulations.

The construction of the system is based on aluminium profiles with thermal spacers. The constructional depths of profiles is 78 mm.

The MB-78EI features a low value of heat transfer coefficient  $U_f$  due to the application of specially moulded thermal spacers 34 mm wide and gaskets.

Depending on the required fire resistance class, elements of insulation resistant to fire - GKF or CI are inserted in the inside chambers of profiles and in the insulation space between the profiles.

Working required in connecting of profiles is reduced to minimum thanks to the use of provided with the system aluminium connecting members and auxiliary accessories. Corner connections of "L" type are executed by trimming the ends of the frame or leaf profiles at the angle of 45°, followed by crimping or pinning and gluing (with CORALGLUE® - two-component glue) to aluminium corner cleats embedded in the inner chambers of profiles. Crosswise joints of the "T" type are performed by pinning of crosspieces to embedded corner cleats and gluing with CORALGLUE®.

Window panes or other types of infills are mounted in steel holders with glued on ceramic gaskets and masked with glazing beads and EPDM gaskets. Such technique of installation of infills enables easy replacement of damaged glass panes and secures good tightness to water infiltration. The system allows for the application of any standard fireproof glazing of a relevant class (thickness of glazing, depending on the holder option, ranges between 6 and 49 mm or between 8 and 49 mm). Shims are made of a fireproof material.

Each construction of the MB-78EI system, designed to be fitted in external developments, must be equipped with an efficient drainage and ventilation system deflecting water from the pane chamber. The working and the diagram with the layout of drainage and ventilation holes are presented on the pages of the section "Working". The performed tests have also proved that products based on this system feature very good sound-proof performance.

