SYSTEM

MB-DPA

DOOR & WINDOW SYSTEMS

Sliding doors provide an aesthetic, safe and comfortable solution for their users. In view of their properties they find application both in small objects, as well as in large office buildings and shopping centres. The construction of the MB-DPA system enables execution of doors in two variants: they may be built of thermally insulated profiles belonging to the MB-59S Casement system or from profiles without a thermal break, which are a part of the MB-45 system. Among assets of this solution are large allowable dimensions and weight of the construction: the leaves may be up to 3000 mm wide and weigh up to 200 kg.

AUTOMATIC AND MANUAL SLIDING DOOR

Construction

The constructional depth of profiles equals 50 mm in the case of thermally insulated profiles and 45 mm in the case of uninsulated profiles. The MB-DPA sliding doors may be fitted in different types of development: they can be installed directly in masonry or in glazed internal partitions of the MB-45 system, in glass and aluminium curtain walls or in display window structures, built either of profiles of the MB-59S, MB-60 or MB-70 systems, depending on thermal insulation requirements. The Aluprof door and window systems may come with wide crosspiece and frame profiles, which allow mounting most of sliding-door automatic gear available on the market. The gear may be freely selected, independent of the type of development.

A wide range of infills

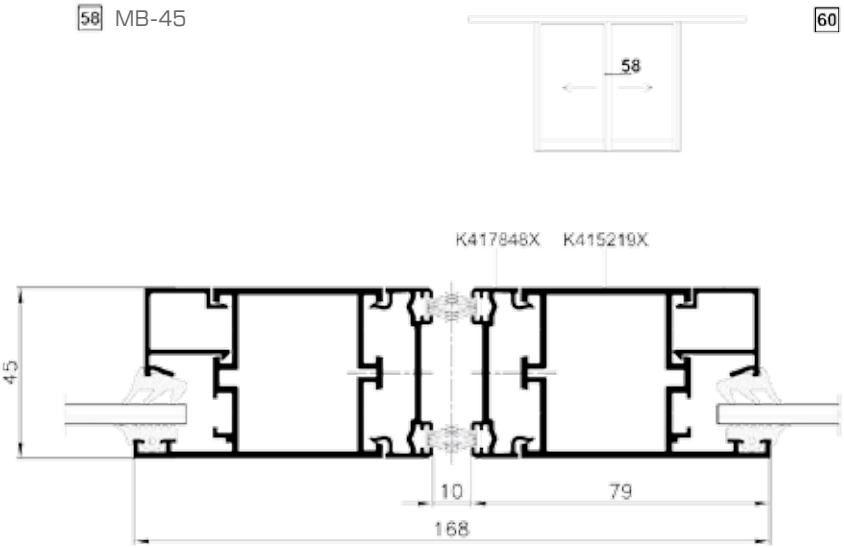
Depending on the choice of variant and requirements, the door leaves may be filled with either single glass panes or with insulating glass units. Glazing range for infills ranges between 4.5 mm and 31.5 mm.

Comfort and safety of use

Due to their principle of operation, sliding doors are space-efficient and ensure safety of operation and in automatic version they provide their user full comfort of passage devoid of any architectural barriers. However, in view of a lack of the threshold, doors installed in external developments should be protected against direct exposure to rain water.

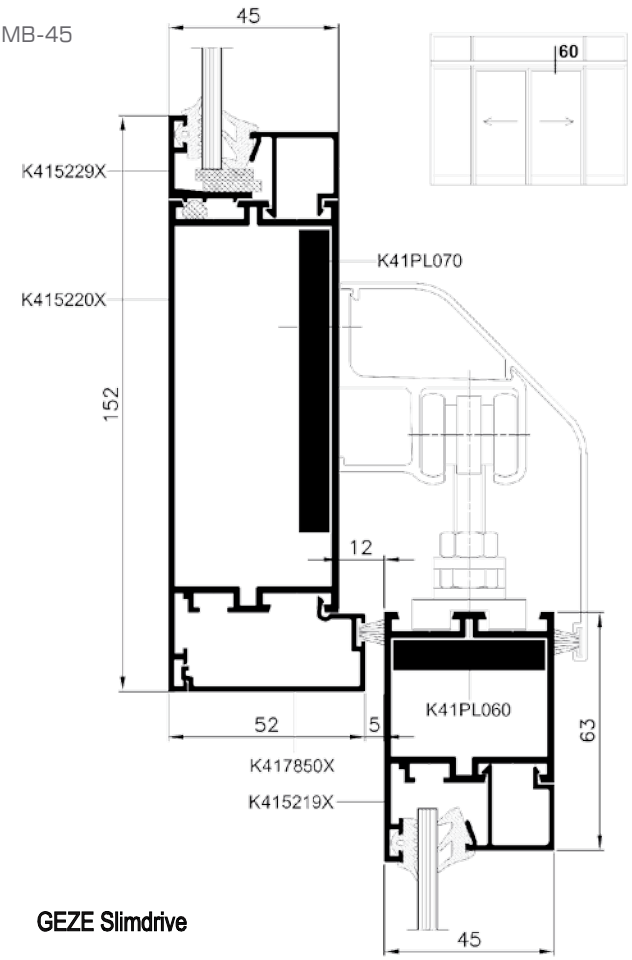
Sliding door - cross section

58 MB-45



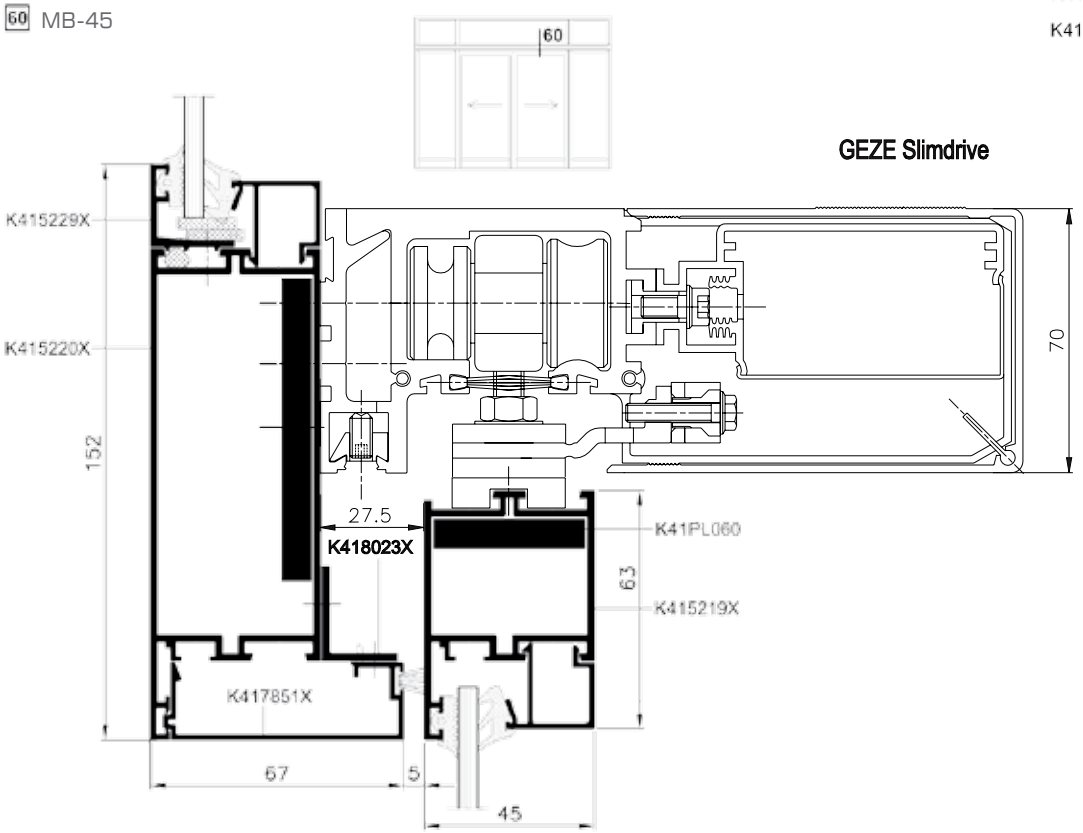
Sliding door - cross section

60 MB-45



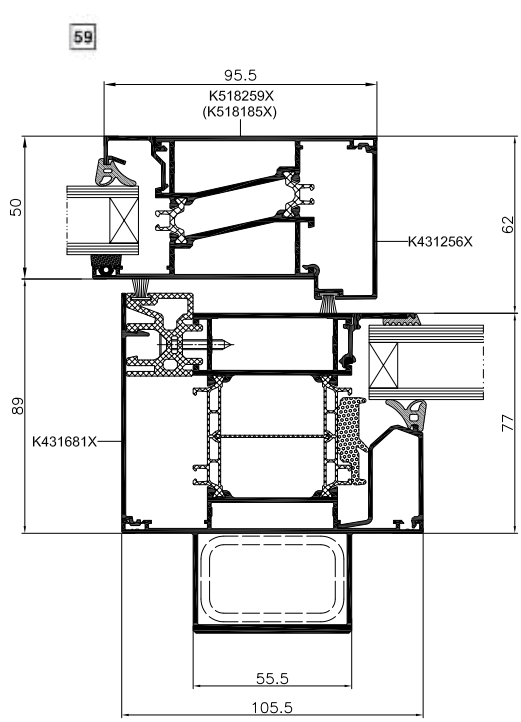
Sliding door - cross section

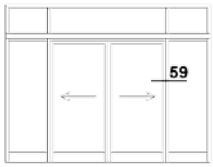
60 MB-45



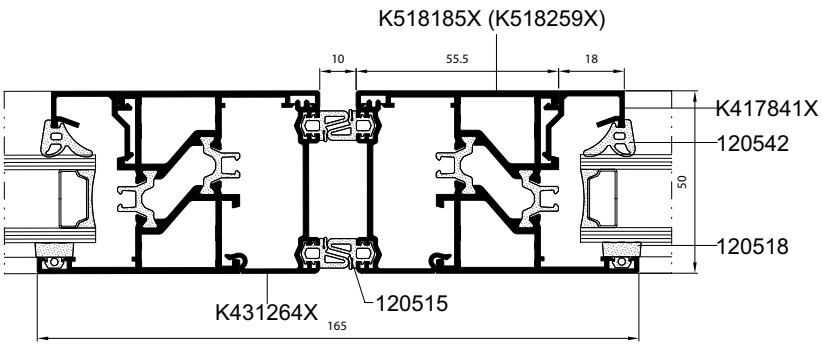
Scale 1:2

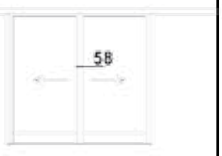
DPA doors in MB-86 screen - section

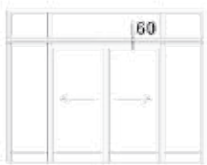




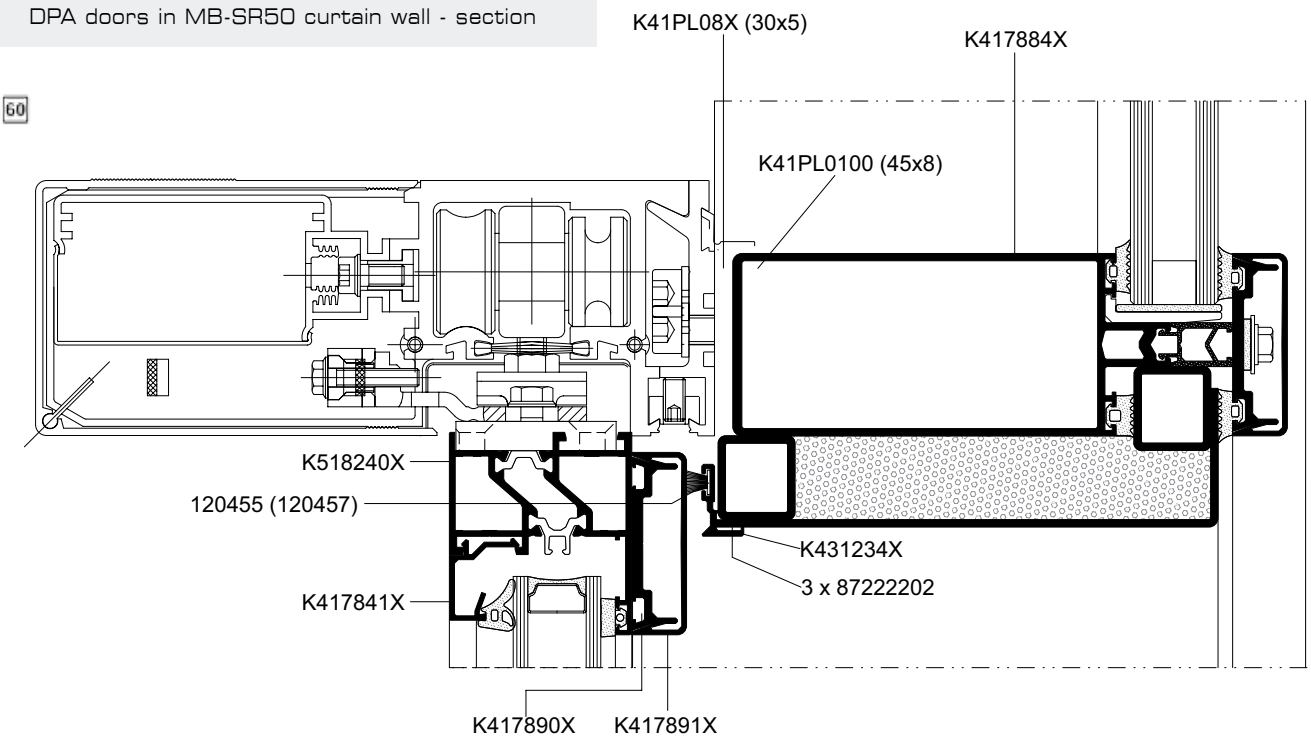
Sliding door - cross section







DPA doors in MB-SR50 curtain wall - section

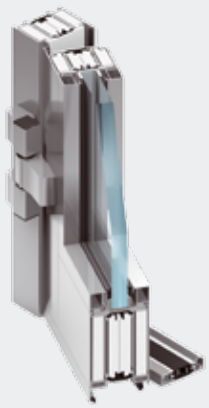


Scale 1:2

SYSTEM

MB-78EI

FIREPROOF CONSTRUCTIONS



The MB-78 EI firewall system is used to construct exterior and interior firewalls with single and double-leaf doors with fire resistance class of EI15, EI30, EI45, or EI60, according to B-02851-1:1997. The MB-78 EI firewall system is used to construct exterior and interior firewalls with single and double-leaf doors featuring fire resistance class of EI15, EI30, EI45, EI60 or EI90 according to B-02851-1:1997 and EN 13501-2:2005. The construction of the MB-78 EI system is based on aluminium profiles with a thermal break. The constructional depth of the profiles is 78 mm. The profiles are characterised by a low overall heat-transfer coefficient U_f due to the use of, among other things, special profiled thermal breaks 34 mm wide. The system allows glazing with any standard fireproof glass pane of the appropriate class (infill thickness between 8 and 49 mm). Within his system it is also possible to built smoke-proof constructions, which come in several options. Bending profiles and building arch constructions is also possible.

FIREWALLS WITH DOORS

Wide range of applications

MB-78EI EI is a modern firewall system used to make exterior and interior firewalls with single and double-leaf doors featuring fire resistance class of EI15, EI30, EI45, or EI60.

Optimally selected profile shape

The system profiles have a three-chamber structure. The constructional depth of profiles is 78 mm. The door leaf and frame surfaces are flush with the wall both outside and inside. The shape of profiles makes it possible to built slender and durable window and wall constructions.

High fire resistance and smoke tightness

Depending on the construction variant and the type of panes (infills) installed, the fire resistance of the MB-78EI system can be **EI15**, **EI30**, **EI45**, **EI60** or **EI90**. According to this classification, fire resistance relates to fire insulation and tightness. It is obtained, inter alia, by insertion of profiles into internal chambers and fire resistance components into the spaces between these profiles. The system also features high smoke tightness classifications according to EN13501-2:2003 – classes **Sm** and **Sa**. The classification according to UA GS VII.01/98 is **S30**.The system is classified as non-fire propagating (NRO).

High thermal and sound performance

The MB-78EI system is characterised by a low overall heat-transfer coefficient U due to the application of special thermal breaks and gaskets. The value of overall heat transfer coefficient U_f starts from 1,60 W/m^{2}K. Omega-shape profiled thermal breaks 34 mm wide are used in the system. Such shape of breaks improves profile rigidity in relation to flat breaks and facilitates water removal from sections, thus ensuring proper thermal insulation under any weather conditions. A thermally insulated sill and EPDM gaskets ensure good thermal insulation of door leaves and water and air tightness. The system also ensures good sound insulation. The value of the Rw index depends on the pane and type of door used.

High tightness to water and air infiltrations

Tightness is ensured by the use of special EPDM gaskets to provide resistance to aging during long-term operation. Glass gaskets are trimmed at the angle of 45° and bonded in the corners, while cover gaskets do not require corner trimming. This method of glazing ensures excellent water and air tightness. Every construction of the MB-78EI system, for external applications, has an effective ventilation and drain system to remove water from the pane chamber and the chamber between the leaf and frame.

High tightness to water and air infiltrations

Tightness is ensured by the use of special EPDM gaskets to provide resistance to aging during long-term operation. Glass gaskets are trimmed at the angle of 45° and bonded in the corners, while cover gaskets do not require corner trimming. This method of glazing ensures excellent water and air tightness. Every construction of the MB-78EI system, for external applications, has an effective ventilation and drain system to remove water from the pane chamber and the chamber between the leaf and frame.

Diversity of solutions

Versatility and attractiveness of the system is additionally enhanced by the possibility to select from several variants of solutions for different constructional details, e.g. bottom sealing of door leaves or the shape and height of doorsills.

Wide glazing range.

Freedom of hardware selection

The MB-78EI construction has been adapted to typical hardware, locks and hinges, following European standards. Sections are equipped with grooves of such dimensions as to enable fixing of multi-point locking hardware and connecting members, as per EURO standard. Thus, it is possible to meet the demands of our customers without changing the basic construction

Flexible glazing

MB-78EI system can by glazed with package of thickness between 6mm and 49.5mm

- single glass units in accordance with EN 357:2005
- double glazing units in accordance with EN 1279-1:2006 and EN 1279-5+A1:2009, with fire rated glass internally and safety glass externally
- multi-layer panels made of two aluminium or steel sheets of relevant thickness and gyp-rock or Promatec insulation between with additional mineral wool layer of 70 kg/m^3 minimum density if required.

Fire rated glass range

tested and approved to be used with MB-78EI system includes:

- Pyrobel of thickness between 9.3mm and 30.4mm
- Polflam of thickness between 21 mm and 32 mm
- Swissflam of thickness between 14 mm do 25 mm
- Contraflam Lite of thickness between 13 mm and 22 mm
- Contraflam 30 of thickness between 16 mm and 20 mm
- Contraflam 60 of thickness between 25 mm and 35 mm
- Pyrostop of thickness between 15 mm and 45 mm
- Pyrodur of thickness between 9 mm and 13 mm
- Promaglas of thickness between 17 mm and 30 mm
- Pyranowa of thickness between 15 mm and 27 mm
- Fireswiss of thickness between 15 mm and 28 mm

Technical parameters:

- Air infiltration: Class 2 PN-EN 12207:2001
- Water tightness: Class 5A, PN-EN 12208:2001
- Wind resistance: 2400[Pa], EN 12179:2002, EN13116:2004
- Sound insulation: R_W = 41 dB (subject to the glazing package being used)

NEW

SYSTEM MB-78EI DPA

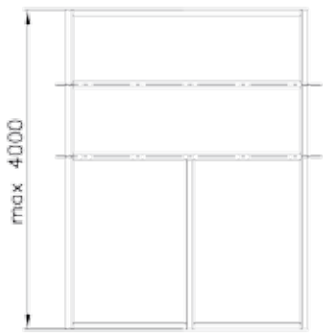
AUTOMATIC SLIDING FIRE DOORS

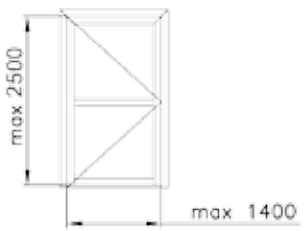
The MB-78EI DPA system is used for internal or external fire barriers with automatic sliding single- or double-leaf doors in the class EI15 or EI30.

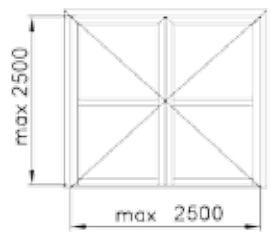
The applied motor allows the efficient and failure-free operation of doors with a leaf weight of up to 200 kg. The maximum size of the structure in a door opening:

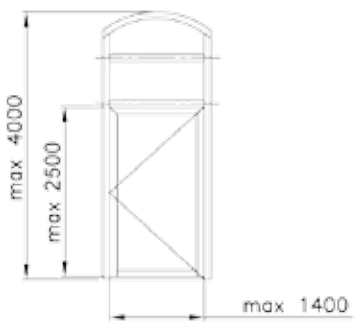
- height of 1-leaf and 2-leaf doors: up to 2450 mm.
- width of 1-leaf doors: up to 1100 mm.
- width of 2-leaf doors: up to 2125 mm.

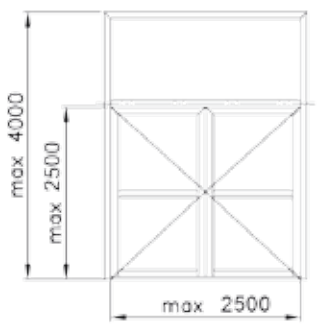
EI 15, EI 30, EI 45, EI 60. Maximum dimensions of wall segments.

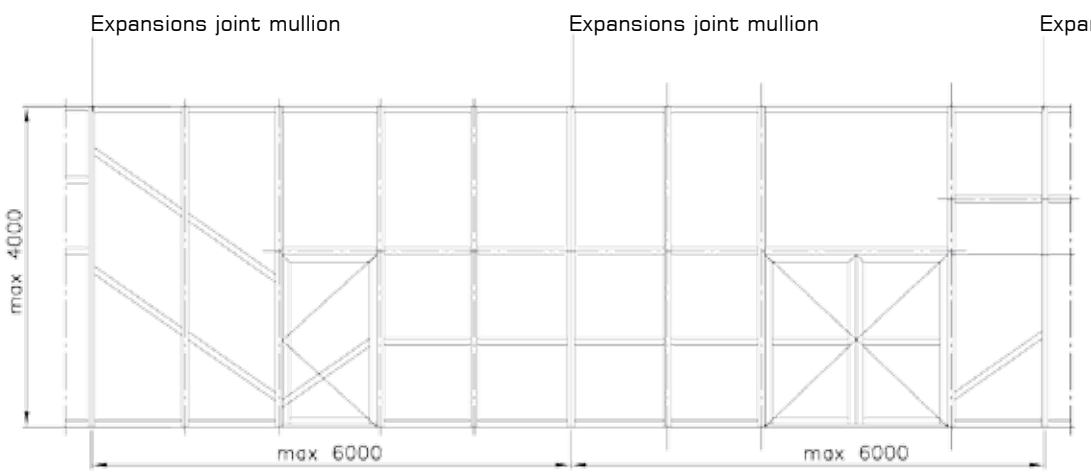






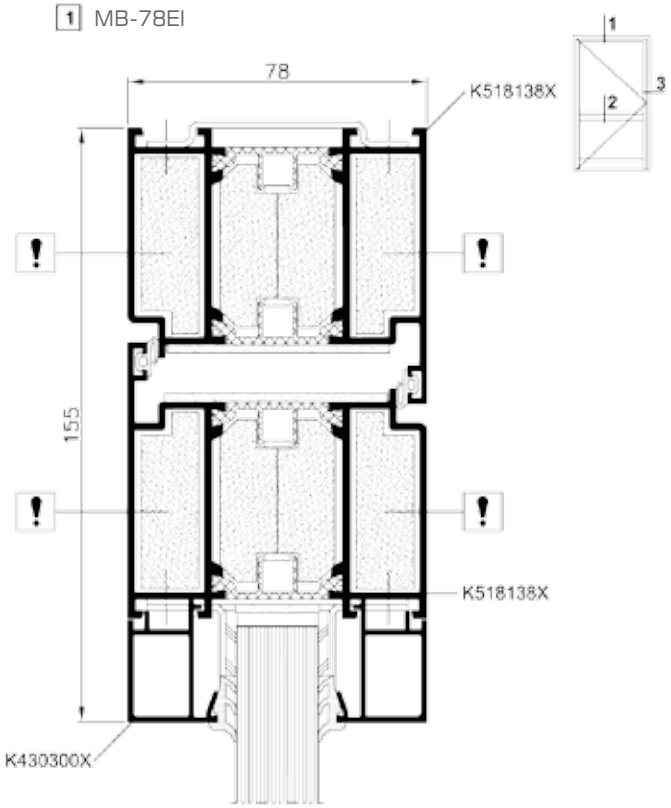






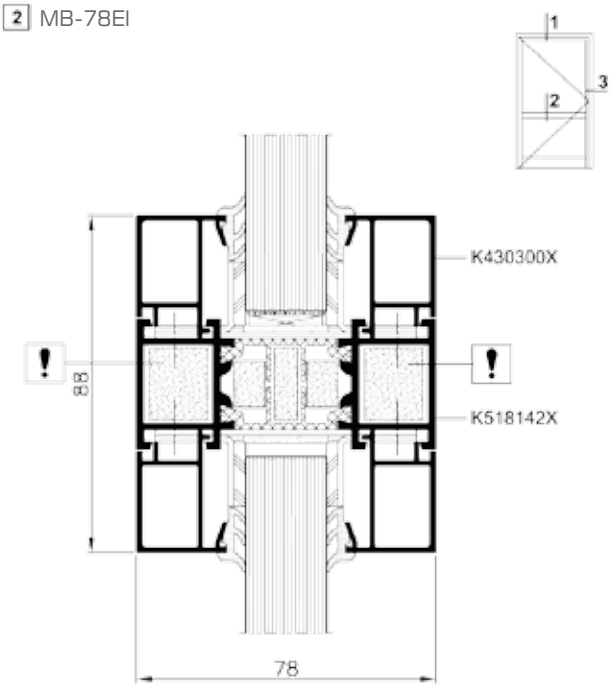
Single outward or inward opening door - cross-section

1 MB-78EI



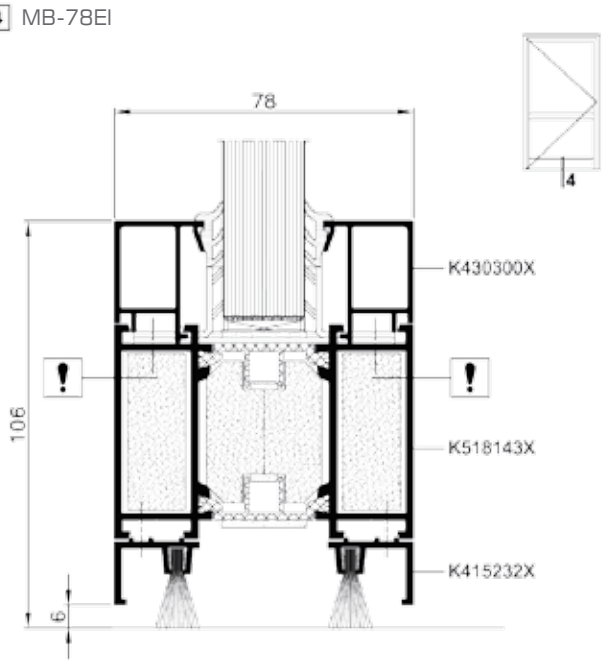
Single outward or inward opening door - cross-section

2 MB-78EI



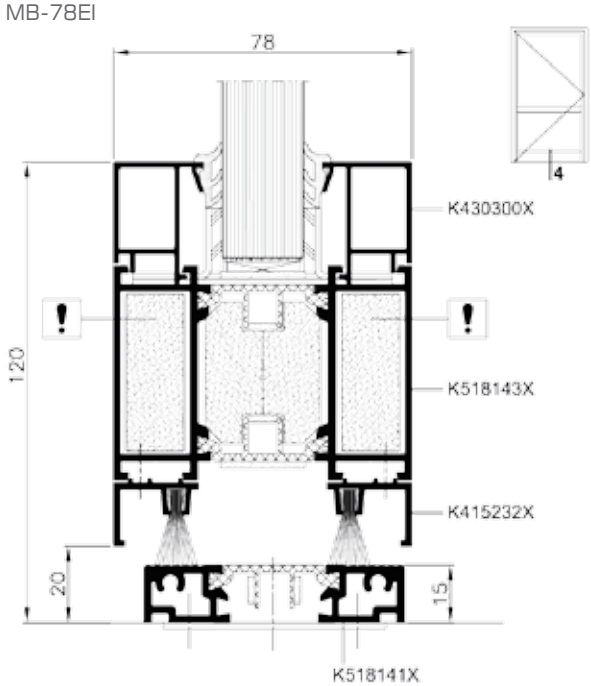
Single outward or inward opening door - cross-section

4 MB-78EI



Single outward or inward opening door - cross-section

4 MB-78EI

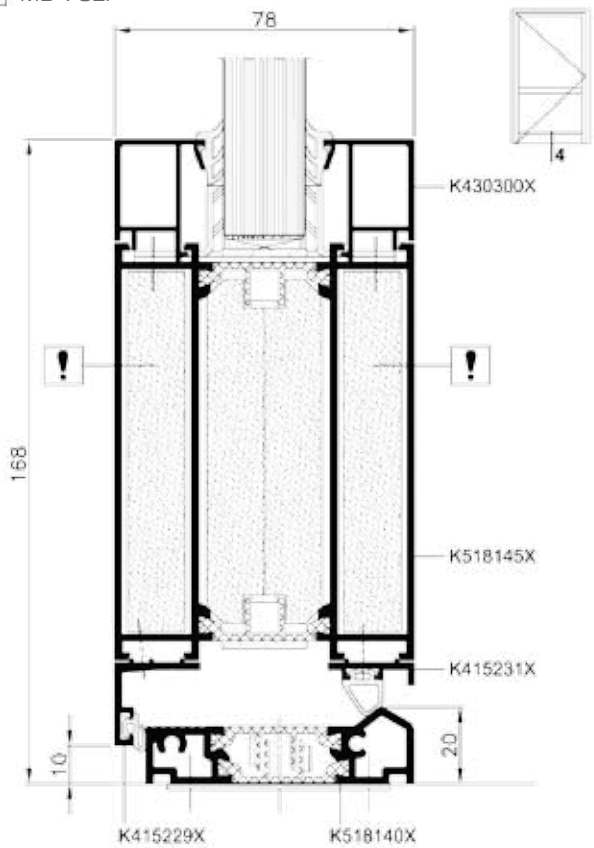


Applicable only for EI45 I EI60

Scale 1:2

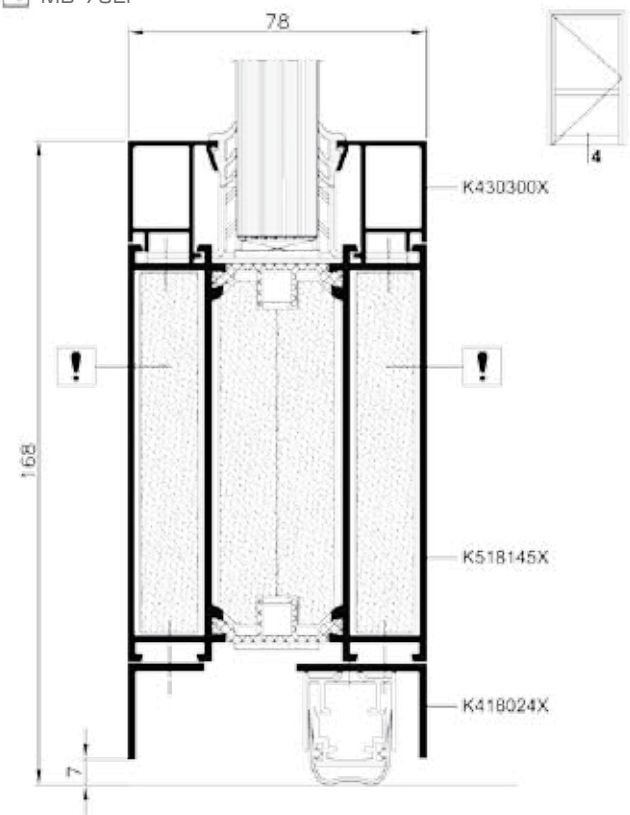
Single outward or inward opening door
- cross-section

4 MB-78EI



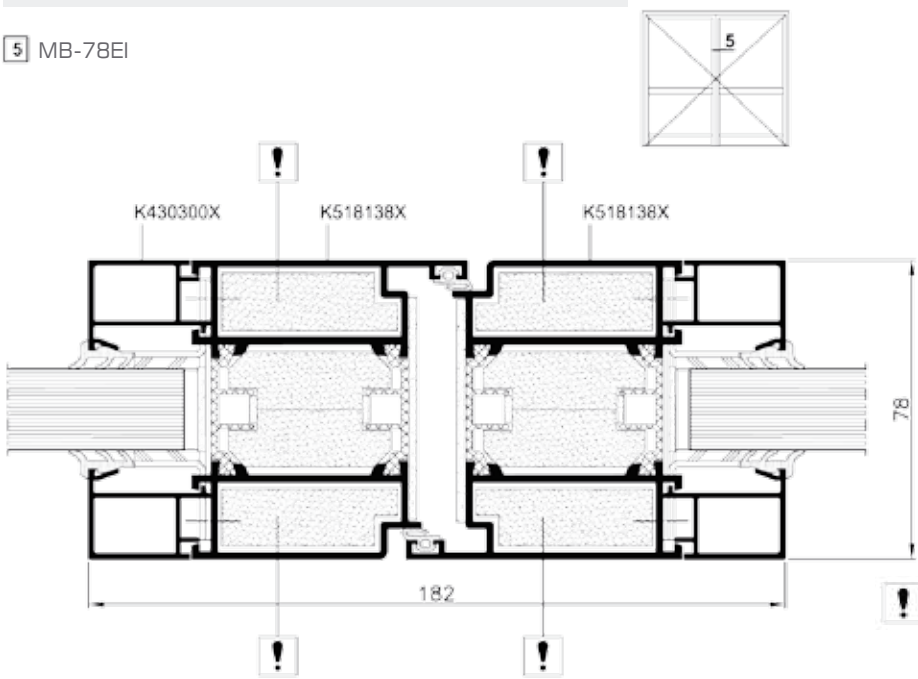
Single outward or opening door
- cross-section

4 MB-78EI



Double door - cross-section

5 MB-78EI

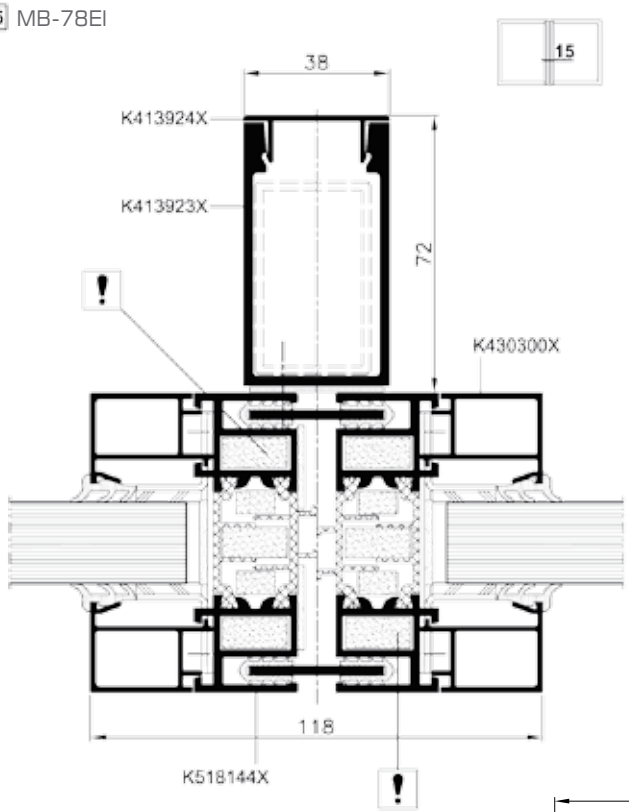


Applicable only for EI45 I EI60

Scale 1:2

Expansion - cross- section

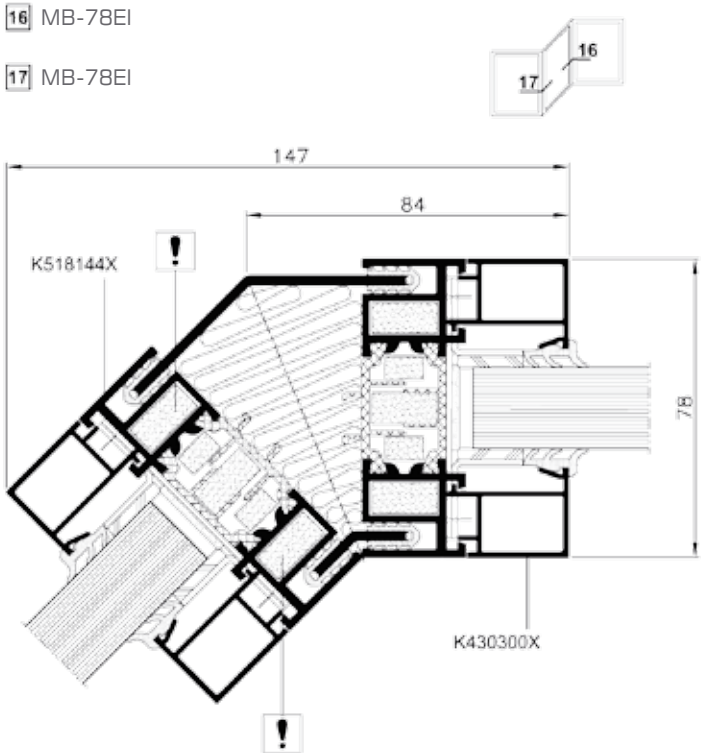
15 MB-78EI



Angular connection - cross- section

16 MB-78EI

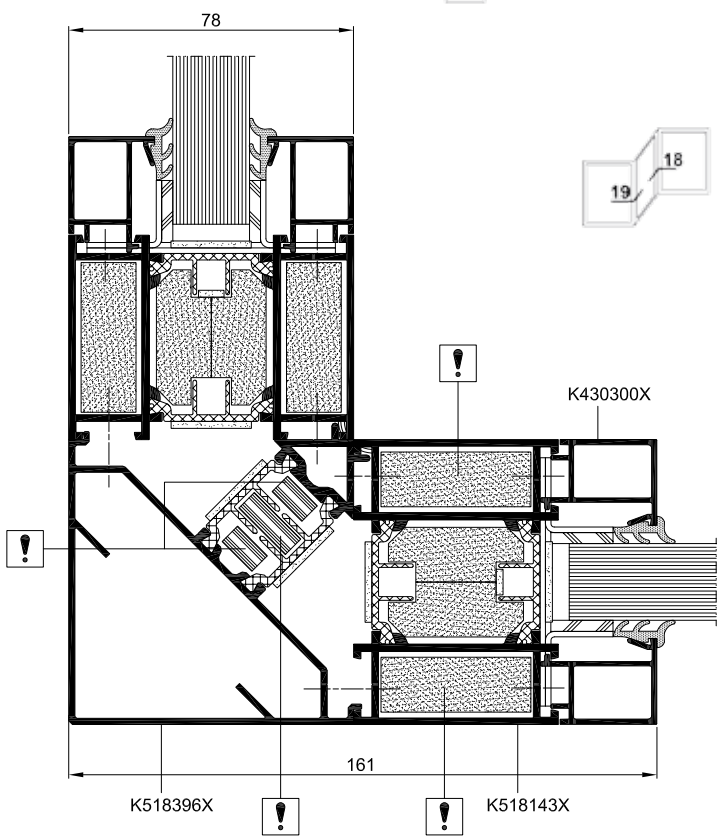
17 MB-78EI



Angular connection - cross- section

18 MB-78EI

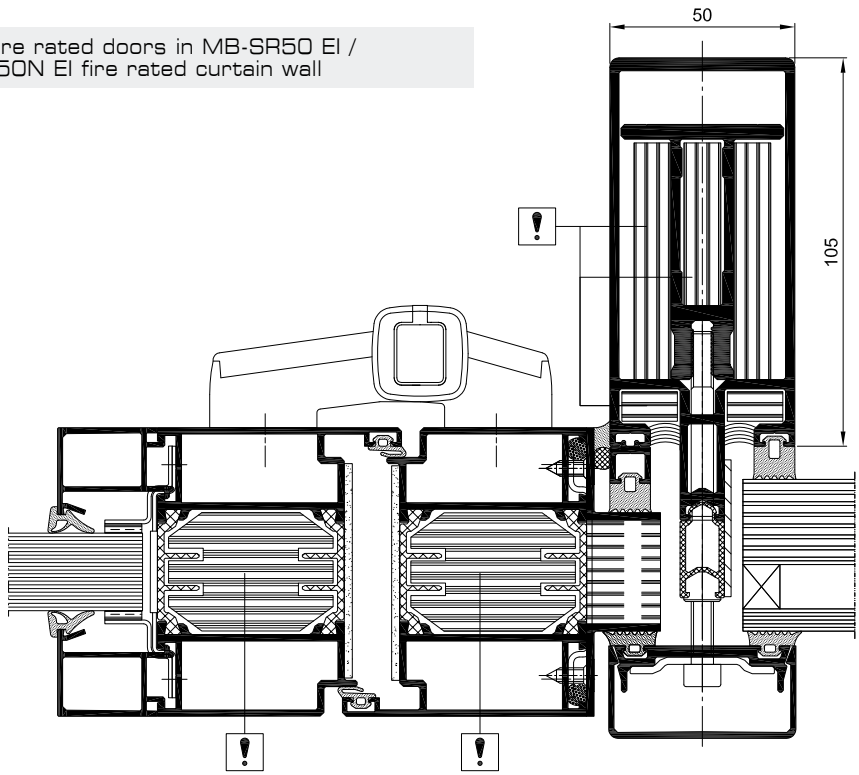
19 MB-78EI



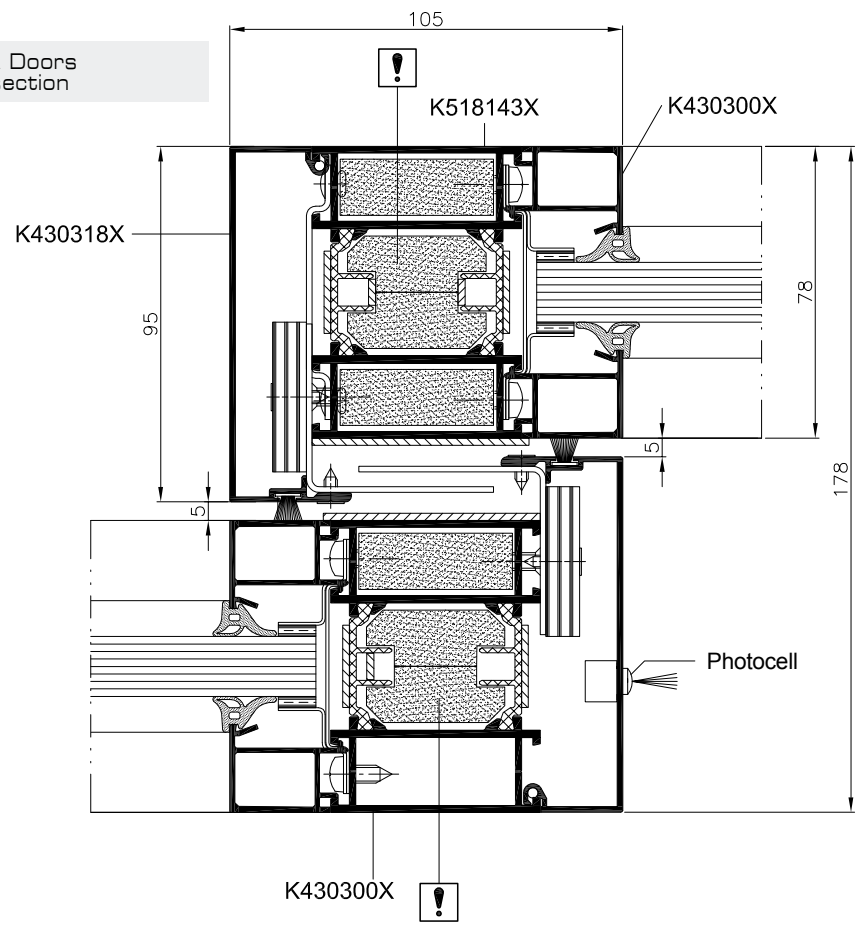
Applicable only for EI45 I EI60

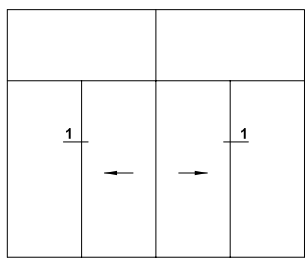
Scale 1:2

MB-78EI fire rated doors in MB-SR50 EI /
MB-SR50N EI fire rated curtain wall



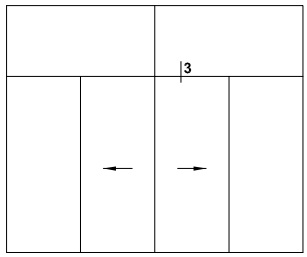
MB-78EI DPA Doors
- horizontal section





Scale 1:2

MB-78EI DPA sliding doors - vertical section



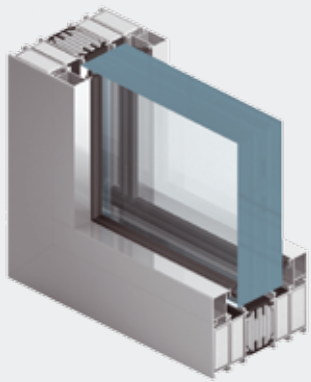
Scale 1:2

NEW

SYSTEM

MB-118EI

FIRE-RESISTANT STRUCTURES

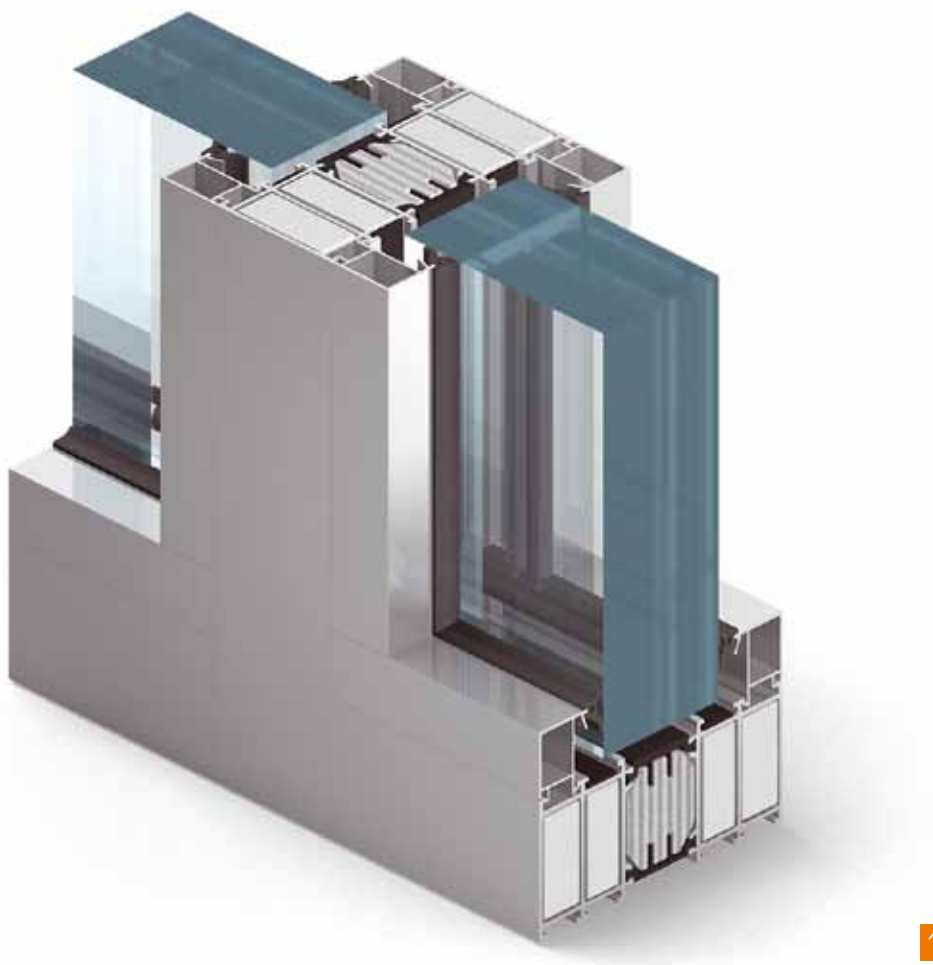


MB-118 EI is a system for external or internal fire walls with a fireproofing classification of EI120. It is based on the MB-78EI system of fire partitions with doors, which provides here most of the components, including glazing beads, cooling inserts, expanding foam tapes, seals and most accessories. The system is classified as fire-retardant; it can be also used for smoke-tight structures.

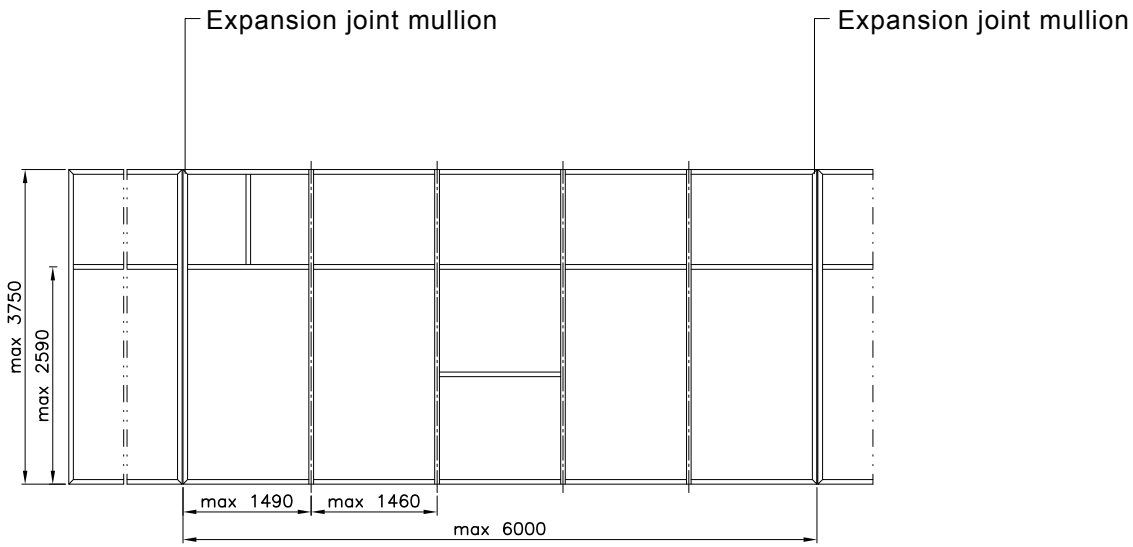
FIRE PARTITIONS

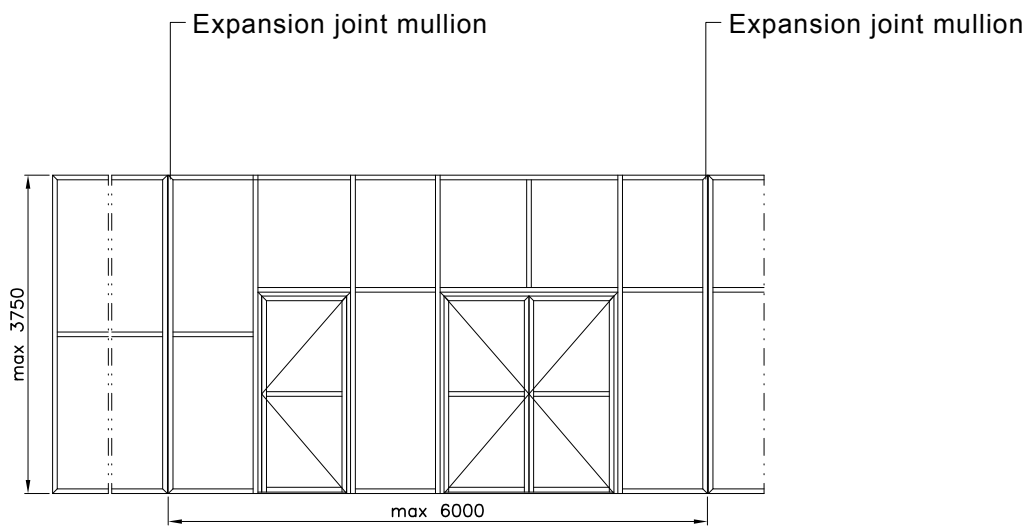
MB-118EI features:

- Design depth of profiles is 118 mm
- The system is based on five-chamber aluminum profiles with a 34 mm wide thermal spacers.
- The internal chambers of the profiles and insulating spaces between the profiles include fire insulation elements. On the external surfaces, additional foam tapes are mounted, which expand under high temperatures.
- The glazing range for MB-118EI partition walls covers a infill thickness of 48-84 mm. Depending on the function of the building, single fire-resistant panes or glazing units with fire-resistant glass can be used.
- The fire-resistance of MB-118EI walls is classified EI120 for both external and internal fire.
- It is possible to use decorative muntins.
- Technical approval ITB AT-15-6006/2012.
- The construction technology is the same as for the MB-78EI system.

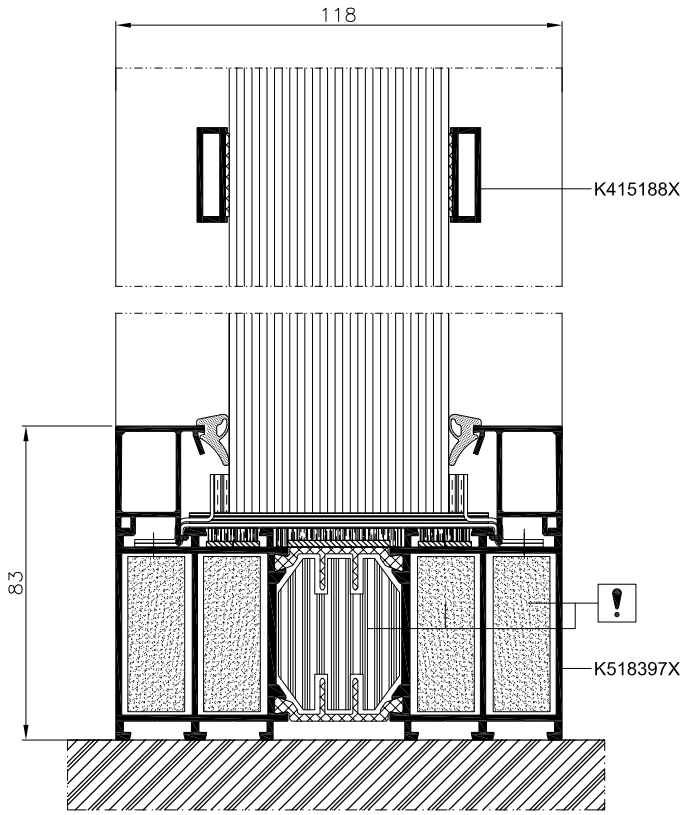


Maximum sized of the screen

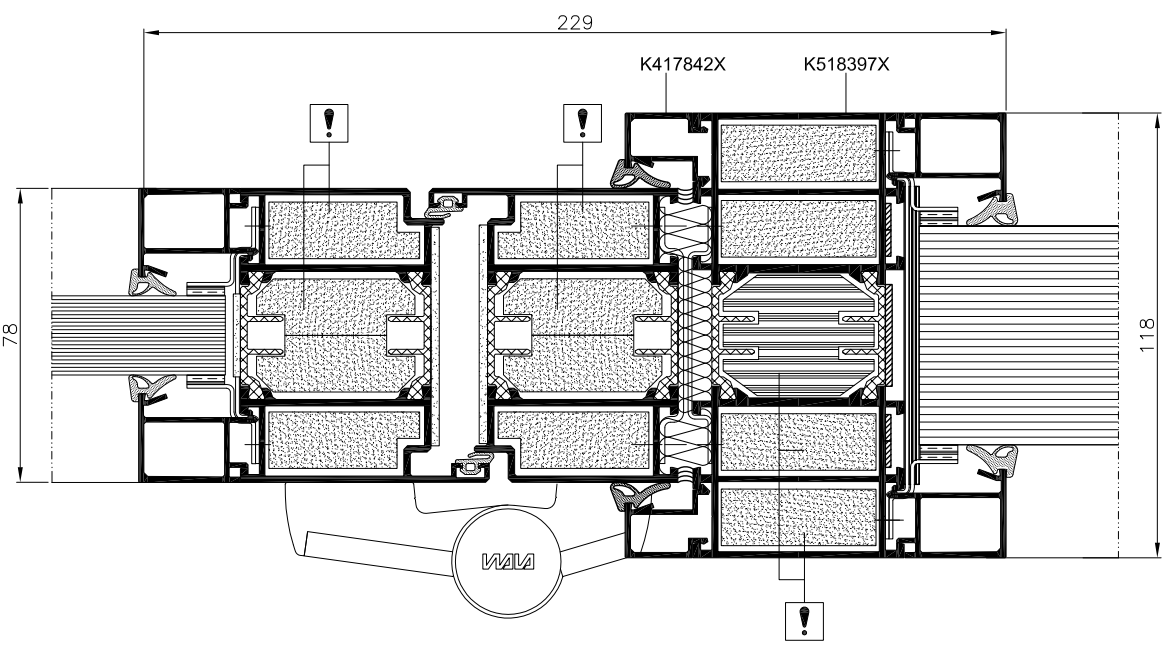




Section through bottom rail



Section through the joint of MB-118EI screen
with MB-78EI doors



Scale 1:2

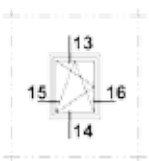
MB-WINDOW IN BOARDS SYSTEM

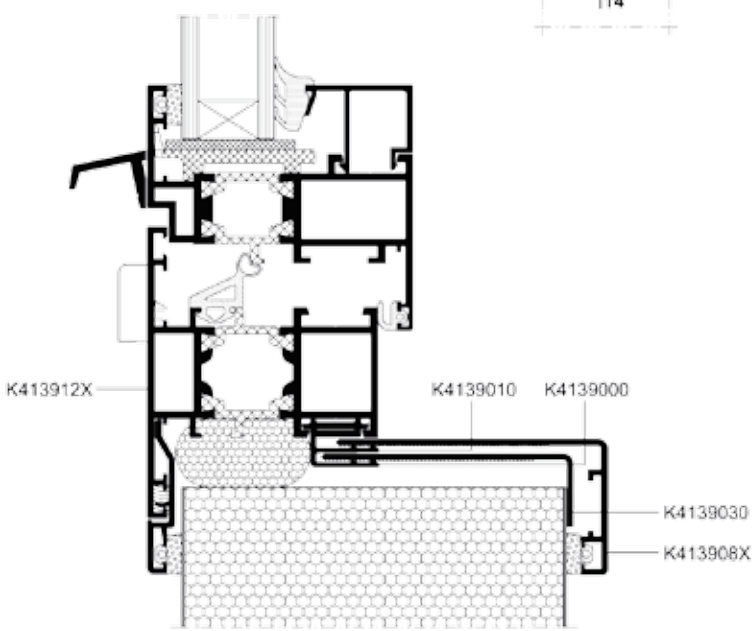
DOOR AND WINDOWS IN SANDWICH PANELS

A system of aluminium sections that allows easy and aesthetic installation of windows and doors of the following systems: MB-45, MB-45S, MB-59S, MB-59SE, MB-59S CASEMENT, MB-59S PIVOT, MB-60, MB-60 PIVOT, MB-60US, MB-70, MB-70HI, MB-70US, MB-70US HI facilities made from layered boards of different types, of the thickness ranging between 60 and 150 mm. The system features very simple construction and easy assembly, which involves snapping fastening angle sections and cover sections in special gripping strips. It is of great importance in the era of growing demand for shortening the time-consuming assembly works.

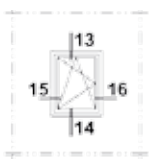
MB-60 active window - cross-section

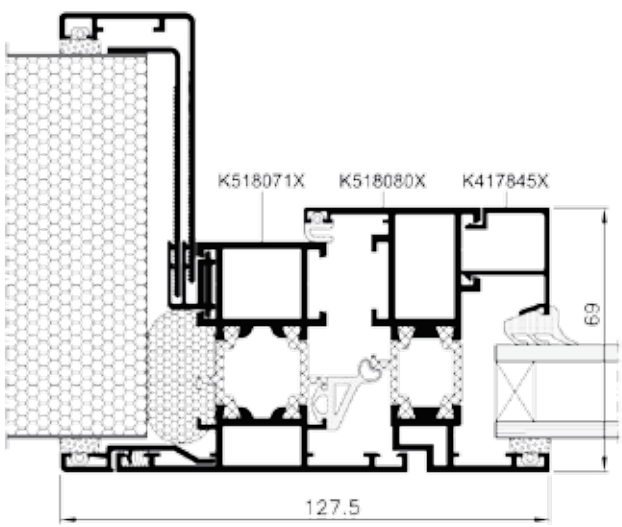
14 Window in a panel





15 Window in a panel





Scale 1:2