

SYSTEM

MB-77HS

MB-77HS HI

LIFT & SLIDE DOOR



The MB-77HS "Lift & Slide" door product is an ideal solution for connecting interior space rooms or conservatories with the outside balcony, terrace or garden area. Providing both a smooth & silent slide action operation, it can bring the benefits of a beautiful day outside, into the living space. In addition, & by way of its design & operation, the MB-77HS is a great space saving opening & does not encroach the free space beyond the internal or external confines of the frame, without any compromise.

LIFT & SLIDE DOOR WITH ENHANCED THERMAL PERFORMANCE

Providing excellent weather tightness together with enhanced thermal performance, the MB-77HS complies with all of the requirements associated with this product type. Available in two different options, with regard to the level of thermal performance, the MB-77HS is further categorised as "ST" and "HI," standard or highly insulated. The design & arrangement of the system profiles enable luxurious openings of large dimensions, accommodating double & even triple glass unit compositions, which in conjunction with the constituent parts & innovative technical solutions, help achieve a high level of thermal & acoustic performance. Due to the system properties, & rigorous performance proven through a stringent testing regime, the MB-77HS is ideally suited to many domestic & retail applications, providing a comfortable, safe working, cost effective & low maintenance solution for the end user.



Features of systems MB-77HS:

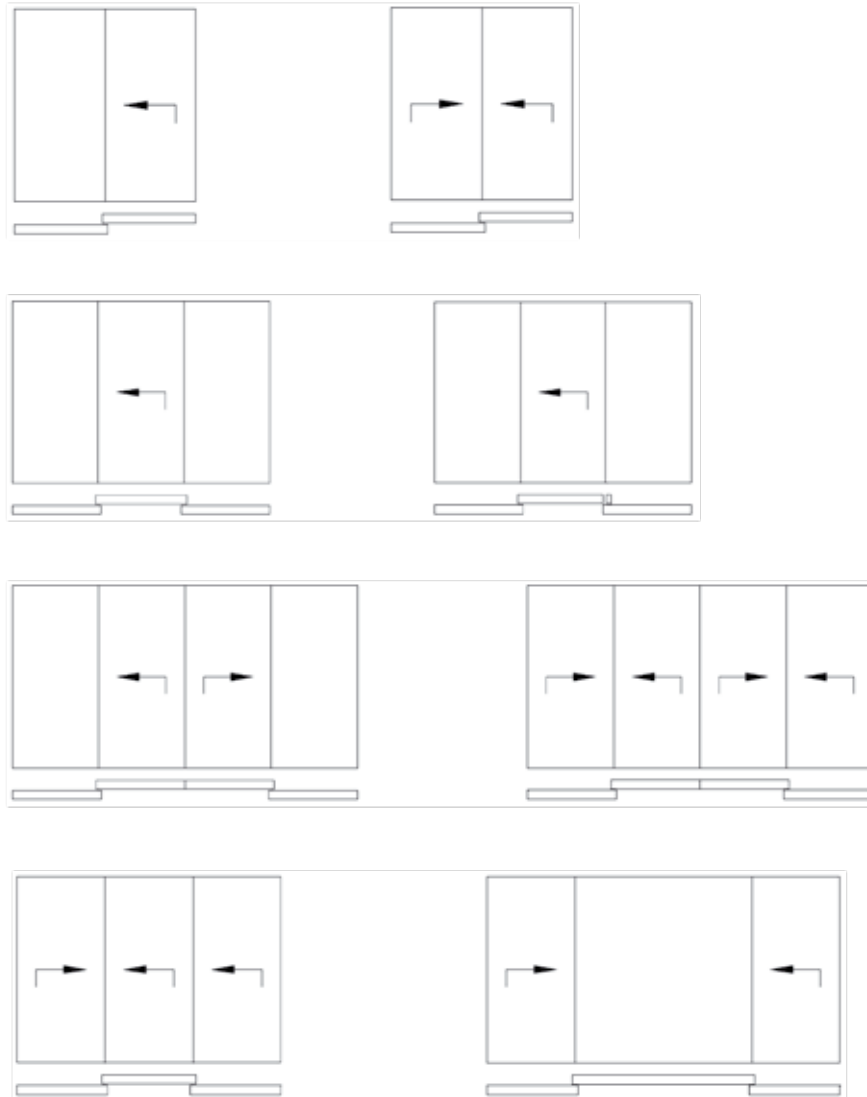
- durable and slender profiles enable screens of a low-threshold door of the weight of the leaf of up to 400 kg, height – up to 3.2 m and width - up to 3.3 m.
- a wide range of glazing options, allowing application of double or triple glazed units combined with thermal breaks as well as additional inserts, enable achieving high thermal and acoustic insulation of the door.
- for aesthetic values glazing beads come in three options: Standard (rectangular), Prestige (rounded) and Style (shaped)

- closed shape of glazing beads and anti-jimmy details provide enhanced security properties without altering any essential constructional elements of the door.
- unique shape of closing and glazing gaskets and quality hardware ensure top end weather and air tightness performance
- profiles adapted to accommodate a number of manually or automatically operated hardware available on the market
- a large degree of compatibility with the MB-86 system creates an aesthetic combination

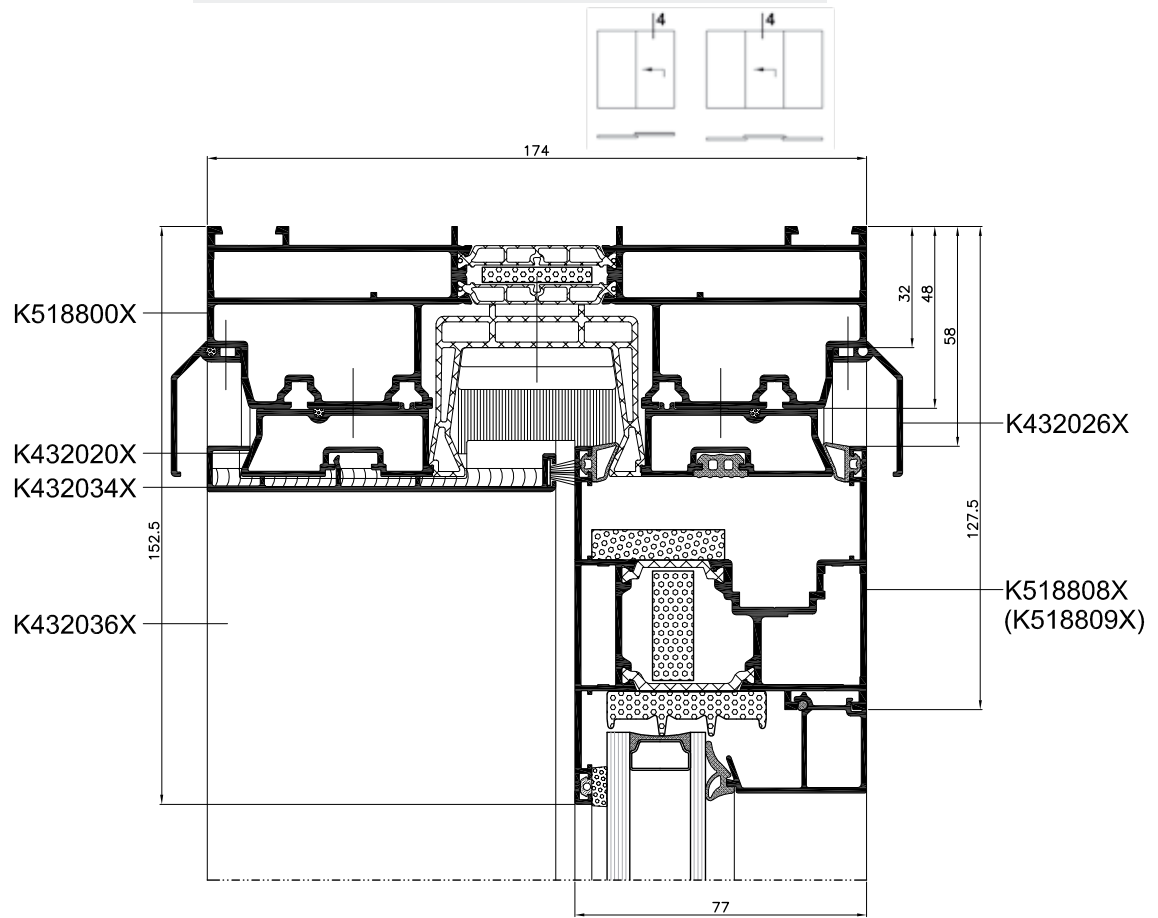
of the MB-77HS doors with windows and using the same components in fabrication process

- a wide range of colour schemes allows for arrangement of doors to meet any individual requirements

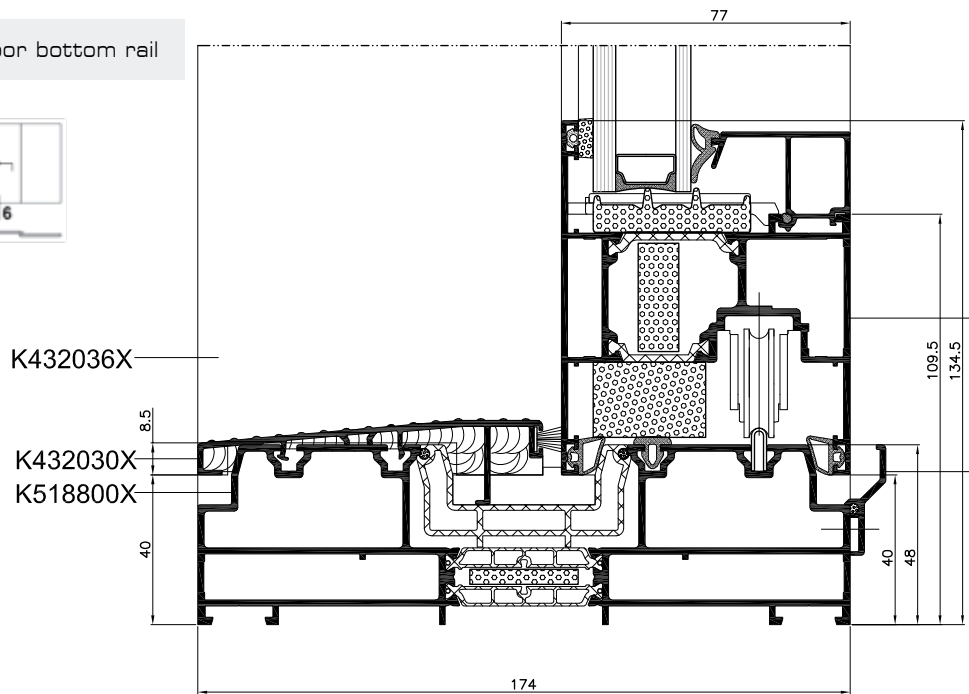
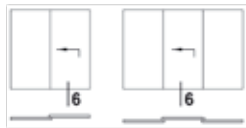
Examples of constructions lift & slide door MB-77HS / MB-77HS HI



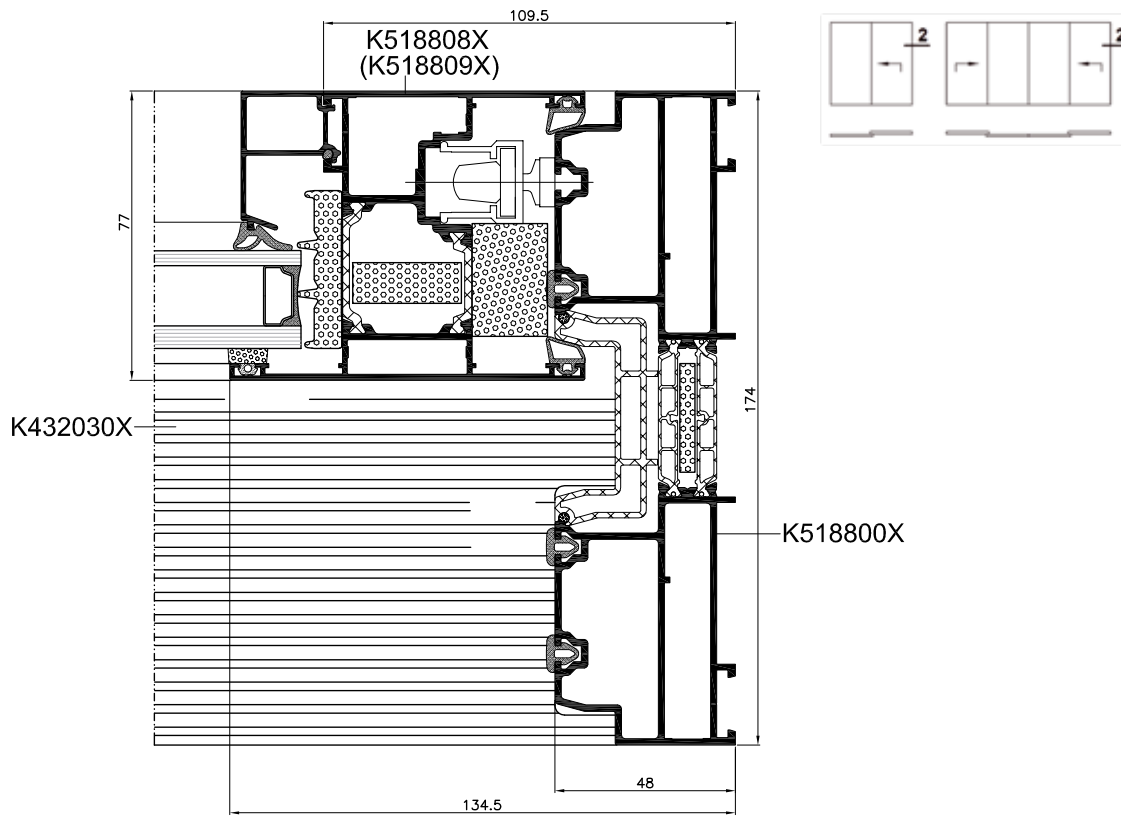
Door top rail - cross-section



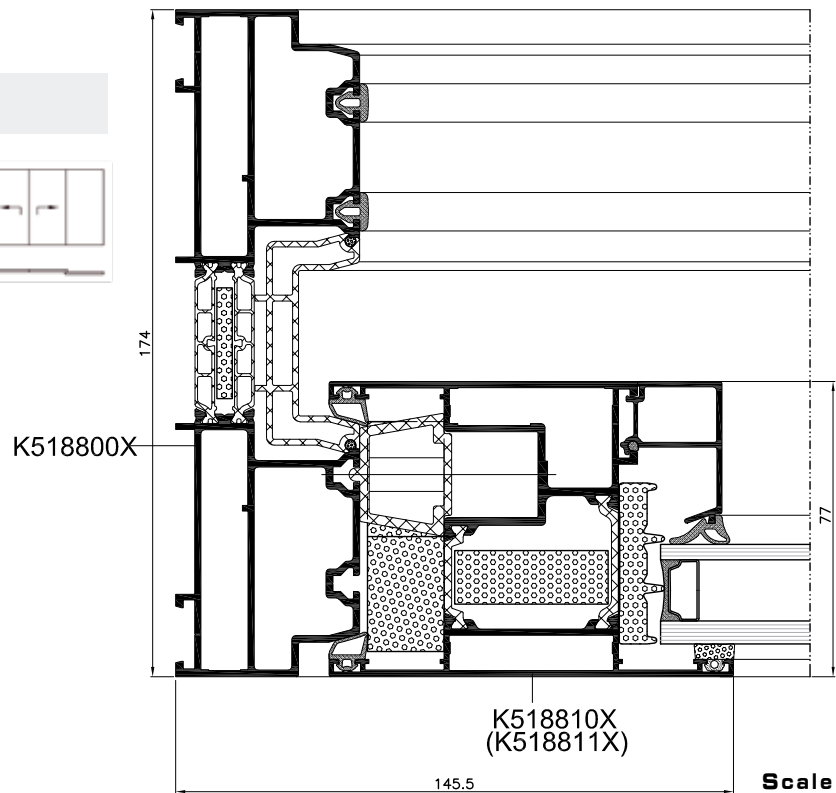
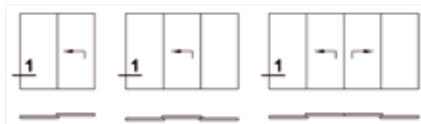
Cross-section of door bottom rail



Side door - cross- section

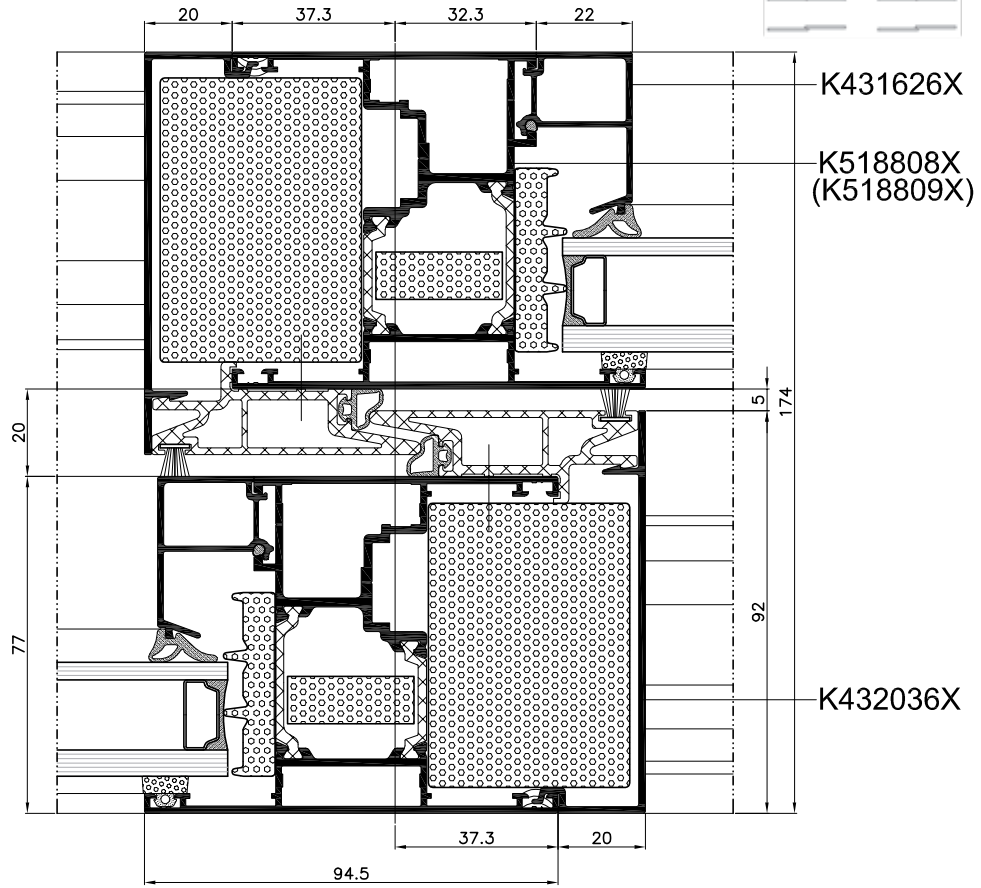


Side door - cross- section

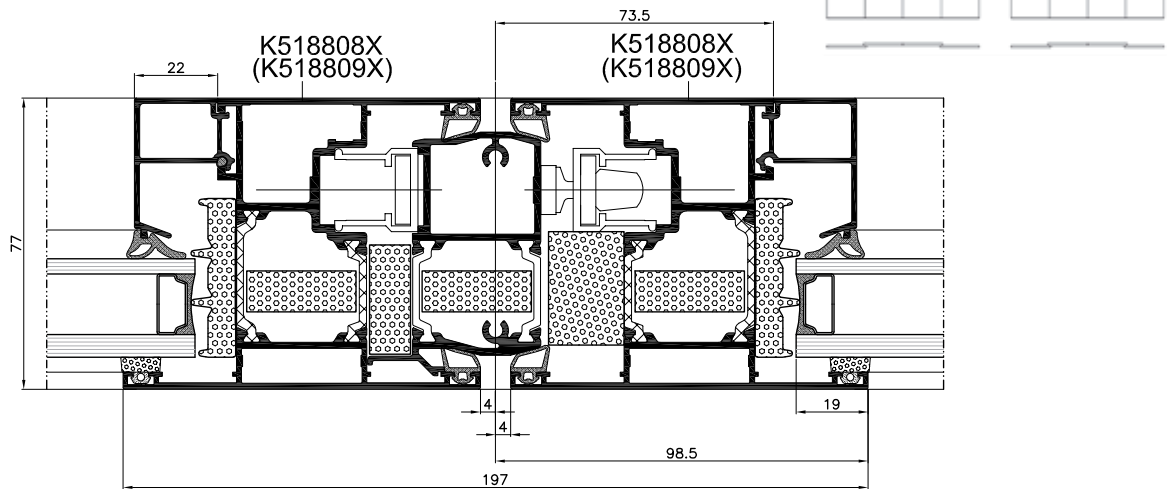


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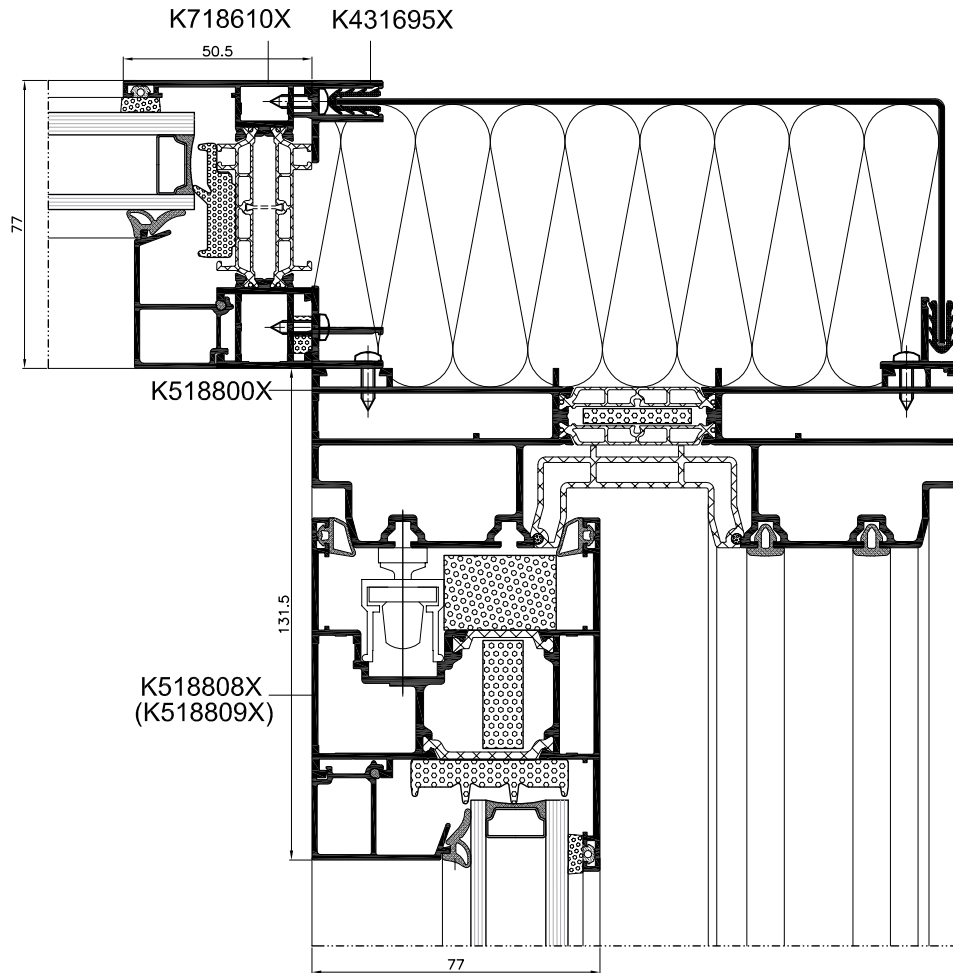
Cross - section of jambs of door



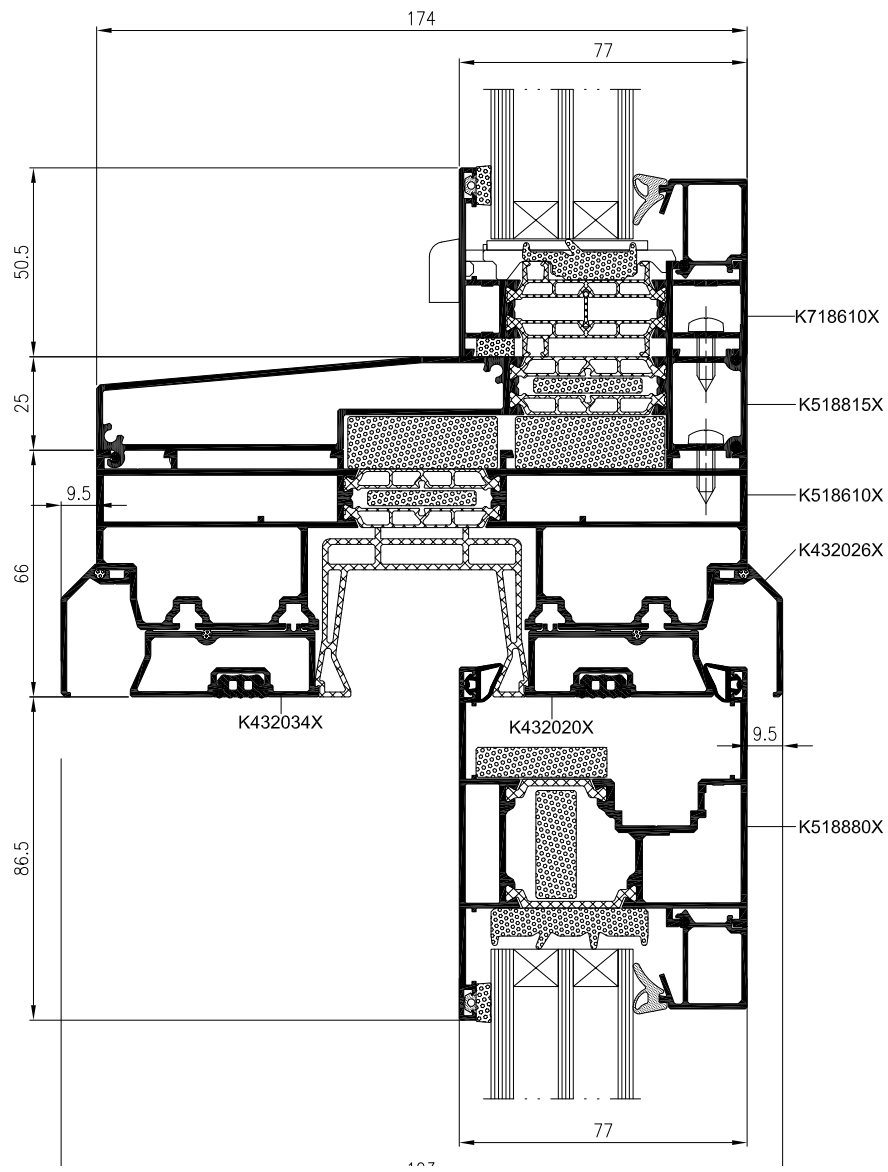
Jambs of door - cross - section



Cross - section of 90° mullion



Door head jamb section



SYSTEM MB-SLIDE



SYSTEM MB-SLIDE ST



SLIDING DOORS

Sliding doors, especially the ones of large dimensions, visually “enlarge” the living space by connecting it with an outside terrace or a garden. The MB-SLIDE, MB-SLIDE ST systems are designed to construct thermally insulated sliding doors and windows, which may be built in brick walls, aluminium curtain walls, winter gardens or window display constructions based on the MB-59S or MB-59S Casement elements.

Wide range of applications

The MB-Slide and MB-Slide ST sliding door systems offer a wide range of space arrangement possibilities with maximum dimensions of leaves: H: 2600 mm, L: 1800 mm, max. weight 160 kg. There are available different constructional variants from 2 to 6 modules. They may be fitted with glazing sets up to 26 mm wide.

Construction

Constructional depth of leaf profiles is 37 mm (apart from horizontal profiles in the MB-Slide ST) and of frames 50 mm and 97 mm for double track frames and triple-track frames respectively. The same depth of basic double-track frames in the MB-Slide system and window or door frames of such systems as MB-59S, MB-59S Casement, MB-59S Pivot and MB-59SE allow to directly join products based on these systems. Frames of depth over 50 mm may be joined with each other via a special strengthened intermediate mullion.

Tightness and thermal insulation

Sliding door constructions ensure very good technical parameters: plastic thermal breaks guarantee suitable thermal insulation of aluminium profiles, while sliding brush gaskets or gaskets made of thermoplastic elastomer TPE, combined with EPDM cover and glazing gaskets, enable obtaining high tightness of the construction.

Diversity of solutions

The basic difference between the MB-Slide and MB-Slide ST systems lies in the construction of leaf profiles as well as in the technology of production and glazing. MB-Slide leaf profiles feature 3-chambered construction, they are trimmed at the angle of 45° and connected by means of suitable corner cleats. Then, the corners are crimped. Thus formed frame is then glazed and the glass panel is secured with glazing strips and gaskets. In the case of MB-Slide St the profiles have single chamber construction and they are joined by screwing vertical and horizontal profiles together by means of appropriate screws. Glass panel installation is performed at the stage of connecting leaf profiles.

Compatibility with other systems

Both sliding door systems are compatible, to a large extent, with other systems manufactured by ALUPROF S.A. Assuming such a constructional concept enables application of a number of common profiles, accessories and technological processes. All components of sliding door systems are compliant with the applicable standards.

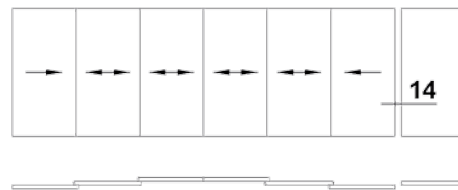
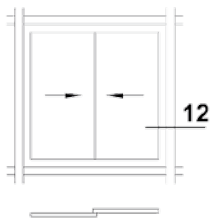
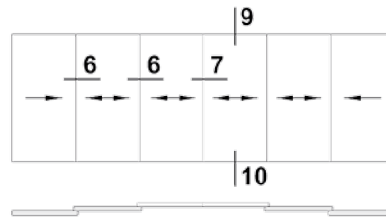
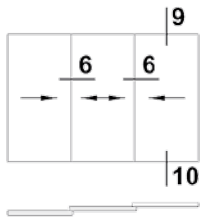
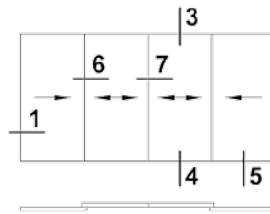
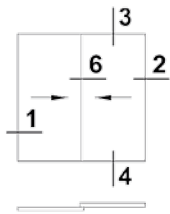
Functionality and aesthetics

A wide range of Sobinco and Giesse hardware can be accommodated into the sliding door systems. Depending on the applied system various accessories and elements can be used in sliding operation. They can be fitted with mosquito screen modules. There is also an option to built two-colour construction.

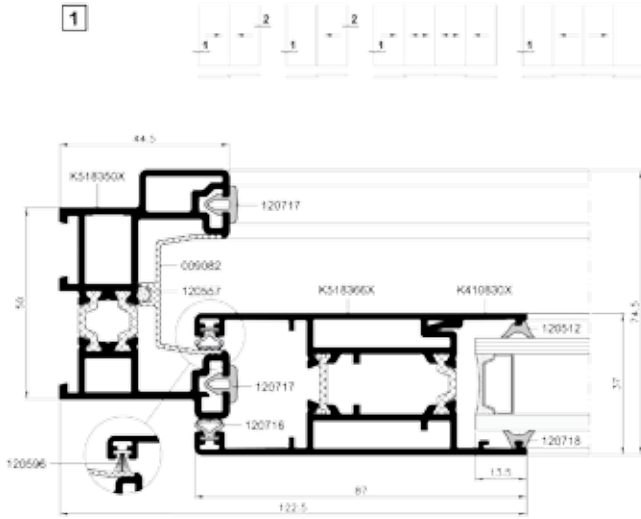
Technical parameters:

- Overall heat transfer coefficient:
 U_f from 2,61 W/m²K
- Air infiltration:
Class 4, EN 1026:2001;
EN 12207:2001
- Rainwater resistance:
Class 7A, EN 1027:2001;
EN 12208:2001
- Wind load resistance:
Class 3C/4B, EN 12211:2001;
EN 12210:2001

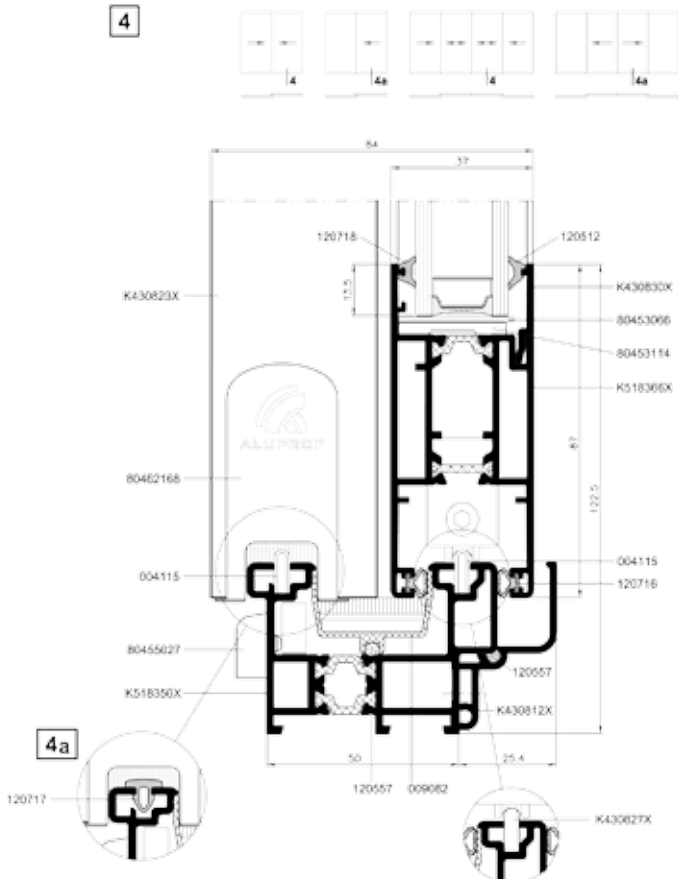
Examples of constructions



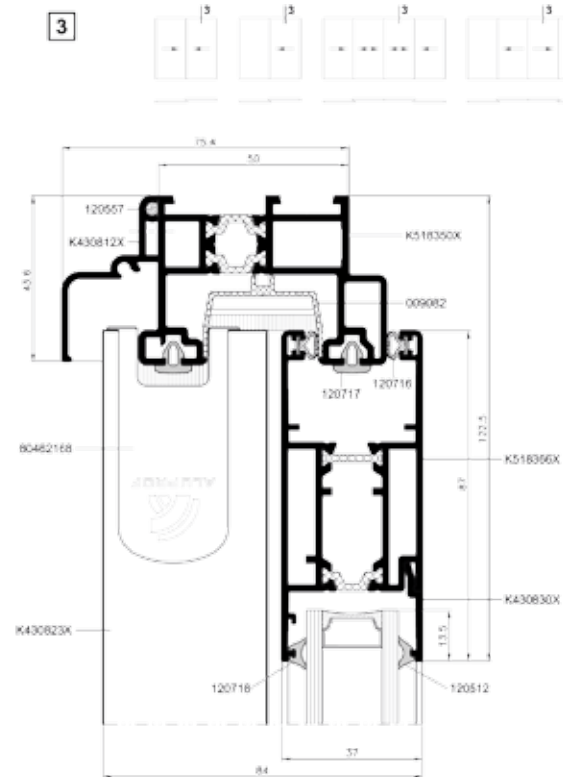
Cross-section of door



Cross-section of door bottom rail

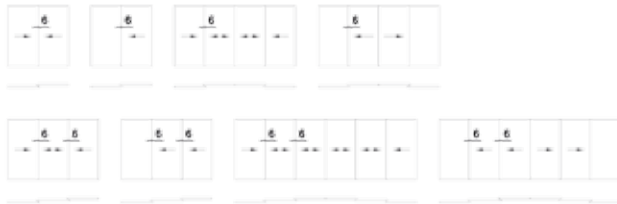


Cross-section of door upper rail

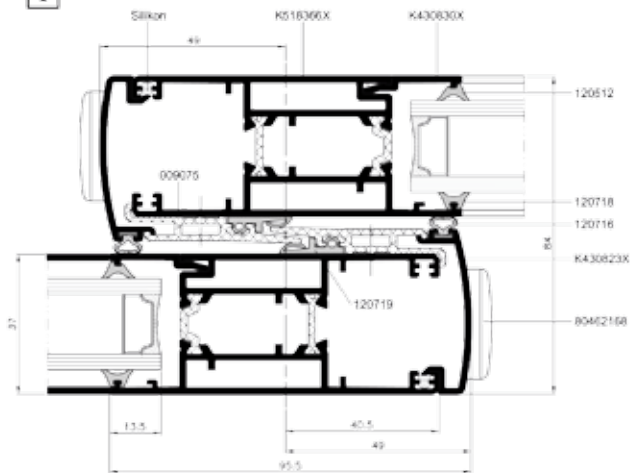


Scale 1:2

Cross-section of door jambs

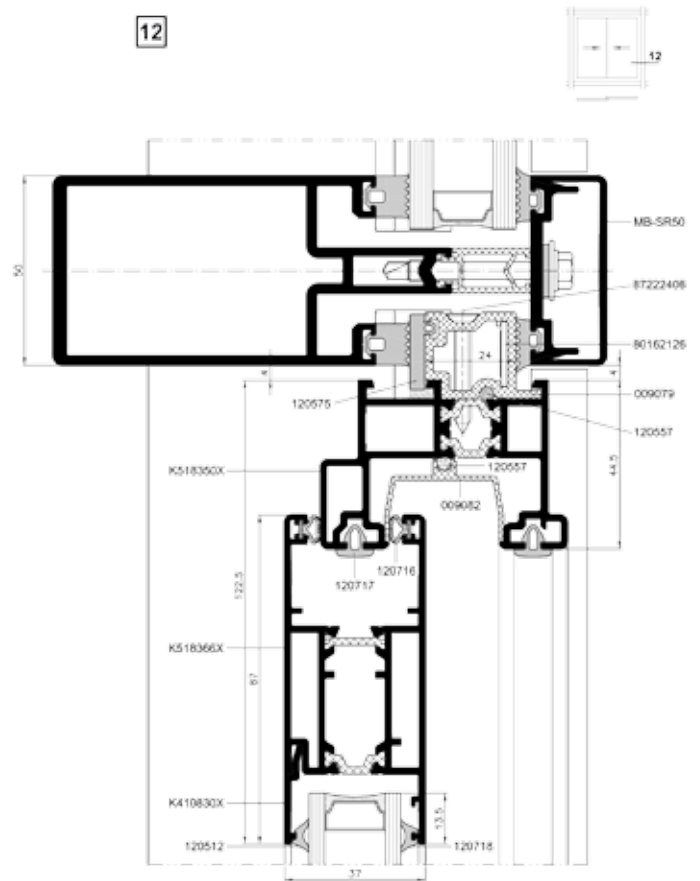


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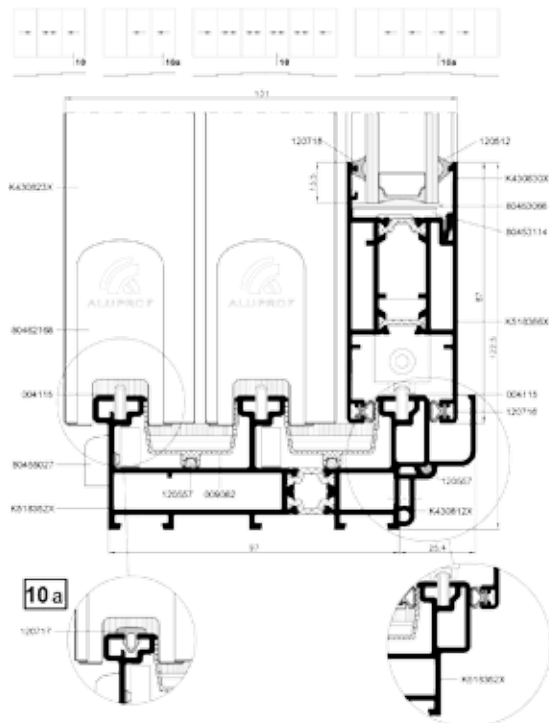
Cross-section of door in MB-SR50

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Cross-section of door bottom rail

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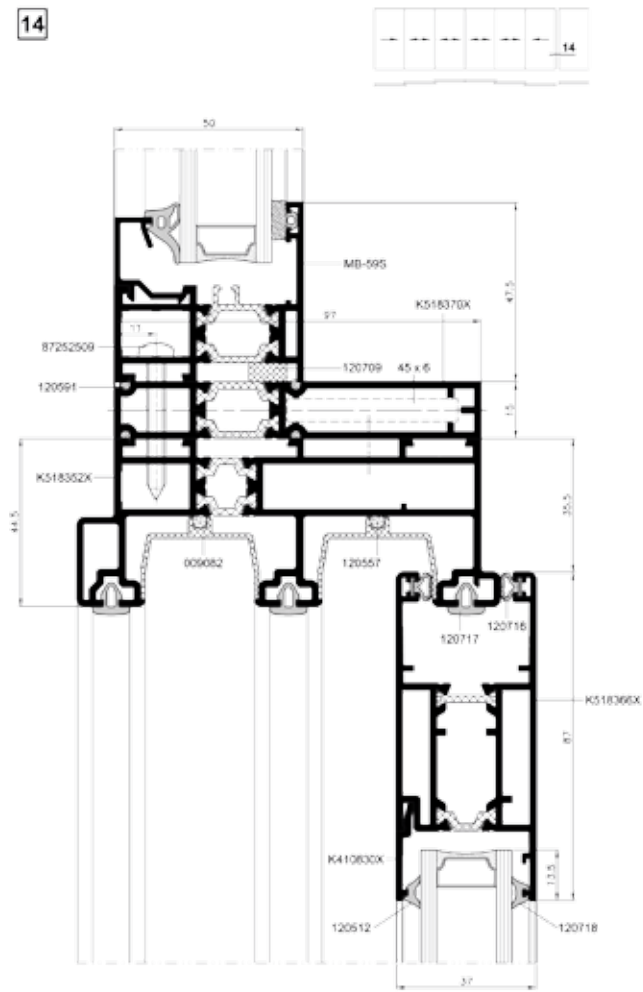


10 a



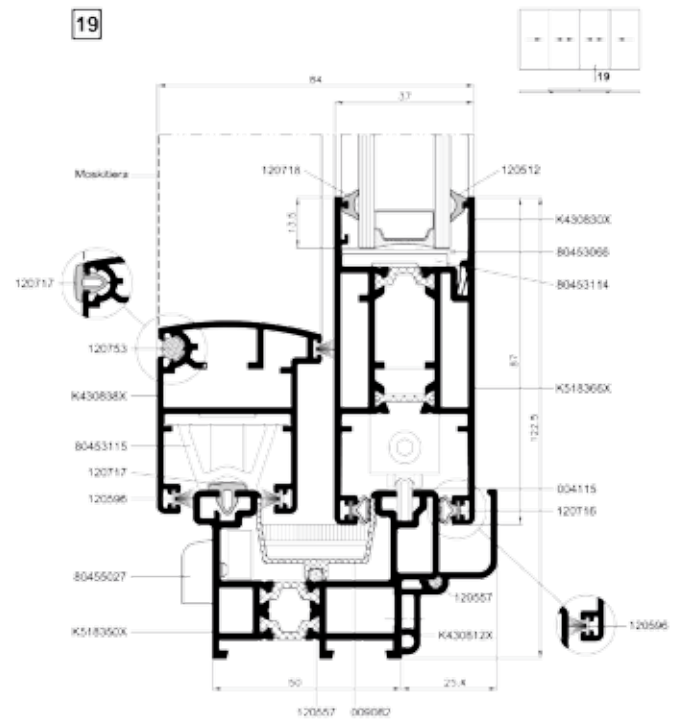
Cross-section of frame connection

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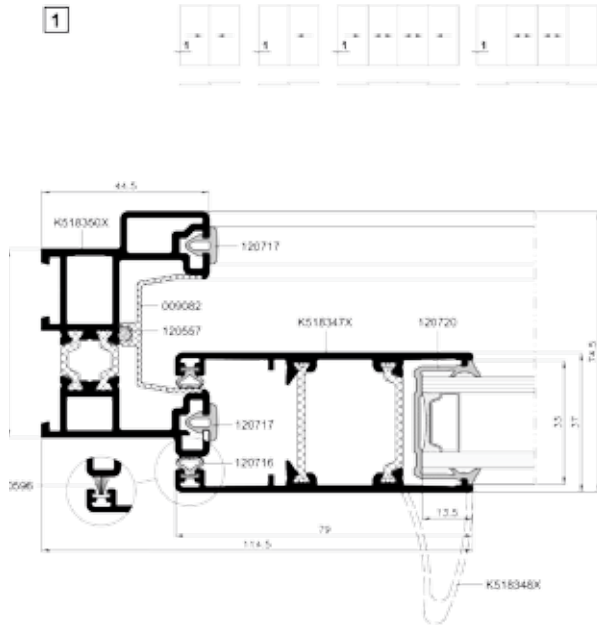
Cross-section of door bottom rail with a mosquito screen

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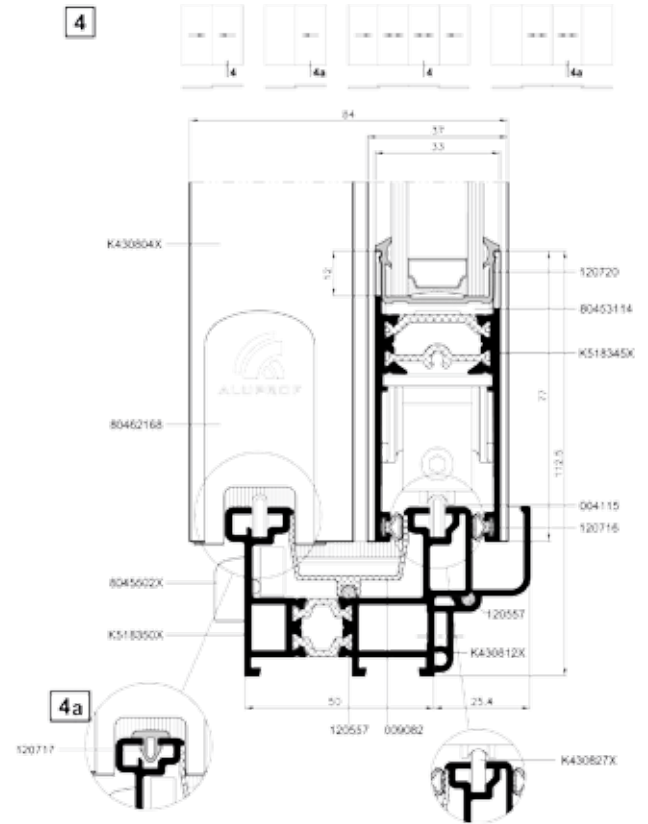


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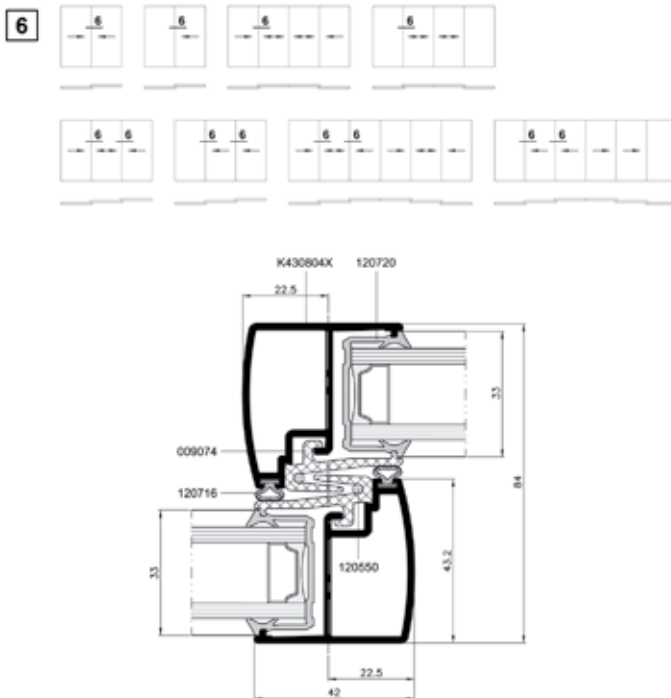
Cross-section of door and window



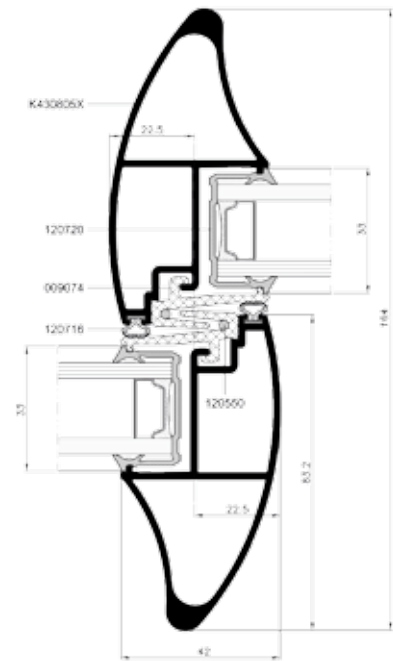
Cross-section of door and window bottom rail



Cross-section of door and window jambs



Cross-section of door jambs



Scale 1:2

FOLDING D O O R S Y S T E M

DOOR & WINDOW SYSTEMS



This engineered system has been designed for aluminium folding doors that require thermal insulation. The system is available in inward opening doors (on the basis of the MB-59S, MB-60, MB-70 systems), as well as outward opening doors (based on the MB-59S Casement system).

Diversity of solutions

The basic profiles used in the fabrication of folding doors feature a three-chamber design. The section depth of profiles depends on the selected system and ranges from 50 mm (frame), 59 mm (leaf) in the case of the MB-59S and MB-59S Casement systems - to 70 mm and 79 mm respectively in the case of the MB-70. In particular systems various options of doorsills and ways methods of doorsill fixing may be selected. Base systems also make it possible to choose from a selection of different glazing beads (options: Standard, Prestige and Style) as well as different types of gaskets.

Very good thermal and sound performance

Depending on applied underlying system, the construction may fulfill the requirements of thermal protection for building. Gaskets made from synthetic rubber EPDM guarantee very good thermal insulation of the door leaves and tightness to water and air infiltration. The system also features high sound insulation performance. The value of coefficient R_w depends, above all, on the applied profiles and glass panels.

High tightness to water and air infiltrations

Due to the application of window profiles and special EPDM gaskets, the tightness of folding doors is the same as of active windows of the system they are based on. Every system in external development must be equipped with efficient water deflection and ventilation system in the glass chamber and the space between the leaf and the frame. Ventilation and drainage holes are protected from the outside with plastic shields.

Freedom of hardware selection

Frame and leaf profiles are equipped with moulded grooves of the dimensions suitable to accommodate multi-point security locking hardware and connecting members compliant with the EURO standard. Folding doors are fitted with well-proven Roto hardware: Roto Patio 6080 (folding leaves and active leaf) and ALU 540i (active tilt and turn leaf). The guide rail may be mounted either on the upper frame profile (top hung) or at the doorsill (bottom hung).

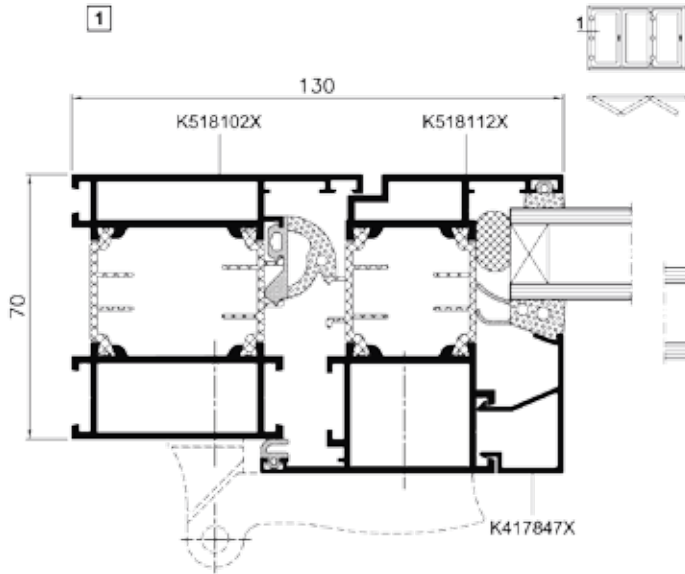
Large allowable dimensions functionality of the construction

The length of the guide rail, which predetermines the total width of the door may be up to 6000 mm. The leaf weight mounted on ROTO PATIO 6080 hardware may be up to 80 kg (active leaf). The width of an active leaf: maximum 1230, of a folding leaf: maximum 930 mm. The maximum height of leaves is 2430 mm. Allowable weight of an active tilt and turn leaf mounted on Roto ALU 540i fittings is 130 kg and its dimensions may be as follows: maximum width: 1600 mm and maximum height: 2400 mm.

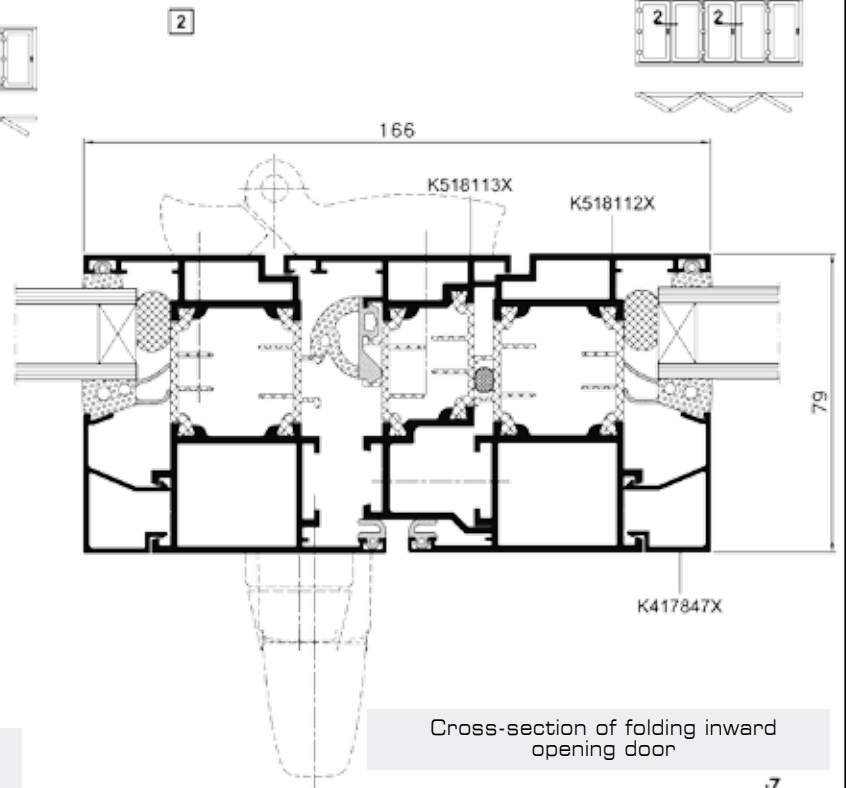
Wide glazing range

The construction, depending on the applied base system makes it possible to apply glass panels and glazing units ranging from 4.5 mm (MB-59S) to 60 mm (MB-70).

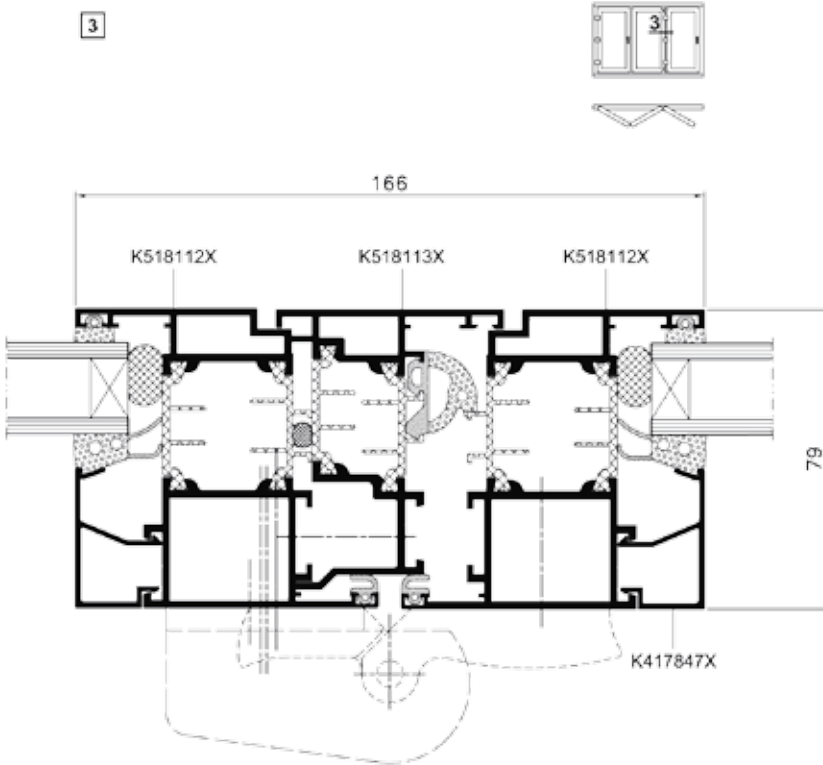
Cross-section of folding inward opening door



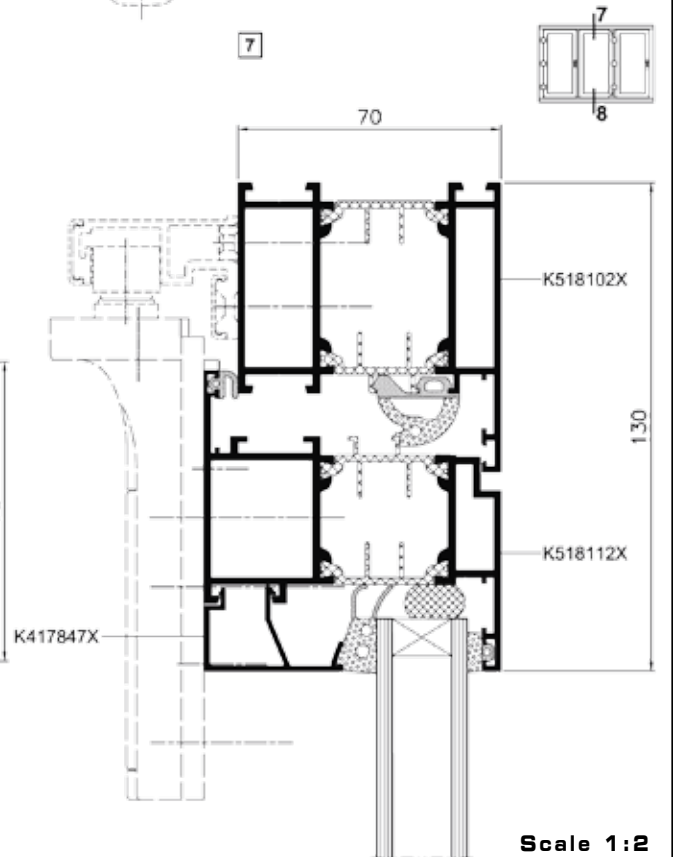
Cross-section of folding inward opening door



Cross-section of folding inward opening door



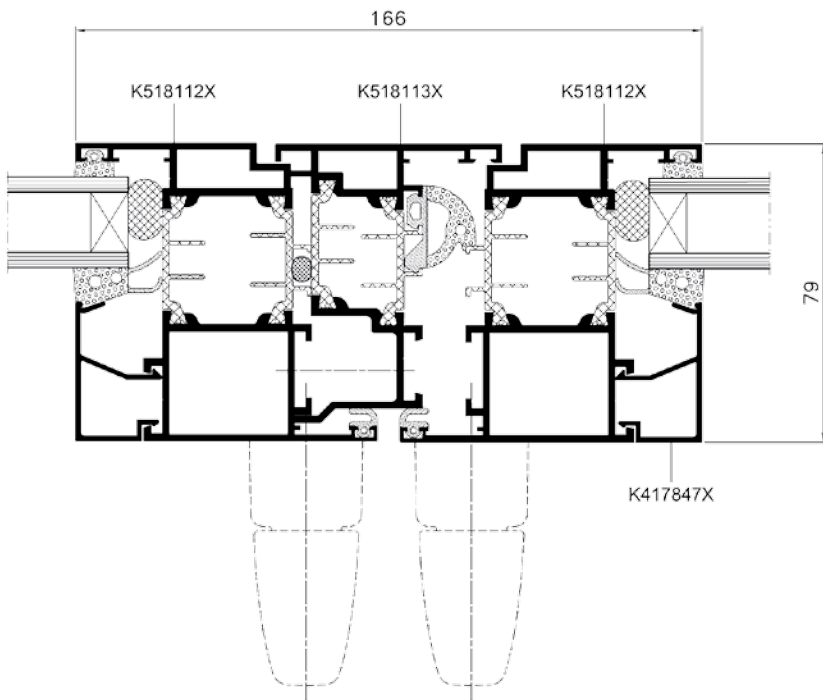
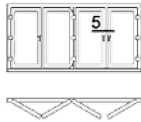
Cross-section of folding inward opening door



Scale 1:2

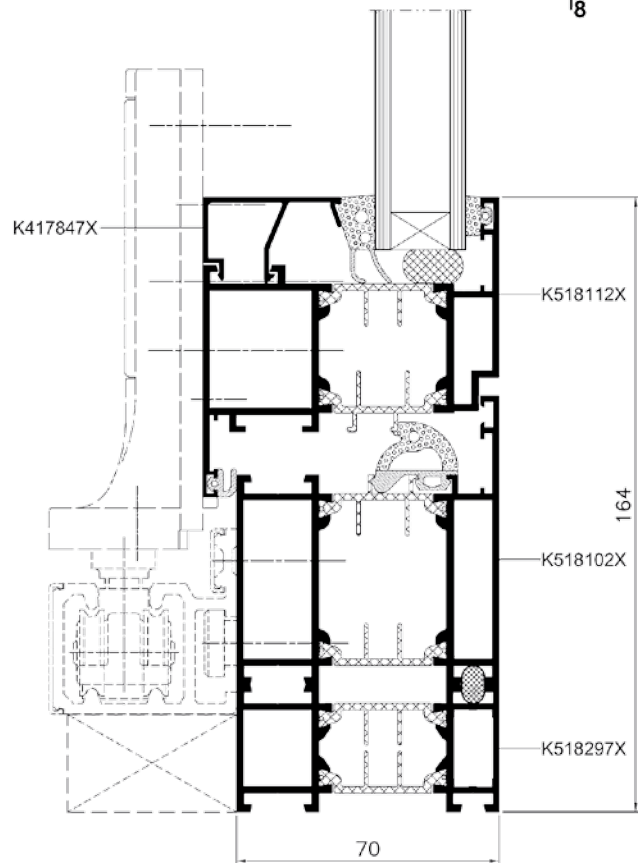
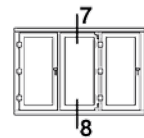
Cross-section of folding inward opening door

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Cross-section of folding inward opening door

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Scale 1:2