ALU

Thermally insulated fire door system **AS 75EI**

aluron
ALUMINIUM SYSTEMS

AS 75EI SYSTEM

Thermally insulated fire door

The three-chamber AS 75 EI system is intended for constructing thermally insulated internal and external doors with fire resistance class EI 30 and EI 60. The system ensures full optimisation of the profiles thanks to the use of the same sections and accessories as in the case of the classic AS 75 window and door system.

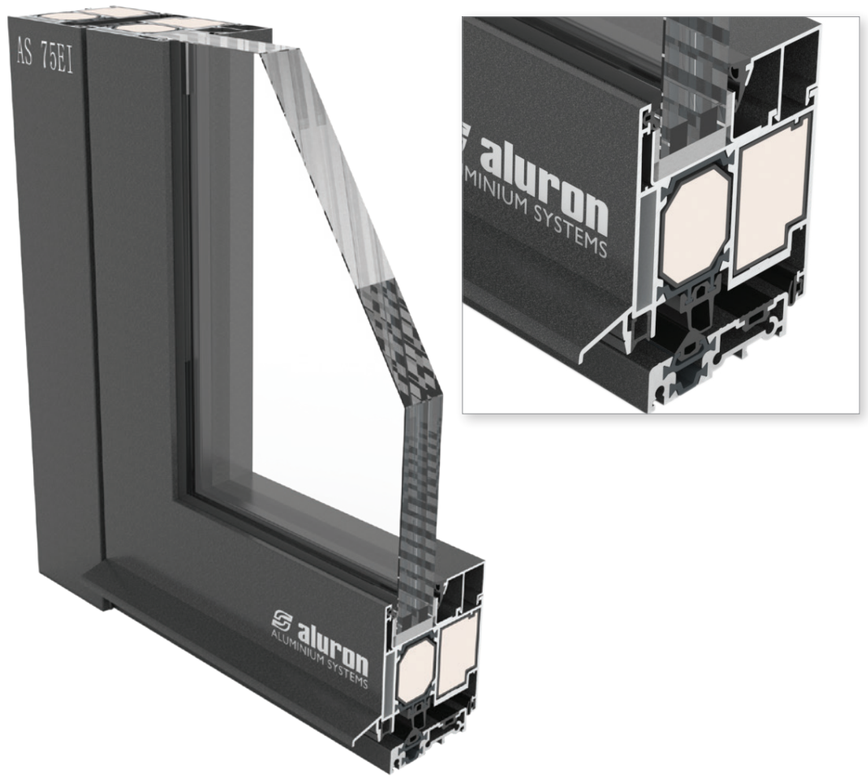
The solutions include multi-variant single- and double-chamber glass panes of the Vetrotech Saint-Gobain company, and surface door fittings of well-known brands: Wala, Master, Dr Hahn, Wilka, MC Aluhard, Eco Schulte, and Geze. The system allows for constructing outwards and inwards opening doors.

CE CERTIFIED

Ud > 1,2 W/(m²K)

EI 30

EI 60



DESIGN POSSIBILITIES OF THE SYSTEM:

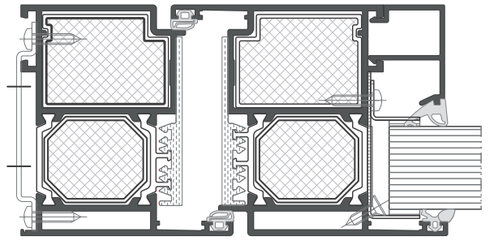
- The system can be equipped with fanlights with max. dimensions 2740 x 1557 mm (width x height).
- The system can be equipped with sidelights with max. dimensions 1592 x 2588 mm (width x height).
- Possibility of using a warm opaque panel in doors.
- Possibility of installation in showcase structures, AS 75EI walls and plasterboard walls.
- Possibility to create a technical window.
- Possibility to create the fire-resistant walls in EI 30 class – according to **National Technical Assessment**.

ASSEMBLY FACILITATION IN THE AS 75EI SYSTEM:

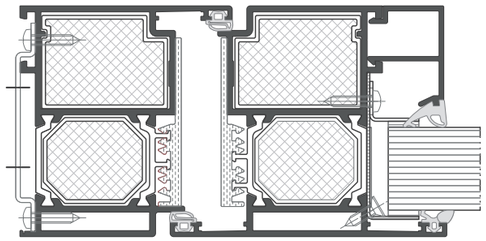
- One-sided glazing as in typical door systems. Clip assembly on the inside.
- Possibility to choose the position of the glass pane relative to the sash axis - the so-called central glazing.
- Innovative Perliterm fireproof inserts shaped to match the chambers of aluminium profiles.
- Company-owned expanding gaskets attached to thermal spacers, eliminating the problem of gaskets unsticking.
- Adjustable system angle brackets for fixing the glass, facilitating the glazing of glass panes units of various thicknesses.
- In case of fire, the gaskets completely fill the working space and do not blow out.

European Funds Smart Growth
Republic of Poland
NCBR National Centre for Research and Development
European Union European Regional Development Fund

TECHNICAL DRAWINGS OF THE AS 75EI SYSTEM

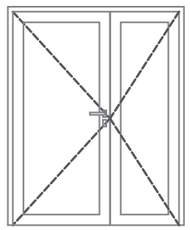


Cross-section of the door opening inwards – EI 60 variant



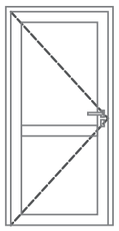
Cross-section of the door opening outwards – EI 60 variant

VARIANTS OF DOOR IN EI 30 AND EI 60 CLASS

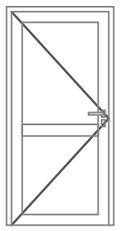


Double-leaf door opening inwards

Double-leaf door opening outwards

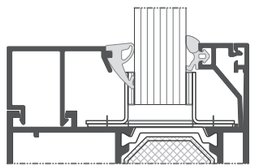


Single-leaf door opening inwards

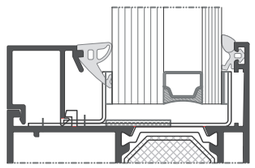


Single-leaf door opening outwards

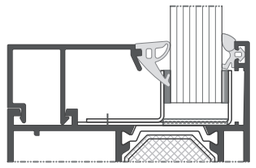
POSSIBLE VARIANTS OF THE GLASS POSITION IN RELATION TO THE AXIS OF THE LEAF PROFILE



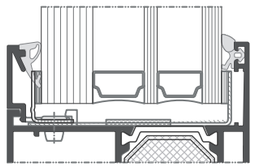
Available only in EI 30 class



Available in EI 30 and EI 60 class

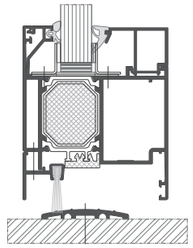


Available in EI 30 and EI 60 class

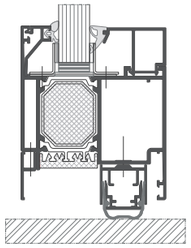


Available only in EI 30 class

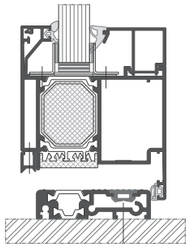
EI 30 THRESHOLD VARIANTS



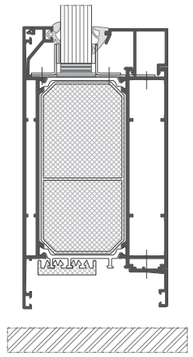
Bottom section with brush seal



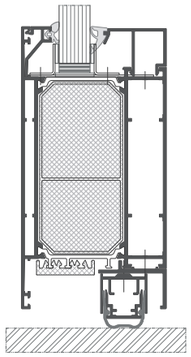
Bottom section with falling threshold



Bottom section with threshold

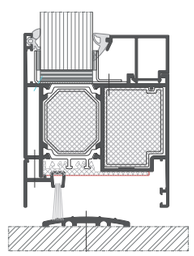


Bottom section with kick-plate

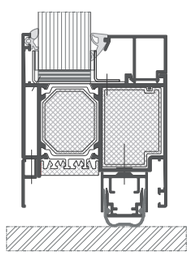


Bottom section with kick-plate and falling threshold

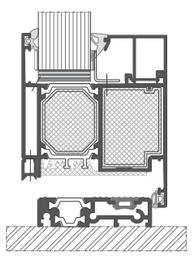
EI 60 THRESHOLD VARIANTS



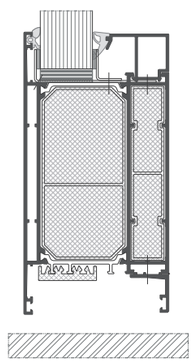
Bottom section with brush seal



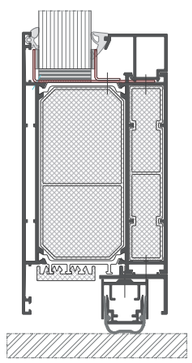
Bottom section with falling threshold



Bottom section with threshold



Bottom section with kick-plate

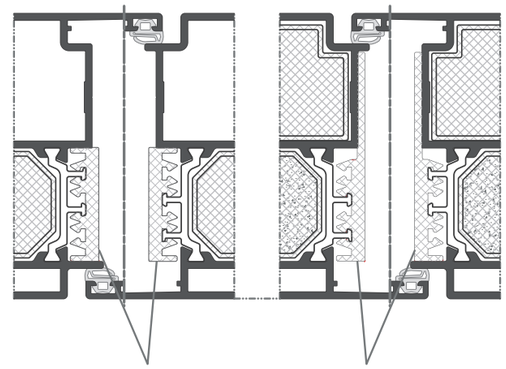


Bottom section with kick-plate and falling threshold

DOUBLE-FUNCTION THERMO-EXPANDABLE GASKETS:

EI 30 thermo-expandable gasket

EI 60 thermo-expandable gasket



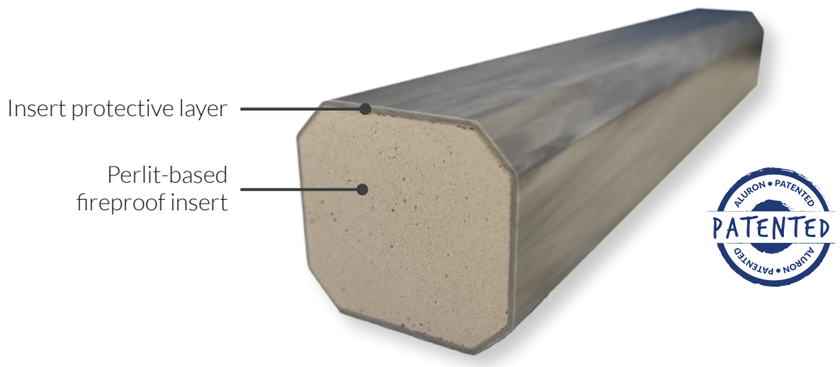
Door seal – EI 30 class

Door seal – EI 60 class

PERLITERM

Innovative fireproof inserts

Aluron has created and patented modern fireproof inserts, which shape is adapted to the chambers of aluminium profiles. These are the first inserts of this type made of perlite - a natural and exceptionally durable rock of volcanic origin, which after extraction is crushed and ground to form ore. The inserts consist of: fireproof filling based on perlite and a plastic matrix.



Advantages of the PERLTERM fireproof inserts

- Characterized excellent fire protection properties, and cooling properties.
- Easy prefabrication by adjusting the shape of the insert to the profile chambers.
- Lighter than typical gypsum inserts, which reduces the weight of the entire structure.
- Mechanical durability - resistant to cracks and breaks.
- Plastic matrix, in which the fireproof filling is located, ensures clean processing and storage of inserts.
- Improvement of thermal insulation of the entire structure.
- First solution on the market that eliminates the dusting problem typical of gypsum inserts.

PARAMETRY TECHNICZNE

The AS 75EI fire protection door has been tested by the Building Research Institute, which confirmed the very high performance parameters of the entire structure.

from 1,2 W/m²K	EI 30 and EI 60 class	Sa, Sm class	7A class
Thermal insulation Ud	Fire resistance	Smoke-proof	Watertightness
2 class	C2 class	75 mm	2500 mm
Air permeability	Wind load resistance	Door profile depth	Max. leaf height for class EI 60
2800 mm	1320 mm	220 kg	15 mm, 16 mm
Max. leaf height for class EI 30	Max. leaf width	Max. leaf weight	Thickness of a single pane in the door EI 30
27 mm	34-56 mm	4800 mm	4000 mm
Thickness of a single pane in the door EI 30	Range of thickness of glazing units in EI 30 and EI 60 doors	Max. height of fire walls EI 30 based on AS 75EI	Max. height of fire walls EI 60 based on AS 75EI

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