
aliplast
aluminium systems
ALUMINIUM SYSTEMS APPLIED
IN THE BUILDING INDUSTRIES

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www.aliplast.pl

ALUMINIUM SYSTEMS & PROFILES
APPLIED IN THE BUILDING INDUSTRIES

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ABOUT COMPANY

Aliplast is a leading manufacturer of aluminium systems for the construction industry on the European market. In its business, the company focuses on design and distribution of architectural profile systems (together with accessories) and provision of powder coating and arc bending services.

Aliplast was established in 2002 in partnership with Aliplast Group based in Belgium, which has been manufacturing aluminium systems since 1984. As a result of the established company, it was possible to create a distribution network and a production line of Aliplast aluminium systems in Poland.

Since the beginning, Aliplast Poland has been relaying on expansive development, with the highest quality of the offered products and development of new solutions for aluminium profile systems. Sales dynamics, an ever-expanding list of costumers from Poland and Europe, innovation and high quality of the offered products – all these have been recognised on the market. Aliplast has received many honourable mentions and awards granted by industry and business organisations.

Offer of **ALIPLAST** aluminium systems:

- windows
- doors
- sliding
- folding
- curtain walls
- fireproof systems
- wintergarden systems

CORIALIS

core innovative aluminium integrated solutions

Aliplast Sp. z o.o. (segment of aluminium systems) and **Aliplast Aluminium Extrusion (aluminium profile pressing plant)** are included the international group – **CORIALIS** – supplying comprehensive solutions as regards design engineering, manufacturing, fabrication and decoration of aluminium profiles.

CORIALIS Core Innovative Aluminium Integrated Solutions is an international group gathering the following companies: Aliplast Aluminium Systems Belgium, Profils Systemes France, Smart System UK, Aliplast Aluminium Systems and Aliplast Extrusion Poland, JMD Systems, Lingote Aluminios in Portugal.

CERTIFICATION

Aluminium systems offered by Aliplast both in Poland and countries, which are included in the distribution, are accompanied by documents of approval for use in the construction industry. Technical approvals, hygiene certificates, ITT testing confirm high parameters of Aliplast products in accordance with European standards.

SOFTWARE

AliCAD is a software used to create commercial offers for customers, generate production lists, profile cutting/ shape/ dimension/ infill type specifications and material orders. The software is constantly being developed and supplemented with new technical solutions added to Aliplast offer.

TECHNICAL SUPPORT

Practical and theoretical training covering design and construction aspects associated with Aliplast aluminium systems, software training, product training, practical training is provided at the R&D Training Centre at Aliplast.

The training centre is equipped with a KS Schulten test chamber which is used to verify gap and strength parameters of window and door joinery as well as lightweight curtain walls as regards air infiltration, water tightness and wind load resistance. The test chamber is also referred to as AWW chamber (Air - Wind - Water). The test wall is used for products with the maximum dimensions of 6 m x 6 m. The AWW chamber is controlled via KS Software with programming and sequencing capability relating to individual test cycles in accordance with European standards for window-door and facade structures.
Our own testing laboratory offers us the possibility of controlling and supervising all processes affecting the quality of aluminium systems to be designed.
Aliplast has concluded an agreement with IFT Rosenheim testing laboratory in order to perform tests followed by certificates issued by IFT Rosenheim.

DEVELOPMENT

Close cooperation between development departments of the international group of Corialis ensures continuous exchange of experience, new improved structural solutions and continuous extension of the offer of Aliplast aluminium systems.

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POWDER COATING

Aliplast has two of the most technologically advanced vertical powder coating lines in Poland, two horizontal coating lines and one for painting small accessories. The modern powder coating technology and advanced machine park allow for keeping the higher quality products that meet the quality standards and the highest customer requirements. Own laboratory provides current control of surface preparation process before coating.

Production process is continously checked by our experienced staff, in compliance with European standards: Qualicoat (licence number: 1518) and QUALIDECO (licence number: PL- 0001).

VERTICAL PAINTING LINE

- 200 mm x 100 mm x 7500 mm,
- fully automated,
- production line capacity: 600-800 m² per hour,
- modern and environmentally friendly

VERTICAL PAINTING LINE

- 200 mm x 100 mm x 7000 mm,
- fully automated,
- production line capacity: 1000 m² per hour,
- modern and environmentally friendly

HORIZONTAL PAINTING LINE

- 300 mm x 2000 mm x 7000 mm,
- fully automated,
- production line capacity: 360 m² per hour

MANUAL PAINTING LINE

- horizontal, manual painting line dedicated to accesories

WOOD COLOUR

- Aliplast Wood Colour Effect (automatic horizontal line for aluminium decoration), imitating wood structure

ANODISING (QUALANOD 1808)

Aliplast has completed the construction of a new production plant with an area of 6 000 m^2 and has launched a new production line (anodising line) for refining of aluminium surfaces.

The Galvatek process line is fully automated. The operating system supports 39 process tanks, including cold-hot sealing baths and four dryers stations which accelerate the production process.

The line is designed for anodising aluminium profiles and components up to 7.2 m length and with a working depth of 2 m. Capacity of the line: up to 1 800 000 m^2/year, anodising thickness:– 5 – 25 microns plus electro-colouring (C31, C32, C33, C34, C35).

Aliplast company has also purchased a fully automated shot blasting machine made by OSMG Italy to give the processed surfaces a homogeneous velvet look. The anodising line, the latest investment of Aliplast company, is the largest anodising line in the Central and Eastern Europe in terms of production capacity.

ADDITIONAL SERVICES

Aliplast is a company that provides comprehensive solutions: from the production of aluminium profiles to mechanical processing and surface treatment.

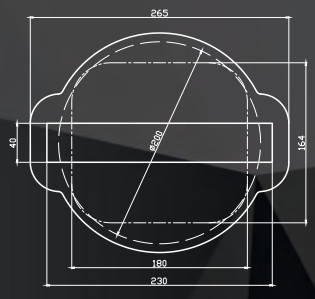
Aliplast has its own fabrication department, systematically expanded and adapted to the Customers' needs. The company invests in a high technological level – state-of-the-art machining centres accelerate and streamline production processes, while maintaining high quality of services.

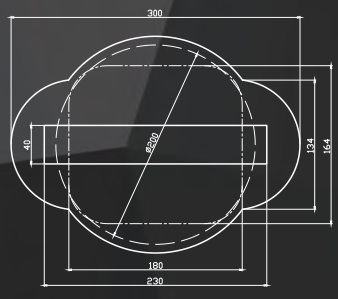
Aliplast offers machining of sections on three- and four-axis machining CNC centres. **The processing range at the CNC centre includes:**

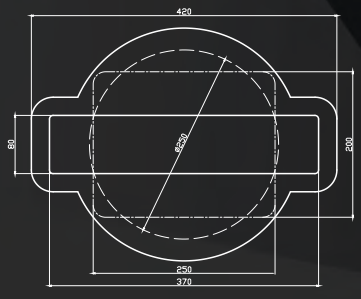
- milling of surfaces and holes
- milling sheets on the Vacuum table
- threading and tapping
- engraving
- drilling
- cutting

PRESS CAPABILITIES

	PRESS 8"	PRESS 8"	PRESS 9"
	Aluminium alloys: EN AW 1050, 6060, 6063, 6005A, 6101		**Aluminium alloysy: EN AW 1050, 6060, 6063, 6005A, 6082, 6101**
pressure:	2 200 T	2 400 T	2 800 T
minimum weight of profile:	0,3 kg/m	0,3 kg/m	0,9 kg/m
maximum width of profile:	230 mm	230 mm	370 mm
standard profile length:	4000 - 7000 mm	4000 - 7000 mm	4000 - 7000 mm
maximum profile length:	7000 mm	14 000 mm	14 000 mm







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SP

- SP i
- SP i+
- SP SU
- SP OUT
- SP 800 i+
- PD SP 800 i+

SUPERIAL

Three-chamber window and door system designed for designing windows, doors with high thermal insulation parameters, installed in residential, public and industrial buildings and structures.

Superial system offers a broad range of window designs: opening and tilting type, opening type, tilting type, tilting and sliding type, rotating type with a vertical and horizontal axle of rotation, and doors (opening outwards and inwards, single or double-wing, glazed, swing doors and sliding doors).

Large number of shapes/profiles in the system allows obtaining desired appearance and structural strength.

The system permits bending of profiles, i.a. window frames, wings and lacings, which allows all kinds of arches and similar designs (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

Superial window system meets the requirements of burglary resistance class RC3 according to norm PN-EN 1627.

Superial system, including subsystems (Superial OUT - outward opening doors, SP SU - hidden wing), offer a broad range of possibilities in external design.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours - selection between RAL palette (Qualicoat 1518), structural colours Aliplast Wood Colour Effect (Qualideco PL-0001), bi-colour and anodized finish (Qualanod 1808).

ALUMINIUM SYSTEMS APPLIED IN THE BUILDING INDUSTRY

WINDOW & DOOR SYSTEMS

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WINDOW & DOOR SYSTEMS

SP

SP i, SP i+, SP SU, SP OUT, SP 800 i+

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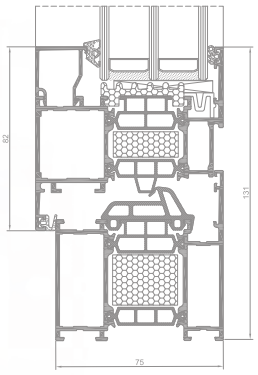
SP i, SP i+

The system is designated for design of windows and doors with high thermal insulation parameters. Available system variants:

- SP i
- SP i+

Improved thermal insulation was obtained by applying special thermal inserts installed between thermal separators and around the glass pane, improving thermal insulation factor coefficients of the profile 0,2-0,4 W/m^{2}K.

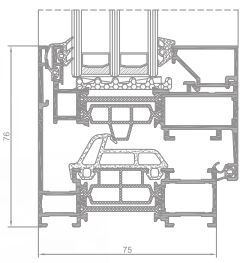
Design of systems SP i, SP i+ is based on proven, extensive and recognized base system Superial.



SP i+ window section

SP SU

System with thermal insulation designed for designing windows with hidden sash, invisible from the outside. Specially designed shape of the frame hides the full height of sash profile.
SP SU system is the system preferred by designers, as it allows "hiding" windows in aluminium and glass structure.
The system is also available in a thermal version SP SU i.

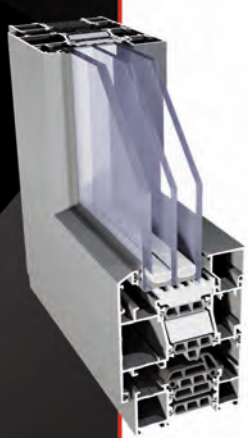


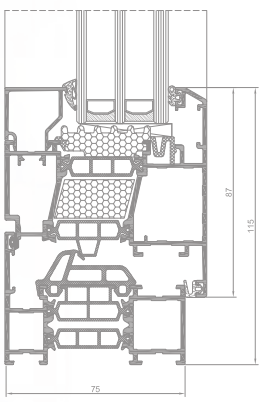
SP SU i window section

SP OUT (Superial Outward)

Window system which allows designing windows tilting and opening outwards. Superial OUT features faced internal surface of the frame and the wing. Such windows allow full use of the space inside the building. Available system variants:

- **SP OUT i** variant with additional thermal insulation, at the profile-glass interface.
- **SP OUT i+** variant with additional thermal insulation in the space between thermal separators.





SP OUT i+ window section

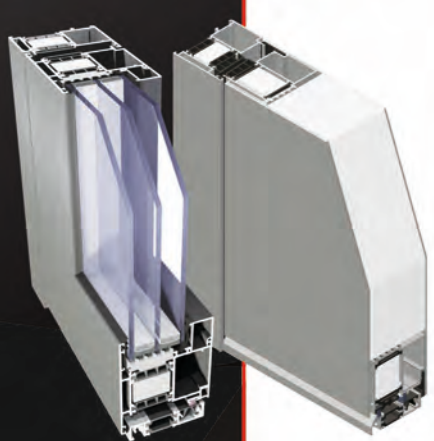
SP 800 / SP 800 i+ PANEL DOOR

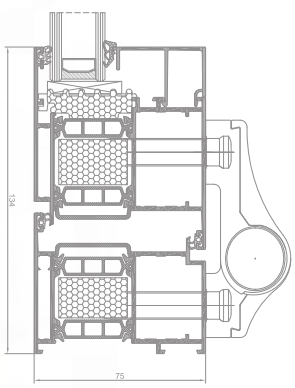
Three-chamber system designed for designing door with improved thermal insulation power. Available system variants:

- SP 800 i
- SP 800 i+

Improved thermal insulation was obtained by applying special thermal inserts installed between thermal separators and around the glass pane, improving thermal insulation factor coefficients of the profile 0,2-0,4 W/m^{2}K.

Thermally insulated aluminium system designed for the design of single-leaf panel doors. **SP 800 i+ panel door system** is a solution based on the SP 800 i+ door system; it is characterized by very good thermal insulation and new sealing solutions.
The system is compatible with the SUPERIAL system. The door leaf is adapted to the most common panel glued on both sides.





SP 800 i+ door section

SUPERIAL

SP i, SP i+, SP SU, SP OUT, SP 800 i+, PD SP 800 i+

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEAP OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
SP i+ **Superial i+** window system	aluminium / polyamid	75 mm	84 mm	14-61 mm	single and double doors, outside opening, inside opening	———
SP OUT **Superial Outward** window system	aluminium / polyamid	75 mm	84 mm	max 50 mm	outward opening	———
SP SU **Superial SU** window system	aluminium / polyamid	75 mm	78 mm	14-51 mm	hidden sash	———
SP 800 **Superial 800** door system	aluminium / polyamid	75 mm	75 mm	14-61 mm	———	single and double doors, outside opening, inside opening, panic door
SP 800 i+ **Superial 800 i+** door system	aluminium / polyamid	75 mm	75 mm	14-61 mm	———	single and double doors, outside opening, inside opening, panic door
PD SP 800 i+ **Superial 800 i+ panel door** door system	aluminium / polyamid	75 mm	75,5 mm	———	———	tilt

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
SP	Uf from 1,41 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1950; EN 12208
SP i+	Uf from 1,08 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1950; EN 12208
SP OUT	Uf from 1,65 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208
SP OUT i+	Uf from 1,41 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208
SP SU	Uf from 1,48 W/m^{2}K	Class 4; EN 12207	Class C5; EN 12210	Class E900; EN 12208
SP SU i	Uf from 1,12 W/m^{2}K	Class 4; EN 12207	Class C5; EN 12210	Class E900; EN 12208
SP 800	Uf from 1,61 W/m^{2}K	Class 4; EN 12207	Class CE 2400; EN 12210	Class 8A; EN 12208
SP 800 i+	Uf from 1,36 W/m^{2}K	Class 4; EN 12207	Class CE 2400; EN 12210	Class 8A; EN 12208
PD SP 800 i+	Uf from 1,60 W/m^{2}K	Class 4; EN 12207	Class C5 (2000 Pa); EN 12210	Class 8A (450 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

- The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.
- The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- The wind load resistance is a measure of the profile's structural strenght and is tested by applying increasing levels of air pressure to simulate the wind force. There are up to five levels of wind resistance (1 to 5) and three deflection classes (A, B, C). The higher the number, the better the performance.
- The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.

WINDOW AND DOOR SYSTEMS

SP i+

SUPERIAL i+

Window and door systems with high thermal insulation. The system allows the designing modern window solutions in multiple variants. It is used in the design of residential and public buildings.

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SP i+

The system is designed for designing windows, doors and shop windows with high thermal insulation parameters.

A high thermal insulation power was achieved by applying special thermal inserts between thermal separators and around the glass pane. Available options: SP, SP i, SP i+.

Large number of shapes in the system guarantees the obtained desired appearance and structural strength.

The option of installing windows in facade systems.

Glazing strips available in a rectangular and circular variant.

The shapes of profiles suitable for the installation of various peripheral hardware, including hidden hinges and PCV hardware.

A broad range of glazing allows using all types of single and double cavity, acoustic and anti-burglary glass panes.

Profile drainage in two variants: traditional and hidden.

The option of bending profiles (detailed specification of profiles and the detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

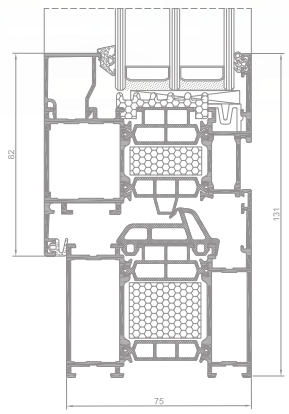
The available option of a low lintel in single or double wing rectangular balcony door (designs using dedicated profiles); in addition structural tightness was improved thanks to the application of ACRS461 gasket.

The system is designed for use in residential and public buildings, and also allows designing modern window solutions in multiple variants.

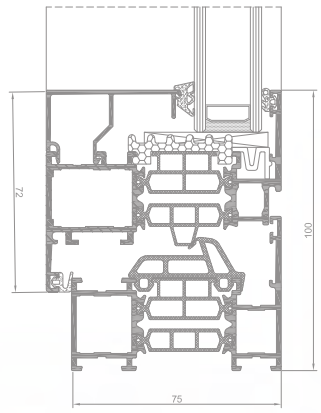
The design of systems SP i, SP i+ is based on a proven, extensive and recognized base system Superial.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

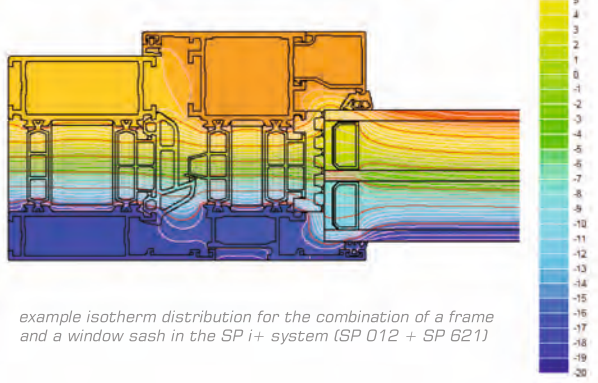
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



SP i+ section



SP i window section



example isotherm distribution for the combination of a frame and a window sash in the SP i+ system (SP 012 + SP 621)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
SP	aluminium / polyamid	75 mm	84 mm	14-61 mm	single and double windows, outside opening, inside opening	———
SP i+	aluminium / polyamid	75 mm	84 mm	14-61 mm	single and double windows, outside opening, inside opening	———

PERFORMANCE

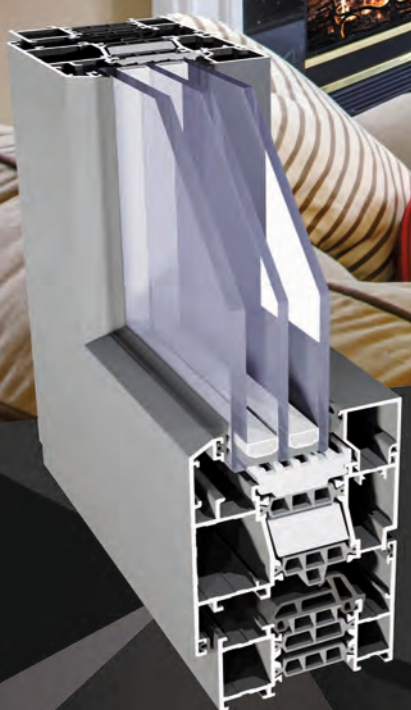
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
SP	Uf from 1,41 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1950; EN 12208
SP i+	Uf from 1,08 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1950; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

SP OUT

SUPERIAL OUT



A three-chamber window system with thermal insulation designed for tilt-out and turn-out windows.

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SP OUT

System Superial OUT is designed for tilt out and turn out windows.

The system Superial OUT features a faced internal surface of the frame and the sash.

The system Superial OUT is fully compatible with the window system Superial (they share system elements: connectors, gaskets, glazing strips).

Turn-out windows can be fitted with two types of hinges: rotating hinges or scissor hinges; window hardware used allows tilting the top or the bottom of the window outwards; option of a turn-out window with the stop limit.

Turn-out windows can be fitted with two types of hinges: rotating hinges or scissor hinges.

An available option of integrating windows with walls by using a reversing profile.

Maximum dimensions and weights of structures in Superial OUT system:

- *tilt-out windows* - minimum width and height of sash 500 mm, maximum width and height of sash 2000 mm, maximum weight of sash 100 kg for tilt-out windows
- *turn-out windows* - minimum width and height of sash 500 mm, maximum width of sash 1500 mm, height of sash 3000 mm, maximum weight of sash 120 kg for turn-out windows

The system SP OUT is available in the variant with improved thermal insulation power:

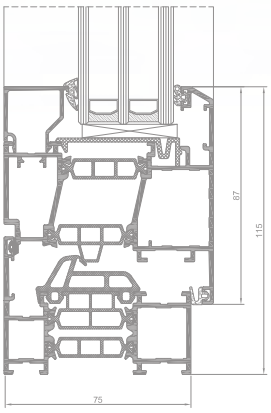
- *SP OUT i* with additional thermal insulation, at the profile-glass interface
- *SP OUT i+* with additional thermal insulation between thermal spacers

This system is very popular in Nordic countries and on The British Isles. Perfectly matching old and stylized manor houses, wood cabins or simple Scandinavian type houses. Shutters are often used with such windows.

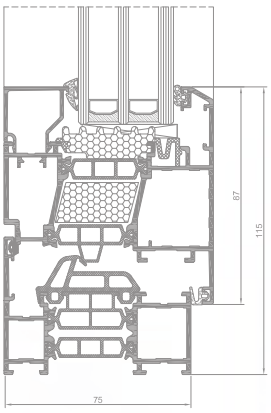
There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

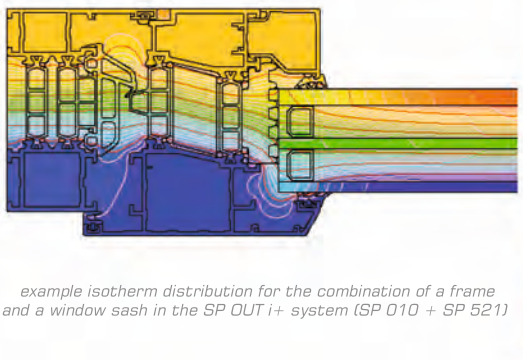
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



SP OUT window section



SP OUT i+ window section



example isotherm distribution for the combination of a frame and a window sash in the SP OUT i+ system (SP 010 + SP 521)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
SP OUT	aluminium / polyamid	75 mm	84 mm	max 61 mm	outward	———
SP OUT i+	aluminium / polyamid	75 mm	84 mm	max 61 mm	outward	———

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
SP OUT	Uf from 1,65 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208
SP OUT i+	Uf from 1,41 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

SP SU

SUPERIAL SU

A three-chamber window system with thermal insulation designed for windows with a hidden sash, invisible from the outside.

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SP SU

A three-chamber window system with thermal insulation desiged for designing windows with a hidden sash, invisible from the outside.

A specially designed shape of the frame hides the full height of the sash profile.

A wide range of glazing allows using all types of single and double cavity, acoustic and anti-burglary glass panels.

Profile drainage in two variants: traditional and hidden.

An available option of a low threshold in a single wing balcony door (in addition, structural tightness was improved thanks to application of ACSR461 gasket).

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

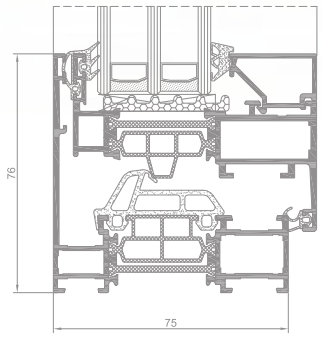
The hidden sash system is the system preferred by designers, as it allows "hiding" windows in aluminium and glass structure. Thanks to the application of this solution opened and fixed window segments look identical from the outside.

The system SP SU is also available in the variant with improved thermal insulation power.

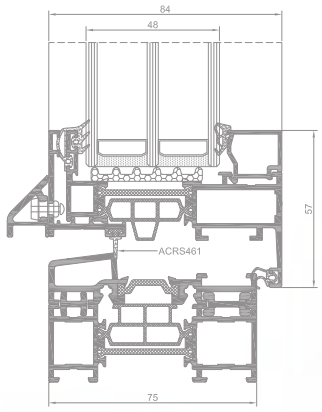
- *SP SU i* z which was achieved by applying thermal insulation under the glass panel.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

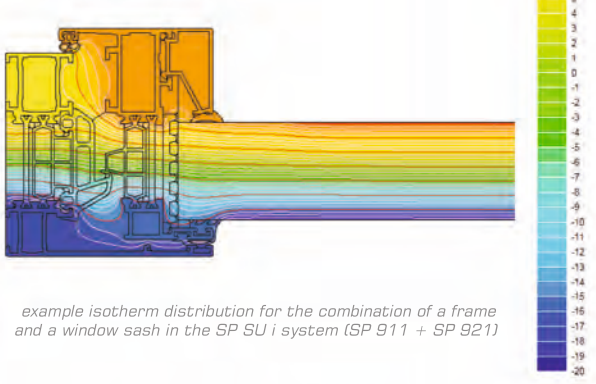
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



SP SU i window section



SP SU i window section



example isotherm distribution for the combination of a frame and a window sash in the SP SU i system (SP 911 + SP 921)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
SP SU	aluminium / polyamid	75 mm	78 mm	14-51 mm	hidden sash	———
SP SU i	aluminium / polyamid	75 mm	78 mm	14-51 mm	hidden sash	———

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
SP SU	Uf from 1,48 W/m^{2}K	Class 4; EN 12207	Class C5; EN 12210	Class E900; EN 12208
SP SU i	Uf from 1,12 W/m^{2}K	Class 4; EN 12207	Class C5; EN 12210	Class E900; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

SP 800 i+

SUPERIAL 800 i+

A door system designed for doors with high thermal insulation parameters.

aliplast
aluminium systems

SP 800 i+

A door system designed for doors with high thermal insulation parameters.

The system is compatible with system the Superial system - thanks to adaptive profiles designs in series SP 800 can be integrated with Superial shop windows.

The system features very good anti-burglary properties (the lock is situated far from the outer side).

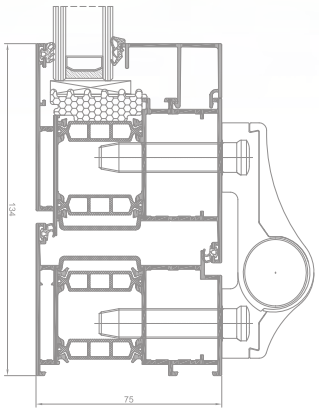
A thermal insulation threshold is used, which can be disassembled following door installation in the frame.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of a profile bending process are available in the customer area of the website www.aliplast.pl).

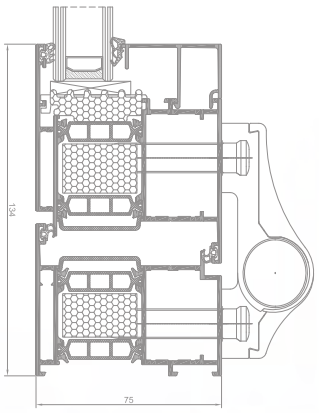
System SP800 is also available in the variant with improved thermal insulation power (SP 800 i, SP 800 i+), which was achieved by applying special thermal inserts slid between thermal separators and around the glass pane. Such a solution improves the insulating power of the profile by 0,2 – 0,5 W/m^{2}K.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects.)

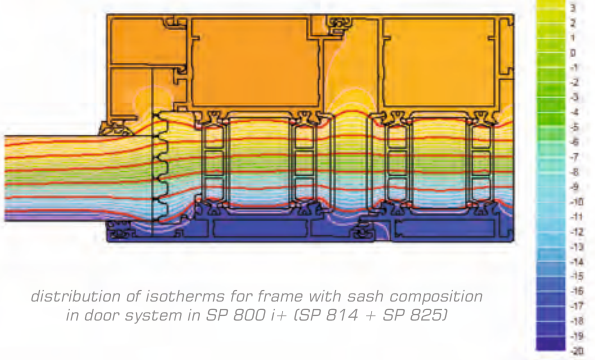
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



SP 800 i door section



SP 800 i+ door section



distribution of isotherms for frame with sash composition in door system in SP 800 i+ (SP 814 + SP 825)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
SP 800	aluminium / polyamid	75 mm	75 mm	14-61 mm	———	single and double doors, outside opening, inside opening, panic doors
SP 800 i+	aluminium / polyamid	75 mm	75 mm	14-61 mm	———	single and double doors, outside opening, inside opening, panic doors

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
SP 800	Uf from 1,61 W/m^{2}K	Class 4; EN 12207	2400 Pa; EN 12210	Class 8A; EN 12208
SP 800 i+	Uf from 1,36 W/m^{2}K	Class 4; EN 12207	2400 Pa; EN 12210	Class 8A; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

PD SP 800 i+

SUPERIAL 800 i+ PANEL DOORS

Thermally insulated aluminium system designed for the design of single-leaf panel doors.

aliplast
aluminium systems

PD SP 800 i+

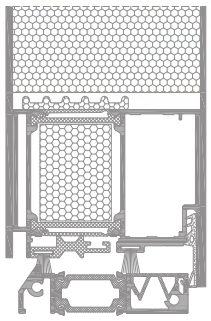
Thermally insulated aluminium system designed for the design of single-leaf panel doors.

SP 800 i+ panel door system is a solution based on the SP 800 i+ door system; it is characterized by very good thermal insulation and new sealing solutions.

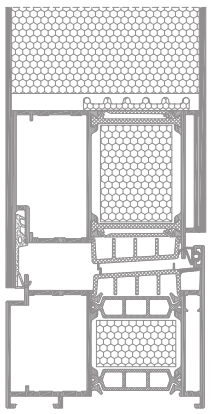
The system is compatible with the SUPERIAL system. The door leaf is adapted to the most common panel glued on both sides.

The filling panels are available in various designs and colours. The techniques for the milling of different shapes, making decorative applications and putting in glass units used in their production provide an endless number of combinations and variants.

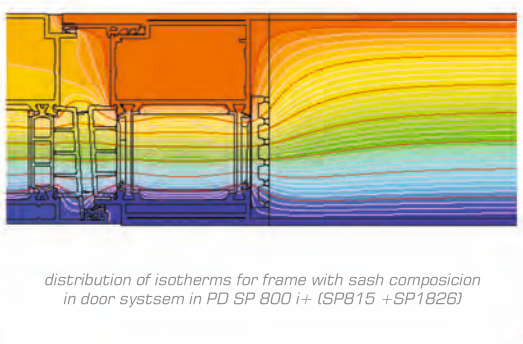
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



PD SP 800 i+ door section



PD SP 800 i+ door section



distribution of isotherms for frame with sash composicion in door systsem in PD SP 800 i+ (SP815 +SP1826)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAŁ	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
PD SP 800 i+	aluminium / polyamid	75 mm /	75,5 mm /	75 mm	———	tilt-turn

PERFORMANCE

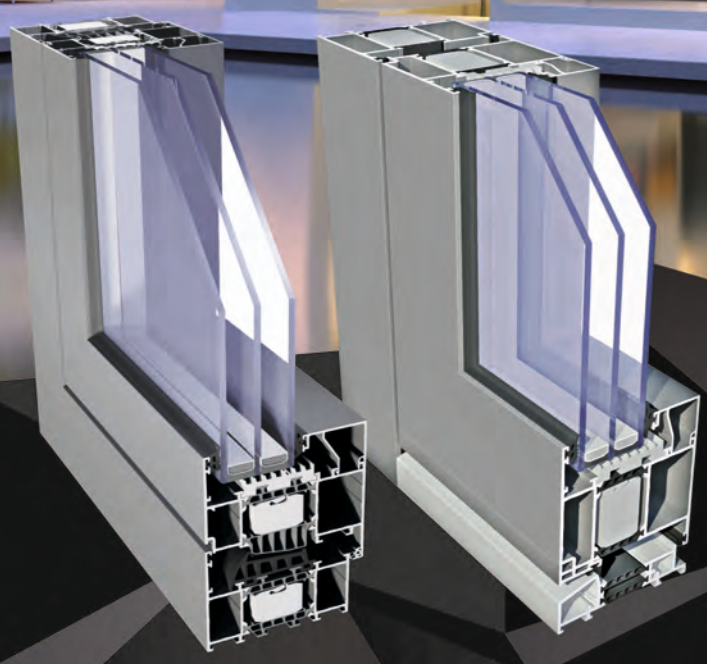
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
PD SP 800 i+	Uf from 1,60 W/m^{2}K	Class 4; EN 12207	C5 (2000 Pa); EN 12210	8A (450 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

GT

STAR



Modern aluminium system for designing windows and doors requiring very good thermal insulation.

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aluminium systems

GT

A modern aluminium system for designing windows and doors requiaring very good thermal insulation.

Thermal separator 45 mm deep, made of solid and proven materials, is an effective thermal barrier.

The same type of insulation insert in the window sash and in the window frame provides continued protection against heat losses of the whole structure.

New standard of profile and glass pane interface - increased depth improves hermal properties and structure of the system.

New type of corner section used preventing collision between the screw and the corner when screwing in surface hardware elements under the PVC groove.

The possibility of adding roller hinge system hardware with very high load bearing capacity.

Innovative drainage system (no visible elements stopping drainage outlets).

The same type of corner and T connector in the external and internal cavity (reduced number of accessories, faster fabrication).

Reduced number of glazing strips and gaskets, while keeping the continuity of glazing depending on package thickness.

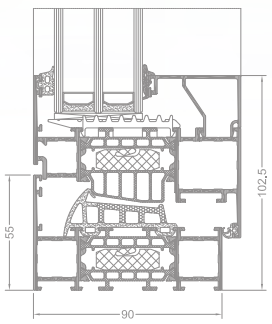
Option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

Modern design.

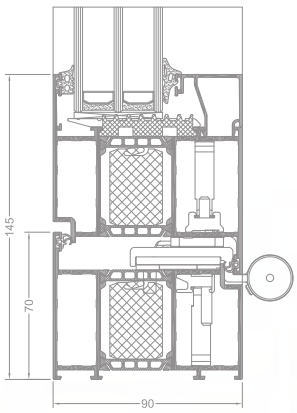
The system is particularly recommended for low energy consumption and thermal insulation retrofitted buildings, and they also improve thermal comfort in standard objects.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

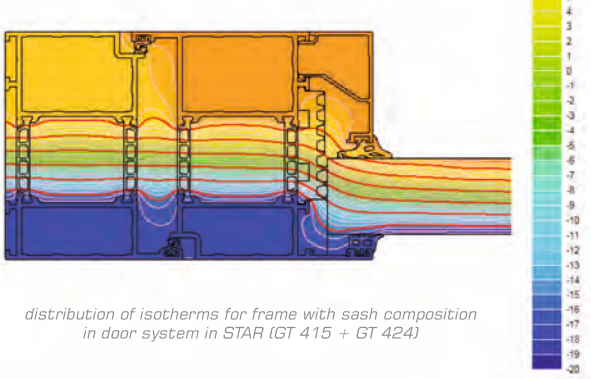
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



STAR window section



STAR door section



distribution of isotherms for frame with sash composition in door system in STAR (GT 415 + GT 424)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
GT window	aluminium / thermal insulation	90 mm	99 mm	fix 14-72 mm ru 23-81 mm	walls, fix, tils and turn	———
GT door	aluminium / thermal insulation	90 mm	99 mm	14-72 mm	———	single and double doors, outside opening, inside opening

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
GT window	Uf from 0,73 W/m^{2}K	Class 4; EN 12207	Class C5; EN 12210	Class E900; EN 12208
GT door	Uf from 1,21 W/m^{2}K	Class 4; EN 12207	Class C5; EN 12210	Class E1350; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

GN 75

GENESIS 75

The modern aluminium system for designing windows and doors requiring very good thermal insulation.

aliplast
aluminium systems

GN 75

The modern aluminium system for designing windows and doors requiring very good thermal insulation.

The Genesis 75 system is based on 75 mm deep sections use to build frames.

Genesis 75 is a system intended for designing windows and doors structures in public access buildings as well as single-family and multi-unit residential buildings.

A wide range of sections/profiles available in the offer of the Genesis 75 system is used to design modern windows, doors and display units that ensure high functionality.

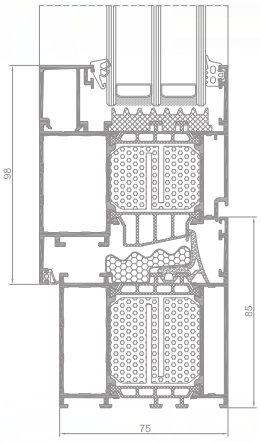
The Genesis 75 system incorporates modern insulation materials that have just been launched onto the market. Apart from a conventional central gasket, an additional thermal gasket has been developed as well. With this solution, it is possible to attain very excellent tightness of windows (air infiltration, water-tightness) as well as innovative appearance and aesthetics.

The system will allow the customer to select various finish options for profiles so that the window structure can be customised.

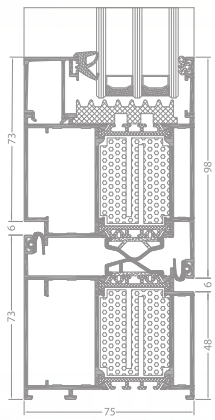
The Genesis 75 system sets a new standard of window thermal performance, with the highest ergonomics of use and modern profile aesthetics maintained.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

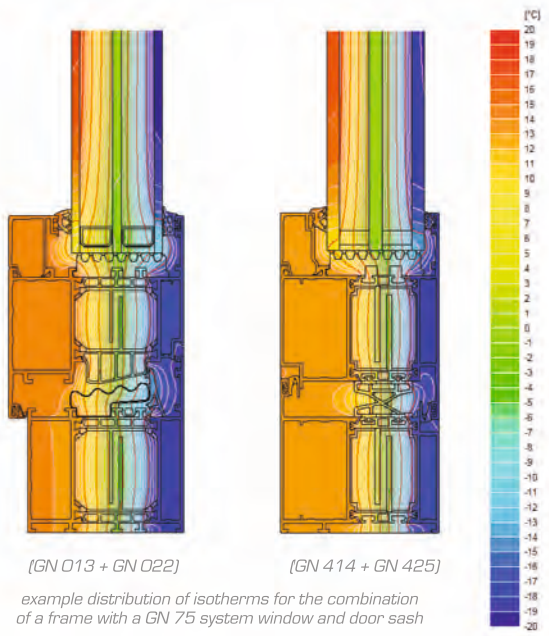
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



GN 75 window section (GN 013 + GN 022)



GN 75 door section (GN 414 + GN 425)



(GN 013 + GN 022) *(GN 414 + GN 425)*

example distribution of isotherms for the combination of a frame with a GN 75 system window and door sash

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
GN 75 window	aluminium / polyamid	75 mm	84 mm	fix 1 - 56 mm window 9 - 65 mm	fix, tilt, turn, tilt and turn	———
GN 75 door	aluminium / polyamid	75 mm	75 mm	1-59 mm	———	single and double doors, outside opening, inside opening, panic door

PERFORMANCE

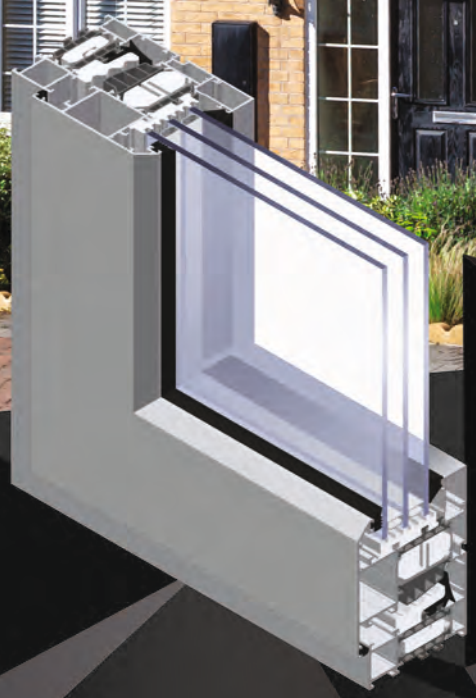
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
GN 75 window	Uf from 0,84 W/m^{2}K	Class 4; EN 12210	C4 (1600 Pa); EN 12210	E1500/E1950* (1950 Pa); EN 12208
GN 75 i+ door	Uf from 1,195 W/m^{2}K	Class 4; EN 12207	C5 (2000 Pa); EN 12210	E1200 (1200 Pa); EN 12208
GN 75 door	Uf from 1,625 W/m^{2}K	Class 4; EN 12207	C5 (2000 Pa); EN 12210	E1200 (1200 Pa); EN 12208

** Thermal performance depends on the combination of profiles and infill thickness.*
** A value of 1950 Pa was obtained during testing.*

WINDOW AND DOOR SYSTEMS

GN OUT

GENESIS OUT



System Genesis OUT is designed for designing tilt out and turn out windows. GN OUT features a faced internal Surface of the frame and the sash.

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GN OUT

System Genesis OUT is designed for designing tilt out and turn out windows.

Genesis OUT features a faced internal Surface of the frame and the sash.

System Genesis OUT is fully compatible with window system Genesis 75 (they share system elements: connectors, gaskets, glazing strips).

Turn out windows can be fitted with two types of hinges: rotating hinges or scissor hinge; window hardware used allows tilting the top or the bottom of the window outwards. Option of turn out window with the limit stop.

The available option of integrating windows with walls by using reversing profile.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

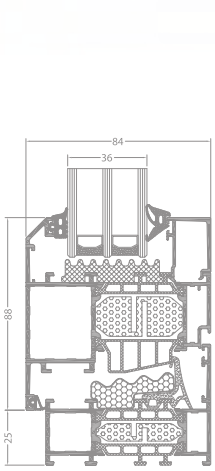
Maximum dimensions and weights of structures in GN OUT system:

- *tilt out windows*: minimum width and height of sash 500 mm, maximum width and height of sash 2000 mm, maximum weight of sash 100 kg for tilt out windows
- *turn out windows*: minimum width and height of sash 500 mm, maximum width of sash 1500 mm, height of sash 3000 mm, maximum weight of sash 120 kg for turn out windows.

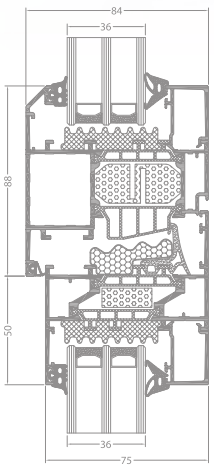
System GN OUT is available in the variant with improved thermal insulation power.
Available options:

- *GENESIS OUT i*
- *GENESIS OUT i+*.

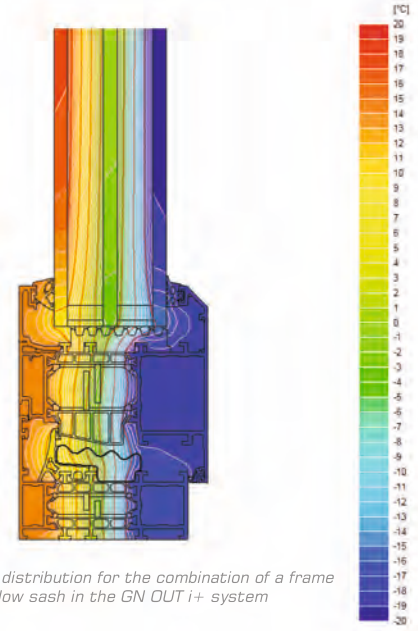
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



GN OUT i+ window section



GN OUT i+ window section



example isotherm distribution for the combination of a frame and a window sash in the GN OUT i+ system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
GN OUT	aluminium / polyamid	75 mm	84 mm	max 59 mm	outward	———

PERFORMANCE

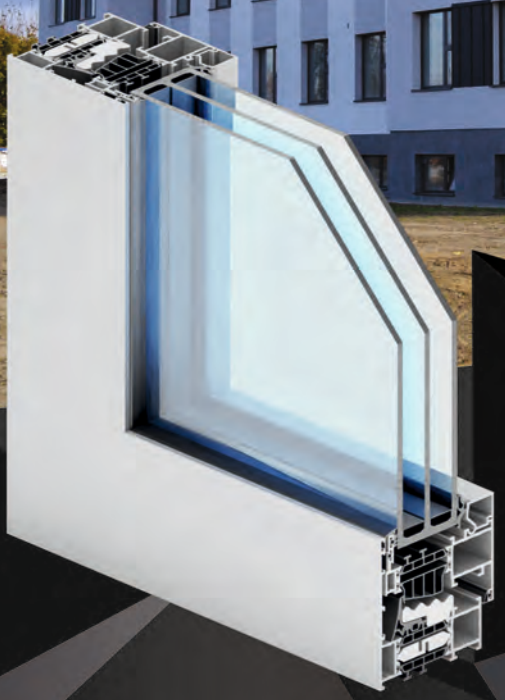
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
GN OUT	Uf from 1,44 W/m^{2}K	Class 4; EN 12210	E2400 Pa; EN 12210	E2400 Pa; EN 12208
GN OUT i	Uf from 1,28 W/m^{2}K	Class 4; EN 12210	E2400 Pa; EN 12210	E2400 Pa; EN 12208
GN OUT i+	Uf from 1,01 W/m^{2}K	Class 4; EN 12210	E2400 Pa; EN 12210	E2400 Pa; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

GN SU

GENESIS SU



The concealed sash system is the solution preferred by designers, enabling "covering of windows" in aluminium-glass structures. With the use of this type of opening solution, openable and fixed lites look identical from the outside.

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aluminium systems

GN SU

The three chamber window system with thermal insulation featuring a specially designed frame shape covering the entire height of the sash profile.

A wide range of glazing allows the use of all types of single and double-chamber, acoustic insulated or anti-burglary window panes.

There are 2 options of movable posts: standard and a narrow post for greater light passage.

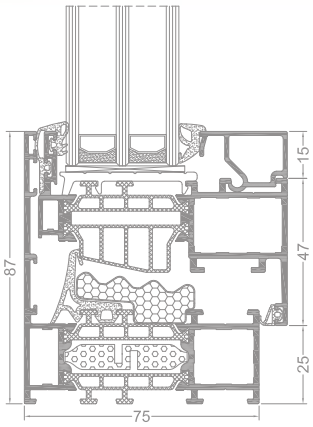
Profile drainage available in two options: traditional and concealed.

Option of profile bending (detailed specification of profiles and details of technical parameters of profile bending – available in the authorised zone at www.aliplast.pl).

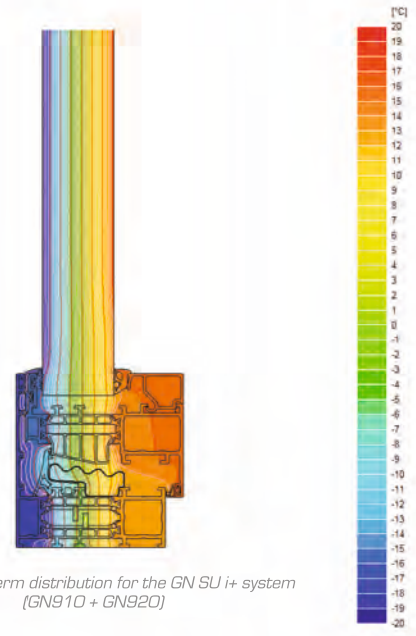
The concealed sash system is the solution preferred by designers, enabling "covering of windows" in aluminium-glass structures. With the use of this type of opening solution, openable and fixed lites look identical from the outside.

Low threshold option available for single and double, rectangular balcony doors (structures with the use of dedicated profiles).

Wide range of colours – RAL palette (Qualicoat 1518), texture colours, Aliplast Wood Colour Effect (wood-like colours), Aliplast Loft View – colours imitating stone surfaces (Qualideco PL-0001), anodised colour (Qualanod 1808), bi-colour.



cross-section of the GN SU i+ window (GN910 + GN920)



example isotherm distribution for the GN SU i+ system (GN910 + GN920)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
GN SU	aluminium / polyamid	75 mm	/ 79,5 mm	/ max 62 mm fixed 59 mm	tilt and turn	———

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
GN SU	Uf from 1,47 W/m^{2}K	Class 4; EN 12207	Class C5 (2000 Pa); EN 12210	Class E1950 (1950 Pa); EN 12208
GN SU i	Uf from 0,82 W/m^{2}K	Class 4; EN 12207	Class C5 (2000 Pa); EN 12210	Class E1950 (1950 Pa); EN 12208
GN SU i+	Uf from 0,79 W/m^{2}K	Class 4; EN 12207	Class C5 (2000 Pa); EN 12210	Class E1950 (1950 Pa); EN 12208

** Thermal insulation performance depends on the combination of profile structures and infill thickness.*

WINDOW AND DOOR SYSTEMS

PD GN 75

GENESIS 75 PANEL DOOR

Thermally insulated aluminium system designed for the design panel doors.

aliplast
aluminium systems

PD GN 75

Thermally insulated aluminium system designed for the design panel doors (Ud from 0,68 W/m^{2}K for the door 1200 x 2100 mm).

Genesis 75 panel door system is a solution based on the Genesis 75 door system; it is characterized by very good thermal insulation and new sealing solutions.

The system is compatible with the Genesis 75 system.

The door leaf is adapted to the most common double bonded panel.

One-sided and two-sided panel possible.

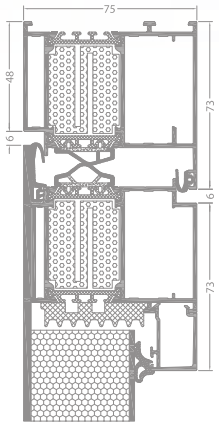
The possibility of using aesthetic door roller hinges and hidden hinges.

Option with and without an aluminium threshold available (the threshold is raised / lowered automatically).

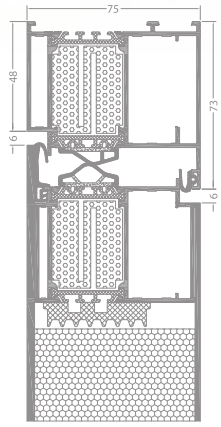
Anti-burglary tested in RC2 and RC3 class.

The filling panels are available in various designs and colours; the techniques for the milling of different shapes, making decorative applications and putting in glass units used in their production provide an endless number of combinations and variants.

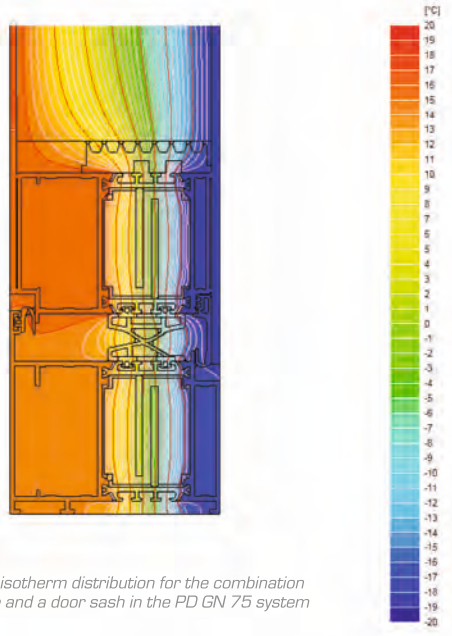
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



PD GN 75 section, panel one sided



PD GN 75 section, panel two sided



example isotherm distribution for the combination of a frame and a door sash in the PD GN 75 system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
PD GN 75	aluminium / polyamid	75 mm	75 mm	panel one sided 40-66 mm panel two sided 75 mm	———	single and double doors, outside opening, inside opening

WINDOW AND DOOR SYSTEMS

PD

PANEL DOORS

A thermally insulated aluminium system used to design panelled doors.

aliplast
aluminium systems

PD

A thermally insulated aluminium system used to design panelled doors. With modern technical solutions applied, the panelled doors can serve not only as a functional and durable house entrance, but also a showpiece and decoration.

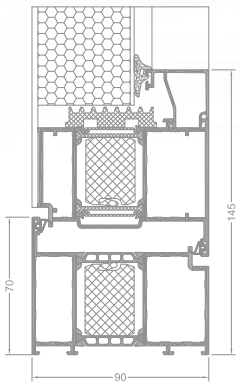
The system is characterised by a range of infill panels available in various patterns and colours. An elegant look of the structure, available dimensions, the option of installation within a larger front frame provide a lot of freedom while arranging the building entrance.

The load-bearing structure of the panelled door system is ensured by the STAR system, and therefore the doors provide excellent thermal performance. This actually translates into the comfort inside the building and the costs of building operation.

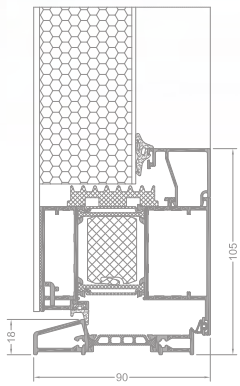
Technical description of the system:

- one plane of the frame and the panel bonded onto the leaf (panel bonded from the external side or double-sided).
- two possible types of hinges: roller hinge – dedicated to the Star system, concealed hinge (Dr.Hahn).
- standard 3-point locks or self-locking devices – to be selected by the customer
- handles, pull elements on the internal side to be selected from the standard offer of Aliplast.

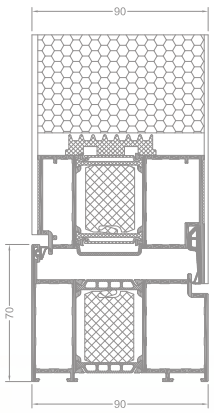
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



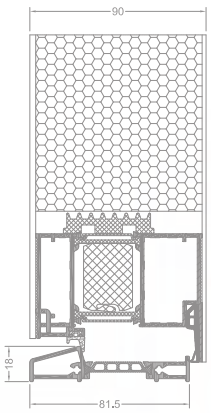
Panel door section, panel one sided, opens inwards



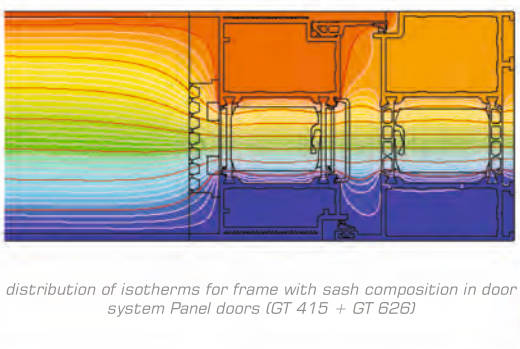
Panel door section, panel one sided, opens inside



Panel door section, panel two sided, opens inwards



Panel door section, panel two sided, opens inside



distribution of isotherms for frame with sash composition in door system Panel doors (GT 415 + GT 626)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
PD	aluminium / polyamid	90 mm	99 mm	panel one sided 22-83 mm panel two sided 90 mm	———	single doors, outside opening, inside opening

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
PD	Ud from 0,73 W/m^{2}K for door: 1200 x 2100 mm	Class 4; EN 12207	E2400; EN 12210	7A (300 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW SYSTEMS

VS600

VERTICAL SLIDING WINDOW

The VS600 vertical sliding window is a brand new innovation to Aliplast product range. VS600 incorporates the traditional styling of sash windows with the advantages of modern thermal aluminium profile.

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VS600

System featuring increased thermal insulation, for designing vertical sliding structures.

System equipped with a profile-concealed drive supplied by a reputable company, for the sashes to be moved vertically (the drive also provides the tilting function to make it easier to clean the outside of the glazing).

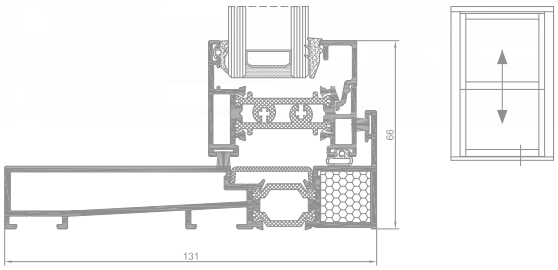
Available infill thicknesses: 24 mm and 28 mm.

Frame depth: 126 mm.

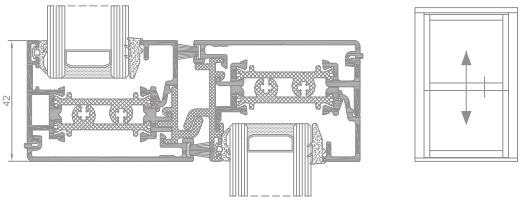
System used in the design of residential and public buildings (schools, hospitals, banks) as well as in renovation projects; it can be used as a pass-through window in offices, canteens, receptions, banks.

The VS600 vertical sliding window is a brand new innovation to Aliplast product range. VS600 incorporates the traditional styling of sash windows with the advantages of modern thermal aluminium profile.

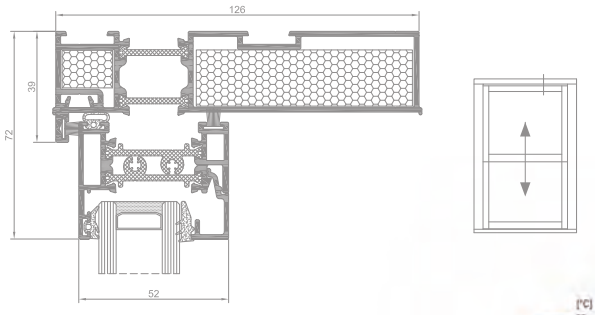
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808).



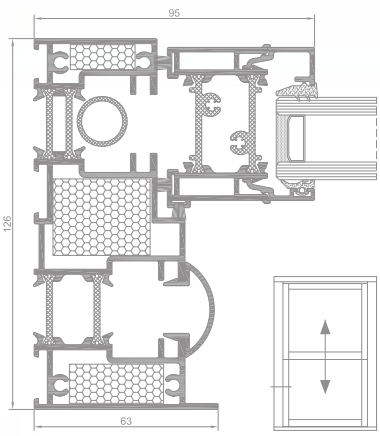
internal sash with horizontal bottom frame



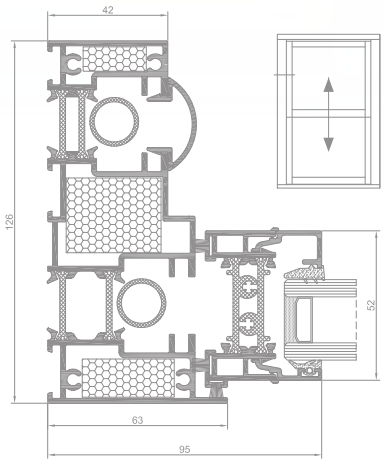
VS600 section throught the connection sash-sash



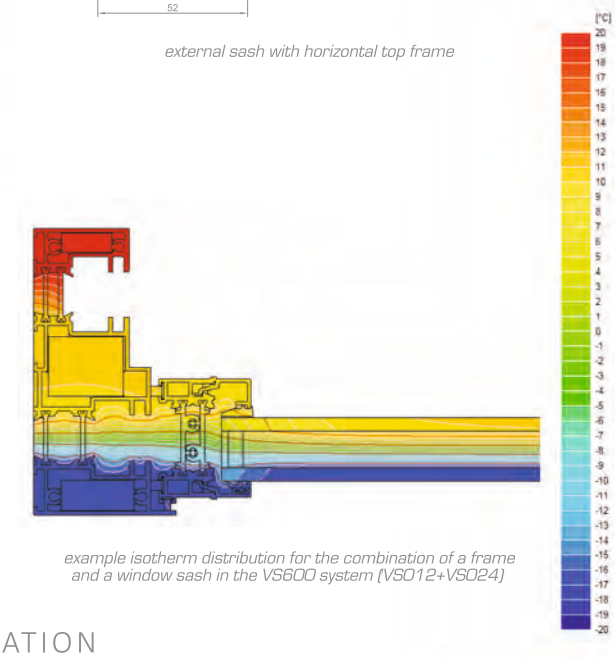
external sash with horizontal top frame



internal sash with vertical frame



external sash with vertical frame



example isotherm distribution for the combination of a frame and a window sash in the VS600 system (VS012+VS024)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	MAX WIDTH	MAX HEIGHT	MAX WEIGHT	GLAZING RANGE	TYPE OF WINDOWS
VS600	aluminium / polyamid	1600 mm /	2500 mm /	40 kg (leaf) /	24 mm, 28 mm	vertical sliding window

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
VS600	Uf from 1,60 W/m^{2}K	Class 5 (200 Pa); EN 12207	Class A4; EN 12210	Class 7A (300 Pa)

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

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IP

- IP i
- IP i+
- IP SU
- IP OUT
- IP 800 i+

IMPERIAL

Three-chamber window and door system with thermal insulation, allowing construction of multiple types of windows and doors, depending on application and detailed requirements concerning functionality, thermal insulation and appearance.

Imperial system offers a wide range of window designs: turn and tilt type, turn type, tilt type, tilt and slide type, rotate type with a vertical and horizontal axle of rotation, and doors (opening outwards and inwards, single or double-leaf, glazed, swing doors and sliding doors).

Large number of profiles in the system allows obtaining desired appearance and structural strength.

The profiles can be profiles can be bent , i.a. window frames, wings and glazing beads, which allows all kinds of arches and similar designs (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl)

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours - selection between RAL palette (Qualicoat 1518), structural colours Aliplast Wood Colour Effect (Qualideco PL-0001), bi-colour and anodized finish (Qualanod 1808).

Imperial system, including subsystems (Imperial OUT - outward opening doors, IP SU - hidden sash), offer a wide range of possibilities in external design. Imperial system also provides profiles allowing design of external frames with either industrial or restorative nature.

ALUMINIUM SYSTEMS APPLIED IN THE BUILDING INDUSTRY

WINDOW & DOOR SYSTEMS

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WINDOW AND DOOR SYSTEMS **IP**

IP i, IP i+, IP SU, IP OUT, IP 800 i+

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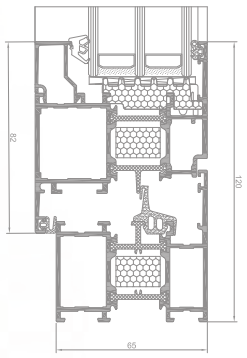
IP i, IP i+

The system is designed for design of windows and doors with high thermal insulation parameters.
Available system variants:

- **IP i**
- **IP i+**

Improved thermal insulation was obtained by applying special thermal inserts installed between thermal separators and around the glass pane, improving thermal insulation factor coefficients of the profile 0,2-0,5 W/m^{2}K.

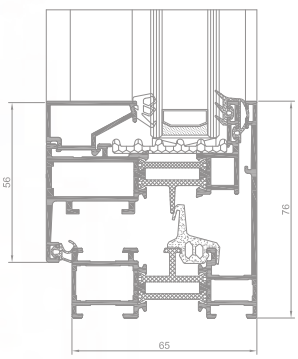
Design of systems IP i, IP i+ is based on proven, extensive and recognized base system Imperial.



IP i+ window section

IP SU

System with thermal insulation designated for designing windows with hidden sash, invisible from the outside. Specially designed shape of the frame hides the full height of sash profile. Imperial SU system is the system preferred by designers, as it allows “hiding” windows in aluminium and glass structure.

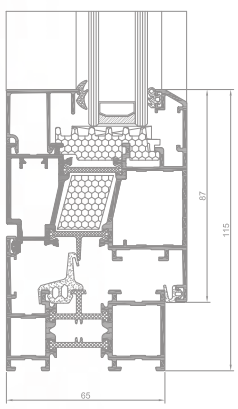


IP SU i window section

IP OUT (Imperial Outward)

Window system which allows designing windows tilting and opening outwards. Imperial OUT features faced internal surface of the frame and the wing. Such windows allow full use of the space inside the building. Available system variants:

- **IP-OUT i** variant with additional thermal insulation, at the profile-glass interface.
- **IP-OUT i+** variant with additional thermal insulation in the space between thermal separators.



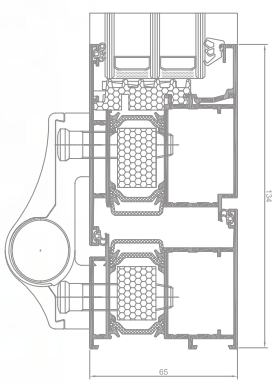
IP OUT i+ window section

IP 800

Three-chamber system designed for designing door with improved thermal insulation power. Available system variants:

- **IP 800 i**
- **IP 800 i+**

Improved thermal insulation was obtained by applying special thermal inserts installed between thermal separators and around the glass pane, improving thermal insulation factor coefficients of the profile 0,2-0,5 W/m^{2}K.



IP 800 i+ door section

IMPERIAL

IP i, IP i+, IP SU, IP OUT, IP 800 i+

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
IP **Imperial** window	aluminium / polyamid	65 mm	74 mm	4-51 mm	single and double windows, outside opening, inside opening	———
IP i+ **Imperial i+** window	aluminium / polyamid	65 mm	74 mm	4-51 mm	single and double windows, outside opening, inside opening	———
IP OUT **Imperial Outward** window	aluminium / polyamid	65 mm	74 mm	max 51 mm	outward opening	———
IP SU **Imperial SU** window	aluminium / polyamid	65 mm	68 mm	4-41 mm	hidden sash	———
IP 800 **Imperial 800** door	aluminium / polyamid	65 mm	65 mm	14-51 mm	———	single and double doors, outside opening, inside opening, panic door
IP 800 i+ **Imperial 800 i+** door	aluminium / polyamid	65 mm	65 mm	14-51 mm	———	single and double doors, outside opening, inside opening, panic door

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
IP	Uf from 1,57 W/m^{2}K	Class 4; EN 12207	Class C4; EN 12210	Class E1350; EN 12208
IP i+	Uf from 1,28 W/m^{2}K	Class 4; EN 12207	Class C4; EN 12210	Class E1350; EN 12208
IP OUT	Uf from 1,85 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208
IP OUT i+	Uf from 1,68 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208
IP SU	Uf from 1,63 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1200; EN 12208
IP SU i	Uf from 1,27 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1200; EN 12208
IP 800	Uf from 1,84 W/m^{2}K	Class 4; EN 12207	Class CE 2400; EN 12210	Class 8A; EN 12208
IP 800 i+	Uf from 1,67 W/m^{2}K	Class 4; EN 12207	Class CE 2400; EN 12210	Class 8A; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

- The Uf-value measures the heat flow. The lower the Uf-value, the betterer the thermal insulation of the frame.
- The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- The wind load resistance is a measure of the profile's structural strenght and is tested by applying increasing levels of air pressure to simulate the wind force. There are up to five levels of wind resistance (1 to 5) and three deflection classes (A, B, C). The higher the number, the better the performance.
- The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.

WINDOW AND DOOR SYSTEMS

IP i+

IMPERIAL i+

Window and door systems with thermal insulation. The system is designed for use in residential and public buildings, and also allows designing modern window solutions in multiple variants.

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IP i+

The system is designed for windows, doors and shop windows with high thermal insulation parameters.

A high thermal insulation power was achieved by applying special thermal inserts between thermal separators and around the glass pane.
Available options: IP, IP i, IP i+ .

Large number of shapes in the system guarantees the obtained desired appearance and structural strength.

The option of installing windows in facade systems.

Glazing strips available in a rectangular and circular variant.

The shapes of profiles suitable for the installation of various peripheral hardware, including hidden hinges and PCV hardware.

A broad range of glazing allows using all types of single and double cavity, acoustic and anti-burglary glass panes.

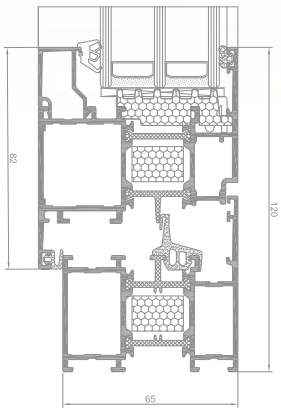
Profile drainage in two variants: traditional and hidden.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

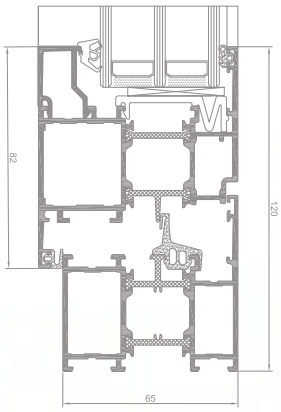
The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

The system is designed for use in residential and public buildings, and also allows designing modern window solutions in multiple variants.

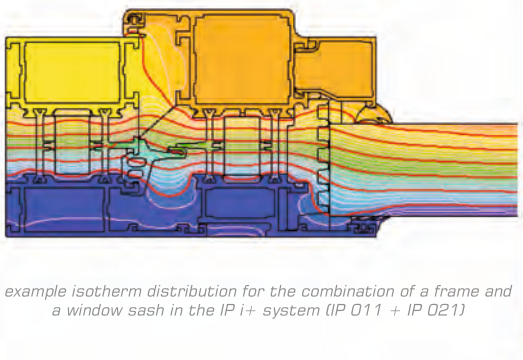
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



IP i+ window section



IP window section



example isotherm distribution for the combination of a frame and a window sash in the IP i+ system (IP 011 + IP 021)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OD WINDOWS	TYPE OF DOORS
IP	aluminium / polyamid	65 mm	74 mm	4-51 mm	single and double windows, outside opening, inside opening	———
IP i+	aluminium / polyamid	65 mm	74 mm	4-51 mm	single and double windows, outside opening, inside opening	———

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
IP	Uf from 1,57 W/m^{2}K	Class 4; EN 12207	Class C4; EN 12210	Class E1350; EN 12208
IP i+	Uf from 1,28 W/m^{2}K	Class 4; EN 12207	Class C4; EN 12210	Class E1350; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

IP OUT

IMPERIAL OUT

The system Superial OUT is designed for tilt out and turn out windows.

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IP OUT

Window system designed for designing tilt out and turn out windows.

System Imperial OUT is fully compatible with window system Imperial (they share system elements: connectors, gaskets, glazing strips).

System Imperial OUT features faced internal surface of the frame and the sash.

Turn out windows can be fitted with two types of hinges: rotating hinges or scissor hinge; window hardware used allows tilting the top or the bottom of the window outwards; option of turn out window with the limit stop.

Available option of integrating windows with walls by using reversing profile.

Option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

Maximum dimensions and weights of structures in Imperial OUT system:

- *tilt out windows* - minimum width and height of sash 500 mm, maximum width and height of sash 2000 mm, maximum weight of sash 100 kg for tilt out windows
- *turn out windows* - minimum width and height of sash 500 mm, maximum width of sash 1500 mm, height of sash 3000 mm, maximum weight of sash 120 kg for turn out windows

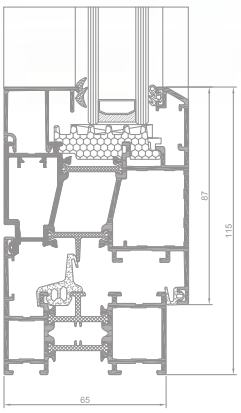
System IP OUT is available in the variant with improved thermal insulation power. Available options:

- *IP OUT i* with additional thermal insulation, at the profile-glass interface;
- *IP OUT i+* with additional thermal insulation between thermal spacers.

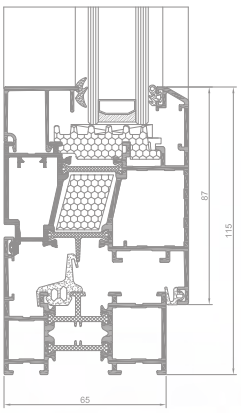
This system is very popular in Nordic countries and on British Isles. Perfectly matching old and stylized manor houses, wood cabins or simple Scandinavian type houses. Shutters are often used with such windows.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

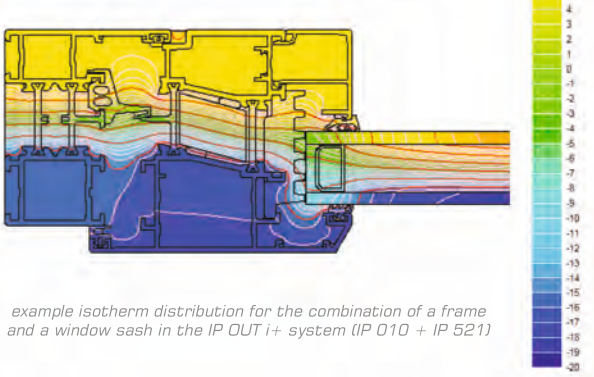
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



IP OUT i window section



IP OUT i+ window section



example isotherm distribution for the combination of a frame and a window sash in the IP OUT i+ system (IP 010 + IP 521)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OD WINDOWS	TYPE OF DOORS
IP OUT	aluminium / polyamid	65 mm	74 mm	max 61 mm	outward opening	———
IP OUT i+	aluminium / polyamid	65 mm	74 mm	max 61 mm	outward opening	———

PERFORMANCE

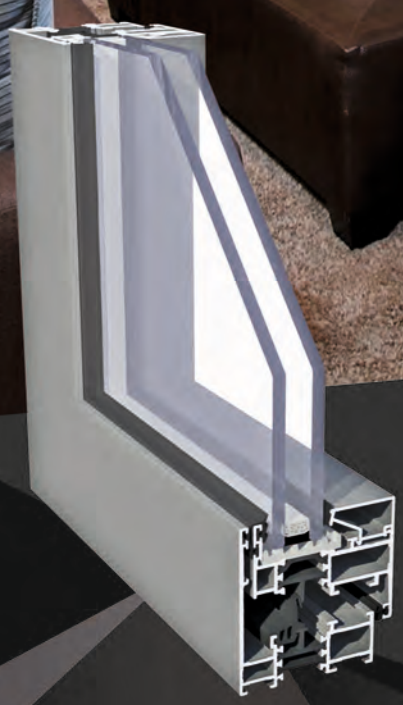
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
IP OUT	Uf from 1,85 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208
IP OUT i+	Uf from 1,68 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E900; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

IP SU

IMPERIAL SU



A three-chamber window system with thermal insulation designed for windows with a hidden sash, invisible from the outside.

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IP SU

A door system designed for designing doors with high thermal insulation parameters.

The system is compatible with Imperial system - thanks to adaptive profiles designs in series IP 800 can be integrated with Imperial shop windows.

The system features very good anti-burglary properties (the lock is situated far from the outer side).

Profile drainage in two variants: traditional and hidden.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

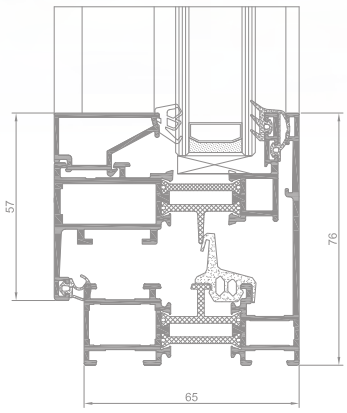
The hidden sash system is the system preferred by designers, as it allows “hiding” windows in aluminium and glass structure. Thanks to application of this solution opened and fixed window segments look identical from the outside.

The system IP SU is also available in the variant with improved thermal insulation power:

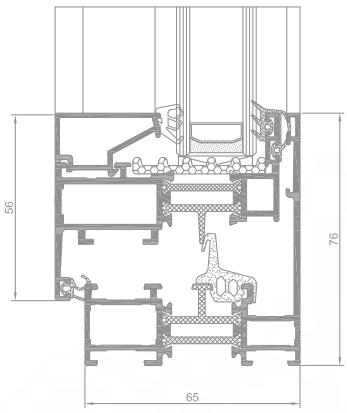
- *IP SU i* - applying thermal insulation under the glass panel.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

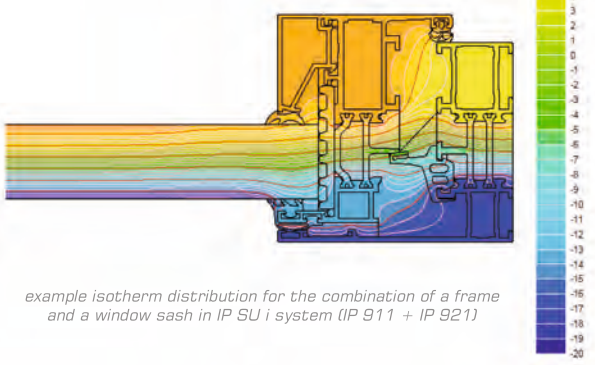
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



IP SU window section



IP SU i window secion



example isotherm distribution for the combination of a frame and a window sash in IP SU i system (IP 911 + IP 921)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
IP SU	aluminium / polyamid	65 mm	68 mm	4-41 mm	hidden sash	———
IP SU i	aluminium / polyamid	65 mm	68 mm	4-41 mm	hidden sash	———

PERFORMANCE

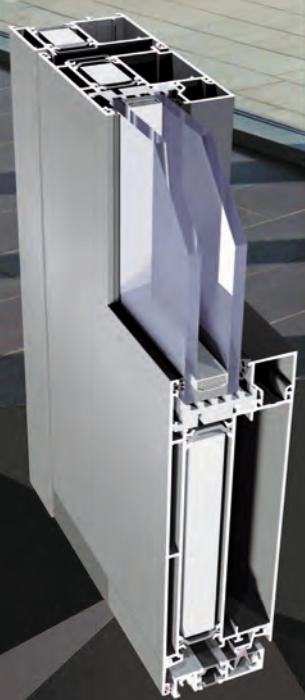
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
IP SU	Uf from 1,63 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1200; EN 12208
IP SU i	Uf from 1,27 W/m^{2}K	Class 4; EN 12207	Class C5/B5; EN 12210	Class E1200; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

IP 800 i+

IMPERIAL 800 i+



A three chamber door system designed for doors with high thermal insulation parameters.

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IP 800 i+

A door system designed for designing doors with high thermal insulation parameters.

The system is compatible with Imperial system - thanks to adaptive profiles designs in series IP 800 can be integrated with Imperial shop windows.

The system features very good anti-burglary properties (the lock is situated far from the outer side).

A thermal insulation threshold is used, which can be disassembled following door installation in the frame.

The system offers solutions preventing catching of fingers (antyfinger).

The option of bending profiles (detailed specification of profiles and detailed technical parameters of a profile bending process are available in the customer area of the website www.aliplast.pl).

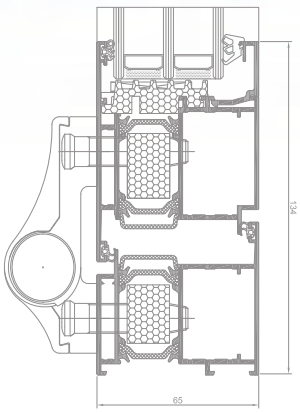
The system IP 800 is also available in the variant with improved thermal insulation power:

- IP 800 i
- IP 800 i+

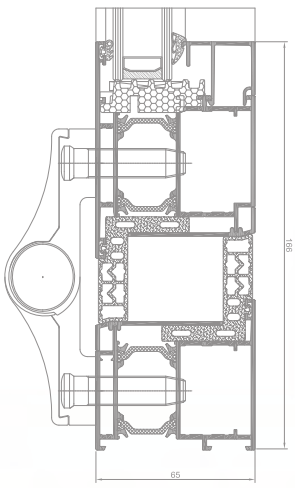
which was achieved by applying special thermal inserts slide between thermal separators and around the glass panel. Such a solution improves the insulating power of the profile by 0,2 – 0,5 W/m^{2}K.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

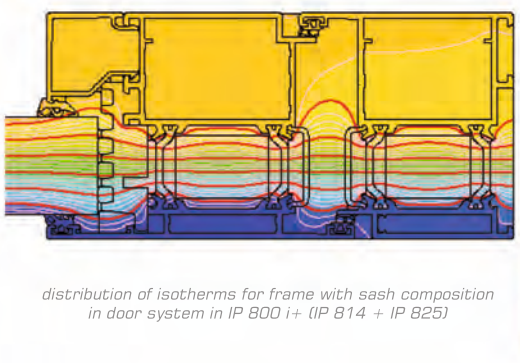
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



IP 800 i+ door section



IP 800 i antyfinger solution door section



distribution of isotherms for frame with sash composition in door system in IP 800 i+ (IP 814 + IP 825)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
IP 800	aluminium / polyamid	65 mm	65 mm	14-59 mm	———	single and double doors, outside opening, inside opening, panic doors
IP 800 i+	aluminium / polyamid	65 mm	65 mm	14-59 mm	———	single and double doors, outside opening, inside opening, panic doors

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
IP 800	Uf from 1,84 W/m^{2}K	Class 4; EN 12207	Class CE 2400; EN 12210	Class 8A; EN 12208
IP 800 i+	Uf from 1,67 W/m^{2}K	Class 4; EN 12207	Class CE 2400; EN 12210	Class 8A; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

EF
EF OC

ECOFUTURAL

ECOFUTURAL OC

Ecofutural window

Ecofutural OC window

aliplast
aluminium systems

EF

Three-chamber window-door system for designing windows and doors featuring high thermal performance. The system features very good technical parameters.

An aluminium profile system with a thermal insert, used in locations where higher thermal performance is required. Options offered within the ECOFUTURAL system:

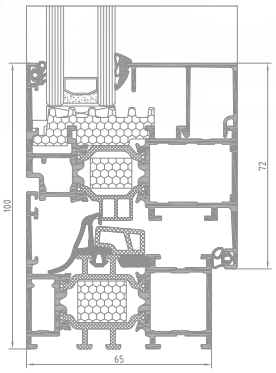
- *ECOFUTURAL i* – with thermal insulation on the perimeter in the spot where the window pane touches the profile.
- *ECOFUTURAL i+* – with thermal insulation on the perimeter in the spot where the window pane touches the profile.

The system is suitable to design monoblock type windows and doors with a displaced axis of rotation – PIVOT doors.

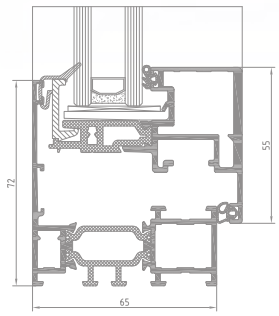
Profile shapes are suitable for installation of various types of envelope fittings, designed for the PVC groove.

The profiles can be bent. For a precise profile specification and details of technical parameters relating to profile bending, visit www.aliplast.pl and go to the customer zone.

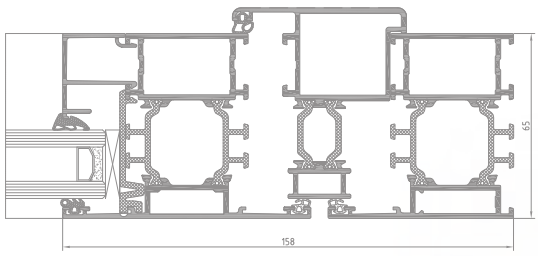
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



EF window section (EF 010 + EF 020)



EF OC window section (EF 214 + EF 1220)



Ecofutural PIVOT door section

EF OC

Three-chamber window-door system for designing windows and doors featuring high thermal performance.

The system features frames, the shape of which is of special design, to mask the entire eight of the leaf profile. The glazing strip which is invisible from the indoor side is a great advantage of the solution.

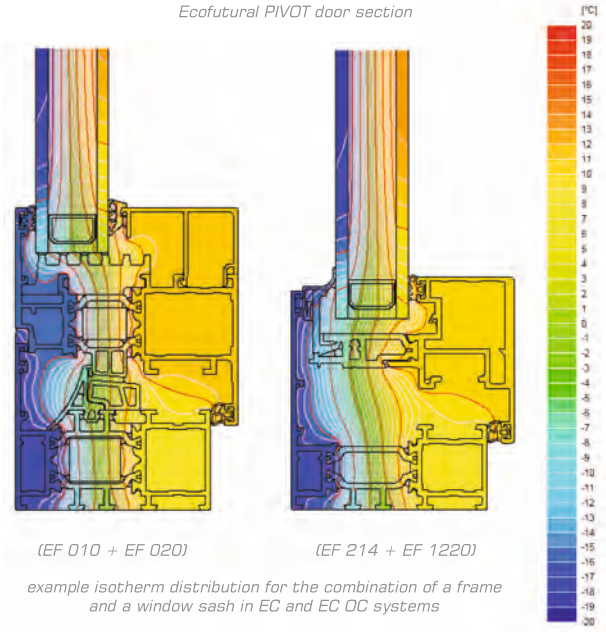
The system is suitable to design monoblock type windows.

A very narrow joint of leaves (movable mullion) – 77 mm – gives the structure a slender look.

The system offers profiles which are ready to install external blinds.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



(EF 010 + EF 020) *(EF 214 + EF 1220)*

example isotherm distribution for the combination of a frame and a window sash in EC and EC OC systems

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
EF	aluminium / polyamid	65-153 mm /	74 mm /	fix 4-50 mm window 13-59 mm	fix, tilt, turn, tilt and turn	single and double doors
EF OC	aluminium / pcv	65-177 mm /	68 mm /	fix 21-26 mm window 21-32 mm	fix, tilt, turn tilt and turn	———

PERFORMANCE

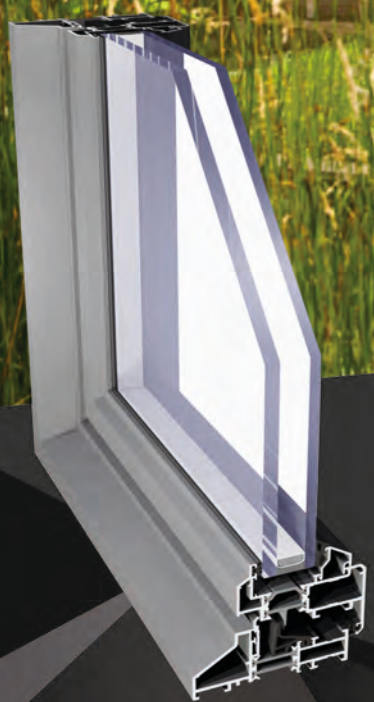
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
EF	Uf from 1,50 W/m^{2}K	Class 4; EN 12207	C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
EF i	Uf from 1,44 W/m^{2}K	Class 4; EN 12207	C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
EF i+	Uf from 1,27 W/m^{2}K	Class 4; EN 12207	C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
EF OC	Uf from 1,66 W/m^{2}K	Class 4; EN 12207	C3 (1200 Pa); EN 12210	E900 (900 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

ST1000

STEEL LOOK



A three-chamber window and door system with thermal insulation.

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aluminium systems

ST1000

A three-chamber window and door system with thermal insulation.

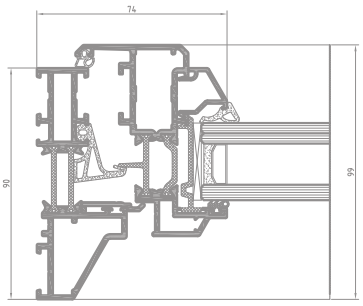
The system is distinctive due to the specific profile shape.

The system is used to design renovated and wood-imitating windows.

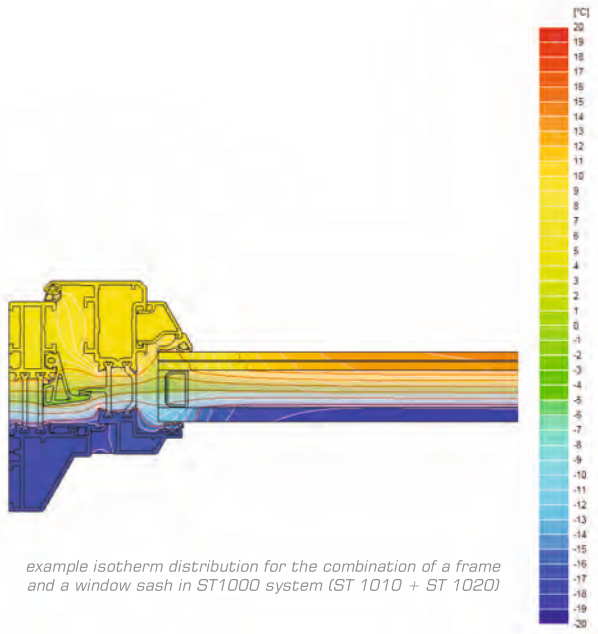
Glazing strips are available in the "soft" version (rounded shapes).

Thermal insulation (Uf) from 2,44 W/m^{2}k.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



STEEL LOOK 1000 window section



example isotherm distribution for the combination of a frame and a window sash in ST1000 system (ST 1010 + ST 1020)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
ST1000	aluminium / polyamid	90 mm	74,4 mm	5-43 mm	fixed glazing, tilt, turn	tilt

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
ST1000 okno	Uf from 1,85 W/m^{2}K	Class 4; EN 12207	Class 7A (300 Pa); EN 12210	Class C4 (1600 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

ML

DESIGN
INVISIBLE
MODERN
STEEL

MAX LIGHT

Max Light DESIGN window

Max Light INVISIBLE window

Max Light MODERN window

Max Light STEEL window

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MAX LIGHT

A window and door system with thermal insulation, featuring a slim profile line to ensure the maximum light access.

The specific shape of the Max Light system profiles (resembling steel profiles) gives the structure a modern industrial character.

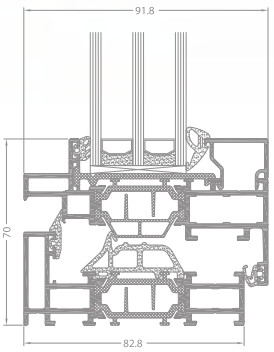
System application:
- fixed windows,
- opening windows: single- or double-sash windows with tilting,
- opened inwards.

Balcony doors inward and outward opening solution is available (threshold options).

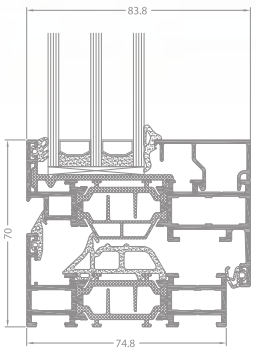
The Max Light system meets the requirements for the burglary resistance class RC2 for compliance with EN 1627.

Available system options: Max Light DESIGN, Max Light INVISIBLE, Max Light MODERN, Max Light STEEL; Max Light – these are a group of systems standing out on the market by their unique design, dedicated to modern architectural designs.

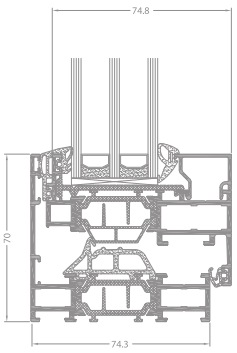
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



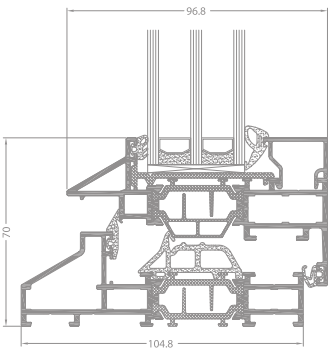
ML DESIGN window section



ML MODERN window section



ML INVISIBLE window section



ML STEEL door section

TECHNICAL SPECIFICATION

SYSTEM	**Max Light DESIGN**	**Max Light INVISIBLE**	**Max Light MODERN**	**Max Light STEEL**
MATERIAL	aluminium / polyamid	aluminium / polyamid	aluminium / polyamid	aluminium / polyamid
MINIMUM VISIBLE WIDTH INWARD OPENING WINDOW	frame: 35 mm pane: 35 mm	frame (hidden vent) 70 mm	frame: 35 mm pane: 35 mm	frame: 35 mm pane: 35 mm
MINIMUM VISIBLE WIDTH INWARD OPENING DOOR	frame: 35 mm pane: 68 mm	———	frame: 35 mm pane: 68 mm	frame: 35 mm pane: 68 mm
MINIUM VISIBLE WIDTH OUTWARD OPENING DOOR	frame: 15 mm pane: 88 mm	———	frame: 15 mm pane: 88 mm	frame: 15 mm pane: 88 mm
INSTALLATION DEPTH FRAME	83 mm	75 mm	75 mm	105 mm
INSTALLATION DEPTH SASH	92 mm	84 mm	84 mm	97 mm
REBATE HEIGHT	15 mm	15 mm	15 mm	15 mm
GLASS THICKNESS	up to 59 mm	up to 59 mm	up to 68 mm	up to 59 mm

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MAX LIGHT	Uf up to 1,8 W/m^{2}K dependant on the pofile combination	Class 4; norma EN 12207	Class C5; norma EN 12210	Class E1650; norma EN 12208

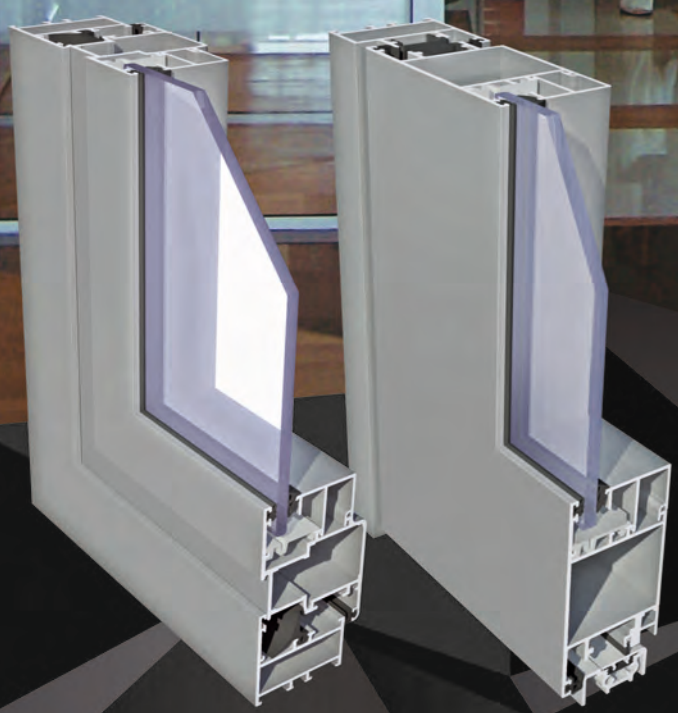
** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

WINDOW AND DOOR SYSTEMS

EL

ECONOLINE

ECONOLINE PANEL DOORS



The system is designed for designing elements of interior and exterior architecture without thermal insulation: windows, doors, segments of partition walls for general use in public and industrial buildings (in office spaces)

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EL

The system is designed for designing windows and doors without thermal insulation.

The system is compatible with all other Aliplast systems: shared glazing strips, gaskets, corner shapes and hardware.

The system is designed for designing elements of interior and exterior architecture without thermal insulation: windows, doors, segments of partition walls for general use in public andindustrial buildings (in office spaces).

The possibility of designing sliding doors and swinging doors, joining walls at any angle, and reinforcing already completed or even installed elements.

The Econoline system has the option of using construction hinges rebate.

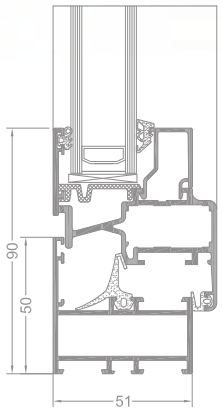
The door system ECONOLINE with smoke protection fulfil the criteria of classes smoke tightness Sa, Sm according to DIN EN 13501-2 + A1: 2010).

The possibility of integrating Econoline doors in partition walls, made of Econoline panels or other panels in any design.

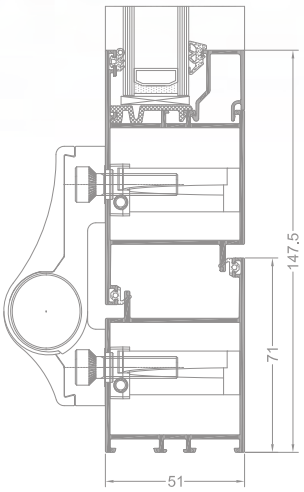
Glazing strips available in a rectangular and circular variant.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



EL 010 + VL 820
window section



EL 014 + EL 025
door section

EL panel doors

An aluminium system without thermal insulation used to design panelled doors.

The load-bearing structure of the panelled door system is provided by the Econoline system.

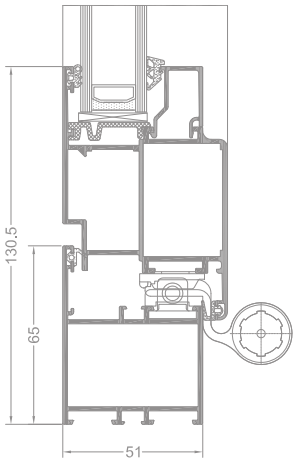
Panel-type Econoline is used to design indoor structures (doors) in residential and public buildings.

One plane of the frame and the panel bonded onto the leaf are flushed (panel bonded from the external side or double-sided).

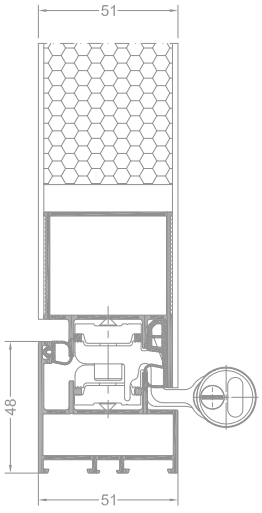
The system is characterised by a range of infill panels available in various patterns and colours.

A wide range of hardware available on the market.

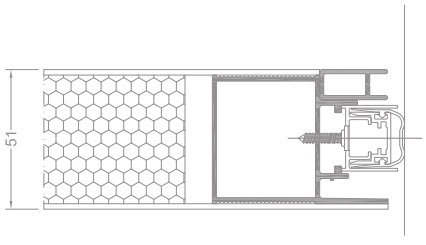
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



EL 011 + EL 022
door section



EC panel door section
- hinge side



EC panel door section - falling threshold solution

TECHNICAL SPECIFICATION

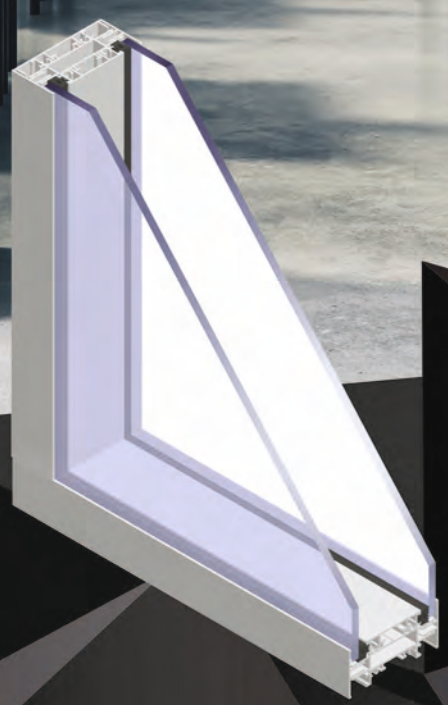
SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
EL window	aluminium	51 mm	60 mm	max 37 mm	casement, tilt & turn	———
EL door	aluminium	51 mm	51 mm	max 37 mm	———	tilt-turn

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOWS	TYPE OF DOORS
PD - EL	aluminium	51 mm	51 mm	51 mm	———	tilt & turn

WINDOW AND DOOR SYSTEMS

OF

ALIPLAST OFFICE



The chamber system without thermal insulation intended for designing interior partition walls.

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aluminium systems

OFFICE

The chamber system without thermal insulation intended for designing interior partition walls.

Various infill options: glass, drywall, laminated furniture board.

Possible infill thickness:
- glass: from 4 mm to 13.8 mm
- laminated furniture board: 18 mm
- drywall: 12.5 mm.

The design of the system provides space for routing electrical cables and installing all kinds of switches, sockets and circuit breakers.

Aliplast Office features very good sound insulating parameters: Rw up to 42 dB.

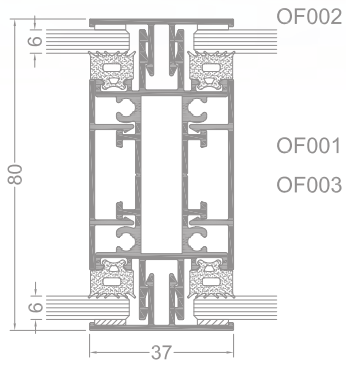
Possible options:
- Econoline system doors: both single and double doors using a dedicated profile
- fully-glazed doors with door hardware made by renowned manufacturers
- wooden non-rebated doors with hidden hinges.

The design of the system provides for the possibility of using blinds integrated between the glass panes.

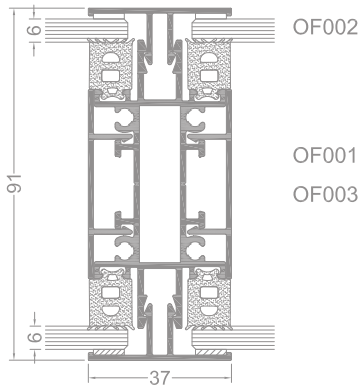
Aliplast Office combines functional and aesthetic values, it is a perfect solution if you need to divide large office spaces.

The system's prefabrication is very simple and quick because time-consuming and expensive processing is reduced to a minimum.

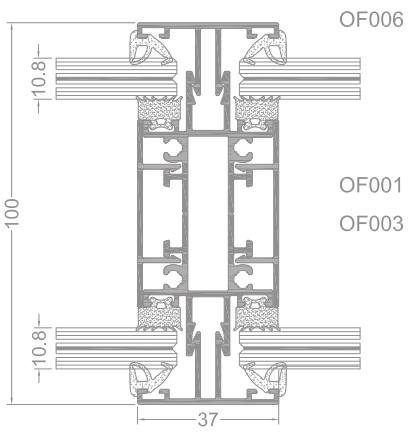
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



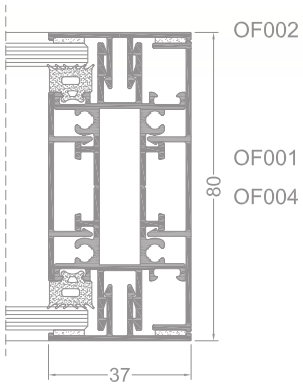
ALIPLAST OFFICE



ALIPLAST OFFICE



ALIPLAST OFFICE



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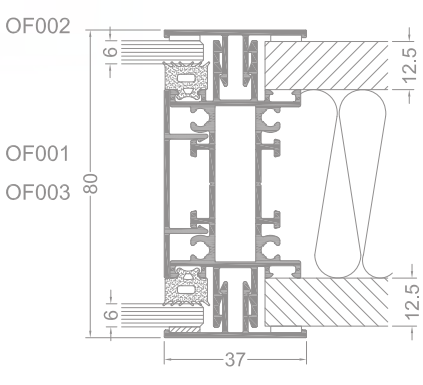

ALIPLAST OFFICE

WINDOW AND DOOR SYSTEMS

ID

IDEAL

IDEAL – an industrial-style internal aluminium installation system without thermal insulation. IDEAL is a system solution for modern spaces, bringing a loft touch to the interior.

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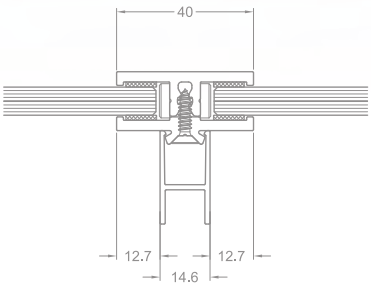
aluminium systems

IDEAL

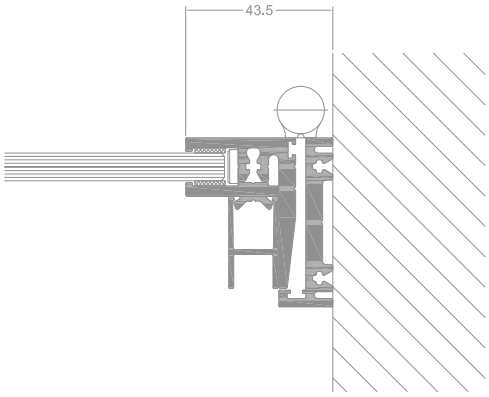


IDEAL

The system is intended to design industrial-style internal installation.

IDEAL is a door and internal wall system available in many options:

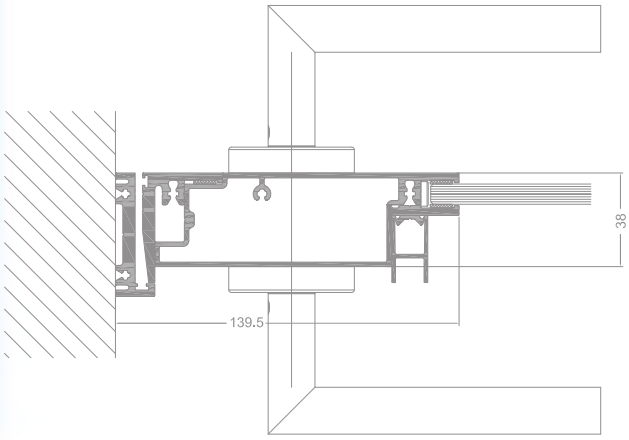
- single doors,
- double doors,
- pivot doors,
- it is also possible to install permanent glazing around the IDEAL doors with top and/or side light. Depending on the demand and the style of the interior, a permanent wall solution is also available, with or without astragal bars.



The IDEAL system is based on a thin profile (33 mm) allowing the engineer structures that fit into modern and classic design.

The IDEAL glazing system is an alternative to the classic partition walls that separate rooms.

Both the doors and walls of the IDEAL system can have different division patterns, which allows a perfect fit to the interior design. Versatility and functionality are further advantages of the IDEAL system.



In order to maintain consistency, the IDEAL system includes specially designed handle grips and matching handles and trim rings. Available types:

- door handle
- handle
- rosette (cylinder lock / key lock / bathroom lock).

A wide range of colours available – RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	VISIBLE WIDTH	VISIBLE WIDTH OF THE DOOR LIGHT	POSSIBILITY OF GLAZING	MAXIMUM WIDTH OF THE STRUCTURE	HINGES
IDEAL	aluminium / polyamid	from 33 mm /	40 mm	/ 8-10-12 mm	2000 cm	visible or concealed (adjustable)

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UG

- UG i+
- UG angular solutions 90°
- UG low threshold
- MONORAIL

ULTRAGLIDE

A system featuring improved thermal performance, used to design sliding and lift-sliding structures. The UG sliding structures are intended for residential buildings, mainly private and public buildings.

The system is adapted to the latest requirements relating to thermal performance, aesthetics and safety. Available system options: UG low threshold option, UG – angular solution 90°, Monorail.

With its parameters, the ULTRAGLIDE system makes it possible to design structures with vary large dimensions of sliding leaves.

- Maximum structure dimensions available in the system: leaf height – Hs = 3300 mm; leaf width – Bs = 3200 mm.

The ULTRAGLIDE system makes it possible to design large – but still stable – sliding windows and doors. Maximum leaf weight:

- 250 kg sliding option
- 400 kg lift-sliding option

Characteristics of construction:

- structure design: 3, 5 and 7 chamber frame
- possible variants with two, three and four components based on the two-rail system
- profiles suitable for installation of various hand-locked hardware available on the market and automatic devices
- various types of infills can be used (double and triple glazed units)
- adapted to the latest requirements relating to thermal performance. The system is equipped with a 22 mm / 28 mm wide separator enhanced with glass fibre, thermal inserts and under-glass inserts to improve cross-sectional thermal performance. Available options: UG, UG i and UG i+
- used for designing large glazing, which provides natural lighting inside the building and facilitates interior design, with ensured stability, functionality and structure lightness

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours - selection between RAL palette (Qualicoat 1518), structural colours Aliplast Wood Colour Effect (Qualideco PL-0001), bi-colour and anodized finish (Qualanod 1808).

ALUMINIUM SYSTEMS APPLIED IN THE BUILDING INDUSTRY

SLIDING SYSTEMS

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SLIDING SYSTEMS

UG

UG, UG i+, UG - angular solution 90°, UG - low threshold, MONORAIL

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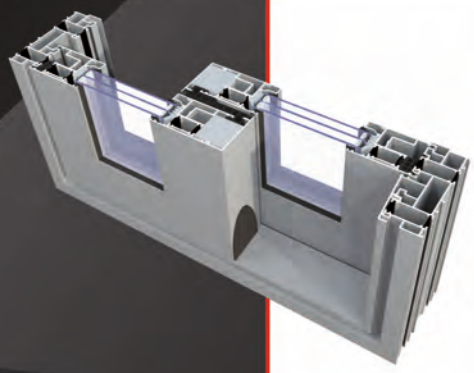
UG, UG i+

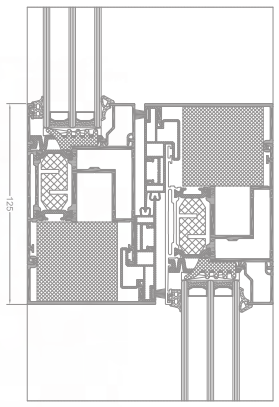


The UG sliding structures are intended for residential buildings, mainly private and public buildings. The system is adapted to the latest requirements relating to thermal performance, aesthetics and safety.

- the system is equipped with a 22 mm / 28 mm wide separator improved with glass fibre
- thermal inserts and under-glass inserts to improve cross - sectional thermal performance

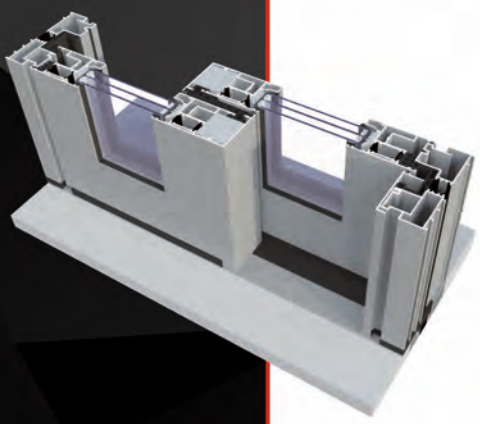
Available options: UG, UG i, UG i+.

The ULTRAGLIDE system makes it possible to design large – but still stable – sliding windows and doors. Maximum leaf weight: 250 kg – sliding option; 400 kg – lift-sliding option.



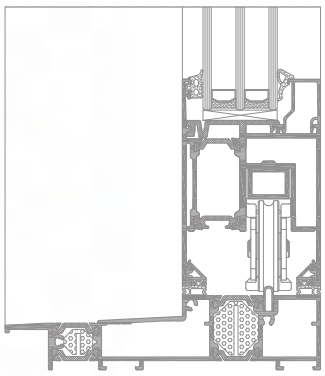
UG i+ cross section

ULTRAGLIDE - low threshold option



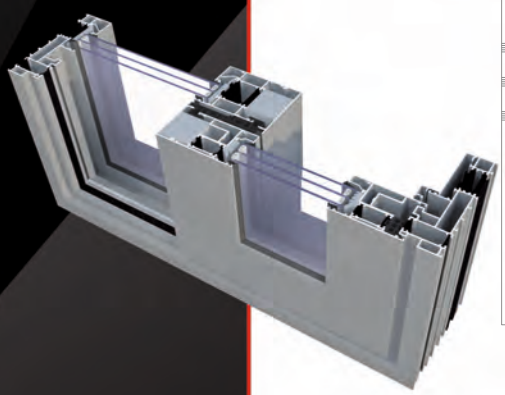
The low-threshold model is a solution to improve building accessibility for disabled people. The low-threshold option prevents edge offset at the door-floor contact and enables threshold-floor flushing. A modern structure and lift-sliding hardware in low-threshold UG system provides convenient use, enhanced usefulness and an elegant design.

- maximum leaf weight: 400 kg
- possible structure variants: 2-, 4-component based on a two-rail frame



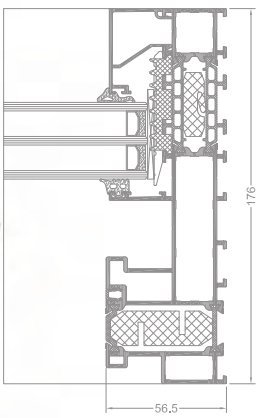
UG low threshold cross section

MONORAIL



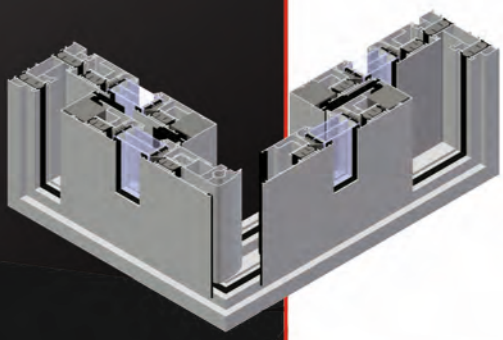
Monorail – option of the Ultraglide system. At least one fixed component (glazing) in the structure is the characteristic feature of the system. A special structure of the frame makes it possible to increase the clear opening relative to the fixed component. The system features improved thermal performance. Sliding or lift-sliding system.

- maximum leaf weight: 400 kg
- single-rail frame
- optional structure combinations:
  - 2-component (sash + fix)
  - 3-component (sash + fix + sash)
  - 4-component (2 sashes + 2 fixes)
- optional to use glazing from the outside, which makes it possible to use large-size, heavy infills.



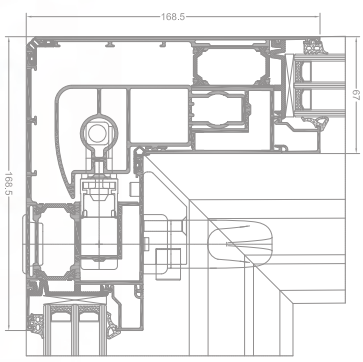
MONORAIL cross section

ULTRAGLIDE - angular solutions 90°



UG angular solution 90° – for large glazed corners. The system is perfect for commercial and private buildings where open space is required: terraces, porches, sunrooms, patios. The door is opened by moving the stud that joins the leaves. As a result, the entire room corner is open, and the space is not divided by the structural stud. For smaller glazing solutions, the sliding corner stud increases the clear opening, which significantly improves the comfort of going in/out.

- maximum leaf weight: 400 kg
- two- and three-rail frame
- possible structure variants: 4-, 6- and 12-component



UG angular solutions 90° - cross section

ULTRAGLIDE

UG, UG i+, UG - angular solution 90°, UG - low threshold solution, MONORAIL

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
Ultraglide	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 250 kg (sliding option) to 400 kg (lift-sliding option)	sliding lift-sliding system
Ultraglide i+	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 250 kg (sliding option) to 400 kg (lift-sliding option)	sliding lift-sliding system
Ultraglide - angular solution	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 250 kg (sliding option) to 400 kg (lift-sliding option)	sliding lift-sliding system
Ultraglide low threshold	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 400 kg	lift-sliding system
Monorail	aluminium / thermal insulation	176 mm	67 mm	leaf 14-52 mm fix 12-72 mm	to 250 kg (sliding option) to 400 kg (lift-sliding option)	sliding lift-sliding system

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
UG	Uf from 1,45 W/m^{2}K	Class 4; EN 12207	Class C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
UG i+	Uf from 1,13 W/m^{2}K	Class 4; EN 12207	Class C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
UG - angular solution	Uf from 1,45 W/m^{2}K	Class 4; EN 12207	Class C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
UG low threshold	Uf from 1,45 W/m^{2}K	Class 4; EN 12207	Class C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208
MONORAIL	Uf from 0,93 W/m^{2}K	Class 4; EN 12207	Class C5 (2000 Pa); EN 12210	E750 (750 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

- The Uf-value measures the heat flow. The lower the Uf-value, the betterer the thermal insulation of the frame.
- The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- The wind load resistance is a measure of the profile's structural strenght and is tested by applying increasing levels of air pressure to simulate the wind force. There are up to five levels of wind resistance (1 to 5) and three deflection classes (A, B, C). The higher the number, the better the performance.
- The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.

SLIDING SYSTEMS

UG

ULTRAGLIDE

A system featuring improved thermal performance, used to design sliding and lift - sliding structures. The Ultraglide sliding structures are intended for residential buildings, mainly private and public buildings.

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UG

A system featuring improved thermal performance, used to design sliding and lift-sliding structures.

The UG sliding structures are intended for residential buildings, mainly private and public buildings.

The system is adapted to the latest requirements relating to thermal performance, aesthetics and safety. Available system options:

- UG low-threshold version
- UG angular solution 90°
- MONORAIL

With its parameters, the ULTRAGLIDE system makes it possible to design structures with vary large dimensions of sliding leaves. Maximum structure dimensions available in the system:

- leaf height Hs=3300 mm
- leaf width Bs=3200 mm

The ULTRAGLIDE system makes it possible to design large – but still stable – sliding windows and doors. Maximum leaf weight: 250 kg – sliding option;
400 kg – lift-sliding option.

Structure design: 3, 5 and 7 chamber frame.

Possible variants with two, three and four components based on the two-rail system.

Profiles suitable for installation of various hand-locked hardware available on the market and automatic devices.

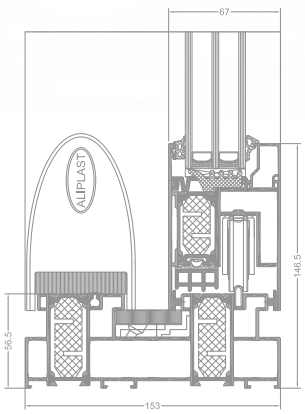
Various types of infills can be used (double and triple glazed units).

System is adapted to the latest requirements relating to thermal performance. The system is equipped with a 22 mm / 28 mm wide separator improved with glass fibre, thermal inserts and under-glass inserts to improve cross-sectional thermal performance.

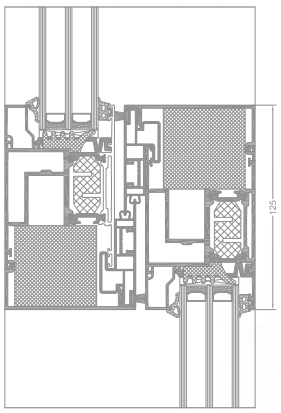
- available options: UG, UG i, UG i+
- available slim transom option.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

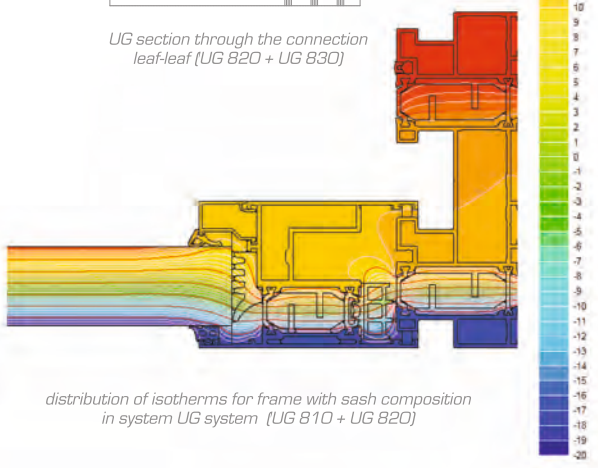
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



(UG 820 + UG 810) UG cross section



UG section through the connection leaf-leaf (UG 820 + UG 830)



distribution of isotherms for frame with sash composition in system UG system (UG 810 + UG 820)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
UG	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 250 kg (sliding option) / to 400 kg (lift-sliding option)	sliding, lift-sliding system
UG i+	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 250 kg (sliding option) / to 400 kg (lift-sliding option)	sliding, lift-sliding system

PERFORMANCE

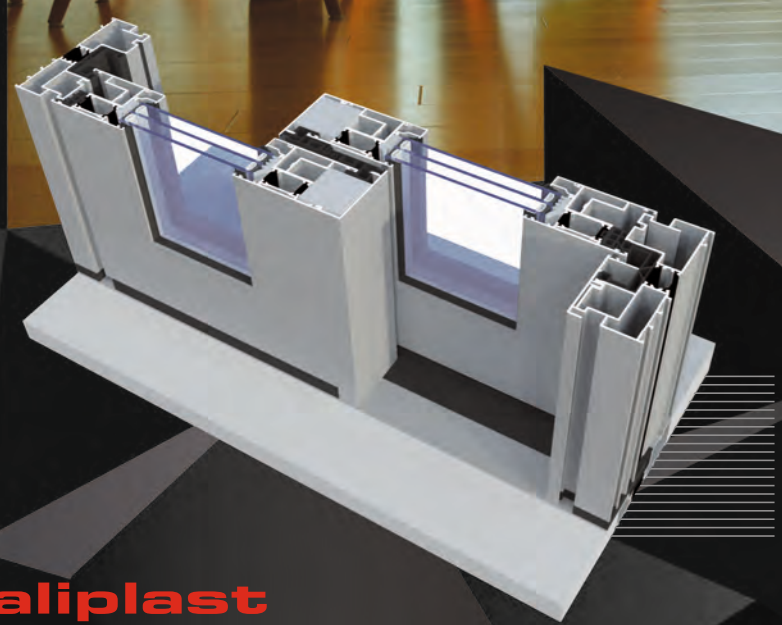
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
UG	Uf from 1,45 W/m^{2}K	Class 4; EN 12207	C4 (1600Pa); EN 12210	9A (600Pa); EN 12208
UG i+	Uf from 1,13 W/m^{2}K	Class 4; EN 12207	C4 (1600Pa); EN 12210	9A (600Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

SLIDING SYSTEMS

UG | low threshold

ULTRAGLIDE – low-threshold option



A modern structure and lift-sliding hardware in low-threshold UG system provides convenient use, enhanced usefulness and an elegant design. The low-threshold model is a solution to improve building accessibility for disabled people.

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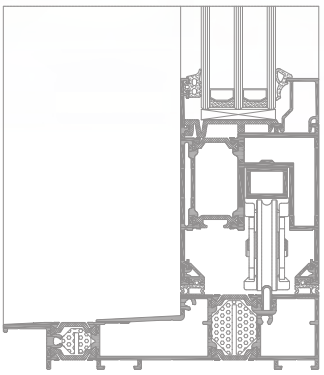
UG - low threshold option

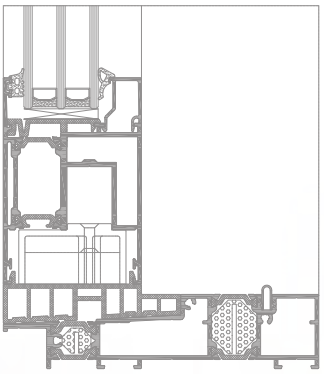


ULTRAGLIDE cross section through frame with sash composition - low threshold option

ULTRAGLIDE is characterised not only by its functionality, but also economical and aesthetic architectural solutions. A modern structure and lift-sliding hardware in low-threshold UG system provides convenient use, enhanced usefulness and an elegant design. The low-threshold model is a solution to improve building accessibility for disabled people. The low-threshold option prevents edge offset at the door-floor contact and enables threshold-floor flushing.

Characteristics of construction:

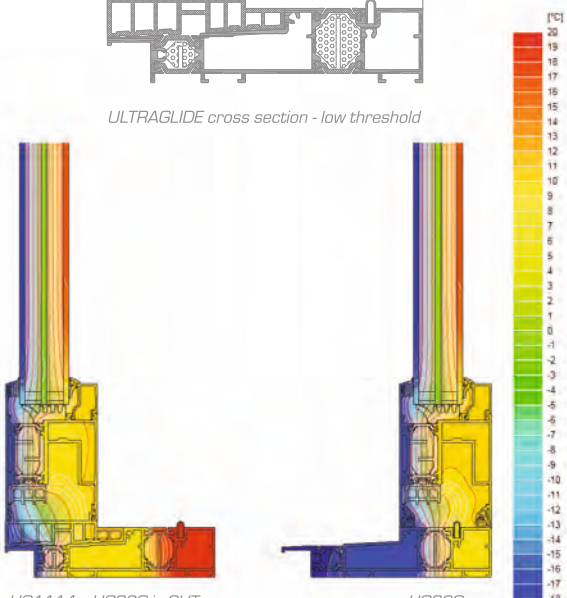
- maximum leaf weight: 400 kg
- possible structure variants: 2-, 4-component based on a two-rail frame
- possible structure variants:
  - 2-component (sash + fix)
  - 4-elements (2 frames + 2 fix)
- optional to use glazing from the outside, which makes it possible to use large-size, heavy infills



ULTRAGLIDE cross section - low threshold

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



distribution of isotherms for frame with sash composition in system ULTRAGLIDE - low threshold option (UG 1114 + UG 820)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
UG	aluminium / thermal insulation	from 153 mm to 239 mm	67 mm	leaf 14-52 mm	to 400 kg	lift-sliding

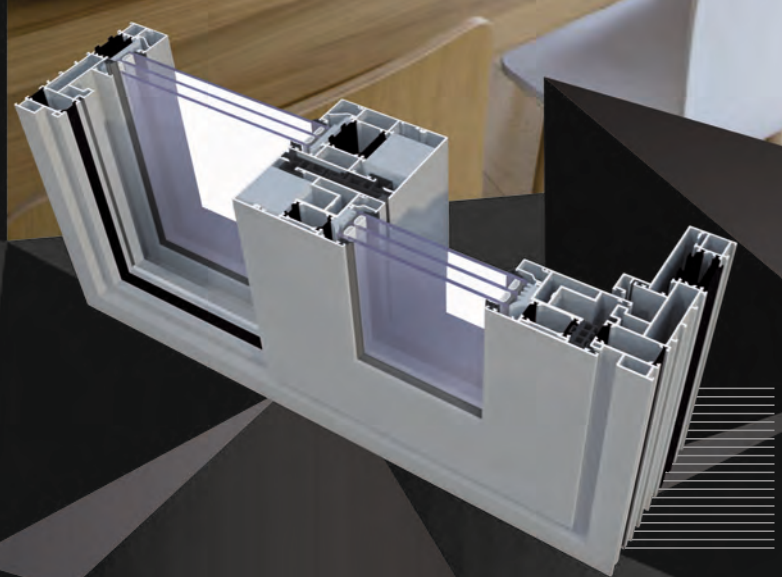
PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
UG	Uf from 1,45 W/m^{2}K	Class 4; EN 12207	C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

MONORAIL

MONORAIL



Monorail – option of the Ultraglide system. At least one fixed component (glazing) in the structure is the characteristic feature of the system. A system featuring improved thermal performance, used to design sliding and lift-sliding structures.

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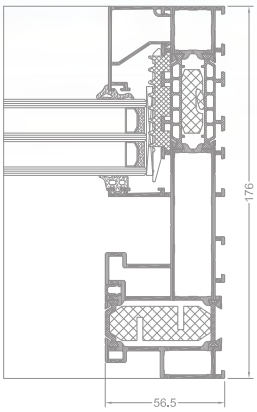
MONORAIL

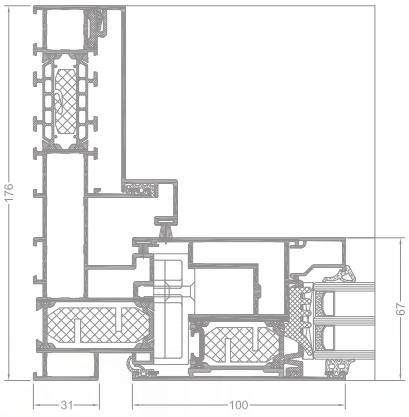
Monorail – option of the Ultraglide system. At least one fixed component (glazing) in the structure is the characteristic feature of the system. A special structure of the frame makes it possible to increase the clear opening relative to the fixed component. The system features improved thermal performance.



MONORAIL cross section

Characteristics of construction:

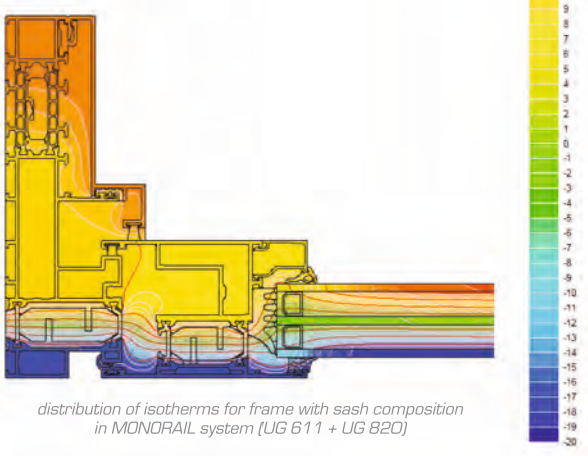
- maximum leaf weight: 400 kg
- single-rail frame
- possible structure variants:
  - 2-component (sash + fix)
  - 3-component (sash + fix + sash)
  - 4-component (2 sashes + 2 fixes)
- optional to use glazing from the outside, which makes it possible to use large-size, heavy infills



MONORAIL cross section

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



distribution of isotherms for frame with sash composition in MONORAIL system (UG 611 + UG 820)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
MONORAIL	aluminium / thermal insulation	176 mm	67 mm	leaf 14-52 mm fix 12-72 mm	to 250 kg (sliding option) / to 400 kg (lift-sliding option)	sliding, lift-sliding

PERFORMANCE

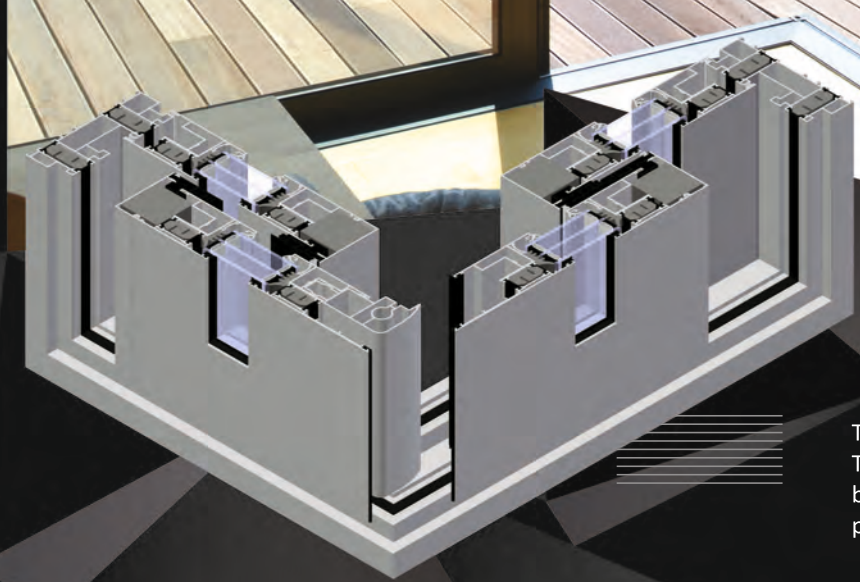
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MONORAIL	Uf from 0,93 W/m^{2}K	Class 4; EN 12207	C5 (2000 Pa); EN 12210	E750 (750 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

SLIDING SYSTEMS

UG | angular solution

ULTRAGLIDE - angular solution 90°



The system is designed for large glazed corner. The system is perfect for commercial and private buildings where open space is required: terraces, porches, sunrooms, patios.

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UG - angular solution 90°

The system is designed for large glazed corner.

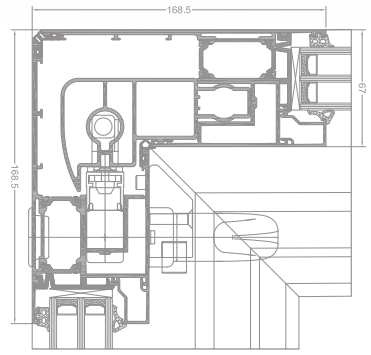
UG angular solution 90° – for large glazed corners. The system is perfect for commercial and private buildings where open space is required: terraces, porches, sunrooms, patios. The door is opened by moving the stud that joins the leaves. As a result, the entire room corner is open, and the space is not divided by the structural stud. For smaller glazing solutions, the sliding corner stud increases the clear opening, which significantly improves the comfort of going in/out.

Characteristics of construction:

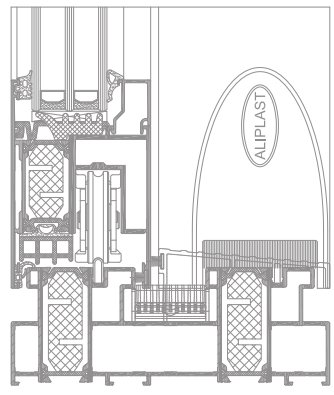
- maximum leaf weight: 400 kg
- two- and three-rail frame
- possible structure variants: 4-, 6- and 12-component

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



UG angular solution 90°- cross section



UG bottom section, sash on inside rail, version i+

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
Ultraglide angular solutions 90°	aluminium / thermal insulation	153-239 mm /	67 mm /	leaf 14-52 mm	to 250 kg (sliding option) / to 400 kg (lift-sliding option)	sliding, lift-sliding system

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
Ultraglide angular solutions 90°	Uf from 1,45 W/m^{2}K	Class 4; EN 12207	C4 (1600 Pa); EN 12210	9A (600 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

SLIDING SYSTEMS

SL+

SLIDE PLUS

A system with thermal insulation
used to design sliding doors.

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SL+

A system with thermal insulation used to design sliding doors.

The system is characterised by no glazing strips. Infills are installed at the leaf installation stage in leaf C-shaped rabbets without glazing strips, with a seal which surrounds the infill.

The frames are available in two versions: with an extruded slide rail and a separate profile for travelling trolleys (mounted at the lower sections of the leaves).

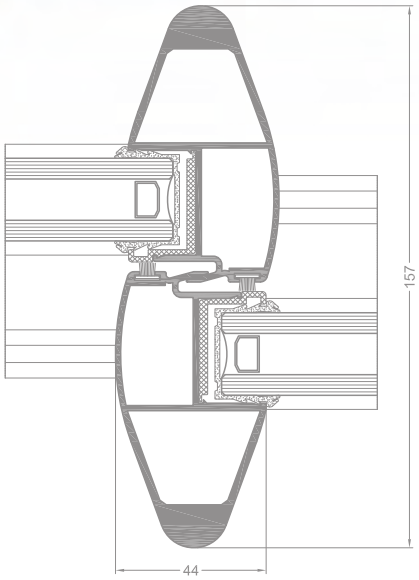
Vertical leaf profiles have a profiled grip along the entire leaf height. The grips also provide static reinforcement of the structure.

Leaf corners are joined by screwing, whereas the frames can be screwed or crimped.

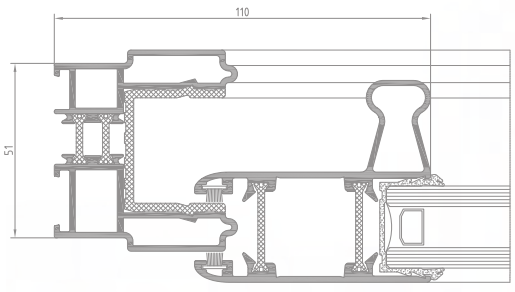
Sliding system Slide Plus provides freedom of design space. The system is perfect for the building of terraces, verandas, winter gardens. Aluminium sliding systems are easy to use and functional both in small areas and the large size of the property.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

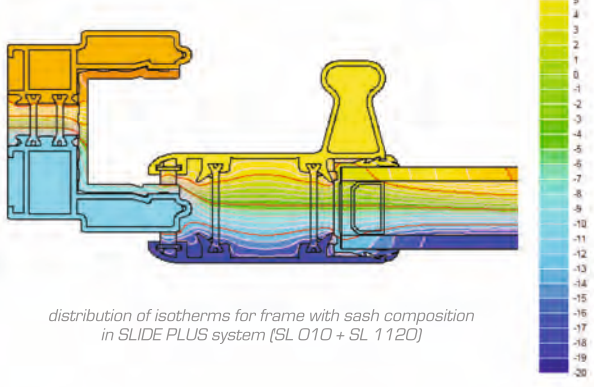
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



Slide Plus cross section through the connection leaf-leaf



Slide Plus cross section



distribution of isotherms for frame with sash composition in SLIDE PLUS system (SL 010 + SL 1120)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
SL+	aluminium / polyamid	59-103 mm /	32 mm /	6-9 mm 20-24 mm	to 120 kg	sliding system

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
SL+	Uf from 3,63 W/m^{2}K	Class 3; EN 12207	B3 (1200 Pa); EN 12210	5A (200 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

SLIDING SYSTEMS

VG PLUS

VISOGLIDE PLUS

A three-chamber system used to design sliding doors. The system is thermally insulated (thermal inserts made of an improved thermal performance material).

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VG PLUS

A three-chamber system used to design sliding doors. The system is thermally insulated (thermal inserts made of an improved thermal performance material).

As trolleys are located under movable elements, the risk of door sagging is eliminated.

Avaiable options of the system: sliding and lift-and-slide. There is also a lift-and-slide option with a low threshold.

Extremely narrow labyrinth stud in sliding and lift-and-slide leaves – 34 mm wide.

Possible combinations of two, three, four and six elements on a two- or three-rail frame.

Available versions of the system: monorail on internal or external rail.

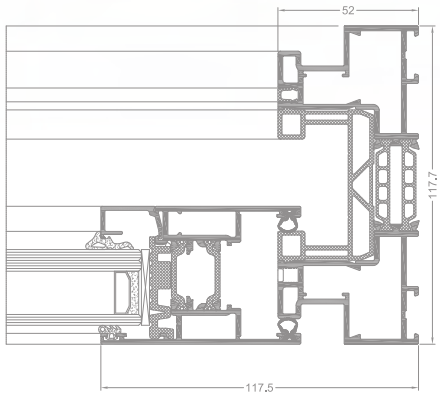
The fixed leaf can be adapted to a two- and three-rail frame.

A wide range of window sill profiles (with concealed water drainage) and angular profiles.

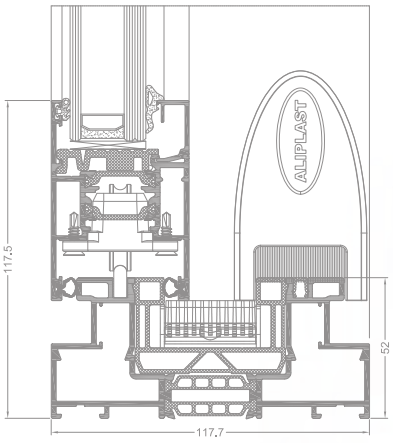
The Visoglide system allows freedom of arrangement in modern office and residential spaces.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

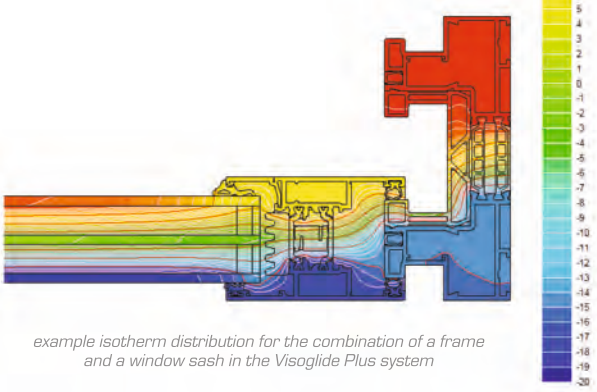
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



VISOGLIDE PLUS cross section



VISOGLIDE PLUS cross section



example isotherm distribution for the combination of a frame and a window sash in the Visoglide Plus system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
VG PLUS	aluminium / thermal insulation	118 mm/142mm /184 mm	51 mm	6-36 mm monorail option: 18-60 mm	250 kg (sliding option) / 200 kg (lift-sliding option)	sliding, lift-sliding

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
VG PLUS	Uf from 2,1 W/m^{2}K	Class 4; EN 12207	C3 / B4 (1200 Pa); EN 12210	9A; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

SLIDING SYSTEMS

MDS

MODERN SLIDE

This is a system used to design sliding structures featuring improved thermal performance. Modern Slide is a system of sliding structures to be used in residential housing, private housing and public buildings. Galandage is a unique structural solution to open the door entirely as door leaves are hidden in chambers in building walls.

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aluminium systems

MDS

The system featuring improved thermal performance is used to design sliding structures.

The solutions offered by the Modern Slide system make are suitable for designing sliding structures on 2-, 3- and 4-rail frames, which offers great flexibility for facade design.

The Galandage solution makes it possible to hide almost completely sliding leaves in the building wall to maximise the clear opening once the structure leaves are opened.

The system also offers the Monoblock solution. Monoblock sliding structures are installed within the thermal insulation layer, which is located inside rooms.

The width of the joint between two structure leaves is only 35 mm. The profiles are available in 3 versions suitable for various resistance-related requirements.

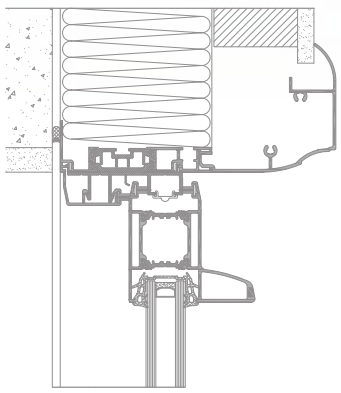
The system is characterised by structural slenderness and modern design.

Maximum leaf weight in the structure up to 250 kg.

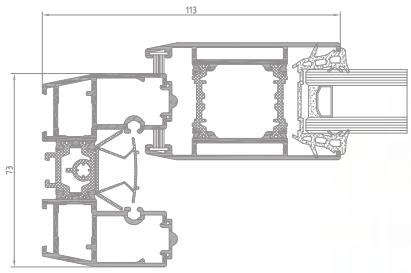
Available infill thickness values: 24, 28 and 32 mm.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

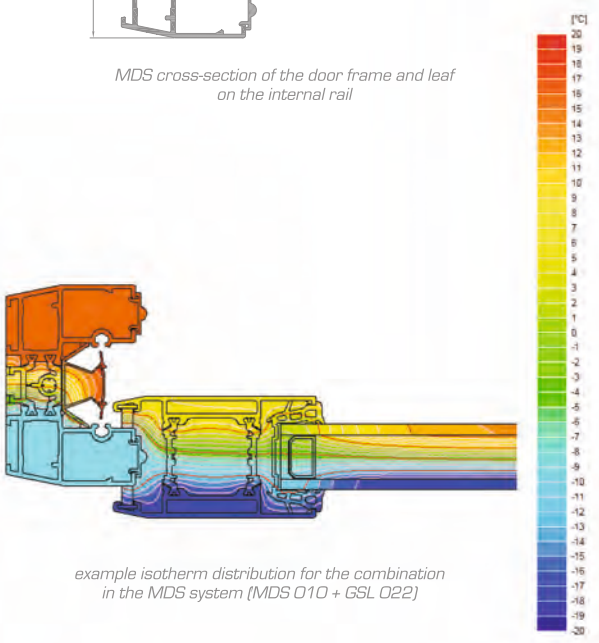
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MDS cross-section of the door frame and leaf on the external rail



MDS cross-section of the door frame and leaf on the internal rail



example isotherm distribution for the combination in the MDS system (MDS 010 + GSL 022)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
MDS	aluminium / polyamid	73,8-195,9 mm	44 mm	24 mm, 28 mm, 32 mm	to 250 kg	sliding

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MDS	Uf from 1,50 W/m^{2}K	Class 3; EN 12207	Class C1 (400 Pa); EN 12210	Class 6A (250 Pa); EN 12208

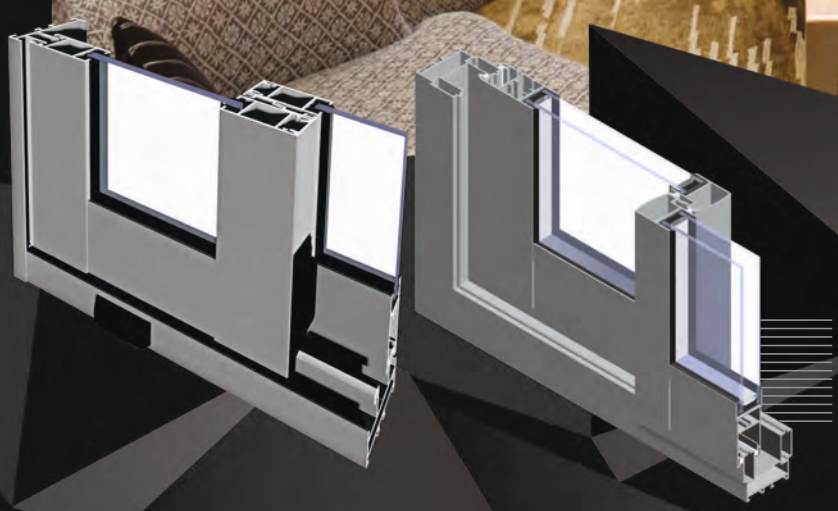
** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

SLIDING SYSTEMS

ES SL

ECOSLIDE

SLIDE COLD



Aluminum sliding systems without thermal insulation. Suited for buildings public and residential buildings.

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ES

A sliding door system without thermal insulation.

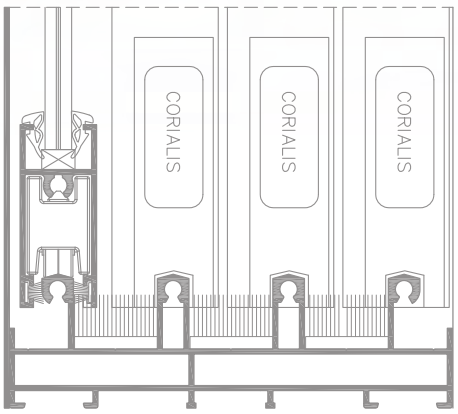
System intended for designing elements of architectural exterior and interior enclosures that do not require thermal insulation.

The system can have two, three or four rails to design 2-, 3-, 4- and 6-leaf installations. Possible infill thickness: 1-12 mm.

Movable leaf trolleys are fixed at the bottom of the leaves.

The ECOSLIDE system is compatible with other systems offered by Aliplast.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).



Ecoslide cross section

SL

A system without thermal insulation used to design sliding doors.

The system is characterised by no glazing strips. Infills are installed at the leaf installation stage in leaf C-shaped rabbets without glazing strips, with a seal which surrounds the infill.

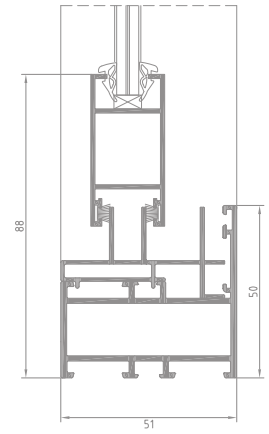
The frames are available in two versions: with an extruded slide rail and a separate profile for travelling trolleys (mounted at the lower sections of the leaves).

Vertical leaf profiles have a profiled grip along the entire leaf height. The grips also provide static reinforcement of the structure.

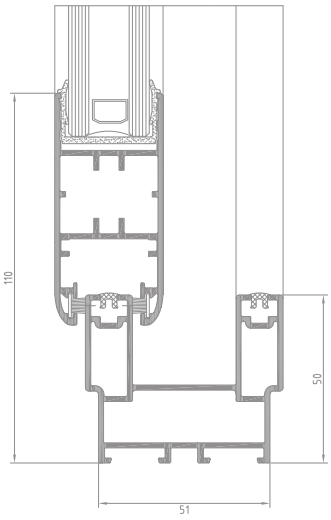
Leaf corners are joined by screwing, whereas the frames can be screwed or crimped.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



ECOSLIDE with adaptation profile in ECONOLINE casement



Slide Cold cross section

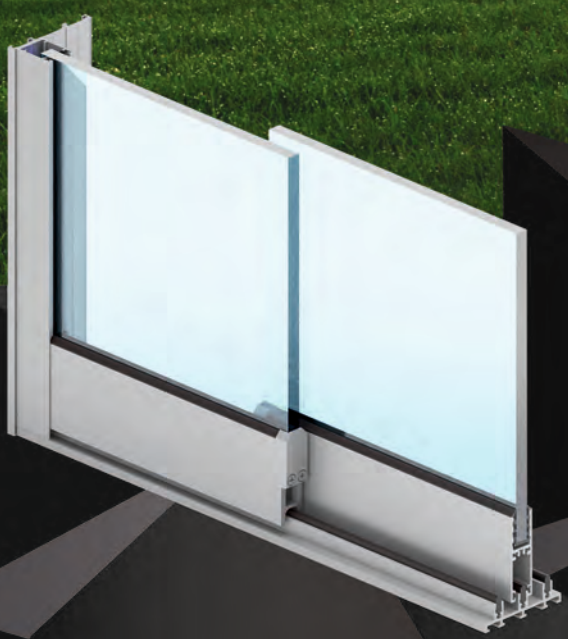
TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
ES	aluminium / polyamid	54-106,5 mm	18,5-21,5 mm	4-12 mm	to 40 kg	sliding
SL	aluminium / polyamid	47,5-99 mm	32 mm	6-9 mm 20-24 mm	to 160 kg	sliding

SLIDING SYSTEMS

SG

SLIDE GLASS



Sliding system for glass structure installation without thermal insulation, characterised by minimal visibility of the edges of aluminium profiles.

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SG

Sliding system for glass structure installation without thermal insulation, characterised by minimal visibility of the edges of aluminium profiles.

The Slide Glass system offers a solution for a profile-free labyrinth joint (without sealing) or a joint between movable door leaves using a narrow brush profile.

Possibility of using 3-, 4- and 5-track guides.

Infill: 10 mm thick tempered glass.

Concealed drainage is possible in the system through lower subframe profiles.

The system is equipped with dedicated hardware:

- adjustable or non-adjustable trolleys,
- glass-fixed handle pull
- and special hook locks.

It can be closed using the built-in catch or the side closure with a lock.

The rails for moving the door leaves can be made of aluminium or stainless steel (the rails can be independent, mounted in the travel tracks).

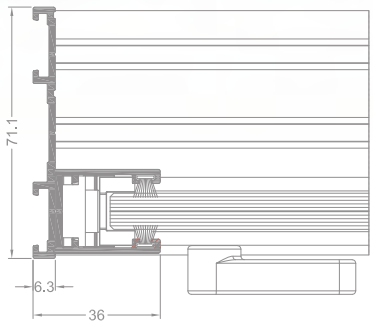
- door leaf dimensions:
  - width: 500-1600 mm
  - height up to 2600 mm
- maximum door leaf weight 80 kg

System-based solutions provide for the possibility of compensating deflections from components located above the sliding body.

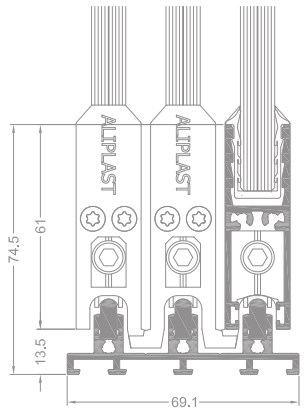
System application:

- installation of vertical walls in pergolas, terraces, etc.
- sliding glass doors.

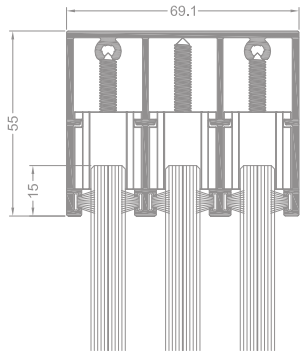
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



vertical section / sash - frame - brick



bottom horizontal section / sash - frame



top horizontal section/top sash - frame

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DOOR LEAF WIDTH	DOOR LEAF HEIGHT	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
SG	aluminium	690 mm to 1130 mm	/ to 2600 mm	/ 10 mm	max. 80 kg	sliding

FOLDING SYSTEMS

DV

PANORAMA

A three chamber door system with thermal insulation used to design accordion doors to arrange wide open passages.

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DV

A three chamber door system with thermal insulation used to design folding doors.

It is possible to use two types of the threshold system: the flat-threshold system is equipped with a brush seal and an air-tight threshold whose design is based on a frame around the perimeter of the entire terrace window.

Depending on requirements and the application, the Panorama systems offers inswing or outswing structures. There are many leaf combinations available (2+1, 3+2, 3+3).

New integrated hardware, such as hinge with bottom carriage, hinge with pull handle and low-profile handles, improve structure functionality, with reduced overall dimensions of the assembled accordion door structure at the same time.

With the minimised visual width of the profile available in the system, the design of folding doors appears to be a light structure.

The system Panorama is optionally available with improved thermal performance due to additional thermal inserts on the perimeter as well as between door leaf separators and door frames. Available options:

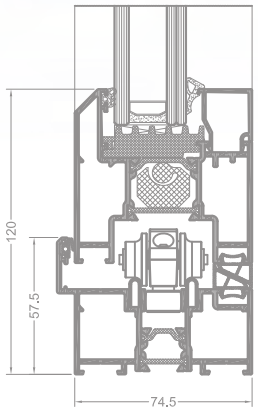
- Panorama
- Panorama i+

The folding system is used to provide an aesthetic, functional and user-friendly installation, which at the same time offers very efficient use of the space inside the building.

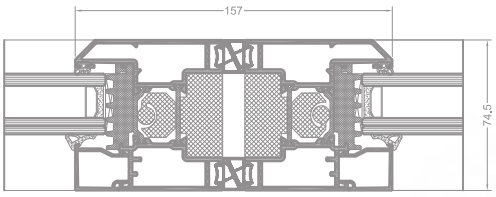
A wide range of available solutions and potential applications makes it possible to design structures for balconies, terraces or winter gardens, and even structures perfect for public and commercial buildings.

There is possibility of use Flyscreen system (Flyscreen – fly screens are a practical and an extremely functional protection against insects).

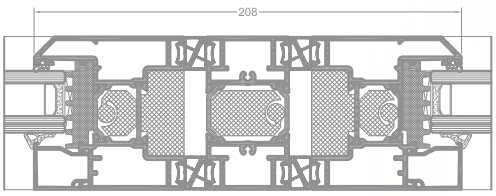
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



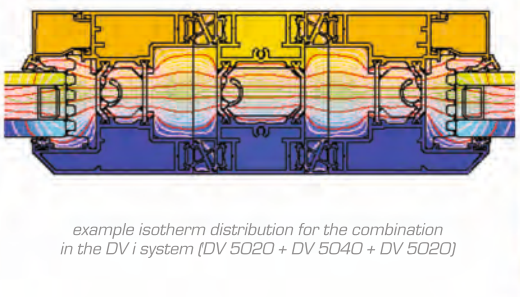
DV i+ cross section through the door on the frame (option opened inward)



DV i+ cross section (A leaf type)



DV i+ cross section (B leaf type)



example isotherm distribution for the combination in the DV i system (DV 5020 + DV 5040 + DV 5020)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	WEIGHT OF LEAF	TYPE OF DOORS
DV	aluminium / polyamid	74,5 mm	74,5 mm	16-50 mm	to 100 kg	folding doors
DV i+	aluminium / polyamid	74,5 mm	74,5 mm	16-50 mm	to 100 kg	folding doors

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
DV	Uf from 1,68 W/m^{2}K	Class 2; EN 12207	C1 (400 Pa); EN 12210	Class E1050; EN 12208
DV i+	Uf from 1,33 W/m^{2}K	Class 2; EN 12207	C1 (400 Pa); EN 12210	Class E1050; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

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MC

- MC WALL
- MC PASSIVE
- MC PASSIVE+
- MC GLASS
- MODULAR FACADE

MC WALL

System designed for construction of modern curtain walls with simple and complex shapes. Technical solutions used by the system also allow construction of glazed roofs, skylights and glazed spaces. The base version of Aliplast's flagship curtain wall system offers great opportunities to meet individual project requirements. Due to large selection of profiles and accessories, the specifiers can bring their most bold architectural concepts into reality.

A wide range of solutions used by the system (MC WALL, MC Passive, MC Passive +, MC Glass) allows free shaping of building facade. A wide range of available covers strips allows modern and custom design solutions of facades.

System MC WALL offers many possibilities of development. The system offers designs opening in the facade: parallel windows (MC PW) and roof windows (MC RW).

Angle joints allow free shaping of aluminium curtain walls.

Large extent of glazing, available insulators and accessories allow obtaining high thermal insulation power of facades.

A wide range of available mullions and transoms adjusting static requirements.

A lot of masking strips allows obtaining diverse visual effects for curtain walls.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

A wide range of colours - selection between RAL palette (Qualicoat 1518), structural colours Aliplast Wood Colour Effect (Qualideco PL-0001), bi-colour and anodized finish (Qualanod 1808).

ALUMINIUM SYSTEMS APPLIED IN THE BUILDING INDUSTRY

CURTAIN WALL

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aluminium systems

CURTAIN WALL

MC

MC WALL, MC PASSIVE, MC PASSIVE+, MC GLASS

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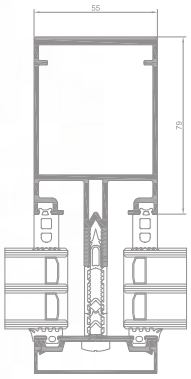
aluminium systems

MC WALL

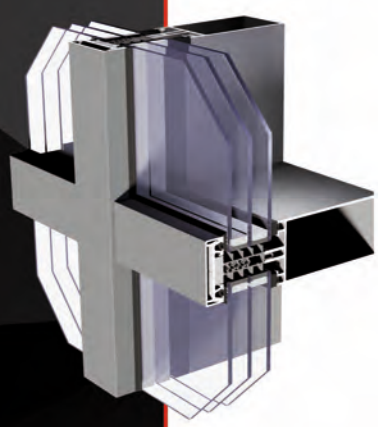
A system used to design modern curtain walls whose shapes are simple and complex. The system is a basis for facade structures: MC PASSIVE, MC PASSIVE+, MC GLASS and MC FIRE (a solution for fire protection). The MC WALL system offers many possibilities of creating the installation. The system offers structures to be opened on the facade: parallel windows (MC PW) and roof windows (MC RW).

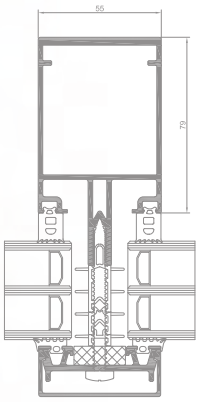


MC WALL mullion cross section

MC PASSIVE

A system used to design modern curtain walls whose shapes are simple and complex, with improved thermal performance ensured. A mullion-transom system used to design modern curtain walls whose shapes are simple and complex, with improved thermal performance ensured. Mullion-transom visual width: 55 mm.

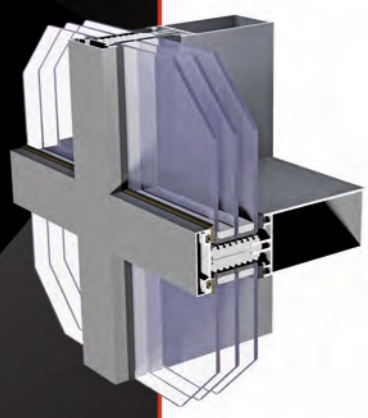


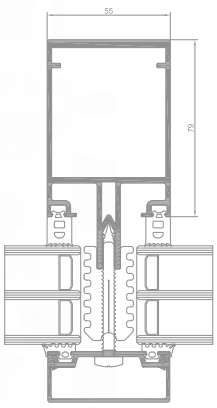


MC Passive mullion cross section

MC PASSIVE +

A modern mullion-transom system used to design curtain walls whose shapes are simple and complex, with the best thermal performance. Mullion-transom visual width: 55 mm. A wide range of mullions and transoms suitable for static requirements. A wide range of decorative cover caps makes it possible to obtain a modern and individual design of the facade.

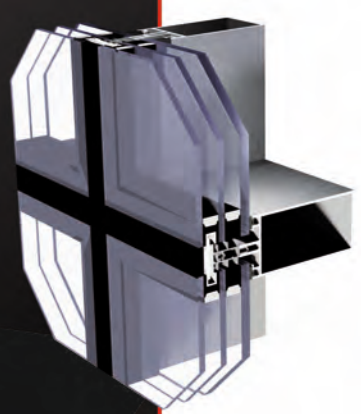


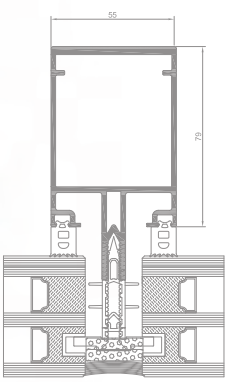


MC Passive + mullion cross section

MC GLASS

Semi-structural facade system. It is used to design facade structures which create a flat surface on the outside without any visible aluminium profiles. MCG includes curtain walls without any visible external aluminium elements. On the outside only glass infills separated by structural silicone gaps are visible. Glazing units have special profiled pockets and gutters in which mounting plates are installed to fasten infills to the curtain wall frame. A wide range of mullions and transoms suitable for static.





MC Glass mullion cross section

MC WALL

MC WALL, MC PASSIVE, MC PASSIVE+, MC GLASS

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLION RIGIDITY	TRANSOM RIGIDITY
MC WALL	aluminium	10-326 mm	from 10-294 mm	from 0-89 mm*	from 2,5-4092 cm4*	from 0,9-1831,1*
MC PASSIVE	aluminium	10-326 mm	from 10-294 mm	from 0-89 mm	from 2,5-4092 cm4*	from 0,9-1831,1*
MC PASSIVE +	aluminium	10-326 mm	from 10-294 mm	from 25-79 mm	from 2,5-4092 cm4*	from 0,9-1831,1*
MC GLASS	aluminium	10-326 mm	from 10-294 mm	from 30-89 mm	from 2,5-4092 cm4*	from 0,9-1831,1*

** MC Wall glazing of a flat profile MC055 from 5-89 mm / profile MC056 from 20-89 mm*
** There is a possibility to use additional reinforcements.*

PERFORMANCE

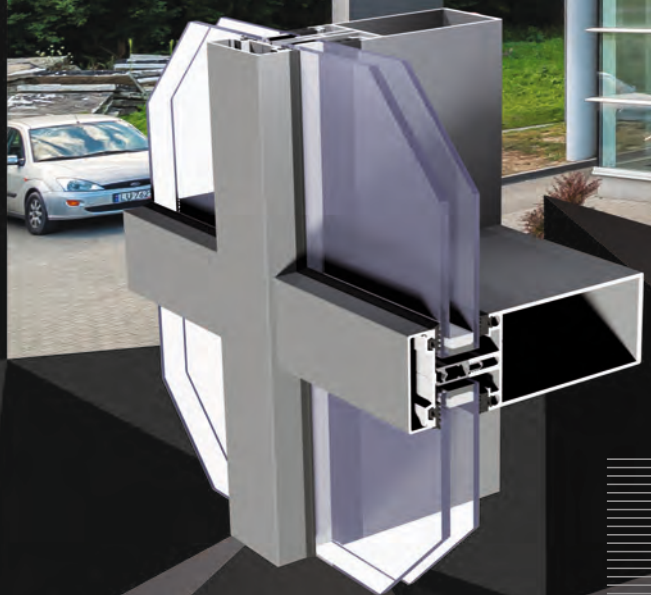
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC WALL	Uf from 0,84 W/m^{2}K	Class AE1500; EN 12152	2600 Pa ± 3900 Pa; EN 13116:2004	Class RE1500; EN 12154
MC PASSIVE	Uf from 0,79 W/m^{2}K	Class AE1300; EN 12152	2600 Pa ± 3900 Pa; EN 13116:2004	Class RE1500; EN 12154
MC PASSIVE +	Uf from 0,61 W/m^{2}K	Class AE1300; EN 12152	2600 Pa ± 3900 Pa; EN 13116:2004	Class RE1500; EN 12154
MC GLASS	Uf from 0,66 W/m^{2}K	Class AE1300; EN 12152	2000 Pa ± 3000 Pa; EN 13116:2004	Class RE1800; EN 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

- The Uf-value measures the heat flow. The lower the Uf-value, the betterer the thermal insulation of the frame.
- The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- The wind load resistance is a measure of the profile's structural strenght and is tested by applying increasing levels of air pressure to simulate the wind force. There are up to five levels of wind resistance (1 to 5) and three deflection classes (A, B, C). The higher the number, the better the performance.
- The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.

MC WALL

MC WALL



A system used to design modern curtain walls. The system is a basis for facade structures: MC PASSIVE, MC PASSIVE+, MC GLASS and MC FIRE, MC GLASS FIRE (a solution for fire protection). The MC WALL system offers many possibilities of creating the installation. The system offers structures to be opened on the facade: parallel windows (MC PW) and roof windows (MC RW).

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MC WALL

A system used to design modern curtain walls whose shapes are simple and complex.

Mullion-transom visual width: 55 mm.

The curtain wall in the MC Wall system consists of mullions and transoms fastened by stainless steel bolts. There are 2 x ø 6 stainless steel fasteners per joint; the fasteners ensure very high load capacity of the mullion-transom connection, both in the wind pressure plane and the infill load plane. The solution does not prevent using traditional transom brackets or fastening transoms only with screws attached from the face side.

A wide range of mullions and transoms suitable for static requirements.

The insulators can be built accordingly to the infill thickness.

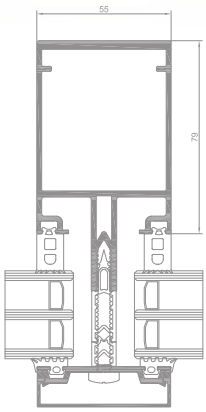
Application of vapour-proof and breather membranes on the perimeter of the facade is easier, in accordance with new guidelines for installation of aluminium structures.

A wide range of decorative cover caps makes it possible to obtain varied visual effects on the curtain wall.

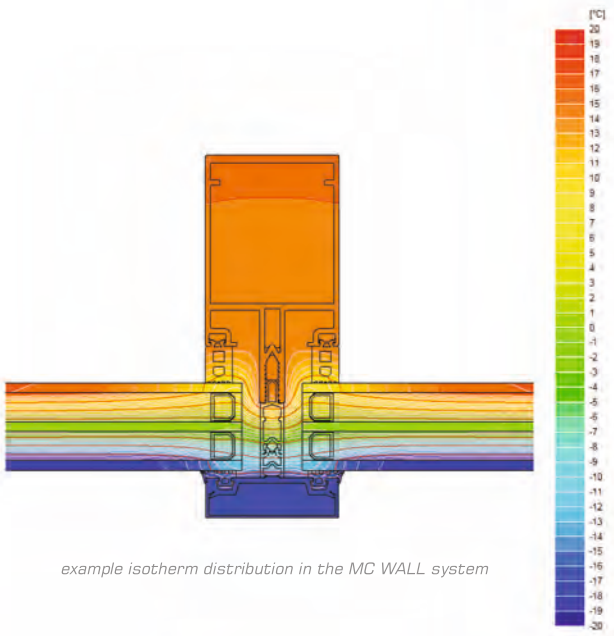
The system is a basis for facade structures: MC PASSIVE, MC PASSIVE+, MC GLASS and MC FIRE.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC WALL mullion cross section



example isotherm distribution in the MC WALL system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLIONS RIGIDITY	TRANSOM RIGIDITY
MC WALL	aluminium	10-326 mm	10-294 mm	0-89 mm*	from 2,5-4092 cm4*	from 0,9-1831,1*

** MC Wall glazing of a flat profile MC055 from 5-89 mm / profile MC056 from 20-89 mm*
** There is a possibility to use additional reinforcements.*

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC WALL	Uf from 0,84 W/m^{2}K	Class AE 1500; EN 12152	2600 Pa ± 3900 Pa EN 13116:2004	Class RE1500; EN 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

MCP

MC PASSIVE

A system used to design modern curtain walls whose shapes are simple and complex, with improved thermal performance ensured.

aliplast
aluminium systems

MCP

A system used to design modern curtain walls whose shapes are simple and complex, with improved thermal performance ensured.

Mullion-transom visual width: 55 mm.

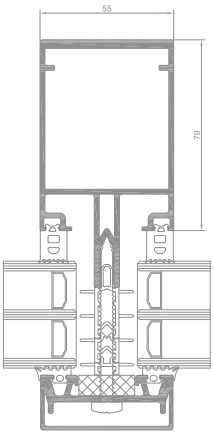
The MC PASSIVE system wall is designed as a mullion-transom frame made of aluminium sections. Its excellent thermal performance is obtained due to a special insulator installed in the space of the holding strip or spacer, which is also located under set screws used to fasten the holding strip. Additionally, thermal properties are improved. Thermal separators are tied to mullion and transom sections, made of hard PVC fitted with additional horizontal “mortises” made of soft PVC.

A wide range of mullions and transoms suitable for static requirements.

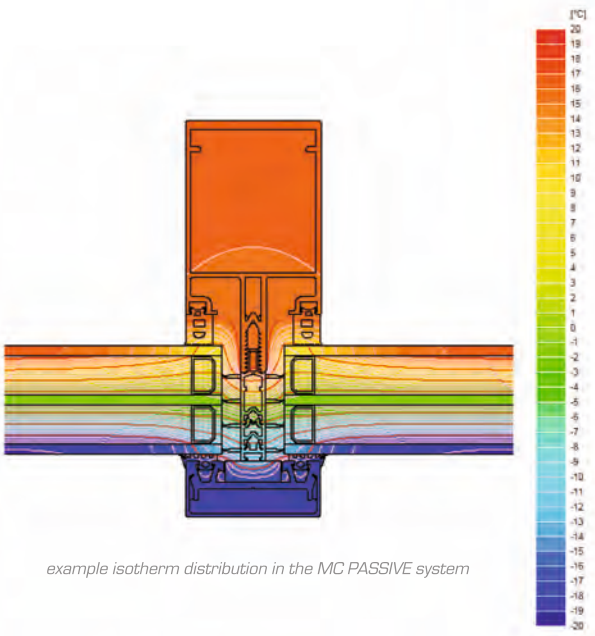
A wide range of decorative cover caps makes it possible to obtain a modern and individual design of the facade.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC PASSIVE mullion cross section



example isotherm distribution in the MC PASSIVE system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLIONS RIGIDITY	TRANSOM RIGIDITY
MC PASSIVE	aluminium	10-326 mm	10-294 mm	0-89 mm	from 2,5-4092 cm4*	from 0,9-1831,1*

** There is a possibility to use additional reinforcements.*

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC PASSIVE	Uf from 0,79 W/m^{2}K	Class AE1300; EN 12152	2600 Pa ± 3900 Pa; EN 13116	Class RE1500; En 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

MCP +

MC PASSIVE +

A modern mullion-transom system used to design curtain walls whose shapes are simple and complex, with the best thermal performance ensured.

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MCP +

A mullion-transom system used to design modern curtain walls whose shapes are simple and complex, with the best thermal performance ensured.

MC PASSIVE+ offers basic features and possibilities available with MC WALL structures.

The improved thermal performance results from application of a new insulator made of innovative materials, which made it possible to obtain an even better heat-transfer coefficient – Uf starting at 0,61 W/m^{2}K. MC PASSIVE+ offers one of the highest technical parameters among aluminium facade systems available on the market to respond to needs of the energy-saving and passive building industry.

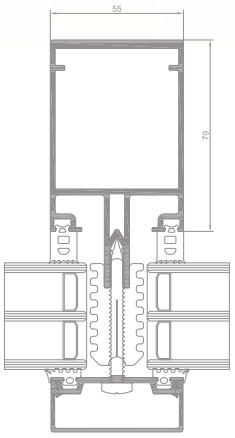
Mullion-transom visual width: 55 mm.

A wide range of mullions and transoms suitable for static requirements.

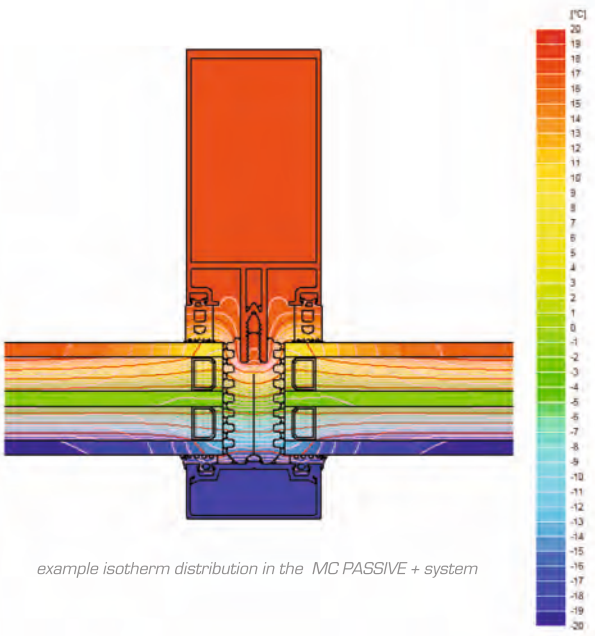
A wide range of decorative cover caps makes it possible to obtain a modern and individual design of the facade.

The option of bending profiles (detailed specification of profiles and detailed technical parameters of profile bending process are available in the customer area of the website www.aliplast.pl).

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC PASSIVE + mullion cross section



example isotherm distribution in the MC PASSIVE + system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLION RIGIDITY	TRANSOM RIGIDITY
MC PASSIVE +	aluminium	10-326 mm	10-294 mm	25-79 mm	from 2,5-4092 cm4*	from 0,9-1831,1*

** There is a possibility to use additional reinforcements.*

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC PASSIVE +	Uf from 0,61 W/m^{2}K	Class AE1300; EN 12152	2600 Pa ± 3900 Pa; EN 13116	Class RE1500; EN 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

MCG

MC GLASS

The semi-structural facade system. It is used to design facade structures which create a flat surface on the outside without any visible aluminium profiles.

aliplast
aluminium systems

MCG

The semi-structural facade system. It is used to design facade structures which create a flat surface on the outside without any visible aluminium profiles.

MC GLASS includes curtain walls without any visible external aluminium elements. On the outside only glass infills separated by structural silicone gaps are visible. Glazing units have special profiled pockets and gutters in which mounting plates are installed to fasten infills to the curtain wall frame.

The system features very good thermal performance (UF starting at 0,66 m^2K). Such a result can be obtained since innovative insulating materials are used.

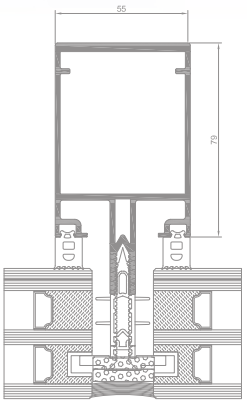
Mullion-transom visual width: 55 mm.

A wide range of mullions and transoms suitable for static requirements.

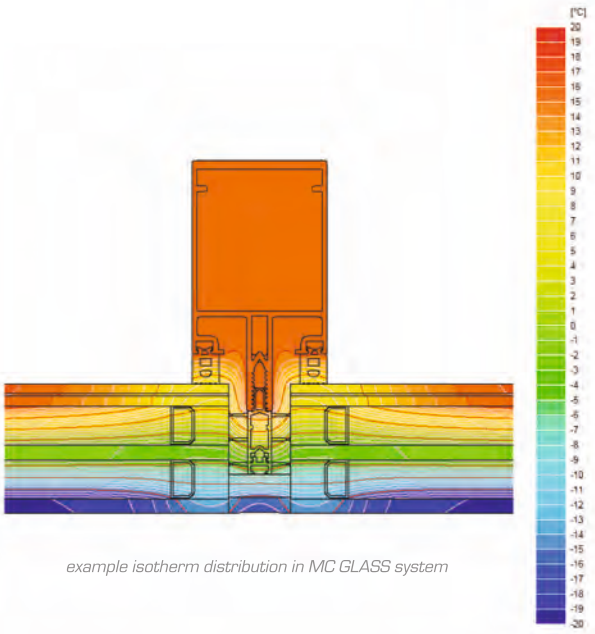
The facade makes it possible to obtain various appearance versions, in particular the so-called horizontal or vertical line.

A broad range of decorative cover caps makes it possible to obtain a modern and individual design of the facade.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC GLASS mullion cross section



example isotherm distribution in MC GLASS system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLIONS RIGIDITY	TRANSOM RIGIDITY
MC GLASS	aluminium	10-326 mm	10-294 mm	30-89 mm	from 2,5-4092 cm4*	from 0,9-1831,1*

** There is a possibility to use additional reinforcements.*

PERFORMANCE

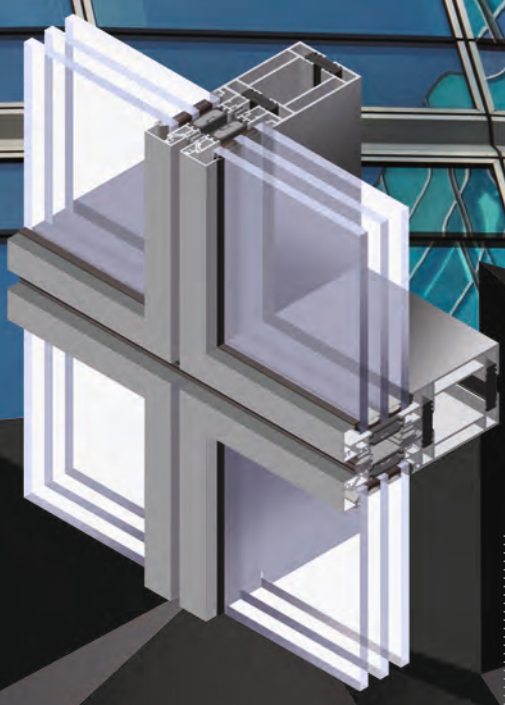
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC GLASS	Uf from 0,66 W/m^2K	Class AE1300; EN 12152	2000 Pa ± 3000 Pa; EN 13116 : 2004	Class RE1800; EN 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

MS

MODULAR FACADE



The system is designed for constructing external vertical facades featuring improved thermal insulation. The system consists of prefabricated segments of aluminium profile frames with glass infill (or other material) to be installed on site, together with joints sealed with appropriate EPDM gaskets.

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MS

The system is designed for constructing external vertical facades featuring improved thermal insulation. The system consists of prefabricated segments of aluminium profile frames with glass infill (or other material) to be installed on site, together with joints sealed with appropriate EPDM gaskets.

The segments can be made as single or double (with a centre stud); the limited number of segments reduces the total installation time.

The system can also be installed in segments of window and door structures available within the aluminium systems offered by Aliplast.

In addition, the system can be installed within the depth of facade profiles on the internal glazing side, sun exposure protection systems such as shutters and blinds.

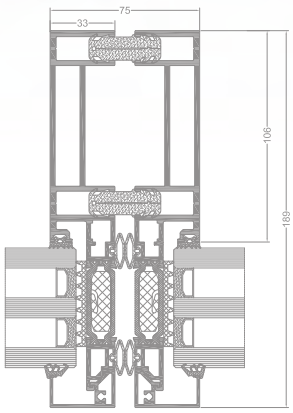
In order to improve strength parameters of the profiles, they can be reinforced with aluminium or steel flat bars and shaped sections inserted into profile chambers. Dimensions of the chambers are selected accordingly to be able to use commonly available standard flat bars and shaped sections.

High tightness parameters are possible by the application of EPDM gaskets. Internal glazing seals are selected based on the glazing table. Expansion seals on segment joints create 4 sealing barriers.

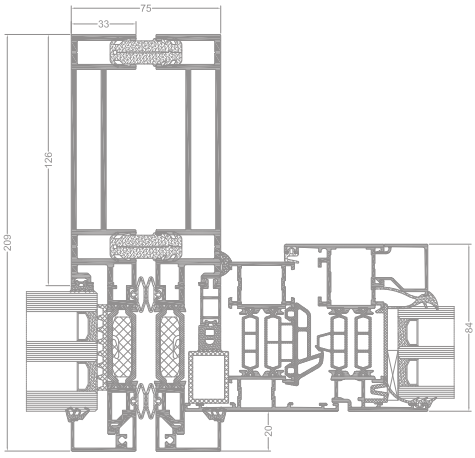
High thermal performance is ensured by 42 mm polyamide (or Noryl) thermal inserts in profiles. The space within the profiles between the thermal inserts is filled with insulating material sheets.

The prefabrication of segments takes place entirely at the workshop. The segments are fixed to the primary building structure using brackets which comprise aluminium elements joined with stainless steel screws to adjust the position of the segments being fixed in three directions. Bracket fixing to the building structure requires a strength analysis of the fasteners (anchors, screws) by an authorised design engineer.

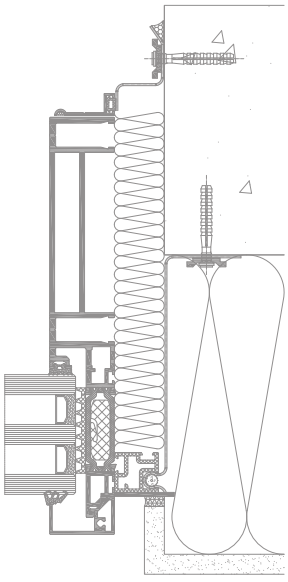
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



connection between modules in the MS system



combination of the IP window system and the MS system



connection of the MS system with the building structure

TECHNICAL SPECIFICATION

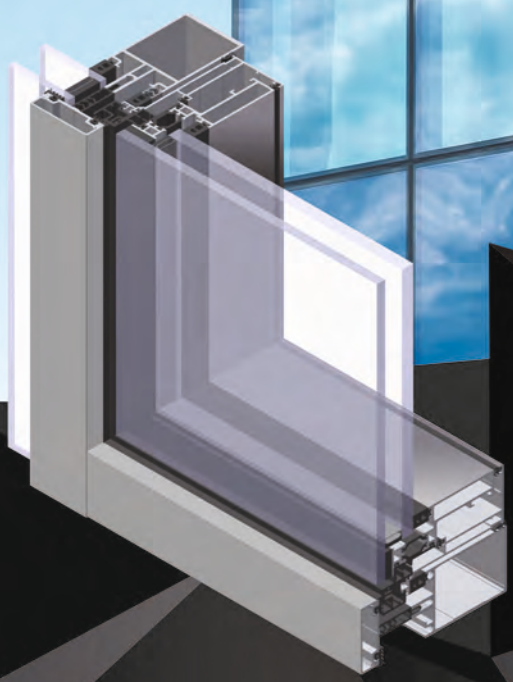
SYSTEM	MATERIAL	WIDTH PROFILES	WIDTH CENTRE PROFILES (MULLIONS AND TRANSOMS)	WIDTH OF THE SPECIAL TRANSOM PROFILE	GLAZING RANGE	THERMAL INSULATION Uf *
MS	aluminium	75 mm (once installed) for vertical profiles 85 mm (once installed) for horizontal profiles	75 mm	55 mm	6 mm - 60 mm	Uf from 1,09 W/m^{2}K

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

MC PW

MC PARALLEL WINDOW



A parallel window system used to design window which are positioned in parallel to facade when opened. The system is provided with thermal insulation. The parallel window is a solution based on the MC Wall facade system. With this solution, uniform appearance of the aluminium-glass wall can be maintained when the window is opened. When the sash moves on the facade, an interesting architectural effect is obtained.

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MC PW

A parallel window system used to design windows which are positioned in parallel to facade when opened.

MC PW is a three chamber system with thermal insulation. It is optional to use additional insulating components to improve thermal aspects of the structure (under-glass inserts, inserts between thermal separators).

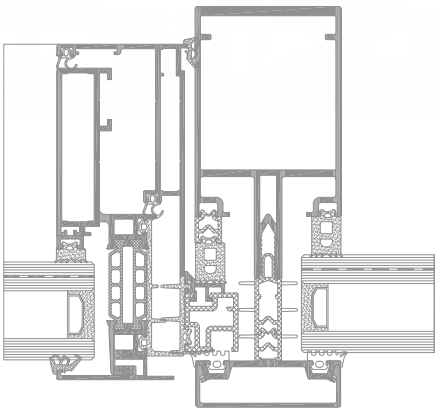
The sash is moved outwards using special scissors mechanism adapted to that purpose. The arrangement of scissors mechanisms and their number depends on the window sash size and glass weight. The scissors mechanism can be used together with multi-point hardware locking points suitable for the overall dimensions, which significantly improves window tightness.

The window can be opened manually using two opposite handles or electrically by means of special servo-motors suitable for that purpose.

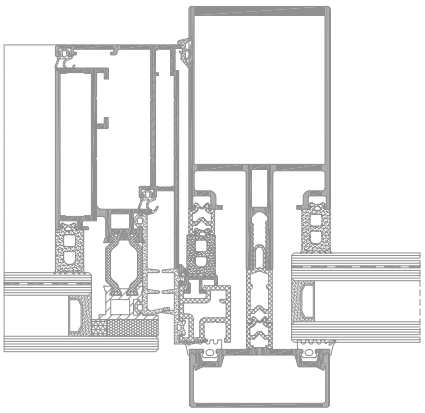
The MC PW windows can be designed as top-hung (the lower part is lifted outwards).

The system ensures optimum ventilation in the room. Once moved out, the sash enables free airflow in both directions: inwards and outwards. Compared to traditional windows, this solution offers more optimum air circulation and much better comfort of use.

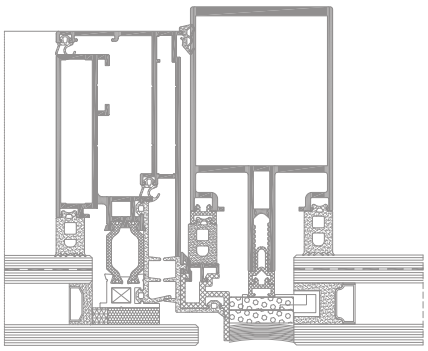
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC PW cross section



MC PW cross section



MC PW cross section

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOW	TYPE OF GLAZING
MC PW	aluminium / polyamid	117 mm	98-115,3 mm	24-46 mm	parallel window	structural, glazing strip

PERFORMANCE

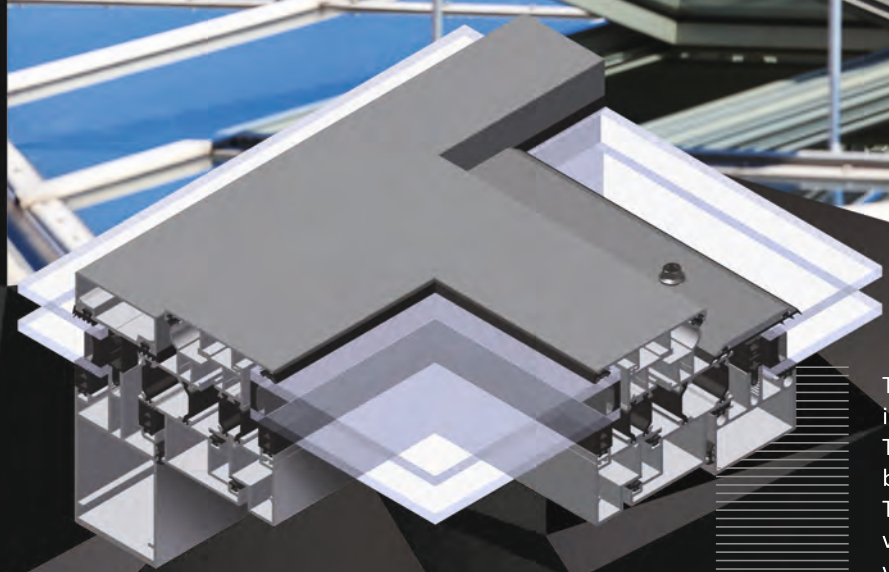
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC PW	Uf from 1,65 W/m^{2}K	Class 4; EN 12207	C5 (2000 Pa); EN 12210	E2400 (2400 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

MC RW

MC RW ROOF WINDOW



Three chamber system with thermal insulation, used to design roof windows. The MC RW roof window is a solution based on the MC Wall facade system.
This type of structures is used to design ventilation dampers. Windows and smoke ventilators have a specific role in ensuring safety and comfort of the building residents.

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MC RW

The MC RW roof window is a solution based on the MC Wall facade system. This type of structures is used to design ventilation flaps.

The MC RW is a three chamber system with thermal insulation. It is optional to use an additional insulating components to improve thermal aspects of the structure (under-glass inserts, inserts between thermal separators).

The structure can be installed on roofs with the pitch ranging from 5° to 75° relative to the horizontal.

The MC RW roof window is fitted with an effective drainage and ventilation system integrated with the mullion-transom wall system.

Maximum structure dimensions:

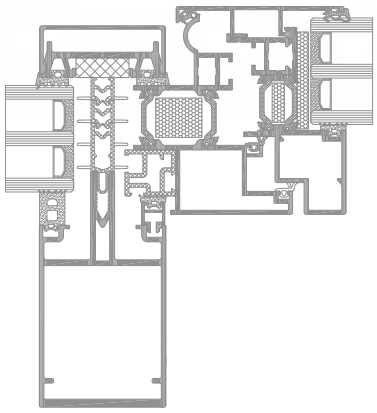
- 2120 x 1120 mm – maximum total pane area: 1,9 m^2
  (for this overall dimensions it is possible to use 6 ESG/16/442 glass)
- 1970 x 2070 mm – maximum total pane area: 3,48 m^2

The window weight is limited by technical parameters of the applied opening mechanisms and hinges. The weight can be up to 150 kg.

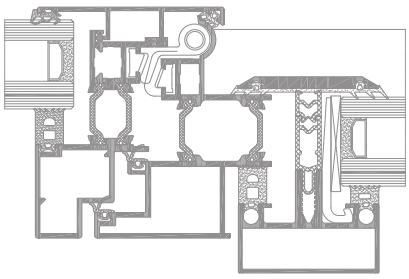
The MC RW structure can be used with a wider range of closers available on the market. The MC RW roof window can be fitted with a manual or electrical opening mechanism.

Optional to use glazing units with the thickness from 28 to 46 mm.

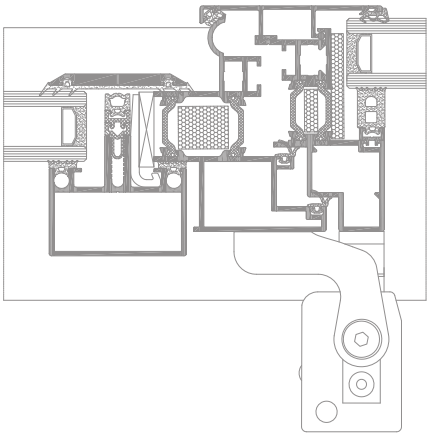
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC RW cross section (leaf and transom connections)



MC RW cross section (hinge side)



MC RW cross section (leaf and transom connections)

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	TYPE OF WINDOW	TYPE OF GLAZING
MC RW	aluminium / polyamid	87 mm	81 mm	28-46 mm	roof window	glazing strip

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC RW	Uf from 1,86 W/m^2K	Class 4; EN 12207	CE/BE 2400; EN 12210	Class E2100; EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

CURTAIN WALL

ST

SUN PROTECTION

Facade-mounted aluminium solar shading devices. To be installed on facades, on mullion-transom curtain walls.

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SUN PROTECTION

Facade-mounted aluminium solar shading devices. To be installed on facades, on mullion-transom curtain walls.

Shading devices available in sizes: 100, 150, 200, 250, 300 and 350 mm.
Fixed brackets – angle of inclination from 45˚ to 90˚.
Option of vertical and horizontal installation.

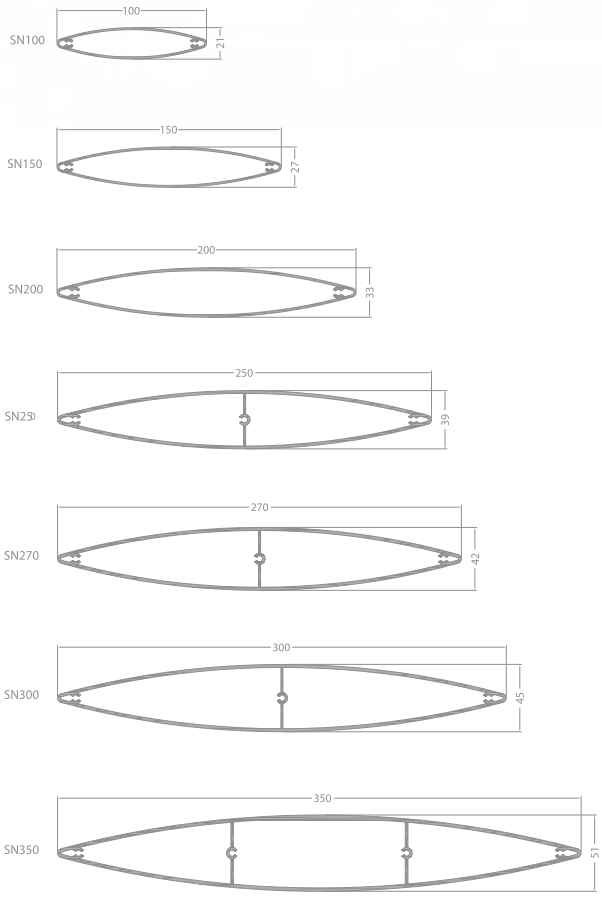
Option of direct installation on the building facade.

The installation is possible not only on straight walls, but also in places where the facade changes in direction.

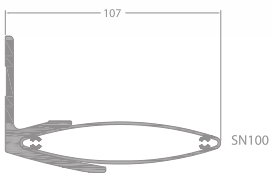
All elements of aluminium shading devices are characterised by high strength and resistance to weather conditions.

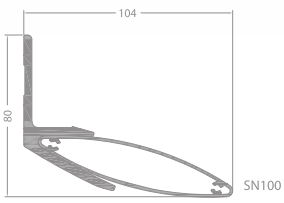
Facade-mounted solar shading devices change the look of facade by providing it with an interesting and modern character. They provide a great potential in creating a modern and vivid external appearance of the building. Sun Protection devices combine durability, thermal and optical comfort as well as aesthetics and functionality.

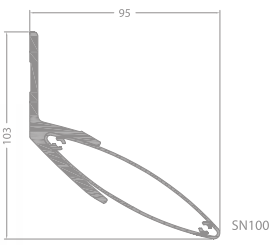
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.

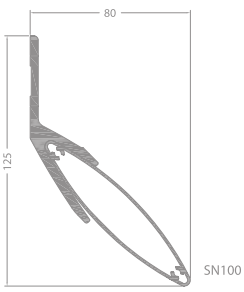


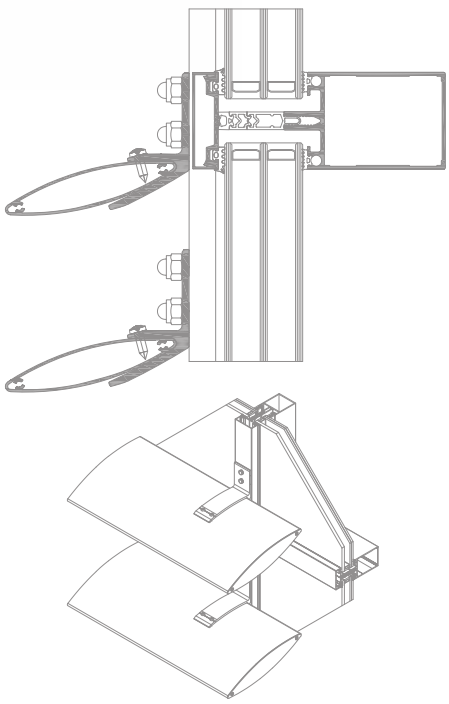
sample of dimensions and angles for Sun Protection panels

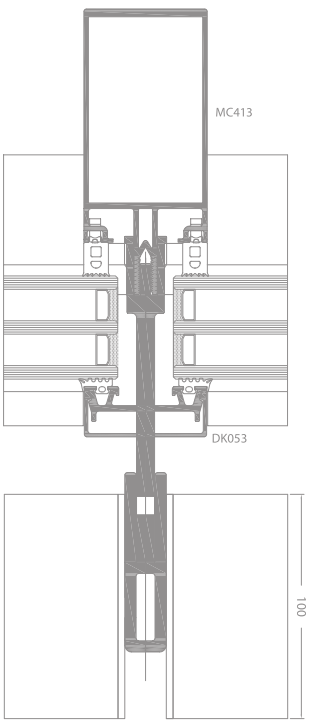












TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	AVAILABLE SIZES	ANGLE OF INCLINATION
SUN PROTECTION	aluminium	100, 150, 200, 250, 300, 350 mm	from 45° do 90°

CURTAIN WALL

SH

SLIDING SHUTTERS

Facade-mounted aluminium solar shading devices. To be installed on facades, on mullion-transom curtain walls.

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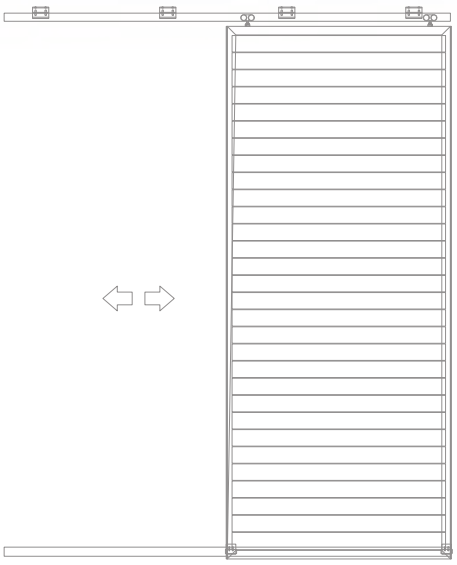
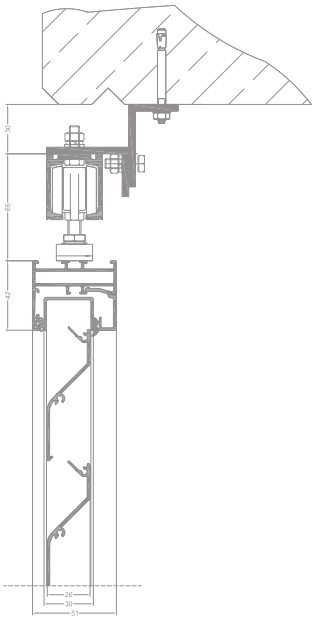
SLIDING SHUTTERS



Sliding shutters create a system of external blinds to provide solar shading.

Apart from their self-explanatory function, solar shading devices enhance the visual effect of the final structure design.

Various shapes of shutter blades and guide rails in the movable shutter system are suitable for designing individual solutions for practically all types of facade and the requirements which such shutters must meet.



Frames and profiles of sliding shutters are made of aluminium. The profiles can be fixed or movable. The system is characterised by simplicity of installation.

Variety of materials and shapes as well as diversity of colours and patterns allow the creation of facades appealing to all tastes. You can rely on a top-quality solar shading device all year round despite wind and bad weather.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.

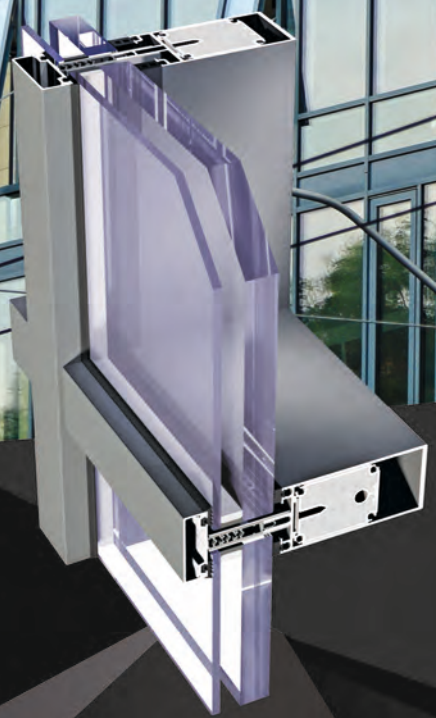
TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	AVAILABLE SIZES	ANGLE OF INCLINATION
SLIDING SHUTTERS	aluminium	84 mm	———

FIREPROOF SYSTEMS

MCF

MC FIRE



A mullion-transom wall system used to design and construct lightweight fire-rated curtain walls conforming to the EI60 fire resistance class.

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MCF

A mullion-transom wall system used to design and construct lightweight fire-rated curtain walls conforming to the EI60 fire resistance class.

The system is based on a framed load-bearing structure consisting of vertical (mullion) and horizontal (transom) aluminium shaped sections with a width of 55 mm.

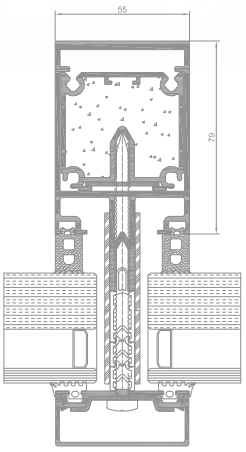
In order to obtain fire resistance of aluminium shaped sections, the mullions and transoms are fitted with special flame-retardant inserts (aluminium shaped sections filled with a flame-retardant compound).

The appearance of the fire-rated facade is the same as the appearance of the mullion-transom facade. Therefore, the joint of the fire-rated facade and the standard facade can be optically invisible.

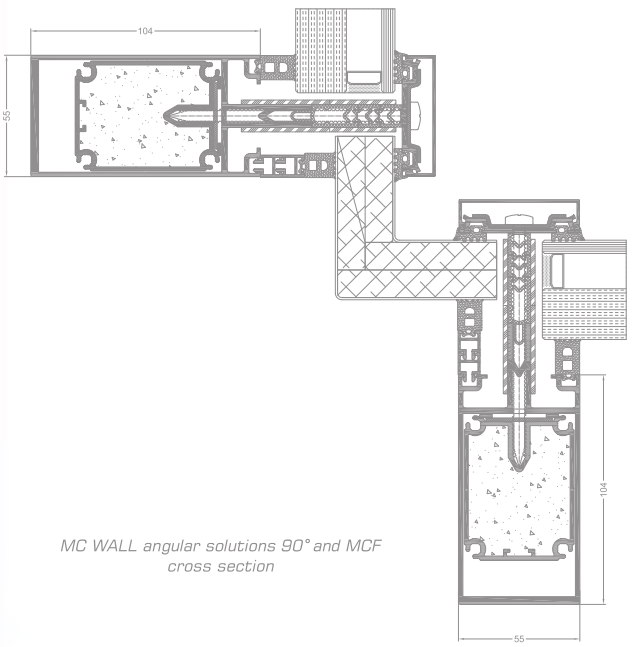
Efficient fire protection of the systems offered by Aliplast is not compromised by appearance. The solutions offered by Aliplast provide maximum safety and freedom of architectural design at the same time.

A wide range of decorative cover caps makes is used to obtain a modern and individual design of the facade.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC FIRE mullion cross section



MC WALL angular solutions 90° and MCF cross section

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLIONS RIGIDITY	TRANSOM RIGIDITY
MC FIRE	aluminium	10-326 mm	10-294 mm	4-59 mm	from 2,5-4092 cm4*	from 0,9-1831,1*

** There is a possibility to use additional reinforcements.*

PERFORMANCE

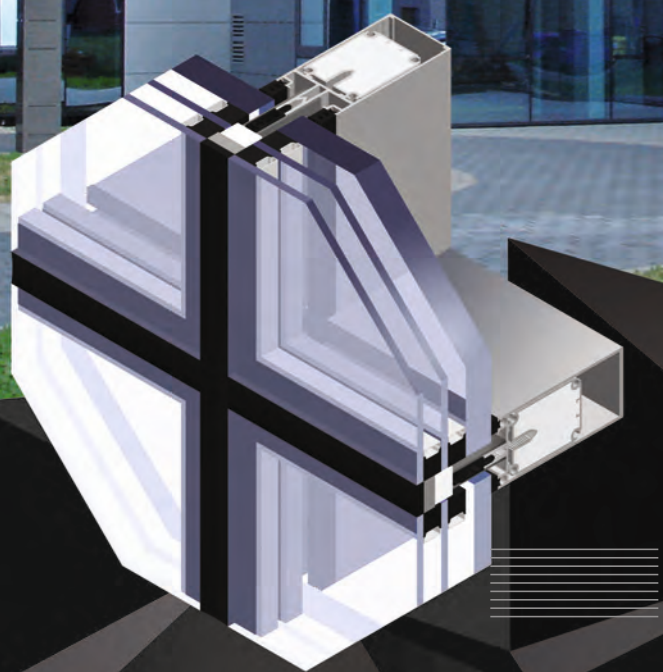
SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC FIRE	Uf from 1,03 W/m^{2}K	Class AE1300; EN 12152	2600 Pa ± 3900 Pa EN 13116:2004	Class RE1500; EN 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

FIREPROOF SYSTEMS

MCGF

MC GLASS FIRE



A semi-structural facade system used to design fire-rated facade structures featuring the EI30, EI60 fire resistance.

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MCGF

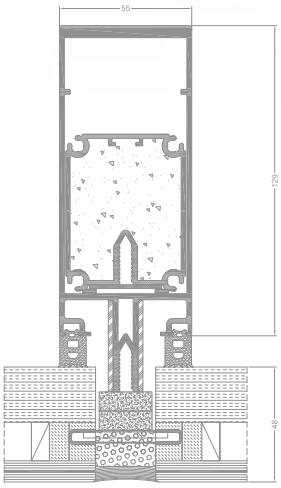
A semi-structural facade system used to design fire-rated facade structures featuring the EI30, EI60 fire resistance.

Structures based on the MC Glass Fire system provide the EI30 and EI60 fire resistance class according to 13501-2+A1:2010.

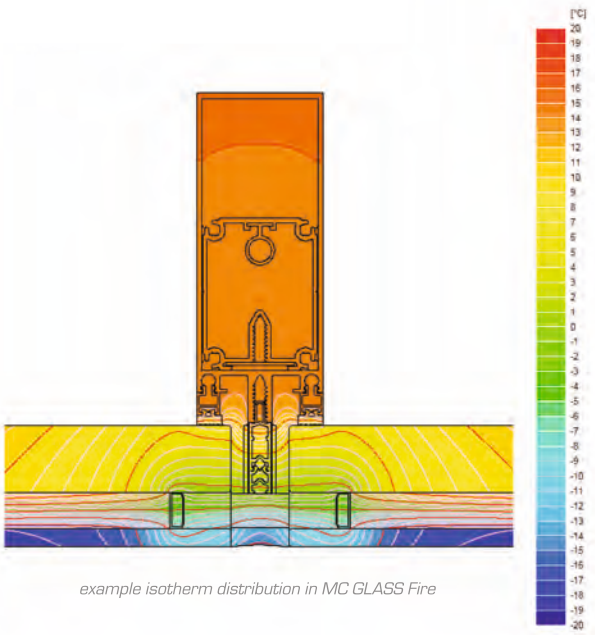
Technical description of the system:

- Infill:
  - Vetrotech glazing unit: 8 tempered / 16 / 25 Contrafla
  - nternal fire-rated glass pane
- Fire-rated inserts in mullions and transoms: aluminium shaped sections filled with the Aestuver fire resistant cement compound supplied by Xella.
- Transoms fixed to mullions using two a ø6 pins and one a ø10 pin (stainless steel). Mullion and transom sockets are lined with intumescent tapes.
- The space between glasses is filled with an insulating material with thermal and fire-resistant features.
- In order to obtain a smooth external surface, the gap is filled with UV resistant silicone.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



MC GLASS Fire mullion cross section



example isotherm distribution in MC GLASS Fire

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLIONS RIGIDITY	TRANSOM RIGIDITY
MCGF	aluminium	10-326 mm	10-294 mm	4-59 mm	from 2,5-4092 cm4*	from 0,9-1831,1*

** There is a possibility to use additional reinforcements.*

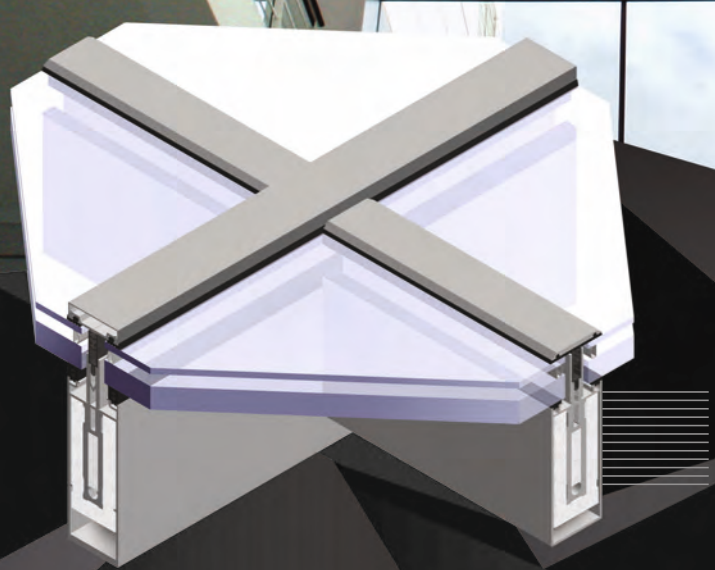
PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MCGF	Uf from 0,88 W/m^{2}K	Class AE1300; EN 12152	2000 Pa ± 3000 Pa; EN 13116 : 2004	CLASS RE1800; EN 12154

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

MC FIRE ROOF

MC FIRE ROOF



The MC FIRE ROOF skylights are reinforced with appropriately matched aluminium cores, which are filled and lined with fire resistant inserts.

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MC FIRE ROOF

The MC FIRE ROOF system consists of posts (rafters) and beams (purlins) available in a wide range of MC WALL system profiles.

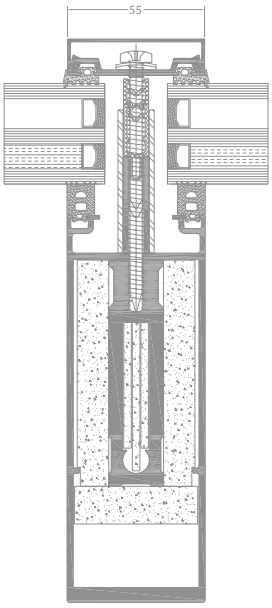
The load-bearing profiles of the structure (posts/rafters and beams/purlins) are reinforced with appropriately matched aluminium cores, which are filled and lined with fire resistant inserts. The posts and beams are additionally connected with each other by means of designed stainless steel pins.

There is a wide range of masking profiles and roof-plane strips available in the system, giving the structure an aesthetic appearance.

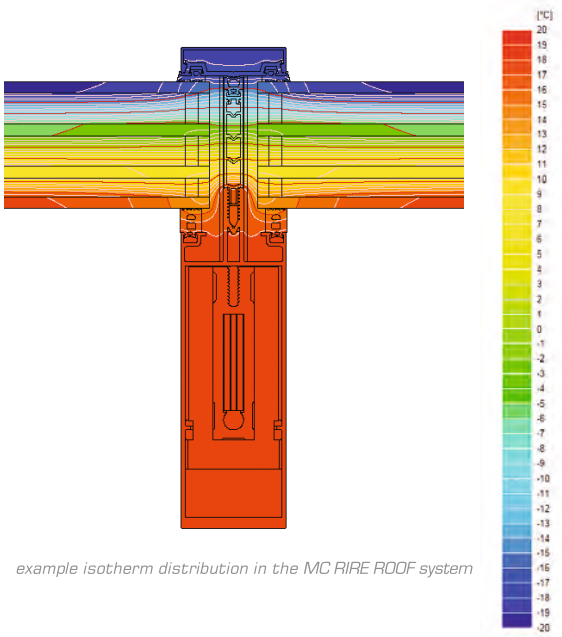
Characteristic:

- the MC FIRE ROOF solution using appropriate glass (different variants available) achieves the REI45 rating (according to PN-EN 13501-2:2016-07)
- the structure of the MC FIRE ROOF skylight can be inclined from 0° to 80° (applies to fire rating). A double pitched structure is also possible, also as a vertical wall transforming into the skylight (knee wall)
- the maximum glass dimensions are 1300 x 2400 (EI30)
  - Glazing thickness ranging from 40 to 66 mm can be used in the system.
  - Non-rectangular glass is also possible.
- the maximum depth of poles/rafters depends on strength calculations and ranges from 104 to 326 mm
- the maximum depth of beams/purlins depends on strength calculations and ranges from 113 to 294 mm.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized finish (Qualanod 1808) and bi-colour.



MC FIRE ROOF



example isotherm distribution in the MC FIRE ROOF system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH MULLION	DEPTH TRANSOM	GLAZING RANGE	MULLIONS RIGIDITY	TRANSOM RIGIDITY
MC FIRE ROOF	aluminium	104-326 mm	138,3 -294 mm	40-66 mm	192,23 - 5177,13 cm4*	370,94 - 2429,84 cm4*

** There is a possibility to use additional reinforcements.*

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
MC FIRE ROOF	Uf from 1,16 W/m^{2}K	Class Ae1300 Pa; EN 12152:2004	2600 Pa ± 3900 Pa; EN 13116:2004	Class AE1500 Pa; EN 12154:2004

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

FIREPROOF SYSTEMS

FR90

FR90

Thermally insulated fire protection system. Structures designed on the basis of the FR90 system feature fire rating EI30 (E_1), EI60 (E_1).

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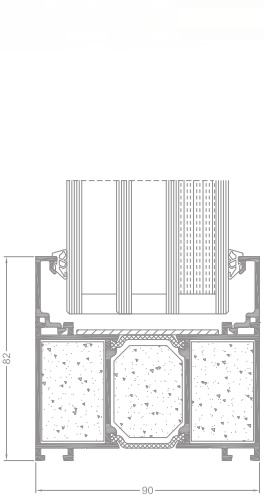
FR90

Thermally insulated fire protection system. Structures designed on the basis of the FR90 system feature fire rating for walls EI30, EI60, EI90, EI120; and fire rating for doors EI30, EI60, EI90.

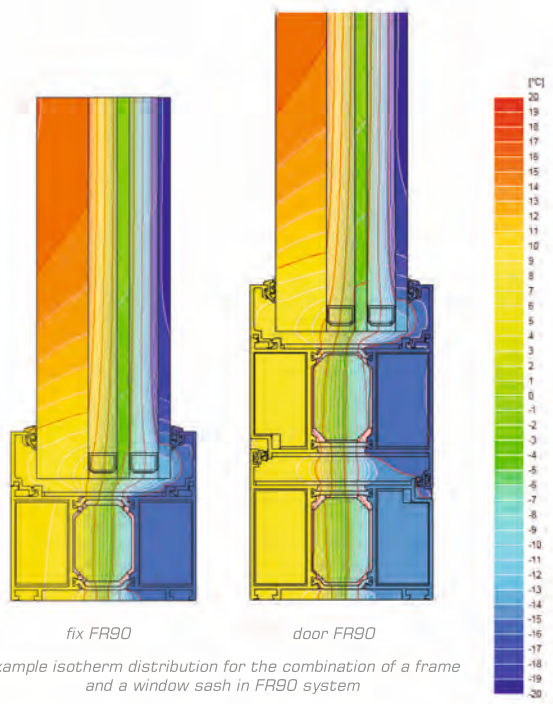
System description:

- Installation depth: 90 mm
- Symmetrically designed profile, inner chamber filled with gypsum infill elements (between thermal separation sheets) – for EI30; all chambers filled with gypsum – for EI60
- Compatible with systems with the installation depth of 90 mm (STAR)
- Possibility of using a triple glazing unit (glazing: 20 mm to 68 mm)
- Option of panel infill (panel thickness 60 mm):
  - mineral wool filed panels (Up = 0,57 W/m^{2}K)
  - gypsum filled panels;
- Application: indoor and outdoor installations
- Structures: single and double doors, fixed glazing
- Maximum dimensions of the tested structure: 6000 x 3000 mm (fixed wall, single glass pane)
- Maximum dimensions of single-leaf doors: 1650 x 2870 mm
- Maximum dimensions of double-leaf doors: 3170 x 2870 mm
- Single-point and multi-point door locks, electric door strikes
- Cover plate hinges, roller hinges
- Solutions with and without thresholds
- Door kick plates (high plinth block)
- Option of air vent installation
- Optimised profiles (one profile type for the door frame and leaf)
- Quick and simple prefabrication (no processing of the glazing bar)
- Acoustics – acoustic testing of double doors featuring fire rating EI30 and EI60 for indoor and outdoor installations: 39 to 47 dB.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



FR90 fix section *FR90 door section*



fix FR90 *door FR90*

example isotherm distribution for the combination of a frame and a window sash in FR90 system

TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	MAX. SIZE OF FIX GLAZING	MAX. SIZE OF DOORS
FR90 fix	aluminium / polyamid	90 mm	/ —— /	fix 20 - 60 mm	EI30: 2200 x 4316 mm EI60: 2046 x 3966 mm EI90: 1500 x 3000 mm EI120: 1500 x 3000 mm	——
FR90 door	aluminium / polyamid	90 mm	/ 90 mm /	door 20 - 60 mm	——	single sash doors EI30: 1541 x 2806 mm double sash doors EI30: 2532 x 2928 mm single sash doors EI60: 1340 x 2440 mm double sash doors EI60: 2680 x 2440 mm single sash doors EI90: 1450 x 2600 mm double sash doors EI90: 2770 x 2600 mm

PERFORMANCE

SYSTEM	THERMAL INSULATION Uf *	AIR PERMEABILITY	WINDLOAD RESISTANCE	WATERTIGHTNESS
FR90	Uf from 2,145 W/m^{2}K	Class 4; EN 12207	C1 (400 Pa); EN 12210	A4 (150 Pa); EN 12208

** Thermal insulation is dependent on a combination of profiles and thickness of the filling.*

FIREPROOF SYSTEMS

FR65

FR65

Thermally insulated fire protection system. Structures designed on the basis of the FR65 system feature fire rating EI30.

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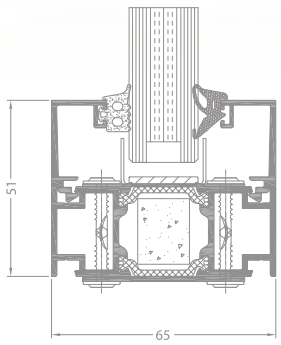
FR65

Thermally insulated fire protection system. Structures designed on the basis of the FR65 system feature fire rating for walls EI30, EI60 and feature fire rating for doors EI30.

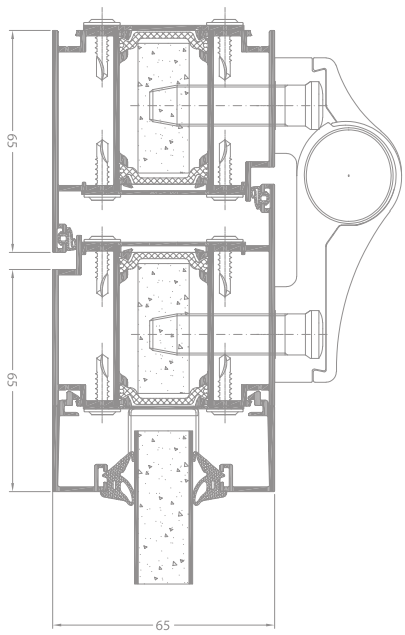
System characteristics:

- installation depth 65 mm
- symmetrically designed profile, middle chamber filled with gypsum infill elements (between thermal separation sheets)
- compatible with systems with the installation depth of system 65 mm (Imperial, Ecofutural)
- possibility of using a double glazing unit (glazing: 17 mm to 48 mm)
- option of panel infill (panel thickness 17 mm):
  - gypsum filled panels,
  - the possibility of using steel or aluminum sheet
- application: indoor installations
- structures: single and double doors, fixed glazing;
- maximum dimensions of the tested structure: 4930 x 3100 mm (fixed wall)
- maximum dimensions of single-leaf doors: 1450 x 2500 mm
- maximum dimensions of double-leaf doors: 2690 x 2500 mm
- single-point and multi-point door locks, electric door strikes
- cover plate hinges
- solutions with and without thresholds
- door kick plates (high plinth block)
- option of air vent installation
- optimised profiles (one profile type for the door frame and leaf)
- quick and simple prefabrication (no processing of the glazing bar)
- Acoustics – acoustic testing of double-leaf doors featuring fire rating EI30 and EI60 for indoor installations: from 37 dB, gypsum filled panels: 33 dB.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



FR65 window section



FR65 door section

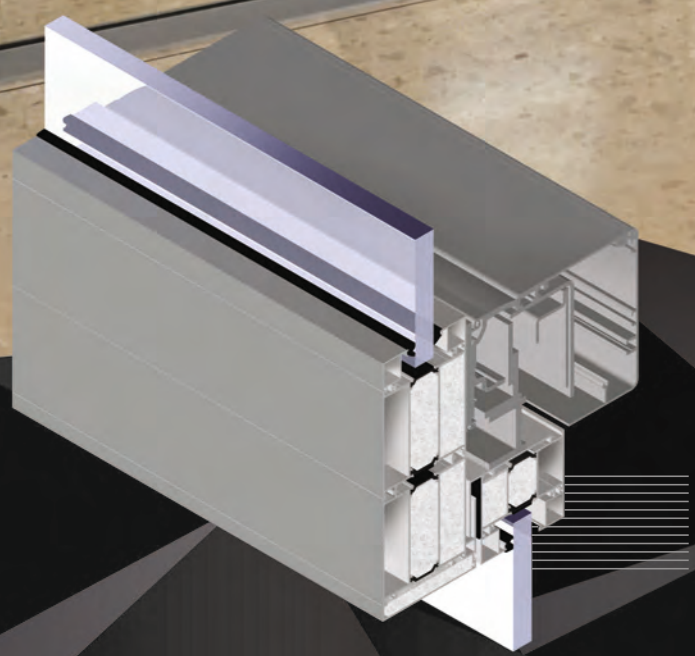
TECHNICAL SPECIFICATION

SYSTEM	MATERIAL	DEPTH OF FRAME	DEPTH OF LEAF	GLAZING RANGE	MAX. SIZE OF FIX GLAZING	MAX. SIZE OF DOORS
FR65	aluminium / polyamid	65 mm /	65 mm /	17-46 mm	EI30: 4930 x 3100 mm	single sash doors EI30: 1450 x 2500 mm double sash doors EI30: 2690 x 2500 mm

FIREPROOF SYSTEMS

FR90 SLIDE

FR90 SLIDE



Thermally insulated automatic fire-rated door system structures based on the FR90 SLIDE system can be applied in public and commercial buildings.

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FR90 SLIDE

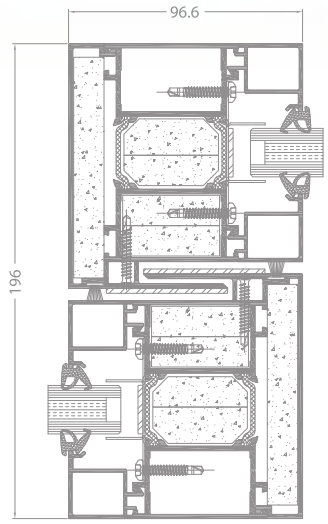
Thermally insulated automatic fire-rated door system structures based on the FR90 SLIDE system provide the EI30 fire resistance class according to PN-EN 1634-1+A1:2018-03.

Characteristic of construction:

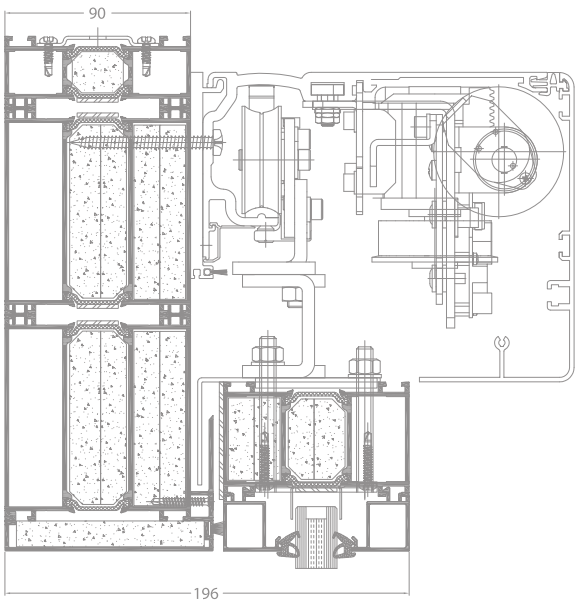
- chambers of the profiles are filled with fireproof inserts
- universality and unification of profiles with the FR90 system
- esthetic labyrinth connection of the sashes
- symmetrically glazing
- maximum dimensions of the structure 4900 mm x 3500 mm
- maximum dimensions of the leaf glass pane: 1193,5 x 2339 mm
- maximum dimensions of sash: 1369 x 2472 mm (joggle connection)
- dedicated automation solution: DORMA, GEZE
- structures:
  - double door,
  - sliding externally,
  - side and top lites.

FR90 SLIDE system can be applied in public and commercial buildings.

A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



FR90 SLIDE



connetion throught the sliding leaf with automatic drive

TECHNICAL SPECIFICATION

SYSTEM	MAXIMUM DIMENSIONS OF THE DOOR LEAF (L x H in mm)	MAX DIMENSIONS OF THE LEAF GLASS PANE	STRUCTURE TYPE	FIRE RESISTANCE CLASS
FR90 SLIDE	1369 x 2472 mm	1193,5 x 2339 mm	double door, sliding externally, side and top lites	EI 30 /PN-EN 1634-1+A1:2018-03

WINTERGARDEN

VT+

VICTORIAN PLUS

A thermally insulated system used to design roofs of complex-shape garden rooms. The system is dedicated to Victorian winter gardens.

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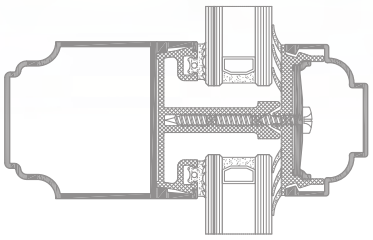
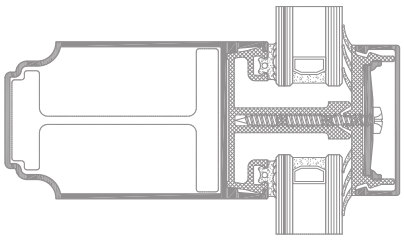
VT+

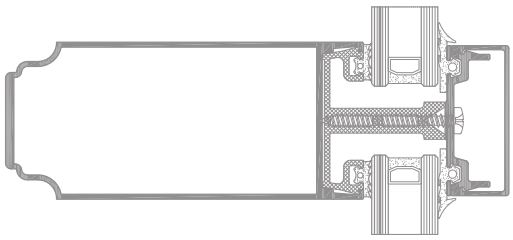


A thermally insulated system used to design roofs of complex-shape garden rooms. The system is dedicated to Victorian winter gardens.



Technical description:

- rafter fixed in the eave and the ridge using pinned hinge fasteners;
- engineered corner joints of various angles: convex and concave;
- available valley beams and rafter blocks (rafter of various heights to obtain a span of the winter garden roof from 1,8 m to 4,5 m);
- separate gutter fixed to the eave profile using hangers providing a slope and a separate eave profile;
- gutter and eave profile provided with fasteners: the most typical angles 90°, 135° and 150°;
- for typical angles, there are engineered blocks, i.e. spots where many rafters are joined;
- option of installation above and below gutters – profiles and ornamental elements (decorative combs, structural ties, enclosures of discharge chutes);
- Victorian Plus is a system suitable for filling made of wall polycarbonate as well as glazed units.

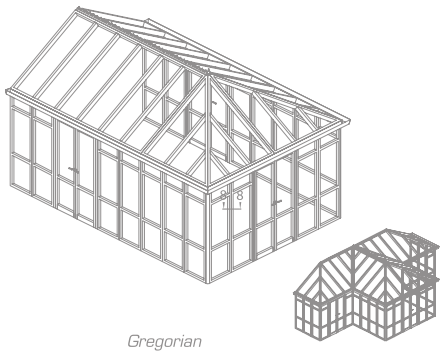


available options of external and internal strips

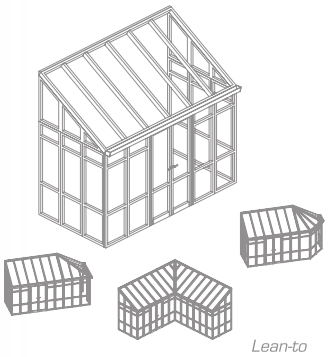
The system is fully compatible with other Aliplast systems used to construct fillings of winter garden walls, including non-openable glazing, lift-and-slide doors, tilt-and-slide doors, accordion doors and windows.

The VT system satisfies requirements relating to profile thermal insulation, rainwater and air tightness. It also guarantees proper ventilation provided appropriate ventilation equipment is used, regardless of weather conditions.

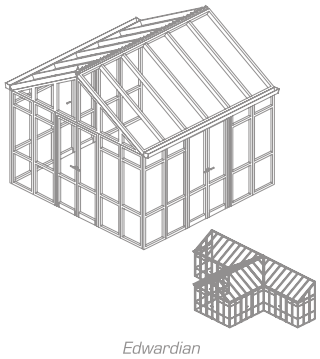
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



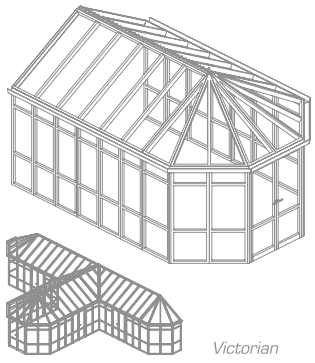
Gregorian



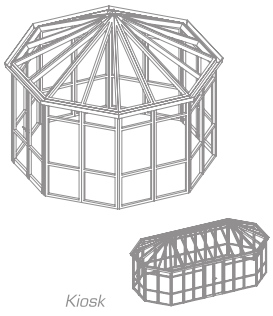
Lean-to



Edwardian



Victorian



Kiosk

example shapes of winter gardens in the VT+ system

WINTERGARDEN

VR2000+

ALIVER 2000+

A thermally insulated system used to design roofs of garden rooms, mainly single and double-pitched roofs.

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VR2000+

A thermally insulated system used to design roofs of garden rooms, mainly single and double-pitched roofs.

The system is fully compatible with other Aliplast systems used to construct infills of winter garden walls, including non-openable glazing, lift-and-slide doors, tilt-and-slide doors, accordion doors and windows.

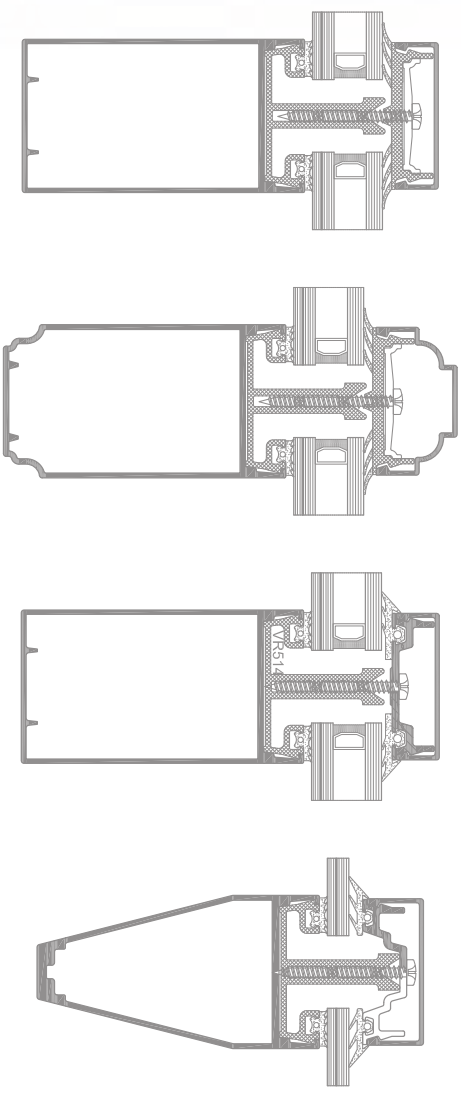
The system features thermal performance of ~2.0 W/m^{2}K.

Technical description of the system:

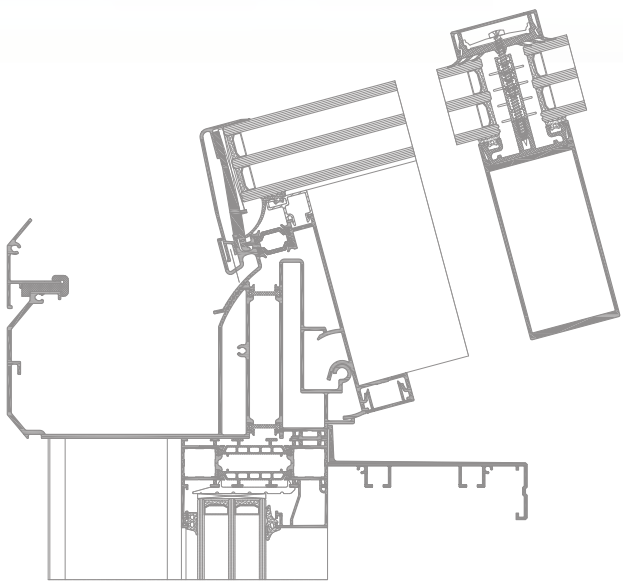
- load-bearing element of the structure located inside (below the infill), anchors fixed to a depth of 105 mm or 125 mm
- rafters and external masking caps available as soft (rounded) and with distinct rectangular shapes
- variety of gutter shapes, option to install gutter mesh guards to prevent undesired accumulation
- available system discharge chutes, optionally to be enclosed
- option to reinforce the rafter and gutter beams using aluminium or steel shaped sections
- the system offers articulated joints in the gutter and roof ridge beams, engineered ties, gutter and discharge chute connectors;
- roof plane pitch 5-45°
- Aliver 2000+ is suitable for infills made of wall polycarbonate as well as glass (single, double and triple glazed)

The Aliver 2000+ system satisfies requirements relating to profile thermal insulation, rainwater and air tightness. The system also guarantees proper ventilation provided appropriate ventilation equipment is used, regardless of weather conditions.

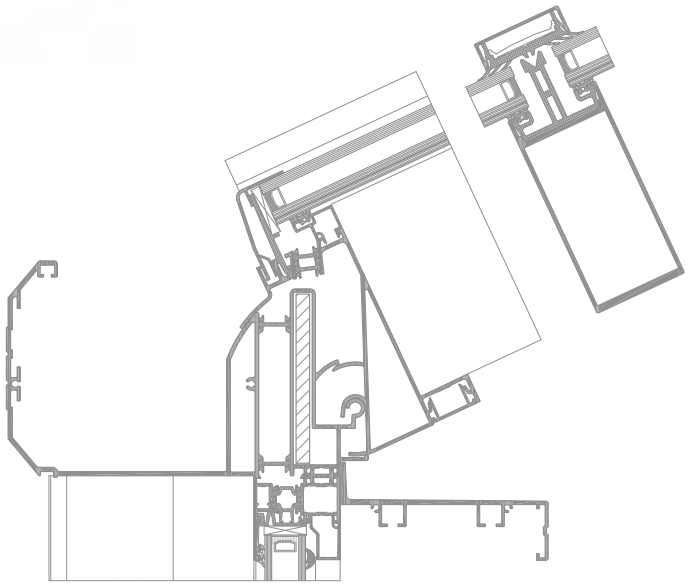
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



available options of external and internal strips



joint passing through the wall and the roof of the VR2000+ structure



joint passing through the wall and the roof of the VR2000+ structure

WINTERGARDEN

TD

TERASSENDACH

The Terassendach system is suitable for infills made of wall polycarbonate and glazing units (single, double and triple glazing).

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TERASSENDACH

Roof system without thermal insulation.

The Terassendach system is suitable for infills made of wall polycarbonate and glazing units (single, double and triple glazing).

Available options of the system:

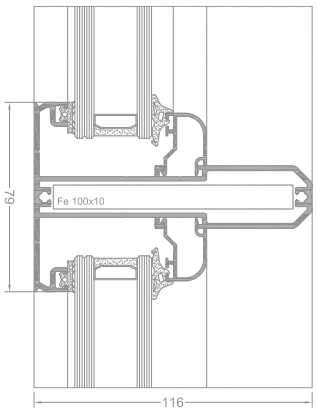
- eave with load-bearing rafter from the external side
- pyramidal roof with various types of the load-bearing rafter (fixed externally)
- double-pitched roof with external rafter
- roof with valley gutters and external rafter

Technical description:

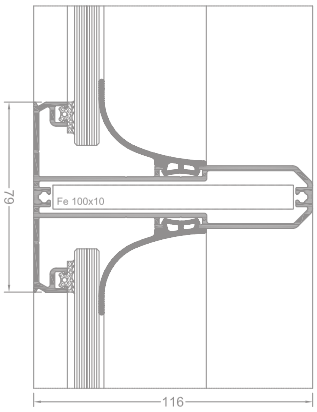
- span between two rafters up to 600 cm
- depth of the load-bearing rafter up to 600 cm*

  **Assumptions: VSG 10 mm, span between rafters 80 cm, snow load 85 kg/m², deflection coefficient L/200.*
- load-bearing structure with various gutter solutions
- option to install solar shading devices to lateral structure beams
- a wide variety of gutter solutions
- roof pitch from 5° to 25° degrees
- option to attach lighting through a terminal strip
- quick prefabrication

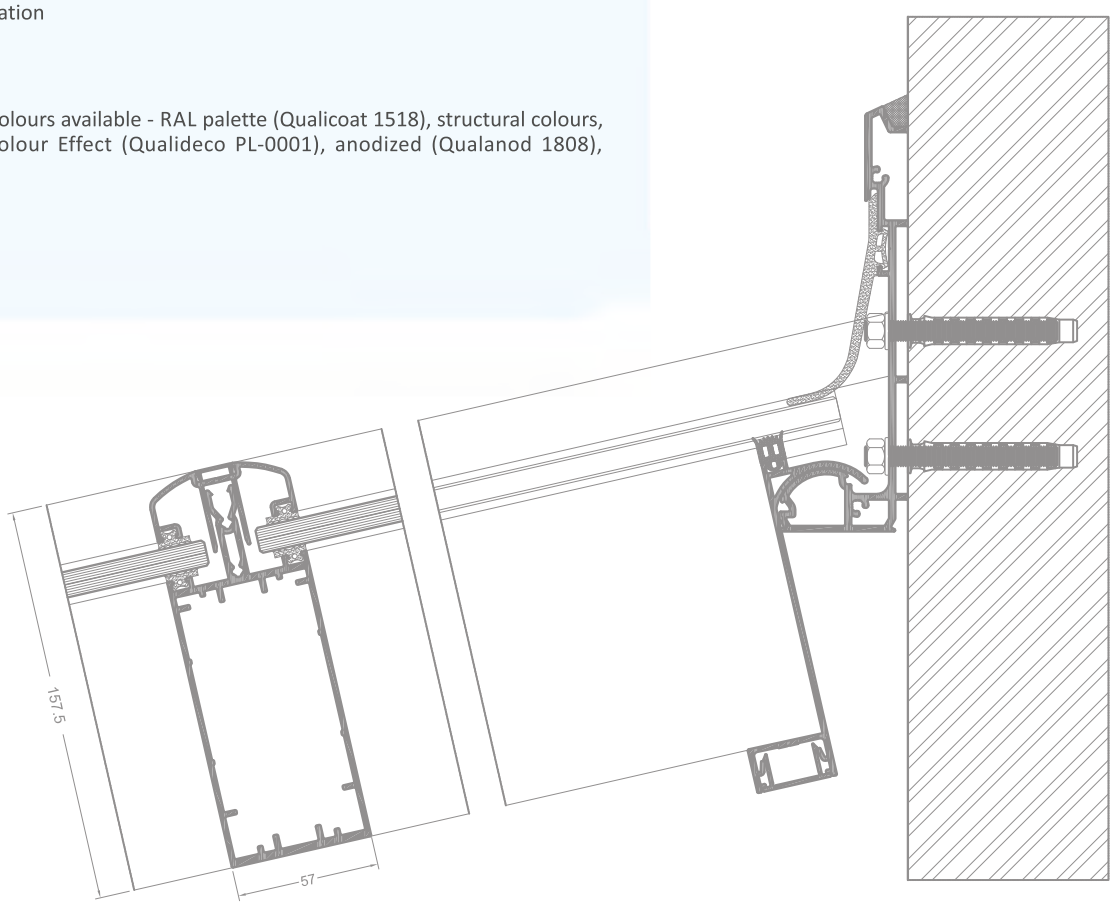
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.



option of glazing with strip



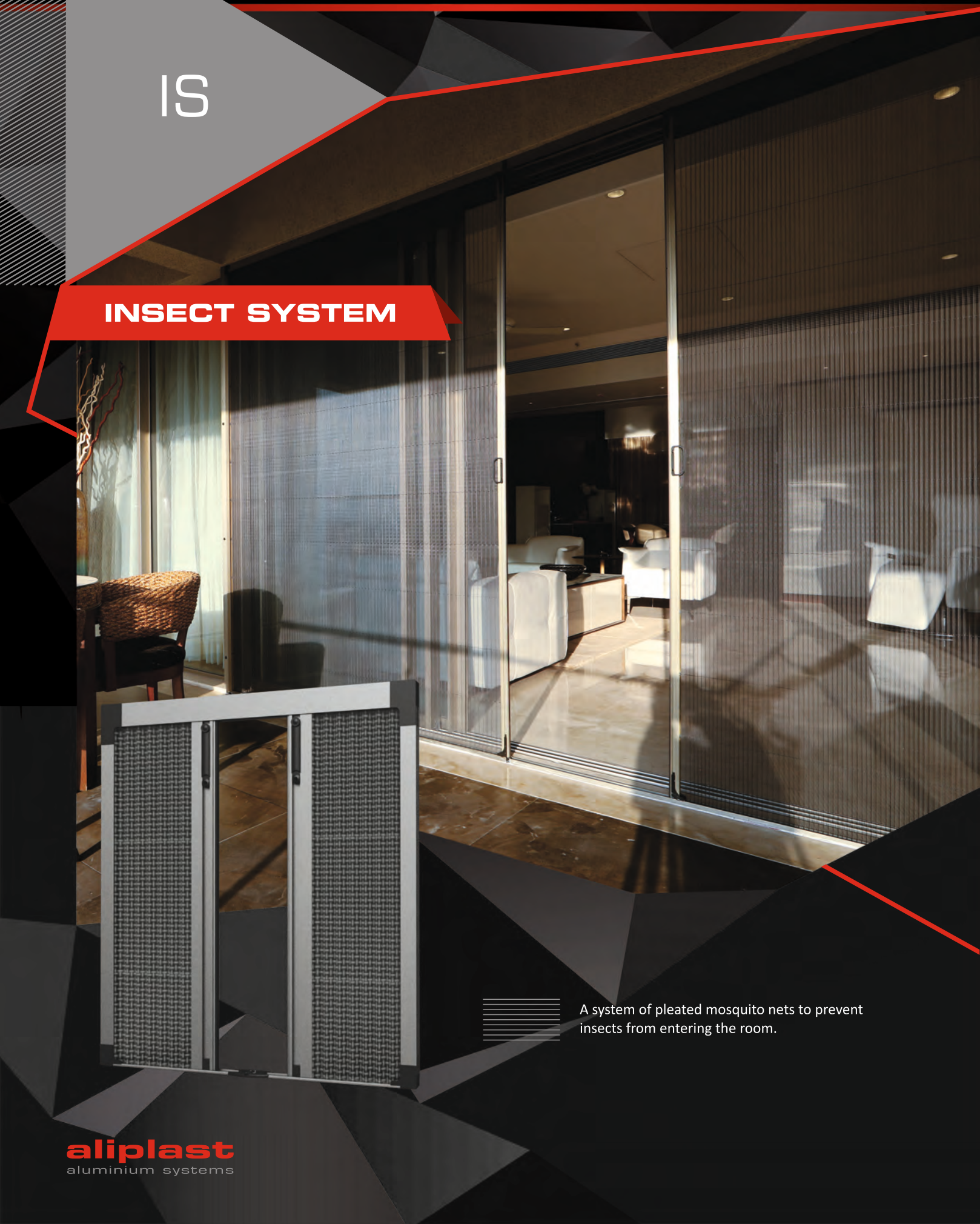
option of glazing with flexible seal



joint passing through the wall and the roof

IS

INSECT SYSTEM



A system of pleated mosquito nets to prevent insects from entering the room.

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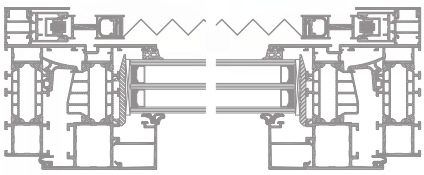
INSECT SYSTEM



window section

A system of pleated mosquito nets to prevent insects from entering the room.

This solution can be installed both in window recess and directly on the window frame. A very important option is the possibility of choosing the direction of mosquito net opening: sideways, centrally or in both directions. This ensures a unique smooth movement system.

The certified pleated net used in the design is made of high quality material resistant to rain, dust, UV radiation and wind.

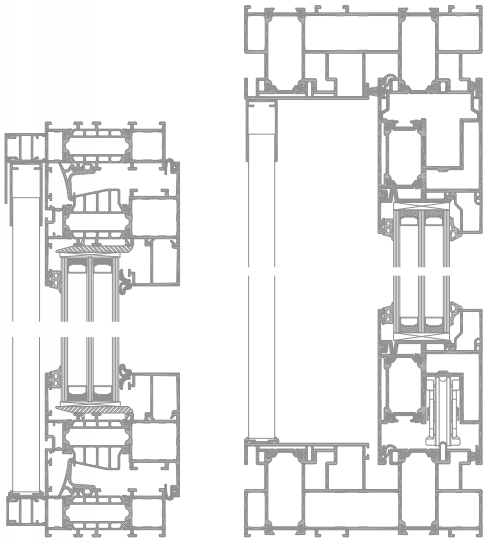
A great advantage is the low-threshold design of the mosquito net, especially useful if there are children, the elderly or people in wheelchairs living in the house, as for them, a high threshold can be an obstacle preventing free movement.

The sliding profile of the mosquito net is fitted with a handle for easy opening and magnets holding the net in the closed position.

In addition to the standard grey or black net, customers can also order a coloured net (uniform or melange), metallised net (reflecting sun rays) and anti-allergic net.

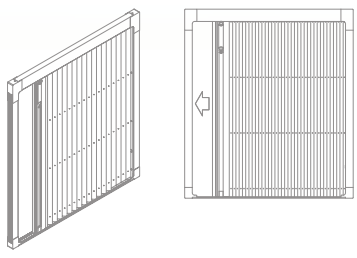
The mosquito net requires no disassembly before winter because all materials used to manufacture the product are resistant to weather conditions.

The Insect System is perfect for large-surface windows and doors, especially for balcony and terrace doors.

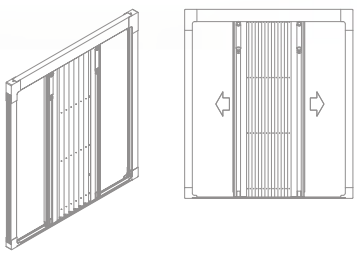


window section

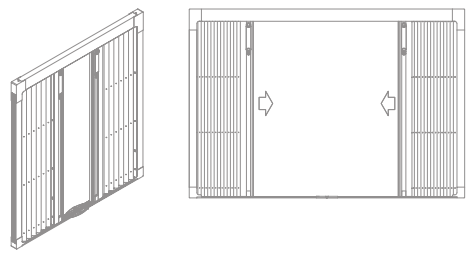
HS door section



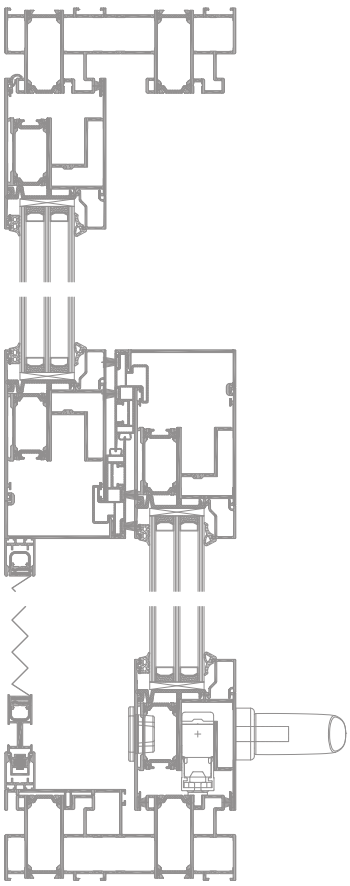
Single-sided pleated mosquito net with sideways adjustment



Double-sided pleated mosquito net



moskitiera plisowana dwustronna centralna



HS door section

F Mac

FLYSCREEN

MACASSAR

F

Frame-based structures filled with a mesh to protect rooms from insects.

Mac

Aluminium handrail system.

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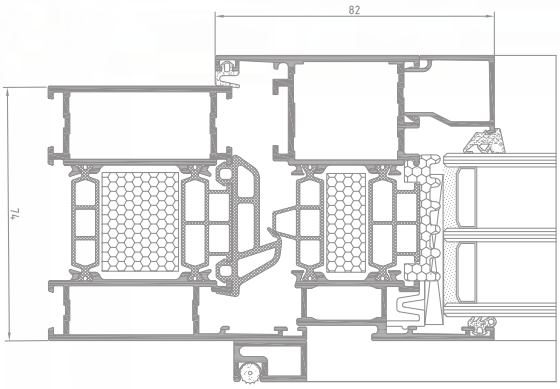
FLYSCREEN

Frame-based structures filled with a mesh to protect rooms from insects.

The screens are attached permanently to windows, doors, shop windows and balconies.

Flyscreens are also available in sliding and swinging versions.

The system is used to provide protection from insects, with ventilation in the room maintained.



Superial + Flyscreen cross section

Mac

Aluminium handrail system. The load-bearing structure comprises studs with modular fastening to the floor using brackets.

The filling consists of various systems of crosspieces made of aluminium profiles (horizontal, vertical) as well as glass or panel materials.

The system is also available as handrails fixed to walls.

Macassar system characterised by durability and easy cleaning. They require a minimum of maintenance. Aluminum railings Macassar is a guarantee durability and aesthetic appearance.

Systems aluminum railings have their use both indoor and outdoor use.

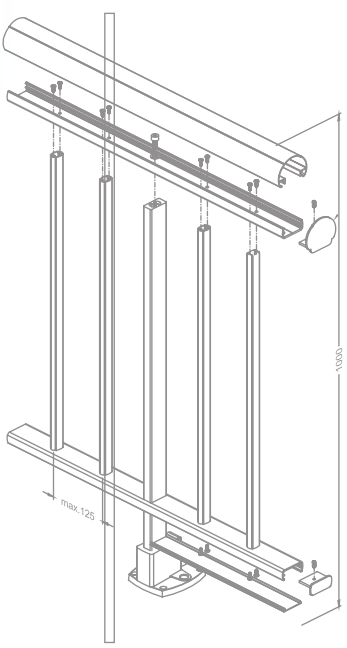
A wide range of colours available - RAL palette (Qualicoat 1518), structural colours, Aliplast Wood Colour Effect (Qualideco PL-0001), anodized (Qualanod 1808), bi-colour.

VR501

FL005

FL006

FL007



NOTEBOOK

DESIGNING | EXTRUSION | FABRICATION | DISTRIBUTION | POWDER COATING

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www.aliplast.pl

Aliplast Sp. z o.o.

ul. Wacława Moritza 3
20-276 Lublin

T: +48 81 745 50 30
F: +48 81 745 50 31

E: biuro@aliplast.pl

www.aliplast.pl