

The Alumil logo is positioned on a yellow triangular graphic that points towards the right. The logo itself consists of a stylized 'A' followed by the word 'lumil' in a lowercase, sans-serif font. The background of the entire page is a photograph of a modern interior with large glass windows and doors, showing a view of a balcony and trees. The image is overlaid with large, dark blue and yellow geometric shapes.

Alumil  **SUPREME**
S77 - SD77

Contents



SUPREME S77 & S77 PHOS

SUPREME SD77

Framing the view

SUPREME S77 belongs to ALUMIL's new generation of hinged systems and is the ideal choice for casements with modern design that meets every contemporary need. The system offers two different designs for your projects, the standard and the minimal energy solutions - Hi, Advanced Plus, Advanced & Standard -sophistically engineered to fulfill any project's specifications.

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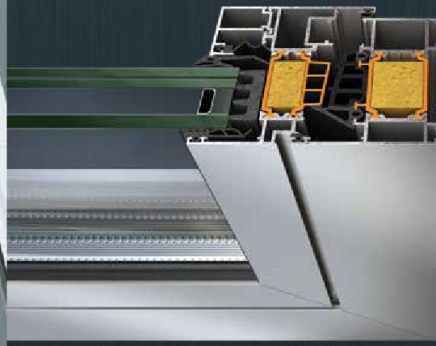


SUPREME S77 is ALUMIL's proposal for advanced insulating casements, which meets the high standards of all advanced markets and incorporate a modern flat design with clear lines. It is the ideal solution for projects that require high performance and maximum safety. The SUPREME S77 satisfies all high requirements in terms of thermal insulation and water tightness performance, as well as sound reduction, making it an ideal choice for the most demanding projects.

- ✓ High thermal insulation value $U_i \geq 0.85 \text{ W/m}^2\text{K}$, certified by the Ift Rosenheim Institute.
- ✓ Visible aluminium face width 93 mm and only 67 mm with concealed sash.
- ✓ Maximum watertightness at 3 levels through EPDM gaskets in combination with EPDM foam.
- ✓ Specially designed low threshold for easy access to people with special needs.
- ✓ For all typologies of hinged windows and patio doors.
- ✓ Wide range of sill profiles available.

Technical Characteristics

Visible aluminium face width	67/93 mm
Frame height	61 mm
Frame width	77 mm
Sash height	73 mm
Sash width	85 mm
Sash weight	up to 180 Kg
Glazing	23 up to 72 mm
Insulation	Polyamides 40 mm width, ALUMIL Energy Bar, PE insulation foam



Alumil SUPREME
S77 PHOS

Sense of freedom



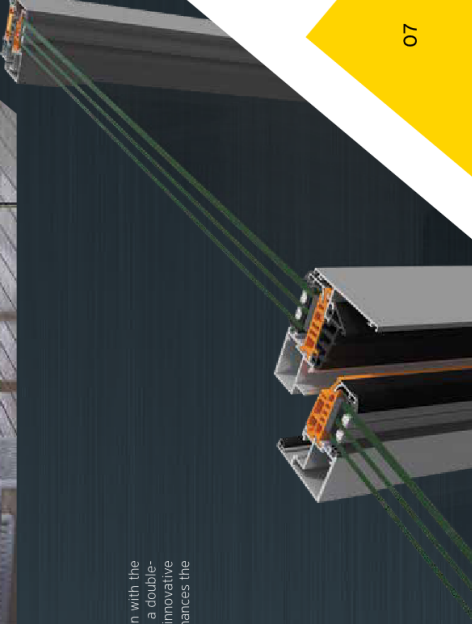
PHOS means Light

"Architecture is the learned game, correct and magnificent, of forms assembled in the light."

Le Corbusier

SUPREME S77 PHOS offers the alternative for casements, with concealed sash and fittings. This version is ideal for maximizing the natural light, thanks to its significantly reduced visible aluminum face width of only 67 mm. The system's remarkable thermal insulation and watertightness performances, make it ideal even for the most demanding projects.

A totally minimal design can be achieved in combination with the narrow adjoining profile at the central vertical column of a double-sash casement, with a face width of only 69 mm. An innovative solution and an absolute competitive advantage that enhances the system's minimal "PHOS" philosophy.

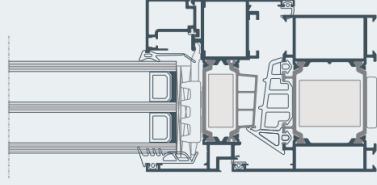


Attention to energy efficiency



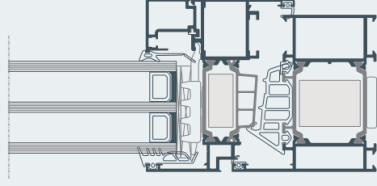
By choosing among the available accessories, SUPREME S77 series provides a wide range of energy solutions, with 4 different levels of thermal insulation: **Hi, Advanced Plus, Advanced & Standard.**

Hi



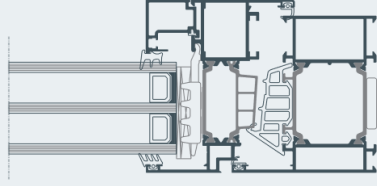
1,4 W/m²K

Advanced Plus



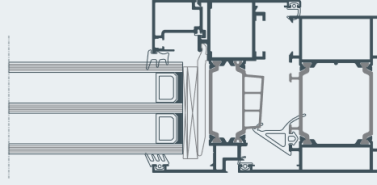
1,5 W/m²K

Advanced



1,9 W/m²K

Standard

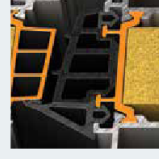


2,3 W/m²K

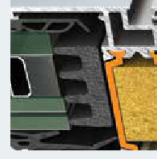
Attention to detail



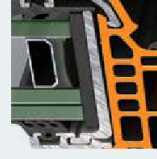
SUPREME S77 system uses fiberglass reinforced polyamides with 40 mm width, that offer high energy efficiency.



The system's central gasket is consisted of full foam EPDM - contributing significantly to the system's watertightness and thermal insulation.

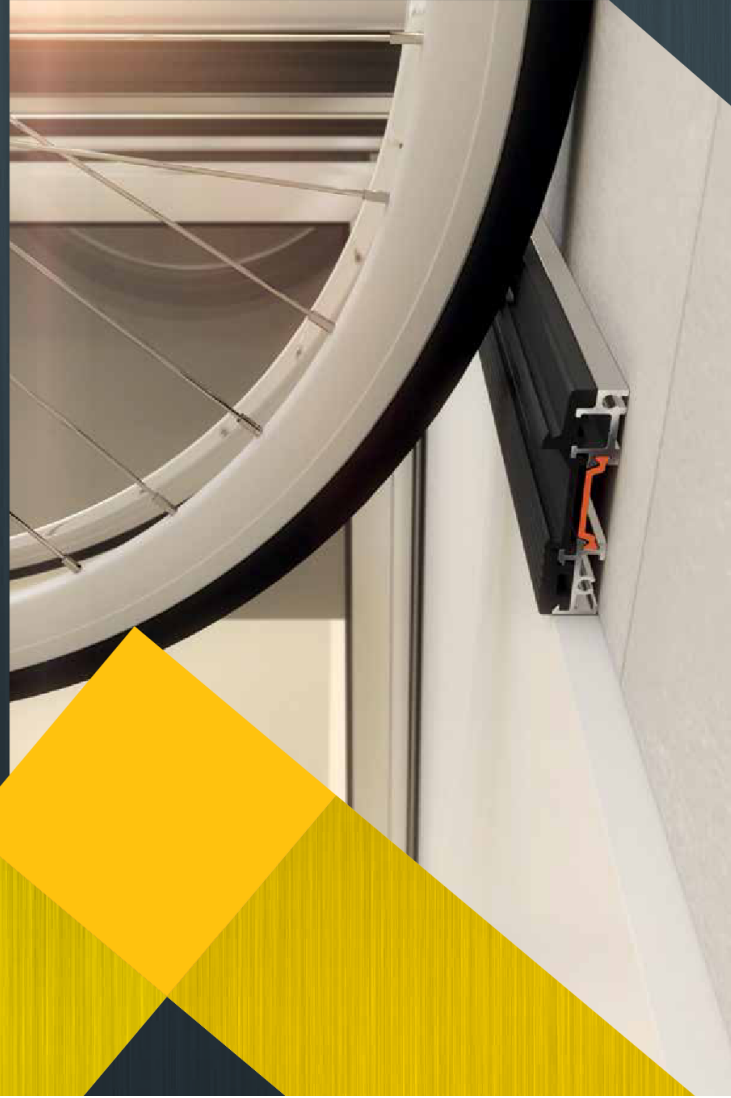


Furthermore, the insulation foam placed perimetrically of the glazing unit, along with the insulation bars of phenolic resin boost significantly the system's thermal insulation, enabling simultaneously the proper ventilation of the glass panel or other infills.



Special designed aluminium glazing support which transfers loads directly to the hinges, maximizing the functionality and the smooth operation of the sashes over time.

Attention to safety



Low threshold

Low, thermally insulated threshold, addressing every precaution for easy and safe access to children, elders and people with special needs. Available in every typology.



Handles

ALUMIL branded handles, are manufactured by world-class specialists to ensure top quality and flawless operation. Standard series made of aluminum are available in various standard colors. The Secustrike® window handles contain a patented jamming-device which provides integrated security. This allows normal use of the window handle from the inside, but blocks the handle if anyone tries to turn it from the outside.



Locking system

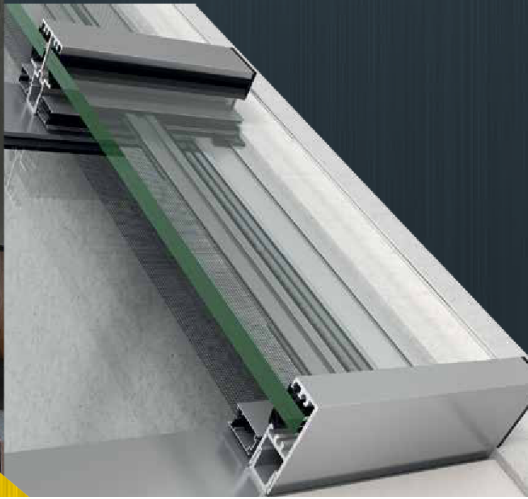
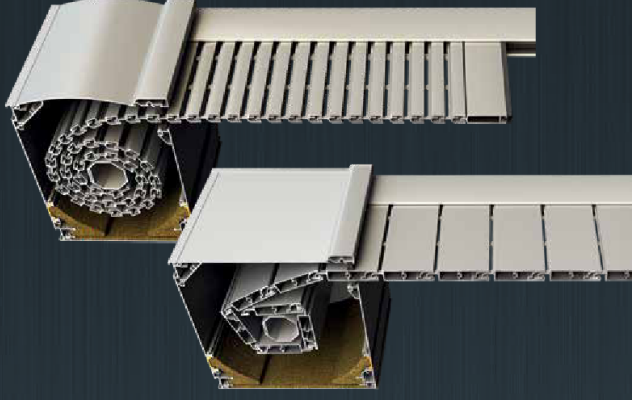
The SUPREME S77 system can be combined either with Euro-nut or with Euro-groove locking system, offering high security level with tested bur-glary resistance class RC3. Using concealed or standard hinges that can open up to 180°, we can create constructions up to 180 Kg per sash.

Exploiting every contemporary need



Cooperation with rolling shutter SMARTIA M13800

Thermal comfort with ALUMIL's rolling shutter system SMARTIA M13800, which provides a unified thermally insulated zone that improves the energy efficiency in buildings, by adjusting natural light and proper ventilation.



Cooperation with glass railing SMARTIA M8250

Ultimate transparency and safety with the glass railing system SMARTIA M8250 for stylish balustrade solutions, placed on the outer side of windows. An ideal option when no balconies exist, offering uninterrupted view and maximum natural lighting to the building. Available for single or multiple constructions, with or without a fixed insect-screen.

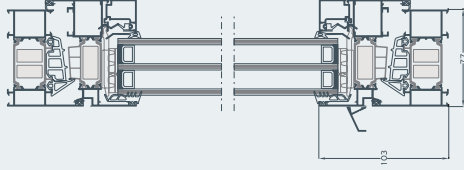
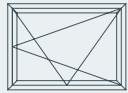


The system SUPREME S77 is ideal for every market as it includes a wide range of profiles with flat or curved design, as well as a wide range of sills for different installation methods.

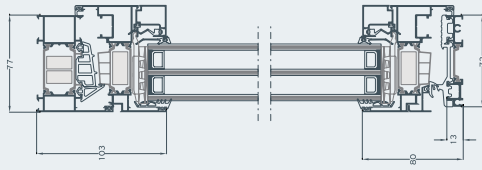
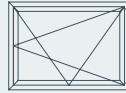


Solutions

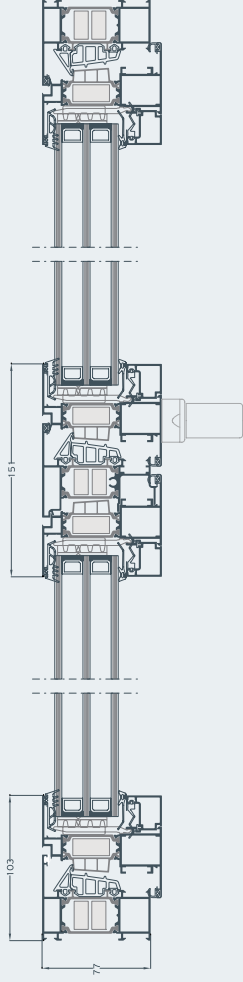
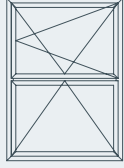
1 sash



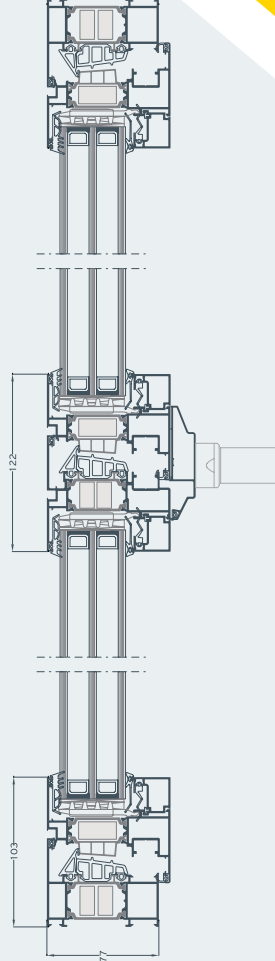
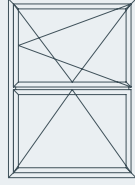
1 sash
low threshold



2 sashes

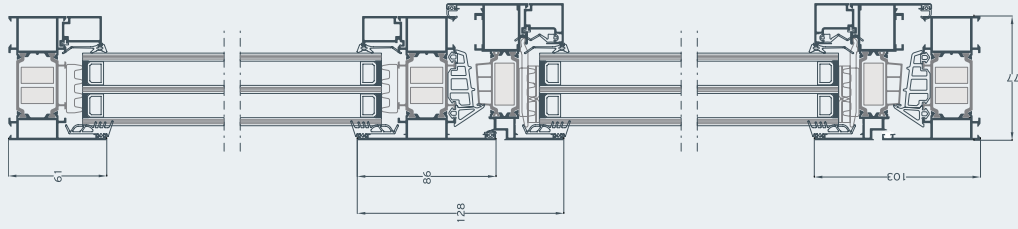
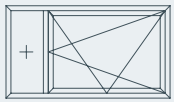


2 sashes
narrow adjoining profile

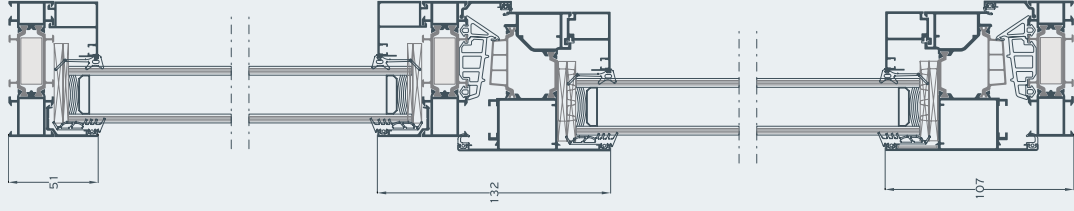
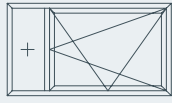


Totally minimal design is achieved, thanks to the symmetrically placed handle.

1 sash / fixed

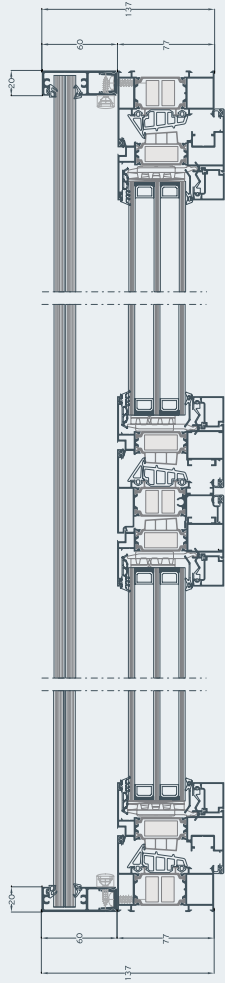
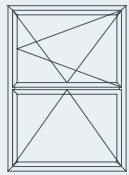


1 sash / fixed
opening outwards



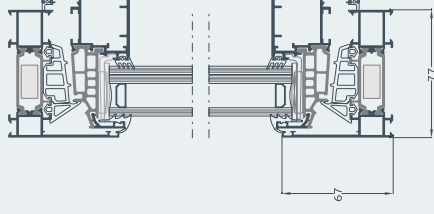
Alumil SUPREME
S77

2 sashes / glass railing

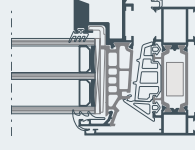
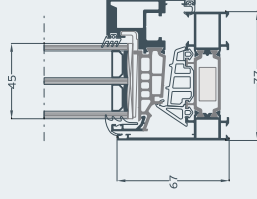
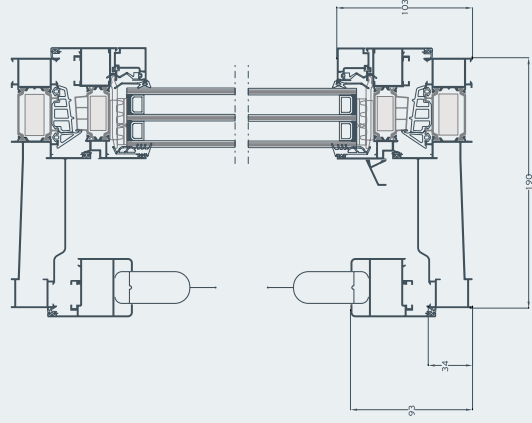
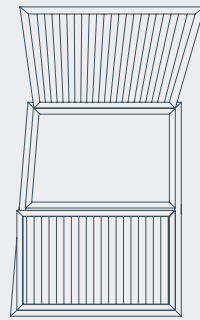


Alumil SUPREME
S77 PHOS

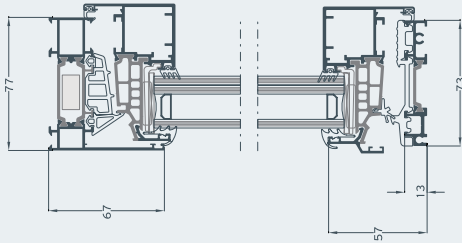
1 sash



2 sashes / shutter

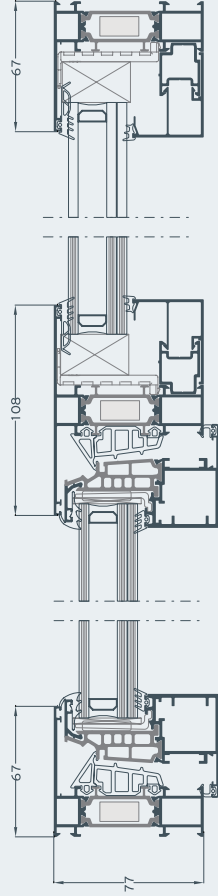
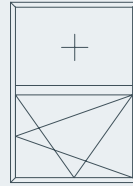


1 sash
low threshold

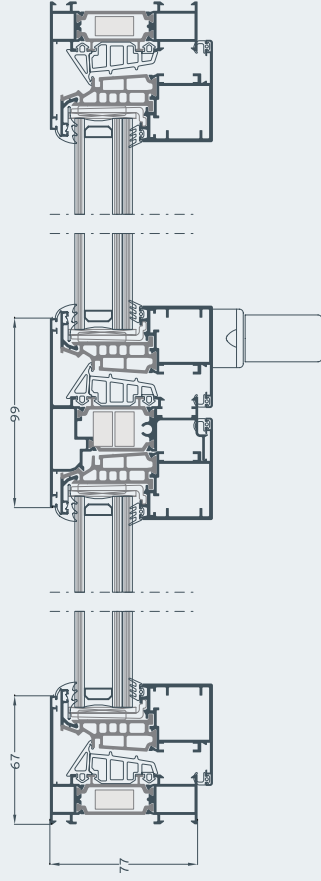
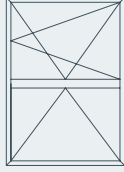


1 sash/ fixed

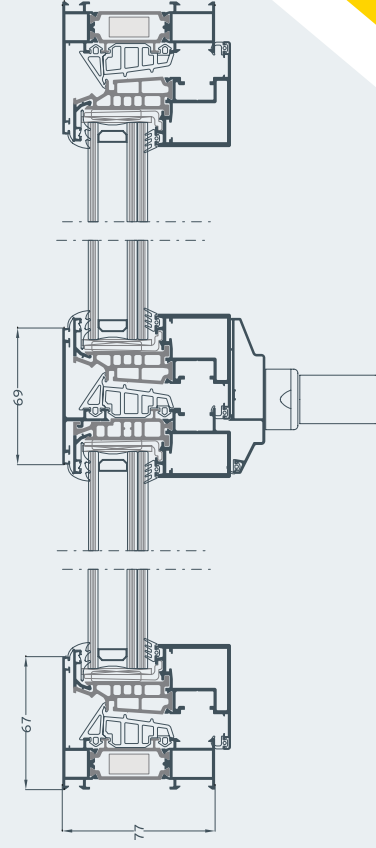
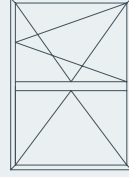
Different sash profiles can be used for glazing width 45mm or 32mm



2 sashes



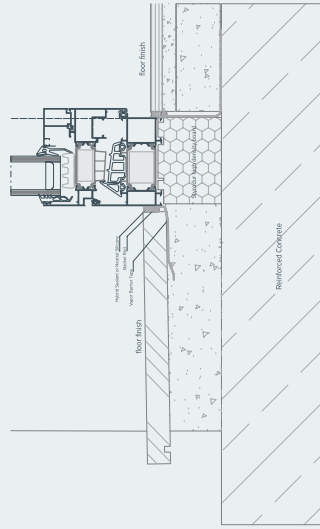
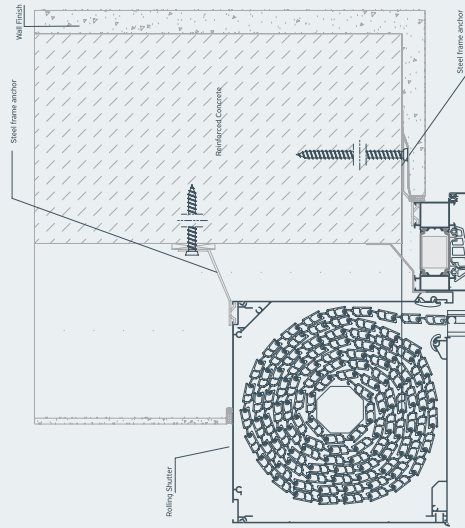
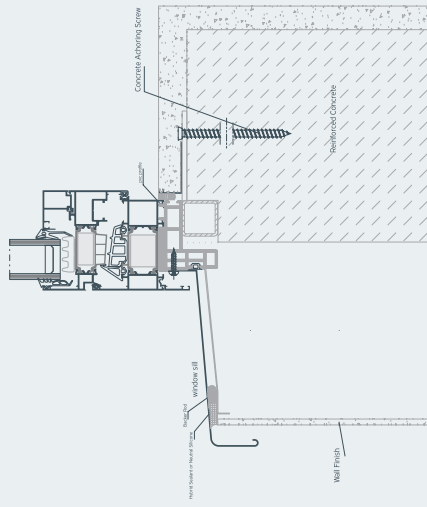
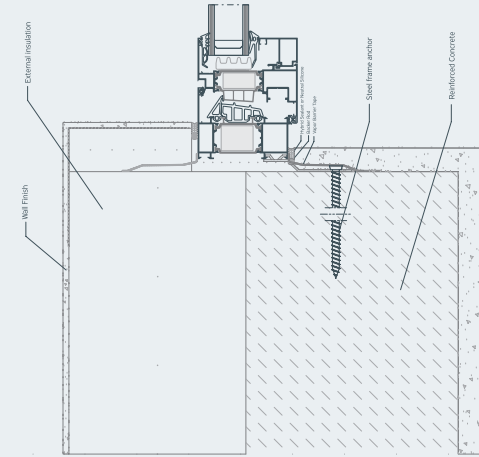
2 sashes
narrow adjoining profile



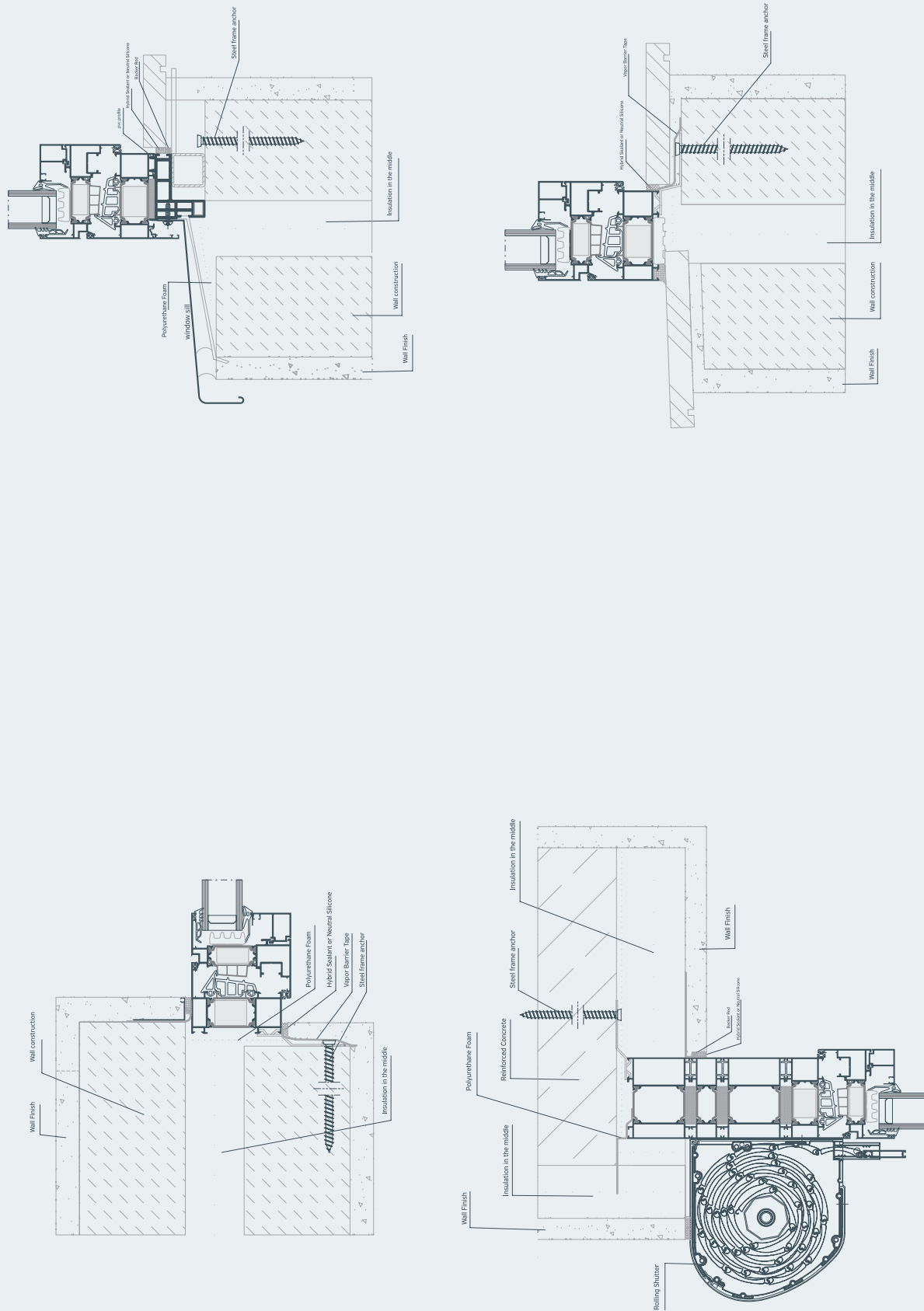
Totally minimal design is achieved, thanks to the symmetrically placed handle.

Installation

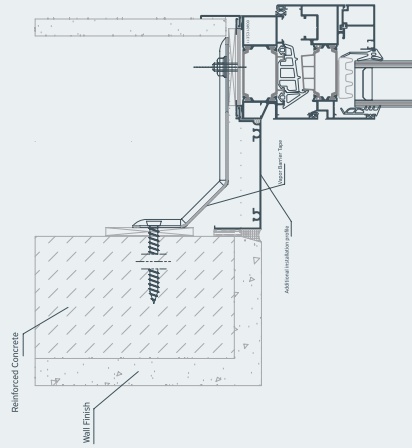
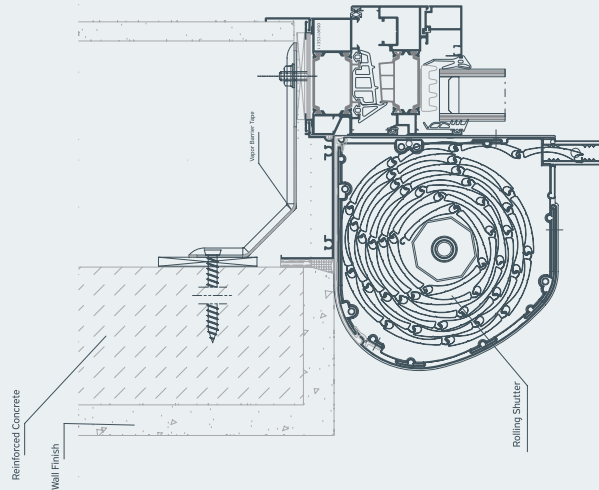
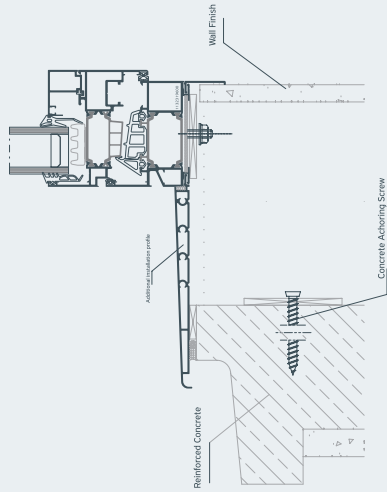
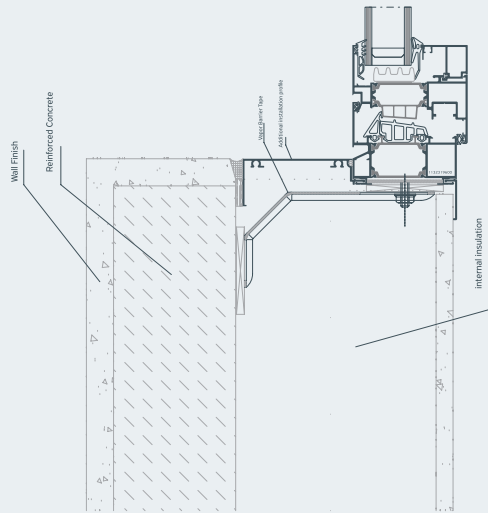
External Insulation



Intermediate Insulation



Internal Insulation



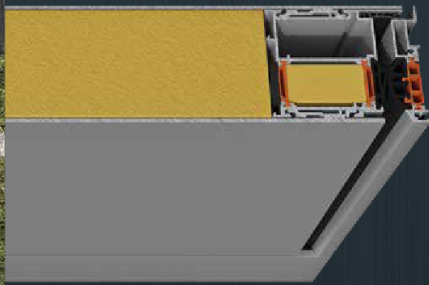


SUPREME SD77 is ALUMIL's system for quality entrance doors requiring modern design, high performance and emphasis on safety. The system provides the ability to create multiple constructions combined either with aluminum panels or with glazing infills. Thanks to its modern, flat and coplanar design, it offers elegant uniformity that enhances the innovative design and aesthetics of the series.

- ✓ Basic depth of system: 77mm.
- ✓ Low threshold of only 22 mm height with slip-resistant design.
- ✓ High level of thermal insulation and water tightness.
- ✓ Designed for various entrance door typologies.
- ✓ Wide variety of security locks and hinges (concealed, barrel or surface mounted).
- ✓ Can be combined perfectly with the hinged window series SUPREME S77.

Technical Characteristics

Frame width	77 mm
Sash width	77 mm
Minimum visible width	154,5 mm
Minimum visible width T-profile	76 mm
Sash weight	up to 180 Kg
Glazing 23	up to 59 mm
Insulation	Polyamides 40 mm width, ALUMIL Energy Bar, PE insulation foam



Attention to safety



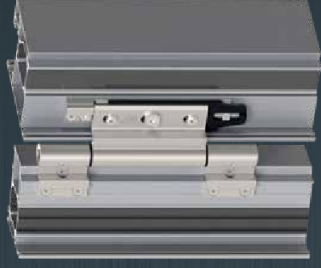
Low threshold

The low threshold of only 22 mm height, with special slip-resistant design, follows the system's safety driven philosophy.



Locking system

High security is the primal principle for SUPREME SD77 entrance doors, providing a wide range of locking systems. Specifically, the series is equipped with a 3-point or a 5-point lock and a standard or a security 6-pin or 12-pin cylinder. Furthermore, an electric lock version is also available.



Hinges

ALUMIL's cylindrical aluminum hinges are sophisticatedly designed, so as to enhance the system's security by using burglar resistant fittings. They are perfectly fitted and aligned so as to offer a 3D micro adjustment ideal for leaves up to 160 Kg. Furthermore, concealed hinges can be used, offering modern aesthetics for leaves up to 120 Kg.



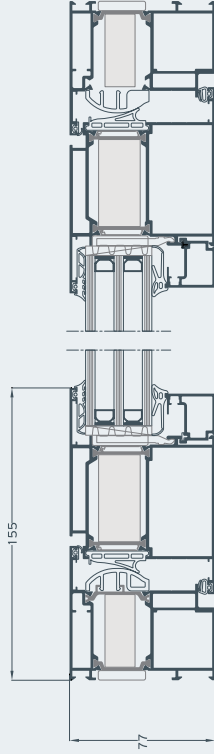
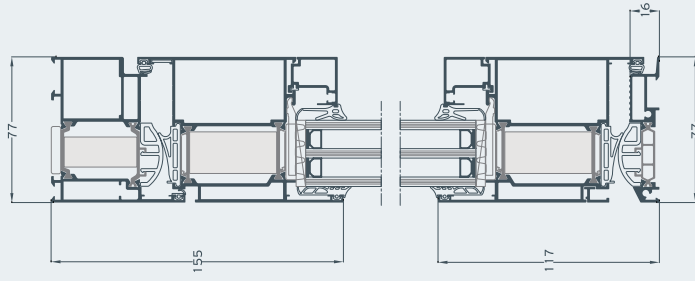
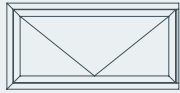
Handles

Standard door handles with ALUMIL patented design, manufactured by world-class specialists, are available in various colors. Alternatively, stainless steel exterior bars can be used, available in various lengths.

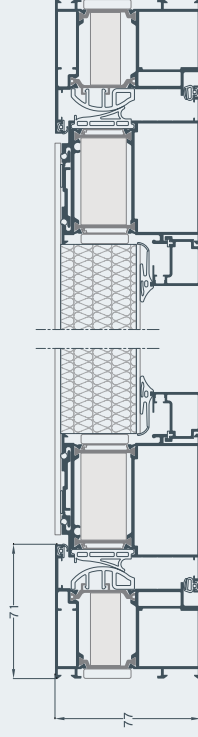
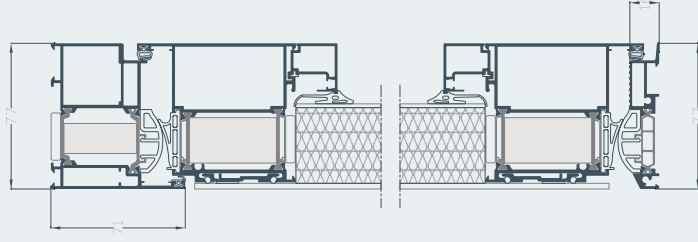


Solutions

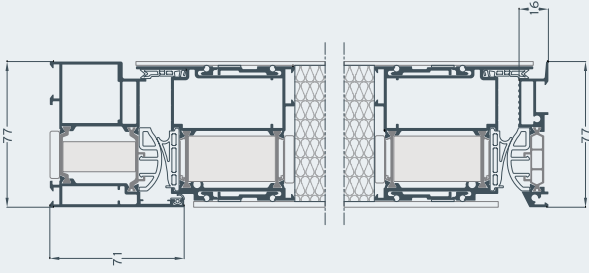
1 leaf
glass panel



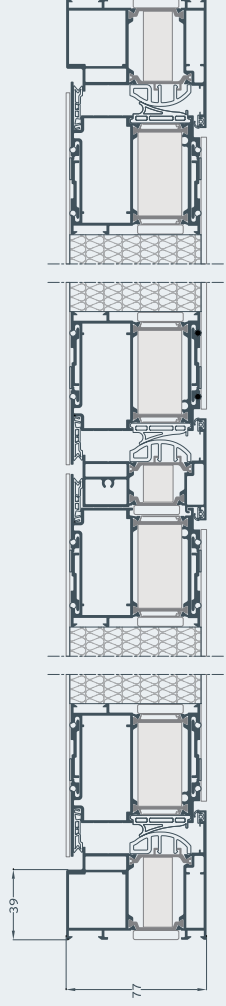
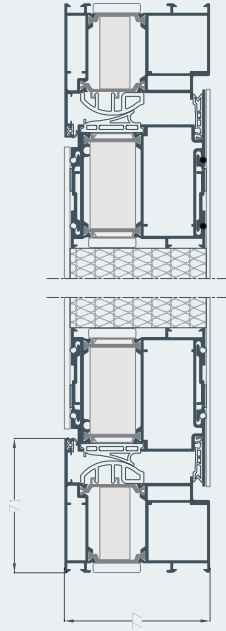
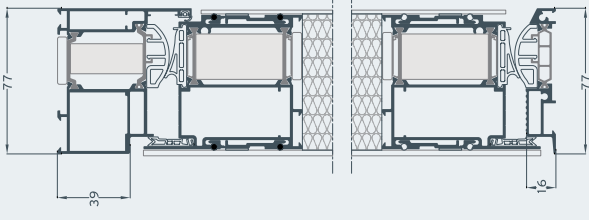
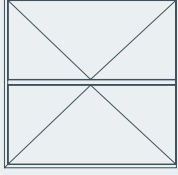
1 leaf
insulated panel 45mm



1 leaf
insulated panel 77 mm

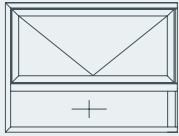


2 leaf
insulated panel 77 mm
opening outwards

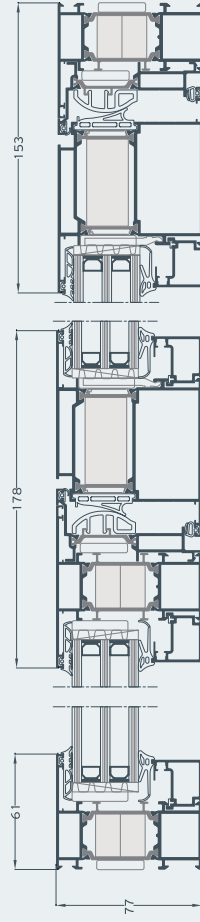
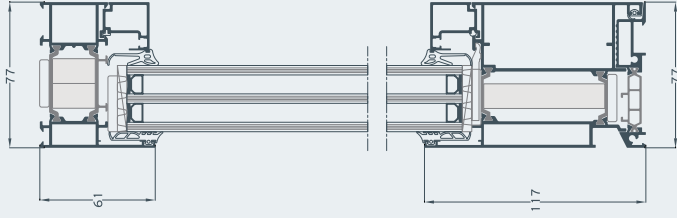
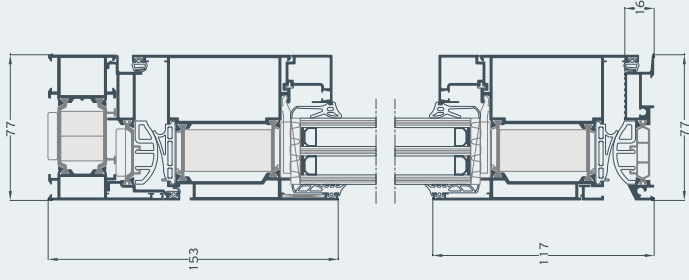


Alumil SUPREME SD77

1 leaf / 1 fixed glass panel

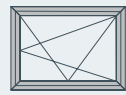


Totally symmetrical look between the fixed and the operable door leaf, with concealed water drainage and without any visible plastic caps.

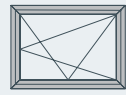


Applications

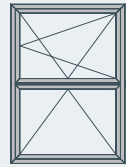
SUPREME S77



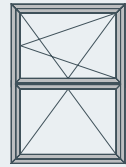
1 sash



1 sash



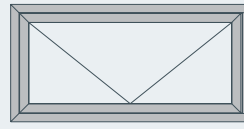
2 sashes



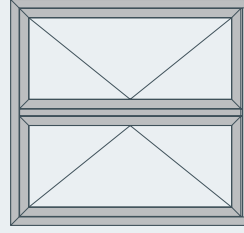
2 sashes



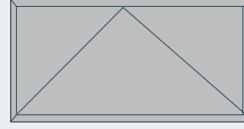
1 sash / Fixed



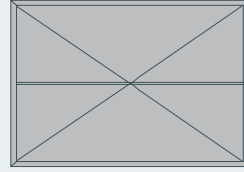
1 glazed leaf



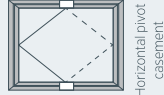
2 glazed leaf



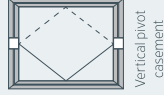
1 panelled leaf



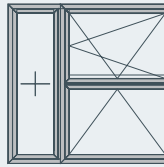
2 panelled leaf



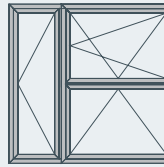
Horizontal pivot casement



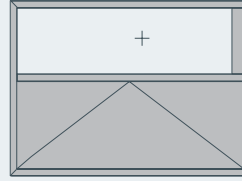
Vertical pivot casement



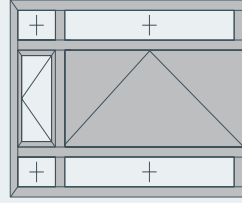
2 sashes / Fanlight



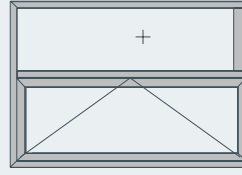
2 sashes / Bottom hung casement



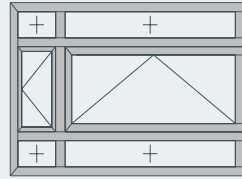
1 panelled leaf / Fixed



1 panelled leaf / Fixed / Bottom hung casement

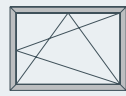


1 glazed leaf / Fixed

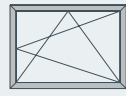


1 glazed leaf / Fixed / Bottom hung casement

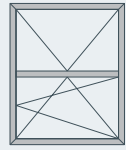
SUPREME S77 PHOS



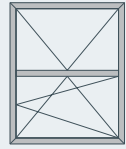
1 sash



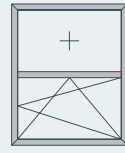
1 sash



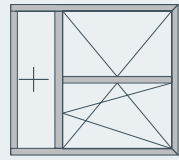
2 sashes



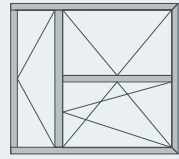
2 sashes



1 sash / Fixed



2 sashes / Fanlight



2 sashes / Bottom hung casement

SUPREME SD77

Table of Performance

SUPREME S77

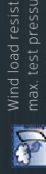
CERTIFICATION



Water tightness
EN 12208



Air permeability
EN 12207



Wind load resistance,
max. test pressure
EN 12210



Wind load resistance
to frontal deflection
EN 12210



Burglar Resistance
EN 1627 -1630



Sound reduction
EN ISO 140-3

CLASSIFICATION

1A 2A 3A 4A 5A 6A 7A 8A 9A
(0 Pa) (50 Pa) (100 Pa) (150 Pa) (200 Pa) (250 Pa) (300 Pa) (450 Pa) (600 Pa) (1500 Pa)

1 2 3 4 5
(400 Pa) (800 Pa) (1200 Pa) (1600 Pa) (2000 Pa)

A B C
($\leq 1/150$) ($\leq 1/200$) ($\leq 1/300$)

RC 1 RC 2 RC 3

Rw (C;Ctr) = 42 (-1, -8) dB depending from the glazing type.

SUPREME SD77

CERTIFICATION



Water tightness
EN 12208



Air permeability
EN 12207



Wind load resistance,
max. test pressure
EN 12210



Wind load resistance
to frontal deflection
EN 12210



Burglar Resistance
EN 1627 -1630

CLASSIFICATION

1A 2A 3A 4A 5A 6A 7A 8A 9A
(0 Pa) (50 Pa) (100 Pa) (150 Pa) (200 Pa) (250 Pa) (300 Pa) (450 Pa) (600 Pa)

1 2 3 4 5
(400 Pa) (800 Pa) (1200 Pa) (1600 Pa) (2000 Pa)

A B C
($\leq 1/150$) ($\leq 1/200$) ($\leq 1/300$)

RC 1 RC 2 RC 3

THERMAL PERFORMANCE

SUPREME S77

	Dimensions in mm (W x H)	U_w in W/m^2K ($U_g = 0,6$)	U_w in W/m^2K ($U_g = 0,8$)	U_w in W/m^2K ($U_g = 1,1$)
1 sash HI	1000 x 2200	0,89	1,02	1,22
2 sashes HI	1500 x 2200	0,94	1,08	1,30
1 sash Advanced	1000 x 2200	1,10	1,23	1,43
2 sashes Advanced	1500 x 2200	1,08	1,23	1,44
1 sash Standard	1000 x 2200	1,20	1,34	1,53
2 sashes Standard	1500 x 2200	1,19	1,33	1,54

SUPREME S77 PHOS

1 sash HI	1000 x 2200	0,92	1,08	1,31
2 sashes HI	1500 x 2200	0,96	1,12	1,35
1 sash Advanced	1000 x 2200	0,91	1,06	1,30
2 sashes Advanced	1500 x 2200	0,95	1,11	1,34
1 sash Standard	1000 x 2200	0,98	1,14	1,38
2 sashes Standard	1500 x 2200	1,03	1,18	1,41

SUPREME SD77

1-leaf, glazing pane	1000 x 2200	1,08	1,20	1,38
2-leaf, glazing pane	2100 x 2200	1,02	1,15	1,34

THERMAL PERFORMANCE

SUPREME SD77

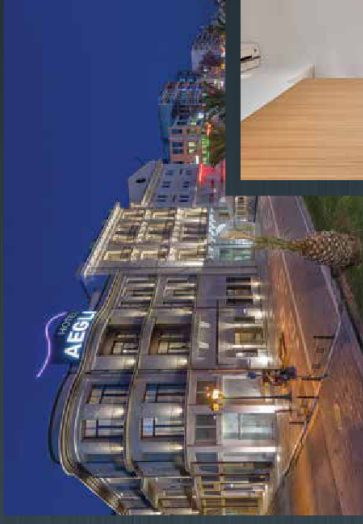
	Dimensions in mm (W x H)	U_g in W/m^2K ($U_p = 0,32$)	U_g in W/m^2K ($U_p = 0,54$)
1-leaf, panel 77 mm infill	1000 x 2200	0,65	0,81
1-leaf, panel 45 mm infill	1000 x 2200	0,66	0,81
2-leaf, panel 77 mm infill	2100 x 2200	0,66	0,83
2-leaf, panel 45 mm infill	2100 x 2200	0,66	0,83



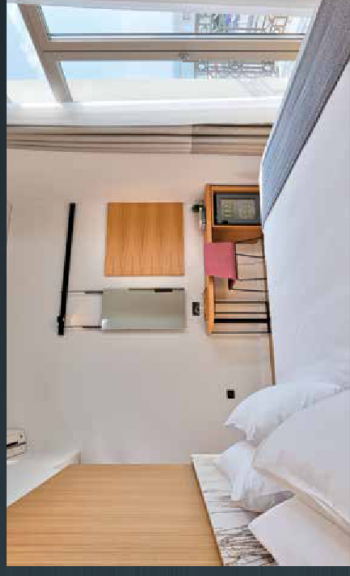
Technical approval and production
conformity by the Belgian construction
Certification Association

CSTB
le futur en construction

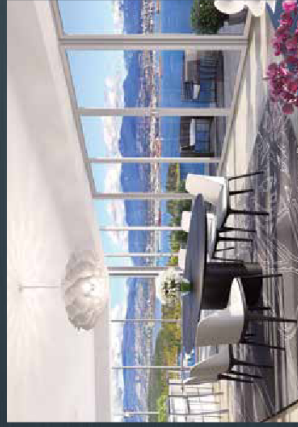
Product conformity by the
Centre Scientifique et Technique
du Bâtiment



Aegle Hotel
Volos, Greece



Vancouver House
Vancouver, Canada



Reference Projects



American Farm School Thessaloniki, Greece

**ALUMIL
HEAD OFFICES
& SHOWROOM - THESSALONIKI**

Goçousi 8, Efkarpia
Thessaloniki - GR 56429
Tel.: +30 2313 011000
Fax: +30 2310 692473
E-mail: info@alumil.com

**ALUMIL
HEADQUARTERS**

Kilkis Industrial Area
Kilkis - GR 61100
Tel.: +30 23410 79300
Fax: +30 23410 71988
Email: info@alumil.com

