



Alumil
Building excellence every day

Alumil > SMARTIA
M9660 - MD9660



CONTENTS

SMARTIA M9660

SYNOPSIS OF CHARACTERISTICS	4
VARIETY OF OPTIONS	8
ATTENTION TO DETAIL	10
SECTIONS	12

SMARTIA M9660 PHOS

WHEN THINNEST POSSIBLE SIGHTLINE IS A DEMAND	26
SECTIONS	30

SMARTIA MD9660

ENTRANCE DOORS	32
SECTIONS	34
APPLICATIONS	36
PERFORMANCE	38



SMARTIA M9660

is a hinged, thermally insulated system, designed to meet the requirements of regions with warm climate, offering competitive price combined with considerable thermal insulation performance. These features render SMARTIA M9660 an ideal solution for both new and renovated buildings in private and public projects.

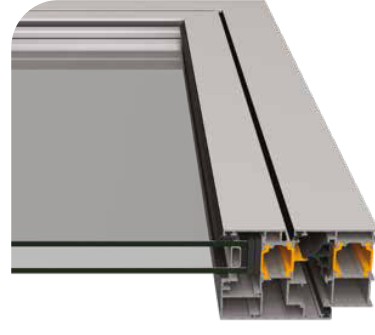
When energy saving
meets minimal design.

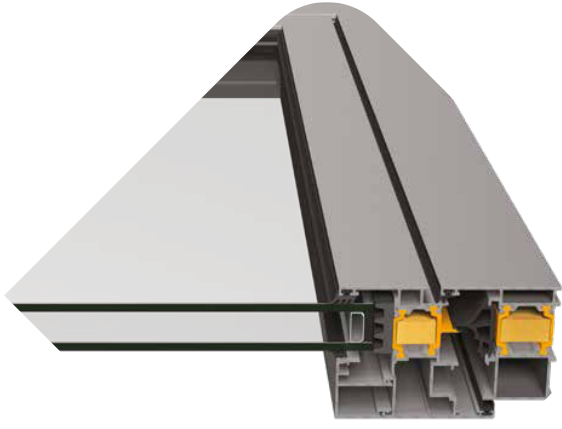
SMARTIA M9660 provides a variety of options...

in terms of **design** (Standard and Minimal) and **energy solutions** (High, Advanced, Standard), that can **meet the trends and specifications of contemporary architecture**.



- Basic system depth 56 mm.
- Available in three energy versions: Standard-Advanced-High.
- Minimal look, thanks to concealed sash of 70,5 mm visible aluminium face width (Phos version).
- Special profiles, available for various entrance doors typologies.
- Available in various designs (flat, curved).
- European groove or PVC groove hardware can be applied.
- Certified by the Ift Rosenheim institute.





VISIBLE ALUMINIUM FACE WIDTH

91,5 mm

FRAME HEIGHT

45/55 mm

FRAME WIDTH

56 mm

SASH HEIGHT

63,5/74 mm

SASH WIDTH

63,5 mm

SASH WEIGHT

UP TO 1,80 kg

GLAZING

FROM 4 UP TO 47 mm

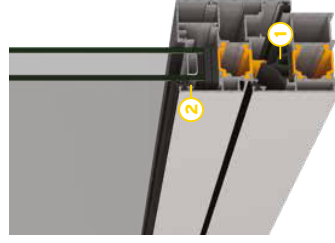
INSULATION

POLYAMIDES 24MM WIDTH, NRC BAR, PE
INSULATION FOAM

Energy versions

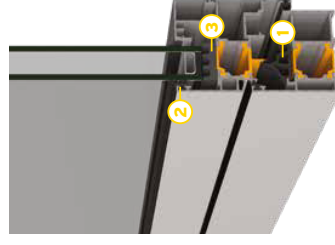
By choosing among different accessories, SMARTIA M9660 provides three different energy versions, satisfying every demand in terms of thermal efficiency.

STANDARD



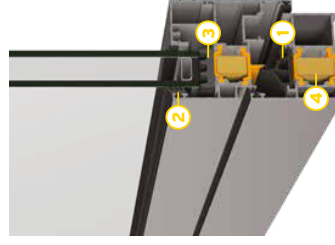
- 1. Multi chamber EPDM central gasket
- 2. One chamber EPDM wedge gasket

ADVANCED

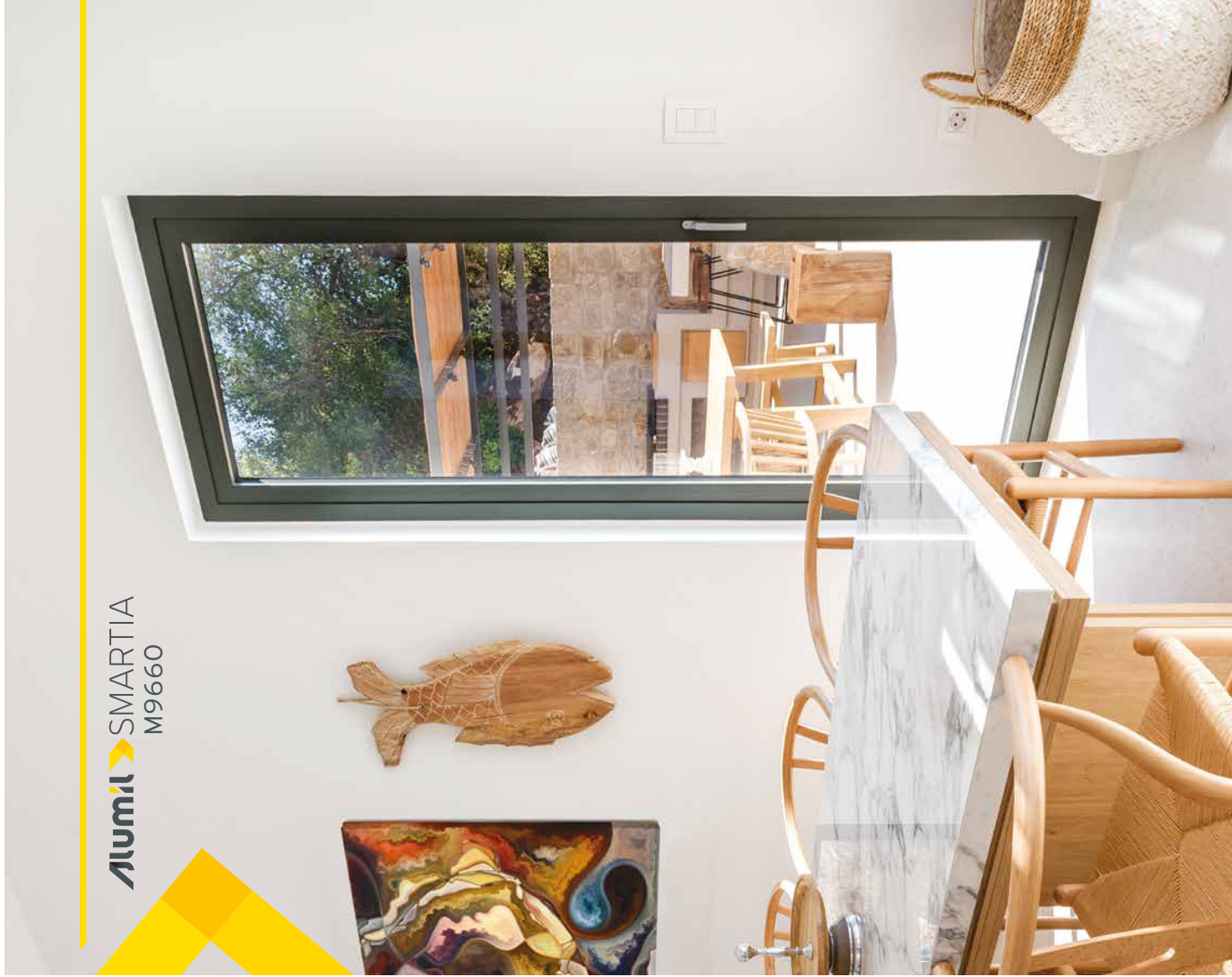


- 1. Multi chamber EPDM central gasket
- 2. One chamber EPDM wedge gasket
- 3. PE Insulation Foam

HI



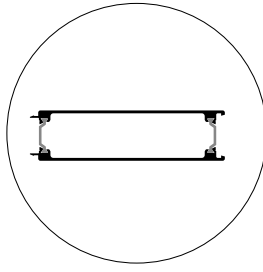
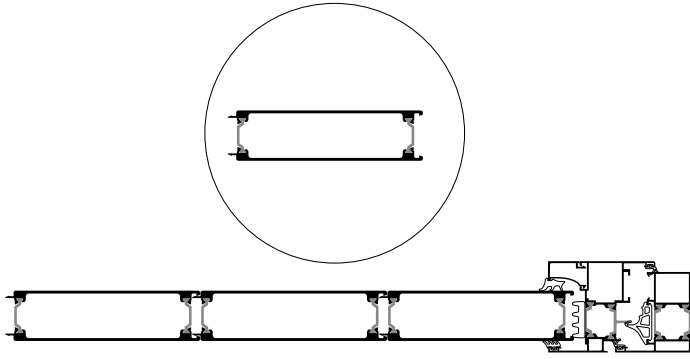
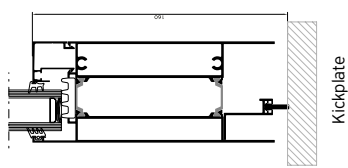
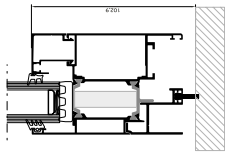
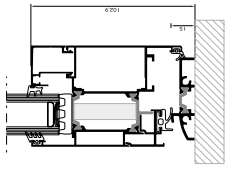
- 1. Multi chamber EPDM central gasket
- 2. One chamber EPDM wedge gasket
- 3. PE Insulation Foam
- 4. Energy Bar



Secondary entrance doors

System's flexibility offers solutions in typologies that are mainly used as secondary entrance doors. Pedestrian doors are available with three bottom configurations:

- Low threshold of 15mm height, which is in line with the legislation for Persons with Disabilities
- Without threshold
- Kickplate

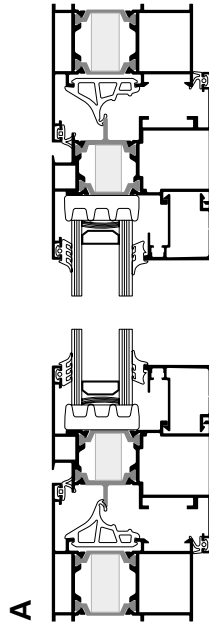
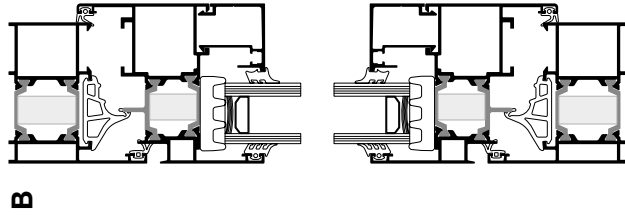
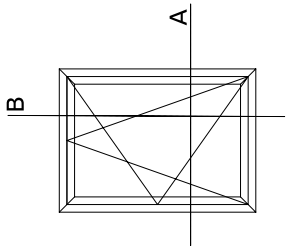


Shutter Panel Infill

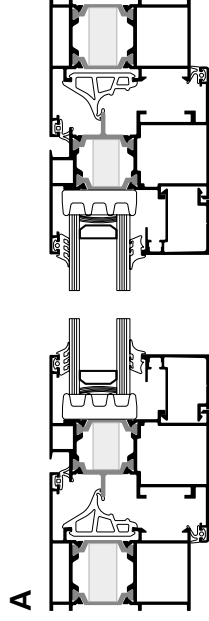
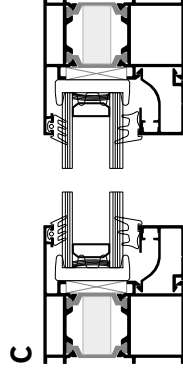
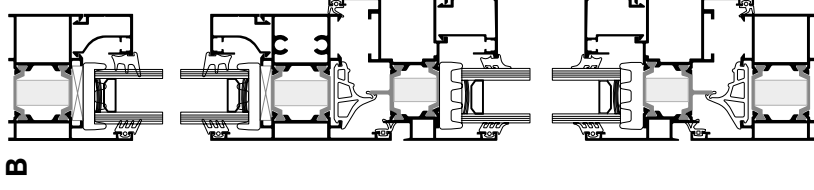
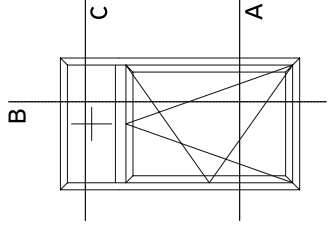
Instead of using aluminium panel as infill, SMARTIA M9660 offers an alternative option, providing a thermal break shutter profile, which contributes significantly to the total thermal efficiency.

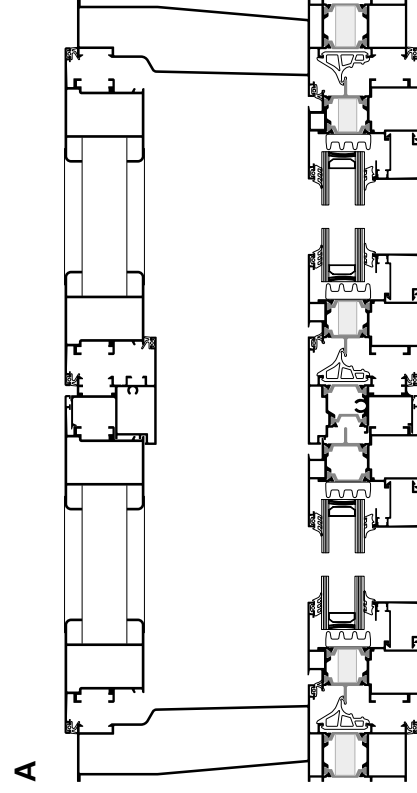
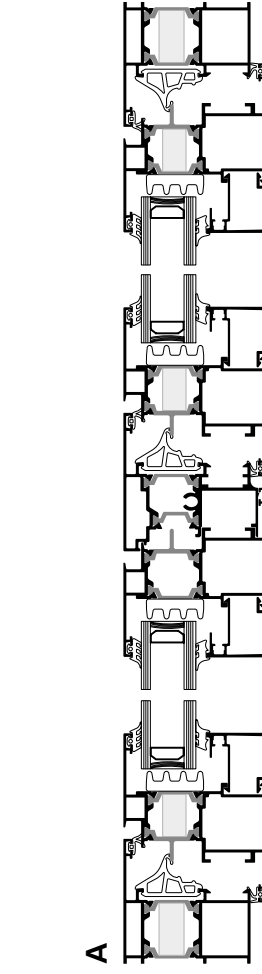
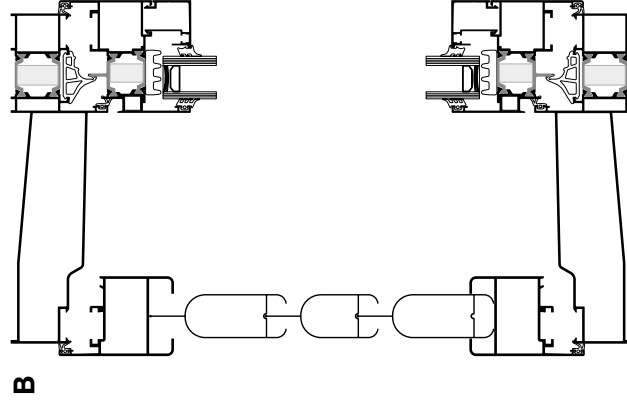
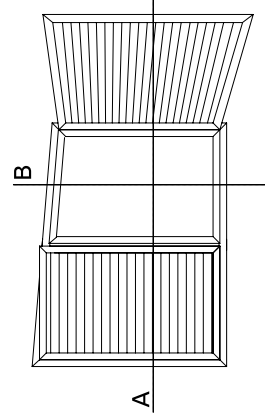
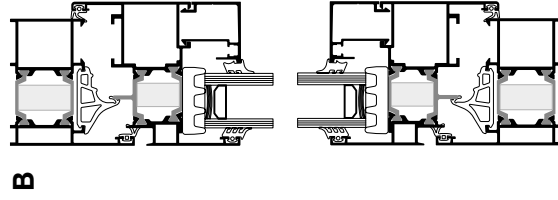
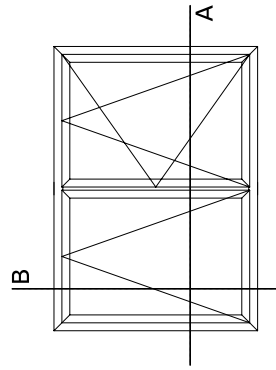


1 Sash



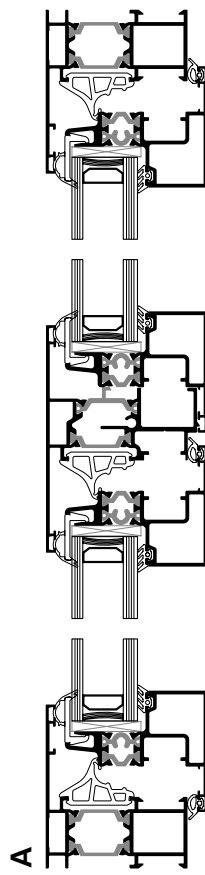
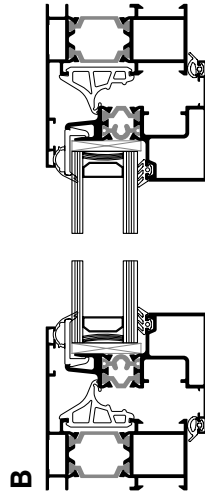
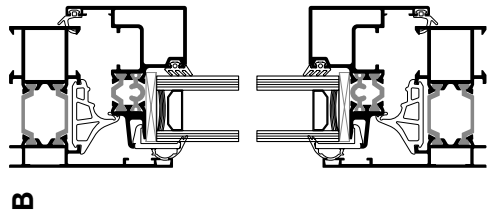
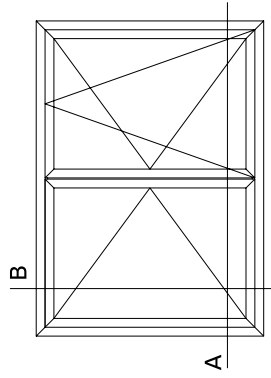
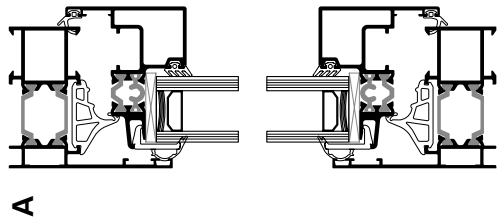
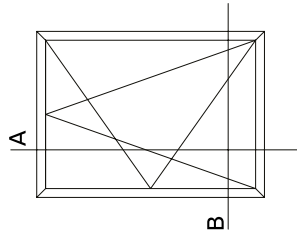
1 Sash / Fixed light





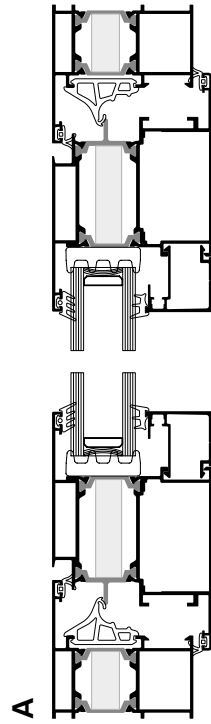
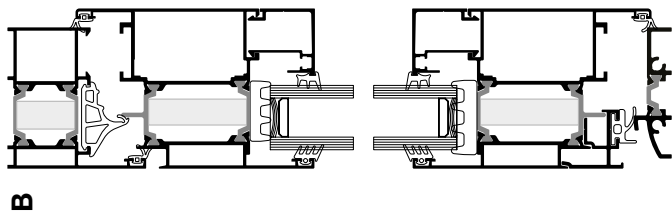
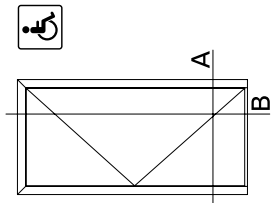
1 Sash / Hi

2 Sashes / Hi

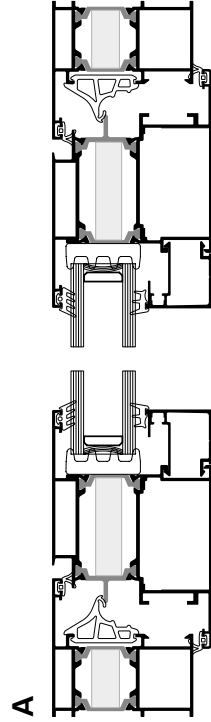
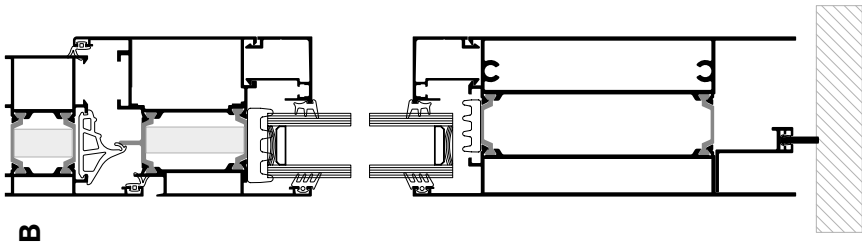
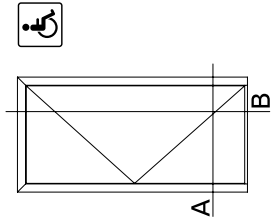


SECONDARY ENTRANCE DOORS

1 Sash / Inwards

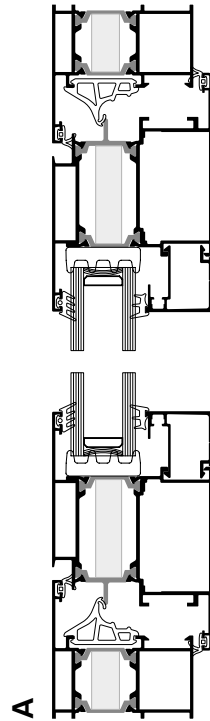
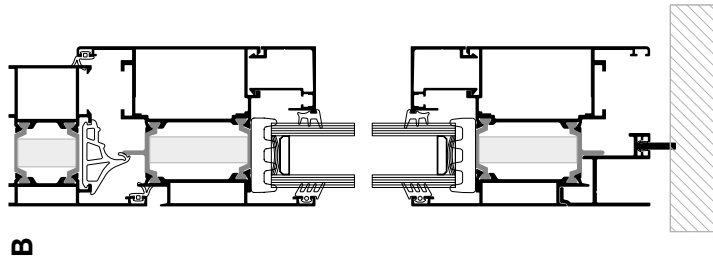
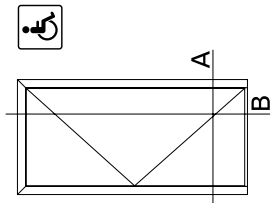


1 Sash / Inwards / Kickplate

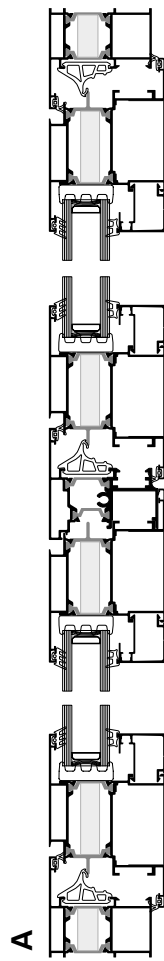
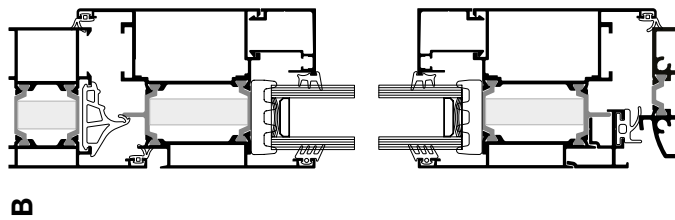
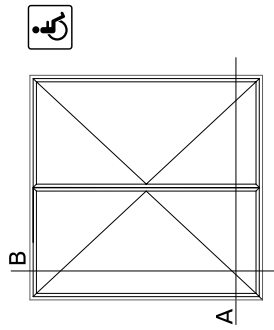


SECONDARY ENTRANCE DOORS

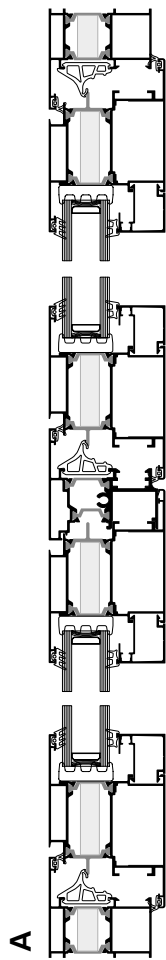
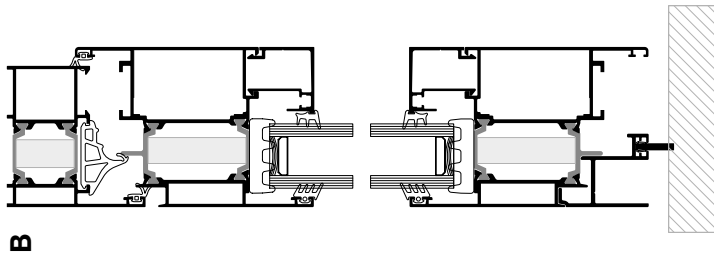
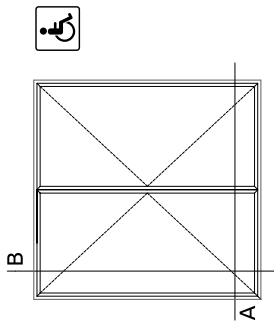
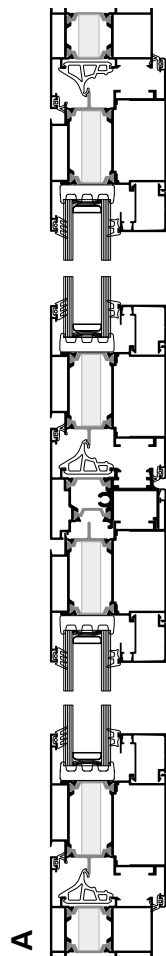
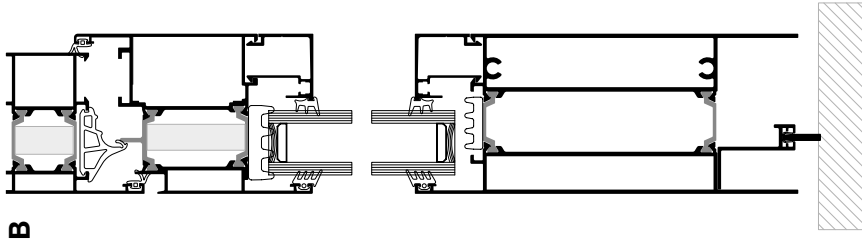
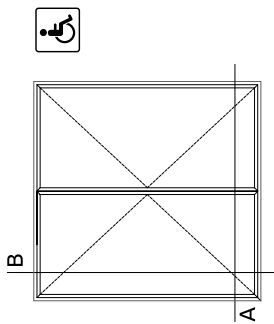
1 Sash / Inwards



2 Sashes / Inwards

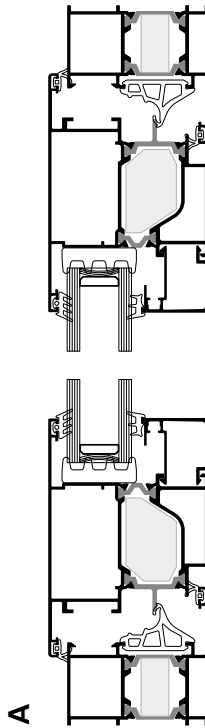
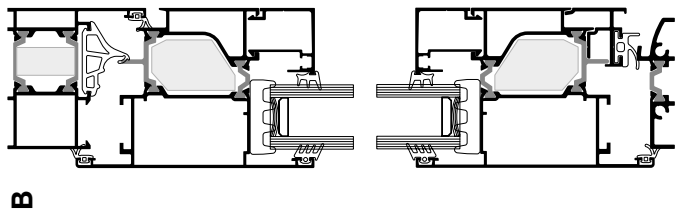
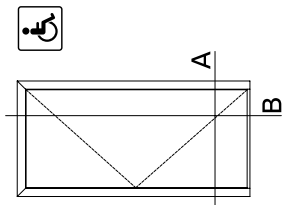


SECONDARY ENTRANCE DOORS
2 Sashes / Inwards / Kickplate

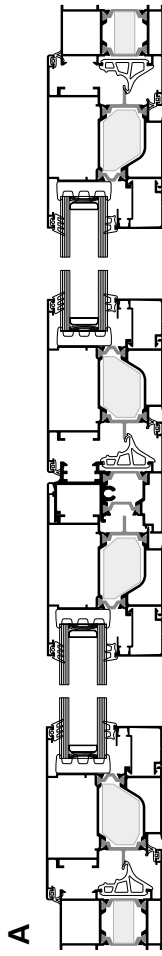
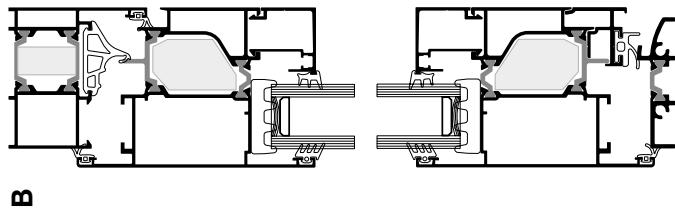
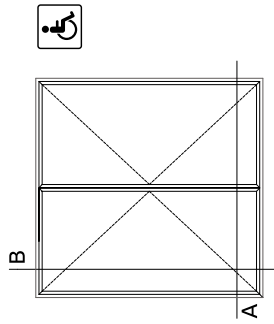


SECONDARY ENTRANCE DOORS

1 Sash / Outwards



2 Sashes / Outwards

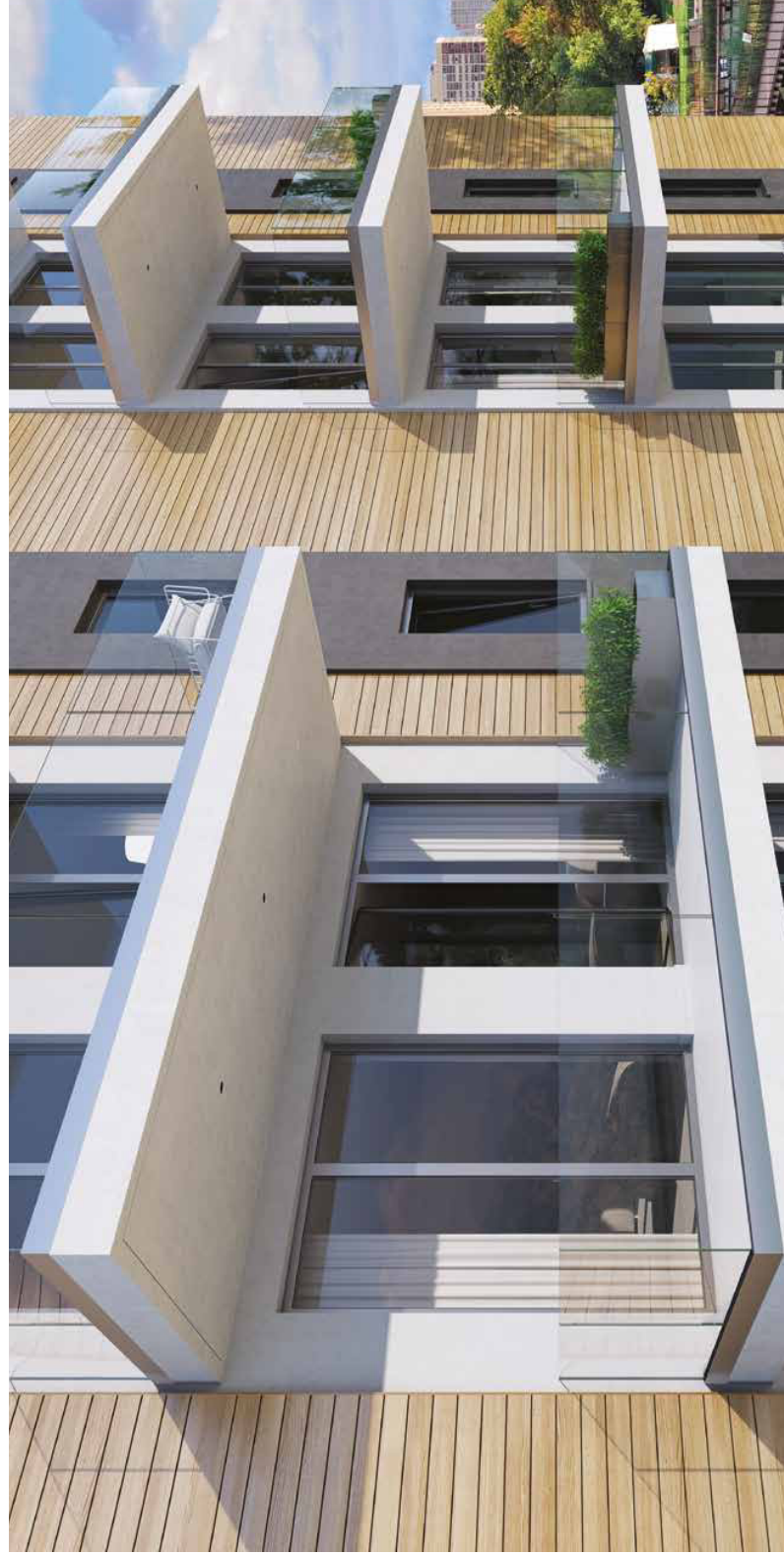


WHEN THE THINNEST SIGHTLINE BECOMES A DEMAND

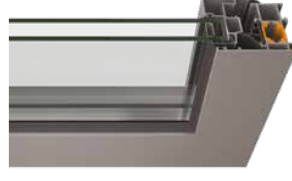
SMARTIA M9660 PHOS offers a competitive alternative option in **concealed sash typologies**.

Thanks to its 70,5 mm visible sightline, **natural light is maximized**, providing a totally **minimal look** in the building.

Moreover, SMARTIA M9660 PHOS **provides a holistic approach** in projects that require standard and concealed design.



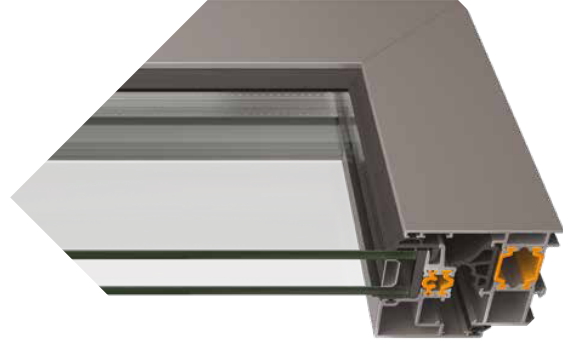
The system is available in two versions:



M9660 PHOS-Standard
Non-thermal break sash



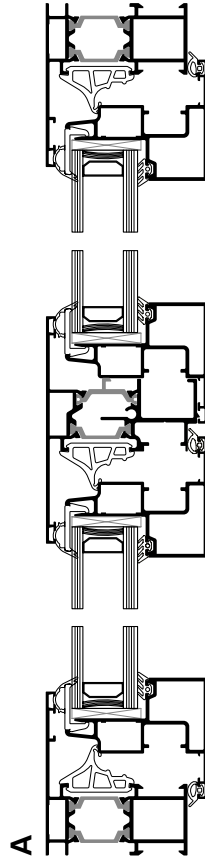
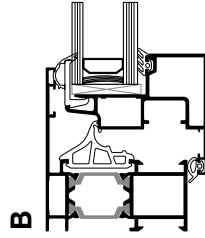
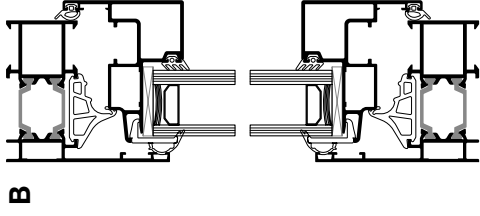
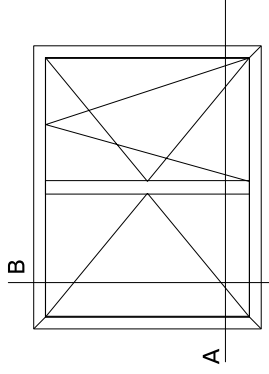
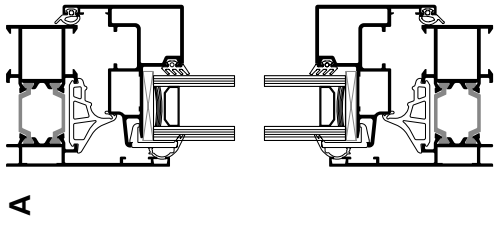
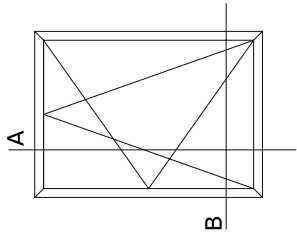
M9660 PHOS-High
Thermal break sash



VISIBLE ALUMINIUM FACE WIDTH	70,5 mm
FRAME HEIGHT	65 mm
FRAME WIDTH	56 mm
SASH HEIGHT	48 mm
SASH WIDTH	56 mm
SASH WEIGHT	UP TO 1,80 kg
GLAZING	2,6 mm
INSULATION	POLYAMIDES 1,4MM WIDTH

1 Sash / Standard

2 Sashes / Standard



ENTRANCE

DOORS

Main entrance doors
(flush) with MD9660

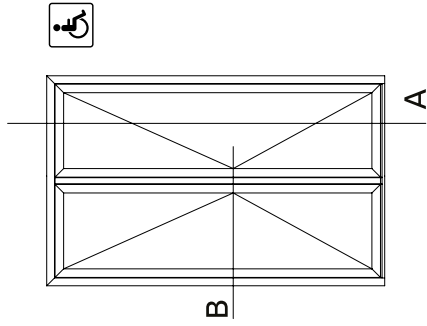
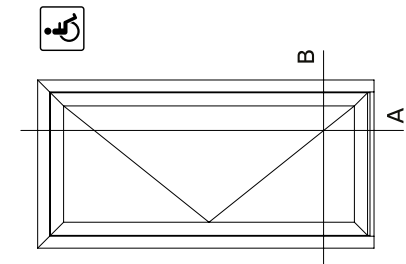
SMARTIA M9660, offers competitive entrance doors, maintaining at the same time, the quality and credibility of an advanced entrance door system.

Thanks to its flat design, it is a magnificent solution for innovative projects of modern architectural approach.



1 Sash / Inwards

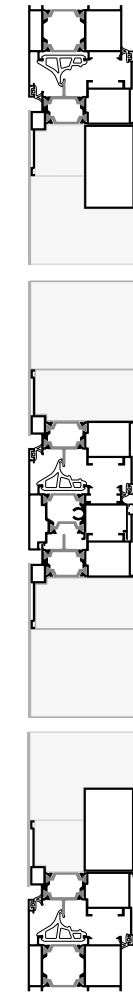
2 Sashes / Inwards



A

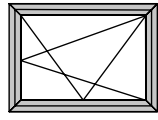


A

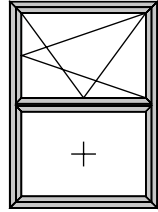


Applications

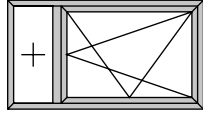
SMARTIA
M9660



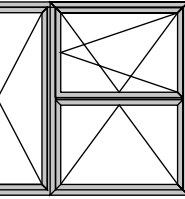
SINGLE TILT & TURN CASEMENT



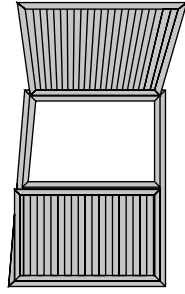
SINGLE TILT & TURN CASEMENT WITH FIXED LIGHT



SINGLE TILT & TURN CASEMENT WITH FANLIGHT

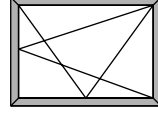


SINGLE TILT & TURN WITH SIDE - HUNG AND BOTTOM HUNG CASEMENT

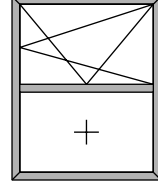


SINGLE TILT & TURN WITH SHUTTER CASEMENT & WITH SHUTTER

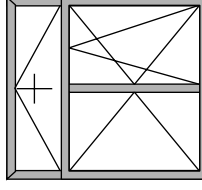
SMARTIA
M9660 PHOS



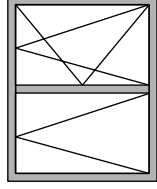
SINGLE TILT & TURN CASEMENT



SINGLE TILT & TURN WITH FIXED LIGHT

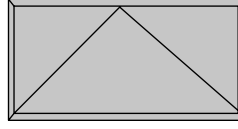


SINGLE TILT & TURN WITH SIDE - HUNG AND BOTTOM HUNG CASEMENT

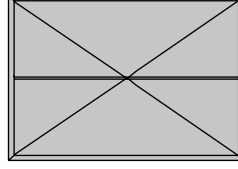


SINGLE TILT & TURN WITH SIDE - HUNG CASEMENT

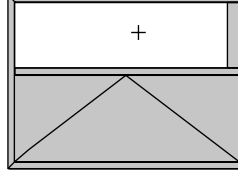
SMARTIA
MD9660



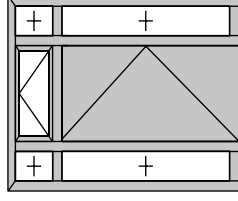
SINGLE LEAF DOOR WITH INSULATION PANEL



DOUBLE LEAF DOOR WITH INSULATION PANEL









SINGLE LEAF DOOR WITH INSULATION PANEL AND FIXED LIGHT



SINGLE LEAF DOOR WITH INSULATION PANEL, FANLIGHT AND FIXED LIGHTS





Table of performance



CERTIFICATION		CLASSIFICATION								
	WATER TIGHTNESS EN 12208	1A (0 Pa)	2A (50 Pa)	3A (100 Pa)	4A (150 Pa)	5A (200 Pa)	6A (250 Pa)	7A (300 Pa)	8A (450 Pa)	9A E1650 (1650 Pa)
	AIR PERMEABILITY EN 12207	1 2 3 4								
	WIND LOAD RESISTANCE MAX TEST PRESSURE EN 12210	1 (400 Pa)	2 (800 Pa)	3 (1200 Pa)	4 (1600 Pa)	5 (2000 Pa)				
	WIND LOAD RESISTANCE TO FRONTAL DEFLECTION EN 12210	A (≤/150)	B (≤/200)	C (≤/300)						
	BURGLAR RESISTANCE EN 1627-1630	RC 1 RC 2 RC 3								
	SOUND REDUCTION EN ISO 140-3	Rw (C;Ctr) = 45 (-1; -8) dB depending from the glazing type								

THERMAL PERFORMANCE	DIMENSIONS IN MM (W x H)	U _w in W/m ² ·K (U _g = 0,6)			U _w in W/m ² ·K (U _g = 0,8)			U _w in W/m ² ·K (U _g = 1,0)		
		1000 x 2200	1500 x 2200	1000 x 2200	1500 x 2200	1000 x 2200	1500 x 2200			
1 SASHES / HI	1000 x 2200	1,09	1,24	1,38	1,38	1,38				
2 SASHES / HI	1500 x 2200	1,17	1,31	1,46	1,46	1,46				
1 SASHES / ADVANCED	1000 x 2200	1,18	1,32	1,47	1,47	1,47				
2 SASHES / ADVANCED	1500 x 2200	1,26	1,40	1,55	1,55	1,55				
1 SASH / STANDARD	1000 x 2200	1,21	1,35	1,49	1,49	1,49				
2 SASHES / STANDARD	1500 x 2200	1,30	1,44	1,60	1,60	1,60				



CERTIFICATION		CLASSIFICATION								
	WATER TIGHTNESS EN 12208	1A (0 Pa)	2A (50 Pa)	3A (100 Pa)	4A (150 Pa)	5A (200 Pa)	6A (250 Pa)	7A (300 Pa)	8A (450 Pa)	9A (600 Pa)
	AIR PERMEABILITY EN 12207	1 2 3 4								
	WIND LOAD RESISTANCE MAX TEST PRESSURE EN 12210	1 (400 Pa)	2 (800 Pa)	3 (1200 Pa)	4 (1600 Pa)	5 (2000 Pa)				
	WIND LOAD RESISTANCE TO FRONTAL DEFLECTION EN 12210	A (≤/150)	B (≤/200)	C (≤/300)						

THERMAL PERFORMANCE	DIMENSIONS IN MM (W x H)	U _w in W/m ² ·K (U _g = 0,9)			U _w in W/m ² ·K (U _g = 1,1)			U _w in W/m ² ·K (U _g = 1,3)		
		1000 x 2200	1500 x 2200	1000 x 2200	1500 x 2200	1000 x 2200	1500 x 2200			
1 SASHES / HI	1000 x 2200	1,31	1,47	1,63	1,63	1,63				
2 SASHES / HI	1500 x 2200	1,36	1,52	1,68	1,68	1,68				
1 SASH / STANDARD	1000 x 2200	1,45	1,61	1,77	1,77	1,77				
2 SASHES / STANDARD	1500 x 2200	1,53	1,69	1,84	1,84	1,84				

www.alumil.com

DISCOVER MORE:

M9660



M9660 PHOS



MD9660



**ALUMIL
HEAD OFFICES
& SHOWROOM - THESSALONIKI**

GOGOUSI 8, EFKARPIA
THESSALONIKI - GR 56429
TEL.: +30 2313011000
FAX.: +30 231692473
E-MAIL: info@alumil.com

**ALUMIL
HEADQUARTERS**

KILKIS INDUSTRIAL AREA
KILKIS - GR 61100
TEL.: +30 23410 79300
FAX.: +30 23410 71988
E-MAIL: info@alumil.com



**ALUMIL
HEAD OFFICES
& SHOWROOM - THESSALONIKI**

GOGOUSI 8, EFKARPIA
THESSALONIKI - GR 56429

TEL.: +30 2313 011000
FAX.: +30 2310 692473
EMAIL: info@alumil.com

**ALUMIL
HEADQUARTERS**

KILKIS INDUSTRIAL AREA
KILKIS - GR 61100

TEL.: +30 23410 79300
FAX.: +30 23410 71988
EMAIL: info@alumil.com

www.alumil.com

alumil