



Alumil
Building excellence every day

Alumil  **SMARTIA**
M630 PHOS



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SMARTIA M630 PHOS

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SMARTIA M630 PHOS

is the ideal choice for minimal thermally insulated sliding windows and doors with wide glazing surfaces. The system can be installed either on-floor or flush to the floor offering a unique combination of elegance and functionality, satisfying even the most demanding requirements.

PHOS means **LIGHT**

*"I sense Light as the giver of all presences, and material as spent Light.
What is made by Light casts a shadow, and the shadow belongs to Light."*

Not just a window
a point of view.

The sliding system
SMARTIA M630 PHOS
offers a minimal touch...

in contemporary residences combining
minimal design with **high thermal
performance.**



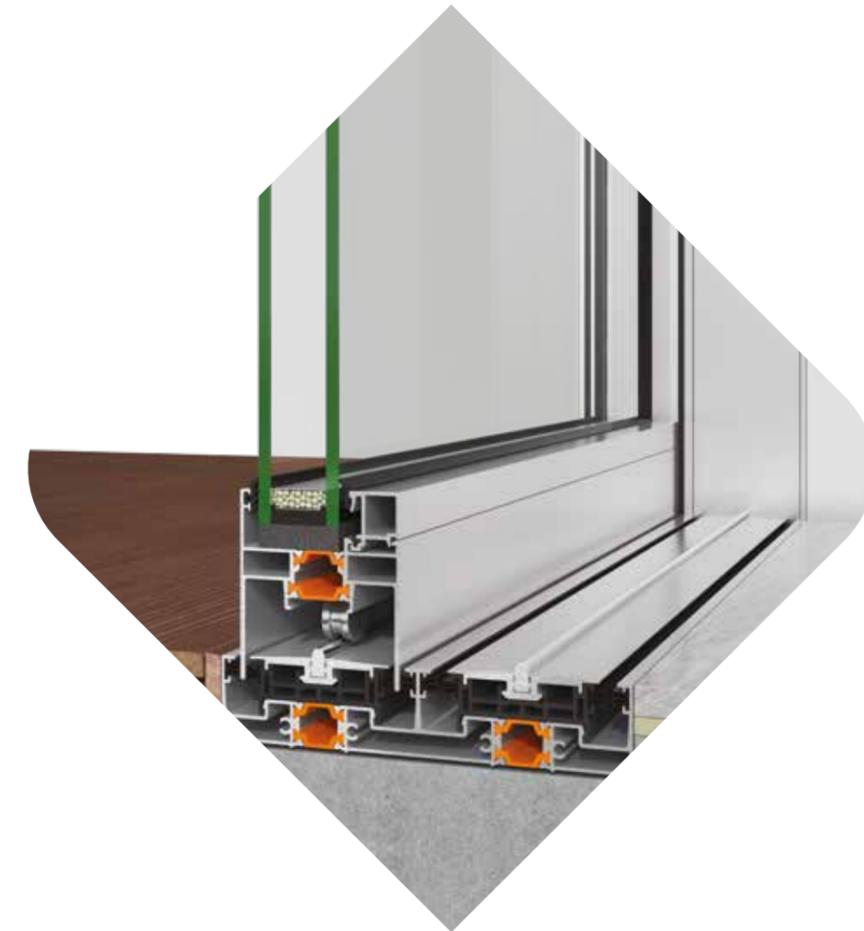
Following the
“**less is more**” philosophy,
all aluminium profiles can
be hidden into the walls
providing a total sense of
comfort with top functionality
and enhanced safety.

- Design ideal for “green” buildings, emphasizing on energy & money savings through thermally efficient solutions.
- Maximum natural light with only 44 mm of visible aluminium face width at the interlocking profile.
- Smart locking mechanism (international patent) with multiple locking points.
- Easy access thanks to the low threshold ideal for children, elders and people with special needs.
- Smooth sliding & maximum functionality with high resistance to corrosion with stainless steel rollers.
- Vast range of typologies available.

Alumil SMARTIA
M630 PHOS

TECHNICAL

CHARACTERISTICS



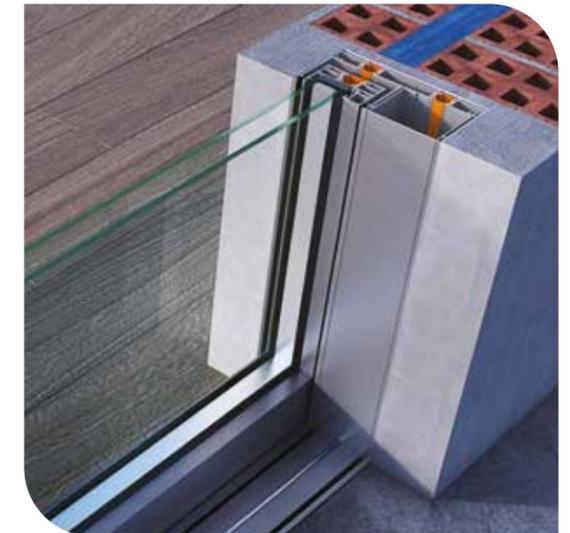
| VISIBLE ALUMINIUM FACE WIDTH | CONCEALED PROFILES |
|------------------------------|--------------------|
| FRAME HEIGHT | 32 mm |
| FRAME WIDTH | 155 mm |
| SASH WIDTH | 63 mm |
| INTERLOCKING PROFILE WIDTH | 44 mm |
| SASH WEIGH | UP TO 250 kg |
| GLAZING | 32 mm |
| INSULATION | POLYAMIDES, PVC |

The system's main characteristic is the aluminium frames that are **totally flush to the wall.**

Thus, it offers to the users **the sense of freedom** and direct interaction with the external environment.

Elegant coziness full of natural light thanks to the **system's minimal design and the wide glazing surfaces that can be integrated.** The visibility is enhanced with the slim interlocking profile of only

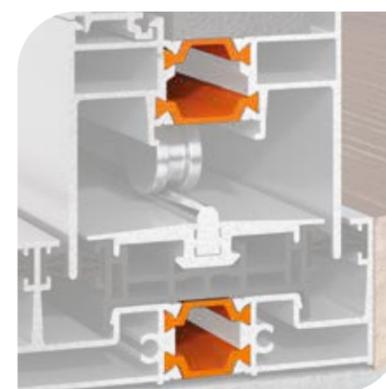
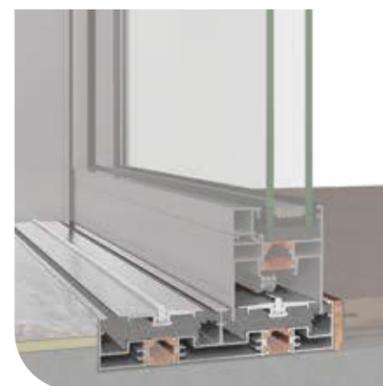
44 mm visible aluminium face width.



Alumil SMARTIA
M630 PHOS

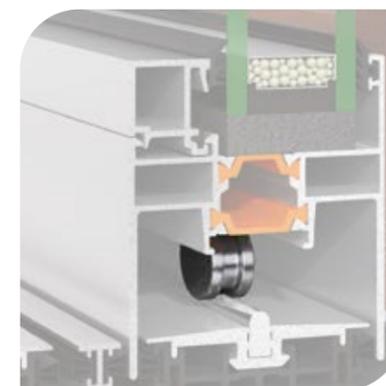
ATTENTION

Flat threshold with a **height of only 32mm**, which was specially designed for easy and safe access to children, the elderly and people with special needs.



SMARTIA M630 PHOS uses **fiberglass reinforced polyamides** with 24mm & 20mm width, along with the contribute to the system's high energy efficiency.

Stainless steel rollers ideal for seaside projects offering **high functionality & smooth gliding** of the sashes.



The unique PVC profiles contribute to the system's **the thermal insulation and watertightness**.

TO DETAIL

The door sash **glides easily and quietly** on the solid rail made by stainless steel AISI 316L.



SMARTIA M630 PHOS uses **high quality brushes with triple membrane** contributing significantly to the system's air permeability and watertightness.

Smart locking system
(international patented)
with ALUMIL design handle...

offer **high security with multiple locking points.**
In addition, they are very easy to install after transportation
on site and can be easily removed for maintenance.

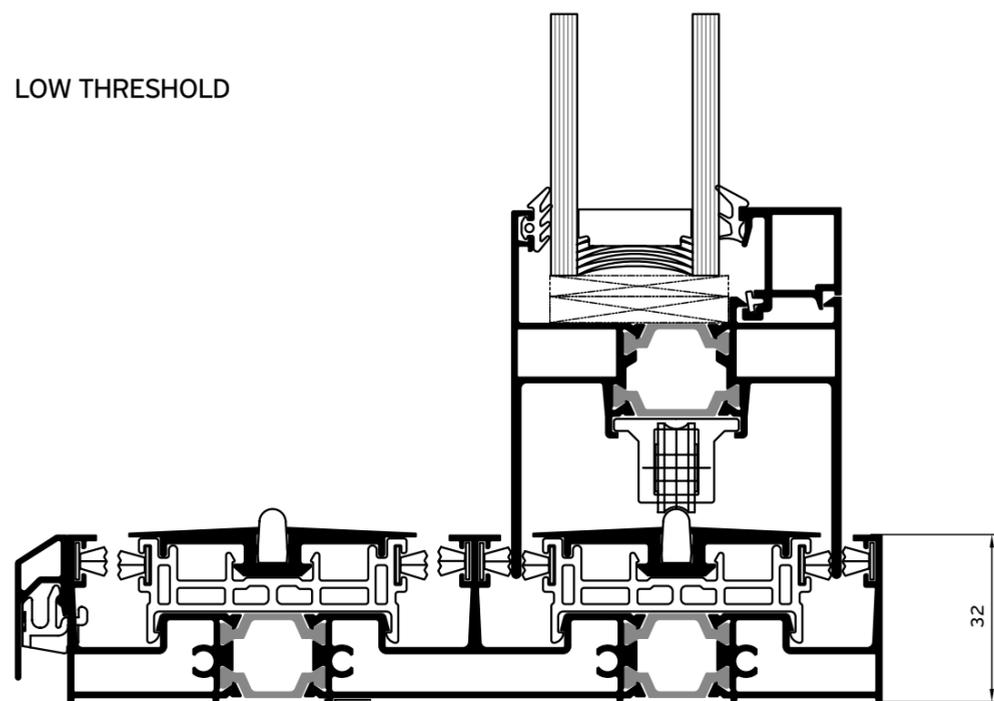


Alumil SMARTIA M630 PH0S

The innovative design of the concealed water drainage system offers excellent performance even under adverse weather conditions. Specially perforated profiles and accessories, assembled together, facilitate the water outflow.

Even when the low threshold is selected for top-mounted installation, there is a special component for the concealed water drainage that offers high watertightness.

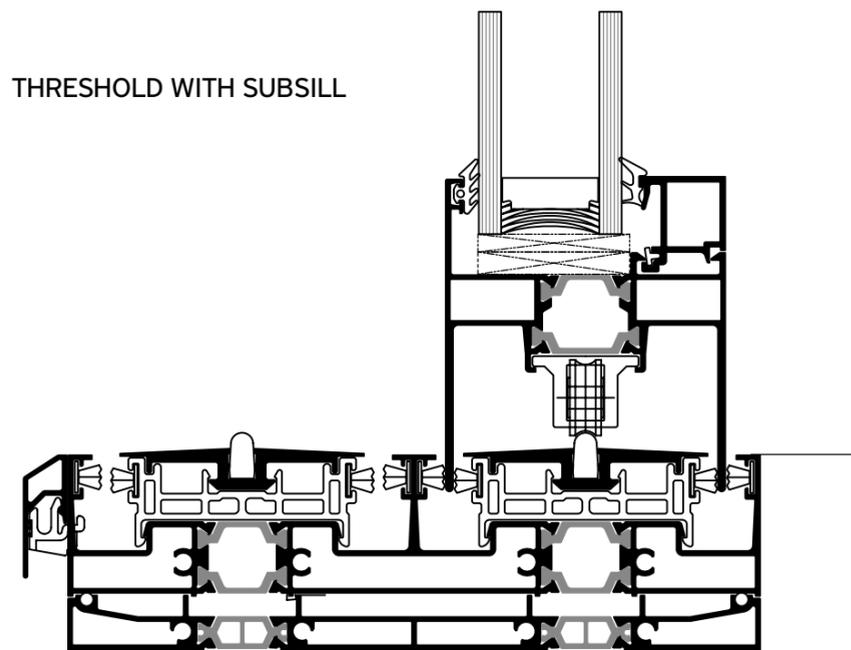
LOW THRESHOLD



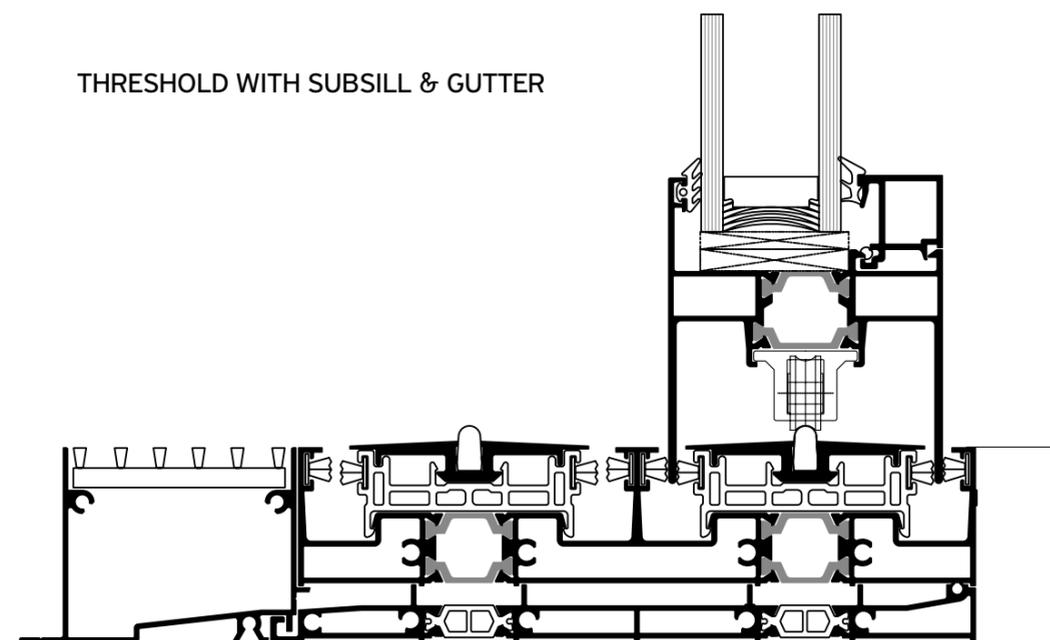
EXPLOITING

EVERY CONTEMPORARY NEED

THRESHOLD WITH SUBSILL



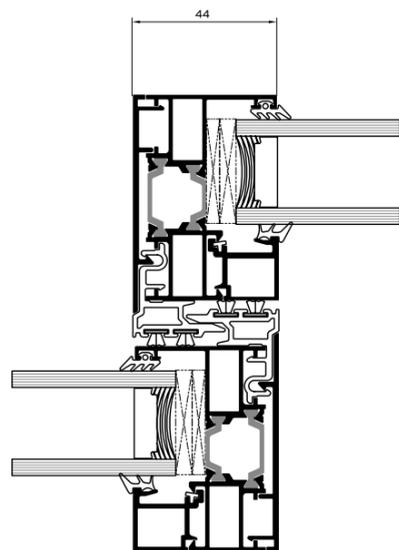
THRESHOLD WITH SUBSILL & GUTTER



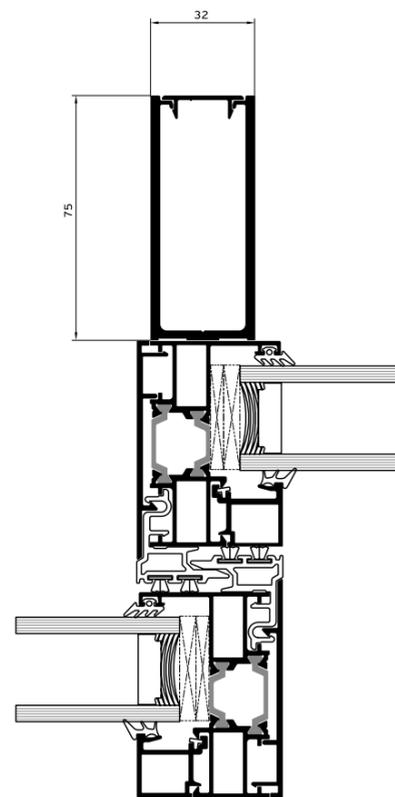
THRESHOLD WITH SUBSILL

Alumil SMARTIA
M630 PH0S

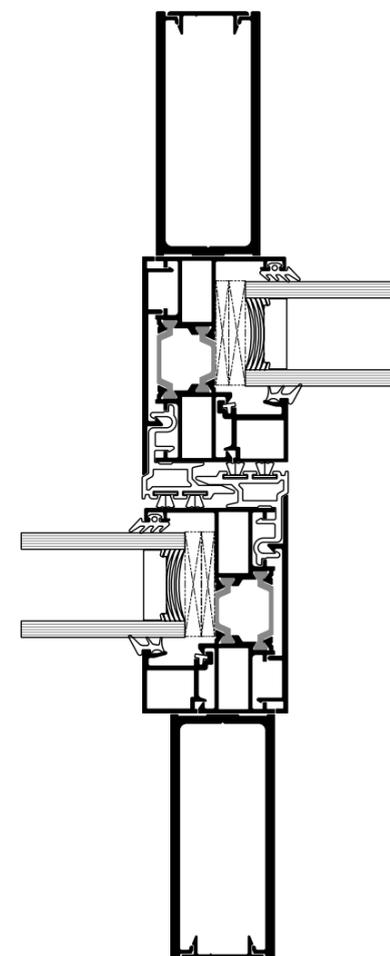
In addition, the reinforced interlocking profile apart from aesthetics and functionality, offers robustness to the structure and resistance to wind loads for higher sashes.



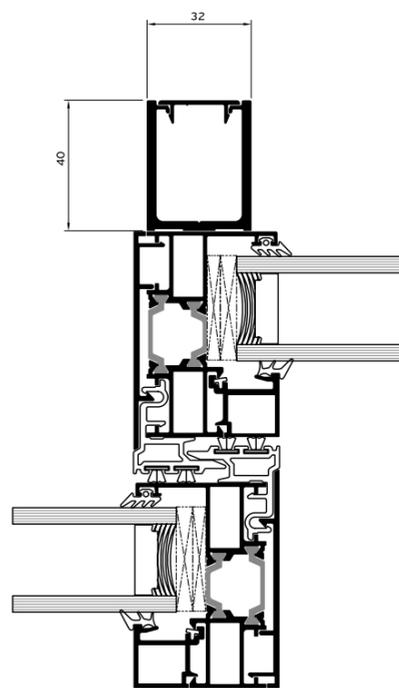
$I_x=31,4 \text{ cm}^4$



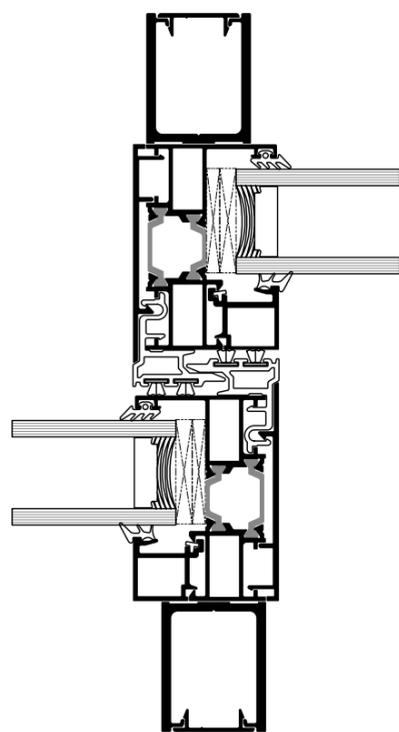
$I_x=156,8 \text{ cm}^4$



$I_x=250 \text{ cm}^4$

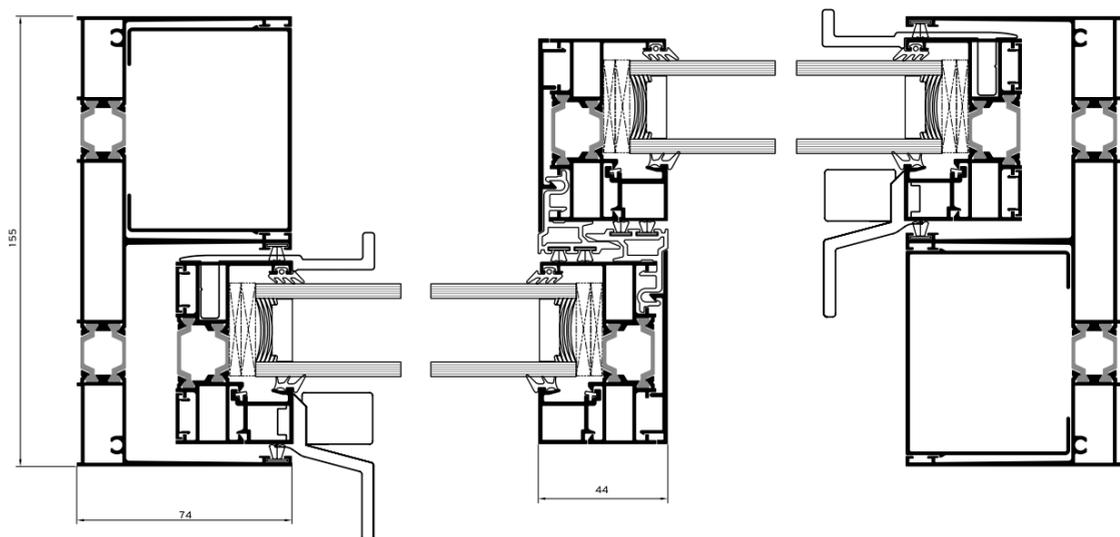
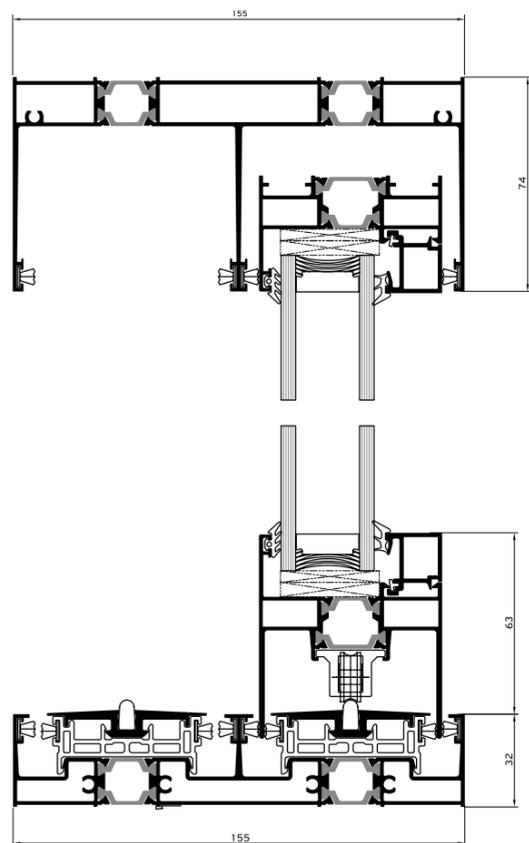
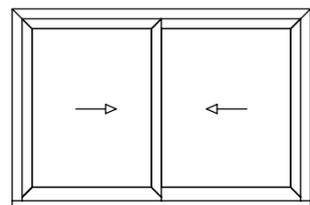


$I_x=70,9 \text{ cm}^4$

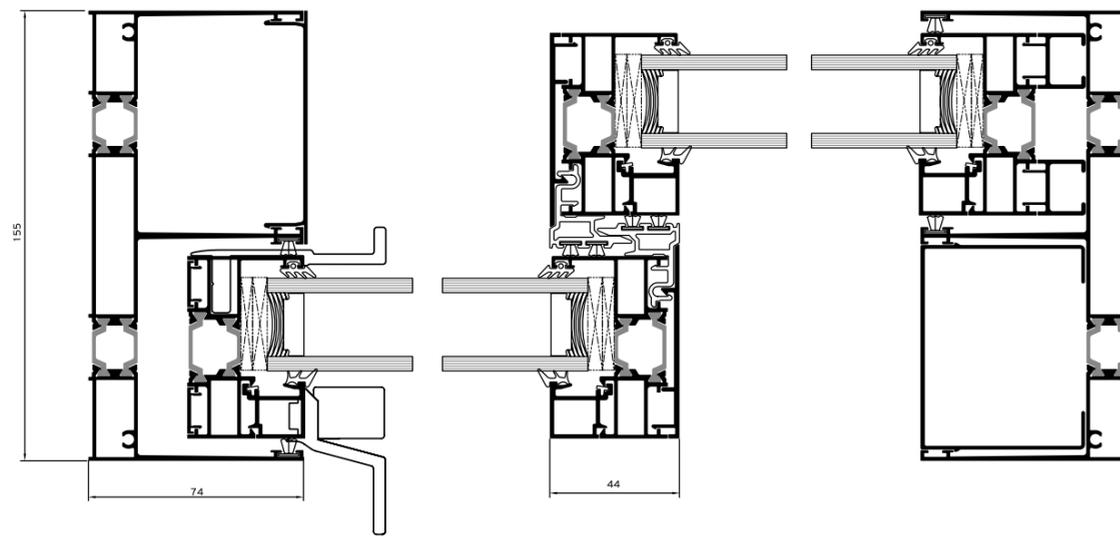
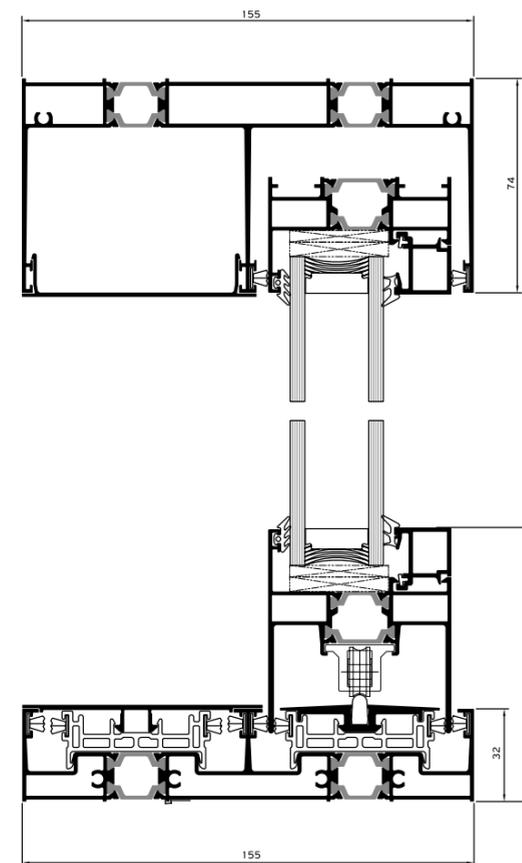
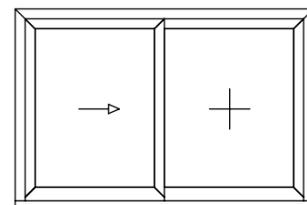


$I_x=100,4 \text{ cm}^4$

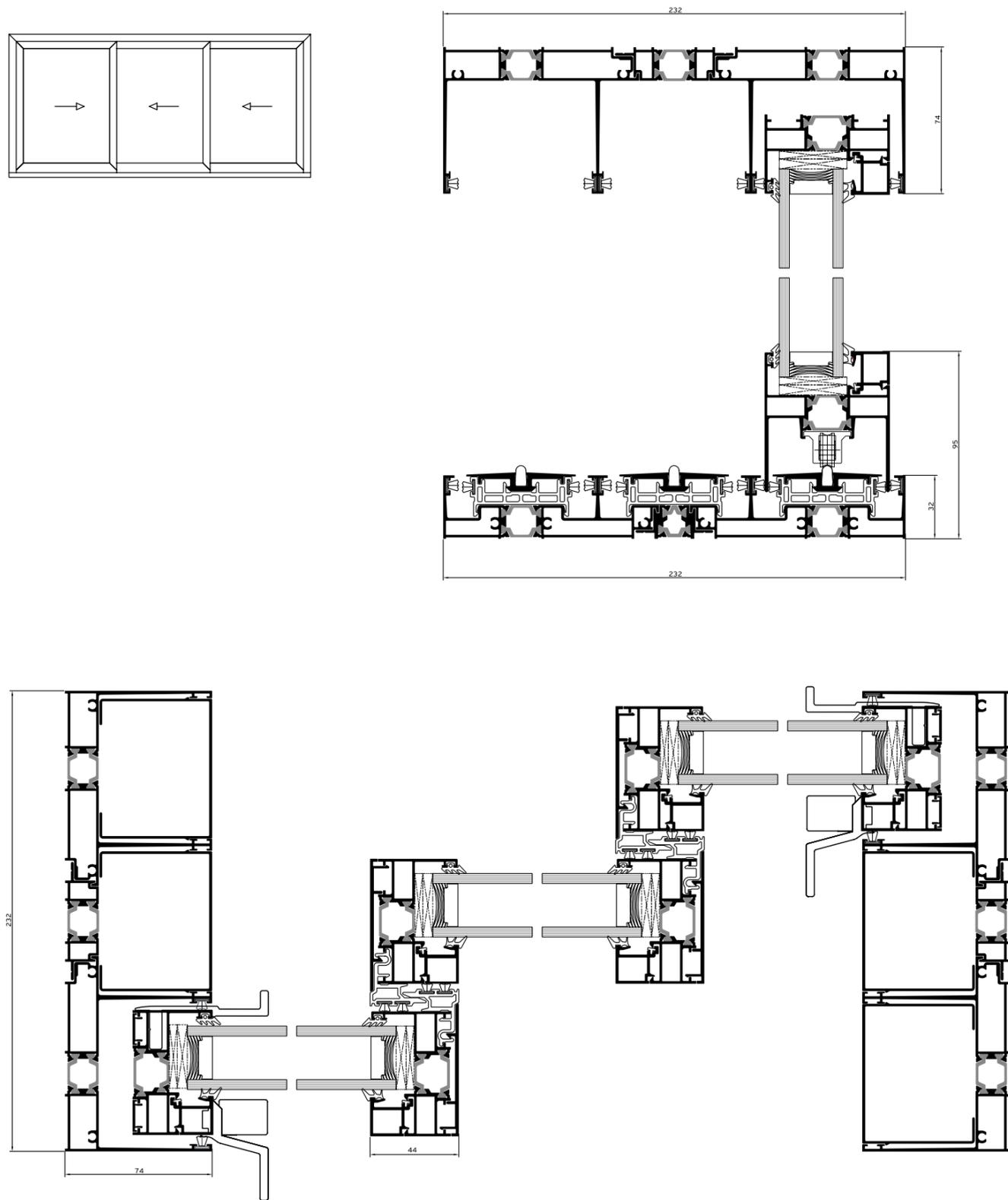
2 Sashes / 2 Track



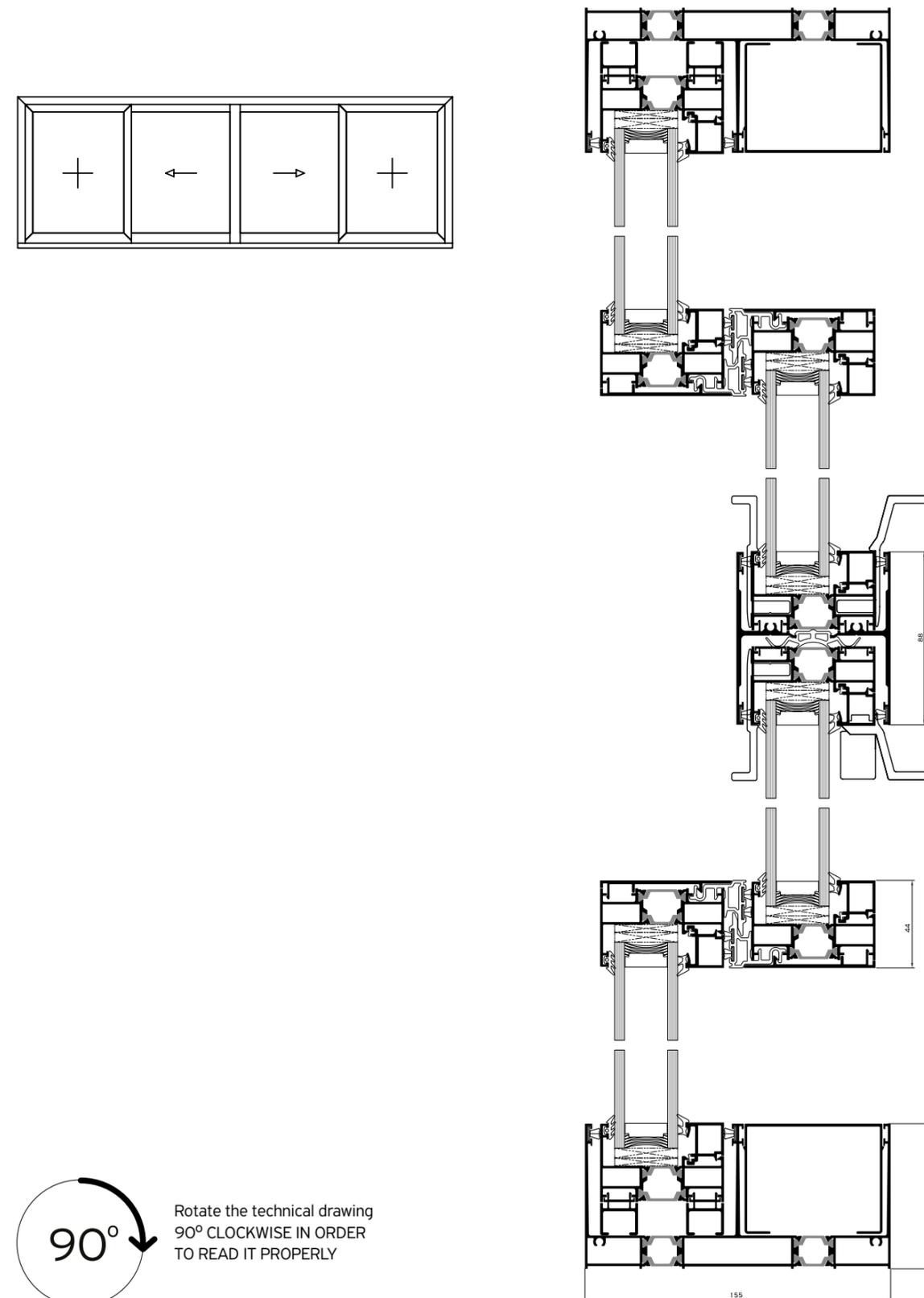
1 Sash / Fixed light



3 Sashes / 3 Track

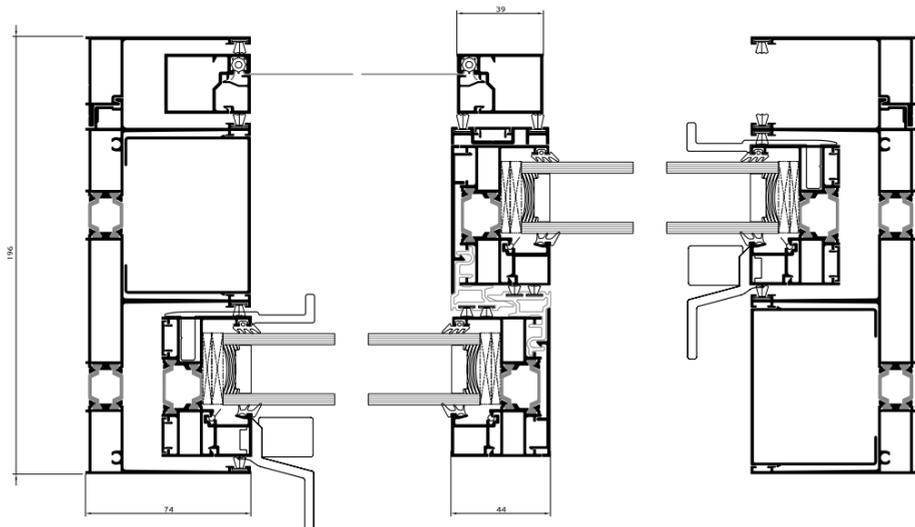
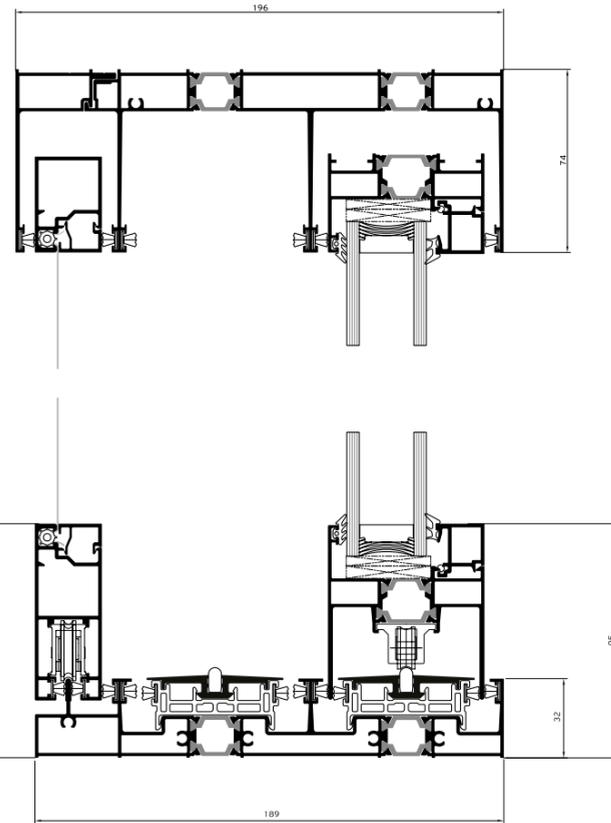
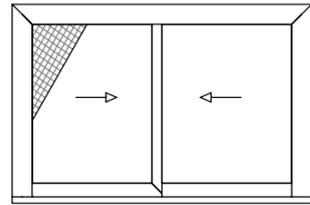


2 Sashes / 2 Fixed lights / 2 Track

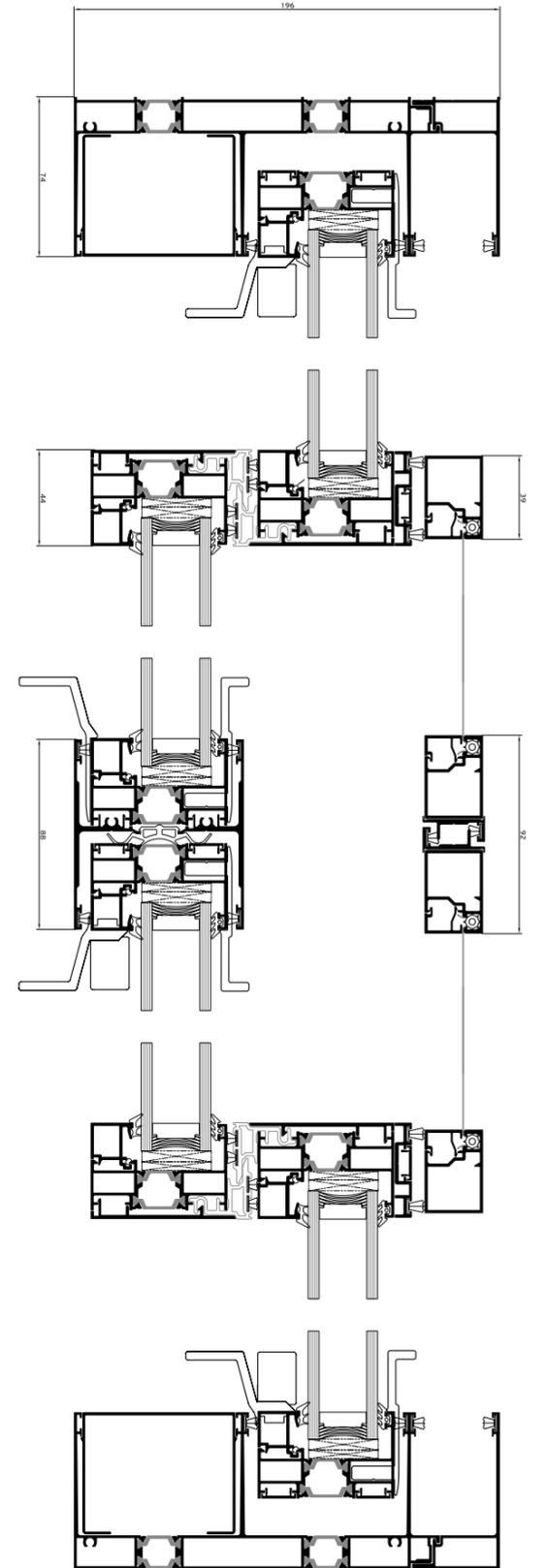
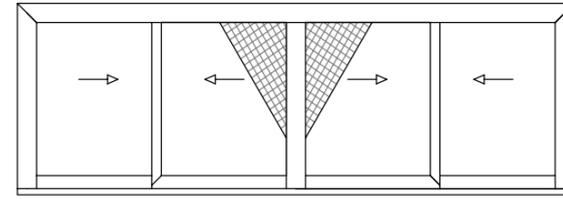


90°
 Rotate the technical drawing
 90° CLOCKWISE IN ORDER
 TO READ IT PROPERLY

2 Sashes / 2 Track / Flyscreen



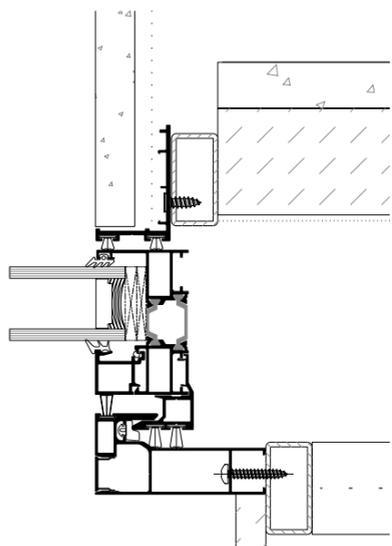
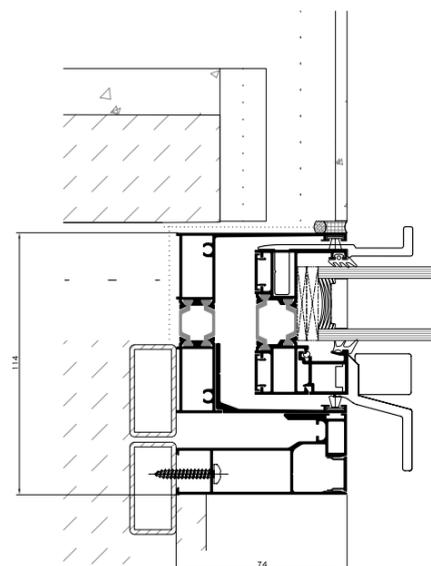
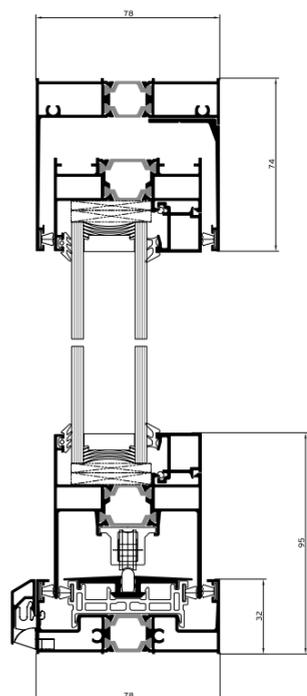
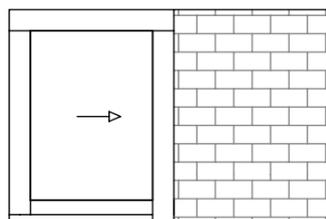
4 Sashes / 2 Track / Flyscreen



90°
Rotate the technical drawing
90° CLOCKWISE IN ORDER
TO READ IT PROPERLY

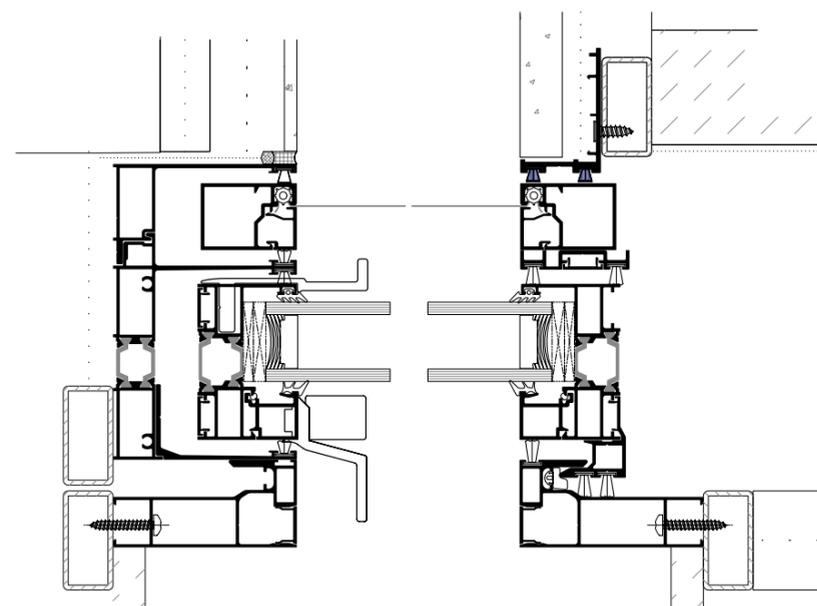
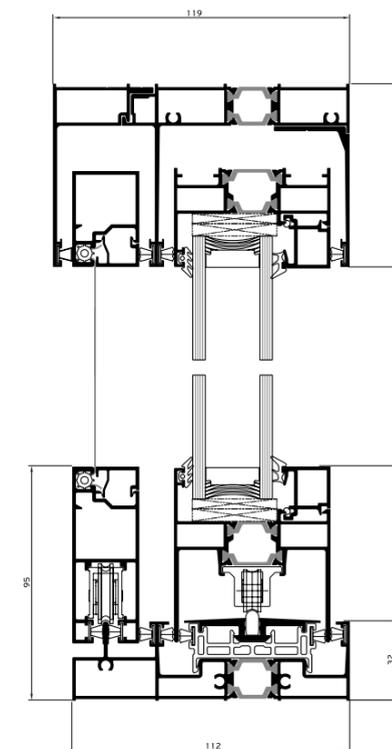
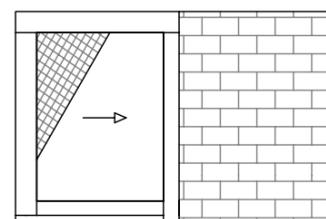
POCKET WINDOW

1 Sash



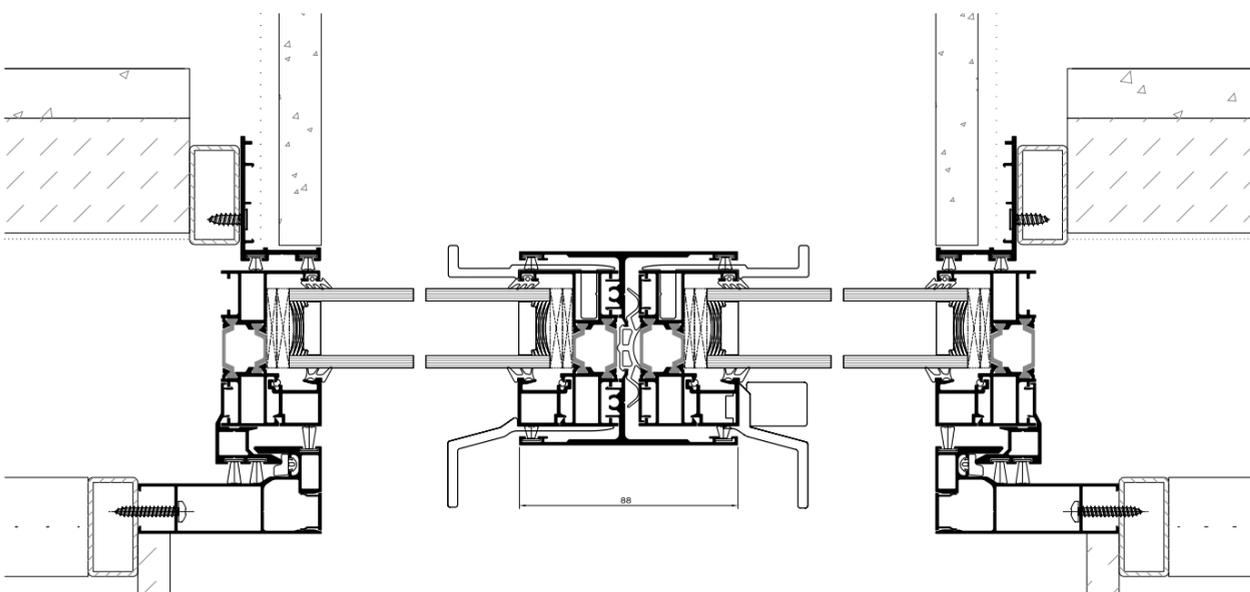
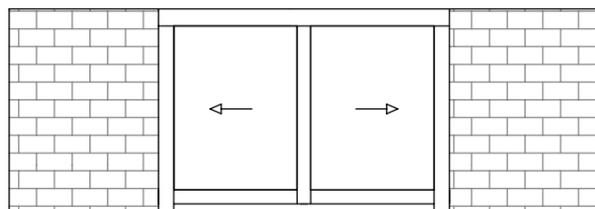
POCKET WINDOW

1 Sash / Flyscreen



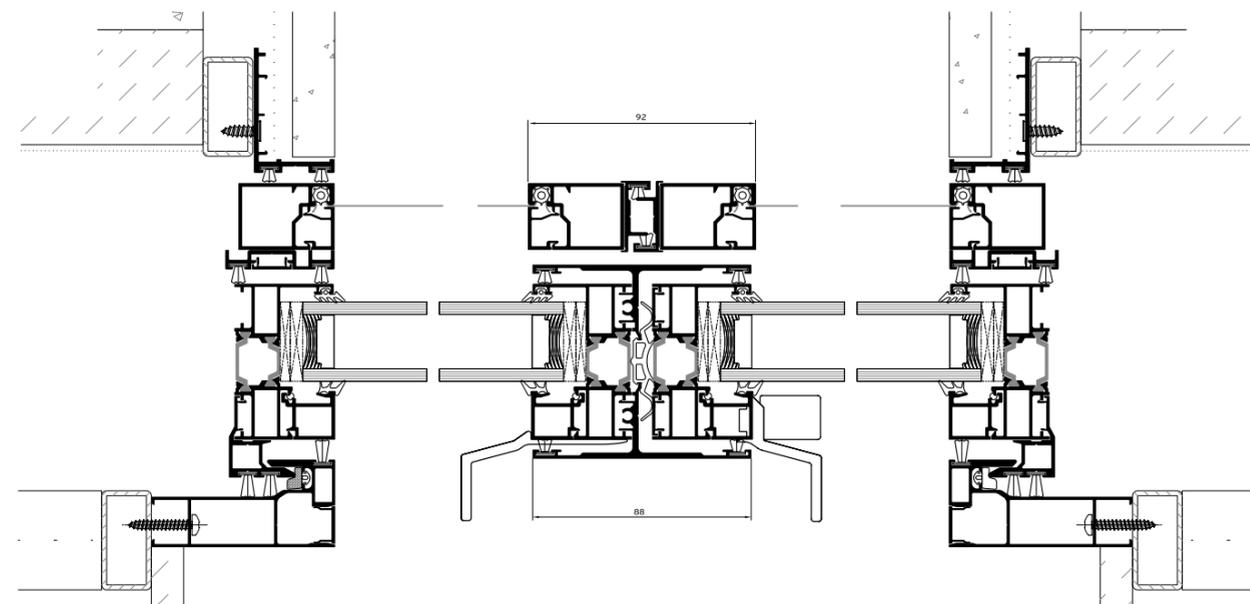
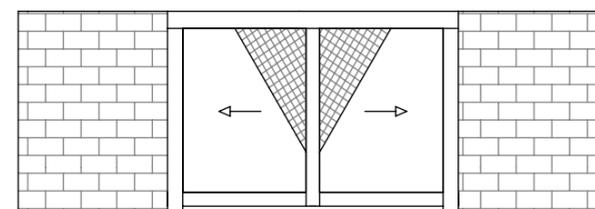
POCKET WINDOW

2 Sashes

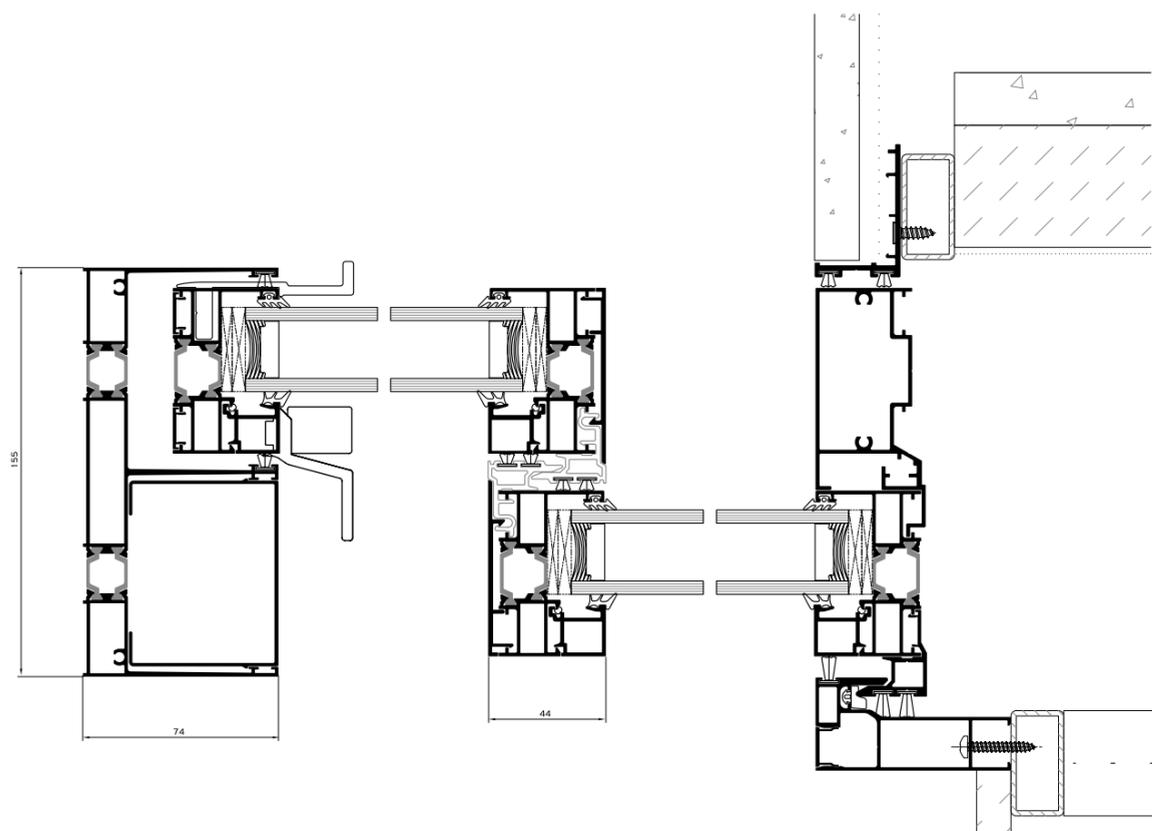
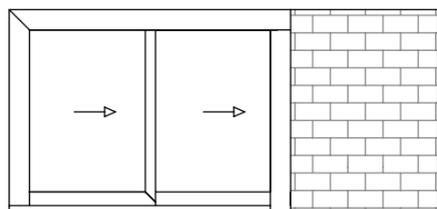


POCKET WINDOW

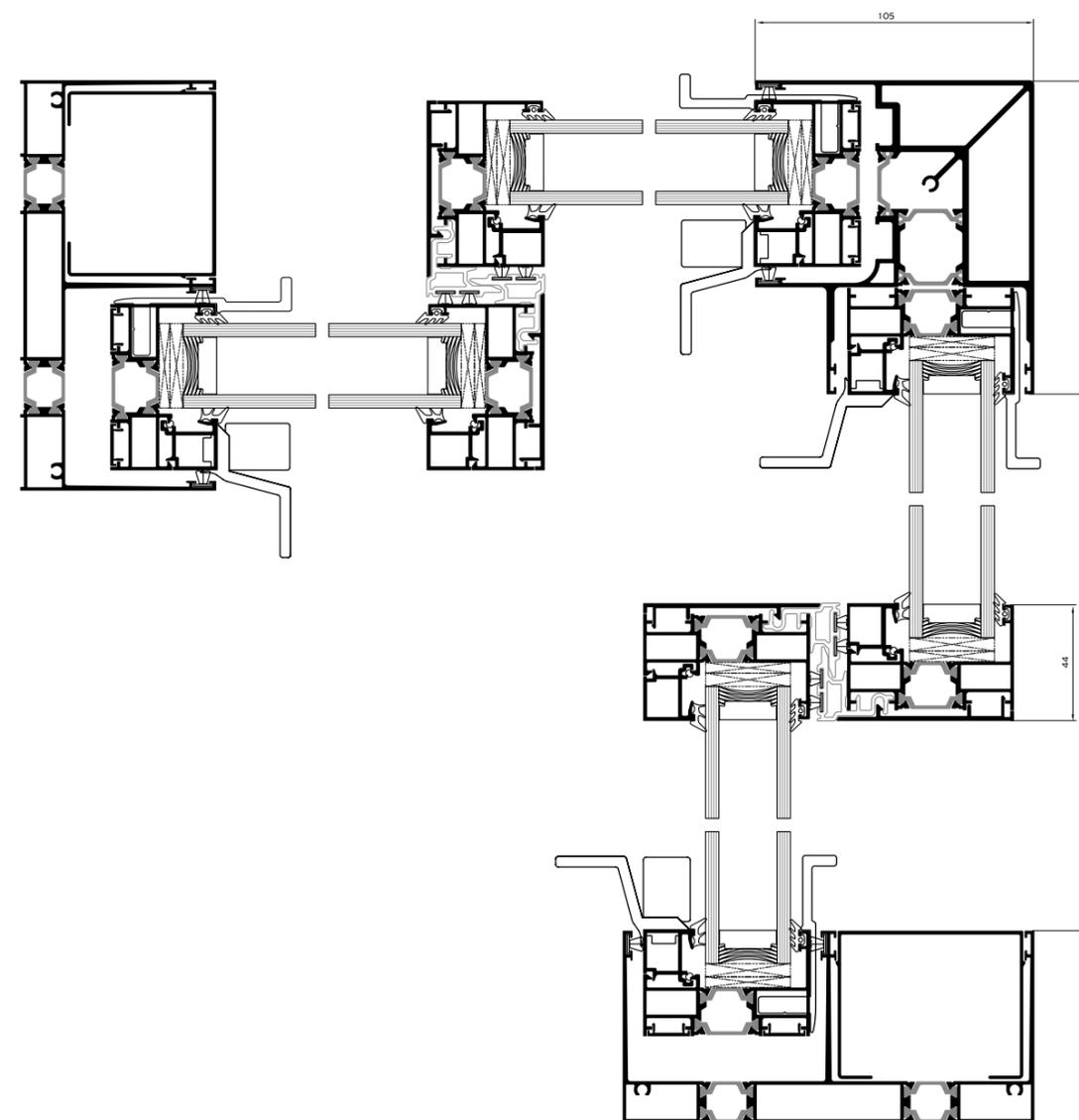
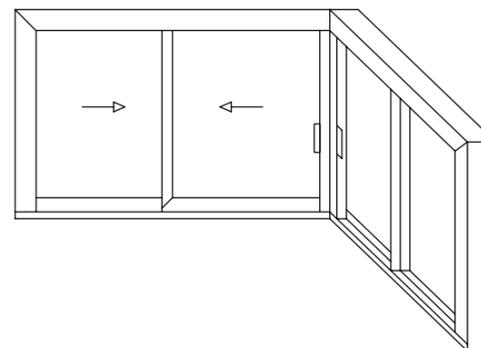
2 Sashes / Flyscreen



POCKET WINDOW Multi-Sash



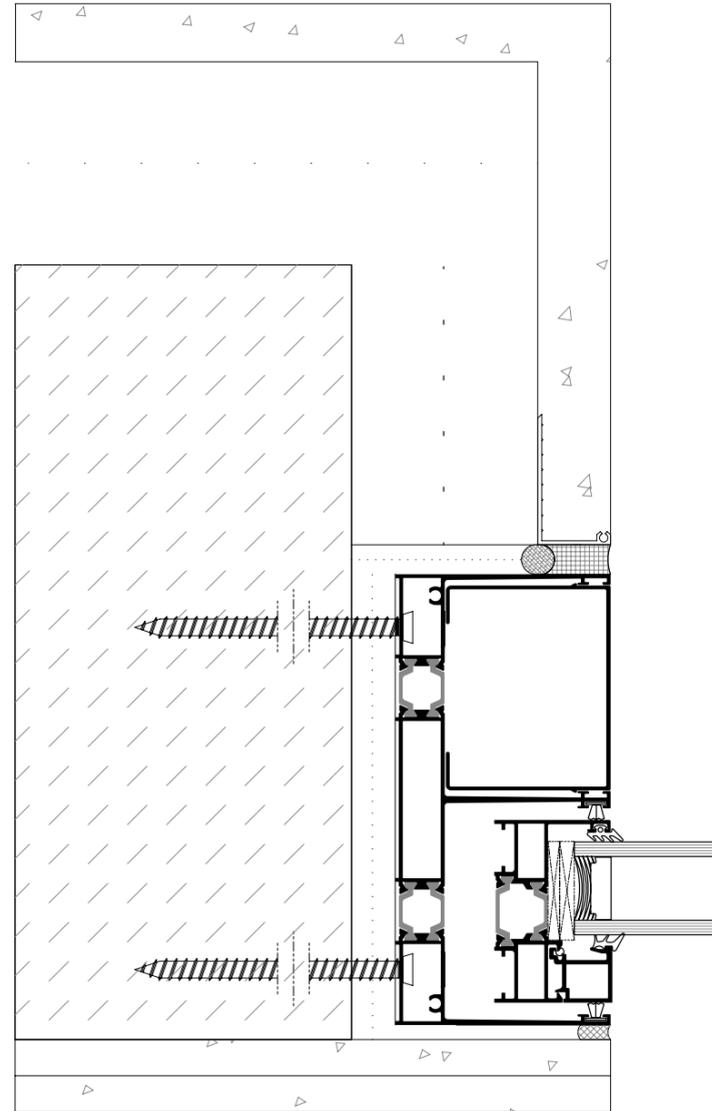
EXTERNAL CORNER



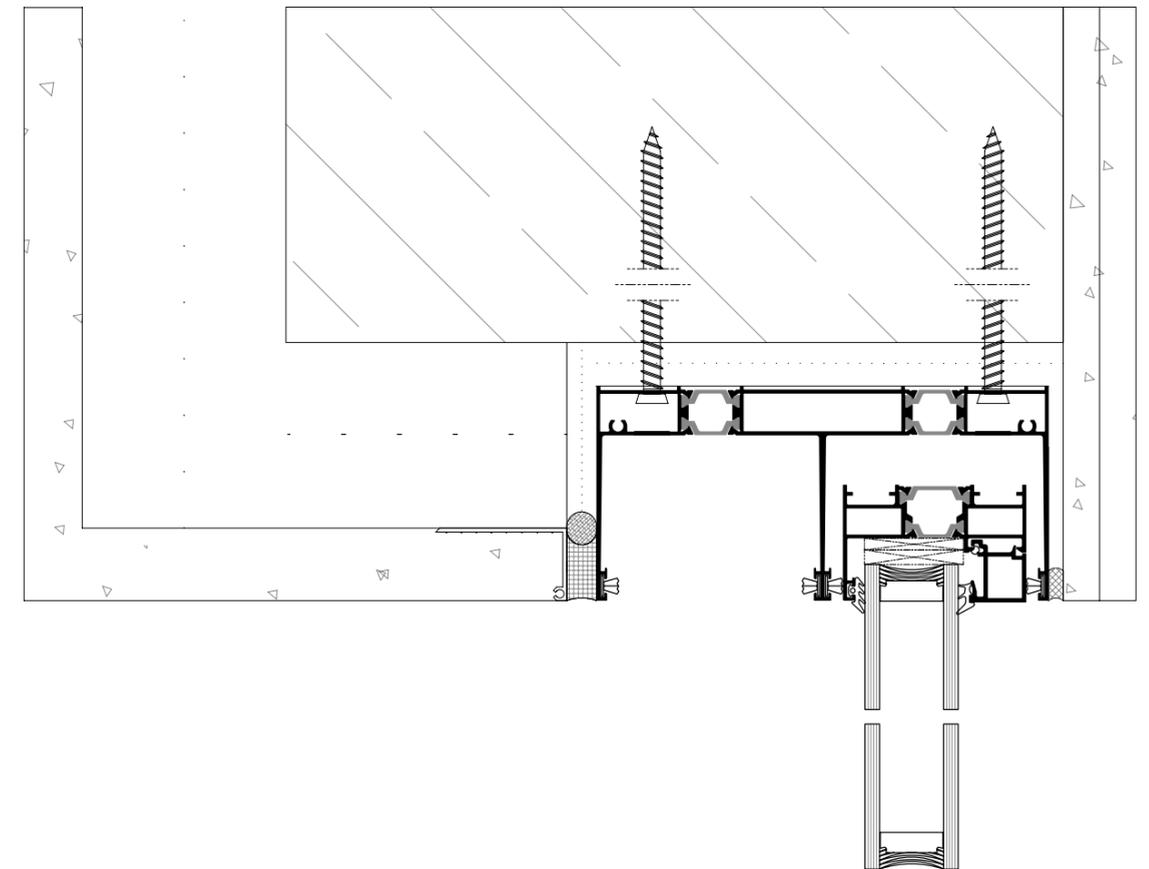
Installation

-  PRECOMPRESSED MULTI-FUNCTION SEALING TAPE
-  BACKER ROD
-  HYBRID SEALANT OR NEUTRAL SILICONE
-  STYRODUR HIGH DENSITY BOARD
-  TILES
-  MARBLE
-  POLYURETHANE FOAM
-  POLYSTYRENE
-  WALL CONSTRUCTION
-  WALL FINISH
-  REINFORCED CONCRETE
-  AIR WATER VAPOR BARRIER TAPE

SIDE SECTION

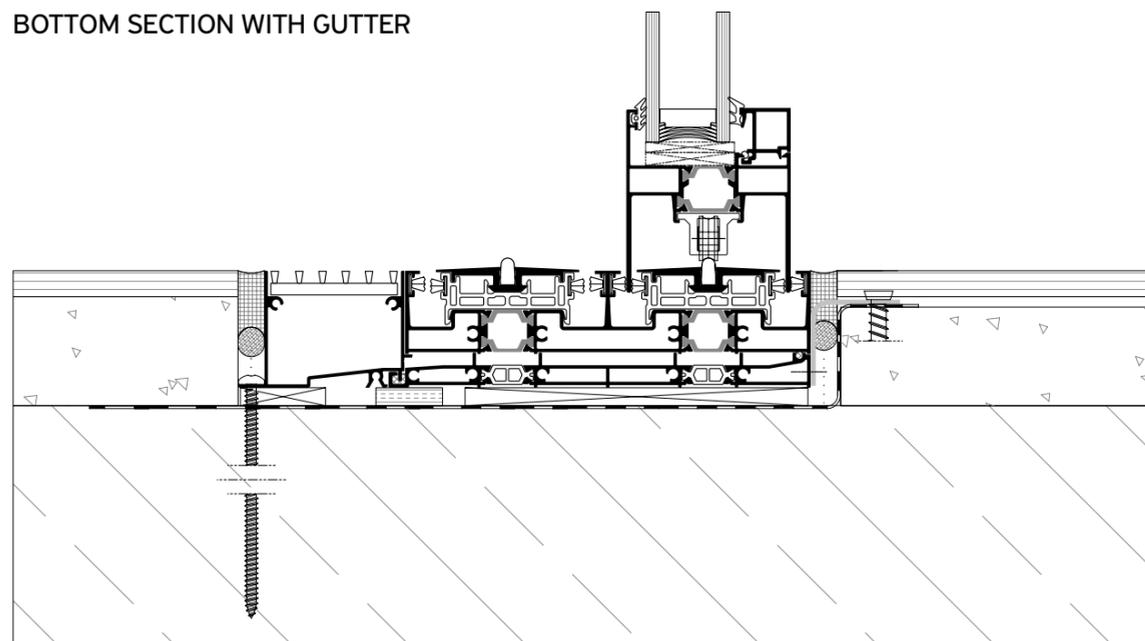


TOP SECTION

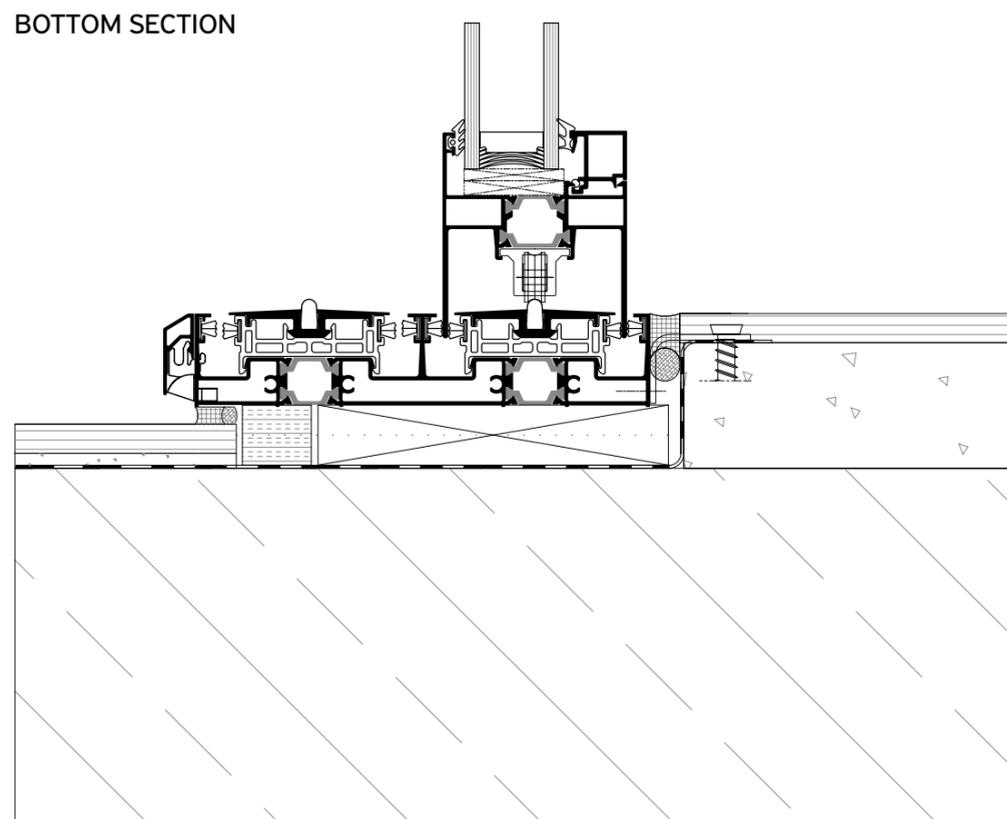


Installation

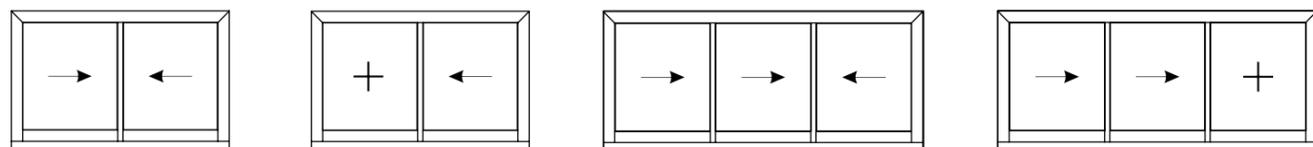
BOTTOM SECTION WITH GUTTER



BOTTOM SECTION



Applications

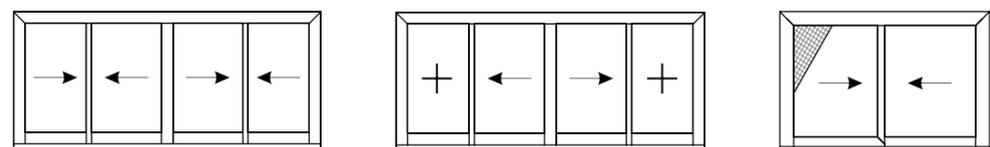


DOUBLE HORIZONTAL SLIDING SASH

SINGLE SLIDING SASH WITH FIXED LIGHT

TRIPLE HORIZONTAL SLIDING SASH

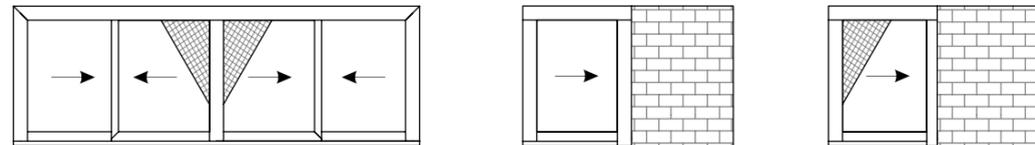
TWO HORIZONTAL SLIDING SASHES WITH FIXED LIGHT



FOUR HORIZONTAL SLIDING SASH WITH MEETING STILE

DOUBLE HORIZONTAL SLIDING SASH MEETING STILE WITH FIXED LIGHTS

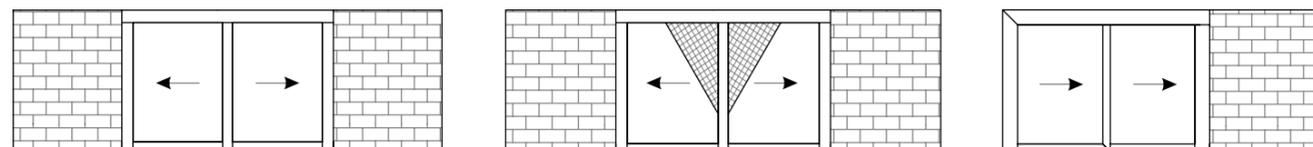
DOUBLE HORIZONTAL SLIDING SASH WITH FLYSCREEN



FOUR HORIZONTAL SLIDING SASHES MEETING STILE WITH FLYSCREEN

SINGLE POCKET SASH

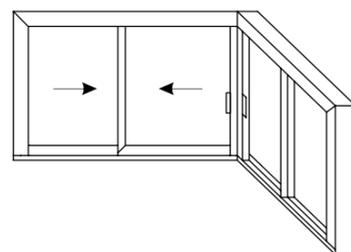
SINGLE POCKET SASH WITH FLYSCREEN



DOUBLE POCKET SASH MEETING STILE

DOUBLE POCKET SASH MEETING STILE WITH FLYSCREEN

MULTI POCKET SASH MEETING STILE



CORNER TYPOLOGY

Table of performance

CERTIFICATION

| | | | | | | | | | |
|--|--|---------------|----------------|----------------|----------------|----------------|------------------------------|----------------|------------------------------|
|  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 (≤ 1/150) | | | B (≤ 1/200) | | | C (≤ 1/300) | | |
|  SOUND REDUCTION EN ISO 140-3 | Rw (C;Ctr) = 42 dB depending from the glazing type | | | | | | | | |

CLASSIFICATION

| | | | | | | | | |
|----------------|---------------|----------------|----------------|----------------|----------------|------------------------------|----------------|------------------------------|
| 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) |
| 1 | | 2 | | | 3 | | 4 | |
| 1 (400 Pa) | | 2 (800 Pa) | | 3 (1200 Pa) | | 4 (1600 Pa) | | 5 (2000 Pa) |
| A (≤ 1/150) | | | B (≤ 1/200) | | | C (≤ 1/300) | | |

THERMAL PERFORMANCE

| | DIMENSIONS IN MM (w x h) | U_w in W/m²K (U_g = 0,6) | U_w in W/m²K (U_g = 0,8) | U_w in W/m²K (U_g = 1,1) |
|---------------------------|---|--|--|--|
| 2 SASHES / 2 TRACK | 2300 x 2180 | 1,12 | 1,30 | 1,55 |
| 3 SASHES / 3 TRACK | 2450 x 2180 | 1,14 | 1,32 | 1,58 |
| 4 SASHES / 2 TRACK | 4600 x 2180 | 1,12 | 1,30 | 1,55 |

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