

STRUCTAURA
CRAFTED BY INNOVATION
DOORS AND WINDOWS BY SAGARASIA

TIMELESS ELEGANCE IN
Aluminum Doors & Windows

PRODUCT CATALOGUE 2025

Founded in 1989, Sagar Asia stands as one of India's premier aluminium manufacturers, with its first extrusion and anodising plant located in the then-unified region of Andhra Pradesh and Telangana. Now headquartered in Hyderabad, Sagar Asia leads the global aluminium manufacturing sector, distinguished by over three decades of pioneering expertise.

With over 500,000 square feet of state-of-the-art facilities, the company is dedicated to delivering advanced, high-precision aluminium solutions that embody unparalleled quality, resilience, and sophisticated design. Sagar Asia's extensive portfolio of precision-engineered aluminium extrusions, system windows, and industry-leading access solutions supports a diverse array of industries worldwide.



Aluminum doors and windows are an exceptional choice for any home, offering a perfect blend of durability and style. Their resistance to corrosion and weathering ensures a long lifespan, making them ideal for various climates. The lightweight design allows for larger glass surfaces, maximizing natural light and creating an airy feel in your space.

ALUMINIUM WINDOWS & DOORS (CASEMENT SERIES)

Aluminum doors and windows are a popular choice for modern homes and commercial spaces due to their durability, sleek design, and versatility.

DURABILITY

Aluminum frames are resistant to rust, corrosion, and weathering, ensuring long-lasting performance for both doors and windows.

SLEEK DESIGN

Slim frames provide a modern and elegant look, maximizing glass area for better natural light and views.

ENERGY EFFICIENCY

When paired with proper glazing, aluminum doors and windows offer excellent thermal and sound insulation, keeping spaces comfortable and reducing energy bills.

LOW MAINTENANCE

They are easy to clean and maintain, with no risk of warping, cracking, or fading over time.

TYPES OF CASEMENT DOORS AND WINDOWS

- SA 40
- SA 50
- REYNAERS ECOSYSTEMS 45
- REYNAERS ECOSYSTEMS 50



SA 40

SYSTEM TYPOLOGY

Double rabbet - custom groove

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

SEAL TYPE AIR-WATER

Water/air tightness typology:

Rebated solution : Double rabbet joint

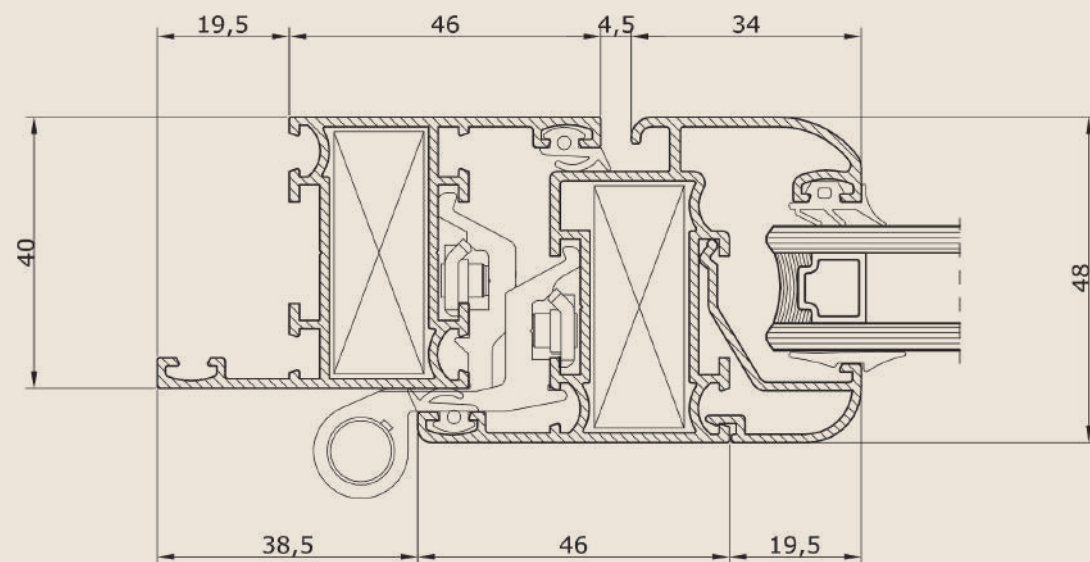
Dimensions base system window series:

Fix frame : 40mm deep - line overlapping –

Mobile frame (sash) : depth 48mm - line coplanar

USE

The system allows the construction of windows, doors or windows of two, three or more ante a flying in the open joint or double seal bar. Mirror can also be fixed, with windows opening to the outside, flap, front flaps, trucks and a mono block doors.



SA 40

OPEN JOINT

SYSTEM TYPOLOGY

Open joint - custom groove

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

SEAL TYPE AIR-WATER

Rebated solution : Central gasket and gasket with acoustic insulation on the internal rabbet

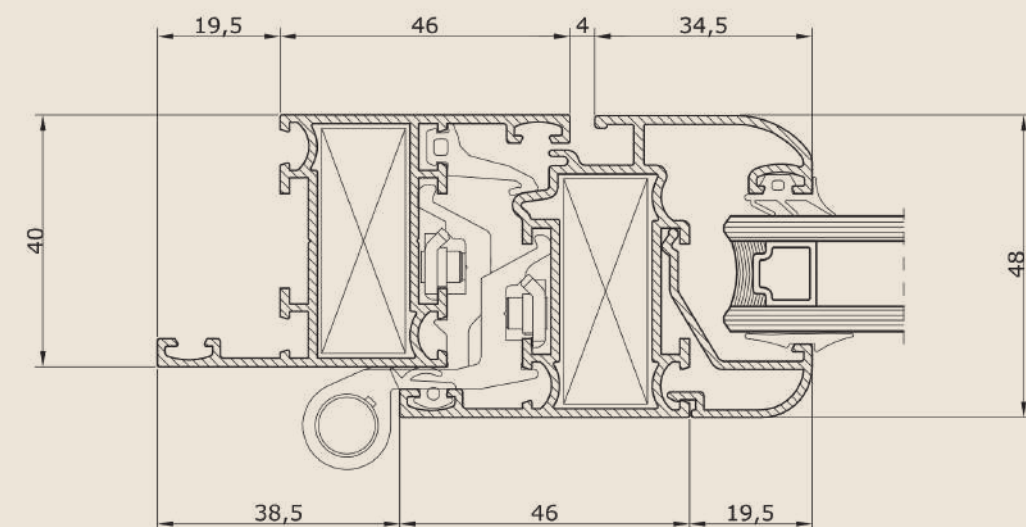
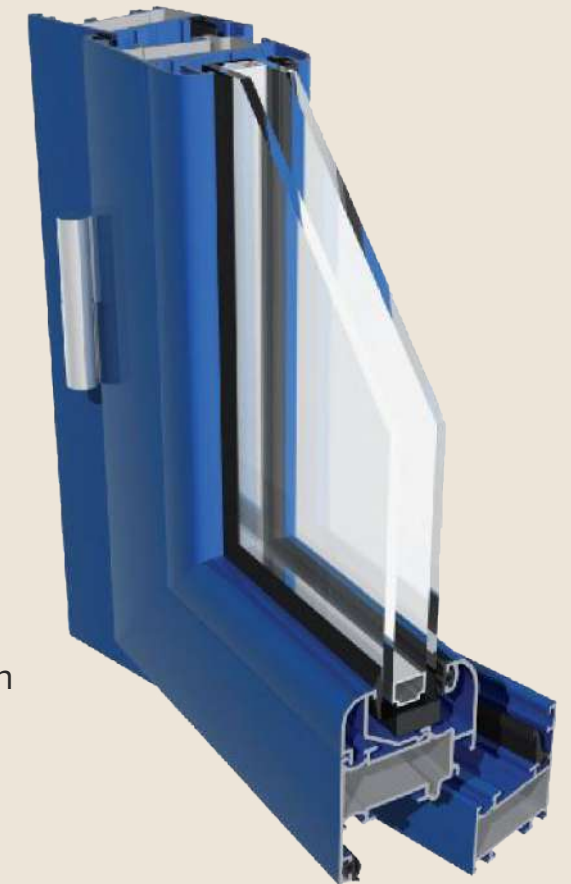
DIMENSIONS BASE SYSTEM WINDOW SERIES

Fix frame : 40 mm deep - line overlapping –

Mobile frame (sash) : depth 48 mm - line coplanar

USE

The system allows the construction of windows, doors or windows of two, three or more ante a flying in the open joint or double seal bar. Mirror can also be fixed, with windows opening to the outside, flap, front flaps, trucks and a mono block doors.



SA 40

SHUTTERS

SYSTEM TYPOLOGY

Double rabbet - custom groove

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

WATER/AIR TIGHTNESS TYPOLOGY

Rebated solution : double rabbet gasket

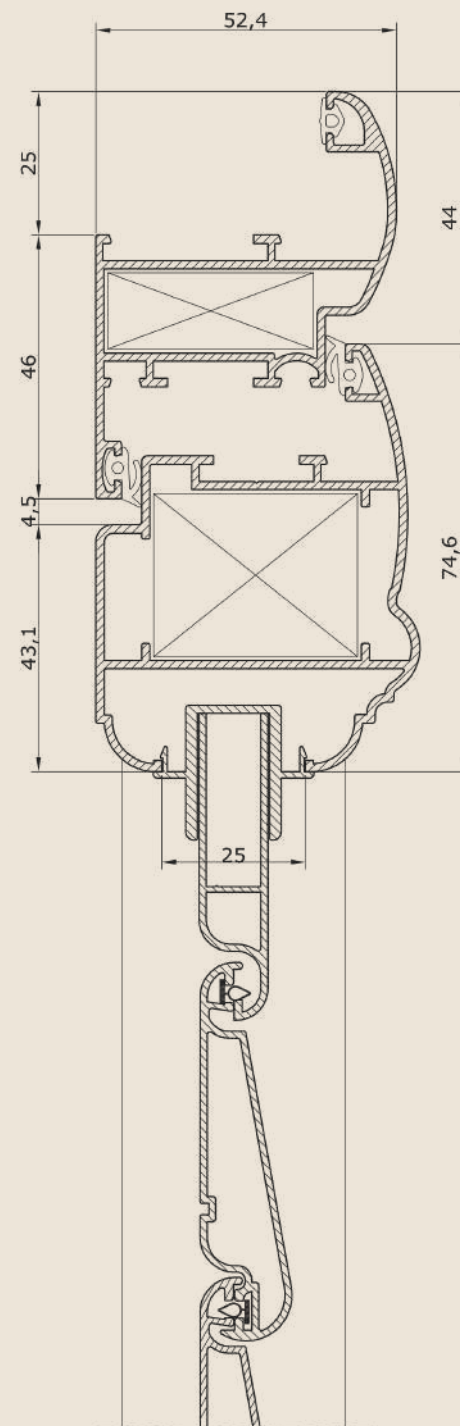
DIMENSIONS BASE SYSTEM WINDOW SERIES

Frame : 40 mm deep - line overlapping

Sash depth : 48 mm - line coplanar

Space for the insert of mechanisms of 25 mm

Space for the insert of mechanisms of 36 mm



SA 50

SYSTEM TYPOLOGY

Open joint European groove

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

SEAL TYPE AIR-WATER

Rebated solution : Central gasket and gasket with acoustic insulation on the internal rabbet

DIMENSIONS BASE SYSTEM

Frame : height 45 mm - flat line and overlapping

Sash depth 52 mm

Overlapping of the profiles - internal and external rebated solution 8 mm

USE

The system allows the construction of windows, doors or windows of two, three or more ante a flying in the open joint or double seal bar. Mirror can also be fixed, with windows opening to the outside, flap, front flips, trucks and a mono block doors.

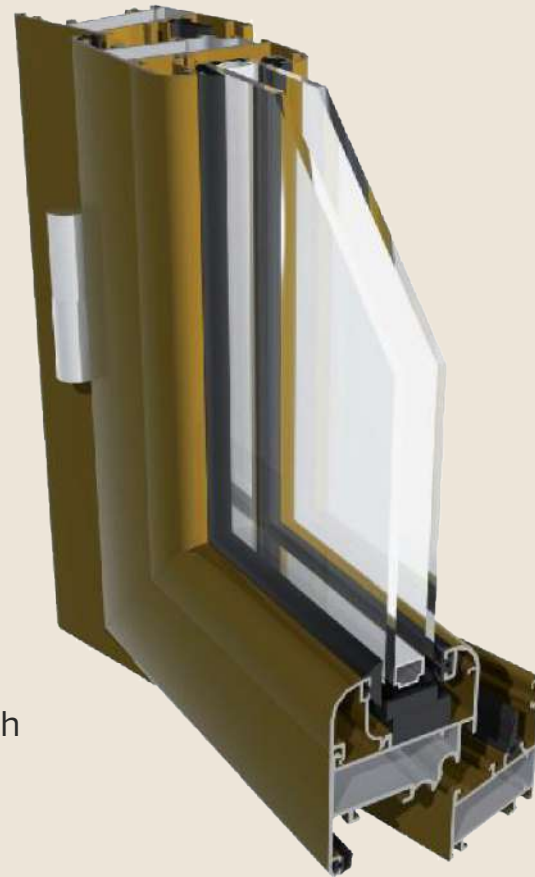
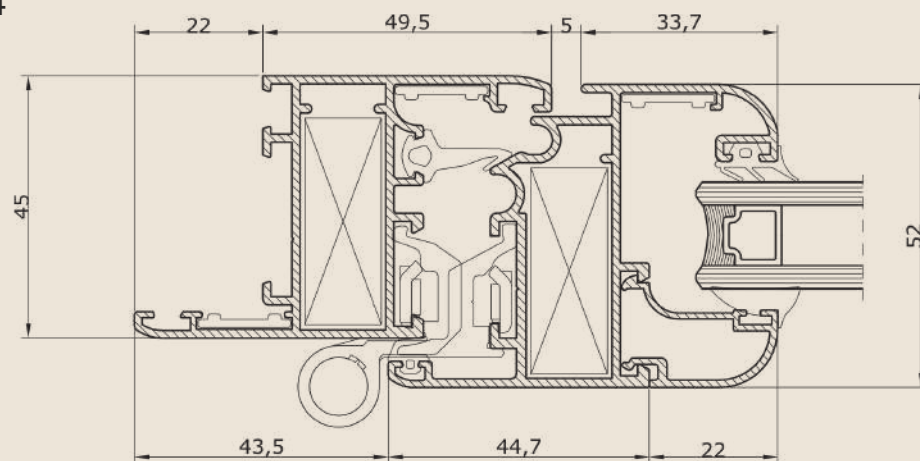
CERTIFICATIONS

Testing conducted by ISTITUTO GIORDANO on 17/05/2010 with test report No. 269487;

Air permeability : Class 4

Water tightness : E750

Wind resistance : C5



SA 50

DOOR SERIES

SYSTEM TYPOLOGY

Double rabbet - custom groove

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

SEAL TYPE AIR-WATER

Double gasket rabbet

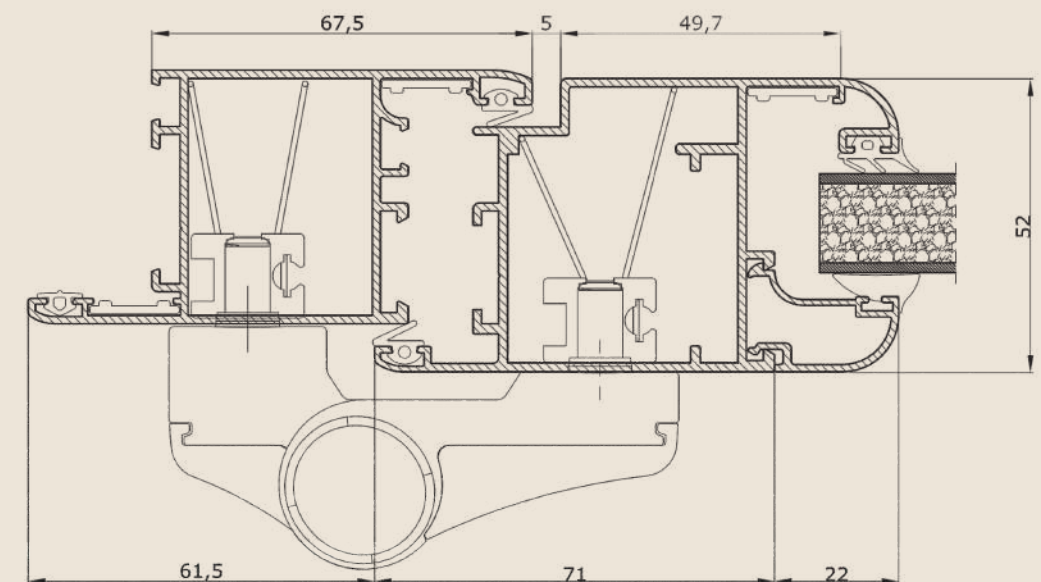
DIMENSIONS BASE SYSTEM

Frame : height 45 mm - flat line and overlapping

Sash depth 52 mm - line coplanar

USE

These profiles allow the construction of doors to one, two or more doors that open inwards, outwards. Lights above with fixed or opening. Is possible to make windows with doors "come and go," and automatic doors.



SA 50

SHUTTERS

SYSTEM TYPOLOGY

Double rabbet - custom groove

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

WATER/AIR TIGHTNESS TYPOLOGY

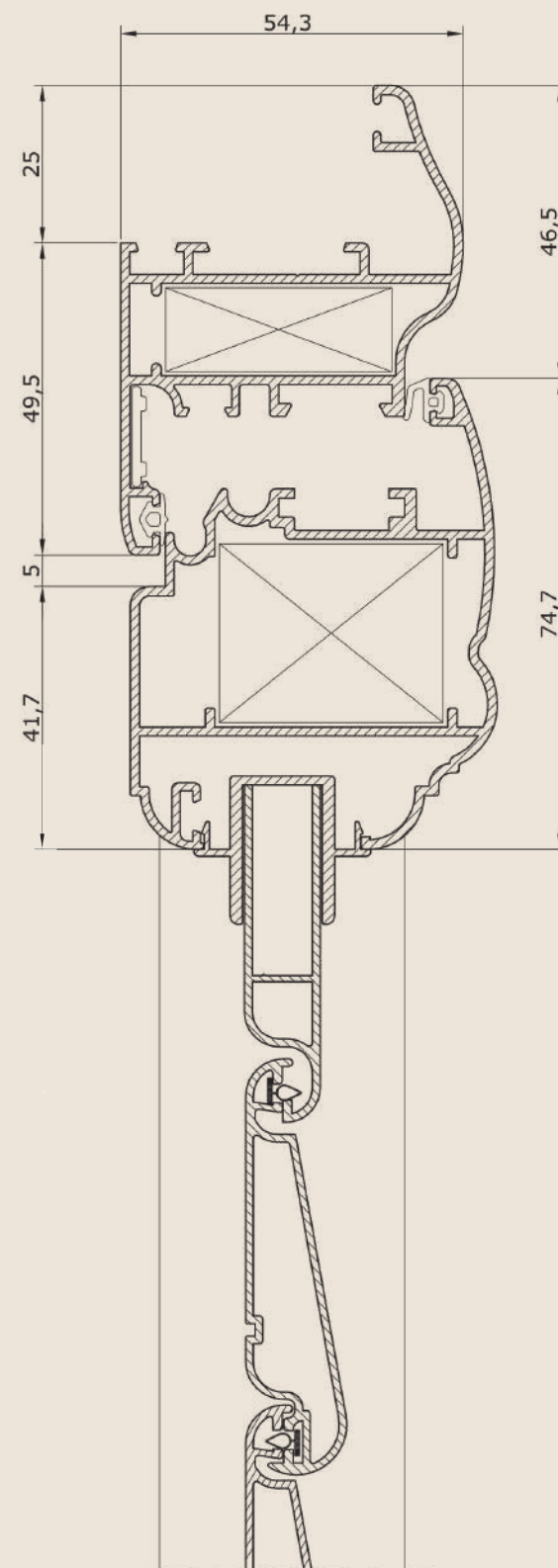
Rebated solution : double rabbet gasket

DIMENSIONS BASE SYSTEM WINDOW SERIES

Frame : 45 mm deep - line overlapping

Sash depth : 52 mm - line coplanar

Space for the insert of mechanisms of 25 mm



REYNAERS ECOSYSTEM 45

The ES 45Pa is a inward and outward opening system designed according to European standards offering superior quality. Because of 3 layers of gaskets the performance is guaranteed in every situation.

- Small range of profiles for a wide variety of solutions
- Flexible choice of Reynaers accessories
- Compatible with Reynaers' Sliding and Curtain Wall systems



PERFORMANCES

COMFORT

| | | | | | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------------|----------------|----------------|------------------|------------------|
| Air tightness, max. test pressure (1) EN 1026; EN 12207 | 1 (150 Pa) | 2 (300 Pa) | 3 (600 Pa) | 4 (600 Pa) | | | | | | |
| Water tightness (2) EN 1027; EN 12208 | 2A (50 Pa) | 3A (100 Pa) | 4A (150 Pa) | 5A (200 Pa) | 6A (250 Pa) | 7A (300 Pa) | 8A (450 Pa) | 9A (600 Pa) | E750 (750 Pa) | E900 (900 Pa) |
| Wind load resistance, max. test pressure (3) EN 12211; EN 12210 | 1 (400 Pa) | 2 (800 Pa) | 3 (1200 Pa) | 4 (1600 Pa) | 5 (2000 Pa) | E2400 (> 2400 Pa) | | | | |
| Wind load resistance to frame deflection (3) EN 12211; EN 12210 | A (≤ 1/150) | | B (≤ 1/200) | C (≤ 1/300) | | | | | | |

This table shows possible classes and values of performances, which can be achieved for specific configurations and opening types.

- (1) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (2) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (3) The wind load resistance is a measure of the profile's structural strength 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.

TECHNICAL CHARACTERISTICS

| | |
|------------------------------------|--|
| Min. visible width inward opening | Frame 47 mm Vent 30 mm |
| Min. visible width outward opening | Frame 25 mm Vent 74 mm |
| Min. visible width T-profile | 69 mm |
| Overall system depth | Frame 45 mm Vent 54 mm |
| Rebate height | 22 mm |
| Glass thickness | Frame 4 mm - 33 mm Vent 4 mm - 42 mm |
| Glazing method | Dry glazing with EPDM or neutral silicones |

REYNAERS ECOSYSTEM 50

Simply smart

EcoSystem 50 is a quality system for windows and doors that combines aesthetic design and energy efficiency. Thanks to the optional, cleverly hidden hinges and a minimal built-in depth, this aluminium solution sports a minimalistic look.

- Well-balanced price-quality-feature mix
- Minimal build-in depth for insulated system
- Reduces visible height for fixed window and opening windows

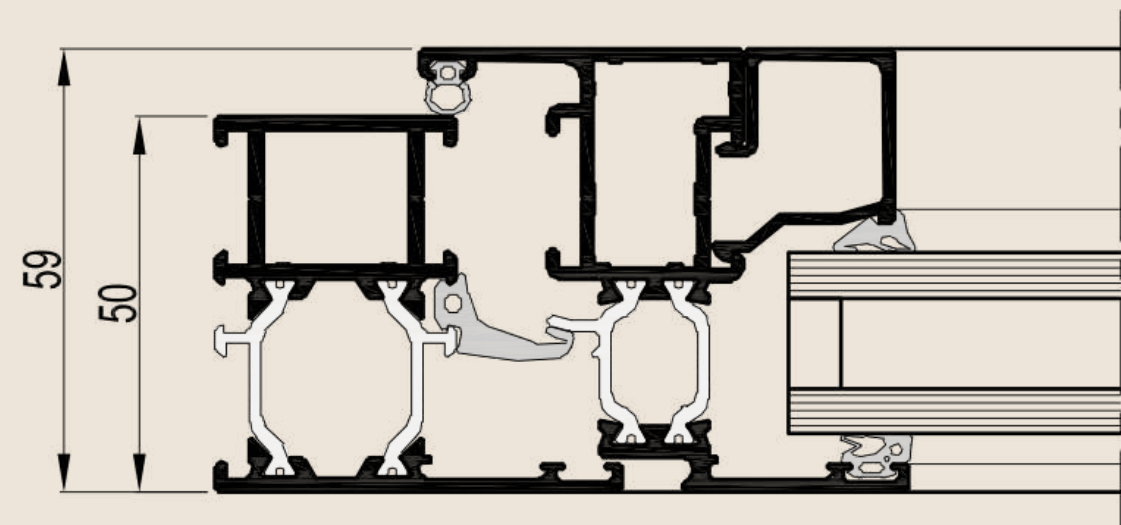


PERFORMANCE

| | |
|----------------------------------|---------------------------------|
| Thermal insulation (Uf) | Down to 2.3 W/m ² K |
| Acoustic performance (Rw ©; Ctr) | 35 (-1; -4) dB / 40 (-2; -4) dB |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to RC 2 (EN 1627) + PAS 24 |

PROPERTIES

| | |
|--|---------------------------|
| Min. visible width inward opening window | Frame 48 mm Vent 30 mm |
| Min. visible width inward opening flush door | Frame 67 mm Vent 74 mm |
| Min. visible width T-profile | 69 mm |
| Overall system depth window | Frame 50 mm Vent 59 mm |
| Max vent height | 2200 mm |
| Rebate height | 22 mm |
| Glass thickness | up to 32 mm |



ALUMINIUM WINDOWS & DOORS (SLIDING SERIES)

Aluminum doors and windows are a popular choice for modern homes and commercial spaces due to their durability, sleek design, and versatility.

SPACE-SAVING DESIGN

Sliding doors and windows operate on tracks, eliminating the need for extra space for opening or closing.

SLEEK & MODERN LOOK

Slim aluminum frames enhance the glass area, offering a stylish and contemporary appearance.

ENHANCED NATURAL LIGHT

Large glass panels allow maximum sunlight, creating brighter and more inviting interiors.

DURABILITY

Large glass panels allow maximum sunlight, creating brighter and more inviting interiors.

TYPES OF SLIDING DOORS AND WINDOWS

- SA 27 & 27 SLIM-INTERLOCK
- SA 29
- SA 42
- REYNAERS CONCEPTPATIO 45 PA (CP45 PA)
- REYNAERS CONCEPTPATIO 68 PA (CP68 PA)
- REYNAERS CONCEPTPATIO 130 (LIFT & SLIDE)
- REYNAERS CONCEPTFOLDING 77 (SLIDING/FOLDING)
- HIFINITY (MOTORISED)



SA 27 & 27 SLIM-INTERLOCK

SYSTEM TYPOLOGY

Sliding system with two or more sashes without glazing bead

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

SEAL TYPE AIR-WATER

Double brush gasket

DIMENSIONS BASE SYSTEM WINDOW SERIES

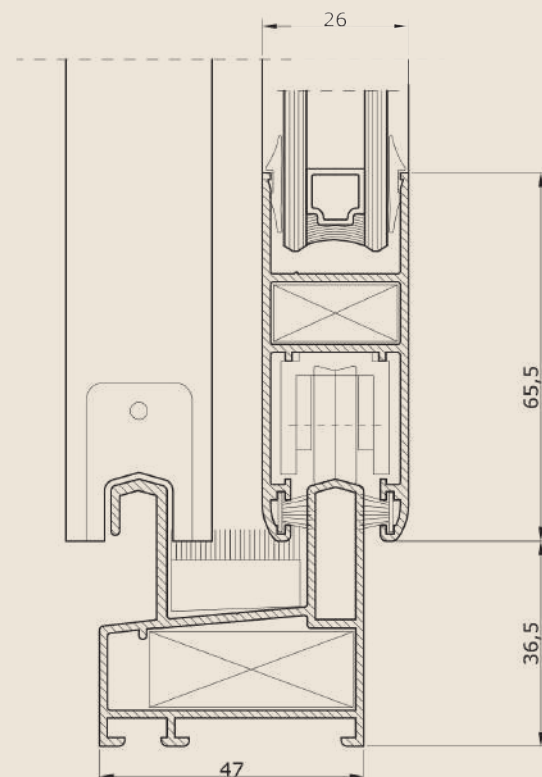
Frame depth 47mm

Sash depth 26mm

Overlap between frame and shutter 13mm

APPLICATION

This system of profiles allows the construction of windows and sliding balcony windows with one, two, three, four or six sliding panels that can be perfectly integrated with casement systems



SA 29

Casement Aluminium System for windows and doors

SEALING OVERLAP

6mm

SEALING

By double gaskets

LATCHING

Single or multipoint

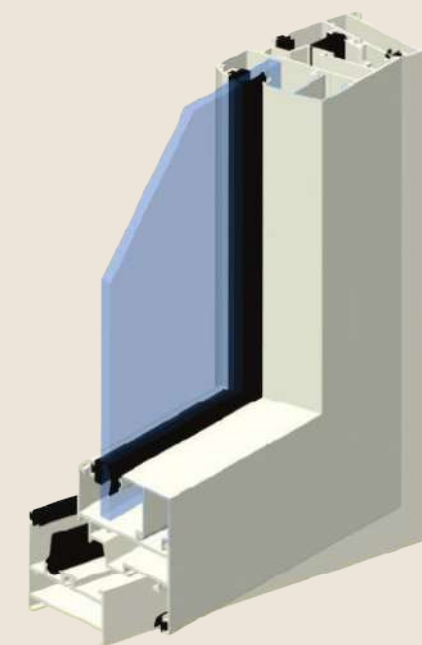
GLASS CHOICE

From 5 to 24mm

MAX SILL DEPTH REQUIRED

50mm (50mm system depth)

Tilt & turn possible



SA 42

SYSTEM TYPOLOGY

Sliding system with two or more sashes with or without glazing bead

PROFILES EXTRUDED ALLOY

EN AW 6060 (EN 573-3 EN 755-2)

STATE SUPPLY

T5 according to UNI EN 515

DIMENSIONAL TOLERANCES & THICKNESS

UNI EN 12020-2

SEAL TYPE AIR-WATER

Double brush gasket

SYSTEM'S DIMENSIONS

Frame depth 78.5mm

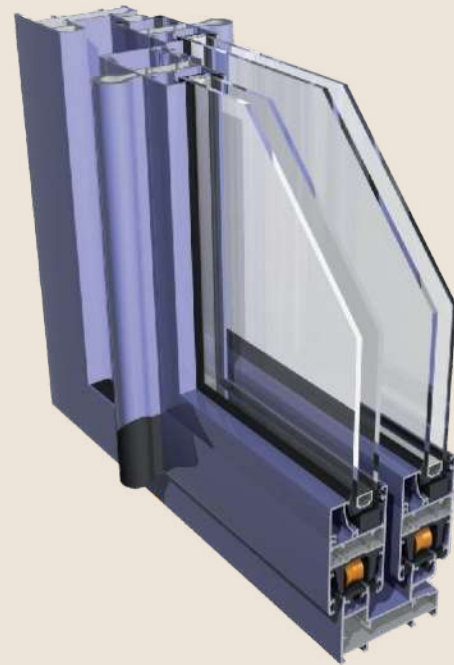
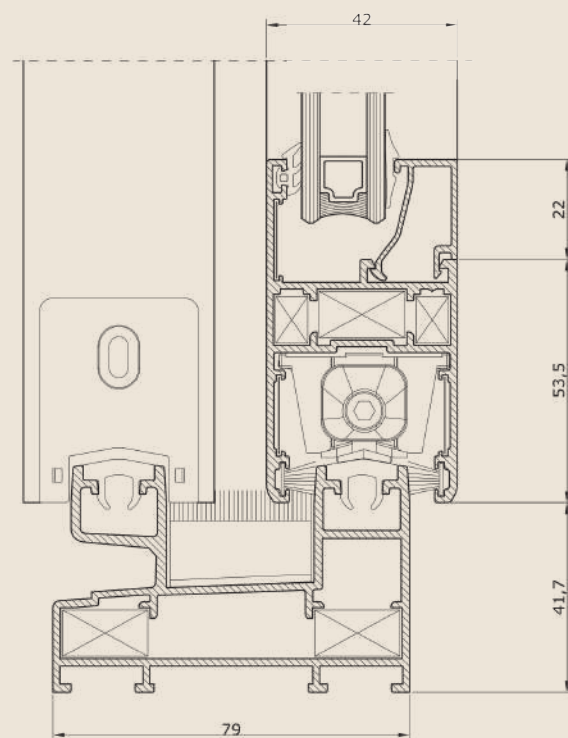
Frame with condensation collector depth 98.5mm

Sash depth 42mm

Overlap between frame and sash 13mm

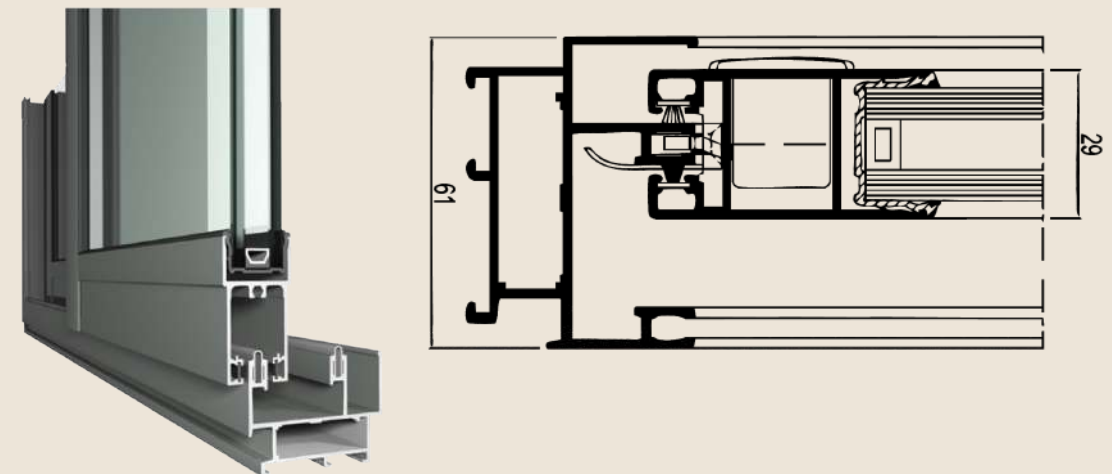
APPLICATION

This system of profiles allows the construction of windows and sliding balcony windows with two, three, four or six sliding panels that can be perfectly integrated with casement systems



REYNAERS CONCEPTPATIO 45 PA (CP45 PA)

The CP 45Pa is a non-insulated sliding system that has been designed to respond to new aesthetical demands. The system is available in functional and softline design. The profile width is reduced to a minimum allowing a maximum of light into the building. CP 45Pa integrates the latest techniques, offering a very competitive solution.



TECHNICAL CHARACTERISTICS

| Style variants | | MONORAIL | 2-RAIL | 3-RAIL | 4-RAIL |
|------------------------|-----------------|---|-----------------|-----------------|-----------------|
| Visible width / height | Frame | 45 mm / 54 mm | 17 mm / 45 mm | 17 mm / 45 mm | 17 mm / 45 mm |
| | Horizontal vent | 56 mm | 56 mm | 56 mm | 56 mm |
| | Vertical vent | 54.5 mm / 67 mm | 54.5 mm / 67 mm | 54.5 mm / 67 mm | 54.5 mm / 67 mm |
| | T-profile | 70 mm | 70 mm | 70 mm | 70 mm |
| | Meeting section | 40 mm | 40 mm | 40 mm | 40 mm |
| Overall system depth | Frame | 48 mm / 56 mm | 50 mm / 61 mm | 86 mm / 97 mm | 122 mm / 133 mm |
| | Vent | 29 mm | 29 mm | 29 mm | 29 mm |
| Rebate height | | 18 mm / 20 mm | 18 mm | 18 mm | 18 mm |
| Glass thickness | | 6-24 mm | 6-24 mm | 6-24 mm | 6-24 mm |
| Glazing method | | with EPDM in accordance with the envelope principle | | | |

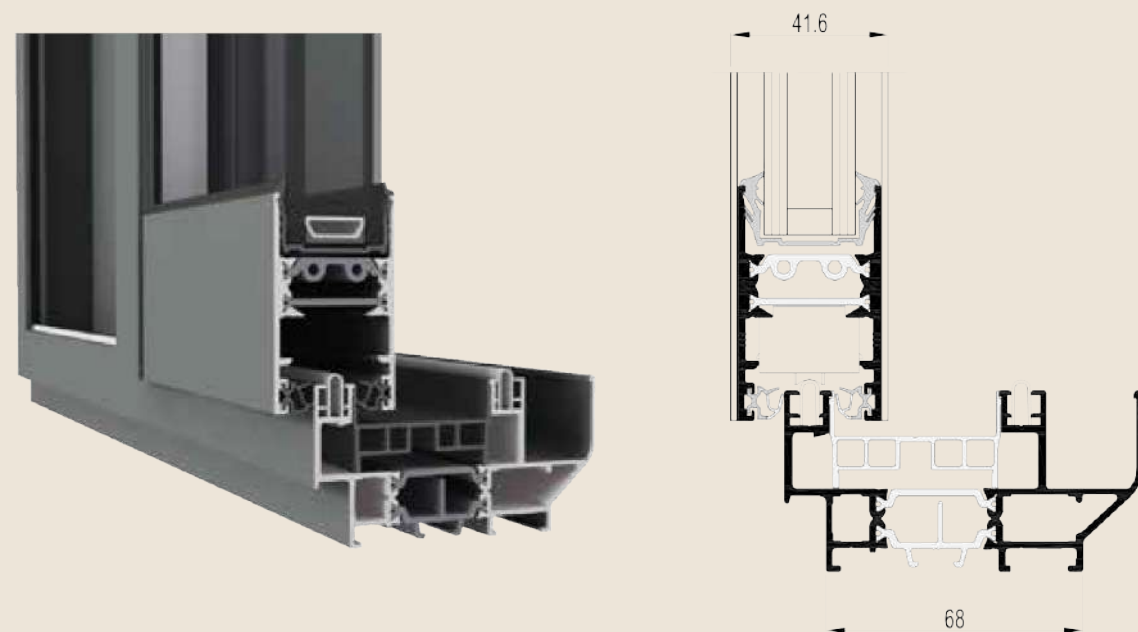
PERFORMANCES

| COMFORT | | | | | | | | | | | | | | |
|---|---|--|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|--|----------------|--------------------|
| Air tightness, max. test pressure ⁽¹⁾ EN 1026; EN 12207 | | 1 (150 Pa) | | | 2 (300 Pa) | | | 3 (300 Pa) | | | 4 (600 Pa) | | | |
| | Water tightness ⁽²⁾ EN 1027; 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) | Exxx (>600 Pa) | | | |
| Water tightness ⁽²⁾ shielded EN 1027; EN 12208 | | 1B (0 Pa) | 2B (50 Pa) | 3B (100 Pa) | 4B (150 Pa) | 5B (200 Pa) | 6B (250 Pa) | 7B (300 Pa) | | | | | | |
| Wind load resistance, max. test pressure ⁽³⁾ EN 12211; EN 12210 | | 1 (400 Pa) | | | 2 (800 Pa) | | | 3 (1200 Pa) | | | 4 (1600 Pa) | | 5 (2000 Pa) | Exxx (>2000 Pa) |
| | Wind load resistance to frame deflection ⁽³⁾ EN 12211; EN 12210 | A (≤1/150) | | | | B (≤1/200) | | | | C (≤1/300) | | | | |
| Acoustic performance ⁽⁴⁾ EN ISO 140-3; EN ISO 717-1 | | Rw (C; Ctr) = 29 (-1; -3) dB / 30 (-1; -3) dB, depending on glazing type | | | | | | | | | | | | |

REYNAERS CONCEPT PATIO 68 PA (CP68 PA)

Concept Patio® 68 is a well insulated sliding system that combines elegance with performance and security. This unique sliding system is characterised by its slim profiles, allowing the integration of large windows and doors for maximum views, in combination with burglary resistance class RC2. The integrated innovative technologies guarantee ultimate performances with regard to wind and water tightness and thermal insulation, meeting with the highest standards.

The sliding system CP 68 offers you all design freedom to create contemporary living spaces, combining ultimate brightness with maximum comfort and security.



FLEXIBILITY ABOVE ALL

This sliding system offers a wide range of opening possibilities, from elements which slide in a hidden wall cavity, over 2- and 3-rail solutions, allowing you to open up to 6 leaves.

| TECHNICAL CHARACTERISTICS | | | |
|---------------------------|-----------------|--|---------|
| Variants | | 2-RAIL | 3-RAIL |
| Visible width | Frame / Vent | 109 mm | 109 mm |
| | Meeting section | 34 mm | 34 mm |
| Overall system depth | Frame / Vent | 68 mm | 124 mm |
| | Meeting section | 41.6 mm | 41.6 mm |
| Maximal vent height | | 2500 mm | |
| Maximal vent weight | | 160 kg | |
| Rebate height | | 18 mm | |
| Glass thickness | | 28 / 36 mm | |
| Glazing method | | with EPDM in accordance with the envelope principle | |
| Thermal insulation | | 32 mm and 36 mm fibreglass reinforced polyamide strips | |

| PERFORMANCES | | | | | | |
|---|---|---------------|----------------|----------------|----------------|-------------------------------|
| ENERGY | | | | | | |
| Thermal insulation ⁽¹⁾ EN ISO 10077-2 | Uf-value down to 2.51 W/m²K, depending on the frame/vent combination | | | | | |
| COMFORT | | | | | | |
| Acoustic performance ⁽²⁾ EN ISO 140-3; EN ISO 717-1 | Rw (C; Ctr) = 38 (-2;-4) dB | | | | | |
| Air tightness, max. test pressure ⁽³⁾ EN 12207 | 1 (150 Pa) | 2 (300 Pa) | 3 (600 Pa) | 4 (600 Pa) | | |
| Water tightness ⁽⁴⁾ EN 12208 | 1B (0 Pa) | 2B (50 Pa) | 3B (100 Pa) | 4B (150 Pa) | 5B (200 Pa) | 6B (250 Pa) 7B (300 Pa) |
| Wind load resistance, max. test pressure ⁽⁵⁾ EN 12211; EN 12210 | 1 (400 Pa) | 2 (800 Pa) | 3 (1200 Pa) | 4 (1600 Pa) | 5 (2000 Pa) | Exxx (>2000 Pa) |
| Wind load resistance to frontal deflection EN 12211; EN 12210 | A (≤1/150) | | B (≤1/200) | | C (≤1/300) | |
| SAFETY | | | | | | |
| Burglar Resistance ⁽⁶⁾ EN 1627-1630 | RC1 | | RC2 | | RC3 | |

This table shows classes and values of performances, which can be achieved for specific configurations and opening types.

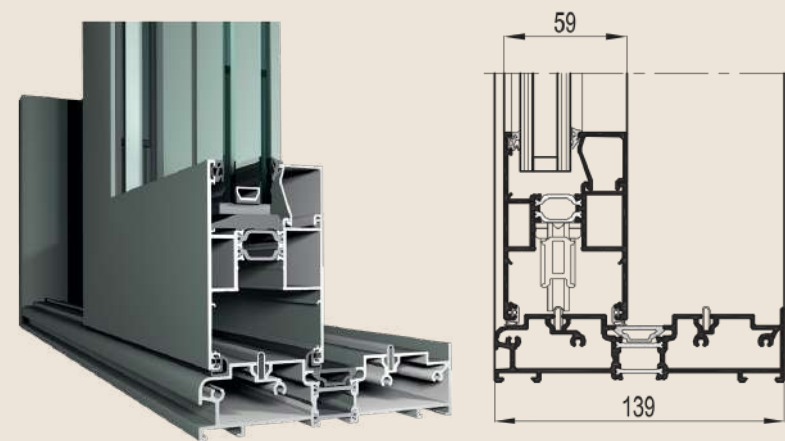
- (1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.
- (2) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame and glass.
- (3) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (4) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (5) The wind load resistance is a measure of the profile's structural strength and is tested by applying increasing levels of air pressure to simulate the wind force.
- (6) The burglar resistance is tested by static and dynamic loads, as well as by simulated attempts to break in using specified tools.

This variant requires specific burglar resistance profiles and accessories.

REYNAERS CONCEPTPATIO 130 (LIFT & SLIDE)

ConceptPatio 130 is a qualitative (lift &) slide solution that balances price, performance and design. The versatile aluminium system allows both architects and homeowners to create spaces without boundaries.

- Very complete offer with various opening types
- Excellent balance between performance and affordability
- Unique low threshold renovation-friendly profile



| PROPERTIES | | SLIDE | LIFT-SLIDE |
|------------------------|-----------|-----------------|---------------------|
| Visible width / height | Frame | 50 mm | 0 / 28 / 35 / 40 mm |
| | Vent | 98 mm | 98 mm |
| | Meeting | 50 / 69 / 98 mm | 50 / 69 / 98 mm |
| Overall system depth | T-profile | 76 - 115 mm | 76 - 115 mm |
| | Frame | 110 - 139 mm | 139 - 210 mm |
| | Vent | 59 mm | 59 mm |
| Rebate height | | | 25 mm |
| Glass thickness | | | Up to 43 mm |
| Max vent weight | | | 300 kg |
| Max vent height | | | 2700 mm |

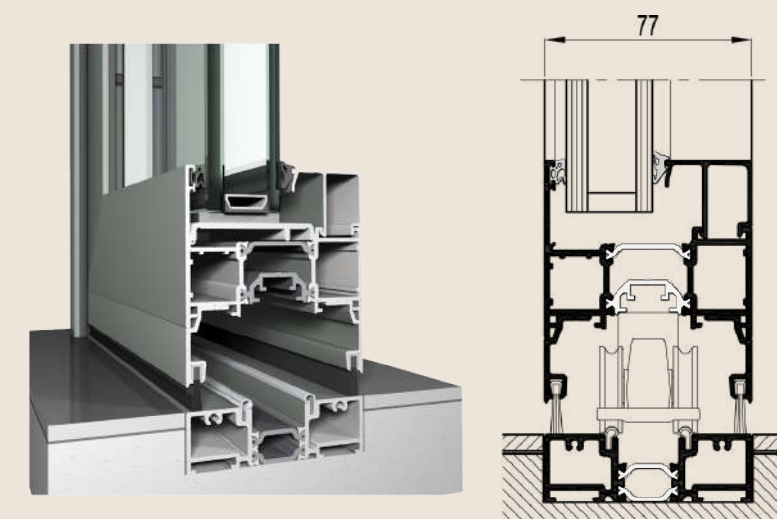
| PERFORMANCE | |
|------------------------------------|---------------------------------|
| Thermal insulation (Uw) | Down to 1.4 W/m²K |
| Acoustic performance (Rw (C; Ctr)) | 32 (-1; -3) dB / 39 (-1; -3) dB |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 2000 Pa (class 5) |
| Water tightness | Up to 750 Pa (class E750) |
| Burglar resistance | Up to RC 2 (ENV 1627) + PAS 24 |

Performances and properties depend on size, profile combinations, hardware and infill choices.

REYNAERS CONCEPTFOLDING 77 (SLIDING/FOLDING)

ConceptFolding 77 provides exceptional element sizes for maximal transparency and stunning aesthetics. Nature and indoors come closer together as the aluminium folding door system connects up to eight vents to draw the exterior inside.

- High-quality folding doors
- Best in class element sizes
- From 2 to 8 vents, opening any way you want



| PROPERTIES | FUNCTIONAL | SLIMLINE |
|---------------------------|--------------------------|--------------|
| Visible frame / threshold | 0 / 18 / 42 / 57 / 82 mm | 0 / 25 mm |
| Visible vent width | 66 mm | 55 mm |
| Visible vent - vent width | 144 mm | 122 mm |
| System depth | 77 mm | 77 mm |
| Max vent size | 1200x3000 mm | 1200x3000 mm |
| Max vent weight | 120 kg | 120 kg |
| Rebate height | 25 mm | 25 mm |
| Max glass thickness | 63 mm | 44 mm |

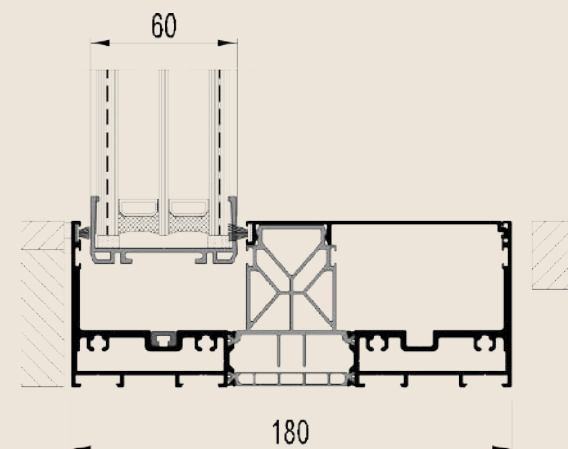
| PERFORMANCE | |
|------------------------------------|-------------------------------|
| Thermal insulation (Uf) | Down to 2.2 W/m²K |
| Acoustic performance (Rw (C; Ctr)) | 45 (-1; -5) dB |
| Air Tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1200 Pa (class 3) |
| Water Tightness | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to RC 2 (EN 1627) + PAS 24 |

Performances and properties depend on size, profile combinations, hardware and infill choices.

HIFINITY (MOTORISED)

HiFinity's ultra-slim profiles create seemingly endless transparent surfaces with a minimalist look. The elegant aluminium sliding system combines an infinite view with impressive performances. The perfect choice for any low-energy contemporary building.

- Ultimate design freedom, matching each project requirement
- Floor-to-ceiling and wall-to-wall fully concealed profiles
- Elegant lines and an unobstructed view



| PROPERTIES | | STANDARD | HIGH INSULATION |
|------------------------------------|--|----------------------------------|----------------------------------|
| Height | Built-in frame | 68 / 100 mm (0mm visible) | |
| Visible width / height | Vent | 8 mm | 10 mm |
| | Meeting section | 35 mm (adjustable) | 35 mm (adjustable) |
| | Meeting section 4 doors | 67 mm (adjustable) | 69 mm (adjustable) |
| Overall system depth | Frame | 2-rail: 148 mm 3-rail: 234 mm | 2-rail: 180 mm 3-rail: 282 mm |
| | Vent | 44 mm | 60 mm |
| | Maximal element height | 4000 mm | |
| Maximal vent weight | 300 kg manual / 750 kg motorised / 1200 kg fixed | | |
| Glass thickness | 36 - 38 mm | | 52 - 54 mm |
| Glazing method | Structurally glued to composite vent profiles (sliding vents) Dry glazing with EPDM (fixed glass) | | |
| PERFORMANCE | | | |
| Thermal insulation (Uw) | Down to Uw 0.87 W/m²K | | |
| Acoustic performance (Rw (C; Ctr)) | 46 (-1; -3) dB | | |
| Air tightness | Up to 600 Pa (class 4) | | |
| Wind load resistance | Up to 2000 Pa (class 5) | | |
| Water tightness | Up to 750 Pa (class E750) | | |
| Burglar resistance | Up to RC 2 (EN 1627) + PAS 24 | | |

Performances and properties depend on size, profile combinations, hardware and infill choices.



ALUMINIUM FACADES

An aluminum facade is an external building envelope that uses aluminum as a primary material. Known for its durability, lightweight nature, and corrosion resistance, aluminum facades are widely used in modern architectural designs.

DURABILITY

Resistant to rust and extreme weather conditions.

LIGHTWEIGHT

Easier to install compared to other materials.

VERSATILITY

Allows for creative architectural designs like cladding, perforated panels, and decorative patterns.

SUSTAINABILITY

Aluminum is recyclable, making facades eco-friendly.

LOW MAINTENANCE

Requires minimal upkeep over time.

TYPES OF ALUMINIUM FACADES

- REYNAERS CONCEPTWALL 50
- ELEMENTFACADE 7 FF & MF
- BESPOKE FACADES

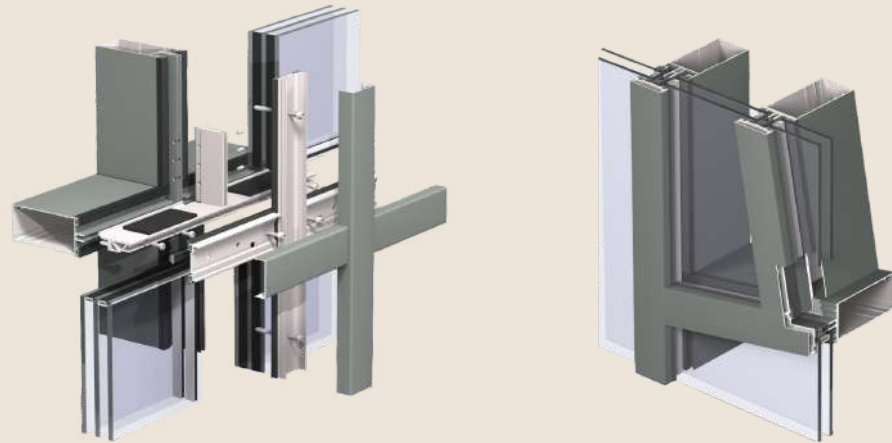


REYNAERS CONCEPTWALL 50







FACADES

ConceptWall 50 is a curtain wall façade and roof system that offers incredible building speed, unlimited design freedom and exceptional performance. The stick façade's highly insulated variants achieve energy efficiency up to Passive House levels.

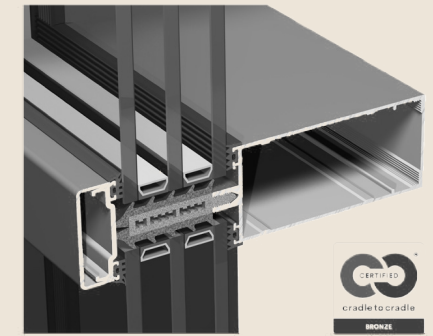
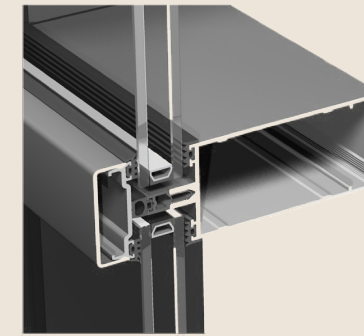
- Excellent thermal and AWW performance
- Broad range of applications and styles
- High weights and large spans



PERFORMANCE

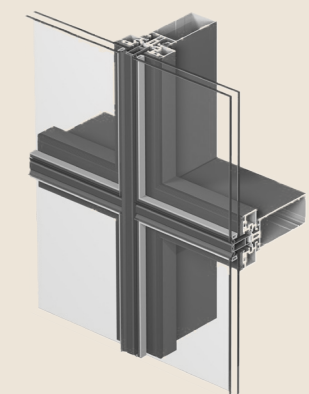
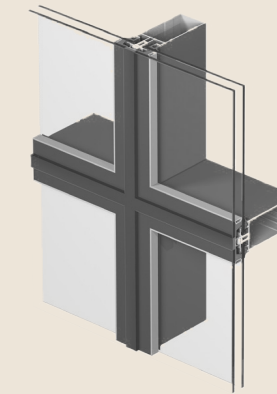
| | |
|--|----------------------------------|
|  Thermal insulation (Uf) | Down to 0.56 W/m ² K |
|  Acoustic performance (Rw (C; Ctr)) | 33 (-1; -3) dB / 60 (-2; -6) dB |
|  Air tightness | Up to 1950 Pa (class AE 1950) |
|  Wind load resistance | Up to 2400 Pa |
|  Water tightness | Up to 1950 Pa (class RE 1950) |
|  Burglar resistance | Up to RC 3 (NEN 5096 / ENV 1627) |

Performances and properties depend on size, profile combinations, hardware and infill choices.



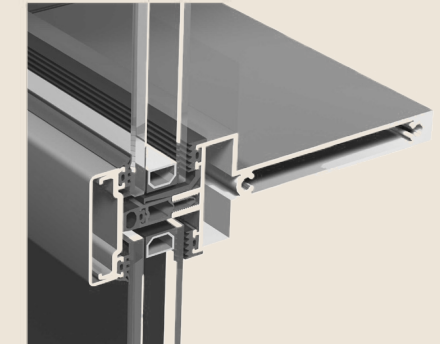
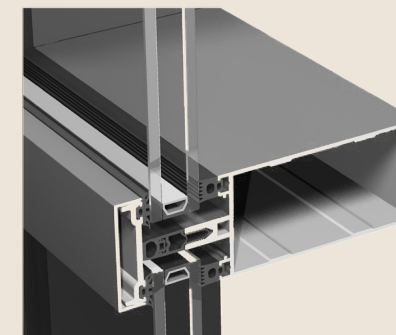
PROPERTIES

| | STANDARD | HIGH INSULATION |
|-----------------------|-----------|-----------------|
| Inside visible width | 50 mm | 50 mm |
| Outside visible width | 50 mm | 50 mm |
| Glass thickness | 6 - 61 mm | 22 - 61 mm |



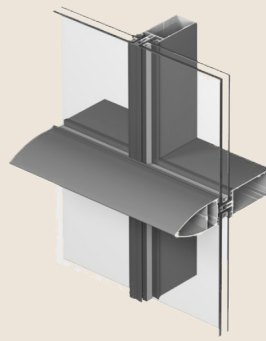
PROPERTIES

| | STRUCTURAL CLAMPED | STRUCTURAL GLAZED |
|-----------------------|--------------------|---------------------------|
| Inside visible width | 50 mm | 50 / 88 mm |
| Outside visible width | joint: 20 mm | EPDM gasket (width 27 mm) |
| Glass thickness | 27 - 63 mm | 24 - 36 mm |

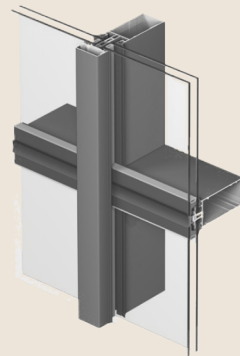


PROPERTIES

| | TRANSOM-TRANSOM | SLIMLINE |
|-----------------------|-----------------|------------|
| Inside visible width | 50 mm | 15 / 50 mm |
| Outside visible width | 50 mm | 50 mm |
| Glass thickness | 6 - 64 mm | 6 - 61 mm |



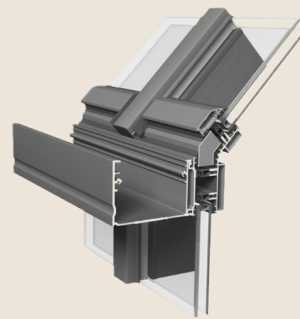
HORIZONTAL LINING



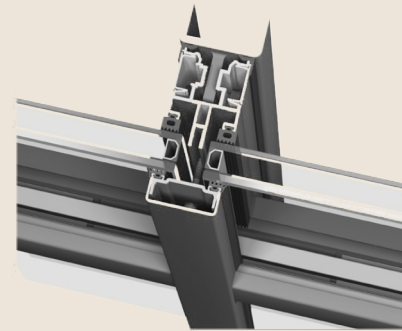
VERTICAL LINING

PROPERTIES

| | | |
|-----------------------|--|--|
| Inside visible width | 50 mm | 50 mm |
| Outside visible width | vertical: 30 mm joint horizontal: 50 mm | vertical: 50 mm horizontal: 20 mm joint |
| Glass thickness | 22 - 48 mm | 27 - 40 mm |



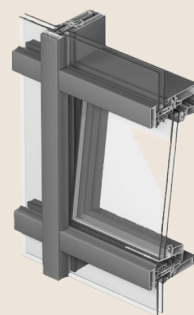
ROOF APPLICATION



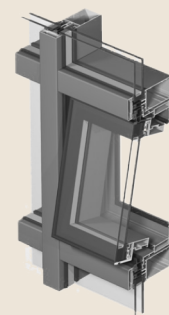
ALU ON STEEL

PROPERTIES

| | | |
|-----------------------|-----------|-----------|
| Inside visible width | 50 mm | 50 mm |
| Outside visible width | 50 mm | 50 mm |
| Glass thickness | 6 - 60 mm | 6 - 61 mm |



HIDDEN VENT
(INWARD OPENING)



TOP HUNG & POW
(OUTWARD OPENING)

PROPERTIES

| | | |
|-----------------------|---|-------------------------------|
| Inside visible width | 23 / 80 mm | 15 / 108 mm (FUNCTIONAL & SG) |
| Outside visible width | 50 mm | 0 mm (SG) / 105 mm |
| Glass thickness | opening window: 22 - 28 mm (opening window SC: 29 - 32 mm) | 24 - 62 mm |

PERFORMANCE

| | | |
|-------------------------|--|--------------------------------|
| Thermal insulation (Uf) | U _{tj} down to 5.5 W/m ² K | Down to 1.5 W/m ² K |
| Air tightness | Up to 600 Pa (class 4) | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class C4) | Up to 2000 Pa (class C5) |
| Water tightness | Up to 1200 Pa (class E1200) | Up to 2100 Pa (class E2100) |

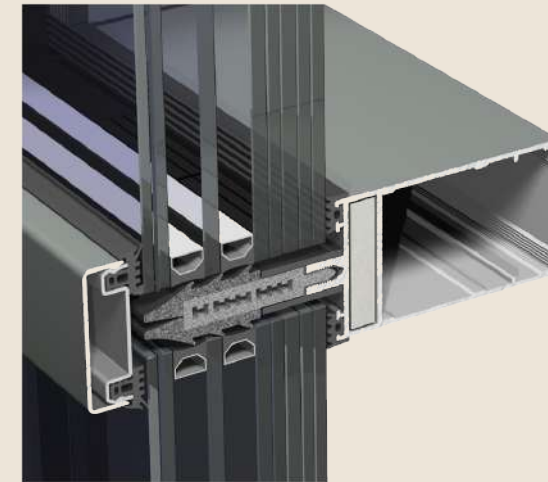
Performances and properties depend on size, profile combinations, hardware and infill choices.

REYNAERS CONCEPTWALL 50-FP

FACADES

In case your project needs fire protection, the ConceptWall 50-FP variant can create strategically placed fireproof zones where needed. With a maximum glass thickness of 78 mm triple glazed panes, the system enables uniform and high thermal performance throughout the whole façade surface.

- EW30, EI30, EI60 fire resistance
- High weights and large spans
- Compatible with MasterLine 8-FP doors



PROPERTIES

| | | |
|-----------------|---------------------------|---------------------------|
| | FIREPROOF 30 | FIREPROOF 60 |
| Rebate height | 20 mm | 20 mm |
| Glass thickness | 34 - 78 mm | 34 - 78 mm |
| Glazing method | fixing by pressure plates | fixing by pressure plates |

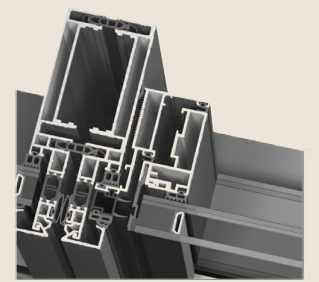
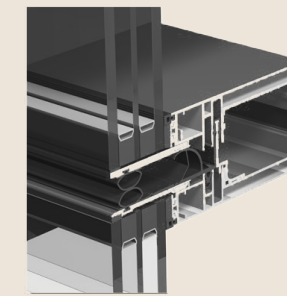
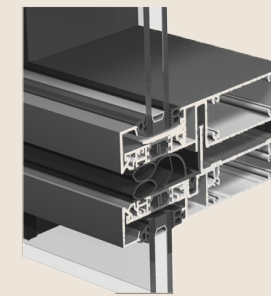
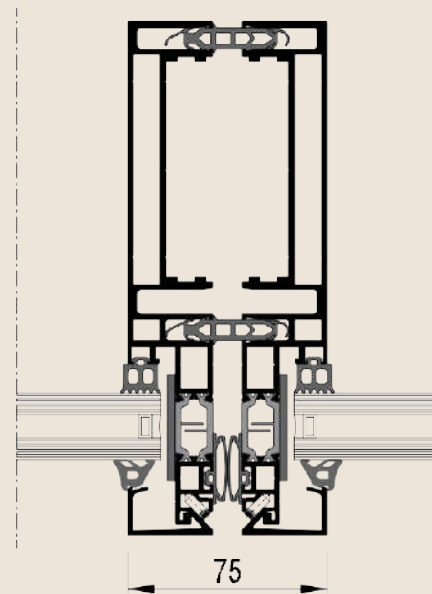
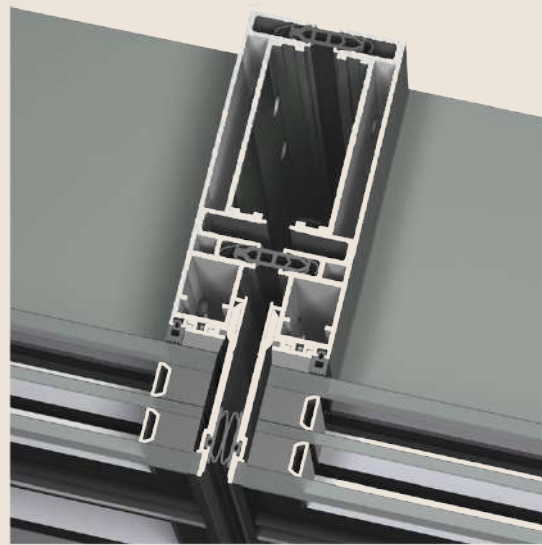
PERFORMANCE

| | | |
|--------------------------------|------------------------|------------------------|
| | FIREPROOF 30 | FIREPROOF 60 |
| European testing standards | EN 1364-1 / EN 1364-3 | EN 1364-1 / EN 1364-3 |
| Classification standard | EN 13501-2 | EN 13501-2 |
| Thermal insulation (Uf) | 0.8 W/m ² K | 0.8 W/m ² K |
| Fire resistance classification | EW30, EI30 | EI60 |

ELEMENTFACADE 7

ElementFaçade 7 meets all contemporary architectural needs by offering an aesthetic, fast-to-produce and easy-to-install façade solution. The off-the-shelf unitised aluminium system combines intelligent design and reliable performance.

- Intelligent and versatile design
- Exceptional, predictable and reliable performance
- Fast in calculation, offering, assembly and installation



| PROPERTIES | GLAZING BEAD / STANDARD | STRUCTURAL GLAZED | OPENING ELEMENTS |
|---|---|---|---|
| Max. dimensions W x H | 2700 x 3700 mm | 2700 x 3700 mm | 2000 x 2500 mm |
| Interior visible width | 75 mm | 75 mm | 58 mm |
| Exterior visible width | 75 mm | 11 mm joint between glass | 58 mm (Fu) 20 mm joint (SG) |
| Glass thickness | 26 - 63 mm | 36 - 60 mm | 23 - 62 mm |
| Glass weight | 300 kg | 300 kg | - |
| Element weight | 700 kg | 700 kg | 180 kg |
| Types of vent | All Reynaers Aluminium systems, top hung window, POW window | All Reynaers Aluminium systems, top hung window, POW window | - |
| PERFORMANCE | GLAZING BEAD / STANDARD | STRUCTURAL GLAZED | OPENING ELEMENTS |
| Thermal insulation | U _f down to 1.3 W/m ² K | U _{ij} down to 3.3 W/m ² K | U _f down to 1.5 W/m ² K (Fu) U _{ij} down to 2.1 W/m ² K (SG) |
| Acoustic performance (R _w (C; C _{tr})) | 43 (-2; -4) dB | 42 (-2; -4) dB | 41 (-2; -4) dB |
| Air tightness | 1200 Pa (class AE1200) | 1200 Pa (class AE1200) | 600 Pa |
| Wind load resistance | 2400 Pa | 2400 Pa | 2000 Pa |
| Water tightness | 1200 Pa (class RE1200) | 1200 Pa (class RE1200) | 1500 Pa (class RE1500) |

Performances and properties depend on size, profile combinations, hardware and infill choices.

BESPOKE FACADES

SYSTEM TYPOLOGY

Mullions and transoms internal framework

EXTRUDED PROFILES

Aluminium alloy 6060 A1 Mg 0.5, Si 0.4, Fe 0.2
according to regulations UNI EN 573

TEMPER STATE

T5 according to regulations UNI EN 515

DIMENSIONAL TOLERANCES AND THICKNESS

UNI EN 12020-2

THERMAL BREAK PROFILES ASSEMBLY

The coupling is done through the insert of 16 mm, long polyamide insulating bars reinforced with fiber glass and blocked through continuous rolling.

WATER/AIR TIGHTNESS TYPOLOGY

Through EPDM gaskets use

System's dimension :

Mullions : From 33mm to 175mm deep

Front (facade) : From 112mm to 254mm deep

Glazing thickness : From 4mm to 36mm

APPLICATION

The Bespoke Facades structural system of profiles allows the construction of vertical and inclined glass facades and roofing with semi structured solutions. Allows for internal and external angles of 90 degrees. Different angles can be obtained by using specific profiles. Fixed panes, different size and shape panes, and projecting openings can be mounted into the units.

CERTIFICATIONS

Testing conducted by ISTDIL on 17/11/2010 with test report No. 1612;

Air permeability : A2

Water tightness : Re1050

Wind resistance : 3000Pa

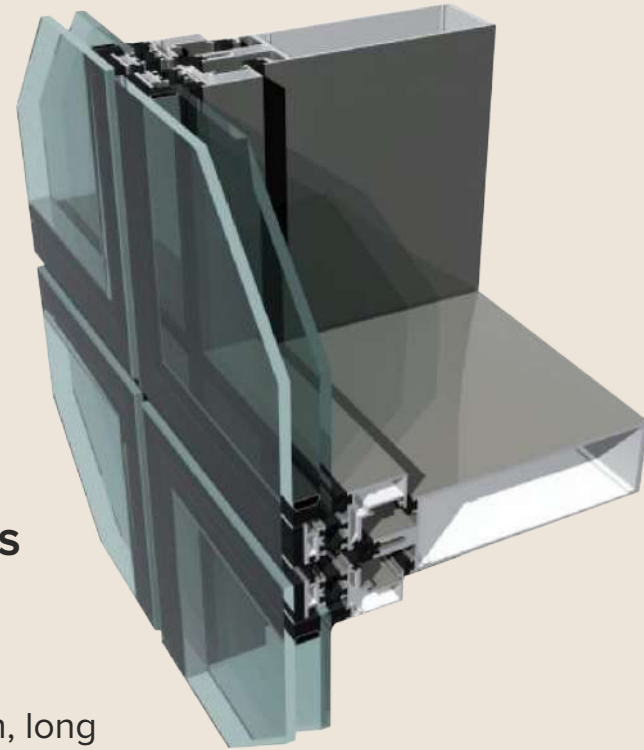
Noise reduction : $R_w(C;Ctr)=40, 0(-1;-3)$ dB

Impact resistance from the inside : I3

Impact resistance from the outside : E5

Linear transmittance = 0,58 W/m.K

With glass $U_g = 1,1$ W/(m² K)



OPTIONS

RAILINGS

Aluminum railings are modern, durable, and lightweight solutions for balconies, staircases, terraces, and fences. They are popular in residential, commercial, and industrial spaces due to their sleek design and long-lasting performance.



MOSQUITO SCREENS

Aluminum mosquito nets are sturdy and reliable insect protection solutions used in windows and doors. Made with high-quality aluminum mesh, they provide effective protection against mosquitoes and other insects while allowing natural ventilation and light to pass through.



SOLAR SHADING

Aluminum solar shading systems are innovative solutions that regulate sunlight entering buildings while enhancing energy efficiency and aesthetics. These systems use durable, lightweight aluminum components to reduce heat gain, limit glare, and improve indoor comfort.



CLADDING

Aluminum cladding is a popular facade solution used to protect buildings while enhancing their aesthetic appeal. It involves covering the exterior walls with aluminum panels, providing a modern, durable, and low-maintenance finish.



FINISHES

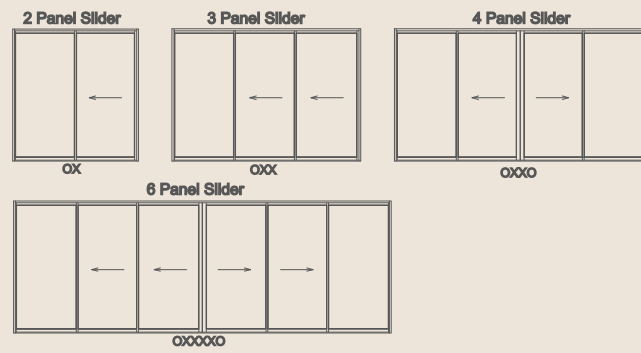
Aluminum products are highly versatile and can be finished in a variety of colors to suit aesthetic and functional needs.



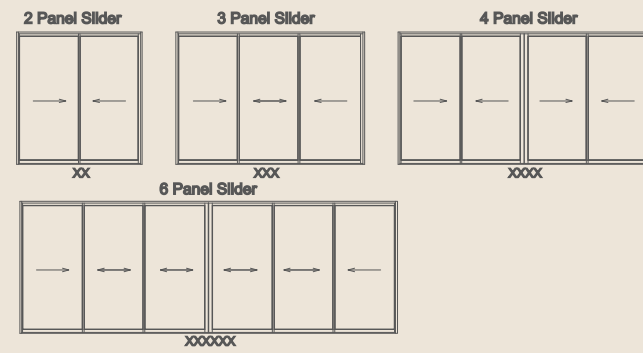
CONFIGURATIONS

TILT & TURN

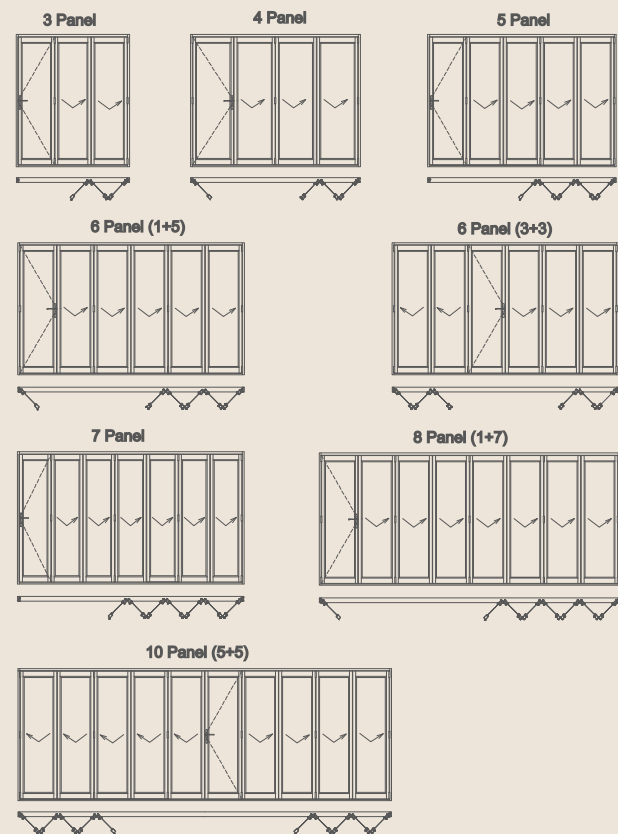
Sliding



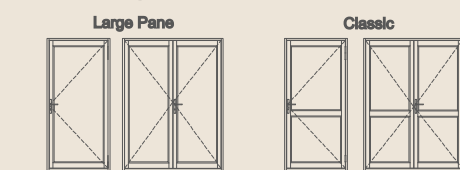
Multi-Sliding



Slide & Fold

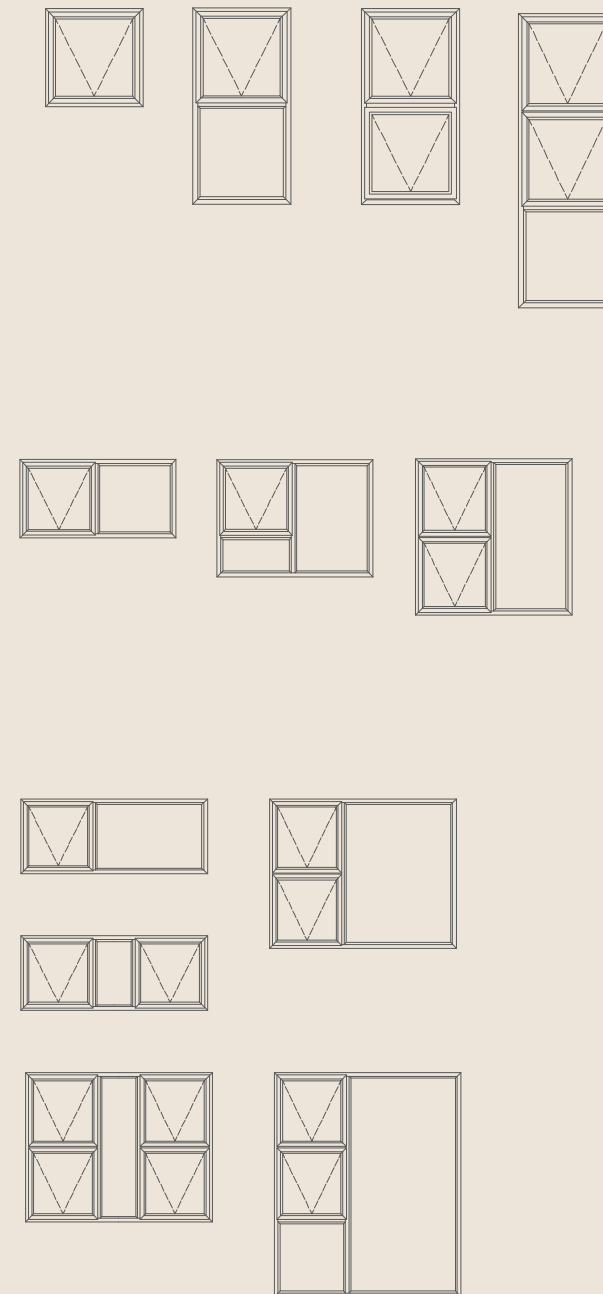


Hinged



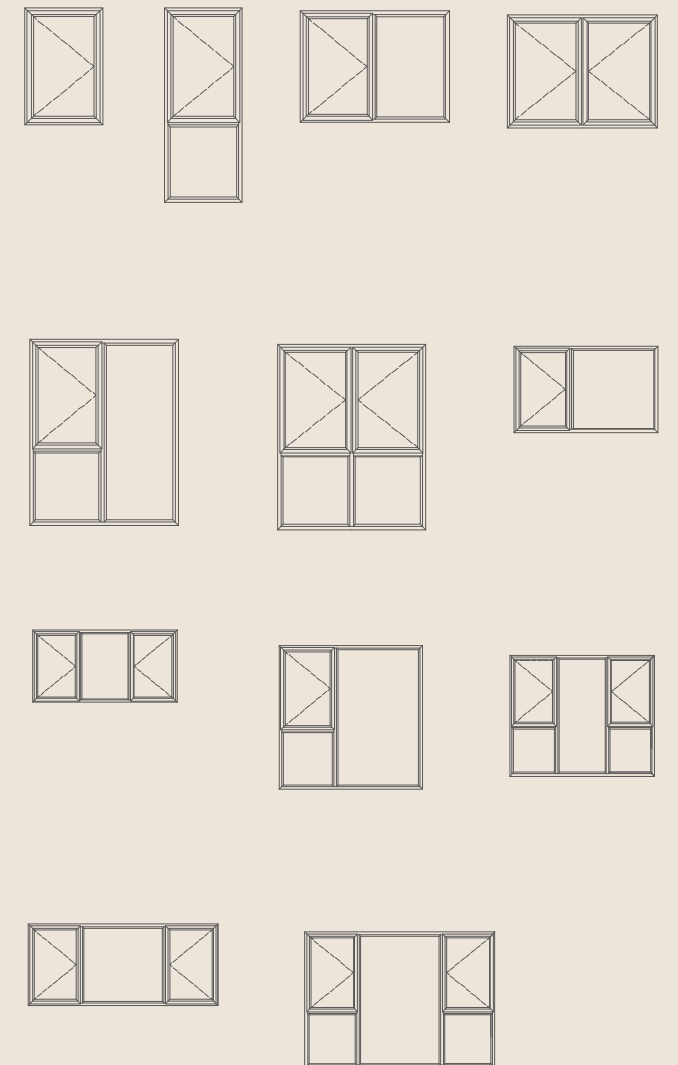
DOORS

Top Hung Casement Typology

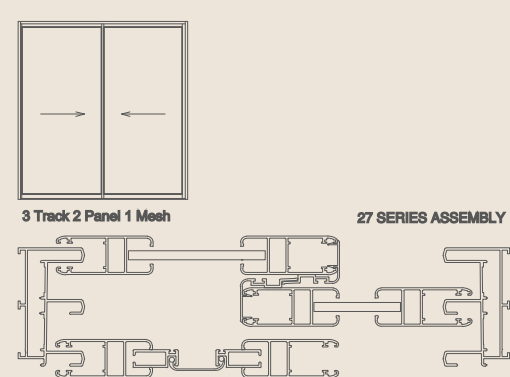
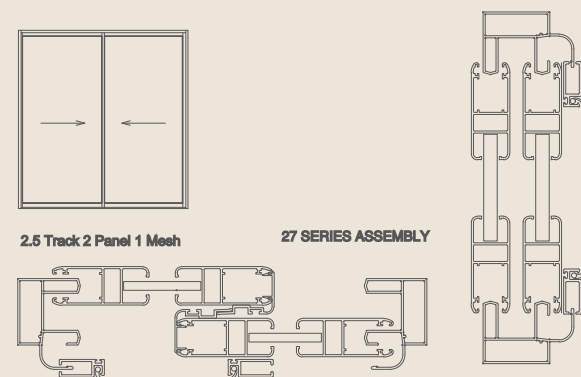
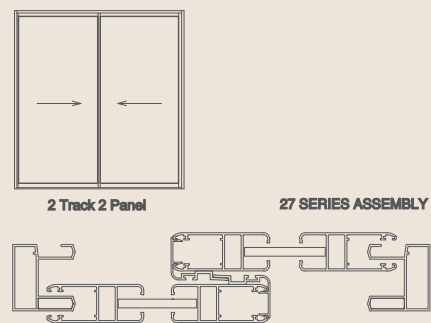
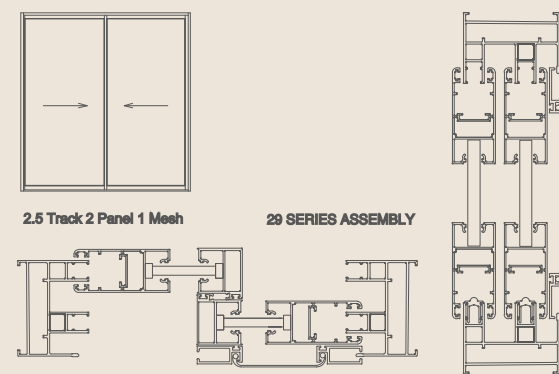
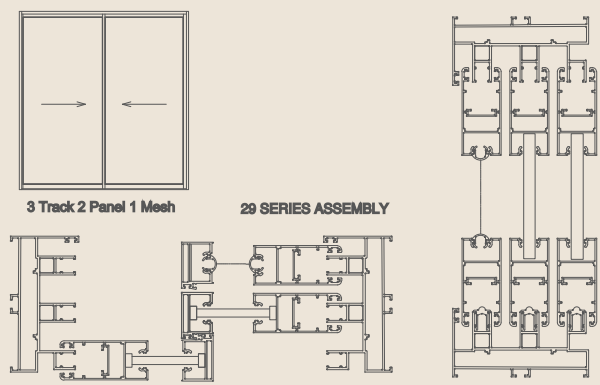
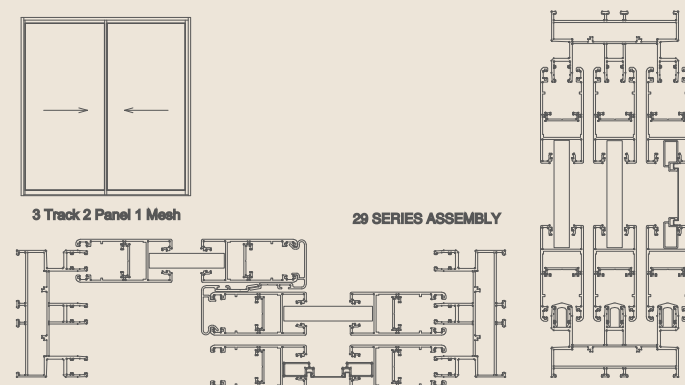
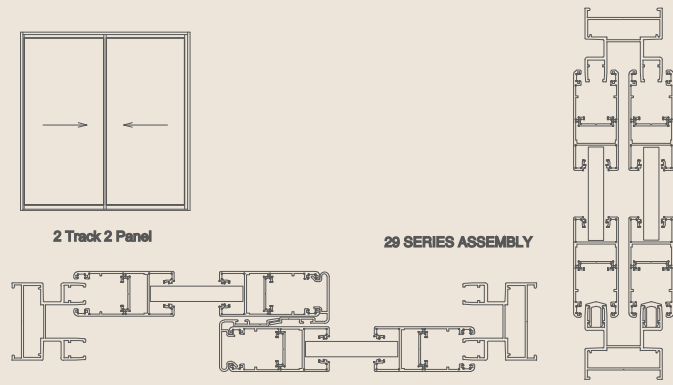


Inward & Outward Opening

Side Hung Casement Typology



Inward & Outward Opening



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