

Meet our products

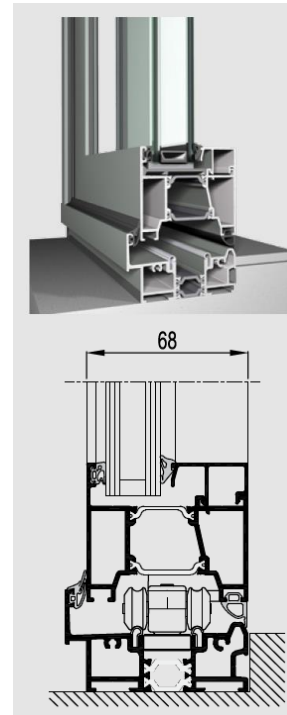
REYNAERS CONCEPT FOLDING 68

Endless enjoyment

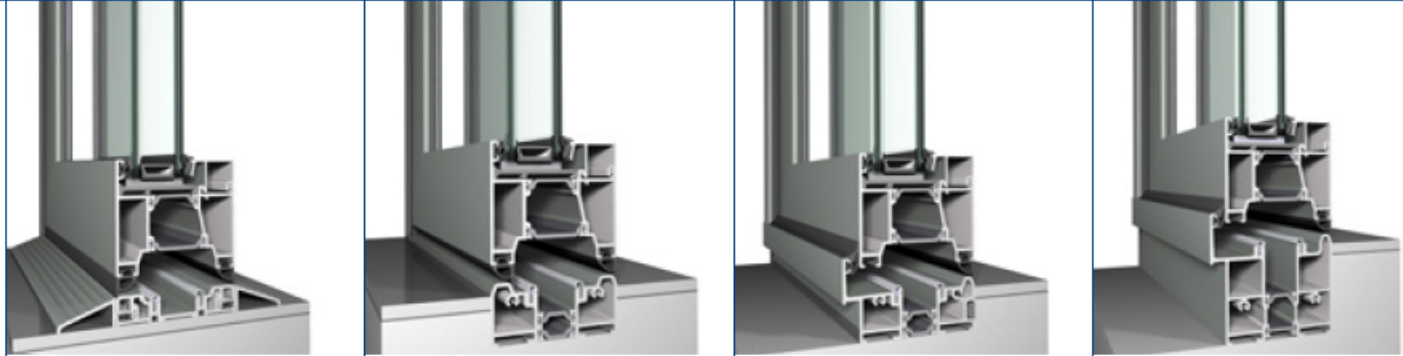
Answering the needs of contemporary architecture, the Concept Folding 68 system combines design, comfort and space efficiency. The wide range of possibilities to unfold numerous glass panes makes the borders between in- and exterior literally vanish.

The folding principle of this high quality system allows you to combine thermal comfort and transparency, with the choice to open to the inside or the outside of the building, whatever fits the specific need.

The elements come in every colour and finish, if desired, offering a different colour for the interior and the exterior, all in order to perfectly match the building.








TECHNICAL CHARACTERISTICS



Variants		Flush threshold	Low threshold	Double weather seal	High performance
Visible width / height	Frame / Threshold	0-15 mm	9-30 mm	23-44 mm	23-74 mm
	Frame-vent section	100 mm			
	Vent-vent section	131 mm			
Overall system depth		68 mm			
Maximal element height		2500 mm			
Maximal vent weight		90 kg			
Rebate height		14 mm			
Glass thickness		12-55 mm			
Glazing method		dry glazing with EPDM or neutral silicones			
Thermal insulation		23 mm, 27.5 mm and 32 mm fibreglass reinforced polyamide strips			
HI variant		extra insulation foams			

In order to meet all comfort and aesthetic requirements, CF 68 is highly thermally insulated and is available in 4 different threshold solutions, from high performance to low and even flush thresholds. With regard to safety, the system is available with a burglar resistance class 2, offering a high level of safety for your home.

PERFORMANCES					
	ENERGY	Flush threshold	Low threshold	Double weather seal	High performance
	Thermal Insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.8 W/m ² K(*), depending on the profile combination			
COMFORT					
	Air tightness, max. test pressure ⁽²⁾ EN 12207	Not applicable	Class 2	Class 4	Class 4
	Water tightness ⁽³⁾ EN 12208	Not applicable	Class 4A (150 Pa)	Class 7A (300 Pa)	Up to Class 9A (600 Pa)
	Wind load resistance ⁽⁴⁾ EN 12211; EN 12210	Not applicable	Class B2	Class C2	Class C2
SAFETY					
	Burglar resistance ⁽⁵⁾ ENV 1627 - ENV 1630	Not applicable	RC2	RC2	RC2

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

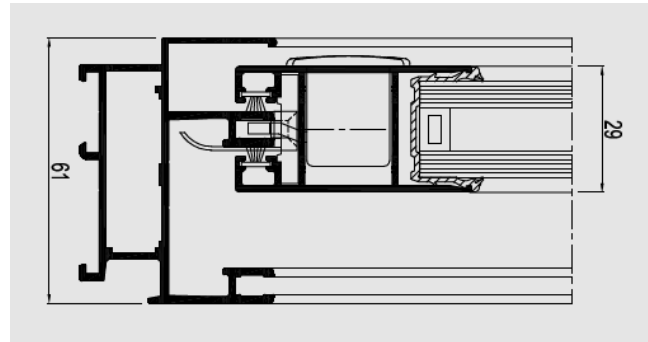
- (1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.
- (2) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (3) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (4) 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.
- (5) 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 accessories.

REYNAERS CP 45Pa

Less is more

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.



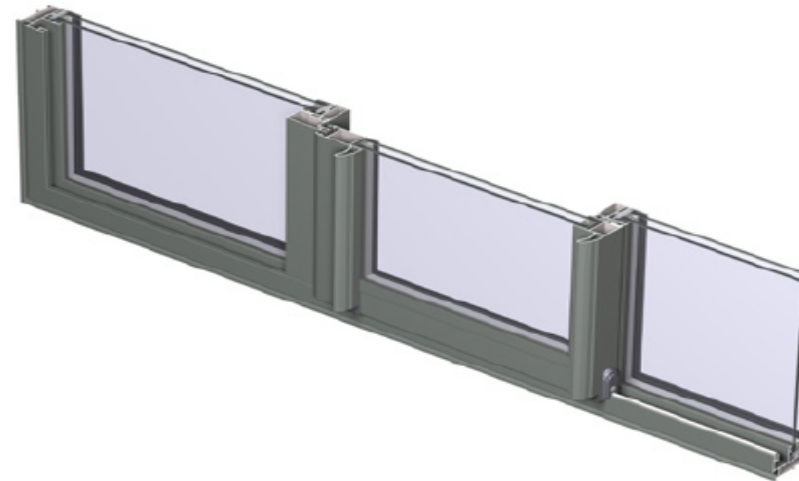
TECHNICAL CHARACTERISTICS





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			

CP 45Pa

Low Threshold

Central Sliding



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													

This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.

- (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.
- (4) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.

REYNAERS CW 50

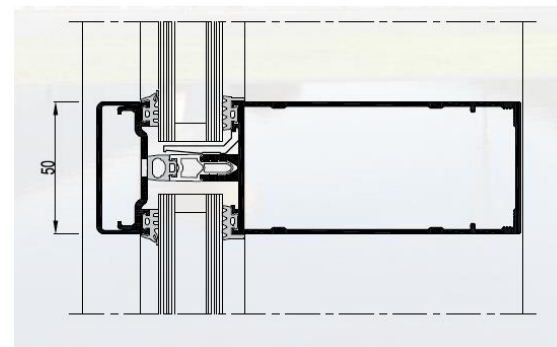
Unlimited creative freedom and maximum entrance of light

Concept Wall® 50 is a façade and roof system that offers unlimited design freedom and allows maximum transparency. As such, CW 50 meets all requirements of contemporary architecture. Innovative solutions contribute towards the tendency of big, heavy and thick glass panes. CW 50 supports up to 700 kg in various glass support configurations. Even more glass weight can be offered in bespoke solutions.

The system is available in several design and glazing variants, like steel beam look, standard pressure plates, structurally glazed and structurally clamped solutions. Specified levels of fire-resistance, burglar proof classes and thermal insulation, down to $U_f = 0.56 \text{ W/m}^2\text{K}$, are provided by different technical variants.

In addition to that, dedicated opening types can also be seamlessly integrated; a parallel opening window, a top hung window, a hidden vent turn and tilt window, but also an attic window for integration in roof applications of CW 50.

The CW 50 stands for an extensive range of profiles, gaskets, accessories and tools. It is specially developed for easy fabrication and installation.



The extensive range of CW 50 profiles meets all requirements of contemporary architecture. With regard to the thermal performance, the system offers solutions in different levels, allowing the use of triple glazing and making the system even applicable for passive house or low energy buildings. In addition to that, dedicated opening types can also be seamlessly integrated:



Description opening types*:

1. Top Hung Window – THW:

The Top Hung Window allows integrating opening elements with large opening spans, which can be operated manually or automatically. The design choice between the solution with glazing bead or structural silicone glazing (SSG) characterises the total appearance of the façade. This THW can be integrated in the overall strategy of the building's Smoke & Heat Exhaust Ventilation Systems (SHEVS).



2. Parallel Opening Window – POW:

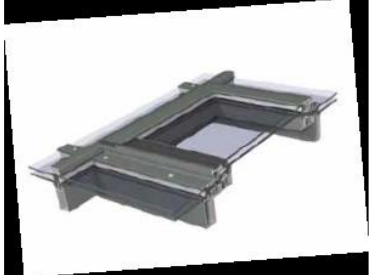
The opening concept, Parallel Opening Window, allows an ultimate airflow for small or tall windows. This results in a better natural ventilation, improving the indoor air quality, thermal comfort and healthy indoor climate for building users. Aesthetically, this parallel way of opening gives a uniform impression: the reflection of the building remains the same for opened or closed vents. An additional advantage of this opening type is that it realises ventilation without creating unwanted access to the building (e.g. night ventilation). Furthermore, the POW can be used for big opening elements, operated both manually or automatically, and is suited to be integrated in Smoke & Heat Exhaust Ventilation Systems. The glazing of the window can be done with glazing beads or with structural sealed glazing (SSG).





3. Hidden vent turn and tilt window - HV-TUT:

A special type of Inward Opening Window, also known as the hidden vent, is a structural sealed glazing solution which can be applied in a standard curtain wall façade or in a structurally clamped façade. It's main advantage is that the exterior doesn't differ from a fixed glazing panel in the façade. Therefore it doesn't affect the façade geometry. From the inside, this system uses a half mullion, resulting in a minimal visible width. Water tightness is assured by the use of a central gasket.



4. Attic Window - AW:



The Attic Window is fully reviewed to meet today's standards to provide a perfect water tight and high insulating solution for open elements in glass roofs. Different glazing options are available for glazing: either a cost efficient glazing bead version for standard glass, or a more aesthetic version with stepped glass. Both glass variants can be combined to create a zero water threshold on the bottom side to allow inclinations down to 5°. The superior High Insulation variant assures an increased insulation by using additional gaskets and smart insulation strips including low-e foil. The possibility to integrate 62 mm glass in this HI version further enhances thermal efficiency. A motor-operated version is especially convenient within building management systems or in roof windows in hard-to-reach places. The Attic window can be applied together with CW 50-RA, CW 60-RA and the CR 120 conservatory system.

5. Integration of Reynaers window and door systems

Several aesthetical connection profiles allow a concealed integration of other Reynaers window and door systems.



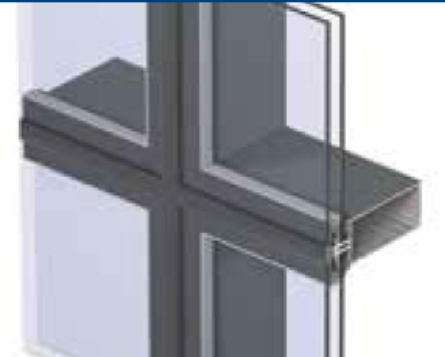



TECHNICAL CHARACTERISTICS

			
Style variants	CW 50	CW 50-HI	CW 50-FP
	functional	ultimate thermal comfort	Fire proof; E 15, EW 20, EI 15, E 30, EW 30, EI 30, E 60, EW 60 & EI 60
Interior visible width	50 mm	50 mm	50 mm
Exterior visible width	50 mm	50 mm	50 mm
Depth mullions	from 42 mm to 300 mm	from 42 mm to 300 mm	from 63 mm to 105 mm
Depth transoms	from 5 mm to 193 mm	from 5 mm to 193 mm	from 67 mm to 109 mm
Inertia mullions (Ix: wind load)	min 14 cm ⁴ to max 2690 cm ⁴	min 14 cm ⁴ to max 2690 cm ⁴	min 38 cm ⁴ to max 123 cm ⁴
Inertia transoms (Ix: wind load)	min 4 cm ⁴ to max 612 cm ⁴	min 4 cm ⁴ to max 612 cm ⁴	min 34 cm ⁴ to max 124 cm ⁴
Inertia transoms (Iy: glass load)	min 8 cm ⁴ to max 59 cm ⁴	min 8 cm ⁴ to max 59 cm ⁴	min 20 cm ⁴ to max 29 cm ⁴
Exterior face caps	different shapes available	different shapes available	different shapes available
Glazing	fixing by pressure plates	fixing by pressure plates	fixing by pressure plates
Rebate height	20 mm	20 mm	20 mm
Glass thickness	from 6 mm to 61 mm	from 22 mm to 61 mm	35 mm / 45 mm to 48 mm
Opening types (see: description)*	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	CS 77-FP door
Roof application	yes	yes	no

TECHNICAL CHARACTERISTICS

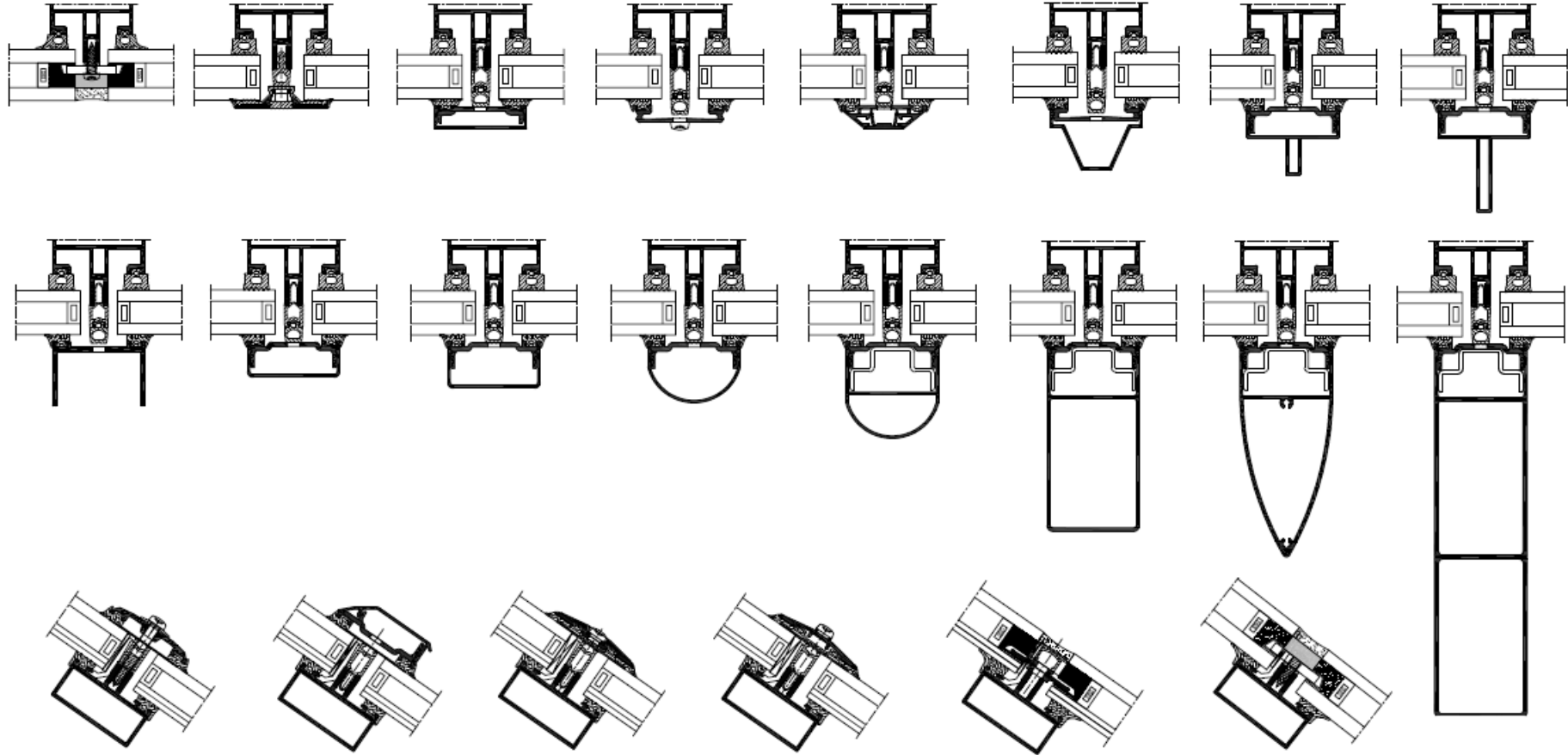


	CW 50-SL	CW 50 ALU ON STEEL	CW 50-TT
Style variants	slender appearance	designed for steel structure	rationalized system
Interior visible width	15/50 mm	50 mm	50 mm
Exterior visible width	50 mm	50 mm	50 mm
Depth mullions	from 126 mm to 168 mm	51 mm	-
Depth transoms	from 88 mm to 173 mm	from 5 mm to 58 mm	from 84 mm to 231 mm
Inertia mullions (Ix: wind load)	min 160 cm ⁴ to max 381 cm ⁴	not applicable	-
Inertia transoms (Ix: wind load)	min 73 cm ⁴ to max 436 cm ⁴	min 4 cm ⁴ to max 16 cm ⁴	min 74 cm ⁴ to max 937 cm ⁴
Inertia transoms (Iy: glass load)	min 9 cm ⁴ to max 24 cm ⁴	min 8 cm ⁴ to max 13 cm ⁴	min 23 cm ⁴ to max 68 cm ⁴
Exterior face caps	different shapes available	different shapes available	different shapes available
Glazing	fixing by pressure plates / clamped	fixing by pressure plates / clamped	fixing by pressure plates / clamped
Rebate height	20 mm	20 mm	20 mm
Glass thickness	from 6 to 61 mm	from 6 to 61 mm	from 6 mm to 64 mm
Opening types (see description)*	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 5
Roof application	yes	yes	no

			
CW 50-SC	CW 50-HL	CW 50-VL	CW 50-SG
structural clamped glazing	aesthetical horizontal lining	aesthetical vertical lining	structural sealed glazing
50 mm	50 mm	50 mm	50/88 mm
joint: 20 mm	vertical: 20 mm joint horizontal: 50 mm	vertical: 50 mm horizontal: 20 mm joint	EPDM gasket (width 27 mm)
from 42 mm to 300 mm	from 42 mm to 300 mm	from 42 to 300 mm	from 42 mm to 300 mm
from 5 mm to 193 mm	from 5 mm to 193 mm	from 5 to 193 mm	from 5 mm to 193 mm
min 14 cm ⁴ to max 2690 cm ⁴	min 14 cm ⁴ to max 2690 cm ⁴	min 14 cm ⁴ to max 2690 cm ⁴	min 14 cm ⁴ to max 2690 cm ⁴
min 4 cm ⁴ to max 612 cm ⁴	min 4 cm ⁴ to max 612 cm ⁴	min 4 cm ⁴ to max 612 cm ⁴	min 4 cm ⁴ to max 612 cm ⁴
min 8 cm ⁴ to max 59 cm ⁴	min 8 cm ⁴ to max 59 cm ⁴	min 8 cm ⁴ to max 59 cm ⁴	min 8 cm ⁴ to max 59 cm ⁴
not applicable	different shapes available	different shapes available	not applicable
continuously clamped and locally clamped solution	vertical: continuously clamped and locally clamped solution horizontal: fixation by pressure plate	vertical: fixation by pressure plate horizontal: continuously clamped and locally clamped solution	structural glazing glued on cassettes
structural sealed glazing	20 mm /structural sealed glazing	20 mm/structural sealed glazing	structural sealed glazing
from 27 mm to 63 mm	from 22 mm to 48 mm	from 27 mm to 40 mm	from 24 mm to 36 mm
1 - 2 - 3 - 5	1 - 2 - 3 - 5	1 - 2 - 3 - 5	1 - 2 - 5
yes	no	yes	no



Overview exterior looks

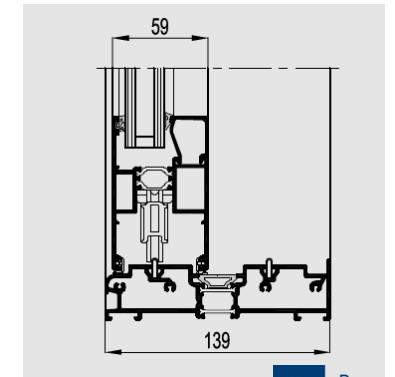


REYNAERS CP 130

Concept Patio® 130 is a well insulated slide and lift-slide system, which meets the highest requirements with regard to insulation, stability and safety. CP 130 is available with various opening possibilities. The low threshold option offers a solution to improve the buildings accessibility. A special corner solution makes it possible to open up spaces without any fixed corner element, creating a perfect and clear continuity between the indoor and outdoor spaces. This makes CP 130 ideal for rooms with a view. This robust system allows the construction of large and stable sliding windows and doors with a vent weight up to 300 kg. It also offers an aesthetical slimline middle section. Additionally, CP 130 can comply with burglar resistance class 2, offering a safe and secure solution. CP 130


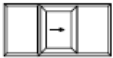
Aesthetic functionality

Architect: POM



INTERIOR & EXTERIOR BECOME ONE

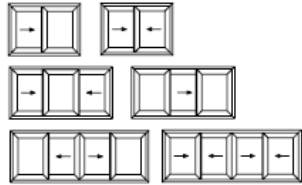

A sliding vent opens up a multitude of possibilities. Through a sliding window, the garden is incorporated into the interior of the house, fading the interior-, exterior border. This creates an extra feeling of space and generates more natural light within the home.

MONORAIL	CP 130	CP 130-LS
	X	X
	X	

A duo rail integrates 2 glazed opening vents, which have an identical look resulting in an aesthetic sliding window. Both vents can be made as sliding element, giving all flexibility to the users.

CP 130 SLIDE AND CP 130 LIFT & SLIDE

All types of CP 130 sliding vents use durable wheels and stainless steel rails, for optimal opening comfort. In case of a lift & slide system, the sliding window will be lifted up before sliding across this rail. In the closed position, the lift & slide window is put down and anchored, which is an extra plus for insulation and theft prevention. Both systems are wind-, waterproof and hermetically sealed.

DUO RAIL	CP 130	CP 130-LS
		
	X	X

A 3-rail integrates an extra rail in the outer frame allowing a third opening vent to be installed. This solution is very interesting because this allows the user to open-up 2 sliding windows, creating an opening which is doubled in size.

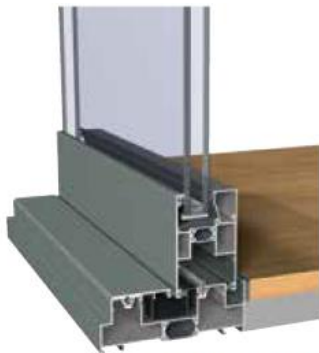
A monorail combines a moving part with a fixed glazed element, anchored directly into the outer frame profile, creating a minimalistic look. As a standard, this solid part is at the inside of the sliding door. For specific situations however, a solution is offered for CP 130 to install the fixed part at the outside of the sliding window. This can be very convenient when large fixed glass panes need to be installed at elevated height or when building construction does not allow inside glazing.

3-RAIL	CP 130	CP 130-LS
	X	X

Even more flexibility is obtained with the unique principle of a multi-rail, available in the liftand-slide variant. This multi-rail solution allows an expansion of outer frames from two to up to eight rails, facilitating creative designs with very large openings.

TECHNICAL CHARACTERISTICS

Variants		CP 130 MONORAIL, DUO RAIL, 3-RAIL	CP 130-LS MONORAIL, DUO RAIL, 3-RAIL, MULTI-RAIL
Visible width / height	Frame / Threshold	50 mm / 28 mm	20 mm / 28 mm / 35 mm / 40mm
	Vent	94 mm	94 mm
	T-profile	from 76 mm till 154 mm	from 76 mm till 154 mm
	Meeting section	69 mm / 98 mm	69 mm / 98 mm
	Meeting section 4 doors	194 mm	194 mm
Overall system depth	Frame	Monorail : 130 mm Duo Rail : 110 mm / 130 mm / 139 mm 3-Rail : 181 mm / 210 mm	Monorail : 139 mm Duo Rail : 139 mm 3-Rail : 210 mm
	Vent	59 mm	59 mm
Maximal Element height		2700 mm	2700 mm
Maximal vent weight		300 kg	300 kg
Rebate height		25 mm	25 mm
Glass thickness		up to 43 mm	up to 43 mm
Glazing method		dry glazing with EPDM or neutral silicones	dry glazing with EPDM or neutral silicones
Thermal insulation		23 mm, 18.6 mm and 32 mm fibreglass reinforced polyamide strips	23 mm and 32 mm fibreglass reinforced polyamide strips
HI variant		extra insulation gaskets	extra insulation gaskets









Flush floor integration



CP 130 Monorail Outside glazing



CP 130-LS 3-rail Low threshold

PERFORMANCES											
	ENERGY										
	Thermal Insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 2.35 W/m ² K (*), depending on the frame/vent combination.									
	COMFORT										
	Acoustic performance ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 35 (-2;-6) dB / 39 (-1;-3) dB, depending on glazing type									
	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	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) E750 (750 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(V) 1627 - 1630	RC 1			RC 2			RC 3			

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. Depending on the bottom solution, different values are achieved.
- (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 accessories.

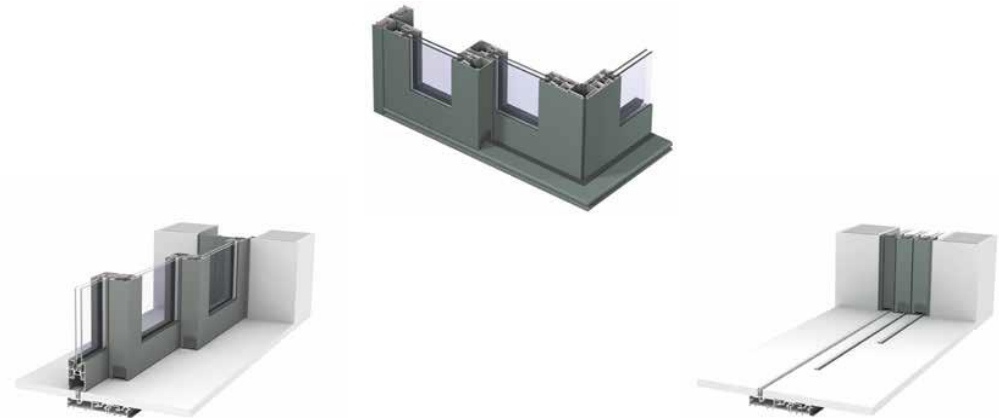


CP 130-LS CORNER

A newly-developed corner solution, exclusively for the CP 130-LS duo rail variant, makes it possible to open up spaces without any fixed corner element. This innovation is an answer to the current architectural need for large glass surfaces with minimal visible elements. The corner solution creates a perfect opportunity to invite nature into your home, removing the indoor and outdoor boundaries.

THE POCKET OPTION

The modular pocket solution provides for up to eight vents to be slid into your wall, thereby creating an open space without visible elements when the window is open. Optimal flush aesthetics in the open position can be realized by applying the same colour as the wall to the finishing profile. The pocket solution is available for the lift & slide systems in duo rail, 3-rail, or up to 8-rail (multi-rail) compositions.

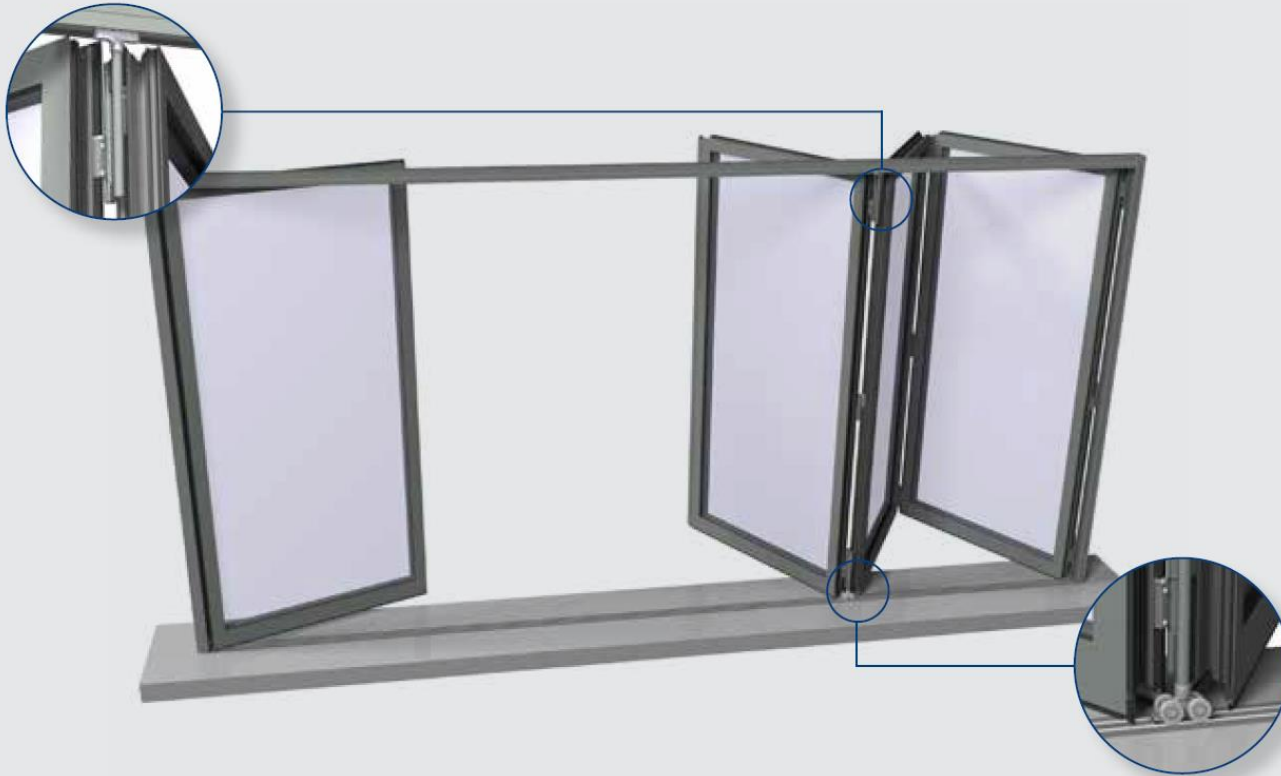


REYNAERS CONCEPT FOLDING 77

Invite nature into your building

People are continuously looking for ways to maximize their space, as well visually as physically. The Concept Folding® 77 offers them the opportunity to optimize the utilization of their rooms, drawing the external environment into their homes. Next to the improved space utilization, this innovative system offers the advantage of loads of daylight coming in, as well as an aesthetical design. Another practical feature of CF 77 is the optional door locking principle which allows to use the first leaf as an entrance door without affecting the folding capacity of the system.





	Max. vent size (mm)	Max. vent weight	Uw (W/m ² K)*	Uf (W/m ² K)	Visible width vent-vent sect.
Reynaers CF 77	1200x3000	120kg	down to 1,66	down to 2,25	144mm
Reynaers CF 77-SL	1200x3000	120kg	down to 1,64	down to 2,31	122mm
Reynaers CF 77-AP	1200x3000	120kg	down to 1,66	down to 2,25	144mm
Reynaers CF 77-SL/AP	1200x3000	120kg	down to 1,64	down to 2,31	122mm

* Ug: 1,1 W/m²K
4-panel: 4000 x 2700 mm

A WIDE RANGE OF SOLUTIONS

With CF 77, design and user friendliness go hand in hand with high technical performance.

The standalone solution exists out of new profiles, accessories and insulation technologies that have specifically been designed for folding systems. It ensures high insulation values (Uf values down to 2,25 W/m²K) that meet stringent local legislation requirements as well as market demands.

Available

in a number of configurations using between 2 and 8 door leaves, you can choose a design where the complete set of vents stacks to the same side, or split the design at any position, possibly integrating a central door solution.

Innovative functional and technical features:

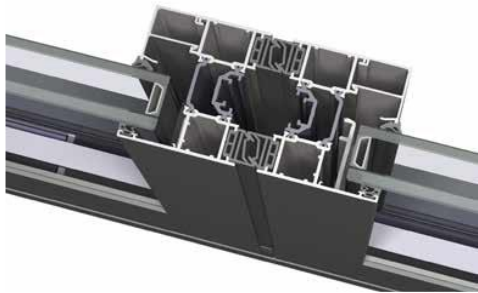
- Highly thermally insulating
- - Large vent sizes
- Water resistance up to 600 Pa
- - High vent weights
- Glazing up to 63mm
- - In- and outward opening using the same profiles
- 2 to 8 vent combinations
- - Window or door functionality for the first vent
- Burglar resistant variant
- Integrated and centrally built-in bottom rolling system

Design variants

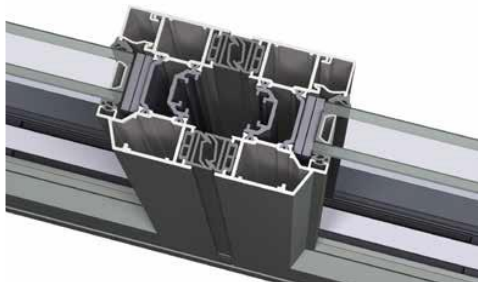
Next to the functional design, the CF 77 is supplemented with a Slim-Line variant, the CF 77-SL, featuring a narrower visible width. Both designs are available in four different door sill solutions: High Performance, Double Weather Seal, Low Threshold and Flat Bottom Solution. The High Performance option offers maximum performance in terms of air, wind and water resistance. The Double Weather Seal solution combines good air, wind and water resistance with decreased threshold and is well suited for renovation projects. The Low Threshold option offers a rise of only 18 mm and finally the FlatBottom solution allows easy passage and maximum convenience for high traffic.









4 different threshold solutions meeting functional needs and performance levels:

CF 77



CF 77-SL



					
		Flat Bottom	Low Threshold	Double Weather Seal	High Performance
	Air tightness	Not applicable	Class 2	Class 2	Up to Class 4
	Wind load resistance	Not applicable	Class B2	Class B2	Up to Class B3
	Burglar Proof*	RC2	RC2	RC2	RC2
	Water tightness	Not applicable	Class 4A (150 Pa)	Class 5A (200 Pa)	Up to Class 9A (600 Pa)
		Optimal accessibility Aesthetic bottom solution Economical solution	Easy passing (18 mm threshold) Elementary AWW rating Weather Seal	Double Weather Seal Suitable for renovation	High Performance Double Weather Seal 3 different performance levels in one profile

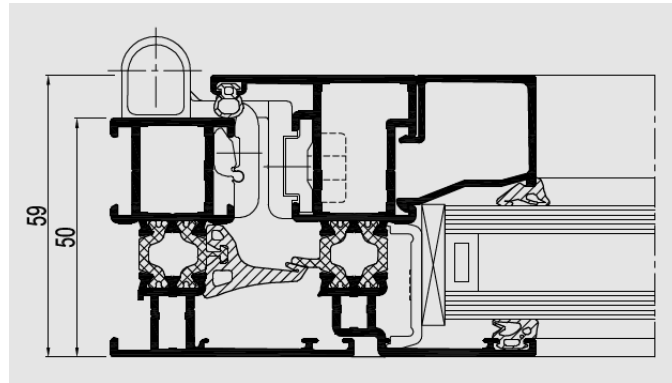
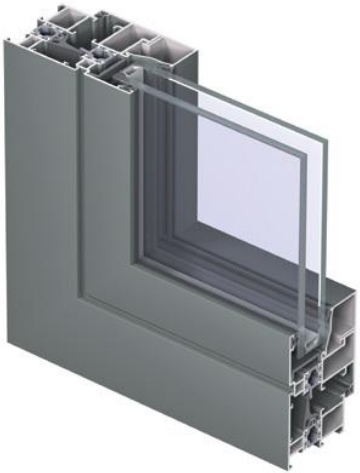
*The burglar proof classification is in accordance with EN 1627-1630.

REYNAERS CS 59

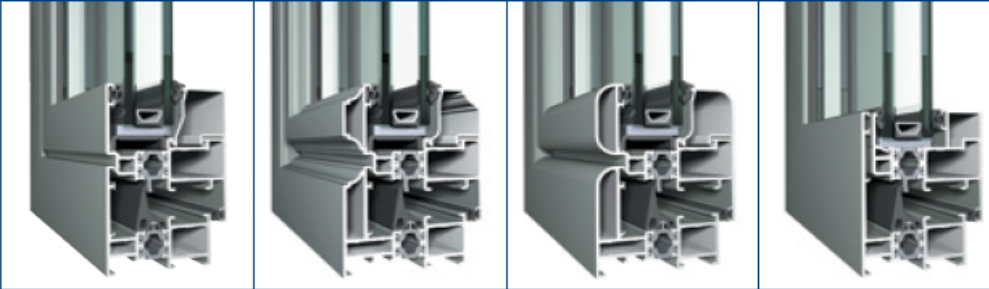
CS 59 is a thermally improved three-chamber system for windows and doors.

The system is available in a variety of aesthetic shapes to match the current architectural styles whilst offering all types of both inward and outward opening windows and doors.

Different inner and outer colours are possible.



CS 59









TECHNICAL CHARACTERISTICS

Style variants		FUNCTIONAL	RENAISSANCE	SOFTLINE	HIDDEN VENT
Min. visible width inward opening window	Frame	51 mm	51 mm	51 mm	76 mm
	Vent	33 mm	33 mm	33 mm	not visible
Min. visible width outward opening window	Frame	17.5 mm	-	-	-
	Vent	76 mm	-	-	-
Min. visible width inward opening flush door	Frame	67 mm	-	-	-
	Vent	77 mm	-	-	-
Min. visible width outward opening flush door	Frame	42 mm	-	-	-
	Vent	102 mm	-	-	-
Min. visible width T-profile		76 mm	76 mm	76 mm	126 mm
Overall system depth window	Frame	59 mm	59 mm	59 mm	50 mm
	Vent	59 mm	68 mm	68 mm	54.5 mm
Rebate height		25 mm	25 mm	25 mm	18.5 mm
Glass thickness		up to 35 mm	up to 35 mm	up to 35 mm	up to 31 mm
Glazing method	dry glazing with EPDM or neutral silicones				
Thermal insulation	14 mm omega-shaped fibreglass reinforced polyamide strips				



PERFORMANCES

ENERGY											
	Thermal Insulation (1) EN 10077-2	Uf-value between 3.0 W/m ² K and 3.7 W/m ² K, depending on the frame/vent combination									
COMFORT											
	Acoustic performance (2) EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 36 (-2; -6) dB / 39 (-1; -4) dB, depending on glazing type									
	Air tightness, max. test pressure (3) EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)			
	Water tightness (4) 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)	E (750 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 frame deflection (5) EN 12211; EN 12210	A (≤1/150)			B (≤1/200)			C (≤1/300)			
SAFETY											
	Burglar resistance (6) ENV 1627 - ENV 1630	WK 1			WK 2			WK 3 (doors)			

This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.

- (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.
- (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. 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.
- (6) The burglar resistance is tested by static and dynamic loads, as well as by simulated attempts to break in using specified tools.

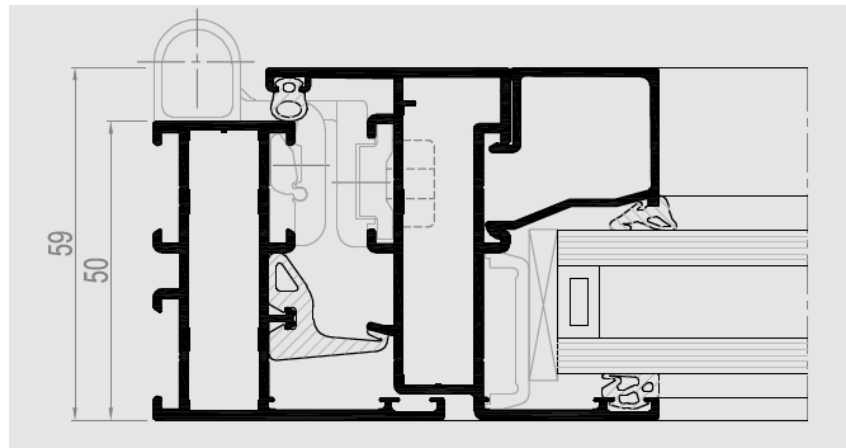


REYNAERS CS 59 PA

Ideal in warm climates






CS 59Pa offers an extensive range of non-insulated profiles for the construction of elegant and moderately priced aluminium frames in functional style. Therefore CS 59Pa is the ideal system for outdoor applications in warm climates but it can also be used for the partitioning of indoor office spaces.

The system is available in inward and outward opening windows and inward and outward opening flush doors.



TECHNICAL CHARACTERISTICS

Style variants		FUNCTIONAL	RENAISSANCE
Min. visible width inward opening window	Frame	49 mm	55 mm
	Vent	31 mm	31 mm
Min. visible width outward opening window	Frame	19.5 mm	-
	Vent	89 mm	-
Min. visible width inward opening window door	Frame	60 mm	-
	Vent	64 mm	-
Min. visible width inward opening flush door	Frame	61.5 mm	-
	Vent	72.5 mm	-
Min. visible width outward opening flush door	Frame	36.5 mm	-
	Vent	97.5 mm	-
Min. visible width T-profile		74 mm	74 mm
Overall system depth window	Frame	50 mm	59 mm
	Vent	59 mm	68 mm
Rebate height		25 mm	25 mm
Glass thickness		up to 35 mm	up to 35 mm
Glazing method		dry glazing with EPDM or neutral silicones	

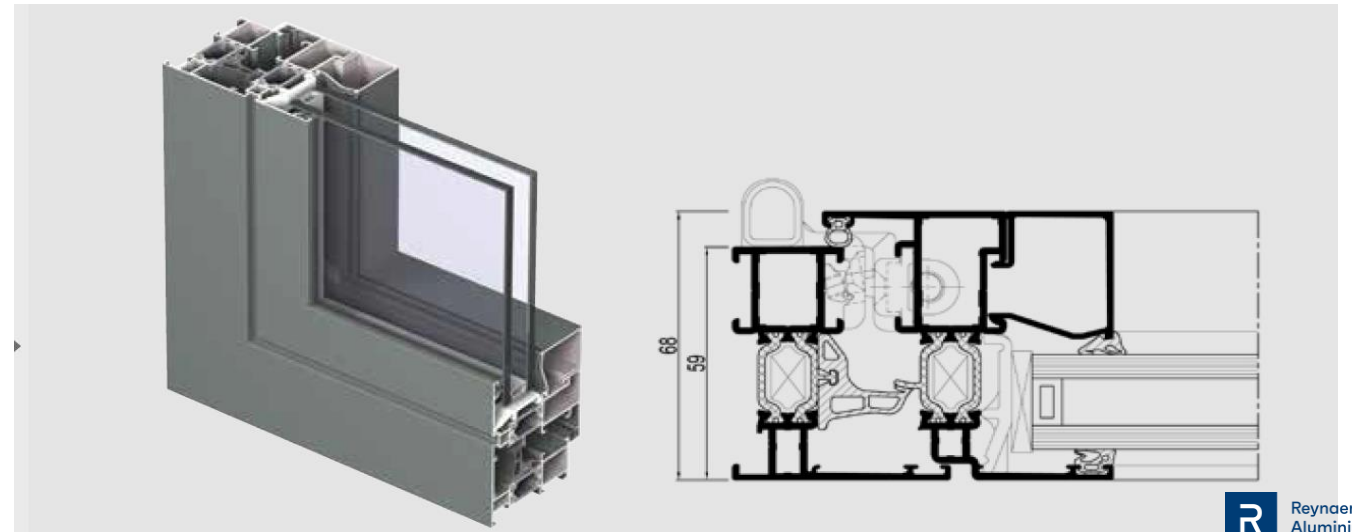
PERFORMANCES											
	COMFORT										
	Acoustic performance ⁽¹⁾ EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 36 (-1; -3) dB / 44 (-2; -4) dB, depending on glazing type									
	Air tightness, max. test pressure ⁽²⁾ EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)			
	Water tightness ⁽³⁾ 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)	E (750 Pa)
	Wind load resistance, max. test pressure ⁽⁴⁾ EN 12211; EN 12210	1 (400 Pa)		2 (800 Pa)		3 (1200 Pa)		4 (1600 Pa)		5 (2000 Pa)	E _{xxx} (>2000 Pa)
	Wind load resistance to frame deflection ⁽⁴⁾ EN 12211; EN 12210	A (≤1/150)			B (≤1/200)			C (≤1/300)			
	SAFETY										
	Burglar resistance ⁽⁵⁾ ENV 1627 - ENV 1630	WK 1			WK 2			WK 3			

This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.



- (1) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.
- (2) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (3) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (4) 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.
- (5) The burglar resistance is tested by static and dynamic loads, as well as by simulated attempts to break in using specified tools.







REYNAERS CS 68 Windows & Doors

Concept SystemR 68 is a thermally improved three-chamber system for windows and doors that boasts the optimum combination of high insulation levels and optimal safety. The system is available in a variety of aesthetic shapes to match current architectural styles whilst offering all types of both inward and outward opening windows and doors. Double butt strips between the frame and vent and lowered drainage ensure superior wind and water tightness. Different inner and outer colours are possible.



TECHNICAL CHARACTERISTICS

		
Style variants	FUNCTIONAL	HIDDEN VENT
Min. visible width inward opening window		
Frame	51 mm	76 mm
Vent	33 mm	not visible
Min. visible width outward opening window		
Frame	17,5 mm	-
Vent	76 mm	-
Min. visible width inward opening flush door		
Frame	68 mm	-
Vent	76 mm	-
Min. visible width outward opening flush door		
Frame	42 mm	-
Vent	102 mm	-
Min. visible width T-profile	76 mm	126 mm
Overall system depth window		
Frame	59 mm	59 mm
Vent	68 mm	63.5 mm
Rebate height	25 mm	18,5 mm
Glass thickness	up to 44 mm	up to 44 mm
Glazing method	dry glazing with EPDM or neutral silicones	
Thermal insulation	23 mm omega-shaped fibreglass reinforced polyamide strips	

PERFORMANCES												
	ENERGY											
	Thermal Insulation ⁽¹⁾ EN 10077-2	Uf-value between 1.8 W/m ² K and 2.9 W/m ² K, depending on the frame/vent combination										
	COMFORT											
	Acoustic performance ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 37 (-1; -4) dB / 44 (-2; -5) dB, depending on glazing type										
	Air tightness, max. test pressure ⁽³⁾ EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)				
	Water tightness ⁽⁴⁾ 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)	E (1200 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 frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤1/150)			B (≤1/200)			C (≤1/300)				
	SAFETY											
	Burglar resistance ⁽⁶⁾ ENV 1627 - ENV 1630	WK 1			WK 2 (windows & doors)			WK 3 (flush doors)				

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.
- (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. 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.
- (6) The burglar resistance is tested by static and dynamic loads, as well as by simulated attempts to break in using specified tools.

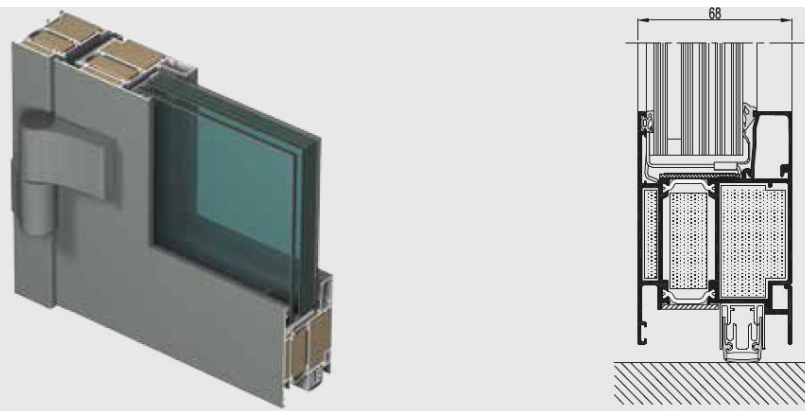
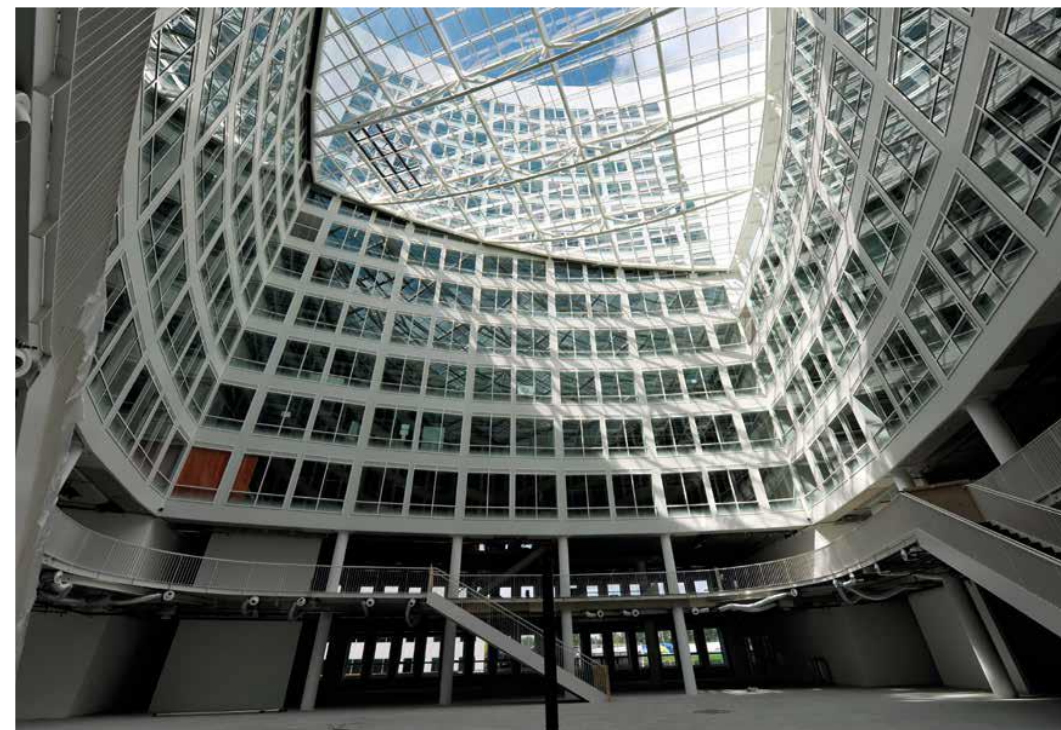
REYNAERS CS 77-FP

Fire resistance for great designs

Concept System® 77-Fire Proof is a high-quality flush door and partitioning system that combines elevated requirements regarding thermal insulation, stability, safety and fire resistance. This Fire Proofvariant is developed as an extension to the standard CS 77 system, providing an extensive range of solutions and performances. This includes the availability of burglar resistance, access control, panic and emergency exit functionalities and smoke tightness. The CS 77-FP is compliant with EU regulations and EI30 and EI60 classification for fire resistance.

The performance is defined by directly exposing the construction to fire in order to determine the stability, thermal insulation and radiation insulation over a certain amount of time.

To ensure proper compliance with the EN standards and acceptance by the different internationally recognized laboratories, the Reynaers' Fireproof system has been tested throughout Europe. These tests have been performed with different glass and hardware suppliers, resulting in the widest range of approved solutions.



REYNAERS CS 77-FP DOORS

The extended range of approved CS 77-FP flush doors is available for all inward and outward opening types. This is realised with a full range of door locks and hinges to meet every kind of locking demand, from standard single point locks, over motorised multi-point locks, up to fully integrated solutions in building management systems. These doors can be used in different compositions and in combination with fixed glazing. Both single and double leaf doors are available up to a maximum door leaf size of 1.3 by 2.75m.

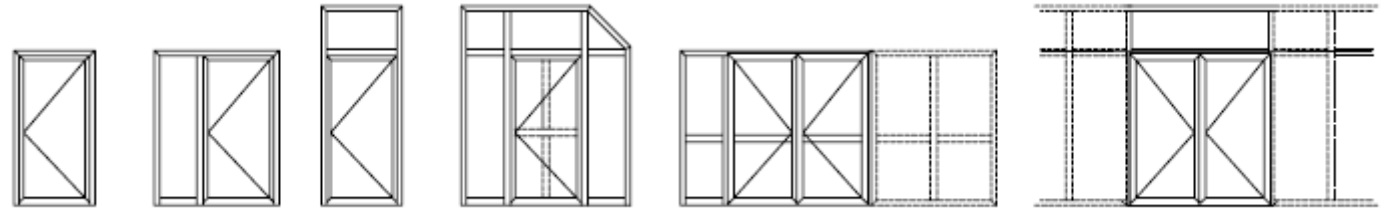
E130



E160



Approved configurations (available for inside and outside opening)



CS 77-FP GLAZED PARTITION WALLS / FIXED WINDOW ELEMENTS

* depending on the glass configuration

E130

Maximum element height of 4.4m
Maximum glass surface* of 6.85m²

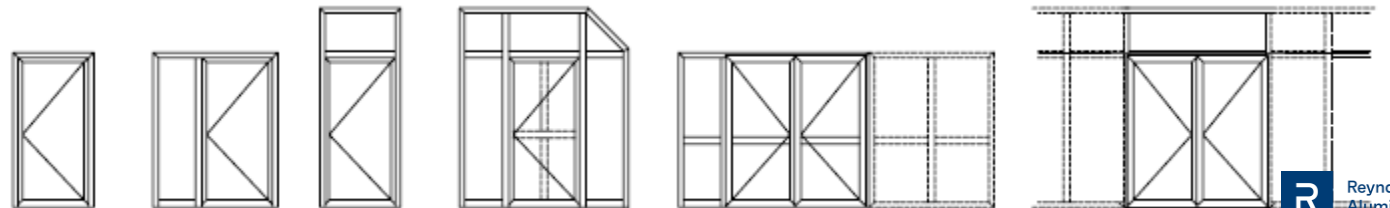


E160

Maximum element height of 3.8m
Maximum glass surface* of 4.45m²





Approved configurations





PERFORMANCES / TECHNICAL CHARACTERISTICS

		CS 77-FP EI30	CS 77-FP EI60
	European testing standards	EN 1364-1 EN 1634-1	
	Classification standard	EN 13501-2	
	Fire resistance classification	E 30, EW 30, EI 30	EI 45, E 60, EW 60, EI 60
	Burglar resistance EN(V) 1627-1630	RC 2	RC 2
	Rebate height	25 mm	25 mm
	Glass thickness	from 15 to 52 mm	from 23 to 52 mm
	Glazing method	dry glazing with EPDM	dry glazing with EPDM
	Certified glass suppliers	Vetrotech Saint-Gobain - Contraflam Pilkington - Pyrostop AGC Glass - Pyrobel	

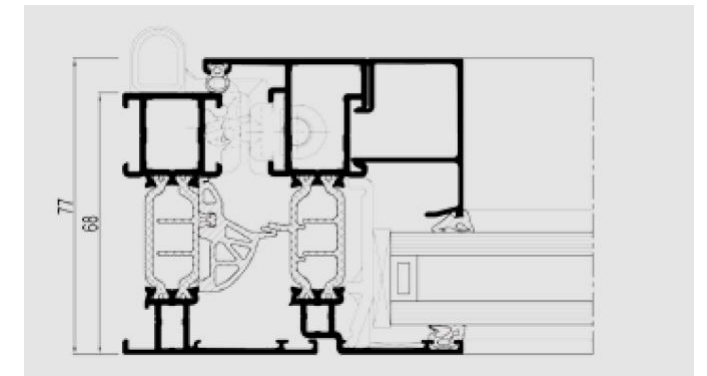
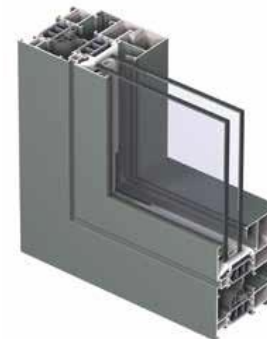
REYNAERS CS 77

Optimised safety and comfort

Concept System[®] 77 is a high insulation window and door system that meets elevated requirements regarding thermal insulation, stability and security. The system's HI+ variant achieves Uf values down to 1.2 W/m²K. The Uf value of a frame/vent section with 115 mm visible width is 1.7 W/m²K.

CS 77 is available in a variety of aesthetic styles to match the current trends whilst offering all types of both inward and outward opening windows and doors. An additional asset is the possibility to combine this system with Ventalis[®].









The system's performance regarding acoustics, water- and air tightness, but also for specific applications like Bullet - and Fire Resistance, meets the most severe European standards. Moreover, CS 77 is available in different burglar resistance levels (RC2 & RC3) making it an extremely secure system.



TECHNICAL CHARACTERISTICS



Style variants		FUNCTIONAL	RENAISSANCE	HIDDEN VENT
Min. visible width inward opening window	Frame	51 mm	51 mm	76 mm
	Vent	33 mm	33 mm	not visible
Min. visible width outward opening window	Frame	17.5 mm	-	-
	Vent	76 mm	-	-
Min. visible width inward opening flush door	Frame	68 mm	-	-
	Vent	76 mm	-	-
Min. visible width outward opening flush door	Frame	42 mm	-	-
	Vent	102 mm	-	-
Min. visible width T-profile		76 mm	76 mm	126 mm
Overall system depth window	Frame	68 mm	77 mm	68 mm
	Vent	77 mm	86 mm	72.5 mm
Rebate height		25 mm	25 mm	18.5 mm
Glass thickness		up to 53 mm	up to 53 mm	up to 48 mm
Glazing method		dry glazing with EPDM or neutral silicones		
Thermal insulation		32 mm omega and/or hollow chamber -shaped fibreglass reinforced polyamide strips		
High Insulation variant (HI)		Available	Available	Not Available
High Insulation Plus variant (HI+)		Available	Not Available	Not Available

PERFORMANCES											
ENERGY											
	Thermal insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.2 W/m ² K depending on the frame/vent combination and the glass thickness.									
COMFORT											
	Acoustic performance ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 36 (-1; -4) dB / 42 (-2; -4) dB, depending on glazing type									
	Air tightness, max. test pressure ⁽³⁾ EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)			
	Water tightness ⁽⁴⁾ 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)	E900 (900 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 frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤1/150)			B (≤1/200)			C (≤1/300)			
SAFETY											
	Burglar resistance ⁽⁶⁾ EN 1627-1630	RC 1			RC 2			RC 3			
	Fire resistance ⁽⁷⁾ - EN 13501-2, EN 1364-1, EN 1634-1 - NEN 6069	EI 30 EI 60, EI 45 EW 30									
	Bullet resistance ⁽⁸⁾ EN 1522	FB 1	FB 2	FB 3	FB 4	FB 5	FB 6				
				FSG		Kalashnikov					

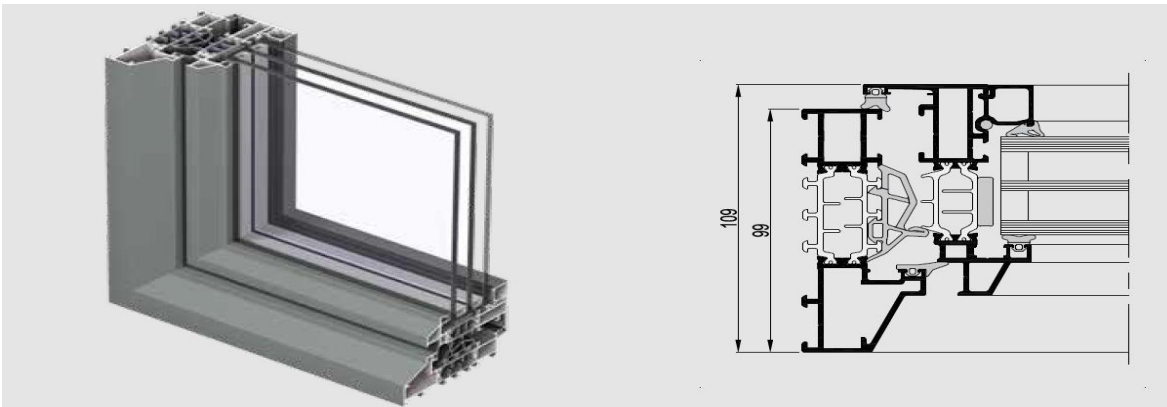
This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.

- (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.
- (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. 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.
- (6) The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.
- (7) The performance is defined by directly exposing the construction to fire in order to determine the stability, thermal insulation and radiation insulation over a certain amount of time.
- (8) The bullet resistance of the window or door is evaluated for different classes of weapons and ammunition: hand guns, (automatic) rifles and shot guns.

REYNAERS SlimLine 38

Light, Elegance and Comfort

SlimLine 38 is a highly insulated system inward and outward opening windows and doors, which combines elegance and comfort, with a unique design. This special slender steel look is the perfect solution for modern architecture and renovation of steel-framed windows, respecting the original design but offering a thermally improved solution. The SL 38 system is available in 3 different minimalistic design variants, Classic, Ferro and Cubic, to perfectly match the architectural aspect of the building. The windows and doors can be provided with double and triple glazing without losing the ultra-slim look. In combination with its superior insulation capabilities, the system provides the perfect harmony between durable material, clean design and demanding architectural challenges.









SLIMLINE 38



TECHNICAL CHARACTERISTICS

Design variants		CLASSIC	CUBIC	FERRO
Min. visible width inward opening window	Frame	33.5 mm	33.5 mm	33.5 mm
	Vent	23 mm	22 mm	21.5 mm
Min. visible width outward opening window	Frame	29 mm	-	18.5 mm
	Vent	60.5 mm	-	60.5 mm
Min. visible width inward opening window-door	Frame	33.5 mm	33.5 mm	59.5 mm
	Vent	52.5 mm	52.5 mm	52.5 mm
Min. visible width outward opening window-door	Frame	29 mm	-	18.5 mm
	Vent	82 mm	-	82 mm
Min. visible width T-profile		48 mm	48 mm	48 mm
Overall system depth window	Frame	99 mm	76 mm	76 mm
	Vent	86 mm	75 mm	72 mm
Rebate height		13.5 mm	13.5 mm	13.5 mm
Glass thickness		up to 55 mm	up to 55 mm	up to 55 mm
Glazing method		dry glazing with EPDM or neutral silicones		
Thermal insulation		omega-shaped fibreglass reinforced polyamide strips (frame 40 mm - vent 32 mm)		
High Insulation variant (HI)		available	available	available

PERFORMANCES												
ENERGY												
	Thermal Insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.7 W/m ² K depending on the frame/vent combination and the glass thickness. Uw of less than 1.4 W/m ² K for a standard window section ⁽²⁾										
COMFORT												
	Acoustic performance ⁽³⁾ EN ISO 140-3; EN ISO 717-1	$R_w(C;C_{tr}) = 38 (-1; -4) \text{ dB} / 45 (-1; -5) \text{ dB}$, depending on glazing type										
	Air tightness, max. test pressure ⁽⁴⁾ EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)				
	Water tightness ⁽⁵⁾ 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)	E (1200 Pa)	
	Wind load resistance, max. test pressure ⁽⁶⁾ 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 ⁽⁶⁾ EN 12211; EN 12210	A (≤1/150)			B (≤1/200)			C (≤1/300)				
SAFETY												
	Burglar resistance ⁽⁷⁾ EN 1628-EN 1630; EN 1627	RC1			RC2				RC3			

This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.

- (1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.
- (2) Window dimension of 1.23m x 1.48m, with glass of 1.1 W/m²K.
- (3) The sound reduction index (Rw) measures the capacity of the sound reduction performance of the frame.
- (4) The air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (5) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (6) 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.
- (7) 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 accessories.

REYNAERS MASTERLINE 10

NO COMPROMISE

Don't settle for the compromise: with MasterLine 10 you can have it all. This new system unites the best of all worlds: unlimited design freedom combined with ultimate comfort and optimal insulation performance. MasterLine 10 windows are designed for the building trends of today and tomorrow: low energy building, maximum daylight access, superb performance and safe homes (burglar resistance class 3).

The product offering of MasterLine 10 windows is truly unique in its applicability: inward opening windows, a full range of transoms and frames, connection profiles with Sliding and Curtain Wall system, but also the design freedom that is offered with the Renaissance and Deco profile range.

The windows are offered with a Passive House certificate!

The combination of all these features makes MasterLine 10 the ideal solution for domestic as well as public projects.



FUNCTIONAL



RENAISSANCE









DECO



TECHNICAL CHARACTERISTICS		FUNCTIONAL	RENAISSANCE	DECO
Min. visible width inward opening window	Frame		60 mm	
	Vent		37 mm	
Min. visible width inward opening window-door	Frame		60 mm	
	Vent		67 mm	
Min. visible width T-profile			87 mm	
Overall system depth window	Frame	97 mm	107 mm	107 mm
	Vent		107 mm	
Rebate height			27 mm	
Glass thickness	Frame		up to 88 mm	
	Vent	up to 88 mm	up to 78 mm	up to 78 mm
Glazing method		60 mm glass fibre reinforced noryl strips		



PERFORMANCES

ENERGY											
	Thermal insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 0.78 W/m ² K depending on the frame/vent combination and the glass thickness.									
COMFORT											
	Acoustic performance ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw (C; Ctr) = 46 (-1; -4) dB / 50 (-1;-2) dB, depending on glazing type									
	Air tightness, max. test pressure ⁽³⁾ EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)			
	Water tightness ⁽⁴⁾ 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)	E900 (900 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 frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤1/150)			B (≤1/200)			C (≤1/300)			
SAFETY											
	Burglar resistance ⁽⁶⁾ EN 1627-1630	RC 1			RC 2			RC 3			

This table shows possible classes and values of performances. The values indicated in red are the ones relevant to this system.

- (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.
- (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. 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.
- (6) The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.

MasterLine 8 is a unique windows and doors system that combines countless design possibilities with first in class performance and production speed. This system gives you a wide design range, to perfectly fit any architectural style, while at the same time offering the ultimate performance regarding thermal insulation and air- and water tightness, with a limited system depth of 77 mm. This new generation of innovative window and door solutions mirrors the current architectural trend towards maximising daylight while offering ultimate insulation levels. GAMA MasterLine 8 panel doors even come with passive house certification.

MasterLine 8 windows feature 3 different levels of insulation, offering solutions for high insulated, low energy and even passive houses. These different levels of insulation are achieved by the integration of new and clever materials.

For the High Insulating Plus (HI+) variant, innovative insulation bars are incorporated, which use a low-emission foil and thus improve the insulation value by reflecting and retaining heat.

STANDARD



$U_f = 1.9 \text{ W/m}^2\text{K} (*)$

HI



$U_f = 1.5 \text{ W/m}^2\text{K} (*)$

HI+



$U_f = 1.2 \text{ W/m}^2\text{K} (*)$



AIR- WIND- WATER TIGHTNESS

MasterLine 8 windows and doors allow for a water tightness of 900Pa, reduced air loss at 600Pa air pressure, and excellent sealing properties. These ultimate performances are achieved by the overall concept and the increased overlap of the central gasket in the windows, offering a guaranteed performance.

VENTILATION VENT

MasterLine 8 ventilation vents are available on 2 different levels of insulation for high insulated, low energy and even passive houses. These ventilation vents exist in 2 widths for optimal fresh air access: 185mm and 250mm. The vents are optimised for easy installation and aesthetics as the end pieces are adjustable for optimal fit and paintable to match the color of the profiles.



MasterLine 8 windows and doors ensure your safety as they comply to burglar resistance class RC2 or RC3. Reynaers Aluminium offers a wide range of compatible handles, locks and hinges to ensure your safety and comfort. To further enhance safety, MasterLine 8 is compatible with RB Glass: the add-on glass balustrade for larger window areas in high rise buildings. Even without balconies, RB Glass ensures you can safely open your windows and enjoy an unobstructed view. MasterLine 8 also offers single or double panic doors and Anti-Fingertrap doors.

TECHNICAL CHARACTERISTICS		WINDOWS				DOORS	
		FUNCTIONAL	RENAISSANCE	DECO	HIDDEN VENT	WINDOW DOORS	FLUSH DOORS
Min. visible width inward opening window or door	Frame	53 mm			80 mm	60 mm	68.5 mm
	Vent	37 mm			-	67 mm	78.5 mm
Min. visible width outward opening window or door	Frame	21 mm			n.a.	21 mm	42.5 mm
	Vent	113 mm			n.a.	113 mm	104.5 mm
Min. visible width T-profile		80 mm			107 mm	80 mm	80 mm
Overall system depth window or door	Frame	77 mm	87 mm	87 mm	77 mm	77 mm	77 mm
	Vent	87 mm			77 mm	80 mm	77 mm
Rebate height		27 mm					
Glass thickness	Frame	up to 62 mm					
	Vent	up to 72 mm	up to 62 mm	up to 62 mm	up to 57 mm	up to 72 mm	up to 62 mm
Glazing method		dry glazing with EPDM or neutral silicones					
Thermal break		omega-shaped glass fibre reinforced polyamide strips. HI+ version: glass fibre reinforced noryl strips. 40 or 37.8 mm depending on profile.					

MasterLine 8 doors are available in 2 levels of insulation for balcony, flush and pivot doors. For projects where extreme insulation is required, our MasterLine 8 range offers a panel door with excellent insulation values, that was awarded passive house certification by the renowned Passive House Institute.

PASSIVE DOOR



Uf = 2.2 W/m²K

HI



Uf = 1.4 W/m²K

HI+



Uf = 0.87 W/m²K

MasterLine 8 doors offer a wide range of highly insulated and robust flush doors, which meet the modern requirements with regard to safety, thermal insulation and stability (class 8). This allows for the creation of entrance doors with large dimensions and weights up to 250 kg. MasterLine 8 doors are available as inward and outward opening glass or panel doors and pivoting doors are possible. All the doors can be fitted with a wide range of locks and hinges.

PIVOT DOOR



PANEL DOOR



BALCONY DOOR



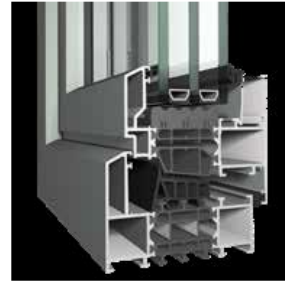
The unique MasterLine 8 windows concept offers up to 4 design variants, each with their own distinct look and feel, which make MasterLine 8 suitable for any architectural style. Needless to say, MasterLine 8 can easily be integrated with other Reynaers Aluminium systems, such as CP 130 and CP 155 sliding systems, the RB glass balustrade, the Mosquito system, and curtain wall system CW 50. The unique concept makes it possible to combine an extensive range of window opening types, design variants, and different levels of thermal insulation.

FUNCTIONAL



The straightforward design of the MasterLine 8 Functional variant is beautiful in its simplicity, and is suitable for both modern and contemporary buildings.

DECO



MasterLine 8 Deco windows offer a modern, unique design that stands out and gives a contemporary feel. The sash is recessed to the frame on the exterior side and the sloped detailing brings a finepalette of reflections and shading.

RENAISSANCE









The MasterLine 8 Renaissance windows have been redesigned, more true to the traditional ogee detailing in heritage windows. The sash is recessed to the frame on the exterior side and the detailing is more refined.

HIDDEN VENT



For a modern minimalistic Appearance MasterLine 8 offers the Hidden Vent system. With Hidden Vent profiles the vents are covered by the outer frames and transoms, which allows for a concealed install of the opening elements behind the window reveal.

PERFORMANCES											
ENERGY											
	Thermal insulation windows ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.0 W/m²K depending on the frame/vent combination and the glass thickness.									
	Thermal insulation doors ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.4 W/m²K depending on the frame/vent combination and the glass thickness.									
COMFORT											
	Acoustic performance windows ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw(C;Ctr) = 45 (-1;-4) dB, Hidden Vent: Rw(C;Ctr) = 49 (-1;-5) dB, depending on glazing and opening type									
	Acoustic performance doors ⁽²⁾ EN ISO 140-3; EN ISO 717-1	Rw(C;Ctr) = 43 (-1;-4) dB, depending on glazing and opening type									
	Air tightness windows & doors, max. test pressure ⁽³⁾ EN 1026; EN 12207	1 (150 Pa)	2 (300 Pa)	3 (600 Pa)	4 (600 Pa)						
	Water tightness windows ⁽⁴⁾ 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)	E1200 (1200 Pa)
	Water tightness doors ⁽⁴⁾ 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)	E1200 (1200 Pa)
	Wind load resistance windows, 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 windows to frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤ 1/150)		B (≤ 1/200)		C (≤ 1/300)					
	Wind load resistance doors, 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 doors to frame deflection ⁽⁵⁾ EN 12211; EN 12210	A (≤ 1/150)		B (≤ 1/200)		C (≤ 1/300)					
SAFETY											
	Burglar Resistance ⁽⁶⁾ EN 1627 - 1630	RC 1		RC 2			RC 3				

This table shows possible classes and values of performances. The values indicated in orange are the ones relevant to this system.

- (1) The Uf-value measures the heat flow. The lower the Uf-value, the better the thermal insulation of the frame.
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(4) The water tightness test 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. 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.
(6) The burglar resistance is tested by statistical and dynamic loads, as well as by simulated attempts to break in using specified tools.

REYNAERS CP 155 / REYNAERS CP 155-LS

Sophistication for quality and insulation



TECHNICAL CHARACTERISTICS		CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERGIE LABEL
Visible width / height	Frame	52 mm	60 mm	60 mm
	Vent	102 mm	102 mm	102 mm
	T-profile	from 76 mm till 154 mm	from 76 mm till 154 mm	from 76 mm till 154 mm
	Meeting section	115 mm	115 mm	115 mm
	Threshold	60 mm	20 mm	69 mm
	Meeting section 4 doors	212 mm	212 mm	n/a
Overall system depth	Frame	155 mm / 242 mm (3-rail)	155 mm / 242 mm (3-rail)	192 mm
	Vent	68 mm	68 mm	68 mm / 105 mm
Maximal Element height		3000 mm	3000 mm	3000 mm
Maximal vent weight sliding vent		250 Kg	400 Kg	400 Kg
Maximal vent weight fixed vent		1500 Kg	1500 Kg	1500 Kg
Rebate height		25 mm	25 mm	25 mm
Glass thickness		up to 52 mm	up to 52 mm	up to 61 mm
Glazing method		dry glazing with EPDM or neutral silicones	dry glazing with EPDM or neutral silicones	dry glazing with EPDM or neutral silicones
Thermal insulation		32 mm and 23 mm fibreglass reinforced polyamide strips with 3 chambers	32 mm and 23 mm fibreglass reinforced polyamide strips with 3 chambers	41 mm and 23 mm fibreglass reinforced polyamide strips with 5 chambers
HI variant		extra insulation gaskets	extra insulation gaskets	standard available



CP 155-LS/HI 3-rail



CP 155-LS/HI low threshold



CP 155-LS zero threshold



SLIM CHICANE

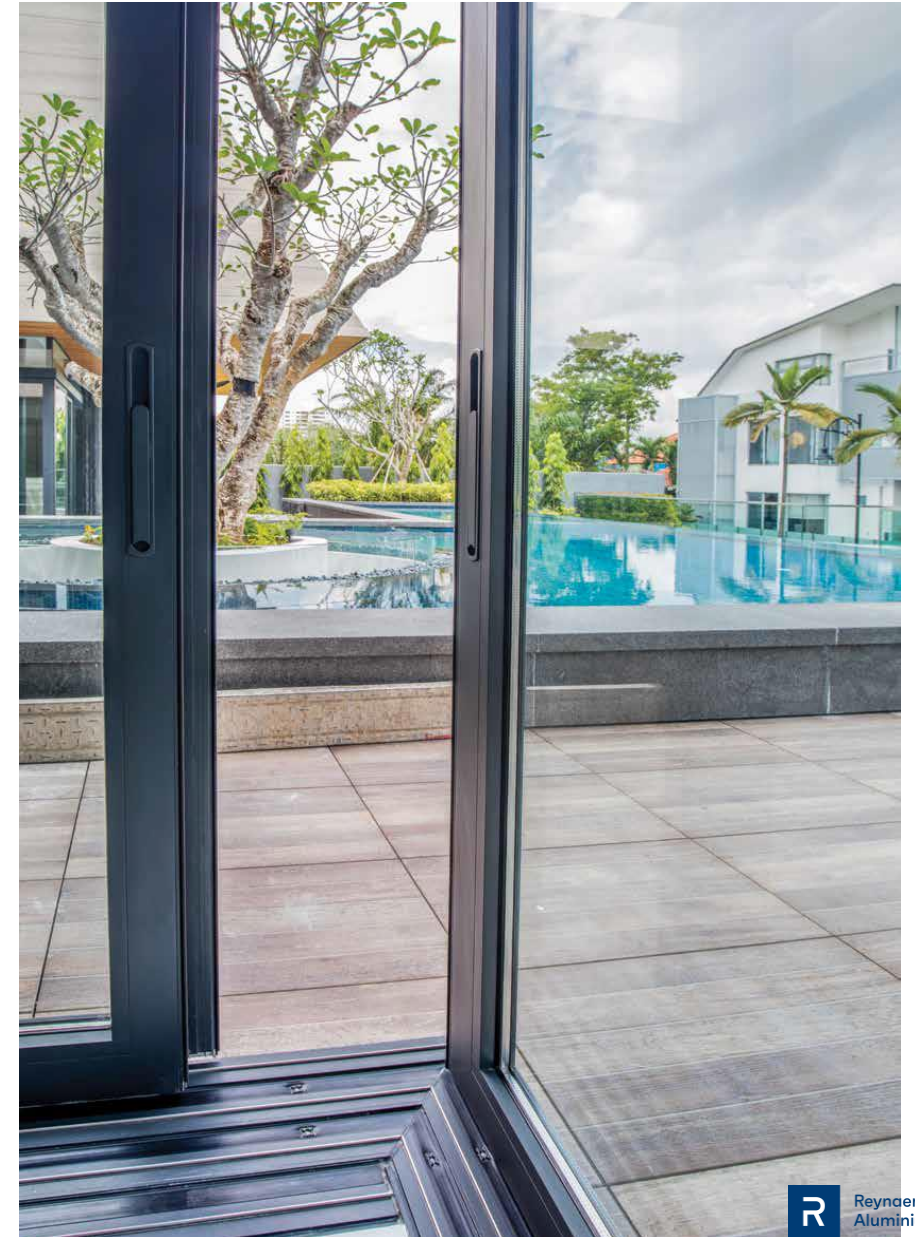
The CP 155(-LS) Slim Chicane introduces a sliding window with a meeting section of only 50 mm visual width, transforming the CP 155(-LS) into a modern design and making it an elegant system, perfectly suited to meet today's trends. The Slim Chicane is applicable to both the slide and lift-slide options in 2-rail and monorail options (inside and outside glazed).

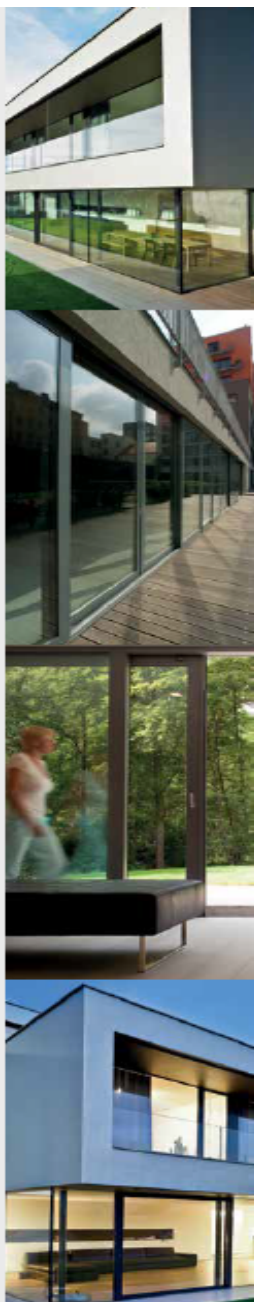


CP 155-LS/HI with Minergie label

MINERGIE®

Minergie is a sustainability label for new and refurbished buildings, with a focus on a high level of comfort in the building. To obtain this comfort level, the Minergie standards require high-grade, air-tight building envelopes and the continuous renewal of air in the building using an energy-efficient ventilation system. This Swiss Minergie standard is widely accepted and is referred to as a quality label.





INTERIOR & EXTERIOR BECOME ONE

A sliding window opens up a multitude of possibilities. Through a sliding window, the garden is incorporated into the interior of the house. This creates an extra feeling of space and generates more natural light within the home.

CP 155 SLIDE AND CP 155 LIFT & SLIDE

All types of CP 155 sliding window use durable wheels and stainless steel rails, for optimal opening comfort. In case of a lift & slide system, the sliding window will be lifted before sliding to serve smooth operation. In the closed position, the lift & slide window is put down and anchored, which is an extra plus for isolation and theft prevention. Both systems are highly wind- and waterproof.

MONORAIL, DUO RAIL, 3-RAIL OR MULTI-RAIL

A **monorail** combines a moving part with a fixed glazed element, anchored directly into the outer frame profile, creating a minimalistic look. The sliding panel can be positioned on the outside or inside. The fixed part on the outside can be very convenient when large fixed glass panels need to be installed at elevated height or when building construction does not allow inside glazing.

MONORAIL	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
	X	X	X

A **duo rail** integrates 2 glazed opening vents, which have an identical look resulting in an aesthetic sliding window. Both these vents can be made as sliding element, giving all flexibility to the users.

DUO RAIL	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
	X	X	

A **3-rail** integrates an extra rail in the outer frame allowing a third opening vent to be installed. This solution allows the user to open-up 2 sliding windows, creating an opening which is double in size.

3-RAIL	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
	X	X	

Even more flexibility is obtained with the unique principle of a **multi-rail**, available in the lift & slide variant. This multi-rail solution allows an expansion of elements up to eight rails, facilitating creative designs with very large openings.

SPECIAL SOLUTIONS

A **glass corner** is a fixed glazed element without any visible corner profiles. This provides optimal daylight and a better view to the outside, and it also allows for seamless façades on the outside. The fixed glass corner can be applied on all CP 155-LS outside glazed monorails.

GLASS CORNER	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
		X	X

An **open corner** makes it possible to open up the room without any visible corner elements. In combination with low or zero threshold solutions, this takes away all boundaries between inside and outside. The CP 155-Lift & Slide corner solutions allow to open both in- and outward corners, without compromising the systems' known benefits of comfort and insulation. The open corner is applicable on CP 155-LS 2-rail and outside glazed monorail.

OPEN CORNER	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
		X	

With a **Pocket solution** up to 8 vents can be slid into the wall when opened, so no visible elements remain and the maximal opening potential can be used. The pocket solution is available for the lift & slide systems in duo rail, 3-rail, or up to 8-rail (multi-rail) compositions.

POCKET SOLUTION	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
		X	

A **low or zero threshold** creates a perfect continuity between the indoor and outdoor spaces and improves the accessibility to the building. This accessibility and comfort is further improved by the solutions for automatic opening.

LOW OR ZERO THRESHOLD	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
		X	

The **Slim Chicane** solution has a meeting section of only 50 mm wide, which fits perfectly with today's architectural trends.

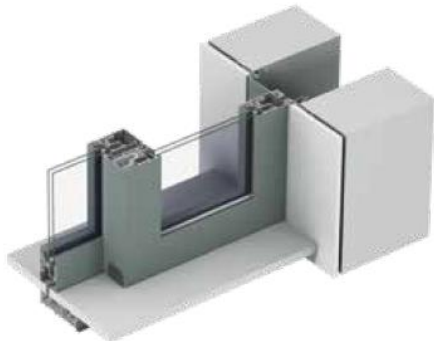
SLIM CHICANE	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
	X	X	

To further enhance accessibility and comfort, CP 155-LS can be **motorised** as an option. This can be applied to certain configurations on mono-, 2- or 3-rail solutions.

MOTORISED	CP 155 / CP 155-HI	CP 155-LS / CP 155-LS/HI	CP 155-LS/HI WITH MINERALE LABEL
		X	

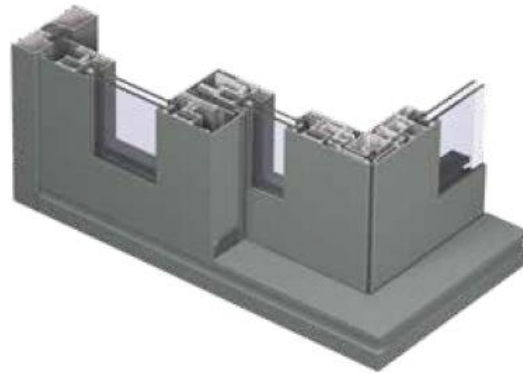
LOW THRESHOLD - ZERO THRESHOLD

Our low and zero threshold solution literally lower the boundaries between inside and outside. A flush threshold gives a very aesthetically pleasing result when the doors are open, as there are no borders to be seen. As an added bonus, this solution significantly improves the accessibility to your building for everyone, especially for people with reduced mobility. For this solution the bottom profiles are hidden in the floor, and still provide sufficient drainage to prevent water from entering your home.



CP 155-LS CORNER

A corner solution makes it possible to open up spaces without any fixed corner element. This innovation is an answer to the current architectural need for large glass surfaces with high insulation values. The corner solution creates a perfect opportunity to invite nature into your home, removing the indoor and outdoor boundaries.



THE POCKET OPTION

The modular pocket solution provides for up to eight vents to be slid into your wall, thereby creating an maximal open space without visible elements when the vents are open. Optimal flush aesthetics in the open position can be realized by applying the same finish on the cover profile and the wall. The pocket solution is available for the lift & slide systems in duo rail, 3-rail, or up to 8-rail (multi-rail) compositions.



REYNAERS Hi-Finity

Your dream come true...

Ultimate design freedom.

Available in a wide variety of configurations with open or glass corners, large and connected glass panels, motorised sashes, pockets and alternative threshold solutions, Hi-Finity can wrap itself around any building.

And for the most challenging requests you can rely on our project department to design and deliver a bespoke solution, tailored to your needs.

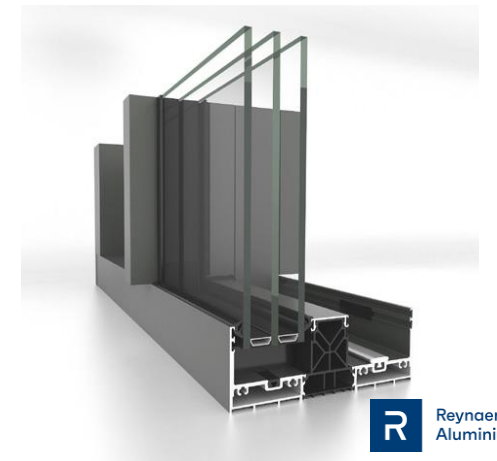
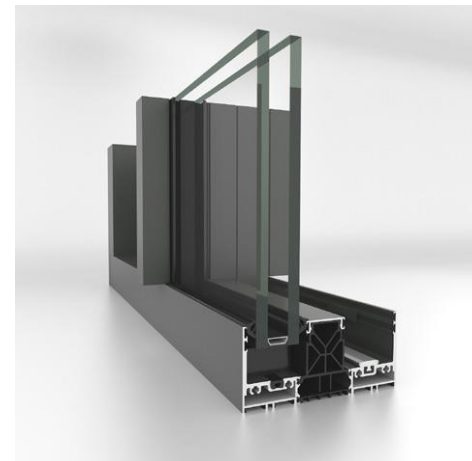
Ultimate luxury.

Designed to be invisible when you want it to be, but a closer look will reveal the high attention to detail.

The excellent performances allow the system to be implemented equally comfortable in a residential suburban home as in a high-rise hotel near the seaside.

Ultimate solution.

All of this, in combination with the high energy performance and the minimalistic look, makes this product the go-to solution for low-energy contemporary architecture.



INFINITE VIEWS

By integrating the aluminium profiles into the walls, the glass surfaces are extending from floor to ceiling, creating the ultimate minimalistic appearance, giving you a view without boundaries. The Floor Finish solution lets the threshold disappear below the flooring.

MAXIMUM COMFORT

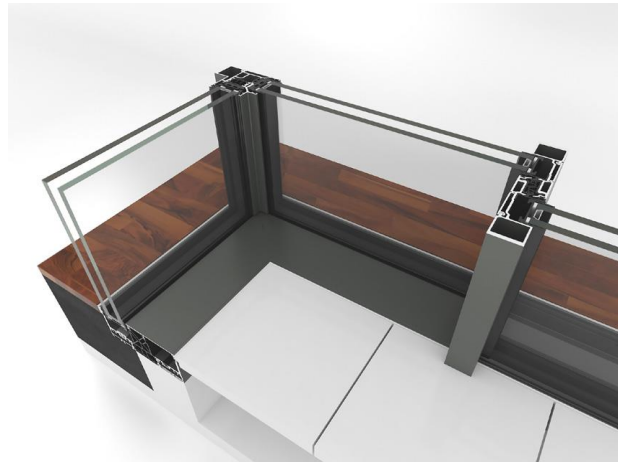
Linking multiple sliders to each other and a domotics system is easy with our thoroughly tested plug-and-play motor design. It enables the use of large, heavy sashes, with guaranteed optimum convenience during use. These large glass areas maximise the incoming light through the facade, creating a comfortable and spacious feeling inside.

OPEN CORNER

A creative corner solution makes it possible to open up spaces without any fixed corner element. When the sliding door is open, the corner is entirely free, offering a unique solution for application in places where access to the exterior adds particular value, expanding the living area, e.g. residential homes, penthouses, holiday homes and hotels.

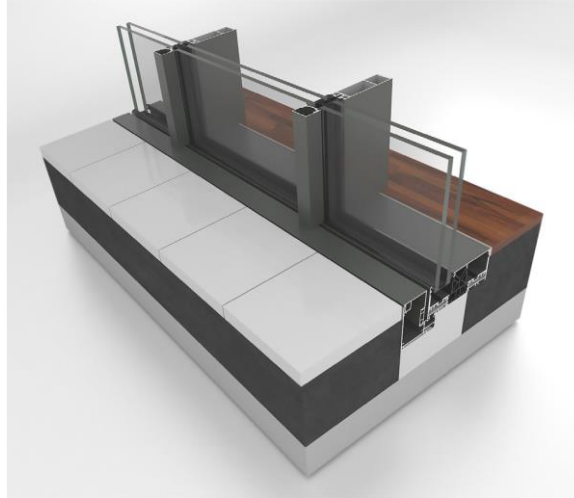
HI-END PERFORMANCES

Hi-Finity is not only an elegant architectural product. It has the performances to back up the ambitions of being a full-fledged sliding system, capable of being used anywhere, even in challenging environments.



WALL

On top of all the other available design choices, multiple standard glass panels can be linked together with 35mm slim vertical profiles. This feature turns the Hi-Finity system into a glass facade with sliding features, rather than a standalone sliding system.



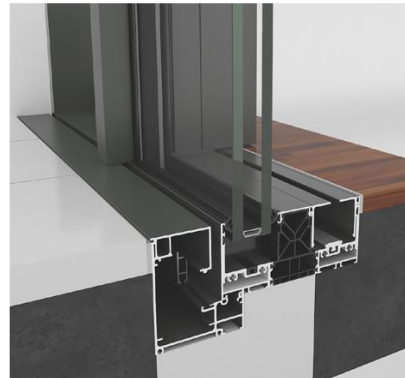
ZERO THRESHOLD

Hi-Finity is always a zero threshold solution, but we also offer 2 alternatives:

PROFILE FINISH, lets you cover the track area, so the floor level remains the same everywhere, which is especially useful with multitrack solutions. **FLOOR FINISH**, lets you completely erase the system boundaries, by continuing the flooring on top of the system. When the door is opened, the bottom profile 'disappears'.



FLOOR FINISH








PROFILE FINISH



TECHNICAL CHARACTERISTICS

Variants		DOUBLE GLAZING	TRIPLE GLAZING
Height	Build-in frame	68 mm / 100 mm	
Visible width / height	Vent	8 mm / 10 mm	
	Meeting section	35 mm	
	Meeting section 4 doors	67 mm / 69 mm	
	Wall	35 mm	
Overall system depth	Frame	Duo Rail : 148 mm 3-Rail : 236.5 mm	Duo Rail : 180 mm 3-Rail : 284.5 mm
	Vent	44 mm	60 mm
Maximal element height		4000 mm	
Maximal weight	Manual vent	300 kg	
	Motorized vent	750 kg	
	Fixed glass pane	1200 kg	
Glass thickness		36.5-38.5 mm	52.5-54.5 mm
Glazing method		Structural glazing (sliding) + Standard glazing (fixed)	
Thermal insulation		52 mm fibreglass reinforced polyamide strips	

PERFORMANCES

ENERGY												
	Thermal Insulation ⁽¹⁾ EN ISO 10077-2	Uf-value down to 1.4 W/m ² K, depending on the frame/vent combination.										
COMFORT												
	Air tightness, max. test pressure ⁽²⁾ EN 1026; EN 12207	1 (150 Pa)		2 (300 Pa)		3 (600 Pa)		4 (600 Pa)				
	Water tightness ⁽³⁾ 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)	E750 (900 Pa)	
	Wind load resistance, max. test pressure ⁽⁴⁾ 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 ⁽⁵⁾ EN 1628-EN 1630; EN 1627	RC 1			RC 2 ⁽⁶⁾				RC 3			

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 air tightness test measures the volume of air that would pass through a closed window at a certain air pressure.
- (3) The water tightness testing involves applying a uniform water spray at increasing air pressure until water penetrates the window.
- (4) The wind load resistance is a measure of the profile's structural strength, tested by applying increasing levels of air pressure to simulate the wind force.
- (5) The burglar resistance is tested by static and dynamic loads, as well as by simulated attempts to break in using specified tools.
- (6) Only for motorized.