

ALUMINIUM BUILDING SOLUTIONS





TABLE OF CONTENTS

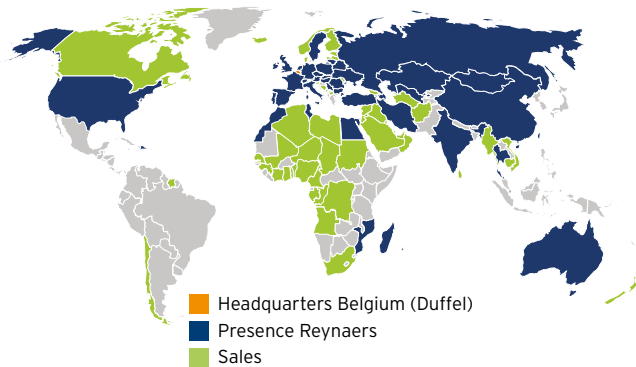
Introduction	5	Conservatories	53
Windows and Doors	7	Cintro	53
Decision matrix	8	TR 200	54
Opening types	10	Complementary Systems	55
ES 45Pa	12	Mosquito	57
ES 50	13	RB 10	60
CS 24-SL	14	Ventalis	61
CS 38-SL	15	Handles	63
CS 59Pa	16	Purity	64
CS 68	17	Orchid	65
CS 77	18	Horizon	66
CS 77-FP	19	Shield	67
CS 77-BP	20	Solar	69
CS 86-HI	21	BS 100 / 30 SOLAR	70
Sensity	22	CW 60 / RB 10 SOLAR	71
CS 104	23	Activities & Services	73
Sliding Systems	25	Reynaers' activities	74
Decision matrix	26	The Reynaers Institute	75
Opening types	27	Training centre	75
CP 45Pa	28	Automation centre	76
CP 50	29	Test centre	78
CP 96	30	Reynaers' services	80
CP 130	32	Reynaers consult and project team	80
CP 155	33	Colours and domotics	81
Hi-Finity	34	Sales support	82
GP 51	35	Total Quality Management	84
CF 68	36	10-Year system guarantee	85
CF 77	37	CE Marking	86
Curtain Walls	39	Green commitment	87
CW 50	40		
CW 60	43		
CW 65-EF	44		
CW 86 (-EF)	46		
Brise Soleil	49		
BS 100 / 30 / 20	50		
BS 40	51		



Reynaers Aluminium is a leading European specialist in the development and marketing of innovative and sustainable aluminium solutions for windows, doors, curtain walling, sliding systems, sunscreening and conservatories. Besides offering an extensive range of standard solutions, the company also develops solutions that are tailored to the individual customer or project. Research, product development and testing are conducted at the Reynaers Institute, the sector's largest private innovation and testing centre, located in Duffel (Belgium). In addition, the company also provides extensive technical support and advice to fabricators, contractors and architects.

TOGETHER FOR BETTER

This is our motto. We want to be a business partner, sharing our worldwide knowledge with architects, engineers and fabricators. With an open and proactive collaboration we can realize the highest standards and get the best results in any project, big or small, together.



INTERNATIONAL PRESENCE

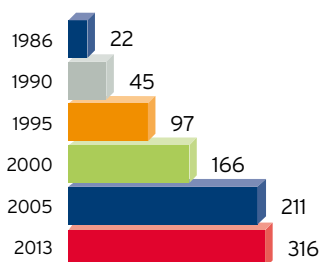
Reynaers Aluminium is the market leader in Belgium and has acquired a strong market position in the 30 countries where it has its own sites. The company's success is due in part to the close partnership between Reynaers and 5,000 partner fabricators, architects and project developers worldwide. The company exports to more than 70 countries on 5 continents.

Our international approach allows us to regularly extend our product range by offering solutions that are suitable for local markets.

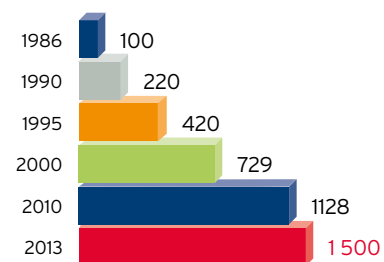
IMPRESSIVE GROWTH

The Reynaers group has experienced massive growth in the last 20 years. Having grown more than 200% over the last 10 years. Reynaers is considered by all players in the industry as one of the leaders in its business. In 2013 the Reynaers group achieved a turnover of 316 million euros and has 1500 employees throughout the world.

Turnover (in million eur)



Employees





WINDOWS & DOORS



ES 45Pa



CS 59Pa



CS 77-BP



ES 50



CS 68



CS 86-HI



CS 24-SL



CS 77



Sensity



CS 38-SL



CS 77-FP



CS 104

DECISION MATRIX

Windows & Doors

WINDOW MATRIX

FUNCTIONAL



RENAISSANCE



SOFTLINE

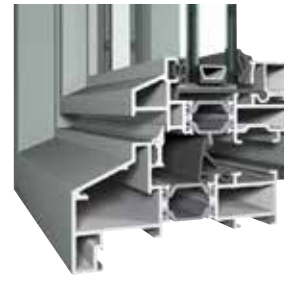


- ES 45Pa
- ES 50
- CS 24-SL
- CS 38-SL
- CS 59Pa
- CS 68
- CS 77
- CS 86-HI
- Sensity
- CS 104

HIDDEN VENT



SLIM LINE



- ES 45Pa
- ES 50
- CS 24-SL
- CS 38-SL
- CS 59Pa
- CS 68
- CS 77
- CS 86-HI
- Sensity
- CS 104



DOOR MATRIX

FLUSH DOOR WITH SURFACE MOUNTED HINGES

FLUSH DOOR WITH BARREL HINGES

WINDOW DOOR



- ES 45Pa
- ES 50
- CS 24-SL
- CS 38-SL
- CS 59Pa
- CS 68
- CS 77
- CS 86-HI
- Sensity
- CS 104

PERFORMANCE MATRIX

- ES 45Pa
- ES 50
- CS 24-SL
- CS 38-SL
- CS 59Pa
- CS 68
- CS 77
- CS 86-HI
- Sensity
- CS 104

SAFETY VARIANTS

- Burglary Proof
- Fire Proof
- Bullet Proof

SUSTAINABILITY

- High Insulation
- Ventalis

OVERALL SYSTEM DEPTH (STANDARD)

Window - Frame	45 mm	50 mm	85 mm	90 mm	50 mm	59 mm	68 mm	77 mm	80 mm	95 mm
Window - Vent	54 mm	59 mm	85 mm	76 mm	59 mm	68 mm	77 mm	86 mm	100 mm	104 mm

PERFORMANCES

Insulation (Uf-value ≥ ...)*	-	1.6 W/m²K	3.3 W/m²K	2.1 W/m²K	-	1.8 W/m²K	1.2 W/m²K	1.0 W/m²K	1.1 W/m²K	0.88 W/m²K
Air tightness Class (value in Pa)	4 (600 Pa)	4 (600 Pa)	-	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)
Wind load resistance Class (value in Pa)	E 2400 (2400 Pa)	4 (1600 Pa)	-	4 (1600 Pa)	5 (2000 Pa)	5 (2000 Pa)	5 (2000 Pa)	5 (2000 Pa)	w5 (2000 Pa)	w5 (2000 Pa)
Water tightness Class (value in Pa)	E900 (900 Pa)	E750 (750 Pa)	-	9A (600 Pa)	9A (600 Pa)	E1200 (1200 Pa)	E900 (900Pa)	E900 (900Pa)	9A (600 Pa)	E900 (900Pa)

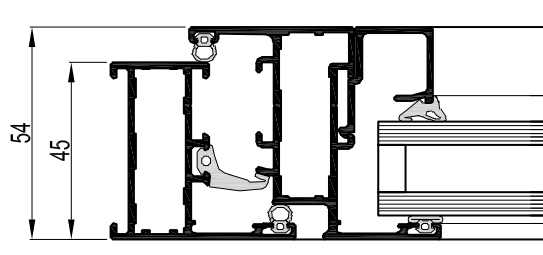
* depending on the frame (vent combination)

OPENING TYPES

WINDOWS	ES 45Pa	ES 50	CS 24-SL	CS 38-SL	CS 59Pa	CS 68	CS 77	CS 86-HI	Sensity	CS 104

ES 45Pa

Windows & Doors



A new dimension of affordable quality

ES 45Pa is a non-insulated system for inward and outward opening windows and doors, designed according to the highest European quality standards. To guarantee superior quality and performance in every situation, the system has three gasket levels for inward and outward opening windows and doors. Through intelligent application, these multiple gaskets meet even the high air- and water tightness requirements of tropical regions. This simple, yet highly innovative design offers a very cost-efficient solution thanks to its optimised fabrication process.

ES 45Pa can be realised with all types of inward and outward opening windows and doors, with an extensive choice of accessories. The numerous combinations of elements and the perfect match with the ES 45Pa door -and sliding system, make ES 45Pa extremely suitable for all types of building concepts. As with all Reynaers systems, a 10-year guarantee is offered.



TECHNICAL CHARACTERISTICS

Min. visible width inward opening window

Min. visible width inward opening window door

Overall system depth

Rebate height

Glass thickness

FUNCTIONAL

Frame

Vent

Frame

Vent

Frame

Vent

47 mm

30 mm

47 mm

61 mm

45 mm

54 mm

22 mm

up to 42 mm

PERFORMANCES



Acoustic performance



Air tightness



Wind load resistance



Water tightness

Rw (C;Ctr) = 41 (-1;-5) dB / 42 (-2;-5) dB, depending in or outward opening window

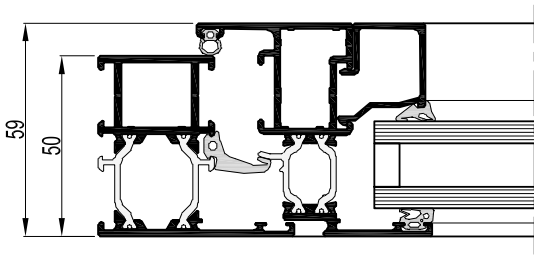
Up to 600 Pa (class 4)

Up to 2400 Pa (class RE2400)

Up to 900 Pa (class E900)

ES 50

Windows & Doors

Simply smart

ES 50 is a well-insulated system for inward and outward opening windows and doors, that combines aesthetic design and energy efficiency with a moderate price. The system's limited built-in depth allows its application in many constructions, even with reduced wall thicknesses.

Design wise, ES 50 offers, next to the functional design frames, special block profiles resembling wooden frames. The use of invisible fittings results in an even more elegant look, since hinges are no longer in sight. In addition, ES 50 can comply with burglar resistance class 2, offering a safe and secure solution both for residential constructions and utility buildings.







TECHNICAL CHARACTERISTICS

Min. visible width inward opening window
Min. visible width inward opening flush door
Overall system depth window
Rebate height
Glass thickness

FUNCTIONAL

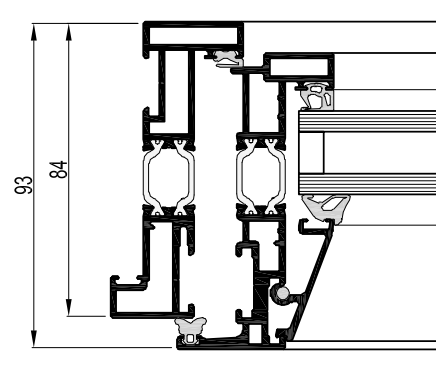
Frame	48 mm
Vent	30 mm
Frame	67 mm
Vent	74 mm
Frame	50 mm
Vent	59 mm
	22 mm
	up to 32 mm

PERFORMANCES

 Thermal insulation	Uf-value down to 1.6 W/m ² K depending on the frame/vent combination and the glass thickness
 Acoustic performance	Rw (C;Ctr) = 35 (-1;-4) dB / 39 (-1;-3) dB, depending on the glazing type
 Air tightness	Up to 600 Pa (class 4)
 Wind load resistance	Up to 1600 Pa (class 4)
 Water tightness	Up to 750 Pa (class E750)
 Anti-burglar	RC2 / WK2 (windows)(Dutch standard NEN 5096)

CS 24-SL

Windows & Doors



Ultimate elegance

CS 24-SL is a thermally insulated system for outward opening windows and doors that combines ultra-slim design, stability and ease in production. The system's slender exterior contours and specially designed glazing beads give it a steel look & feel.

This in combination with the excellent insulation level makes CS 24-SL not only suitable for new-build houses, but also for renovations of steel-framed windows and doors, residential constructions, schools and utility buildings.

The standard outward opening types can be applied in numerous combinations in line with the needs of the building. A unique aspect is that this slim system can also comply with burglar resistance class 2, offering a safe and secure solution.



TECHNICAL CHARACTERISTICS

Min. visible width inward opening window

Min. visible width outward opening window door

Overall system depth

Rebate height

Glass thickness

Frame

Vent

Frame

Vent

Frame

Vent

SLIM LINE

19 mm

31 mm

19 mm

70 mm

85 mm

85 mm

14 mm

up to 29 mm

PERFORMANCES



Thermal insulation



Air tightness



Wind load resistance



Water tightness



Anti-burglar

Uf-value down to 3.3 W/m²K depending on the frame/vent combination and the glass thickness

Up to 600 Pa (class 4)

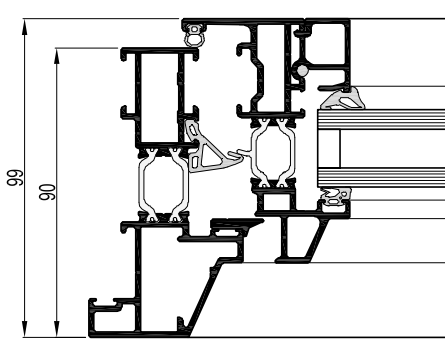
Up to 1200 Pa (class 3)

Up to 750 Pa (class E750)

RC2 / WK2 (windows & doors) (Dutch standard NEN 5096)

CS 38-SL

Windows & Doors



Respect for the original

CS 38-SL is a thermally insulated system for inward and outward opening windows and doors that combines elegant design, stability and easy in production. The system's austere style and slender contours on the outside give it a steel look & feel.

As such, CS 38-SL is the perfect solution for both new-built constructions and the replacement of steel-framed windows and doors, respecting the original design but offering a thermally improved solution.

The minimalistic design is reinforced by an invisible drainage system, avoiding the use of drainage caps at the outside of the windows. This system can also comply with burglar resistance class 2, offering a safe and secure solution.

TECHNICAL CHARACTERISTICS

Min. visible width inward opening window
Min. visible width inward opening flush door
Overall system depth window
Rebate height
Glass thickness

SLIM LINE

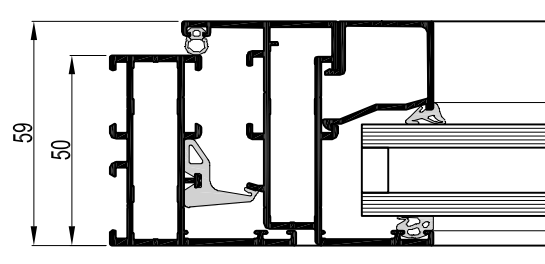
Frame	33 mm
Vent	23 mm
Frame	33 mm
Vent	53 mm
Frame	90 mm
Vent	76 mm
	14 mm
	up to 46 mm

PERFORMANCES

Thermal insulation	Uf-value down to 2.1 W/m ² K, depending on the frame/vent combination
Acoustic performance	Rw (C;Ctr) = 36 (-1;-4) dB / 45 (0;-3) dB, depending on the glazing type
Air tightness	Up to 600 Pa (class 4)
Wind load resistance	Up to 1600 Pa (class 4)
Water tightness	Up to 750 Pa (class E750)
Anti-burglar	RC2 / WK2 (windows & doors) (Dutch standard NEN 5096)

CS 59Pa

Windows & Doors



Ideal for warm climates

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

For winter gardens, special combinations are possible with the Reynaers conservatory systems. The different design options and the large choice of colours allow a perfect match with the building style.

Furthermore CS 59Pa can comply with burglar resistance class 2, offering a safe and secure solution. As with all Reynaers systems, a 10-year guarantee is offered.



TECHNICAL CHARACTERISTICS

		PARALLEL	RENAISSANCE
Min. visible width inward opening window	Frame	49 mm	55 mm
	Vent	21 mm	31 mm
Min. visible width inward opening flush door	Frame	61,5 mm	-
	Vent	72,5 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

PERFORMANCES

Acoustic performance

Rw (C;Ctr) = 36 (-1;-3) dB / 44 (-2;-4) dB, depending on the glazing type

Air tightness

Up to 600 Pa (class 4)

Wind load resistance

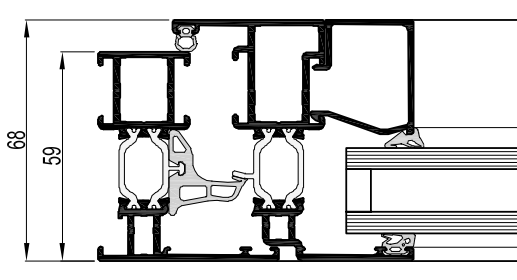
Up to 2000 Pa (class 5)

Water tightness

Up to 750 Pa (class E750)

CS 68

Windows & Doors



Universal solution

CS 68 is a universal window and door system, with good performances regarding stability, thermal insulation and security. The system is available in a variety of aesthetic styles: Functional, Renaissance, Softline and Hidden Vent – this way the windows can match your building style perfectly.

The system offers a range of solutions for inward and outward opening windows, doors and is compatible with the Ventalis ventilation units. In addition, CS 68 windows and doors can comply with burglar resistance classes 2 and 3, offering an ultimate level of security.

TECHNICAL CHARACTERISTICS

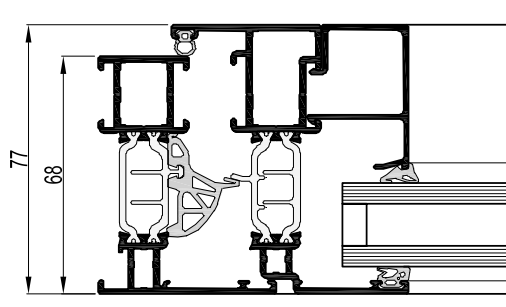
		FUNCTIONAL	RENAISSANCE	SOFTLINE	HIDDEN VENT
Min. visible width inward opening window	Frame	51 mm	51 mm	51 mm	76 mm
	Vent	33 mm	33 mm	33 mm	not visible
Min. visible width inward opening flush door	Frame	68 mm	-	-	-
	Vent	76 mm	-	-	-
Overall system depth window	Frame	59 mm	68 mm	68 mm	59 mm
	Vent	68 mm	77 mm	77 mm	63.5 mm
Rebate height		25 mm	25 mm	25 mm	18.5 mm
Glass thickness		up to 44 mm	up to 44 mm	up to 44 mm	up to 40 mm

PERFORMANCES

Thermal insulation	Uf-value down to 1.8 W/m ² K, depending on the frame/vent combination
Acoustic performance	Rw (C;Ctr) = 37 (-1;-4) dB / 44 (-2;-5) dB, depending on the glazing type
Air tightness	Up to 600 Pa (class 4)
Wind load resistance	Up to 2000 Pa (class 5)
Water tightness	Up to 1200 Pa (class E1200)
Anti-burglar	RC2 / WK2 (European standard EN(V) 1627 - EN(V) 1630 (windows), Dutch standard NEN 5096 (windows & doors) RC3 / WK3 (windows & doors) (Dutch standard NEN 5096)

CS 77

Windows & Doors



Optimised safety and comfort

CS 77 is a high insulating window and door system that meets elevated requirements regarding thermal insulation, stability and security. Anticipating on the thermal requirements, the insulation value (Uf) for the HI+ variant of this system goes down to 1.7 W/m²K for a standard opening window. The unique concept of the system makes it perfectly suitable for triple glazing and CS 77 even achieved the Swiss Minergie® component label.

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 (class 2 & 3) making it an extremely secure system.

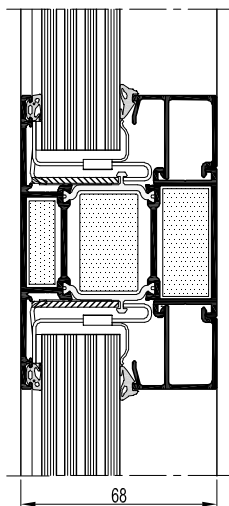
To match the different building types, the system is available in a variety of aesthetic styles: Functional, Renaissance and Hidden Vent.

The CS 77 system includes the most complete range of solutions for all types of inward and outward opening windows and doors. Ultimate combination possibilities with the CP 130 sliding system and Ventalis ventilation units, makes CS 77 extremely suitable for all types of building concepts, even with the highest safety requirements.



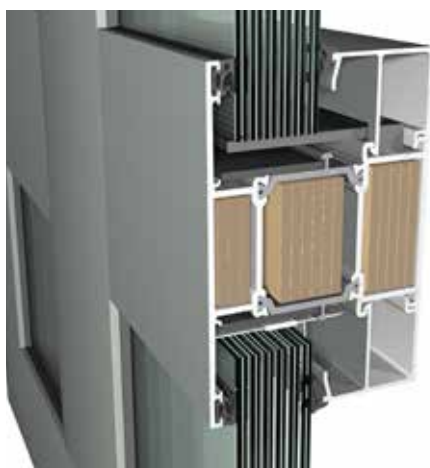
TECHNICAL CHARACTERISTICS		FUNCTIONAL	RENAISSANCE	HIDDEN VENT	SOFT LINE
Min. visible width inward opening window	Frame	51 mm	51 mm	76 mm	51 mm
	Vent	33 mm	33 mm	not visible	33 mm
Min. visible width inward opening flush door	Frame	68 mm	-	-	-
	Vent	76 mm	-	-	-
Overall system depth window	Frame	68 mm	77 mm	68 mm	68 mm
	Vent	77 mm	86 mm	72.5 mm	77 mm
Rebate height		25 mm	25 mm	18.5 mm	25 mm
Glass thickness		up to 53 mm	up to 53 mm	up to 49 mm	up to 30 mm

PERFORMANCES	
Thermal insulation	Uf-value down to 1.2 W/m ² K depending on the frame/vent combination and the glass thickness
Acoustic performance	Rw (C;Ctr) = 36 (-1;-4) dB / 42 (-2;-4) dB, depending on the glazing type
Air tightness	Up to 600 Pa (class 4)
Wind load resistance	Up to 2000 Pa (class 5)
Water tightness	Up to 900 Pa (class E900)
Anti-burglar	RC2 / WK2 (windows & doors)(European standard EN(V) 1627 - EN(V) 1630, Dutch standard NEN 5096) RC3 / WK3 (European standard EN(V) 1627 - EN(V) 1630 (windows), Dutch standard NEN 5096 (windows & doors))



CS 77-FP EI60

CS 77-FP
Windows & Doors



The CS 77-FP EI30 and EI60 was developed based on the existing CS 77 profiles and accessories for windows and doors and was tested in an optimized European test and approval program. The fireproofing time span is achieved by inducing a special cooling material into the profile chambers and by using self-adhesive and water-resistant swelling gaskets. These gaskets do not need to be sealed, reducing fabrication time of the profiles and saving costs.

The CS 77 proof range is available as outward opening single and double doors, panic doors, combined fixed window elements as well as glazed partition walls. This extensive range of configurations offers a huge range of options and combinations for architects to work with. Furthermore a large choice of accessories and locking devices is available.

TECHNICAL CHARACTERISTICS

Rebate height	
Glass thickness	
Glazing method	

	CS 77-FP EI30	CS 77-FP EI60
Rebate height	25 mm	25 mm
Glass thickness	from 15 mm to 52 mm	from 15 mm to 52 mm
Glazing method	dry glazing with EPDM	dry glazing with EPDM

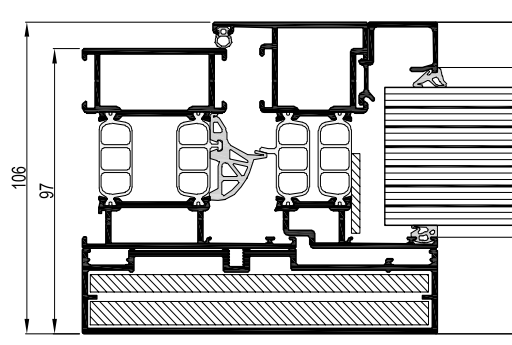
PERFORMANCES

European testing standards	
Classification standard	
Fire resistance classification	
Anti-burglar	

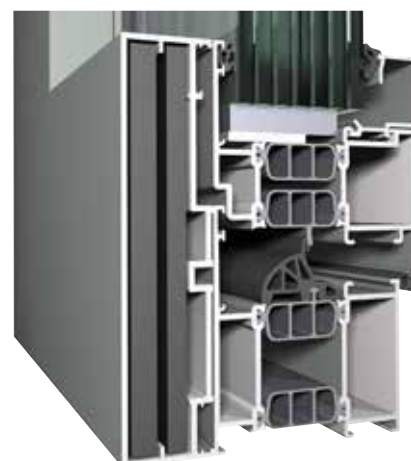
	CS 77-FP EI30	CS 77-FP EI60
European testing standards	EN 1364-1 EN 1634-1	EN 1364-1 EN 1634-1
Classification standard	EN 13501-2	EN 13501-2
Fire resistance classification	EW30, E30, EI ₁ 30, EI ₂ 30	EI45, EW60, E60, EI60
Anti-burglar	RC2 / WK2 (partitioning & doors) (European standard EN(V) 1627 - EN(V) 1630)	

CS 77-BP

Windows & Doors



CS 77-BP is an extension of CS 77 which enables the realisation of bulletproof windows and doors according to the most severe European standards.



TECHNICAL CHARACTERISTICS

Min. visible width inward opening window

Min. visible width inward opening flush door

Overall system depth window

Rebate height

Glass thickness

BULLETPROOF

Frame	128 mm
Vent	-
Frame	77 mm
Vent	77 mm
Frame	97 mm
Vent	77 mm
	25 mm
	from 25 to 63 mm

PERFORMANCES

Thermal insulation

Acoustic performance

Air tightness

Wind load resistance

Water tightness

Anti-bullet

Uf-value down to 1.94 W/m²K, depending on the frame/vent combination

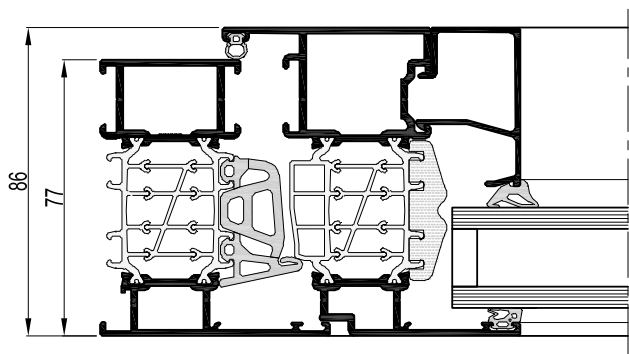
Rw (C; Ctr) ≤ 42 (-2; -4) dB, depending on the glazing type

Up to 600 Pa (class 4)

Up to 2000 Pa (class 5)

Up to 900 Pa (class E900)

European standard EN 1522 - 1523



CS 86-HI

Windows & Doors



Highly energy efficient

CS 86-HI is a highly insulated system for inward opening windows and doors, which meets the highest requirements concerning safety and stability. The system's unique insulation concept not only ensures the extreme stability and elevated water- and air tightness, but also makes it perfectly suitable for triple glass applications.

The overall insulation value (Uf) of the system's HI+ variant goes down to 1.0 W/m²K, making it one of the most energy-efficient systems available. CS 86 even achieved the Swiss Minergie® and Minergie-P® component label. With regard to safety, CS 86-HI can comply with burglar resistance classes 2 and 3, offering an ultimate level of security.

Ultimate combination possibilities with the CP 155 sliding system and CF 77 Folding doors, makes CS 86 extremely suitable for all types of building concepts.

TECHNICAL CHARACTERISTICS

Min. visible width inward opening window
Min. visible width inward opening flush door
Overall system depth window
Rebate height
Glass thickness

	FUNCTIONAL	HIDDEN VENT
Frame	51 mm	70 mm
Vent	35 mm	not visible
Frame	68 mm	-
Vent	76 mm	-
Frame	77 mm	77 mm
Vent	86 mm	79 mm
	25 mm	17 mm
	up to 72 mm	up to 44 mm

PERFORMANCES

- Thermal insulation
- Acoustic performance
- Air tightness
- Wind load resistance
- Water tightness
- Anti-burglar

Uf-value down to 1.0 W/m²K, depending on the frame/vent combination and the glass thickness

Rw (C;Ctr) = 36 (-1;-4) dB / 44 (0;-2) dB, depending on the glazing type

Up to 600 Pa (class 4)

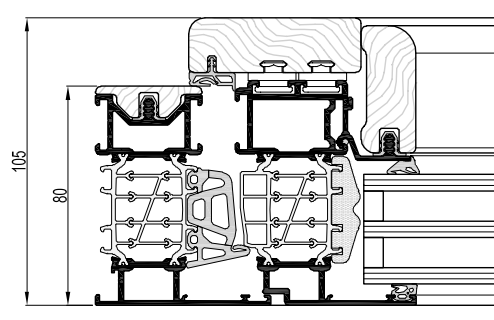
Up to 2000 Pa (class 5)

Up to 900 Pa (class E900)

RC2 / WK2 (windows & doors)(European standard ENV 1627 - ENV 1630) RC3 / WK3 (windows)(European standard ENV 1627 - ENV 1630)

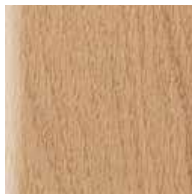
Sensity

Windows & Doors



Combining the best of aluminium and wood

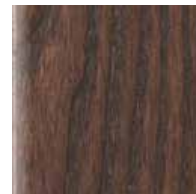
SENSITY is a highly insulated aluminium system for windows, based on the technologically refined Reynaers CS 86-HI system, providing the best guarantee for a comfortable interior climate. The thermally insulated aluminium frame will ensure the durability, wind and water tightness and acoustic performance of your windows. This window system is perfectly suitable for different architectural creations. The aluminium at the outside allows you to personalise your windows, by selecting from over 100 possible RAL colors, from 60 structural Coatex surfaces or even give it a “wooden-look” finish, while maintaining the ultimate low maintenance properties of the aluminium.



BLEACHED OAK
modern interior



TOBACCO
cozy interior



WENGE
luxury interior

TECHNICAL CHARACTERISTICS

Min. Visible width inward opening window

Overall system depth window

Rebate height

Glass thickness

PERFORMANCES

- Thermal insulation
- Acoustic performance
- Air tightness
- Wind load resistance
- Water tightness

FUNCTIONAL

Frame	64 mm
Vent	35 mm
Frame	80 mm
Vent	100 mm
	25 mm
	up to 52 mm

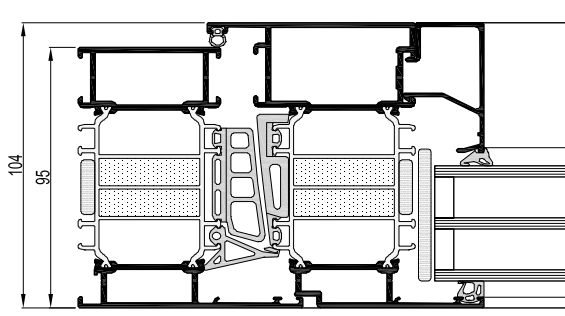
Uf-value down to 1.1 W/m²K depending on the frame/vent combination and the glass thickness

Rw (C;Ctr) = 37 (-1,-3) / 39 (-1,-3) dB

Up to 600 Pa (class 4)

Up to 2000 Pa (class 5)

Up to 600 Pa (class 9A)



CS 104

Windows & Doors



Solution for low energy constructions

CS 104 is our most innovative inward opening window and door system, designed to increase comfort and decrease energy consumption to a minimum. The extreme insulation levels (U_f down to $0.88 \text{ W/m}^2\text{K}$) are achieved by a patented technology, in which insulation strips with increased stability are combined with special foam in a way that no extra manipulation is needed during the production of the elements. This guarantees a constant quality of the assembled element, making these windows and doors perfectly applicable in passive constructions.

Besides a high insulation level, air tightness is the most important factor determining a window's or door's energy efficiency. Therefore, a new set of specific gaskets was developed to ensure ultimate water- and air tightness of the system, making this system applicable for extreme conditions such as coastal areas and high altitudes. The increased built-in depth (104mm) contributes to the strength and stability of the elements, allowing large dimensions, even with the application of triple glazing. Additionally, the system offers several different levels of burglar resistance (class 2 and 3).

TECHNICAL CHARACTERISTICS

Min. Visible width inward opening window
Overall system depth window
Rebate height
Glass thickness

	WINDOWS	DOORS
Frame	69 mm	82 mm
Vent	45 mm	71 mm
Frame	95 mm	95 mm
Vent	104 mm	95 mm
	25 mm - 30 mm	25 mm
	65 mm	65 mm

PERFORMANCES

Acoustic performance
Air tightness
Anti-burglar
Thermal insulation
Water tightness
Wind load resistance

WINDOWS	DOORS
Rw (C;Ctr) = 36 (-1,-5) dB / 43 (-3,-6) dB depending on the glazing type	
Up to 600 Pa (class 4)	Up to 600 Pa (class 3)
RC2 / WK2 (windows & doors)(European standard ENV 1627 - ENV 1630, Dutch standard NEN 5096) RC3 / WK3 (European standard ENV 1627 - ENV 1630 (windows), Dutch standard NEN 5096 (windows & doors))	
Uf-value down to $0.88 \text{ W/m}^2\text{K}$ depending on the frame/vent combination and the glass thickness	
Up to 900 Pa (class E900)	Up to 300 Pa (class 7A)
Up to 2000 Pa (class 5)	Up to 800 Pa (class 2)



Architect: Daluz / González Architekten
Photography: Peter Baracchi

SLIDING SYSTEMS



CP 45Pa



CP 130 / CP 130-LS



GP 51



CP 50



CP 155 / CP 155-LS



CF 68



CP 96 / CP 96-LS








Hi-Finity



CF 77

DECISION MATRIX

Sliding Systems

DESIGN VARIANTS	CP 45Pa	CP 50	CP 96	CP 130	CP 155	Hi-Finity	CF 68	CF 77
Functional								
Softline								
Renaissance								
Slim Line								
Monorail								
2-Rails								
3-Rails								
Slide								
Lift-Slide								
Automatic								
Flat bottom								
SAFETY VARIANTS								
 Burglary Proof								
OVERALL SYSTEM DEPTH (STANDARD)								
Frame	50 mm	50 mm	96 mm	130 mm	155 mm	147/179 mm	68 mm	77 mm
Vent	29 mm	33 mm	43 mm	59 mm	68 mm	44/60 mm	68 mm	77 mm
SUSTAINABILITY								
High insulation								
Ventalis								
ENERGY PERFORMANCE								
 Insulation (Uf-value >= ...)*	-	3,4 W/m²K	3,5 W/m²K	2,8 W/m²K	2,2 W/m²K	1,4 W/m²K	1,8 W/m² K	2,3 W/m²K
 Air tightness Class (value in Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)	4 (600 Pa)
 Water tightness Class (value in Pa)	6A (250 Pa)	5A (200 Pa)	9A (600 Pa)	9A (600 Pa)	E900 (900 Pa)	9A (600 Pa)	9A (600 Pa)	9A (600 Pa)
 Wind load resistance Class (value in Pa)	4 (1600 Pa)	3 (1200 Pa)	3 (1200 Pa)	3 (1200 Pa)	4 (1600 Pa)	4 (1600 Pa)	2 (800 Pa)	3 (1200 Pa)

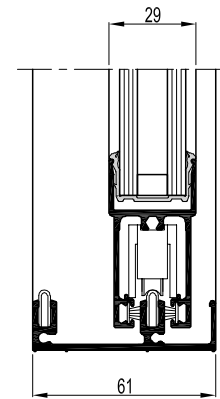
* Depending on frame/vent combination - HI variant

OPENING ELEMENTS

	CP 45Pa	CP 50	CP 96	CP 130	CP 155	Hi-Finity	CF 68	CF 77

CP 45Pa

Sliding Systems



Less is more

CP 45Pa is a non-insulated sliding system offering a wide range of solutions ideal for applications in warm climates, winter gardens or the partitioning of indoor office spaces. CP 45Pa applies the latest techniques, designed according to the highest European quality standards. This sliding system offers the complete range of opening possibilities, from sliding elements in the wall, over 2-, 3- to even 4-rail solutions.




With the minimalistic design, offered in Functional and Softline style, CP 45Pa realises an aesthetic solution for your building. In addition, the sliding elements can easily be integrated with different types of windows, conservatory systems, sun screenings and screen doors.



TECHNICAL CHARACTERISTICS

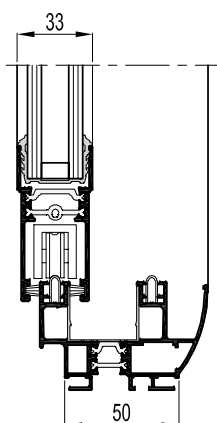
Style variants		MONORAIL	2-RAIL	3-RAIL	4-RAIL
Visible width / height	Frame	45 mm	17 mm / 45 mm	17 mm / 45 mm	17 mm / 45 mm
	Horizontal vent	56 mm			
	Vertical vent	54.5 mm / 67 mm			
	Meeting section	40 mm			
Overall system depth window	Frame	48 mm / 56 mm	50 mm / 61 mm	86 mm / 97 mm	122 mm / 133 mm
	Vent	29 mm			
Glass thickness		from 6 mm to 24 mm			

PERFORMANCES

 Air tightness	Up to 600 Pa (class 4)
 Wind load resistance	Up to 1600 Pa (class 4)
 Water tightness	Up to 250 Pa (class 6A)

CP 50

Sliding Systems



Discrete functionality

CP 50 is an insulated sliding system that is elegant, slim and extremely lightweight. Besides meeting the aesthetic requirements, this system is designed according to the highest European quality standards.

CP 50 offers a wide range of opening possibilities, provided in the elegant Softline look, with matching handles.

The built-in depth of 50 mm allows CP 50 to perfectly integrate with ES 50 and CS 59 series.

TECHNICAL CHARACTERISTICS

Visible width / height

Overall system depth


Glass thickness

	2-RAIL	3-RAIL
Frame	47.2 mm	
Horizontal Vent	67.3 mm	
Vertical vent	69.7 mm	
Meeting section	34 mm	
Frame	50 mm	92.4 mm
Vent	33 mm	
	from 6 mm to 26 mm	


PERFORMANCES

 Thermal insulation


Uf-value down to 3.4 W/m²K
depending on the frame/vent combination

 Air tightness

Up to 600 Pa (class 4)

 Wind load resistance

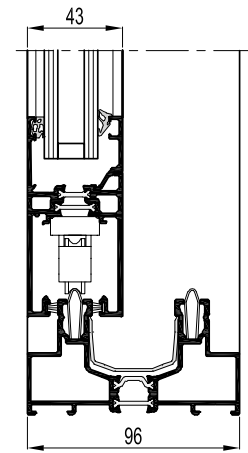
Up to 1200 Pa (class 3)

 Water tightness

Up to 200 Pa (class 5A)

CP 96 / CP 96-LS

Sliding Systems



Safety and durability at a fair price

CP 96 sliding and lift & slide elements are the perfect answer to the increasing demand for safety and durability. They combine strong technical performance with aesthetical minimalism.






CP 96 is available in a wide range of opening possibilities and can also comply with different burglar resistance levels.

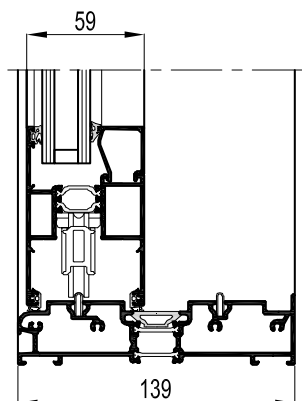


TECHNICAL CHARACTERISTICS

Style variants		CP 96 MONORAIL	CP 96 2-RAIL	CP 96 3-RAIL	CP 96-LS 2-RAIL
Visible width / height	Frame			52 mm	
	Vent			90 mm	
	T-profile			89-102 mm	
	Meeting section			104 mm	
Overall system depth window	Frame	96 mm	96 mm	149 mm	96 mm
	Vent			43 mm	
Glass thickness		from 10 mm to 29 mm			

PERFORMANCES

 Thermal insulation	Uf-value down to 3.5 W/m ² K depending on the frame/vent combination
 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)
 Anti-burglar	WK 2 (Dutch standard NEN 5096)



CP 130 / CP 130-LS

Sliding Systems



Aesthetic functionality

CP 130 is a highly insulated slide and lift-slide system, which meets the highest requirements with regard to insulation, stability and safety. The system perfectly links up to the CS 77 series.

CP 130 is available with various opening possibilities and 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.



TECHNICAL CHARACTERISTICS

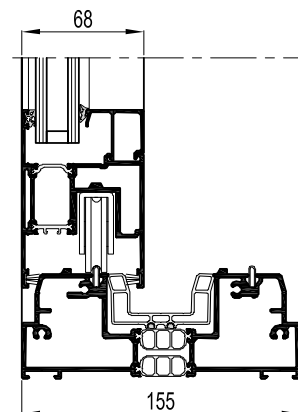
Style variants		CP 130 MONORAIL	CP 130 2 RAIL	CP 130 3 RAIL	CP 130-LS 2 RAIL	CP 130-LS 3 RAIL
Visible width / height	Frame	50 mm	50 mm	50 mm	28/35/40 mm	28/35/40 mm
	Vent	94 mm				
	T-profile	From 76 mm till 115 mm				
Overall system depth	Frame	130 mm	130 mm	181 mm	139 mm	210 mm
	Vent	59 mm				
Rebate height		25 mm				
Glass thickness		Up to 43 mm				

PERFORMANCES

Thermal insulation	Uf-value down to 2.78 W/m ² K, depending on the frame vent combination
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), 450 Pa (class 8A), 300 Pa (class 7A)
Anti-burglar	WK 2 (European standard ENV 1627 - ENV 1630)

CP 155 / CP 155-LS

Sliding Systems



Sophistication for quality and insulation

CP 155 is a premium insulating slide and lift-slide system, designed to create maximal glass areas, combined with increased comfort. The system perfectly links up to the CS 86 series.

The new CP 155 can be upgraded to High Insulation (HI) in order to achieve even better insulation values, which makes the system suitable for low energy buildings. A specific variant of CP 155 monorail has even achieved the Swiss Minergie® component label.

CP 155 is available with various opening possibilities and the low threshold option offers a solution to improve the buildings accessibility. Optional automatic opening solutions guarantee a maximum of comfort.

The lift-slide system allows the creation of glazed doors with extreme dimensions and weights up to 400 kg. It also offers an aesthetic minimalistic middle section. Additionally, CP 155 can comply with burglar resistance class 2, offering a safe and secure solution.

TECHNICAL CHARACTERISTICS

Style variants		CP 155 MONORAIL	CP 155 2-RAIL	CP 155 3-RAIL	CP 155 LS MONORAIL	CP 155 LS 2-RAIL	CP 155 LS 3-RAIL
Visible width / height	Frame	60 mm					
	Vent	102 mm					
	Meeting section	115 mm					
Overall system depth	Frame	155 mm	155 mm	242 mm	155 mm	155 mm	242 mm
	Vent	68 mm					
Rebate height		25 mm					
Glass thickness		up to 52 mm					

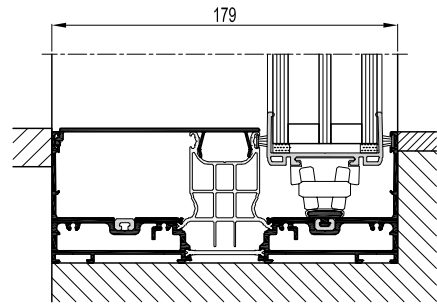
PERFORMANCES

Thermal insulation	Uf-value down to 1.07 W/m ² K, depending on the frame/vent combination
Acoustic performance	Rw (C;Ctr) = 35 (-2;-5) dB / 42 (-1;-3) dB, depending on the glazing type
Air tightness	Up to 600 Pa (class 4)
Wind load resistance	Up to 1600 Pa (class 4)
Water tightness	900 Pa (class E900), 300 Pa (class 7A), 450 Pa (class 8A)
Anti-burglar	WK 2 (European standard ENV 1627 - ENV 1630)



Hi-Finity

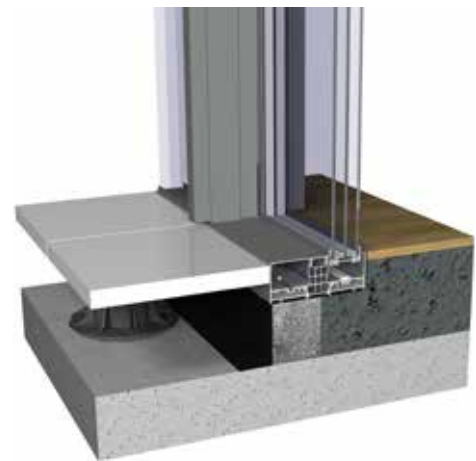
Sliding Systems



Enjoy an infinite view with ultimate performances! The ultra-slim design of the Hi-Finity sliding door creates large transparent surfaces, with a light, sleek and elegant appearance.

This fully transparent and accessible sliding door seamlessly extends the house's interior to the outside. Despite the minimal visual sidelines, the system's high strength allows Hi-Finity to carry the weight of a large glass pane up to 500 kilograms.

This in combination with the high energy performance and the minimalistic look makes this product the best solution for low-energy contemporary architecture.



TECHNICAL CHARACTERISTICS

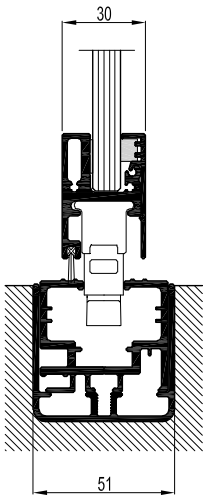
Variants		Double glazing	Triple glazing
Height	Build-in frame	68 mm / 100 mm	68 mm / 100 mm
Visible width / height	Vent	8 mm	10 mm
	Meeting section	35 mm (adjustable)	35 mm (adjustable)
Overall system depth	Meeting section 4 doors	67 mm (adjustable)	69 mm (adjustable)
	Frame	Duo Rail : 147 mm 3-Rail : 234 mm	Duo Rail : 179 mm 3-Rail : 282 mm
	Vent	44 mm	60 mm
Maximal element height		3500 mm	
Maximal vent weight		500 kg / 300 kg motorized	
Glass thickness		36-38 mm	52-54 mm

PERFORMANCES

Thermal insulation	Uf-value down to 1.4 W/m ² K, depending on the frame/vent and the glazing thickness.
Air tightness	Up to 600 Pa (class 4)
Wind load resistance	Up to 1600 Pa (Class 4B)
Water tightness	Up to 600 Pa (class 9A)
Anti-burglar	RC 2/WK2 (European standard EN 1628 - EN 1630)

GP 51

Sliding Systems



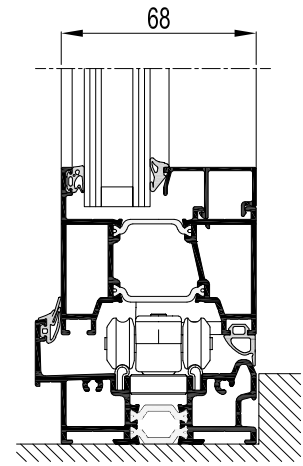
The GP 51 is an innovative full glass sliding system. It consists of individually sliding glass panels, without vertical frames. The system provides a convenient and modular solution for glazing balconies and terraces or partitioning internal office spaces. GP 51 has been designed to meet the requirements of modern, lightweight and transparent architecture. Easy and fast to assemble and to install, the system is unique due to its flat bottom rail solution and the absence of a threshold allowing easy access to the terrace. GP 51 is the ideal solution for enjoying the surrounding environment all year long. Certified fabricators are trained to assemble and install this GP 51 system.

TECHNICAL CHARACTERISTICS

Corner connection of the rails	90° - 270°
Glass thickness	6 - 8 - 10 mm
Dimensions glass panels	max. 2800 mm height max. 800 mm width
Glazing type	tempered glass

CF 68

Folding Systems



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.

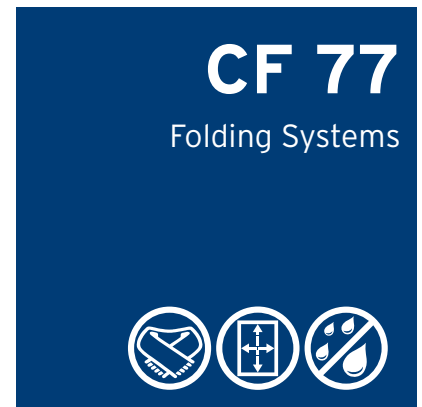
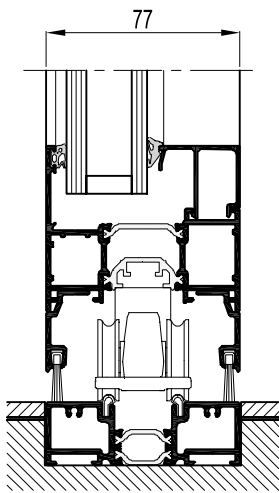
TECHNICAL CHARACTERISTICS

Variants

	Frame / Threshold	Flush threshold	Low threshold	Double weather seal	High performance
Visible width / height	Frame-vent section	0-15 mm	9-30 mm	23-44 mm	23-74 mm
	Vent-vent section			100 mm	
				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	

PERFORMANCES

Thermal insulation	Uf-value down to 1.8 W/m ² K(*), depending on the profile combination			
Air Tightness	Not applicable	Class 2	Class 4	Class 4
Wind load resistance	Not applicable	Class B2	Class C2	Class C2
Water Tightness	Not applicable	Class 4A (150 Pa)	Class 7A (300 Pa)	Up to Class 9A (600 Pa)
Anti-burglar	Not applicable	RC2/WK 2	RC2/WK 2	RC2/WK 2



Invite nature into your building

CF 77 combines high insulation and comfort with maximal transparency and aesthetics. This folding door system optimizes your way of living by drawing the exterior into your home, with a minimum of space usage. This high performance system offers different opening types, both inward and outward, to meet all possible requirements. Apart from the standard folding elements, CF 77 can feature a main door principle, in which the first leaf is used as an entrance door without affecting the other folding leaves.

CF 77 is available in 4 different threshold solutions, from high performance to low and even flush thresholds, in order to perfectly match all comfort and aesthetic requirements. Additionally, the CF 77-concept can perfectly be combined with the CS systems for windows, doors and curtain walls.

Furthermore, CF 77 is available in Functional Slim-Line style. This CF 77-SL variant features a slimmer visible profile width.



TECHNICAL CHARACTERISTICS

Style variants	CF 77	CS 77-SL
Max. vent size	1200 x 3000 mm	1200 x 3000 mm
Max. vent weight	120 kg	120 kg
U _w (W/m ² K) 4-panel: 4000 x 2700 mm	down to 1.66	down to 1.64
Visible width vent-vent section	144 mm	122 mm

PERFORMANCES

	CF 77	CS 77-SL
Thermal insulation	U _f -value down to 2.25 W/m ² K	U _f -value down to 2.31 W/m ² K
Air Tightness	Up to Class 4	Up to Class 4
Wind load resistance	Up to Class B3	Up to Class B3
Water Tightness	Up to Class 9A (600 Pa)	Up to Class 9A (600 Pa)
Anti-burglar	RC 2 / WK 2	RC 2 / WK 2



TWINS (J. Mayer H./a2o architecten/Lens°ass architecten)

CURTAIN WALLS



CURTAIN WALLS



CW 50



CW 65 EF



CW 86-EF



CW 60

CW 50

Curtain Walls

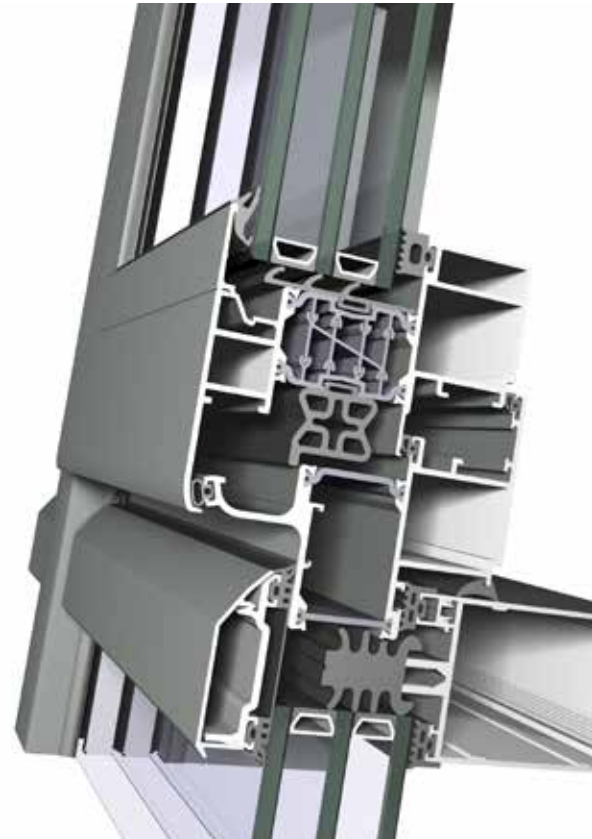


Unlimited creative freedom and maximum entrance of light

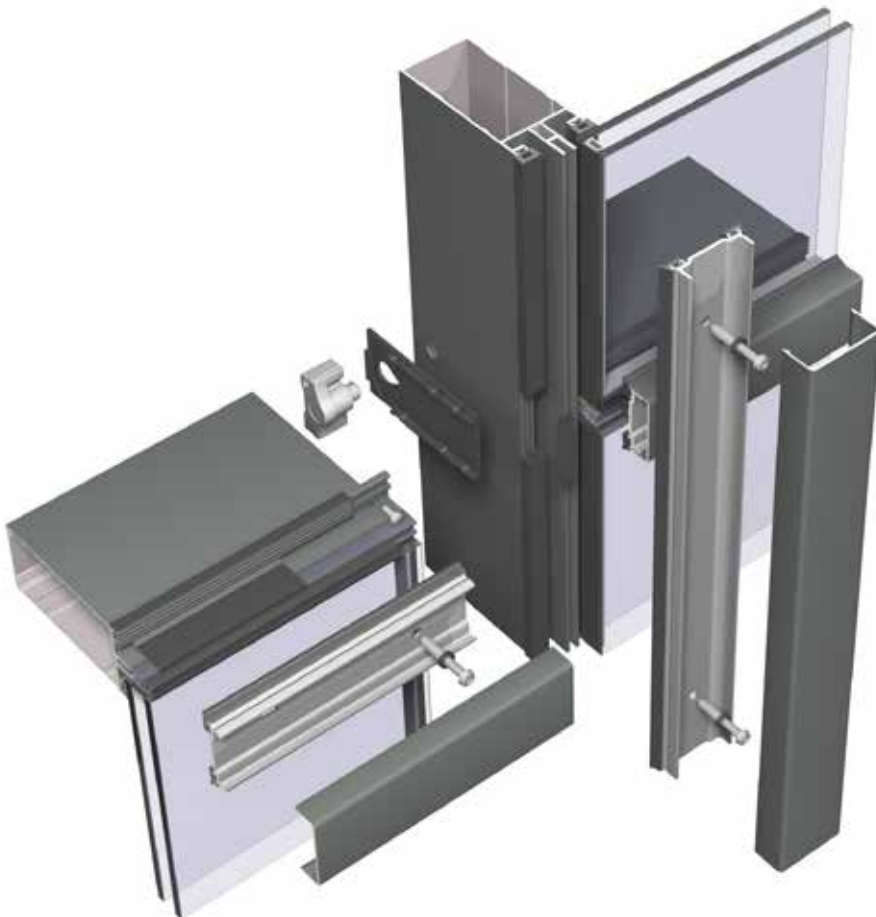
Curtain Wall 50 is a façade and roof system that offers unlimited design freedom and allows maximum transparency. Innovative solutions contribute towards the tendency of big, heavy and high insulated glass panes. CW 50 supports up to 150, 310 and even 450 kg in various glass support configurations.

The system is available in several design and glazing variants, but also includes different technical variants to comply with specified levels of fire-resistance and thermal insulation.

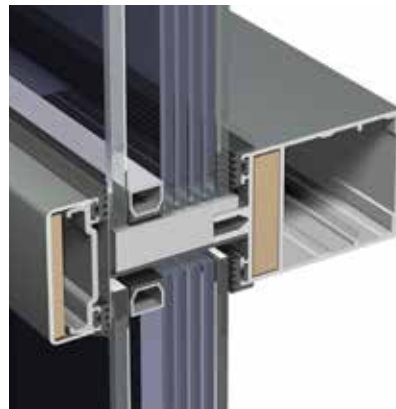
The design variants offer solutions for both the exterior and the interior of the building. The glazing variants range from using standard pressure plates, to structurally glazed and structurally clamped solutions.



CW 50 flush roof vent

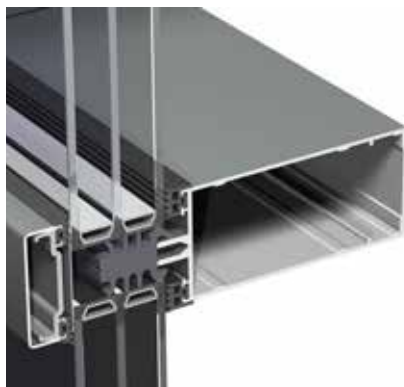


TECHNICAL CHARACTERISTICS



Style variants	CW 50
Interior visible width	50 mm
Exterior visible width	50 mm
Glass thickness	from 6 to 62 mm

Style variants	CW 50-FP (EI30 & EI60)
Interior visible width	50 mm
Exterior visible width	50 mm
Glass thickness	33 mm / 48 mm



Style variants	CW 50-HI
Interior visible width	50 mm
Exterior visible width	50 mm
Glass thickness	from 22 to 62 mm

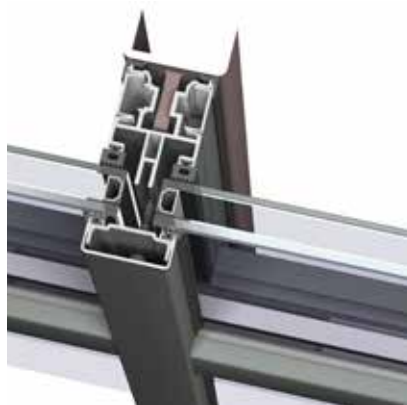
Style variants	CW 50-SL
Interior visible width	15/50 mm
Exterior visible width	50 mm
Glass thickness	from 6 to 62 mm



Style variants	CW 50-HL
Interior visible width	50 mm
Exterior visible width	vertical: 30 mm joint horizontal: 50 mm
Glass thickness	from 22 to 48 mm

Style variants	CW 50-VL
Interior visible width	50 mm
Exterior visible width	vertical: 50 mm horizontal: 20 mm joint
Glass thickness	from 27 to 42 mm

TECHNICAL CHARACTERISTICS



CW 50 ALU ON STEEL

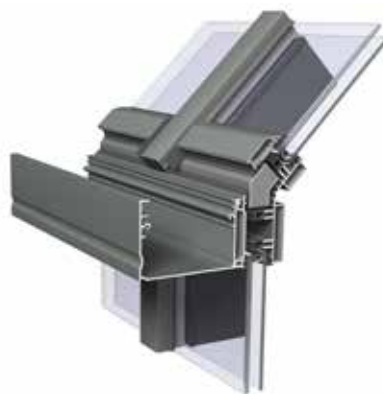
Style variants
Interior visible width
Exterior visible width
Glass thickness

50 mm
50 mm
from 6 to 62 mm



CW 50-SC

50 mm
joint: 20 mm
from 27 mm to 63 mm



CW 50-RA (ROOF APPLICATION)

Style variants
Interior visible width
Exterior visible width
Glass thickness

50 mm
50 mm
from 6 to 62 mm



CW 50 HIDDEN VENT TURN AND TILT
CW 50 HV-TUTI

23/80 mm
50 mm
opening window 22-28 mm (opening window SC 29-32 mm)

PERFORMANCES

	Thermal insulation
	Acoustic performance
	Air tightness
	Wind load resistance
	Water tightness
	Anti-burglar

Uf-value down to 0.8W/m²K depending on the profile combination

Rw (C;Ctr) = 33 (-1;-3) dB / 60 (-2;-6) dB,
depending on the glazing type or panel type

Up to 1200 Pa (class AE1200)

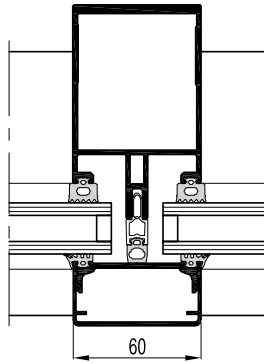
Up to 2000 Pa

Up to 1200 Pa (class RE1200)

RC2 / WK 2 & RC3 / WK3 (European standard ENV 1627 - ENV 1630)

CW 60

Curtain Walls



Solution for heavy glass panes

CW 60 is an excellent thermally insulated curtain wall system for robust constructions of large glass surfaces, that answers even to the specific needs of sloped or curved constructions. This modular system is designed with intelligently reinforced profiles, allowing the use of glass panels with weights up to 450 kg.

The CW 60 concept meets the highest requirements in water- and air tightness, wind load resistance and thermal insulation. It also offers the possibility to integrate triple glazing.

This curtain wall system is standard available in 4 different aesthetical outside appearances. These different design options, together with the flush roof application, make CW60 the perfect system for ultimate design freedom. In addition, CW 60 is made up of an extensive profile range and facilitates the integration of all types of windows.



TECHNICAL CHARACTERISTICS

Inside visible width

CW 60
functional

60 mm

CW 60-HI
ultimate thermal comfort

60 mm

CW 60-SC
structural clamped glazing

60 mm

Outside visible width

60 mm

60 mm

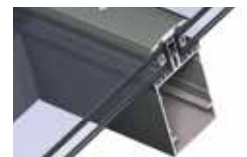
Silicon joint or EPDM gasket of 20mm width

Glass thickness

6 mm to 62 mm

22 mm to 62 mm

27 mm to 63 mm



TECHNICAL CHARACTERISTICS

Inside visible width

CW 60-SG
structural sealed glazing

60/88 mm

CW 60-HL / CW 60-VL

60 mm

CW 60-RA

60 mm

Outside visible width

EPDM gasket of 27mm width

mix of 20/30 mm joint & 60 mm pressure plate

60 mm

Glass thickness

24 mm to 36 mm

22 mm to 48 mm

6 mm to 45 mm

PERFORMANCES



Thermal insulation

Uf-value down to 0.76W/m²K depending on the profile combination



Acoustic performance

Rw (C;Ctr) = 33 (-1;-4) dB / 56 (-1;-5) dB, depending on glazing type



Air tightness

Class A4



Wind load resistance

Up to 2400 Pa



Water tightness

Up to 1200 Pa (class RE)

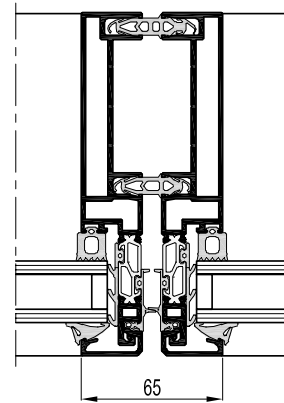


Anti-burglar

RC2 / WK 2 & RC3 / WK3 (European standard ENV 1627 - ENV 1630)

CW 65-EF

Curtain Walls



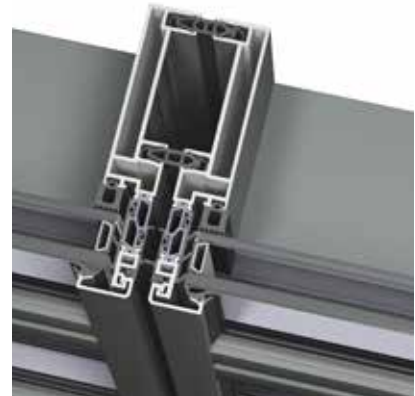
Unitized façade system with maximum transparency

CW 65-EF is a cost efficient curtain wall system for element façades with unique slender aesthetics, without compromising the extreme strength and stability required in high-rise constructions.

The typical characteristics of the unitized façade result in a high execution speed on the building site, because its elements are completely pre-assembled in the workshop. This high productivity however embraces architectural aesthetics as the CW 65-EF works with slender profiles of only 65 mm.

CW 65-EF meets the highest performance requirements in water- and air tightness and wind load resistance. The curtain wall system is available in different insulation levels, answering the appropriate insulating requirement of the building. It also offers the possibility to integrate triple glazing.

CW 65-EF is available in two glazing variants, with unique aesthetical features: Cassette Glazing (CG) variant holds the glass using glazing beads, while the glass of the Structural Glazing (SG) variant is structurally bonded, offering a complete glass surface at the outside of the building. To fully answer all needs of the building, CW 65-EF can integrate opening elements, such as a top hung and parallel opening windows.









TECHNICAL CHARACTERISTICS

	CW 65-EF	CW 65-EF/Hi	CW 65-EF/SG
Max. dimensions W x H	1.600 mm x 3.700 mm	1.550 mm x 3.500 mm	1.600 mm x 3.700 mm
Interior visible width	65 mm	65 mm	65 mm
Exterior visible width	65 mm	65 mm	16 mm joint between glass
Glass thickness	From 4 to 36 mm	From 34 to 63 mm	From 4 to 40 mm
Glass weight	300 kg	300 kg	250 kg
Types of vent	All Reynaers systems, top hung window, POW window	---	---

PERFORMANCES

	CW 65-EF	CW 65-EF/Hi	CW 65-EF/SG
 Thermal insulation	down to 2,54 W/m ² K, depending on the profile combination	down to 1,51 W/m ² K, depending on the profile combination	down to 7,6 W/m ² K, depending on the profile combination and glass composition
 Air tightness	Class A4	Class A4	Class AE 700
 Wind load resistance	1800 Pa	1800 Pa	1400 Pa
 Water tightness	Class RE 1200	Class RE 1200	Class RE 1200



CW 86 (-EF) Curtain Walls



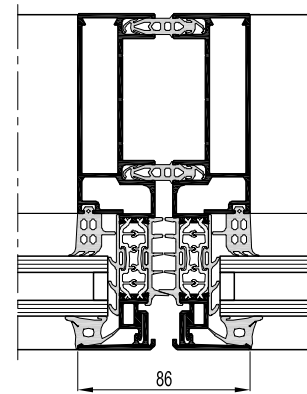
High execution speed

CW 86 is an insulated and aesthetical curtain wall system that complies with all requirements for large building projects. For these building projects, the execution speed on the building site is very important. CW 86 therefore offers a special solution, where cassettes or elements can be pre-assembled in the workshop. On the building site, the cassettes can either be hooked on to a traditional stick structure (CW 86) or the façade can be built up element by element according to the modular curtain wall principle (CW 86-EF).

CW 86 is available in two glazing variants, with unique aesthetical features: Cassette Glazing (CG) variant holds the glass using glazing beads, while the glass of the Structural sealed Glazing (SG) variant is structurally bonded, offering a complete glass surface at the outside of the building.

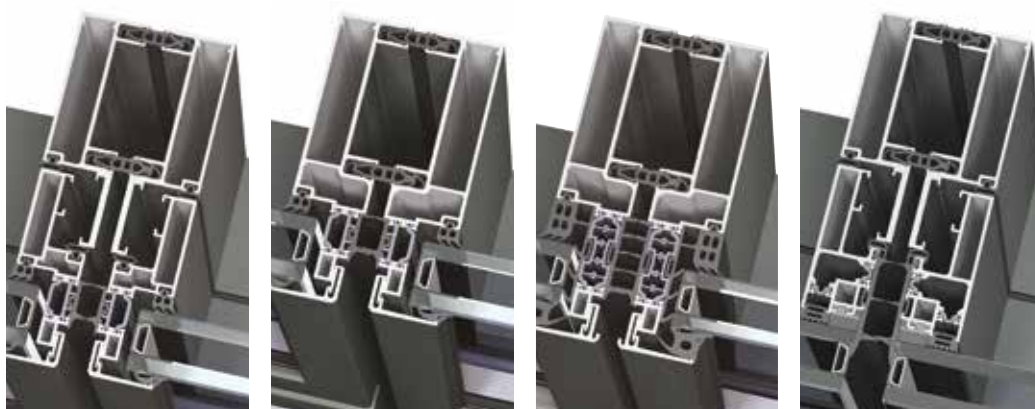
The energetic performance of the system is offered in different levels, providing thermally insulated profiles also for the Structural sealed Glazing. Specific drainage methods like cascade drainage lift this façade up to the highest demands in water- and air tightness. This makes this system applicable for extreme conditions such as coastal areas and high altitudes.

Besides the seamless integration of different types of windows, doors and sun screening systems, CW 86 offers motorised solutions for its opening elements, such as top hung and parallel opening windows, providing a total solution for your façade.



PERFORMANCES

Thermal insulation	Uf-value down to 1.5 W/m ² K, depending on the profile combination
Acoustic performance	Rw (C;Ctr) = 41 (-2;-5) dB, depending on the glazing type
Air tightness	Up to 900 Pa (class AE900)
Wind load resistance	Up to 2000 Pa
Water tightness	Up to 1200 Pa (class RE1200)


**TECHNICAL
CHARACTERISTICS -
ELEMENT FAÇADE**

	CW 86-EF	CW 86-EF (FIXED FAÇADE JUNIOR)	CW 86-EF HI	CW 86-EF SG
Interior visible width	86 mm (38.5 - 9 - 38.5)	86 mm (38.5 - 9 - 38.5)	86 mm (38.5 - 9 - 38.5)	86 mm (38.5 - 9 - 38.5)
Exterior visible width	68 mm (26 - 16 - 26) or 86 mm (35 - 16 - 35)	86 mm (35 - 16 - 35)	86 mm (38.5 - 9 - 38.5)	22 mm joint between glass
Glass thickness	from 4 mm to 38 mm	from 6 mm to 38 mm	from 30 mm to 50 mm	from 4 mm to 36 mm





Architect: Gemeindezentrum Spielberg / Architekturbüro Barbist, Reutte

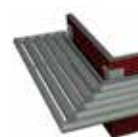
BRISE SOLEIL



BS 100



BS 40



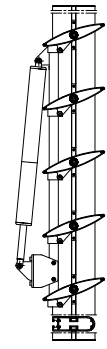
BS 30



BS 20

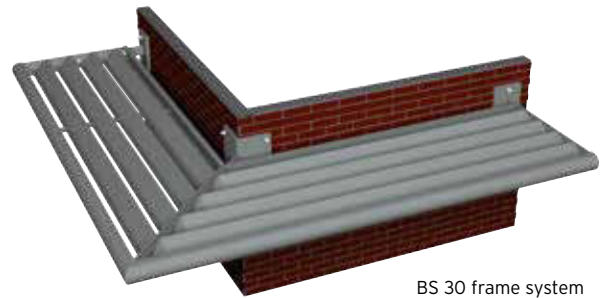
BS 100/30/20

Sunscreening



BS 100 movable louvre

Reynaers' BS (Brise Soleil) systems are designed to provide an aesthetic and efficient shading solution to almost any new and existing building. They are offered both standard or as a bespoke solution. Brise soleil is the generic term for a system of louvres which, when fitted to the external façade of a building, provides protection against solar heat and glare.



BS 30 frame system



BS 100
PRE-ASSEMBLED
FRAME



BS 100 FIXED
LOUVRE



BS 100 MOVABLE
LOUVRE

TECHNICAL CHARACTERISTICS

Shape louvres	ellipse	ellipse	ellipse
Size louvers	140 mm / 180 mm	from 120 to 400 mm	from 120 to 400 mm
(Fixed) angle	45°	0° / 15° / 30° / 45° / 60° / 75° / 90°	variable
Walkway application	yes	yes	yes



BS 100 LOUVRE
GRIP



BS 100 GLASS
LOUVRES



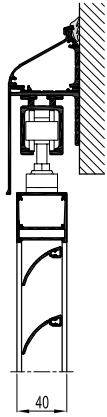
BS 30 FRAME
SYSTEM



BS 20 FRAME
SYSTEM

TECHNICAL CHARACTERISTICS

Shape louvres	ellipse	hardened glass	z-shaped	curved
Size louvers	200 / 250 / 300 mm	366 x 10 / 12 / 14 / 17 mm	90 mm wide x 60 mm high	80 mm / 140 mm wide
(Fixed) angle	0° / 15° / 30° / 45°	0° / 15° / 30° / 45° / 60° / 75° / 90° and variable	yes	30°
Walkway application	no	yes	yes	no



BS 40

Sunscreening

Contemporary shutters

The BS 40 system offers an innovative and aesthetical sun shading solution for energy conservation, perfect for apartments and smaller buildings. The system consists of elements with z-shaped or curved slats. These sliding shutters are positioned on the outside of the windows and can be removed from the window pane by sliding them horizontally. This manipulation is done manually or can be motorised.

The panels of BS 40 are available in different sliding configurations, from one to three panels behind each other. This makes it an ideal solution to control both the light entrance and the comfort level inside the building. The BS 40 system comes with various mounting options, to allow installation in front of façades, between floors or in any combination thereof. This makes it an extremely versatile application.

TECHNICAL CHARACTERISTICS

Shape louveres
Max. vent height
Max. vent width
Max. vent weight
Sliding option
Operation

BS 40	
z-shaped or curved / wood (optional)	
3000 mm (depending on the width)	
2000 mm (depending on the height)	
100 kg	
mono-, 2- & 3- rail	
manual & motorised	



Z-SHAPED LOUVRES



CURVED LOUVRES



CONSERVATORIES



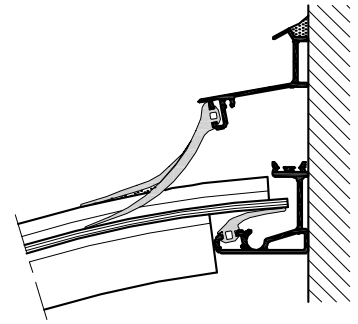
Cintro



TR 200

Cintro

Conservatories



The profiles within the Cintro range have been developed as an architectural solution for bending profiles.

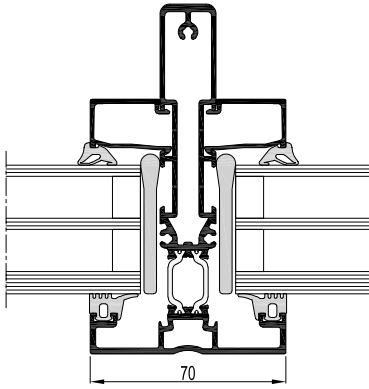
The possibilities for application are numerous and may even include light roofs. The system is able to incorporate a variety of glazing styles including plate glass and is the ideal system for applications where abundant daylight is required.



TECHNICAL CHARACTERISTICS

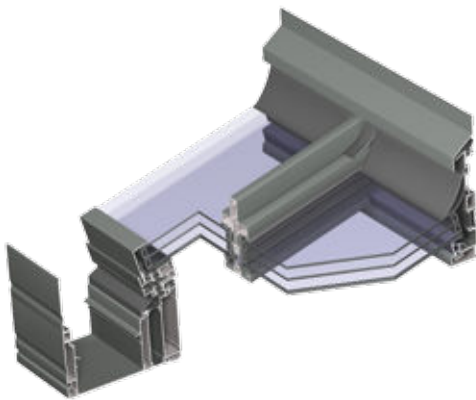
	CINTRO
Inner visible width	60 mm
Outer visible width	60 mm
Height of the covers	8 mm
Height of the bearing profile	8 - 35 mm
Inertia of the bearing profile	$I_x = 0.2$ to 9.8 cm^4
Filling thickness	from 2 mm to 32 mm





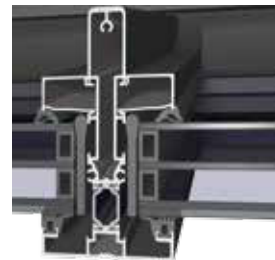
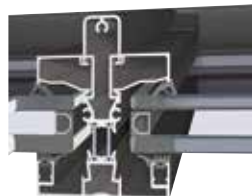
TR 200

Conservatories



Thermo Roof 200 is a thermally insulated conservatory system offering a broad range of roof configurations. Depending on the design of the conservatory, the structure of the roof can be optimised to perfectly fit your needs. The interior of the roof structure has a minimalistic look. The gutters however, are available in three variants to match your style perfectly; Renaissance, Functional and Ellipse.

Furthermore, the conservatory system allows the integration of flush roof vents for ventilation, which can be electrically operated if desired. Anticipating any thermal requirements, the unique glazing concept of the system makes it perfectly suitable for triple glazing. TR 200 provides rafters which are not only able to carry the weight of the triple glazing but also to withstand the weight of snow load.



TECHNICAL CHARACTERISTICS

Overall system depth of rafter

Style variants

Min. visible width of rafter

Slope

Construction options

Glass thickness

DOUBLE GLAZING

inside: 18 mm
outside: 23 - 58 mm

Functional / Renaissance / Ellipse

70 - 99 - 128 mm

5° - 45°

Hip and valley

6-40 mm

TRIPLE GLAZING

inside: 14.5 mm
outside: 38 mm

Functional / Renaissance / Ellipse

70 - 99 - 128 mm

5° - 45°

Hip

30-62 mm

PERFORMANCES



Thermal insulation



Air tightness



Wind load resistance



Water tightness

U-value rafter down to 1.8 W/m²K
For specific calculation per profile combination:
please contact your Reynaers Aluminium fabricator.

Up to 600 Pa (class 3)

Up to 800 Pa (class 2)

Up to 900 Pa (class E)



COMPLEMENTARY SYSTEMS



Mosquito



RB 10

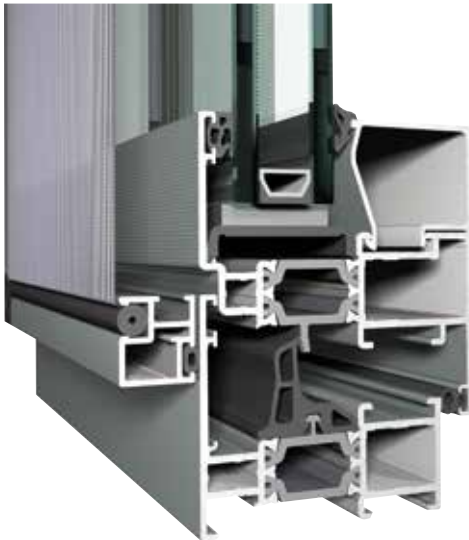


Ventalis



Mosquito

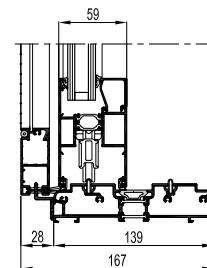
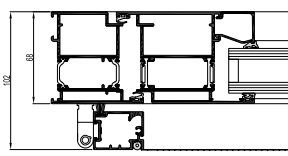
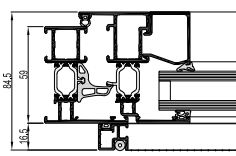
Complementary Systems



Keep out insects

Mosquito is a wire screen system, mounted on to a window, door or sliding door, which keeps out insects with a minimal interference of the view outside. The insect screen concept allows the windows, doors or sliding doors to be opened or closed without taking out the system. For the sliding insect screen, the rail is situated above or at the bottom of the door, assuring optimal comfort.

Obviously, the Mosquito system is compatible with all Reynaers window, door and sliding door systems as well as systems from other system suppliers, even non aluminium windows like wood and PVC.



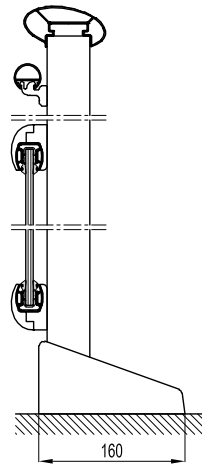
TECHNICAL CHARACTERISTICS

	INSECT-RETARDANT WINDOWS	INSECT-RETARDANT DOORS	INSECT-RETARDANT SLIDING DOORS
System depth	15 mm/22 mm	28 mm	28 mm
Corners	pre-formed synthetic supporting corner pieces or aluminium clampable corner.	pneumatically crimped aluminium corner or aluminium clampable corner.	pneumatically crimped aluminium corner or aluminium clampable corner.



RB 10

Complementary Systems



Ensured safety

RB 10 is an elegant balustrade system, which guarantees optimum levels of safety. It has been tested in renowned test centres according to the most stringent European standards.

This system is available in three styles: Functional, Ellipse or Softline – this way your balustrade matches your style perfectly. Besides the traditional set-up of a balustrade, RB 10 also provides a very aesthetical way of incorporating panels, like multilayered glass, plexiglas or acrylic sheets allowing a multitude of design variants.

STANDARDS

STS 54

NEN 6702

NF P01-013

Polish standard balustrades

STYLE VARIANTS



Functional



Ellipse



Softline



Ventalis

Complementary
Systems



A breath of fresh air

Ventalis is an innovative and controllable ventilation system with a self-regulating airflow that can seamlessly be integrated in your windows or sliding doors. This modular system ensures both efficiency and an aesthetic design, allowing hassle-free cleaning and maintenance.

The patented self-regulating units automatically open and close the air inlet when wind pressure increases or decreases, keeping the incoming airflow constant. What's more, the Ventalis system is easily adjustable in 5 different positions, allowing users to easily adjust the ventilation degree.

The Ventalis system is installed at the top of the window or sliding door in the so-called 'dry rooms'. They can be built in different configurations, depending on the aesthetics or the required airflow, to comply with the applicable regulations. Ventalis can be integrated with a wide range of Reynaers systems: ES 50, CS 68, CS 77, CP 130 and CP 155.

TECHNICAL PERFORMANCE OF THE SELF-REGULATING UNIT

Water tightness	class 9A (600 Pa)
Airflow for each unit of 20 cm	10 m ³ /h (windows) - 12 m ³ /h (sliding elements)
Self-regulation	class P3
Extra exterior visible height	18.5 mm (windows) - 30.5 mm (sliding elements)





Architects: Hartmann & Schüpbach Architekten

HANDLES



Purity



Orchid



Horizon



Shield

Purity

Handles

















Design matters...

For people who desire ultimate design and top quality, a unique Reynaers handle series is created, called Purity. This series combines next-generation material and mechanical properties with the superior Italian design abilities of designer Leo De Carlo, who previously worked in the studios of Philippe Starck. De Carlo studied both Reynaers' culture and recent project successes to capture the essence of his observations in the PuRity design, resulting in a timeless, minimal and rational design.

The PuRity handles are available in three standard colours (Sapphire Black, Moonlight White and Lithium), while five more colours are available on demand (Or, Obsidian, Polaris, Eclipse and Belgian Chocolate). But PuRity is much more than just a great design. The combination of the material and its surface treatment makes the handles non-corrosive, hypoallergenic and 100% recyclable.

TECHNICAL CHARACTERISTICS

Window	 <p>DESIGN H : 147 mm D : 24 mm W : 46 mm</p>	 <p>COMFORT H : 147 mm D : 24 mm W : 46 mm</p>
Door	 <p>DESIGN H : 147 mm D : 24 mm W : 46 mm</p>	 <p>COMFORT H : 147 mm D : 24 mm W : 46 mm</p>
Sliding door	 <p>DESIGN H : 147 mm D : 24 mm W : 46 mm</p>	 <p>COMFORT H : 147 mm D : 24 mm W : 46 mm</p>
Left and slide	 <p>DESIGN H : 235 mm D : 24 mm W : 46 mm</p>	 <p>COMFORT H : 235 mm D : 24 mm W : 46 mm</p>
Reduced	 <p>DOOR H : 147 mm D : 23 mm W : 11 mm</p>	 <p>WINDOW H : 147 mm D : 23 mm W : 11 mm</p>
Options	 <p>CYLINDER COVER</p>	 <p>SAFETY</p>
Offset	 <p>DESIGN</p>	 <p>COMFORT</p>



Orchid

Handles

Elegance

Orchid is a beautiful and elegant handle type. This series is characterized by a curved shaped design that radiates in its simplicity. The handles are very reliable and cost-efficient, making them suitable for any window or door system. Orchid handles are available in white, black or anodized colours.

TECHNICAL CHARACTERISTICS

HANDLES WITH A 90° CLICK

Windows



H : 186 mm
D : 73 mm
W : 34 mm



H : 154 mm
D : 65 mm
W : 37 mm



H : 180 mm
D : 68 mm
W : 32 mm



H : 186 mm
D : 73 mm
W : 34 mm

A handle with a long body and a large grip. With or without built-in lock.



H : 154 mm
D : 65 mm
W : 37 mm

A handle with a short cover plate and large grip. With or without built in lock.



An economical handle with a large body and a large grip. Either inward opening or outward opening (ES 45Pa).

HANDLES WITH RETURN SPRING

Doors and sliding doors



H: 63 mm
D: 65 mm
W: 133 mm

A door handle with a short cover plate and a large grip.



H: 216 mm
D: 60 mm
W: 40 mm

A sleek rounded handle specially designed for sliding doors.

FEATURES

Surface treatment

all handles are painted

Colors

available in all RAL colors.

Uses

doors, sliding doors (CP 45Pa and CP 50), inward opening windows and outward opening windows (ES 45Pa)

Horizon

Handles



Modern style

The Horizon handle is characterised by the modern and contemporary appearance. The horizontal details give the handle a very special and unique look. Its sleek design makes it the perfect combination for any window or door system. Horizon handles can either be anodized, or powder coated in one of our 400+ RAL-colours.

TECHNICAL CHARACTERISTICS

HANDLES WITH A 90° CLICK

Windows



H: 161 mm x D: 71 mm x W: 26.5 mm

A handle with a short cover plate and long grip

HANDLES WITH RETURN SPRING

Doors



H: 161 mm
D: 71 mm
W: 26.5 mm

H: 72 mm
D: 30 mm
W: 140 mm

H: 221 mm
D: 71 mm
W: 140 mm

H: 72 mm
D: 71 mm
W: 140 mm

A handle with a long cover plate or a short cover with cylinder cover and a long grip. Ideal for roll down shutters.

A handle with a long or short cover plate and a long grip. A cylinder cover is also available.

HANDLES WITH A 90° CLICK

Sliding doors



H: 221 mm D: 71 mm W: 140 mm

A handle with a long cover plate and a long grip.

FEATURES

Surface treatment

anodized or powder coated

Colors

when powder coated, there is a choice of more than 250 RAL color

Uses

doors, sliding doors, inward opening windows (side hung, bottom hung, turn-tilt, tilt-turn)

* Sliding door handles are only available for the systems CP 130 and CP 155.



Shield

Handles



Reliability

The range of the Shield handles not only express safety and strength by the robust and reliable design, but this series also complies with burglar resistance classes 2 & 3. The handles are available in unpolished, natural anodized colour.

TECHNICAL CHARACTERISTICS




HANDLES WITH A 90° CLICK

Windows

	
H: 161 mm D: 71 mm W: 26.5 mm	H: 152.5 mm D: 66.5 mm W: 28 mm
A handle with a short cover plate and a long grip	A handle with a short cover plate, long grip and built-in lock



HANDLES WITH RETURN SPRING

Doors

		
H: 246 mm D: 57 mm W: 78.6 mm	H: 246 mm D: 28 mm W: 150 mm	H: 246 mm D: 74 mm W: 150 mm
A handle with a long face plate and a short, round and flat grip	A handle with a long face plate and a long straight grip	A handle with a long face plate and a long rounded grip

HANDLES WITH A 90° CLICK

Sliding doors

	
H: 246 mm D: 52 mm W: 91.5 mm	H: 246 mm D: 74 mm W: 150 mm
A handle with a long face plate and a rounded grip	A handle with a long face plate and a long, round and reduced grip

FEATURES

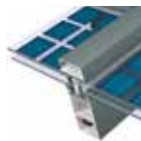
Surface treatment	unpolished natural anodized (color .17)
Colors	all models are available in unpolished natural anodized (color .17)
Uses	doors, inward opening windows and sliding doors (CP 130 and CP 155 only)



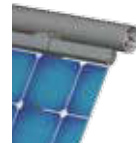
SOLAR



BS 100/30 Solar



CW 60 Solar



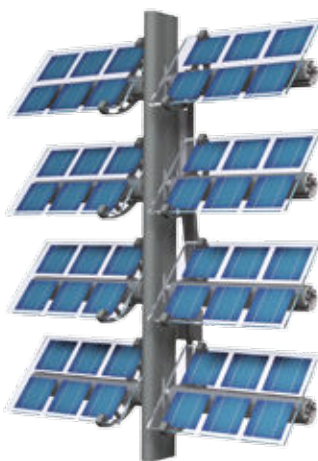
RB 10 Solar

BS 100/30 Solar

Solar



The SOLAR version of the already existing systems BS 100 and 30, matches electricity production with protection against blinding and direct sunlight. BS 100 and BS 30 can handle all 3 types of PV panels: mono and poly crystalline and amorphous cells.



TECHNICAL CHARACTERISTICS

	BS 100 SOLAR	BS 30 SOLAR
Filling type	Glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, side PV panel box or back PV panel box	Standard or glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, back PV panel box
Inclination	0° to 45°	15° to 45°

CW 60 / RB 10 Solar

Solar

CW 60 Solar

The CW 60 Solar is the aesthetically pleasing high tech green energy solution, ideal for wall and roof application.

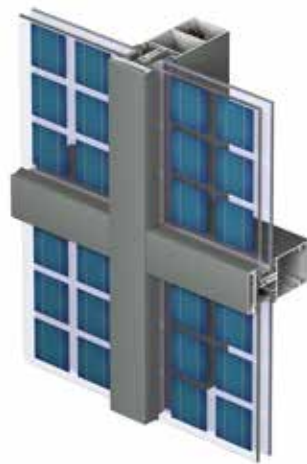
The system, totally insulated, has been designed to completely avoid shadow on the cells.

CW 60 Solar can handle all 3 types of PV panels: mono and poly chrySTALLINE and amorphous cells.

RB 10 Solar

The RB 10 Solar is the ideal system for balustrade on balconies that are accessible or not. The system can integrate a glass with photovoltaic cells, with not only an aesthetic result but also the opportunity to create energy.

RB 10 Solar can handle all 3 types of PV panels: mono and poly chrySTALLINE and amorphous cells.



TECHNICAL CHARACTERISTICS	CW 60 SOLAR		RB 10 SOLAR	
			Accessible balconies	Non-Accessible balconies
Filling type	Glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single or double glassed, side PV panel box or back PV panel box		Standard or glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, back PV panel box	
Inclination	5° to 90°		90°	60° to 90°



Architect: BOB 361 architects



**ACTIVITIES
&
SERVICES**

REYNAERS ACTIVITIES

RESEARCH AND DEVELOPMENT

Reynaers Aluminium puts enormous investment into research and development to maintain its position at the forefront of the industry. We work closely with architects and building contractors all over the world, developing systems and solutions for total facade construction - from the design concept through to manufacture and installation.

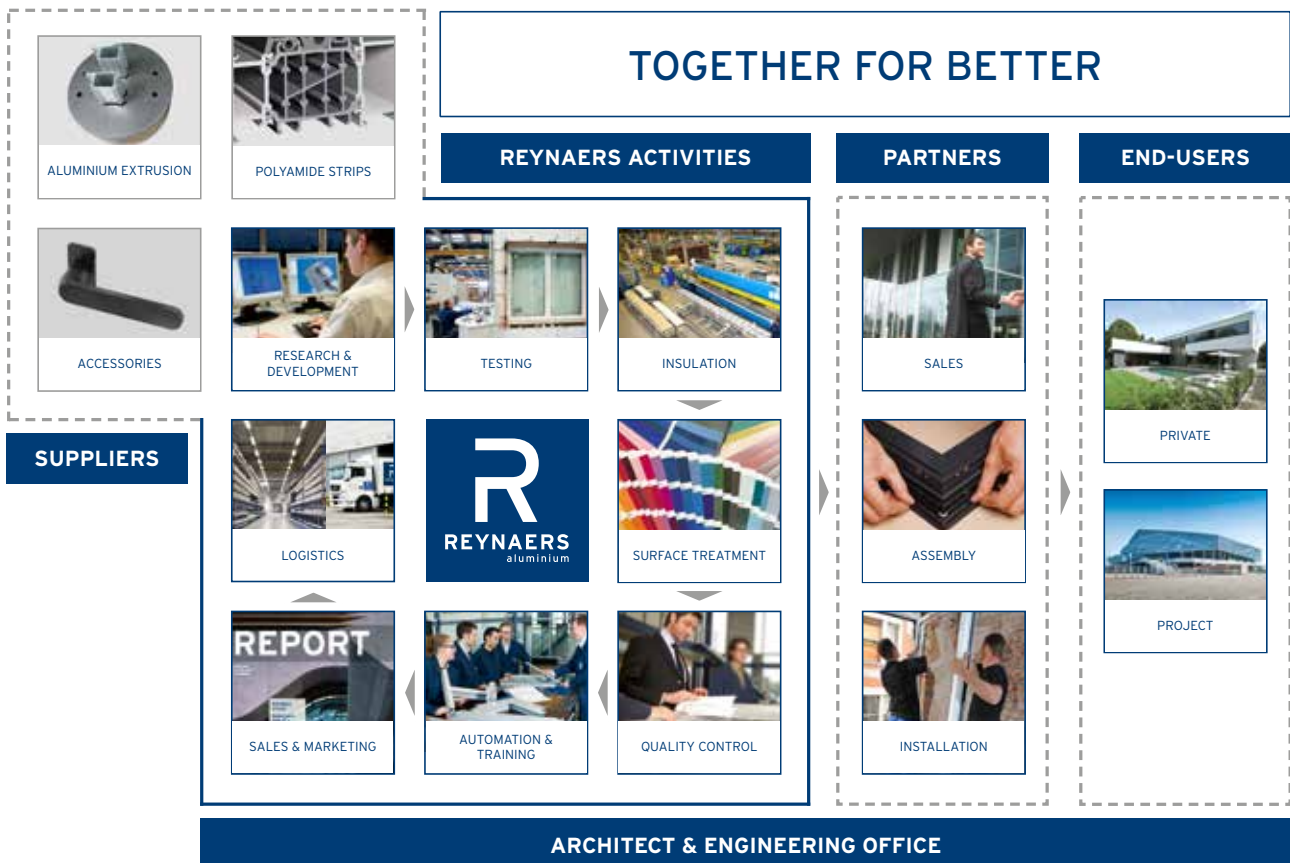
Reynaers Aluminium's high-performance window, door and curtain-walling systems are developed with the aim of enhancing the energy-efficiency, design, comfort and safety of buildings. All our systems are all tested to the relevant standards for thermal performance, as well as air, wind and water tightness. The product range also includes specific fire-resistant, burglar-resistant and bulletproof solutions.

INSULATION AND SURFACE TREATMENT

The insulation of aluminium profiles requires a lot of know-how and experience. In order to ensure the highest quality, Reynaers created its own insulation company, ERAP. For the surface treatment of the profiles we collaborate with selected painting companies that strictly adhere to our standards and regulations.

LOGISTICS

Our customers benefit from our strong logistics organisation, which enables us to quickly deliver products from our various distribution centres worldwide.



THE REYNAERS INSTITUTE

Introduction

The Reynaers institute was established in 2004. This unique institute with a total surface of 2800m² focuses on sharing the know-how and experience with architects, fabricators, contractors and other building partners. Moreover, the Reynaers institute provides the following services to its partners:

- Training centre
- Automation centre
- Test centre

The Reynaers institute is much more than just a building... it's a state of mind and a permanent incentive to implement values such as partnership and innovation. It is an international communication forum and a source of inspiration for all those involved in the building process.


TRAINING CENTRE

At Reynaers we endorse the importance of qualitative production and installation for the long-term performance of our aluminium systems. That is why we maintain daily contacts with a strong international network of professional manufacturers and designers and why we advise and train our customers.

We organise numerous training sessions in order to teach our customers the necessary skills and know-how enabling them to provide their own customers with high-quality service. Our practical training is made up of both standard and specialised courses (assembly and installation) as well as software classes.

Reynaers organizes an average of 1800 training days every year (around 1200 practical training courses and 600 software training courses) for its customers and own employees. The trainees come from all over the world (40 different nationalities).



Our corporate and Reynaers Institute videos can be found on  : www.youtube.com/ReynaersAluminium

AUTOMATION CENTRE



Reynaers Aluminium offers a full range of automation solutions to the customer through dedicated partnerships. Every stage of the production process can be optimized using a fine-tuned combination of the right experience and know-how, state-of-the-art machinery, the most recent technologies and an optimized link with the ReynaPro software. In this way, the fabricator gets the opportunity to produce in the most efficient way, reduce costs and increase profitability.

In order to realize this, Reynaers selects the best performing and most suitable solution for every type of operation on our profiles.

CONVENTIONAL TOOLING OFFER

- **Multifunctional punch tool:** for all simple operations on profiles
- **Notching saw:** high quality tooling for the notching of curtain wall transoms
- **Copy routers:** specialized copy routers are available for more complex operations to profiles
- **Glazing bead / single head saws:** a range of sawing machines for small profiles



For more detailed information about our tooling offer, visit our Extranet - www.reynaers-extranet.com

To allow fully automated production of our systems, there is a direct link between miscellaneous machines and the ReynaPro software. This **ReynaPro software** includes a database of all profiles and accessories, allowing calculation and manufacturing of projects. The technical data and commercial information are continuously updated and supported by our technical service. Today, over 1400 supported ReynaPro-licenses are in use.



For an optimised production, Reynaers established close partnerships with machine suppliers, to optimally set-up and install different types of machines, but also to ensure full service and support after installation. Over the last 10 years, this collaboration resulted in the installation of over 200 Elumatec machines all over Europe.

A SELECTION OF OUR MACHINE OFFER

Double mitre saw: 2 types of high quality double mitre saws, with special clamping blocks to fully support the entire Reynaers profile range.

DG104

DG244



CNC-machining centres: a whole range of state of the art CNC machining centres, with clamping blocks and tooling sets to allow all necessary operations to the Reynaers profiles.

SBZ122

SBZ130

SBZ140

SBZ151



Corner press: dedicated 1 and 4 corner press machines to create high quality corner connections, with special quick-change sets for supports and crimping knives to reduce adjustment time.

EP124

EP424



Transporting units: a combination of tables and transporting units are able to process your elements throughout the workshop with minimal risk of damage.



THE
REYNAERS
INSTITUTE




TEST CENTRE

The Reynaers Institute accommodates one of the most advanced testing centres for windows, doors and façades. In the test centre all our systems are meticulously tested to comply with various European standards and to meet the highest standards for quality, durability and reliability, resulting in a 10-year system guarantee.



Yearly, Reynaers performs an average of 150 tests in the Reynaers Institute. Our tests are performed in close collaboration with various European notified bodies such as SKG-IFT-WTCB-TNO-Peutz-Efectis-ITB-WFRG...

The different tests are centered around these **3 MAJOR TRENDS** in the aluminium industry:

		
<ol style="list-style-type: none">1. AIR-, WIND-, WATER TIGHTNESS2. ACOUSTIC INSULATION	<ol style="list-style-type: none">1. MECHANICAL PERFORMANCE2. SOLAR RADIATION3. OTHER TEST FACILITIES4. ENERGY PERFORMANCE	<ol style="list-style-type: none">1. IMPACT RESISTANCE2. BURGLAR RESISTANCE3. BULLETPROOF4. FIRE RESISTANCE5. SMOKE RESISTANCE6. SMOKE & HEAT EVACUATION

Depending on **your project specifications**, the Reynaers Institute is at your disposal and supports you in organising tailored and extensive testing on various systems in divergent situations and conditions.



REYNAERS' SERVICES

Introduction

Reynaers Aluminium continuously listens to the requirements and wishes of fabricators, architects, contractors, investors and end-users. Reynaers develops customised technical and marketing tools to provide them with all the means to work as efficiently as possible. A large range of tools and services is at our customers' disposal:

1. REYNAERS CONSULT & PROJECT TEAM

Our consult & project team gives advice during the design process.

2. COLOURS & DOMOTICS

Reynaers offers more than 400 top quality RAL colours and solutions for the use of domotics.

3. SALES SUPPORT

A range of crossmedial tools which support and inspire our partners. Reynaers Extranet, communication tools, commercial trainings, Point of Sales material, product brochures and more.

4. TOTAL QUALITY MANAGEMENT

The total quality management of Reynaers strives to guarantee optimal customer satisfaction by excellent quality assurance.

1. REYNAERS CONSULT & PROJECT TEAM

"I have a dream..." Almost everything starts with a dream, a vision. With imagination, enthusiasm and a little help from Reynaers, your dream becomes a project that will soon become reality.

As Reynaers opens the window on the world, we plan to be there for you not only this year but during the years to come. We, Reynaers consultants, engineers and technicians are your professional partners. We will support you every step of the way.

The design process

Imagine... You have a project. There is nothing more powerful than your imagination. You see a high-tech office building, energy-efficient apartments, sustainable private houses and when it comes to aluminium profiles you can now explore the dreams you have.

We will help you to bring your projects to life!

Bespoke solutions tested and approved

New projects need suitable solutions. That's why we will even develop new products for you. You need a new profile, a special design and different specifications in one of your new projects? If the quantity is large enough we will extrude special profiles to perfectly match and meet your requirements and existing standards. Illustrative in this respect is the Heathrow and Gatwick airports project, where special product teams were assigned the task of designing concepts into reality.

All our products' standard measurements are tested and certified. But every so often you will plan a module not covered by standard measurements or that has to meet special requirements. After agreement, Reynaers Aluminium is able to carry out the design for you and test it for wind resistance, water tightness and stability. The testing facilities at the Reynaers Institute are fully compliant with official standards.

2. COLOURS & DOMOTICS

Colours

Reynaers offers more than 400 top quality RAL colours: gloss and matt finishes, pastel shades, metallic and anodised colours and even wood imitation. Coatex, the structure lacquer from Reynaers Aluminium has an especially attractive appearance and offers a higher scratch-resistance than traditional lacquer (up to 60%).

Furthermore, profiles lacquered with Coatex only require half the maintenance of traditional paint because of its microstructure that gives the surface a water-repellent character.

Domotics

Creating more comfort at home or in the office has gradually become a major concern for the occupants. Efficient climate control and better protection against cold, wind, sun, radiation and noise are some of the requirements the architect has to consider when designing a building. The use of domotics - i.e. the combination of mechanical fittings and electronics - allows building components such as shutters, windows and solar protection to be computer controlled rather than operated manually.

Windows, façades and sunscreening systems play an essential role here. They perform as a functional component between the outside environment and the building interior. Reynaers offers automated solutions that allow ventilation and security systems to be fully controlled. Windows can be automatically opened, closed or ventilated at the touch of a button, by remote control, by sensors or by the central control unit in an automated building system.



SALES SUPPORT

3. SALES SUPPORT

Extranet

On the extranet site our partners have the opportunity to access up-to-date technical and commercial information such as:

- product catalogues for fabricators with information about all Reynaers systems: profile overviews, section drawings, assembly steps, ...
- architect catalogue: dedicated catalogue with all important architectural sections of our systems
- software packages and calculation tools e.g.
 - EOS (Electronic Ordering System)
 - U-tool for insulation calculations
 - Ventalis tool for the calculation of natural airflow according to relevant standards
- other technical information e.g. system characteristics, performances

Professional fairs

Reynaers participates in professional fairs, both local and abroad.



COMMUNICATION TOOLS

Reynaers Aluminium continuously listens to the requirements and wishes of fabricators, architects, contractors, investors and end-users. Reynaers develops customised technical and marketing tools to provide them with all the means to work as well and efficiently as possible.

A large range of tools and services is at our customers' disposal:

- Corporate website: www.reynaers.com
- REPORT magazine: biannual architectural magazine
- Commercial trainings
- Point of Sales material
- Product brochures
- Corporate brochures
- Reference book
- Demo assembly movies on **You Tube**
- Support customers in organizing local trade fairs



TOTAL QUALITY MANAGEMENT

4. TOTAL QUALITY MANAGEMENT

Reynaers Aluminium aims to still be valued by its partners ten years from now. Customer satisfaction and quality assurance are closely linked. They are both high on our list of priorities. Together with our suppliers we endeavour to guarantee permanent high quality.



Reynaers provides certainty: 10-year system guarantee

At each stage of the production process our quality control department carries out very stringent checks, which enable us to guarantee that our systems satisfy country- and product specific technical approvals and standards. In addition we grant a 10-year system guarantee. This is an insurance on the aluminium, lacquer or anodisation layer, as well as on the insulation. On the accessories, we grant a 5-year system guarantee.



ISO 9001:2008 certification: proves permanent quality control

Striving for quality is no empty slogan at Reynaers Aluminium. We permanently and systematically update our quality control as proven by our ISO 9001 : 2008 certification. In order to acquire and maintain this certification, our departments responsible for design, production and delivery of all our products and services, are regularly inspected.



Qualicoat guarantees top-quality lacquer work

All our lacquering partners bear the European Qualicoat quality label, which implies that they meet specific requirements with respect to seals, service life, UV-resistance, discolouration, etc., representing the best possible guarantee for the quality of the lacquer work.



Qualanod guarantees optimal anodisation

All our anodising suppliers bear the European Qualanod quality label and consequently meet specific requirements with respect to seals, service life, UV-resistance, discolouration, etc., representing the best guarantee for the quality of the anodisation.

10-YEAR SYSTEM GUARANTEE

Reynaers Aluminium guarantees that the Reynaers Aluminium systems meet the technical specifications and standards of the country and the product in question. The current processing and maintenance regulations mentioned in the Reynaers Aluminium catalogues determine the extent of this 10 year guarantee (a 5 year guarantee for wearing parts).

OBJECT OF THE GUARANTEE

The products delivered by Reynaers Aluminium have the following properties and/or guarantees, with explicit exception of items detailed under the headings "validity" and "exclusions".

ALUMINIUM

Standards extruded aluminium:

- Composition to standard EN 573 parts 3 and 4;
- Mechanical properties to standard EN 755 part 2;
- Tolerances to standard DIN 17 615 and EN 12020 part 2;

Standards rolled aluminium:

- Composition painted aluminium EN AW 1050 A H24 to standard EN 573 part 3;
- Composition anodised aluminium EN AW 5005 H14 AQ to standard EN 573 part 3;
- Mechanical properties to standard EN 485 part 2;
- Tolerances to standard EN 485 part 4.

PAINTING AND ANODISING

A 10 year guarantee on:

- Detachment, flaking and blistering of the treated aluminium parts.
- Corrosion, including filiform corrosion for material AlMgSi0.5F22 (AW6060 and AW6063) with additional requirements Zn \leq 0.15%; Cu \leq 0.02%; Pb \leq 0.022%; Si: 0.30 -0.55%; Fe: 0.10-0.30%; Mg: 0.35%-0.60%; Mn \leq 0.10%; Cr \leq 0.05%; Ti \leq 0.10%; other elements individually \leq 0.05% together \leq 0.15%; after treatment T66;
- UV resistance, discolouring and loss of gloss exceeding the defined tolerances, according to Qualicoat and Qualanod regulations (latest editions).

INSULATION

A 10 year guarantee on:

- Adherence between the polyamide strips and the aluminium;
- Preservation of the thermal and mechanical properties of the insulator, within the boundaries defined by the technical specifications.

ACCESSORIES

Accessories, gaskets and synthetic profiles:

- A 10 year guarantee on properties, functionality and design, within restrictions defined by technical specifications;
- Painting and anodising: see above;
- A 5 year guarantee on wearing parts, only applies to normal and realistically foreseeable use.



CE MARKING

The CE - Marking is now required also in the European building industry. Products have to show the conformity with the appropriate European guidelines. These European guidelines for the building aim to promote the free flow of products in this sector within the European Union by overcoming the technical barriers between standards that had previously applied to different countries. The CPD (Construction Products Directive) now lays down the basic requirements that products must meet in terms of:

- Mechanical stability,
- Fire safety,
- Hygiene, health and the environment,
- User safety,
- Noise reduction,
- Energy savings and thermal insulation.

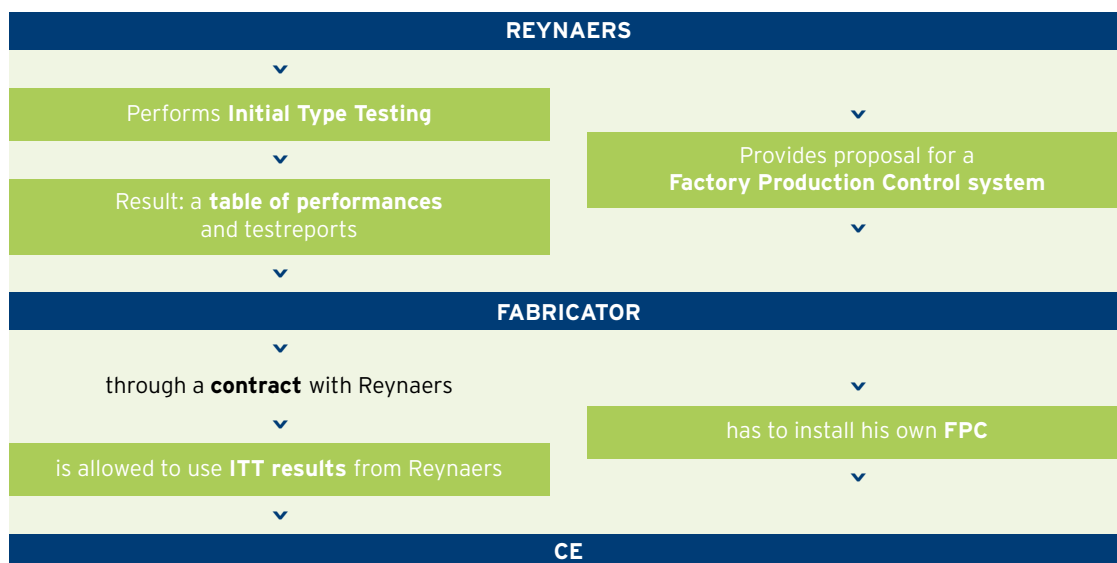
For the CE - Marking of facades the harmonized product standard 14351-1 is relevant for windows and doors and 13830 for curtain walls.

This obligation is not only valid for enterprises exporting to other European Union countries, but also for those, which are exclusively active in their homeland.

The Reynaers systems carry this CE - Marking. This implicates that they are fully compliant with the EU Construction Products Directive (CPD).

The procedure for CE - Marking of products entails a process that starts with Initial Type Testing (ITT) where all the relevant elements of products are tested to determine the extent to which a product will meet the standards that apply to it, and classes of compliance are allocated. A second important item in the CE - Marking is Factory Production Control (FPC) this ensures that the products are manufactured under controlled conditions to ensure that each product meets the performances as determined during the ITT.

To prepare ourselves, Reynaers as your partner issued a CE - Marking brochure and other tools to inform you about every step necessary for a standard marking.



GREEN COMMITMENT

Reynaers Aluminium is aware that companies play an important role in the care for the environment. That is the reason why Reynaers is constantly searching for new ways to become “greener”. This means that Reynaers is passionately interested in sustainability, by being at the forefront in the development of energy saving and sustainable products. This has resulted in some actions, taken by Reynaers to try and make a difference.

First of all, aluminium is a material which is 100% recyclable without any losses in quality. This allows Reynaers to use aluminium profiles with a high recycled content, with guaranteed quality. On the other hand, it also allows all systems to be recycled at the end of their lives.

Due to the use of aluminium, Reynaers is able to develop slim profiles for large glass panes, allowing more light to enter and therefore leading to a comfortable indoor environment.

Aside this, the energy-efficiency of our systems is a very important topic for Reynaers. A good example of this is the development of our new CS 104 system, a window and door system which can be used for passive houses. Also our high insulated sliding elements and curtain walls can minimize the building’s energy loss.

The integration of external sunscreening (Brise Soleil range) onto our façade systems makes it possible to control the sun entering the building minimizing the use of energy intensive air-conditioning. The integration of photovoltaic panels into our innovative façades, even transforms the solar energy into green electricity.



BREEAM[®]

All of this contributes to the realization of sustainable buildings and leads to credits for LEED (Leadership in Energy and Environmental Design) and BREEAM (BRE Environmental Assessment Method), just two examples of assessment methods which set the standard for best practice in sustainable architecture.

These certifications show that the buildings are built taking into account environmental issues such as: energy demands of the building, recycling of materials, use of water, comfort of people inside the building, use of renewable energy sources, location of the building,...

The increasing interest in these types of certificates proves the importance of sustainable buildings and products. Reynaers’ innovative products, continuing research and focus on knowledge exchange will allow the company to make a genuine contribution to this new way of building.

ABOUT REYNAERS ALUMINIUM

Reynaers Aluminium is a leading European specialist in the development and marketing of innovative and sustainable aluminium solutions for windows, doors, curtain walling, sliding systems, sunscreening and conservatories. Besides offering an extensive range of standard solutions, the company also develops solutions that are tailored to the individual customer or project. Research, product development and testing are conducted at the Reynaers Institute, the sector's largest private innovation and testing centre, located in Duffel (Belgium). In addition, the company also provides extensive technical support and advice to fabricators, contractors and architects.

Reynaers Aluminium is the market leader in Belgium and has acquired a strong market position in the 30 countries where it has its own sites. The company's success is due in part to the close partnership between Reynaers and 5,000 partner fabricators, architects and project developers worldwide.

In 2013 the Reynaers group achieved a turnover of 316 million euros and has 1,500 employees throughout the world. The company exports to more than 70 countries on 5 continents.

For more information: www.reynaers.com

REYNAERS ALUMINIUM NV/SA
Oude Liersebaan 266 · B-2570 Duffel
t +32 15 30 85 00
www.reynaers.com · info@reynaers.com
www.reynaers-extranet.com