



Architect: STARH EOOD, Architect Svetoslav Stanislavov
Photo: 3nSpirit LTD

PRODUCT OVERVIEW

R
REYNAERS
aluminium





TABLE OF CONTENTS

| | | | |
|--------------------------|----|----------------------------------|----|
| Introduction | 5 | Conservatories | 61 |
| Windows and Doors | 7 | Cintro | 62 |
| Decision matrix | 8 | TR 200 | 63 |
| Performance matrix | 10 | CR 120 | 64 |
| Opening types | 12 | PR 100 | 65 |
| MasterLine 10 | 14 | Complementary Systems | 67 |
| MasterLine 8 | 15 | Ventalis | 68 |
| Sensity | 17 | Mosquito | 69 |
| CS 77 | 18 | RB 10 | 70 |
| CS 77-FP | 19 | RB Glass | 71 |
| CS 77-BP | 20 | Handles | 73 |
| CS 68 | 21 | Purity | 74 |
| ES 50 | 22 | Touch | 75 |
| SlimLine 68 | 23 | Olimpo | 76 |
| SlimLine 38 | 24 | Orchid | 77 |
| CS 24-SL | 25 | Horizon | 78 |
| CS 59Pa | 26 | Shield | 79 |
| ES 45Pa | 27 | Solar | 81 |
| Sliding Systems | 29 | BS 100 / 30 SOLAR | 82 |
| Decision matrix | 30 | CW 60 / RB 10 SOLAR | 83 |
| Opening types | 31 | Activities & Services | 85 |
| Hi-Finity | 32 | Reynaers Campus | 86 |
| SlimPatio 68 | 34 | Experience Centre | 86 |
| CP 155 / CP 155-LS | 36 | Technology Centre | 87 |
| CP 130 / CP 130-LS | 37 | Training centre | 88 |
| CP 96 / CP 96-LS | 38 | Automation Centre | 90 |
| CP 68 | 39 | Production Centre | 91 |
| CP 45Pa | 40 | Logistics Centre | 91 |
| GP 51 | 41 | Surface Treatment | 92 |
| CF 77 | 42 | Reynaers Campus Offices | 92 |
| CF 68 | 43 | Bespoke Solutions | 92 |
| Curtain Walls | 45 | Research & Development | 93 |
| CW 50 | 46 | Communication | 94 |
| CW 50-FP | 49 | Quality Management | 96 |
| CW 60 | 50 | 10-Year system guarantee | 97 |
| CW 65-EF | 52 | CE Marking | 98 |
| CW 86 (-EF) | 54 | Green commitment | 99 |
| Brise Soleil | 57 | | |
| BS 100 / 30 | 58 | | |
| BS 40 | 59 | | |

WELCOME TO REYNAERS ALUMINIUM

For over 50 years, Reynaers Aluminium has been designing cutting-edge glazing solutions for some of the most iconic buildings in the world. Engineered without compromise, our range of aluminium windows, doors and curtain wall systems have been specified time and again by the world's leading architects and construction companies.

Reynaers Aluminium is recognised globally for the premium quality of its products. To help us maintain this reputation, we have invested in a world-class design and testing facility. When you choose Reynaers Aluminium products, you can rest assured that you are choosing a product that will not only look great, but will also offer industry-leading performance and reliability.

TOGETHER FOR BETTER

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

READY FOR THE FUTURE

Reynaers Aluminium is the market leader in Belgium and we have acquired a strong market position in over 40 countries, each with its own offices.



The Reynaers Campus is the corporate headquarters of Reynaers and is located in Duffel (Belgium). The Reynaers Campus is the inspiring and dynamic work environment of all Reynaers Aluminium employees and a place for partners to experience the latest products and innovations in full interactivity.



At the Reynaers Campus, you can visit the Experience Centre that is designed to bring people together and inspire you with our latest solutions and state-of-the-art technologies for architectural building solutions. In the Experience Room, you can discover our unique offering, assisted by inspiring digital applications. For a full immersive experience, a visit to AVALON can be booked where you can visit future buildings through a shared virtual reality experience.

In addition to these facilities, the Reynaers Campus also includes the Technology Centre, the largest privately owned innovation and testing centre, for the validation of architectural and high-tech window, door and façade concepts. One of the showpieces of the Technology centre is a state-of-the-art testing wall for façades with a height of 15 meters, allowing air-wind-water testing of multi-storey façades. This part of the Reynaers Campus also accommodates the 'R-Lab'; our dedicated lab for prototyping and 3D printing, resulting in faster and more accurate R & D tracks.



IMPRESSIVE GROWTH

Reynaers Aluminium is a part of the group Reynaers. This international group has experienced massive growth in the last 30 years. Having grown more than 200% over the last 10 years, Reynaers Aluminium is considered by all players in the industry as one of the leaders in its business. In 2018 Reynaers achieved a turnover of 537 million euros and has over 2200 employees throughout the world.

WINDOWS & DOORS



Architect: Artist Michel Huisman in collaboration with Wauben Architects
Photo: Hennie Raaymakers



MasterLine 10



CS 77



SlimLine 68



CS 59Pa



MasterLine 8



CS 68



SlimLine 38



ES 45Pa



Sensity



ES 50











CS 24-SL

DECISION MATRIX

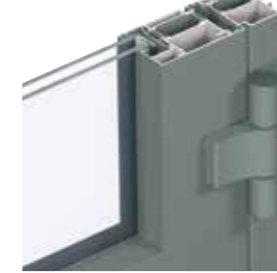
Windows & Doors



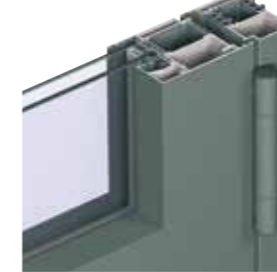
| WINDOW MATRIX | MasterLine 10 | MasterLine 8 | Sensity | CS 77 | CS 68 | ES 50 | SlimLine 68 | SlimLine 38 | CS 24-SL | CS 59Pa | ES 45Pa |
|---------------|---|--------------|---------|-------|-------|-------|-------------|-------------|----------|---------|---------|
| FUNCTIONAL |  | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ |
| HIDDEN VENT |  | | ■ | ■ | ■ | | | | | | |
| RENAISSANCE |  | ■ | ■ | | | | | | | | |
| DECO |  | ■ | ■ | | | | | | | | |
| CUBIC |  | | | | | | | ■ | | | |
| FERRO |  | | | | | | | ■ | | | |
| CLASSIC |  | | | | | | | ■ | ■ | | |
| SOFTLINE |  | | | ■ | | | | | | | |

DOOR MATRIX

FLUSH DOOR WITH SURFACE MOUNTED HINGES



FLUSH DOOR WITH BARREL HINGES



WINDOW DOOR



| DOOR MATRIX | MasterLine 10 | MasterLine 8 | Sensity | CS 77 | CS 77-FP | CS 77-BP | CS 68 | ES 50 | SL 68 | SL 38 | CS 24-SL | CS 59Pa | ES 45Pa |
|--|---------------|--------------|---------|-------|----------|----------|-------|-------|-------|-------|----------|---------|---------|
| FLUSH DOOR WITH SURFACE MOUNTED HINGES | | | | ■ | ■ | ■ | ■ | ■ | | | | ■ | |
| FLUSH DOOR WITH BARREL HINGES | | | | ■ | ■ | ■ | ■ | | ■ | | | ■ | |
| WINDOW DOOR | ■ | ■ | | ■ | | | ■ | ■ | | ■ | ■ | ■ | ■ |

PERFORMANCE MATRIX

Windows & Doors

Architect: Enzmann & Fischer AG
Photo: Bruno Rubatscher / Danny Schullhess

| | MasterLine 10 | | MasterLine 8 | | Sensity | CS 77 | | CS 77-FP/SP | CS 77-BP | |
|--|---------------|--|--------------|--|---------|-------|--|-------------|----------|--|
| | | | | | | | | | | |

SAFETY VARIANTS

| | | | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|--|--|
| Burglary Proof | | | | | | | | | | |
| Fire Proof | | | | | | | | | | |
| Bullet Proof | | | | | | | | | | |
| Smoke leakage control | | | | | | | | | | |

SUSTAINABILITY

| | | | | | | | | | | |
|-----------------------------|--|--|--|--|--|--|--|--|--|--|
| High Insulation | | | | | | | | | | |
| Passive Housing Certificate | | | | | | | | | | |
| Ventalis | | | | | | | | | | |

MINIMAL VISIBLE WIDTH FRAME/VENT

| | | | | | | | | | | |
|--|--------|--------|-------|--------|--------|-------|--------|--------|--------|--------|
| | 104 mm | 162 mm | 97 mm | 153 mm | 117 mm | 89 mm | 150 mm | 150 mm | 128 mm | 150 mm |
|--|--------|--------|-------|--------|--------|-------|--------|--------|--------|--------|

PERFORMANCES

| | | | | | | | | | | |
|---|---------------|--------------|---------------|--------------|--------------|--------------|-------------|-------------|--------------|-------------|
| Insulation smallest frame/vent section (Uf-value ≥ ...) | 0.9 W/m²K | 0.79 W/m²K | 1.2 W/m²K | 1.4 W/m²K | 1.4 W/m²K | 1.8 W/m²K | 2.1 W/m²K | 2.2 W/m²K | 1.8 W/m²K | 2.2 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) | 4 (600 Pa) |
| Wind load resistance Class (value in Pa) | C4 (1600 Pa) | C3 (1200 Pa) | C4 (1600 Pa) | C3 (1200 Pa) | C4 (1600 Pa) | C5 (2000 Pa) | C2 (800 Pa) | C2 (800 Pa) | C5 (2000 Pa) | C2 (800 Pa) |
| Water tightness Class (value in Pa) | E900 (900 Pa) | 9A (600 Pa) | E900 (900 Pa) | 7A (300 Pa) | 9A (600 Pa) | 9A (600 Pa) | 7A (300 Pa) | 7A (300 Pa) | 9A (600 Pa) | 7A (300 Pa) |

- (1) Panel door only
- (2) Windowdoor
- (3) Outside opening only
- (4) Dutch standard only

Check CE passport for the most recent data

| CS 68 | | ES 50 | | SL 68 ⁽³⁾ | SL 38 | | CS 24-SL ⁽³⁾ | | CS 59Pa | | ES 45Pa | |
|-------|--|-------|--|----------------------|-------|--|-------------------------|--|---------|--|---------|--|
| | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|-------|--------|-------|--------|-------|-------|----------|-------|--------|-------|--------|-------|--------|
| 89 mm | 150 mm | 86 mm | 146 mm | 65 mm | 67 mm | 101.5 mm | 50 mm | 103 mm | 85 mm | 139 mm | 84 mm | 115 mm |
|-------|--------|-------|--------|-------|-------|----------|-------|--------|-------|--------|-------|--------|

| | | | | | | | | | | | | |
|---------------|--------------|-------------|--------------|-----------------|--------------|--------------|---------------|-------------|---------------|--------------|-------------|---|
| 2.5 W/m²K | 2.8 W/m²K | 2.3 W/m²K | 3.2 W/m²K | 2.9 W/m²K | 1.9 W/m²K | 1.9 W/m²K | 3.3 W/m²K | 3.3 W/m²K | - | - | - | - |
| 4 (600 Pa) | 4 (600 Pa) | 4 (600 Pa) | 4 (600 Pa) | 4 (600 Pa) | 4 (600 Pa) | 3 (600 Pa) | 4 (600 Pa) | 4 (600 Pa) | - | - | 4 (600 Pa) | - |
| C4 (1600 Pa) | C4 (1600 Pa) | C2 (800 Pa) | C5 (2000 Pa) | C4 (1600 Pa) | C3 (1200 Pa) | C3 (1200 Pa) | C5 (2000 Pa) | - | - | C5 (2000 Pa) | C2 (800 Pa) | - |
| E900 (900 Pa) | 4A (150 Pa) | 9A (600 Pa) | 4A (150 Pa) | E1200 (1200 Pa) | 9A (600 Pa) | 4A (150 Pa) | E750 (750 Pa) | 4A (150 Pa) | E750 (750 Pa) | - | 9A (600 Pa) | - |

OPENING TYPES

Architect: Mark Van Acker
Photo: Debbie De Brauwer

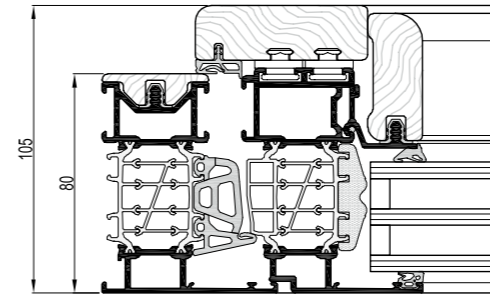
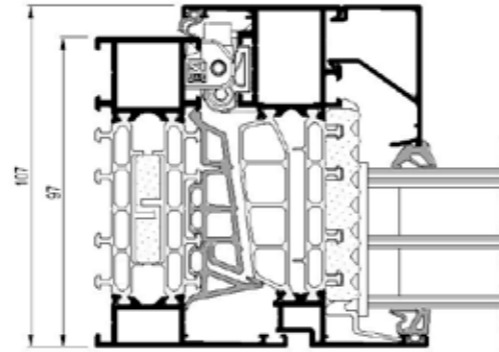
| WINDOWS | MasterLine 10 | MasterLine 8 | Sensity | CS 77 | CS 68 | ES 50 | SL 68 | SL 38 | CS 24-SL | CS 59Pa | ES 45Pa |
|---------|---------------|--------------|---------|-------|-------|-------|-------|-------|----------|---------|---------|
| | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ |
| | | ■ | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| | | ■ | | ■ | ■ | ■ | | | ■ | ■ | ■ |
| | | | | ■ | ■ | ■ | ■ | | ■ | ■ | ■ |
| | | ■ | | ■ | ■ | | ■ | ■ | ■ | ■ | ■ |
| | | ■* | | ■ | ■ | | | | | | |
| | ■ | ■ | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| | ■ | ■ | | ■ | ■ | ■ | | | | ■ | ■ |
| | ■ | ■ | | ■ | ■ | ■ | | | | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ |
| | | ■ | | ■ | ■ | ■ | | ■ | | ■ | ■ |

* CS 86-HI Solution

| DOORS | MasterLine 10 | MasterLine 8 | Sensity | CS 77 | CS 77-FP | CS 77-BP | CS 68 | ES 50 | SL 68 | SL 38 | CS 24-SL | CS 59Pa | ES 45Pa |
|-------|---------------|--------------|---------|-------|----------|----------|-------|-------|-------|-------|----------|---------|---------|
| | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ |
| | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ |
| | ■ | ■ | | ■ | ■ | | ■ | ■ | | ■ | | ■ | ■ |
| | ■ | ■ | | ■ | ■ | | ■ | ■ | | ■ | | ■ | ■ |
| | | | | ■ | | | | ■ | | | | ■ | |
| | | ■ | | ■ | | | ■ | ■ | | | | ■ | |
| | | ■ | | ■ | | | ■ | ■ | | | | ■ | |
| | | ■ | | | | | | | | | | | |
| | | ■ | | ■ | | | ■ | ■ | | | | ■ | |
| | | ■ | | ■ | | | ■ | ■ | | | | ■ | |
| | | ■ | | | | | | | | ■ | | | |
| | | ■ | | | | | | | | | | | |
| | | ■ | | ■ | | | | | | | | | |

MasterLine 10

Windows



Sensity

Windows



No compromise

No need to compromise: with MasterLine 10 you can have it all. This new system unites the best of all worlds: unlimited design freedom combined with ultimate comfort and optimal insulation performance.

MasterLine 10 windows are designed for the building trends of today and tomorrow: low energy building, maximum daylight access, superb performance and safe homes (burglar resistance class 3).

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

The windows are offered with a Passive House certificate!

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



Combining the best of aluminium and wood

SENSITY is a highly insulated aluminium system for windows, based on the technologically refined 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 a wide range of RAL colors, structural Coatex surfaces or even give it a "wooden-look" finish, while maintaining the ultimate low maintenance properties of the aluminium.



TECHNICAL CHARACTERISTICS

| | | FUNCTIONAL | RENAISSANCE | DECO |
|---|-------|-------------|-------------|-------------|
| Min. visible width inward opening window | Frame | 60 mm | 60 mm | 60 mm |
| | Vent | 37 mm | 37 mm | 37 mm |
| Min. visible width inward opening window-door | Frame | 60 mm | 60 mm | 60 mm |
| | Vent | 67 mm | 67 mm | 67 mm |
| Overall system depth window | Frame | 97 mm | 107 mm | 107 mm |
| | Vent | 107 mm | 107 mm | 107 mm |
| Rebate height | | 27 mm | 27 mm | 27 mm |
| Glass thickness | Frame | up to 88 mm | up to 88 mm | up to 88 mm |
| | Vent | up to 88 mm | up to 78 mm | up to 78 mm |

PERFORMANCES

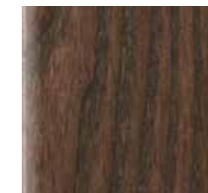
| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 0.76 W/m²K depending on the frame/vent combination and the glass thickness. |
| Acoustic performance | Rw(C;Ctr) = 46 (-1; -4) dB |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | Up to 900 Pa (class E900) |
| Burglar resistance | Up to RC 3 (EN 1627) |



BLEACHED OAK
modern interior



TOBACCO
cozy interior



WENGE
luxury interior

TECHNICAL CHARACTERISTICS

| | | |
|--|-------|-------------|
| Min. Visible width inward opening window | Frame | 64 mm |
| | Vent | 35 mm |
| Overall system depth window | Frame | 80 mm |
| | Vent | 100 mm |
| Rebate height | | 25 mm |
| Glass thickness | | up to 52 mm |

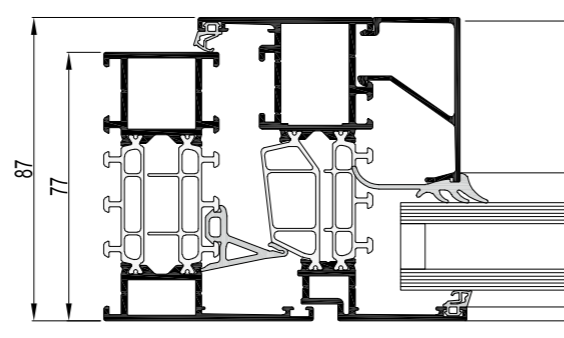
PERFORMANCES

| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 1.1 W/m²K depending on the frame/vent combination and the glass thickness |
| Acoustic performance | Rw (C;Ctr) = 37 (-1,-3) / 39 (-1,-3) dB |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 2000 Pa (class 5) |
| Water tightness | Up to 600 Pa (class 9A) |

MasterLine

8

Windows



Made to measure

MasterLine 8 combines a wide range of opening types, design variants and insulation levels into just one platform with a 87mm system depth. All opening types are available in three insulation levels (standard, HI and HI+), larger windows are possible with stronger profiles with smaller sight lines. The functional design variant offers the widest range of profiles to be able to neatly connect to profile ranges such as sliding elements, curtain wall profiling etcetera.

With ever more awareness on our ecological mark on the future, there is a need for better insulation performances and improved air and water tightness. With MasterLine 8 it is possible to combine water tightness of 900Pa as a standard and air tightness 600Pa with reduced air loss, with excellent thermal values and glass weights up to 200kg for a turn-tilt window.

In MasterLine 8 the manufacturing process from first sketch to the installation of windows has been simplified and therefore the productivity of creating aluminium windows has improved. Less tolerance sensitivity when installing windows, fewer and easier to apply gaskets and foams all assist in the goal of making it easier to produce high quality windows.

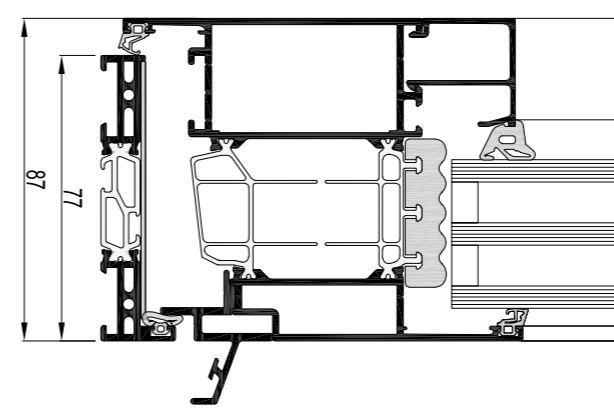


TECHNICAL CHARACTERISTICS

| | | FUNCTIONAL | RENAISSANCE | DECO | HIDDEN VENT |
|---|-------|-------------|-------------|-------------|-------------|
| Min. visible width inward opening window | Frame | 53 mm | 53 mm | 53 mm | 80 mm |
| | Vent | 37 mm | 37 mm | 37 mm | - |
| Min. visible width inward opening window-door | Frame | 60 mm | 60 mm | 60 mm | not visible |
| | Vent | 67 mm | 67 mm | 67 mm | not visible |
| Overall system depth window | Frame | 77 mm | 87 mm | 87 mm | 77 mm |
| | Vent | 87 mm | 87 mm | 87 mm | 80 mm |
| Rebate height | | 27 mm | 27 mm | 27 mm | 27 mm |
| Glass thickness | Frame | up to 62 mm | up to 62 mm | up to 62 mm | up to 62 mm |
| | Vent | up to 72 mm | up to 62 mm | up to 62 mm | up to 62 mm |

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uf-value down to 1.0 W/m²K depending on the frame/vent combination and the glass thickness. |
| Acoustic performance | Rw(C;Ctr) = 45 (-1; -4) dB, depending on glazing type |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | Up to 900 Pa (class E900) |
| Burglar resistance | Up to RC 3 (EN 1627) |



MasterLine

8

Doors



Made to measure

MasterLine 8 doors offer a wide range of highly insulated and robust flush doors, which meets the modern requirements with regard to safety, thermal insulation and stability, allowing the creation of large entrance doors. MasterLine doors are available as inward and outward opening glass or panel doors and pivoting doors are possible. All the doors can be fitted with a wide range of locks and hinges.

MasterLine doors are designed to meet the modern comfort requirements. The excellent air tightness and superb thermal performances are proven by the Passive Housing certificate that is included in the system.

With regard to safety and performance, the robust MasterLine doors can comply with burglar resistance class 3, large dimensions and weights up to 250kg and are proven to be extremely durable (class 8).



TECHNICAL CHARACTERISTICS

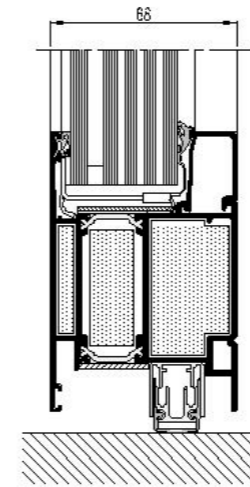
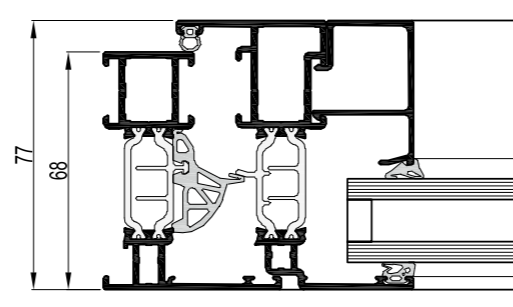
| | | BALCONY DOOR | FLUSH DOOR | PIVOT DOOR |
|--|-------|--------------|-------------|-------------|
| Min. visible width inward opening door | Frame | 53 mm | 68.5 mm | 68.5 mm |
| | Vent | 52 mm | 78.5 mm | 104.5 mm |
| Overall system depth window | Frame | 77 mm | 77 mm | 77 mm |
| | Vent | 87 mm | 77 mm | 77 mm |
| Rebate height | | 27 mm | 27 mm | 27 mm |
| Glass thickness | Vent | up to 62 mm | up to 61 mm | up to 61 mm |

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uf-value down to 1.4 W/m²K depending on the frame/vent combination and the glass thickness. |
| Acoustic performance | Rw(C;Ctr) = 45 (-1; -4) dB, depending on glazing type |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1200 Pa (class 3) |
| Water tightness | Up to 300 Pa (class 7A) |
| Burglar resistance | Up to RC 3 (EN 1627) |

CS 77

Windows & Doors



CS 77-FP60 door

CS 77-FP

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.

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. For insulation, CS 77 even achieved the Swiss Minergie® component label.

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

The CS 77 system includes a 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.



The CS 77-FP EI30 and EI60 is developed based on the existing CS 77 profiles and accessories for windows and doors and extensively 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 fire 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.



FUNCTIONAL HIDDEN VENT SOFT LINE

| TECHNICAL CHARACTERISTICS | | FUNCTIONAL | HIDDEN VENT | SOFT LINE |
|--|-------|-------------|-------------|-------------|
| Min. visible width inward opening window | Frame | 51 mm | 76 mm | 51 mm |
| | Vent | 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 | 68 mm | 68 mm |
| | Vent | 77 mm | 72.5 mm | 77 mm |
| Rebate height | | 25 mm | 18.5 mm | 25 mm |
| Glass thickness | | up to 53 mm | up to 49 mm | up to 40 mm |

PERFORMANCES

| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 1.2 W/m²K 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) |
| Burglar resistance | Up to RC 3 (EN 1627 & NEN 5096) |

TECHNICAL CHARACTERISTICS

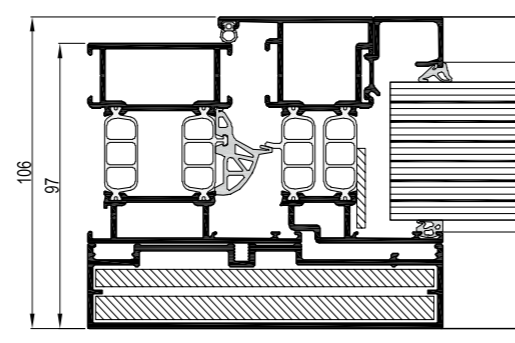
| | CS 77-FP EI30 | CS 77-FP EI60 |
|-----------------|-----------------------|-----------------------|
| Rebate height | 25 mm | 25 mm |
| Glass thickness | from 15 mm to 52 mm | from 15 mm to 52 mm |
| Glazing method | dry glazing with EPDM | dry glazing with EPDM |

PERFORMANCES

| | 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 |
| Burglar resistance | Up to RC 2 (EN 1627) | |

CS 77-BP

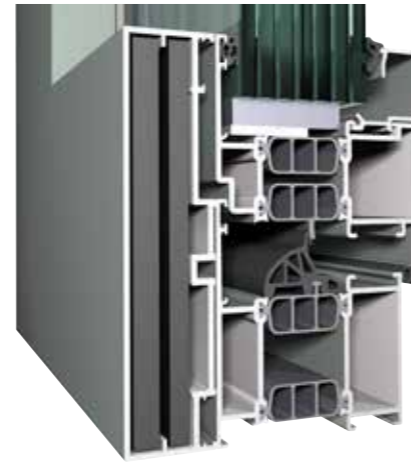
Windows & Doors



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.

We offer a range of window & doors solutions for classifications FB3 up to FB6, FSG & Kalashnikov.

Optionally, the windows can be offered with a burglar resistance up to RC 3.



TECHNICAL CHARACTERISTICS

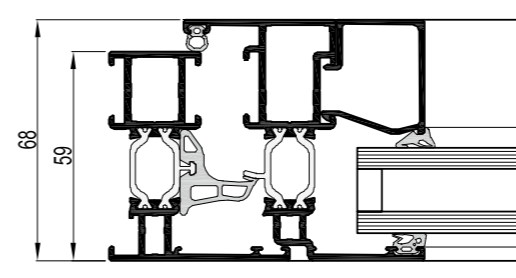
| | | BULLETPROOF |
|--|-------|------------------|
| Min. visible width inward opening window | Frame | 128 mm |
| | Vent | - |
| Min. visible width inward opening flush door | Frame | 77 mm |
| | Vent | 77 mm |
| Overall system depth window | Frame | 97 mm |
| | Vent | 77 mm |
| Rebate height | | 25 mm |
| Glass thickness | | from 25 to 63 mm |

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uf-value down to 1.94 W/m ² K, depending on the frame/vent combination |
| Acoustic performance | Rw (C; Ctr) ≤ 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) |
| Bullet resistance | Up to FB 6, FSG & Kalashnikov (EN 1522) |
| Burglar resistance | Windows: up to RC 3 (EN 1627) |

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 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 or 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

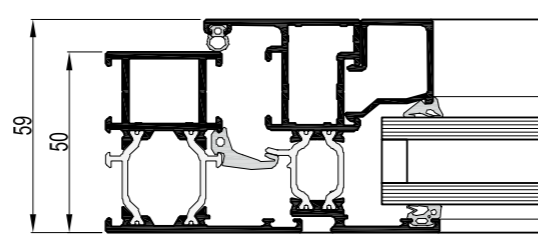
| | | FUNCTIONAL | HIDDEN VENT |
|--|-------|-------------|-------------|
| Min. visible width inward opening window | Frame | 51 mm | 76 mm |
| | Vent | 33 mm | not visible |
| Min. visible width inward opening flush door | Frame | 68 mm | - |
| | Vent | 76 mm | - |
| Overall system depth window | Frame | 59 mm | 59 mm |
| | Vent | 68 mm | 63.5 mm |
| Rebate height | | 25 mm | 18.5 mm |
| Glass thickness | | up to 44 mm | up to 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) |
| Burglar resistance | Windows: Up to RC 2 (EN 1627 & NEN 5096) Doors: Up to WK 3 (NEN 5096) |

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

FUNCTIONAL

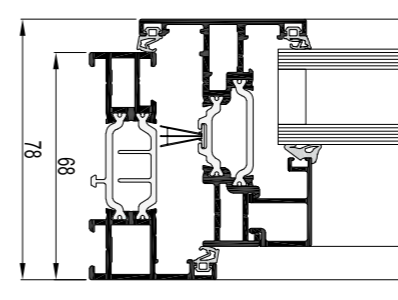
| | | |
|---|-------|---|
| Min. visible width outward opening window | Frame | 15 mm |
| | Vent | 50 mm |
| Min. visible width T-profile | | 50 mm |
| Overall system depth window | Frame | 68 mm |
| | Vent | 68 mm |
| Rebate height | | 18 mm |
| Glass thickness | | up to 43 mm |
| Glazing method | | dry glazing with EPDM or neutral silicones |
| Thermal insulation | | omega-shaped fibreglass reinforced polyamide strips (32 mm) |
| High Insulation variant (HI) | | available |

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) |
| Burglar resistance | Up to RC 2 (EN 1627) |

SlimLine 68

Windows



Reynaers Aluminium's SlimLine 68 window system is specifically designed to meet the demand for an outward opening window with very slim profiles. Particularly suited to use in residential properties, this window maximises the glass area to let in lots of natural daylight. The slim frames and clean lines make this window ideal for both contemporary and more traditional properties, as the design of the window mimics the sight lines of the original steel-framed windows. Its 68mm frame depth makes it perfect as a replacement window as it usually fits within the existing plaster line.

SlimLine 68 vents can be glazed from the inside as well as the outside, and are available on a standard and a HI insulation level.

TECHNICAL CHARACTERISTICS

| | | |
|---|-------|---|
| Min. visible width outward opening window | Frame | 15 mm |
| | Vent | 50 mm |
| Min. visible width T-profile | | 50 mm |
| Overall system depth window | Frame | 68 mm |
| | Vent | 68 mm |
| Rebate height | | 18 mm |
| Glass thickness | | up to 43 mm |
| Glazing method | | dry glazing with EPDM or neutral silicones |
| Thermal insulation | | omega-shaped fibreglass reinforced polyamide strips (32 mm) |
| High Insulation variant (HI) | | available |

FUNCTIONAL

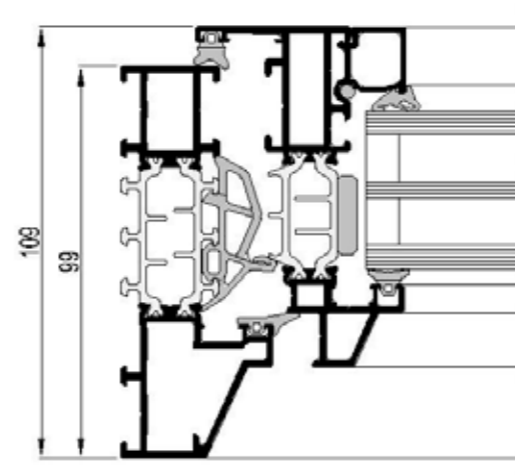
| | | |
|---|-------|---|
| Min. visible width outward opening window | Frame | 15 mm |
| | Vent | 50 mm |
| Min. visible width T-profile | | 50 mm |
| Overall system depth window | Frame | 68 mm |
| | Vent | 68 mm |
| Rebate height | | 18 mm |
| Glass thickness | | up to 43 mm |
| Glazing method | | dry glazing with EPDM or neutral silicones |
| Thermal insulation | | omega-shaped fibreglass reinforced polyamide strips (32 mm) |
| High Insulation variant (HI) | | available |

PERFORMANCES

| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 2.5 W/m ² K depending on the frame/vent combination and the glass thickness. Uw ≥ than 1.4 W/m ² K for a standard window section |
| Acoustic performance | Rw (C; Ctr) = 36 (-1; -5) dB / 47 (-2; -7) dB, depending on glazing type |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | Up to 1050 Pa (class E1050) |
| Burglar resistance | PAS 24 |

SlimLine 38

Windows & Doors



Light, Elegance and comfort

SlimLine 38 is a highly insulated system that combines elegance and comfort with a unique design. This special slender steel look is the perfect solution for modern architecture and renovation of steel-framed windows, respecting the original design but offering a thermally improved solution.

The SL 38 system is available in 3 different minimalistic design variants, Classic, Ferro and Cubic, to perfectly match the architectural aspect of the building. The windows and doors can be provided with double and triple glazing without losing the ultra-slim look.

In combination with its superior insulation capabilities, the system provides the perfect harmony between durable material, clean design and demanding architectural challenges.



CLASSIC



CUBIC

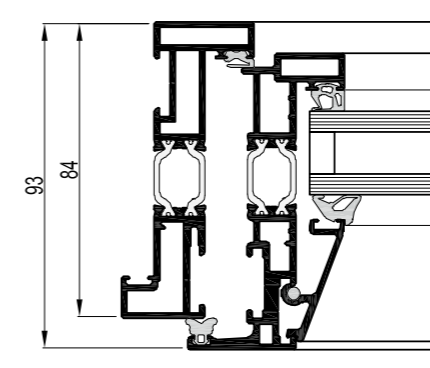


FERRO

| TECHNICAL CHARACTERISTICS | | CLASSIC | CUBIC | FERRO |
|---|-------|-------------|-------------|-------------|
| Min. visible width inward opening window | Frame | 33 mm | 33.5 mm | 33.5 mm |
| | Vent | 23 mm | 22 mm | 21.5 mm |
| Min. visible width inward opening window-door | Frame | 33.5 mm | 33.5 mm | |
| | Vent | 52.5 mm | 52.5 mm | |
| Overall system depth window | Frame | 99 mm | 76 mm | 76 mm |
| | Vent | 86 mm | 75 mm | 72 mm |
| Rebate height | | 13.5 mm | 13.5 mm | 13.5 mm |
| Glass thickness | | up to 55 mm | up to 55 mm | up to 55 mm |

PERFORMANCES

| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 1.7 W/m ² K depending on the frame/vent combination and the glass thickness. Uw of less than 1.4 W/m ² K for a standard window section |
| Acoustic performance | Rw(C;Ctr) = 38 (-1; -4) dB / 45 (-1; -5) dB, depending on glazing type |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to RC 2 (EN 1627 & 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

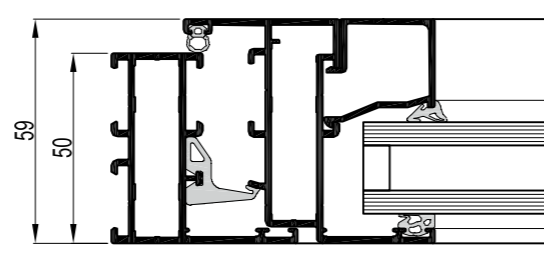
| TECHNICAL CHARACTERISTICS | | SLIM LINE |
|--|-------|-------------|
| Min. visible width outward opening window | Frame | 19 mm |
| | Vent | 31 mm |
| Min. visible width outward opening window door | Frame | 19 mm |
| | Vent | 70 mm |
| Overall system depth | Frame | 85 mm |
| | Vent | 85 mm |
| Rebate height | | 14 mm |
| Glass thickness | | up to 29 mm |

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uf-value down to 3.3 W/m ² K depending on the frame/vent combination and the glass thickness |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1200 Pa (class 3) |
| Water tightness | Up to 750 Pa (class E750) |
| Burglar resistance | Up to WK 2 (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 Aluminium conservatory systems. The different design options and the large choice of colours allow a perfect match with the building style.



TECHNICAL CHARACTERISTICS

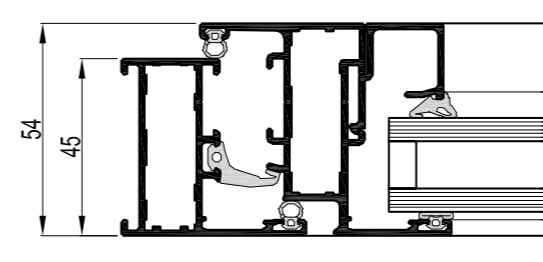
| | | PARALLEL | RENAISSANCE |
|--|-------|-------------|-------------|
| Min. visible width inward opening window | Frame | 49 mm | 55 mm |
| | Vent | 21 mm | 31 mm |
| Min. visible width inward opening flush door | Frame | 61,5 mm | - |
| | Vent | 72,5 mm | - |
| Overall system depth window | Frame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

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.



TECHNICAL CHARACTERISTICS

| | | FUNCTIONAL |
|---|-------|-------------|
| Min. visible width inward opening window | Frame | 47 mm |
| | Vent | 30 mm |
| Min. visible width inward opening window door | Frame | 47 mm |
| | Vent | 61 mm |
| Overall system depth | Frame | 45 mm |
| | Vent | 54 mm |
| Rebate height | | 22 mm |
| Glass thickness | | up to 42 mm |

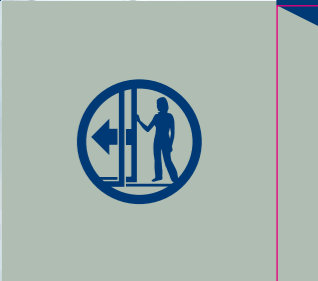
PERFORMANCES

| | |
|----------------------|--|
| Acoustic performance | Rw (C;Ctr) = 41 (-1;-5) dB / 42 (-2;-5) dB, depending in or outward opening window |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 2400 Pa (class E2400) |
| Water tightness | Up to 900 Pa (class E900) |

SLIDING SYSTEMS

Sliding & Folding

SLIDING SYSTEMS



Architect: Bauzeit Architekten GmbH & Strässler Architektur
Photo: © yves-andre.ch



Hi-Finity



CP 155 / CP 155-LS



CP 96 / CP 96-LS



CP 45Pa



CF 77



SlimPatio 68



CP 130 / CP 130-LS



CP 68



CF 68

DECISION MATRIX

Sliding Systems

OPENING ELEMENTS



| DESIGN VARIANTS | Hi-Finity | SlimPatio 68 | CP 155 | CP 130 | CP 96 | CP 68 | CP 45Pa | CF 77 | CF 68 |
|---------------------------|-----------|--------------|--------|--------|-------|-------|---------|-------|-------|
| Functional | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Slim Line | ■ | ■ | ■ | | | | | ■ | |
| Monorail | | | ■ | ■ | ■ | ■ | ■ | | |
| Single Rail | | ■ | | | | | | ■ | ■ |
| 2-Rails | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| 3-Rails | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Multirail | | | ■ | ■ | | | | | |
| Slide | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Lift-Slide | | | ■ | ■ | ■ | | | | |
| Motorised | ■ | | ■ | | | | | | |
| Low and/or zero threshold | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | ■ |
| Pocket | | ■ | ■ | ■ | | ■ | | | |
| Open corner | ■ | | ■ | ■ | | ■ | | | |
| Glass corner | ■ | | ■ | ■ | | ■ | | | |

| SAFETY VARIANTS | Hi-Finity | SlimPatio 68 | CP 155 | CP 130 | CP 96 | CP 68 | CP 45Pa | CF 77 | CF 68 |
|--------------------|-----------|--------------|--------|--------|-------|-------|---------|-------|-------|
| Burglar resistance | ■ | | ■ | ■ | ■ | ■ | | ■ | ■ |

| OVERALL SYSTEM DEPTH (STANDARD) | Hi-Finity | SlimPatio 68 | CP 155 | CP 130 | CP 96 | CP 68 | CP 45Pa | CF 77 | CF 68 |
|---------------------------------|------------|--------------|--------|--------|-------|----------|---------|-------|-------|
| Frame | 147/179 mm | 120 mm | 155 mm | 130 mm | 96 mm | 68 mm | 50 mm | 77 mm | 68 mm |
| Vent | 44/60 mm | 64 mm | 68 mm | 59 mm | 43 mm | 41/49 mm | 29 mm | 77 mm | 68 mm |

| SUSTAINABILITY | Hi-Finity | SlimPatio 68 | CP 155 | CP 130 | CP 96 | CP 68 | CP 45Pa | CF 77 | CF 68 |
|-----------------|-----------|--------------|--------|--------|-------|-------|---------|-------|-------|
| High insulation | ■ | ■ | ■ | ■ | | ■ | | ■ | ■ |
| Ventalis | | | ■ | ■ | | | | | |

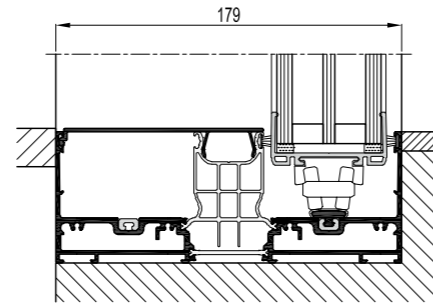
| ENERGY PERFORMANCE | Hi-Finity | SlimPatio 68 | CP 155 | CP 130 | CP 96 | CP 68 | CP 45Pa | CF 77 | CF 68 |
|--|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Insulation (Uf-value >= ...)* | 1.4 W/m²K | 2.4 W/m²K | 1.1 W/m²K | 2.35 W/m²K | 3.5 W/m²K | 2.5 W/m²K | - | 2.3 W/m²K | 1.8 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) |
| Water tightness Class (value in Pa) | 9A (600 Pa) | 8A (450 Pa) | 9A (600 Pa) | 9A (600 Pa) | 9A (600 Pa) | 7B (300 Pa) | 7B (300 Pa) | 6A (250 Pa) | 9A (600 Pa) |
| Wind load resistance Class (value in Pa) | 4 (1600 Pa) | 5 (2000 Pa) | 4 (1600 Pa) | 4 (1600 Pa) | 3 (1200 Pa) | 4 (1600 Pa) | 4 (1600 Pa) | 3 (1200 Pa) | 2 (800 Pa) |

* Depending on frame/vent combination - HI variant - Ug value = 1.0 and pSi = 0.11

| | Hi-Finity | SlimPatio 68 | CP 155 | CP 130 | CP 96 | CP 68 | CP 45Pa | CF 77 | CF 68 |
|--|-----------|--------------|--------|--------|-------|-------|---------|-------|-------|
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | | | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | ■ | ■ | ■ | | |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | ■ | ■ | ■ | ■ | ■ | | |
| | | | | | | | | ■ | ■ |
| | | | | | | | | ■ | ■ |
| | | | | | | | | ■ | ■ |
| | | | | | | | | ■ | ■ |

Hi-Finity

Sliding Systems



The infinite view

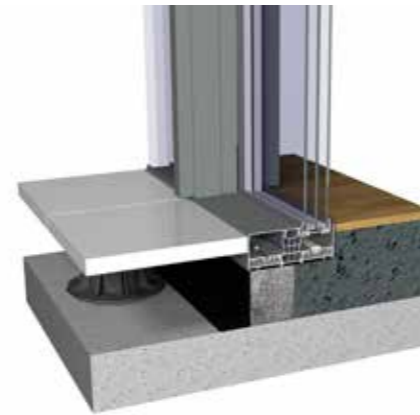
Enjoy an infinite view with ultimate performances! The ultra-slim design of the Hi-Finity sliding door creates large transparent surfaces, with a light, sleek and elegant appearance.

This fully transparent and accessible sliding door seamlessly extends the house's interior to the outside. Despite the minimal visual sidelines, the systems high strength allows Hi-Finity to carry the weight of a large sliding glass pane up to 750 kilograms. Fixed panels up to 1200 kg.

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

For a higher level of comfort a concealed motor allows you to open the vents with the push of a button, or by connecting the motor to your home automation system. This high performance motor guarantees optimum convenience during use and is a safe and reliable solution.

Hi-Finity is an exclusive system for certified fabricators.

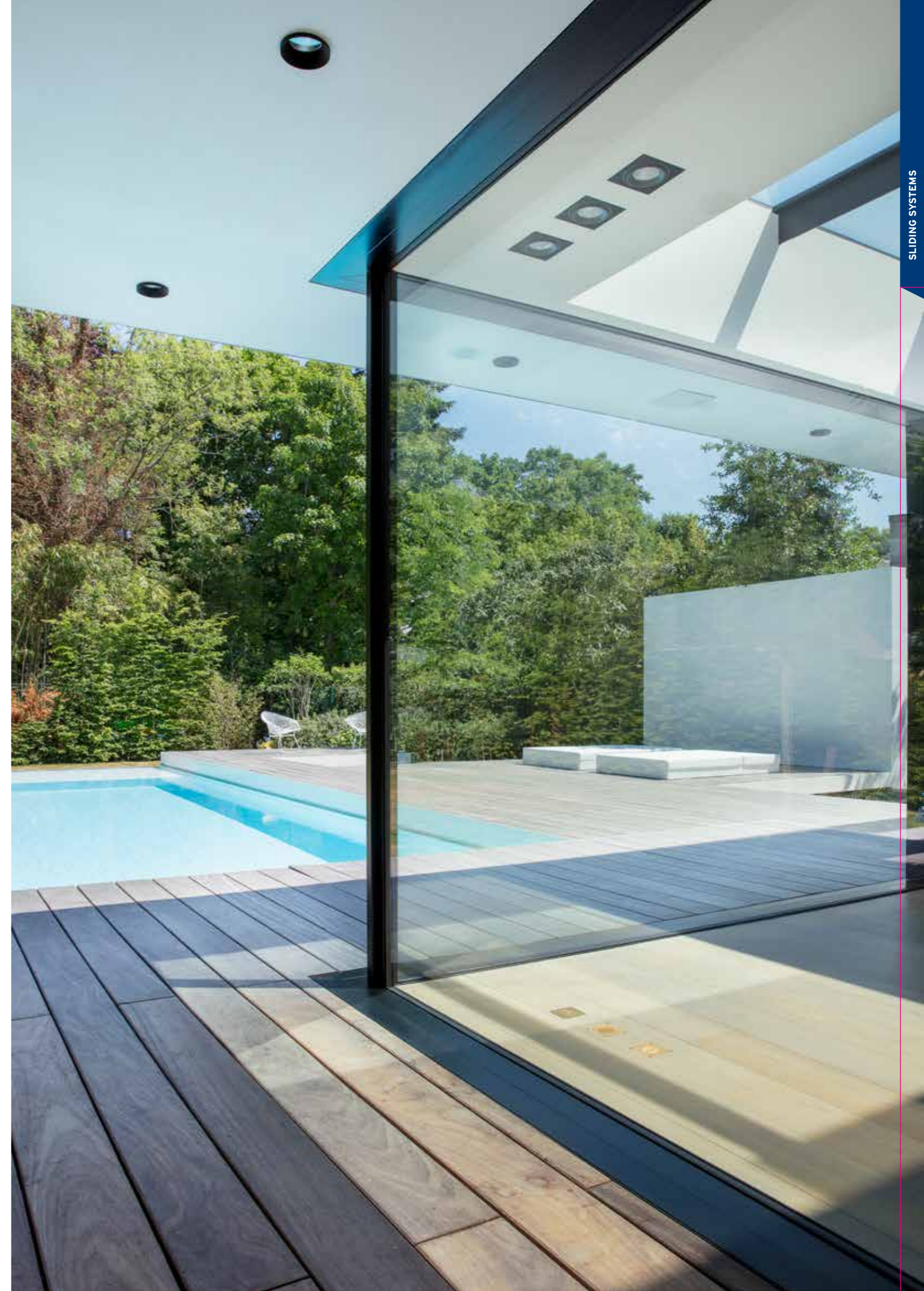


TECHNICAL CHARACTERISTICS

| | | 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) |
| | Meeting section 4 doors | 67 mm (adjustable) | 69 mm (adjustable) |
| Overall system depth | 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 | 300 kg manual / 750 kg motorized / 1200 kg fixed | | |
| Glass thickness | 36-38 mm | | 52-54 mm |

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uw-value down to 1.4 W/m ² K, depending on the frame/vent and the glazing thickness. |
| Acoustic performance | Rw(C;Ctr) = 43 (-1;-3) dB |
| 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) |
| Burglar resistance | Up to RC 2 (EN 1627) |



SlimPatio 68

Sliding Systems

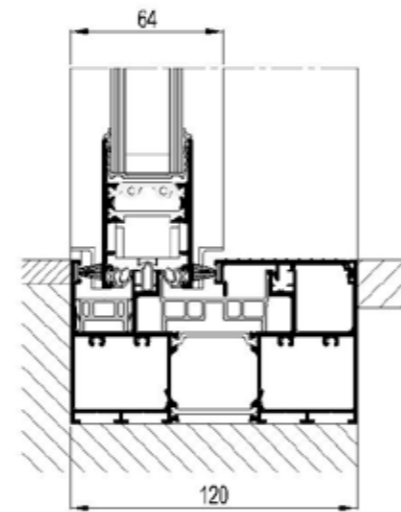


Open Elegance

SlimPatio 68 is a high insulated sliding system with slim profiles and a concealed frame that combines comfort with elegance. Thanks to the ultra slim design, this sliding window allows for maximum natural light and provides an optimal panoramic view. The integrated innovative technologies guarantee ultimate performances with regard to wind and water tightness and thermal insulation, meeting with the highest standards.

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

This sliding system offers a wide range of opening possibilities, from elements which slide over 2- and 3-rail solutions, allowing you to open up to 6 leaves, over a very slim central closing option of only 74 mm wide, to a single- and double-rail pocket solution that allows you to slide the elements into the wall.

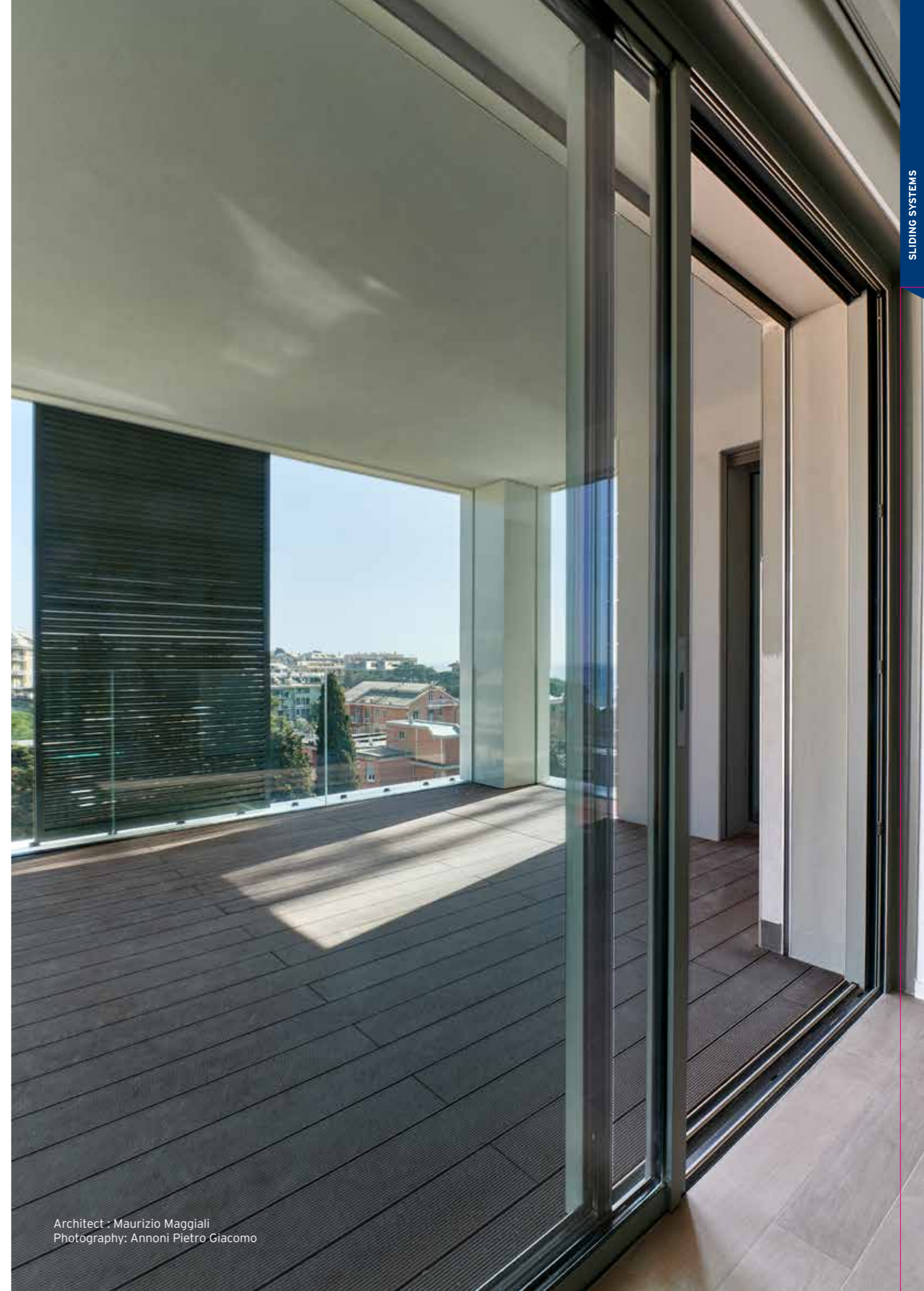


TECHNICAL CHARACTERISTICS

| | 2-RAIL | 3-RAIL |
|------------------------|--------|--|
| Visible width / height | | |
| Frame | | 0 mm |
| Horizontal Vent | | 34 mm |
| Vertical vent | | 34 mm |
| Meeting section | | 34 mm |
| Overall system depth | 120 mm | 176 mm |
| Maximal vent height | | 64 mm |
| Maximal vent weight | | 2700 mm |
| Rebate height | | 250 kg |
| Glass thickness | | 18 mm |
| Thermal insulation | | from 24 mm to 36 mm |
| | | 32 mm and 36 mm fibreglass reinforced polyamide strips |

PERFORMANCES

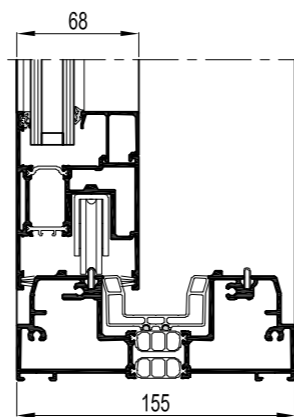
| | |
|----------------------|---|
| Thermal insulation | Uw-value down to 1.2 W/m ² K, for 3000mm x 2500mm frame/vent combination (Ug=0.8 W/m ² K) |
| Acoustic performance | Rw (C; Ctr) = 40 (-2;-4) dB |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 2000 Pa (class 5) |
| Water tightness | Up to 450 Pa (class 8A) |



Architect : Maurizio Maggiali
Photography: Annoni Pietro Giacomo

CP 155 / CP 155-LS

Sliding Systems



Sophistication for quality and insulation

Concept Patio® 155 is a premium insulating slide and lift-slide system, designed to create maximal opening elements, combined with increased comfort. The system perfectly links up to the CS 77 series.

With the CP 155(-LS) Slim Chicane, we introduced a sliding window with a meeting section of only 50mm width, which transforms our CP 155(-LS) into a modern design and makes it an elegant system, ready to meet today's trends.

The 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, including open / glass corner, pocket and the low and zero 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. Monorail allows up to 1500 kg for fixed panels. Additionally, CP 155 can comply with burglar resistance class 2, offering a safe and secure solution.



TECHNICAL CHARACTERISTICS

| | | CP 155 | | | CP 155 LS | | | MINERGIE |
|------------------------|-----------------|-------------|--------|--------|-------------|--------|--------|-------------|
| | | MONORAIL | 2-RAIL | 3-RAIL | MONORAIL | 2-RAIL | 3-RAIL | |
| Visible width / height | Frame | 50 - 60 mm | | | 50 - 60 mm | | | |
| | Vent | 102 mm | | | 102 mm | | | |
| | Meeting section | 115 mm | | | 115 mm | | | |
| Overall system depth | Frame | 155 mm | 155 mm | 242 mm | 155 mm | 155 mm | 242 mm | 192 mm |
| | Vent | 68 mm | | | 68 mm | | | |
| Rebate height | | 25 mm | | | 25 mm | | | |
| Glass thickness | | up to 52 mm | | | up to 52 mm | | | up to 61 mm |

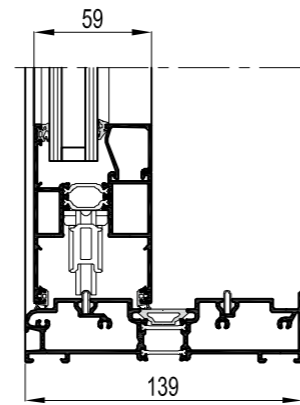
PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uw-value down to 1.04 W/m²K for Minergie version, with Ug = 0.5 W/m²K |
| 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 | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to WK 2 (ENV 1627) |

Architect : Architectenbureau Favril BVBA
Photography: Debbie Debrauwer

CP 130 / CP 130-LS

Sliding Systems



Aesthetic functionality

Concept Patio® 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 68 series.

CP 130 is available with various opening possibilities and the low and zero threshold option offers a solution to improve the buildings accessibility. The open corner and pocket solution make 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

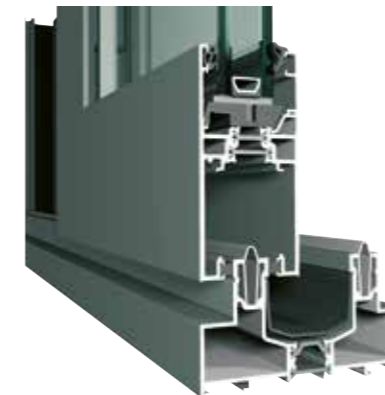
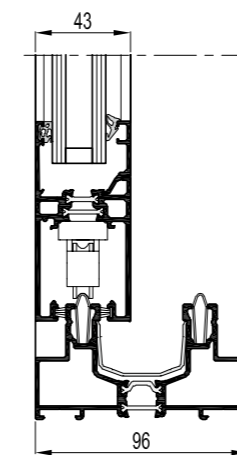
| | | CP 130 | | | CP 130-LS | |
|------------------------|-----------|------------------------|------------|--------|------------------------|-------------|
| | | MONORAIL | 2 RAIL | 3 RAIL | 2 RAIL | 3 RAIL |
| Visible width / height | Frame | 50 mm | 50 mm | 50 mm | 28/35/40 mm | 28/35/40 mm |
| | Vent | 69 - 98 mm | | | 69 - 98 mm | |
| | T-profile | From 76 mm till 115 mm | | | From 76 mm till 115 mm | |
| Overall system depth | Frame | 130 mm | 110-139 mm | 181 mm | 139 mm | 210 mm |
| | Vent | 59 mm | | | 59 mm 59 mm | |
| Rebate height | | 25 mm | | | 25 mm | |
| Glass thickness | | Up to 43 mm | | | Up to 43 mm | |

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uw-value down to 1.9 W/m²K, depending on the frame/vent combination and the glass thickness |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to WK 2 (ENV 1627) |

CP 96 / CP 96-LS

Sliding Systems



Safety and durability at a fair price

Concept Patio® 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 offers an enhanced burglary resistance.

TECHNICAL CHARACTERISTICS

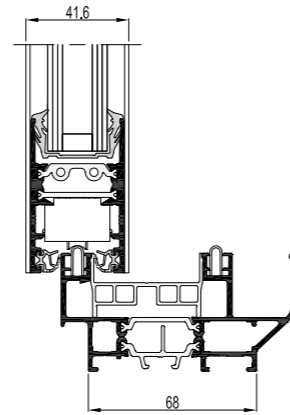
| | | CP 96 | CP 96-LS | | |
|-----------------------------|-----------------|----------|---------------------|--------|---------------------|
| | | MONORAIL | 2-RAIL | 3-RAIL | 2-RAIL |
| Visible width / height | Frame | | 52 mm | | 52 mm |
| | Vent | | 90 mm | | 90 mm |
| | T-profile | | 89-102 mm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

PERFORMANCES

| | |
|----------------------|---|
| Thermal insulation | Uw-value down to 2.1 W/m²K, depending on the frame/vent combination and the glass thickness |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1200 Pa (class 3) |
| Water tightness | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to WK 2 (NEN 5096) |

CP 68

Sliding Systems



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

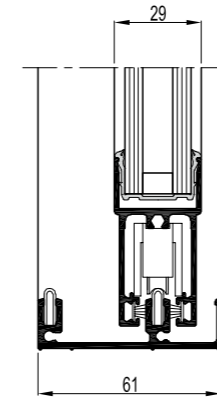
The sliding system CP 68 offers you all design freedom to create contemporary living spaces, combining ultimate brightness with maximum comfort and security.

| TECHNICAL CHARACTERISTICS | | 2-RAIL | 3-RAIL |
|---------------------------|---------------------|--|---------|
| Visible width | Frame / Vent | 109 mm | 109 mm |
| | Meeting section | 34 mm | 34 mm |
| | Frame | 68 mm | 124 mm |
| Overall system depth | Vent | 41,6 mm | 41,6 mm |
| | Maximal vent height | 2500 mm | |
| Maximal vent weight | | 200 kg | |
| Rebate height | | 18 mm | |
| Glass thickness | | 28 / 36 mm | |
| Glazing method | | with EPDM in accordance with the envelope principle | |
| Thermal insulation | | 32 mm and 36 mm fibreglass reinforced polyamide strips | |

| PERFORMANCES | |
|----------------------|---|
| Thermal insulation | Uw-value down to 1.8 W/m²K, depending on the frame/vent combination and the glass thickness |
| Acoustic performance | Rw (C; Ctr) = 38 (-2;-4) dB |
| Air tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1600 Pa (class 4) |
| Water tightness | 300 Pa (class 7B) |
| Burglar resistance | Up to RC 2 (EN 1627) |

CP 45Pa

Sliding Systems



Less is more

Concept Patio® 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.

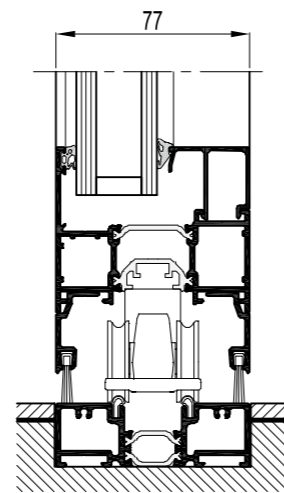
With the minimalistic design, CP 45Pa realises an aesthetic solution for your building. In addition, the sliding elements can easily be integrated with different types of windows, conservatory systems, sun screenings and screen doors.

| TECHNICAL CHARACTERISTICS | | 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 300 Pa (class 7B) |

CF 77

Folding Systems



Invite nature into your building

Concept Folding 77 combines high insulation and comfort with maximal transparency and aesthetics. CF 77 allows for large and heavy glass panes to really open up the space, while assuring optimal insulation.

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

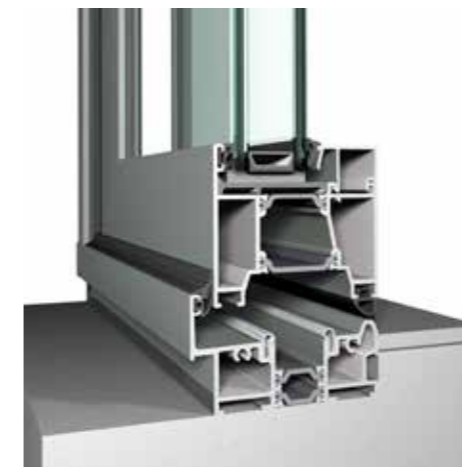
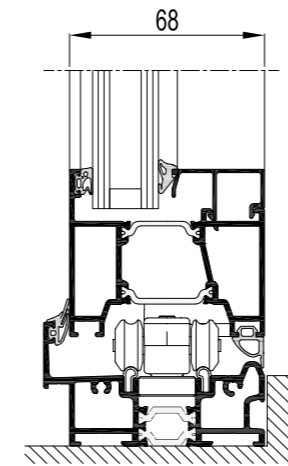
| | CF 77 | CF 77-SL |
|---|----------------|----------------|
| Max. vent size | 1200 x 3000 mm | 1200 x 3000 mm |
| Max. vent weight | 120 kg | 120 kg |
| Uw (W/m ² K) 4-panel: 4000 x 2700 mm | down to 1.66 | down to 1.64 |
| Visible width vent-vent section | 144 mm | 122 mm |

PERFORMANCES

| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 2.25 W/m ² K |
| Air Tightness | Up to 600 Pa (class 4) |
| Wind load resistance | Up to 1200 Pa (class 3) |
| Water Tightness | Up to 600 Pa (class 9A) |
| Burglar resistance | Up to RC 2 (EN 1627) |

CF 68

Folding Systems



Endless enjoyment

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

The folding principle of this high quality system allows you to combine thermal comfort and transparency, with a wide choice of in- or outside opening types.

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

| | Flush threshold | Low threshold | Double weather seal | High performance |
|------------------------|-----------------|---------------|---------------------|------------------|
| Visible width / height | 0-15 mm | 5-30 mm | 19-44 mm | 19-74 mm |
| | | | | 100 mm / 111 mm |
| | | | | 131 mm / 153 mm |
| Overall system depth | | | | 68 mm |
| Maximal element height | | | | 2500 mm |
| Maximal vent weight | | | | 90 kg |
| Rebate height | | | | 14 mm / 25 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 | Up to 600 Pa (class 4) | | |
| Wind load resistance | Not applicable | Up to 1200 Pa (class 3) | | |
| Water Tightness | Not applicable | Class 5A (0 Pa) | Class 7A (300 Pa) | Up to Class 9A (600 Pa) |
| Burglar resistance | Up to RC 2 (EN 1627) | | | |

CURTAIN WALLS



CURTAIN WALLS

Architect: Jaspers Eyers Architects
Photo: Philippe Van Gelooven



CW 50



CW 60



CW 86 (-EF)



CW 50-FP



CW 65-EF

CW 50

Concept Walls

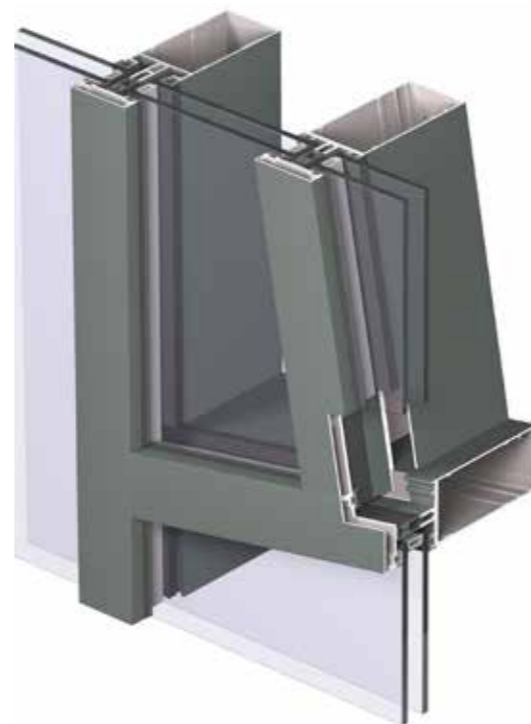


Unlimited creative freedom and maximum entrance of light

Concept Wall 50 is a façade and roof system that offers unlimited design freedom and allows maximum transparency. Innovative solutions contribute towards the tendency of big, heavy and high insulated glass panes. CW 50 supports glass panes up to 700 Kg in various glass configurations. Even more glass weight can be offered in bespoke solutions.

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 down to $U_f = 0.56W/m^2K$.

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.



PERFORMANCES

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

U_f -value down to $0.56W/m^2K$ depending on the profile combination

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

Up to 1950 Pa (class AE 1950)

Up to 2400 Pa

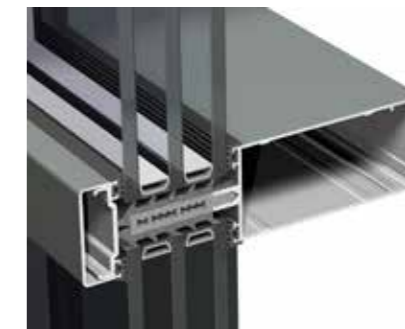
Up to 1950 Pa (class RE 1950)

Up to WK 3 (NEN 5096 / ENV 1627)



TECHNICAL CHARACTERISTICS

| | |
|-----------------------|----------------------------|
| | CW 50 functional |
| Inside visible width | 50 mm |
| Outside visible width | 50 mm |
| Glass thickness | from 6 to 61 mm |



TECHNICAL CHARACTERISTICS

| | |
|-----------------------|---|
| | CW 50-HI ultimate thermal comfort |
| Inside visible width | 50 mm |
| Outside visible width | 50 mm |
| Glass thickness | from 22 to 61 mm |



TECHNICAL CHARACTERISTICS

| | |
|-----------------------|---|
| | CW 50-SC structural clamped glazing |
| Inside visible width | 50 mm |
| Outside visible width | joint: 20 mm |
| Glass thickness | from 27 mm to 63 mm |



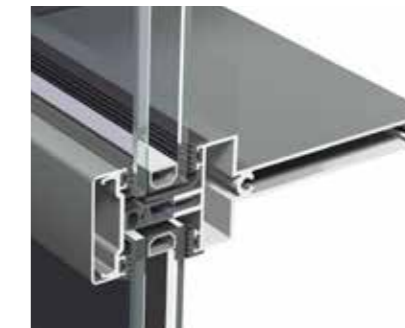
TECHNICAL CHARACTERISTICS

| | |
|-----------------------|--|
| | CW 50-SG structural sealed glazing |
| Inside visible width | 50/88 mm |
| Outside visible width | EPDM gasket (width 27 mm) |
| Glass thickness | from 24 mm to 36 mm |



TECHNICAL CHARACTERISTICS

| | |
|-----------------------|--|
| | CW 50-TT rationalized system |
| Inside visible width | 50 mm |
| Outside visible width | 50 mm |
| Glass thickness | from 6 to 64 mm |

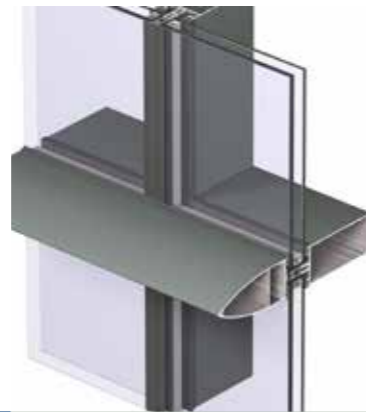


TECHNICAL CHARACTERISTICS

| | |
|-----------------------|---------------------------------------|
| | CW 50-SL slender appearance |
| Inside visible width | 15/50 mm |
| Outside visible width | 50 mm |
| Glass thickness | from 6 to 61 mm |

CW 50-FP

Curtain Walls



CW 50-HL
aesthetic horizontal lining

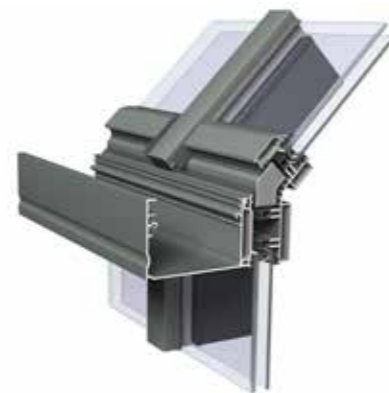
TECHNICAL CHARACTERISTICS

| | |
|-----------------------|--|
| Inside visible width | 50 mm |
| Outside visible width | vertical: 30 mm joint horizontal: 50 mm |
| Glass thickness | from 22 to 48 mm |



CW 50-VL
aesthetic vertical lining

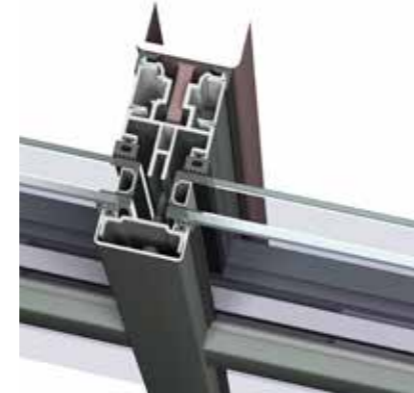
| | |
|-----------------------|--|
| Inside visible width | 50 mm |
| Outside visible width | vertical: 50 mm horizontal: 20 mm joint |
| Glass thickness | from 27 to 40 mm |



CW 50-RA (ROOF APPLICATION)
designed for inclined surfaces

TECHNICAL CHARACTERISTICS

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



CW 50 ALU ON STEEL
designed for steel structure

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



**CW 50 HIDDEN VENT TURN AND TILT
CW 50 HV-TUTI**
slender visible width opening element

TECHNICAL CHARACTERISTICS

| | |
|-----------------------|---|
| Inside visible width | 23/80 mm |
| Outside visible width | 50 mm |
| Glass thickness | opening window 22-28 mm (opening window SC 29-32 mm) |



The CW 50-FP fire rated curtain wall is designed to provide an EW30, EI 30 or EI 60 fire resistance, whilst still offering the same advantages as the standard CW 50 façade system.

The system can be applied for both the exterior and the interior of the building, and can also offer burglar resistance as an extra option.

CW 50-FP contributes towards the tendency to use big, heavy glass panes and allows for the creation of transparent designs.

This façade system is compatible with our CS 77-FP fire resistant door system.

TECHNICAL CHARACTERISTICS

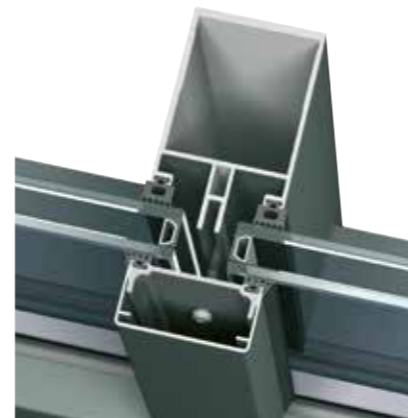
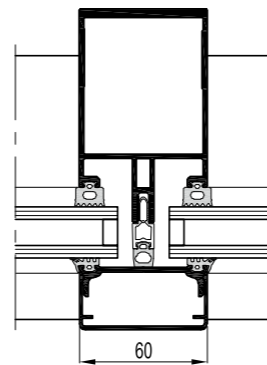
| | CW 50-FP EI30 | CW 50-FP EI60 |
|--------------------------------|----------------------------------|---------------------------|
| Rebate height | 20 mm | 20 mm |
| Glass thickness | 35 mm | from 45 to 48 mm |
| Glazing method | fixing by pressure plates | fixing by pressure plates |
| Fire resistance classification | E15, EI15, EW20, E30, EW30, EI30 | EW60, E60, EI60 |

PERFORMANCES

| | CW 50-FP EI30 | CW 50-FP EI60 |
|----------------------------|---------------|---------------|
| European testing standards | EN 1364-3 | EN 1364-3 |
| Classification standard | EN 13501-2 | EN 13501-2 |

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 facade design with wide glass panels.

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 CW 60 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

| | CW 60 functional | CW 60-HI ultimate thermal comfort | CW 60-SC structural clamped glazing |
|-----------------------|------------------|-----------------------------------|--|
| Inside visible width | 60 mm | 60 mm | 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

| | CW 60-SG structural sealed glazing | CW 60-HL / CW 60-VL horizontal or vertical lining | CW 60-RA designed for inclined surfaces |
|-----------------------|------------------------------------|---|---|
| Inside visible width | 60/88 mm | 60 mm | 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 48 mm |

PERFORMANCES

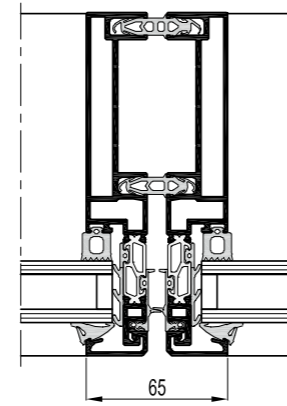
| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 0.76W/m ² K depending on the profile combination |
| Acoustic performance | Rw (C;Ctr) = 33 (-1;-4) dB / 56 (-1;-5) dB, depending on glazing type |
| Air tightness | 600 Pa (Class A4) |
| Wind load resistance | Up to 2400 Pa |
| Water tightness | Up to 1200 Pa (class RE 1200) |
| Burglar resistance | WK2/RC2 & WK3/RC3 (NEN 5096 / ENV 1627) |



Architect: JSK Architektci Sp. z o.o.
Photo: Jaroslaw Ceborski

CW 65-EF

Curtain Walls



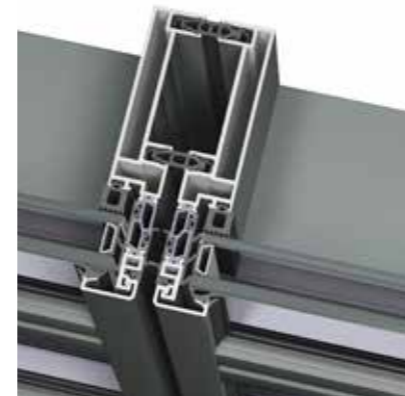
Unitized façade system with maximum transparency

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: one 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 functional | CW 65-EF/Hi ultimate thermal comfort | CW 65-EF/SG structural sealed glazing |
|------------------------|---|--------------------------------------|---------------------------------------|
| 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 10 to 60 mm | From 4 to 40 mm |
| Glass weight | 300 kg | 300 kg | 250 kg |
| Element weight | 700 kg | 700 kg | 700 kg |
| Types of vent | All Reynaers Aluminium systems, top hung window, POW window | --- | --- |

PERFORMANCES

| | CW 65-EF | CW 65-EF/Hi | CW 65-EF/SG |
|----------------------|---|---|---|
| Thermal insulation | U _i down to 2.5 W/m ² K, depending on the profile combination | U _i down to 1.5 W/m ² K, depending on the profile combination | U _i down to 7.6 W/m ² K, depending on the profile combination and glass composition |
| Air tightness | 600 Pa (Class A4) | 600 Pa (Class A4) | 700 Pa (Class AE 700) |
| Wind load resistance | 1800 Pa | 1800 Pa | 1400 Pa |
| Water tightness | 1200 Pa (Class RE 1200) | 1200 Pa (Class RE 1200) | 1200 Pa (Class RE 1200) |



Architect: Taylor Architects / RMJM Architects
Photo: Neil Warner

CW 86 (-EF) Curtain Walls



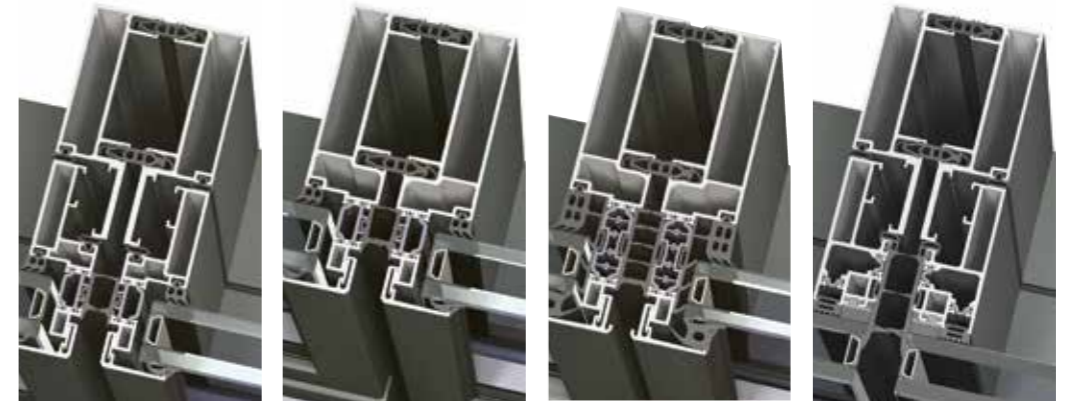
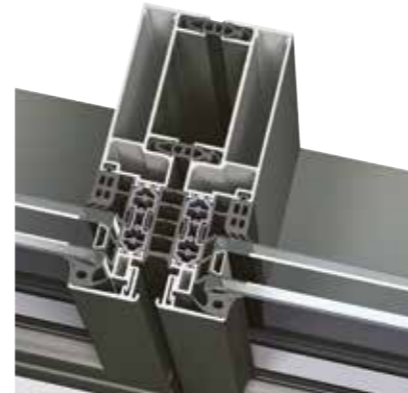
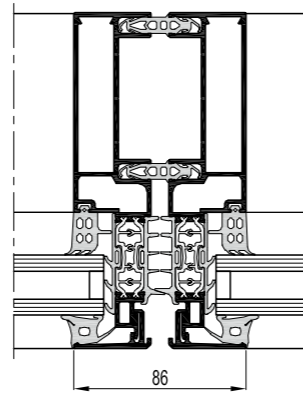
High execution speed

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).

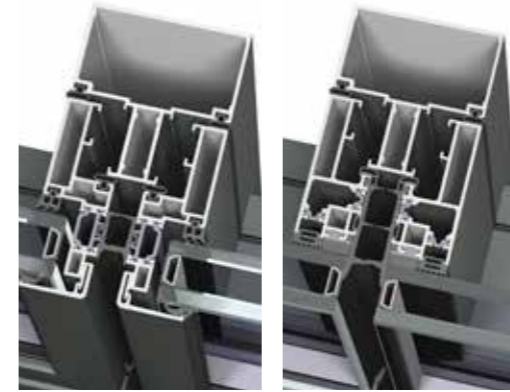
CW 86 is available in two glazing variants, with unique aesthetical features: one variant holds the glass using glazing beads, while the glass of the Structural sealed Glazing (SG) variant is structurally bonded, offering a complete glass surface at the outside of the building.

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.



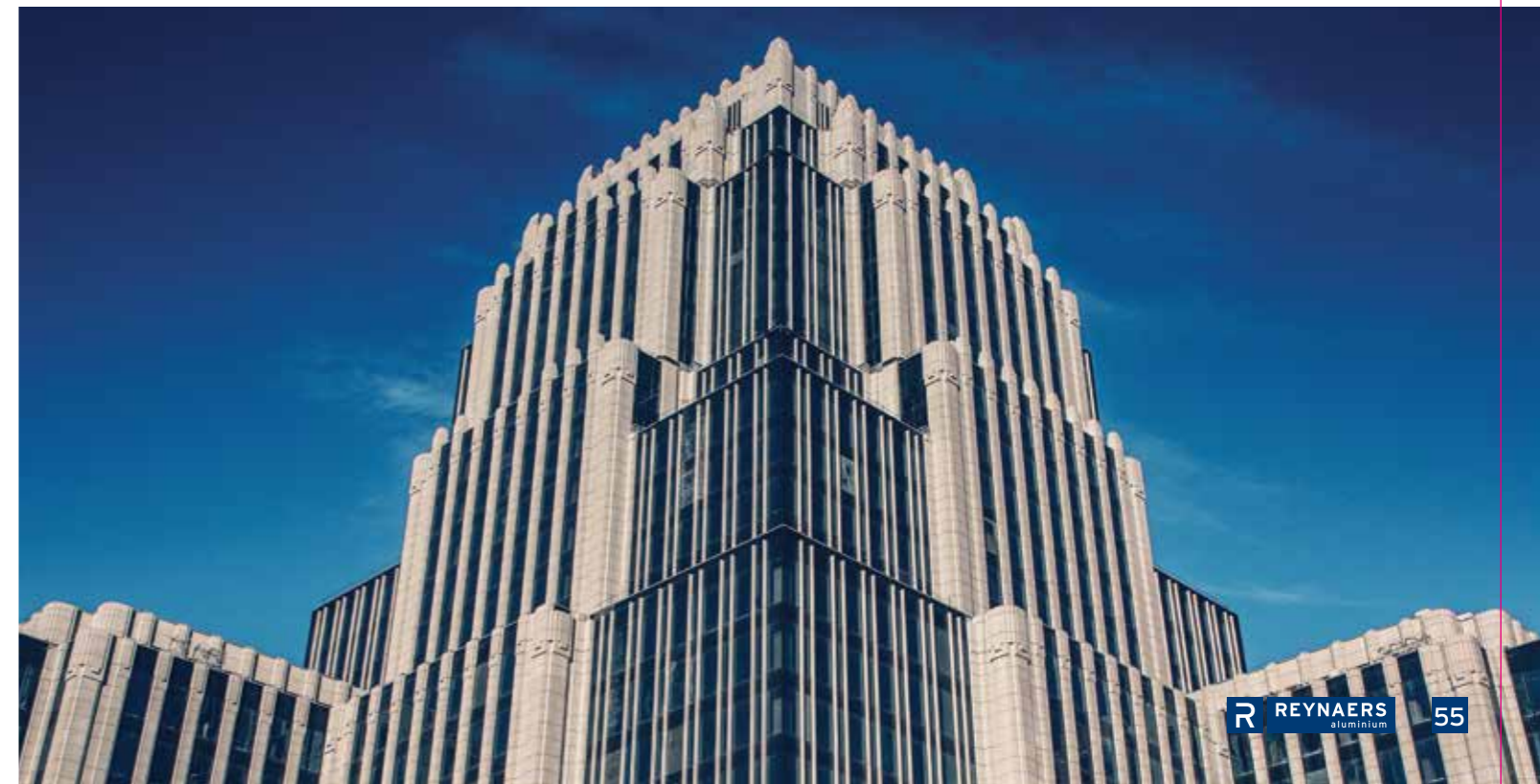
| TECHNICAL CHARACTERISTICS - ELEMENT FAÇADE | CW 86-EF functional | CW 86-EF Fixed façade (junior) | CW 86-EF HI ultimate thermal comfort | CW 86-EF SG structural sealed glazing |
|--|--|--------------------------------|--------------------------------------|---------------------------------------|
| 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 |



| TECHNICAL CHARACTERISTICS - SEMI ELEMENT FAÇADE | CW 86-CG functional | CW 86-SG structural sealed glazing |
|---|--|------------------------------------|
| Interior visible width | 86 mm | 86 mm |
| Exterior visible width | 68 mm (26 - 16 - 26) or 86 mm (35 - 16 - 35) | 22 mm joint between glass |
| Glass thickness | from 4 mm to 38 mm | from 4 mm to 36 mm |

PERFORMANCES

| | |
|----------------------|--|
| Thermal insulation | Uf-value down to 1.5 W/m²K, depending on the profile combination |
| Acoustic performance | Rw (C;Ctr) = 41 (-2;-6) 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) |
| Burglar resistance | Up to RC 2 (EN 1627) upon request |



BRISE SOLEIL



Architect: Gemeindezentrum Breitenwang / Architekturbüro Bärlist, Reutte-
Photo: Architekturbüro Bärlist

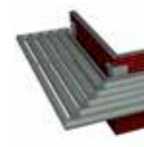
BRISE SOLEIL



BS 100



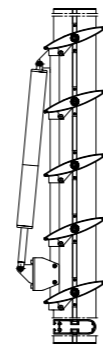
BS 40



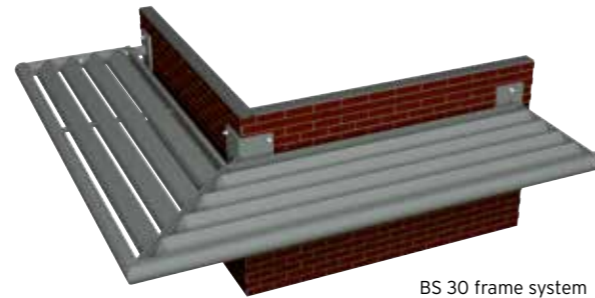
BS 30

BS 100/30

Sunscreening



BS 100 movable louvre



BS 30 frame system

Complete shading solution

Reynaers Aluminium's 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 100 PRE-ASSEMBLED FRAME



BS 100 FIXED LOUVRE



BS 100 MOVABLE LOUVRE

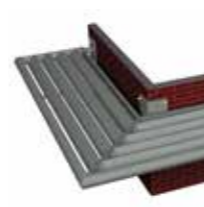
| TECHNICAL CHARACTERISTICS | BS 100 PRE-ASSEMBLED FRAME | BS 100 FIXED LOUVRE | BS 100 MOVABLE LOUVRE |
|---------------------------|----------------------------|--|-----------------------|
| Shape louvres | ellipse | ellipse | ellipse |
| Size louvres | 140 mm / 180 mm | from 120 to 400 mm | from 120 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

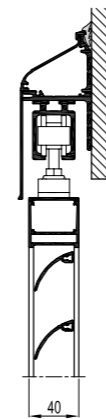


BS 30 FRAME SYSTEM

| TECHNICAL CHARACTERISTICS | BS 100 LOUVRE GRIP | BS 100 GLASS LOUVRES | BS 30 FRAME SYSTEM |
|---------------------------|----------------------|---|-------------------------|
| Shape louvres | ellipse | hardened glass | z-shaped |
| Size louvres | 200 / 250 / 300 mm | 366 x 10 / 12 / 14 / 17 mm | 90 mm wide x 60 mm high |
| (Fixed) angle | 0° / 15° / 30° / 45° | 0° / 15° / 30° / 45° / 60° / 75° / 90° and variable | yes |
| Walkway application | no | yes | yes |

BS 40

Sunscreening



Contemporary shutters

The Brise Soleil 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

| TECHNICAL CHARACTERISTICS | BS 40 |
|---------------------------|--------------------------------------|
| Shape louvres | z-shaped or curved / wood (optional) |
| Max. vent height | 3000 mm (depending on the width) |
| Max. vent width | 2000 mm (depending on the height) |
| Max. vent weight | 100 kg |
| Sliding option | mono-, 2- & 3- rail |
| Operation | manual & motorised |



Z-SHAPED LOUVRES

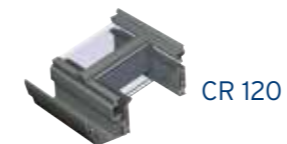


CURVED LOUVRES

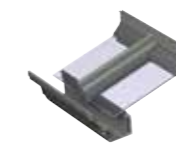
CONSERVATORIES



CONSERVATORIES



CR 120



PR 100



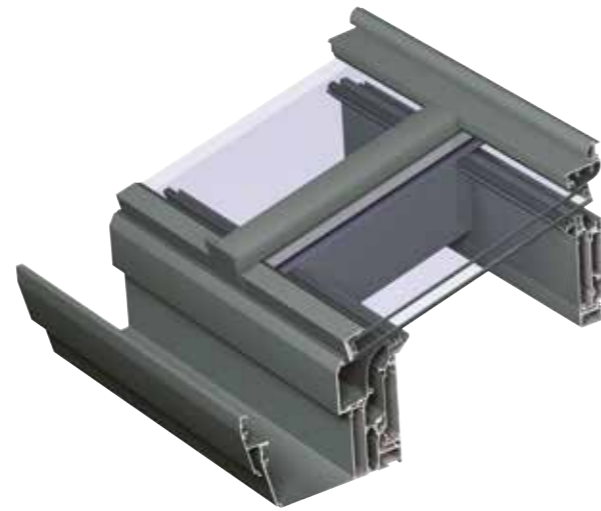
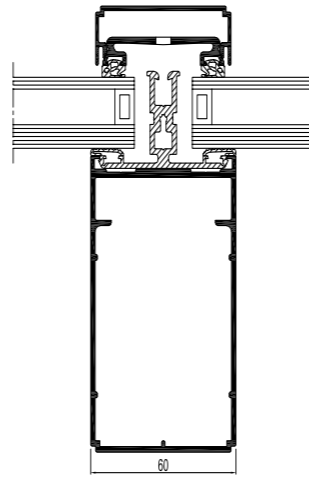
TR 200



Cintro

CR 120

Conservatories



Concept Roof 120 is a thermally insulated conservatory roof system. The tubular aluminium rafters create space for integration of cabling and light on the inside while the small cover plates on the outside create a slim design.

This system is compatible with all Reynaers Aluminium window and door systems as well as sliding systems and offers the possibility to create a wide range of conservatory constructions and skylights.

Compatibility with motorised attic windows and roller shutters takes care of a safe and comfortable environment.

TECHNICAL CHARACTERISTICS

| | FUNCTIONAL | RENAISSANCE | ORANGERY |
|------------------------------|------------|---|----------|
| Min. visible width of rafter | | 60 mm | |
| System depth of rafter | | 70 mm / 100 mm / 120 mm / 150 mm | |
| Slope | | 5° - 45° | |
| Rooftop | | 90° - 170° | |
| Glass thickness | | From 6 mm to 40 mm | |
| Glazing method | | Dry glazing with EPDM or neutral silicones | |
| Thermal insulation | | Omega-shaped fiberglass reinforced polyamide strips + synthetic profile | |

PERFORMANCES

- Thermal insulation
- Wind load resistance
- Water tightness

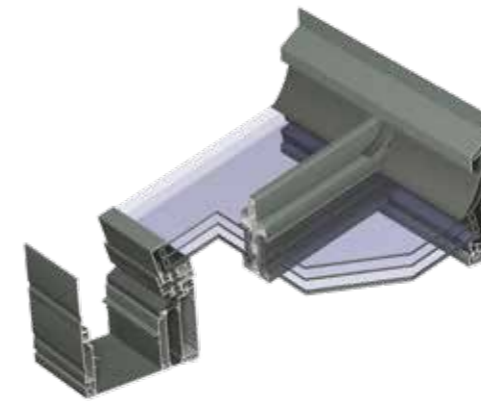
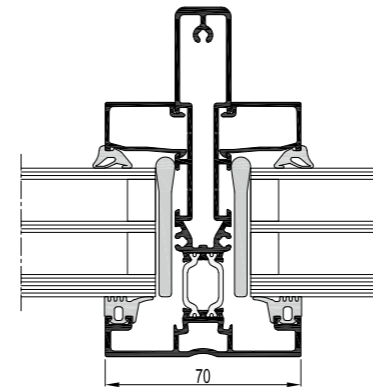
Specific calculation per profile combination please contact your Reynaers Aluminium fabricator

Up to 800 Pa (class 2)

Up to 750 Pa (class E750)

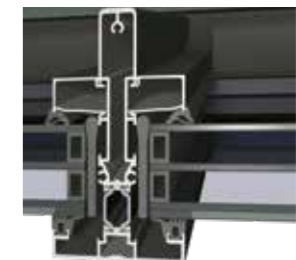
TR 200

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

| | DOUBLE GLAZING | TRIPLE GLAZING |
|--------------------------------|--------------------------------------|------------------------------------|
| Overall system depth of rafter | inside: 18 mm outside: 23 - 58 mm | inside: 14,5 mm outside: 38 mm |
| Style variants | Functional / Renaissance / Ellipse | Functional / Renaissance / Ellipse |
| Min. visible width of rafter | 70 - 99 - 128 mm | 70 - 99 - 128 mm |
| Slope | 5° - 45° | 5° - 45° |
| Construction options | Hip and valley | Hip |
| Glass thickness | 6-40 mm | 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.

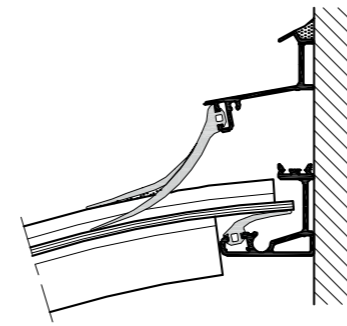
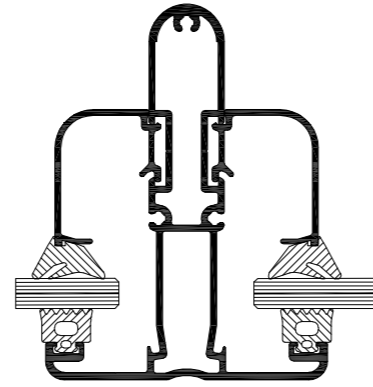
Up to 600 Pa (class 3)

Up to 800 Pa (class 2)

Up to 900 Pa (class E)

PR 100

Outside roof



Cintro

Conservatories

Parallel Roof 100 is a non-insulated aluminium roof system that can be used as a terrace covering or a carport. PR 100 offers a range of rafters in different heights and widths so that high static requirements coming from snow load and own weight can be implemented without using steel reinforcements.



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

| | SOFTLINE |
|------------------------------|-----------------------|
| Height of rafter | 100 - 150 mm |
| Min. visible width of rafter | 75 - 105 mm |
| Slope | 5° - 45° |
| Glass thickness | 8 - 37 mm |
| Glazing method | dry glazing with EPDM |

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 |





Architect: B01 Arquitectes

COMPLEMENTARY SYSTEMS



Ventalis



Mosquito



RB 10



RB Glass

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 Aluminium 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) |



Mosquito

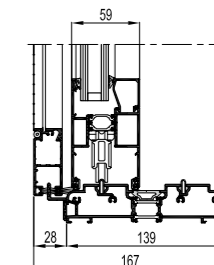
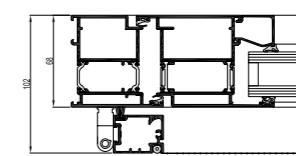
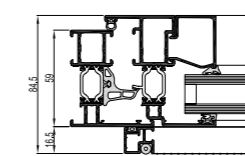
Complementary Systems



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 Aluminium window, door and sliding door systems as well as systems from other system suppliers, even non aluminium windows like wood and PVC.



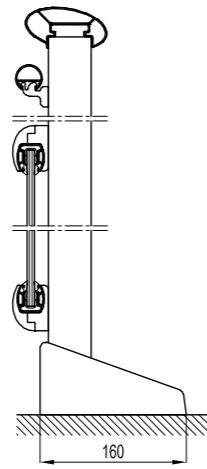
TECHNICAL CHARACTERISTICS

| | 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



RB Glass

Complementary

Ensured safety

Reynaers Balustrade 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



Invisible safety

High rise buildings without balconies are a worldwide seen architectural trend. Simultaneously safety cannot be jeopardized by transparency and design.

Reynaers Balustrade Glass is an add-on glass balustrade for larger window areas in high rise buildings. Even without balconies, you can safely open your windows and enjoy an unobstructed view.

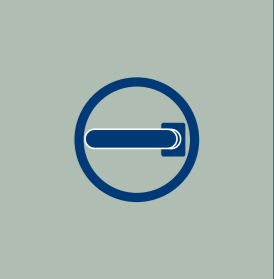
RB Glass is compatible with all MasterLine and Concept System Window and Door Systems, as well as Concept Patio and Hi-Finity Sliding Systems.

TECHNICAL CHARACTERISTICS

| | |
|----------------------|---------|
| Min. glass thickness | 12.5 mm |
| Min. glass width | 800 mm |
| Max. glass width | 2000 mm |
| Min. glass height | 1200 mm |



HANDLES



Architect: Hartmann & Schüpbach Architekten
Photo: Anna-Tina Eberhard



PuRity



Touch



Olimpo



Orchid



Horizon



Shield

PuRity

Handles



Design matters...

For people who desire ultimate design and top quality, a unique Reynaers Aluminium 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. De Carlo studied both Reynaers Aluminium's culture and 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 four standard colours (Sapphire Black, Eclipse, Moonlight White and Lithium). 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. The PuRity range is suited for all Reynaers Aluminium windows, doors, sliding doors and lift&slide doors.

TECHNICAL CHARACTERISTICS

Window



Door



Sliding door



Lift and slide



Offset



Reduced



Options



Touch

Handles



True elegance

Create an aesthetic look with this minimalist timeless design, tailored to the needs of contemporary living, without sacrificing ease of use. The finishes (anodization or powder coatings) are endless for each type and ensure a uniform look, that fits into any type of architecture.

TECHNICAL CHARACTERISTICS

HANDLES WITH A 90° CLICK

Windows



HANDLES WITH RETURN SPRING

Doors



HANDLES WITH A 90° CLICK

Sliding doors



Lift-Slide doors



FEATURES

Surface treatment

anodized or powder coated

Colors

all RAL colours available

Uses

doors, inward opening windows and sliding + lift-sliding doors

Olimpo

Handles



Affordable design

The brand new OLIMPO LINE introduces an up-to-date design that meets the latest aesthetic trends; the accuracy of all details ensures innovation, as well as a smart, easy and ergonomic shape to each product. The smooth shape of the Olimpo line is enhanced by the many finishes available which contribute to meet the highest quality and aesthetical requirements.

TECHNICAL CHARACTERISTICS

HANDLES WITH A 90° CLICK

Windows



Iris

Eos

Gea

Hera

HANDLES WITH RETURN SPRING

Doors



FEATURES

Surface treatment

anodized and powder-coated

Colors

available in all RAL colors.

Uses

doors, sliding doors, inward opening windows

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-look.

TECHNICAL CHARACTERISTICS

HANDLES WITH A 90° CLICK

Windows



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

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

HANDLES WITH RETURN SPRING



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



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



A handle with a short cover plate and long grip

HANDLES WITH RETURN SPRING

Doors



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



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

FEATURES

Surface treatment

anodized or powder coated

Colors

available in all RAL colours

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

Shield is our safest and strongest series of handles. Created to withstand thieves, these handles are characterized by their rugged, robust and reliable design. Shield received two SKG stars on most of the range and on some specific articles even three stars as a safety score. The handles are available in unpolished, natural anodized colour.

TECHNICAL CHARACTERISTICS

HANDLES WITH A 90° CLICK

Windows



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



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



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 for all handles (color .17), powder coated possible for doors and sliding doors

Colors

all models are available in unpolished natural anodized (color .17), for doors and sliding doors all RAL colours available

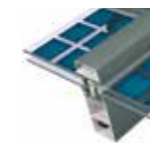
Uses

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 Brise Soleil 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.



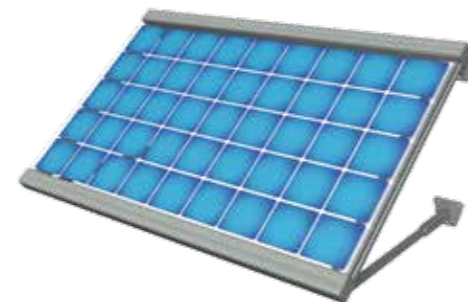
BS 100 SOLAR

Glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, side PV panel box or back PV panel box

Filling type

Inclination

0° to 45°



BS 30 SOLAR

Standard or glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, back PV panel box

15° to 45°

TECHNICAL CHARACTERISTICS

CW 60/RB 10 Solar

Solar

CW 60 Solar

The Concept Wall 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 crystalline and amorphous cells.

RB 10 Solar

Reynaers Balustrade 10 SOLAR is a balustrade system, designed for the integration of photovoltaic panels and all its necessary wiring. The balustrade system can be applied on both accessible and inaccessible balconies.

RB 10 Solar positions the photovoltaic panels at the most efficient angle.

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



CW 60 SOLAR

Glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single or double glassed, side PV panel box or back PV panel box

TECHNICAL CHARACTERISTICS

Filling type

Inclination

5° to 90°



RB 10 SOLAR

| Accessible balconies | Non-Accessible balconies |
|---|---|
| Standard or glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, back PV panel box | Standard or glass edged photovoltaic modules, semi transparent or normal, crystalline or amorphous, single glassed, back PV panel box |
| 90° | 60° to 90° |



**ACTIVITIES
&
SERVICES**

Architect: BOB 361 architects

REYNAERS CAMPUS



THE REYNAERS CAMPUS

Introduction

Reynaers Campus is the headquarters of Reynaers. This unique establishment with a total surface of 283,000 m² focuses on sharing the know-how and experience with architects, fabricators, contractors and other building partners.

The Reynaers Campus consists of:

- Experience centre
- Technology centre
- Training centre
- Automation centre
- Logistics Centre
- Production Centre
- Quality Control
- Offices

The Reynaers Campus 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.

EXPERIENCE CENTRE

The Reynaers Experience Centre is designed to bring people together and inspire you with our latest solutions and state-of-the-art technologies for architectural building solutions. In the Experience Room, you can discover our unique offering, assisted by inspiring digital applications.

For a full immersive experience, a visit to AVALON can be booked where you can visit future buildings through a shared virtual reality experience. AVALON is a high-end projection-based Virtual Reality room, specifically configured for architectural applications.

Together with an auditorium and multiple meeting rooms, this Experience Centre is the place to share know-how and strengthen partnerships. On the storytelling table you can discover more about our history, activities and corporate social responsibility.



TECHNOLOGY CENTRE

The Reynaers Aluminium Technology Centre is the largest privately owned innovation and testing centre in Europe. All Reynaers Aluminium systems are rigorously tested to ensure that they meet the international standards.

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

| COMFORT | SUSTAINABILITY | SAFETY |
|---|--|--|
| | | |
| <ol style="list-style-type: none"> AIR-, WIND-, WATER TIGHTNESS ACOUSTIC INSULATION | <ol style="list-style-type: none"> MECHANICAL PERFORMANCE SOLAR RADIATION OTHER TEST FACILITIES ENERGY PERFORMANCE | <ol style="list-style-type: none"> IMPACT RESISTANCE BURGLAR RESISTANCE BULLETPROOF FIRE RESISTANCE SMOKE RESISTANCE SMOKE & HEAT EVACUATION |

One of the showpieces of the test centre is a state-of-the-art testing wall for curtain walls with a height of 15 m. On this specially developed test wall we carry out air-, wind- and water-tightness tests, especially on glass façades. Thanks to the 15 m height we can test multi-storey elements with connections playing an important role.

For windows and doors, we have a 20 m wide wall at our disposal to execute tests for air permeability, wind load and watertightness. There are 5 calibrated test walls with a total capacity for 10 different test positions.

To ensure that all Reynaers Aluminium systems remain stable and of high quality even after extensive use or after natural disasters, we carry out cyclic tests and earthquake or seismic tests.

In the acoustic test lab, aluminium façade elements are tested on their acoustic insulation. Different test elements can be built in thanks to a flexible partition wall between the sending and receiving room.

The Technology Centre also accommodates the Research Centre, with the R-cube and the R-Lab. The R-cube is a rotatable research- and test installation designed for thermal performance analyses. The R-lab is the dedicated lab to test solutions at an early stage through the use of rapid prototyping and 3D printing.



TRAINING CENTRE

At Reynaers Aluminium 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.

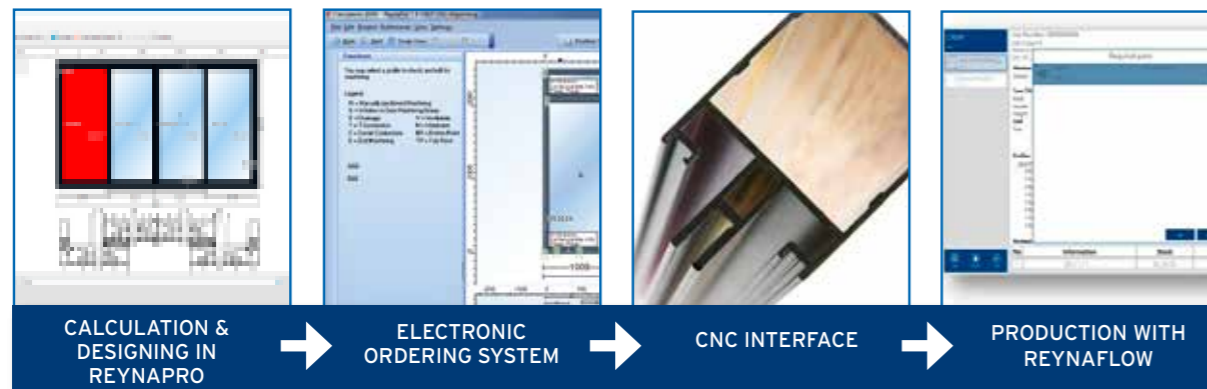
Reynaers Aluminium organizes an average of 2000 training days every year (both practical training and software training) for its customers and own employees. The trainees come from all over the world.



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.

On top of that, Reynaers Aluminium developed ReynaFlow, an intelligent control system and workflow manager that optimises the production processes in the realm of 'smart manufacturing' and improves quality and production time.



In terms of tooling, Reynaers Aluminium can offer you several possibilities:


Conventional tooling offer

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

- **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

A selection of our machine offer



For an optimised production, Reynaers Aluminium 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.

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

SBZ122



SBZ140

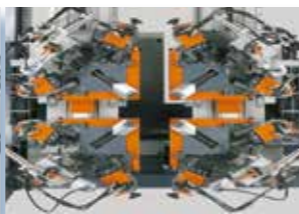


SBZ151 Flexium +



Corner press: dedicated 1 and 4 corner press machines to create high quality corner connections, with special quickchange 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.

Software

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, almost 2400 supported ReynaPro-licenses are in use.

To further support fabricators, Reynaers offers **ReynaFlow**: an intelligent control system and workflow manager that optimizes production processes in the realm of 'smart manufacturing', also known as Industry 4.0. While most production processes are still manually driven, ReynaFlow digitally links the full manufacturing process, from preparation (cutting, machining), through connection and sealing to the final assembly and finishing. By providing on the spot information, tracking errors and monitoring each phase in real time, both quality and production times are vastly improved.



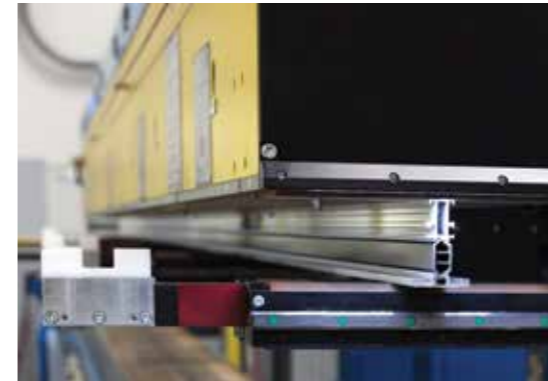
PRODUCTION CENTRE

Thermal insulation

The thermal insulation of aluminium profiles requires a lot of know-how and experience. In order to ensure the highest quality, we created our own insulation company, ERAP.

The outer and inner chambers of the profiles are joined with glass-fibre reinforced polyamide or Noryl strips. These strips create a thermal break. The insulation value depends on the height of the strip, the type of strip and whether or not extra foam is used.

In total, Reynaers insulates ±100,000 profiles per month (= ±700,000 metres of profiles) with 9 machines.



LOGISTICS CENTRE

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

The warehouses in Duffel cover a total surface area of almost 62,000 m², equal to ca. 9 football fields. Stock is permanently maintained through continuous delivery by more than 200 different suppliers. The Reynaers Aluminium Logistics Centre consists of Profiles warehouses (approx. 50,000 m²) and an Accessories warehouse.

The Profiles warehouses provide storage for 4,500 different profiles (mostly 7 metres long). After insulation, lacquering and anodisation, orders are sorted, packed and prepared for transport.

The Accessories warehouse (approx. 12,000 m²) stores 5,000 different accessories, such as handles, hinges, locks and gaskets (over 7 million units).

Worldwide, Reynaers Aluminium has 17 distribution centres.



SURFACE TREATMENT

Colors & finishing

For the surface treatment of the profiles we collaborate with selected painting companies that strictly adhere to our standards and regulations.

Reynaers Aluminium can provide you with different treatments and finishes, depending on your personal taste and on the building environment:

- **Powder coating:**
Suitable for all environments, except mild-aggressive and aggressive environments. Available in large color variations, and has different shine and finishing possibilities.
- **Pre-anodisation and powdercoating:**
Pre-anodisation for aggressive environments (Coastal area < 1km, swimming pool, ...) or Seaside treatment for mild aggressive environments (Coastal area 1-10km, railways, ...) gives the finish increased corrosion resistance. Available in large color variations, and has different shine and finishing possibilities.
- **Anodisation:**
Suitable for all environments, layer thickness is adjusted for aggressive environments. Available in different colors: natural, champagne, bronze and black. Preserves the natural look of aluminium



REYNAERS CAMPUS OFFICES

The Reynaers Campus houses the Belgium-Luxembourg organisation and centralises the corporate functions for the entire group Reynaers. These corporate departments can provide you with a lot of added value.

BESPOKE SOLUTIONS

Reynaers Aluminium Consult & Project Team

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

As Reynaers Aluminium 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 Aluminium consultants, engineers and technicians are your professional partners, and we can create a special design. We will support you every step of the way, and 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? 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 Campus are fully compliant with official standards.

RESEARCH & 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.

In all our developments we follow these 4 key innovation drivers:



Sustainability
energy efficiency :
thermal insulation,
sunscreening, solar
cradle-to-cradle,
green labels



Safety
burglar proof,
fire proof, bullet proof,
smoke evacuation,
earth quake proof



Comfort
interior climate,
acoustic insulation,
integration of systems in
floors, daylight, domotics,
water-tightness



Design
transparency:
large glass panes,
slim profiles,
full glass panes

COMMUNICATION

Reynaers Aluminium develops customised technical and marketing tools to provide solutions for our partners with all the means to work as well and efficiently as possible.

Discover our inspirations platform



A new showcase article is published regularly and offers inspiring pictures, a detailed article, interviews, video's and technical solutions.

Explore this inspirational website with interesting functionalities and share the projects with your network via the social share buttons!

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

- Corporate website: www.reynaers.com
- Commercial trainings
- Point of Sales material
- Product brochures
- Corporate brochures
- Reference book
- Demo assembly movies on dedicated training channel
- Presence at fairs



Customer portal

On the new Customer Portal, Reynaers Fabricators and Installers can access up-to-date technical documentation and commercial information. All information is grouped into categories and easily accessible through a dashboard on the homepage. The new Reynaers customer portal is the central location for all digital Reynaers services.

- **Product information:**
Easy access to catalogues, article information and hardware drawings. Thanks to the integrated notifications feature, users will instantly be informed whenever a new version of a document becomes available.
- **Tools:**
A brand new Colour code calculator together with the existing U-tool, Ventalis, Statica and Profical websites.
- **Training:**
An overview of all training courses and a library of training videos to explain the assembly of Reynaers systems. A training calendar shows all scheduled trainings at the Reynaers Campus Training Centre, or trainings that are hosted in local Reynaers training centre.
- **Machines:**
All machines available for order through Reynaers Aluminium.
- **Software:**
All software solutions for our customers: Electronic Ordering System (EOS), ReynaPro, ReynaFlow, and more.
- **Order website:**
Access to the order website, where customers can find an overview of all running orders and invoices.

QUALITY MANAGEMENT

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



Reynaers Aluminium 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 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 (AW 6060 and AW 6063) with additional requirements Zn ≤ 0.15%; Cu ≤ 0.02%; Pb ≤ 0.022%; Si: 0.30 -0.55%; Fe: 0.10-0.30%; Mg: 0.35%- 0.60%; Mn ≤ 0.10%; Cr ≤ 0.05%; Ti ≤ 0.10%; other elements individually ≤ 0.05% together ≤ 0.15%; after treatment T66;
- UV resistance, discolouring and loss of gloss exceeding the defined tolerances, according to Qualicoat and Qualanod regulations (latest editions).
- The paintwork warranty can be extended under specific conditions. These conditions can be obtained from Reynaers Aluminium.

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.
- A 2 year guarantee on electrical and wood components

All details are specified in the System Guarantee.

CE MARKING

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

- Mechanical resistance and stability,
- Safety in case of fire,
- Hygiene, health and the environment,
- Sustainable use of natural resources
- Safety and accessibility in use,
- Protection against noise
- Energy economy and heat retention

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 Aluminium systems can be CE-marked in accordance with the relevant product standards. This implicates that they are fully compliant with the EU Construction Products Regulation (CPR).

The procedure for CE - Marking of products entails a process that starts with Type Testing (TT) 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 Type Testing.

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

GREEN COMMITMENT

Reynaers Aluminium is aware that companies play an important role in the care for the environment. That is the reason why we are constantly searching for new ways to become “greener and are at the forefront in the development of energy saving and sustainable products.



It all starts with the material we use for our profiles: aluminium. The high durability and 100% recyclability without loss of quality has firmly established the reputation of aluminium as the green metal. Its remarkable strength, anti-corrosion and low maintenance characteristics make it the ultimate construction material for an industry that is constantly searching for lighter, stronger, more durable and greener alternatives.

The sustainability aspect has been recognized by achieving the Cradle to Cradle certificate (C2C) for a number of the advanced window, door and façade solutions.

In short, the Cradle to Cradle certificate guarantees that:

- no harmful materials are used;
- our systems are made with due respect for raw materials, energy and water usage;
- these systems can be recycled easily.

In doing so, C2C certified systems offer the guarantee of environmentally conscious and circular building.



Sustainability, however, is not restricted to material usage: energy efficiency is also an important point of attention for Reynaers Aluminium. Its continued investments in research and development resulted in the Passive House certificate and the Swiss Minergie label for several of its systems. These energy-efficient solutions can be used in low- and energy-neutral homes and thus contribute to a sustainable environment.

For architects and builders, it pays to build with C2C, Passive House or Minergie certified systems. The principles of these certificates are closely aligned with BREEAM (BRE Environmental Assessment Method) and LEED (Leadership in Energy and Environmental Design), the internationally recognized labels that determine the sustainability levels of buildings. 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 certificates proves the importance of sustainable. With innovative products, continuing research and focus on knowledge exchange Reynaers Aluminium makes a genuine contribution to this way of building.

However, our focus is not only on making our products greener, but also to make ourselves as a company as sustainable as possible. Around the Reynaers Campus, a large green zone ensures optimal and sustainable water management. In addition, the company has been focusing for years on alternative and creative transport solutions for commuter traffic: from (electric) bicycles and carpooling to company cars with low CO2 emissions. With this policy, Reynaers Aluminium saw its CO2 footprint falling sharply over a short period. The company was also amongst the first to firmly opt for the large-scale use of solar panels.



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 Campus, 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 40 countries where it has its own sites. The company's success is due in part to the close partnership between Reynaers Aluminium and 5,000 partner fabricators, architects and project developers worldwide.

Reynaers Aluminium is founded in 1965 and is part of the group Reynaers, currently employing over 2200 workers in more than 40 countries worldwide and exporting to more than 70 countries on 5 continents. The company achieved an annual turnover of 537 million euros in 2018.

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



TOGETHER FOR BETTER