

ConceptWall

Enjoy unlimited
design freedom

Torre Puig II, Barcelona, Spain - Architect: CDA Architects



Reynaers
Aluminium

Windows.
Doors.
Façades.

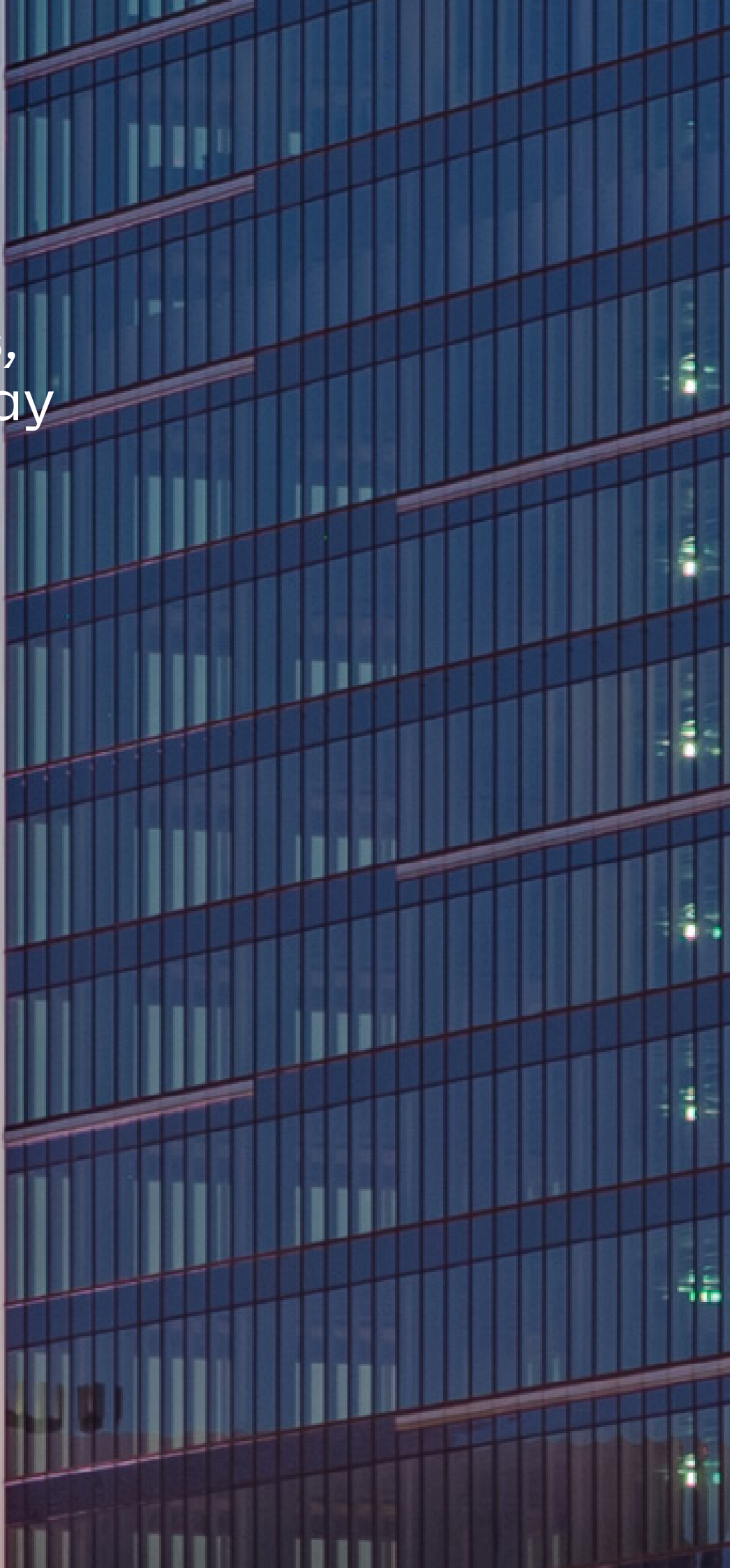
Together for better

www.reynaers.com

Introduction

In dense cityscapes, the only way is up

*Warsaw Unit, Warsaw - Architect: PBPA Projekt
ConceptWall 50-HI, ConceptWall 86-HI*



City populations are on the rise and buildings rapidly reach for the sky to foresee the appropriate living space. At the same time, energy requirements and comfort needs have never been higher. When it comes to façade construction, this implies new challenges (and opportunities) for building professionals all over the world.

Modern façades not only comply with the strictest building regulations, but they also improve the daily comfort of visitors and occupants alike. People want to live and work in optimal indoor conditions, with lots of natural daylight entering the building and (passive) ventilation methods to keep the air quality under control.

Yet at the operational end of the chain, building companies face specific needs of their own. The need for skilled workers requires no-nonsense, standard building components that are easy to fabricate, transport and install. On market level, there is a considerable demand for certified sustainable systems that can meet the ever-growing list of energy requirements. However, the availability of high-quality materials is scarce yet crucial to limit lead times and overall construction costs.

On top of all that, on the creative side of things, architects aim to create lasting landmarks that exemplify their creative vision and impact communities for decades to come.

To meet every stakeholder's needs, it is important to select the right components and the right system supplier for your building project.

At Reynaers Aluminium, we pride ourselves in being a trusted partner who delivers on their promises and provides excellent solutions with a human touch. Together, we build future cities with highly insulated, user-friendly façade systems that meet the building requirements of today and tomorrow. Comfort, design and sustainability are imbedded in every solution we offer, whether it is a standard or project-specific development.

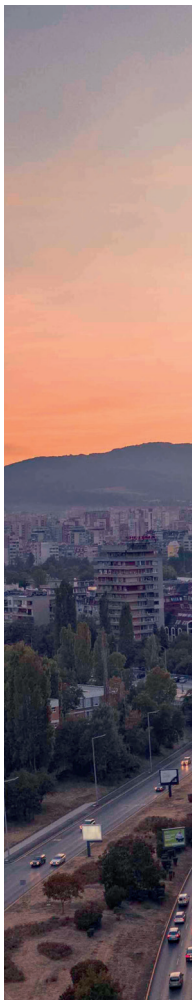
Stick façades are highly versatile building solutions that meet and exceed today's construction standards.

With stick curtain walling, the profiles are assembled mainly on site. The concept is simple: long vertical mullions are attached to the building structure, shorter horizontal profiles between the mullions complete the frame. This efficient production process makes stick façades one of the broadest applied solutions in the industry. Different styles of face caps, material combinations and combinations with structural glazing give building projects a personal look and feel. From horizontal, vertical or diagonal lining, combinations with wood or steel, to slimline design: the choice is yours.

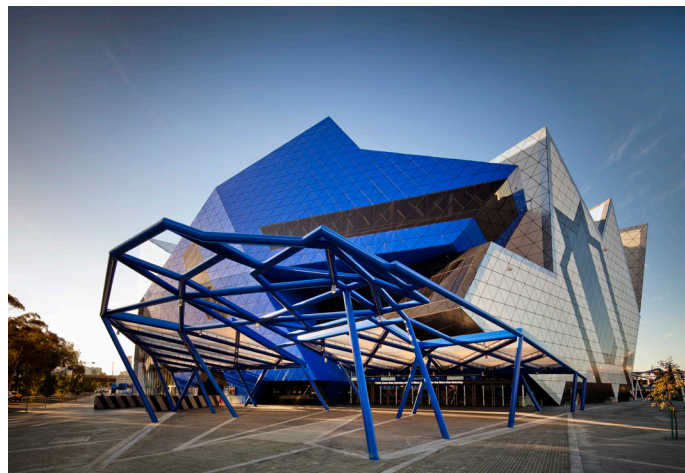
Aluminium is typically used for curtain walls because of its strength, versatility and stability. The material offers high insulation options combined with unlimited design freedom, and it is highly recyclable too. Both a sturdy and light material, aluminium easily integrates into any architectural design and can be used in all shapes and sizes, providing the ultimate creative finish to any building type. The design possibilities are virtually endless.

Over the years, Reynaers Aluminium has mastered the stick façade principle and perfected its design to make the lives of all our partners easier. Our solutions offer the highest comfort levels and are featured in some of the most iconic buildings in the world. From low or medium-insulated profiles to passive levels of thermal insulation: there is always a façade solution for you - all of them extensively tested and easy to produce, thanks to its dedicated tooling and full Industry 4.0 compatibility. It comes to show, we help your building project reach new impressive heights.

When standard systems do not fit your building demands, our Project Cell gets to work to find a bespoke solution that does. In collaboration with the different stakeholders of the project, our team of experts offers excellent guidance, detailed visualisation in our 3D VR Room Avalon, and even training and on-site support if needed. The result: tailor-made and proven quality that will last for generations.



“Reynaers Aluminium’s expertise in stick façades makes all the difference”



Perth Arena, Perth — Architect: ARM Architecture + CCN Architects — bespoke solution



Pierres Vives, Montpellier — Architect: Zaha Hadid Architects — bespoke solution

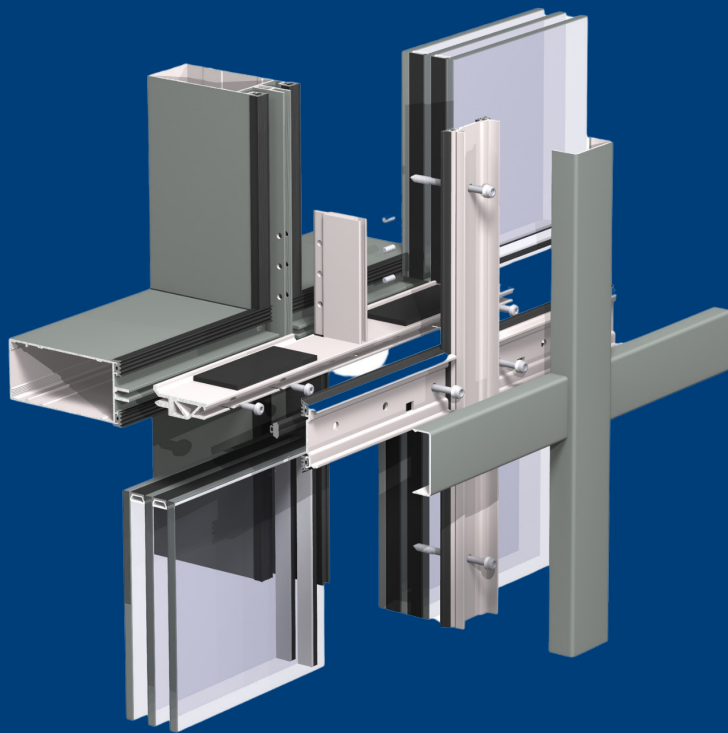


Amsterdome, Amsterdam — Architect: Architectenburo Guido Bakker — ConceptWall 50

Millennium Centre, Sofia — Architect: Amfion — bespoke solution

Meet our ConceptWall façade solutions

The ConceptWall series consists of two fully compatible main systems, ConceptWall 50 and ConceptWall 60. Next, we offer various safety variants, ranging from anti-burglary to explosionproof solutions. If desired, all our standard systems can be tailored to your project-specific needs with the help of the Reynaers Aluminium Project Cell.



1

Easy fabrication
and installation.

2

Highly compatible.

3

Unlimited creative
freedom.

ConceptWall 50

The only
limitation is your
imagination

*House of Basketball, Lithuania — Architect: UAB Architektu Biuras G. Natkevičius Ir Partneriai
ConceptWall 50-HI, ConceptWall 50-SC, ConceptWall 50-FP*



ConceptWall 50

A trusted solution

For over 30 years, ConceptWall 50 has been our flagship aluminium façade system. Still today, it is the go-to solution for most of our fabricators, sporting a wide range of profiles, functional variants and accessories. The stick façade's design has been perfected to guarantee worry-free fabrication, fully supported in ReynaPro, and a smooth installation process. For instance, its dedicated tooling makes life easier for professionals, giving them a competitive edge when it comes to time and cost efficiency.

ConceptWall 50 is a high-quality façade solution that is available in multiple thermal levels. The High Insulation variant is Passive House certified, making it a perfect sustainable choice for your low-energy building projects.

Endless design freedom

The design options are basically unlimited. Straightforward horizontally or vertically aligned façades are no issue, and even more unconventional designs can be realised. Asymmetrical structures,

steep inclines, large spans, integrated opening elements: whatever your vision may be, ConceptWall 50 can help make it reality.

There is no need for a bespoke solution as the standard system is highly flexible and offers a plethora of options and features. And if you do want something special, our Project Cell is more than happy to sit together and provide a tailored solution to your specific needs.

Finally, ConceptWall 50 features multiple safety variants for additional peace of mind, even in extreme circumstances. We offer burglarproof, fireproof and explosionproof variants as standard solutions, all to protect people in the heat of the moment. Ask your local Reynaers Aluminium representative for more information on our various safety systems.

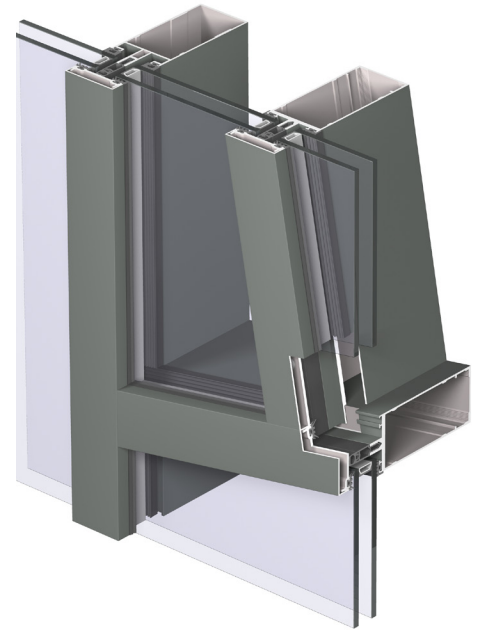
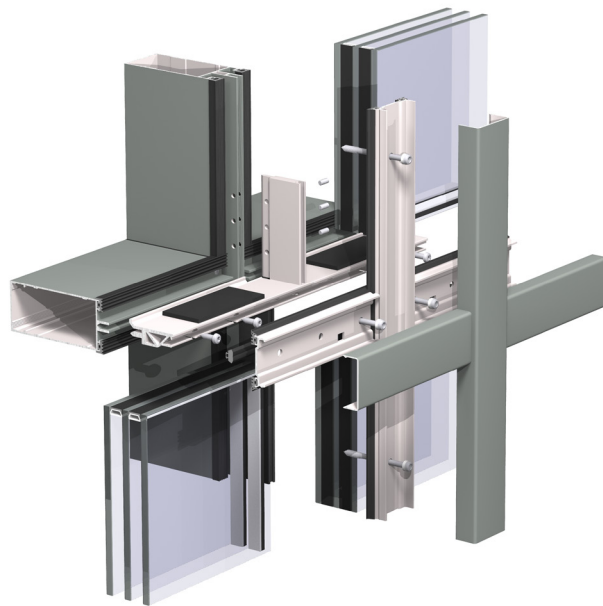
ConceptWall 50

Stick façades







Unlimited creative freedom

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

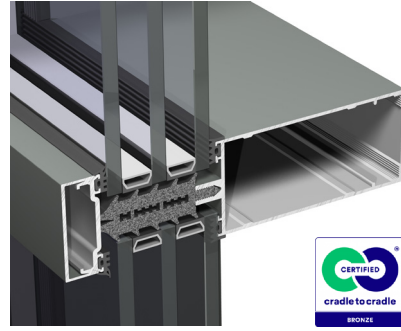
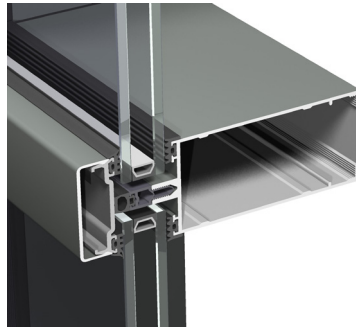
- Excellent thermal and AWW performance
- Broad range of applications and styles
- High weights and large spans



PERFORMANCE

 Thermal insulation (Uf)	Down to 0.56 W/m ² K
 Acoustic performance (Rw (C; Ctr))	60 (-2; -6) dB
 Air tightness	Up to 1950 Pa (class AE1950)
 Wind load resistance	Up to 2400 Pa (class E2400)
 Water tightness	Up to 1950 Pa (class RE1950)
 Burglar resistance	Up to RC 3 (NEN 5096 / ENV 1627)

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



PROPERTIES

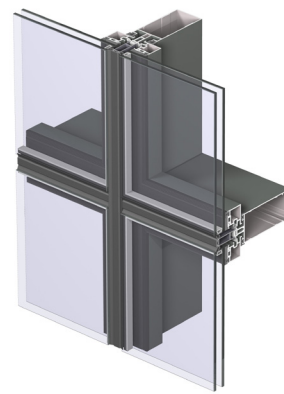
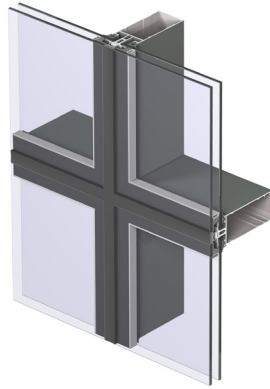
STANDARD

HIGH INSULATION

Inside visible width
Outside visible width
Glass thickness

50 mm
50 mm
6 - 60 mm

50 mm
50 mm
32 - 78 mm



PROPERTIES

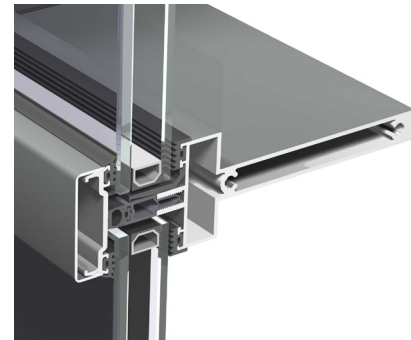
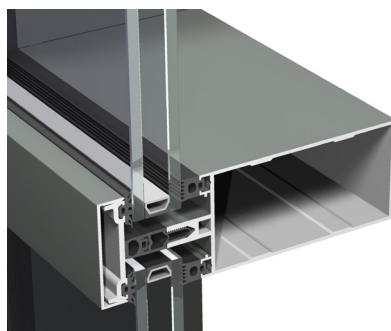
STRUCTURAL CLAMPED

STRUCTURAL GLAZED

Inside visible width
Outside visible width
Glass thickness

50 mm
joint: 20 mm
27 - 63 mm

50 / 88 mm
EPDM gasket (width 27 mm)
24 - 36 mm



PROPERTIES

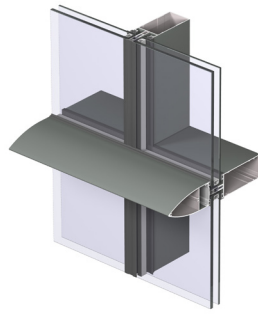
TRANSOM-TRANSOM

SLIMLINE

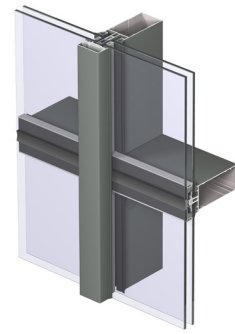
Inside visible width
Outside visible width
Glass thickness

50 mm
50 mm
8 - 64 mm

15 / 50 mm
50 mm
6 - 60 mm



HORIZONTAL LINING



VERTICAL LINING

PROPERTIES

Inside visible width

50 mm

50 mm

Outside visible width

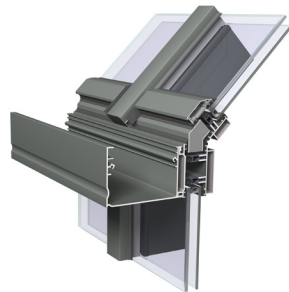
vertical: 30 mm joint
horizontal: 50 mm

vertical: 50 mm
horizontal: 20 mm joint

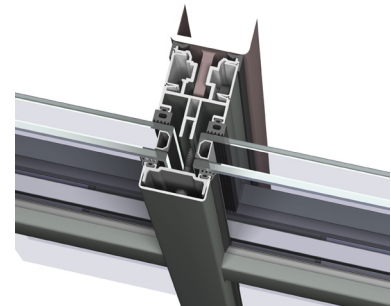
Glass thickness

22 - 48 mm

27 - 40 mm



ROOF APPLICATION



ALU ON STEEL

PROPERTIES

Inside visible width

50 mm

50 mm

Outside visible width

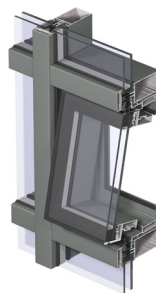
50 mm

50 mm

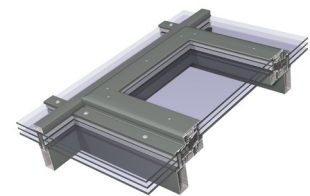
Glass thickness

6 - 60 mm

6 - 60 mm



TOP HUNG & POW
(OUTWARD OPENING)



ATTIC WINDOW
(OPTIONALLY WITH NSHEV)

PROPERTIES

Inside visible width

15 / 108 mm (Fu & SG)

0 (SG) / 102 mm

Outside visible width

0 mm (SG) / 105 mm


107 mm (Fu & SG)

Glass thickness

24 - 62 mm

24 - 62 mm

PERFORMANCE

 Thermal insulation

Uf down to 1.5 W/m²K

Uf down to 1.3 W/m²K

 Air tightness

Up to 600 Pa (class 4)

Up to 600 Pa (class 4)

 Wind load resistance

Up to 2000 Pa (class C5)

Up to 2150 Pa (class E2150)

 Water tightness

Up to 1500 Pa (class E1500)

Up to 1200 Pa (class E1200)

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



*Warsaw Unit, Warsaw - Architect: PBPA Projekt
ConceptWall 50-HI, ConceptWall 86-HI*

Fixscreen Minimal

Solar shading

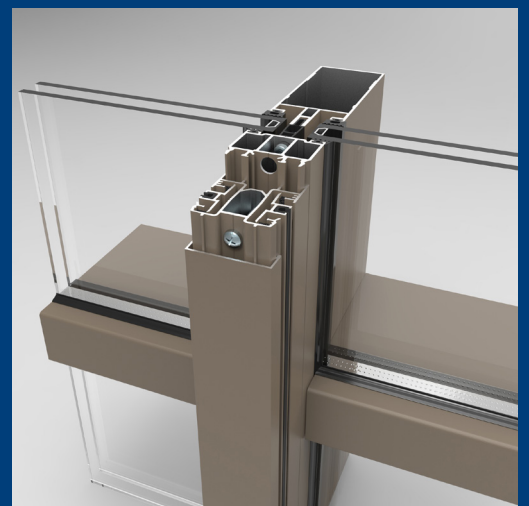
Joining forces where it matters most

The Fixscreen Minimal Curtain Wall 50 is an easy-to-install solar shading solution that helps prevent indoor overheating and protects against unwanted glare. With its reimagined design, the Fixscreen Minimal is now completely compatible with our ConceptWall 50 façade system, offering a clean and minimalistic look even for larger glass surfaces.

Designed in cooperation with solar shading specialist Renson, this 100% Belgian solution combines all the benefits of versatile aluminium curtain walls and highly flexible sunscreens. Instantly create perfect indoor temperatures with one neatly integrated system.

At Reynaers Aluminium, we leave nothing to chance. That is why we have thoroughly tested this solution for all kinds of resistance levels. For instance, the curtain wall-sunscreen combination withstands wind loads of up to 130 kilometres per hour when the sunscreens are down. Extensive pressure tests showed no sign of bending, while thermal expansion is anticipated by the cleverly aligned design.

Intense collaboration leads to user-friendly innovation: beat the heat with the help of the Fixscreen Minimal solution by Reynaers Aluminium and Renson.




Reynaers
Aluminium





PROPERTIES	MEDIUM	LARGE
Min. - Max. width	670 - 3600 mm	
Max. height	4000 mm	6000 mm
Max. screen surface	14.4 m ²	21.6 m ²
Application	Built in (invisible) or mounted onto the profile (visible fabric box)	

PERFORMANCE		
 Wind load resistance*	Screen up	Up to 2400 Pa (EN12179 / EN13116)
	Screen down	Up to 1200 Pa (EN13561:2004)

* Tested up to Class 3 for safety. At 65 kilometres per hour, an integrated wind speed sensor automatically triggers the screen to roll up. However, the Fixscreen Minimal can resist wind speed levels of up to 130 kilometres per hour.





*Roztyly Plaza, Prague - Architect: Aulík Fiser
Photo: Jan Kroupa
ConceptWall 50-HI, ConceptWall 86-EF-HI,
ConceptWall 66-RA*

ConceptWall 60

Full compatibility

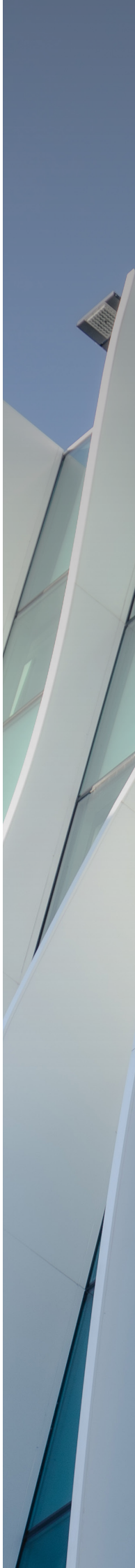
ConceptWall 60 is fully compatible and interchangeable with ConceptWall 50, although it has its own advantages. This 60 mm-wide stick façade offers all the benefits of its 50 mm twin, but thanks to reinforced profiles and larger glass rebates, it can support wide spans and heavier glass weights, even in sloped or curved constructions.

But stability is not its only strength. As is the case for ConceptWall 50, a dedicated set of tooling is provided to guarantee fail-safe fabrication. The functional no-nonsense design makes manufacturing and installation equally easy, ready for the challenges of Industry 4.0. In fact, the curtain wall system is fully supported by our ReynaPro software and has been optimised for effortless processing with all kinds of CNC machinery.

Complete and versatile

Next, ConceptWall 60 is always a sustainable, energy-efficient choice for modern-day projects. Suitable for triple glazing, the High Insulation variant offers Passive House certified performance, with Uf thermal insulation values down to 0.56 W/m²K.

Other upgrades include multiple on demand safety variants and the possibility to add user-friendly opening elements, including a subtle hidden vent solution.



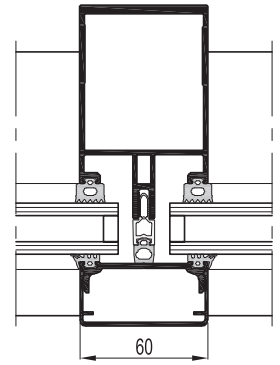


Versatility and
strength to
answer any
challenge

*Edifício Defensores de Chaves, Lisbon — Architect: Conceito Arquitectos
ConceptWall 60-SC*

ConceptWall 60

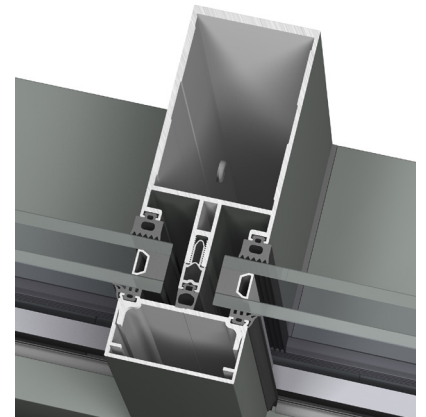
Stick façades









Solution for heavy glass panes

The ConceptWall 60 curtain wall system is ideal for higher wind load areas thanks to stronger aluminium profiles and larger glass rebates, compared to ConceptWall 50. Its functional design makes manufacturing and installation equally easy. Perfect for roof applications thanks to its large drainage channel.

- Excellent thermal and AWW performance
- Freedom in both building shapes and profile design
- High weights and large spans



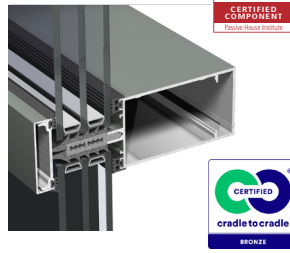
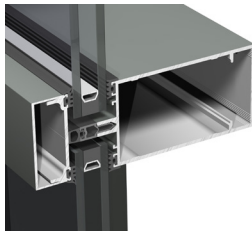
PERFORMANCE	
 Thermal insulation (Uf)	Down to 0.6 W/m ² K
 Acoustic performance (Rw (C; Ctr))	56 (-1; -5) dB
 Air tightness	1950 Pa (class AE1950)
 Wind load resistance	Up to 2400 Pa (E2400)
 Water tightness	Up to 1950 Pa (class RE1950)
 Burglar resistance	Up to RC 3 (ENV 1627)

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

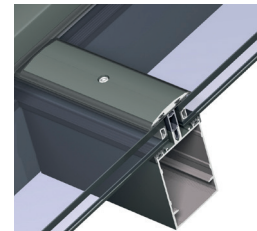
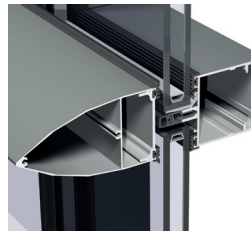
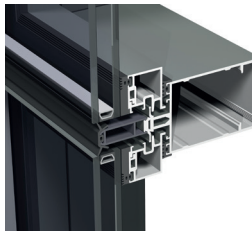


NEW ConceptWall 60 Hidden Vent

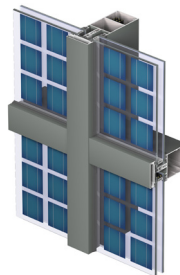
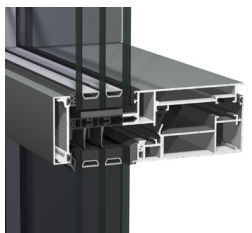
The Hidden Vent variant of our trusted ConceptWall 60 façade solution adds new possibilities to integrate elegant opening elements into your building envelope. The inward opening windows are fully harmonized with the ConceptWall design, offering a durable floor-to-ceiling solution with minimal profile widths. Moreover, when viewed from the outside, the opening vents are indistinguishable from the fixed elements, which gives for a neat continuous façade finish. Combined with a glass balustrade, the Hidden Vent brings exterior and interior closer together in multi-storey buildings, while the tilt mode helps to let in a breath of fresh air.



PROPERTIES	STANDARD	HIGH INSULATION	STRUCTURAL CLAMPED
Inside visible width	60 mm	60 mm	60 mm
Outside visible width	60 mm	60 mm	Silicon joint or EPDM gasket of 20 mm width
Glass thickness	6 - 60 mm	32 - 78 mm	27 - 63 mm



PROPERTIES	STRUCTURAL GLAZED	HORIZONTAL/VERTICAL LINING	ROOF APPLICATION
Inside visible width	60 / 88 mm	60 mm	60 mm
Outside visible width	EPDM gasket of 27 mm width	mix of 20 / 30 mm joint & 60 mm pressure plate	60 mm
Glass thickness	24 - 36 mm	22 - 48 mm	6 - 60 mm



PROPERTIES	HIDDEN VENT (INWARD OPENING)	SOLAR
Inside visible width	65 mm	60 mm
Outside visible width	60 mm	60 mm
Glass thickness	Frame: 6 - 64 mm Vent: 24 - 57 mm	6 - 60 mm

ConceptWall Safety solutions

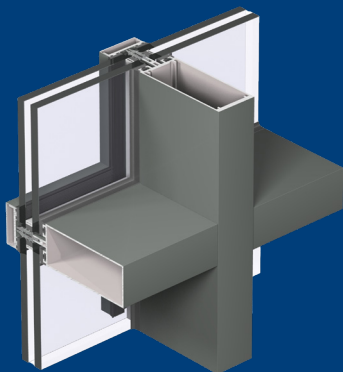
Nothing left to chance

Reynaers Aluminium curtain wall systems are designed to meet all kinds of specific safety requirements. Besides fulfilling basic building needs such as AWW tightness and thermal insulation, these innovative systems can be offered with many additional safety features, often combined in one solution. Whether you need fire protection, or burglar and explosion-resistant features, our safety variants guarantee the most secure finish to your project. With the help of our trusted international testing partners and the Project Cell, anything is possible.



SAFETY OPTIONS*	CONCEPTWALL 50	CONCEPTWALL 60
Burglarproof	X	X
Fireproof	X	-
Impact resistance	X	X
Explosionproof	X	-
Earthquake resistance	X	X
Hurricaneproof	X	X

**These standard safety options can be applied to all our curtain wall systems on demand. Contact your Reynaers Aluminium representative for more information.*



Did you know?

Next to ConceptWall 50 and ConceptWall 60, Reynaers Aluminium also offers a ConceptWall 80 façade solution. This extra wide reinforced system is specifically developed for explosionproof protection and is only available as a bespoke solution. A safe bet for your next project!

ConceptWall Opening Elements

A window of opportunity for your façade

Creating a pleasant indoor climate not only benefits the long-term health of people, but it also ensures the extended lifetime of the building itself. Opening elements in building façades help create ideal indoor conditions, even at great heights. They are easy-to-operate and safe solutions that let air flow freely inside and connect the exterior with the interior. When closed, the systems provide excellent wind and water tightness, and they can withstand heavy wind loads. The choice of hardware and handles allows you to add extra safety features and a personal touch to your building envelope.



The ConceptWall series is compatible with most Reynaers Aluminium windows, doors and sliding systems, but also with a wide range of dedicated opening types. Outward opening elements include parallel opening windows, top-hung windows, and attic window solutions for nearly horizontal roofs. An example of an inward opening type is the Hidden Vent turn-tilt window, which is indistinguishable from the surrounding façade, viewed from the outside. All these solutions come with optional motorisation, an interesting upgrade for windows in hard-to-reach places. Combinations with smart building management systems are also possible.



**Reynaers
Aluminium**

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