

SOLEAL NEXT

THE UNIVERSAL WINDOW



Heathervale House

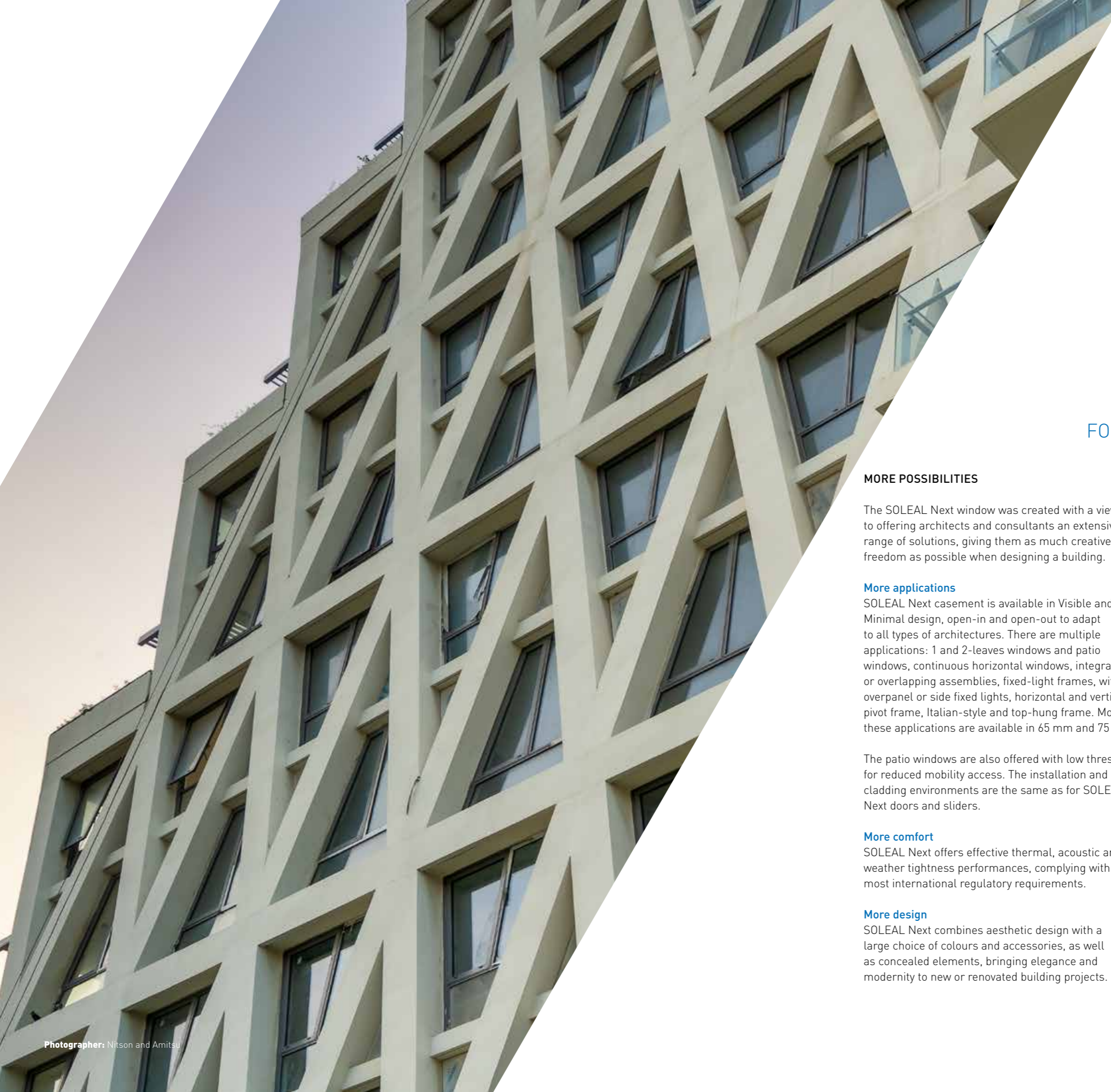
Thomson Snell & Passmore



TECHNAL®

Architect: Morton Scarr
Photographer: John Kees Photography

By  Hydro



SOLEAL NEXT

/ THE UNIVERSAL WINDOW

WINDOW BEYOND LIMITS FOR THE ARCHITECTURAL CREATIVITY

MORE POSSIBILITIES

The SOLEAL Next window was created with a view to offering architects and consultants an extensive range of solutions, giving them as much creative freedom as possible when designing a building.

More applications

SOLEAL Next casement is available in Visible and Minimal design, open-in and open-out to adapt to all types of architectures. There are multiple applications: 1 and 2-leaves windows and patio windows, continuous horizontal windows, integrated or overlapping assemblies, fixed-light frames, with overpanel or side fixed lights, horizontal and vertical pivot frame, Italian-style and top-hung frame. Most of these applications are available in 65 mm and 75 mm.

The patio windows are also offered with low threshold for reduced mobility access. The installation and cladding environments are the same as for SOLEAL Next doors and sliders.

More comfort

SOLEAL Next offers effective thermal, acoustic and weather tightness performances, complying with most international regulatory requirements.

More design

SOLEAL Next combines aesthetic design with a large choice of colours and accessories, as well as concealed elements, bringing elegance and modernity to new or renovated building projects.

LESS IMPACT

Using the UN Sustainability Goals as our compass, we aim to reduce by half our CO₂ emissions by 2025 and commit to contribute to quality education and capacity building for 500,000 people in our communities and for business partners from 2018 until the end of 2030.

Less CO₂ footprint

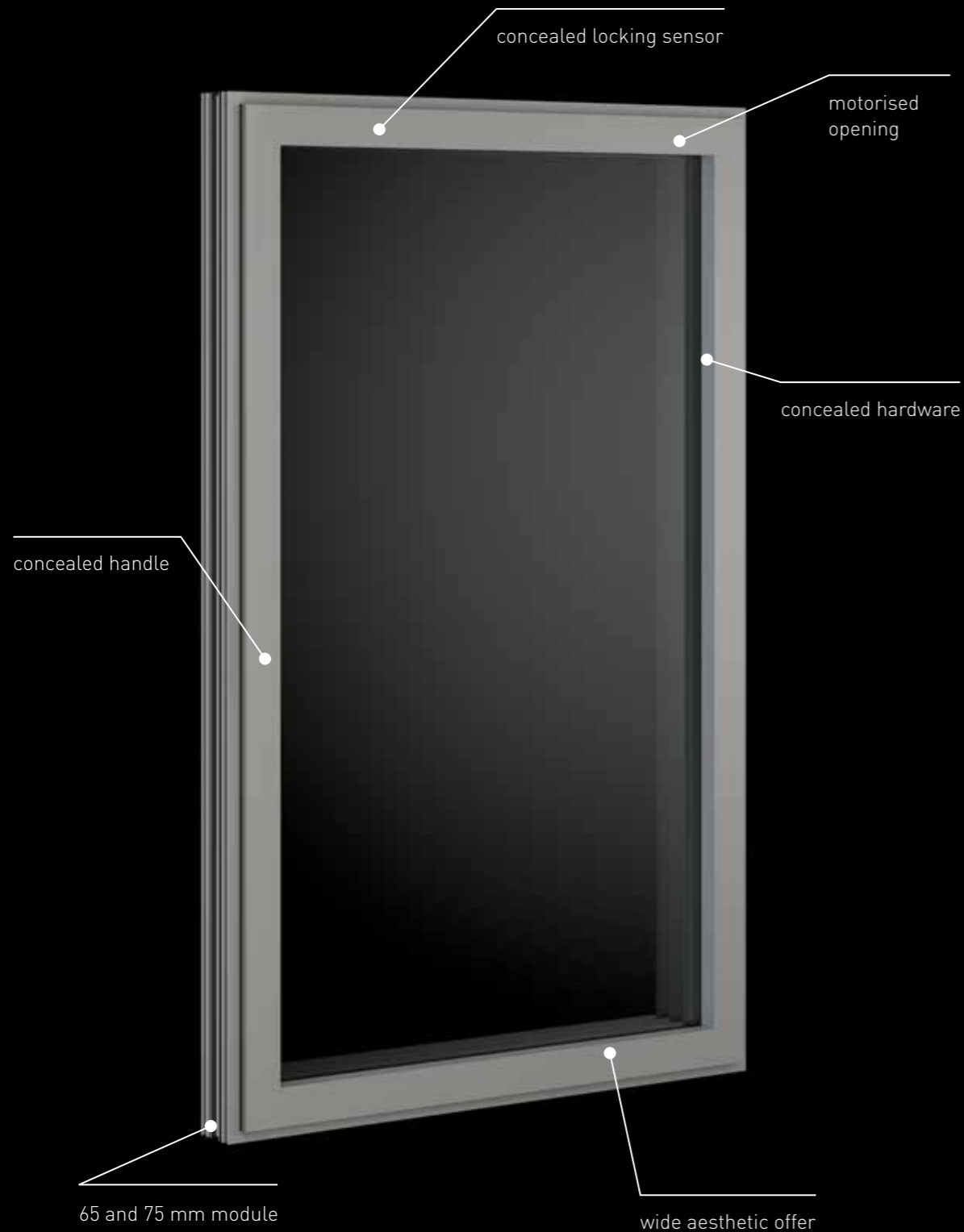
Using Hydro CIRCAL[®], an alloy made with a minimum of 75% recycled end-of-life aluminium (post-consumer scrap), allows tons of scrap that would otherwise become solid waste to be reintroduced into the system. SOLEAL Next's thermal break elements are made from recycled material giving a second life to drink bottles.

More recyclable

SOLEAL Next is under certification to obtain Cradle to Cradle[®] label. The specific characteristics contribute to constructing sustainable buildings that are eligible to be awarded to the main environmental certifications.

SOLEAL NEXT 65 & 75

/ MORE POSSIBILITIES. LESS IMPACT.



KEY FEATURES & INNOVATIONS

MORE DESIGN & AESTHETICS

- Wide choice of Minimal and Visible vents and frames design
- Concealed hardware
- Concealed handle and drainage
- EXCLUSIVE® handle collection
- EXCLUSIVE® colour range

LARGE DIMENSIONS

- Module: 65 and 75 mm
- Height: up to 3 meters
- Glazing thickness: up to 69 mm
- Infill weight: up to 160 kg

MORE APPLICATIONS

- Numerous opening possibilities
- Façade and other ranges integration
- Composite assemblies
- Horizontal and vertical pivot frame
- Residential door
- Patio window
- Juliet balcony
- Motorised available for tilt
- Magnetic window contact

MORE SAFETY AND ACCESSIBILITY

- Burglary resistance up to RC2 and PAS24
- Security glazing beads for glass pan installation from the outside, including open-out
- Building management system: concealed locking sensor
- Antibacterial coating on handles
- Reduced threshold for disabled: 15-20 mm

MORE PERFORMANCES

- Thermal: U_w up to 0.71 W/m²K
- Air permeability: Class 4
- Watertightness: Class E1500
- Wind pressure resistance: Class 5
- Acoustic performance: R_w up to 47 dB

MORE SUSTAINABILITY

- SOLEAL Next is made in Hydro CIRCAL®, aluminium made with a minimum of 75% recycled end-of-life aluminium.
- PVC-free components
- Cradle to Cradle®: under certification
- Dynamic EPD available on TechDesign
- 75% recycled and 95% recyclable

SOFTWARE

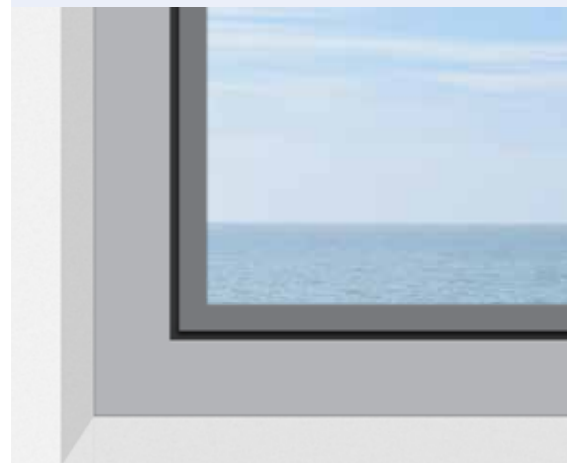
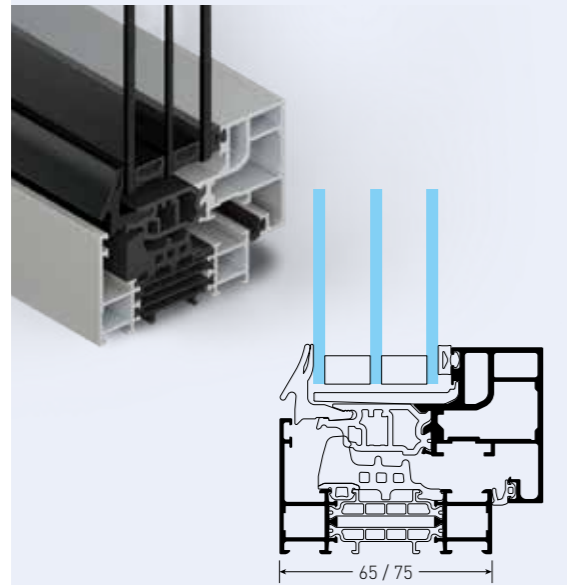
- Available in TechDesign
- BIM: available in Tech3D, Archicad and REVIT

SOLEAL NEXT

/ A MODULAR SOLUTION

MINIMAL

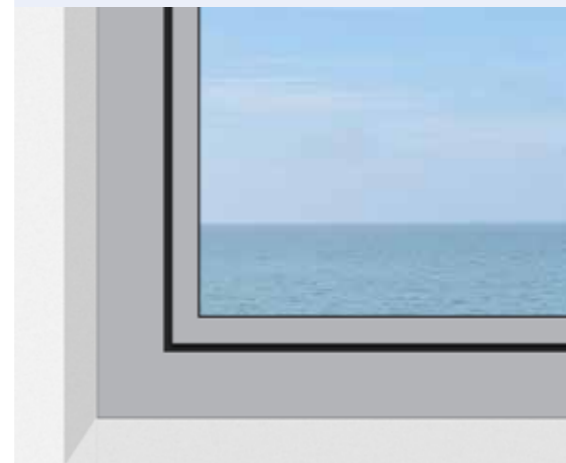
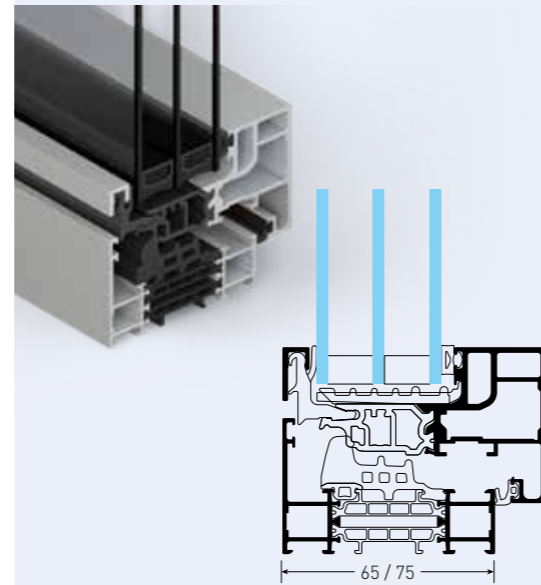
The fine lines of the Minimal vent contribute to creating elegant and minimalistic architecture.



SOLEAL NEXT Minimal

MINIMAL CLIP-ON TRIM

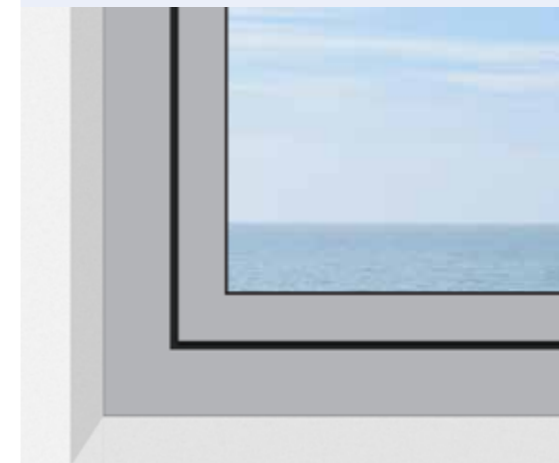
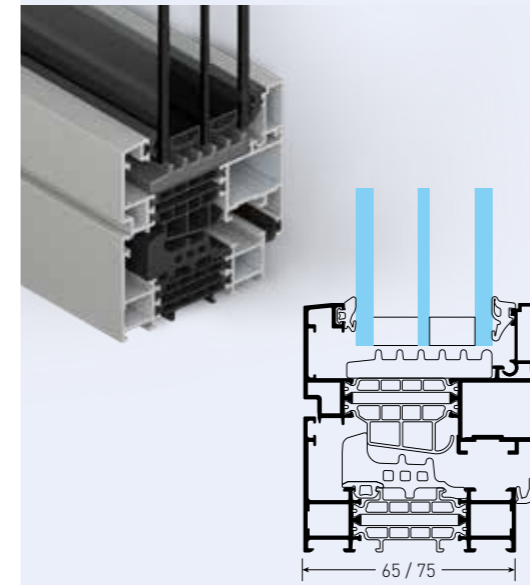
The clip-on-trim adds modernity to the joinery and discreetly highlights the presence of the opening vent.



SOLEAL NEXT Minimal Clip-On-Trim

VISIBLE OPEN-IN

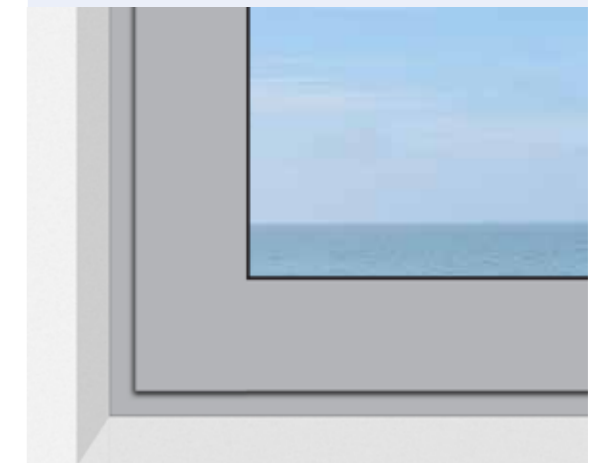
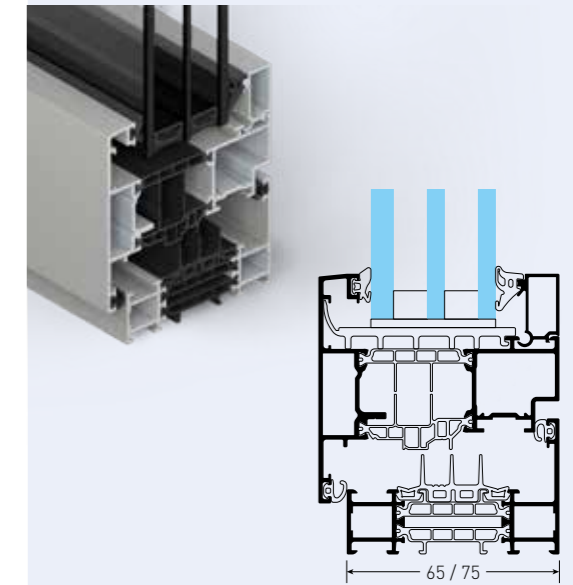
The visible structure is balanced between the fixed frame and the opening vent, providing an additional aesthetical touch to the window.



SOLEAL NEXT Visible Open-In

VISIBLE OPEN-OUT

Not only are there several designs of visible vents, it's also available for outward opening, giving a wide choice of possibilities.



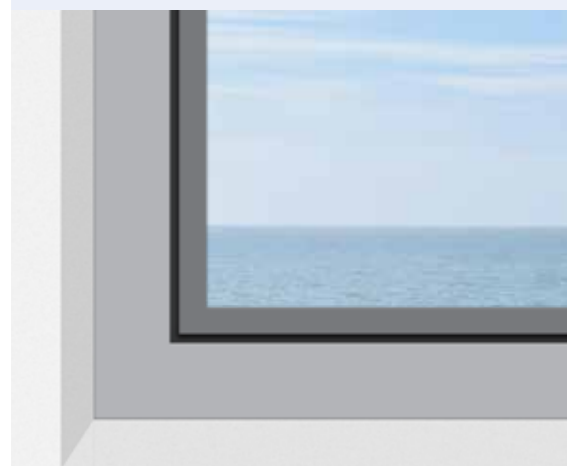
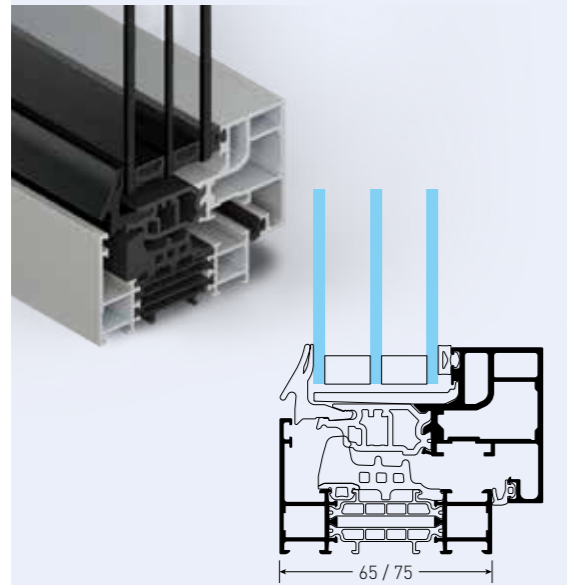
SOLEAL NEXT Visible Open-Out

SOLEAL NEXT

/ A MODULAR SOLUTION

MINIMAL

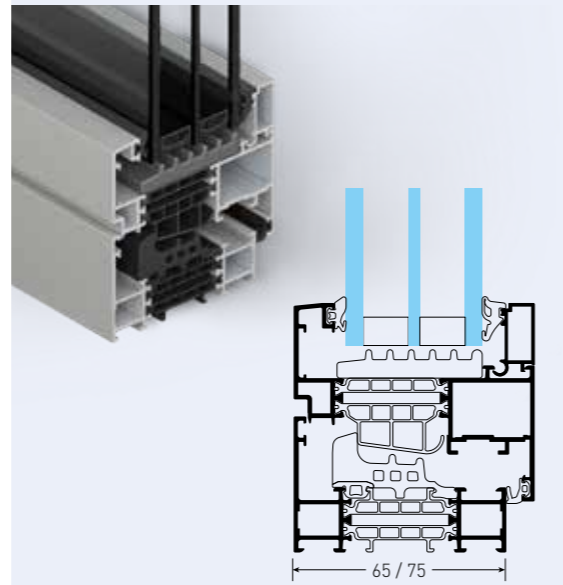
The fine lines of the Minimal vent contribute to creating elegant and minimalistic architecture.



SOLEAL NEXT Minimal

VISIBLE OPEN-IN SQUARE

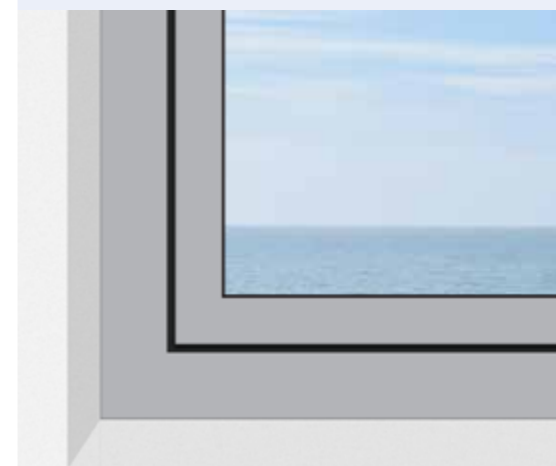
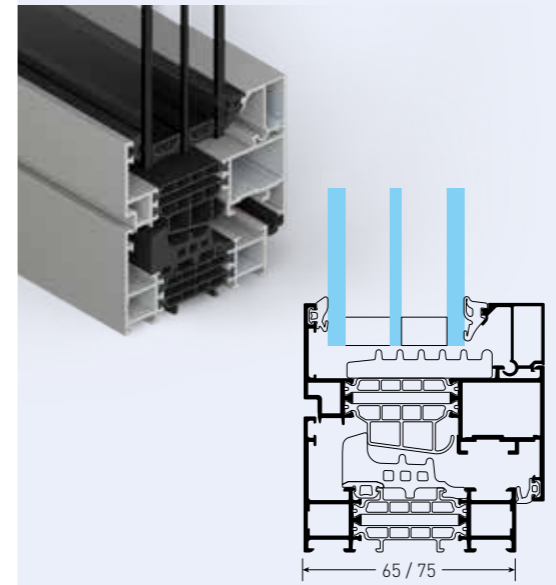
The visible structure is balanced between the fixed frame and the opening vent, providing an additional aesthetical touch to the window.



SOLEAL NEXT Visible Open-In Square

VISIBLE OPEN-IN FLUSH

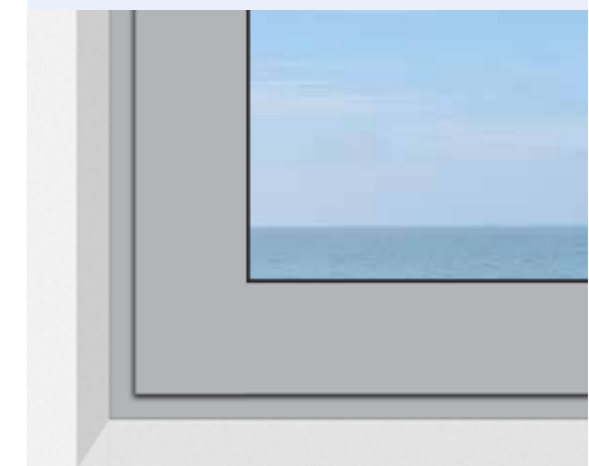
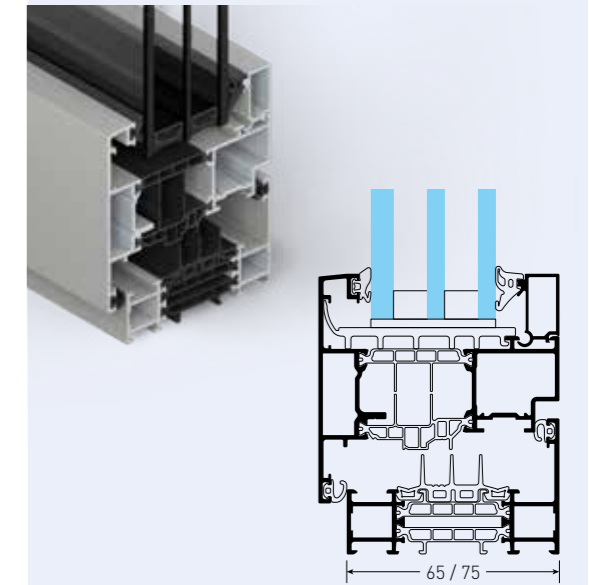
The visible structure is balanced between the fixed frame and the opening vent, providing an additional aesthetical touch to the window.



SOLEAL NEXT Visible Open-In Flush

VISIBLE OPEN-OUT

Not only are there several designs of visible vents, it's also available for outward opening, giving a wide choice of possibilities.



SOLEAL NEXT Visible Open-Out

SOLEAL NEXT

/ MINIMAL

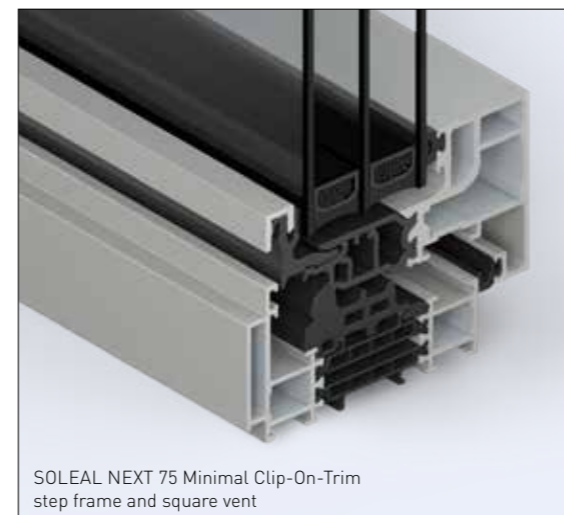
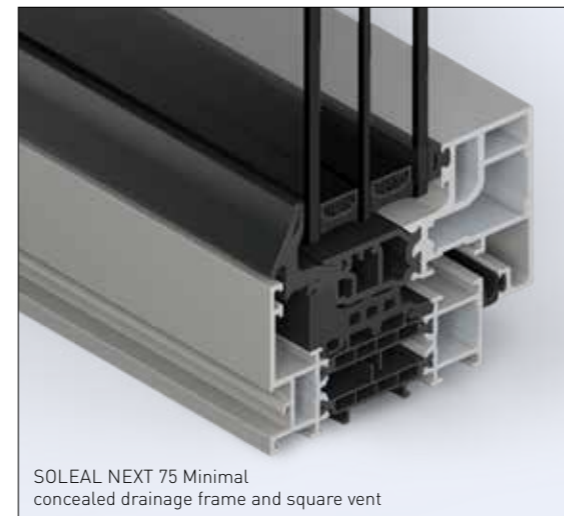
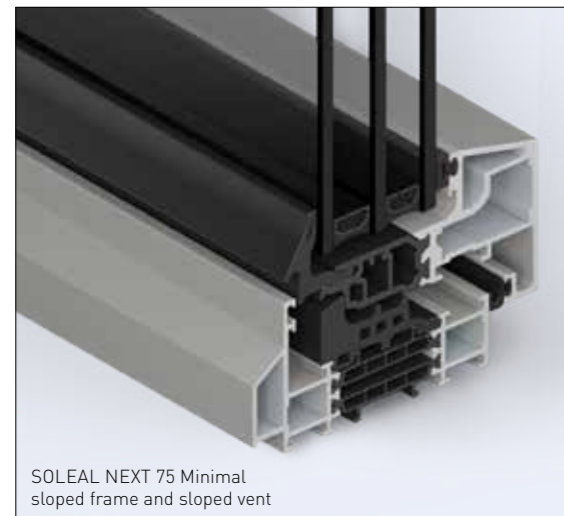
With a range of 5 different frames and 4 different vent designs, SOLEAL Next Minimal can be offered in 20 different visual aspects.

FRAME DESIGNS

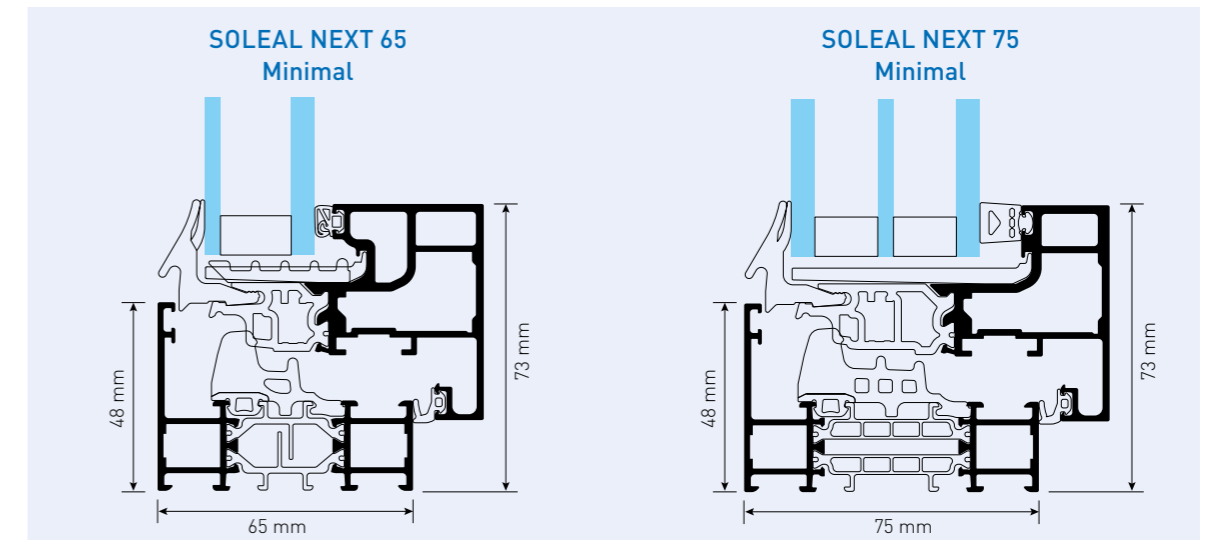
- Standard
- Step
- Slope
- Concealed drainage
- Dutch frame

VENT DESIGNS

- Square
- Step
- Slope
- Clip on trim



The patented minimalist opening frame with slim, subtle sightlines is perfect to reduce the visible aluminium and to increase the amount of glazing.



SOLEAL NEXT

/ VISIBLE OPEN-IN

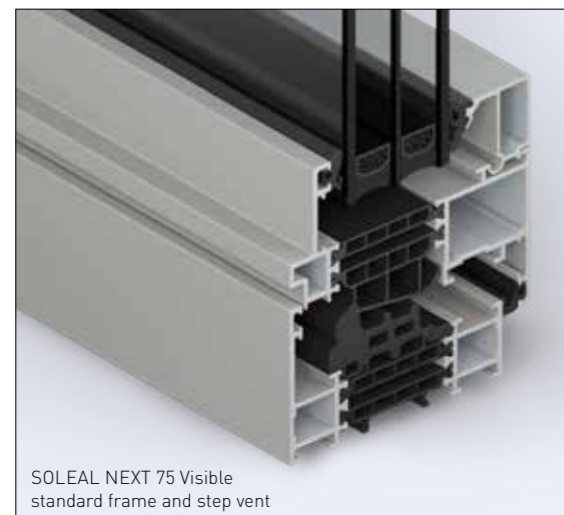
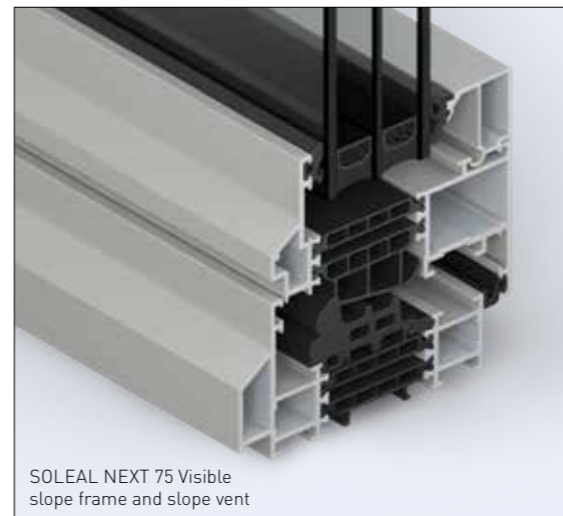
With a range of 5 different frames and 5 different vent designs, SOLEAL Next Visible can be offered in 25 different visual aspects.

FRAME DESIGNS

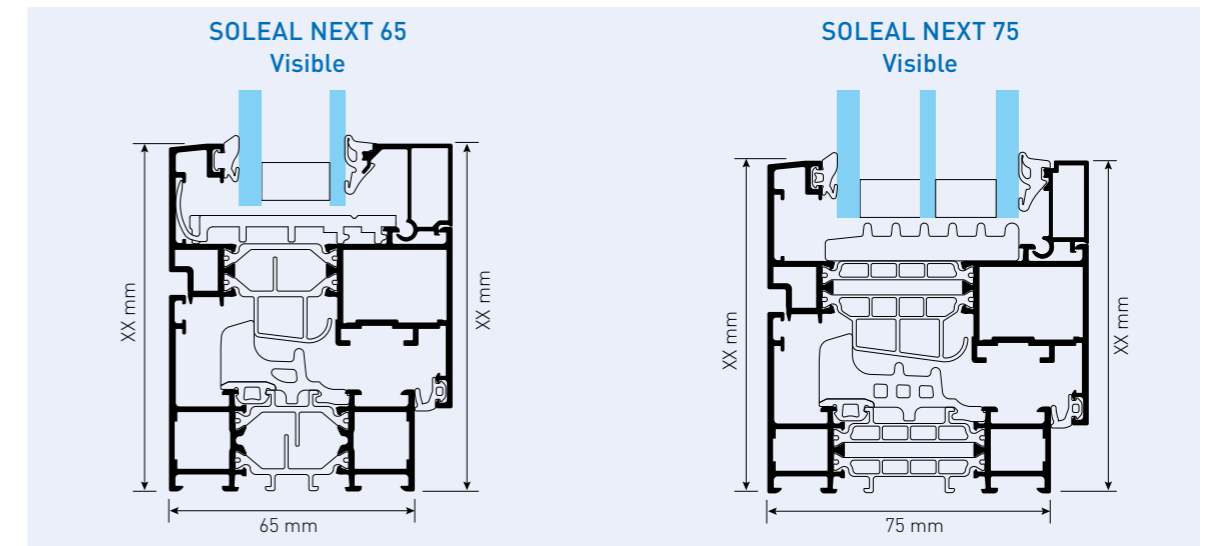
- Standard
- Step
- Slope
- Concealed drainage
- Dutch frame

VENT DESIGNS

- Square
- Step
- Slope
- Soft
- Flush



The stylish visible opening frame provides a contemporary, modern aesthetic.



SOLEAL NEXT

/ VISIBLE OPEN-IN

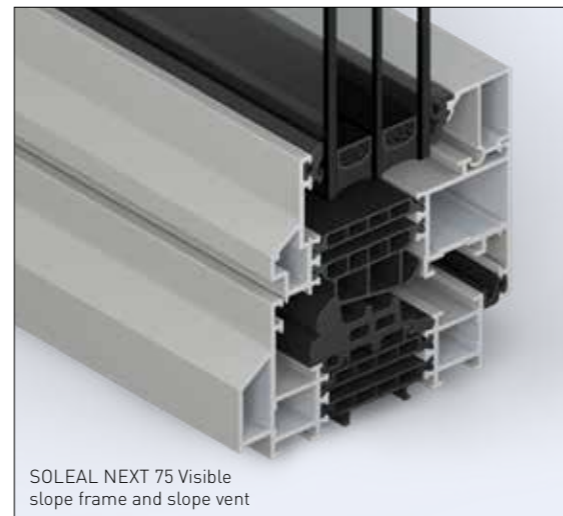
With a range of 5 different frames and 5 different vent designs, SOLEAL Next Visible can be offered in 25 different visual aspects.

FRAME DESIGNS

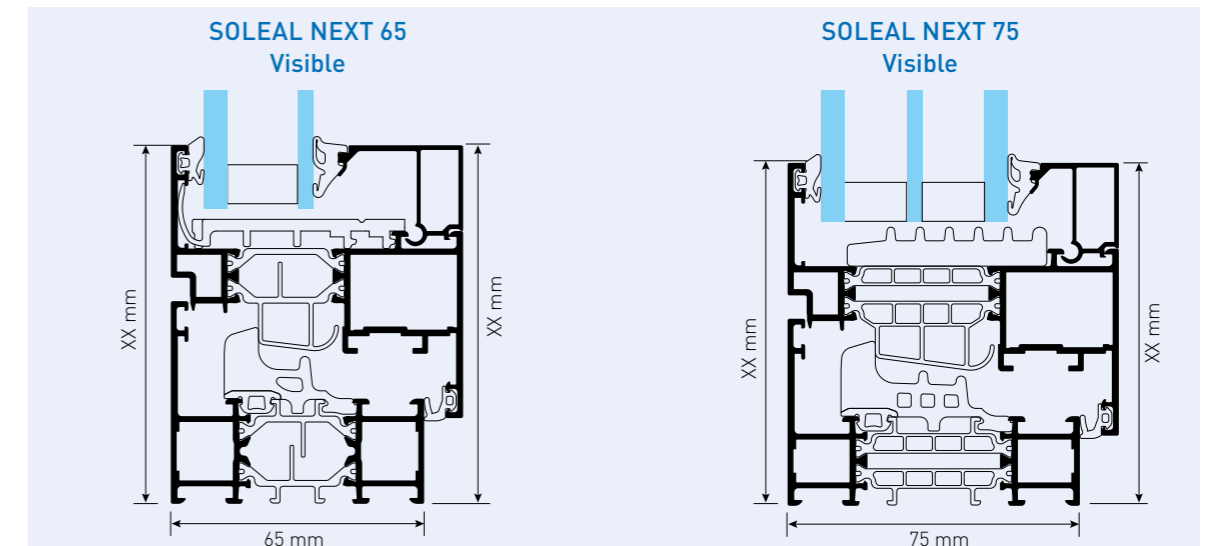
- Standard
- Step
- Slope
- Concealed drainage
- Dutch frame

VENT DESIGNS

- Square
- Step
- Slope
- Soft
- Flush

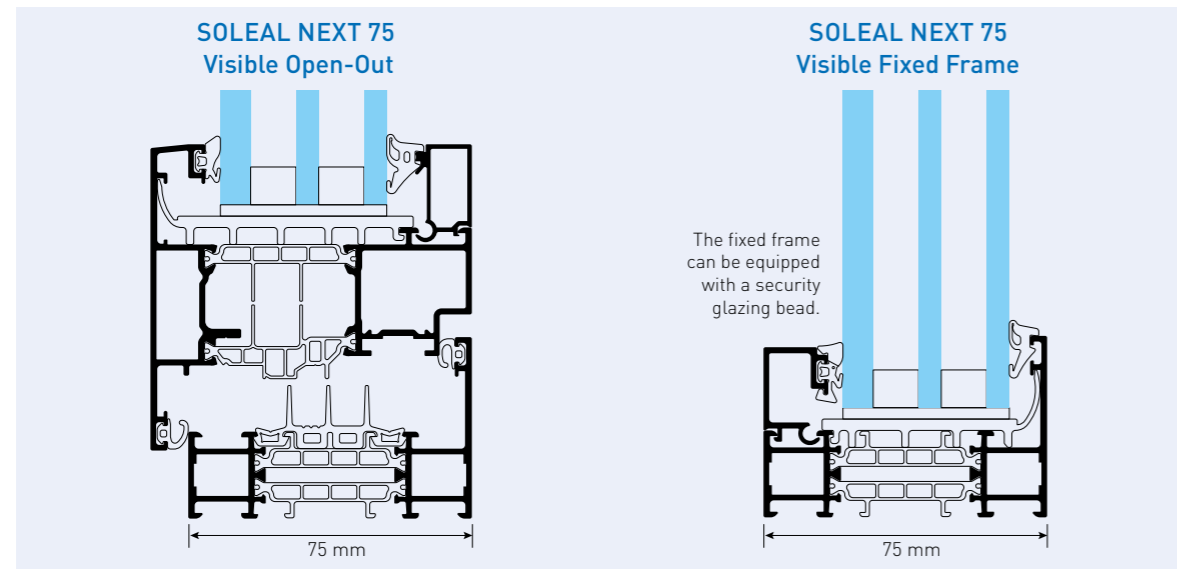


The stylish visible opening frame provides a contemporary, modern aesthetic.



SOLEAL NEXT

/ VISIBLE OPEN-OUT

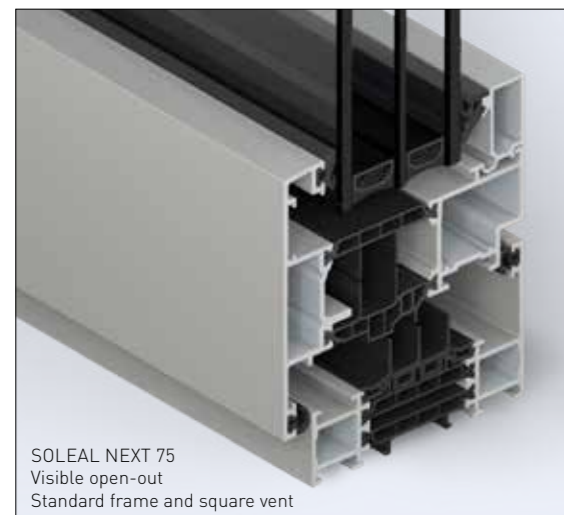


WINDOW FEATURES

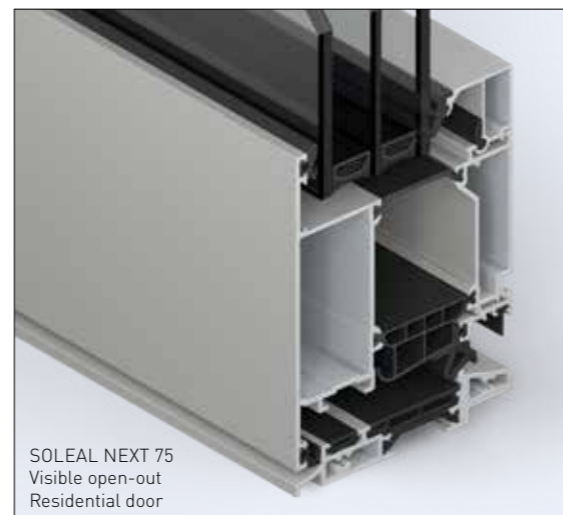
- Vent optimized for friction stay (No packer on the vent)
- Straight cut central gasket (Overlapping lips)
- Exist in single and double vent
- PAS24 available

RESIDENTIAL DOOR FEATURES

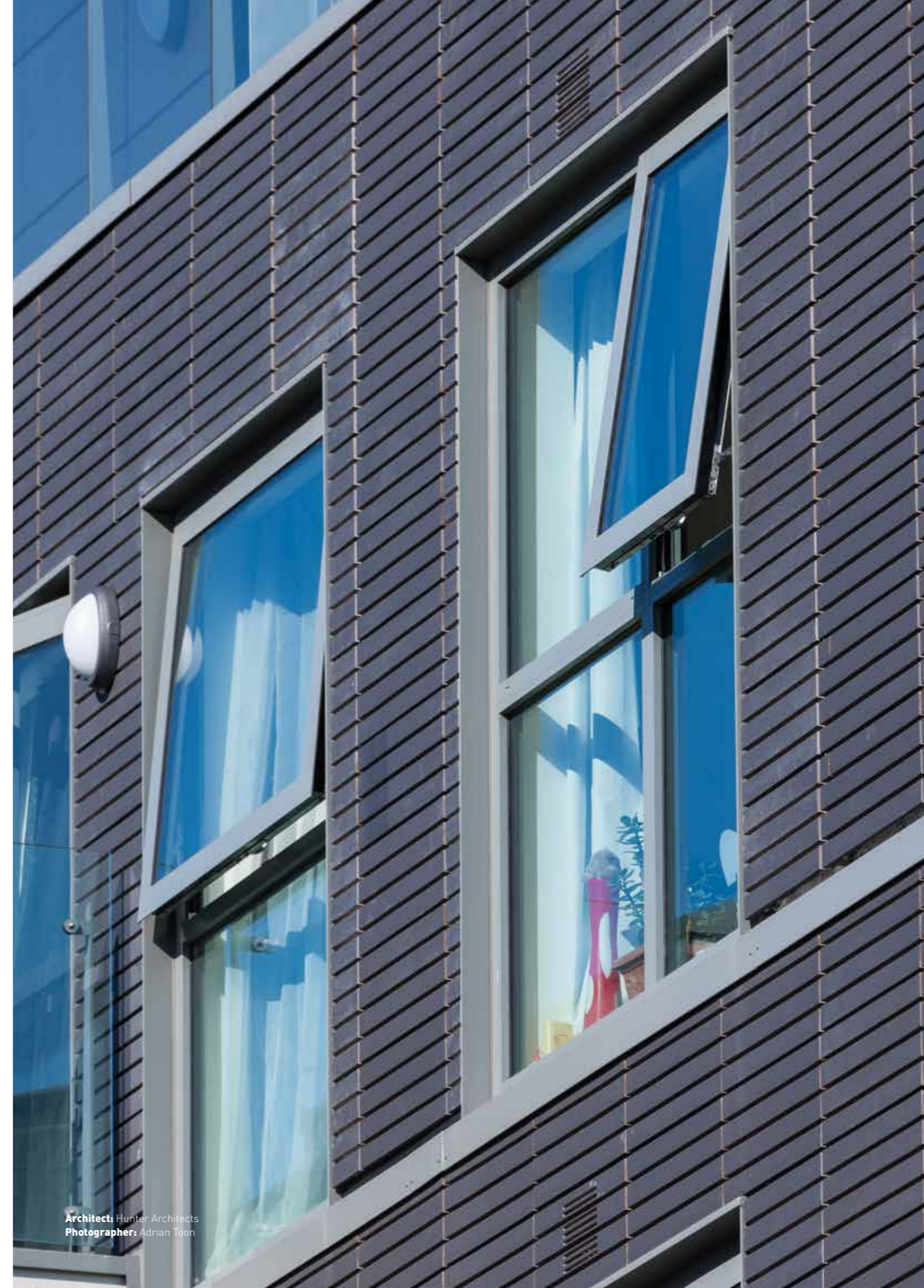
- Door lock offer
- Door hinges tested at 200 000 cycles



SOLEAL NEXT 75
Visible open-out
Standard frame and square vent



SOLEAL NEXT 75
Visible open-out
Residential door



Architect: Hunter Architects
Photographer: Adrian Toon

SOLEAL NEXT

/ CONCEALED ELEMENTS AND HARDWARE

AESTHETICS

- Invisible hinges to create a minimalistic look
- Thin hardware components, harmonious finishes
- Finishing covers tie rod and frame groove for a clean appearance

FAST ASSEMBLY

- Frontal mounted elements
- Direct punching of the tie rod
- No groove notching on the vent
- Positioning with breakable stoppers

SIMPLE SUPPLY

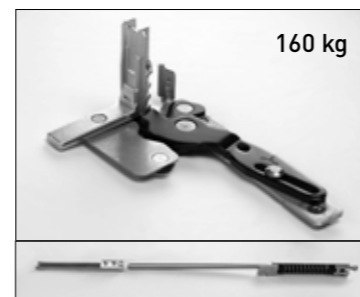
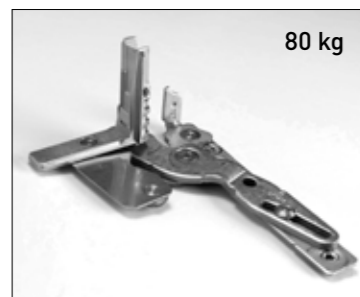
- No coated or anodized part, which reduces lead time for supply
- All components are common except for the bottom hinge, which enables stock to be built up according to weight and opening

LARGE DIMENSIONS

- Up to 3 m height
- 160 kg per vent

COMPREHENSIVE SOLUTION

- Bottom hinges adapted to the weight of the glazing and the type of project:



CONCEALED HANDLES

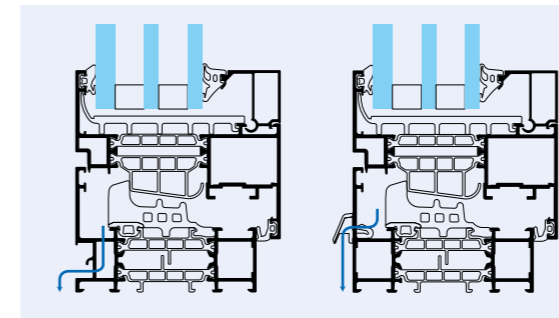
The window handle is hidden in the vent, adding to the harmonious appearance of the window. This innovative design idea was awarded prizes from the international expert juries of the iF DESIGN AWARD 2018, the Red Dot Design Award 2018. This feature is proposed on the Minimal vent.



CONCEALED DRAINAGE

Concealed, our drainage is strategically placed on the casement frame to drain water out while preventing the air from coming inside.

If visible, our minimalistic drainage cap features standard colour, or lacquered in order to match the tint of the window.



Concealed drainage versus traditional drainage through the frame profile and drainage caps

CONCEALED LOCKING SENSOR

The concealed locking sensor is integrated into the profile. It represents an additional security feature as it sends an alert on the user's device when the window is not properly closed. It's easy to mount, and without any maintenance operation (no battery).

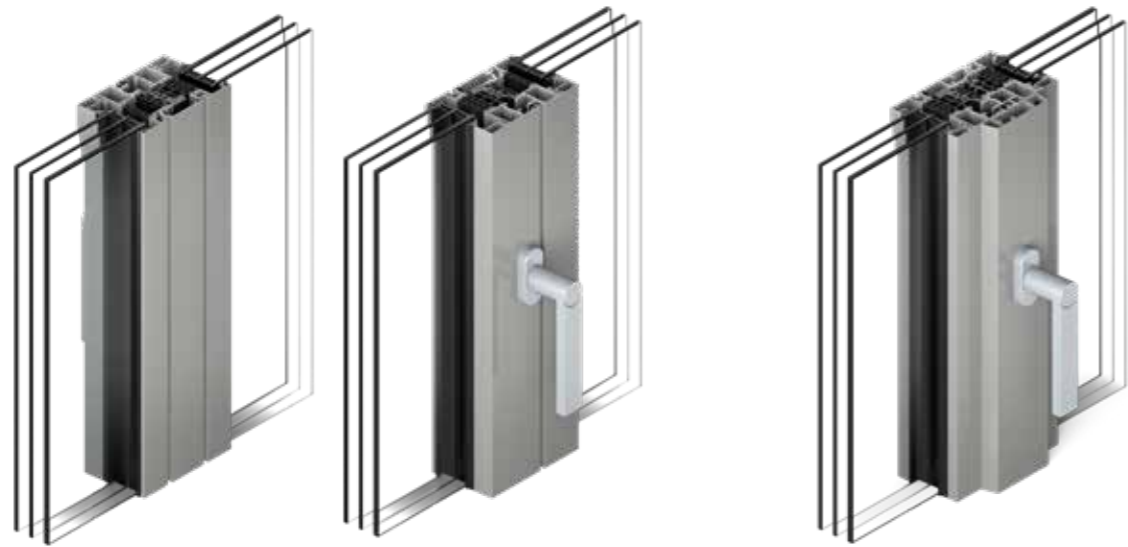


Architect: Elding Oscarsson Architects
Photographer: Erik Wik

SOLEAL NEXT

/ MORE AESTHETIC FEATURES

2 VENTS MULLION SOLUTIONS

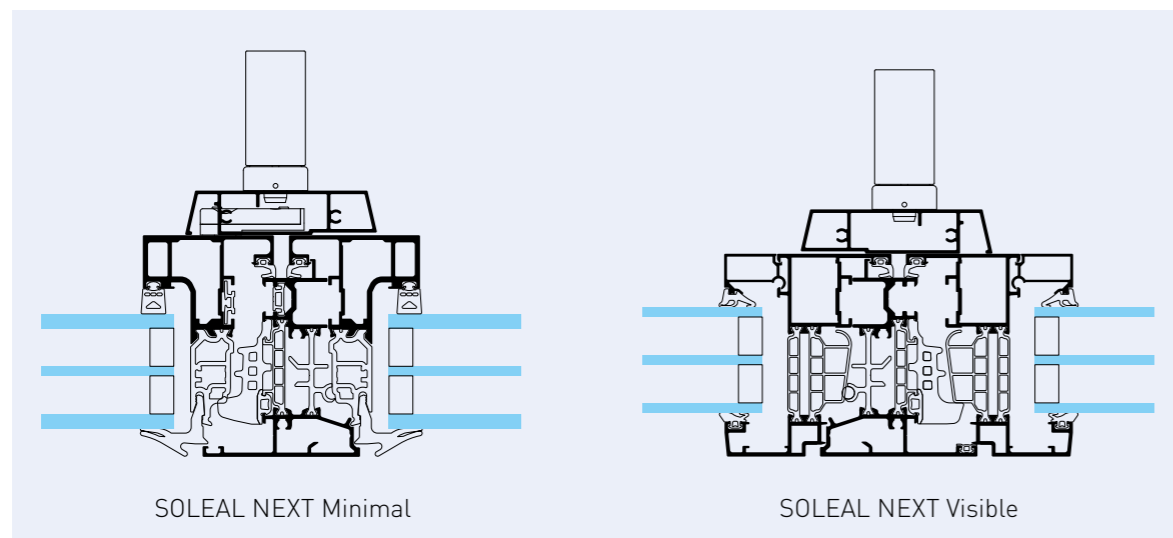


REDUCED SIGHTLINE

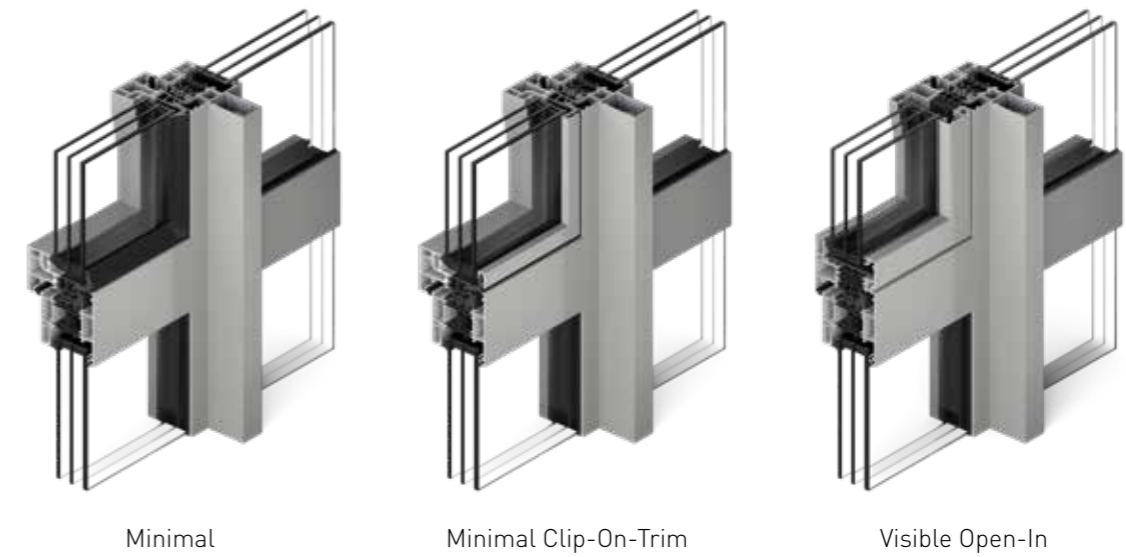
- 146 mm for Visible vent with add-on rebate
- 126 mm for Visible vent with TZ profile for a reduced sightline
- 116 mm for Minimal vent

CENTERED HANDLE

- Contributes to an harmonious internal design
- Available in Minimal and Visible vent



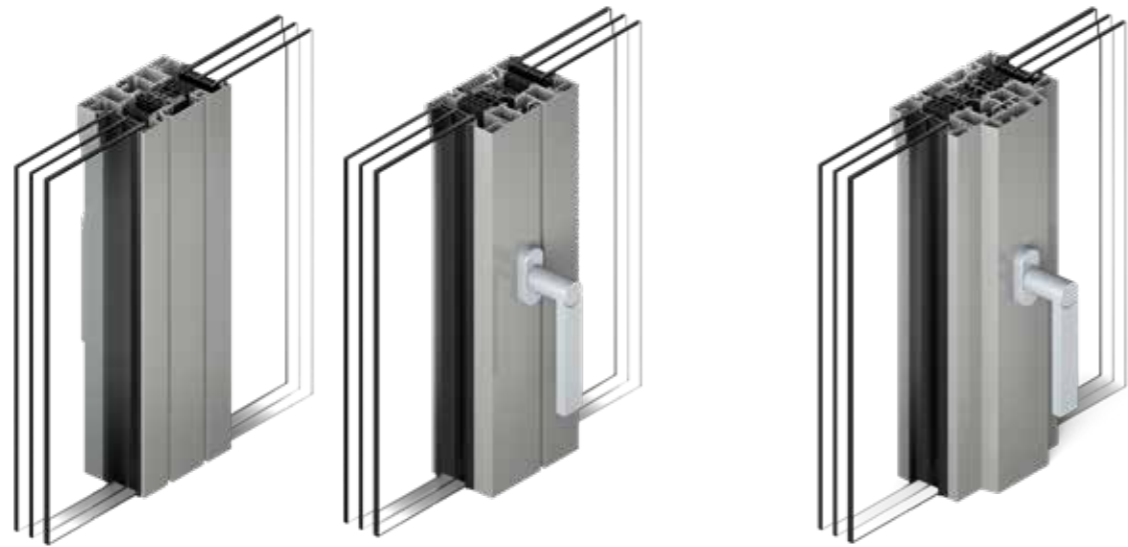
COMPOSITE FRAME WITH OPEN-IN VENT



SOLEAL NEXT

/ MORE AESTHETIC FEATURES

2 VENTS MULLION SOLUTIONS

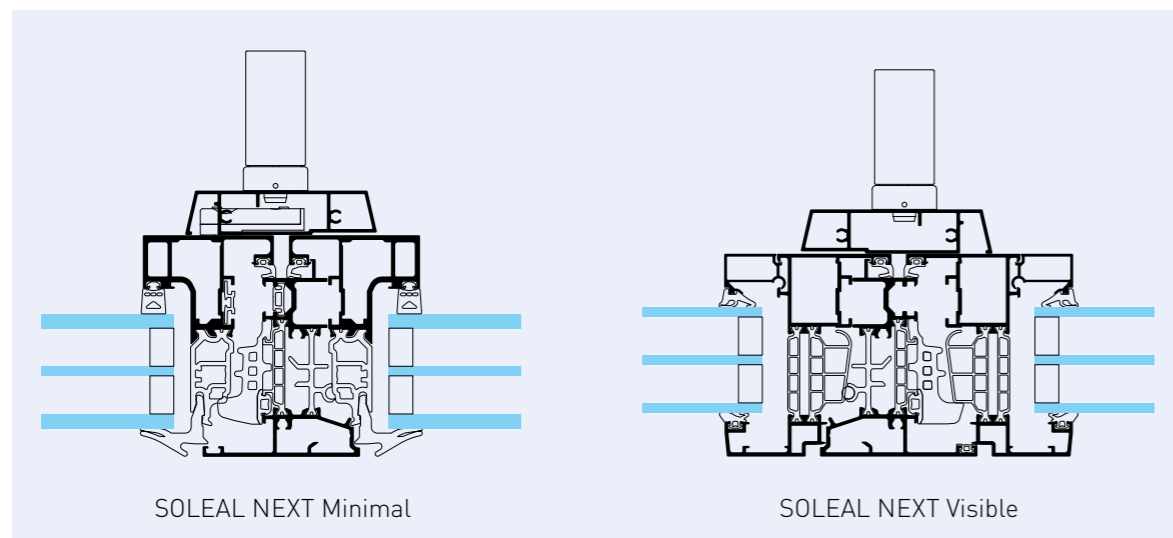


REDUCED SIGHTLINE

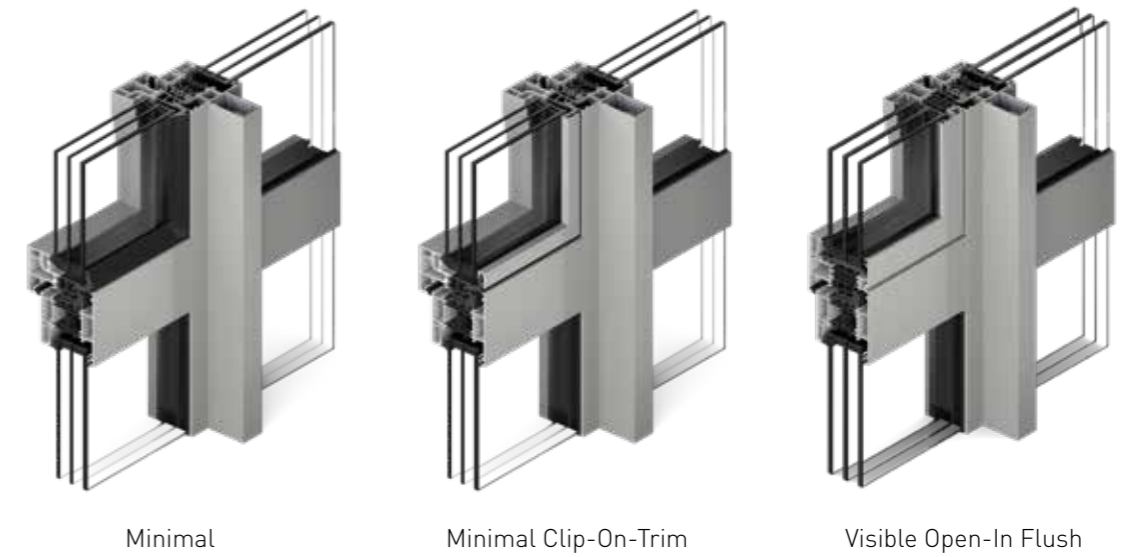
- 146 mm for Visible vent with add-on rebate
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CENTERED HANDLE

- Contributes to an harmonious internal design
- Available in Minimal and Visible vent



COMPOSITE FRAME WITH OPEN-IN VENT



SOLEAL NEXT

/ EXCLUSIVE® HANDLES COLLECTION

The discreet but effective design approach for our new EXCLUSIVE® range - SELECTION, TEMPTATION & PASSION - aims to allow users to customise their handles, creating a sophisticated but timeless and functional visual signature on SOLEAL Next windows. Our handles offer a wide choice of colours, noble materials and clean lines.

/ SELECTION

True to TECHNAL's practical approach to design, this range of handles draws attention with its understated and elegant lines. A strong visual identity with simple and graphic geometric shapes, round or square, with an ergonomic design to the touch that modernises the current offer. Proven quality, with anodised or coated finishes for each handle, not to mention the new black anodised finish that adds an extra level of sophistication.



ROUND AND SQUARED HANDLES WITH STANDARD ROSETTES



ROUND AND SQUARED HANDLES WITH REDUCED ROSETTES



HANDLES WITH LOCKS



/ TEMPTATION

This range builds on TECHNAL's expertise, taking its extruded aluminium design to new levels of high quality and clean lines. All the elements come in a mix of finishes, textures and colours and can be combined to get unique and personalised colour options. All this designed to achieve a unique visual sensation and a magnificent experience to the touch.



/ PASSION

Taking design to new heights, the passion range is a new expression in luxury fittings, with exclusive mixes of finishes and materials aimed at pleasing even the most demanding users. Making use of simple geometric shapes, this collection works as the perfect complement to a wide range of architectural aesthetics.



SOLEAL NEXT

/ MORE COLOURS



TECHNAL RELEASES THE COLOURS FOR A LIVING ARCHITECTURE

Ever faithful to its creative and architectural logic, TECHNAL has enriched its colour range with different collections. To highlight the EXCLUSIVE COLLECTION.

At first glance, it's the material that speaks. This voice comes from the colours themselves, which are sometimes concrete and solid and sometimes light and volatile.

This choice of material is also enhanced by looks or finishes: the classic / satin / gloss duo is joined by textured, matt, metallised, spangled or even iridescent finishes.

This visual and tactile experience is primarily an echo of noble and ancestral materials - the rustic character of the earth, the raw harshness of adobe, the grain of stone - all expressed through colour.

It's also the imprint of innovation which mixes the ephemeral play of light and the changing nature of pigment in colour and recreates a new materiality that has never been seen before.

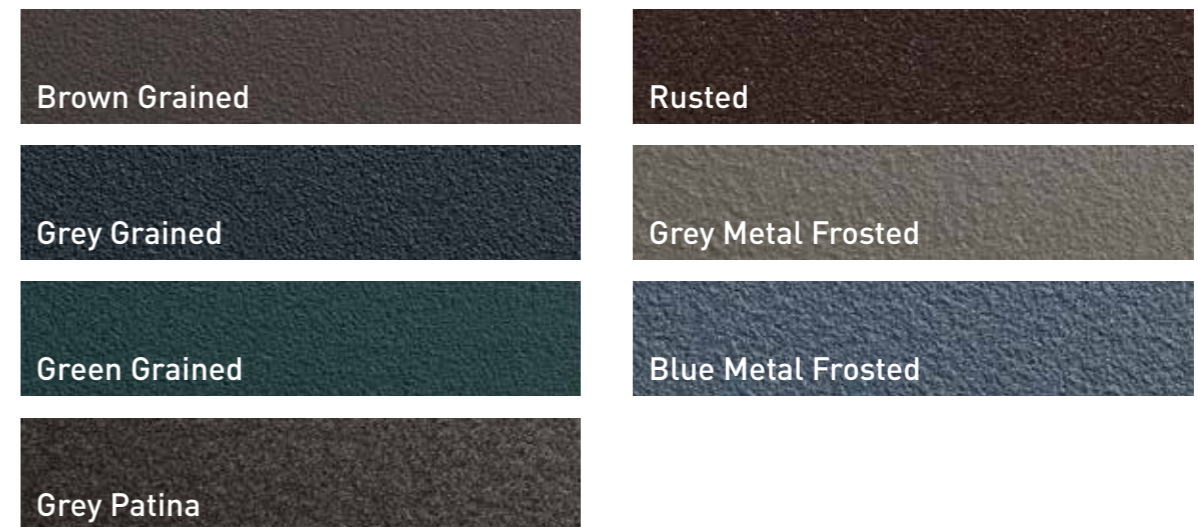
FINISHES AND COLOURS

A wide range of finishes and colours is available to meet individual project requirements, enhancing existing buildings and offering architects and designers greater design freedom:

- Natural anodised in accordance with "QUALANOD" instructions. EN 23731:2001.
- Polyester coating finishes in a wide range of colours in accordance with "QUALICOAT" and "QUALIMARINE" instructions.
- SOLEAL NEXT is also available in lacquered finishes with the colour range EXCLUSIVE® for a stylish and contemporary look.

EXCLUSIVE / CLASSIC COLLECTION

The Classic Collection is made up a unique selection of aluminium finishes offering different material effects: grained, frosted and patina. Every face of metal is explored to combine colour, texture and light.



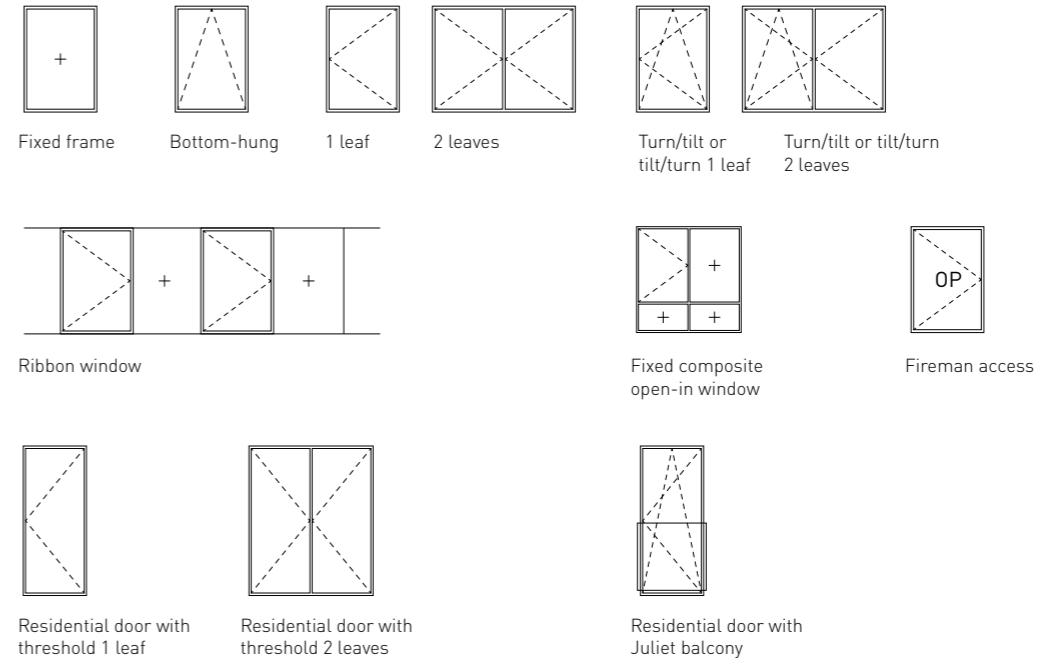
EXCLUSIVE / DOWNTOWN COLLECTION

Developed in collaboration with architects, this collection is made up of eight 100% exclusive colours which enhance the aluminium. The combination of materials and light effects highlight the simplicity and elegance of the subtle colours which are reminiscent of natural materials.

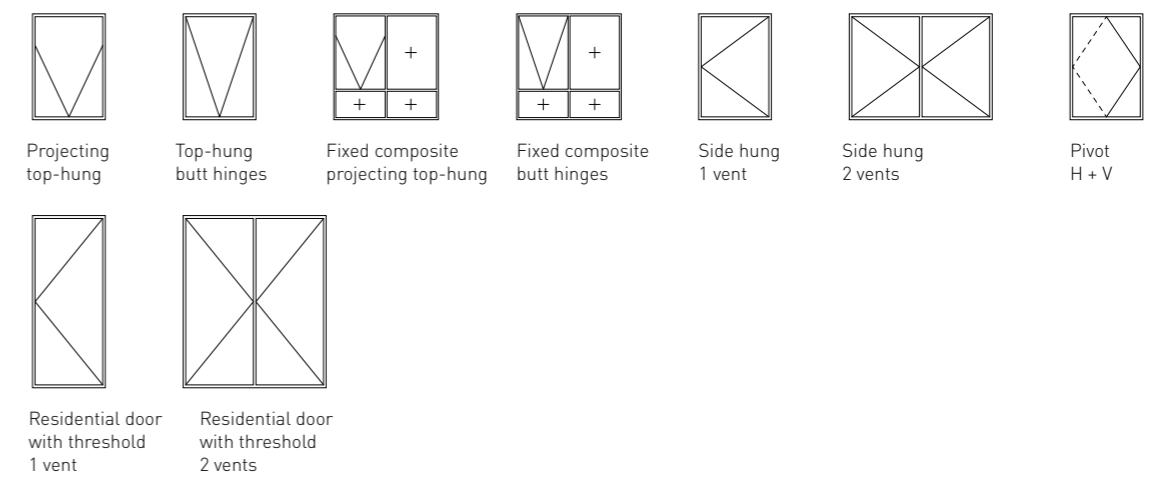


APPLICATIONS 75 MM MODULE

OPEN-IN



OPEN-OUT



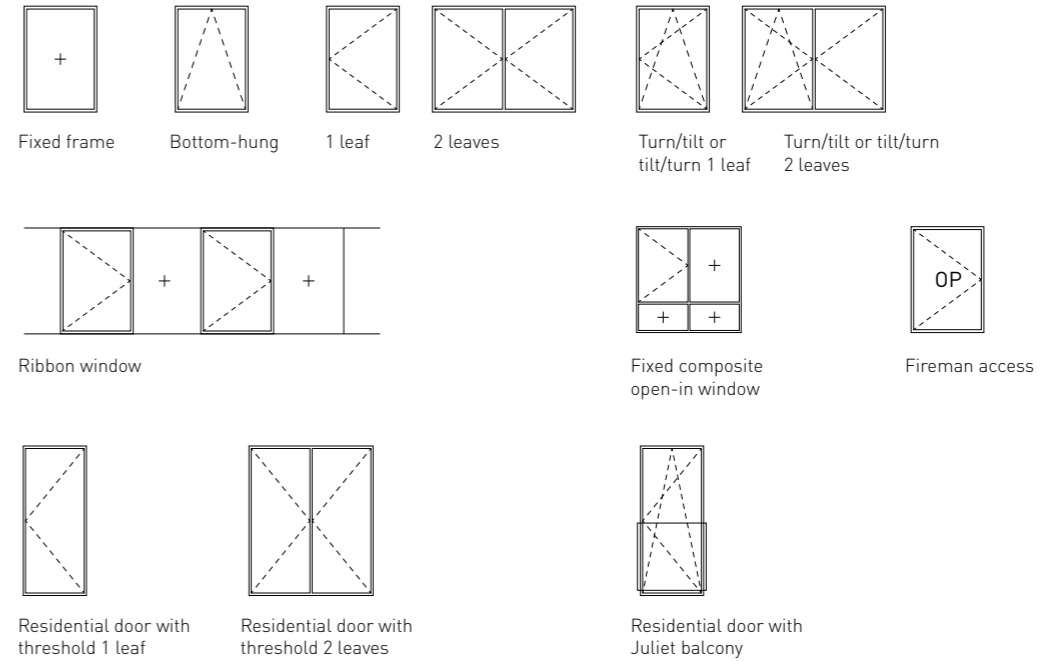
SOLEAL NEXT 75
Minimal Open-In

SOLEAL NEXT 75
Visible Open-Out

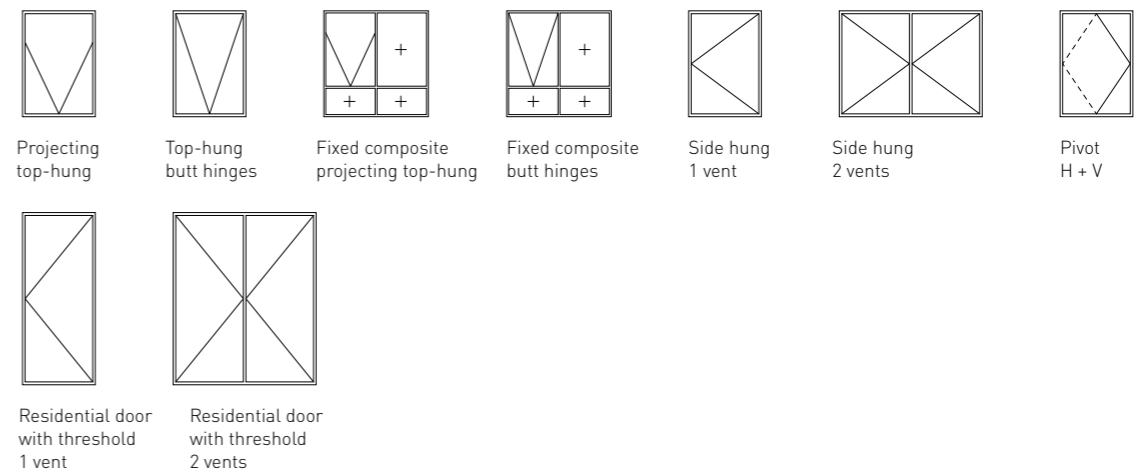


APPLICATIONS 65 MM MODULE

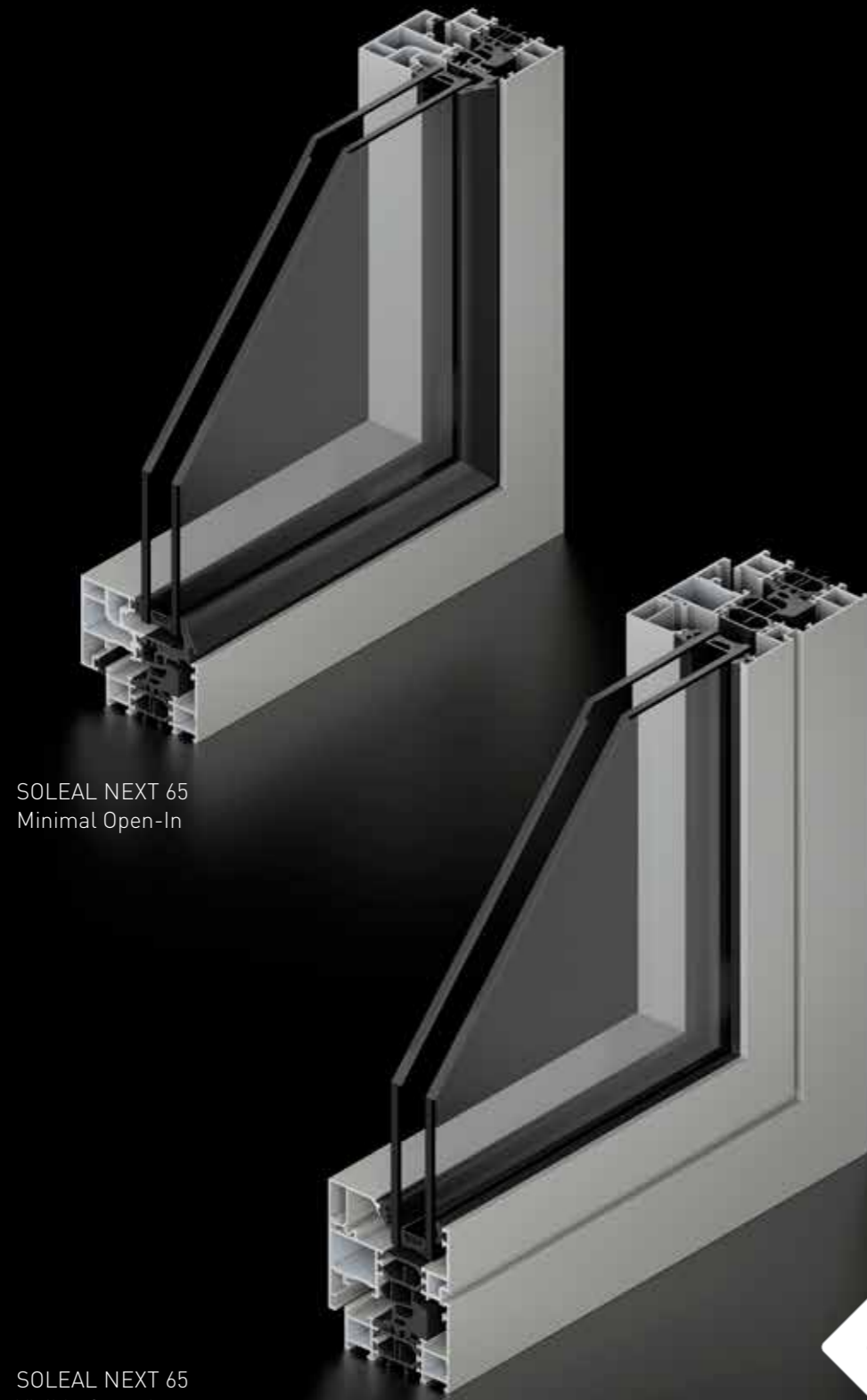
OPEN-IN



OPEN-OUT*



* available in 2023.



SOLEAL NEXT 65
Minimal Open-In

SOLEAL NEXT 65
Visible Open-In



SOLEAL NEXT

/ RESIDENTIAL DOOR

2 BOTTOM SECTION OPTIONS

- Features no threshold with lowering gasket
- One low threshold profile to allow easy entrance for disabled

ENDURANCE

- Door hinges tested: 200.000 cycles

APPLICATIONS

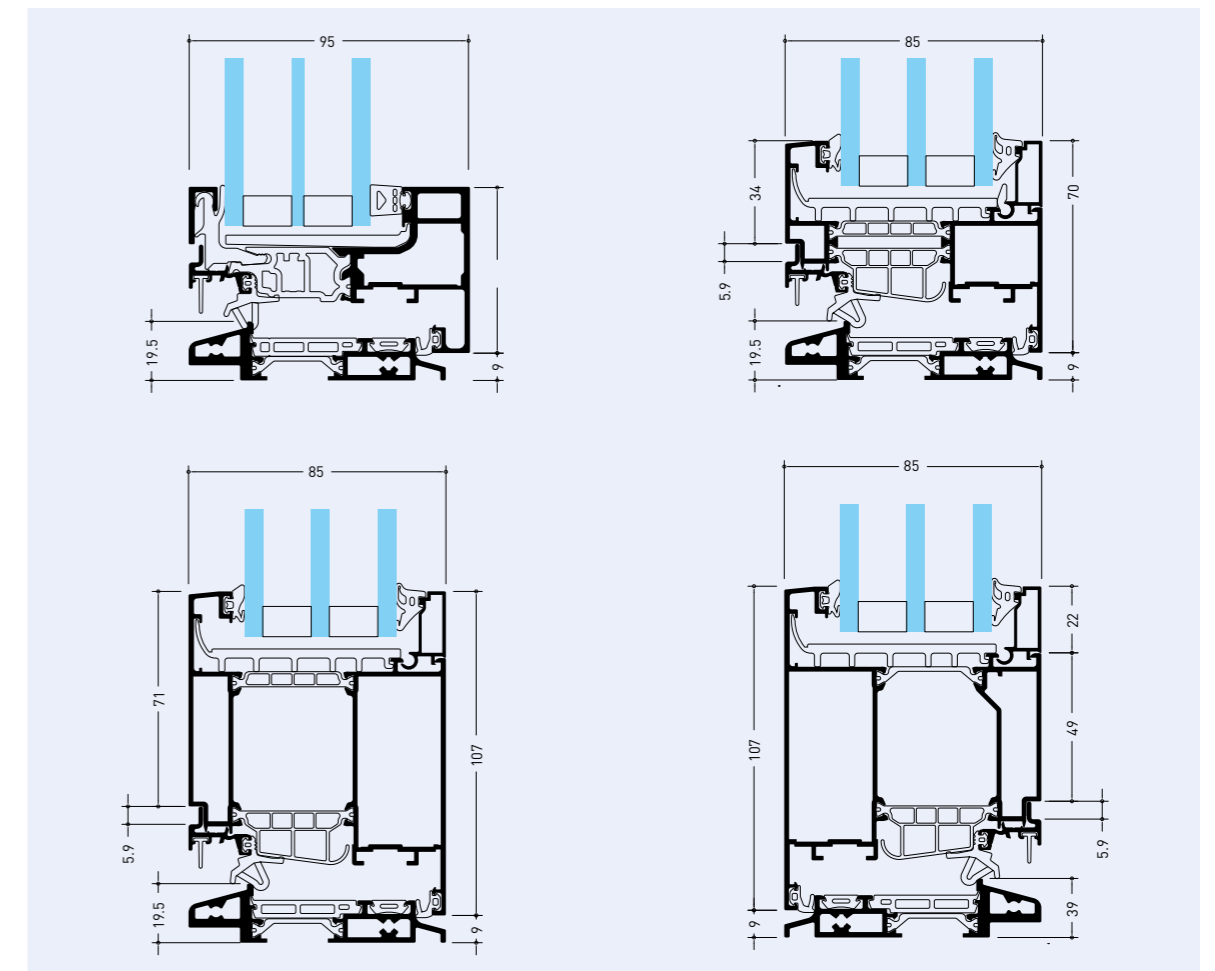
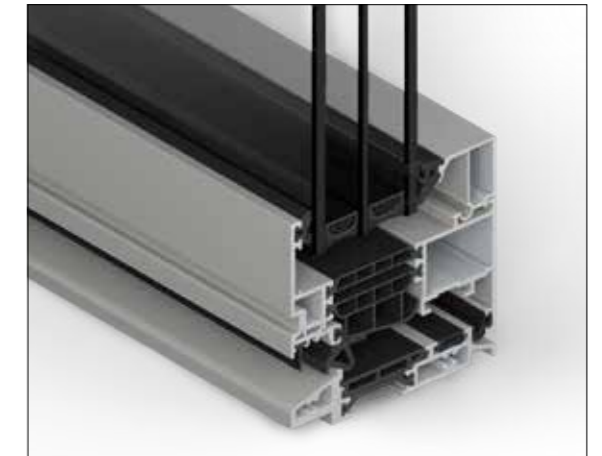
- Single and double residential door open-in
- Single and double residential door open-out



/ MORE ACCESSIBILITY

FIXED FRAME THRESHOLD FOR DISABLED

- Adapted for easy access on all available applications:
 - Easy opening / closing
 - Adaptable handle height
- No functional gasket at bottom
- No front drainage like flush doors
- Sloped < 5mm
- 15 mm and 20 mm solution can be used with support profile



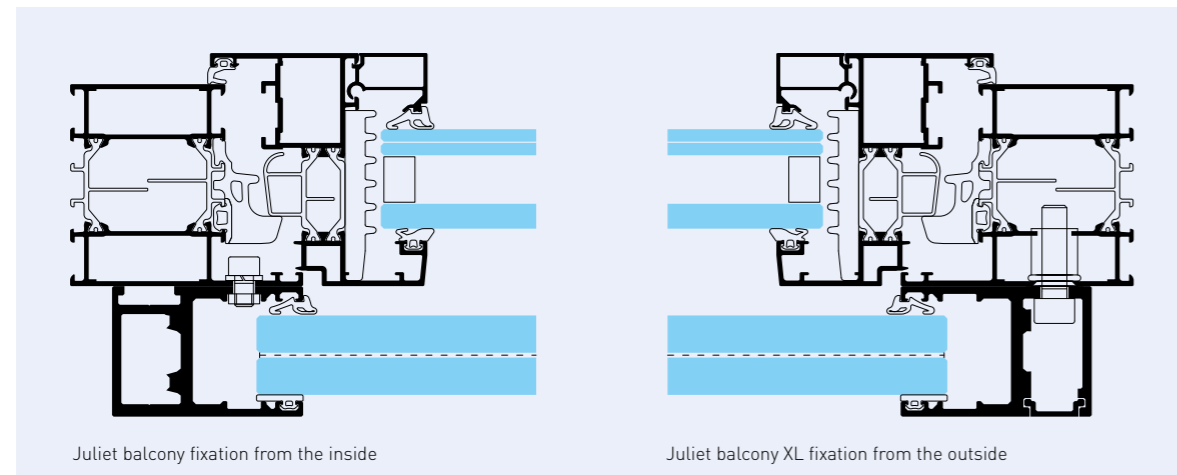
SOLEAL NEXT

/ MORE COMFORT

JULIET BALCONY

Integrated into the window system, the Juliet balcony is a glass balustrade which provides additional safety for peace of mind.

- Can be fixed on 65 and 75 mm module
- Glass can be installed from the inside or from outside
- Limited to 35 mm protrusion for roller shutters
- End plugs without screws visible from the outside
- 2 profiles dimensions to allow standard or XL Juliet balcony



MOTORISED OPENING CONTROL TO REDUCE ENERGY LOSS

- Available for tilt open-in
- Simple solution, easy to install
- Concealed chain engine
- 1 or 2 chain drive depending on configuration
- High tightness performances
- Locking sensor optional
- Silent operation system; less than 35 dB
- Suitable for building management system
- 2 year guarantee



Motorisation can be integrated in SOLEAL Next Minimal and Visible vent, tilt open-in, in both 65 and 75 modules.

SOLEAL NEXT

/ MORE SAFETY

BURGLARY RESISTANCE

SOLEAL Next provides excellent protection against burglary, up to Resistance Class 2 (RC2) in accordance with EN-1627-30 and PAS24. It can be fitted with multi-point locks as an optional feature. Locking handles are available to increase security and reduce the risk of burglary.

APPLICATIONS

RC2 available for the following window types:

- Fixed frame
- 1 leaf turn
- 1 leaf turn & tilt

PAS 24 available for the following window types:

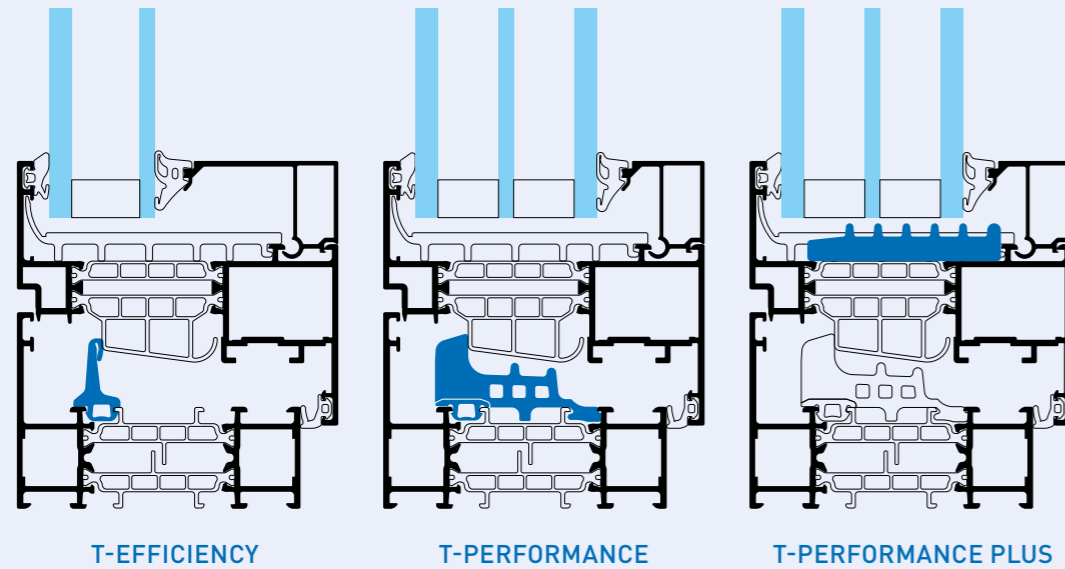
- Side hung 1 leaf and 2 leaves and top hung friction hinges open-out
- 1 leaf turn & tilt open-in



SOLEAL NEXT

/ MORE THERMAL MODULARITY

Our modular design allows to cover several thermal performance levels, from hot temperature regions to the coldest parts of the world.



WEATHER PERFORMANCES - WITH CONCEALED HARDWARE				
Application	W x H (mm)	Air tightness	Water tightness	Wind resistance
Minimal Open-In 75 mm, 1 vent tilt&turn	1500 x 1700	A4	1050	C5
Visible Open-In 65 mm, 1 vent tilt&turn	1500 x 1700	A4	1500	C5
Visible Open-In 75 mm, 1 vent tilt&turn	1500 x 1700	A4	1500	C5
Visible Open-Out 75 mm, 2 vents, turn friction stay	1530 x 1480	A4	1500	C5
Visible Open-Out 75 mm, 2 vents hinged	1820 x 840	A4	1650	C4
Visible Open-Out 75 mm, top-hung, friction stay	1844 x 1844	A4	1650	C5
Visible Open-Out 75 mm, 1 vent side-hung	884 x 1844	A4	1500	C5
Visible Open-Out 75 mm, 2 vents side-hung	1650 x 1844	A4	1350	C5

THERMAL PERFORMANCES - SOLEAL NEXT 65							
Application	Dimensions W x H	U _g	1.1	1.0	1.0	0.7	0.6
		spacer	Warm Edge Swisspacer Ultimate				
		glazing	24 mm	24 mm	28 mm	36 mm	42 mm
SOLEAL NEXT Visible Open-In 65 mm							
window, 1 vent	1230 x 1480	U _w =	1.4	1.3	1.3	1.1	0.98
residential door, 1 vent	1230 x 2180	U _w =	1.4	1.3	1.3	1.0	0.93
window, 2 vents	1530 x 1480	U _w =	1.5	1.4	1.4	1.1	1.1
residential door, 2 vents	1530 x 2180	U _w =	1.4	1.4	1.3	1.0	1.0
SOLEAL NEXT Minimal Open-In 65 mm							
window, 1 vent	1230 x 1480	U _w =	1.4	1.3	1.3	1.0	1.0
residential door, 1 vent	1230 x 2180	U _w =	1.3	1.3	1.3	1.0	0.91
window, 2 vents	1530 x 1480	U _w =	1.4	1.3	1.4	1.1	1.1
residential door, 2 vents	1530 x 2180	U _w =	1.4	1.3	1.3	1.1	1.0

THERMAL PERFORMANCES - SOLEAL NEXT 75							
Application	Dimensions W x H	U _g	1.1	1.0	1.0	0.7	0.6
		spacer	Warm Edge Swisspacer Ultimate				
		glazing	24 mm	24 mm	28 mm	36 mm	42 mm
SOLEAL NEXT Visible Open-In 75 mm							
window, 1 vent	1230 x 1480	U _w =	1.3	1.2	1.2	1.0	0.71
residential door, 1 vent	1230 x 2180	U _w =	1.3	1.2	1.2	0.92	0.79
window, 2 vents	1530 x 1480	U _w =	1.3	1.3	1.2	1.0	0.86
residential door, 2 vents	1530 x 2180	U _w =	1.3	1.2	1.2	1.0	0.83
SOLEAL NEXT Visible Open-Out 75 mm							
window, 1 vent	1230 x 1480	U _w =	1.3	1.2	1.2	1.0	0.85
residential door, 1 vent	1230 x 2180	U _w =	1.3	1.2	1.2	1.0	0.81
window, 2 vents	1530 x 1480	U _w =	1.4	1.3	1.3	1.1	0.92
SOLEAL NEXT Minimal Open-In 75 mm							
window, 1 vent	1230 x 1480	U _w =	1.3	1.2	1.2	1.0	0.78
residential door, 1 vent	1230 x 2180	U _w =	1.3	1.2	1.2	0.92	0.74
window, 2 vents	1530 x 1480	U _w =	1.3	1.3	1.3	1.0	0.85
residential door, 2 vents	1530 x 2180	U _w =	1.3	1.2	1.2	1.0	0.82

SOLEAL NEXT

/ COMMITMENT AND SUSTAINABILITY

TECHNAL demonstrates its strong commitment to the environment in all areas: by using recycled and low-carbon materials, with a product design that is adapted to a circular economy, and produced within a responsible supply chain. In addition, these statements are certified by external organisations to ensure maximum transparency.

HYDRO CIRCAL®

We are demonstrating our focus on sustainability by using Hydro CIRCAL® for our system solutions, one of the most sustainable aluminium alloys in our sector. Hydro CIRCAL® is a range of prime quality aluminium made with a minimum of 75% recycled end-of-life aluminium (post-consumer scrap). The production process is verified by an independent third party (DNV-GL), and confirmed by an EPD (Environmental Product Declaration). Hydro CIRCAL® also has **one of the smallest CO₂ footprint worldwide: 2.3 kg CO₂ per kilo of aluminium** – 4.5 times less than the world global primary average.

RECYCLED & RECYCLABLE

Following our path to the certified circular economy, all of our systems are composed with a majority of materials and components that can be infinitely recyclable, that can come from recycled raw materials, that can be recycled to have a second life or components that can also be reused.

In rough figures, we're talking about **75% recycled content and 95% recyclable content**. It's an efficient way to drastically reduce the impact of materials on the life cycle of a building. Finally, our greener approach goes a step further thanks to recycled thermal strips for 75 mm modules.

75% RECYCLED POST CONSUMER

Hydro CIRCAL® is the world's first certified recycled aluminium which means that at least 75% of the prime-quality aluminium alloy comes from post-consumer materials.

95% ENERGY SAVED

By recycling post-consumer scrap aluminium, the remelting process saves up to 95% of energy that would normally be spent and maintain the same high quality as primary aluminium.

85% REDUCTION OF CO₂ EMISSIONS

The consequence of using Hydro CIRCAL® is the drastic reduction in CO₂ emissions which sums more than 85% when compared with the global average for primary aluminium production.

SOLEAL NEXT
75% RECYCLED
95% RECYCLABLE



SOLEAL NEXT

/ CERTIFICATIONS



CRADLE TO CRADLE (C2C) CERTIFICATION

From its design to the selection of materials and how it is manufactured, the product must offer the level of performance required by the market by reducing, to the greatest extent possible, environmental impacts such as energy consumption or greenhouse gas emissions. We classify our range under the criteria of the Cradle to Cradle seal, an independent institute that certifies products and processes from a circular economy perspective. We have numerous Cradle to Cradle certified series, including the manufacturing in our plants. In this way, we are able to ensure that the carbon footprint of transporting our products is as low as possible.

Our range is under certification.



ALUMINIUM STEWARD INITIATIVE (ASI)

ASI is a multi-stakeholder, non-profit, standards-setting and certification organisation. It is the most internationally recognised standard, which addresses the environmental, social and governance (ESG) aspects of the entire aluminium value chain. The assessment is based around the sustainable production of aluminium, from bauxite or mining to the production of semi-fabricated products, taking into account the recycling of pre- and post-consumer scrap. Hydro was one of the first companies, that received this recognition, in accordance with its commitment to a more sustainable future.

100% of our extrusion plants are ASI Performance Standard Certified.



ENVIRONMENTAL PRODUCT DECLARATION

An Environmental Product Declaration (EPD) is an independently third party-verified document that communicates precise, transparent and comparable information about the life-cycle environmental impacts of a product. But it is not only limited to products, such as a window, but can also be applied to materials (an aluminium billet), assembly parts of products or even for services (like maintenance). This document is used for many different applications, e.g. public procurement or green building rating schemes (i.e. BREEAM, LEED, DGNB).

Thanks to our software TechDesign, it's possible to generate a dynamic EPD according specified dimensions, applications any type of glazing.



Architect: OECO Architectes
Photographer: Kevin Dolmaire



IMAGINE WHAT'S NEXT

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