SOLEAL NEXT

THE UNIVERSAL DOOR

Architects: Julie Fabre et Mathieu De Marien (FABRE/de MARIEN Architectes)
Photographer: Stephane Chalmeau

TECHNAL®

By Hydro

Architect: Stephen George + Partners LLP
Photographer: John Kees Photography

SOLEAL NEXT
/ THE UNIVERSAL DOOR

DOOR BEYOND LIMITS FOR THE ARCHITECTURAL CREATIVITY

MORE POSSIBILITIES

The SOLEAL Next door was created with a view to offering architects an extensive range of solutions to cover the different needs on level of safety, comfort and building management.

SOLEAL Next door is available in many applications: stand-alone or with fixed field, glazed or with overlapping panel, push pull, single or double action, façade integrated, hinged or pivoting, low or barrier free threshold.

SOLEAL Next offers effective thermal, acoustic and weather performances, complying to highest international standards.

SOLEAL Next includes safety features such as anti-finger-trap, panic escape route, burglary and bullet resistance as well as smoke and fire protection.

SOLEAL Next combines aesthetic design with a large choice of colours and accessories, as well as concealed elements and hardware, 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 CO_2 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.

Using Hydro CIRCAL®, an alloy made with a minimum of 75% recycled end-of-life aluminium, 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 on 75 series.

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 building environmental certifications.

SOLEAL NEXT 75 DOOR

/ MORE POSSIBILITIES, LESS IMPACT

Hydro CIRCAL® Recycled Aluminium

KEY FEATURES AND INNOVATIONS

MORE DESIGN

- Concealed hinges
- EXCLUSIVE® handle collection

LARGE DIMENSIONS

- Height: up to 3 metres
- Glazing thickness: up to 59 mm
- Infill weight: up to 250 kg

MORE APPLICATIONS

- Multiple opening options:
  - Open-in and open-out, 1-leaf or 2-leaves
  - Single action, with or without fixed field
  - Double action, with or without fixed field
  - Push-pull
  - Vent overlapping panel
- Facade integration
- Compatible with TENTAL facade, and SOLEAL Next window ranges

MORE SAFETY & ACCESIBILITY

- Finger protection
- Burglary resistance up to RC3 and PAS24
- Bullet resistance FB4
- Emergency exit
- Anti-bacterial nano-coating on handles
- Barrier free and low threshold
- Mechatronics insertion (technical mullion)

MORE PERFORMANCES

- Endurance test for heavy traffic – up to 2.000.000 cycles
- Acoustic insulation up to 43 dB
- Weather tightness and thermal performances complying to highest international standards

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

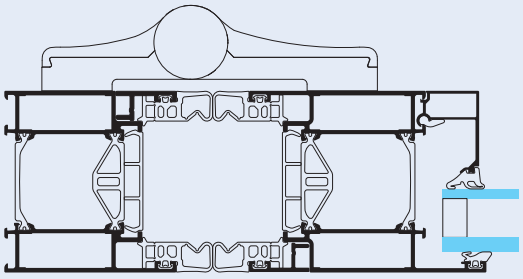
- Available in TechDesign
- BIM: available in Tech3D, Archicad and REVIT

SOLEAL NEXT 75
/ MORE SAFETY

FINGER SAFETY

Finger entrapment in doors can result in serious injuries. Preventing such injuries is therefore important, especially in educational and healthcare buildings.

SOLEAL Next door offers optional finger safety solution on several types of hinged and pivot doors.



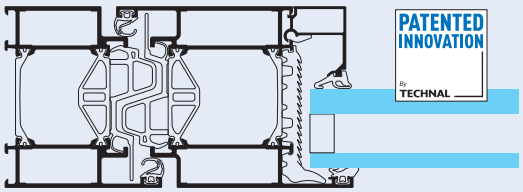
Finger safety on the hinge side

BURGLARY AND BULLET RESISTANCE

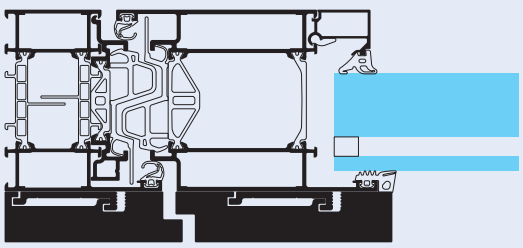
Building protection can be accomplished with SOLEAL Next door solution. It can provide both burglar and bullet resistance, in combination with other additional functions. The various levels of resistance classes can be achieved without altering the architectural lines.

burglary resistance
- Available on most applications
- Resistance levels: RC1, RC2, RC3 and PAS24

bullet resistance
- Bullet resistant door offer for open-in and open-out single hinged doors
- Resistance level: FB4 NS



Burglary resistance



Bullet resistance

EMERGENCY EXIT

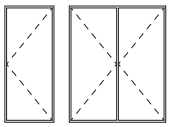
In panic situations, the safety and evacuation are the main concern. SOLEAL Next door systems offer a comprehensive range of applications, which can also be combined with other functions and design options.

- Anti panic locks, handles and push bars
- Emergency exits according to EN 179 for buildings to which the general public does not have access
- Panic door exit according to EN 1125 for public buildings like schools, hospitals, shopping malls etc...

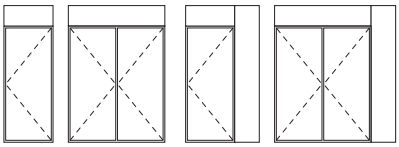
Architect: Planforum Arkitekter
Photographer: Hundven-Clements Photography

SOLEAL NEXT DOOR
/ MORE APPLICATIONS

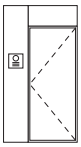
Open-in Single Action



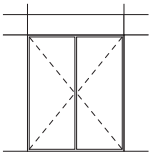
Stand-alone



Compositions with fixed light

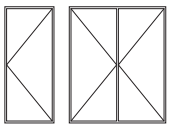


Integration of technical mullion

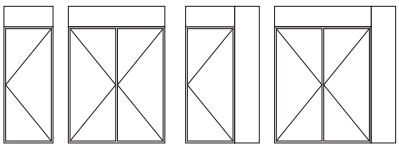


Integration in TENTAL façade

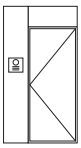
Open-out Single Action



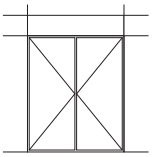
Stand-alone



Compositions with fixed light



Integration of technical mullion



Integration in TENTAL façade

Architect: OECO Architectes
Photographer: Kévin Dolmaire

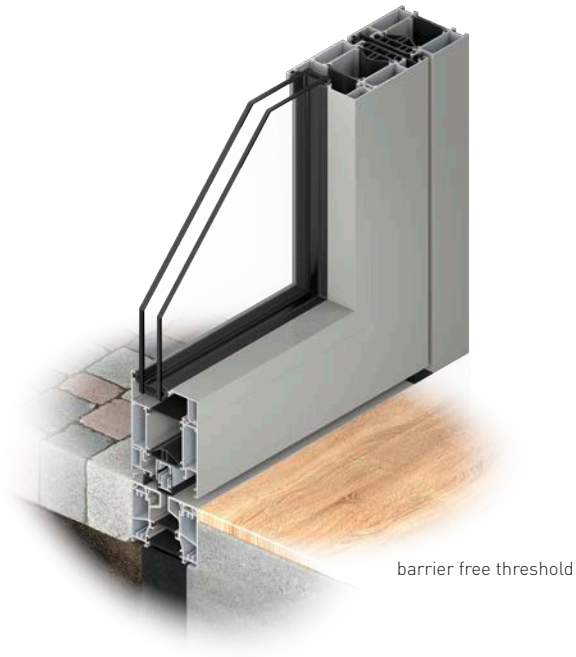
SOLEAL NEXT DOOR
/ MORE ACCESSIBILITY

DISABLED ACCESS THRESHOLDS

The disabled access threshold for the SOLEAL NEXT door complies with regulations for accessibility, while maintaining high weather performance.

Low threshold
- available for all modules
- as low as 15 mm

Barrier free threshold
- Available only on 75 mm
- 0mm projection
- Slick lines for minimalistic architectural design
- No obstacle to the door passage
- Superior technical performance
- Thermal insulation in line with new standards



barrier free threshold

ELECTRO-MAGNETIC LOCK

- Integrated in the continuous hand-grip
- Flexibility in access control

TECHNICAL MULLION

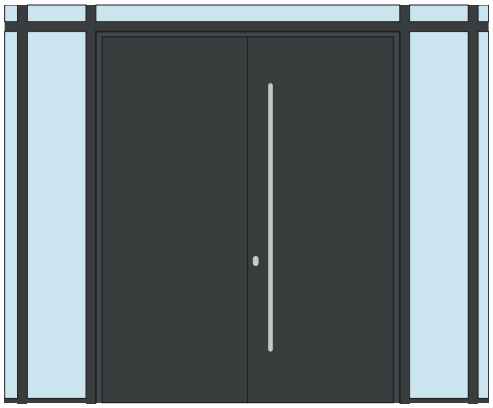
- Integration of all kind of access control systems (camera's etc.)
- Easy access for maintenance from the inside
- Can be combined with a wide diversity of window frames & transoms

Photographer: Adrian Toon

SOLEAL NEXT DOOR
/ MORE DESIGN

CONCEALED HINGES

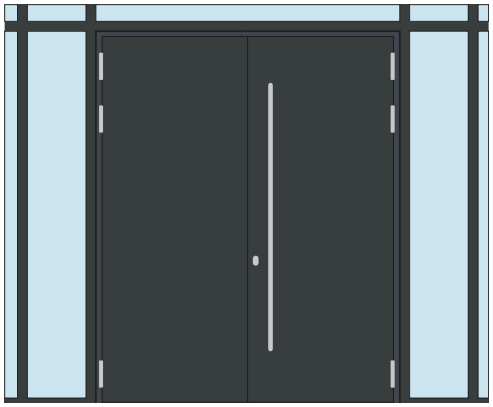
- Combining pure elegancy with high durability
- An invisible eye-catcher
- No coated or anodized part for reduced supply lead time



VISIBLE HINGES

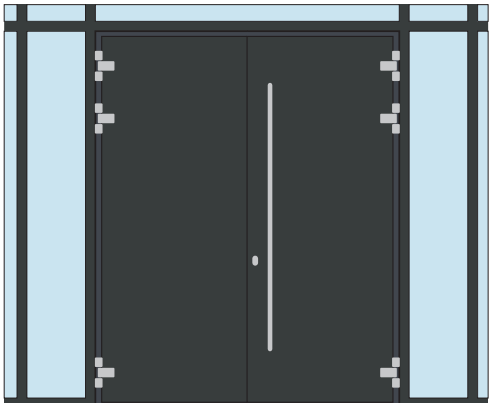
Butt hinges

- Best compromise between design and functionality
- Anodised or powder-coated, to match or contrast with the doors



Build on hinges

- Supports large vent dimensions and weights
- Anodised or powder-coated, to match or contrast with the doors



EXCLUSIVE® HANDLES COLLECTION

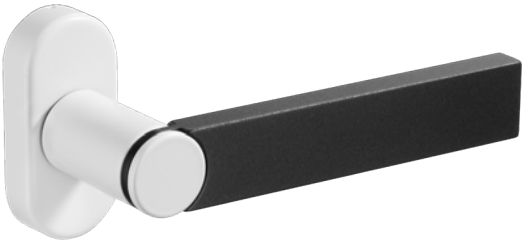
The discreet but effective design approach for our new EXCLUSIVE® range - SELECTION, TEMPTATION & PASSION - aims to allow users to customise their handles, creating a sophisticated but timeless and functional visual signature on SOLEAL Next doors.
Our handles offer a wide choice of colour, noble materials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

Selection

True to our 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 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.

Temptation

This range builds on our 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 aesthtics.

SOLEAL NEXT DOOR
/ 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 CO_2 footprint worldwide: 2.3 kg CO_2 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 CO_2 EMISSIONS**

The consequence of using Hydro CIRCAL® is the drastic reduction in CO_2 emissions which sums more than 85% when compared with the global average for primary aluminium production.

SOLEAL NEXT
75% RECYCLED
95% RECYCLABLE

SOLEAL NEXT DOOR
/ 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, DNGB).
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

PERFORMANCES

WEATHER PERFORMANCES				
Configuration	W x H (mm)	Air permeability	Water tightness	Wind resistance
1-leaf door open out, low threshold	1390 x 2400	Class 4	Class 6A	Class C2
1-leaf door open in, barrier free threshold	1500 x 2640	Class 2	Class 5A	Class C2/B2

THERMAL PERFORMANCES - U_D				
Configuration	W x H (mm)	with U_g = 1.0 (double glazing Ψ = 0.036)	with U_g = 0.7 (triple glazing Ψ = 0.031)	with U_g = 0.5 (triple glazing Ψ = 0.031)
1-leaf open in, low threshold, glazed	1230 x 2180	1.3 W/m²K	1.1 W/m²K	0.96 W/m²K
1-leaf open in, low threshold, glazed	1500 x 2640	1.3 W/m²K	1.0 W/m²K	0.89 W/m²K

Architect: Diego Soroa
Photographer: Wenzel

TECHNAL®

IMAGINE WHAT'S NEXT

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