

different, **of course...**

 **DÖPFNER**
WINDOWS DOORS AND MORE

SKYWALL

Walls of light.



The integral modular system for
wood-aluminum-glass façades.

An object report from New Zealand.



PROJECT SKYWALL

QUEENSTOWN 45° 2' South , 168° 40' East

New Zealand, Southern Alps

SKYWALL.

Walls of light.

The call came from the other side of the world. From New Zealand, to be precise.

ECOWINDOWS - our sales partner in New Zealand just had the latest architectural plans for an exclusive construction project on the table.

"Lots of glass... fine wood, avant-garde modern, with a rustic touch, durable, sustainable, suitable for passive houses and maximum energy efficiency...". The architect had very clear ideas...

The first thought:
Wow, that's an attractive object! And the first answer:
"Sure, we can solve that!"

As it turned out, the construction location was on the South Island in Queenstown, in the middle of the Nature, with panoramic views of the imposing mountain massifs of New Zealand's Southern Alps.

The required speed of execution benefited from the fact that we had already come up with the initial concept for a new glass façade solution in a high-quality mullion and transom construction a year earlier.

So the basic concept of SKYWALL was already in our drawer.

This project gave us the opportunity to implement this technically.

The conceptual specifications included the following planning objectives

- Large, floor-to-ceiling fixed glazing
- Optimized lift and slide elements
- All-glass corner elements
- Zero-barrier thresholds in the passageways with integrated threshold system and interfaces for surface drainage
- DK windows and French doors as slide-in units in fixed glazing
- Very slim face widths
- Uniform look inside and out
- Interdisciplinary system solution

The modular components - such as fixed glazing, corner glazing, sliding elements and window and French door insert elements - should be able to be combined without couplings, from a single cast, to form a glass façade with a continuous homogeneous appearance.

Döpfner SKYWALL glass façades are sold exclusively through a network of Döpfner specialist trade partners who, through training and their own experience, have the specialist expertise for the perfect detailed planning and installation of Döpfner SKYWALL glass façades in mullion-transom construction.

Now it was time to solve some technical problems: Updating our lift and slide systems, developing a new threshold solution and various new aluminum profiles as well as building connections with new interfaces for surface drainage.

There was a lot to do before the new SKYWALL façade system was perfectly "constructed" both technically and visually.

The next step was to record and plan all the components required for the Queenstown project in terms of systems engineering.

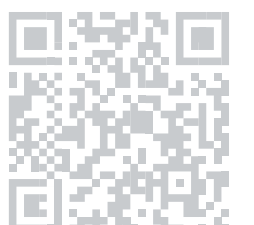
Our Australian sales partner LAROS, who is a proven façade specialist, took over the complex detailed planning in New Zealand and was available to our partner ECOWINDOWS with the architectural office GREEN ARCHITECTS with help and advice.

After production, our first SKYWALL project went to Christchurch in New Zealand in an overseas container.

The result is impressive.

Just see for yourself - on the following pages...

Audio-visual impressions?
Under this link you will find a short video clip about the project.





DÖPFNER SKYWALL FTS 4.0

ECKELEMENTS

SKYWALL can not only go straight ahead, but also around every corner!

After all, maximum plannability was part of the design specifications for SKYWALL development right from the start.

Corner elements are essential for flexible façade planning.

Modular system with many variants:

- Minimalist all-glass corner elements or variants with a narrow or solid mullion look - depending on the individual visual wishes or structural requirements of the respective project.

- Common to all corner variants is the seamless integration with all SKYWALL fixed and sliding elements.



DÖPFNER SKYWALL FTS 4.0

FIXED GLAZING

Sky instead of wall! Modern architecture thrives on large glass surfaces. Ideally room-high, from floor to ceiling.

The highly stable mullion and transom construction used in SKYWALL enables very narrow frame face widths even for large areas.

- Fixed glazing elements can be joined together seamlessly, without visible couplings.
- Wooden elements, insulating glass units and aluminum shells are installed using a clamping profile system that has been tried and tested for decades and meets the highest demands in terms of stability and appearance (the system consists of a base profile, sealing profile, press-fit guide and aluminum cover shell).
- It goes without saying that the construction is optimally thermally separated and therefore also at the highest level in terms of energy efficiency!
- All glued laminated timber components (with static certificate) are made of fine oak, larch or spruce from sustainable, domestic forestry and are available in many different surface finishes. The component dimensioning is adapted to the structural requirements of the element sizes.
- Indestructible outer skin made of high-quality aluminum - with highly weather-resistant PREMIUM powder coating, which combines market-leading durability with a huge selection of different color and surface variants.



DÖPFNER SKYWALL FTS 4.0

SLIDING ELEMENTS

The SKYWALL lift and slide elements are based on the latest technology and are clamped flush on the inside in order to perfectly integrate the innovative zero-barrier thresholds (DÖPFNER COMFORT SLIDE ZERO system) with an absolutely level passage.

- Seamless combination of sliding units with fixed glazing and corner units without couplings
- Optimum drainage thanks to high-quality grating integrated into the panel in the passageway (with interface to a surrounding external grating for on-site surface drainage)
- New tandem trolleys for extremely smooth operation. Low effort required even with high sash weights (up to 400 kg)
- Concealed stoppers (optionally with Soft Close+ Soft Open damping system)
- All components are optimally sealed all round with high-quality seals.
- Aluminum casement shells of the sliding sashes are designed with welded corner joints.
- Safety at a high level: Highly stable bolt locking system (or optionally with swivel hook) and rear locking devices for excellent burglary protection (up to RC 2)
- Different single and multi-sash design schemes for the individual, functional arrangement of the sliding sashes (scheme A | C | G | K)



DÖPFNER SKYWALL FTS 4.0

ZERO-BARRIER THRESHOLDS

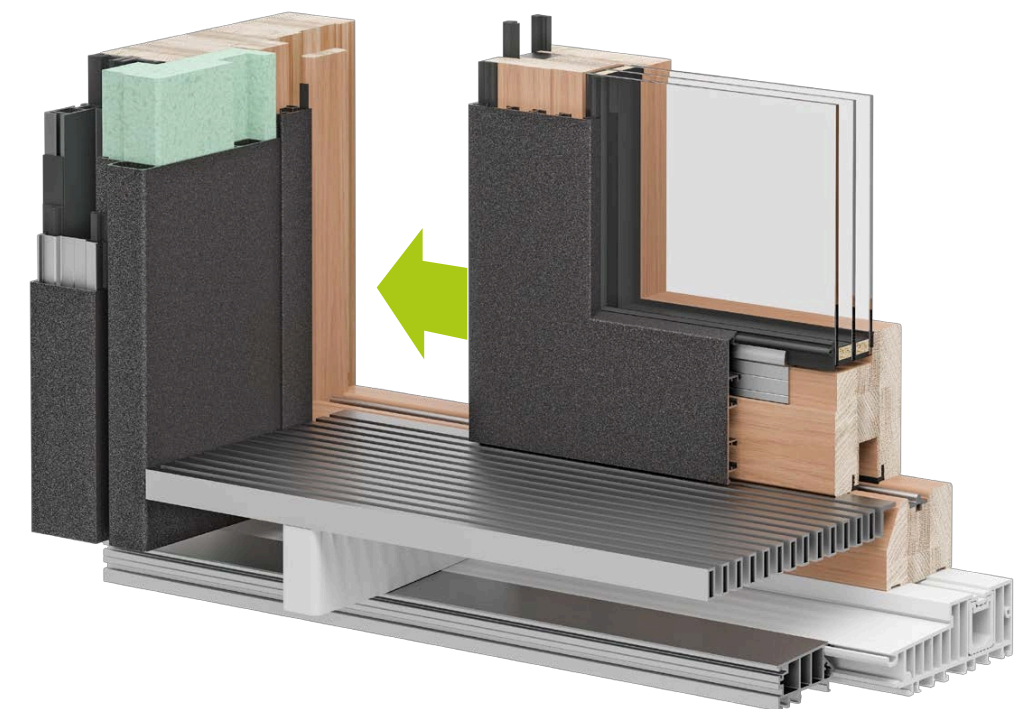
Accessibility has become an important buzzword - and not just in architecture. Consequently, SKYWALL naturally has no barriers. None at all!

The SKYWALL sliding elements are based on the new COMFORT SLIDE ZERO zero-barrier threshold system in the passageway.

Zero tripping hazard! Zero rolling resistance! Zero barrier!

- Interior and exterior floor coverings, threshold element, running rail, drainage grid - everything exactly in line!
- Everything from a single source! The newly designed all-round sealing system and the water drainage through the RIGOL grille integrated in the passageway were - from the very beginning - integrated as integral components in the SKYWALL "constructed into" it. The access grille rests on sturdy console brackets.
- Interface for an external grating for on-site surface drainage is available.

Please note!
The continuous grating does not replace surface drainage. The entire building connection must be planned on site.





DÖPFNER SKYWALL FTS 4.0

SLIDE-IN ELEMENT WINDOW DOOR

Do you need a door in the glass wall?

But isn't a sliding element a bit too big for this situation?

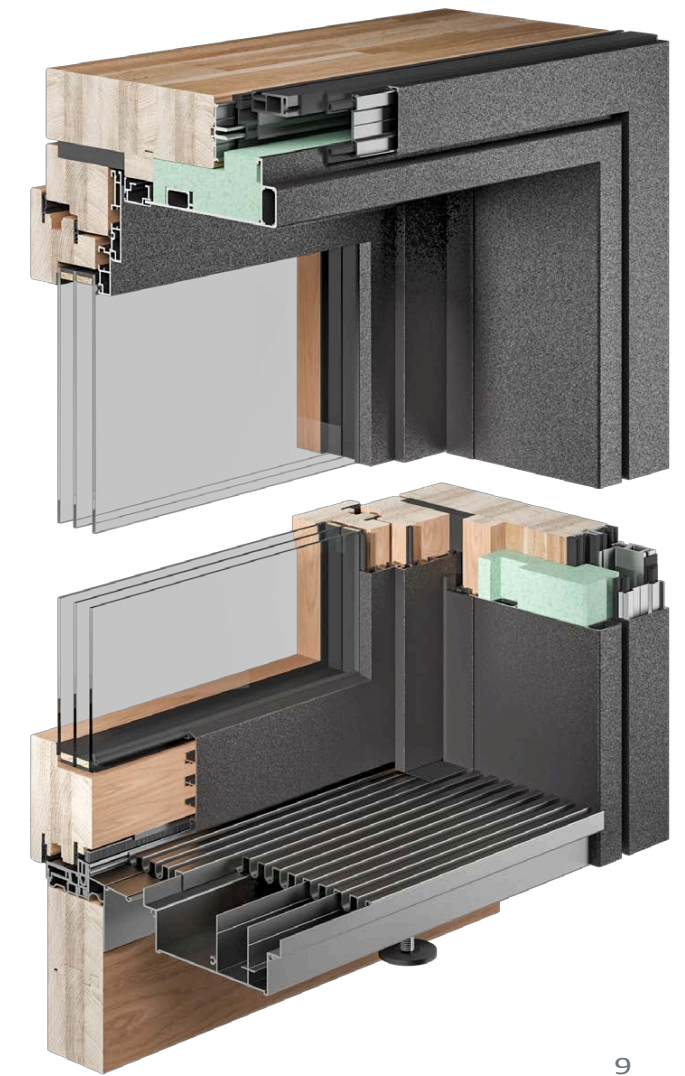
In addition to DK window elements, SKYWALL also integrates French doors just as easily.

- The door elements are also based on the proven Döpfner PREMIUM wood-aluminum window system - with perfectly integrated COMFORT TS threshold system with RIGOL continuous grille.

- The cylinder-operated lock system makes operation just as convenient as with front doors.

- Sturdy locking elements and rear locking devices offer a very high level of security.

- As an option, the safety level can be further optimized by swivel hooks that engage in the COMFORT TS threshold.



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SLIDE-IN ELEMENT TURN-TILT WINDOW

Sometimes fixed glazing is too inflexible, because - as the name suggests - it cannot be opened. You can't just

open the window and air the room briefly.

Yes, you can!
Simply install a window directly in the fixed glazing!

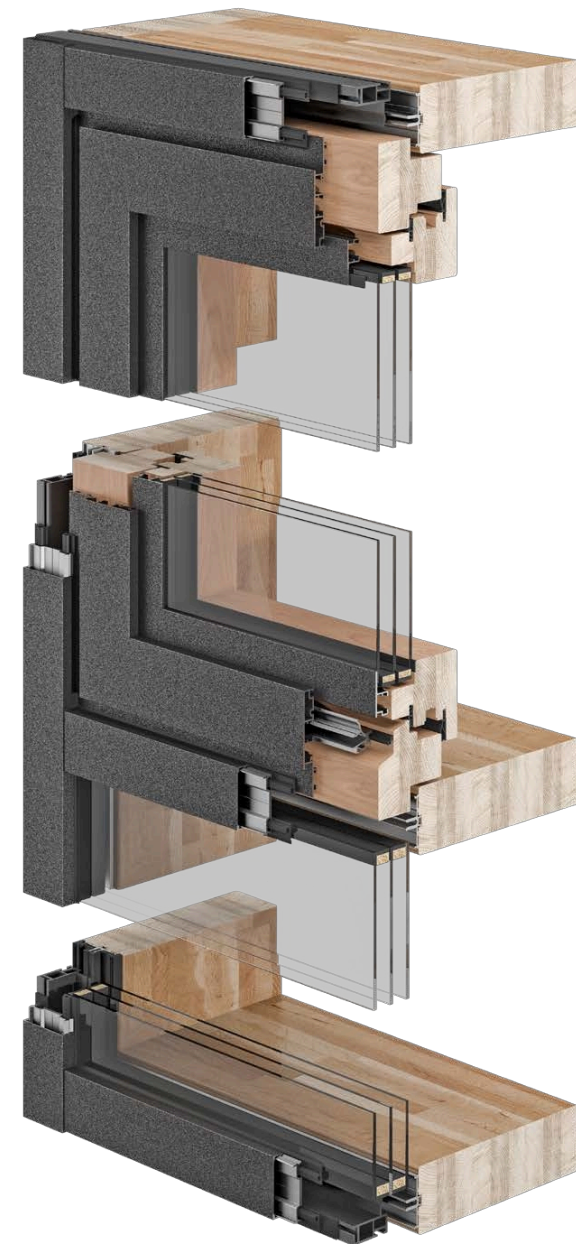
The SKYWALL modular system also has a solution for almost all requirements: large fixed glazing - elegantly broken up by a DK window element, combined with a fixed panel below.

- Our high-quality PREMIUM wood-aluminum window system is integrated into the SKYWALL fixed glazing element as a slide-in element.

- The Döpfner PREMIUM window system has an internal rain protection rail and internally closed aluminum shells for a homogeneous appearance.

- The corner joints of the aluminum shells are welded to a high quality!

- For increased security requirements, the PREMIUM window elements are optionally available in RC 2 design.





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DRAINAGE PERFECTLY INTEGRATED

Zero-barrier threshold solutions are - on the one hand - the absolute optimum in terms of aesthetics and function.

On the other hand, there are also some technical challenges that need to be solved.

Water must be optimally drained away - a really well thought-out drainage solution is therefore essential!

SKYWALL by DÖPFNER was designed from the outset with zero-barrier sliding elements and floor-to-ceiling fixed glazing.

It goes without saying that the water drainage system is also integrated into the overall system.

The elegant grating integrated into the element in the passageway drains water downwards immediately and very effectively.

Drainage grids around the outside for surface drainage are individually - via an existing interface - integrated on site. The dimensioning of the on-site surface drainage can therefore be individually adapted to the respective situation.

Please note!

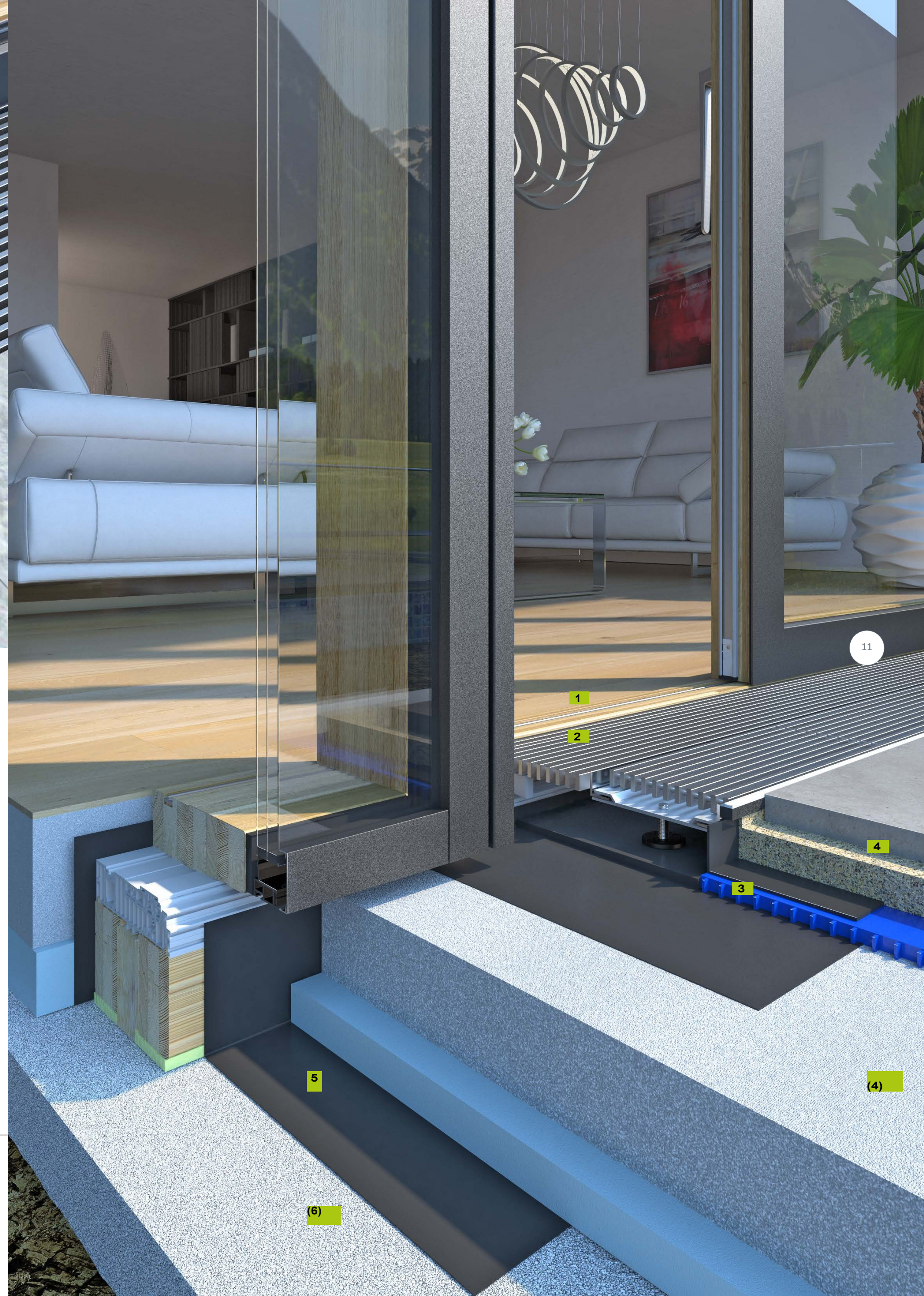
The continuous grating does not replace surface drainage.

The entire building connection must be planned on site.

Zero-barrier threshold solutions are special constructions for which there are no clear structural engineering standards - they must therefore be contractually regulated between the client, planner and contractor!

Model sketch

- 1 Threshold element (zero barrier| Threshold height 0 mm)
- 2 Drainage grate system (inner grate | integrated in the passageway) + external grating on site)
- 3 Drainage mat and upper sealing sheet (welded watertight)> Water-bearing layer
- 4 Terrace layer structure to be planned individually (simplified example illustration)
- 5 Bottom sealing sheet (welded watertight)
- 6 Concrete floor slab



11

1

2

4

3

(4)

5

(6)



SKY INSTEAD OF WALL!

Light instead of a wall!

Modern architecture and generous glass surfaces - these days they are almost synonymous.

SKYWALL by DÖPFNER is a modular system for high-class, large-scale mullion and transom façades made of wood, aluminum and lots of glass.

The planning possibilities are almost unlimited.

It all starts with a creative idea.
SKYWALL is the tool for implementing this idea.

IMPRESSIONS

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