

# THERMAL ALL-GLASS SYSTEMS



clearly invisible

 **Sframe**



# The solution for visually attractive glazing systems

The optimal profile for every design, for a breath-taking view

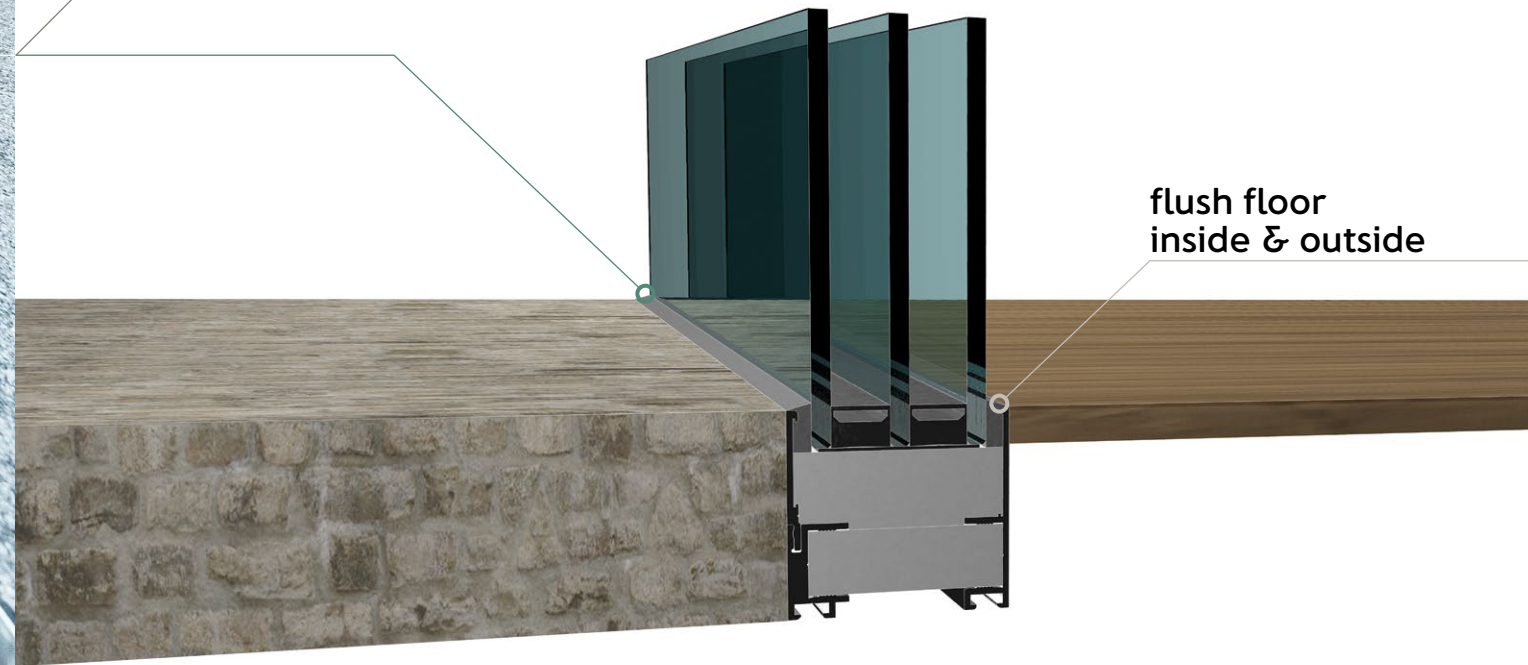
Modern architecture demands completely new ways of thinking. Interior areas visually merge with the surroundings, clear lines dominate the design language. Inside becomes outside, separated by a clearly invisible all-glass facade.

GS-frame enables the implementation of every design idea. GS-frame is **flush with the floor, ceiling, and wall, inside and outside**. The innovative profile system can also be used for the construction of any desired intersections.

The COMPLETE SYSTEM clearly invisible

in any size and glass thickness

- Unobstructed panoramic view
- Unlimited profile combinations for various connections
- Can be combined with wood, wood/aluminium, aluminium, plastic, plastic/aluminium, steel etc.



# Thermal insulation at the highest level

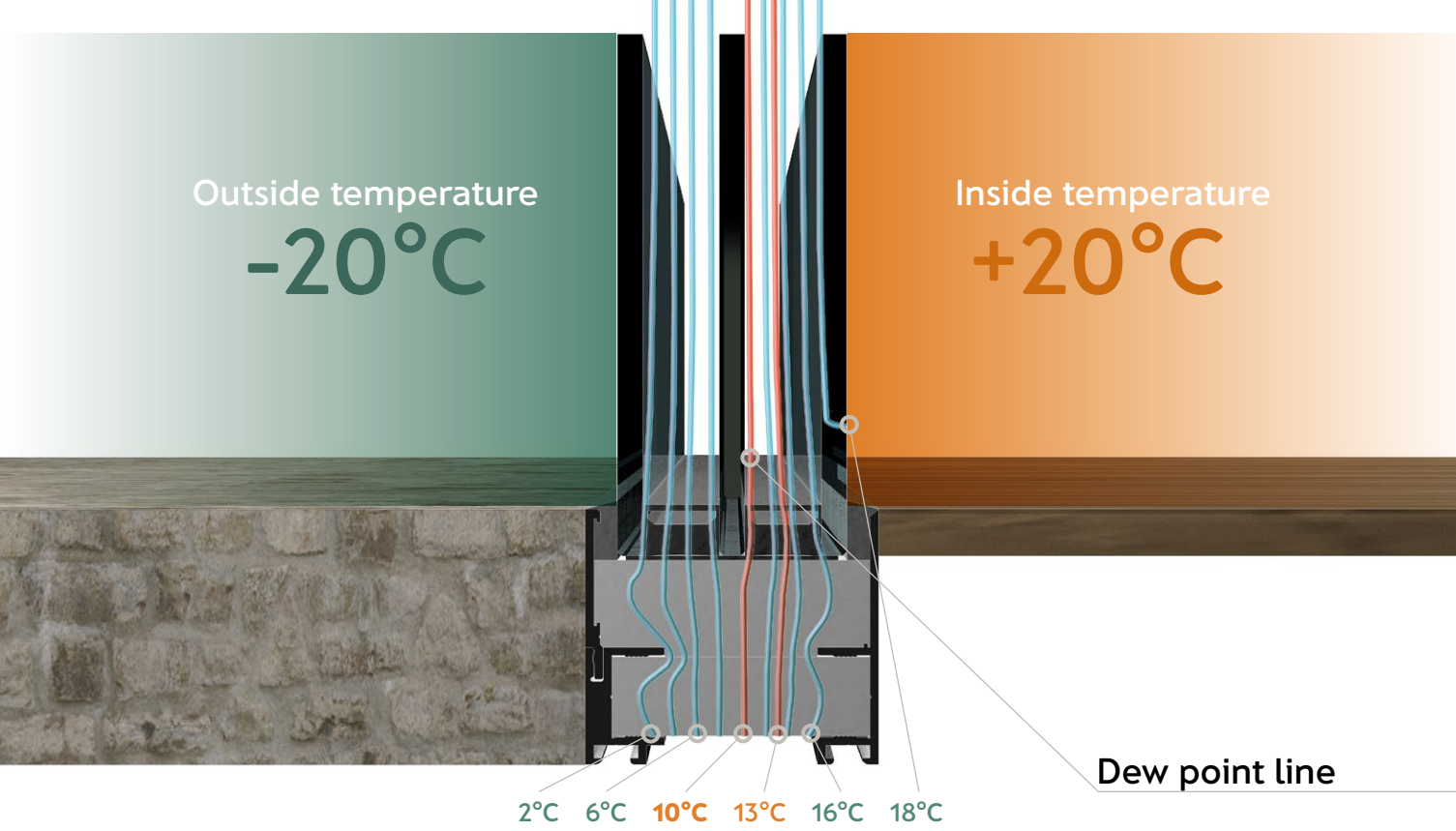
Perfectly closed, completely isolated

All cavities in the GS-frame profile system are thermally completely filled. This prevents any condensation formation, which is why our system does not require a convection heater.

The COMPLETE SYSTEM thermally ideal

$U_w = 0,78 \text{ W/m}^2\text{K}$  at  $U_g = 0,7 \text{ W/m}^2\text{K}$   
 $U_w = 0,70 \text{ W/m}^2\text{K}$  at  $U_g = 0,6 \text{ W/m}^2\text{K}$   
 $U_w = 0,61 \text{ W/m}^2\text{K}$  at  $U_g = 0,5 \text{ W/m}^2\text{K}$

- No transitional weak spots
- Wet sealing with special facade sealant
- No vapour pressure equalizing holes necessary



Dew point line

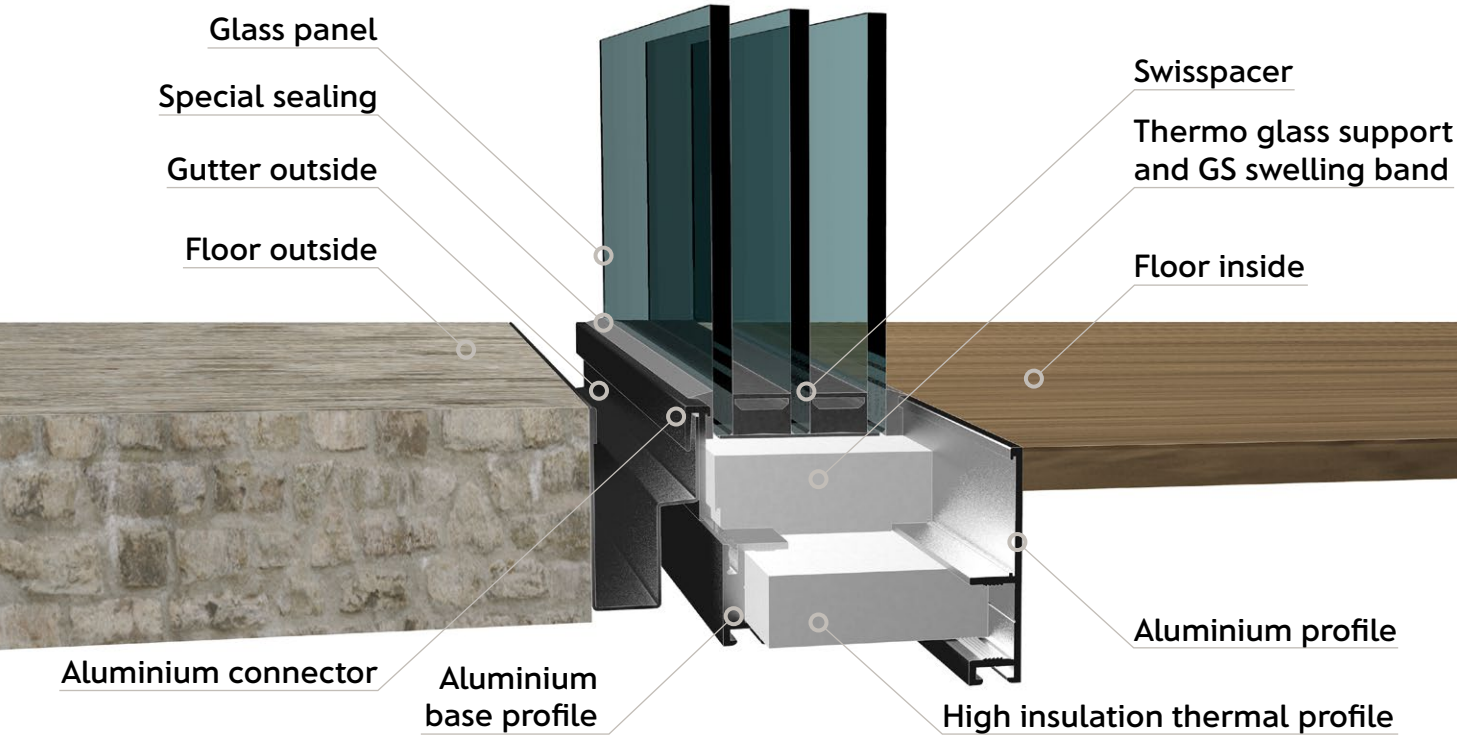
# Unmatched seal tightness

No other system is more weatherproof

GS-frame has reached unrivalled results in tightness tests in testing institutes. The system was able to withstand a raindrop impact of 1050Pa. This force causes a considerable deflexion of the glass panel - but GS-frame remained perfectly tight.

- Profile sealing through special sealing
- Direct drainage of surface water

The COMPLETE SYSTEM perfectly tight  
Raindrop impact values: 1050Pa





Polygonal, slanted and straight all-glass elements combined with modern facade elements







# Look and function

## Sliding door *Panoramic*

### Lift-up sliding doors for complete perfection

GS-frame offers a new view of lift-up sliding doors. Thermally ideal and completely waterproof, this system can be implemented with unparalleled panel sizes.



in cooperation with:

**BKMETALLBAU**

The  
**COMPLETE SYSTEM**  
for opening

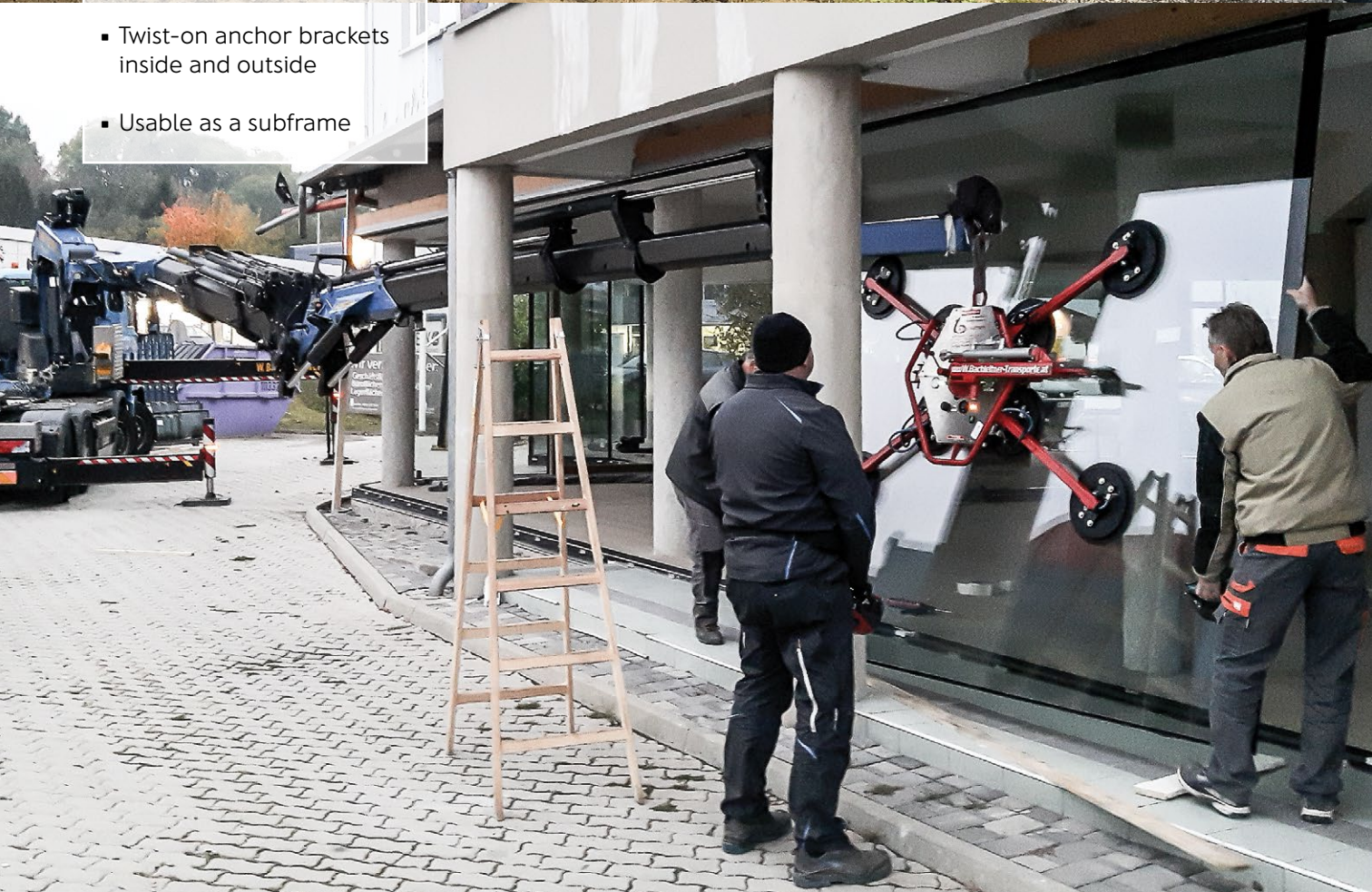
clear view  
without vertical profile

all-glass corners,  
sliding door combinations  
and all-round flush  
all glass connectors





- Easy to screw through
- Assemble using plug-in connectors, no welding necessary

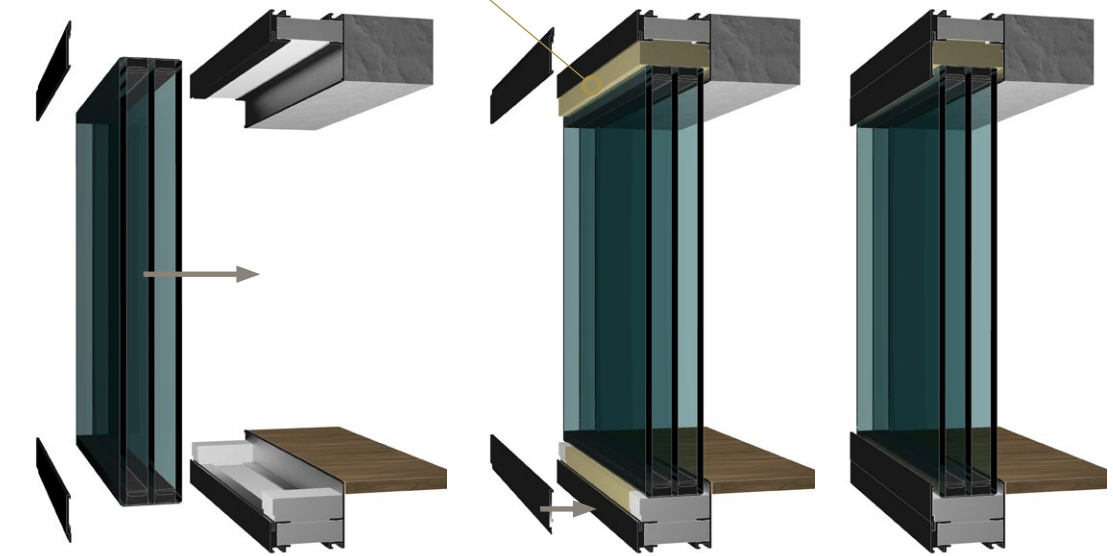


- Twist-on anchor brackets inside and outside
- Usable as a subframe

# Assembly and maintenance

Simple, fast from inside and outside - any time!

GS-frame is assembled on site without welding using an ingenious plug-in system. Inserting the panels is the final step. The unique pre-compressed **GS swelling tape** prevents condensation formation and fills all cavities reliably.

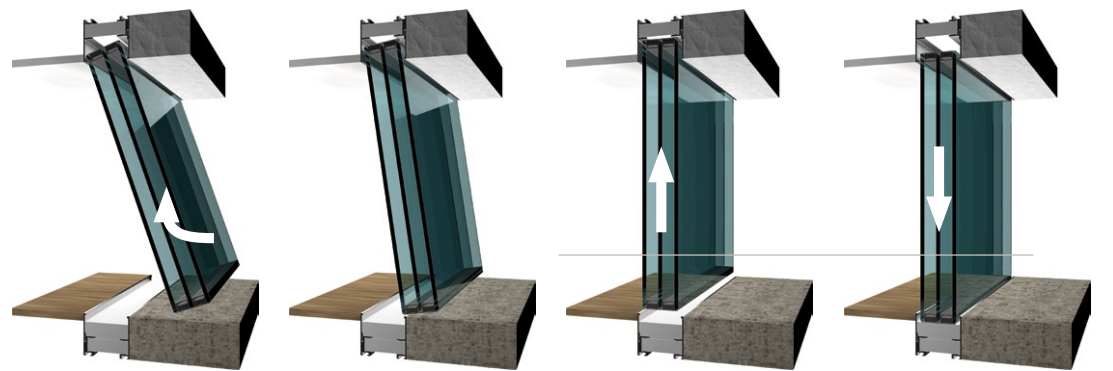


Assembly

1. Insert panel straight

2. Clip in connector

3. Done!



Panel replacement

1

2

3

4

Disassembly of the windowsill inside or outside - Cut out and remove the silicone joints between the glass pane and the GS-frame profile (inside and outside) - Remove the lower header upwards and take out the lower source tape and the two glass supports - Put the pane down and place it on 2mm blocks - Push the glass pane as far to the left or right into the profil until the glass pane is movable in the side reveal area and can therefore be rotated inside or outside.

# Technical specifications & test results

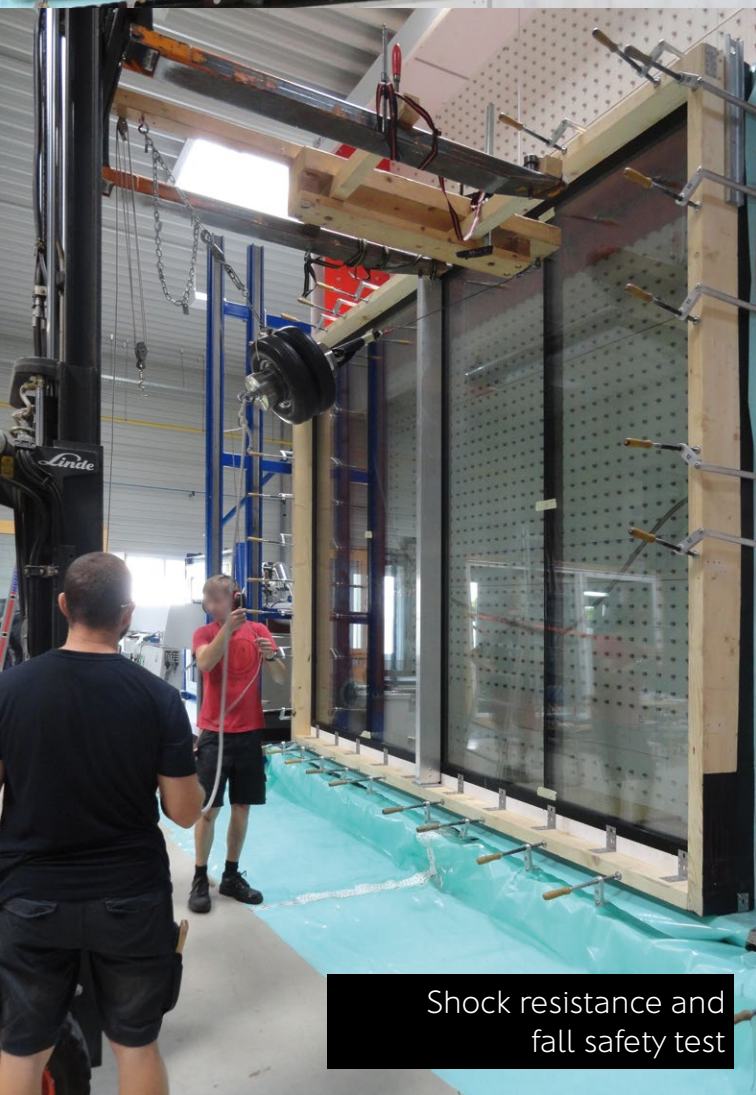
for the GS frame dimension up to **3404mm height**



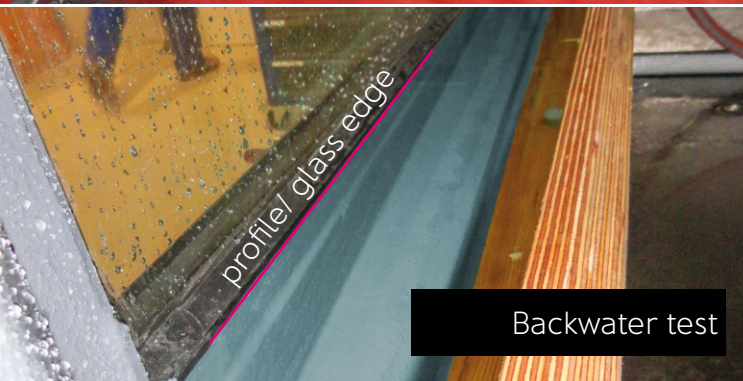
Wind suction test



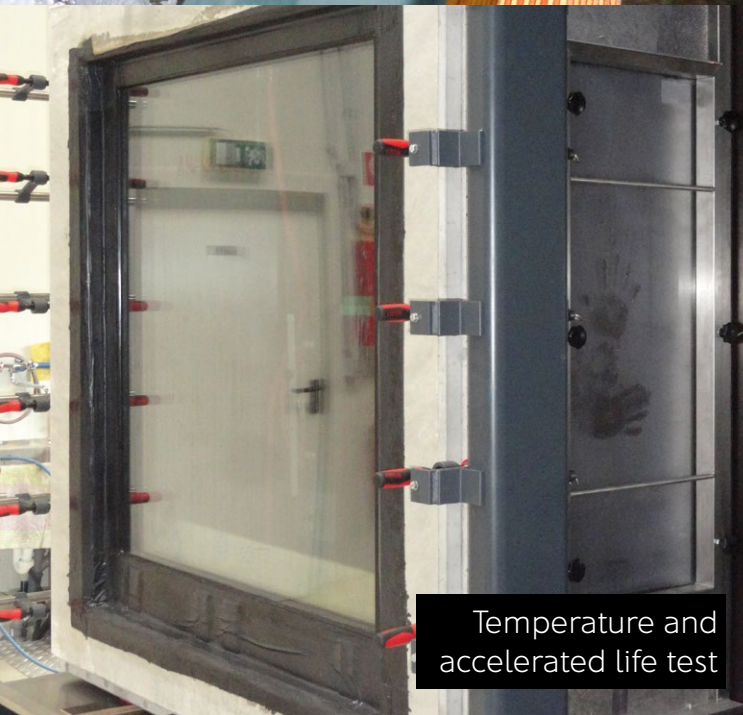
Driving rain test with water accumulation



Shock resistance and fall safety test



Backwater test



Temperature and accelerated life test

## System check with elemet coupling as per ÖNORM B5300; EN14351-1

- air permeability EN1026; EN12207\_class 4
- driving rain tightness EN1027; EN12208\_class E1050
- Wind resistance EN12211; EN12210\_class B2

## Backwaterproof up to the profile/glass edge

- Backwater testing according to the guidelines for waterproofing of buildings – Connection to floor-to-ceiling windows and doors part 2, carried out based on the ÖNORM B5321
- Resistant to driving rain up to 600Pa after the accelerated life test (-15C up to +50C)
- Resistant to temperature changes with frost
- Wind resistant EN12210 at 200 cycles and a pressure suction force of  $\pm 1000\text{Pa}$

## Shock resistance EN13049 (drop height 950mm)

Shock from inside against ESG-window for fall protection

## Shock resistance ÖNORM B3716-3 (drop height 900mm)

Shock from inside against ESG-window for fall protection

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