

INWALL
THE WALL

QUALITY AND TECHNICAL FEATURES

INTRODUCTION

A revolutionary structural external-flush glass partition wall in 85 mm thickness. A snap-fit fastening, between glass and aluminum profile, without the use of glues result of years of research. An innovation that overcomes the limitations of traditional technical adhesive materials allowing a reliable fixing stable over time and independent of the environmental operating conditions. A compensator/leveler designed to absorb structural adjustments or attenuate the seismic stress.

EXTERNAL-FLUSH GLASS

I External-flush glass slabs, without visual glass-stopper profiles. Snap-fit connections that don't need glues, providing an everlasting stability.



VERTICAL CONNECTOR

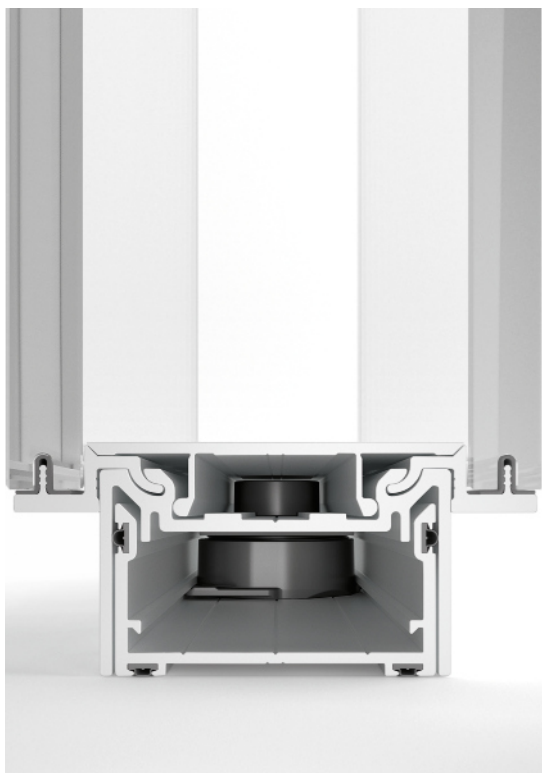
II A vertical structural gasket that aligns and joins the slabs without the use of glues. A concealed coextruded component that fits into the glass. They provide the sealing and the perfect flush alignment of the slabs. An additional innovative element is the vertical junction, the protagonist of the aesthetic continuity that inspires the entire project.



LEVELLER

III

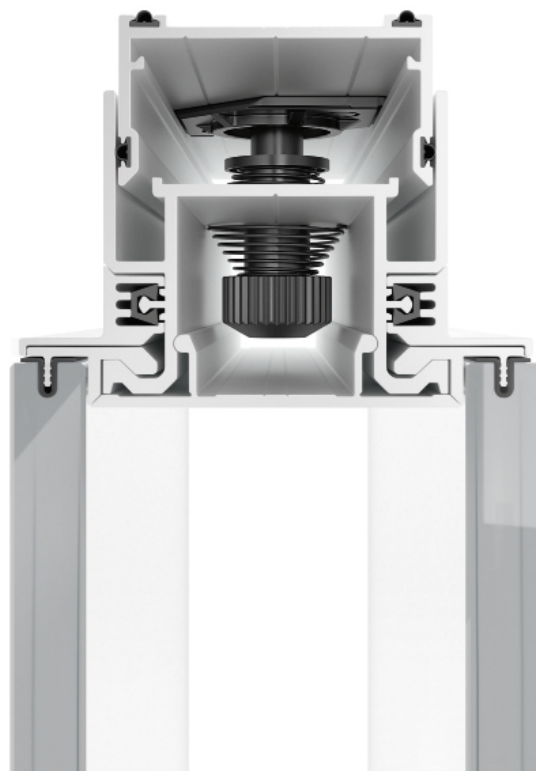
A device designed to guarantee structural strength and micrometric adjustment during installation, to make easy and precise all leveling operations.



COMPENSATOR

Leveller and compensator together. It allows further adjustments to the top profiles and it cushions both the structural settling of the building and the strains during seismic events.

IV



BOTTOM GASKETS

V An interposition element between the glass panels and the horizontal bottom profiles. A splitter of loads and a sliding guide of the glass slab translation during installation.



STRUCTURAL GASKET

A coextruded gasket that fits into a special milling made in the glass. A locking that provides the perfect mechanical tightness avoiding the use of glues. An effective guarantee of an everlasting connection stability.

VI



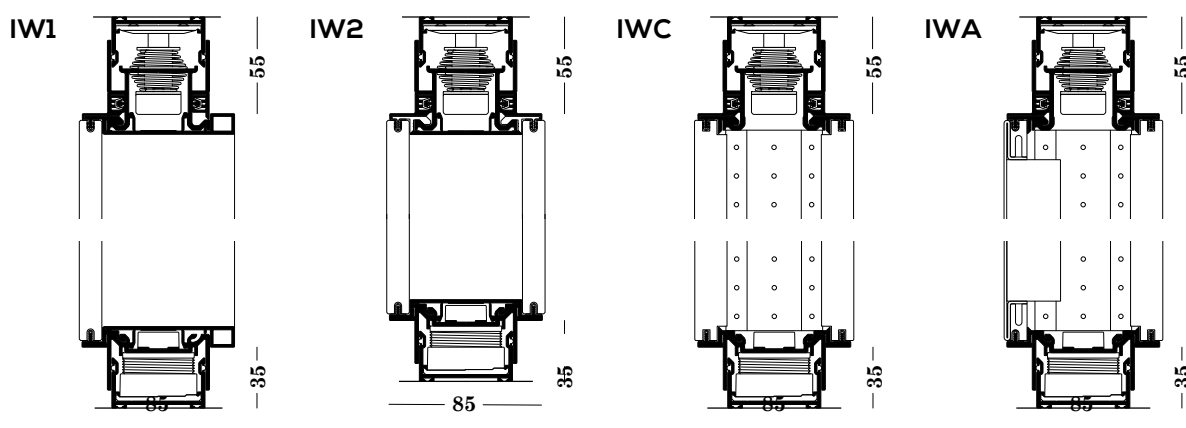
TECHNICAL FEATURES

INWALL is a movable internal partition wall only with a separation function composed by structural profiles in extruded aluminum and infill panels in glass, wood or metal. It is 85 millimetres thick and it is characterized by the revolutionary **external-flush structural glass** with a **snap-fit fastening without the use of glues or double-sided tape** and by the compensator/leveler designed to absorb structural adjustments or attenuate the seismic stress. The “INWALL glass” due to a patent snap-fit fastening and not using glues, ensures a mechanical seal between glasses and aluminum profiles that is safe and stable over time.

PLUS

01. **85 mm** thickness
02. Tightness **without glues**
03. **Connections of the locking** components
04. **External-flush glass**, 12/13 mm
05. **Two solutions of glazed** partition wall
06. **Two solutions of solid** partition wall
07. **Micrometric adjustment** of the bottom track
08. **Spring leveller/compensator** into the top track
09. High **noise reduction**
10. High **sound absorption**
11. Resistance to **seismic stress**

The partition wall is available in four versions: single-glazed with asymmetric glass, double-glazed, solid and acoustic.



The profiles on the floor and ceiling are made 6060 UNI 9006/1 aluminium alloy extrusions and they allow the perfect horizontal leveling, \pm mm 17,5. The adjustments at the base, \pm mm 10, are guaranteed by leveling feet composed of three elements made of solid plastic material. The uppers are carried out by acting on the **spring compensator/leveler** that allows a standard **adjustment** about \pm mm 7.5 and a **dynamic compensation** about mm \pm 9. The telescopic wall start-profiles allow to absorb out of plumbs up to mm 15.

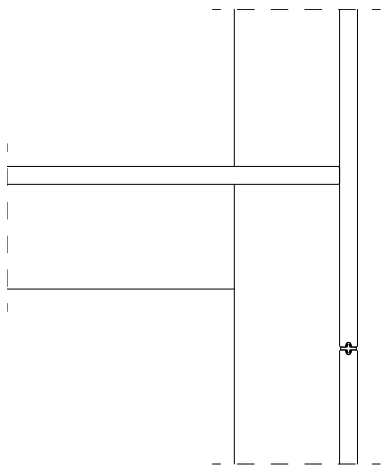
The glazed modules are made by safety laminated sheets with the standard thickness of mm 6+0,38+6, or for a high noise reduction with pvb of interposition. The interlocking of the glass with the lower and upper profiles are made by **patented gaskets** that fit into a special milling made in the upper and lower edges of the glass-sheets. The upper ones are coextruded and they have a stabilizing function, the lower ones in single extrusion serve as support and as a sliding guide for the alignment of the glass-sheets. The **vertical connections** are made, **without using glues**, by coextruded hidden gaskets imbed into a special milling made in the edges of the glass. This solution improves the sound insulation performance and facilitates the assembly and disassembly operations of the partition wall..

The wooden **solid modules** are made of chipboard panels coated on both faces with melamine-paper and perimetrically finished with edges in 10/10 mm thick ABS. The **acoustic modules** have on one side a perforated metal panels, epoxy powder coated, equipped with TNT sealing and interior mattress made of absorbent material, to ensure sound absorbing performance.

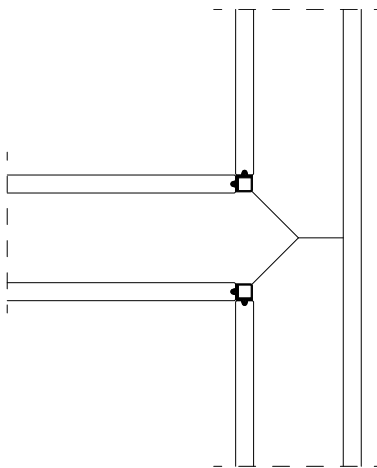
JOINTS AND CONNECTIONS

The corner connections, two-way and three-way types, are fixed and made by interposing between the glass-sheets the interlocking polycarbonate profiles.

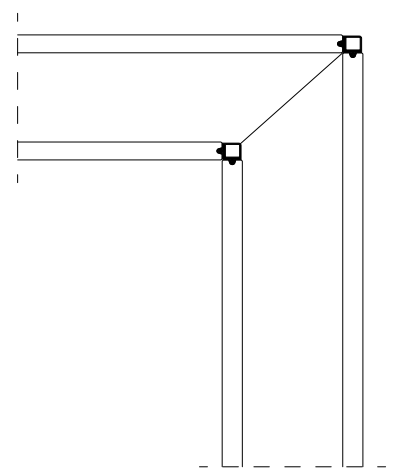
3-way connection IW1



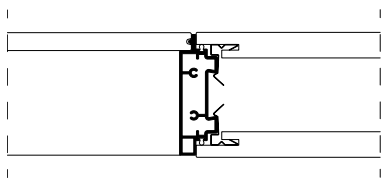
3-way connection IW2



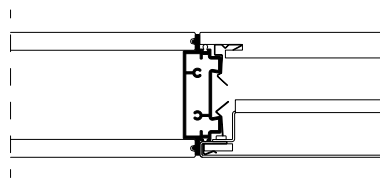
90° connection IW2



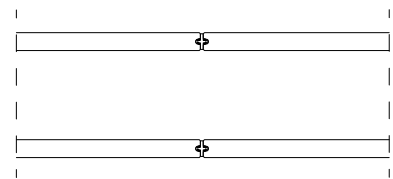
Transition profile IW1 IWC



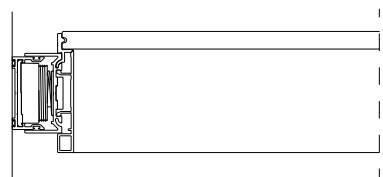
Transition profile IW2 IWA



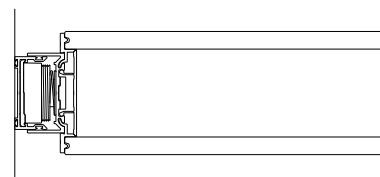
Glass-glass connection



Wall start IW1



Wall start IW2

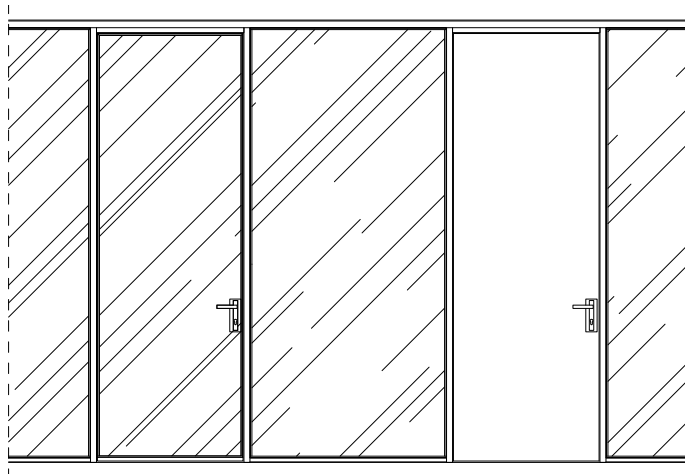


SWING DOORS

The swing doors have the same thickness of the partition wall with **external-flush glass**, single or double, or with hollow-core wood. All types are provided with single and double leaf.

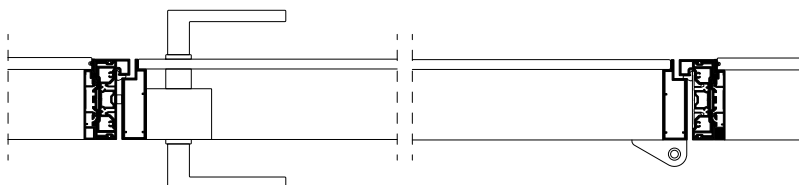
PLUS

01. **Door leaf** with same partition wall thickness, **85mm**
02. Structural **profiles with reduced size**
03. Swing door with **single asymmetric glass**
04. **Double-leaf flush glass door**
05. **Solid door** with aluminium frame
06. Integrated **door-closer**
07. **Acoustic drop-seal**
08. **Handles** with exclusive design
09. High **soudproof**
10. Adjustable **pivot hingee**

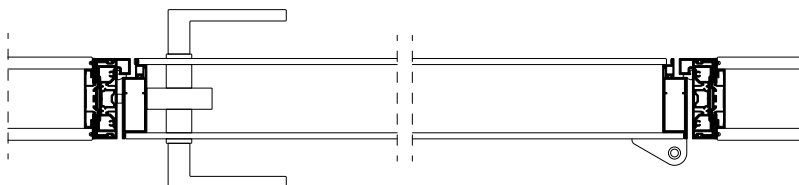


The jambs are made of extruded aluminum profiles, the rebate gaskets are made of grey pvc. The hinged doors made of safety glass are framed with perimetrical aluminium profiles designed to accommodate, in the upper crosspiece, an integrated door-closer and, in the lower one, an acoustic drop-seal. There are adjustable pivot hinges 180° opening with external regulation. The wooden leaves are hollow core and perimetally edged with an aluminium profile. The leaf is provided with an integrated door-closer and an acoustic drop-seal.

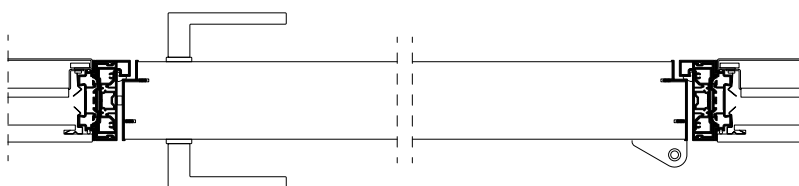
Framed pivot door with **single asymmetric glass**



Framed pivot door with **double glass**



Framed solid wing door



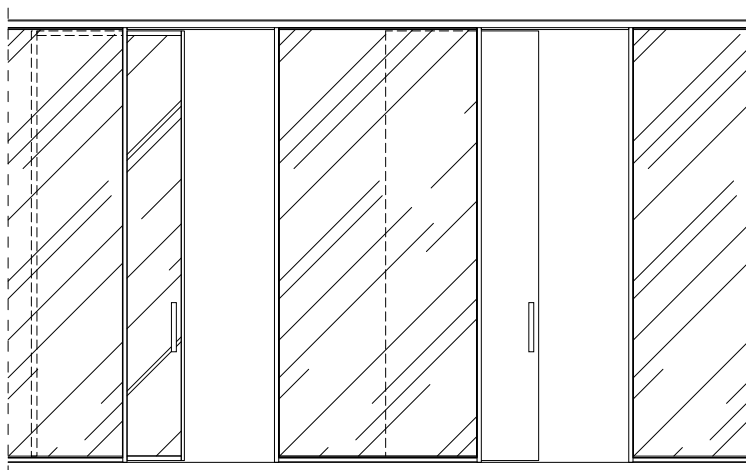
SLIDING DOORS

The sliding doors may have single centered or double glazed leafs in security glass, or in hollow-core wood. The perfect internal sliding is guaranteed by a soft closing and opening system. The space between the leaf and the frame is sealed by brushes made of a soft grey plastic material. Best soundproofing performance are guaranteed by acoustic drop-seals placed inside the lower crosspieces.

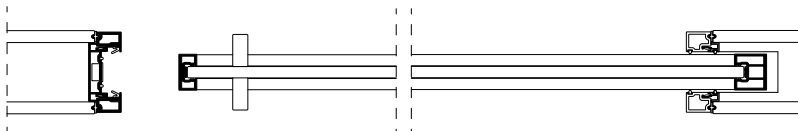
All leafs, the swing type or the sliding ones, are provided with aluminium handles in anodized finish, in polished finish or, upon the specific requests of Customers, in painted finish with the exclusive Vetroin design.

PLUS

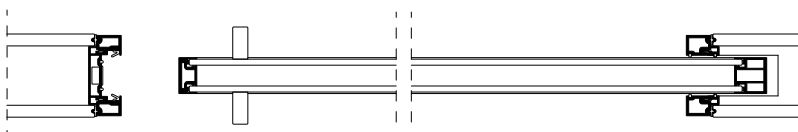
01. **Inner sliding door-leaf**
02. **Structural profiles with reduced size**
03. **Single-glass door leaf**
04. **Double-glass door leaf**
05. **Solid door-leaf**
06. **Soft closing and opening system**
07. **Gaskets with sealing brush**
08. **Acoustic drop-seal**
09. **Handles with exclusive design**



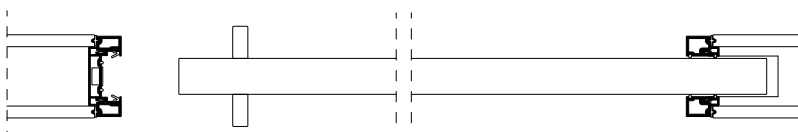
Framed **single-glass** sliding door



Framed **double-glass** sliding door

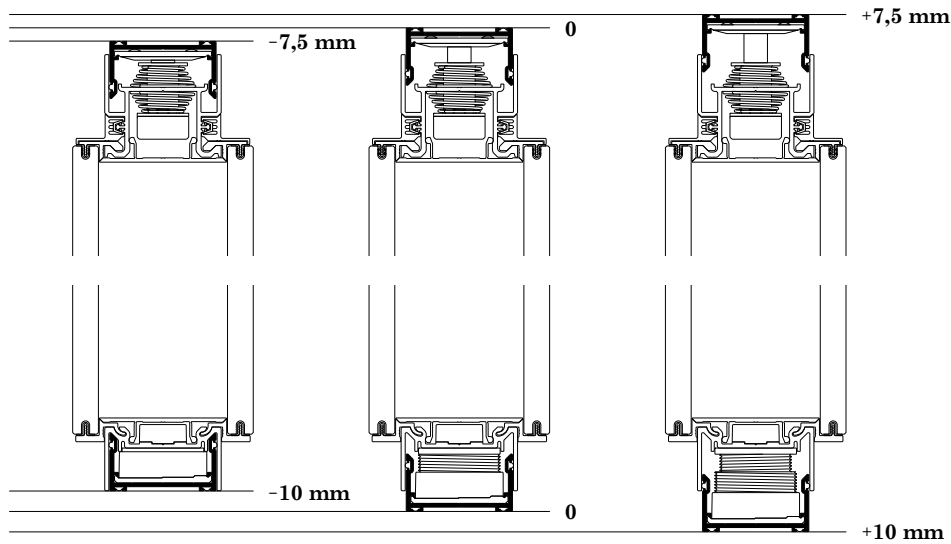


Solid sliding door



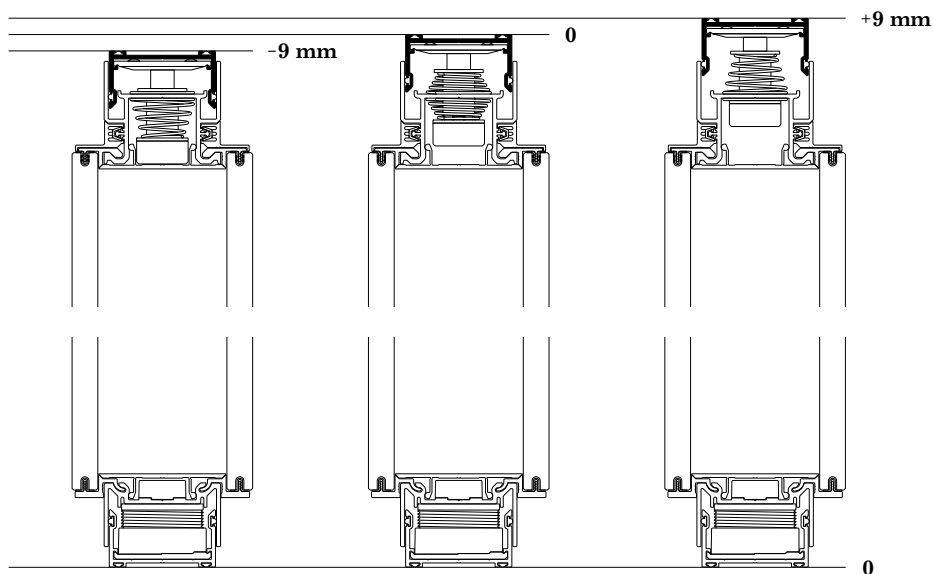
ADJUSTMENTS

The partition wall is designed to simplify the installation on site using optimal solutions to easily adjust the frequent non-levelled floors. The levelling operations are feasible by using the adjustable feet, which also have a structural function and are designed to allow a stroke of ± 10 mm.



DYNAMIC ADJUSTMENT

The partition wall is designed to absorb the settling deformation of the building structures on the interior partitions or those ones due to the seismic action. The spring device, placed inside the top structural profile, allows both the leveling adjustment of ± 7.5 mm and the dynamic adjustment of ± 9 mm.



SEQUENCE OF INSTALLATION

01. Structural bottom track



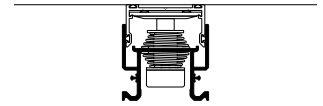
02. Structural top track



03. Profile with leveller



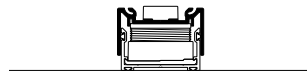
04. Profile with leveller/
compensator



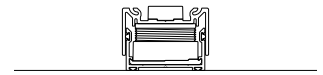
05. Left support profile



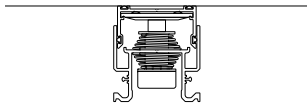
06. Right support profile



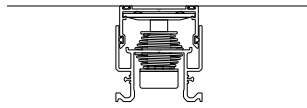
07. Top snap-fit connector



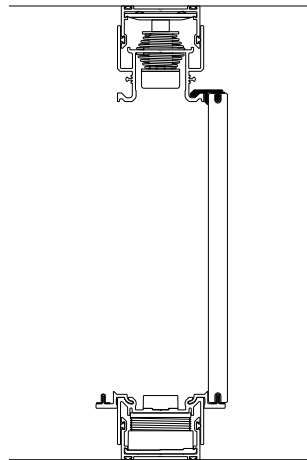
08. Safety profile



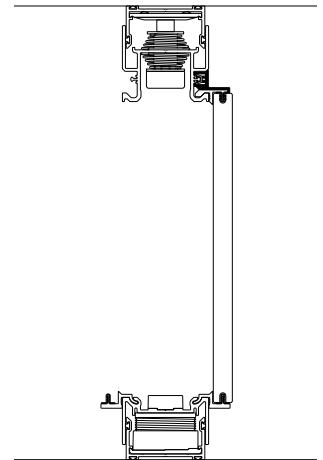
09. Finishing profile



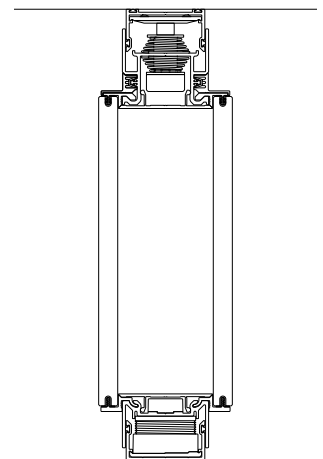
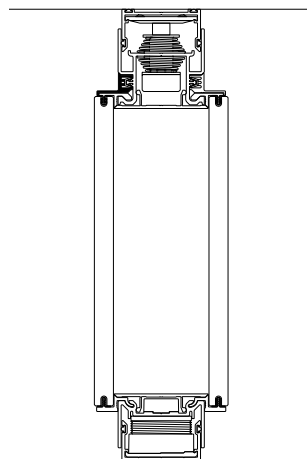
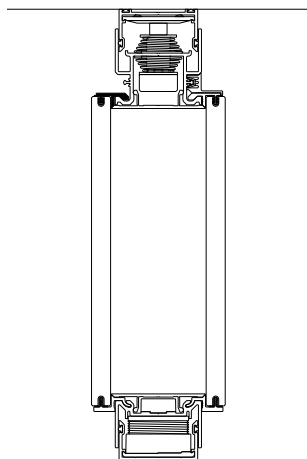
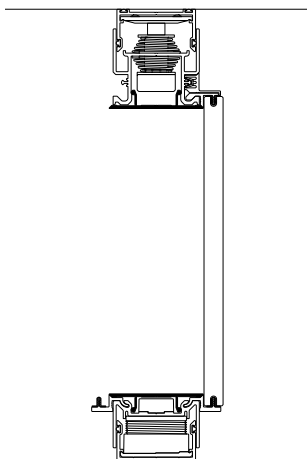
10. Top snap-fit connector



11. Safety profile

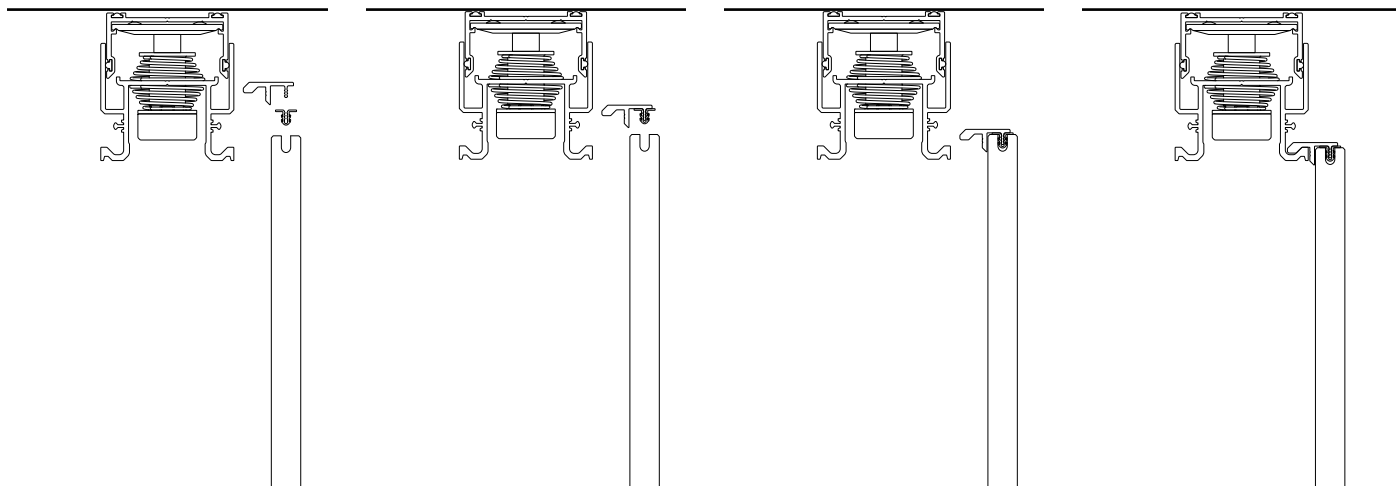


12. InWall partition wall



FIXING OF THE TOP CONNECTOR

The fixing of the horizontal structural profiles is carried out without any glue and is performed directly on site. The patented connector and the extrusion that forms the top hook are inserted by pressing into the appropriate slot created in the glass slab thickness. The expanding effect that is produced during the insertion secures together the connector and the glass creating a single piece.



01. Preparation of the gasket and the extrusion

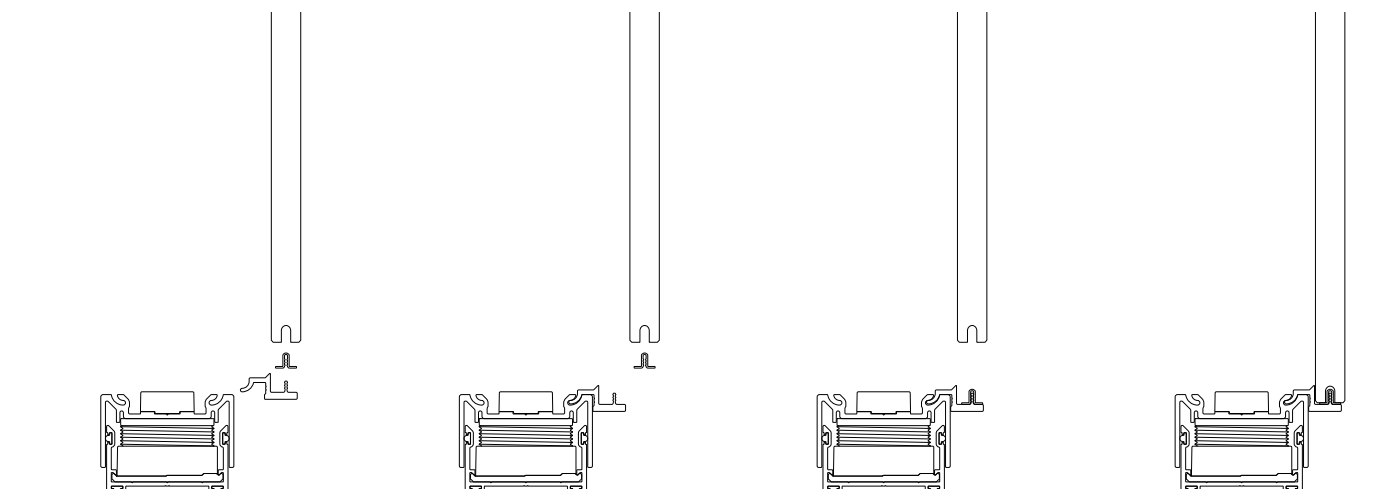
02. Coupling of the extrusion and the gasket

03. Insertion of the connector into the slot

04. Glass hooking to the top profile and locking by the safety profile

FIXING OF THE BOTTOM SUPPORT

A simple and linear sequence, dictated by the experience and by the need to guarantee a proper installation in any condition.



05. Preparation of the bottom gasket

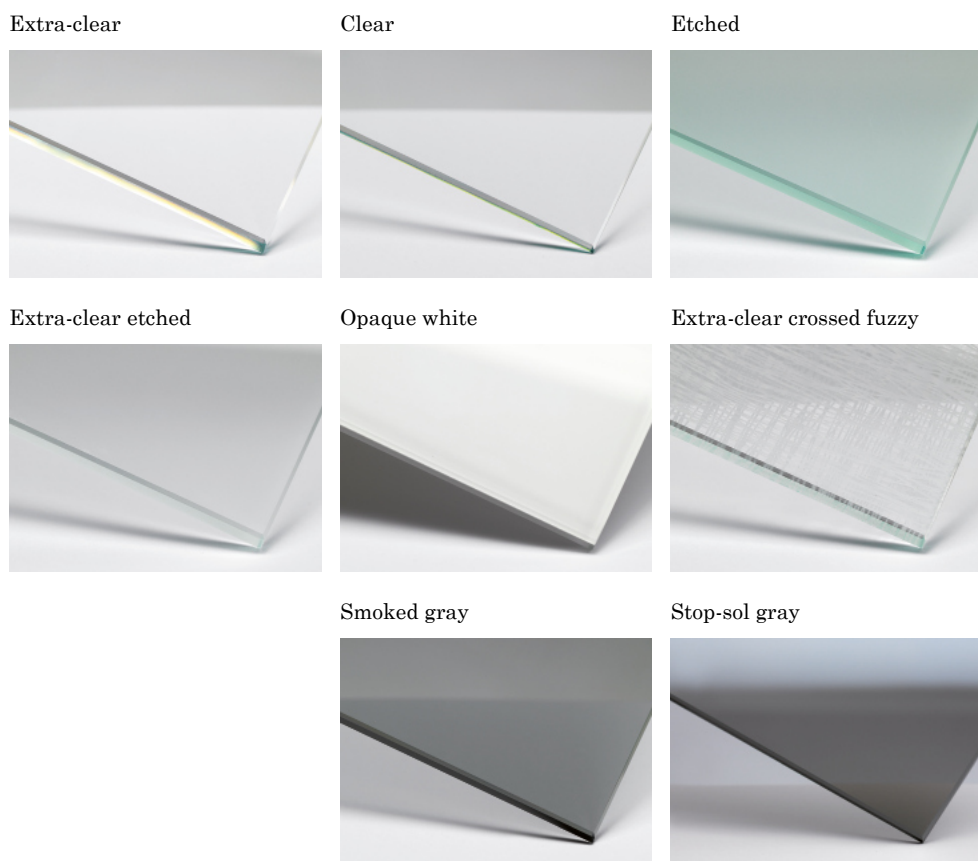
06. Insertion of the support profile into the slot

07. Insertion of the gasket onto the support profile

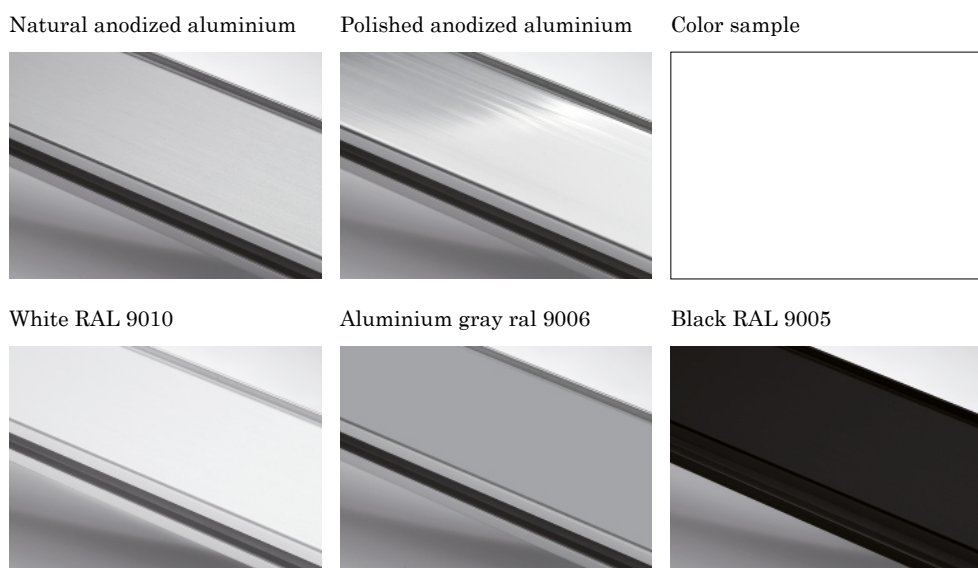
08. Glass slab positioning

FINISHES

GLASS

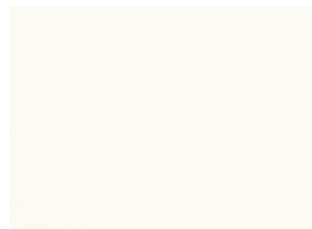


ALUMINIUM

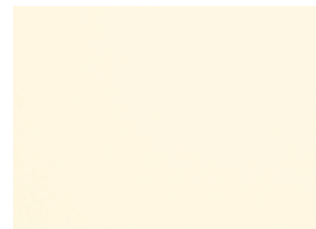


WOOD

V1A - Bianco K101PE



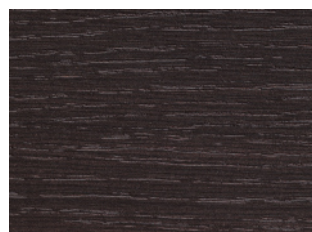
V1B - Magnolia U109BS



V2A - Alluminio penelope FA08



V2B - Wengè poro rovere LD58



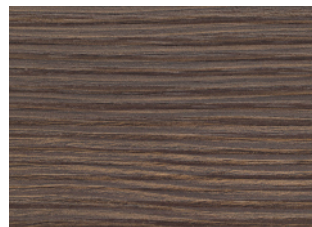
V2C - Acero chiaro D1251VL



V3A - Rovere provenza tranchè LM12



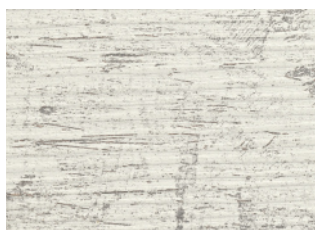
V3B - Oregon pine matrix LK10



V3C - Stratos matrix LM32



V3D - Vintage matrix LM63



V3E - Ciliegio marbella matrix LG69



V3F - Delavè penelope FA41



V3G - Bianco matrix B013



V3H - Kaki penelope FA44

