HI-FINITY LAUNCH PRESENTATION 03/2014

REYNAERS aluminium

TOGETHER FOR BETTER

Hi-Finity

SUBJECT OF THE LAUNCH

HFP 147 double glazing now open to all markets

HFP 179 triple glazing

Fixed corner solution

Open corner solution

New glass profile lay-out

HI FINITY

Hi-Finity

Origin of the name

Insight

In the contemporary architecture, **large glass surfaces** are applied to obtain maximal use of **natural light**.
Hi-Finity is designed exactly for this purpose. In order to combine a minimalistic design with maximal performance, **technical innovations** were designed for this system**.**
This way the customer can enjoy a maximal view with a high level of comfort.

Promise

HI

High-End
High Insulation
High Performance
High Dimensions & weights

(IN)FINITY

Infinite view
Infinite aesthetics
Infinite possibilities

The logo and name are **trademarks of Reynaers**
In written text, the name is spelled as follows: **Hi-Finity**
System name: **HFP 147** (Hi-Finity-Patio , depth 147, double glazing)
HFP 179 (Hi-Finity-Patio , depth 179, triple glazing)
Both Hi-Finity as HFP 147 and HFP 179 are used in tech communication such as catalogue and Reynapro.
Always use name **Hi-Finity** in **commercial communication**.

REYNAERS
aluminium

Hi-Finity

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BUSINESS MODEL
COMPETITION
COMMUNICATION TOOLS
PRODUCTPERFORMANCES
TECHNICAL INNOVATIONS
LAUNCH SCHEDULE

Hi-Finity

Business model:
Reynaers sells the total solution, including the glass

Gluing of the composite profile to the glass for Hi-Finity is as **crucial** as insulation of the profile in a standard system.

We defined **very strict tolerances** on the glass and glued profile in order to ensure a good functionality of the system.

Therefore **we work together with a selected glass supplier/gluer** that can maintain the prescribed process and tolerances.

Hi-Finity

System restrictions

Machines:
For the motorized version of the Hi-Finity, parts of the top frame have to be milled away. This **milling is intensive and is not recommended to do by hand**, therefore the fabricator that produce a motorised solution needs a CNC machine. SBZ 140 and SBZ 151 are suited for this machining.

The manual version can be machined with manual milling and CNC machines.

Finishing
The frame profile is always painted via a **bi-color process**. When the insulated profile is painted , the bottom part of the profile , where the rail is positioned, is not fully covered with paint. This means that local painting is not always possible.

The aluminium profiles are available in all RAL colours and Anodised version.
The handle is available in **all RAL** colours (**no anodisation** possible for this material).

	RAL	Anodized	Black composite
Aluminium profiles	✓	✓	
Handle	✓		
Vent profiles			✓

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Hi-Finity

Product performances HFP 147 – 179 standard

AWW

Standards	Type of test	Class of Declared value									
EN 12211 EN 12210	**Resistance to wind load** *Test pressure p1 (Pa)*	npd	1 *(400)*	2 *(800)*	3 *(1200)*		5 *(2000)*	Exxx *(>2000)*			
EN 12211 EN 12210	**Resistance to wind load** *Frame deflection*	npd	A *(≤1/150)*		B *(≤1/200)*		C (≤1/300)				
EN 1027 EN 12208	**Watertightness – non shielded (A)** *Testpressure (Pa)*	npd	1A *(0)*	2A *(50)*	3A *(100)*	4A *(150)*	5A *(200)*	6A *(250)*	7A *(300)*	8A (450)		Exxx *(>600)*
EN 1026 EN 12207	**Air permeability** *Max. test pressure* *Ref. air permeability at 100Pa (m³/hm² of m³/hm)*	npd	1 *(150)* *(50 or 12.50)*		2 *(300)* *(27 of 6.75)*		3 *(600)* *(9 or 2.25)*				

Remarks
The tested element is BxH: 5m x 3.5m and the moving pane weighs about 500 kg
The opening forced for this big , heavy glass is ca 130N, closing force is 115N. Force to keep movement going; is ca 65N.

REYNAERS aluminium

Hi-Finity

Product performances HFP 147 – 179 standard

Anti burglary class 2 (RC2):

- Official test succeeded 13/09 for HFP 147
- Currently no RC2 for HFP 179

Acoustic tests:

- Rw (C;Ctr) = 35 (0;-1) dB) (With glazing Polypane Miraxvit 10/16/66.2)

Planned tests

- AWW and RC2 on corner solution HFP 147: end May

Remarks
The tested element is BxH: 5m x 3.5m and the moving pane weighs about 500 kg
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HI-FINITY

Hi-Finity

Design: Fade the boundaries

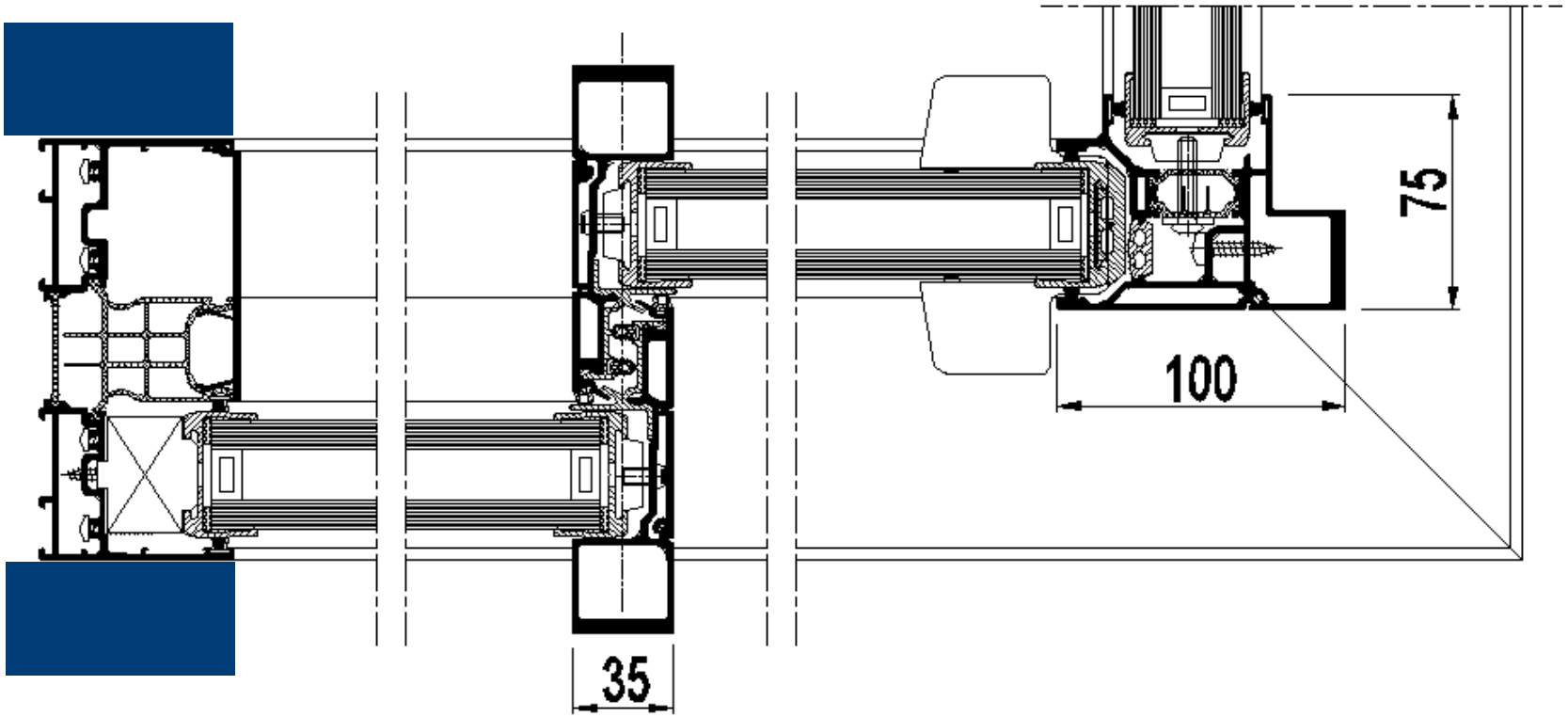
Floor-to-floor and wall-to-wall dimensions
The strength of the system shows off when complete walls are covered with the system. Frames disappear behind ceiling, floors and side walls.

Weights:
The door is designed to carry door leafs up to 500Kg.
For double glass (8/16/66.2), this means that you can cover up to 9.5m² per leaf.

Heights:
Tested up to 3.5m.

HI-FINITY

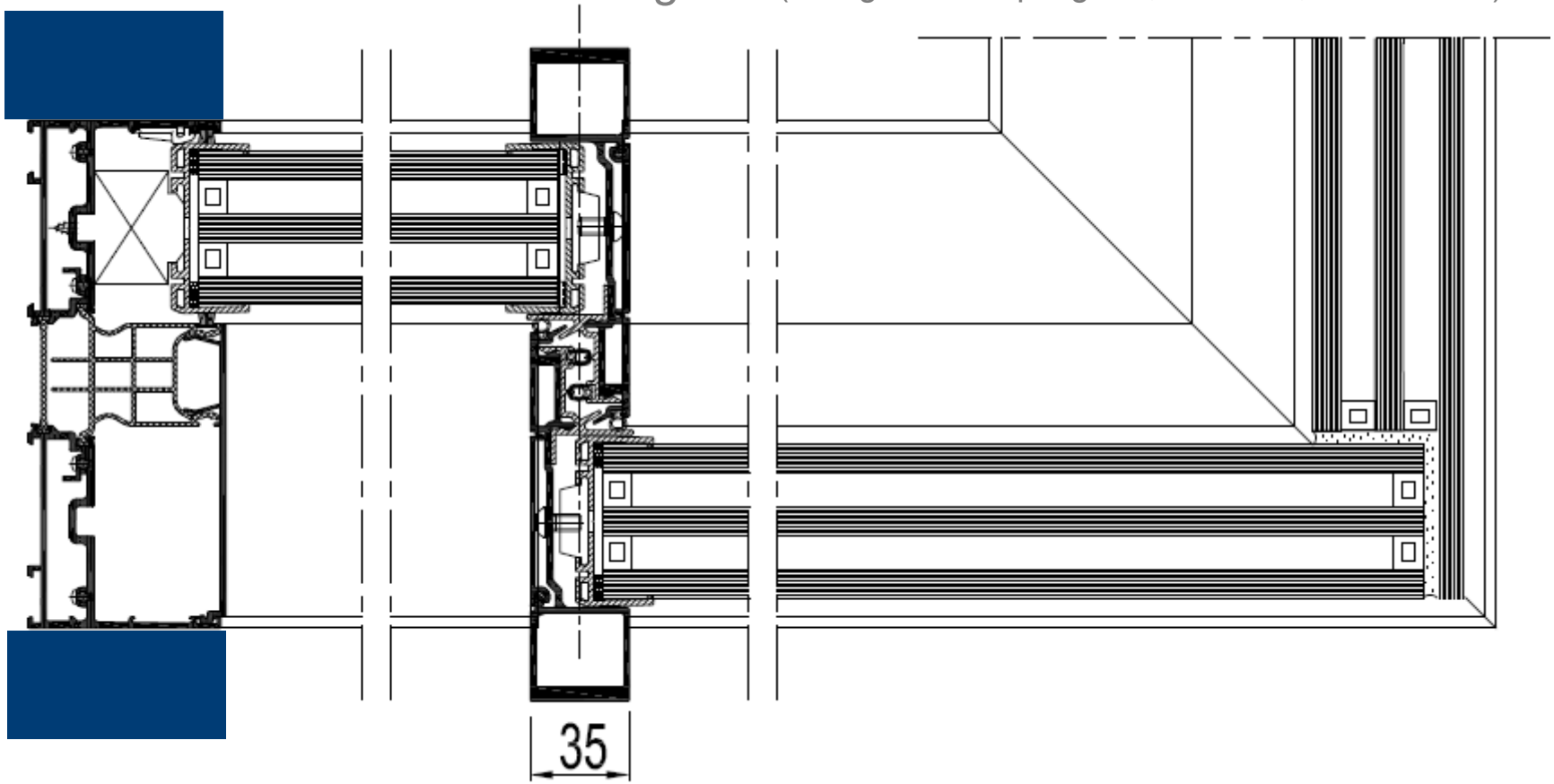
Minimal frame maximal glass (configuration double glass, HFP 147, open corner)



REYNAERS aluminium

HI-FINITY

Minimal frame maximal glass (configuration triple glass, HFP 179, fixed corner)




DESIGN
Integrated design in all details

Hi-Finity

Maximize comfort: Warm, Thermal performance

U-values

		CP130 HI	CP155 HI	CP155 Minergie	HFP 147	HFP 179
glass thickness		24 mm	24 mm	43 mm	double	triple
section 1	side	2.50	2.40	1.90	2.00	2.00
section 2	chicane	4.40	3.40	2.90	5.80	5.50
section 3	side	3.00	2.80	1.40	2.20	2.20
section 11	top	2.50	2.80	2.40	2.00	2.00
section 12	top	3.00	3.00	1.10	2.20	2.20
section 13	bottom	2.60	2.40	2.00	2.00	2.00
section 14	bottom	3.00	2.90	1.10	2.10	2.20

Minergie:
Ud for a sliding door of 4.5x2.3m with Ug 0.7 W/m²K and Psi of 0.07
•Hi-Finity triple glass <1.0 W/m²K

Ud for a sliding door of 4.6x3m with Ug 1.1 W/m²K and Psi of 0.08
•Hi-Finity double glass = 1.3 W/m²K
•CP155 minergie = 1.3 W/m²K
•CP155 HI = 1.5 W/m²K
•CP130 HI = 2.1 W/m²K

MINERGIE®
Mehr Lebensqualität, tiefer Energieverbrauch
Meilleure qualité de vie, faible consommation d'énergie

MINERGIE® MODUL
FFF SZFF Fenster Fenêtres

ZERTIFIKAT

HI-Finity HFP 179

MINERGIE®- Schiebetüre

Der Firma: Reynaers Aluminium NV/SA, Oude Liersebaan 266, B-2570 Duffel
Material: Aluminium thermisch getrennt
Glasflächenanteil: 86.3 %
Verglasung: 3-fach Isolierglas, Stärke: 52.5 mm, U_g-Wert 0.70 W/m²K
Randverbund: Chromatech
U_w-Wert: ≤ 1.0 W/m²K

Diese Fensterkonstruktion erfüllt den **MINERGIE®-Standard**, der von Kantonen, Bund und Wirtschaft getragen wird.

Code Nr. 536.13

Eine MINERGIE®- Schiebetüre ist ein Fensterkonstruktion, welches dem besten Stand der Technik entspricht, insbesondere bezüglich Wärmedämmfähigkeit, Kondensatfreiheit und Dichtigkeit sowie ein gutes Preis-Leistungsverhältnis aufweist. Die Konstruktion **HI-Finity HFP 179** darf als **MINERGIE®-Modul Fenster** bezeichnet werden.

Dietikon, 15.12.2013
Schweizerische Zentrale Fenster und Fassaden SZFF
Fabio Rea, Geschäftsführer

Bachenbülach, 15.12.2013
Schweizerischer Fachverband Fenster- und Fassadenbranche FFF
Beat Rudin, Geschäftsführer

www.minergie.ch
MINERGIE® MADE IN SWITZERLAND

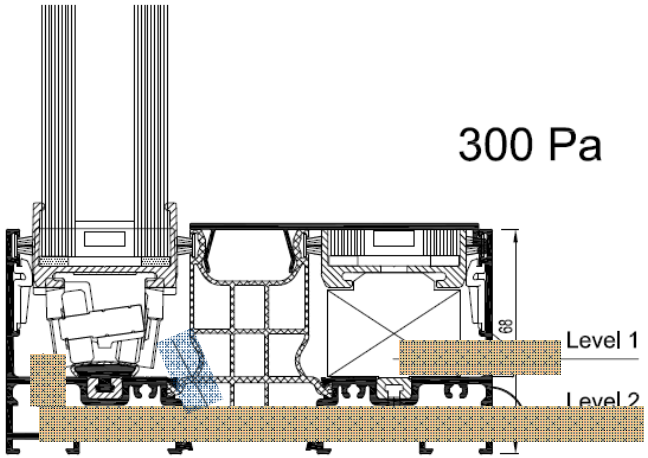
REYNAERS aluminium

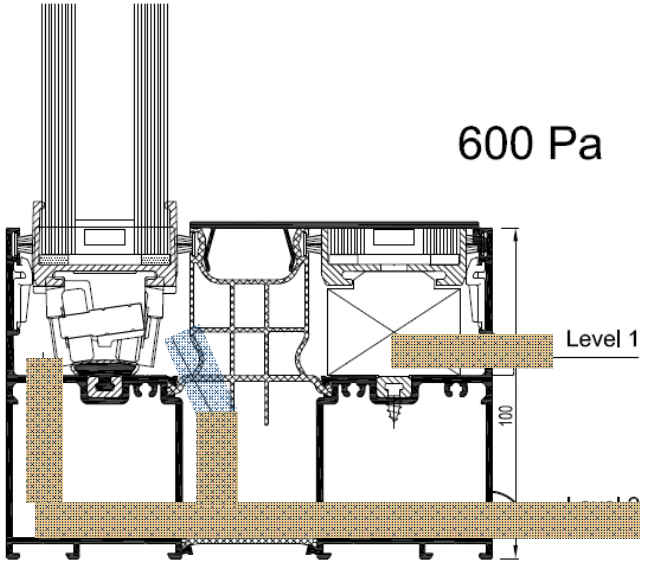
Hi-Finity

Maximize comfort:
Water tight performance

Drainage:
Low bottom – 300 Pa
High bottom – 600 Pa

Building connections:
We will propose the anchors and specific gutter solution for a solid connection.
The Hi-Finity sliding door should be combined with a floating teras or a gutter solution on the outside to drain the water.





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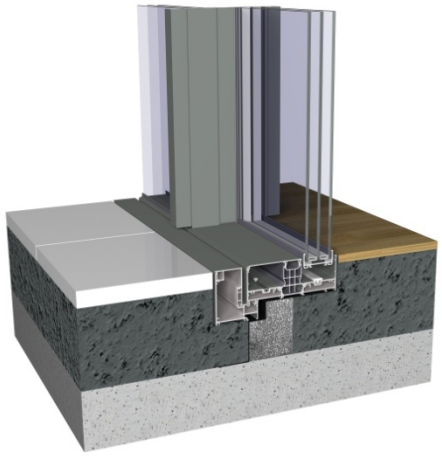
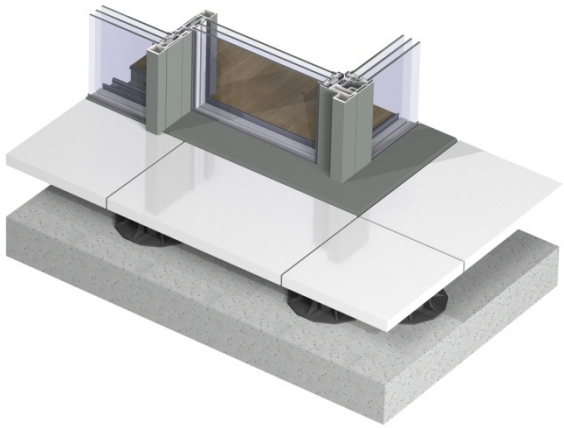
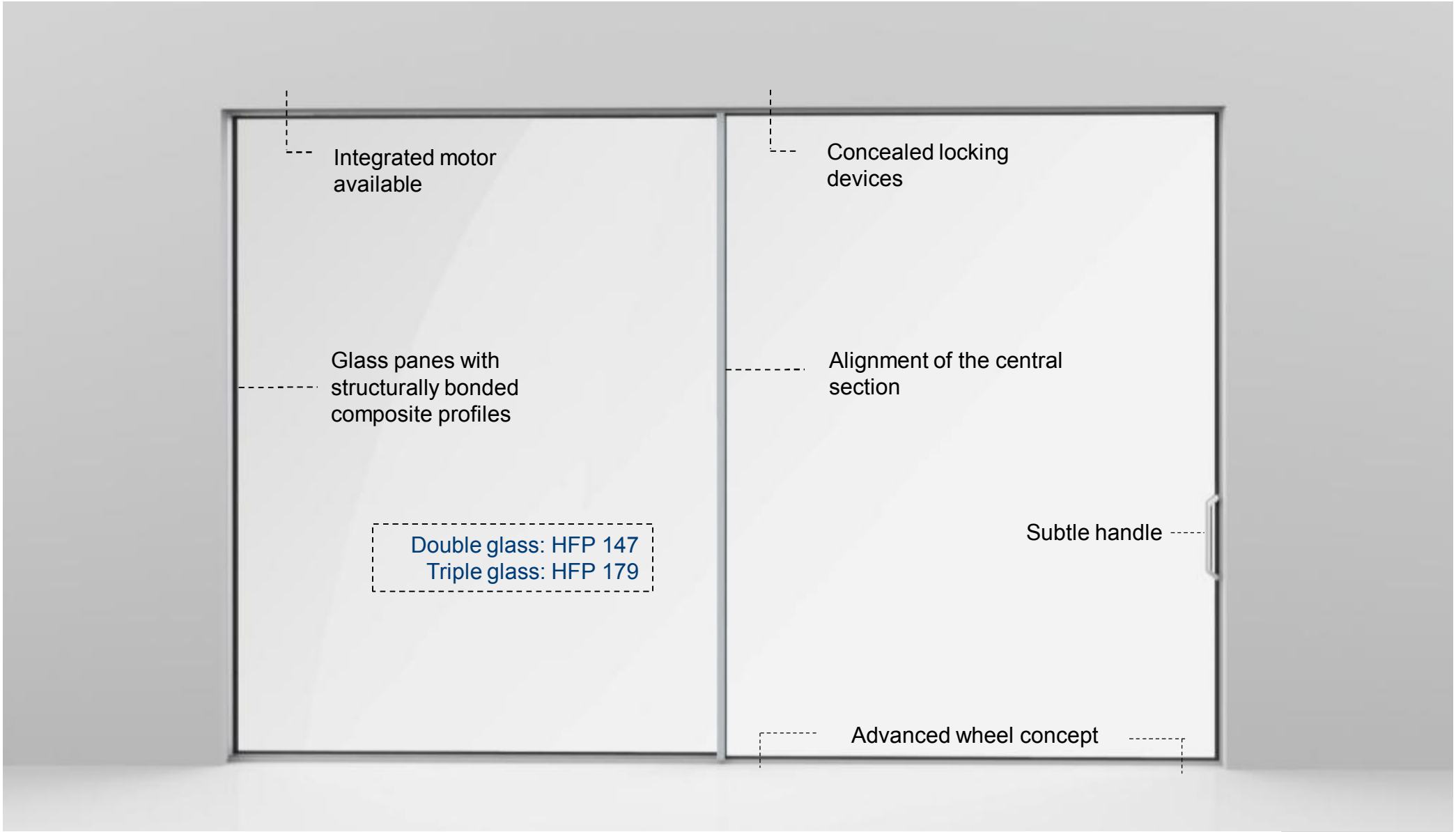
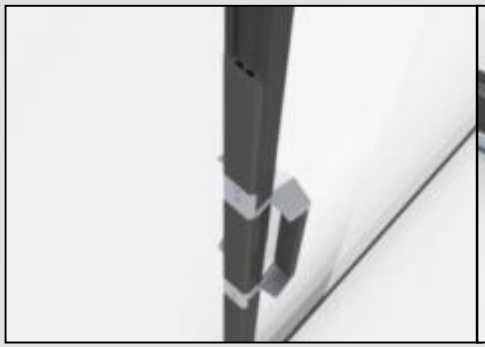





Integrated motor available
Concealed locking devices
Glass panes with structurally bonded composite profiles
Alignment of the central section
Double glass: HFP 147
Triple glass: HFP 179
Subtle handle
Advanced wheel concept

GLASS PANES WITH STRUCTURALLY BONDED COMPOSIT PROFILES

The hardware is mounted in the detail of the composite profile.



Handle

Wheel carraiges

Adjusting mechanism

Locking devices


Subtle handle

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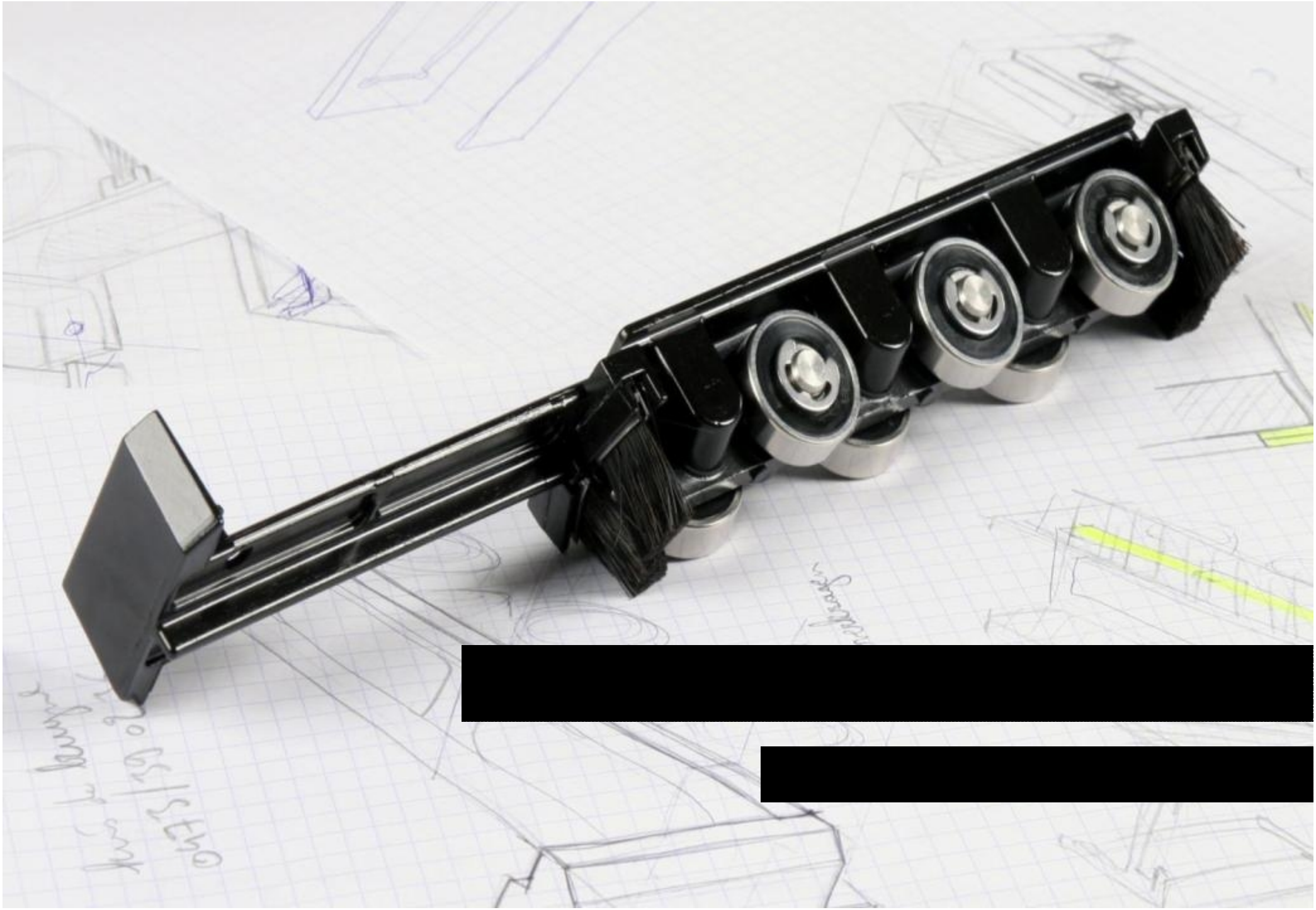
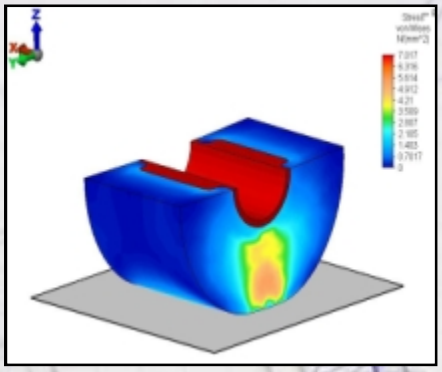
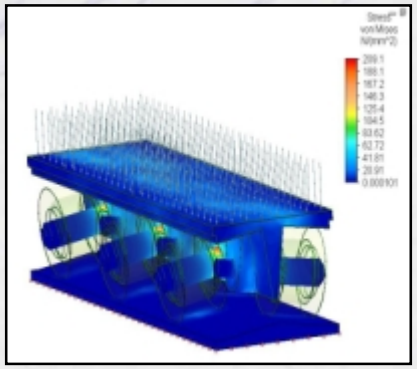
Soft grip


Advanced wheel concept







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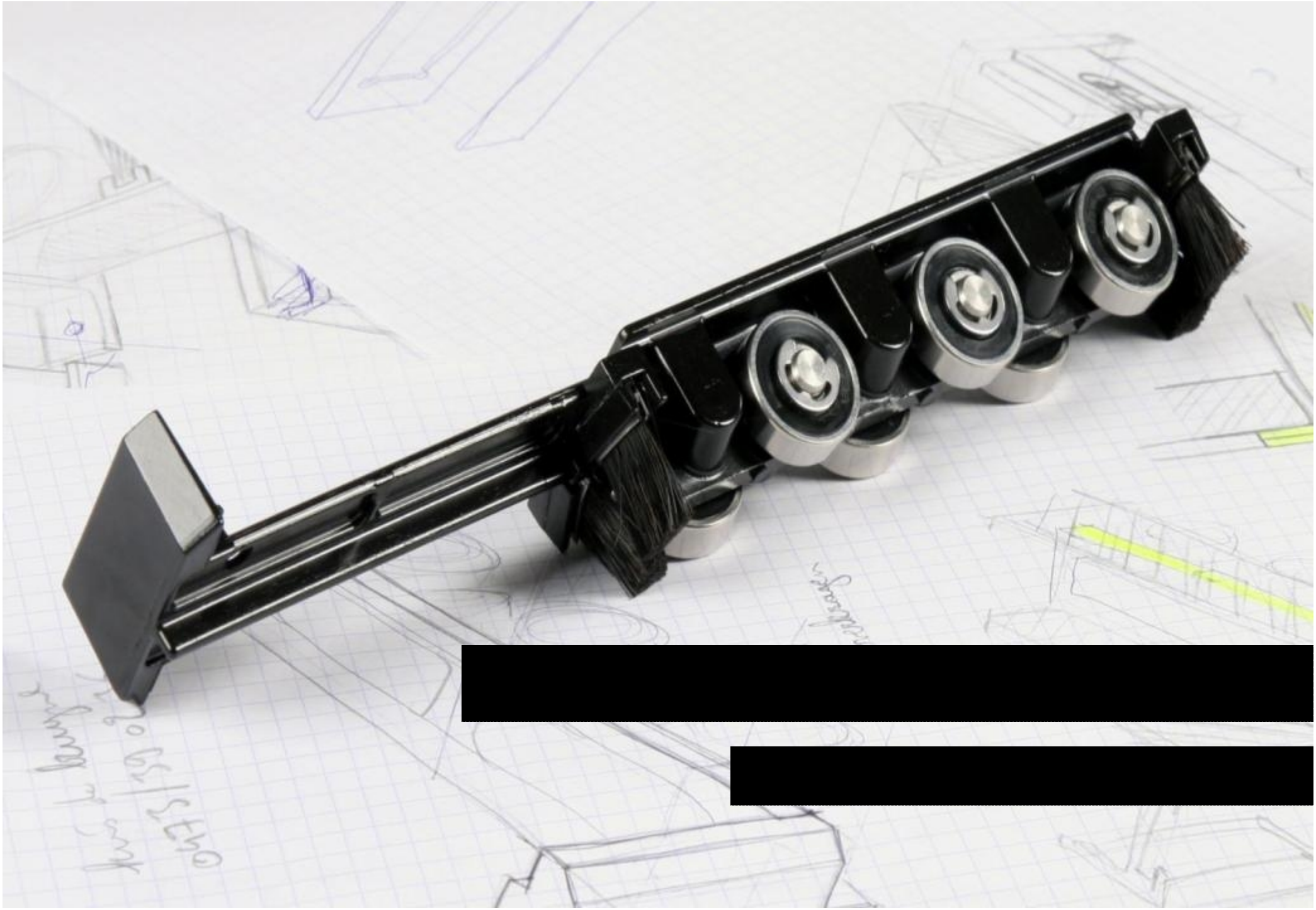
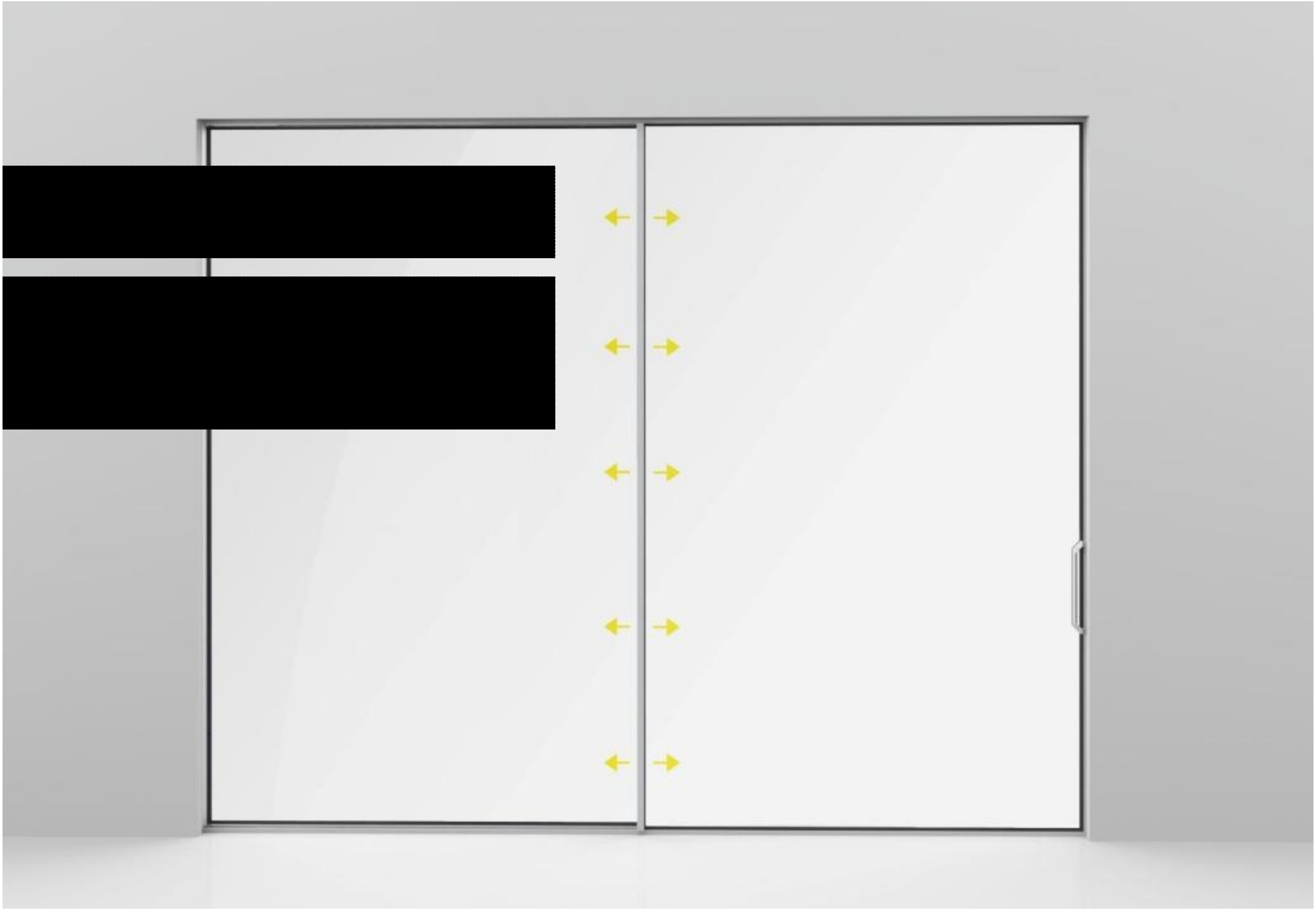
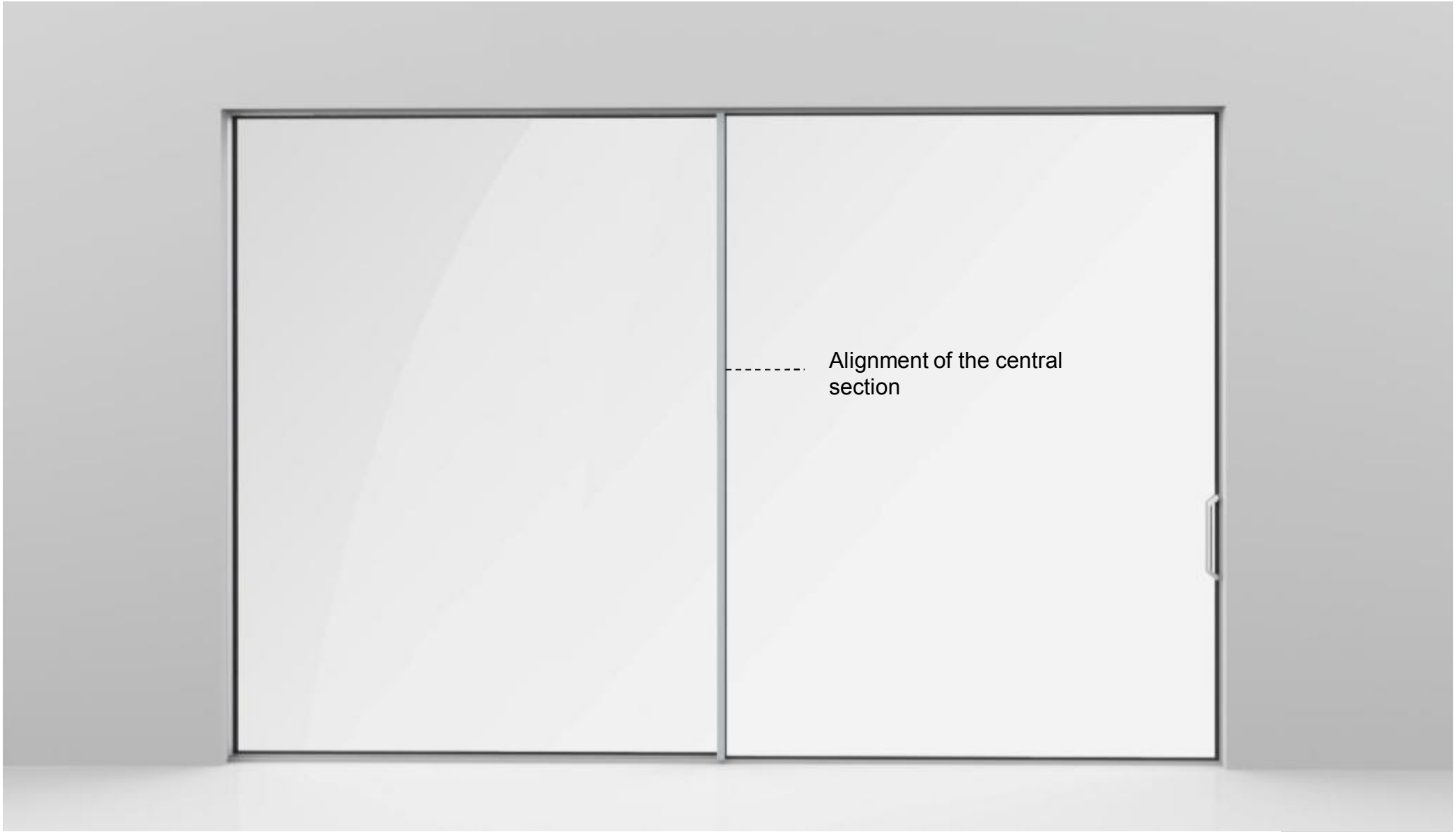
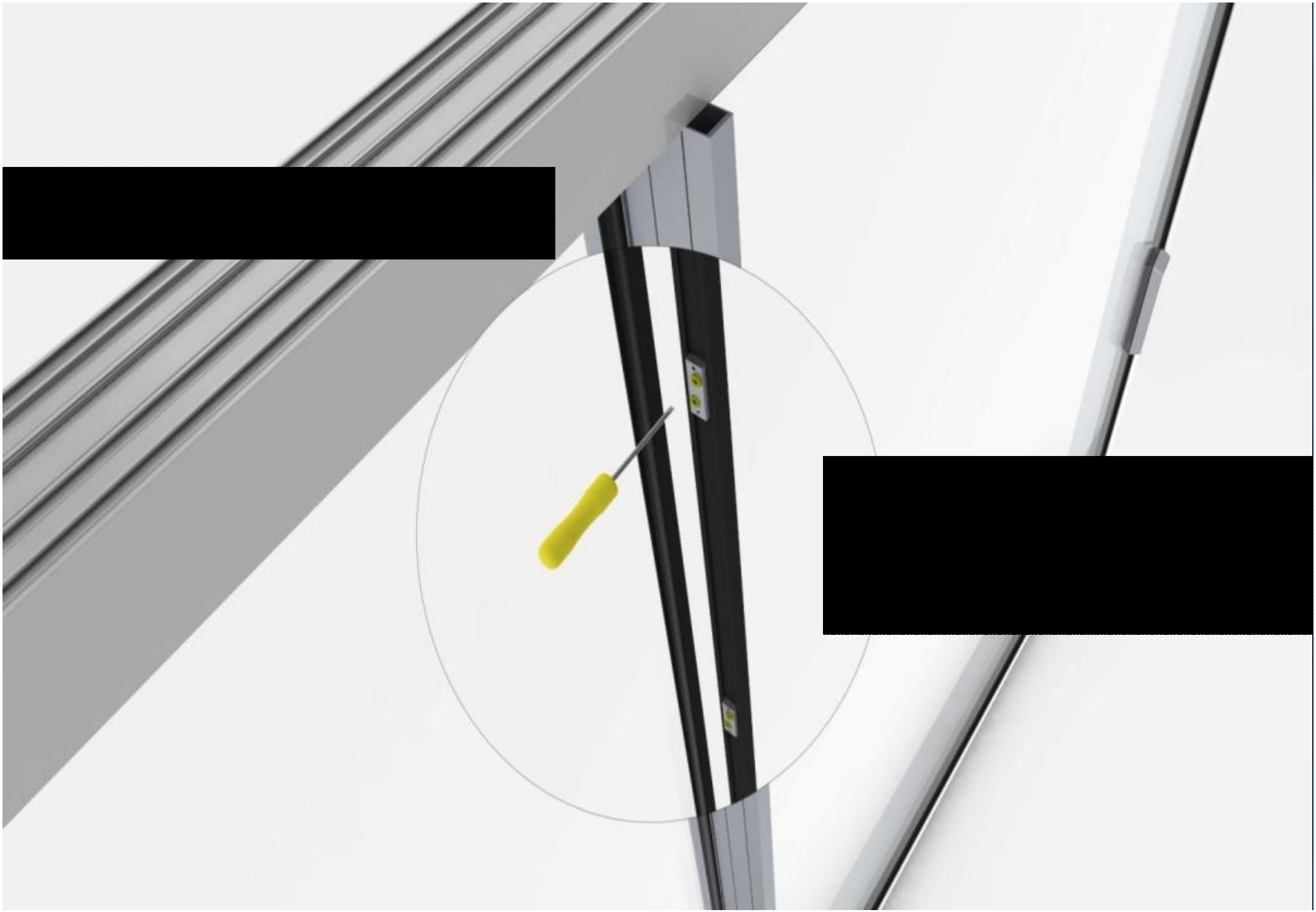
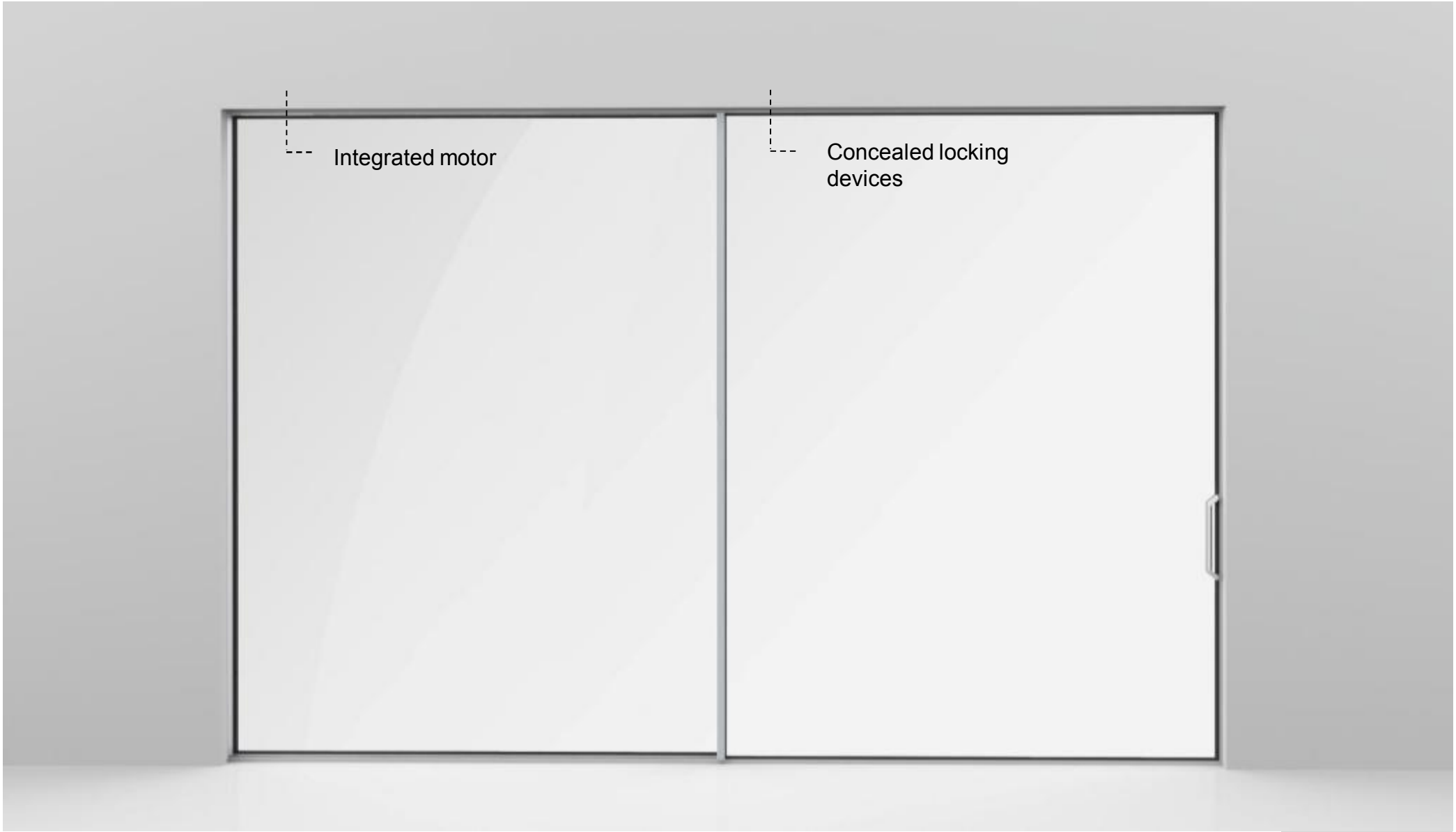





Alignment of the central section




Integrated motor
Concealed locking devices

Hi-Finity

2 Hardware versions

We will launch **2 variants** of Hi-Finity. A **motorized** solution, where the leaf opens and closes automatically. And a **manual** solution, where you have top move the door by means of a pull handle.

Motorized solution,:
There is no need for a handle, in closed position, no accessories are visible. The door is opened/closed by a push on the button.
This button is positioned in the wall next to the sliding system or on the remote control.
Vents up to 300 kg

Manual solution:
The locking/unlocking of the system is realised by an electric lock located in the top frame. Actuator is a push button on the wall next to the sliding system or via a remote control.
Moving of the vent is manual with the design handle.
Vents up to 500 kg

In both cases Lock & motor are hidden inside the top frame profile.
Even when the door is opened only the designed handle is visible.

CONCEALED LOCKING MECHANISM

CONCEALED LOCKING MECHANISM

The **patented adjustment mechanism** allows a **perfect and easy positioning** of the locking plate in order to cover the tolerances.