

ØG[®]

sliding door
with magnetic
levitation



METALFORM

ØG®
zerø gravity



METALFORM



Why ØG[®] is born

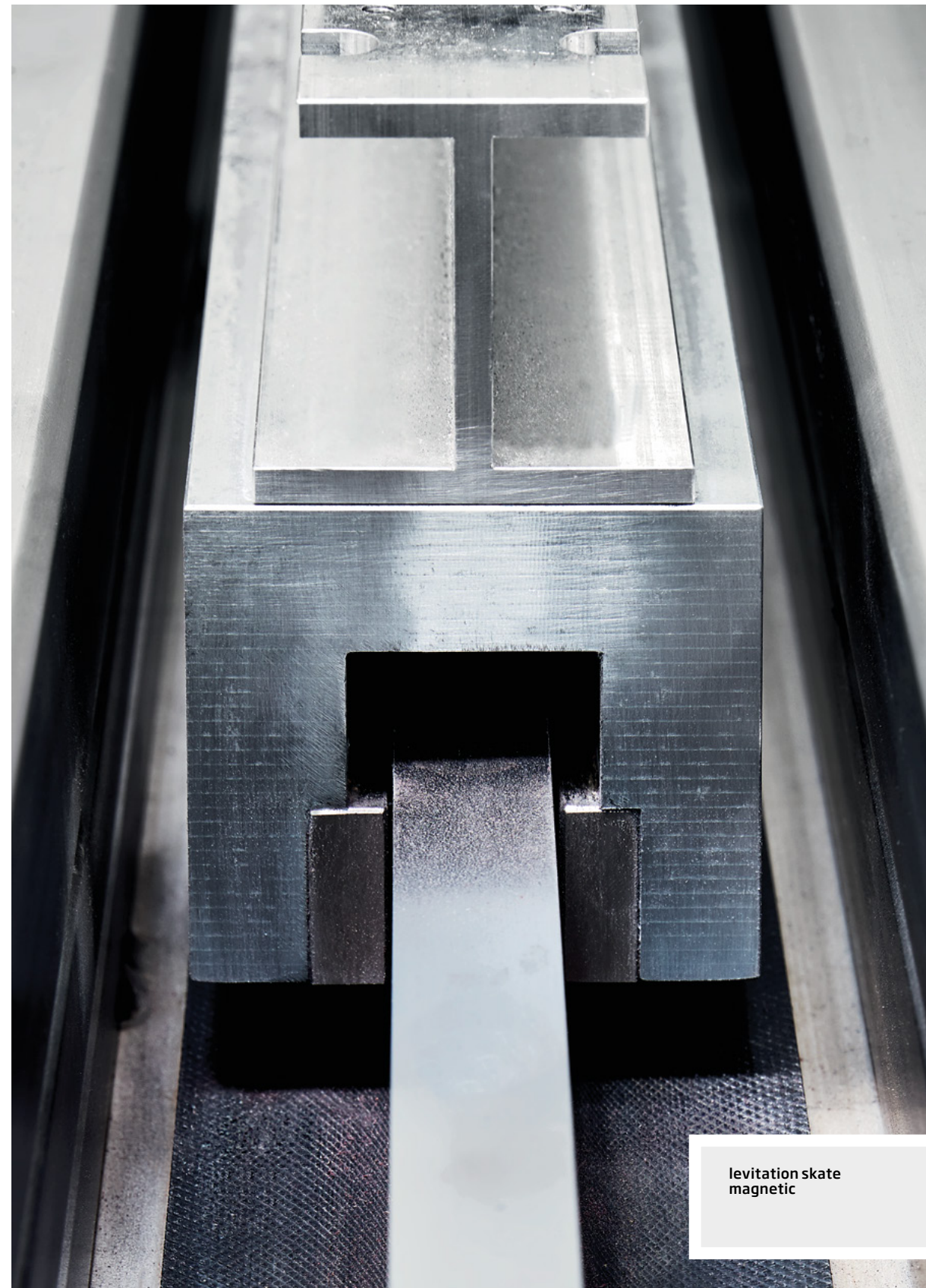
ØG[®] was created to manually move large and heavy lift and slide doors, without having to use electric lifting and towing motors, to offer the designer new solutions, where high technology meets design.



How ØG® is born

ØG® is born from the combination of magnetic levitation and Secco lift and slide doors. The sliding track of the lift and slide doors is equipped with Ironlev® passive magnetic skates, which allow to keep large masses raised along a small track.

The ØG® floats in the air, sliding without friction, as if they were without weight, gravity, hence the name of the ØG® "zero gravity" project.



levitation skate
magnetic

ØG®

the ØG® lift and slide door
it floats in the air, freed from its
weight it flows effortlessly, only
slowed down by the inertia of the
mass. There naturalness and power
of magnets they donate, to the simple
gesture of opening, to raise and slide
a door of enormous dimensions, up
to 1000 kg, an unexpected force,
perfect, without noise,
without electricity.



profiles

ØG® - Zero Gravity is built with elegant OS2 or EBE profiles by Secco Sistemi, for different design and size.



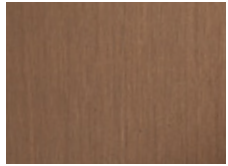
example ØG® with OS2 in burnished brass



example ØG® with EBE in 316 stainless steel

finishes

the ØG® lift and slide doors can be made in following fine finishes



patinated OT67
brass



satin-finished OT67
brass



waxed oxidized
corten steel



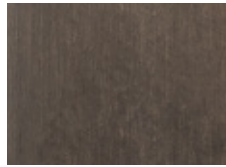
oxidized corten
steel



polished 316L
stainless steel



satin-finished 304
stainless steel



burnished 316SB
stainless steel



painted galvanized
steel

handles

elegant and discreet accessory, with slight and linear profiles, the Secco handles integrate perfectly with the frame and are produced in the same precious materials and finishes of the profiles (brass, corten, stainless steel) and they can be T, or L-shaped.



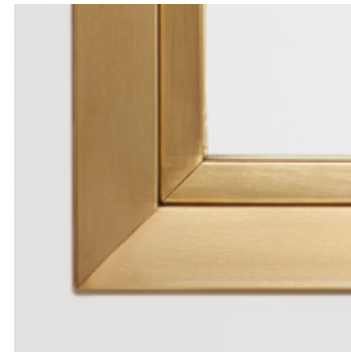
vitrivio
truncated



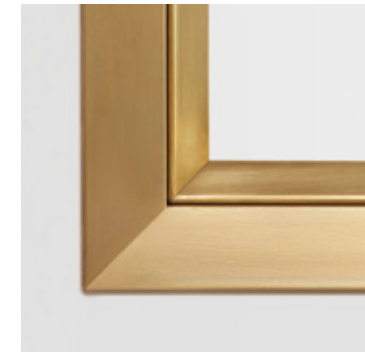
vitrivio
round

glass beads

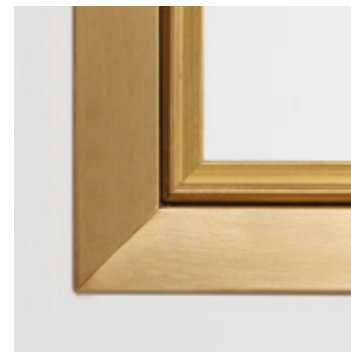
glazing beads are design elements made with the same materials and finishes as the window frame. Their shape and their size, compared to the section of the profile, are variants that can have different combinations and can change the perception of the space occupied by the window. The fastening of the glazing bead on the leaf is always concealed and, due to the continuity of the lines in the prospectus, the profiles can be welded together at the corners.



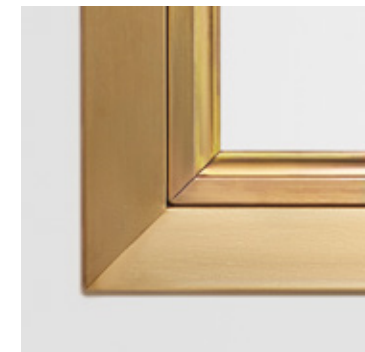
squared



triangular

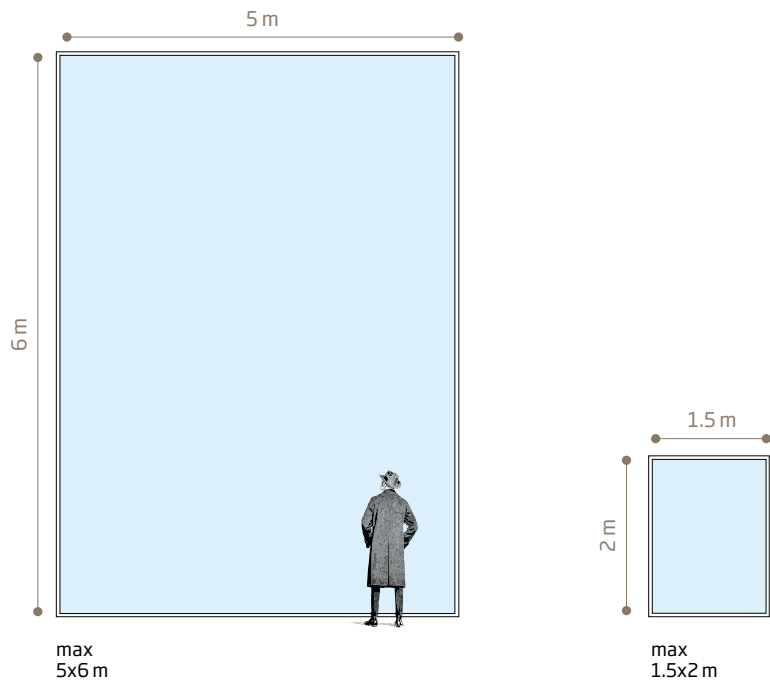


thin

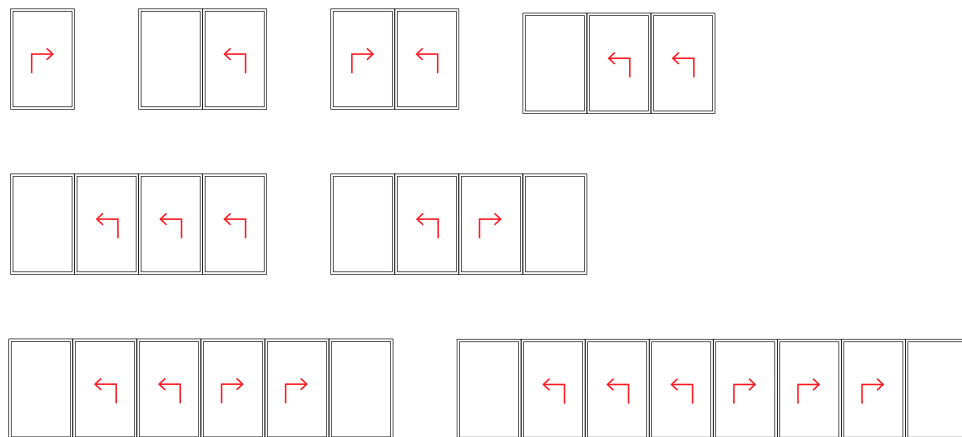


rounded square

dimensions

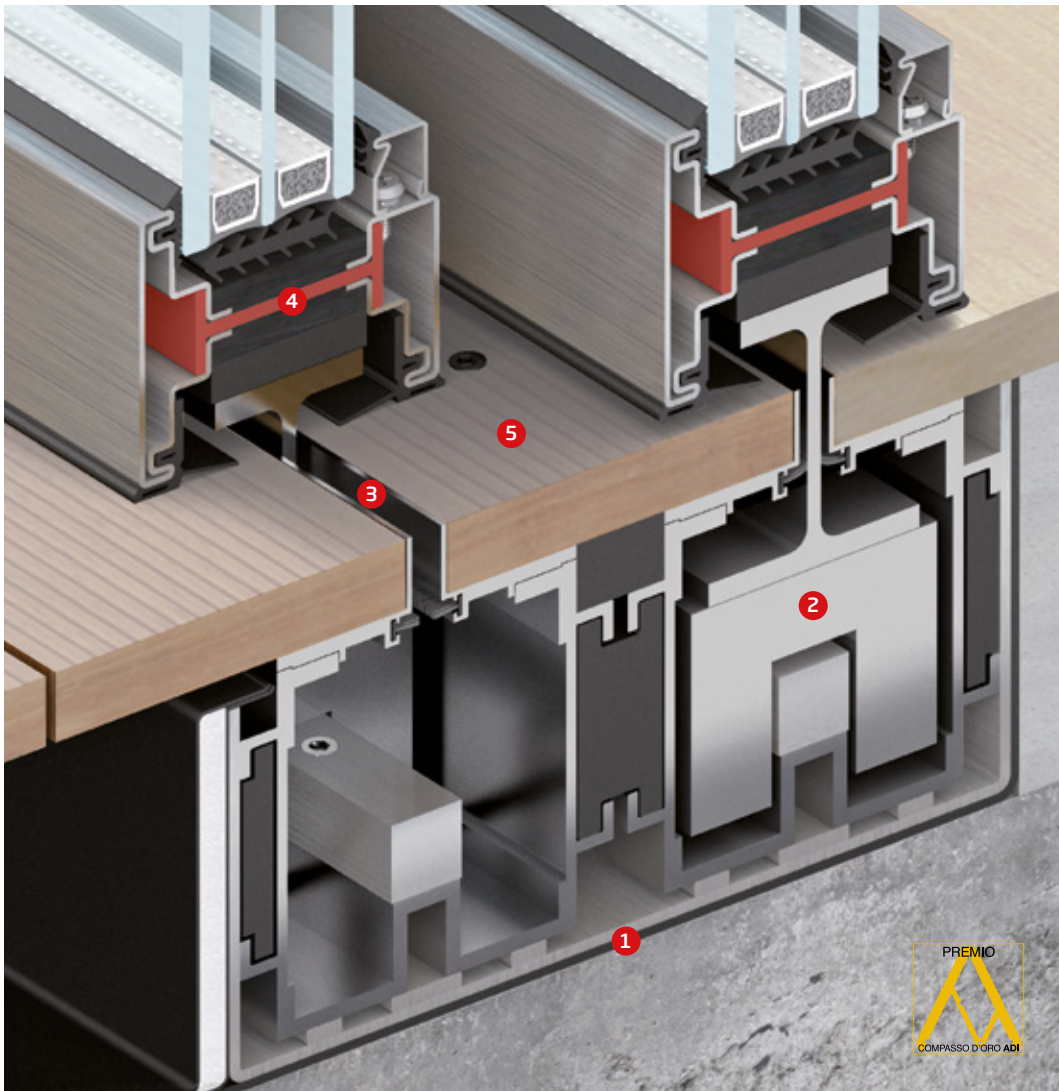


configurations





- 1 work group
- 2 Ironlev® magnetic levitation skid
- 3 sliding loop-hole
- 4 windows/shutters
- 5 floor; continuity between inside and outside and without tripping

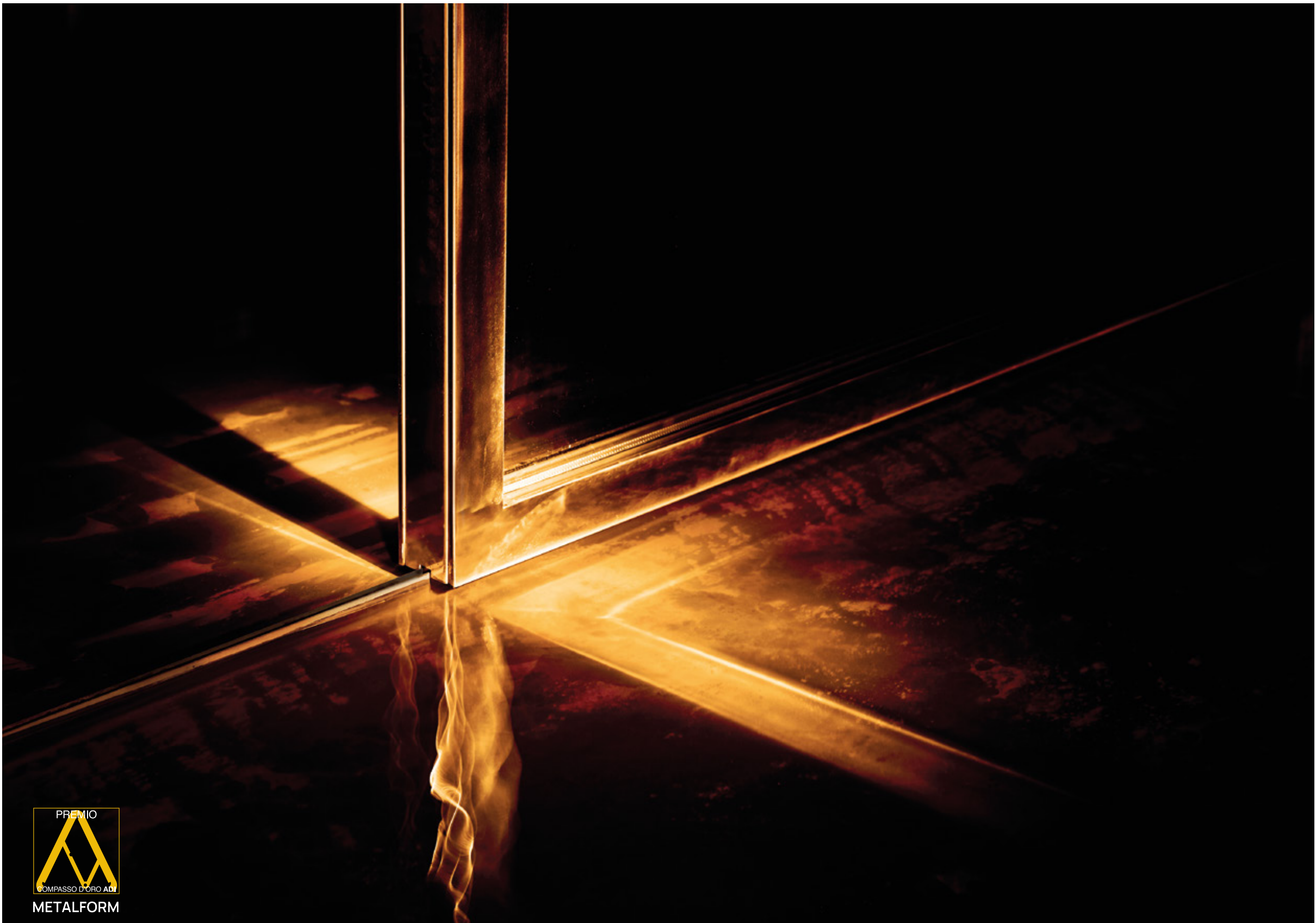


Passive magnetic levitation system, with Ironlev®, magnet technology, for handling lift and slide doors.

ØG® [zerø gravity] consists of a levitation unit recessed into the floor which contains the sliding rail, the Ironlev® magnetic pads and the beam connecting to the door.

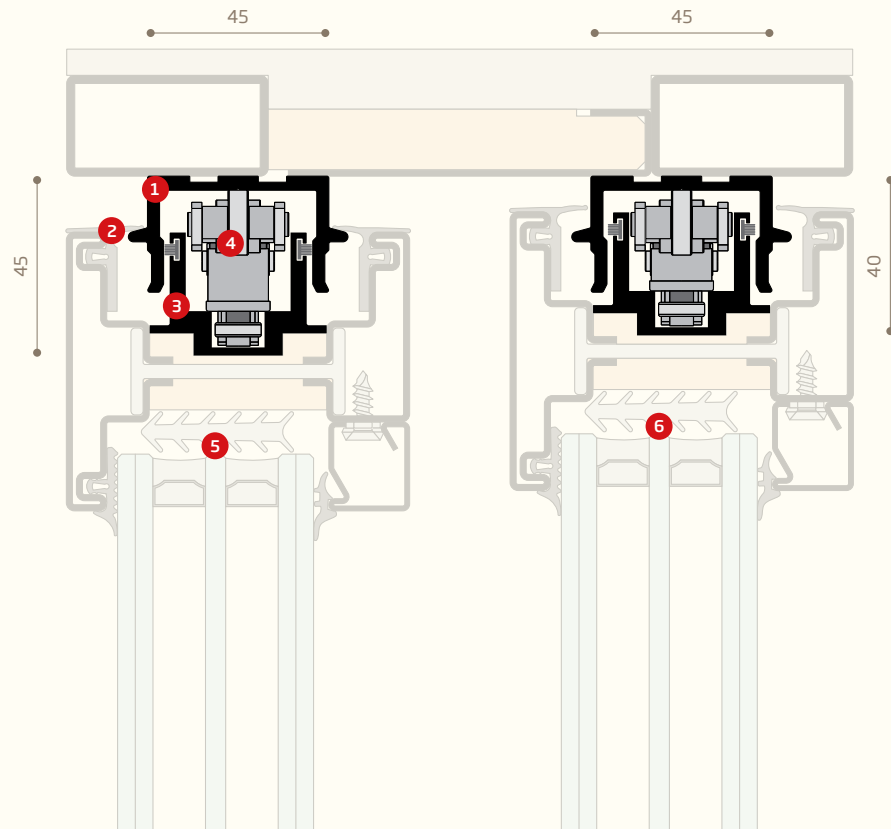
The system is accessible for maintenance through movable roof profiles that can contain the same finishes as the floors in their visible surface, for a perfect continuity between the inside and outside of the building. Only an 8 mm gap, closed by brushes, remains visible in the floor along the entire sliding of the door, without any protrusion and therefore tripping.

In the upper part of the door ØG® provides mechanisms to counteract the lifting thrust of the magnets and lower the door or window bringing it to the closing level. The system does not require electricity, it works manually even with heavy weights over 1000 kg.



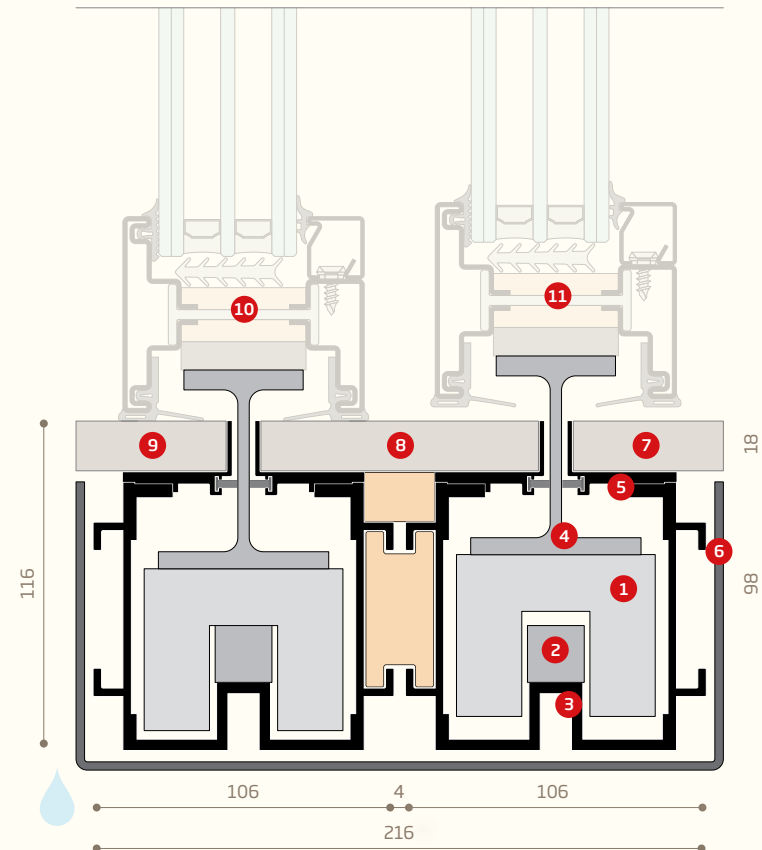
METALFORM

upper node



- 1 thermally insulated polyamide guide
- 2 double seal
- 3 continuous alignment guide
- 4 lowering and closing mechanism
- 5 lowered window frame - closure
- 6 raised shutters - opening

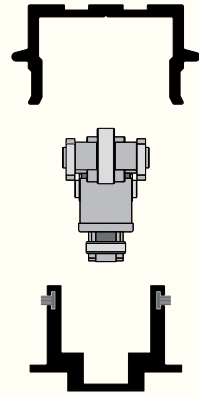
lower node



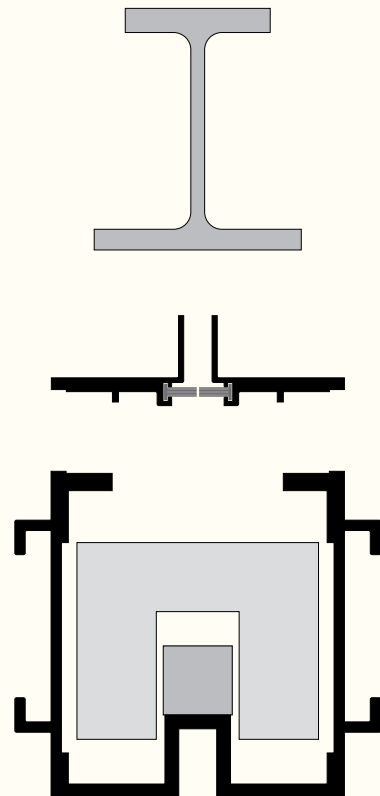
- 1 Ironlev® magnetic levitation runner
- 2 ferromagnetic stainless-steel rail
- 3 alignment profile
- 4 connecting beam between runner and shutter
- 5 finishing profiles for toothbrush holders
- 6 containment and laying box
- 7 interior floor
- 8 removable plate for access and maintenance of the system
- 9 external floor
- 10 lowered window frame - closure
- 11 window raised - opening

components

closing group



levitating group



FAQ

Does the system need electricity to work?

No, the magnetic action is passive, i.e. made by permanent magnets.

Can passive magnetism have negative effects on health?

No, the magnetism induced by the system, due to the low intensity of the magnetic field in play, cannot have negative effects on health, with ref. to legislative decree no. 159/2016.

Is the door locking system secure?

Yes, the restraint system prevents the door from tipping over outside its sliding surface, even in the event of the door or window being misused.

Does the system remain operational and safe in the event of flooding?

Yes, it stays functional and safe.

Are the air-tightness, water-tightness, wind-tightness, acoustics and thermal insulation similar to standard lift and slide systems?

Yes, the door or window has been designed to have performance akin to traditional systems.

Can the magnets be demagnetised?

Up to a maximum of -5% within 20 years, which does not absolutely affect system operation. Then they remain unaltered for an indefinite period.

Can the magnetic field affect mobile phones, magnetic cards or other objects sensitive to magnetism?

No, if you place electronic devices near the outside of the runner, you have no effect on the devices.

Does the sliding system require maintenance?

It is advisable to keep the running rail free from any accumulation of dirt, but it does not require lubrication.

How does magnetic levitation work?

The system of runners generates a magnetic field that balances the weight of the door or window (magnetic spring effect) by lifting it permanently.

How do I raise and lower the door or window?

By moving the handle. It is lowered by overcoming the magnetic support force exerted by the skids; the magnetic system remains in operation even when the door or window is lowered.

What does it take to lift it and then slide it?

It depends on the weight of the door or window; for example, in the case of a 700 kg window, the effort to raise and lower it is about 1 kg, while for sliding it, it is less than 1 kg.



Secco Sistemi is an Italian brand that symbolizes innovation and design awarded with “Compasso d’Oro” prize. It has been contributing to the evolution of window and door engineering for 70 years, inventing systems and profiles that have become benchmarks for the industry of this sector and continuing to improve them and interpret the latest projects and trends of contemporary architecture. So far 340 profiles have been developed in 4 selected metals - galvanized steel, stainless steel, corten steel and brass - and in 9 different finishes with an annual production of 2.8 million linear meters of profiled bars for 280,000 doors and windows.

METALFORM

MASTERS OF METAL

UNITED KINGDOM

METALFORM

NORWAYMETAL LTD

53 Chelsea Manor Street

London, SW3 5RZ

SALES@METALFORM.UK

+44 20 81298814

GERMANY

METALFORM GMBH

Carl-Zeiss-Ring 15A

85737 Ismaning

SALES@METALFORMGROUP.DE

+49 17663630406

NORWAY

METALFORM AS

Brochmannsveien 2

1950 Rømskog

SALG@METALFORM.NO

+47 401 62 446

METALFORMGROUP

SALES@METALFORMGROUP.COM