



TITANE

HIGH - RESISTANCE DOOR





TITANE, high traffic door



Architect: Juan Añón (AIC) Photographer: Wenzel

Designed from a 63 mm module, the TITANE door features a particularly robust hinge system: on the lower section there is a self-lubricating ball joint fixed to a hinge bearing and on the upper section there is an adjustable unit with a stainless steel arm. (system subjected to more than one million cycle of testing, class 8 in accordance with European standards).

The TITANE door has been carefully styled and features elliptical profiles, the concealed closing systems and hinges, and the fact that the door closer is recessed into the transom of the opening frame.

Security is reinforced with the integration of essential features such as security bolts, the integrated door-closer, the 3-point pivoting deadbolts and the electromagnetic closure systems with 600 kg retention capacity (2 suction cups) which are recessed into the transom of the opening frame. This door has been approved for use in French social housing

With its proven endurance, having undergone 1 million test cycles, and large dimensions (2.5 m high and 1.3 m wide per leaf), the TITANE door is ideal for use at the entrance to apartment blocks, public buildings, schools, offices, etc.

Secure homes

- Access control via an electromagnetic closure system and 3-point lock.
- Integrated door-closer and hinges.

Public places

- High traffic door available in 1 or 2 leaves, open in or open out, with independent leaves and finger protection.
- Can be integrated into shop fronts or curtain walling.
- Can be assembled with or without a threshold for premises frequented by disabled persons.

Schools

- Version with finger protection.
- On the hinged side, a special rounded profile is attached to edge of the opening frame.
- On the locking side, an EPDM tubular gasket is clipped to the edge of the opening and outer frames.



TITANE, high-resistance door



Key features and innovations

Large dimensions

- Leaves up to 2.50 m high and 1.30 m wide.
- Maximum weight per leaf: up to 140 kg.
- Glazing thickness: from 6 to 32 mm.

Resistance

- Torsion and buckling tests in accordance with the standard EN 9747-2 (vertical loads) 100 daN EN 9748-2 (torsion) EN 9747-2 (soft body shock) 150 joules.

Endurance

- Endured more than 1 million opening/closing test cycles in accordance with the standard EN 1191: class 8 on the EN 642-E scale.

Design

- The design of the opening frame is extended to the fixed sections.
- Concealed hinges.
- Integrated door-closer.
- More discreet and homogenous frames.

Accessibility and ease of use

- Removable threshold for maintenance purposes.
- Threshold-less installation to facilitate access for disabled persons.
- Version with finger protection ideal for public places (schools, colleges, etc).

Security

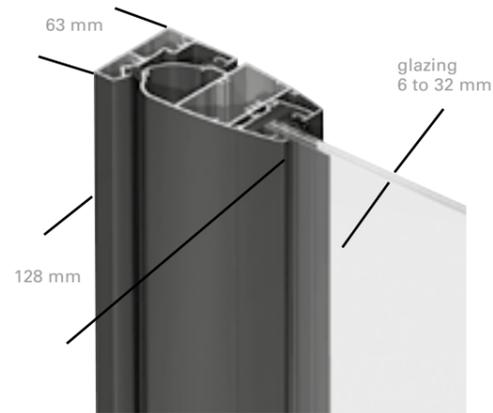
- Concealed and inaccessible hinges.
- Door-closer is recessed into the transom of the opening frame.
- Inaccessible external glazing gaskets.
- External glazing stops are clipped and screwed into the recess.
- Fixed internal glazing stops for forced entry and vandalism delay.

Forced entry delay

- Level 2 rating in accordance with the standard EN 1627, forced entry resistance test. Door fitted with 2 shear locks and a 3-point lock with rollers



TITANE, 63 mm rounded profiles for the door and fixed sections



- Rounded shape identical to the profiles of the opening/outer frames and the fixed sections on the composite frames.
- Minimal aluminium thickness (128 mm).
- Continuous intermediary transoms between opening frames and fixed sections.
- Can be built with large dimensions: leaves up to 2.50 m high and 1.30 m wide.
- Weight of 140 kg per leaf, safety glass from 6 to 32 mm.
- Patented system: concealed top and bottom hinges.
- Bottom section: centre plate assembly set into the ground and a corner piece forming part of the opening frame fitted with self-lubricating needle roller bearing.
- Top section: casing with adjustable rod fixed to the outer frame with an insert.



Handle with exclusive design Technal with lock



Inox handle with lock



Round push bar deported



Recessed trilobe push bar



Round inox push bar



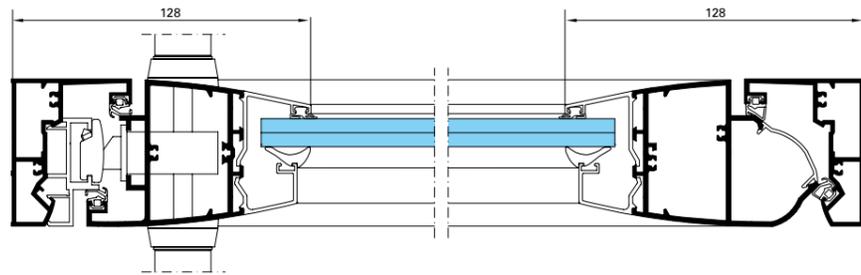
Half-moon handle



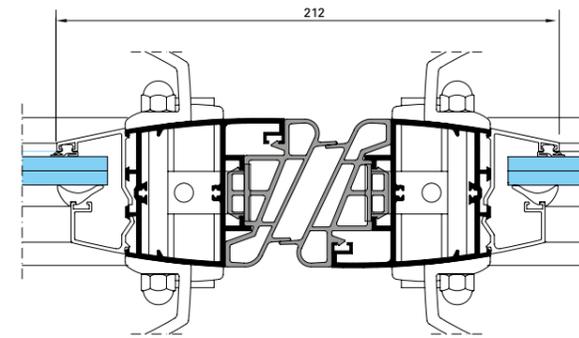
Sections

Open-in doors

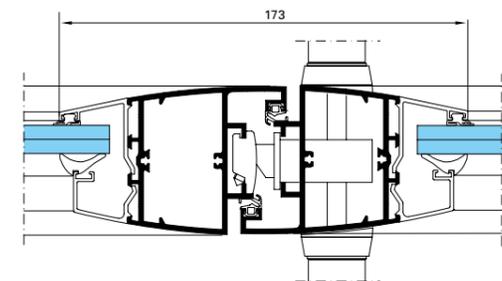
1 leaf



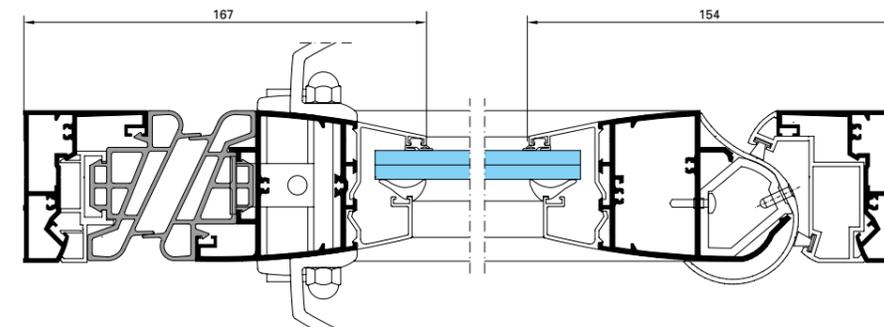
2 leaves with finger protection



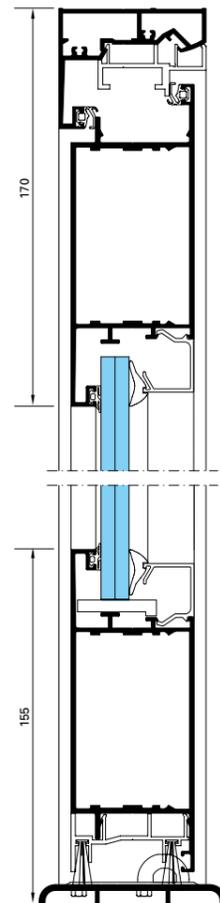
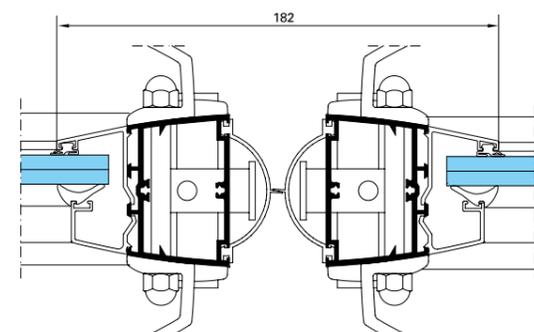
2 leaves



1 leaf with finger protection - level 2



2 independent leaves

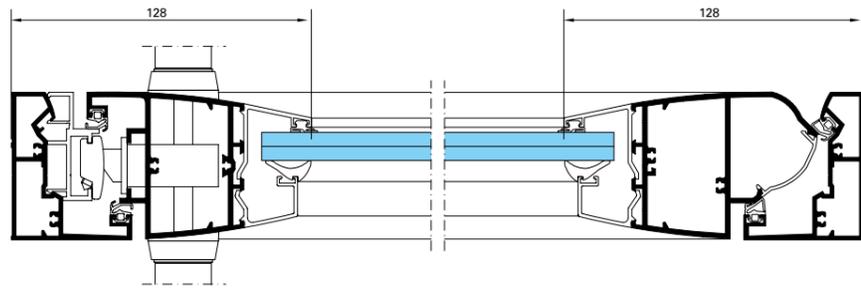




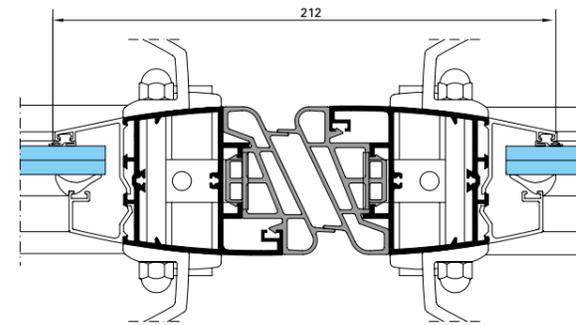
Sections

Open-out doors

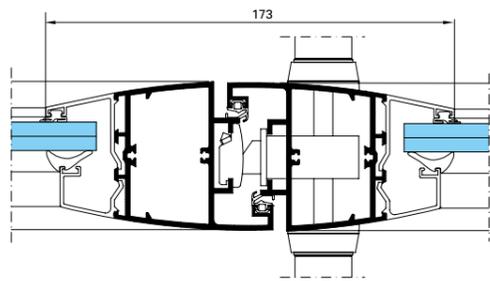
1 leaf



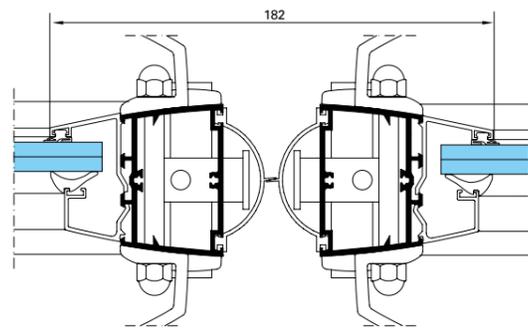
2 leaves with finger protection



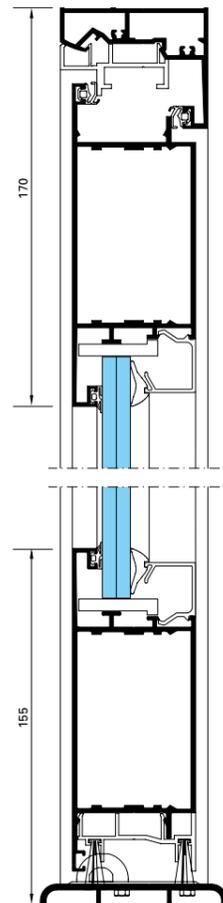
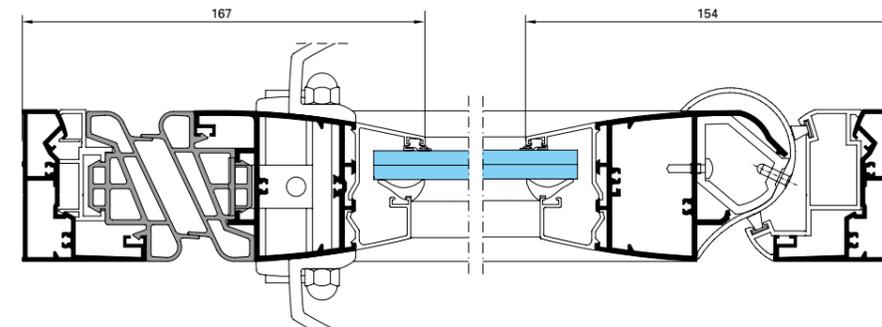
2 leaves



2 independent leaves

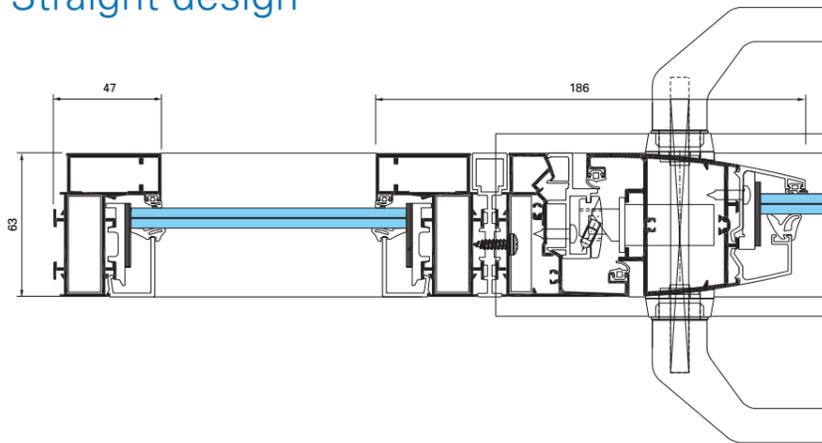


1 leaf with finger protection - level 2

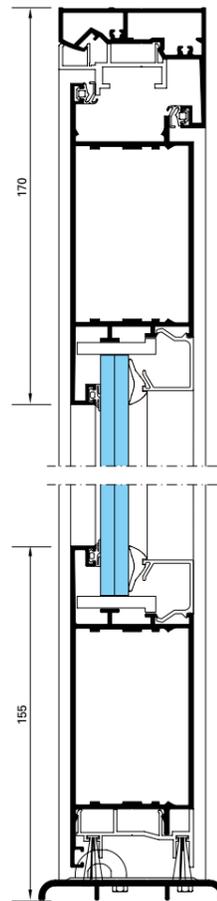
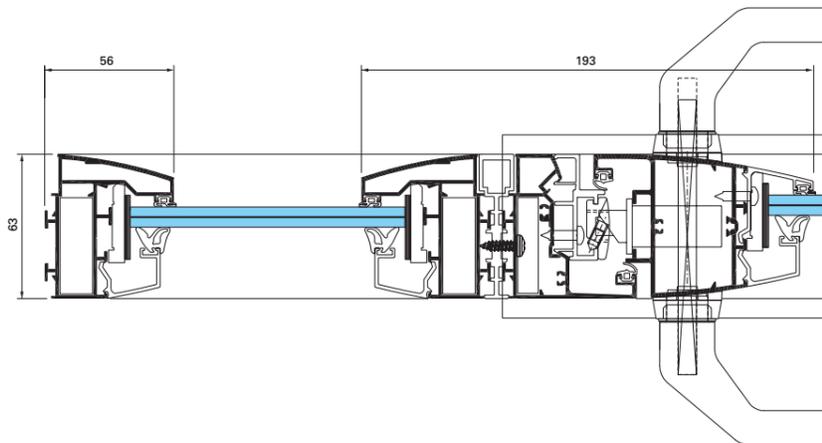


Sections Composite frames

Straight design



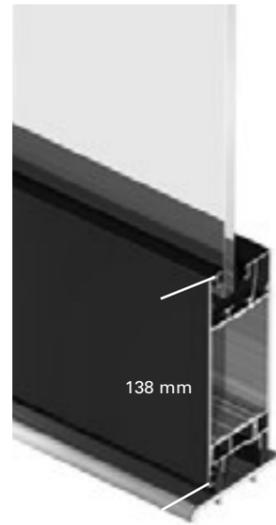
Curved design



Titane, resistance to wear and vandalism

Resistance

- Subject to torsion and bucking tests in accordance with the standard EN 9747-2 (vertical loads) 100 daN EN 9748-2 (torsion) EN 9747-2 (soft body shocks) 150 joules.
- Endurance: subject to more than 1 million opening/closing test cycles in accordance with the methods of the standard EN 1191: class 8 on the EN 642-E scale.
- Forced entry delay: level 2 rating in accordance with the standard EN 1627. Door fitted with 2 shear locks and a 3-point lock with rollers.
- Water tightness:
 - Continuous double row of brush gaskets right up to the hinges.
 - Additional water tightness provided by a tubular threshold.



Reinforced security

- Level 2 classified door according to the standard EN1627.
- Concealed hinges.
- Door-closer is recessed into the transom of the opening frame.
- Inaccessible external glazing gaskets.
- External glazing stops are clipped and screwed into the recess.
- Fixed internal glazing stops for forced entry and vandalism delay.



Locking mechanisms

- Electromagnetic lock recessed into the mullions for an extraction resistance of: 300 kg/standard electromagnetic lock, 750 kg/shear lock.
- Technal locks:
 - 1-, 2- or 3-point with rollers, recessed or on a full-length face plate
 - 3-point pivoting deadbolt
 - Emergency access cremone bolt
 - Electric strike
 - Push button
- Handle with cover plate, special pull handle, vertical push handle.

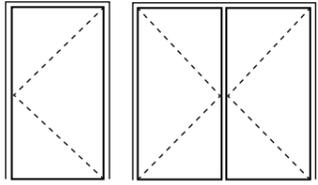


Magnetic shear lock, 3-point locking system with rollers

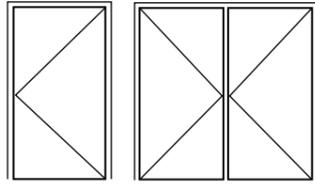


Close-up of version with finger protection

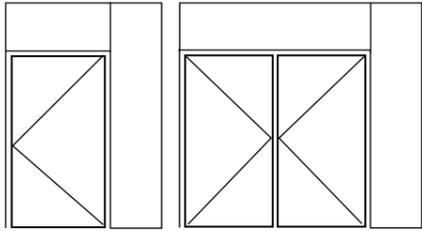
Applications



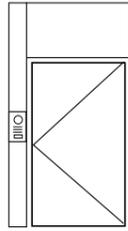
1 and 2 leaves, open in



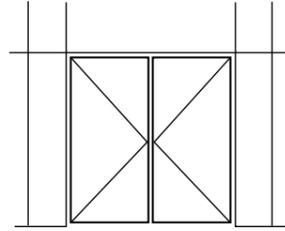
1 and 2 leaves, open out



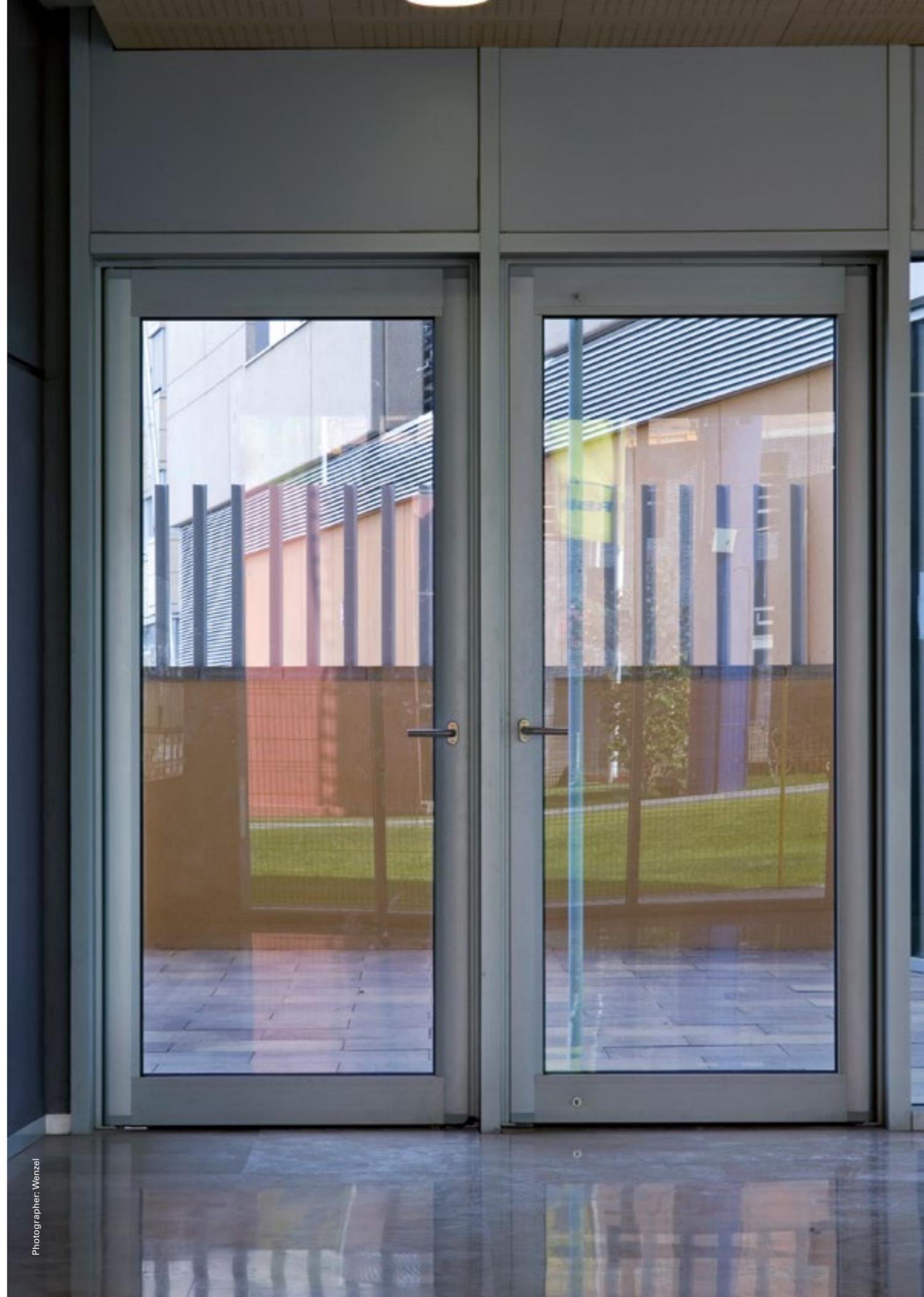
Composite frame with transom and/or side lights



Integration with a technical mullion



Integration with GEODE curtain walling





Architect: Juan Añón (AIC) Photographer: Wenzel

Materials and parts

As with all Technal systems, only the highest materials and components are used to minimise maintenance and ensure long-term performance.

- Aluminium profiles are extruded from 6060 T5 EN 12020, EN 573-3, EN 515 and EN 775-1 to 9 alloys.
- Fittings are cast from EN 12844 compliant Zamak 5.
- EPDM or TPE gaskets (Thermoplastic elastomer).
- Screws are made from stainless steel.

Finishes and colours

A wide range of finishes and colours is available to meet individual project requirements, enhancing existing buildings and offering architects and designers greater design freedom:

- Natural anodised in accordance with EN 123731: 2001.
- Polyester powder coating finishes in a wide range of colours in accordance with "QUALICOAT".
- TITANE is also available in lacquered finishes with exclusive Technal colours for a stylish and contemporary look.





1



2



3

1. Architect: DUNET Lionel Photographer: Xavier Benony
2. Architect: ATENA SARL d'Architecture Photographer: Paul Martinez
3. Architects: Joan Ramón Pascuets + Mónica Mosset arquitectes Photographer: Wenzel