

# l'arsenale

**Made in Italy Entrances  
Designed by You**



# l'arsenale

**L'Arsenale** of Venice was the beating heart, the hidden engine, the industrious secret of the Venetian naval force in which the ships that transformed Venice into a world power were manufactured.

L'Arsenale by Oikos is dedicated to those who design, to build entrance architectures and to Believe that every imagined solution is possibly feasible. Explore. **Believe.** Create.

# The global pluses of Oikos

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# Six product lines

Synua		74
Nova		104
Vela		132
Tekno		144
Project		174
Evolution		196



# Design

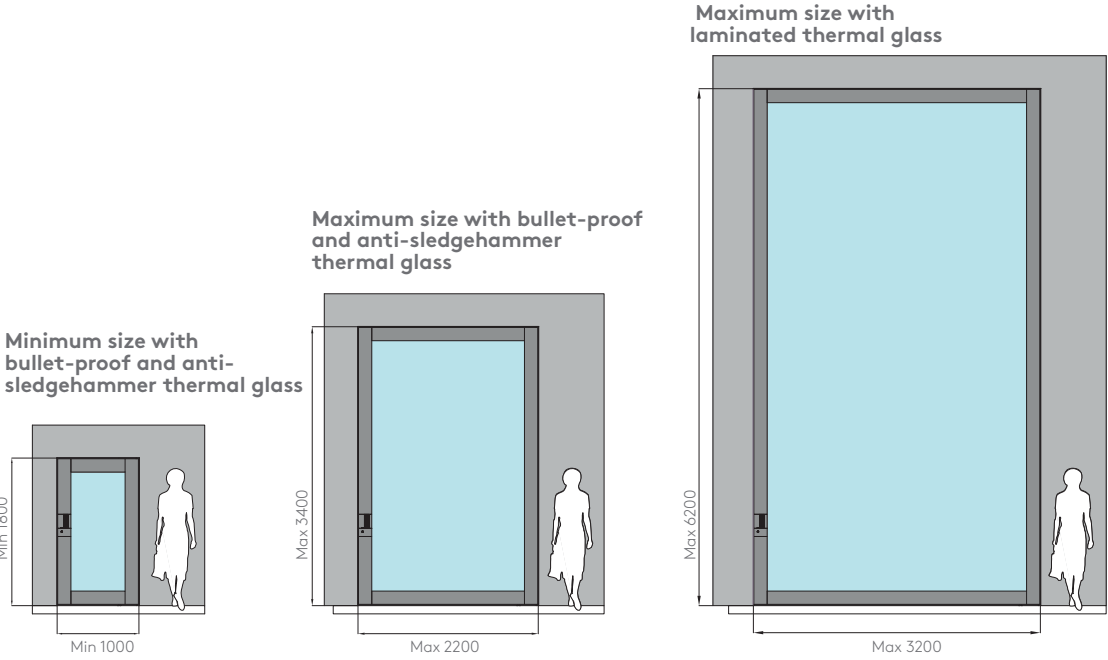
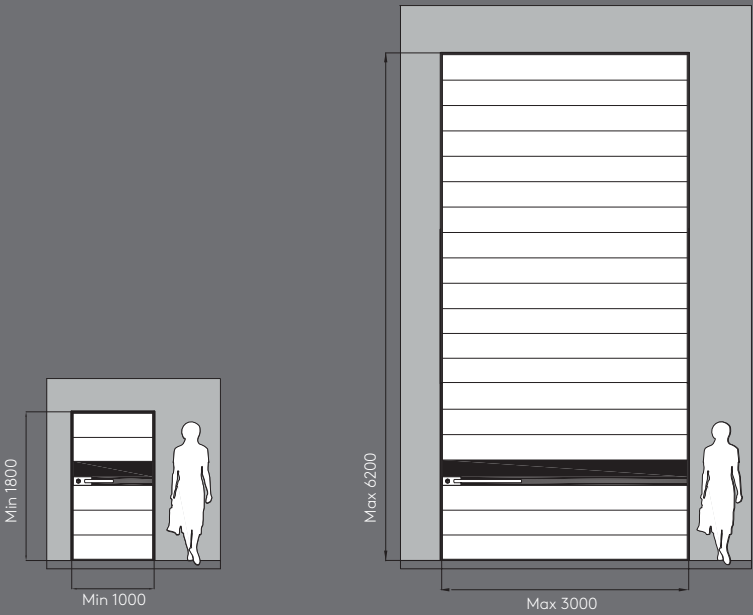
We elaborate innovative shapes and solutions by studying and applying colors and materials in harmony with the most current design trends.





# Size freedom

Limitless dimensions and solutions to give personality to the entrance architecture.



# Performance

## Insulation and protection for high comfort environments.

Fire resistance doors that do not fear water and wind, that insulate against heat, cold and noise. Safety, climate, silence: Comfort is a precious value.



## Break-in resistance

It is the ability to withstand break-in attempts measured by applying stresses with static and dynamic loads and simulating break-in attempts carried out with tools according to the resistance class.



## Acoustic

It is measured in dB and is the ability to prevent noise from passing through the door.



## Thermal

It is indicated with a U; it is measured in  $[W/(m^2k)]$  and is the ability to prevent heat exchange between two environments. (Optimal values are those close to 0).



## Air

Air permeability is measured in classes ranging from 0 to 4, indicating the ability to prevent air from passing through.



## Water

Water tightness is measured in classes ranging from 0 to 9, indicating the ability to prevent water from passing through.



## Wind

Wind resistance is measured in classes ranging from 0 to 5, indicating the mechanical resistance of the safety door to gusts of wind.



## Fire

The reference values are EI 30, EI 60, EI 90, EI 120. They indicate the door's ability to withstand the passage of flame expressed in minutes.



## Hurricane

The ability to withstand impacts by simulating impacts caused by debris from a "Missile Test" hurricane, and violent, continuous extreme wind cycles.



# Certifications

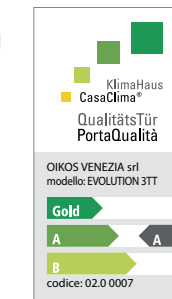
Oikos doors bear the CE marking in accordance with European Regulations 14351-1 and EN 16034.



American Laboratory accredited for Fire Resistance Testing according to American Standards.



The Casa Clima Agency is a Certifying Body that promotes and encourages policies aimed at reducing the use of energy resources, limiting the environmental impact and ensuring the well-being of people.



Miami County agency that guarantees the suitability, according to strict quality standards of door resistance to extreme wind loads caused by hurricanes.



Product certification. The external supervising body IFT controls and verifies occasionally the production phases and characteristics of the used materials.



DNV is the body that constantly verifies that the ISO 9001 quality system is applied at Oikos.



EN 71-3 "Toy Safety". Oikos uses water-based paints that do not release harmful substances along the time, protecting environment and people.



Spanish laboratory recognized by UL to perform fire resistance tests according to strict American regulations.



The Swiss agency VKF verifies that the products comply with the fire resistance characteristics required by the Swiss certification



Certification Body recognized in Italy and internationally to issue certifications: intrusion detection, acoustics, air, water and wind, fire resistance, etc.





# Materials

Albini's Veliero and the two rings echoing Scarpa act as custodians of our collection of materials.



# Wood types and materials "167"

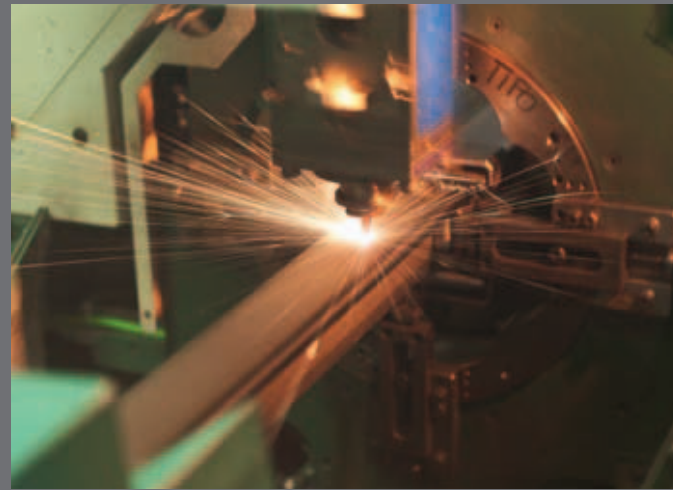
Different materials and woods with standard and customized finishes, colors, shades on request.





# Oikos' Arsenalità

Workshop. When craftsmanship becomes industrial.



Carpentry work The heart of crafts processing experiences here its peak.



Assembly. One by one, piece by piece, each door acquires its identity.



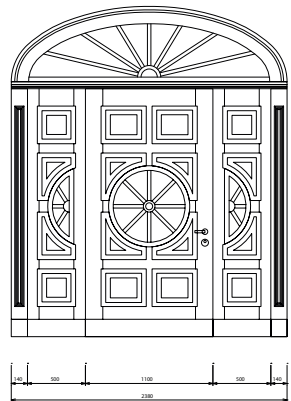
Testing and packing: important and delicate moments to ensure the functionality and integrity of the door.



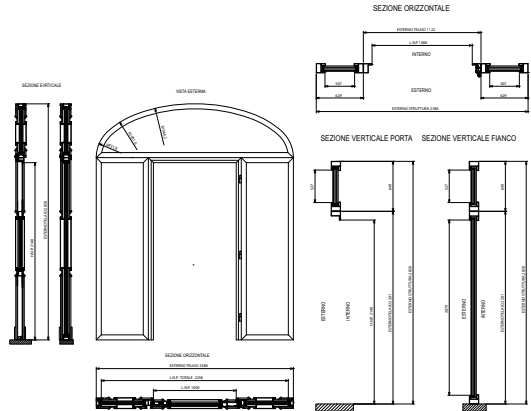


# Customized design

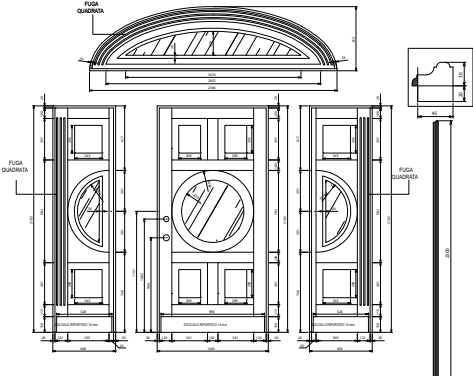
When custom design meets the creative genius of Made in Italy and the passion of craftsmanship, each creation becomes a work of art.



Customer project



Metal structure

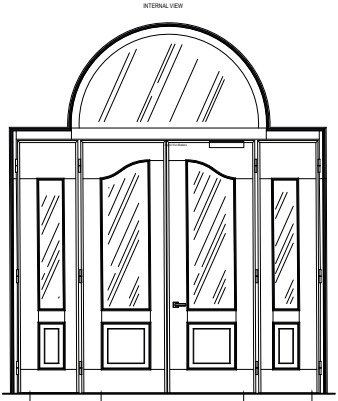


Wood coverings

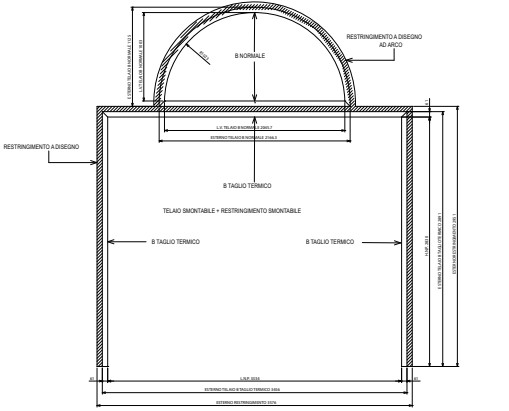


Finished realization

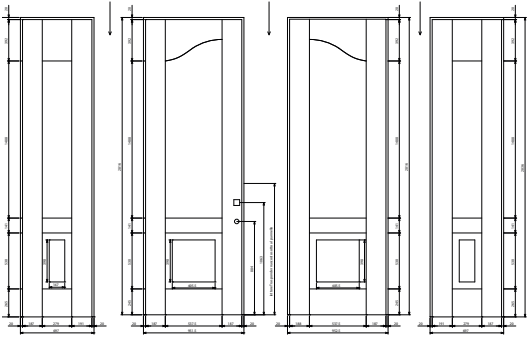
Customer project



Metal structure



Wood coverings

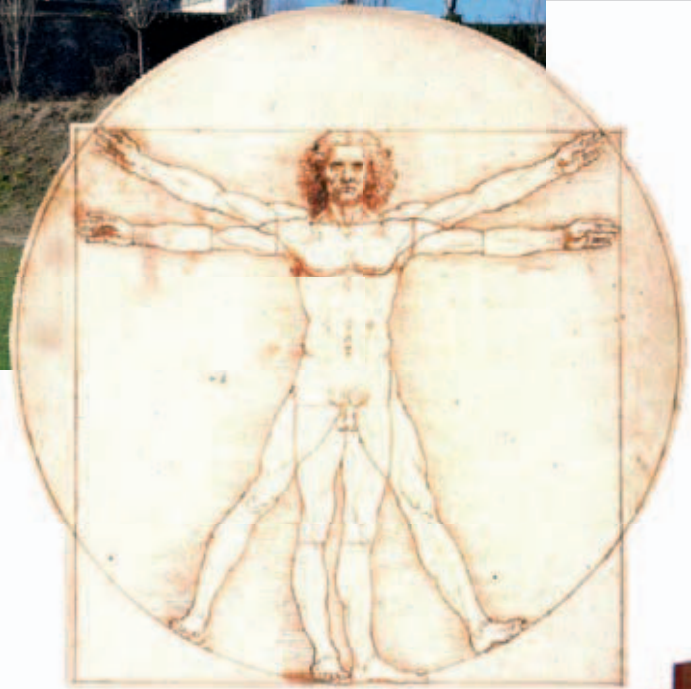
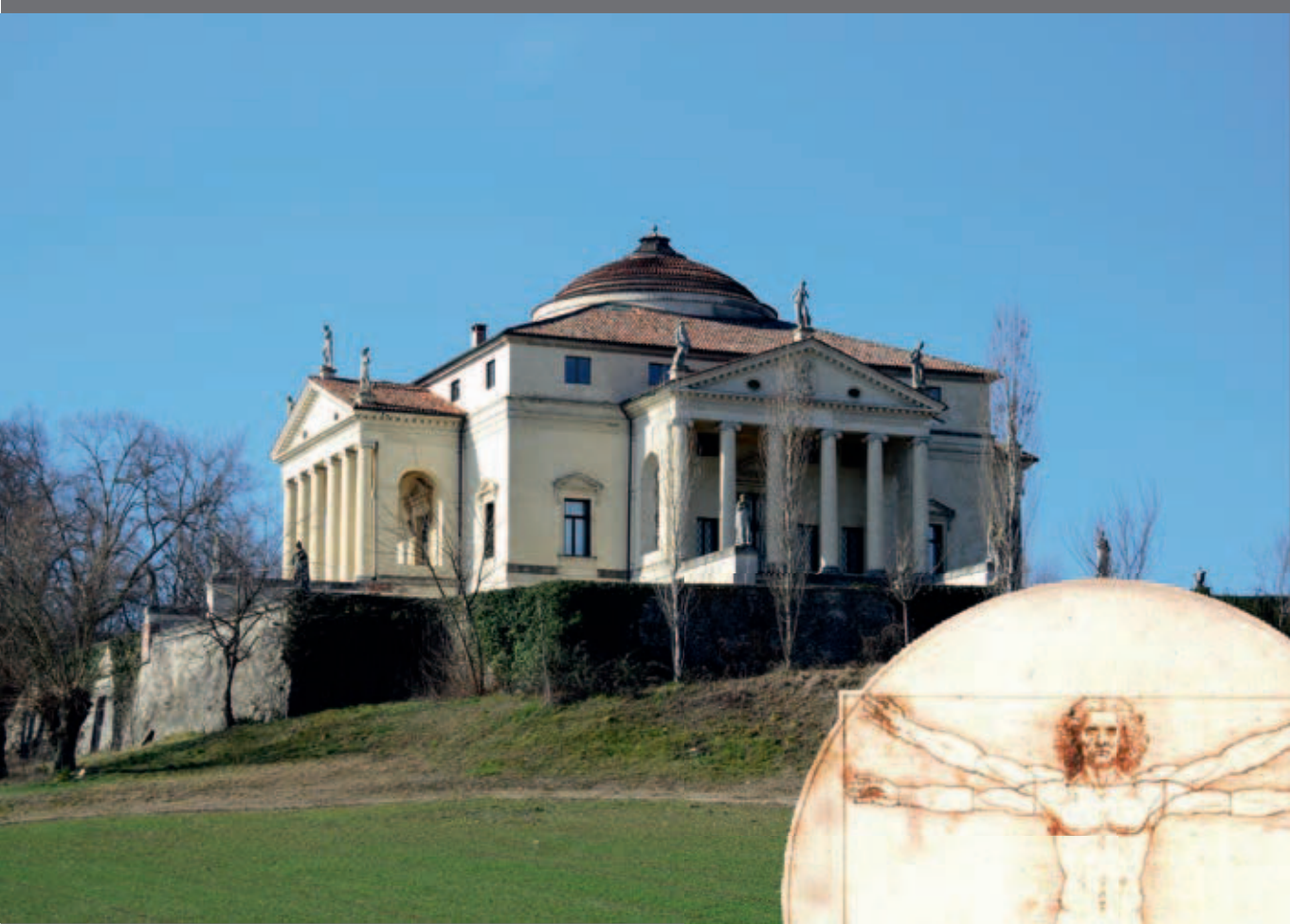


Finished realization





# Culture



"We Italians are like dwarfs on the shoulders of a giant, all of us. And the giant is culture, an ancient culture that has given us an extraordinary, invisible ability to grasp the

# Research

The territory in which we live is an open-air museum that continuously feeds our creativity and freedom of expression, giving rise to our inventiveness.



# Passion

This is the "secret ingredient" that we use every day in everything we do. It's the way we work, the only way we know how to work.





# Oikos Academy

Assistance and assembly



Installation courses



Commercial courses



Technical courses



Conventions and meeting



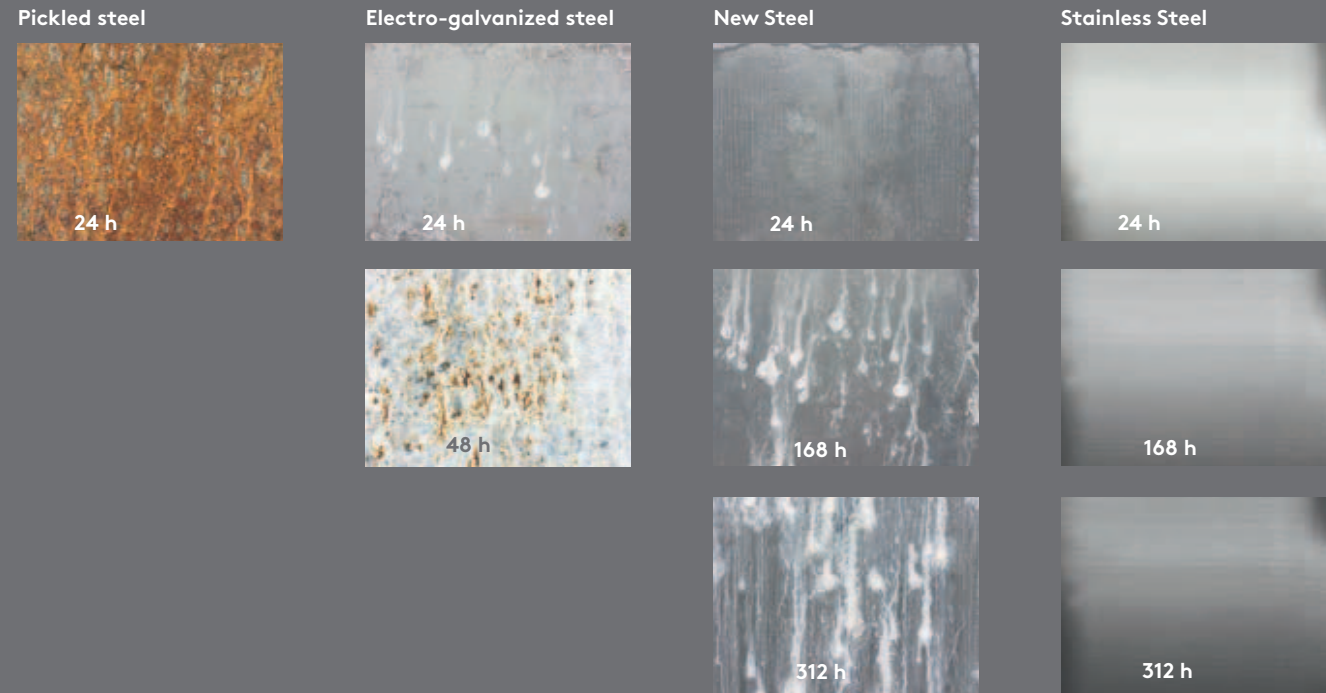
Cultural training



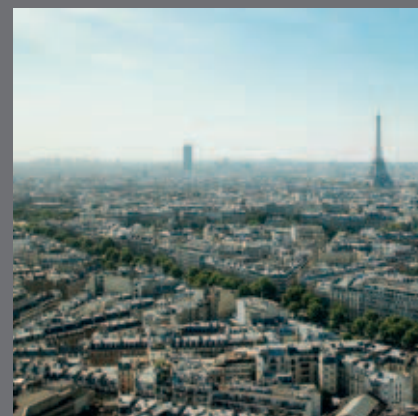


# New Steel

Standard use, on all Oikos products, of a new high-performance steel resistant to rust and corrosion according to UNI EN ISO 9227 certification.



Normal weather conditions



Aggressive weather conditions



Plus material kit to be used in case of installation in aggressive weather conditions.



# Salt spray resistance handles and accessories

All handles and accessories are subject to normal natural tear and wear following their daily use and their exposure to specific climate conditions, which can accelerate normal tear and wear spoiling in short time their surface finish. Resistance to tear and wear as well as surface finish resistance are established pursuant to the **UNI EN ISO 9227:2017** standard indicating as measurement unit the resistance in hours to neutral salt spray corrosion NSS.

Oikos has tested its products according to the manufacturing material and the related surface treatment in order to allow properly selecting the component and related finishing according to the exposure type.

In the case of special conditions such as in the immediate vicinity of the sea, in order to limit wear on the surfaces, frequent cleaning of the accessory is necessary, as well as suitable treatment with non-aggressive products.

**CAUTION!**

Also, in case of lack of ventilation, e.g. the door remains closed for long time, surface oxidation on components like hinge bolts and dead bolts occurs very quickly. Venting the environment (room) allows avoiding the occurrence of this phenomenon.

Material	Finish	Salt spray resistance in hours	Exposure	
Brass	OL	24	Protected	
Brass	CS	24	Protected	
Brass	CL	24	Protected	
Steel	Zinc-plated	24	Protected	
Brass/Steel	OL PVD	168 - 192	Exposed	
Stainless Steel 304	Brushed	268 - 312	Exposed	
Stainless Steel 304	Brushed	408 - 504	Exposed	
Stainless Steel 304	OL TZ - CS TZ CL TZ	528	Very exposed	

**Legend - finishes:**

OL Polished Brass CS = Satin Chrome CL = Polished Chrome

PVD = Physical Vapor Deposition (Coating treatment with zirconium nitrides) TZ = PVD Superior

**New Steel**

The use of a new, higher-performance, rust/corrosion-resistant steel with seven times the strength of galvanized steel.

Used for all metal door components: - Counterframe

- Frame
- Leaf (tray, reinforcing bar, switchlocks, etc...)

Material	Finish	Salt spray resistance in hours	Exposure	
Steel	New steel	312	Exposed	

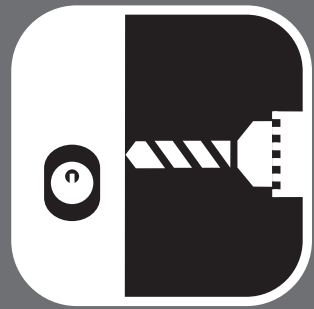
# Safety

Convey safety to the environments and protect the lives of those who live there. The break-in resistant technology by Oikos has always had these objectives, therefore safety doors Class 3 and 4 have been produced, which are resistant to mechanical burglary attempts and attempts carried out using electrical tools.



## Break-in resistance class 3

It is the ability to withstand break-in attempts measured by applying stresses with static and dynamic loads and simulating break-in attempts carried out with manual tools such as a crowbar, screwdrivers, pliers, etc. for a maximum test time duration of 20 minutes.



## Break-in resistance class 4

It is the ability to withstand break-in attempts measured by applying stresses with static and dynamic loads and simulating break-in attempts carried out with manual and electric tools such as a hammer, chisel, ax, shear, electric drill, etc. for a maximum test time duration of 30 minutes.

# Tubular frame

Evolution	Synua	Tekno	Project	Nova
<b>Evolution 3TT</b> 	<b>Synua 3TT</b> 	<b>Oikos tubular frame</b> 		<b>Open profile frame</b> 
<p><b>Installation without counterframe</b> Because of its rigidity, the particular closed section of the frame allows the installation of the door even without counterframe, in absolute security. It is the ideal solution in renovations.</p>		<p><b>Open profile frame</b> </p>		
<p><b>Simplicity of laying</b> The tubular frame does not feel the influence of the imprecision of the wall on which it is to be laid, which is why it guarantees a perfect installation and an excellent aesthetic finish.</p>		<p><b>Open profile frame</b> </p>		
<p><b>Safety</b> The frame does not have open sides and therefore they cannot be attacked, it is reliable and safe.</p>		<p><b>Open profile frame</b> </p>		
<p><b>Thermal and acoustic insulation</b> The frame having a closed structure provides a more effective insulation, creating a useful chamber to separate the interior from the exterior.</p>		<p><b>Open profile frame</b> </p>		
<p><b>Deformation and torsion</b> The frame formed by jambs and transom in closed tubular section, provides such a resistance as to make it difficult to deform and sensitive to torsion.</p>		<p><b>Open profile frame</b> </p>		



# Thermal revolution

Energy efficiency from the threshold.



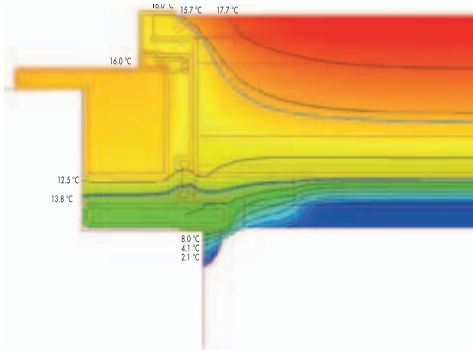
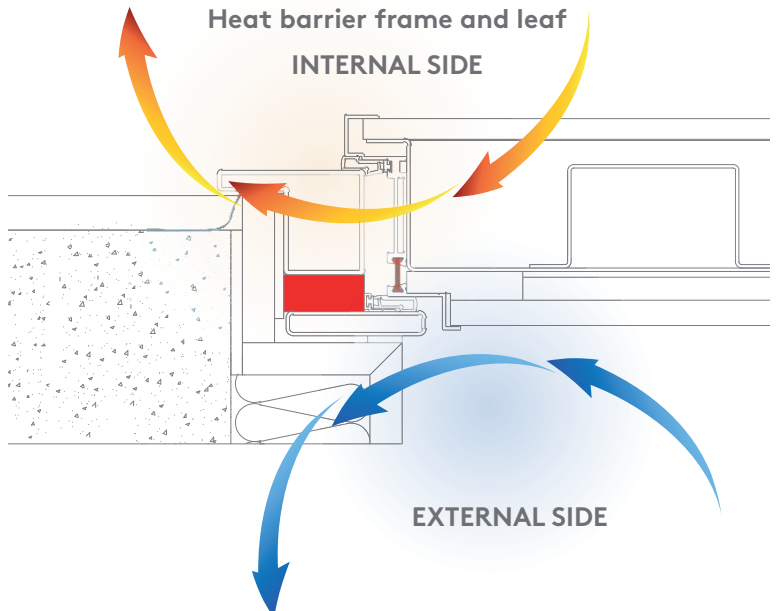
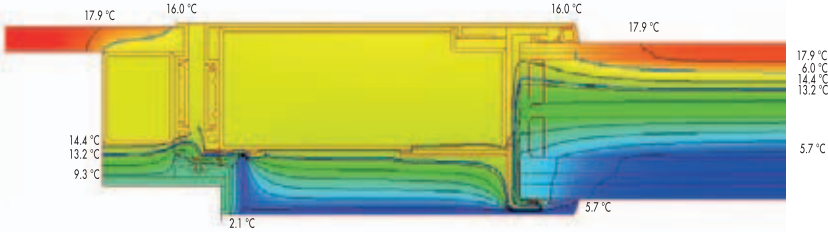
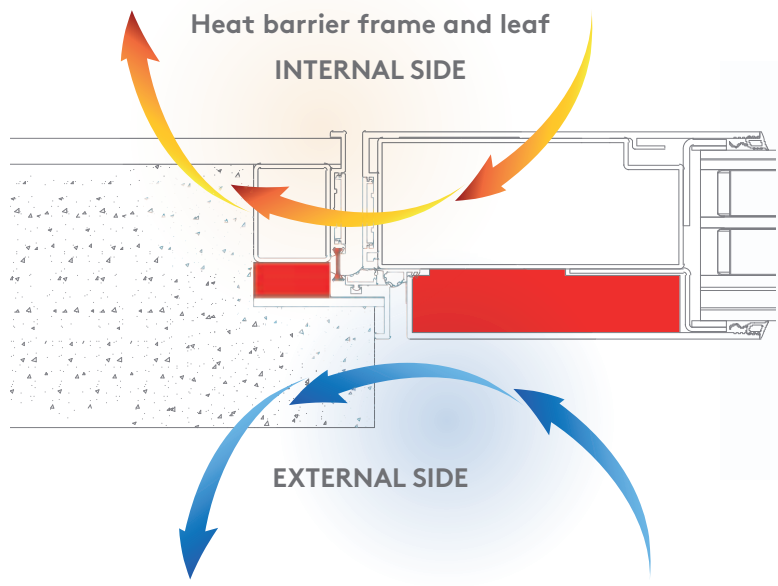
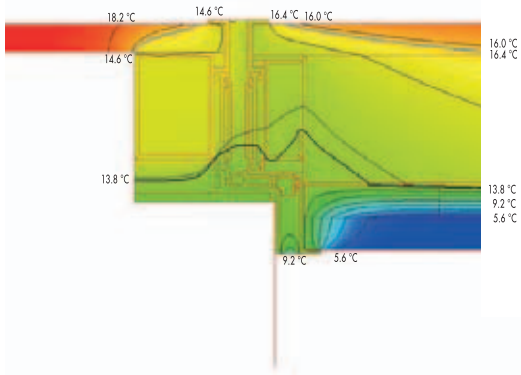
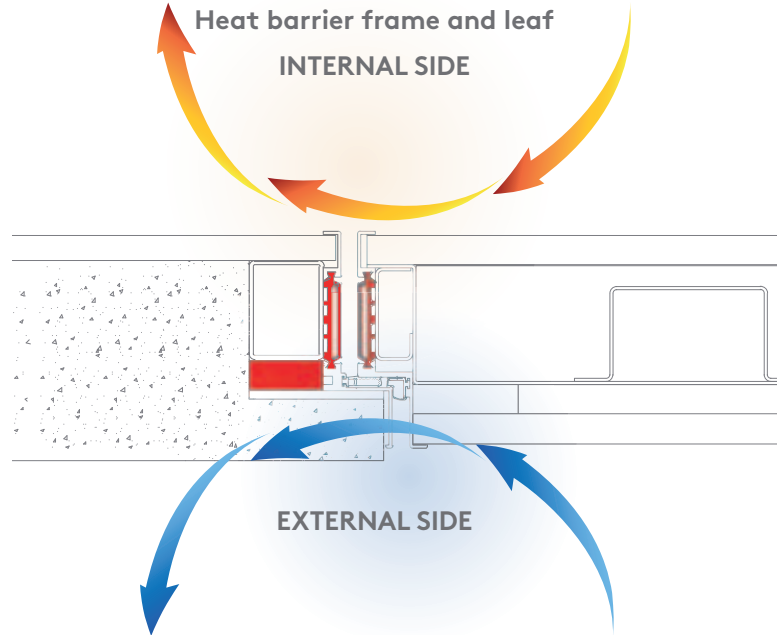
**Synua 3TT**  
The pivot door for large dimensions, which can be made with a heat barrier frame and leaf.



**Nova**  
The safety door that allows creating fully glazed entrances in any size, with standard supplied heat barrier frame and leaf.



**Evolution 3TT**  
The door with both classic and modern aesthetics realized with a heat barrier frame and leaf.





# Condensation

**Evolution, Synua, Nova doors with heat barrier**

The safety doors are characterized by a high break-in resistance and in order to assure such performance they are manufactured using metallic material from inside to outside in seamless way. These constructive peculiarities confer to the binomial **frame - leaf** great performance of mechanical resistance and structural solidity and at the same time, being steel and aluminum materials with high thermal conductivity, they penalize the values of thermal insulation and could promote the emergence of the phenomenon of condensation.



Maintaining unchanged the performance of mechanical and structural resistance Evolution 3TT - Synua 3TT - Nova doors with the interruption of the continuity of the frame and aluminum they can ensure:

- Unchanged door design
- Excellent thermal insulation performance
- Excellent reduction of condensation

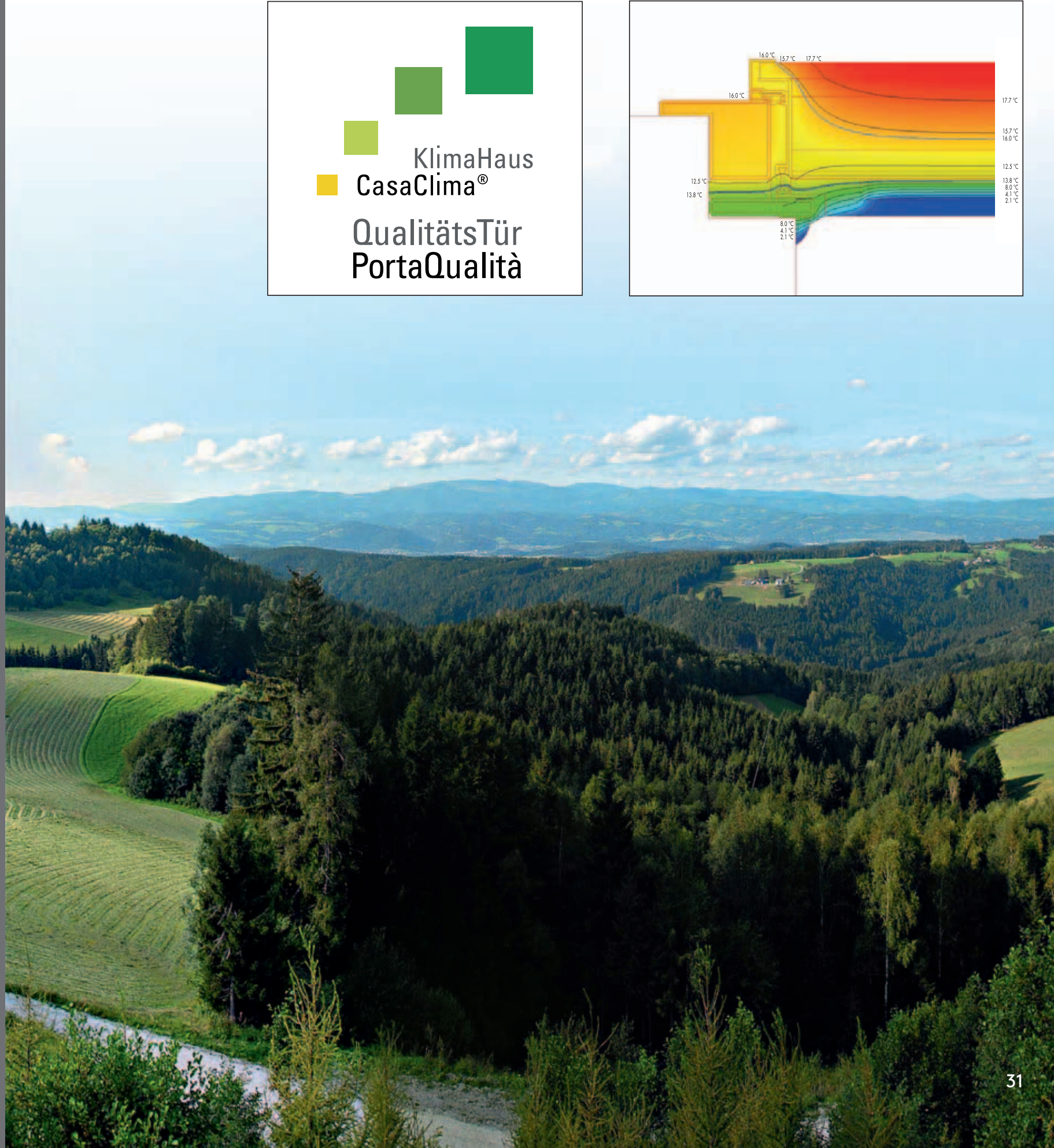
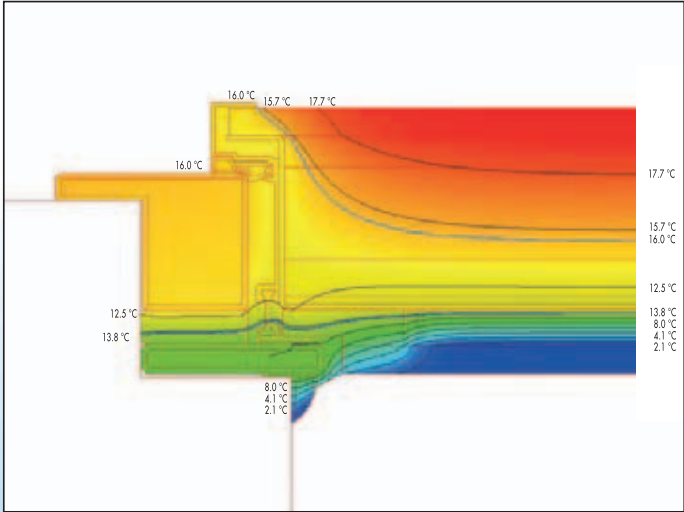


# Energy saving

**Choosing to respect the environment by decreasing energy use means contributing to the saving of environmental resources and saving the planet.**

Casa Clima promotes, encourages and supports these policies by helping citizens and businesses achieve significant improvements in their use of energy and renewable energy sources.

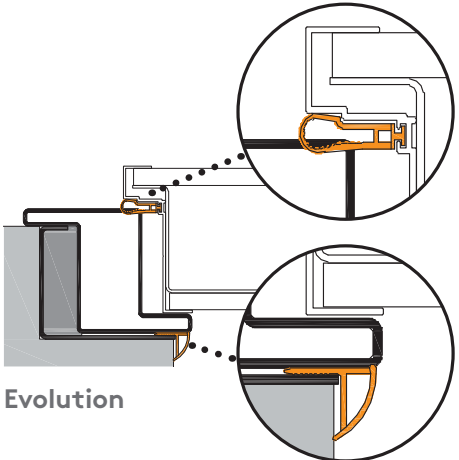
Oikos is a Casa Clima partner and shares its aims.



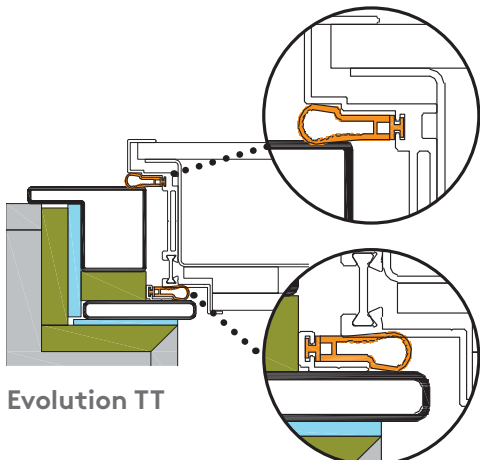


# Frame sealing strips

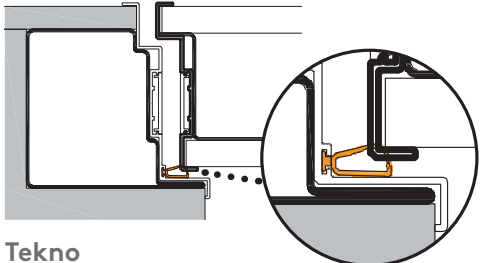
The perimeter frame sealing strips against atmospheric agents, are extruded in plastic material of different nature and hardness to have characteristics of anti-crushing and non-deformability with the variation of temperature and along time.



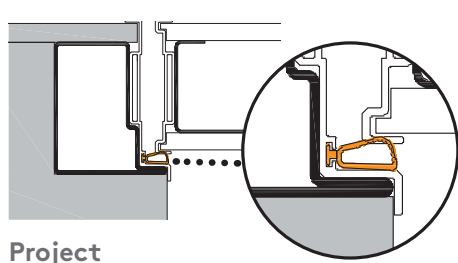
Evolution



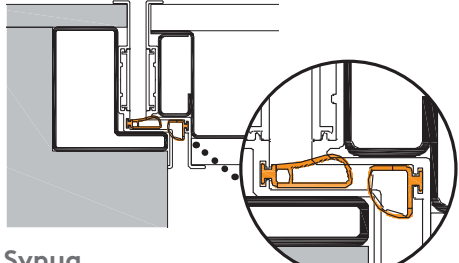
Evolution TT



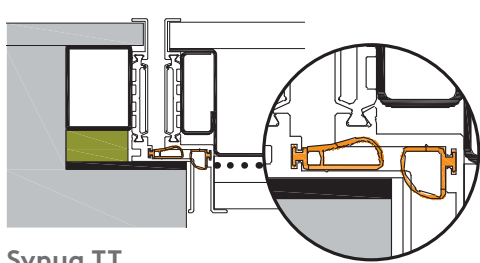
Tekno



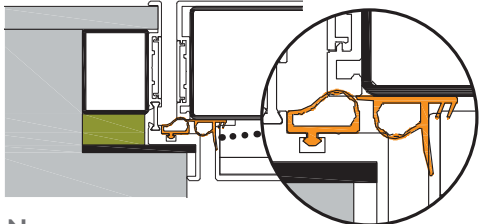
Project



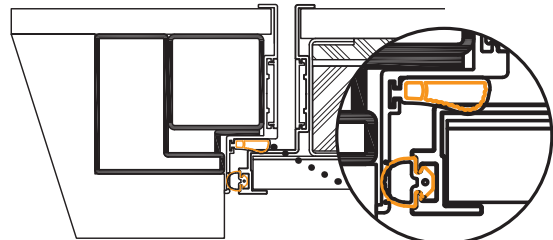
Synua



Synua TT



Nova



Synua anti-hurricane



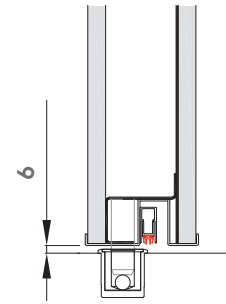


# Dam Kit Invention

The essential is invisible to the eyes.

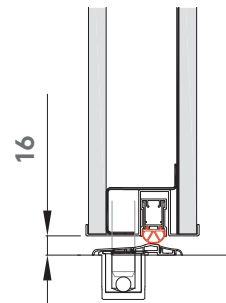
values **Standard draught excluder**

- 2
- 0
- C4



values **Mose Kit**  
The use of the Mose threshold is necessary when you want to obtain maximum performance and there is a non-homogeneous floor or with a limited flatness between the marble floor and the internal floor.

- 4
- 5A
- C5



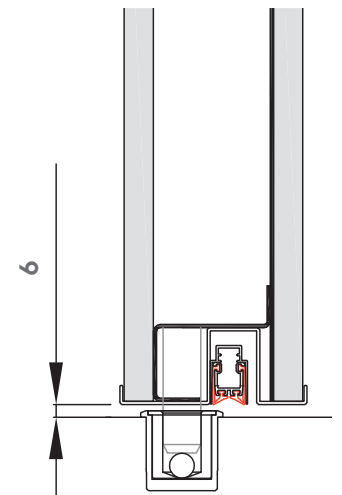
The values indicated refer to the Synua door

# maximum threshold performance... without "the threshold"

**Dam Kit**

Maximum performance of an invisible threshold with homogeneous floor and no steps.

- values 4
- 5A
- C5



The values indicated refer to the Synua door





# Cylinders

## The fundamentals of safety

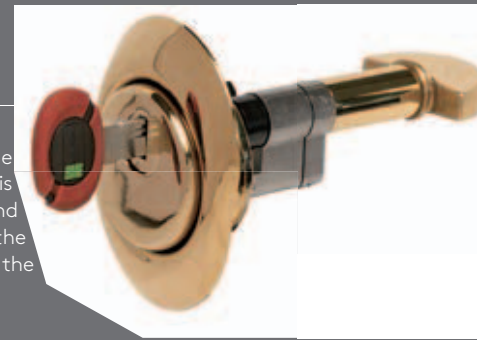
Basing one's safety on a cylinder represents a guaranteed choice: it can be installed also by self-taught people and features a wide range of combinations of short, handy and not too heavy keys in the pocket. Moreover, it is encapsulated in a defender barrel that protects it against being drilled or ripped out, with PVD\* treatment, and therefore against any type of attack. The cylinders used by Oikos have horizontal access and are tamper-proof; the key is specular and works whichever way it is inserted, it is very convenient and it is used to open the door from the outside; from the inside, the door is opened and closed using the convenient knob.

## \*PVD Physical Vapor Deposition

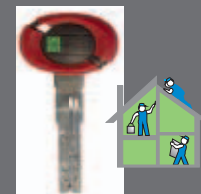
The currently most advanced technology in surface covering processes. The handles, accessories and, in this case, the defender are coated with zirconium nitrides, making them resistant to atmospheric agents (even the most acid) and wear effects, such as abrasion and chafing. PVD is however an ecological process, because the physical process does not generate any harmful residues.

## Please pay attention to the colors of the key

SEKUR is the most recent guarantee formula released by the Oikos school. It is a cylinder with 10 movable recognition pins plus a high precision floating one. The exclusive 3-in-1 patent allows you to change the encryption of the key 3 times without changing the cylinder.



**GREEN** this is the key for the building site stage, which can be given also to strangers.



**GRAY** the color of the owner's keys, with exclusive and reserved profile, which allow normal access and replaces and cancels the green key (these are supplied sealed).



**RED** is the color of the emergency key that replaces and cancels the gray keys, in case of need (this is supplied sealed).



For a further safety guarantee, the duplication of the SEKUR key can be performed only at the internal duplication center of Oikos, considering that the key profile is an exclusive property of Oikos. To request a duplication, please fill out the appropriate form available for download on the website: [www.oikos.it](http://www.oikos.it) (customer service section).



# Maximum sealed safety

All Oikos doors are supplied with a building site key to be used for the production checks and by the technical staff entrusted with the installation, while the owner's keys are always provided sealed inside a special elegant box.



## KA System

All cylinders have the same encryption and therefore can be opened with a single key.



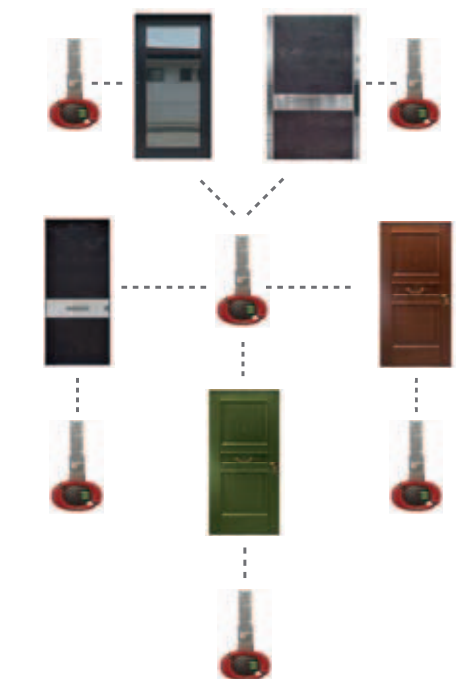
## KC System

Each key not only opens its own door (but not the other doors of the system) but also one or more common doors (condominium door).



## MK System

Master key system consisting of a single key (master) that opens all cylinders in the system and other keys that open only their own cylinder (hotel, residence).





# Arckey

## The lock at the service of architecture

Integrated access management system with electronic opening through **Oikos Arckey App**, born from a twenty-year collaboration with **Iseo Serrature** an Italian company leader in the production of locking systems.



- Opening with smartphone
- Keyless opening
- Motorized opening
- Only the administrator can enable or disable users
- Access Control
- No masonry and cabling work
- Management of up to 300 users
- Office function
- Battery powered
- Reading of the last 1000 events
- Opening by time bands
- Office mode with time band opening control
- Access management with invitations (e.g. Residence, B&B)



## Oikos Arckey app

The Oikos Arckey App is the technological heart of the Arckey access management and control system. The opening of the door with remote button, the user management, and the control of access flows are just some of the functions allowed by the management through App. By bringing the Admin Card closer to the lock, the system administrator gains full control over its functions through the App.

## Door opening from outside

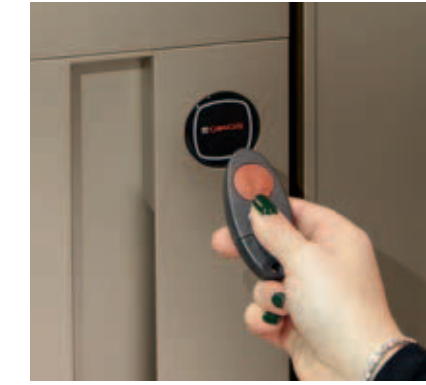
The Arckey system allows, standard supplied, the opening of Oikos' safety door through the App for smartphones. Upon customer request, it can be equipped also with a touchpad, a card reader, a transponder or a fingerprint reader.



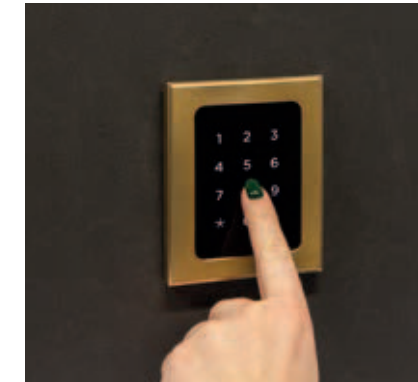
Smartphone



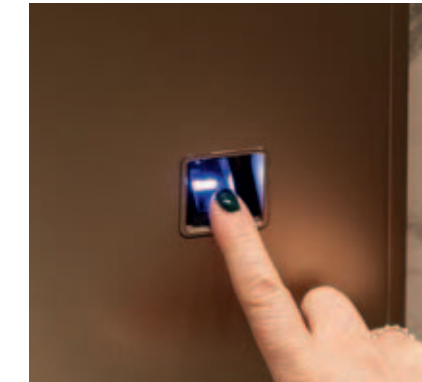
Card Reader



Transponder



Touchpad



Fingerprint reader

## Door opening from inside

The doors Evolution, Tekno, Project and Nova are equipped with anti-panic function that allows the full release of all the key turns, by lowering the handle. The opening of the Synua door from inside takes place through the button integrated in the handle.



Evolution  
Tekno  
Project



Synua



Nova

## Optional features



Remote control



Door status signal kit



Door status for home automation

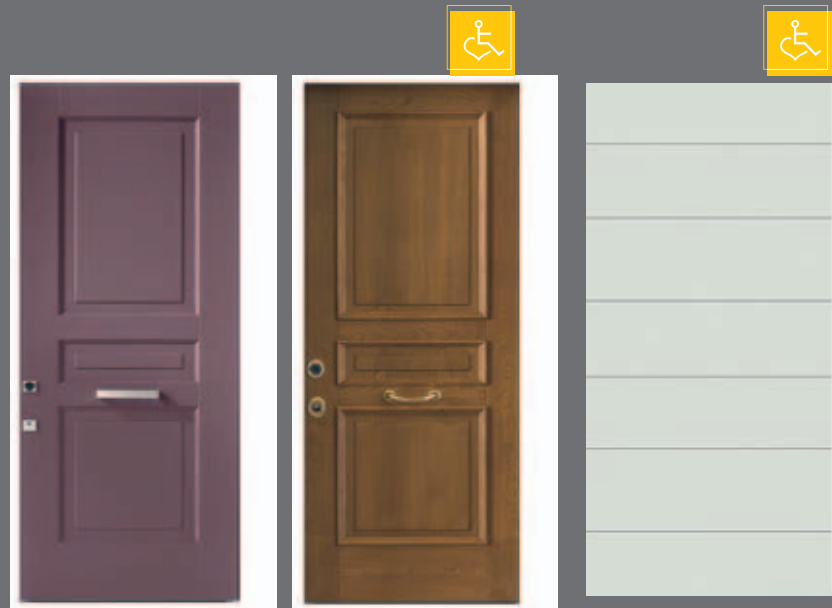


Mains power supply



Remote complete management of all Arckey functions





### Door solutions

The Arckey system integrated in Oikos product is designed to ease access in particular to disabled people.

The safety doors by Oikos with Arckey system are offered in the following solutions:

#### Standard

- Access via the Oikos Arckey App
- Internal handle
- Opening options from outside

#### Door check

- Access via the Oikos Arckey App
- Internal handle
- Opening with motorized door check
- Opening options from outside

#### Free façade

- Access via the Oikos Arckey App
- Internal handle
- Opening with motorized door check
- No opening element visible

### Arckey system programming

The administrator may appoint, enable and disable user access in an exclusive manner. Moreover, only the access administrator can control the access flows and the system status.



Only the administrator can enable or disable users

### Oikos Security Code System

The Security Code System consists of three cards subject to progressive deactivation that allow the administrator to always have the control of the secret code for accessing the Oikos Tech App programming.

**Green card: Level 1** testing/installation card

**Gray card: Level 2** Admin Card

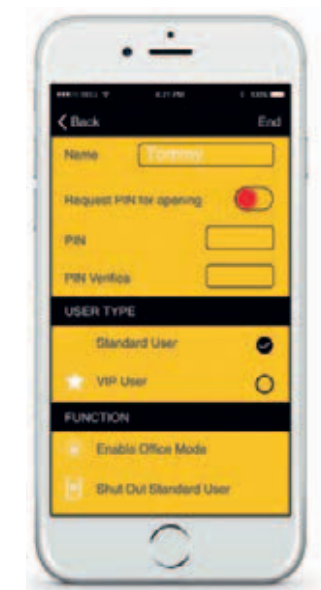
**Red card: Level 3** emergency/system recovery card



### User management

The Oikos Arckey App can manage several doors and allows recording up to 300 users per individual door, enabling different access systems:

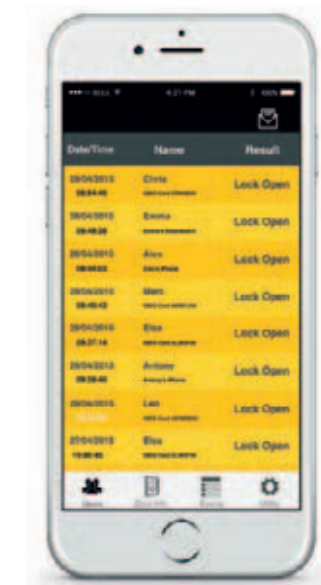
- Smartphone
- Oikos Card
- Touchpad
- Transponder
- Cards with RFID technology
- Fingerprint reader



### Flow and control

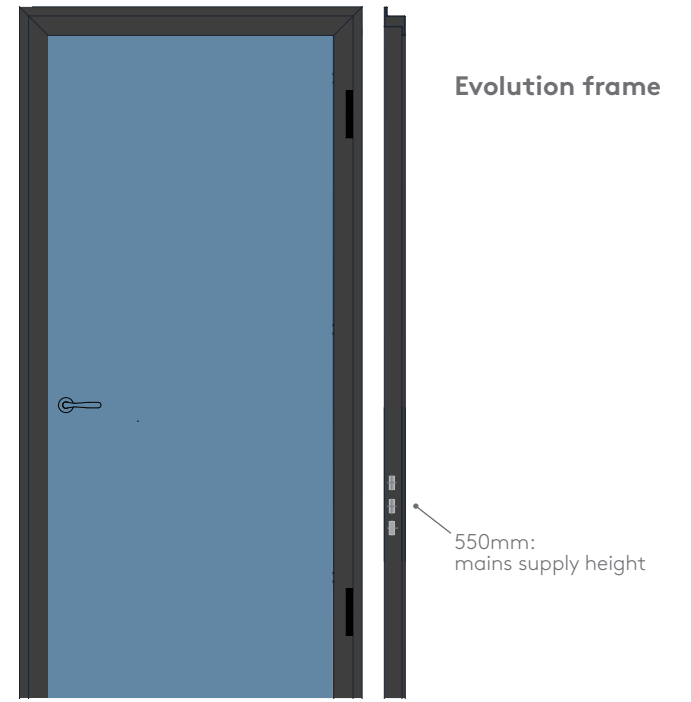
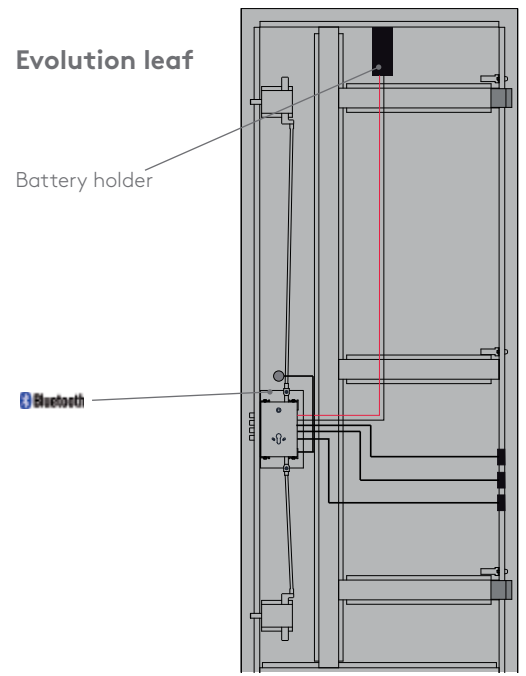
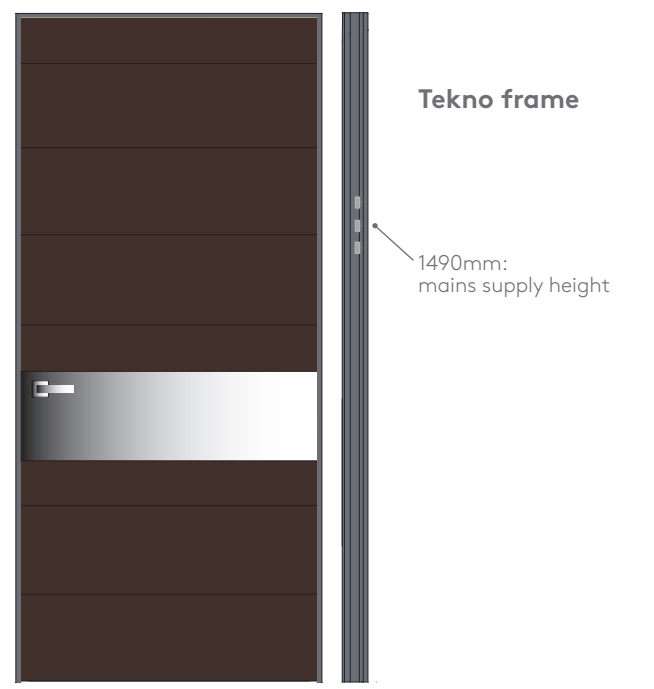
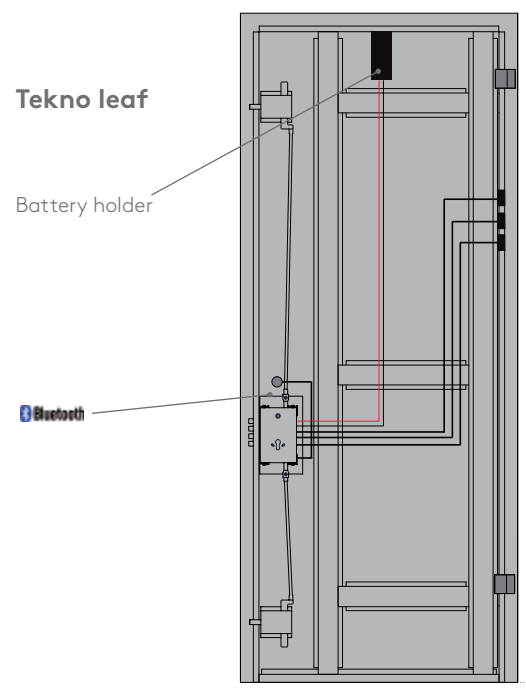
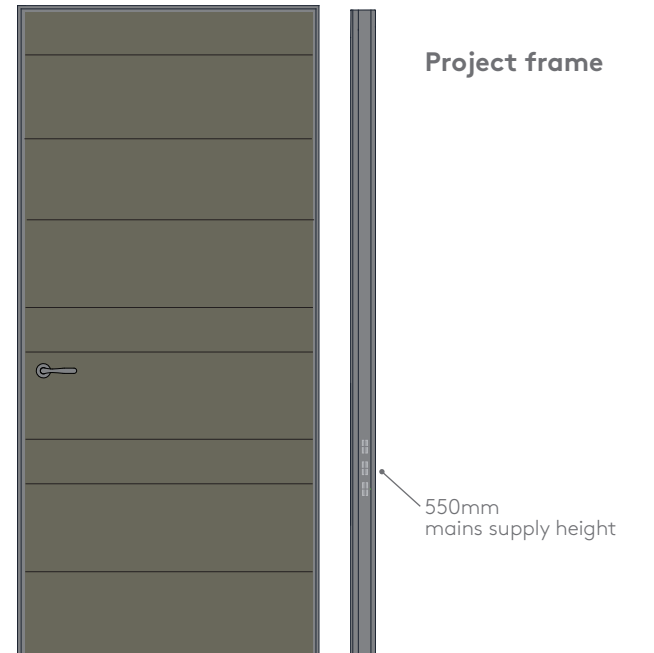
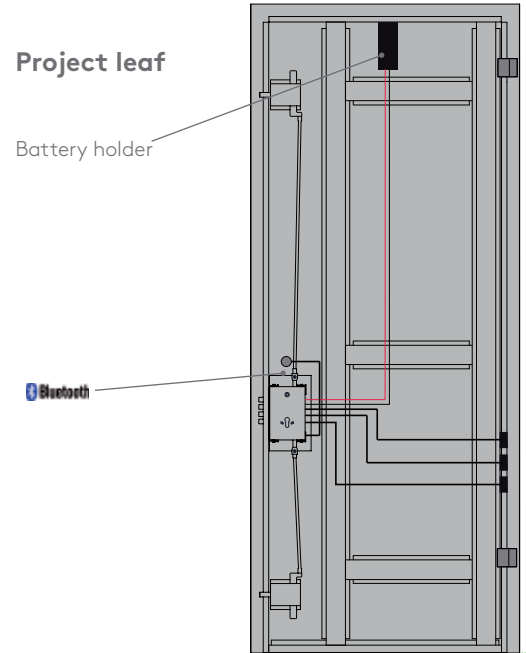
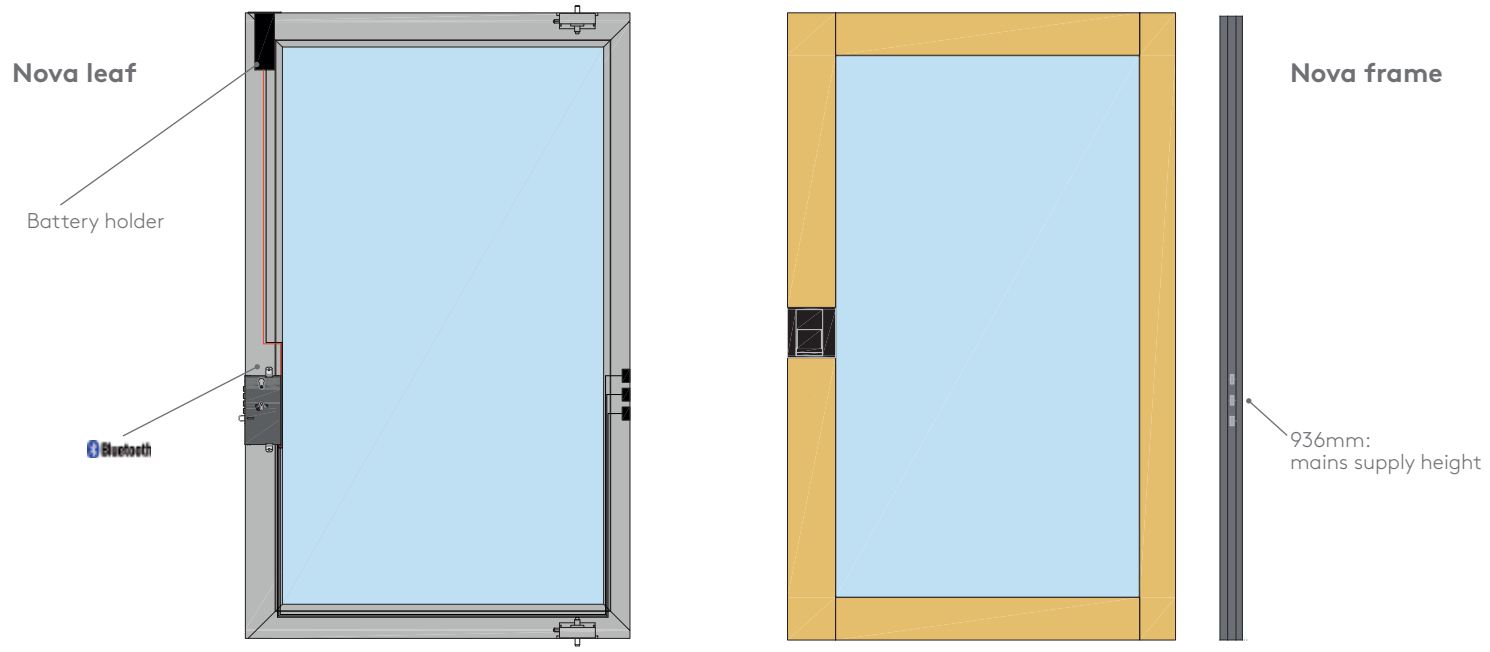
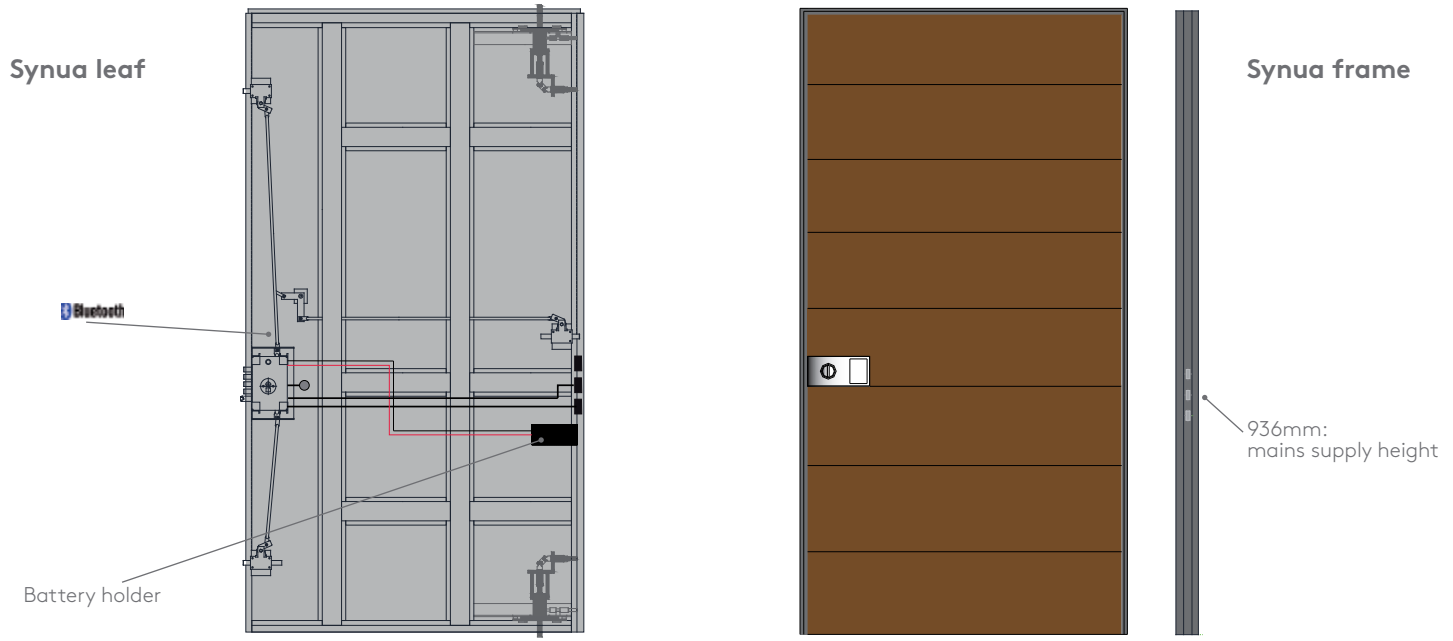
Oikos Arckey App allows controlling the access flows, stating:

- Number of users
- Number of smartphones
- Number of Oikos cards
- Number of keyboard codes
- Number of transponders
- Number of RFID cards
- Reading of the last 1,000 events
- Number of impressions



# Batteries position and wiring diagrams

Pay attention to the positioning of the batteries in case the type of installation prevents their replacement later on. Request that they be moved when placing your order.





# Choosing the type of covering

The coverings proposed by Oikos are classified according to the type of door installation and their use: internal or external side.

They are divided into:  
**Coverings for interiors**

They are suitable for the inner side of the door or the outer side of staircase entrance doors, doors between living and sleeping areas, panic-rooms etc.



**Coverings for protected outdoor exposure**

They are suitable for coverings exposed directly to the outside, provided that they are under the shelter of a porch that protects them from the direct action of atmospheric agents and sun rays. Since they are painted using water-based colors, their maintenance is easy and has to be performed regularly according to the supplied instructions.



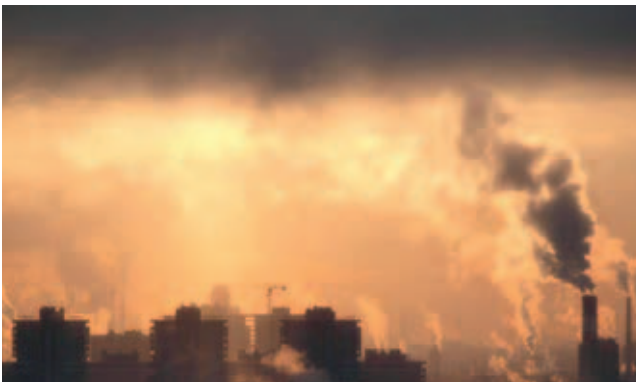
**Coverings for unprotected outdoor exposure**

They are suitable in situations where the door is not protected from the sun rays or the direct action of rain. Outdoor coverings for the Country Line, Massello and Legno Vivo lines bear a 12-year warranty for transparent painting and a 15-year warranty for lacquered finish. The warranty is valid, if panel maintenance is carried out. (see certified quality instructions).

**Laminam** is the covering material that offers the best performance in unprotected exposures and in aggressive weather situations.



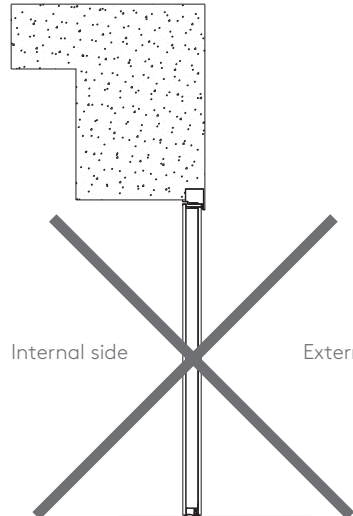
**Coverings for exposure to aggressive weather conditions**  
Use Kit Plus for the appropriate metal structure and covering materials: Laminam, Trespa, Steel-Color steels etc.  
Please consult the Oikos sales network and sales offices.



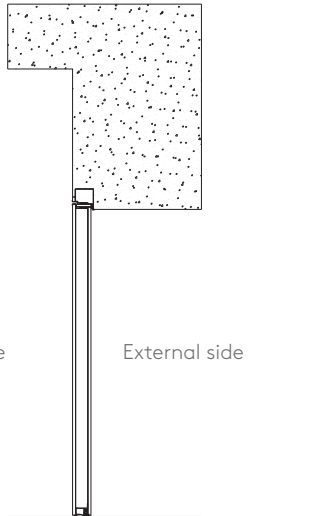
- Aggressive weather conditions are defined on door installations when they are:
- less than 300 meters away from where the sea wave breaks
  - above 2000 meters above sea level
  - hit by desert winds (like Ghibli)
  - violently exposed to the sun (blazing sun)
  - in particularly humid environments
  - in environments with very polluted atmosphere

## Correct installation

**Incorrect door installation**



**Correct door installation**







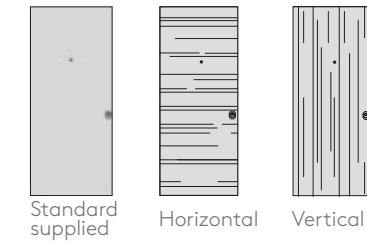
# Coverings

## Piano line

9mm chipboard/mdf panels, with vertical or horizontal veneer and transparent or lacquered painting.

## Piano Country Line

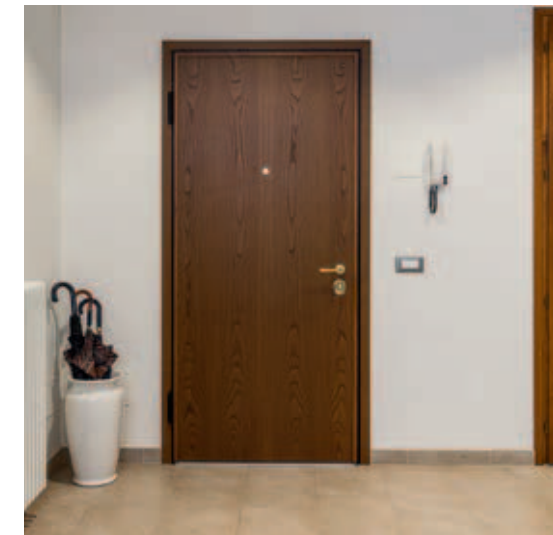
9mm okoumé plywood panels with melamine gluing, with transparent coating (12-year warranty) or lacquered painting (15-year warranty).



Standard supplied Horizontal Vertical



Piano Line/Piano Country Line



## Fugato line

Panels in 9mm MDF, veneered with V grooves engraving with fixed or variable pitch with transparent or lacquered painting.

## Fugato Country Line

9mm okoumé plywood panels with melamine gluing, V-grooving with fixed or variable pitch and transparent (12-year warranty) or lacquered (15-year warranty) painting



Vertical HTF HTA Scala



Fugato Line/Fugato Country Line

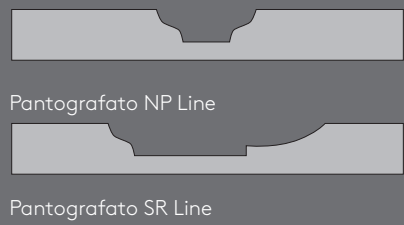


# Pantografato Line

16mm mdf panels, with lacquered painting.

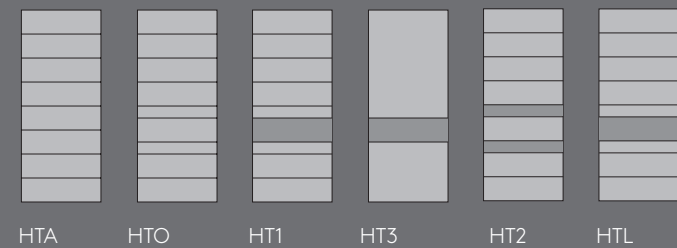
# Pantografato Line Country Line

Melamine multi-layer panels (14mm marine grade) with either a transparent (12-year warranty) or lacquered (15-year warranty) painting.



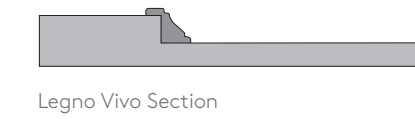
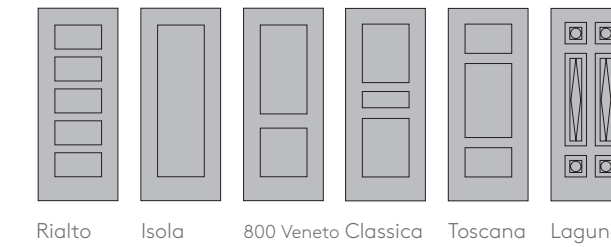
# Tekno Line

Coverings made up of sectors of variable size and quantity, also with one or two steel sectors depending on the model. They can be veneered and transparently coated or lacquered and covered in back-lacquered glass or in Laminam.



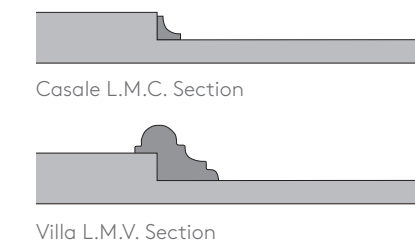
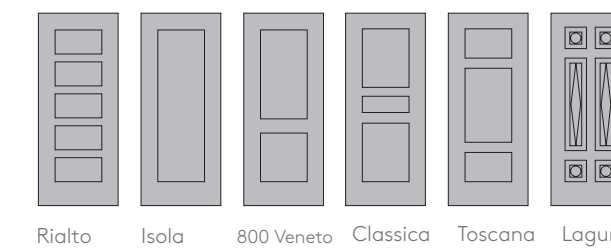
# Legno Vivo Line

Consisting of a support panel and a marine plywood wood covered framework in brushed oak, with vinyl gluing and a transparent (12-year warranty) water-based lacquer painting cycle (15-year warranty). Thickness 23 mm Legno Vivo surround.



# Massello Line

Consisting of a support panel and frame made from marine plywood coated in okoumé/chestnut, with vinyl gluing and a transparent (12-year warranty) water-based lacquer coating cycle (15-year warranty). Thickness 23 mm Casale/Villa surround.





# Outdoor coverings warranted for 15 and 12 years Adler

Oikos has been working for over 20 years with Adler, a leading Austrian company in the production of water-based coatings for wood, in the ongoing improvement of its products and in the respect for the environment. We are proud to have been the first, along with Adler, to provide up to 15-year warranties on our coatings using a water-based painting cycle: Aquawood Protor System for entrance doors.



# Certified Quality

The lines **Country Line, Legno Vivo and Massello** are the result of the need to have coverings with very high characteristics for exterior use. They are therefore made exclusively of plywood with melamine gluing suitable for outdoor environments; they are assembled using adhesives (glues) corresponding to the class **D4** according to the standard **UNI EN 204**. Finally, they are painted using water-based coatings, mordanted (transparent) or covering (lacquered transparent), with marked characteristics of protection against atmospheric agents such as rain, humidity, sunlight and sudden temperature changes. Thanks to these characteristics it was possible to pass severe resistance tests applying the artificial aging method according to the **prEN 927-6 standard**.



Line	Transparent	Lacquered	Warranty years
Country Line	Color 6 - 7 - 8		12
Country Line		Lacquered RAL	15
Legno Vivo	Natural Oak Oak 1		6
Legno Vivo	Honey Oak Oak 2 - 3 Mother of Pearl Tabacco Agate Gray Lead gray Antique oak		12
Legno Vivo		Lacquered RAL Chalk White	15
Heartwood	Color 6 - 7 - 8		12
Heartwood		Lacquered RAL	15
Heartwood	Chestnut 2-3		12

Oikos guarantees Legno Vivo, Legno Massello & Country Line panels from the date of installation, only if the panel is serviced at least once a year. Using the product "Door Finish" or "Synua Finish" manufactured by Adler and supplied by Oikos inside the keys and accessories package, according to the instructions indicated on the back of the certificate and on the package label.





# Color Matching

All metal components can be matched by painting them with the same color.



- Frame aluminum profile
- Door aluminum profile
- Central sector
- Horizontal long handle
- Plate and defender



- Frame aluminum profile
- Door aluminum profile
- Central sector
- Horizontal long handle
- Defender

# Available colors

Available colors and finishes realized through a powder or liquid coating cycle, available for all metal door components. The Marine Silver and Metropolitan finishes, being made by anodic oxidation, can be realized only for aluminum components (casing).

VP Powder coating  
 VL Liquid painting  
 OA Anodic oxidation

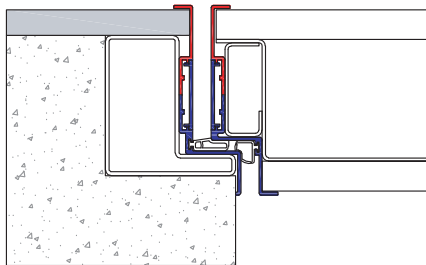
- RAL 9005 VP
- RAL 9016 VP
- RAL 8022 VP
- Gold VL
- Light bronze VL
- Dark bronze VL
- Platinum VL
- Metropolitan OA
- Copper VL
- Marine Silver OA
- Smoke VL
- Cosmo VP
- Sand VP
- Ice VP
- RAL 9006 VP
- Cor-ten VP
- Burnished brass VP



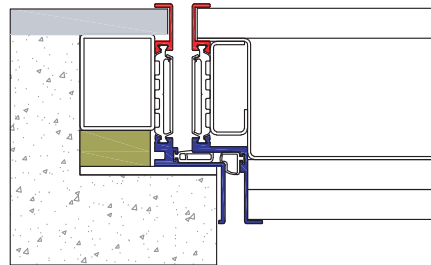
# Two-color frames and aluminums

Solution indicated to coordinate the casings (aluminum) in the presence of internal and external coverings of different colors.

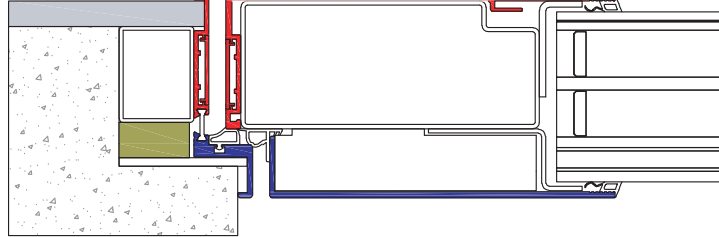
Synua



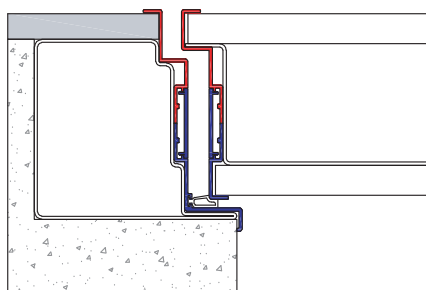
Synua 3TT



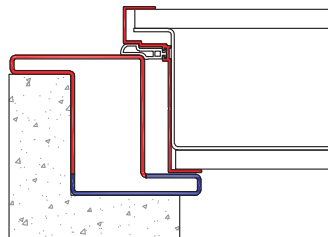
Nova



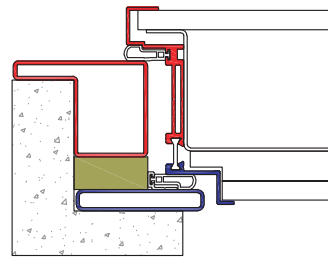
Tekno



Evolution



Evolution 3TT



# Standard shade

Oikos offers standard supplied a wide range of finishes, shades, colors and materials that can be consulted in the catalog l'essenza.



# Color according to sample

If the requested color is not included in the Oikos standard colors, a reference sample must be sent so that it can be replicated in the chosen covering.





# Handles, long handles and accessories



**Standard**  
MO - 05T OL - CS - CL

**Tekno**  
MO - 07Q - CS

**Tekno**  
MO - 07T - CS

**Step**  
MO - 08Q  
OL - OLTZ - CS - CL

**Step**  
MO - 08T  
OL - OLTZ CS - CL



**Uovo**  
MO - 03T  
OL - OLTZ

**Vema**  
MO - 11  
CS

**Willy**  
MO - 13  
CS

**Synda**



**Standard**  
PO - 05T  
OL - CS - CL

**Girevole**  
PO - 02T  
OL

**Step**  
PO - 08Q  
OLTZ - CSTZ - CLTZ



**Brion**  
MO - 12  
CS

**Brion Long handle**  
MAO - 12  
CS

**Brion Knob**  
PR - 01B CS



**Standard**  
MAO - 05  
OLTZ - CSTZ - CLTZ

**Tekno**  
MAO - 07  
CSTZ

**Step**  
MAO - 08  
OLTZ - CSTZ - CLTZ

**Vema Long handle**  
MAO - 11  
CS



**Defender**  
OLPVD - CS - CL

**Internal mask**  
OL - CS - CL

**Yale Hole Mask**  
OLTZ - CSTZ - CLTZ

**Defender cover mask**  
OL - CS - CL

**Internal mask**  
OL - CS - CL



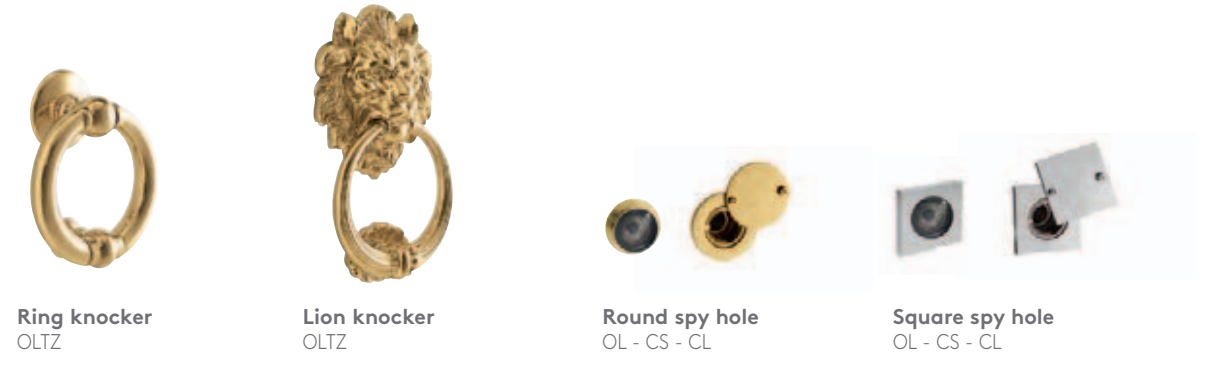
**Yale Hole Mask**  
CS - CL - CLV

**Round limiting device knob**  
OL - CS - CL

**Square limiting device knob**  
OL - CS - CL

**Square knob**  
OL - CS - CL

**Round Knob**  
OL - CS - CL



**Ring knocker**  
OLTZ

**Lion knocker**  
OLTZ

**Round spy hole**  
OL - CS - CL

**Square spy hole**  
OL - CS - CL

## Finishes



**OL Polished Brass**  
OLTZ with PVD treatment

**CD Satin Chrome**  
CDTZ with PVD treatment

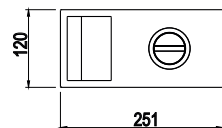
**CL Polished Chrome**  
CLTZ with PVD treatment

All handles, long handles and accessories can be made on request with finishes as on page 53

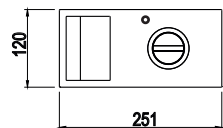
# Synua handle and long handle



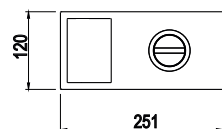
Internal handle with sliding handle mechanical lock



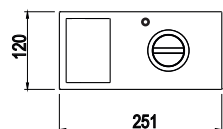
Internal handle with sliding handle Arckey lock



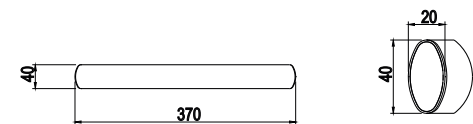
Internal handle with flap mechanical lock



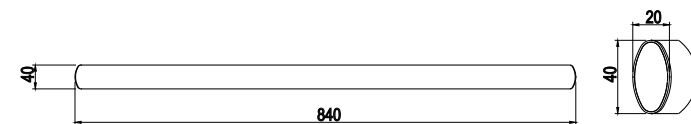
Internal handle with flap Arckey lock



External long handle standard supplied

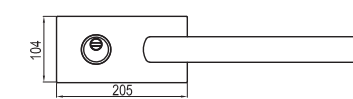


External long handle standard supplied on request

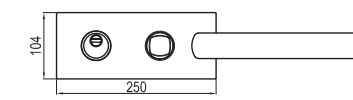


External plate

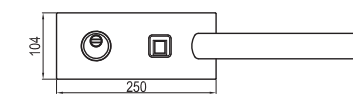
Mechanical lock



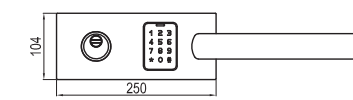
Arckey lock



Arckey lock and fingerprint reader

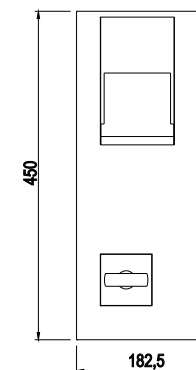


Arckey lock and touchpad

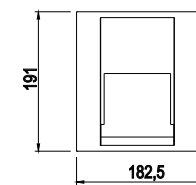


# Nova handle and long handle

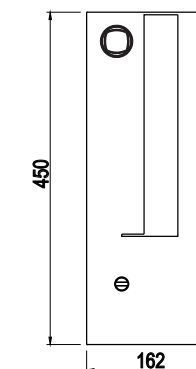
Internal handle mechanical lock



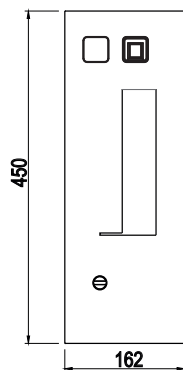
Internal handle Arckey lock



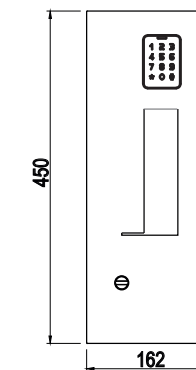
Arckey external long handle lock



Arckey external long handle lock and fingerprint reader



Arckey external long handle lock and touchpad



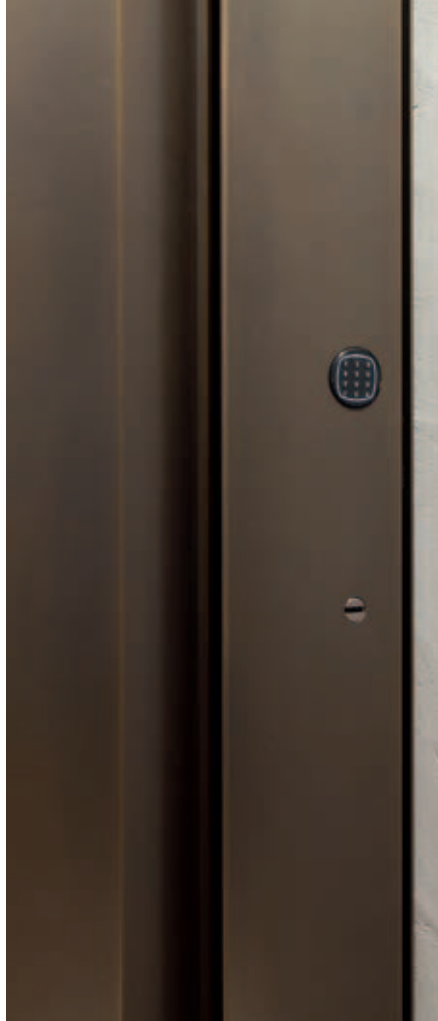
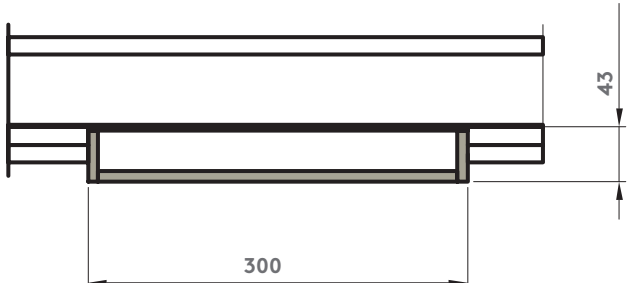


# Cortina long handle and Ceg model

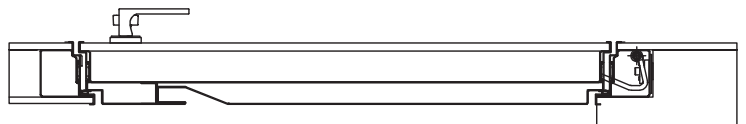
They are installed only on Synua doors with aluminums type 3TT and Tekno doors flush with the external wall.



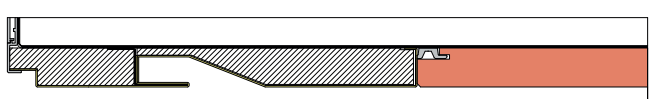
Cortina long handle



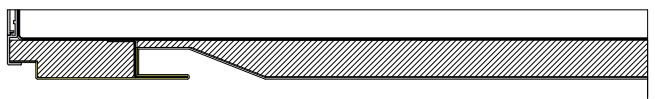
Ceg model



Ceg external long handle



Ceg external cladding

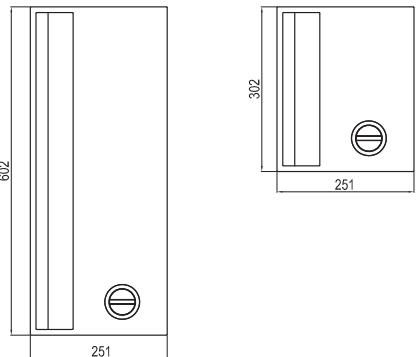


# Jumbo handle

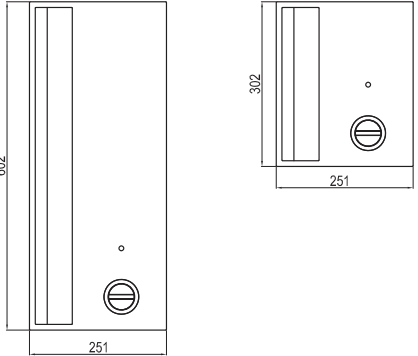
The internal coplanar handle, a distinctive feature of Synua, has also been designed in an extra-large version and inserted perfectly into the central band.



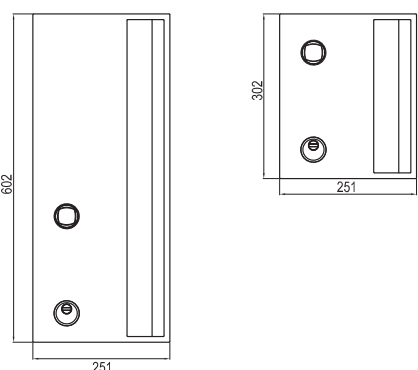
Internal handle Jumbo 600/300 mechanical lock



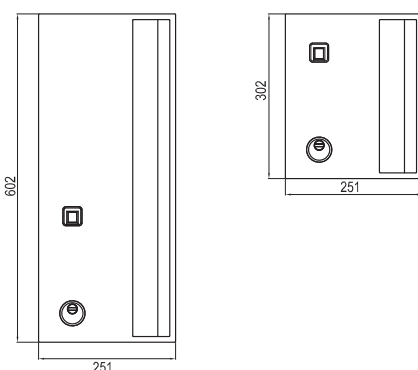
Internal handle Jumbo 600/300 Arckey lock



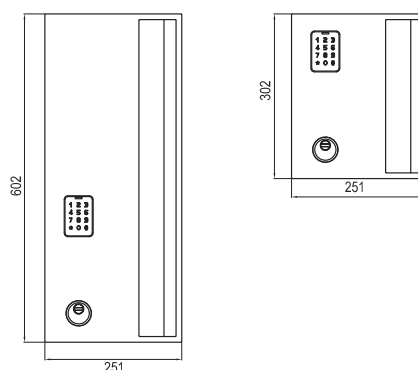
External handle Jumbo 600/300 Arckey lock



External handle Jumbo 600/300 Arckey lock and fingerprint reader



External handle Jumbo 600/300 Arckey lock and touchpad



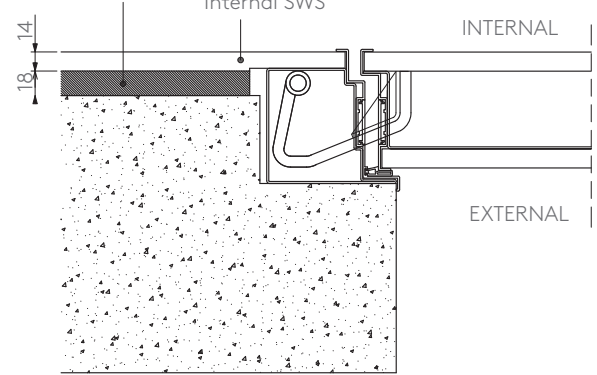
# SWS internal covering

Internal covering that allows the realization of multiple aesthetic solutions using all the coverings of Oikos proposals.

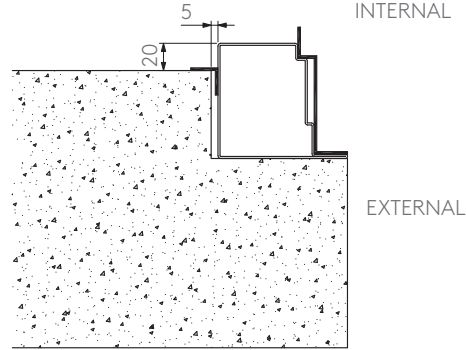


## Tekno SWS internal side

Multi-layer compensation support

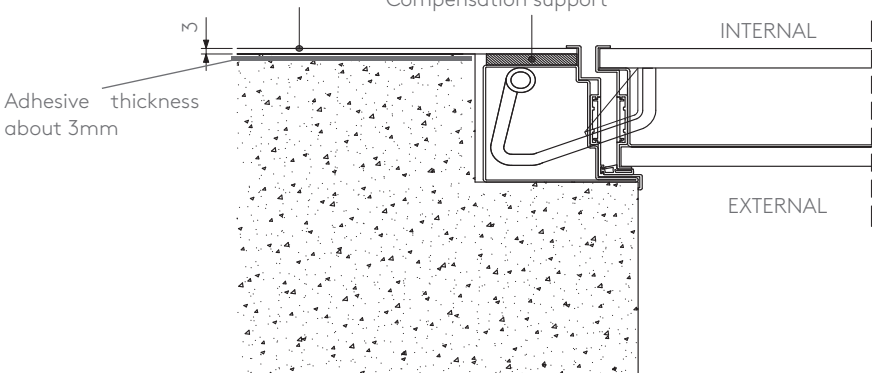


## Frame Installation

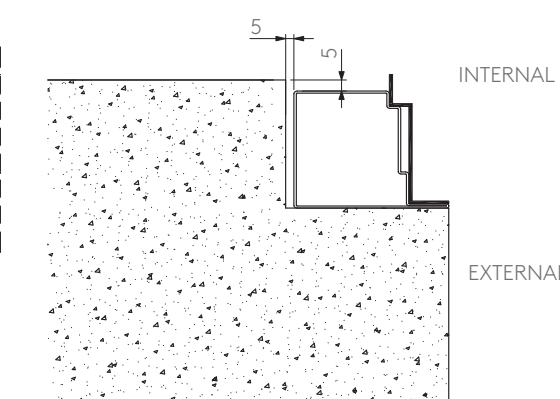


## Tekno SWS internal side direct gluing on wall

Internal Laminam Compensation support

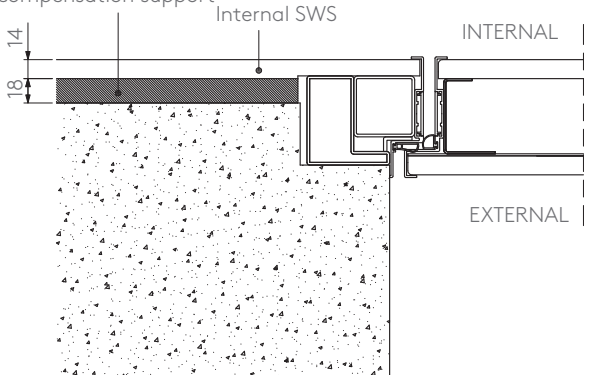


## Frame Installation

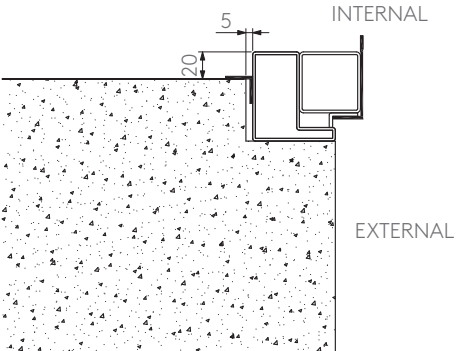


## Synua SWS internal side

Multi-layer compensation support

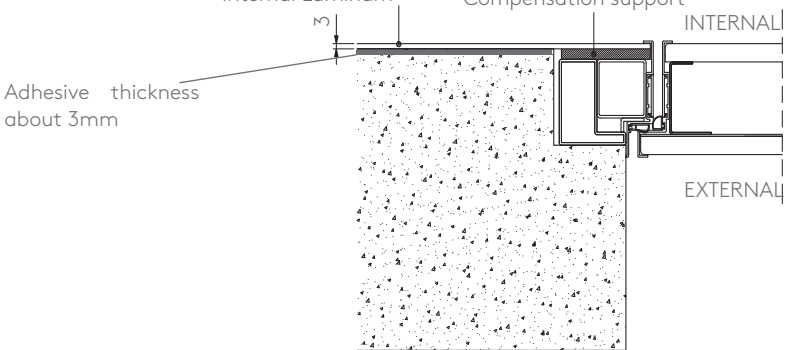


## Frame Installation

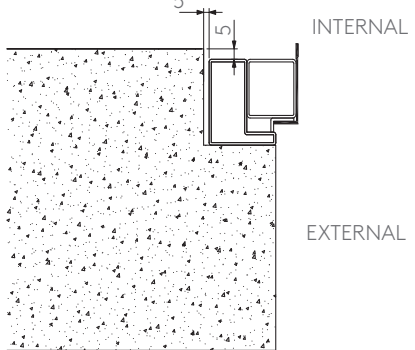


## Synua SWS internal side direct gluing on wall

Internal Laminam Compensation support



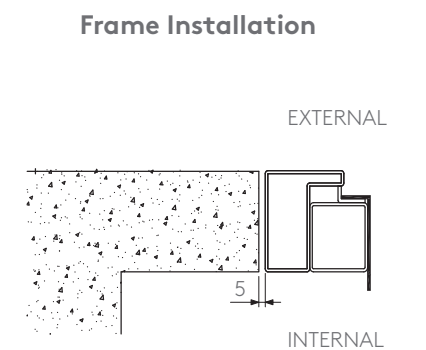
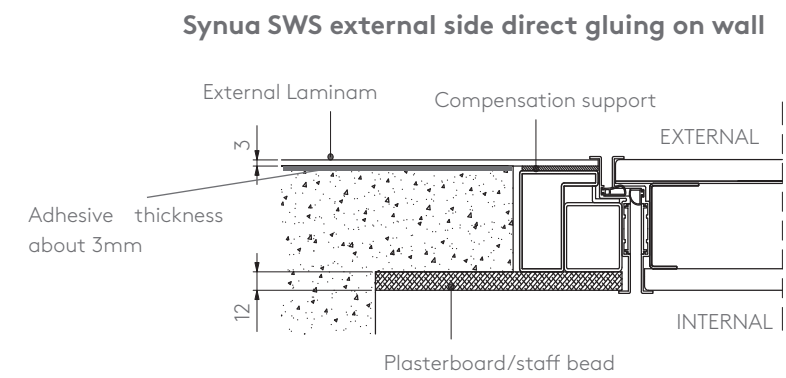
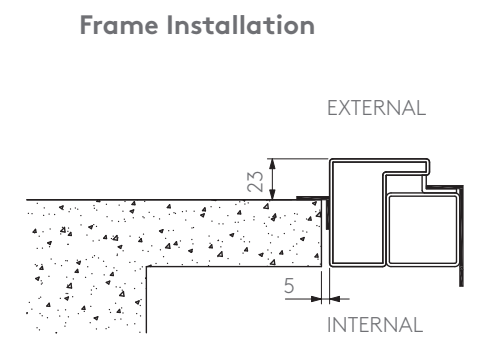
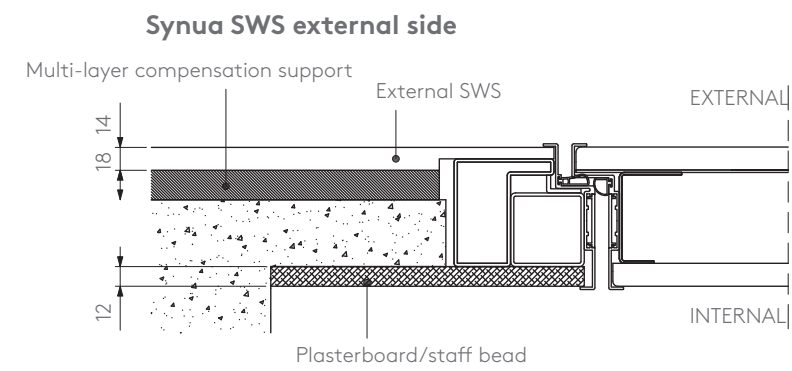
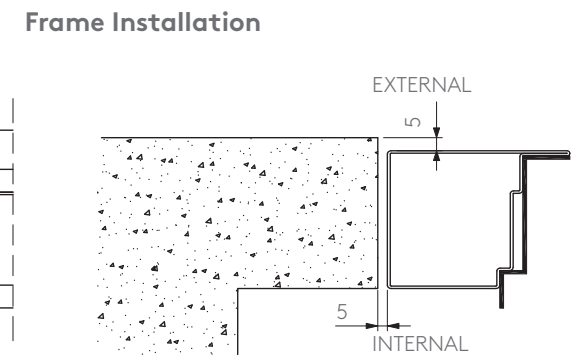
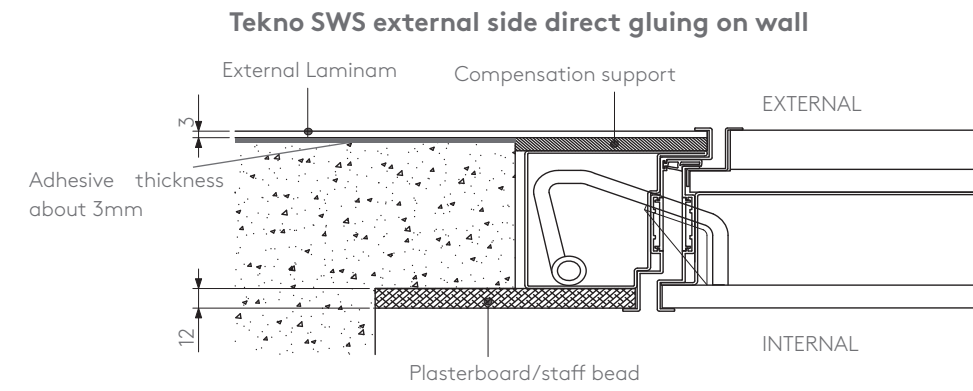
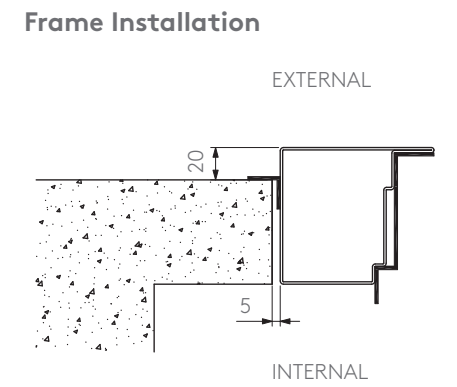
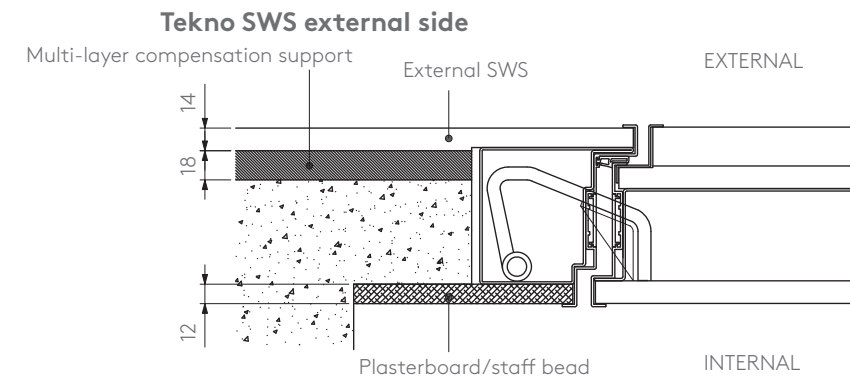
## Frame Installation





# SWS external covering

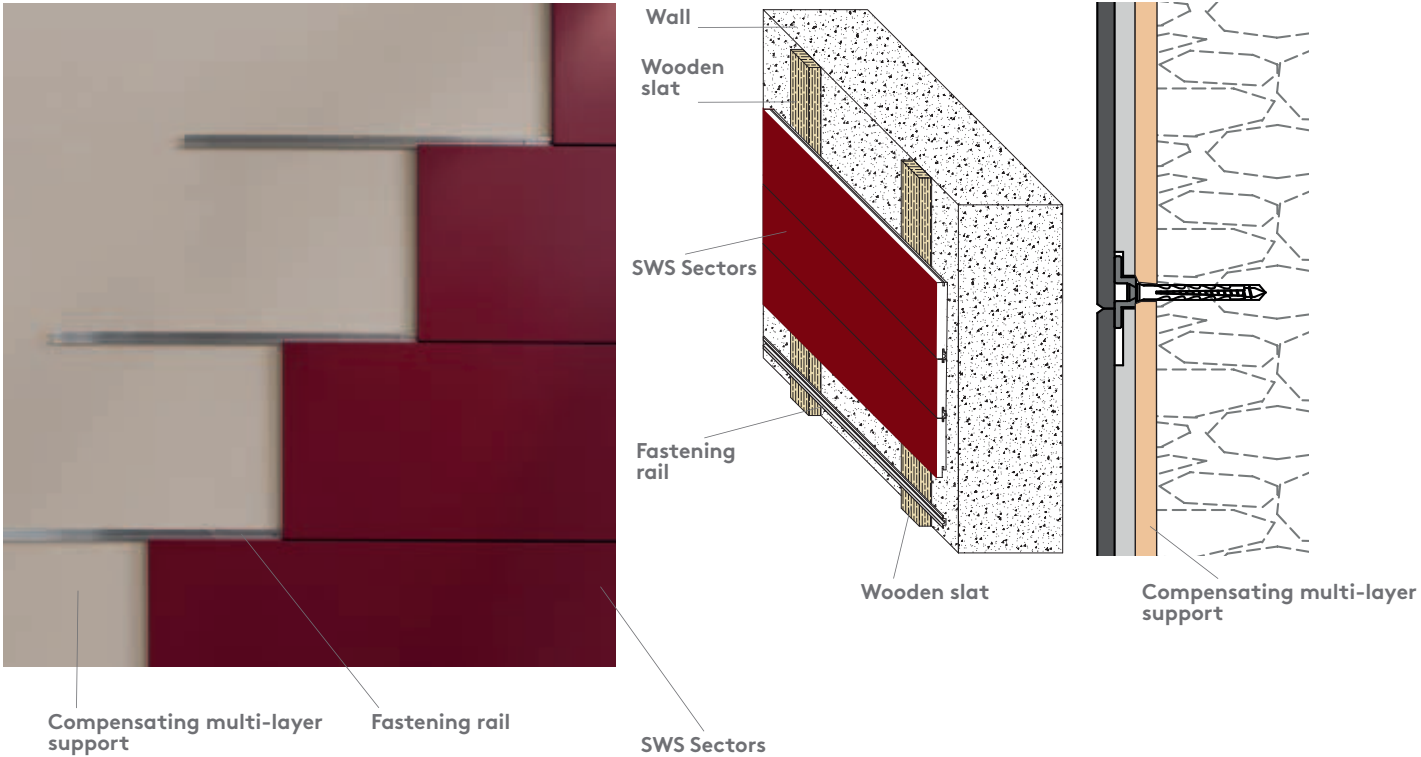
External covering that allows the realization of multiple aesthetic solutions using all the coverings of Oikos proposals.





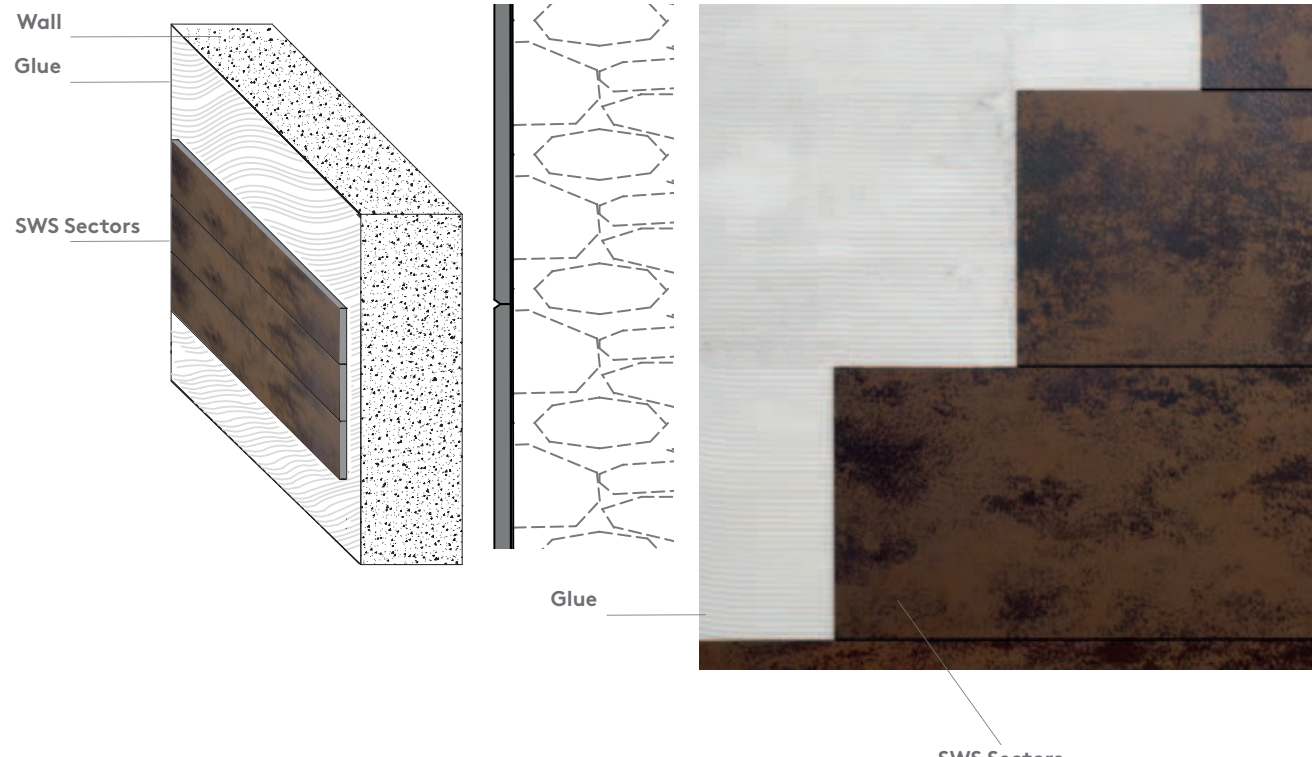
# SWS Fixing Solutions with rail

The sectors for the realization of the wall coverings are supplied already prepared to be inserted in the fixing rails. The installation can be done on a multi-layer compensating support or with wooden slats depending on the flatness of the wall.



# SWS fixing solutions with Laminam gluing directly on wall

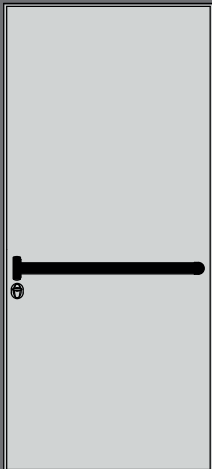
The installation is done with the use of a glue that ensures adequate grip between the sectors in Laminam and the perfectly spirit leveled wall.



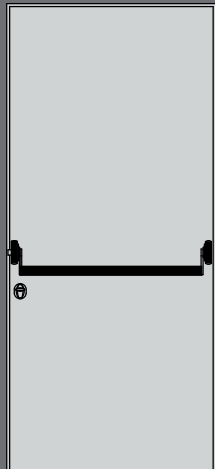


# Anti-panic long handle

They are manually operated by the people who are displacing, to allow a quick opening of the door and facilitate the exit.



Push-bar long handle



Lever long handle

# Visible overhead door check

Mechanical device for automatic door closing.



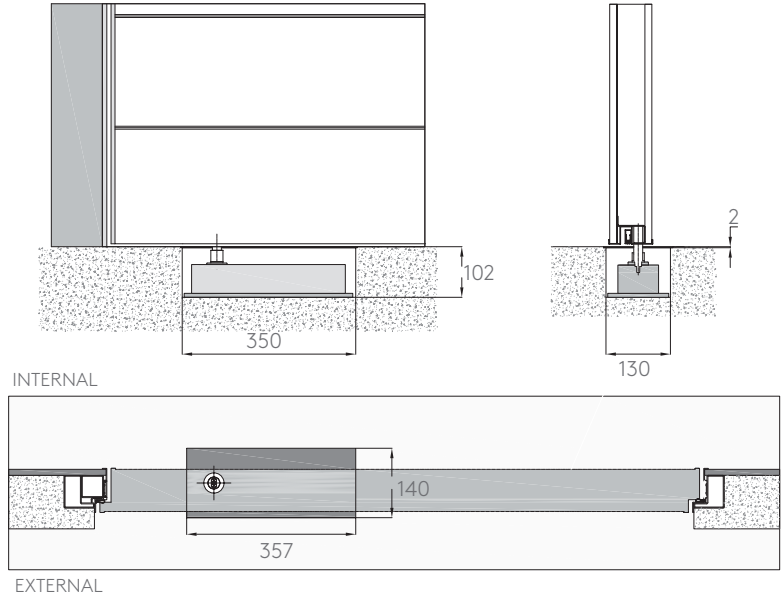
# Concealed overhead door check

Mechanical device for automatic door closing.



# Floor door check

Mechanical device for automatic door closing.



# Motorized door check

Motorized opening system also suitable for handicapped people. It allows the opening of the closed door with remote motorized lock. This solution can be realized only on Tekno model doors with leaf weight not exceeding 120 kg.



## Maximum leaf weight per door check type

Door model	Synua Max door weight in kg	Nova Max door weight in kg	Tekno Max door weight in kg	Project Max door weight in kg	Evolution Max door weight in kg
Overhead sliding door or slide check	180	180	180	180	180
Concealed overhead door check	180*	180*	180	130	180
Motorized overhead concealed door check			120		
Floor mounted mechanical door check	260*	260*			

\* Not possible with the Mose Kit  
For Synua and Nova model doors with Net Wall Opening measurements greater than 1400mm and Tekno and Evolution model doors with Net Wall Opening greater than 1100mm, please consult Oikos technical department.



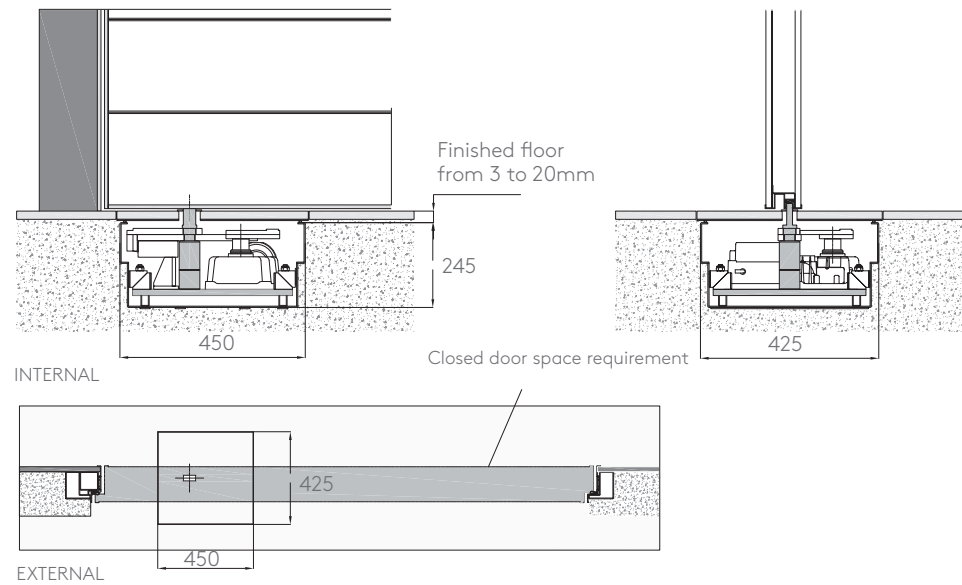


# Floor motor

Floor automatism that with Arckey lock allows the total closing and opening of the entrance in a completely automatic way, maximum door weight 560 kg, corresponding to a door area of about 11 square meters equivalent to Synua door opening 2,200 x 5000mm or a Nova door 1800 x 4000mm. In addition to the maximum weight, it is necessary to take into account the measurements of net wall opening and any wind loads.

Please consult the Oikos sales network or sales offices.

## Space requirement



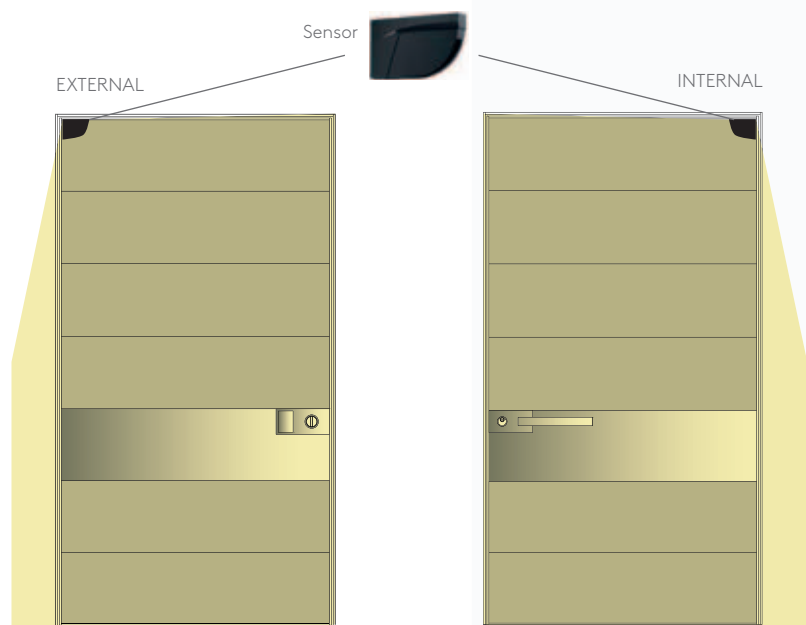
## Present man version

It allows the opening or closing command only and exclusively with the continuous manual pressure on a button or command placed on the internal or external door side. This solution does not include any safety sensor according to EN 16005 standard



## Version with automatic opening

The opening and closing of the door are controlled automatically with the same devices of the Arckey system; this solution requires the installation of two presence and movement sensors in the monitored area according to the EN 16005 standard



Please consult Oikos sales offices for more technical information.





# Synua

The door for large dimensions, with vertical pivot operation and installation coplanar with the wall.  
The perfect combination of technology and design.

## Door with adjustable pivot hinges with:

- Maximum feasible measurements 3000x6200mm
- Other measurements on request
- Version with heat barrier frame and leaf on request
- Motorized electronic lock with integrated access control system on request
- Automatic opening with floor motor for doors weighing up to 560 kg on request

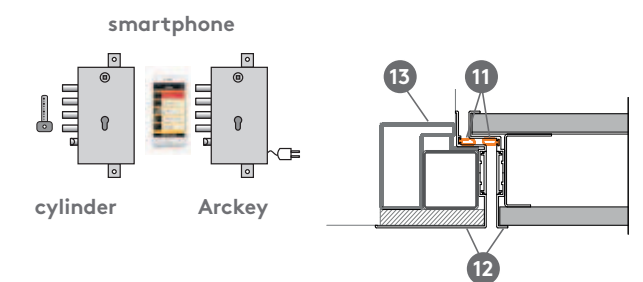


# Synua specifications

15/10 New Steel leaf with 6 horizontal reinforcing bars and 2 vertical reinforcing bars 30/10 lock protection plate, closing profiles and frame covering profiles, perimeter frame sealing strip, internal insulation, standard supplied MOSE upper automatism and standard supplied lower automatism with draught excluder for Hole Opening (L.F.) values lower than 1500 mm with 38 dB acoustic insulation - beyond 1500 mm double draught excluder with not certified acoustic performance. Patented coplanar internal handle made of stainless steel with knob for enabling the cylinder. External plate with embedded defender and 370 mm long handle made of stainless steel. Blind closed sector frame, two fully adjustable pivot mechanisms (lower and upper), 3 side switchlocks (No. 2 on the lock side and No. 1 on the hinge side), cylinder lock with 4 dead bolts plus latch, high safety SEKUR cylinder equipped with building site key, No. 4 owner's keys and No. 1 emergency key.



- 1 New Steel structure leaf tray by 15/10
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Cylinder lock
- 5 Lock connecting rods with closure points
- 6 Switchlock with anti-thrust mechanism
- 7 Patented adjustable pivot mechanism
- 8 Insulation
- 9 Coplanar handle
- 10 Covering sectors
- 11 Double tubular rubber sealing strip
- 12 Aluminum frame profiles
- 13 Closed hollow frame





# Shapes and solutions



# Performance per single door

Interior door (dividing two environments with very similar climatic conditions)

External door (dividing two environments with different climatic conditions)



Thermal 1.6 - 1.3

Thermal 1

Flush with the internal wall - Internal coplanar

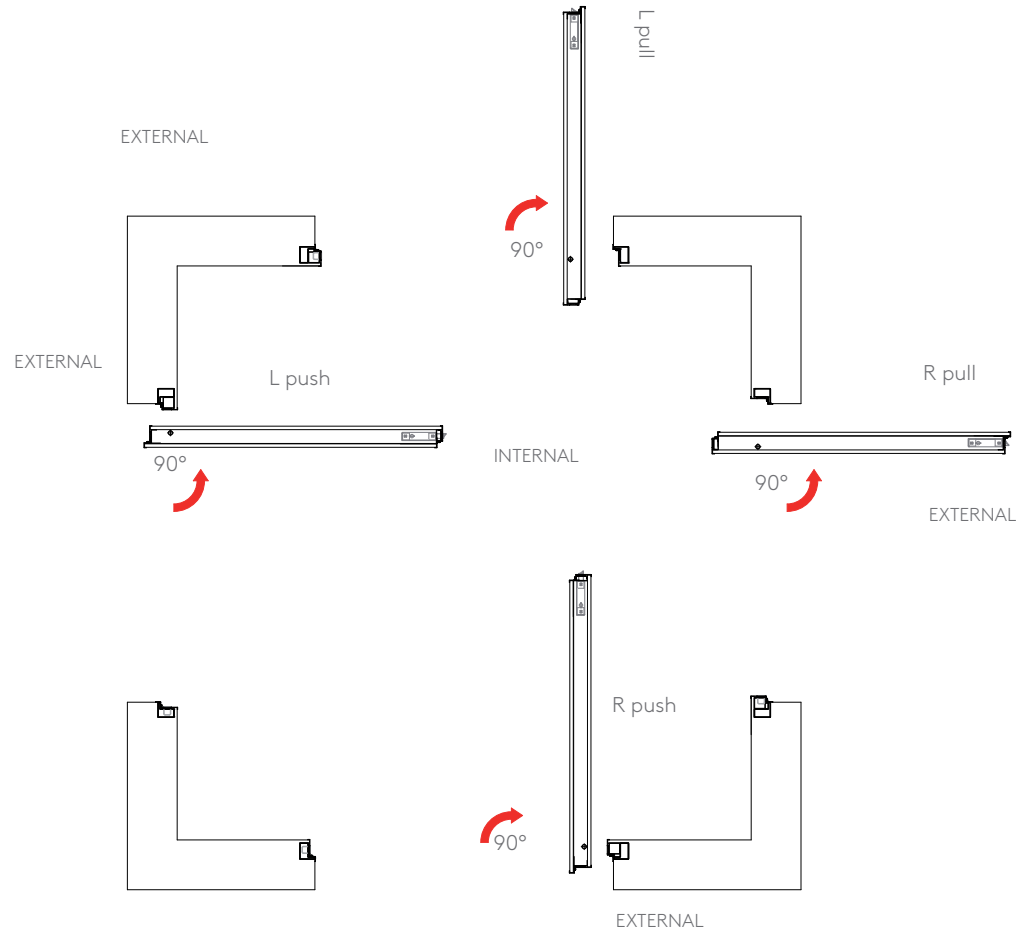
Flush with internal wall 3TT

	Performance	standard	Upon request	size tested sample	Max certified realizable measures
	break-in resistance	Class 3	-	1300 x 2400	1600 x 2800
	acoustic	38 dB	-	1300 x 2400	± 0
	air	2	Mose Kit 4	1300 x 2400	Area + 50%
	water	0	Mose Kit 5A	1300 x 2400	Area + 50%
	wind	C4	Mose Kit C5	1300 x 2400	Area + 0% - 100%
	air	-	Dam Kit 3	1600 x 3000	Area + 50%
	water	-	Dam Kit 5A	1600 x 3000	Area + 50%
	wind	-	Dam Kit C4	1600 x 3000	Area + 0% - 100%
	thermal	1.6	1.3	1230 x 2180	Area ≤ 3.6sqm
	thermal 3TT	1	-	1230 x 2180	Area ≤ 3.6sqm

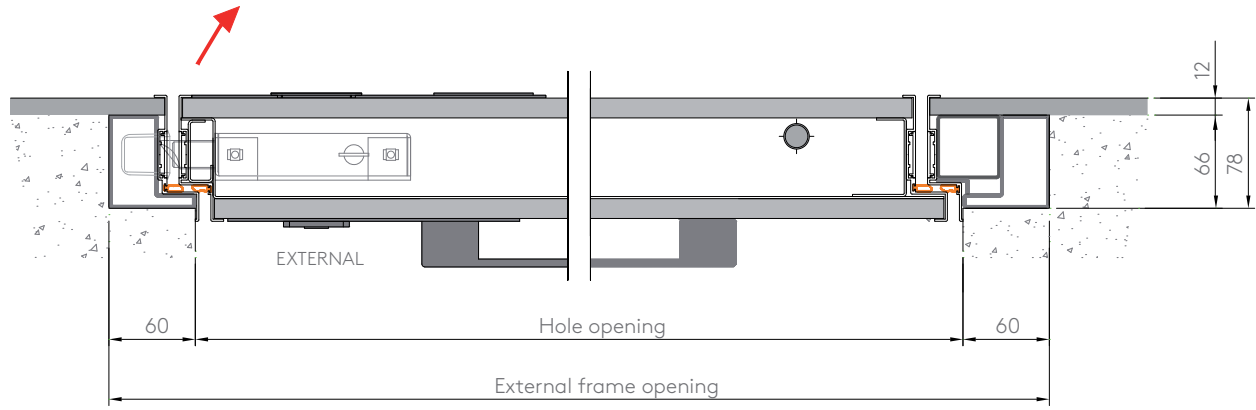
	Performance	sample size tested	Max certified realizable measures
	EI 60	1250 x 2400	width + 15% height +15% max 20% area
	VKF 60	1250 x 2400	width + 15% height +15% max 20% area
	EI 120	1210 x 2430	width + 15% height +15% max 20% area
	UL 120	1210 x 2430	+ 0% - 100%
	Hurricane-proof Noa	1300 x 2400	Area + 0% -100%

The declared performances are valid for intact doors installed according to the official installation instructions of Oikos Venezia srl.

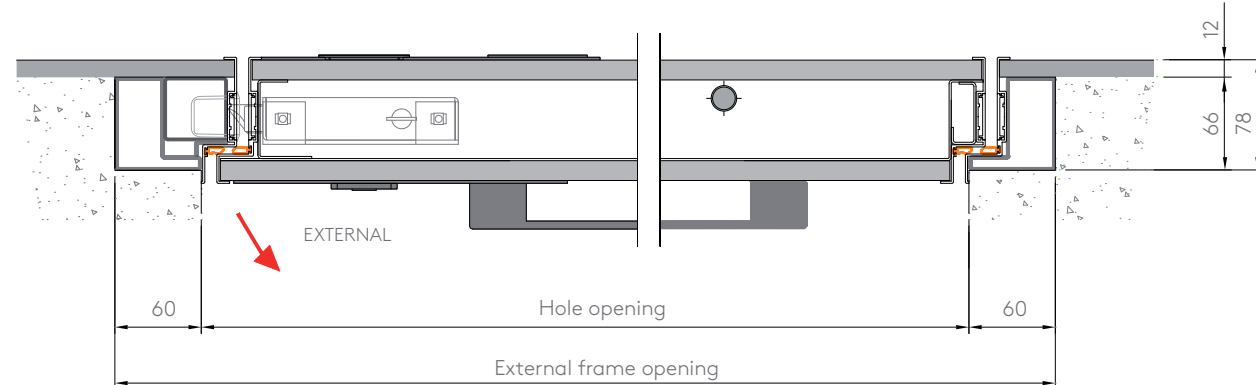
# Synua door opening directions



Door horizontal section with push opening

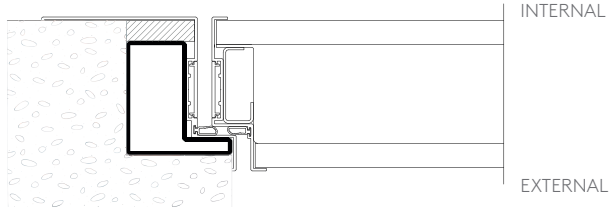


Door horizontal section with pull opening

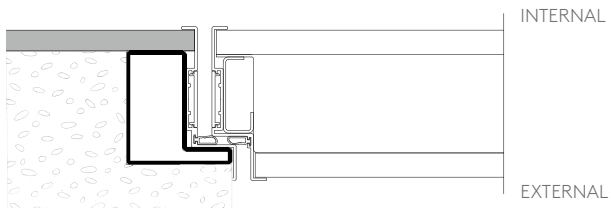


# Synua fitting solutions

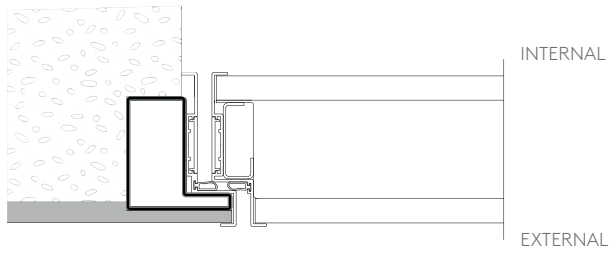
Frame detail Synua interior coplanar



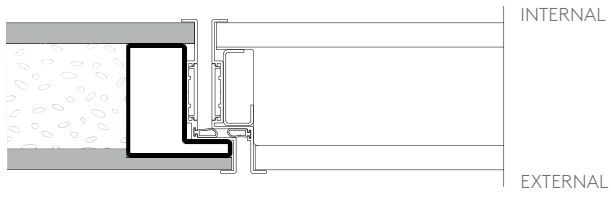
Frame detail Synua flush with internal wall



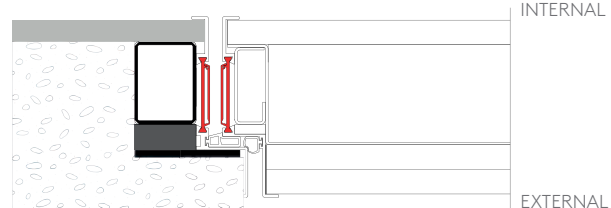
Frame detail Synua flush with external wall



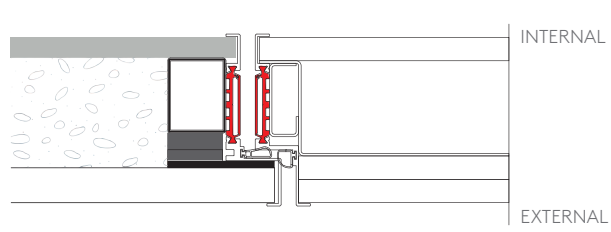
Frame detail Synua flush with internal/external wall



Frame detail Synua 3TT thermal with internal wall



Frame detail Synua 3TT flush with internal/external wall



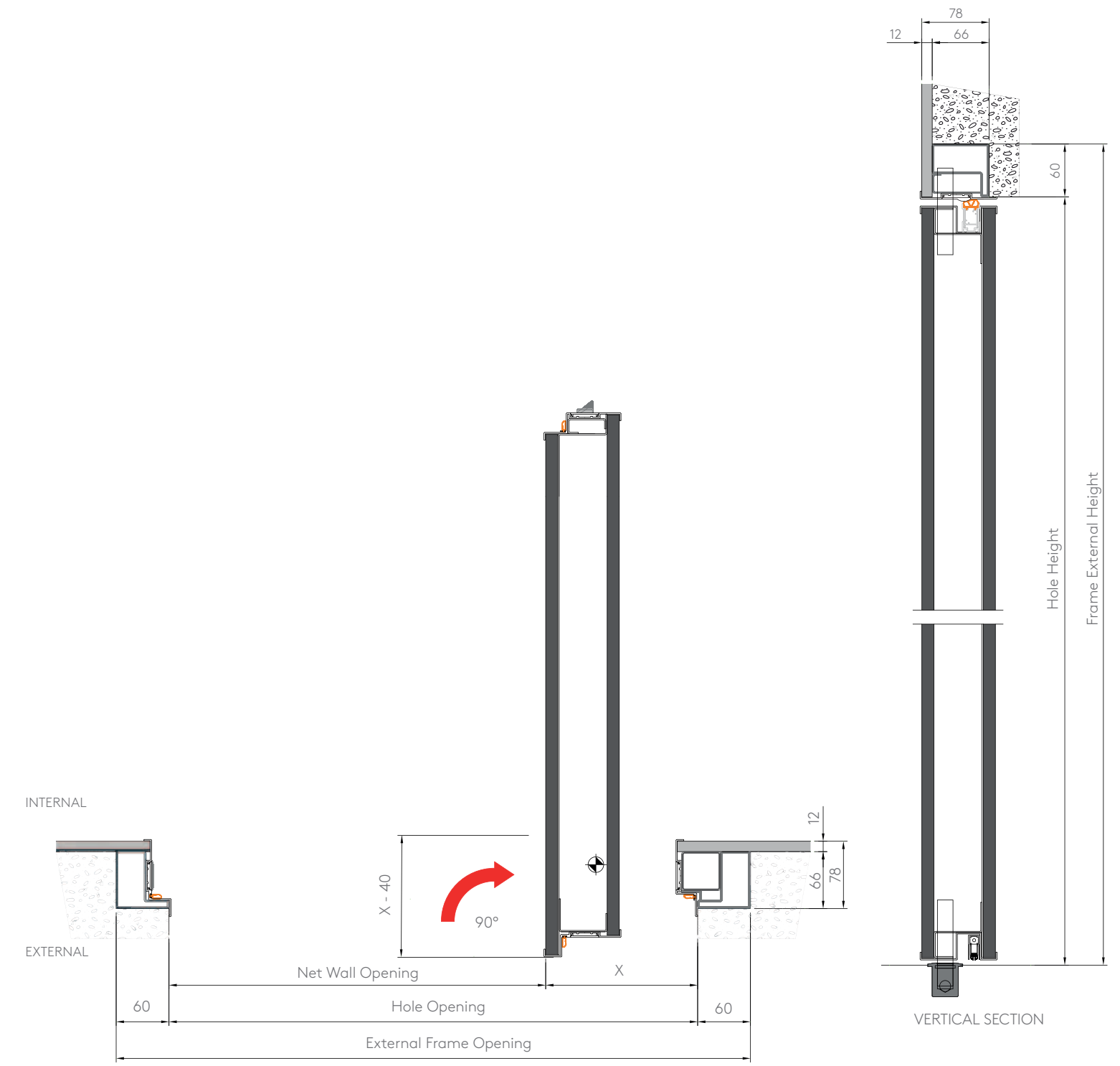




# Synua wall opening names

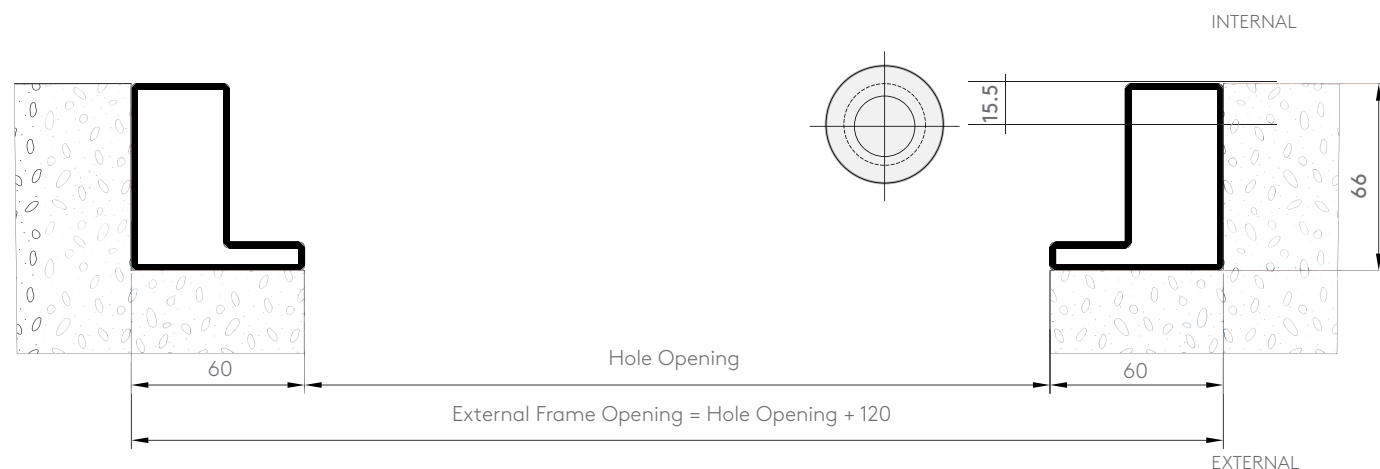
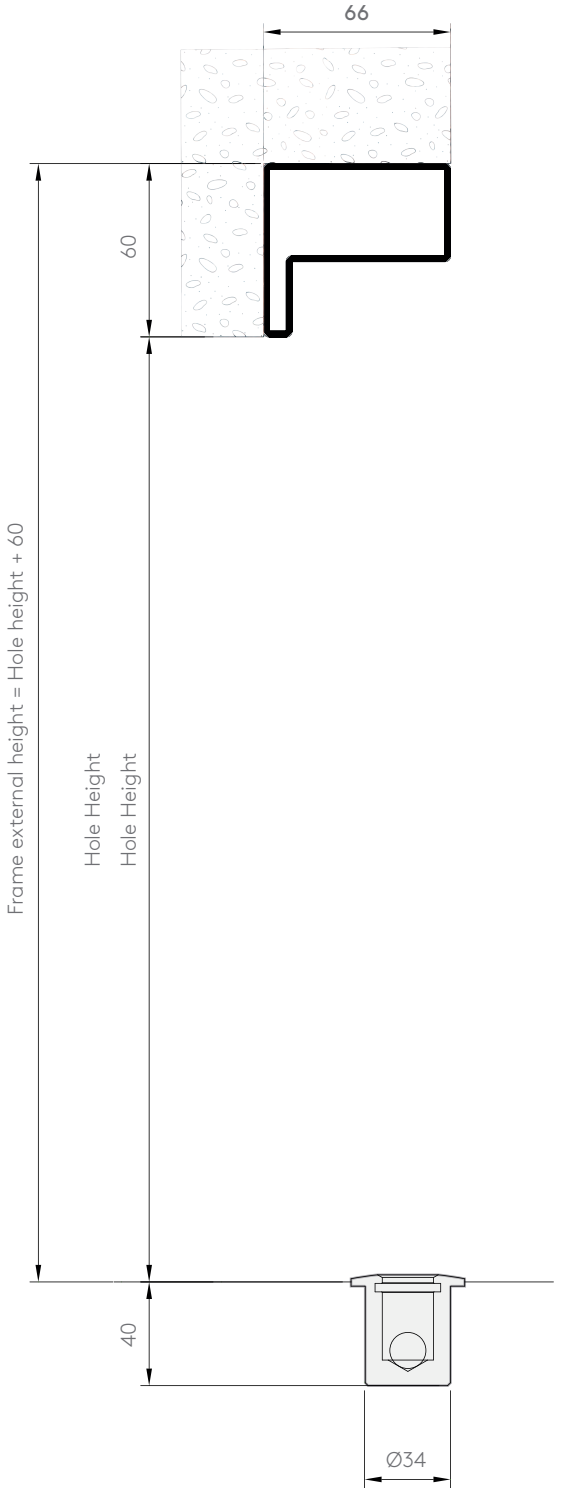
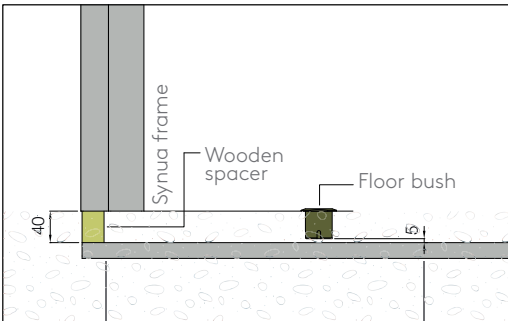
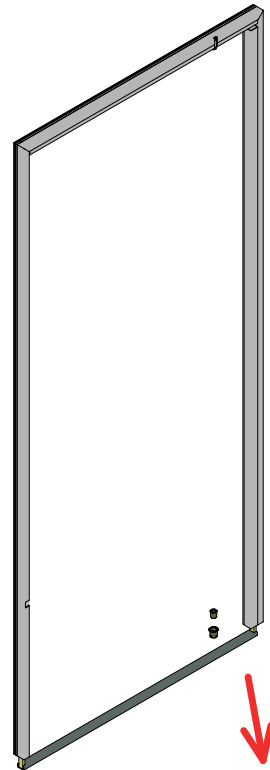
Hole Opening (mm) push version	FROM 1150 TO 1300	FROM 1301 TO 1500	FROM 1501 TO 1700	FROM 1701 TO 1950	FROM 1951 TO 2250	FROM 2251 TO 2550	FROM 2551 TO 2850	FROM 2851 TO 3000
X (mm)	230	300	400	550	700	900	1100	1300

X = Space requirement with 90° opening  
**Net Wall Opening** = Hole Opening - X  
**Wall Opening Net Height** = Hole Height  
**For pull openings, the minimum dimension x is 300 mm**

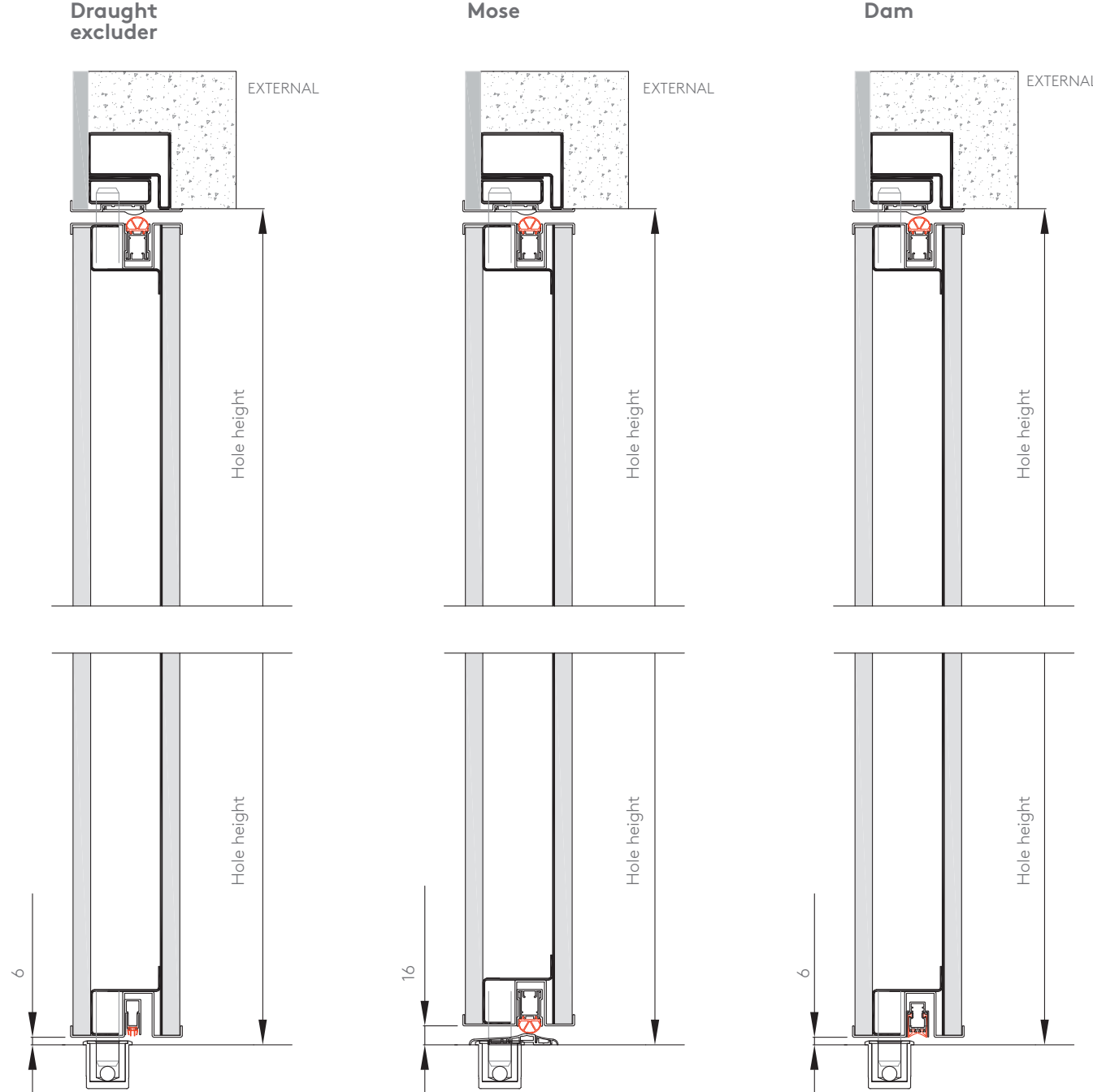


# Synua frame

The 4-sided frame is the solution to help better distribute the weight of the door on a solid concrete screed. A solution to be used with very heavy doors and in the presence of non-load bearing floors.



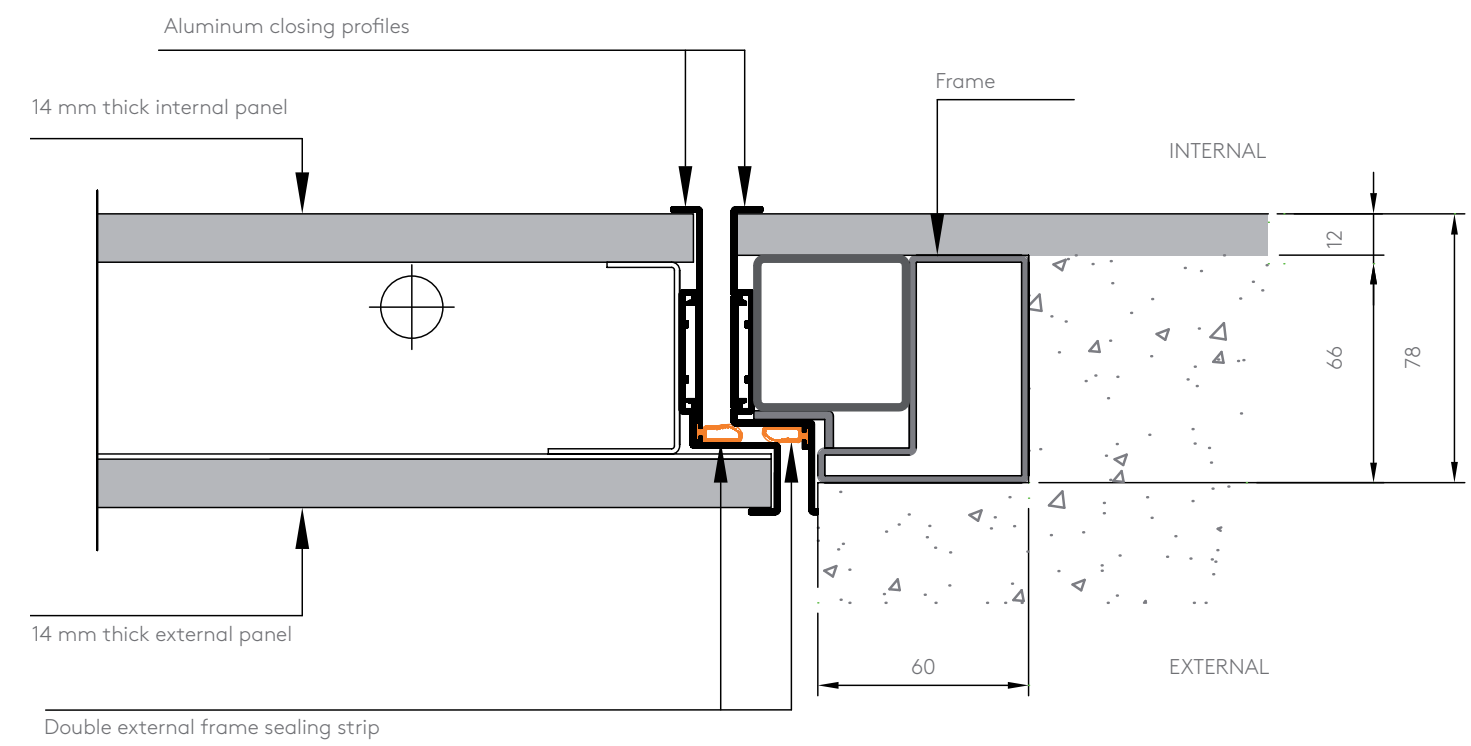
# Synua floor sections







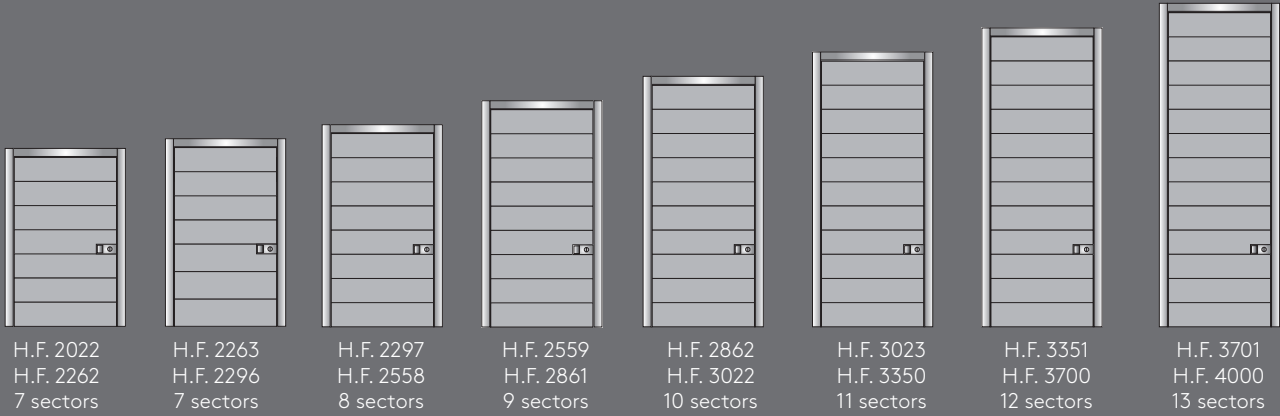
# Leaf frame joint



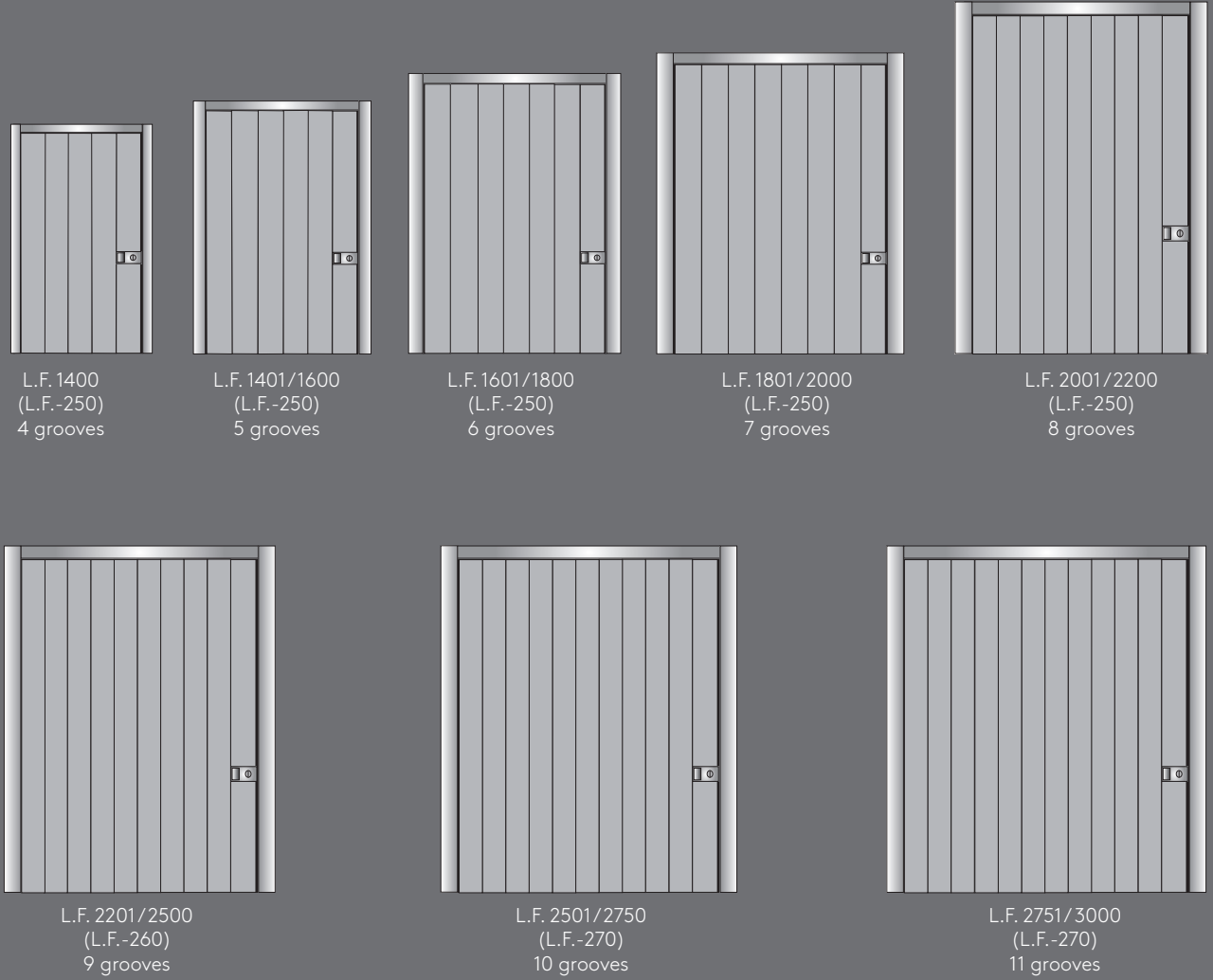


# Synua composition rules

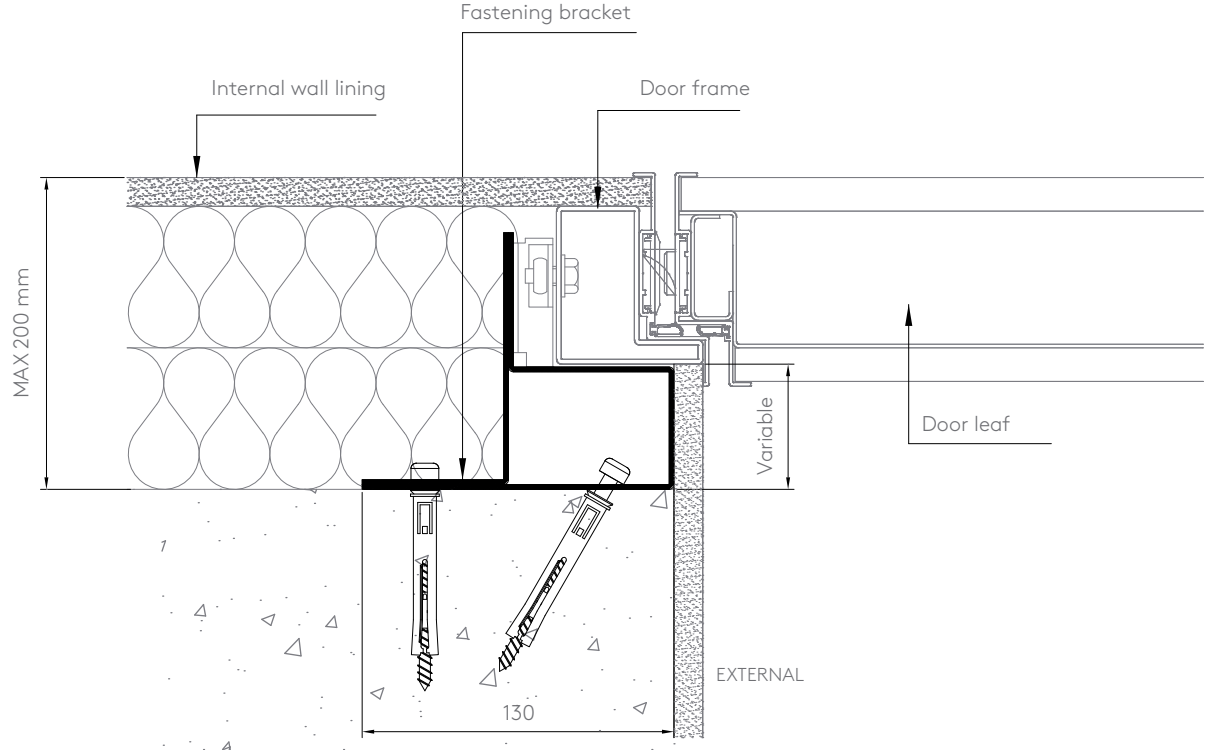
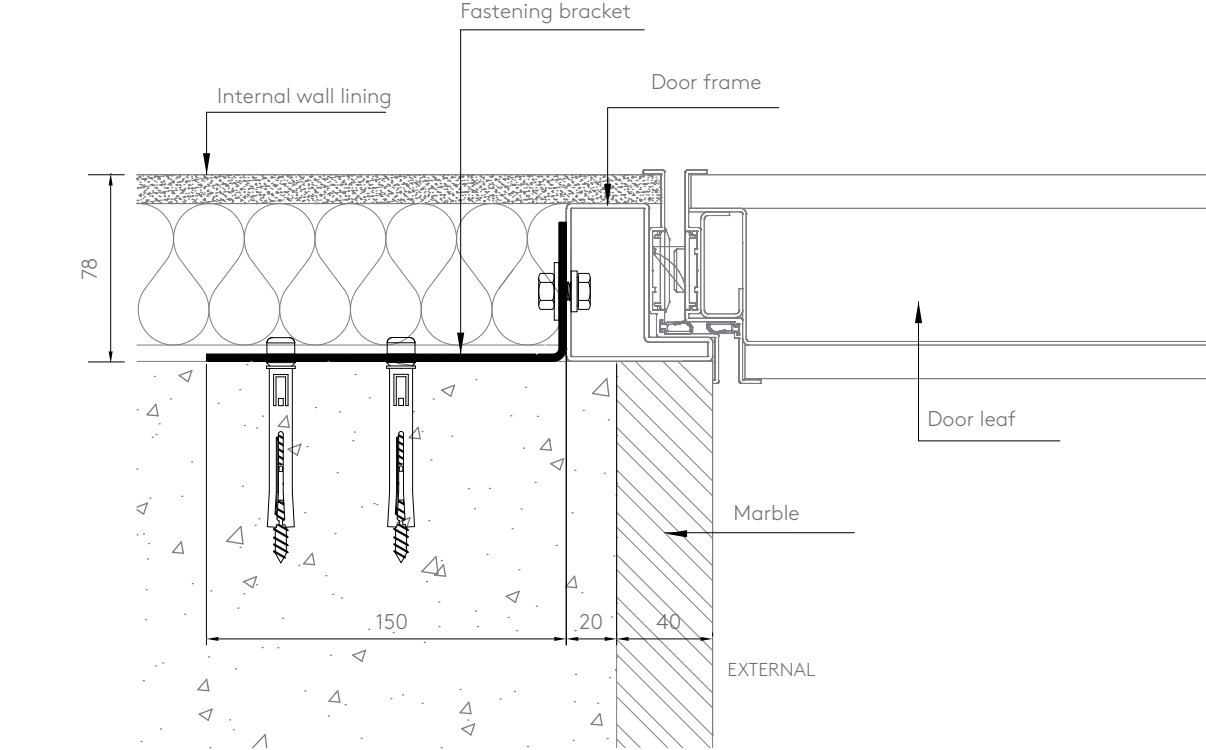
## Horizontal Sectors/Carved



## Vertical Fugato



# Fastening brackets for wall mounting



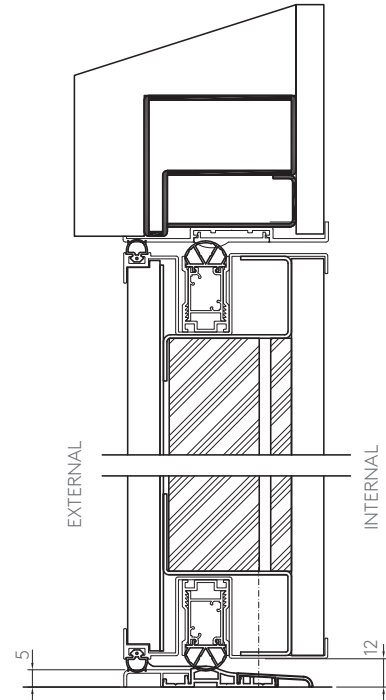


# Synua hurricane-proof

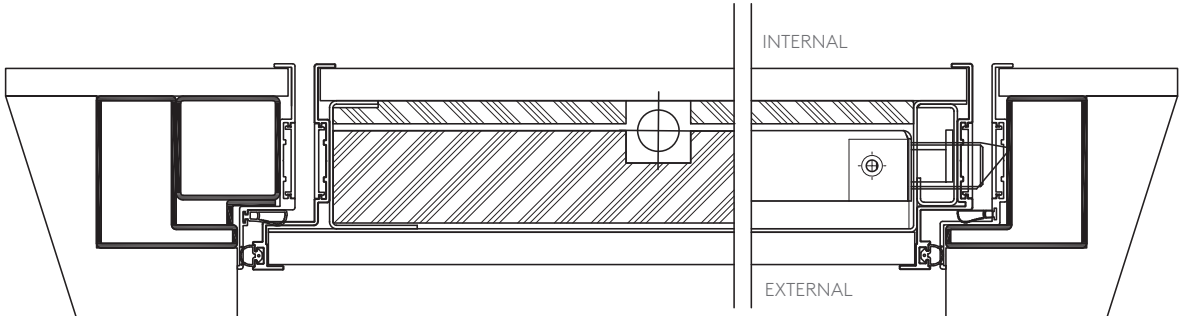
The Miami Dade-certified Synua door, issued by the County of Miami, ensures that it meets stringent quality standards in door designs that can withstand extreme wind loads caused by hurricanes.



Vertical section

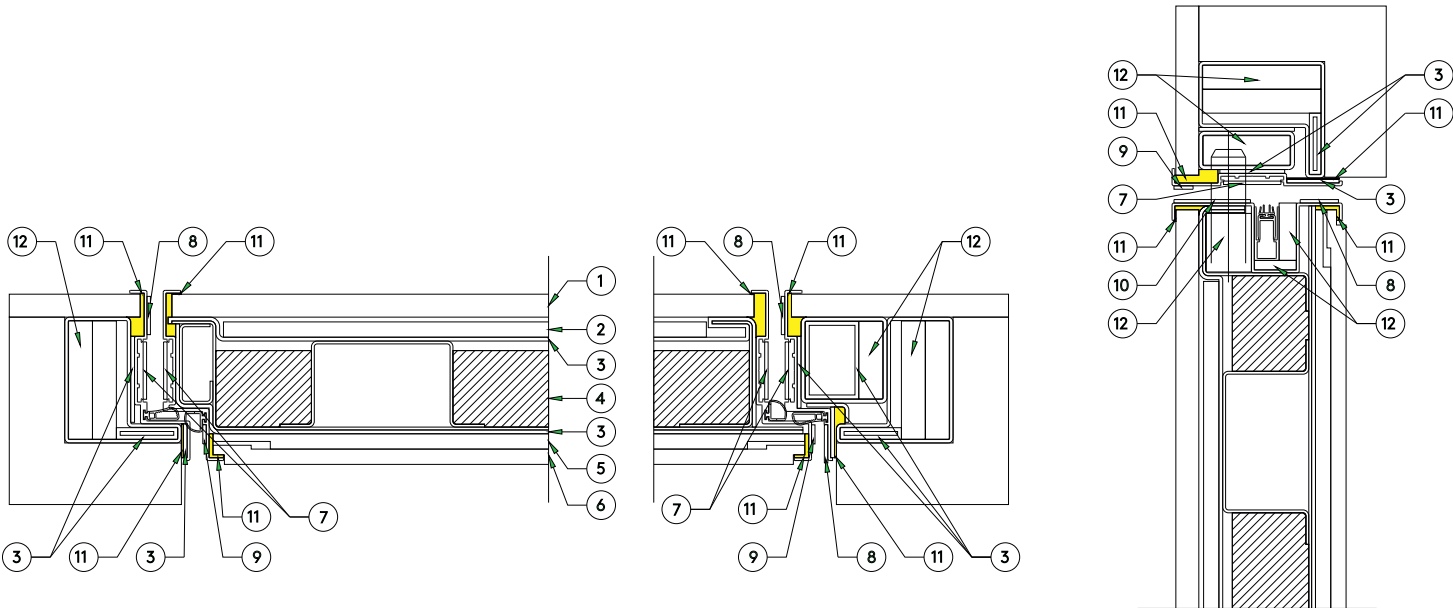


Horizontal section

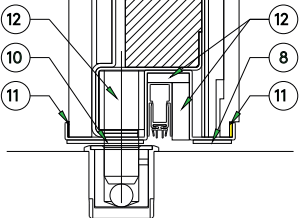


# Synua UL 120

The Synua UL 120 door, certified by the UL laboratory, is a guarantee of compliance with the rigorous U.S. standards for the manufacture of doors that can withstand fire for 120 minutes.



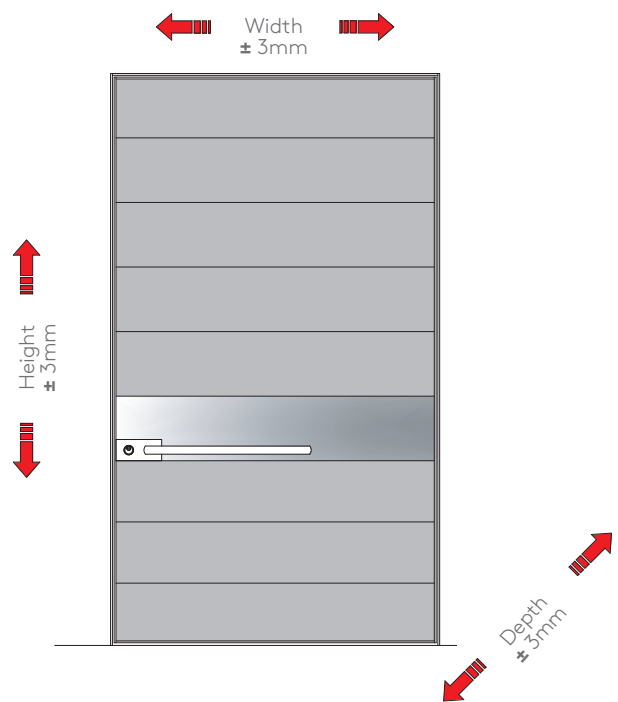
- 1 Internal panel
- 2 Calcium silicate internal
- 3 Ceramic paper
- 4 Mineral wool
- 5 Outer calcium silicate
- 6 Outer panel
- 7 Thermo-expanding seal 30x1.8mm
- 8 Thermo-expanding seal 20x1.8mm
- 9 Thermo-expanding seal 10x1.8mm
- 10 Thermo-expanding seal 40x1.8mm
- 11 Sealant
- 12 Gypsotech focus "F" plasterboard





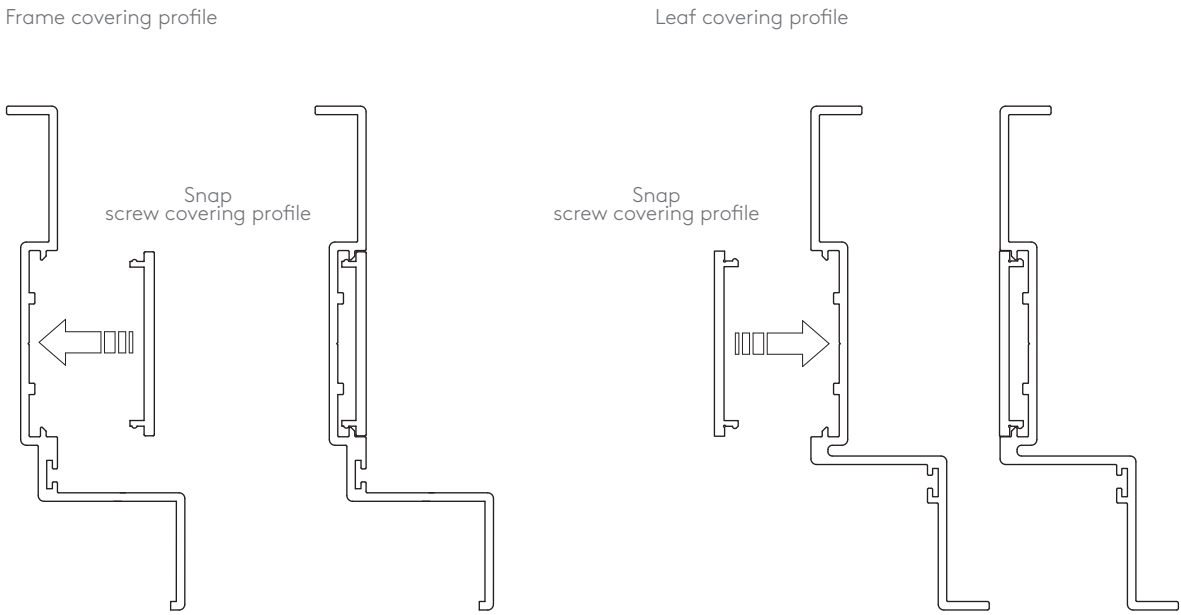
# Adjustable pivot mechanism

The mechanism that allows the rotation of the leaf (patented) facilitates the installation and adjustment of the door. Thanks to exclusive solutions, all this can be achieved with a simple Allen wrench.



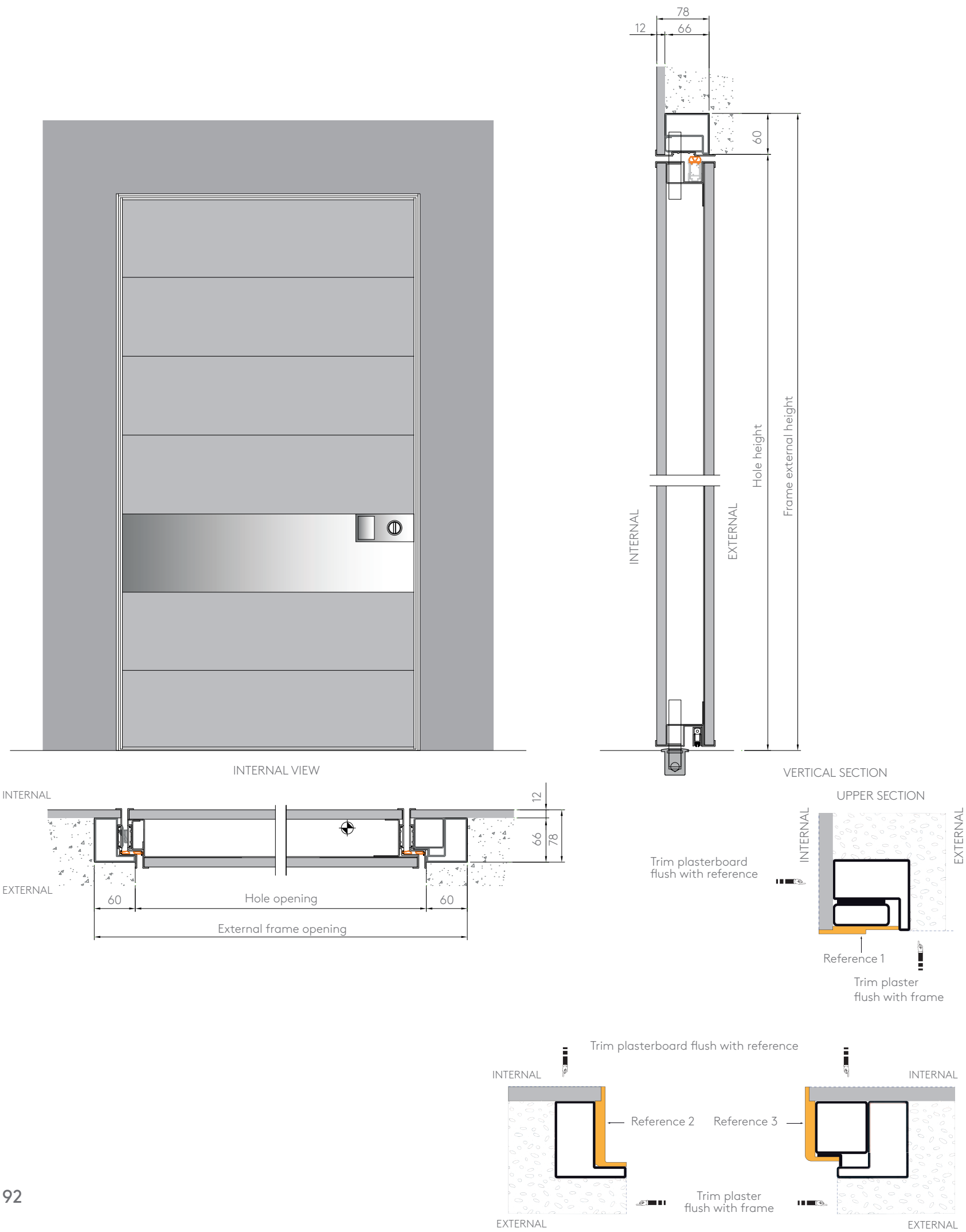
# Aluminum covering profiles without visible screws

The brushed aluminum finish covers the frame and the door profile. No screw is visible, a special feature that guarantees a thorough cleaning and refined aesthetics.



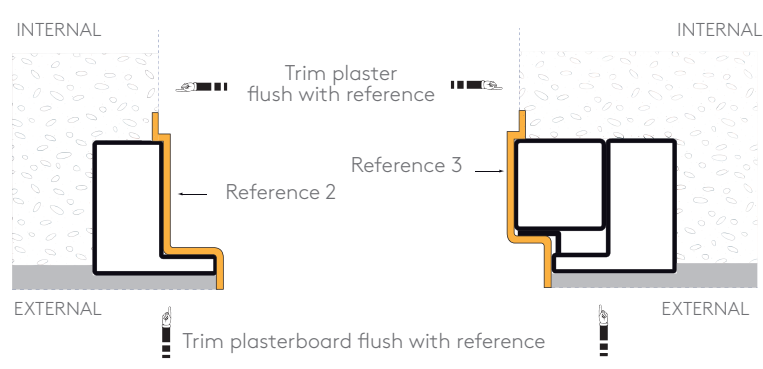
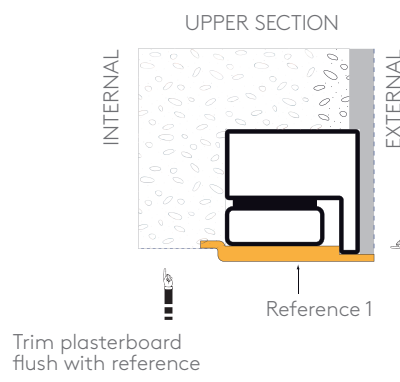
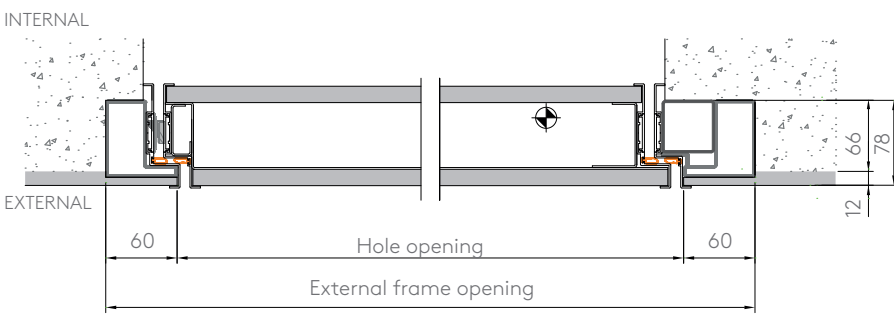
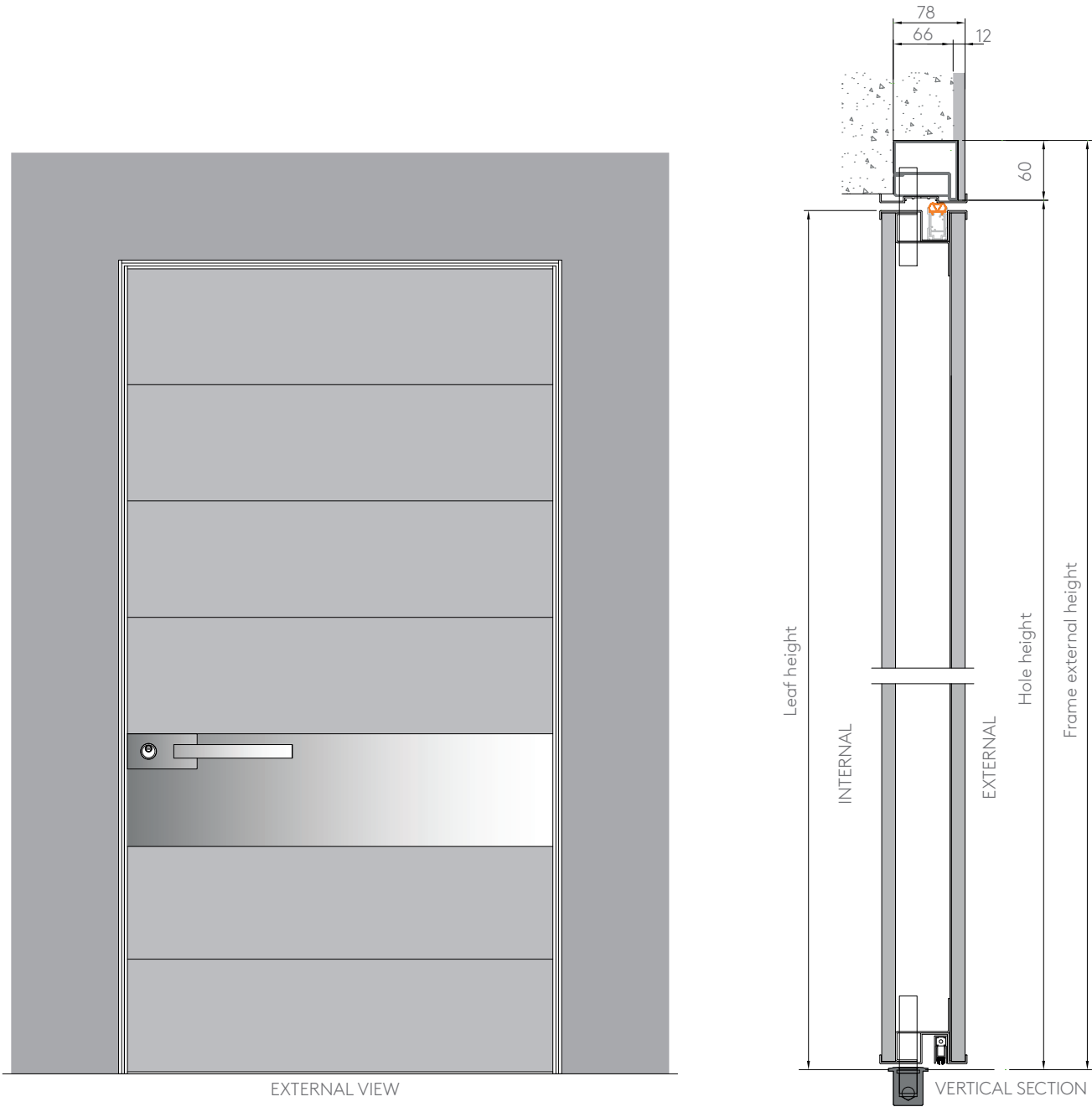


# Synua flush with internal wall





# Synua flush with external wall

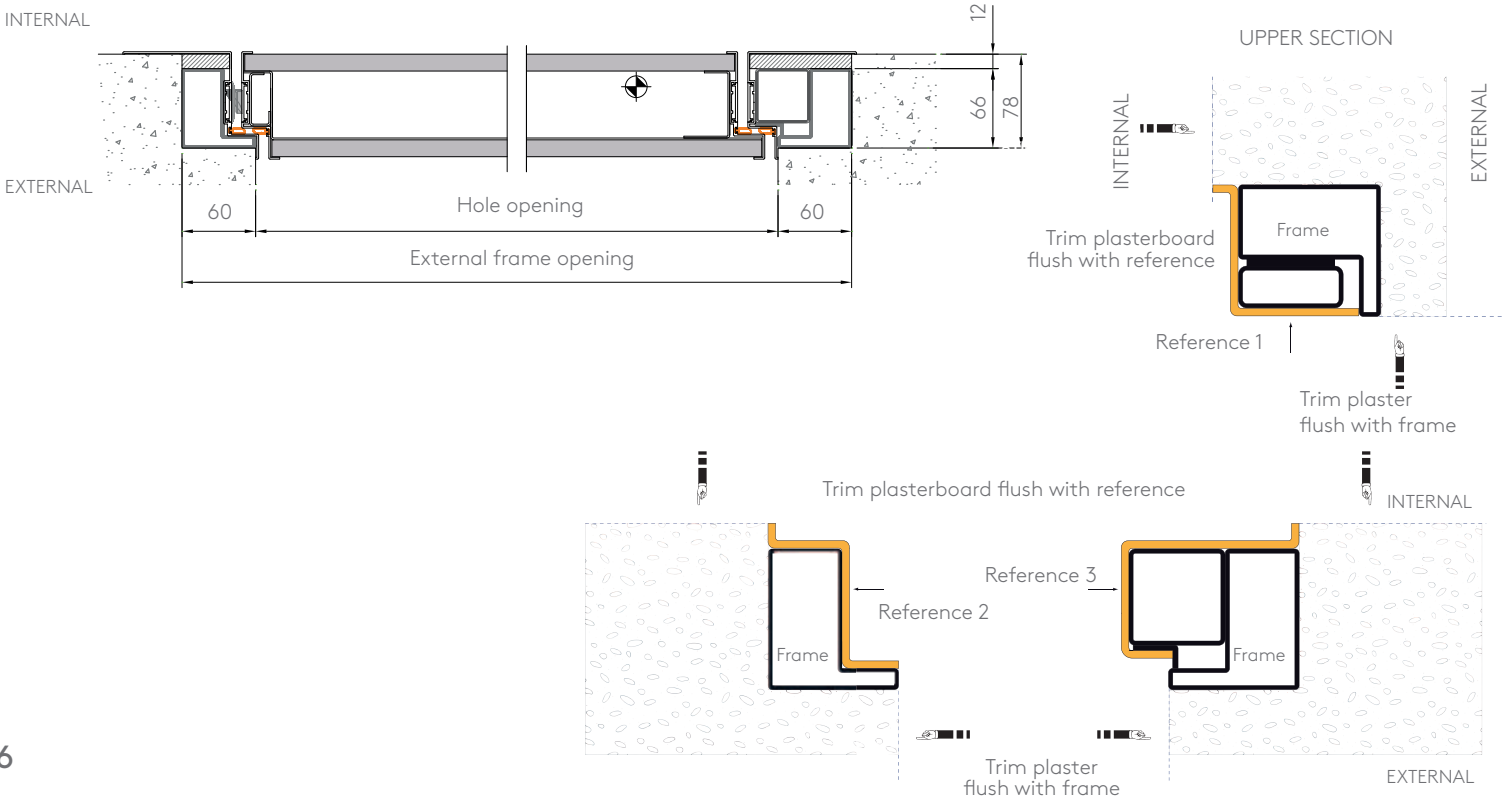
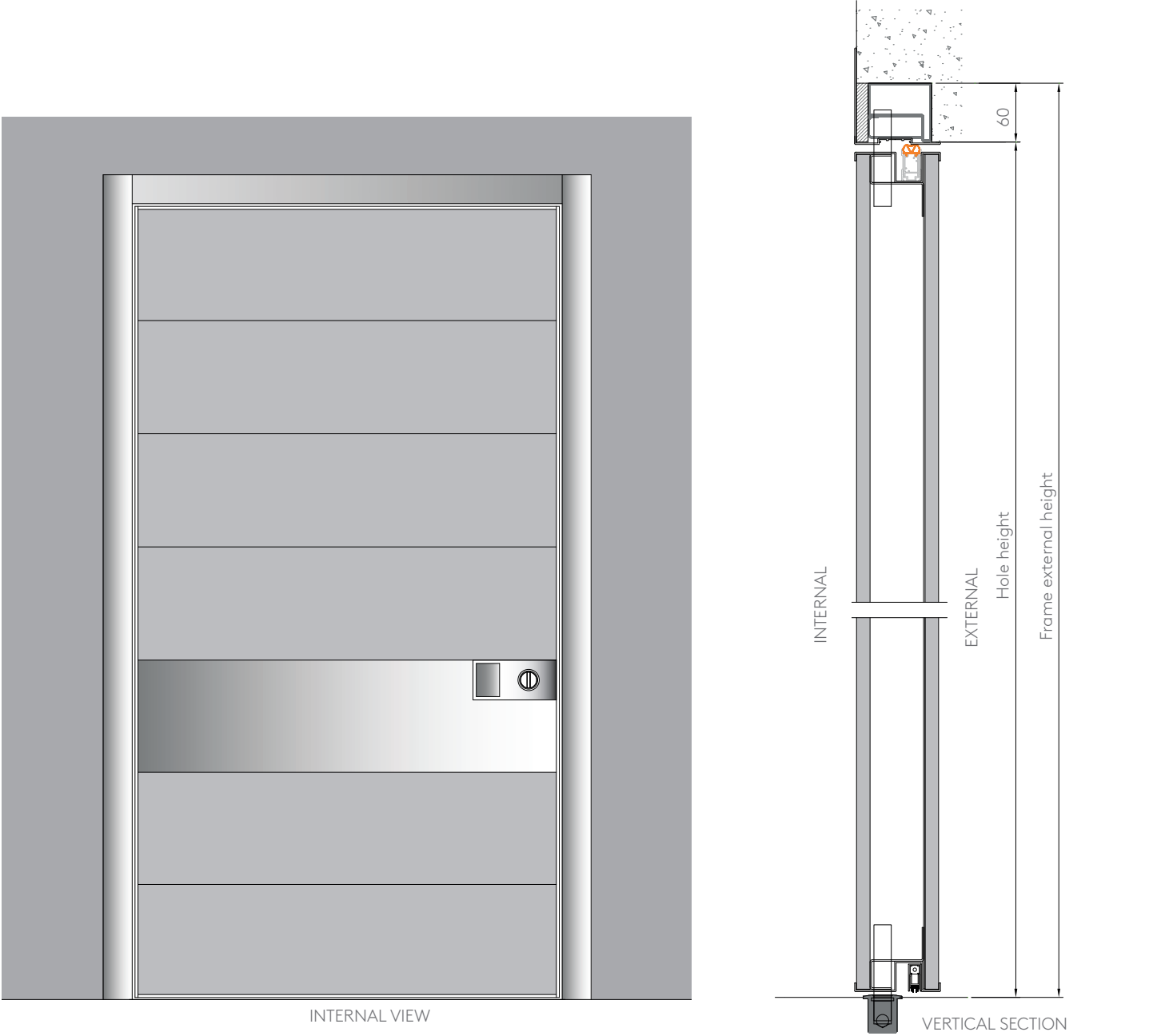


Trim plasterboard flush with reference

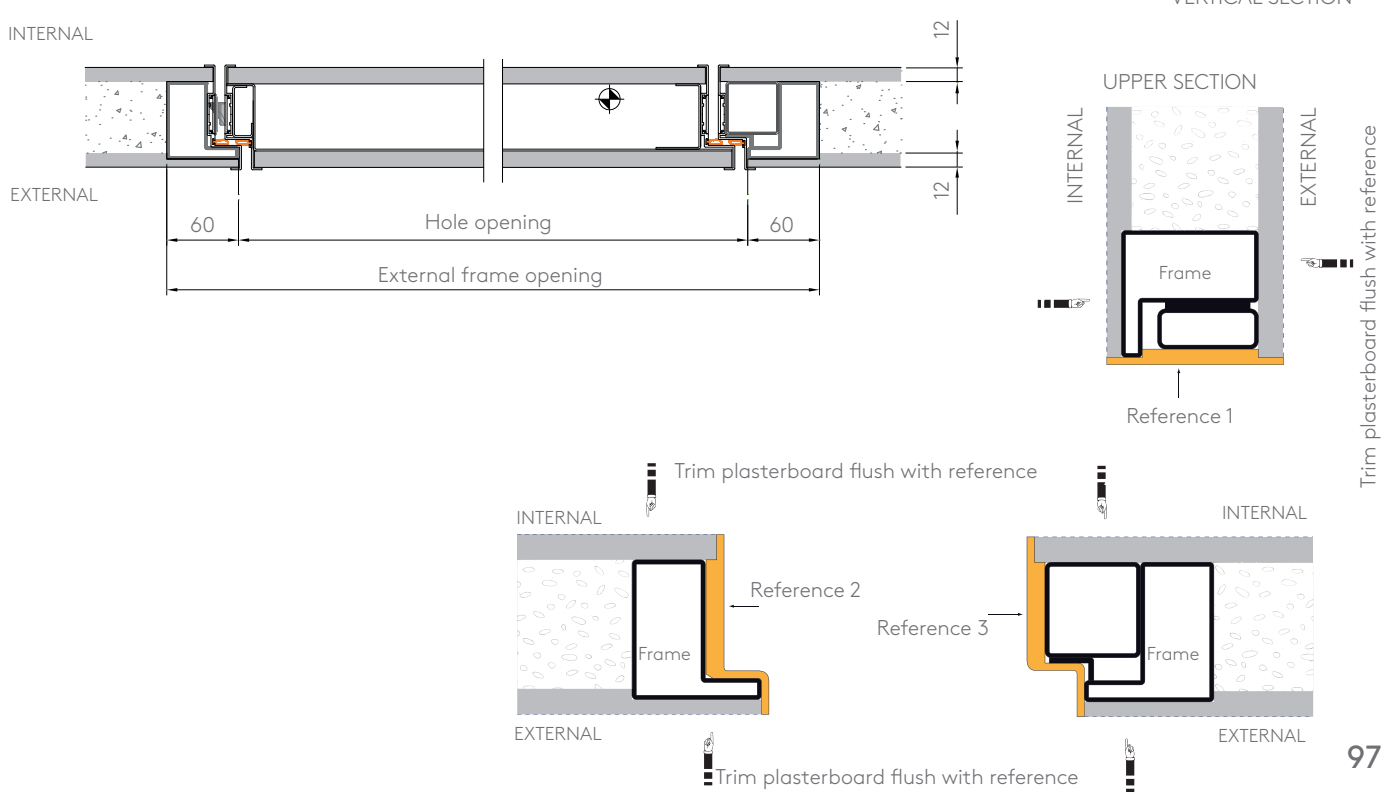
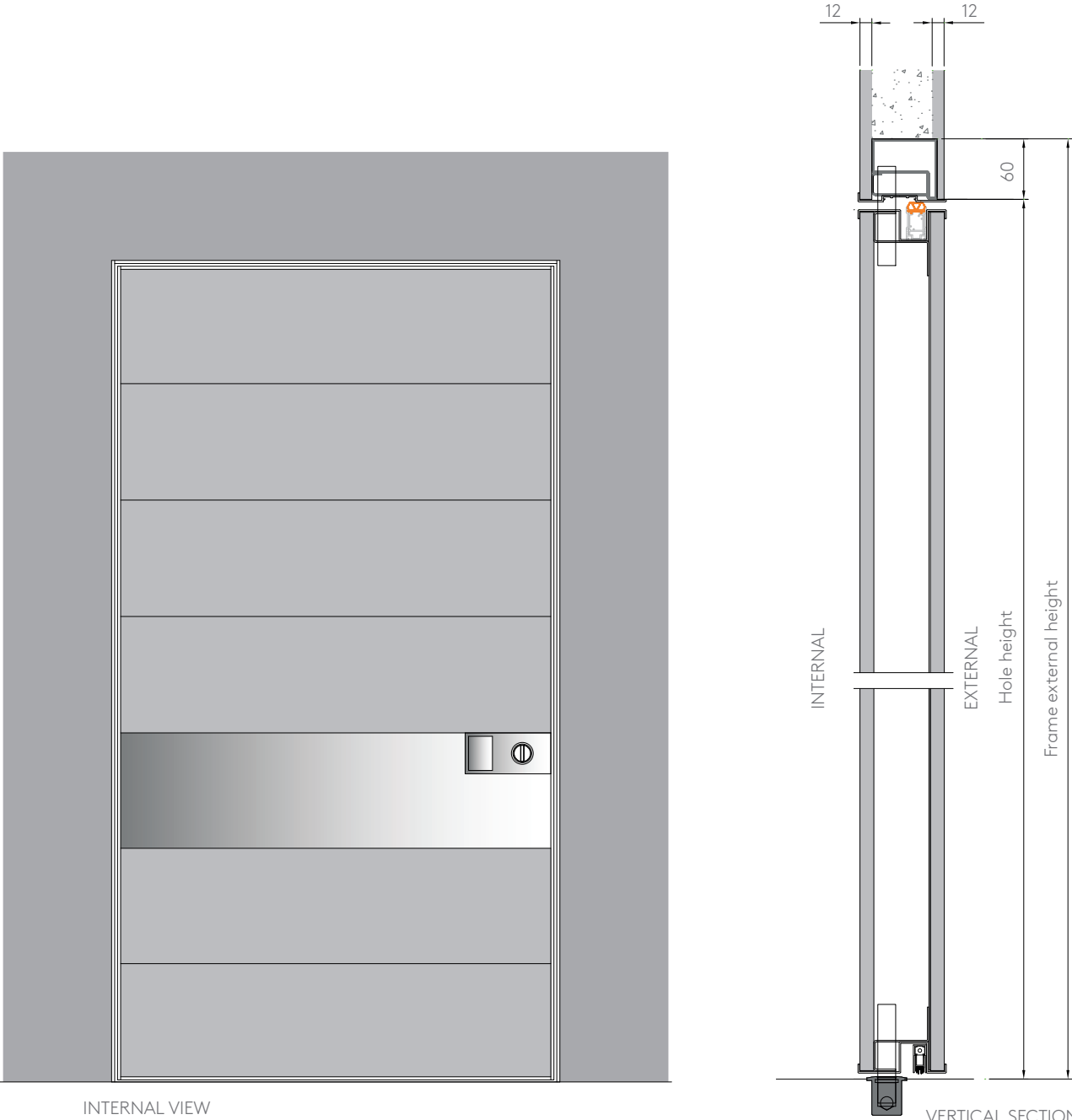




# Synua coplanar internally

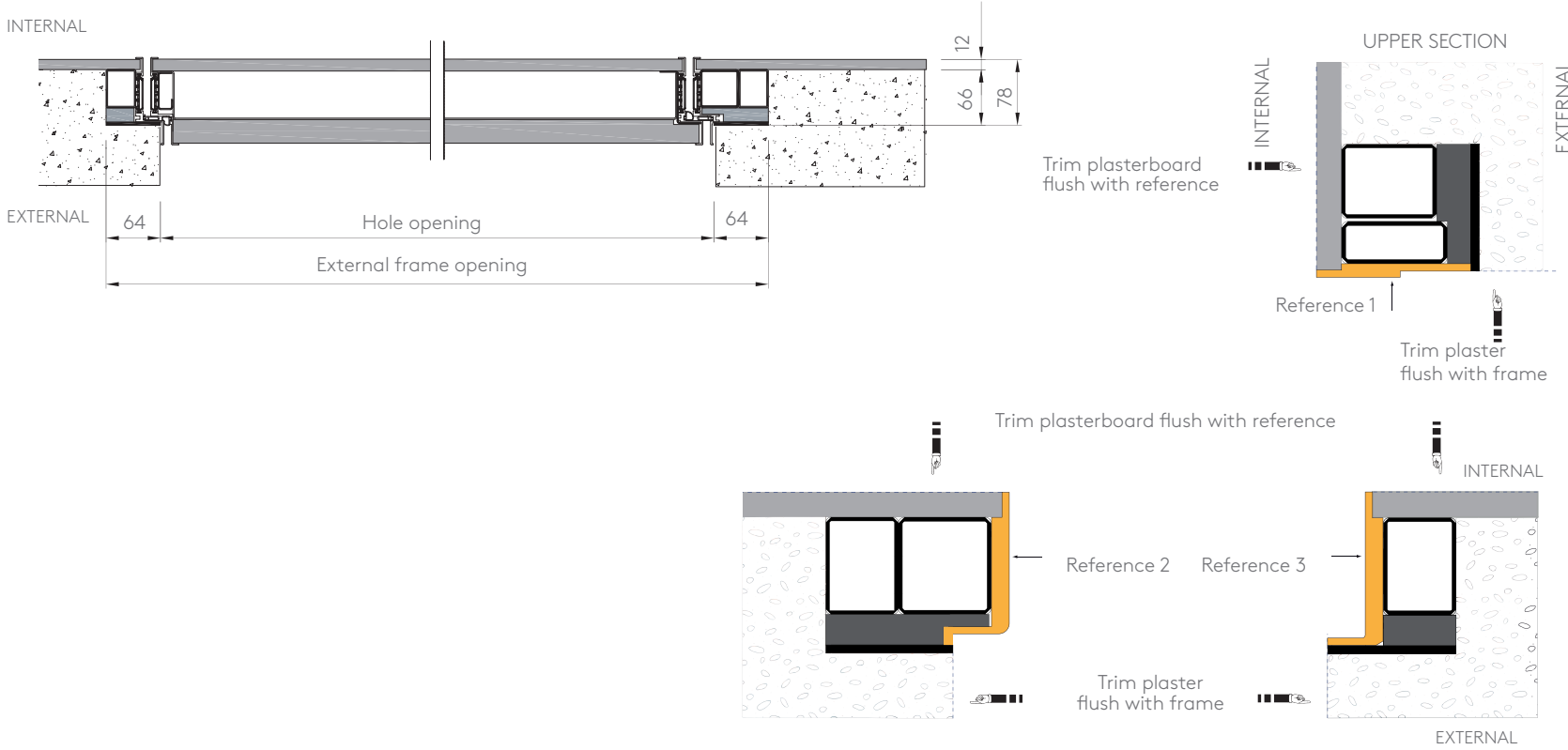
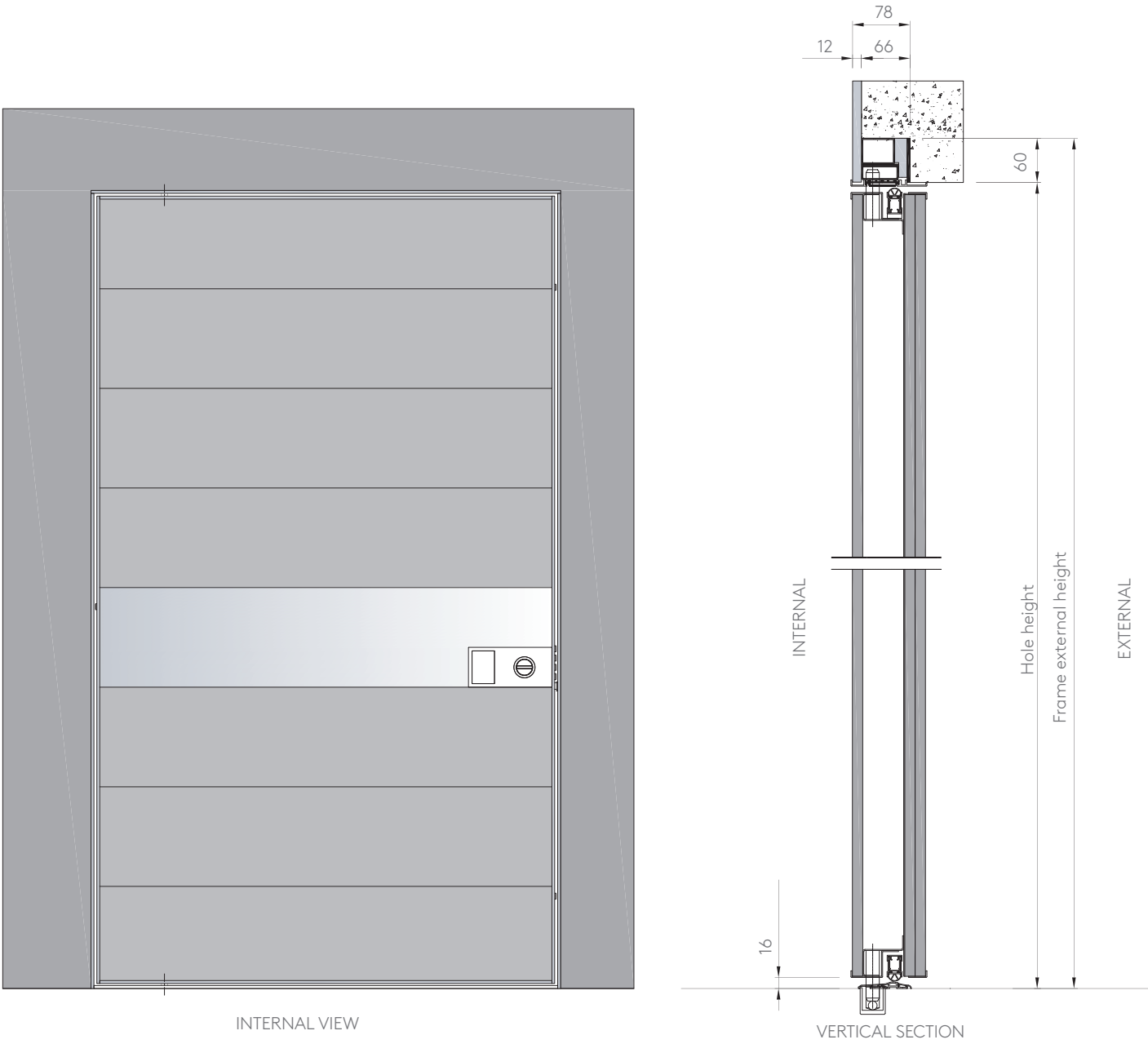


# Synua flush with internal/external wall

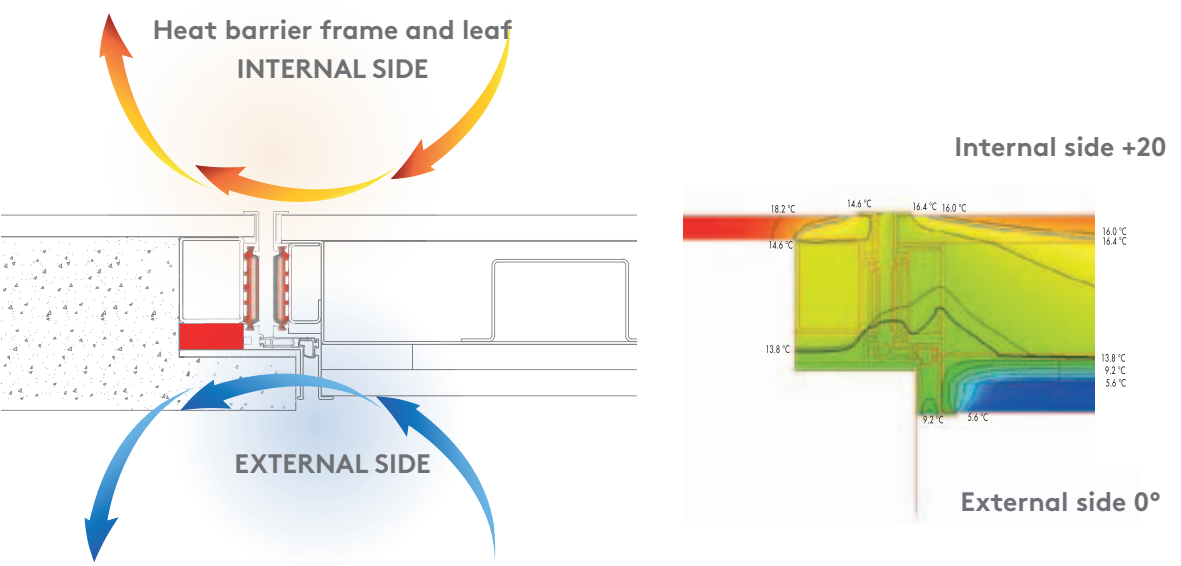
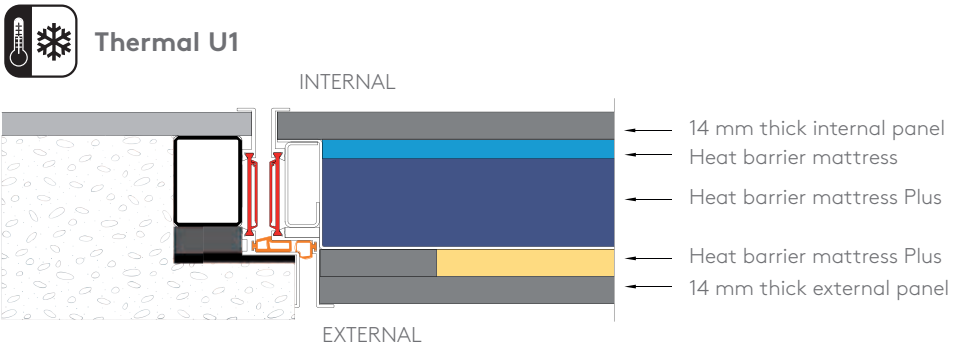
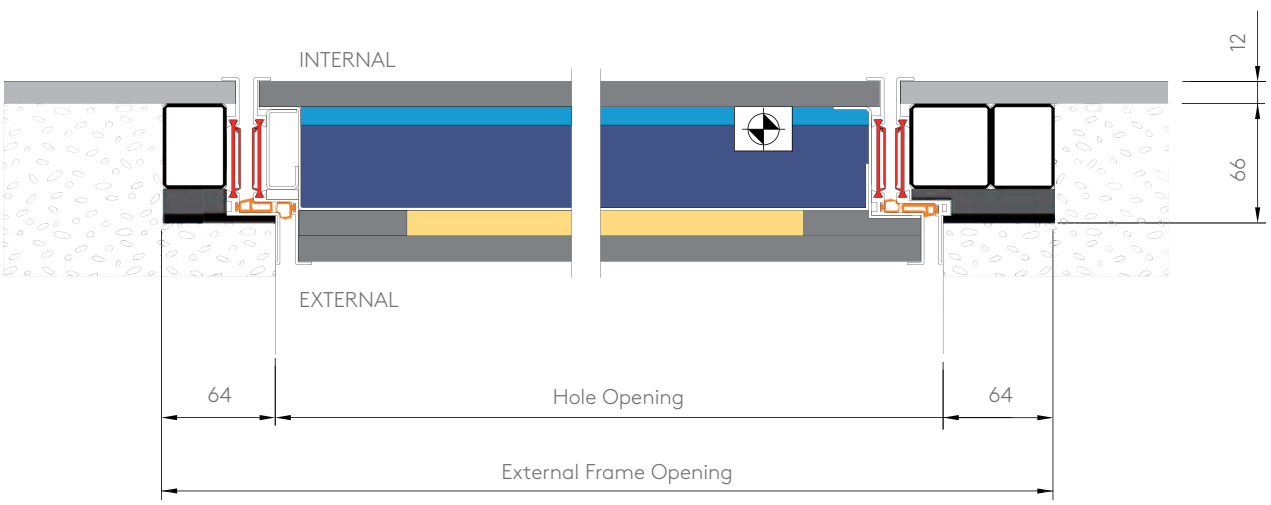




# Synua 3TT flush with internal wall



# Synua 3TT

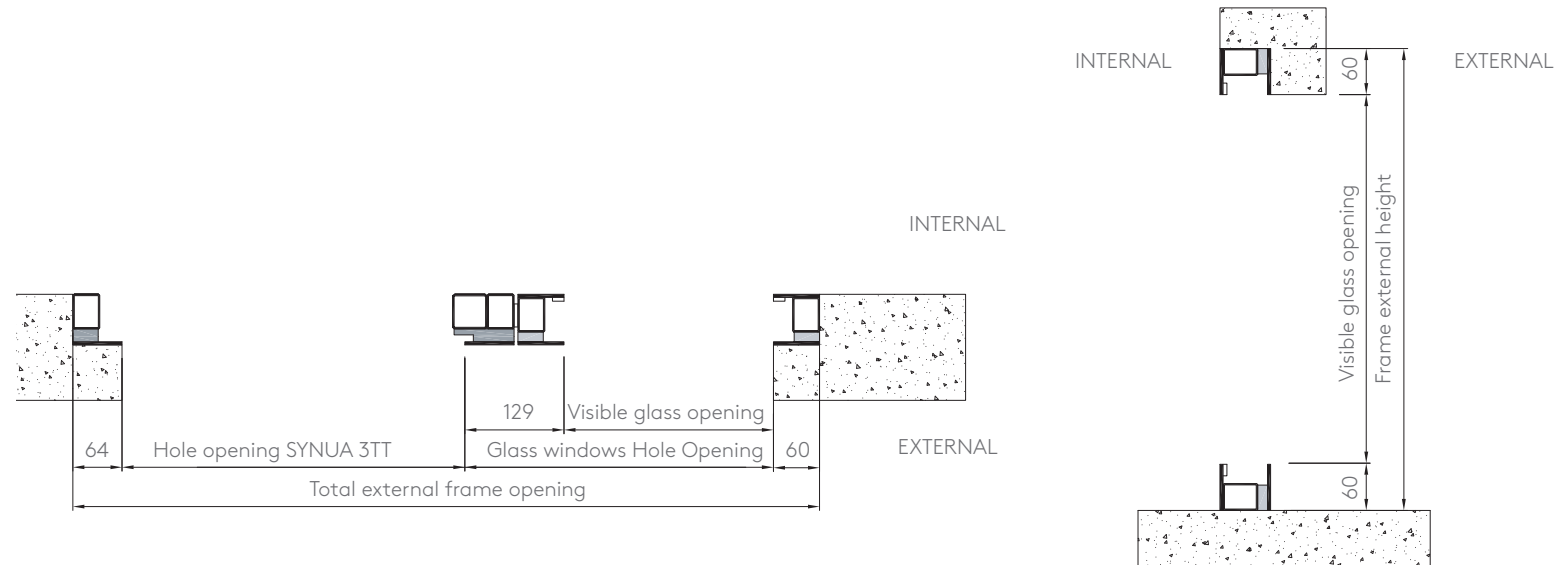




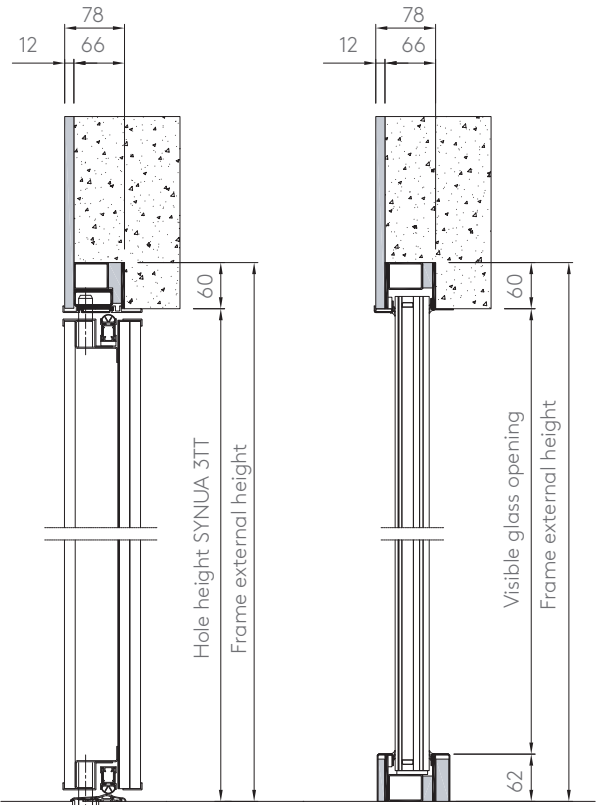
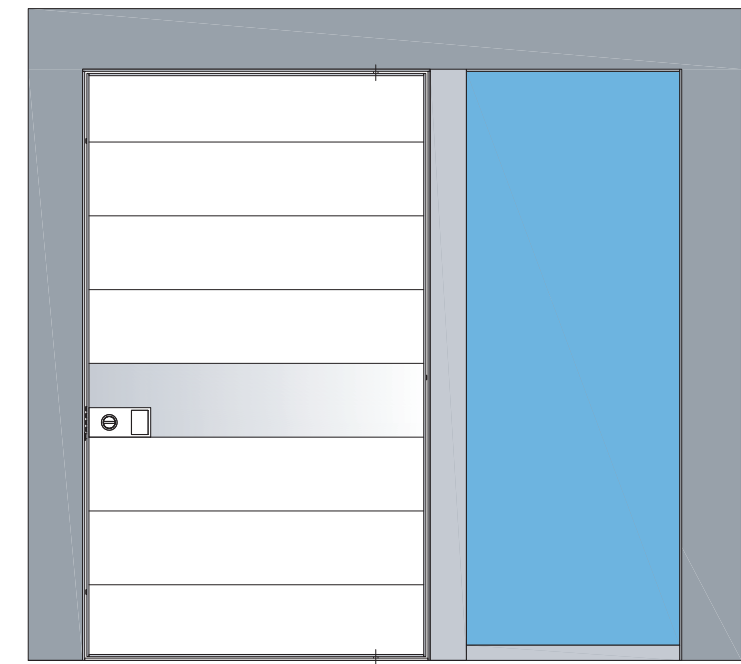




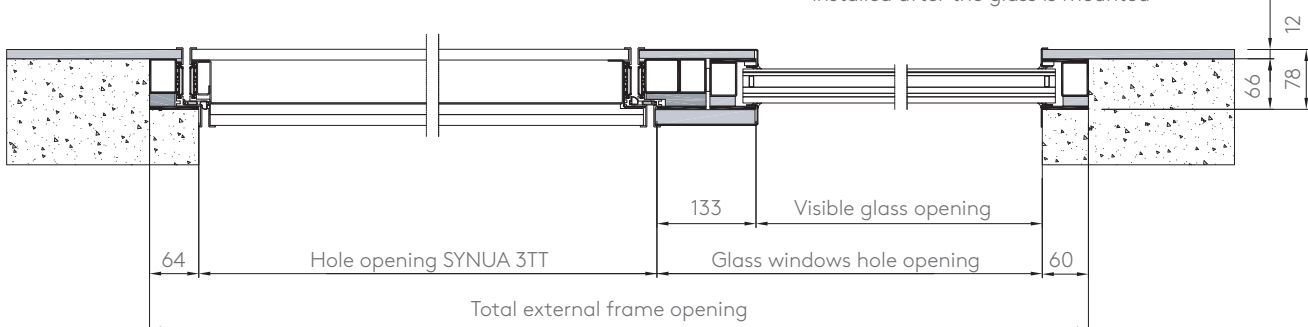
# Synua 3TT with side panel flush with the internal wall



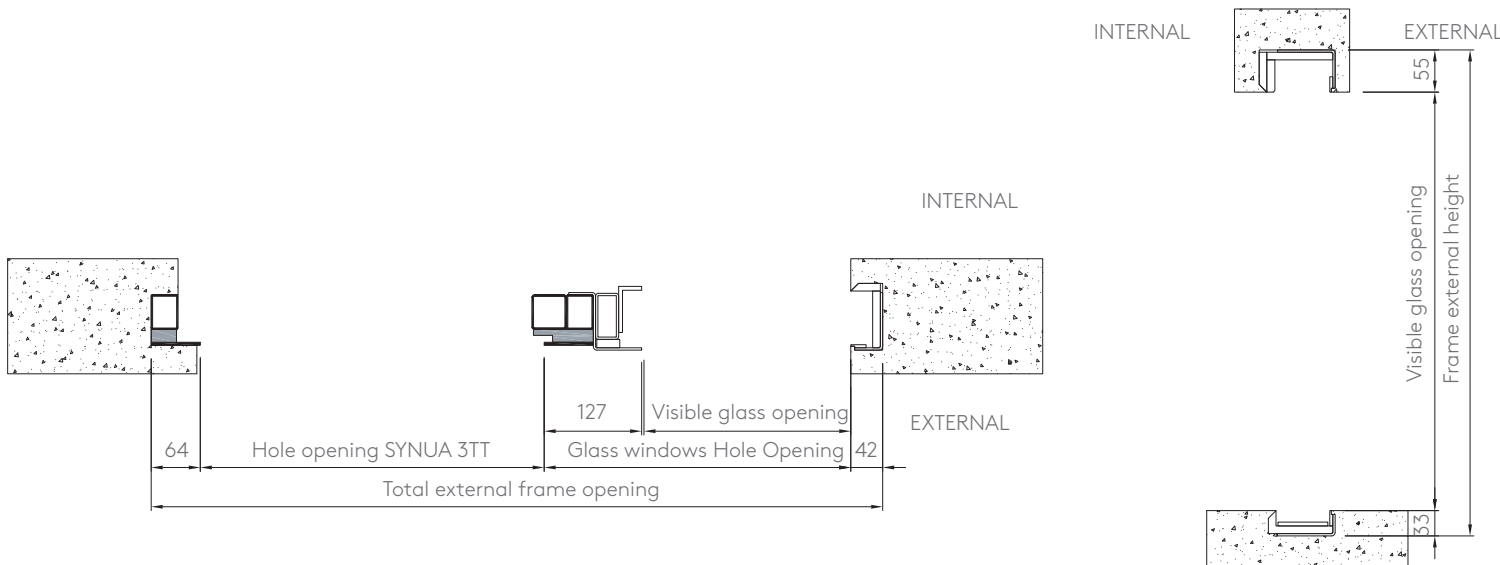
Internal view



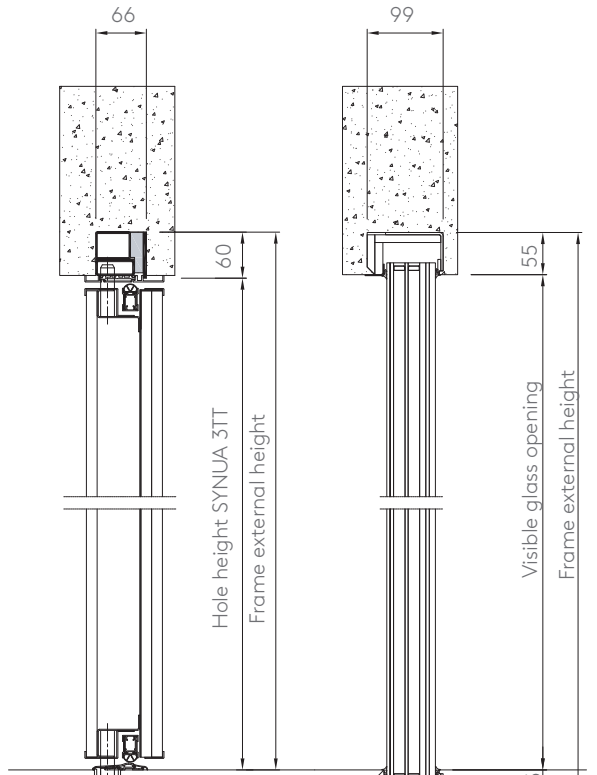
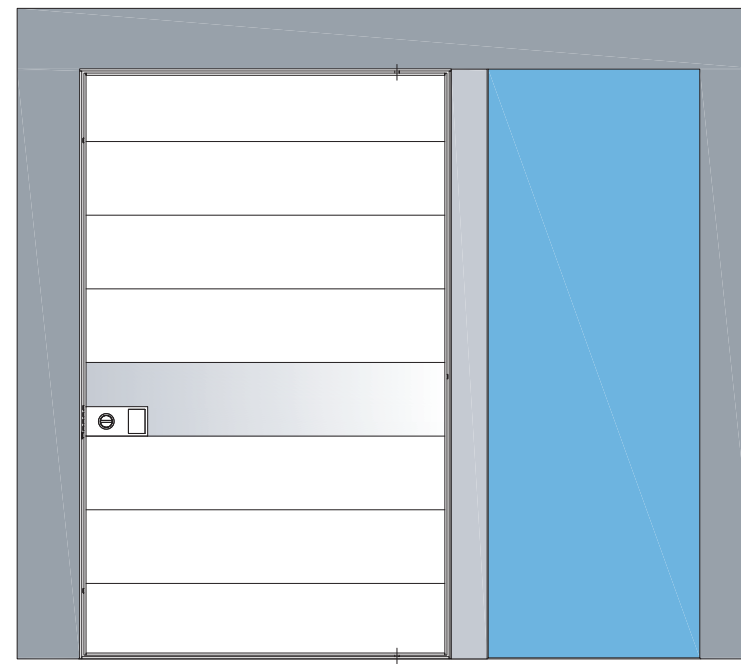
NB: The plasterboard for the flush with the internal wall must be installed after the glass is mounted



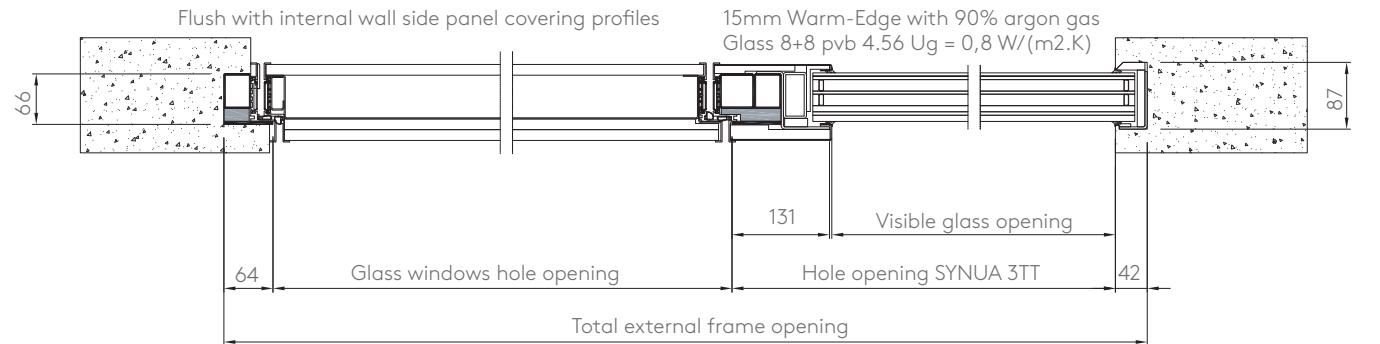
# Synua 3TT with side panel Minimal



Internal view



Glass 4+4 pvb 0.76  
low energy emissive  
15mm Warm-Edge with 90% argon gas  
Glass 4mm extra clear  
15mm Warm-Edge with 90% argon gas  
Glass 8+8 pvb 4.56 Ug = 0,8 W/(m2.K)



# Nova

The pivot safety door that allows creating fully glass windows in any size. It is the entrance architecture that allows new design possibilities

## Door with adjustable pivot hinges with:

- Maximum realizable measures 3200x6200mm
- Other measurements on request
- Version with standard supplied heat barrier frame and leaf
- Motorized electronic lock with integrated access control system on request
- Automatic opening with floor motor for doors weighing up to 560 kg on request

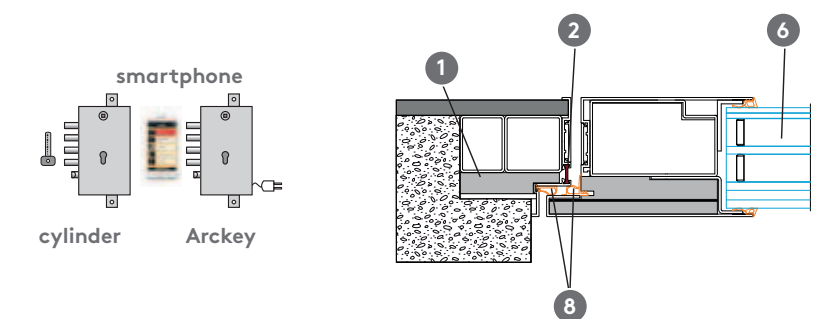
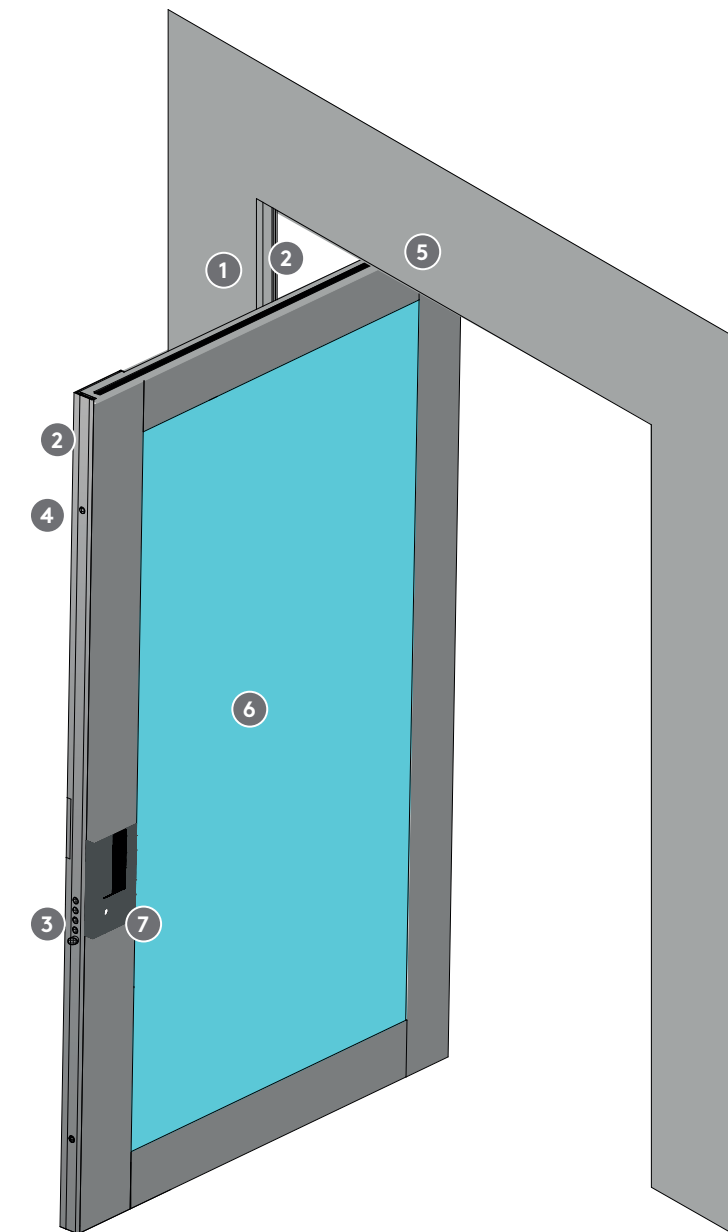


## Nova specifications

Leaf with tubular steel New Steel 20/10, lock protection plate 30/10, tubular aluminum covering profiles, siliconic frame sealing strips, standard supplied upper and lower closing mechanism KRONO up to wall opening measurements 1700mm, internal handle and coplanar external long handle, embedded defender, heat barrier frame in New Steel with aluminum covering profiles, pivoting opening with two fully adjustable lower and upper mechanisms, cylinder lock with four dead bolts plus latch, high security SEKUR cylinder complete with n. 1 building site key, n. 4 owner's keys and n. 1 emergency key.



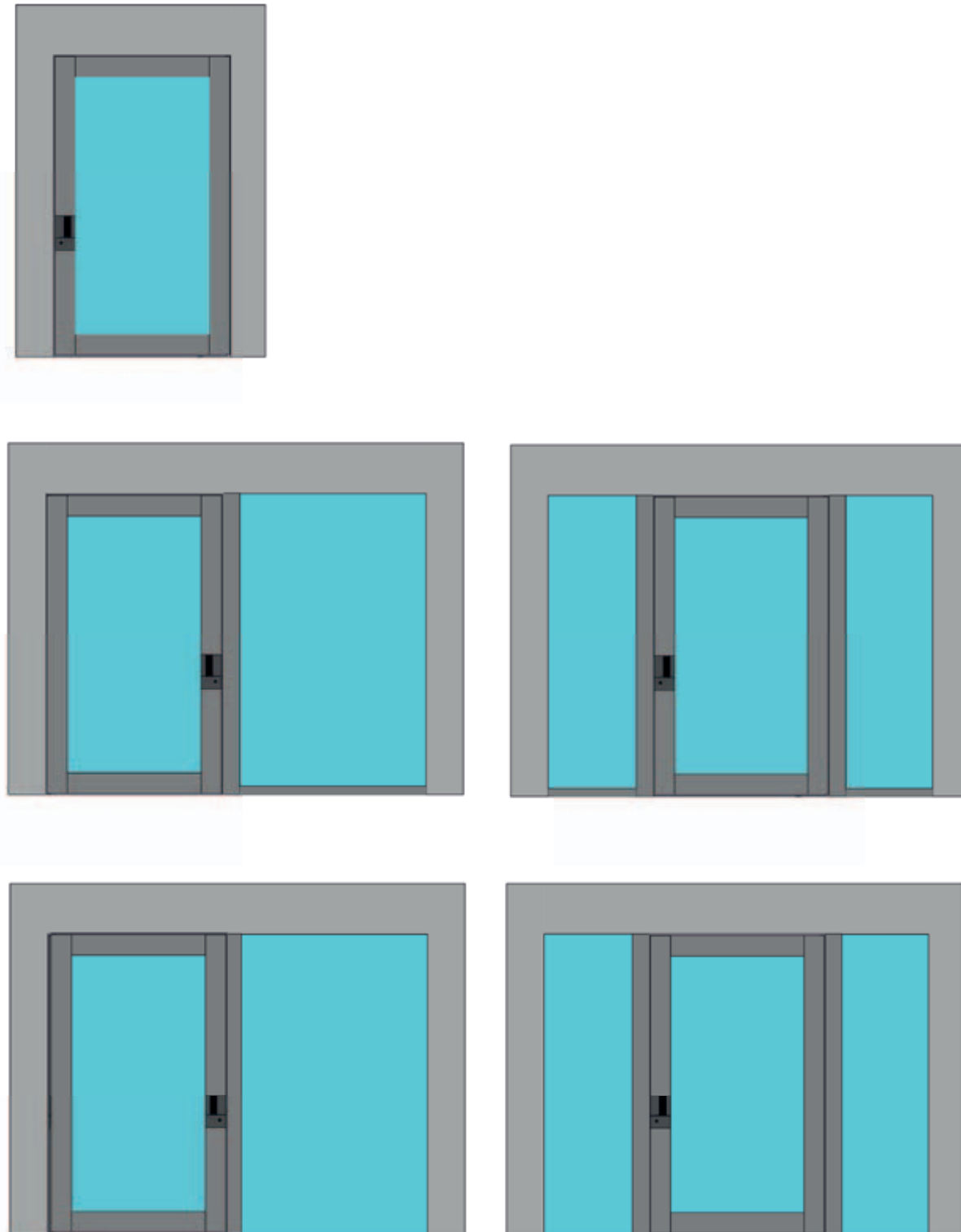
- 1 Heat barrier frame
- 2 Aluminum closing profiles heat barrier
- 3 Cylinder lock
- 4 Switchlock
- 5 Patented adjustable pivot mechanism
- 6 Thermal armored glass
- 7 External handle and internal handle coplanar
- 8 Double strike plate sealing strip





# Performance

Flush with internal wall



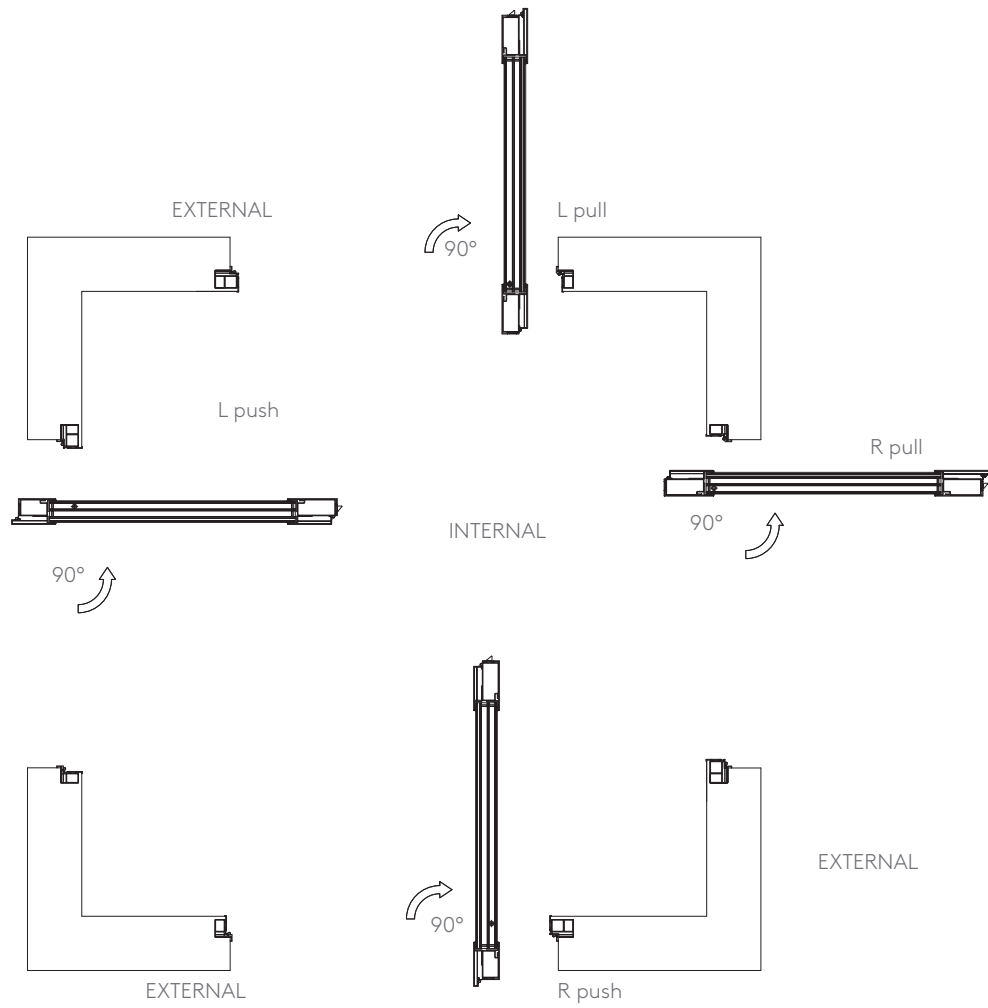
Performance	standard	Upon request	size tested sample	Max certified realizable measures
break-in resistance	Class 3	-	1400 x 2400	2200 x 3400
acoustic	38 dB	-	1400 x 2400	± 0
air	2	Mose Kit 4 Dam Kit 4	1400 x 2400	Area + 50%
water	0	Mose Kit 5A Dam Kit 5A	1400 x 2400	Area + 50%
wind	C4	Mose Kit C5 Dam Kit C5	1400 x 2400	Area + 0% - 100%
thermal	1	-	1230 x 2180	Area ≤ 3.6sqm

## Nova: characteristics and weights

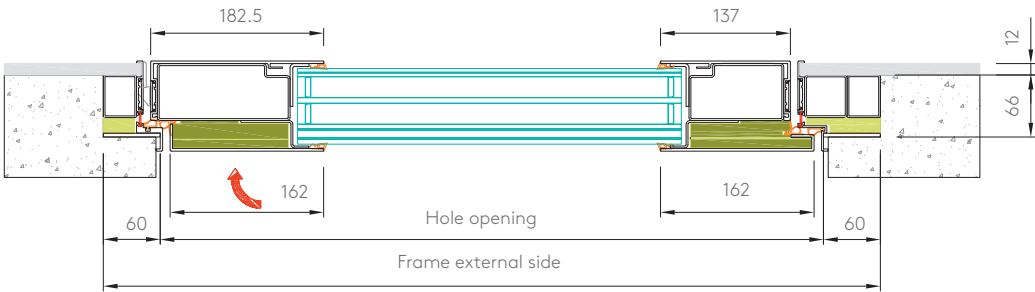
Hole opening	Glass	Leaf weight	Glass weight class 3	Safety glass weight	Total weight leaf+ Glass class 3	Total weight leaf + safety glass
1100X2100	1.44 sqm.	76 Kg.	118 Kg.	100 Kg.	194 Kg.	176 Kg.
1200X2400	1.89sqm	86 Kg.	154 Kg.	132 Kg.	240 Kg.	218 Kg.
1300X2400	2.10 sqm.	88 Kg.	172 Kg.	154 Kg.	260 Kg.	242 Kg.
1300X2500	2.20 sqm.	91 Kg.	181 Kg.	154 Kg.	272 Kg.	245 Kg.
1500X2500	2.64 sqm.	96 Kg.	261 Kg.	185 Kg.	312 Kg.	281 Kg.
1300X2700	2.40 sqm.	97 Kg.	198 Kg.	168 Kg.	295 Kg.	265 Kg.
1700X3100	3.92 sqm.	118 Kg.	323 Kg.	274 Kg.	441 Kg.	392 Kg.
2250X4000	7.21 sqm.	154 Kg.	595 Kg.	505 Kg.	749 Kg.	659 Kg.

The declared performances are valid for intact doors installed according to the official installation instructions of Oikos Venezia srl.

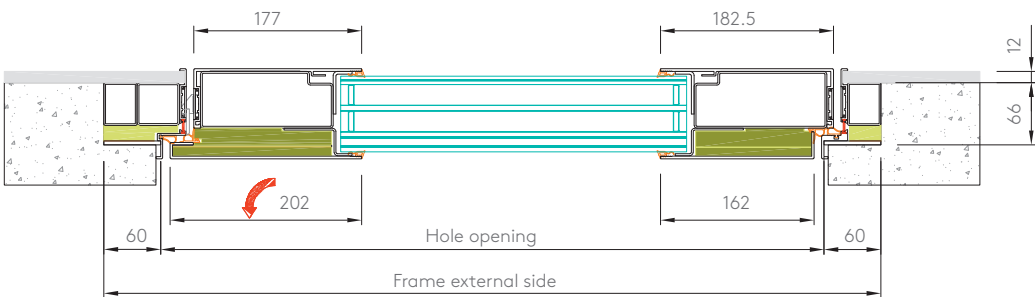
# Nova door opening directions



Door horizontal section with push opening

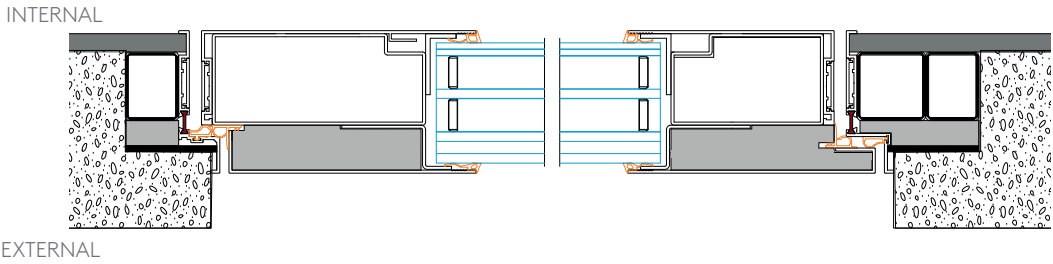


Door horizontal section with pull opening

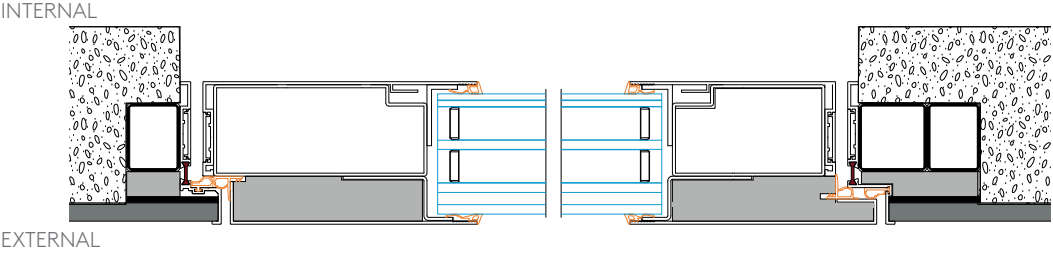


# Nova fitting solutions

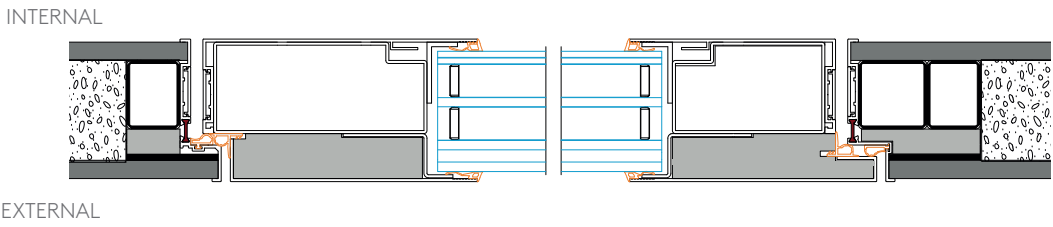
Nova flush with the internal wall



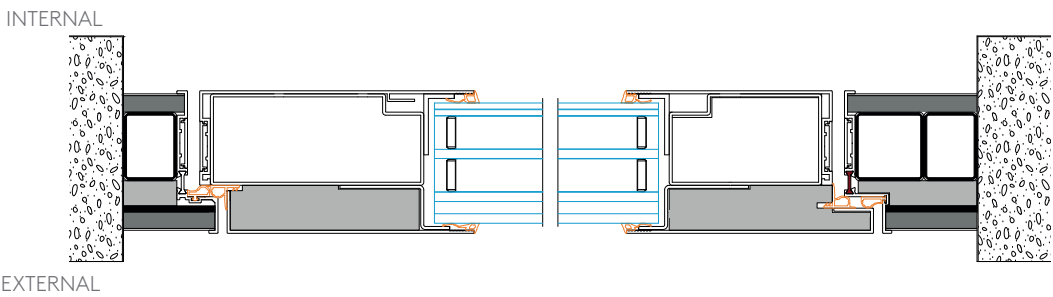
Nova flush with the external wall



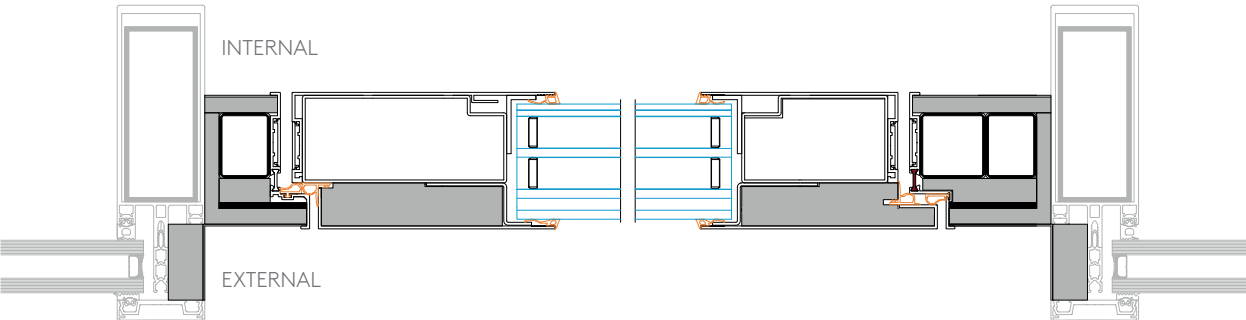
Nova flush with the internal-external wall



Nova wall opening fitting



Nova façade fitting (to be evaluated depending on the system used)



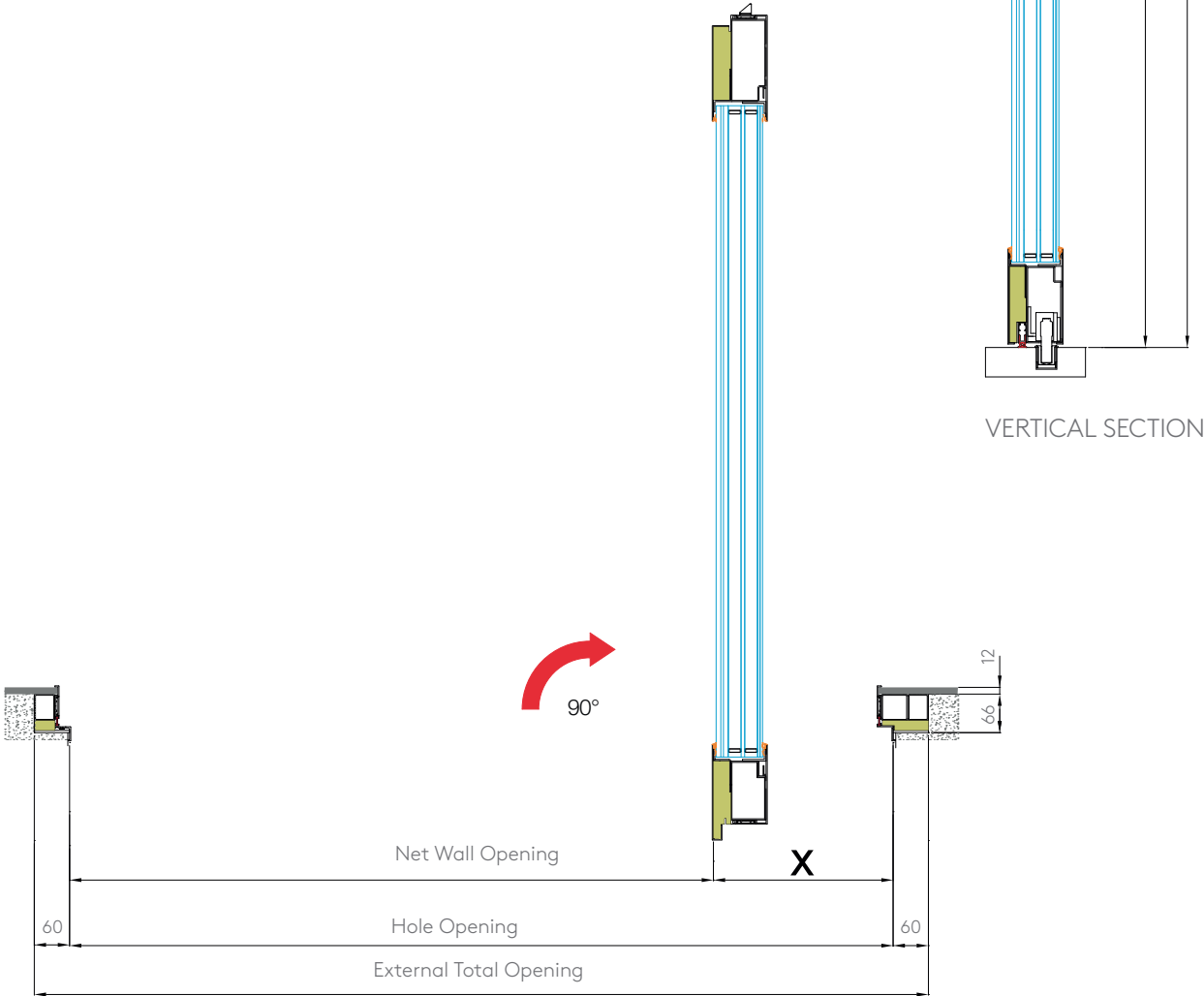
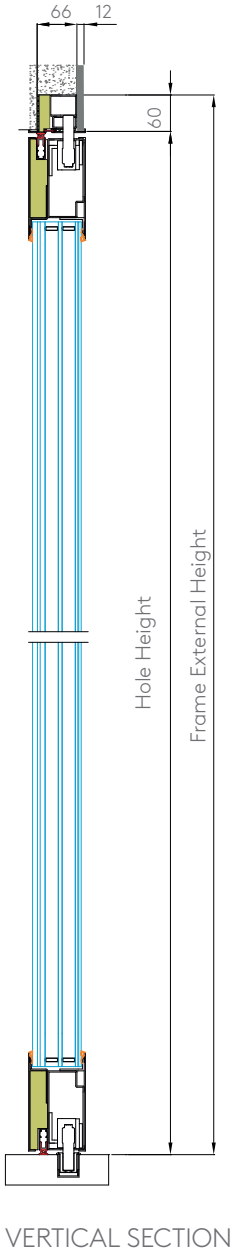




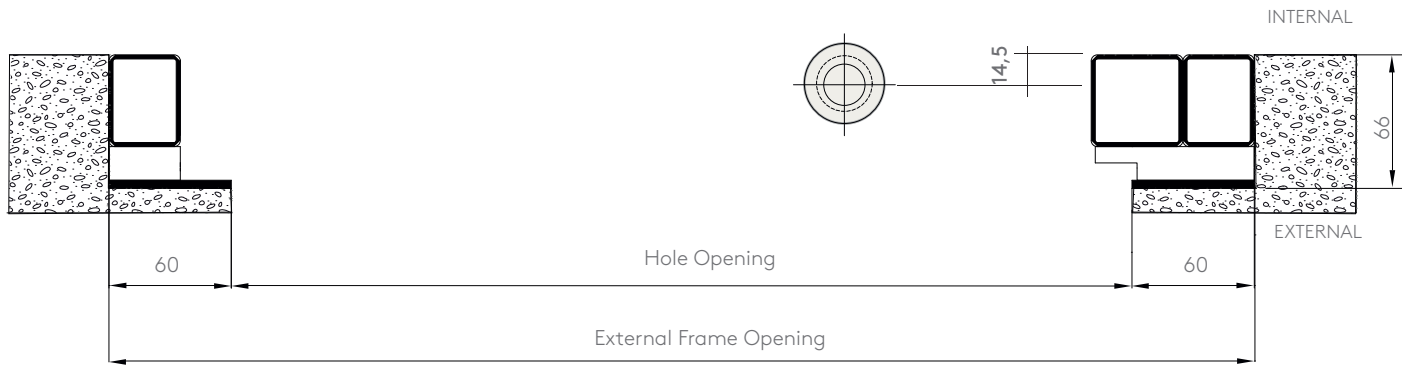
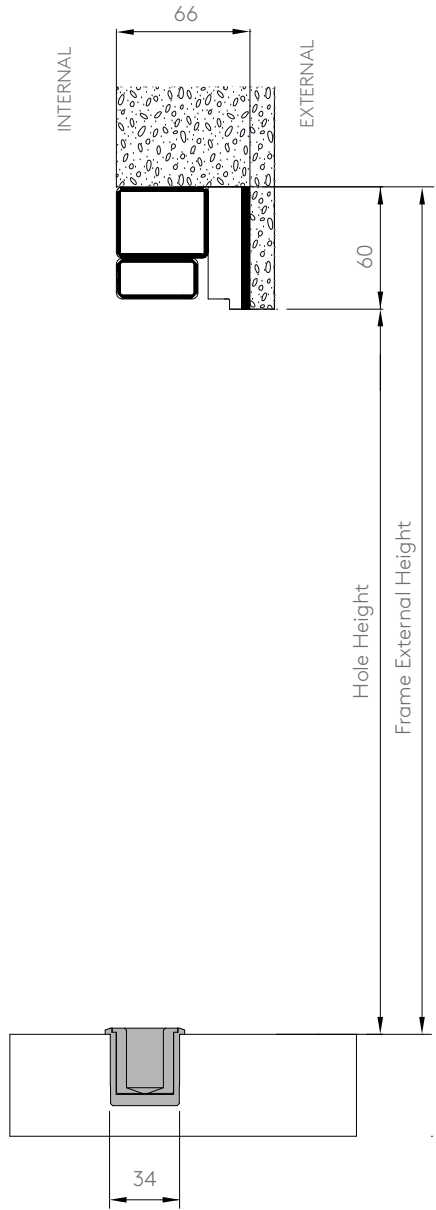
# Nova wall opening names

HOLE OPENING (mm) Push version	FROM 1000 TO 1150	FROM 1151 TO 1300	FROM 1301 TO 1500	FROM 1501 TO 1700	FROM 1701 TO 1950	FROM 1951 TO 2250	FROM 2251 TO 2550	FROM 2551 TO 2850	FROM 2851 TO 3200
X (mm)	180	230	300	400	550	700	900	1100	1300

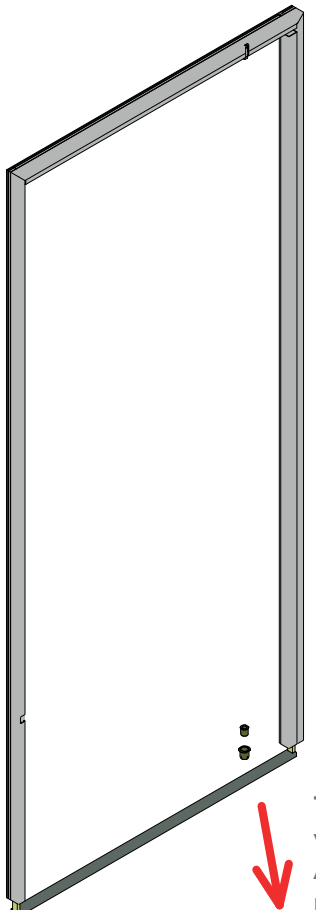
**X** = Space requirement with 90° opening  
**Net Wall Opening** = Hole Opening - X  
**Wall Opening Net Height** = Hole Height  
 The measure X changes according to the hole opening in compliance with the table given above.  
 Consider that the 180 mm size is the MINIMUM ONE THAT CAN BE REALIZED.  
**For pull openings, the minimum dimension x is 300 mm**



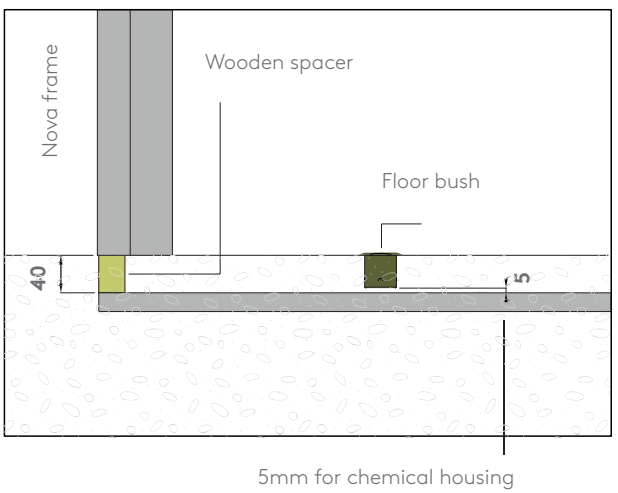
# Nova frame



# Nova frame 4th side

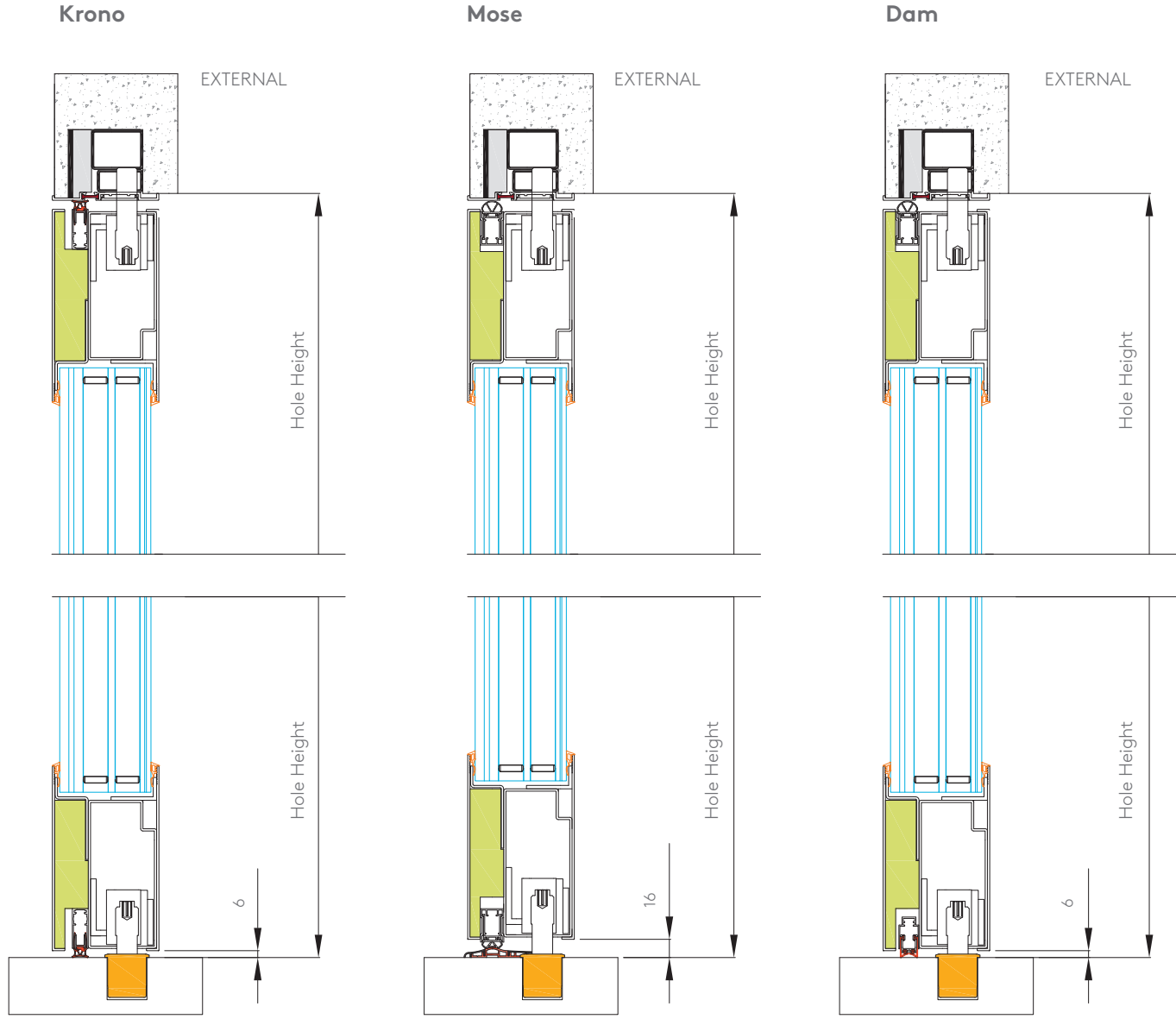


The 4-sided frame is the solution to help better distribute the weight of the door on a solid concrete screed. A solution to be used with very heavy doors and in the presence of non-load bearing floors.

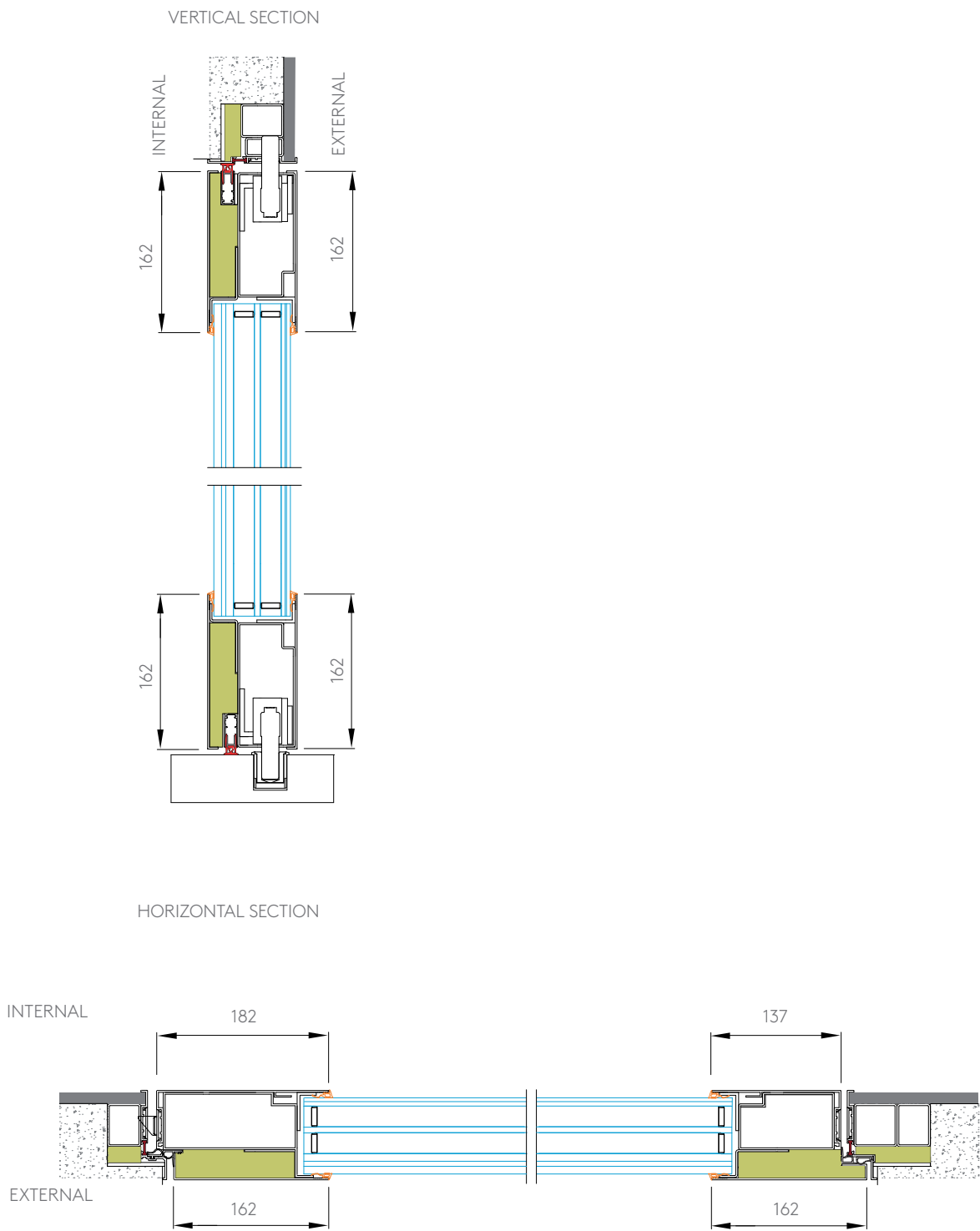




# Nova lower and upper sections

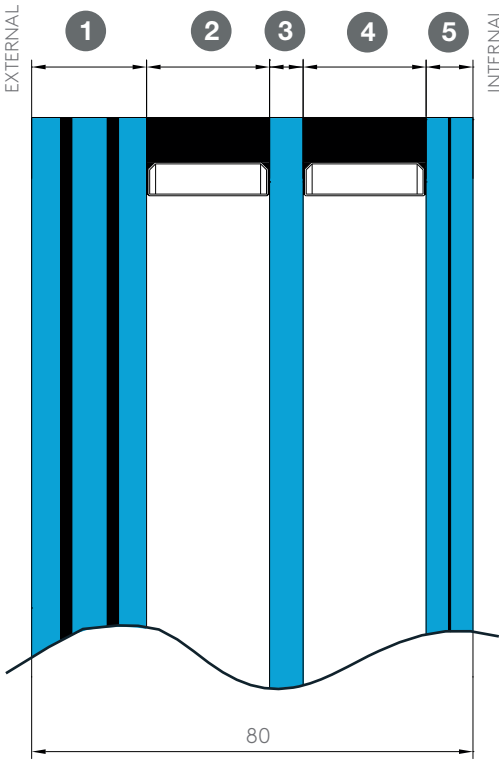


# Internal/external dimension Nova bands



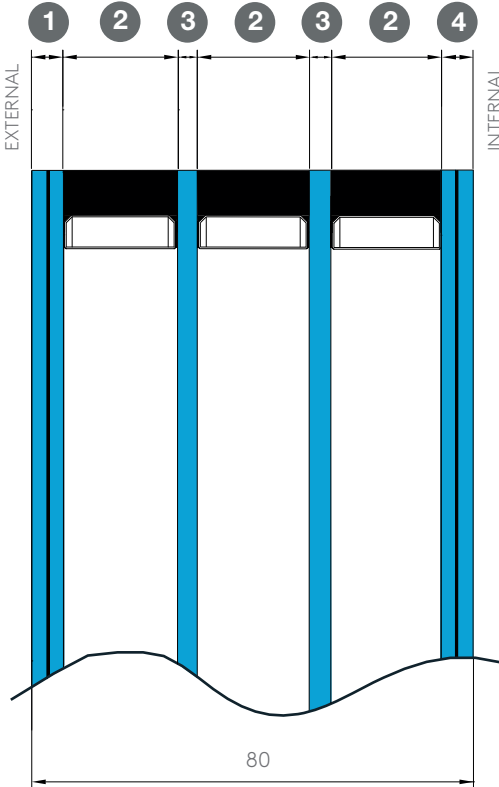
# Nova glass section and type

Thermal glass section for class 3 door



- 1 5 pvb 1.52 + 8 pvb 1.52 + 5
  - 2 22 warm-edge duct with 90% Argon gas duct color: Black
  - 3 6 extra-clear
  - 4 22 warm-edge duct with 90% Argon gas duct color: Black
  - 5 4+4 pvb 0.38 low energy emissive
- Ug=0.76 W/m²K**

Thermal safety glass section



- 1 4+4 pvb 0.76 - 5+5 pvb 0.76 - 6+6 pvb 0.76 - 8+8 pvb 0.76
  - 2 12/15/18 warm-edge duct with 90% Argon gas duct color: Black
  - 3 4/5 extra-clear
  - 4 4+4 pvb 0.76 - 5+5 pvb 0.76 - 6+6 pvb 0.76
- Ug=0.8 W/m²K**

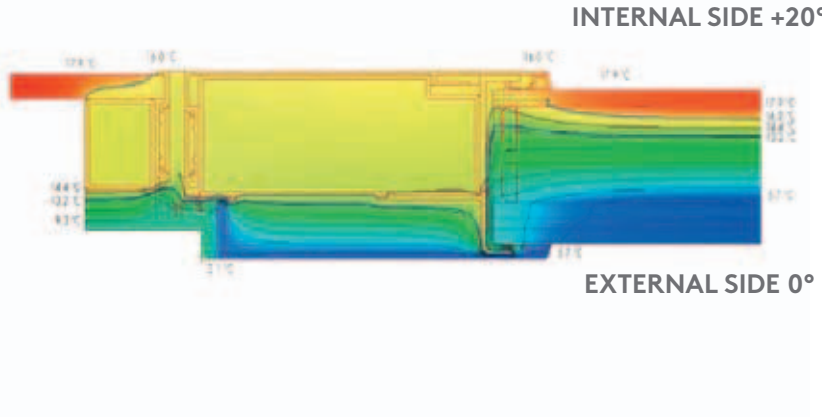
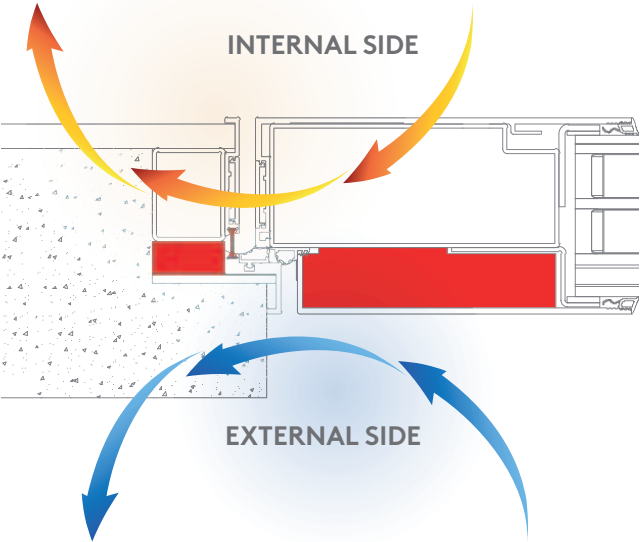
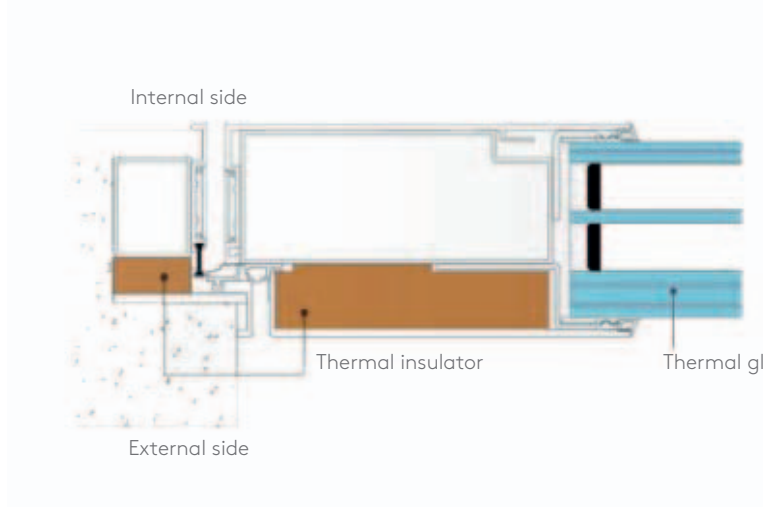
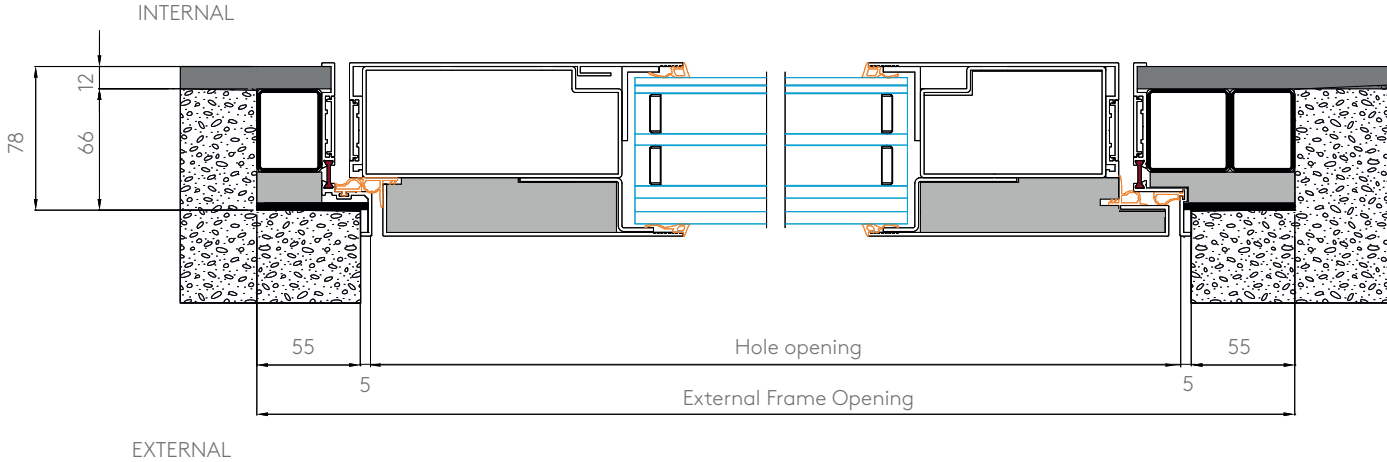
REMARK: the composition of the glass varies depending on the total size of the leaf



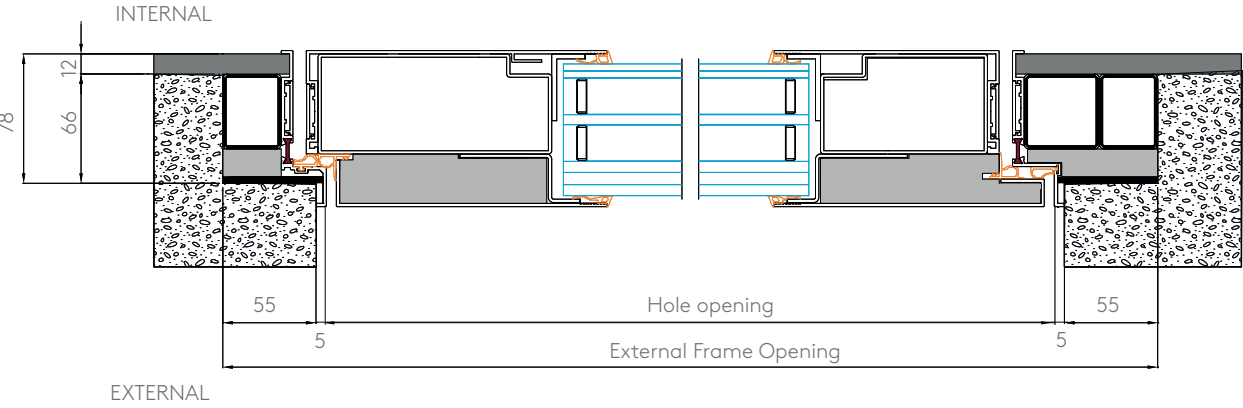


# Nova heat barrier

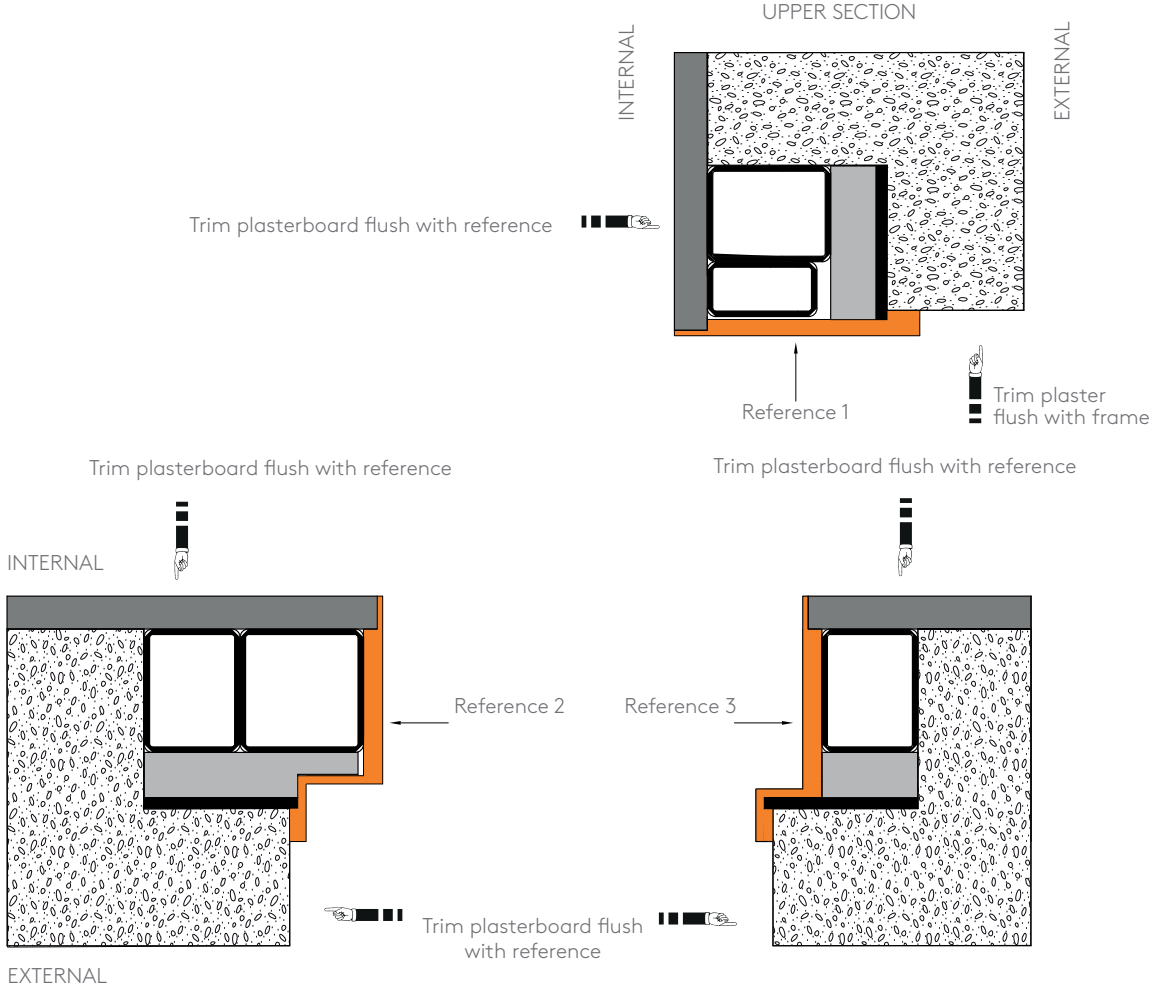
Heat barrier frame and leaf



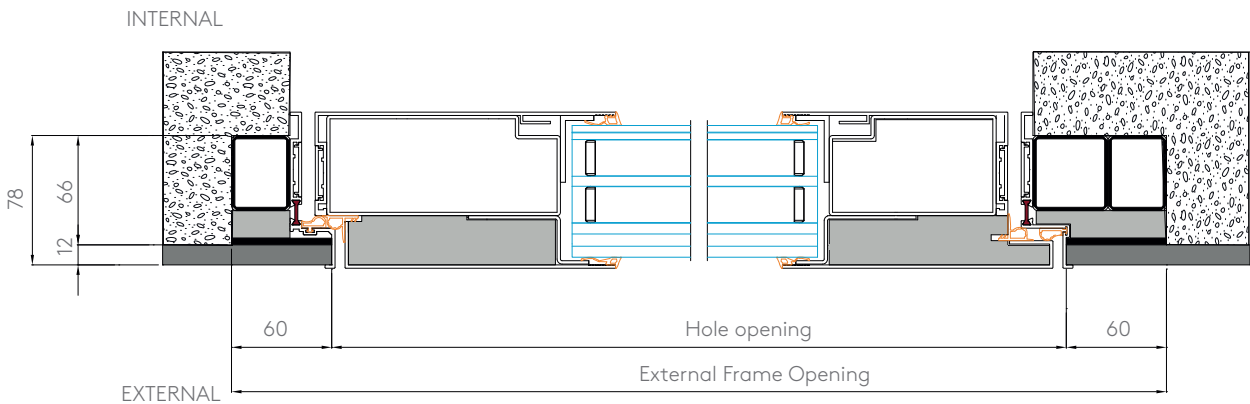
# Horizontal section flush with internal wall



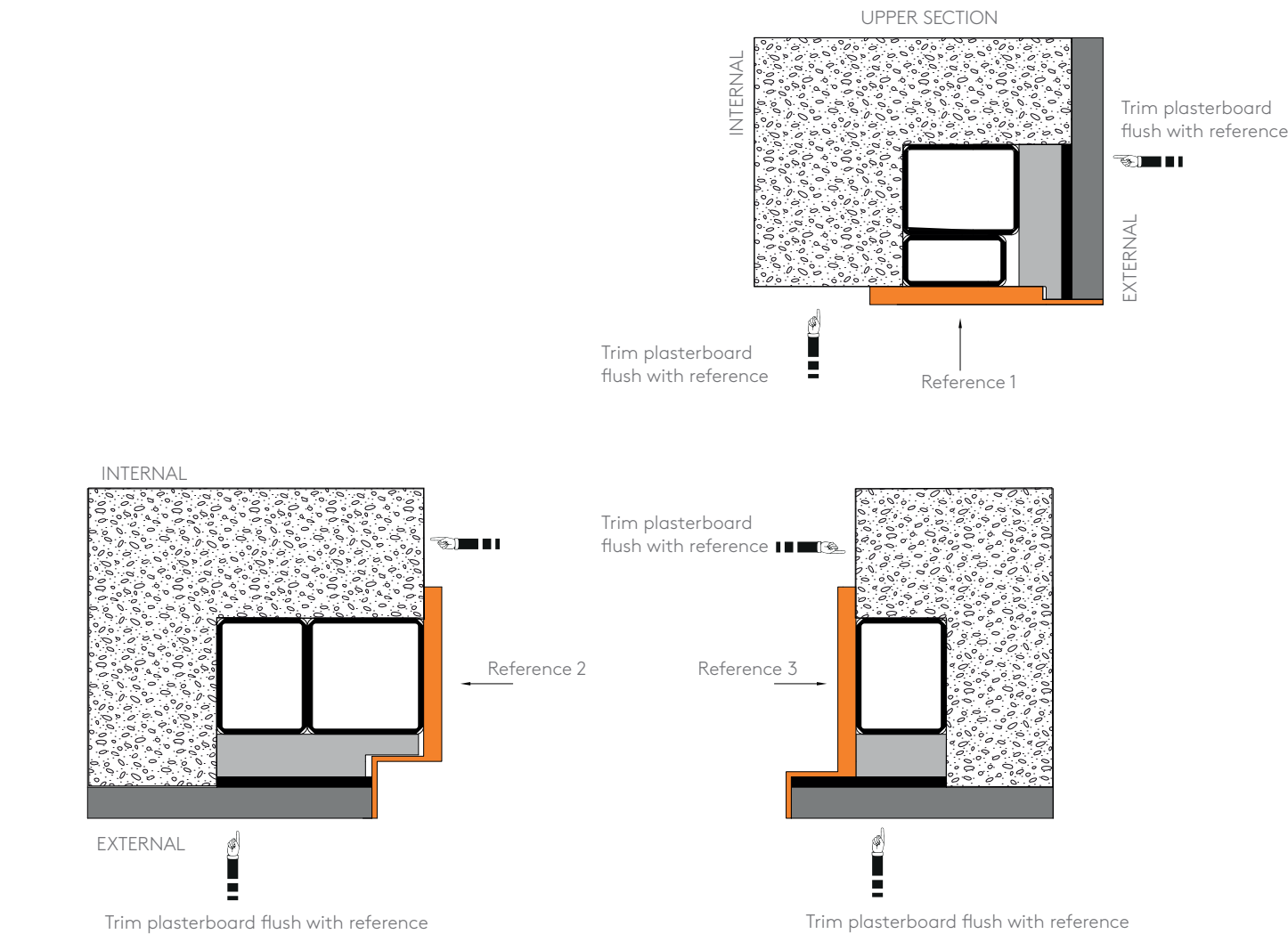
References for frame positioning



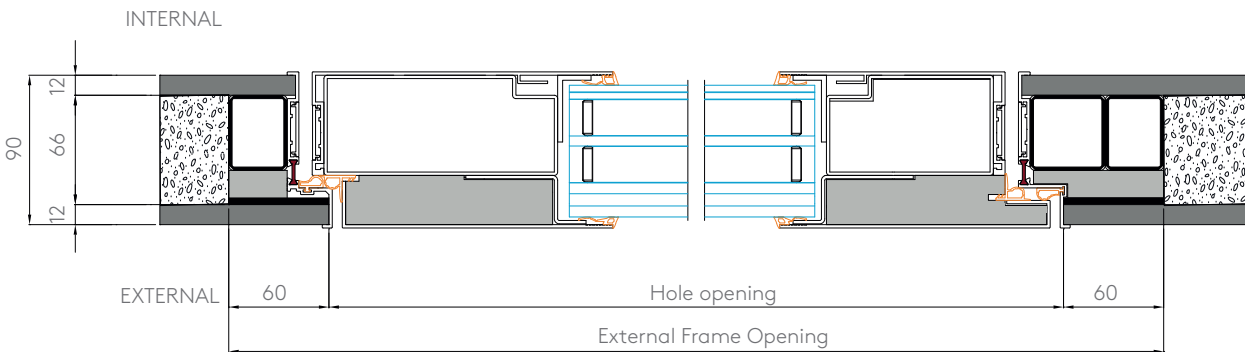
# Nova horizontal section flush with the external wall



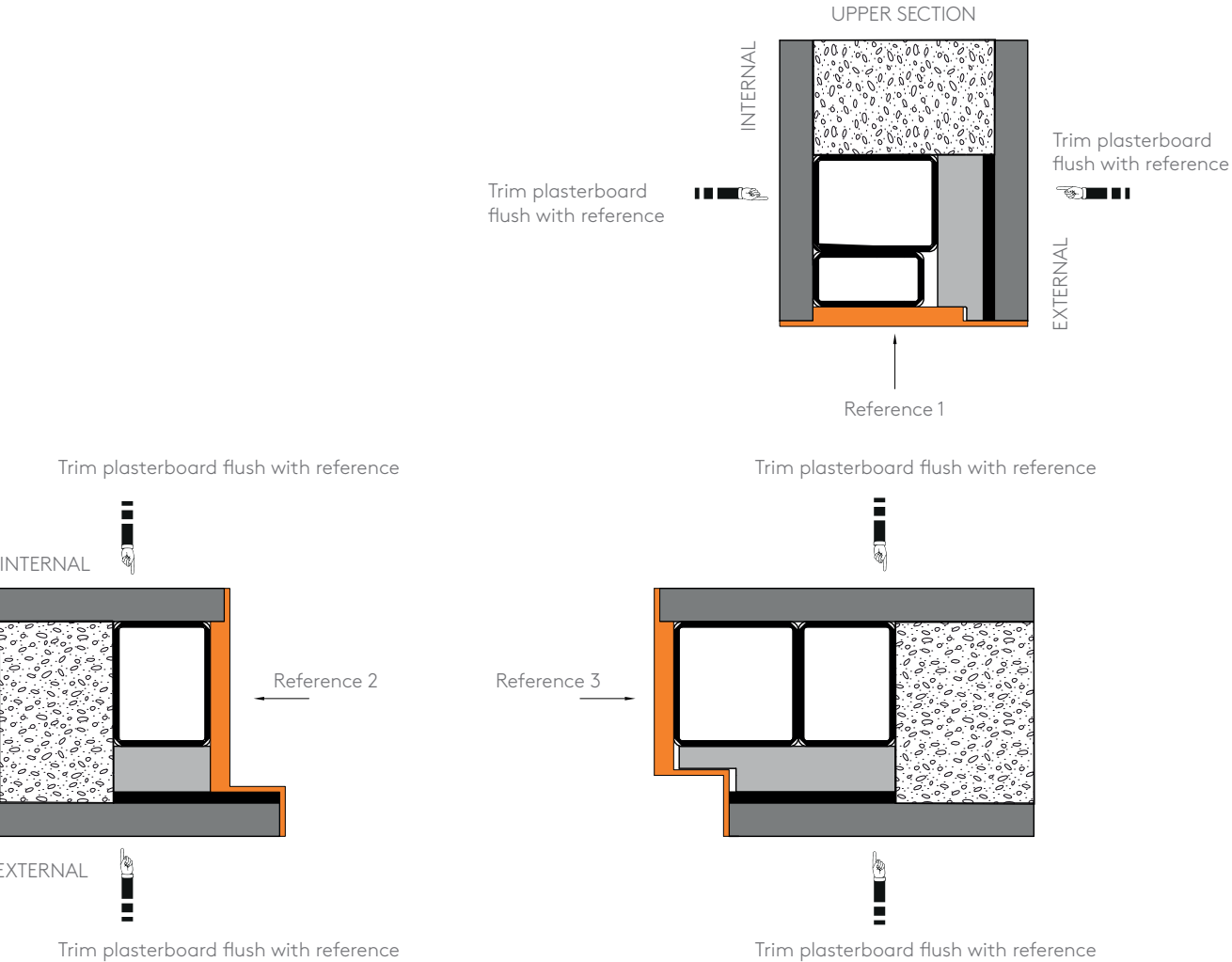
References for frame positioning



# Nova horizontal section flush with internal/external wall



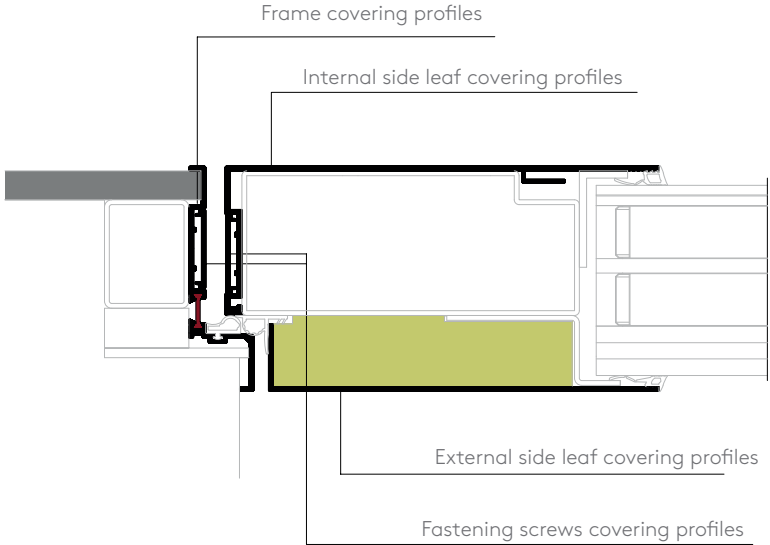
References for frame positioning





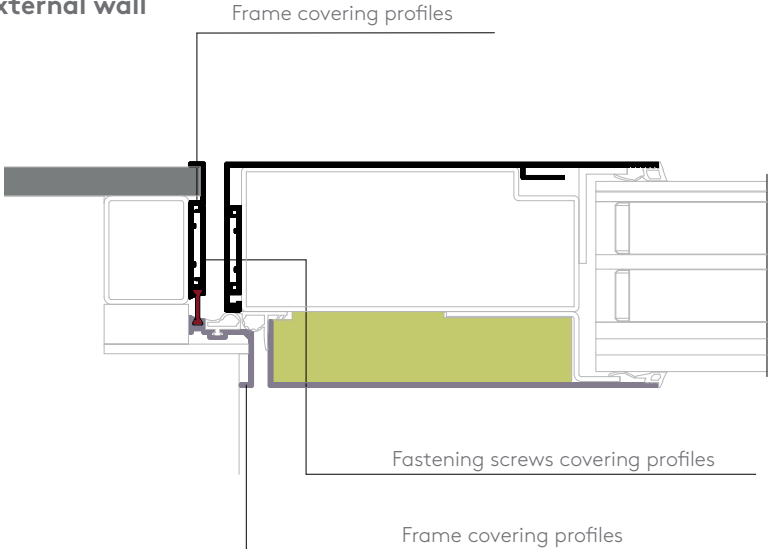
# Frame leaf covering profiles

- Flush with internal wall
- Flush with external wall
- Flush with internal/external wall

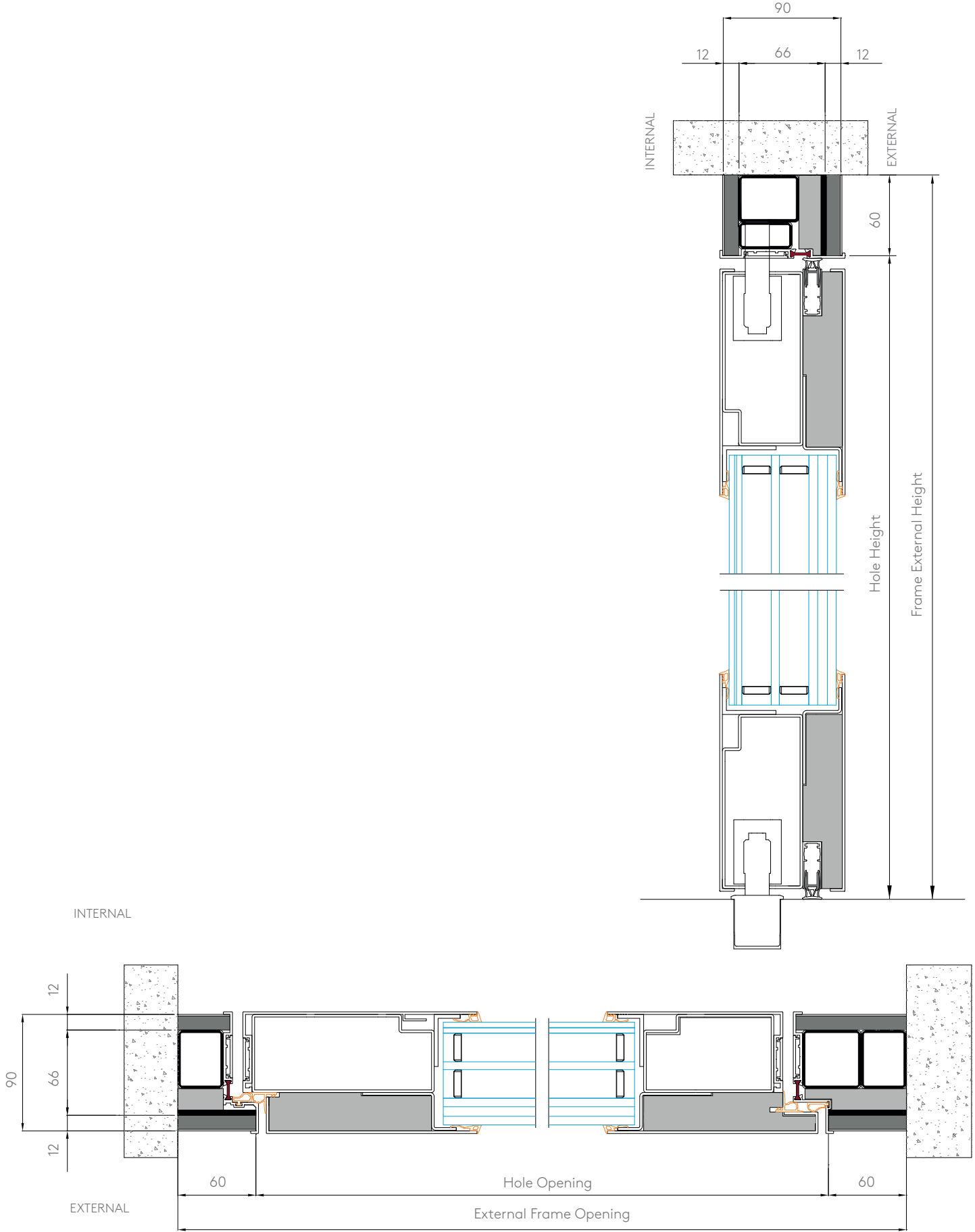


# Frame leaf covering profiles two-color frame

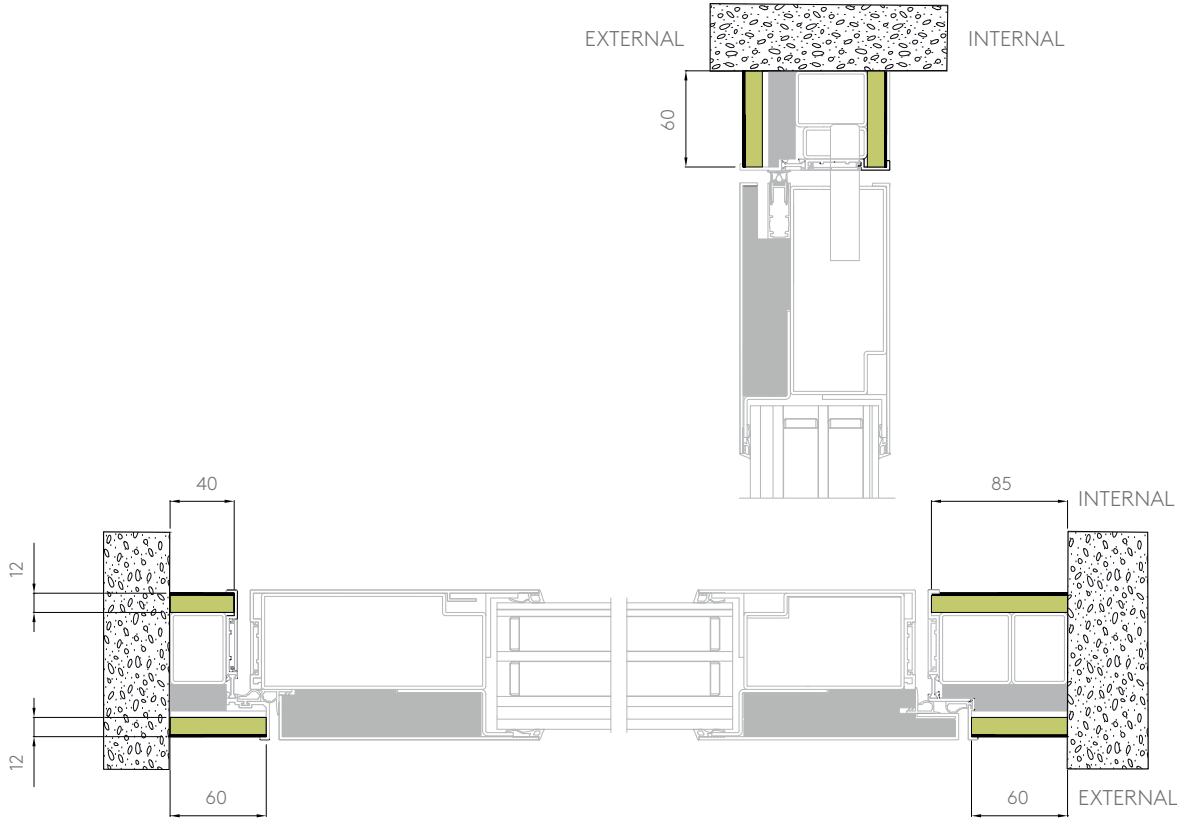
- Flush with internal wall
- Flush with external wall
- Flush with internal/external wall



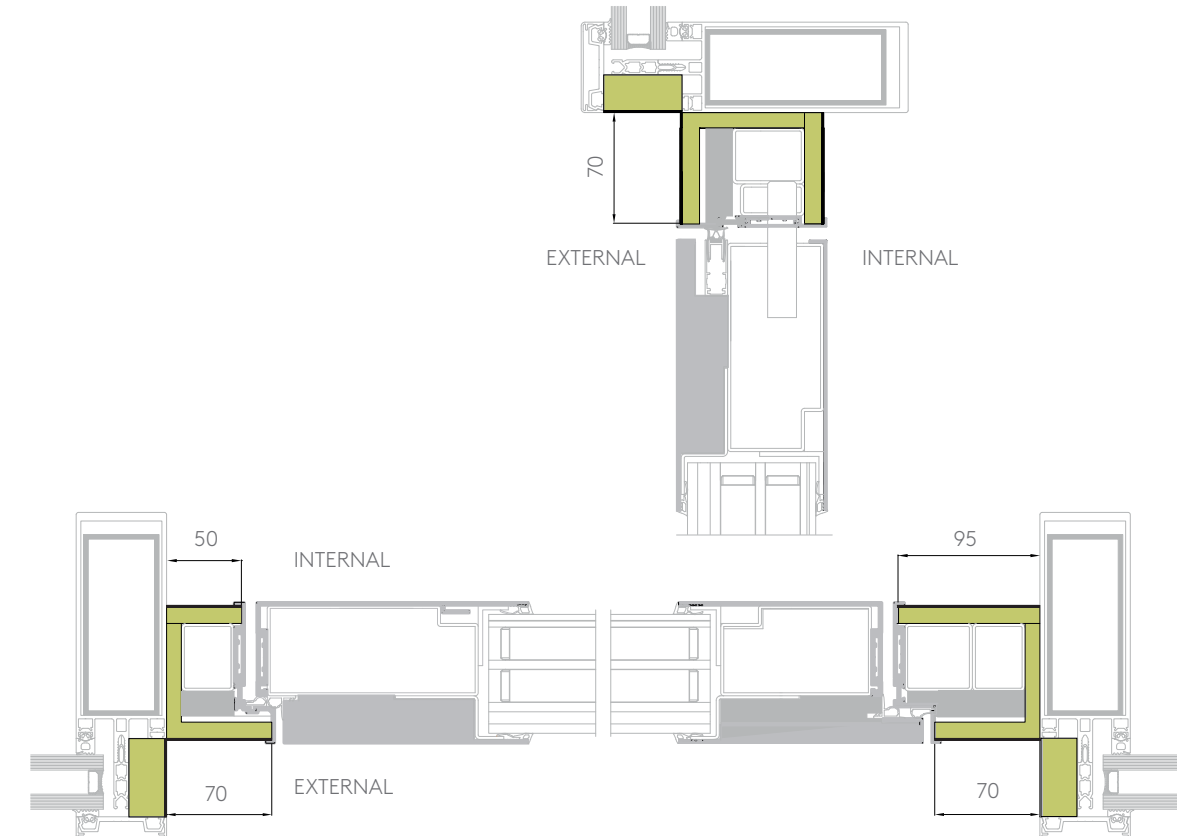
# Nova section wall opening fitting



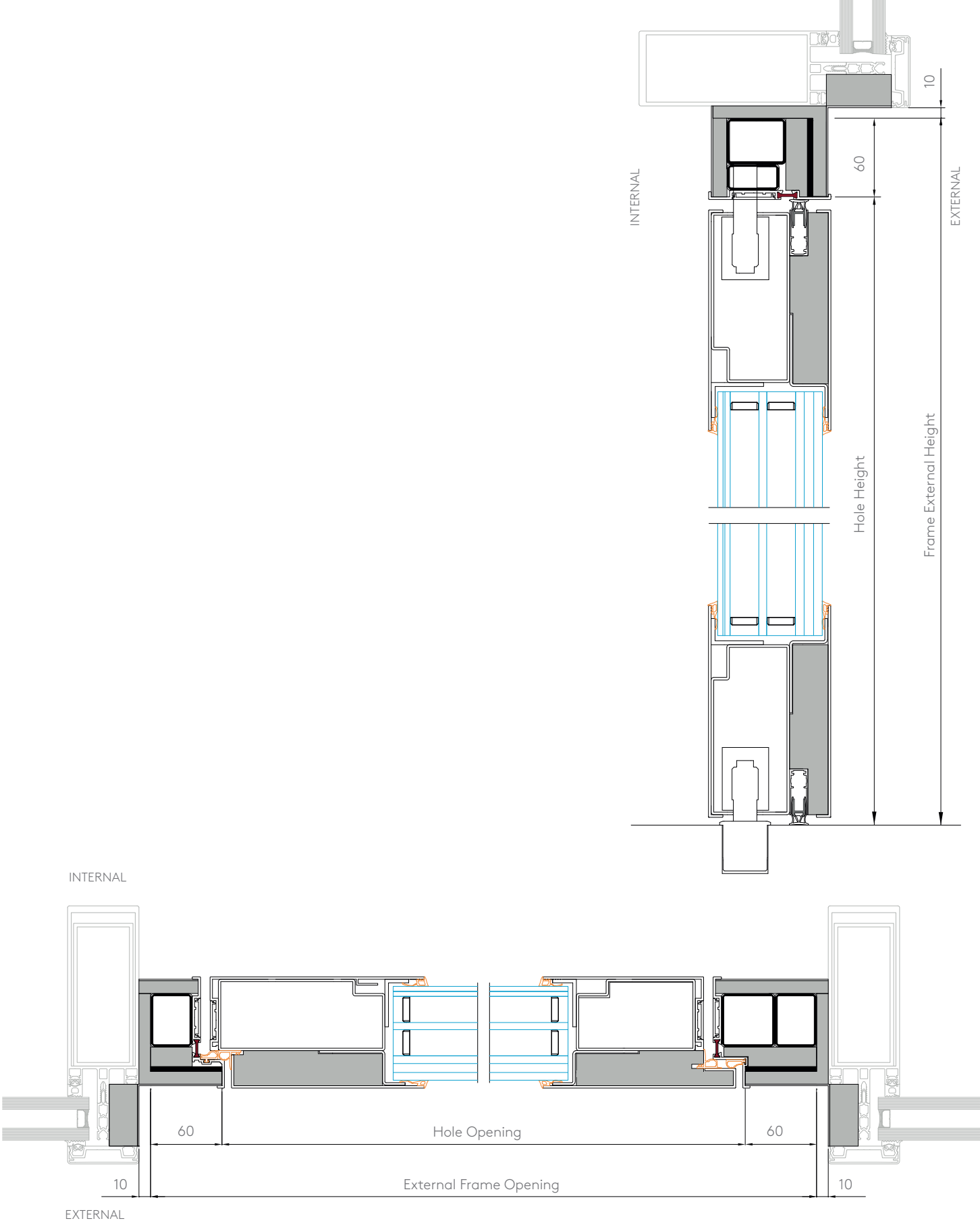
# frame covering surrounds wall opening fitting



# frame covering surrounds façade fitting



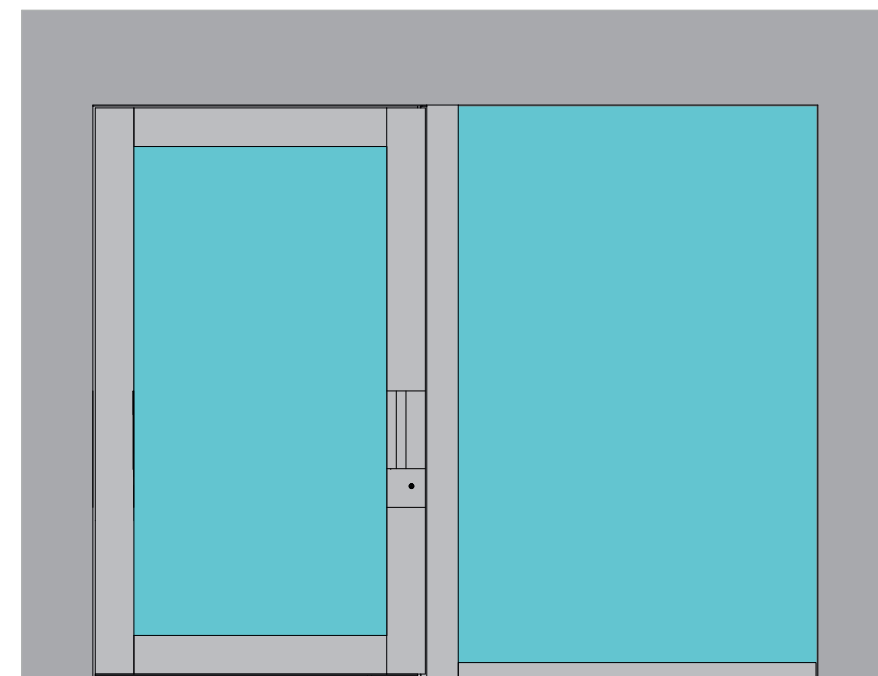
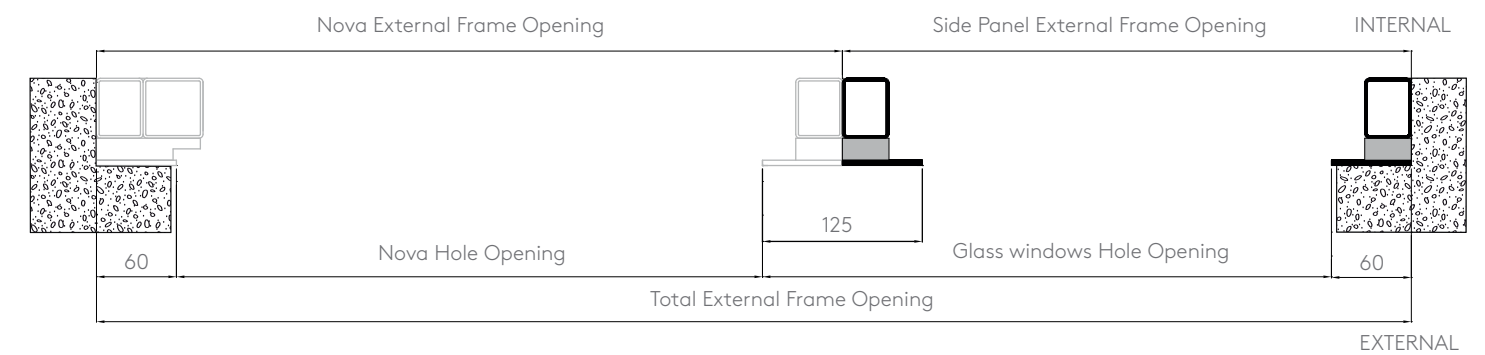
# Nova section façade fitting







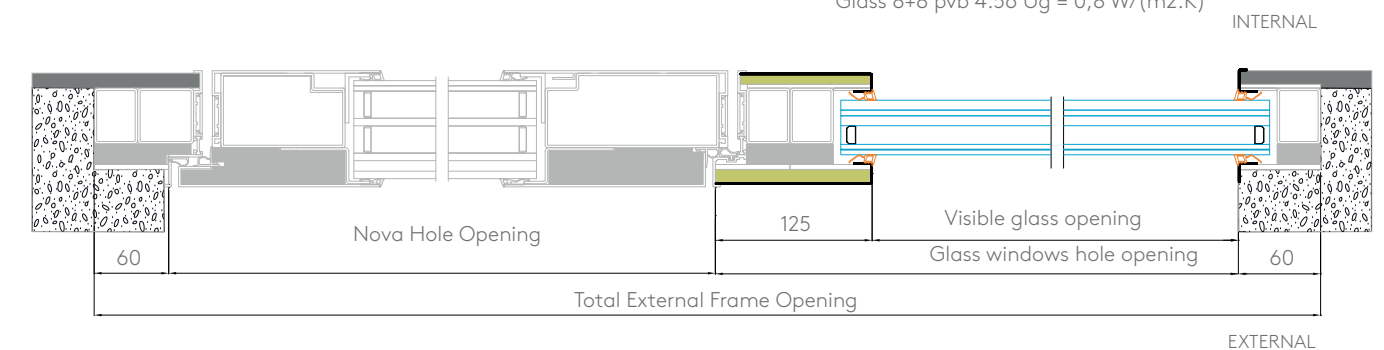
# Side panel flush with the internal wall



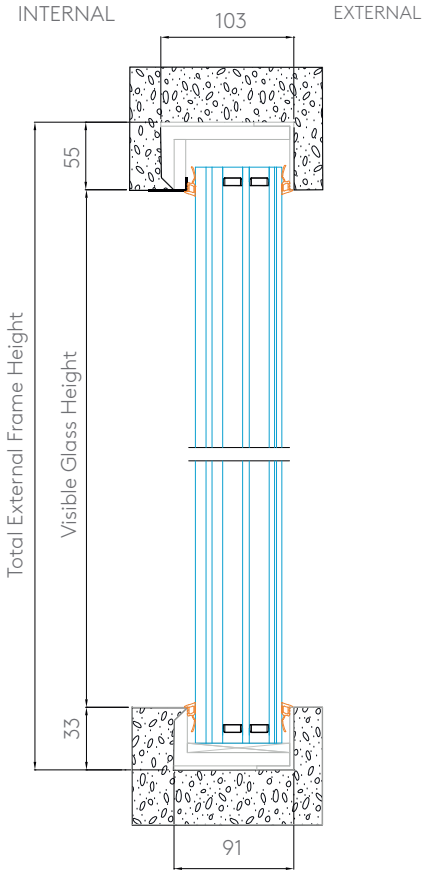
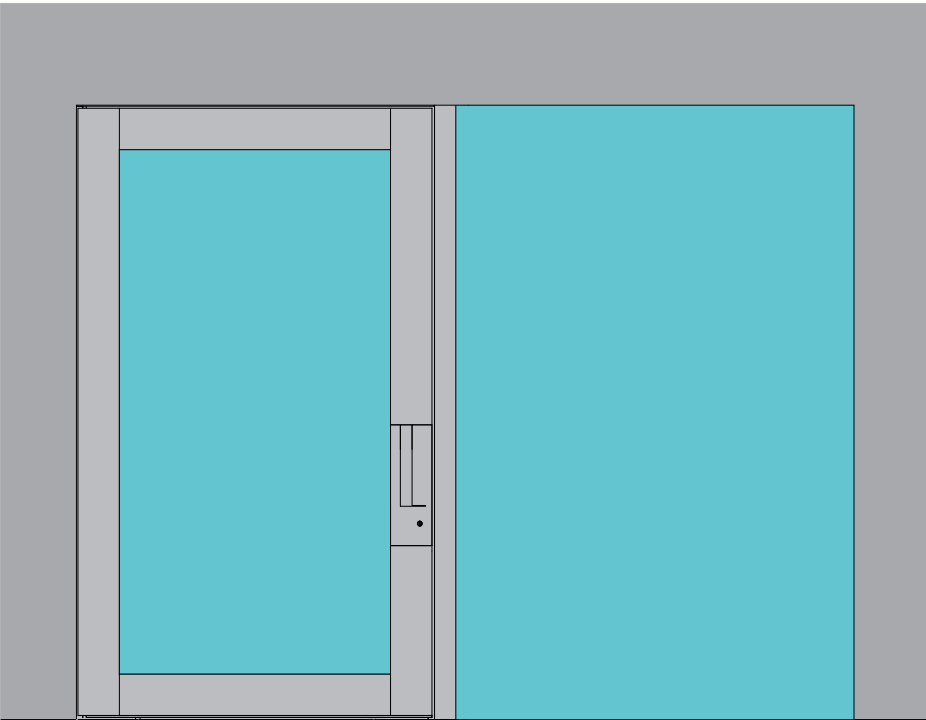
Flush with internal wall side panel covering profile



Glass 4+4 pvb 0.76  
 low energy emissive  
 15mm Warm-Edge with 90% argon gas  
 Glass 4mm extra clear  
 15mm Warm-Edge with 90% argon gas  
 Glass 8+8 pvb 4.56  $U_g = 0,8 \text{ W}/(\text{m}^2\cdot\text{K})$



# Minimal side panel

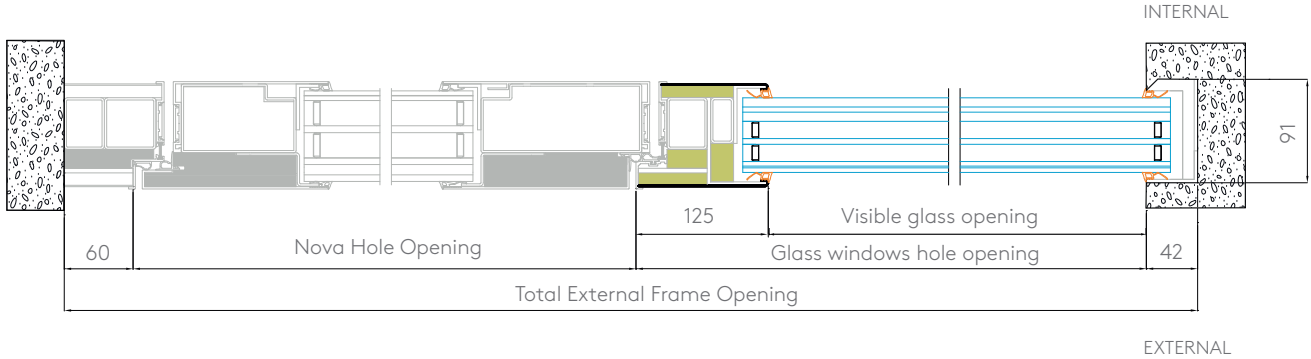


Minimal side panel covering profile

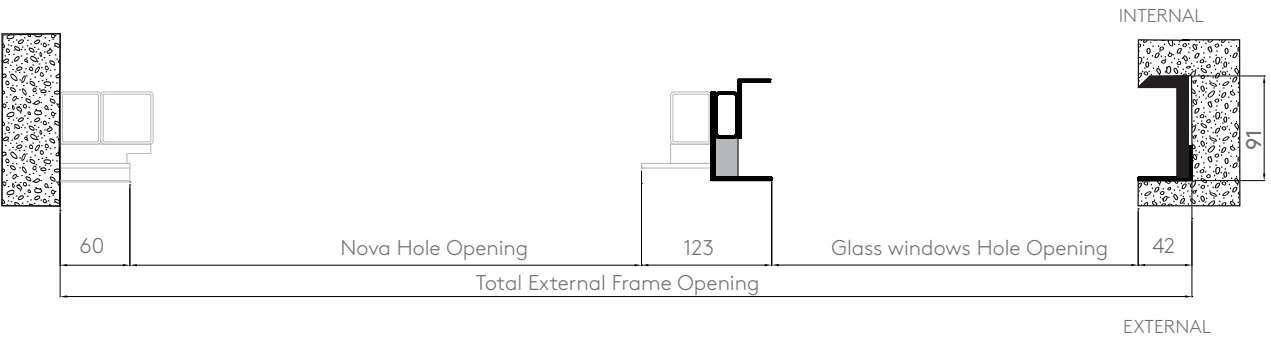
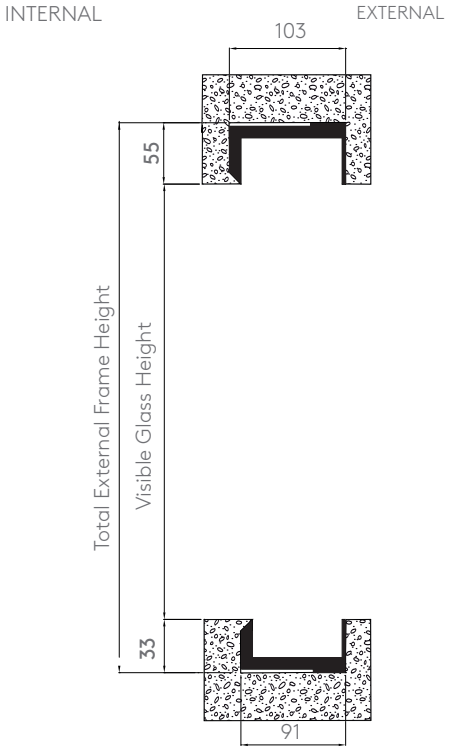


**Thermal 1.4**

Glass 4+4 pvb 0.76 low energy emissive  
15 Warm-Edge with 90% argon gas  
8+8 pvb 4.56 Ug = 1.0 W/(sqm.K)



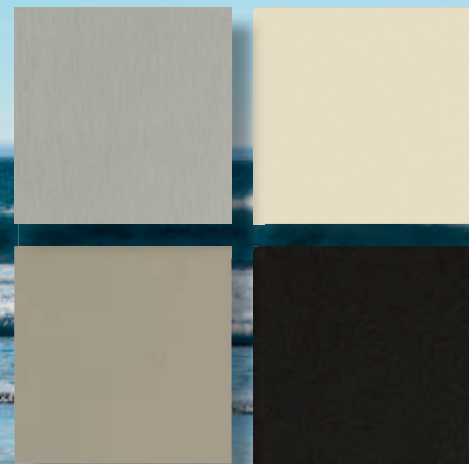
# Minimal side panel frame





# A specific color for each landscape

Nova visually opens the space to the outside world through colors, materials and finishes that are chosen to ensure a complete integration of the entrance solution with the surrounding landscape.



VP Powder coating  
VL Liquid painting  
OA Anodic oxidation

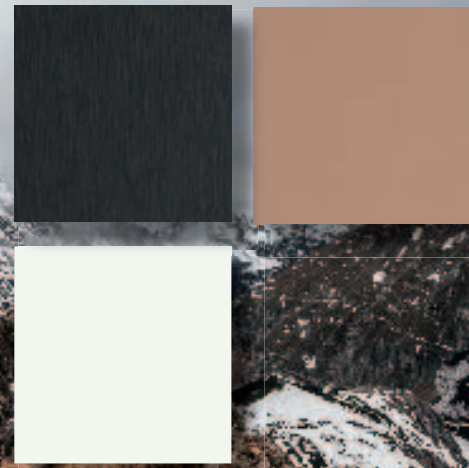
## Sea

Marine Silver OA  
Sand VP  
Platinum VL  
Smoke VL



## Earth

Clear Bronze VL  
Dark Bronze VL  
Cosmo VP  
Gold VL

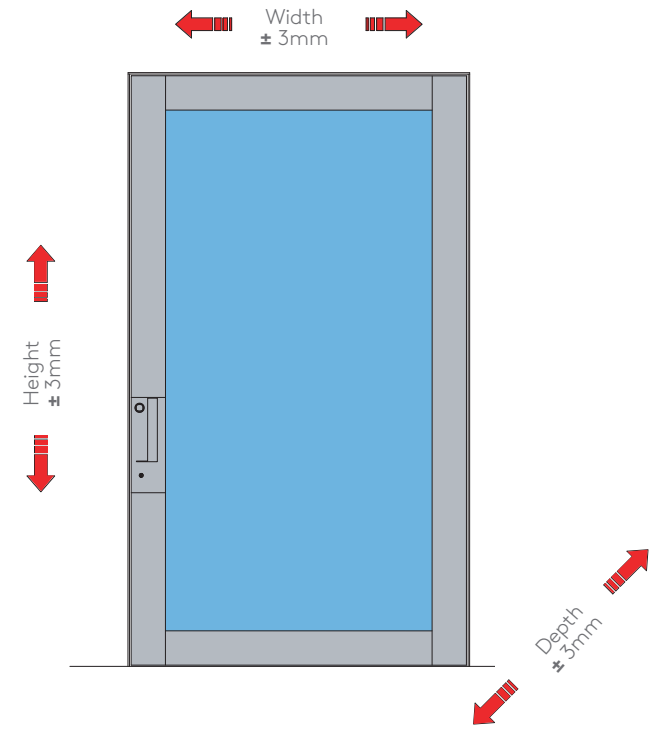


## North

Metropolitano OA  
Copper VL  
Ice VP

# Hinge adjustments

The mechanism that allows the rotation of the leaf (patented) facilitates the installation and adjustment of the door. Thanks to exclusive solutions, all this can be achieved with a simple Allen wrench.





# Vela

Indoor door with opening to design a door reaching the ceiling and turn it into a moving architectural element

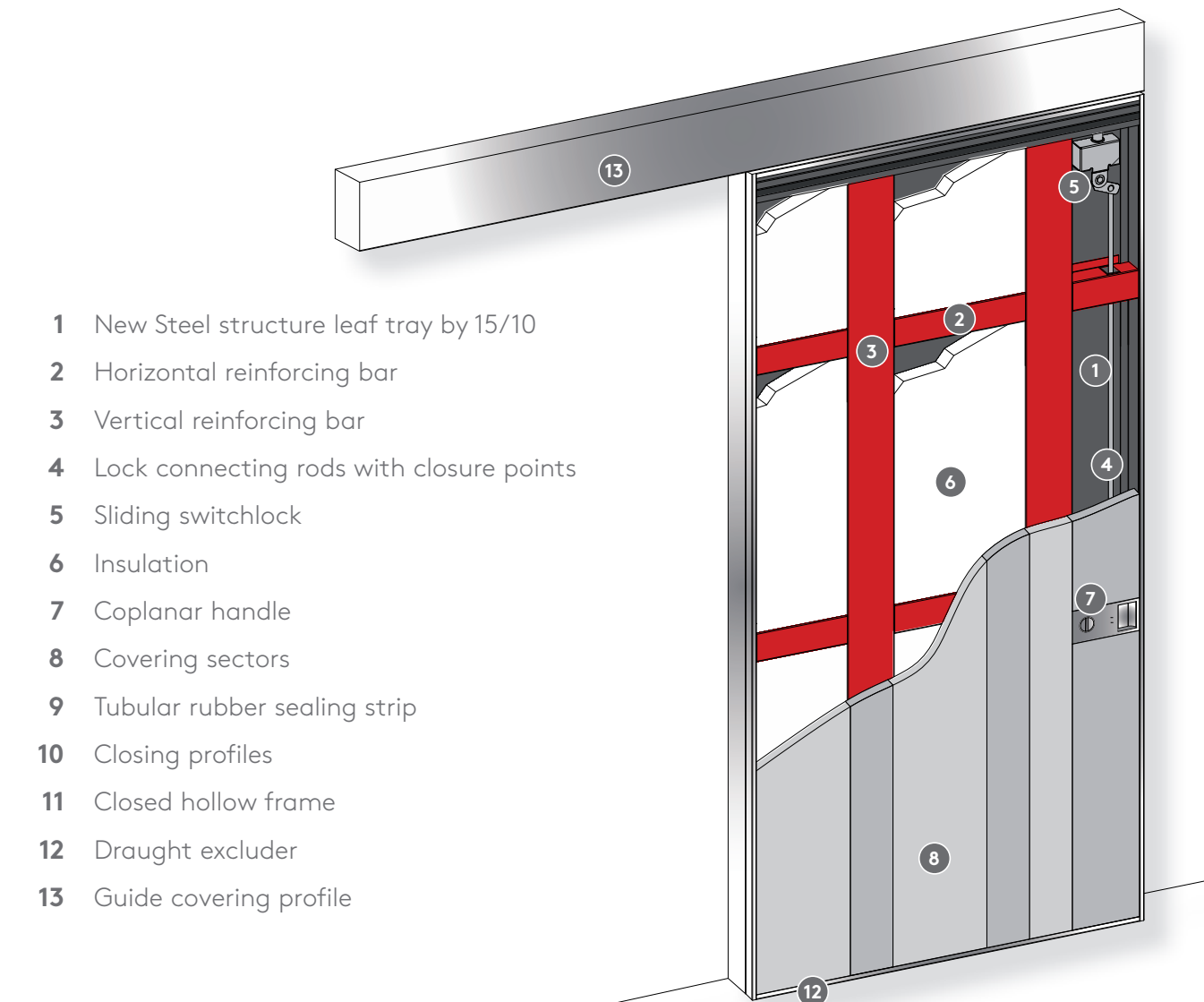
## Sliding door with manual handling and closing:

- Maximum realizable measures 1300x2700mm
- Other measurements on request
- Automatic door handling on request
- Leaf opening and closing with motorized rail and lock with Arckey system on request

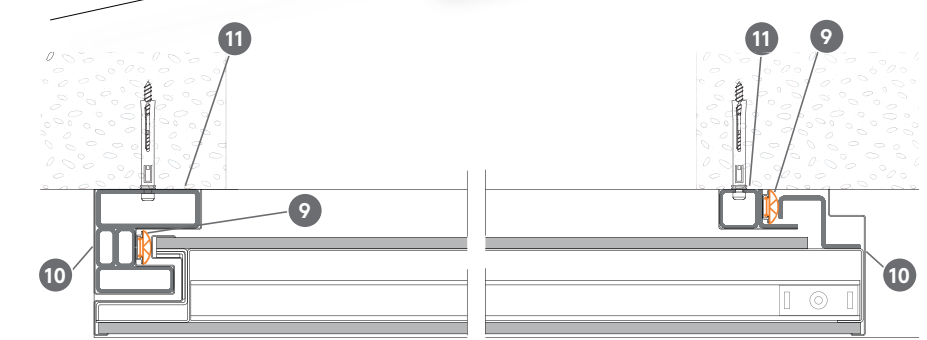
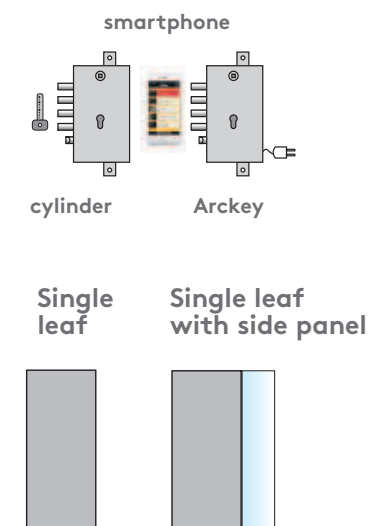


# Vela specifications

Leaf in New steel 15/10 with 6 horizontal reinforcing bars and 2 vertical reinforcing bars, 30/10 lock protection plate with manganese insert, closing profiles in stainless steel, upper/lower automatism with draught excluder, patented coplanar internal handle in stainless steel with knob for cylinder control, coplanar external long handle with embedded Defender in stainless steel, covering profiles fitted on the lock side and on the sliding side in satin stainless steel, upper transom with sliding guide and carriages with bearing, floor and ceiling stop element with closing bar all height long with anti-unhinging mechanism on the lock side and on the sliding side. Cylinder lock with latch.

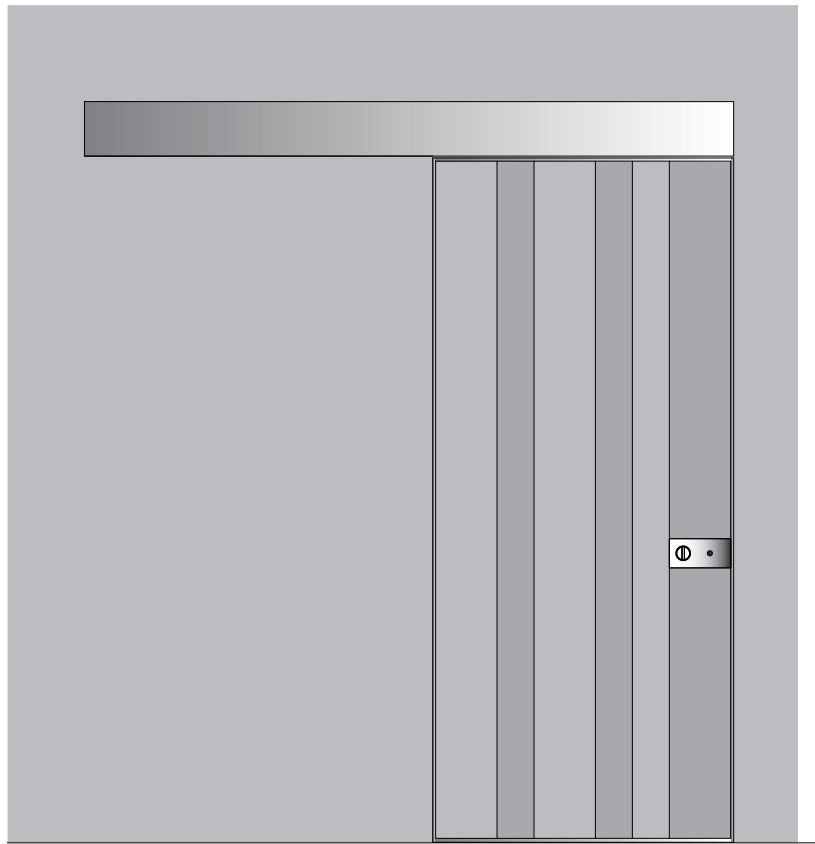


- 1 New Steel structure leaf tray by 15/10
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Lock connecting rods with closure points
- 5 Sliding switchlock
- 6 Insulation
- 7 Coplanar handle
- 8 Covering sectors
- 9 Tubular rubber sealing strip
- 10 Closing profiles
- 11 Closed hollow frame
- 12 Draught excluder
- 13 Guide covering profile

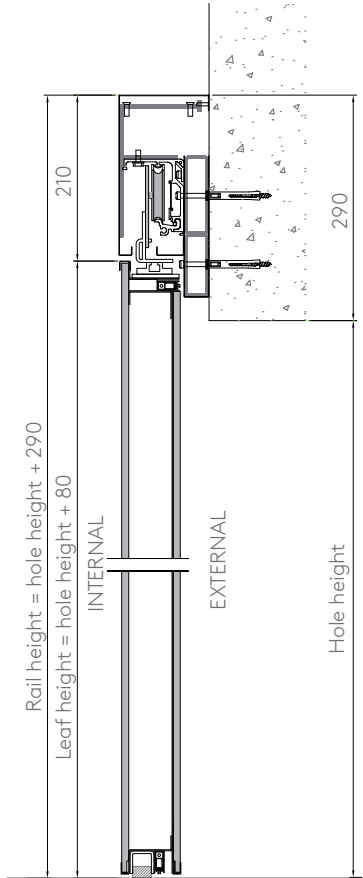




# Space requirements for sliding door Vela

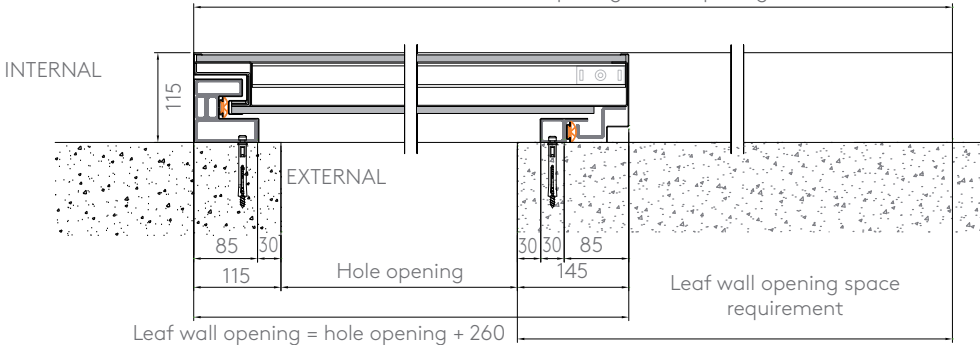


INTERNAL VIEW

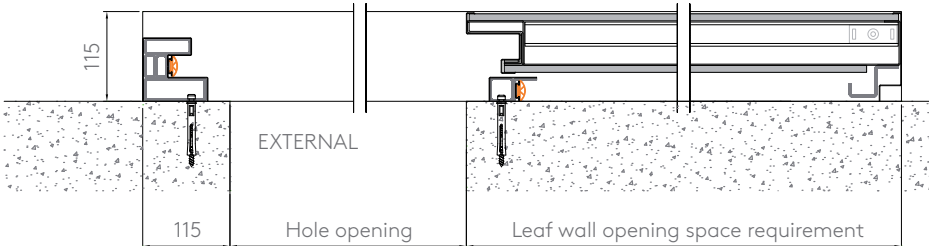


VERTICAL SECTION

Motorized rail wall opening = hole opening x2 + 575  
 Manual rail wall opening = hole opening.x2 + 375



UPPER SECTION WITH RIGHT BLIND LEAF

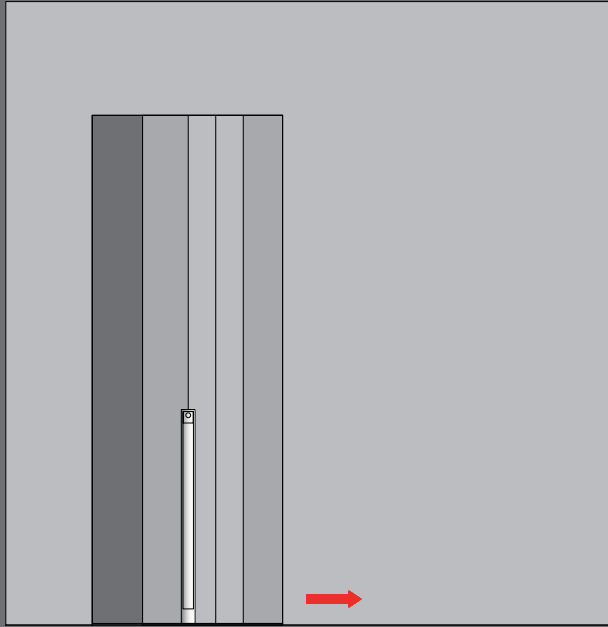


UPPER SECTION WITH RIGHT OPEN LEAF

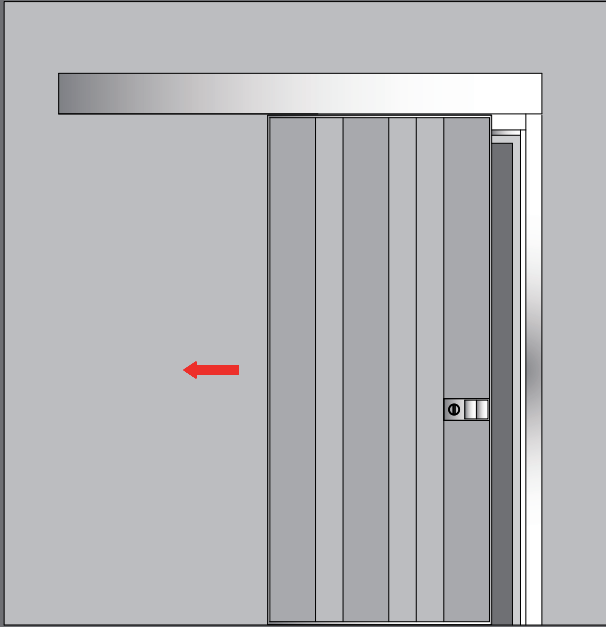


# Opening directions of the door Vela

Sliding door with opening on the right

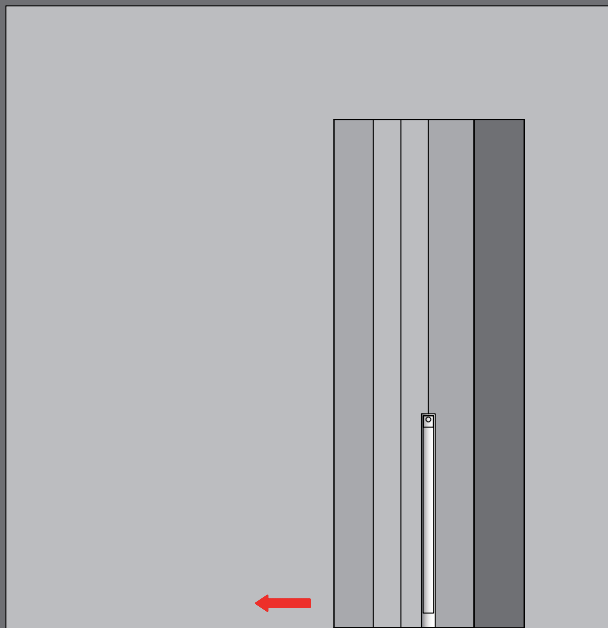


EXTERNAL VIEW

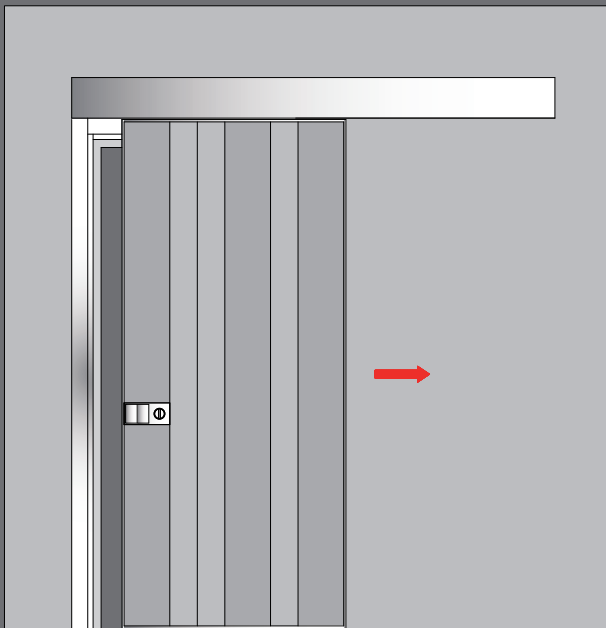


INTERNAL VIEW

Sliding door with opening on the left

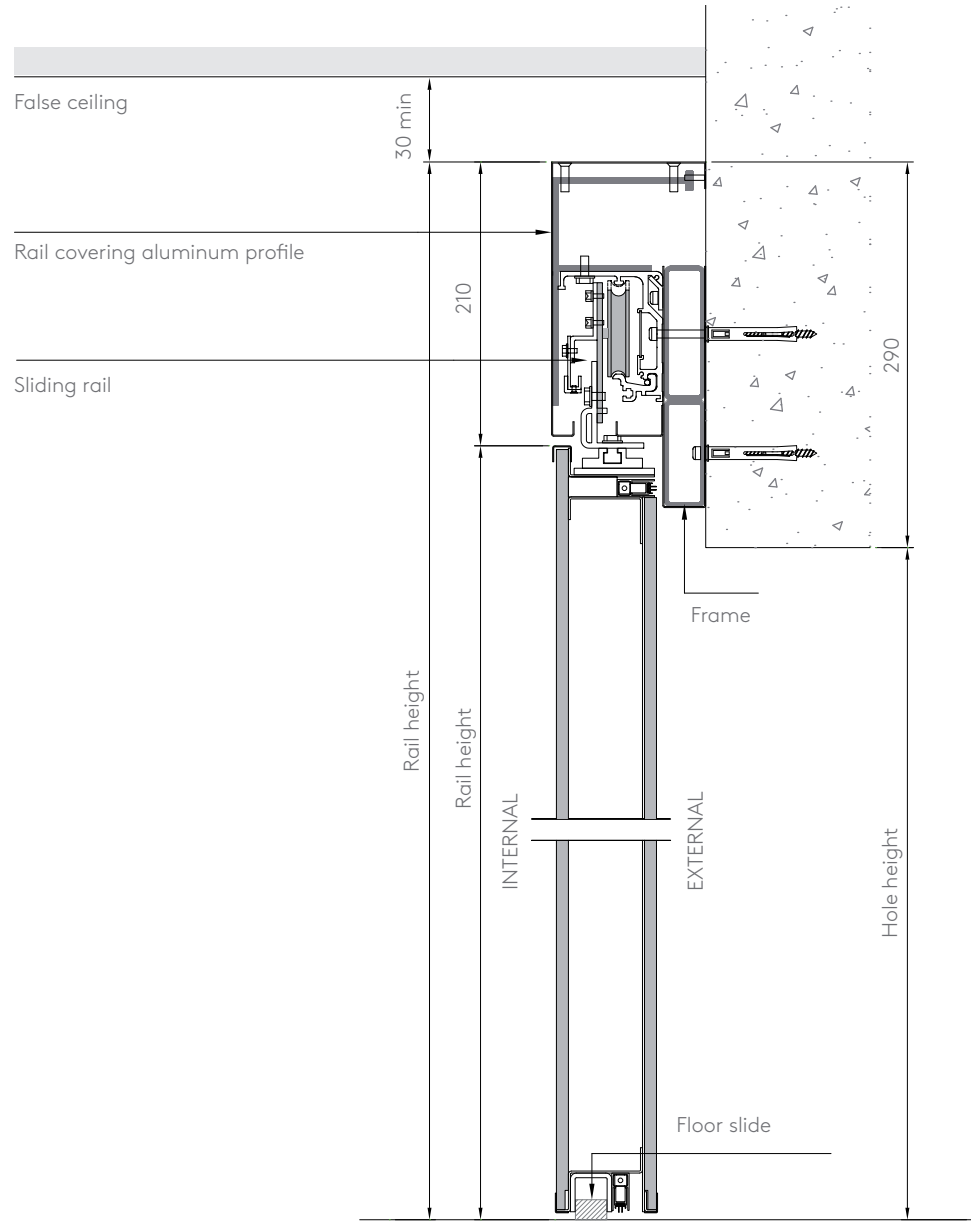


EXTERNAL VIEW



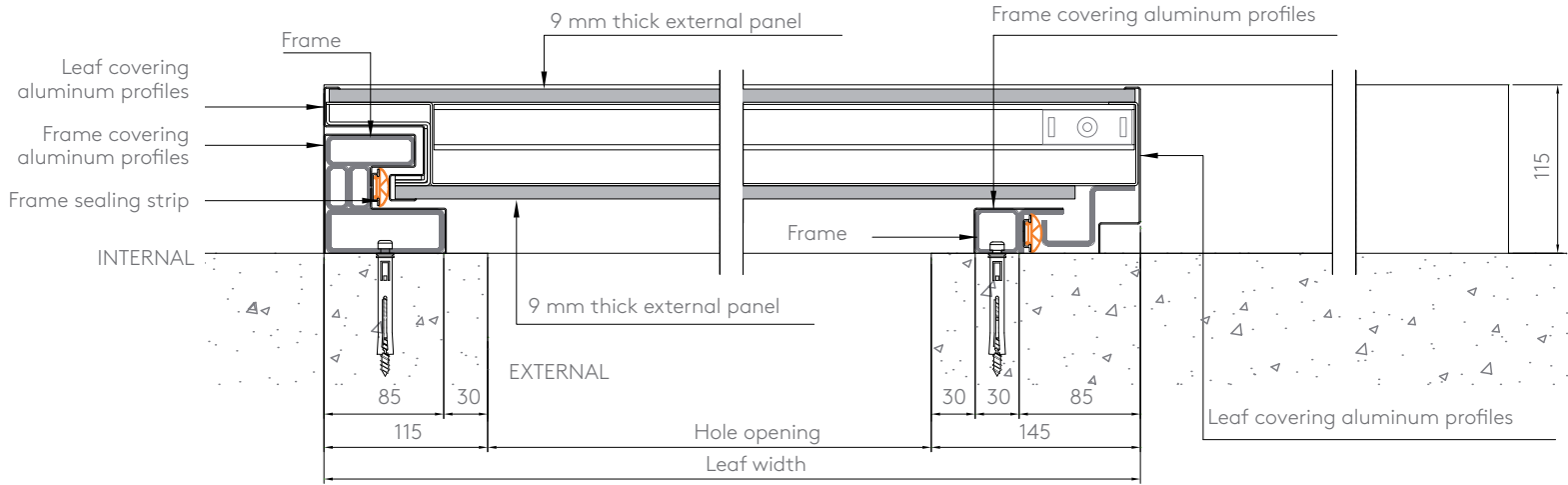
INTERNAL VIEW

# Joint frame sections



VERTICAL SECTION

HORIZONTAL SECTION

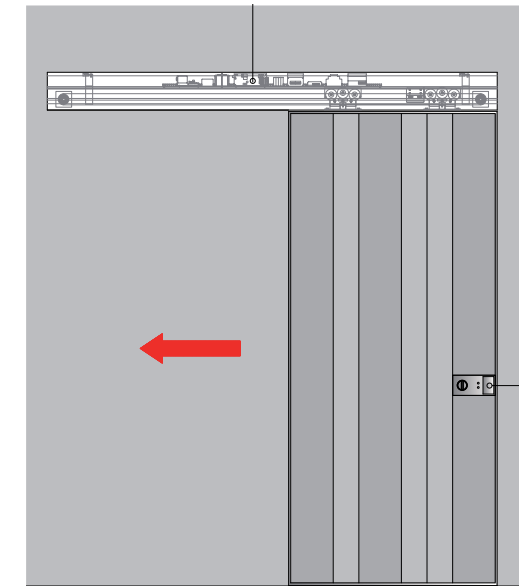




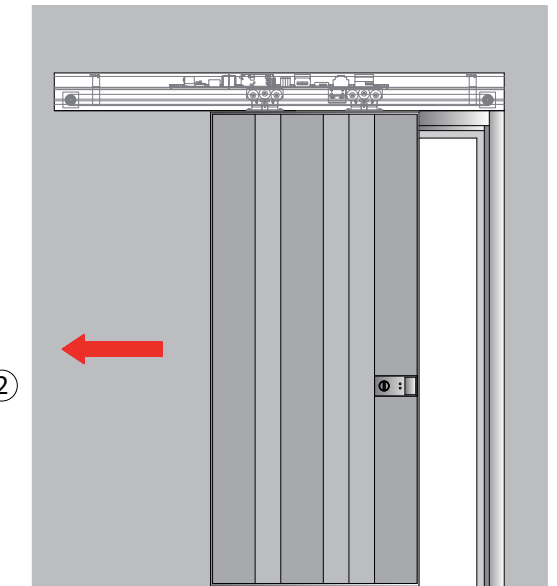


# Versions of sliding door Vela

Automatic Vela: leaf opening and closing with motorized rail and Arckey system lock, all managed by Oikos Arckey App



EXTERNAL VIEW



INTERNAL VIEW

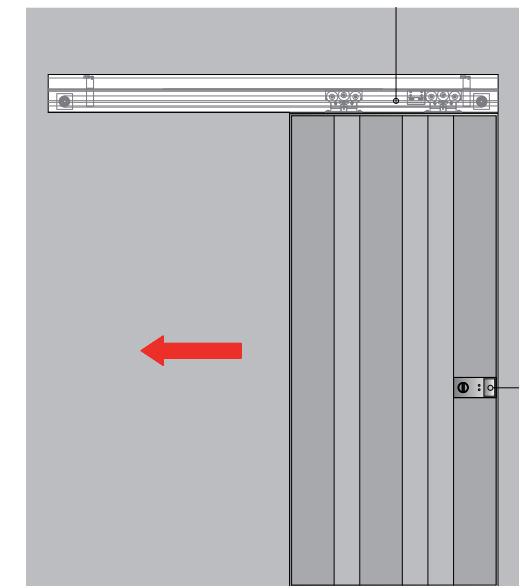


1. Motorization device

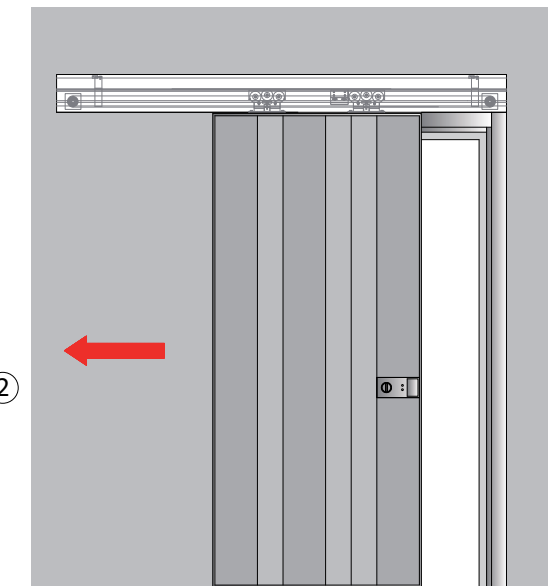


2. Automatic lock

Manual Vela: leaf opening and closing with manual sliding rail, mechanical lock.



EXTERNAL VIEW



INTERNAL VIEW

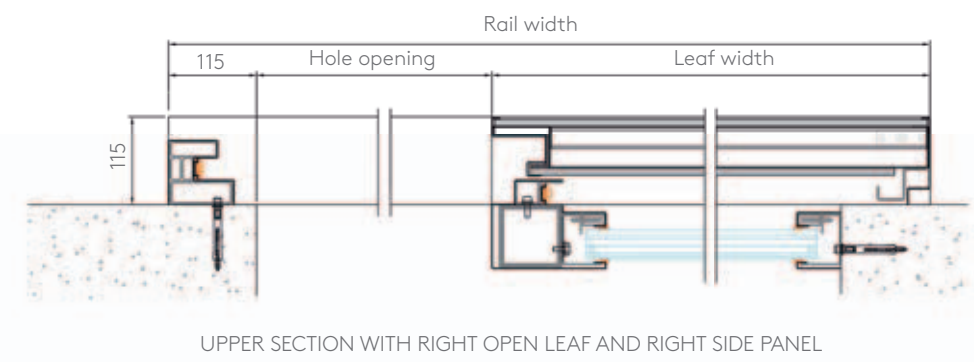
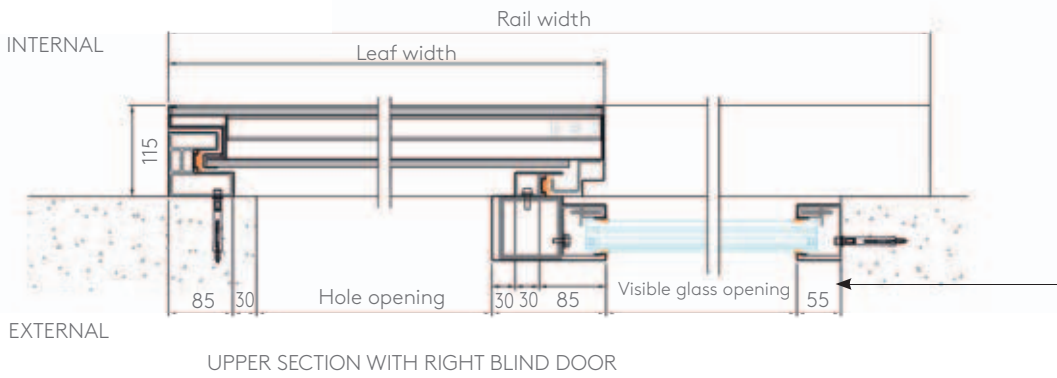
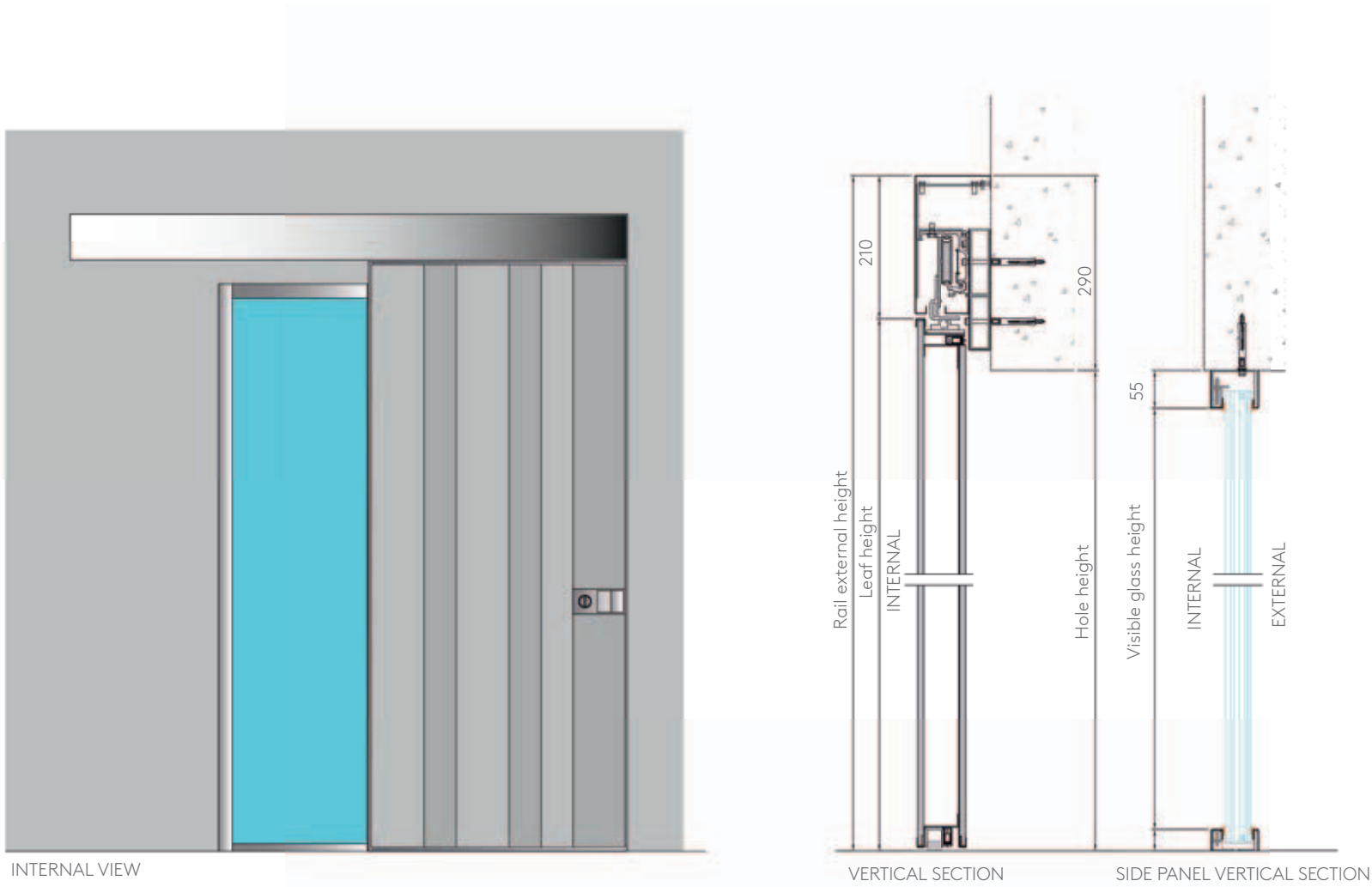


1. Manual sliding rail



2. Mechanical cylinder lock

# Sliding door Vela with side panel



# Coplanar internal handle



# Coplanar external long handle



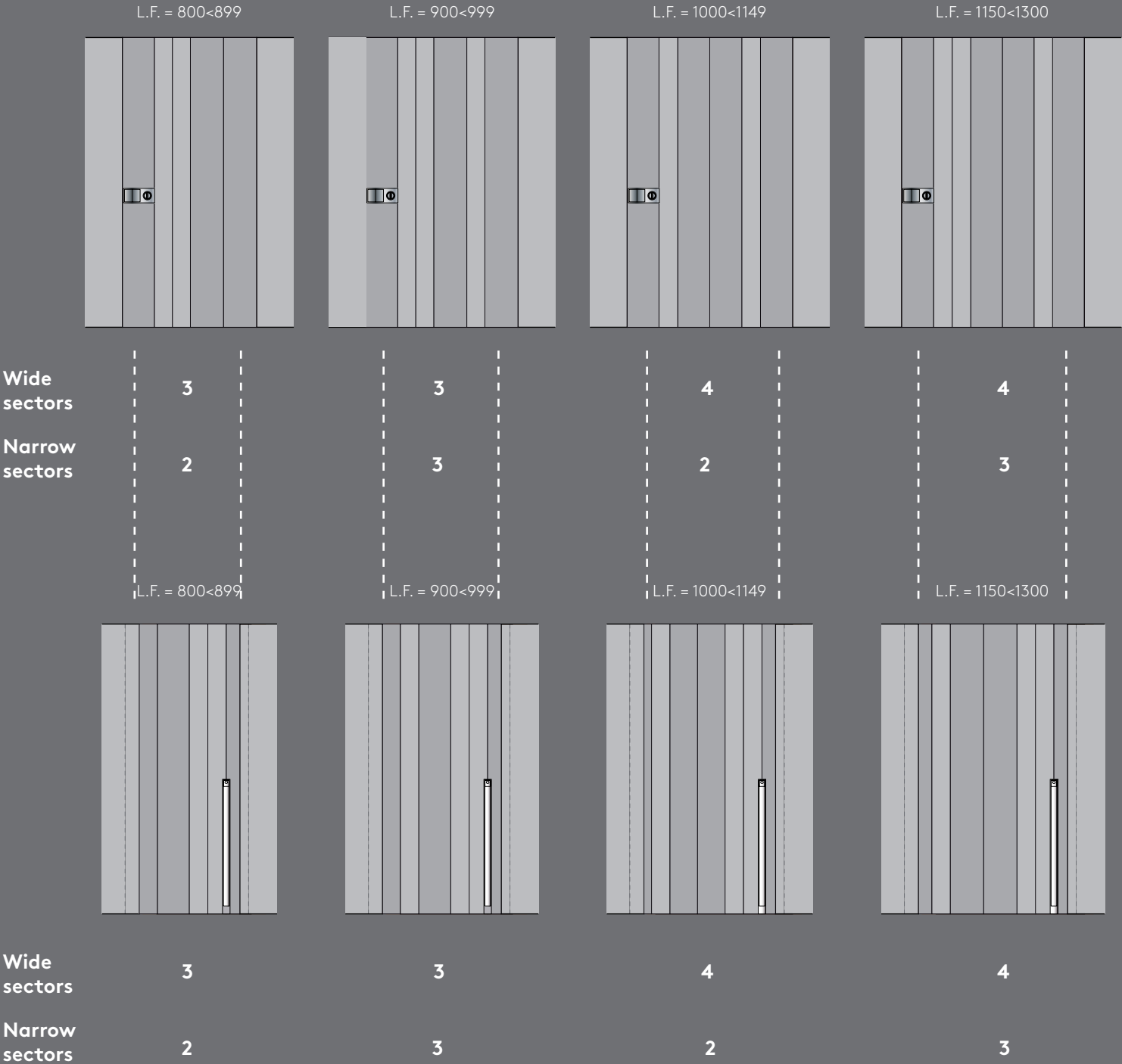


# Arrangement and number of sections

The number of sections divided by type change according to the Hole Opening and to the internal and external side, pursuant to the following drawing.

- wide sectors: 230 - 300 mm
- narrow sectors: 130 - 180 mm

### Internal side sections (left leaf)



### External side sections (left leaf)





# Tekno

With horizontal and customizable sectors, a concentrate of innovation and technology that perfectly matches the solutions of modern architectural projects

## The door with concealed hinges:

- 100° Opening
- Maximum feasible measures 1300x3000mm single leaf  
1900x3000mm double leaf
- Other measurements on request
- Door profiles and frame cover in brushed aluminum standard supplied steel without visible screws
- Motorized electronic lock with integrated access control system on request

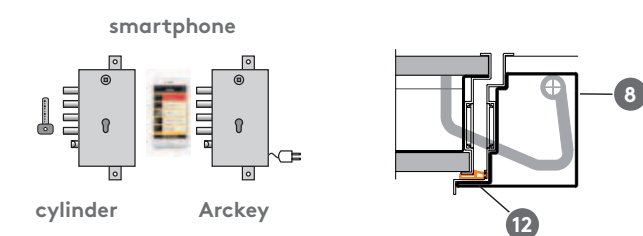
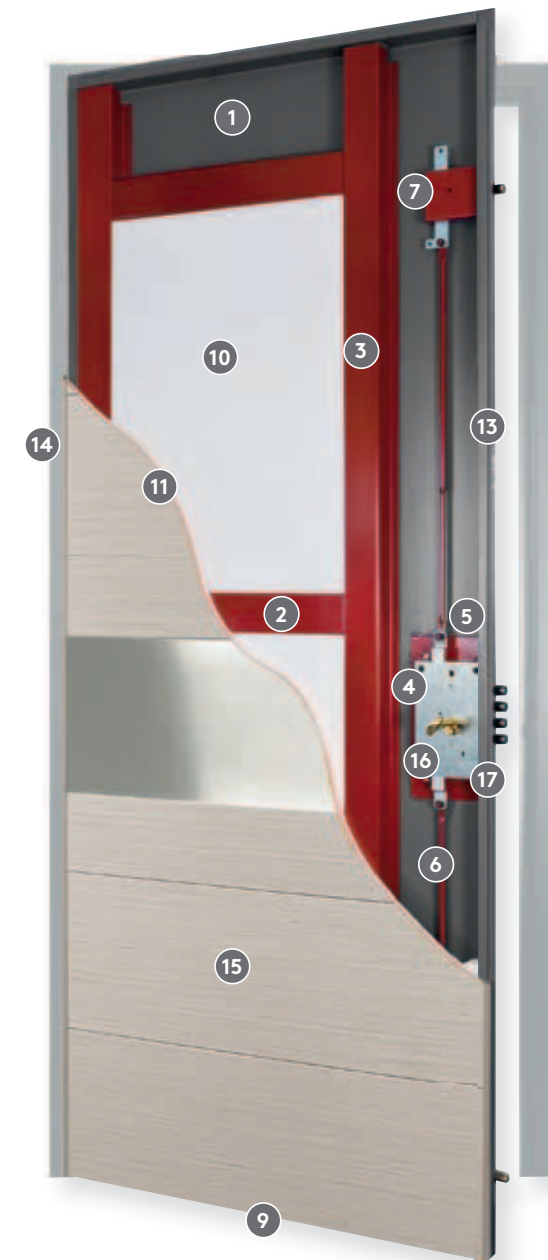


# Tekno specifications

Safety door Tekno, flush with internal wall/coplanar with surrounding frame: leaf in 15/10 electro-galvanized sheet steel with 3 horizontal reinforcing bars and 2 vertical reinforcing bars, 30/10 lock protection plate, closing profiles and frame covering profiles in aluminum in 5 finishes, perimeter frame sealing strip, internal insulation, draught excluder, brushed chrome square internal/external kit, closed sector frame, 2 patented concealed hinges, 2 side switchlocks, cylinder lock with defender included.



- 1 Leaf tray
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Cylinder lock
- 5 Lock protection and support plate
- 6 Lock connecting rods with closure points
- 7 Switchlock
- 8 Concealed hinge
- 9 Draught excluder
- 10 Insulation
- 11 Heat barrier mat
- 12 Tubular rubber sealing strip
- 13 Aluminum frame profiles
- 14 Closed hollow frame
- 15 Internal covering panel
- 16 Satin chrome handle kit
- 17 Defender satin chrome





# Shapes and solutions



# Performance

**Interior door**  
(dividing two environments with very similar climatic conditions)



**External door**  
(dividing two environments with different climatic conditions)



Flush with internal wall

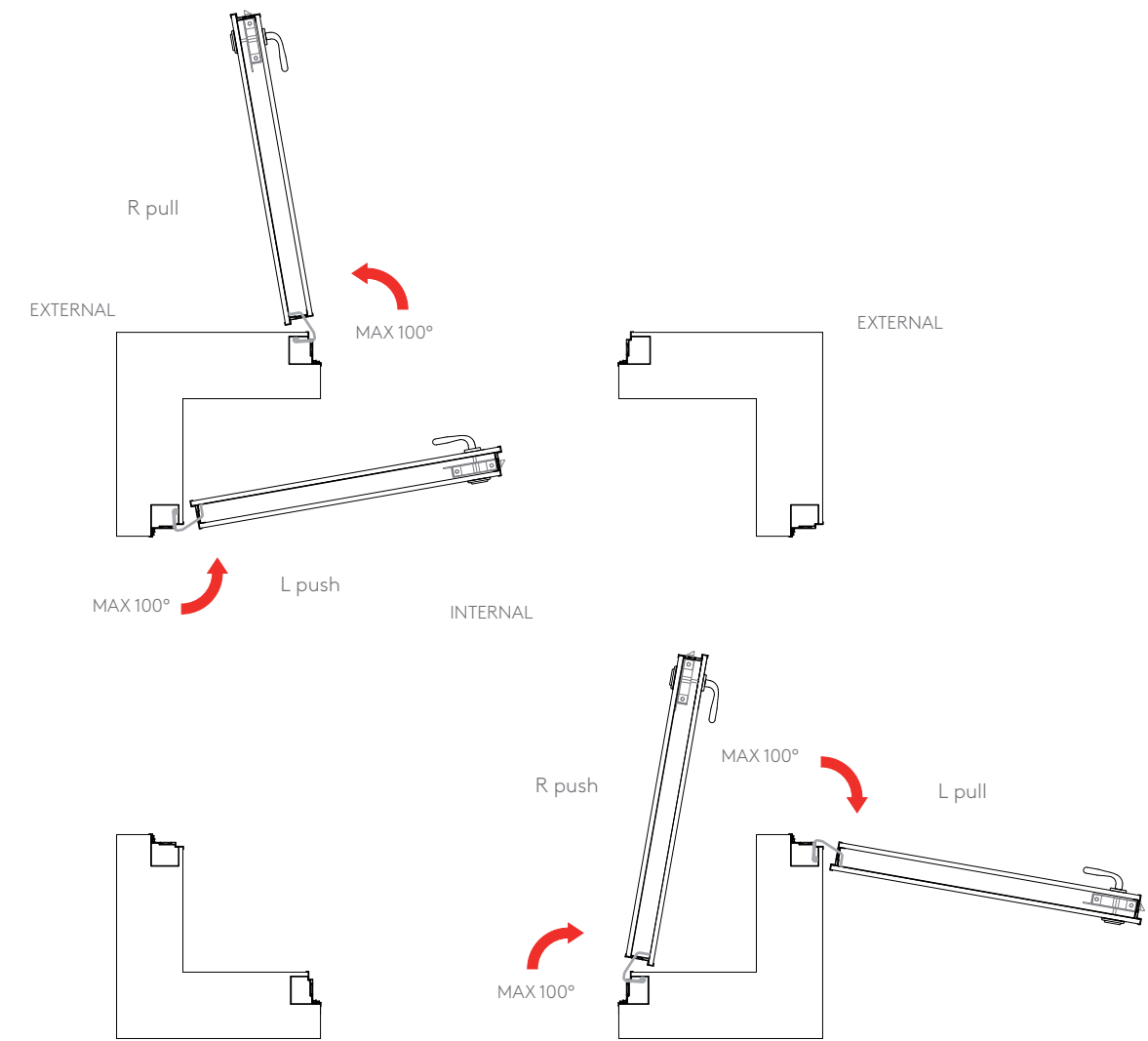
	Performance	standard	Upon request	size tested sample	Max certified realizable measures
	break-in resistance	Class 3	-	850 x 2100	1030 x 2400
	acoustic	43 dB	-	900 x 2100	± 0%
	air	2	Mose Kit 4 Dam Kit 4	850 x 2100	Area + 50%
	water	0	Mose Kit 5A Dam Kit 5A	850 x 2100	Area + 50%
	wind	C4	Mose Kit C5 Dam Kit C5	850 x 2100	Area + 0% -100%
	thermal	1.6	1.3 - 1	1230 x 2180	Area ≤ 3.6sqm

	Performance	sample size tested	Max certified realizable measures
	EI 90	900 x 2100	± 0
	VKF 90	900 x 2100	± 0
	EI 120	900 x 2100	width + 15% height +15% max 20% area
	UL 120	910 x 2395	+ 0% -100%
	Hurricane-proof Noa	1030 x 2430	Area + 0% -100%

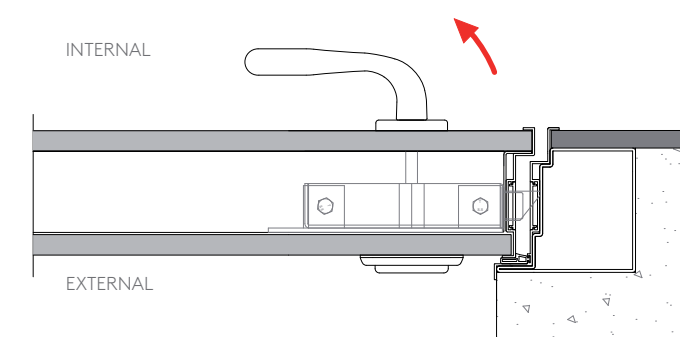
The declared performances are valid for intact doors installed according to the official installation instructions of Oikos Venezia srl.



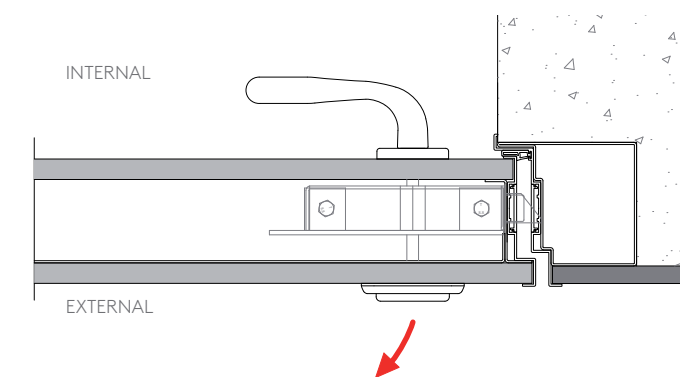
# Tekno door opening directions



Door horizontal section with push opening



Door horizontal section with pull opening

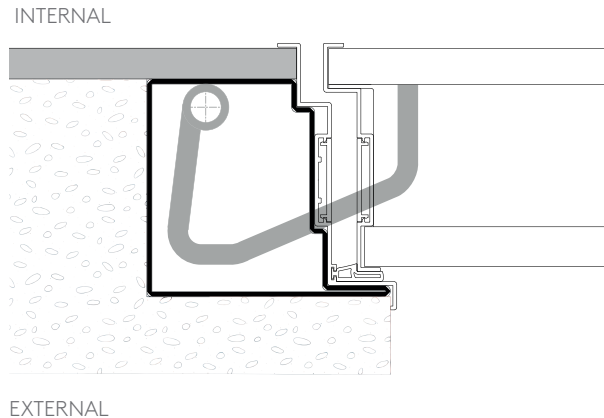




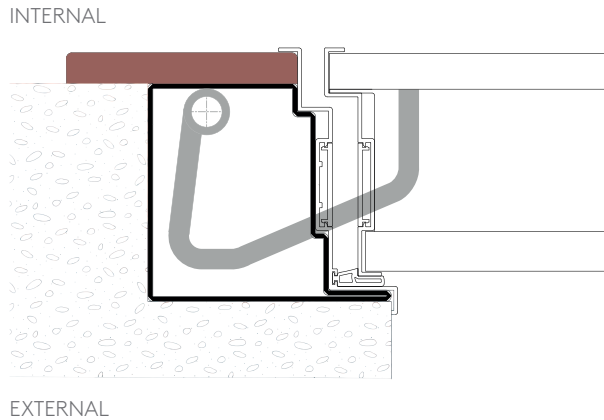
# Fitting solutions



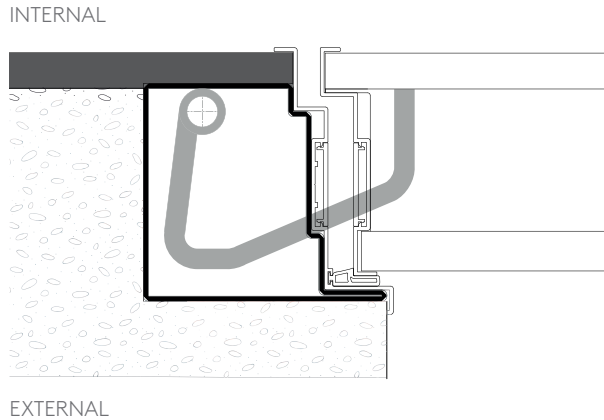
Flush with internal wall with plasterboard



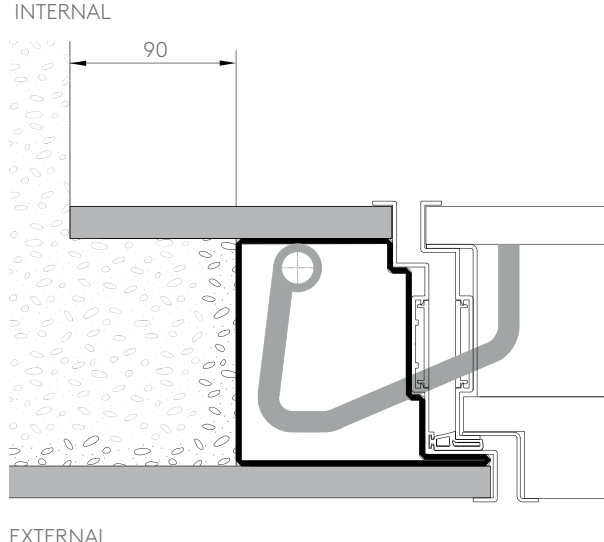
Coplanar with surround (90x12)



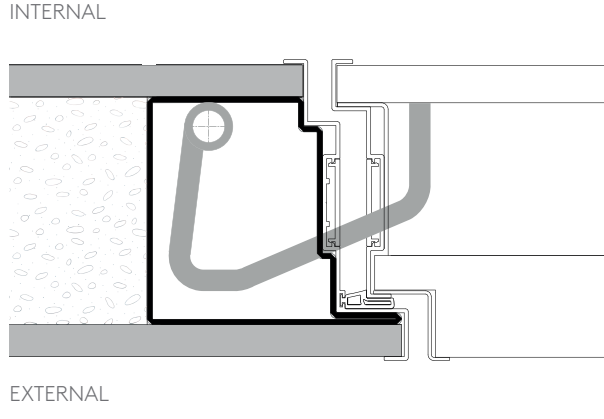
Flush with internal wall with SWS



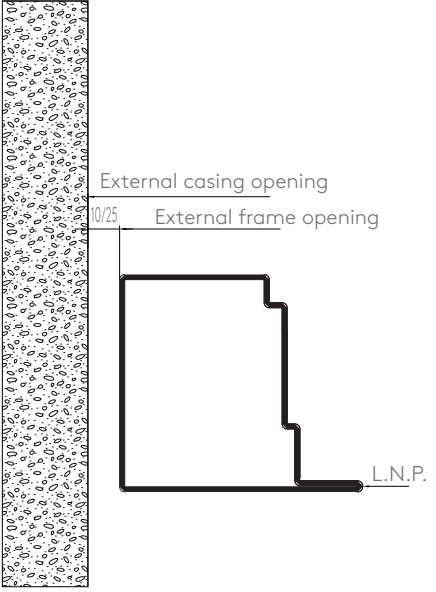
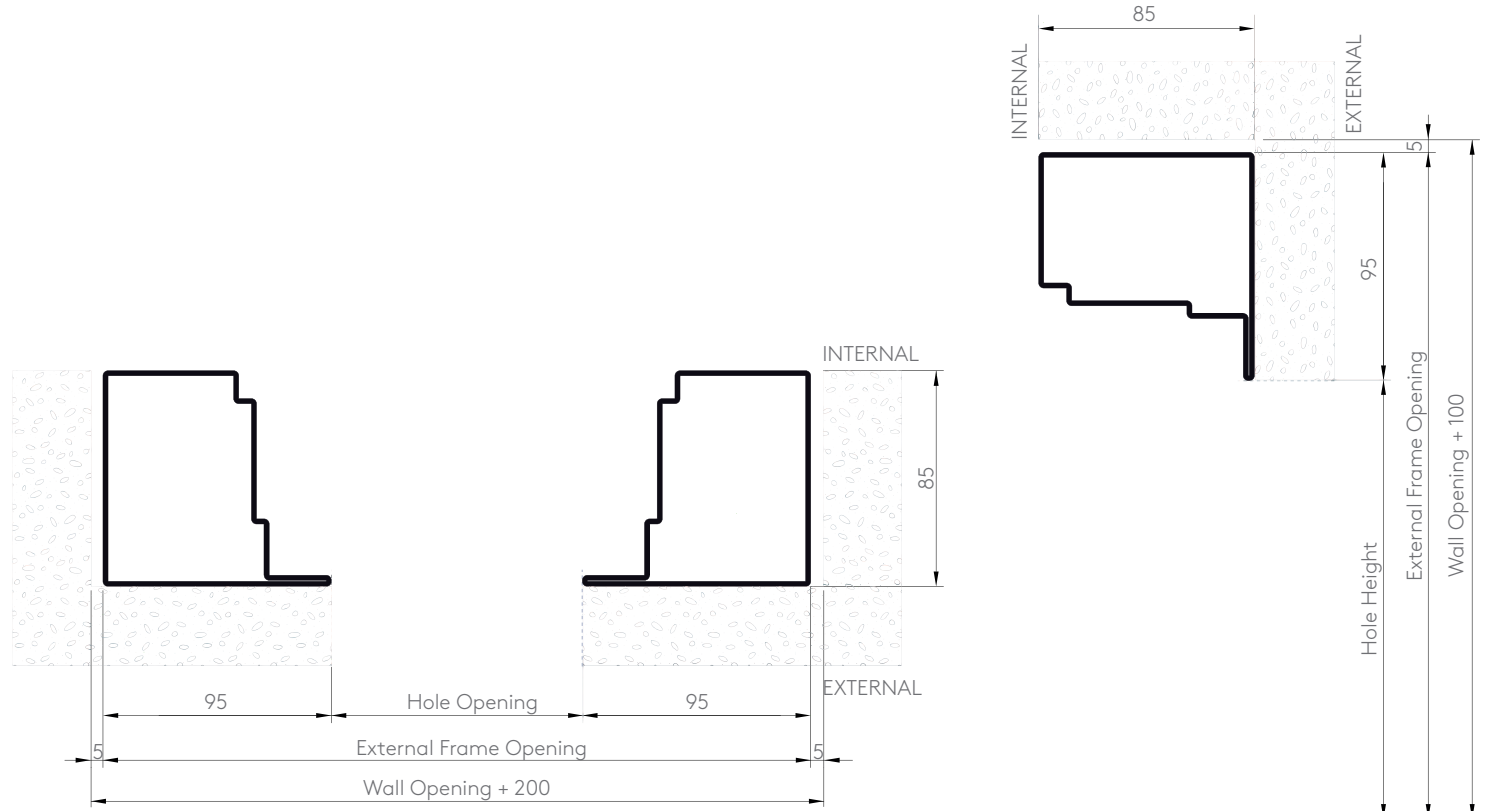
Flush with external wall



Flush with external wall with SWS



# Tekno frame

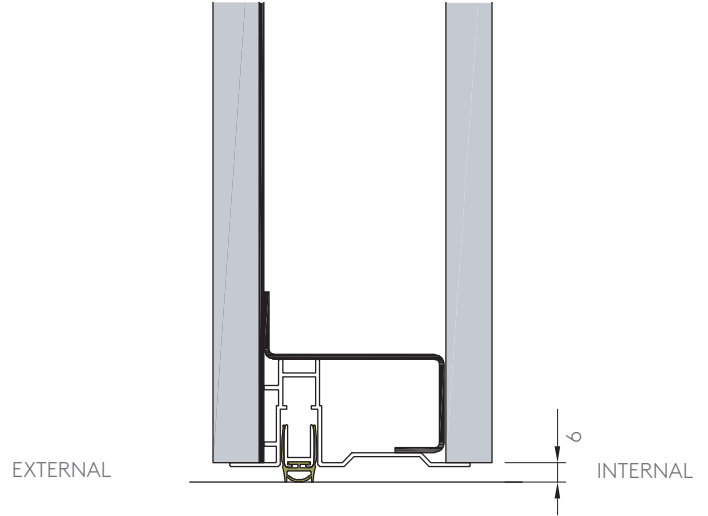


For the perfect rotation of the hinges in case of wall opening installation, when ordering the frame, consider keeping a clearance of 10 mm for Piano panels; for the panels Legno Vivo, etc., keep a minimum clearance of 25 mm. When ordering it is necessary to include the external frame covering profiles.

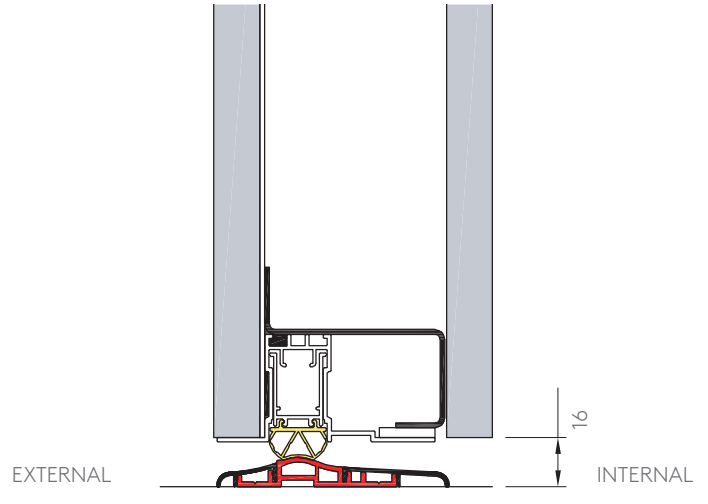
**Caution: when using skirting-type profiles, the door opening is restricted.**

# Floor sections

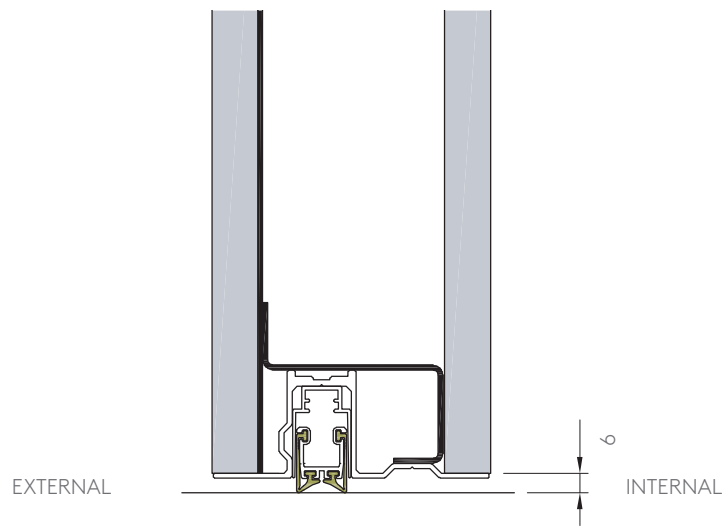
Standard solution with draught excluder



Solution with Mose kit

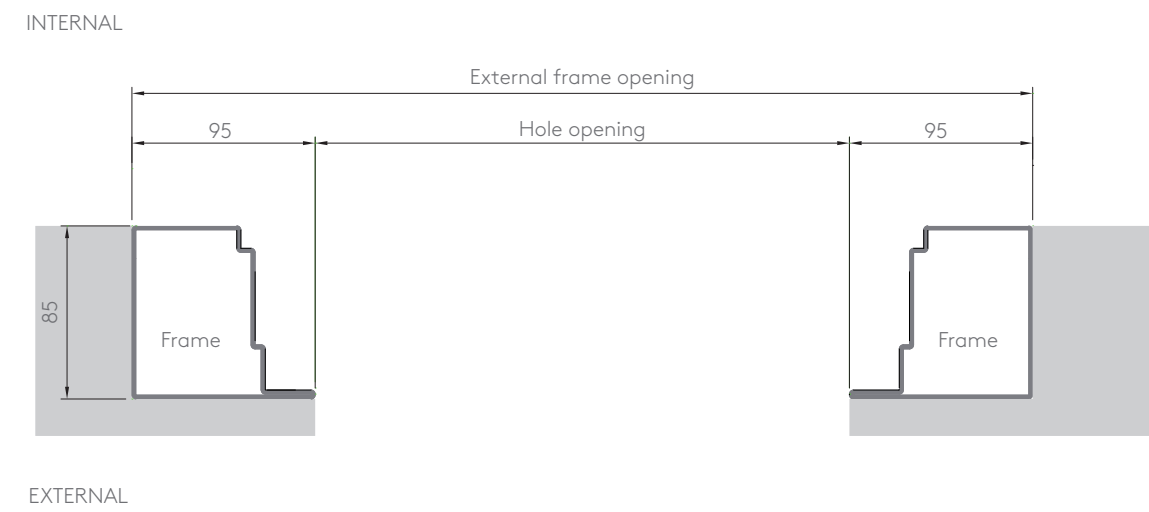
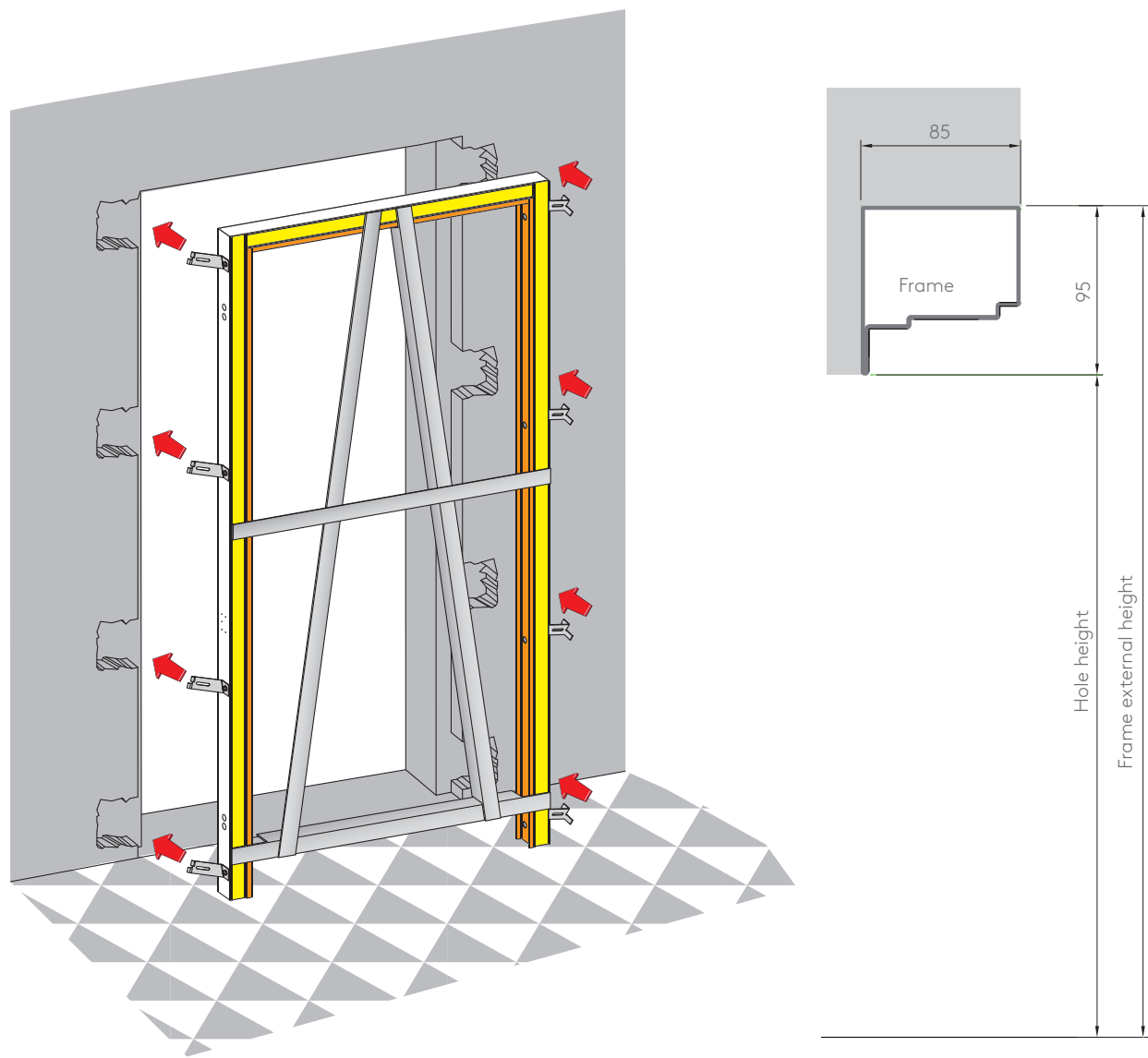


Solution with Dam kit



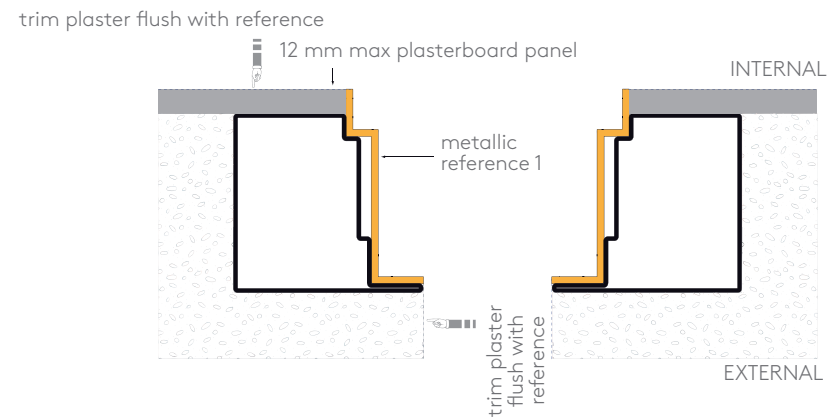


# Tekno frame

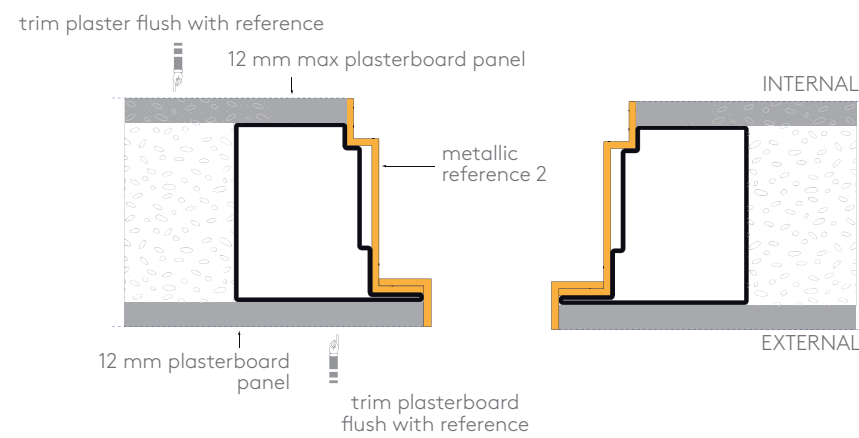


# References for frame fitting

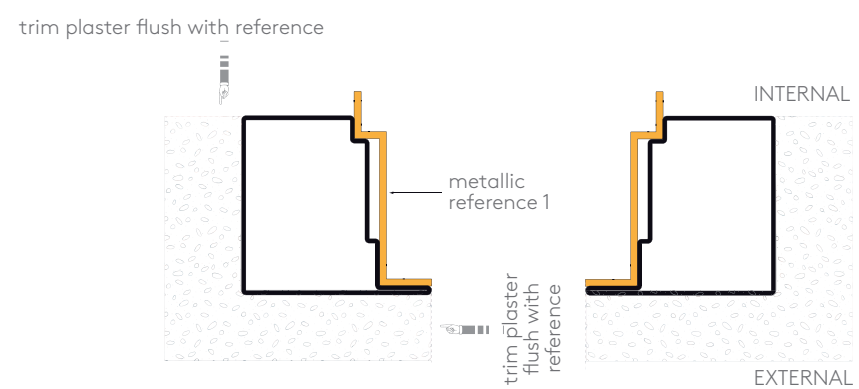
## Fitting flush with internal wall with plasterboard



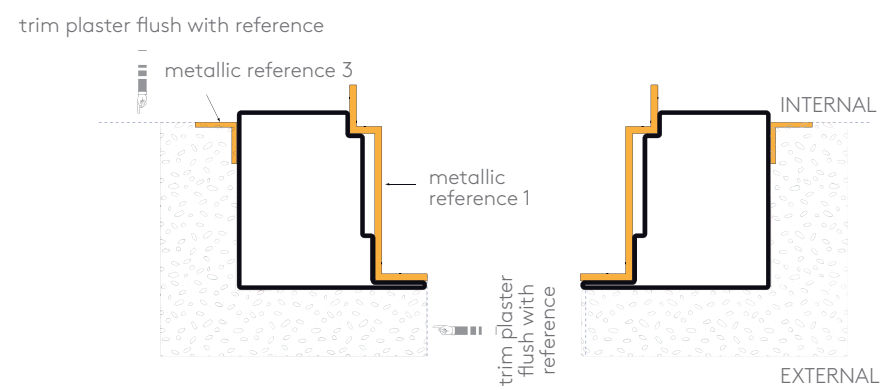
## Fitting flush with internal/external wall



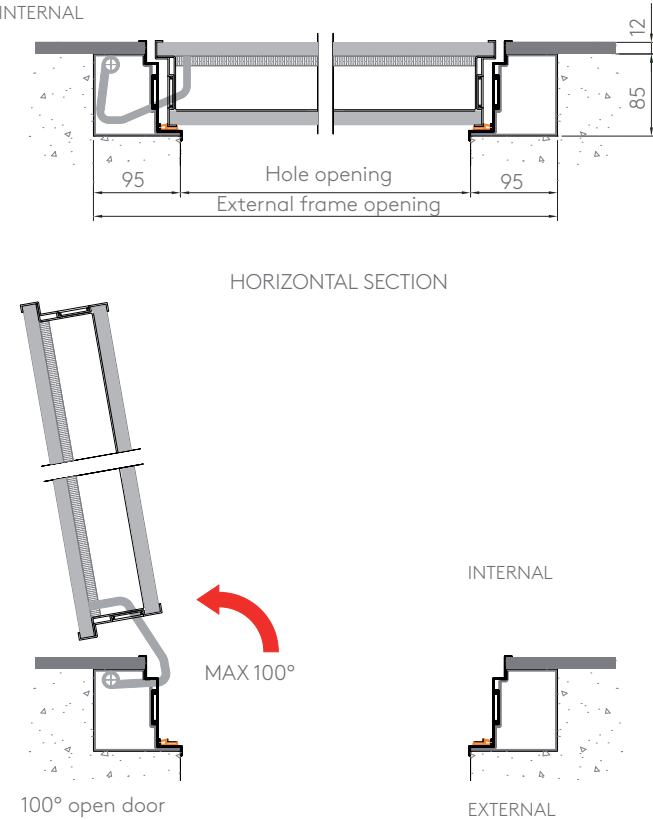
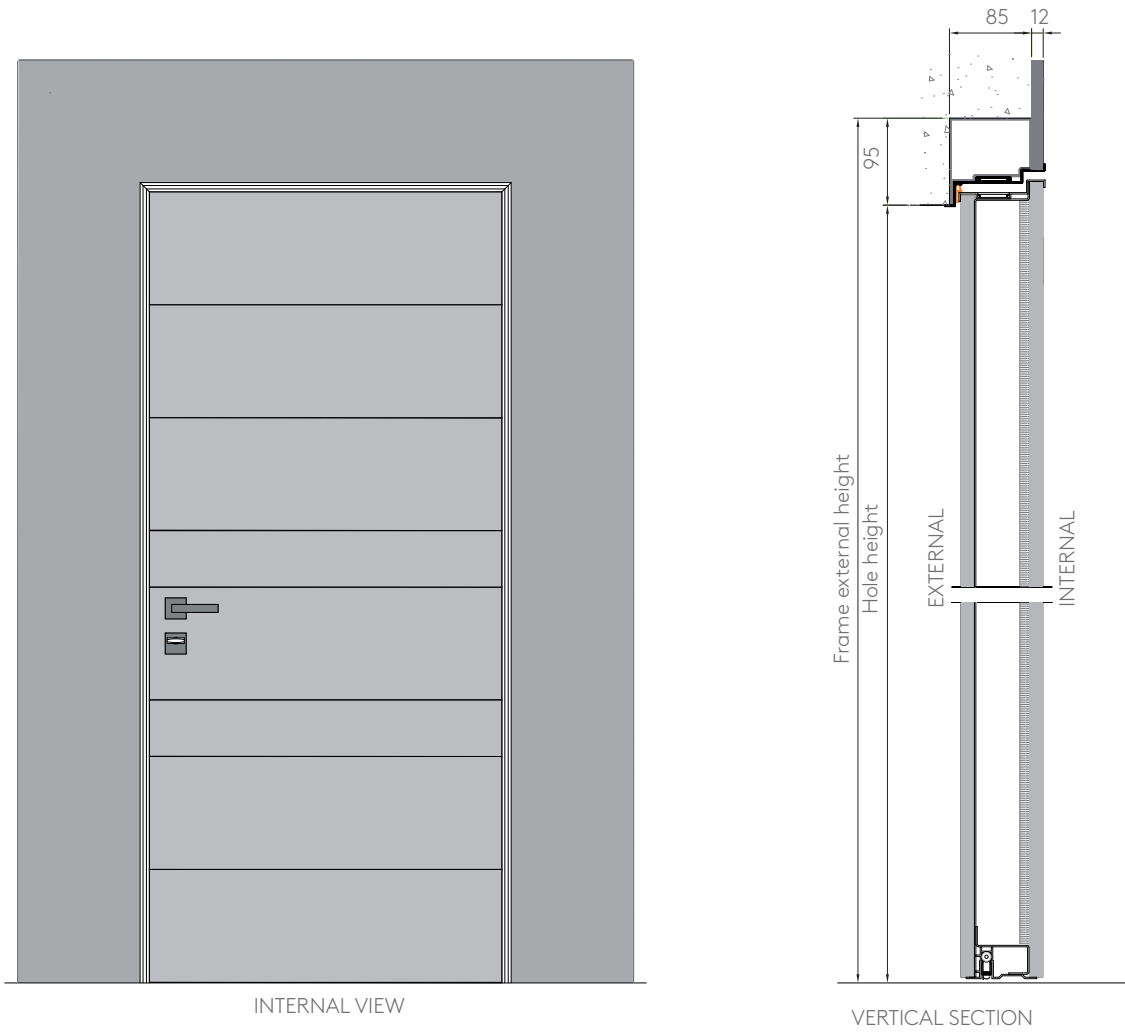
## Internal coplanar fitting with surround



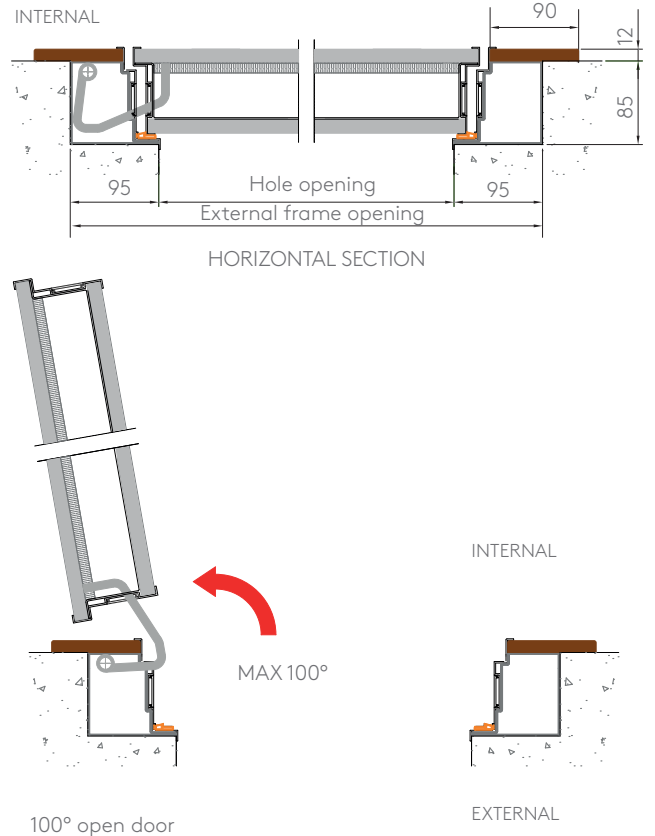
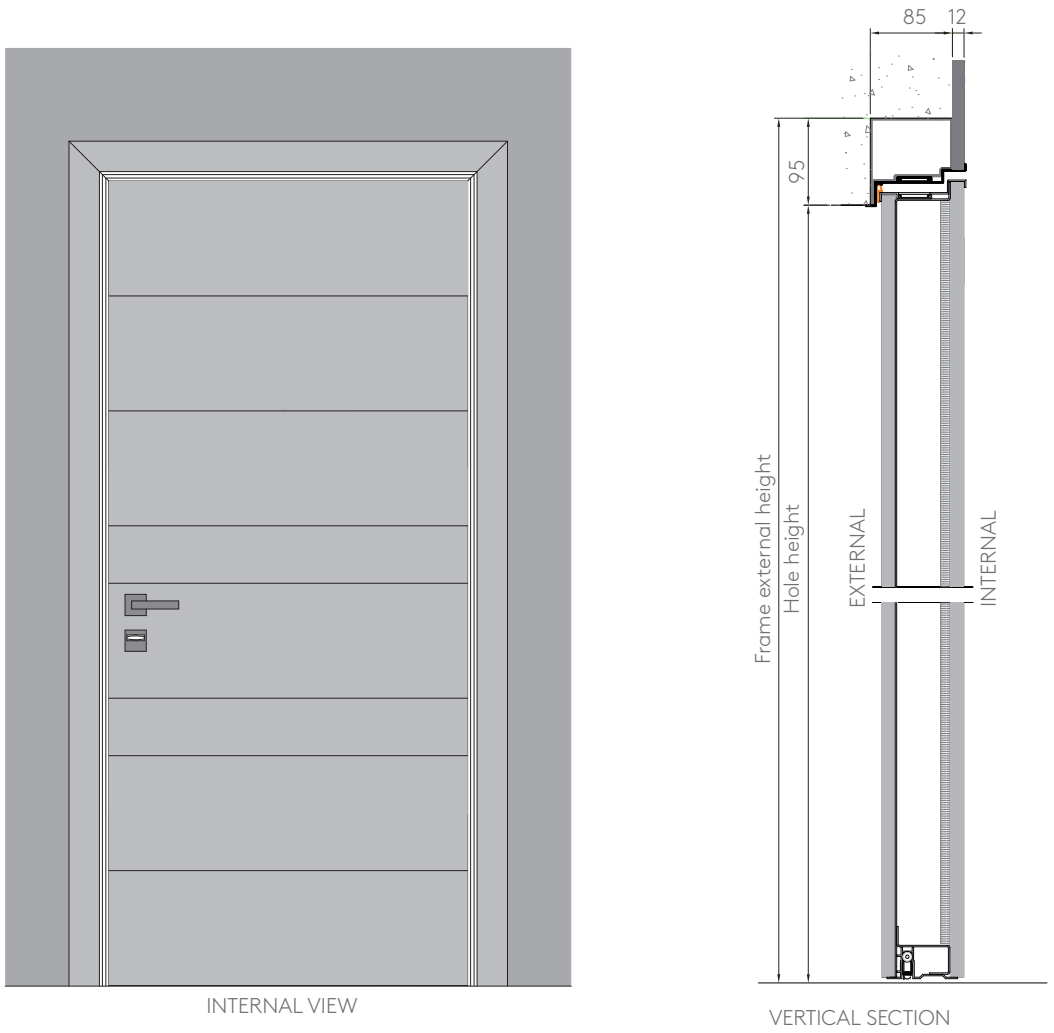
## Fitting flush with internal wall with SWS



# Tekno flush with internal wall with plasterboard

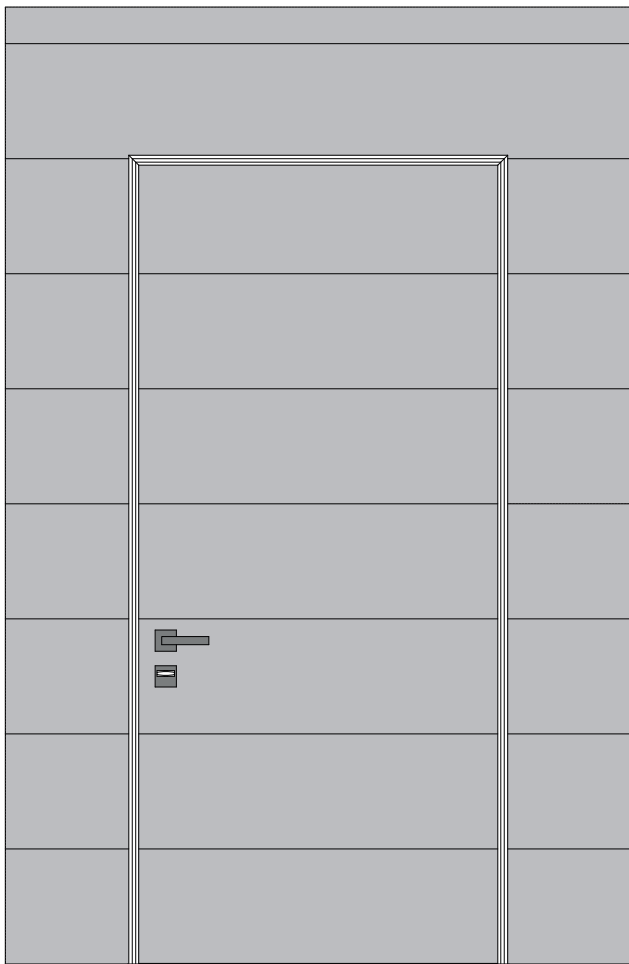


# Tekno coplanar with surround (90x12)

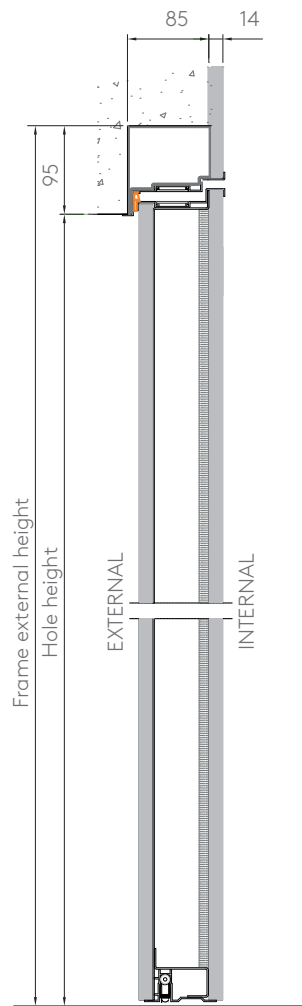




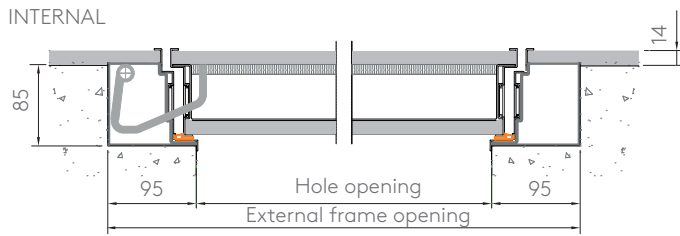
# Tekno flush with internal wall with SWS



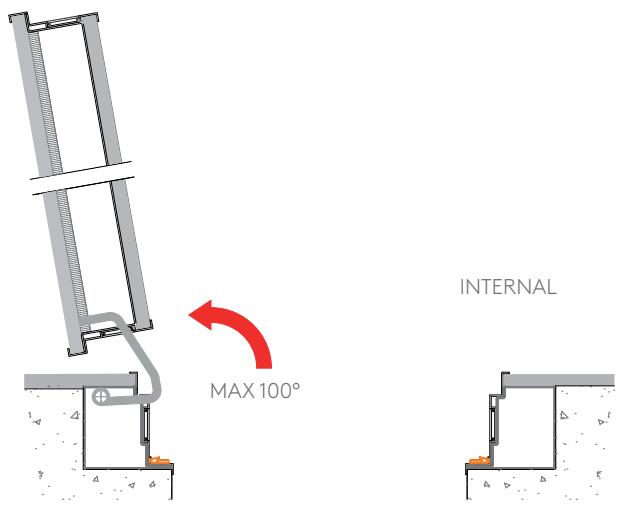
INTERNAL VIEW



VERTICAL SECTION



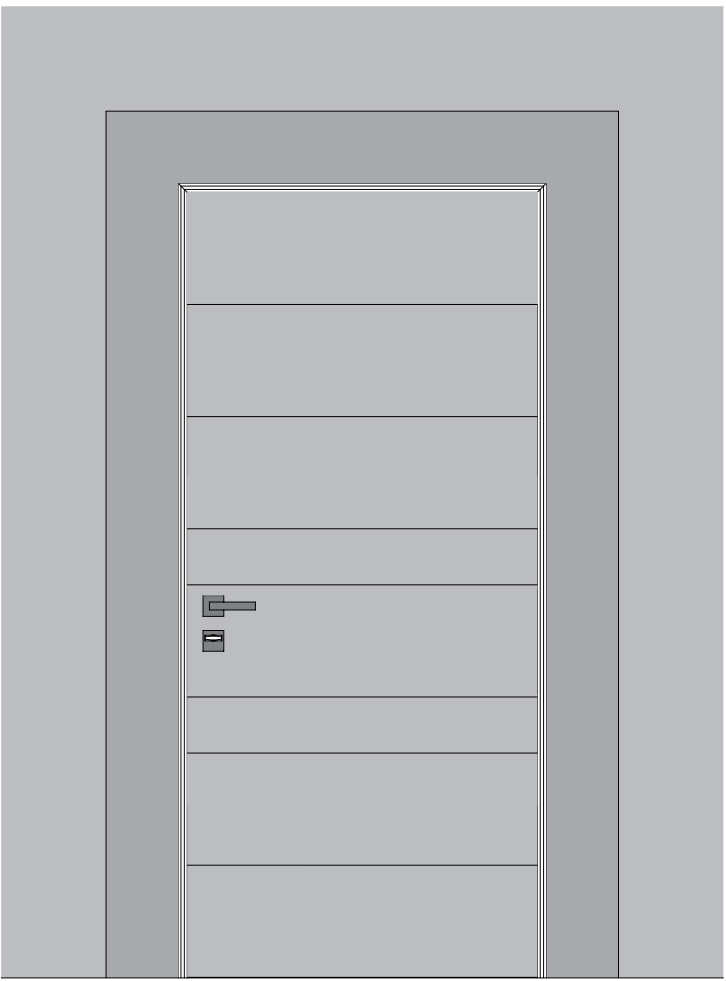
HORIZONTAL SECTION



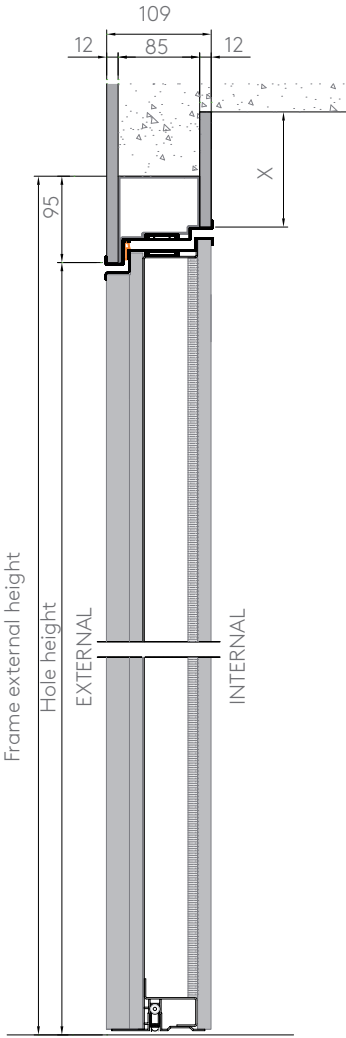
100° open door

EXTERNAL

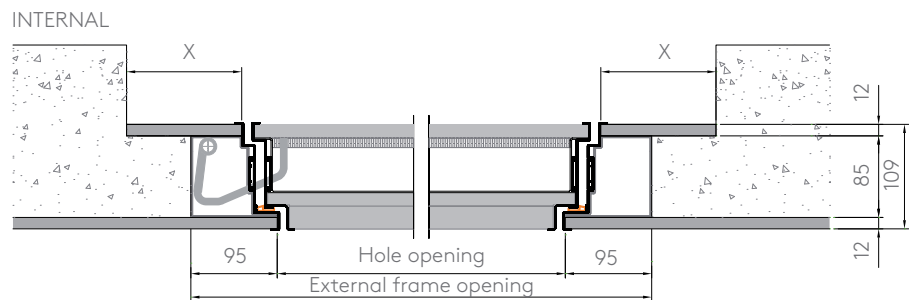
# Tekno flush with the external wall



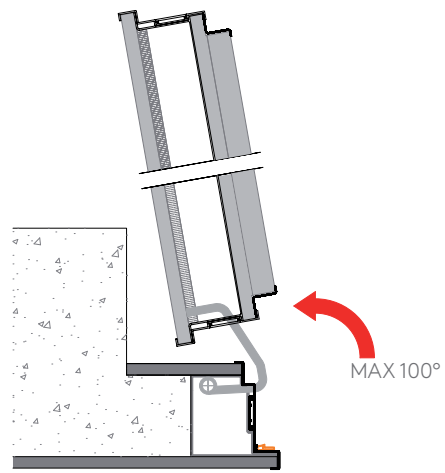
INTERNAL VIEW



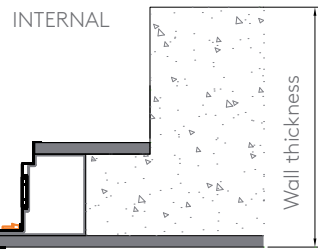
VERTICAL SECTION



HORIZONTAL SECTION



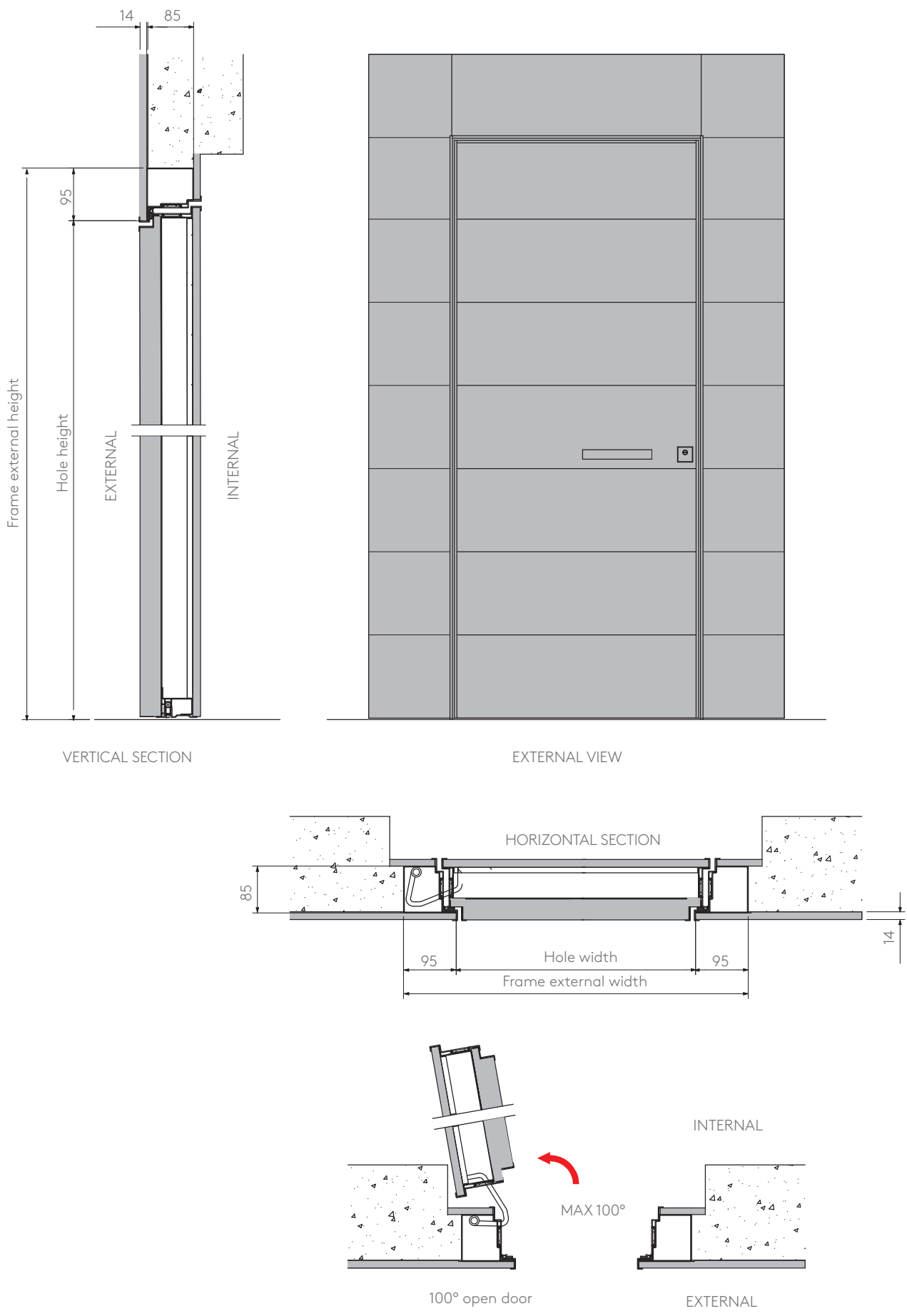
100° open door



EXTERNAL

for 100° door opening  
X > of 150mm for wall  
thickness 200/300mm

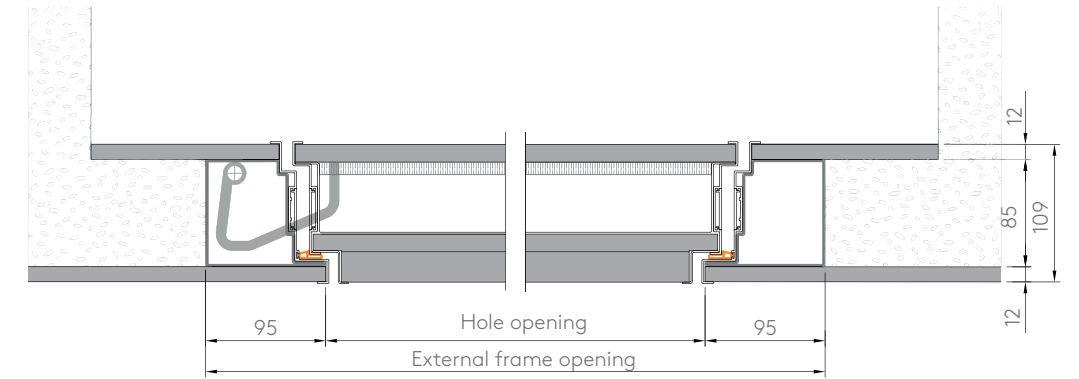
# Tekno flush with internal wall with SWS



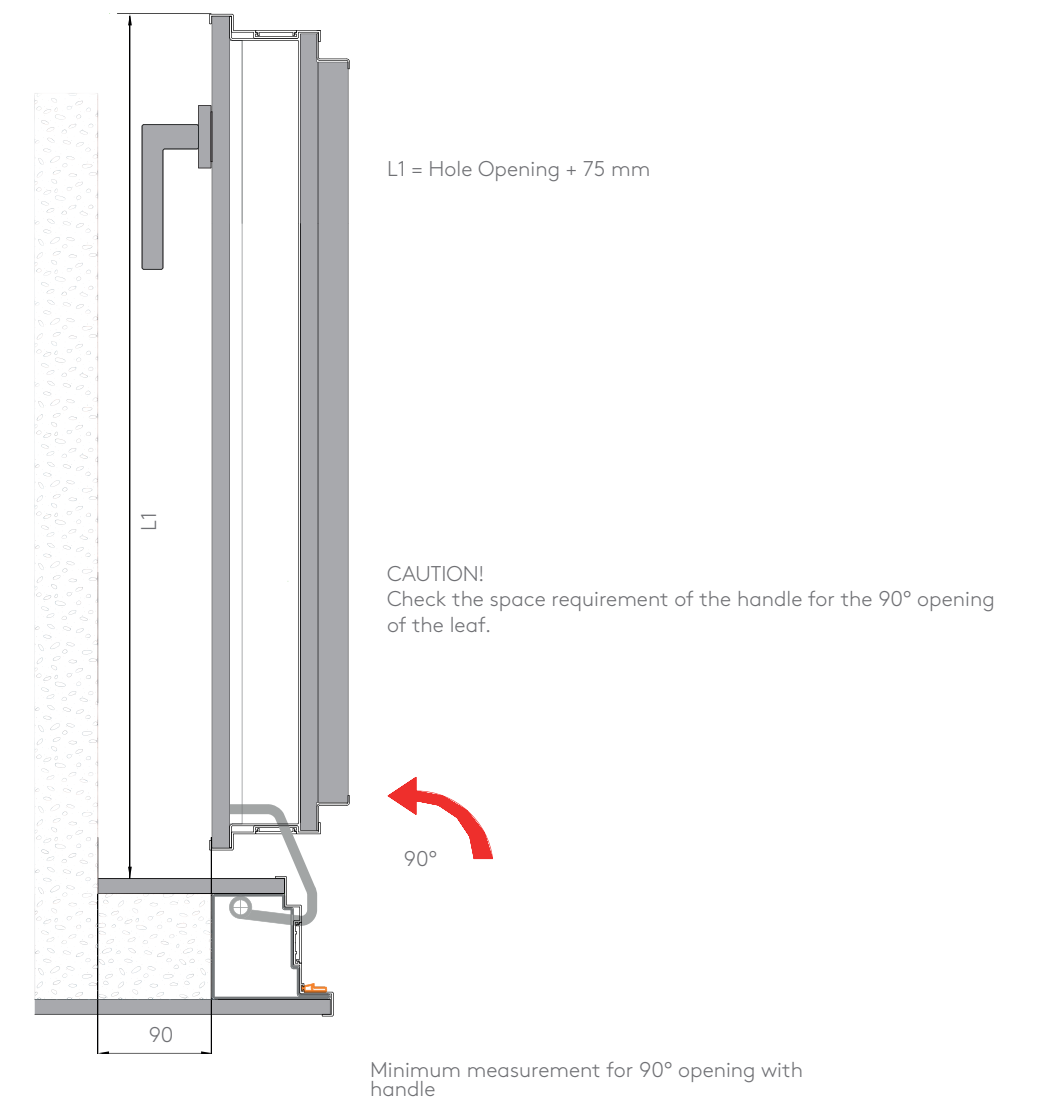




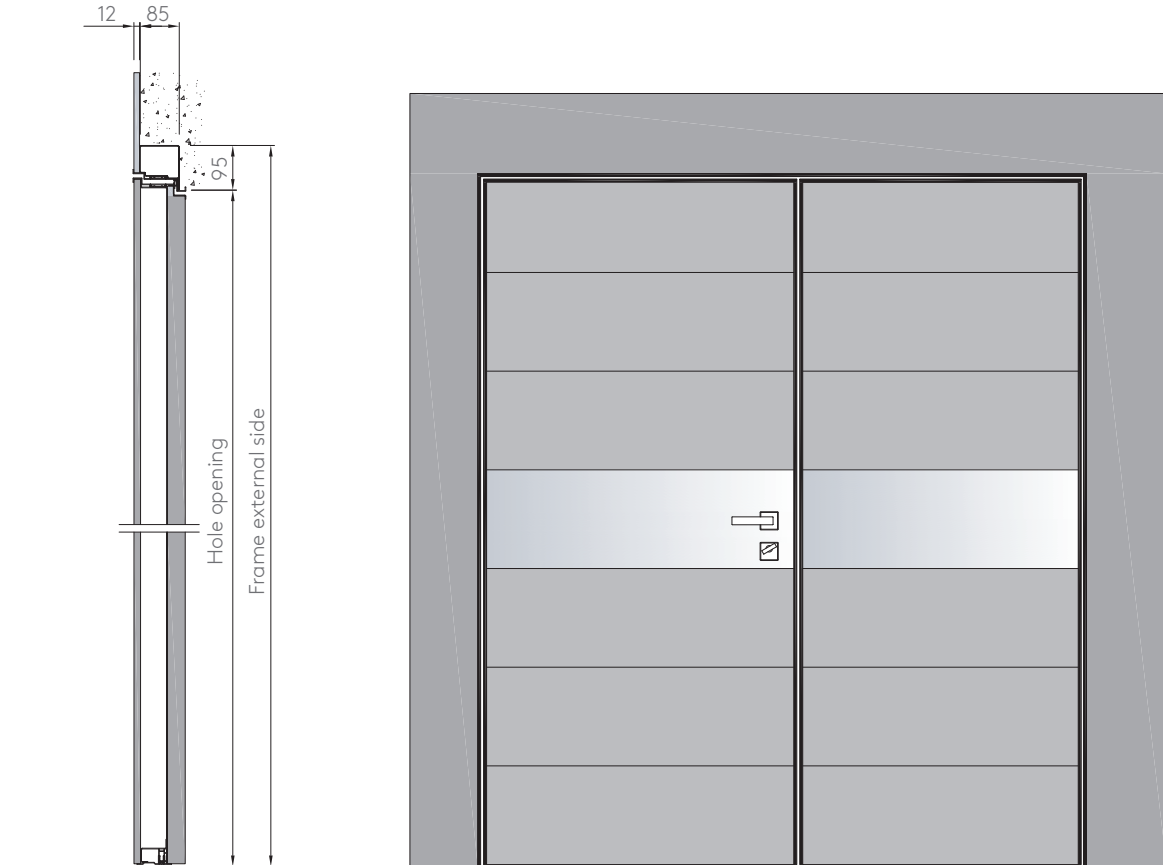
# Tekno fitting types



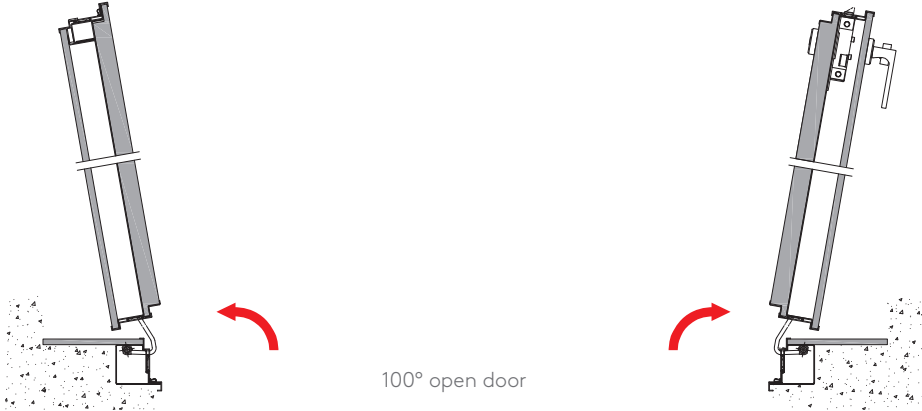
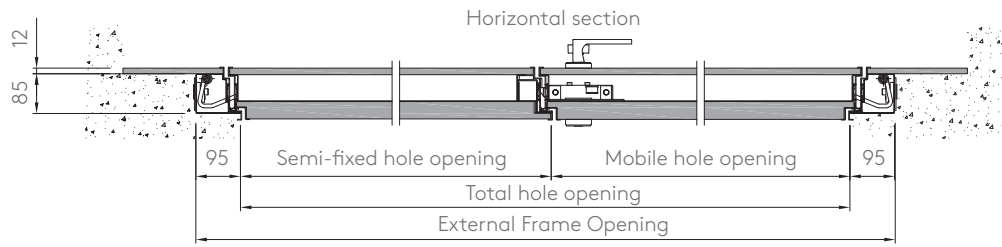
Space requirement with 90° open door



# Tekno double leaf flush with the internal wall

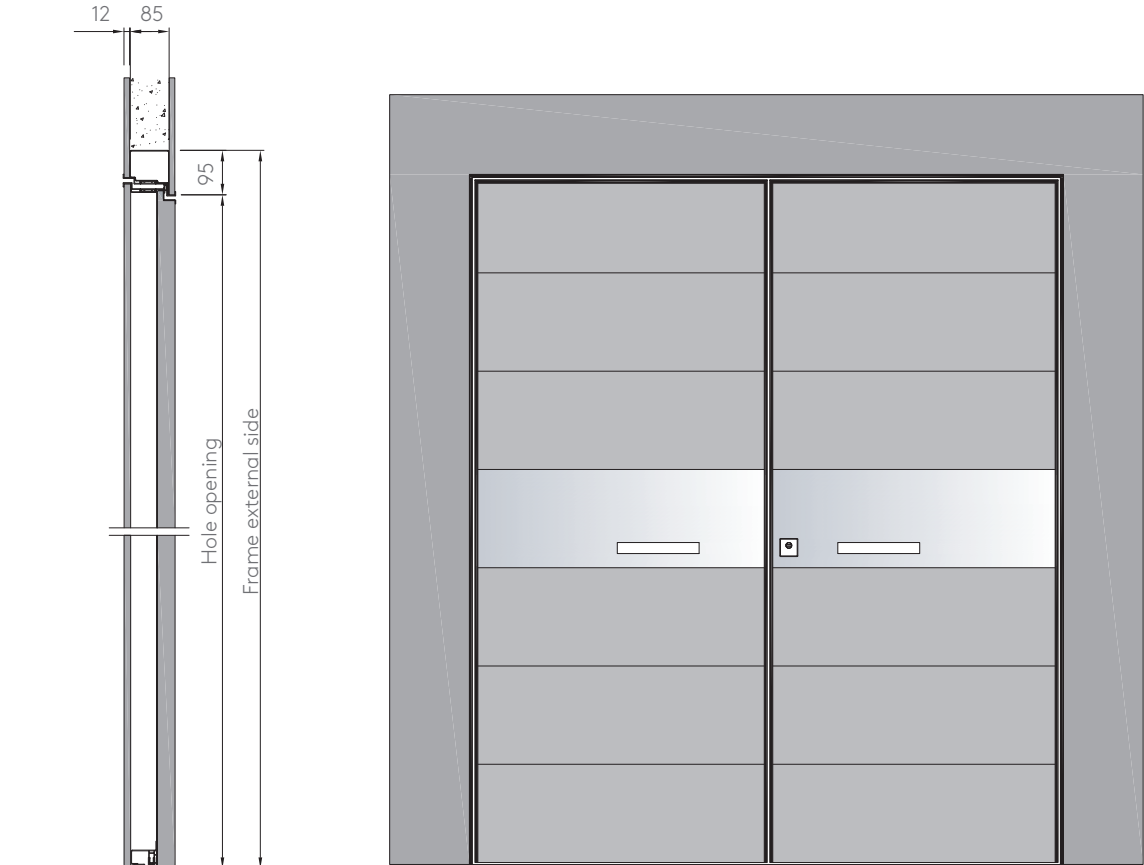


INTERNAL VIEW

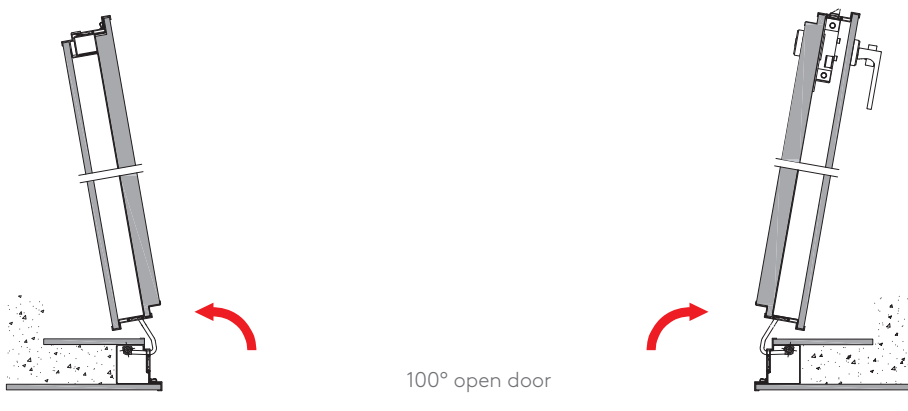
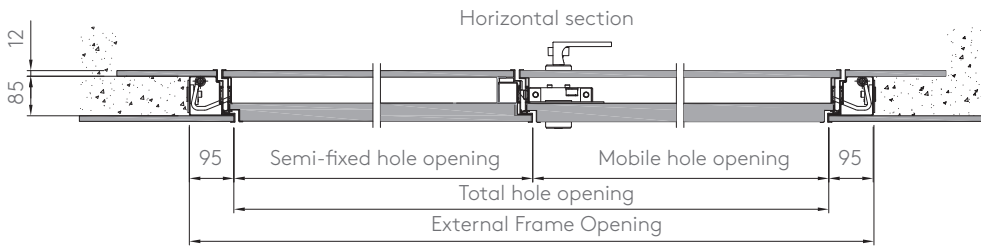


100° open door

# Tekno double leaf flush with the external wall



EXTERNAL VIEW



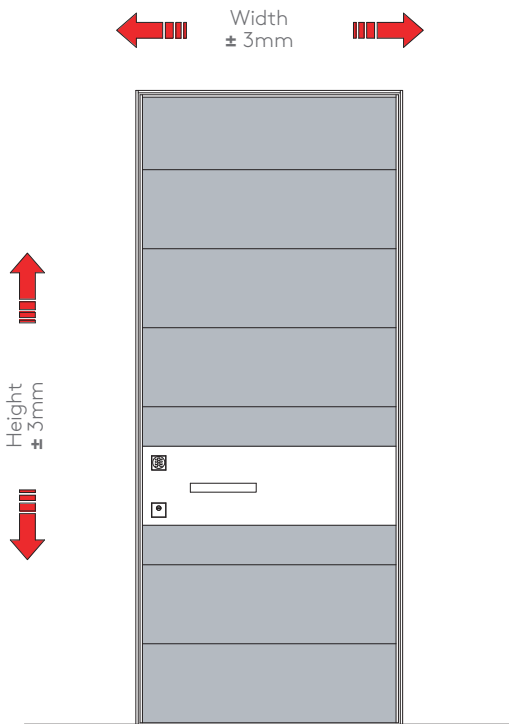
100° open door





# Adjustable concealed hinges

An exclusive hinge, absolutely invisible when the door is closed, allows the door to open up to 100°. These special hinges allow easily adjusting the height and plumbing of the door using an Allen wrench in the event of settling, even after many years.

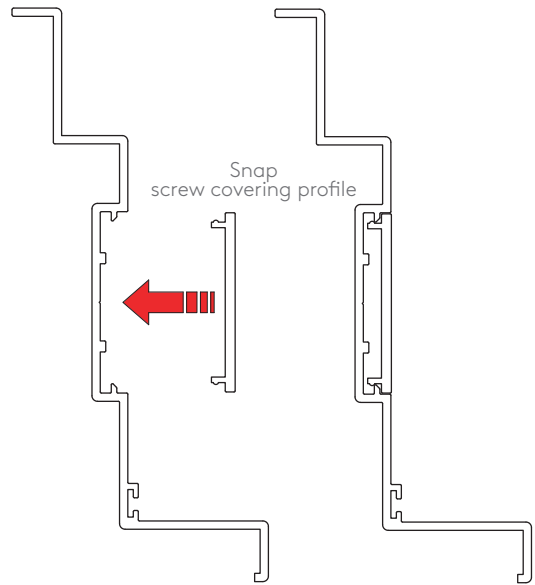


# Aluminum cover profiles without visible screws

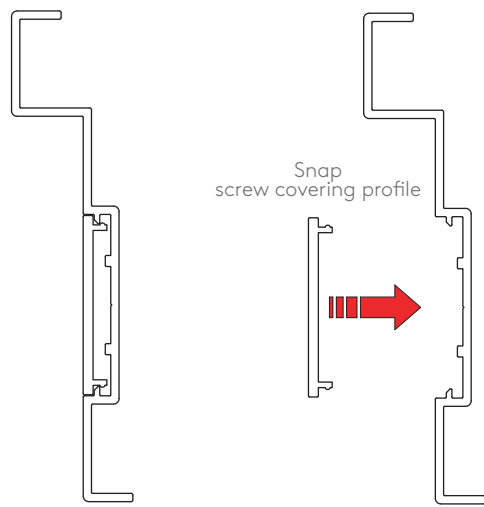
The aluminum finish in brushed steel covers the frame and the door profile. No screw is visible, a special feature that guarantees a thorough cleaning and refined aesthetics.



Frame covering profile



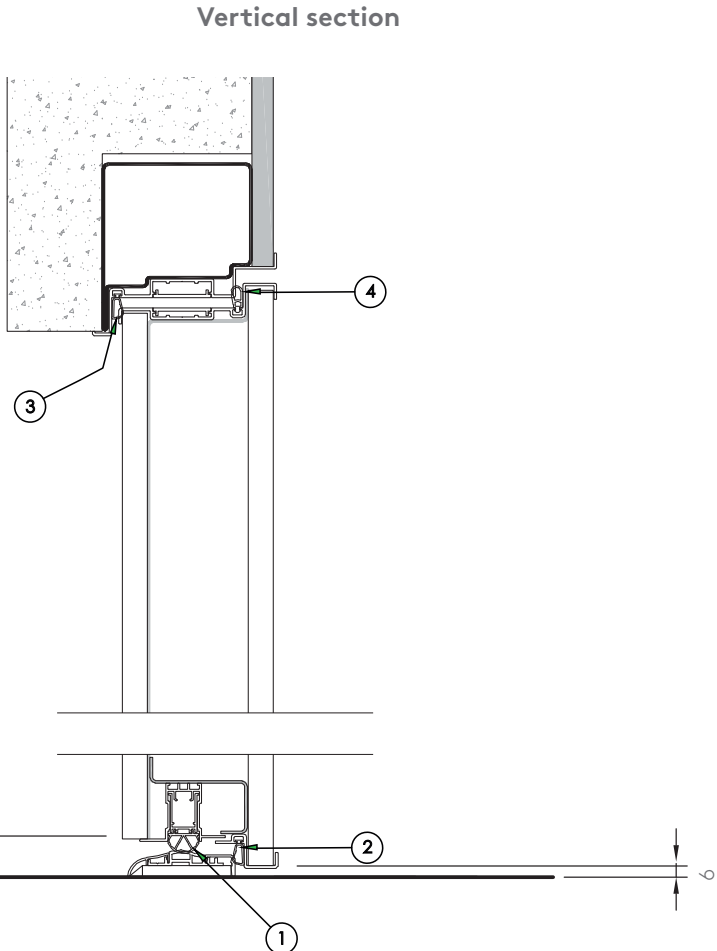
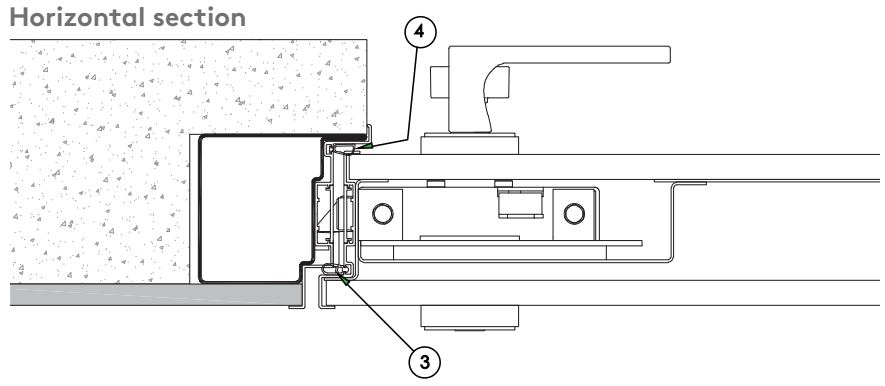
Leaf covering profile





# Tekno hurricane proof

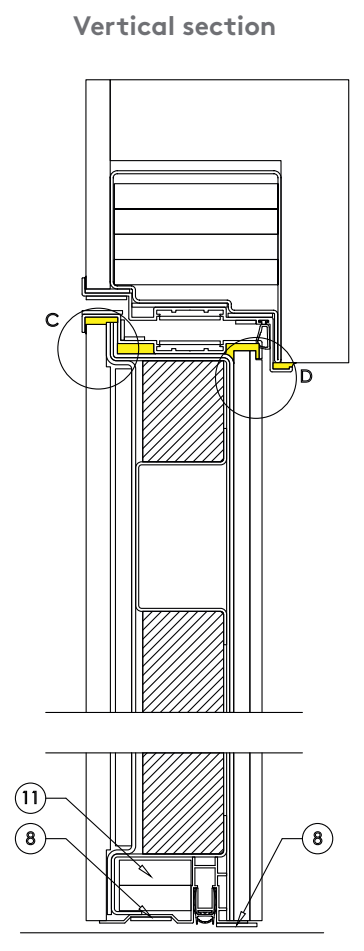
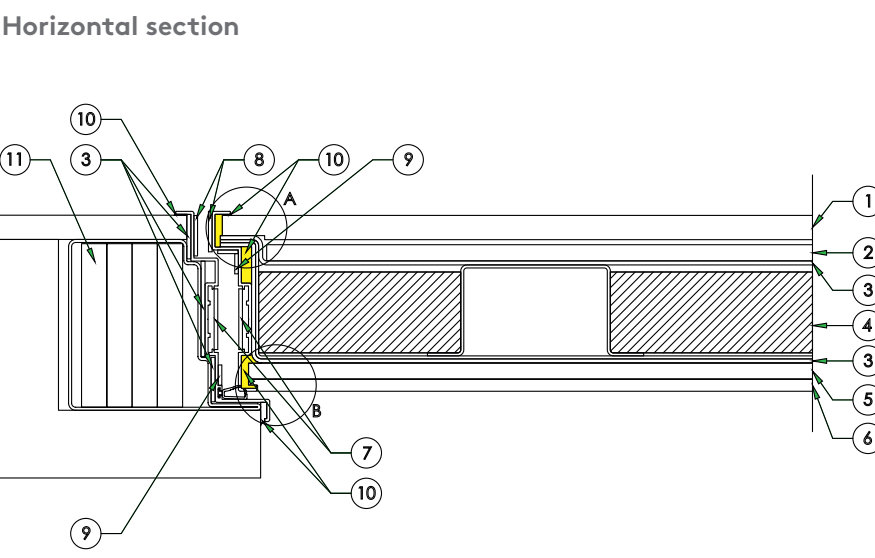
The Miami Dade-certified Tekno door, issued by the County of Miami, ensures that it meets stringent quality standards in door designs that can withstand extreme wind loads caused by hurricanes.



- 1 Noa adjustment
- 2 Additional floor sealing strip
- 3 Standard supplied sealing strip
- 4 Additional sealing strip

# Tekno UL 120

The Tekno UL 120 door, certified by the UL laboratory, guarantees compliance with the rigorous American standards in the manufacture of doors capable of resisting fire for 120 minutes.



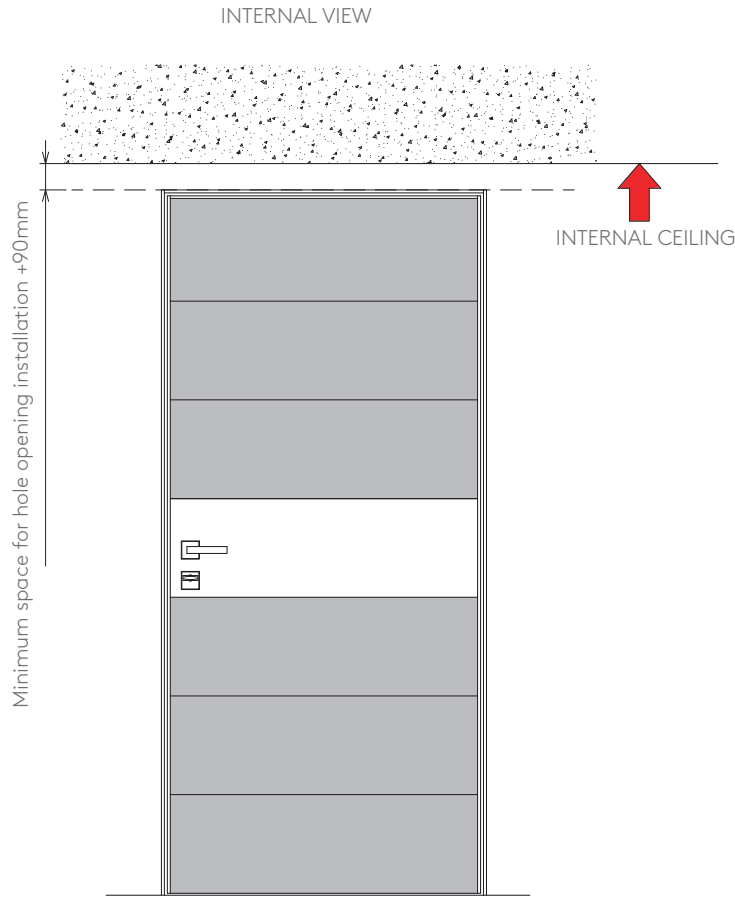
- 1 Internal panel
- 2 Calcium silicate internal
- 3 Ceramic paper
- 4 Mineral wool
- 5 Outer calcium silicate
- 6 External panel
- 7 Thermo-expanding seal 30x1.8mm
- 8 Thermo-expanding seal 20x1.8mm
- 9 Thermo-expanding seal 10x1.8mm
- 10 Sealant
- 11 Gypso-tech focus "F" plasterboard

# Minimum height between door and ceiling

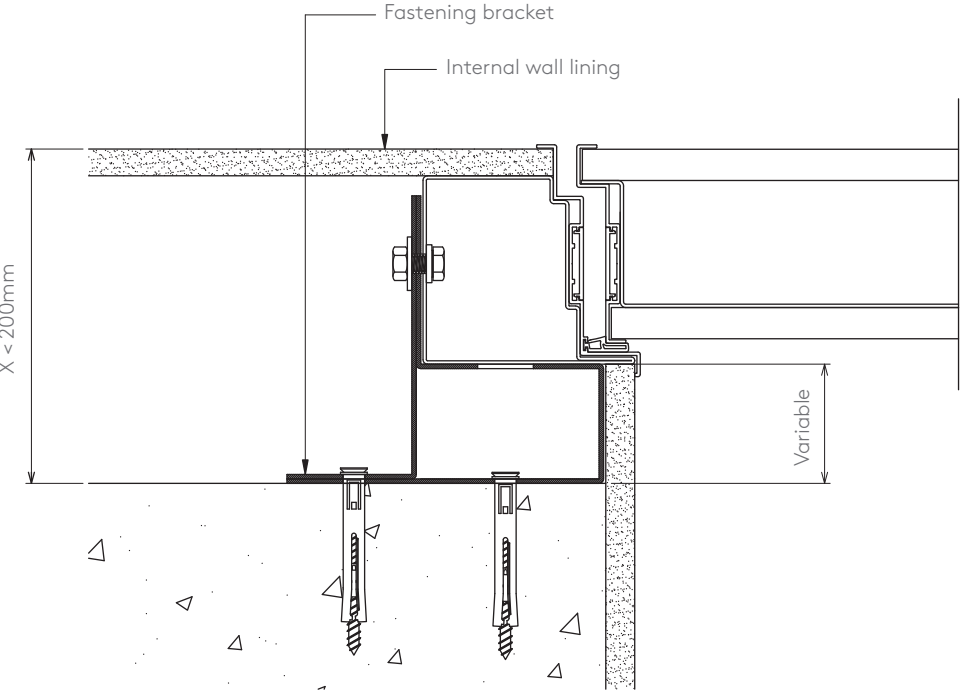
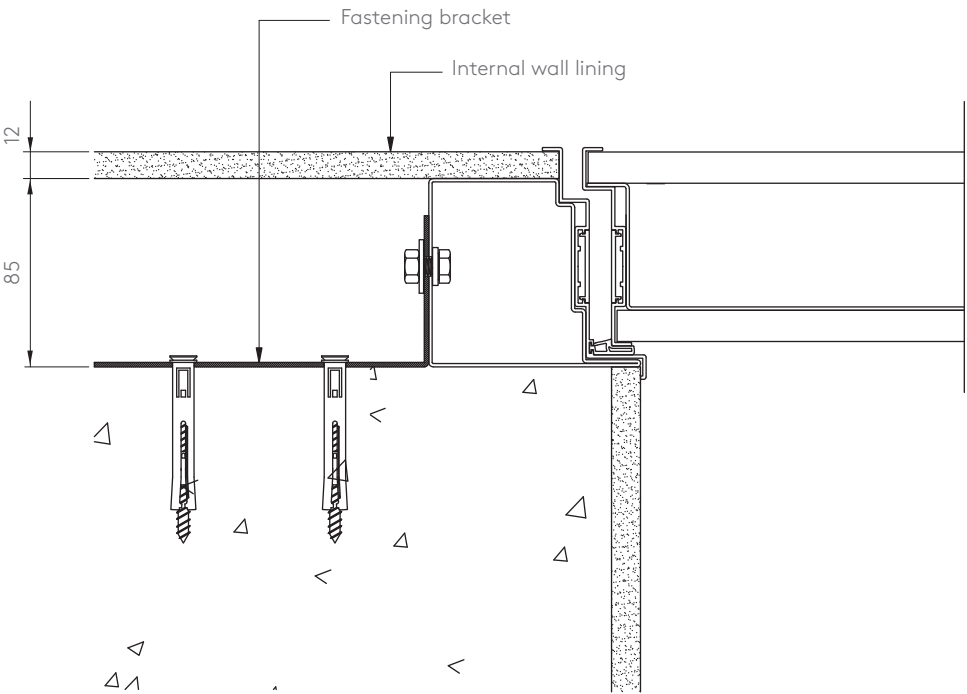
Minimal space for fitting between upper door edge and ceiling without removing hinges for installation. In this situation it is necessary, at the moment of the order, to ask to move the batteries pack because it will not be possible the eventual replacement of the batteries.



Minimum height



# Fastening brackets for wall mounting





# Project

Safety door for the internal part of the home with flush-to-wall, coplanar solutions and materials preferred by the interior design, including single panel solutions

## The door with concealed hinges:

- 100° Opening
- Maximum realizable measures 1030x2400mm
- Other measurements on request
- Door and frame covering profiles in aluminum lacquered Ral 8022
- Motorized electronic lock with integrated access control system on request

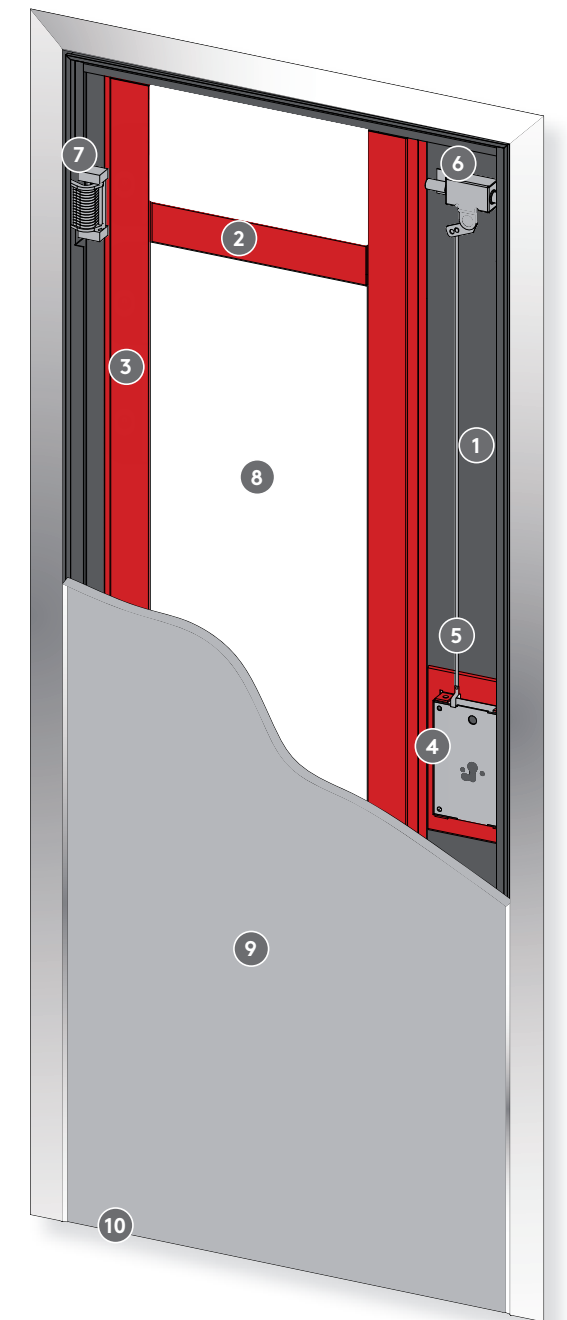


# Project Specifications

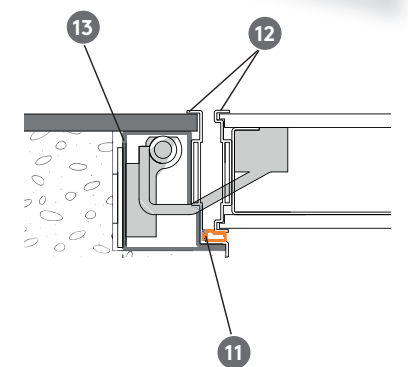
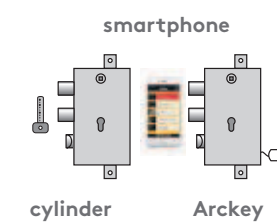
Safety door PROJECT flush with wall interior coplanar with surround: leaf in 15/10 New Steel with 3 horizontal reinforcing bars and 2 vertical reinforcing bars, 30/10 lock protection plate, closing profiles and frame covering profiles in aluminum in three finishes, perimeter frame sealing strip, internal insulation, draught excluder, internal handle, external fixed knob and wide angle brass spy hole, closed sector frame, 2 patented concealed hinges, 2 side switchlocks, cylinder lock with defender included.



- 1 Leaf tray
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Cylinder lock
- 5 Lock connecting rods with closure points
- 6 Switchlock
- 7 **Concealed hinge**
- 8 Insulation
- 9 Internal panel
- 10 Draught excluder
- 11 Tubular rubber sealing strip
- 12 Aluminum profiles
- 13 Closed hollow frame



## Single leaf







# Performance

Interior door flush with the internal wall



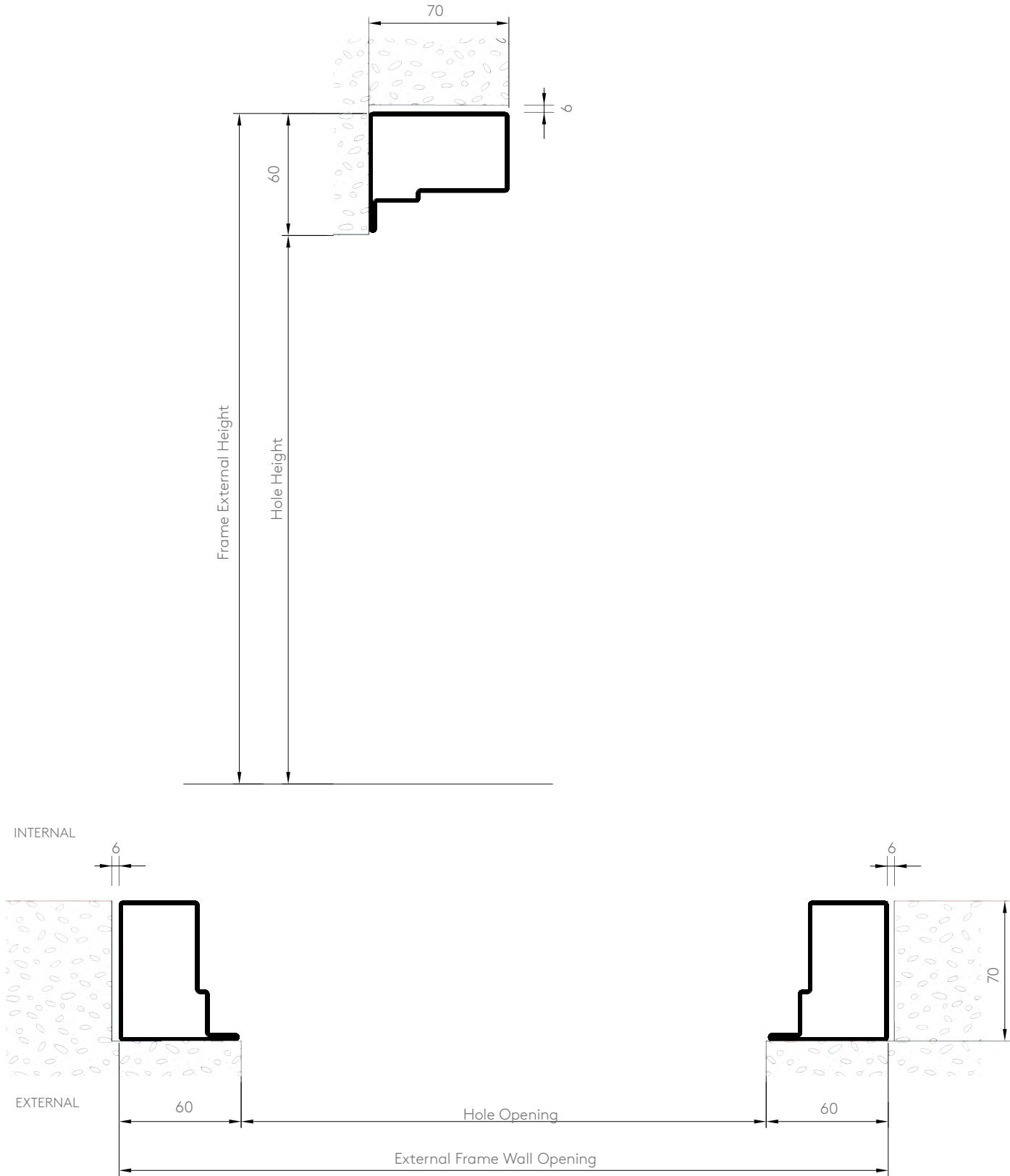
	Performance	standard	Upon request	dimensions sample tested	Max certified realizable measures
	break-in resistance	Class 3	-	900 x 2100	Area - 20% + 10%
	acoustic	36 dB	40 dB	900 x 2100	± 0
	thermal	1.8	1.2	1230x 2180	Area ≤ 3.6sqm

	Performance	sample size tested	Max certified realizable measures
	EI 30	900 x 2100	width + 15% height +15% max 20% area
	VKF 30	900 x 2100	width + 15% height +15% max 20% area

The declared performances are valid for intact doors installed according to the official installation instructions of Oikos Venezia srl.



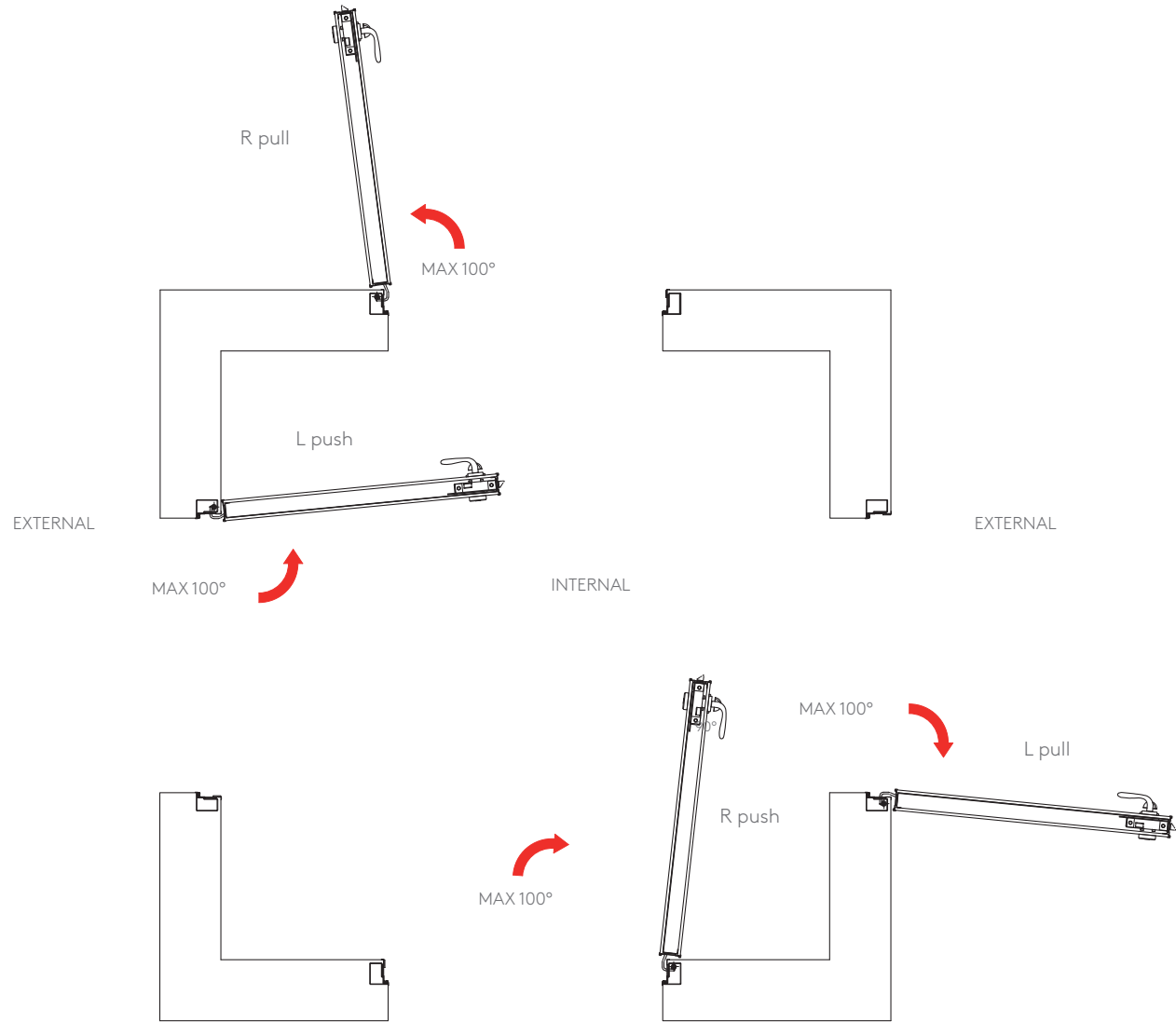
# Project frame



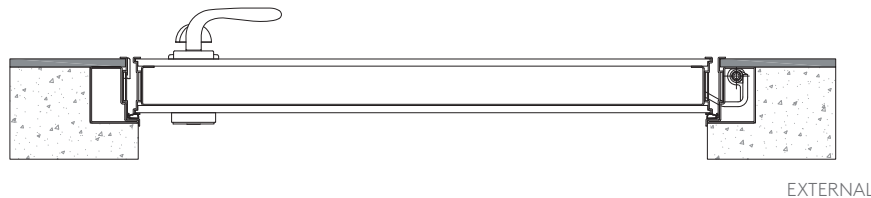
N.B. 6 mm on each side are necessary for housing the bushes external to the frame.



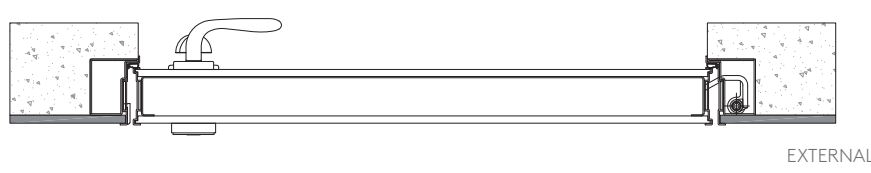
# Opening directions



Door horizontal section with push opening

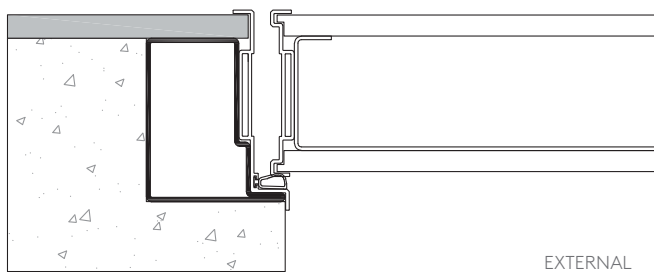


Door horizontal section with pull opening

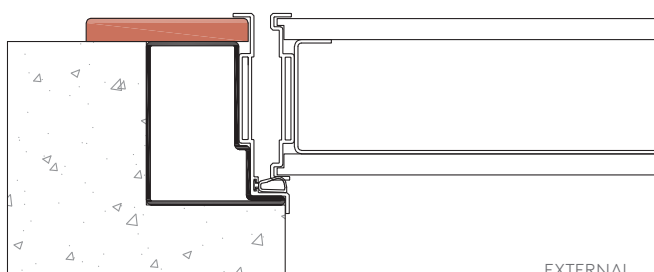


# Fitting solutions

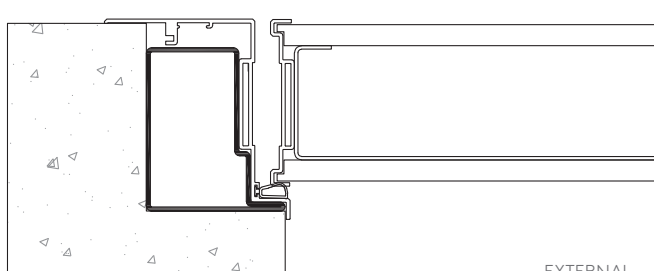
Flush with internal wall



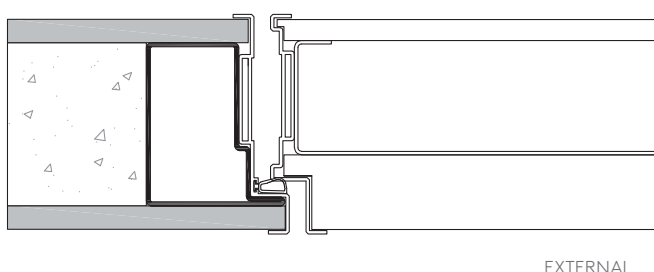
Flush with internal wall with surround



Flush with internal wall coplanar

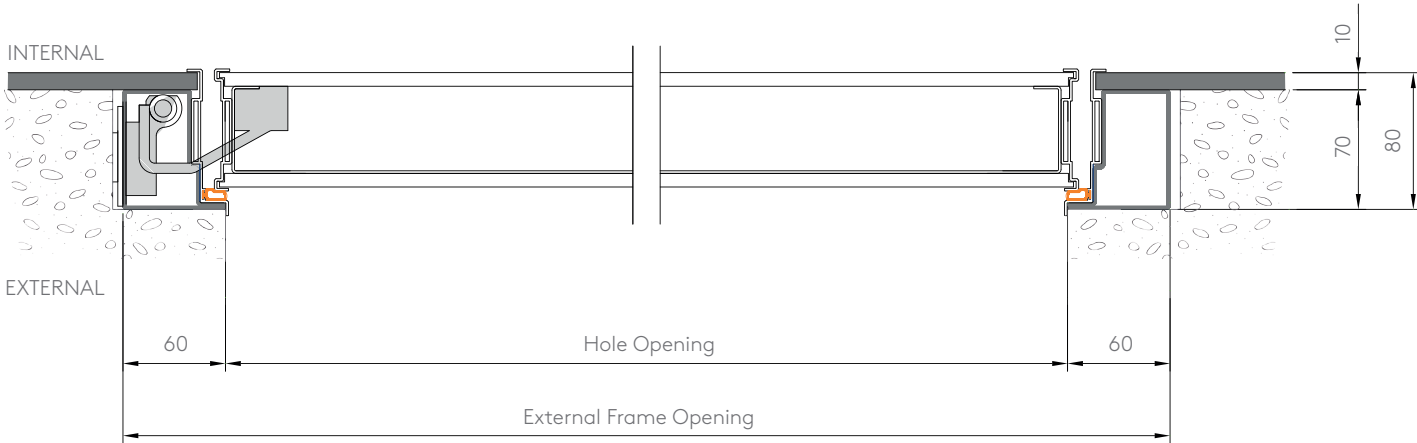


Flush with internal-external wall

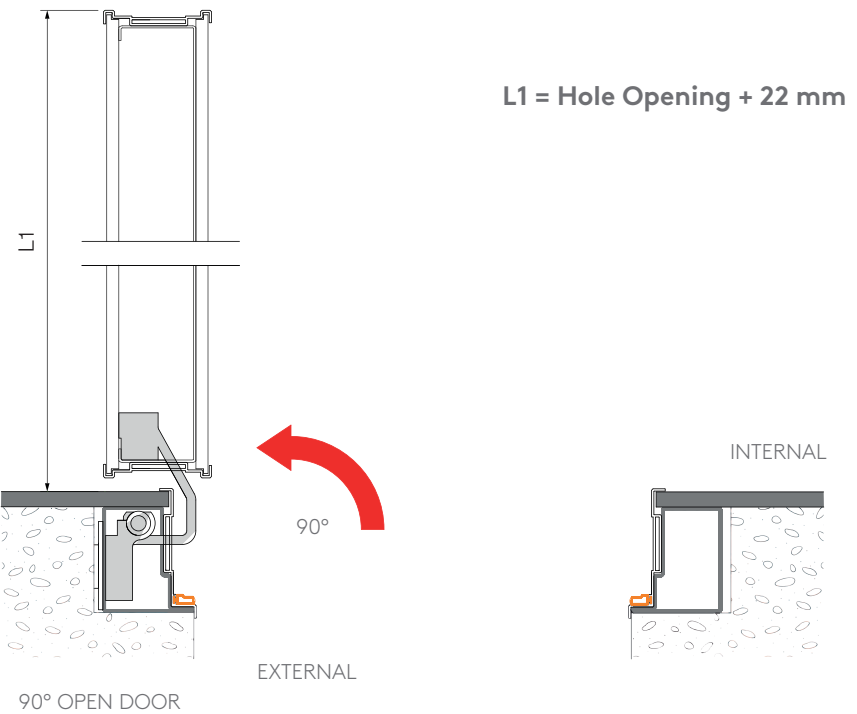




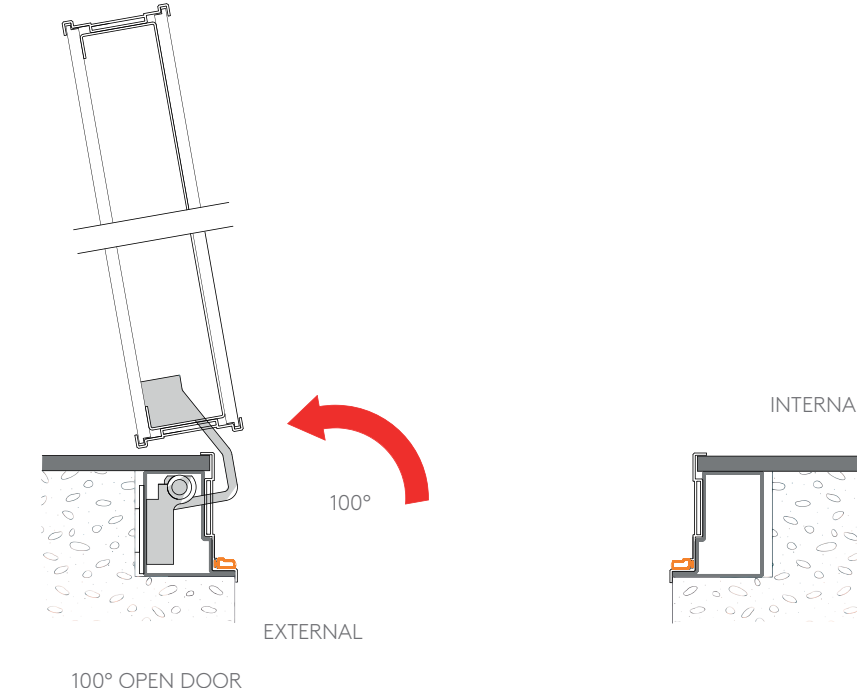
# Project flush with the internal wall



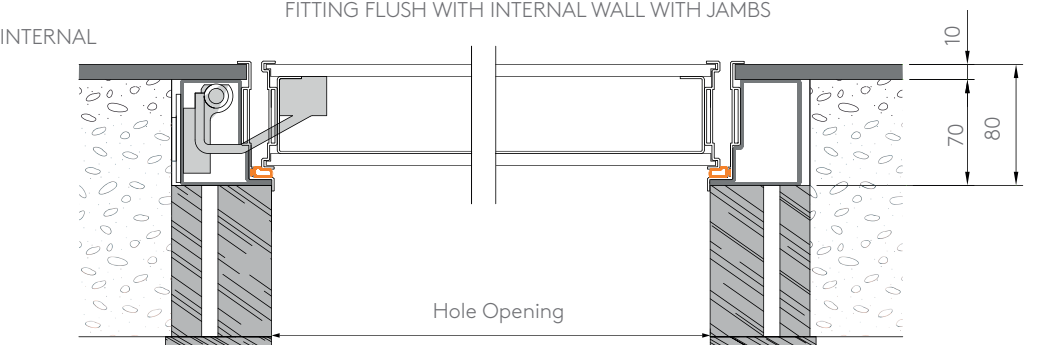
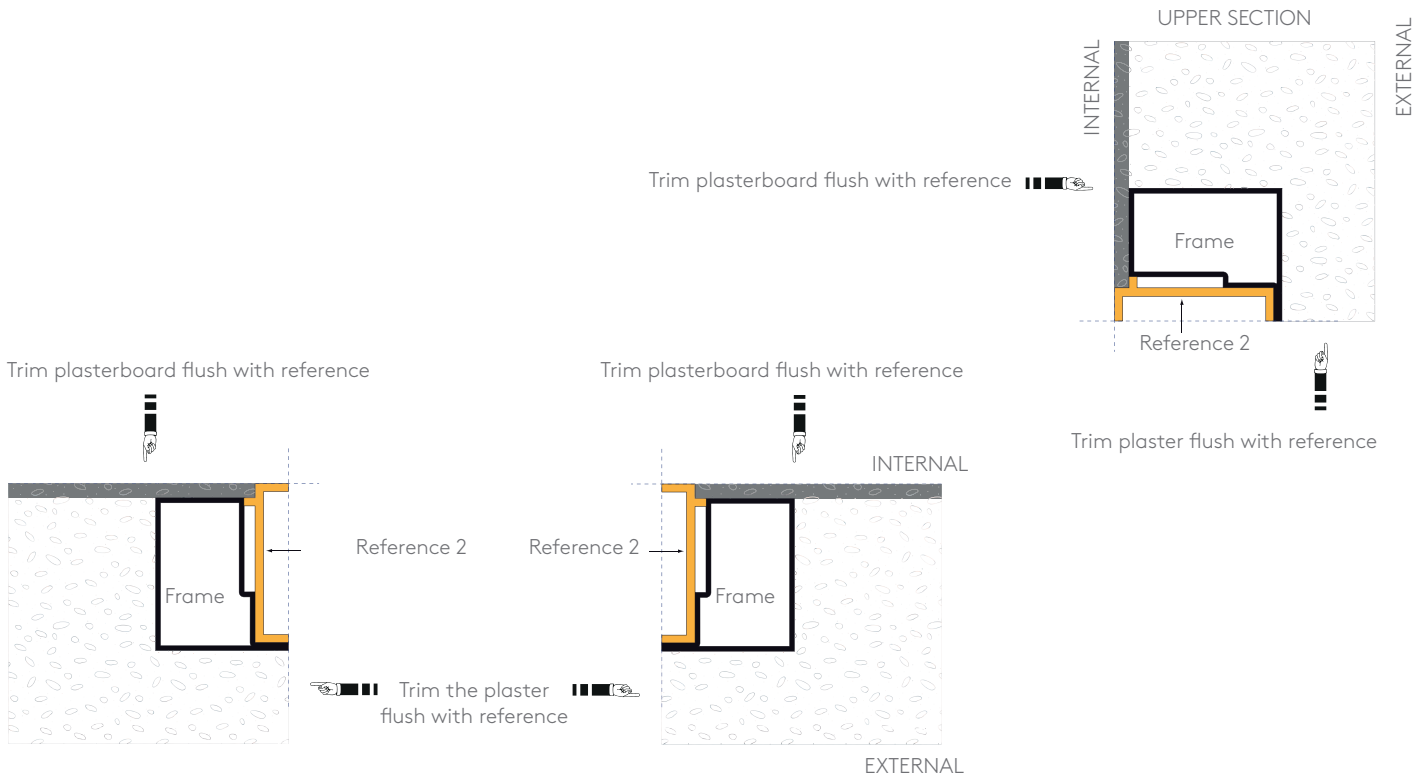
# Project space requirement flush with internal wall



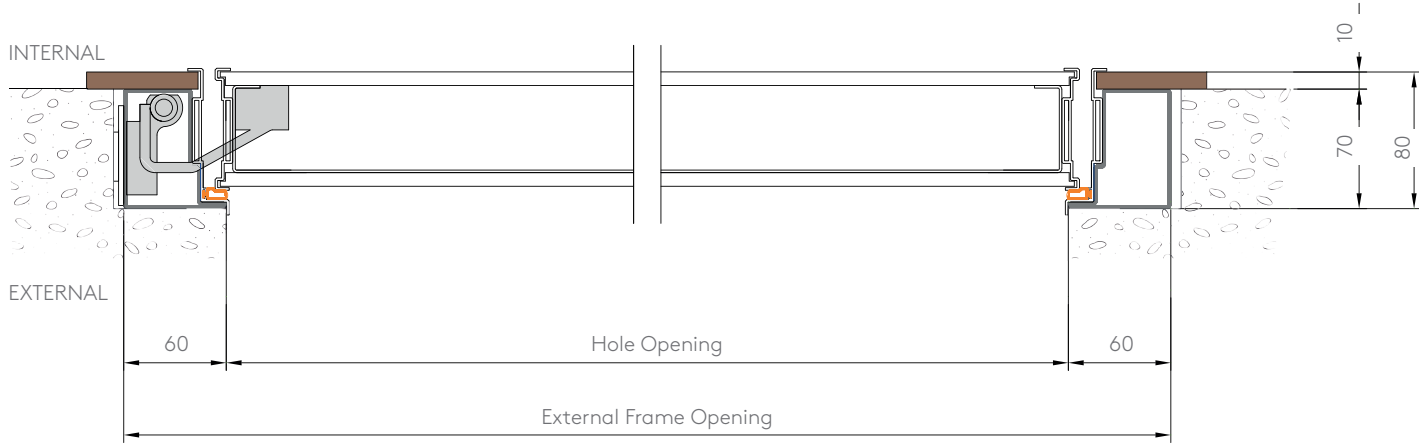
CAUTION!  
Check the space requirement of the handle for the 90° opening of the leaf.



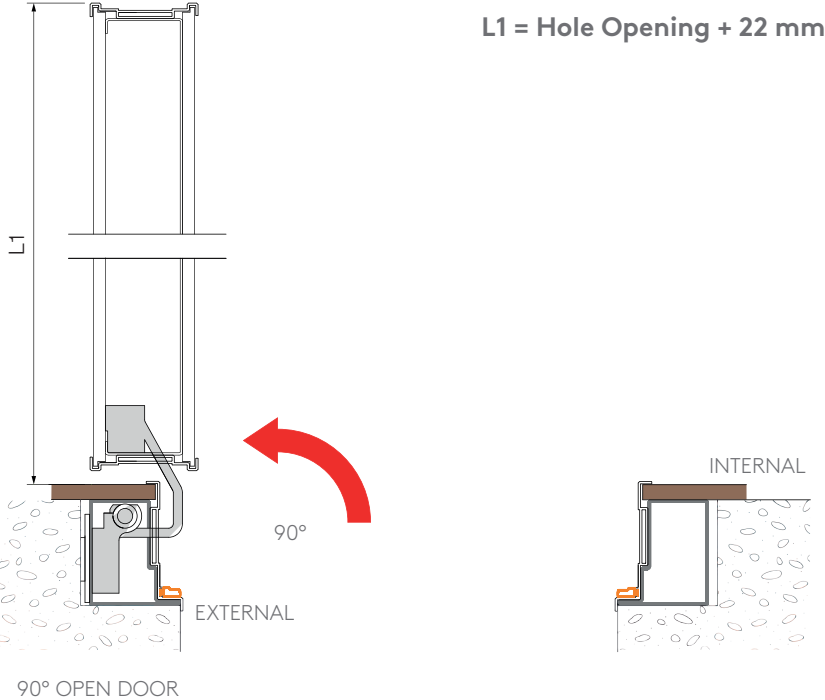
# Reference for frame fitting



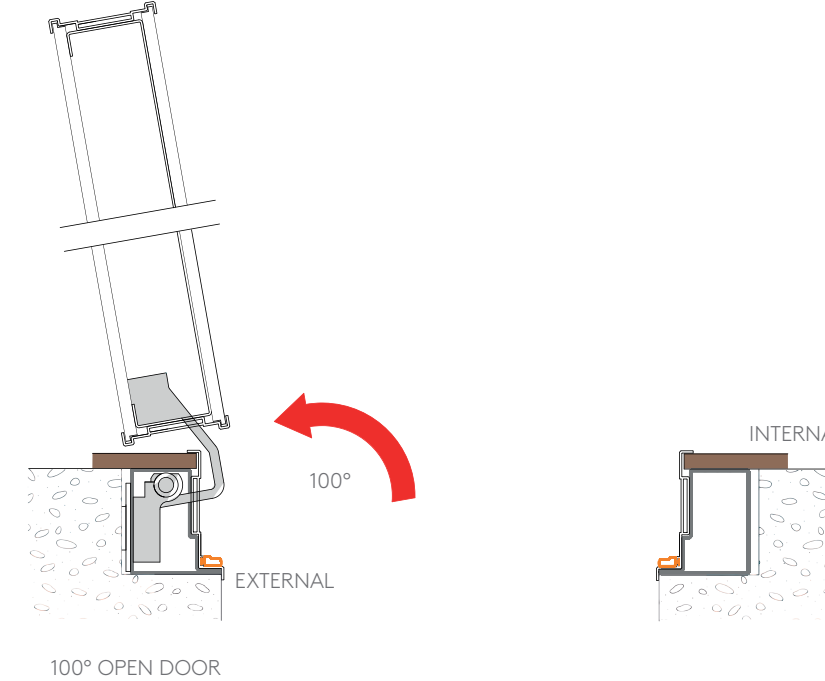
# Project coplanar with surround



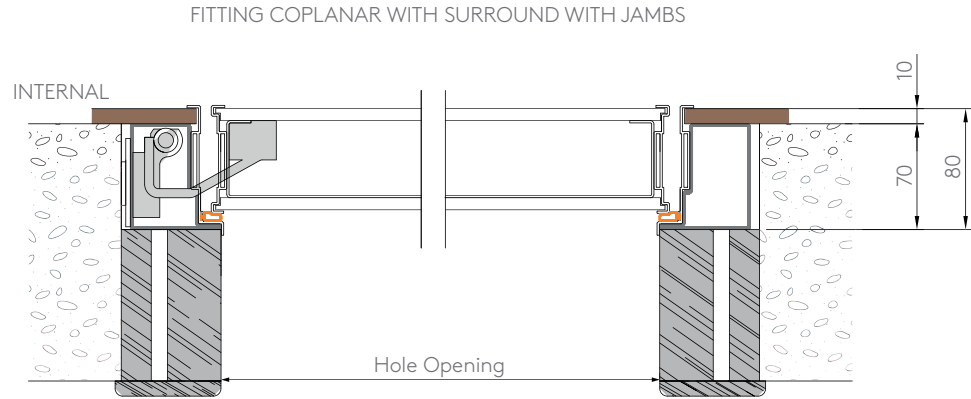
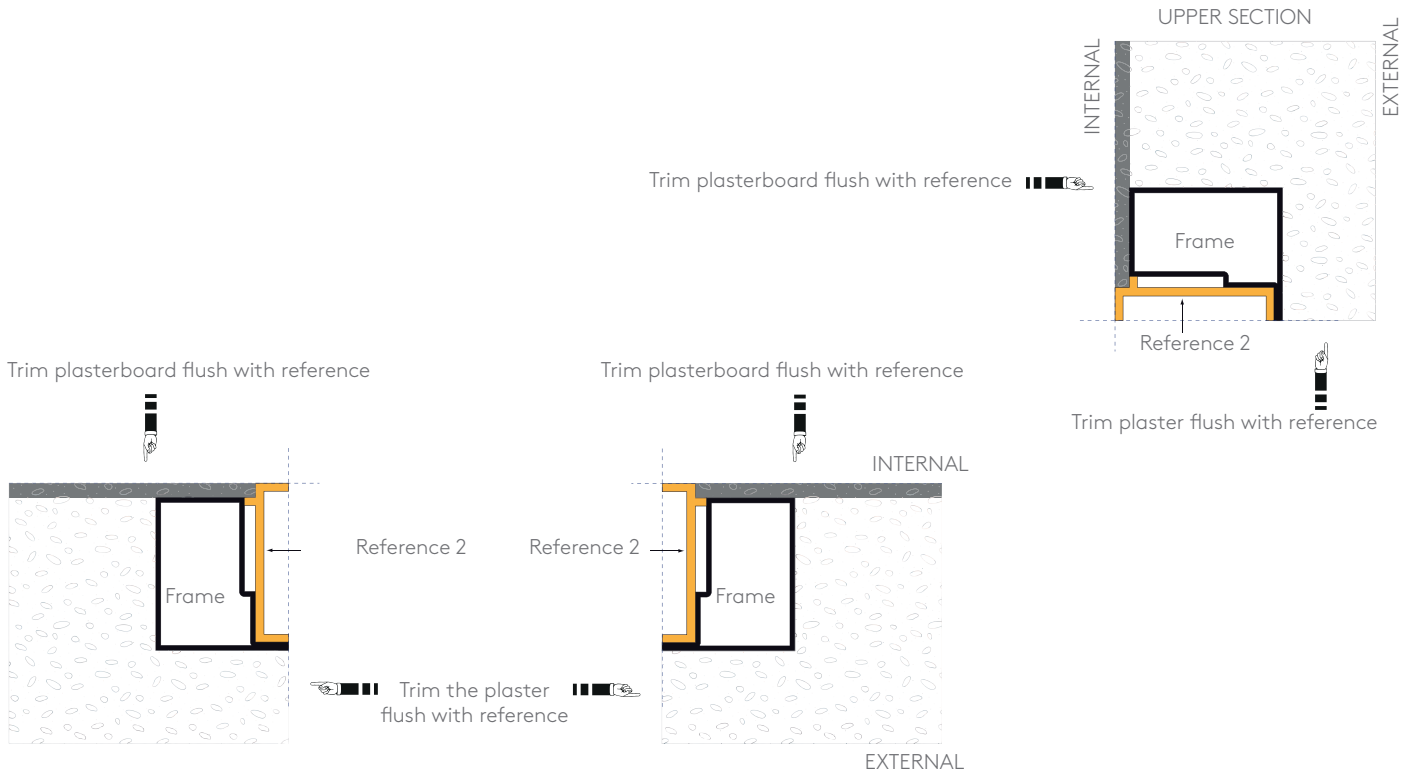
# Project space requirement coplanar with surround



CAUTION!  
Check the space requirement of the handle for the 90° opening of the leaf.

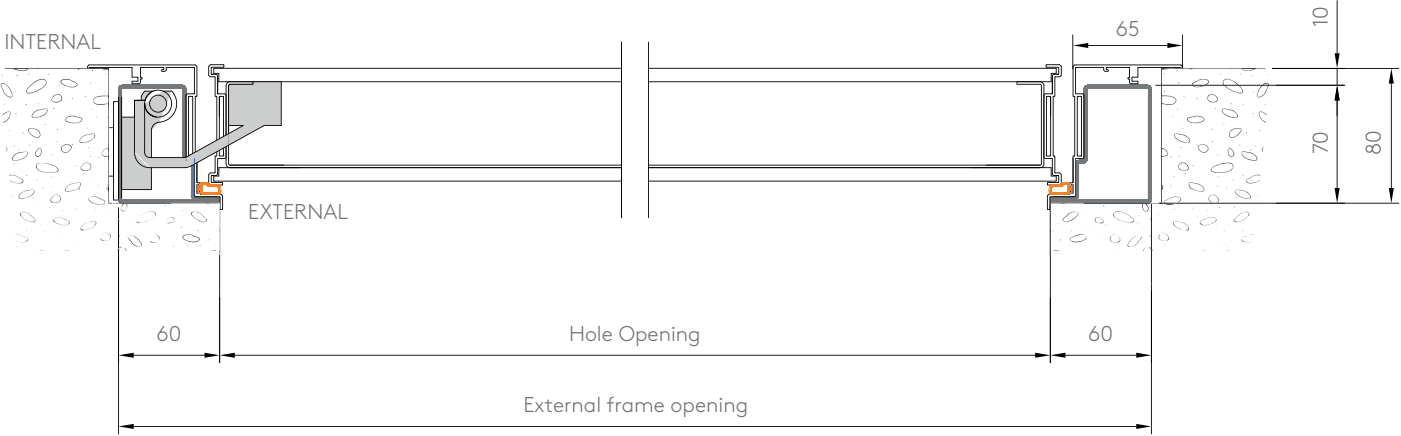


# Reference for frame fitting

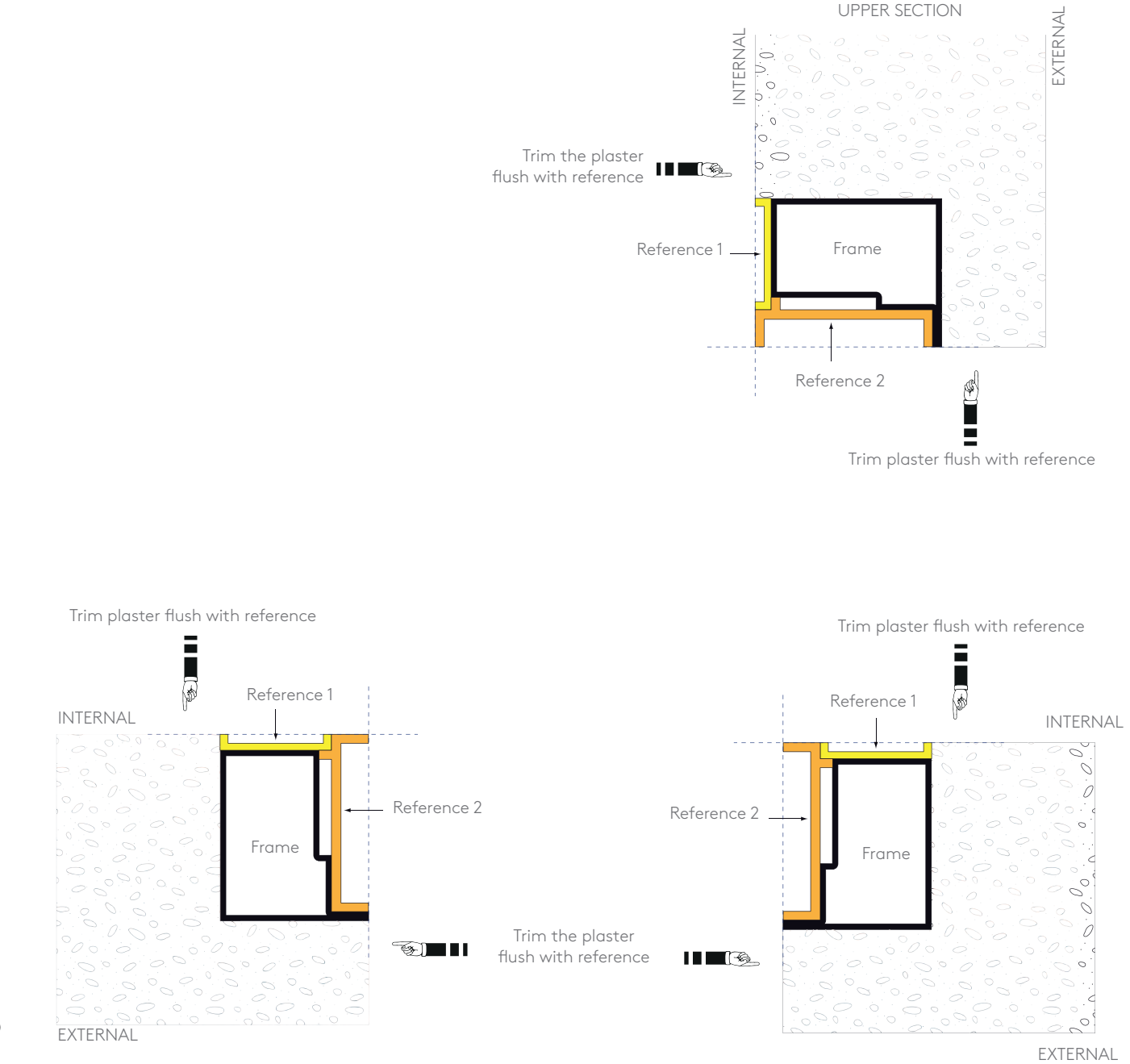




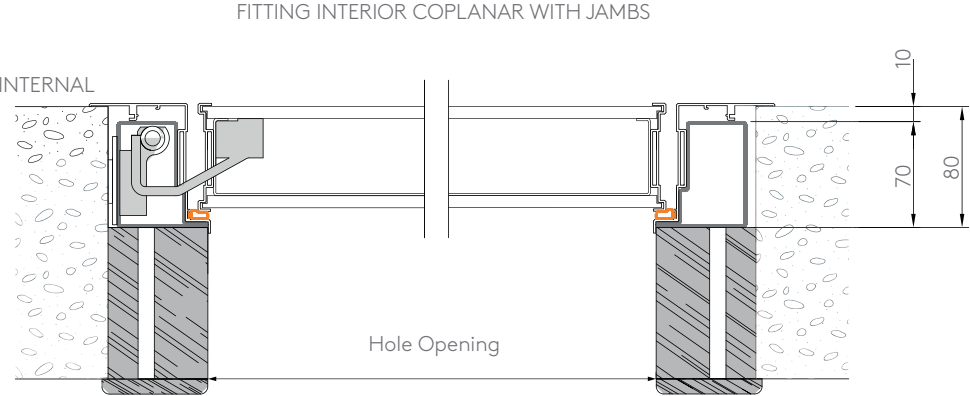
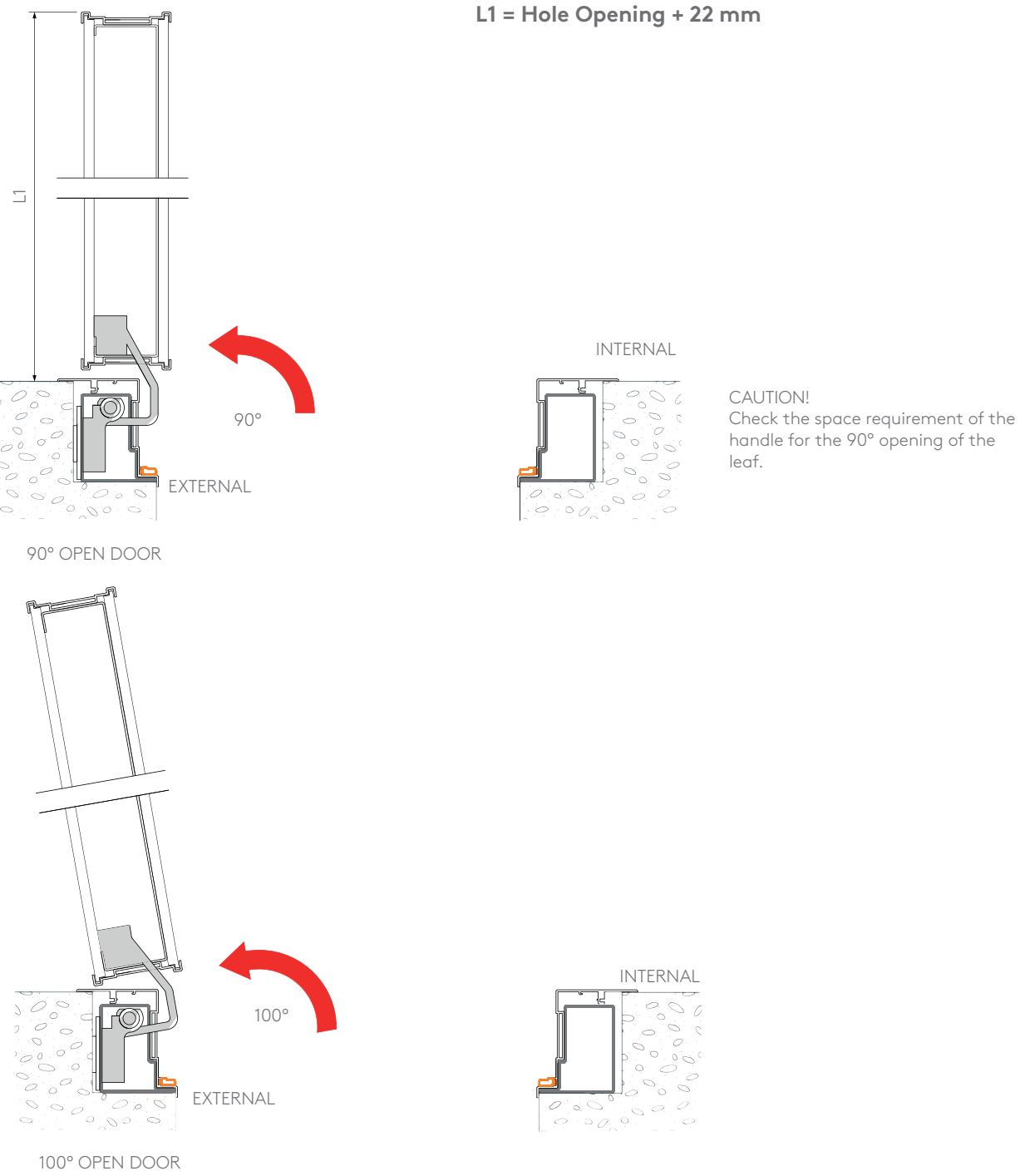
# Horizontal section - Project interior coplanar



# Reference for frame fitting

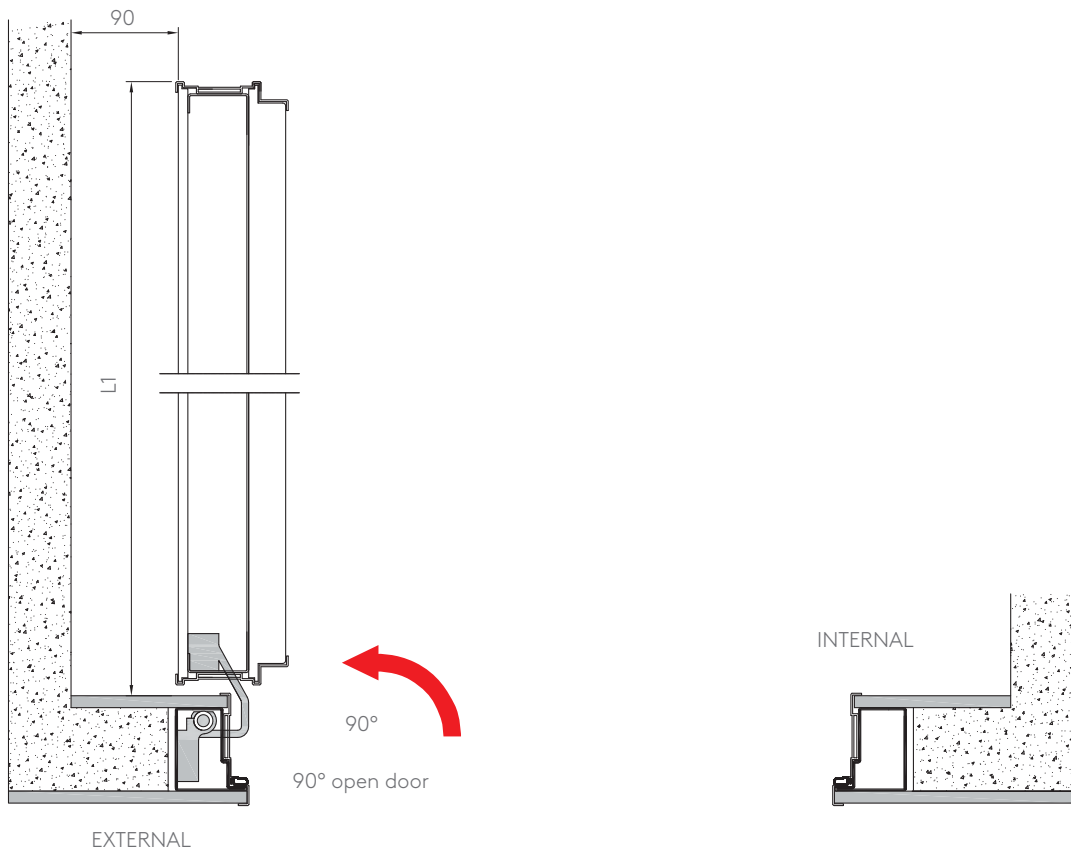
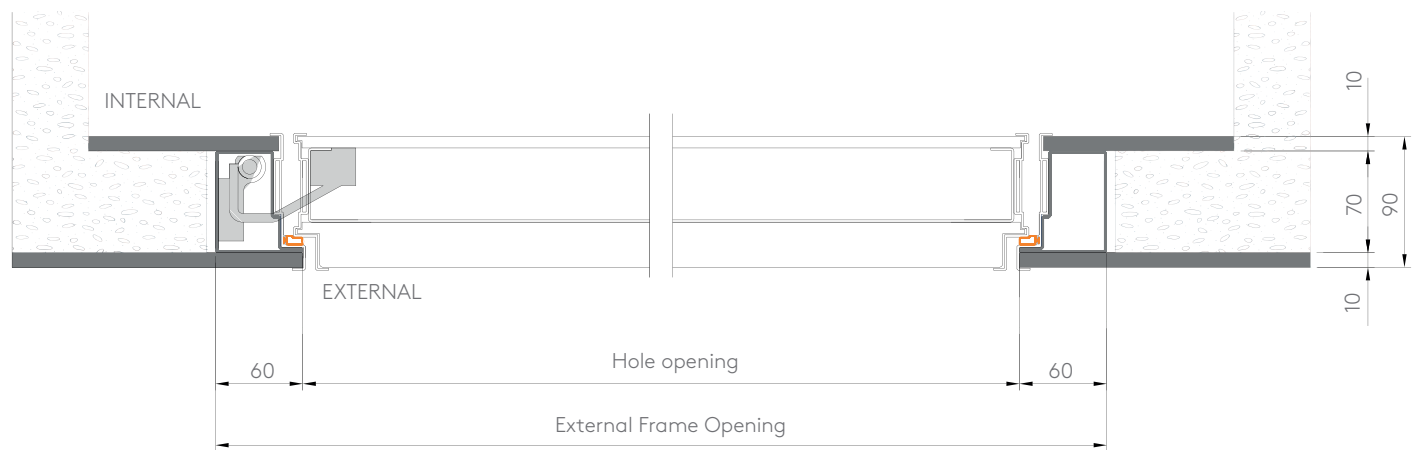


# Project space requirement internal coplanar

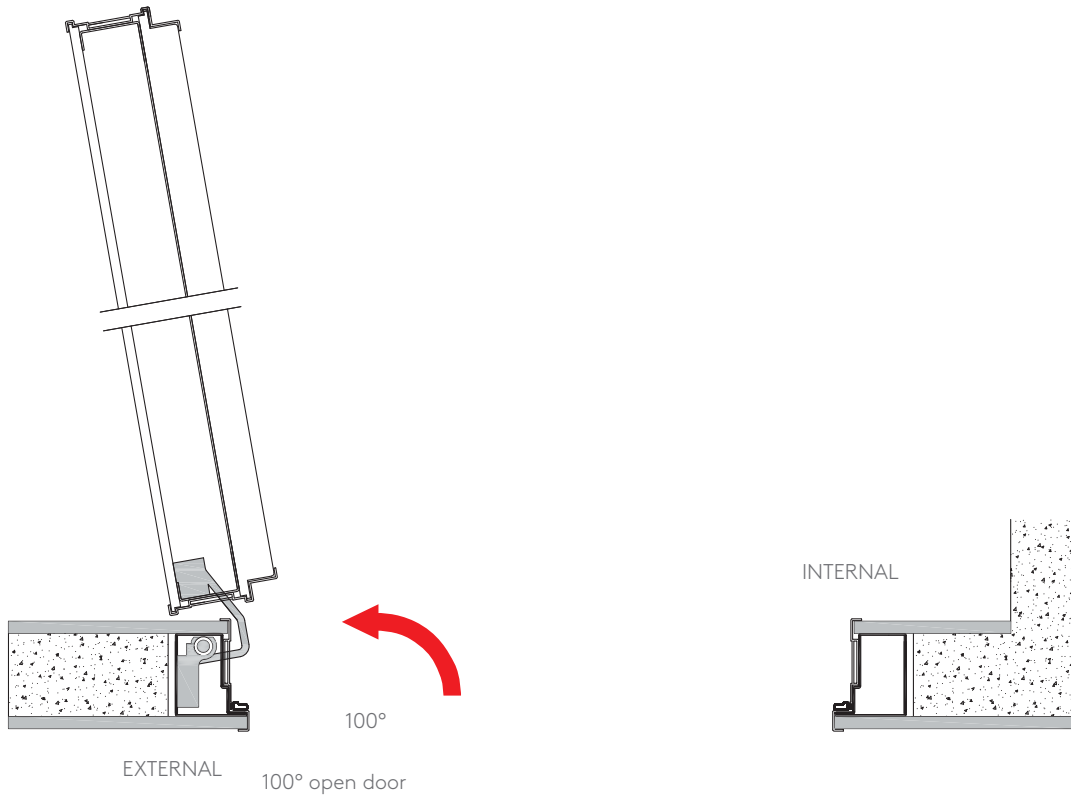
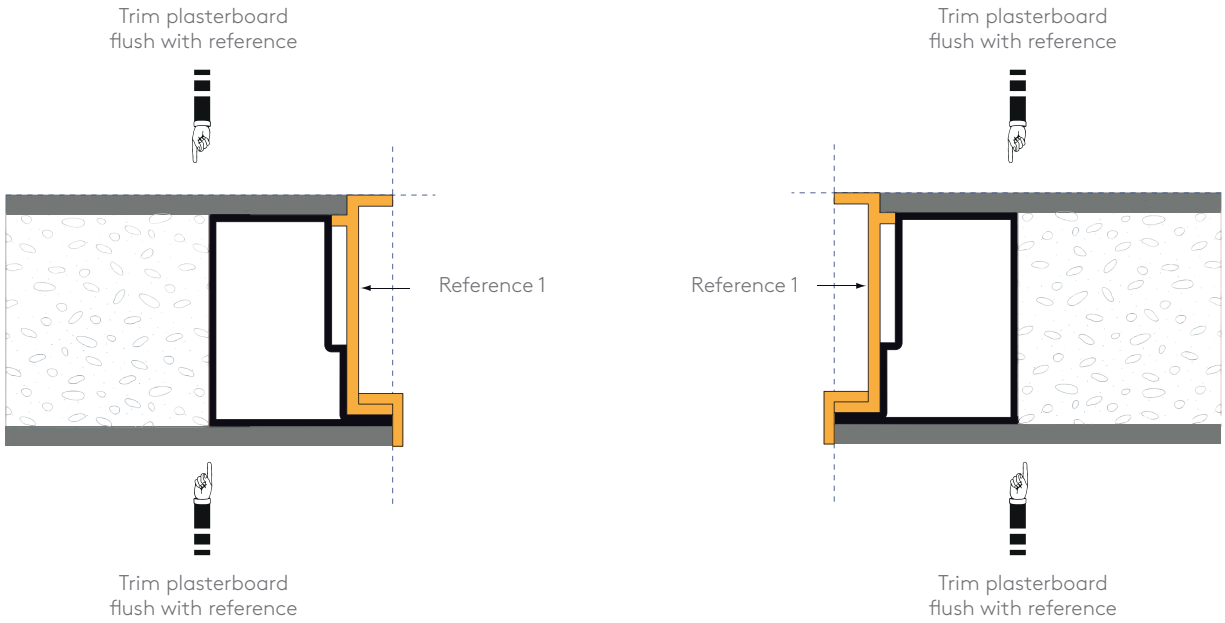
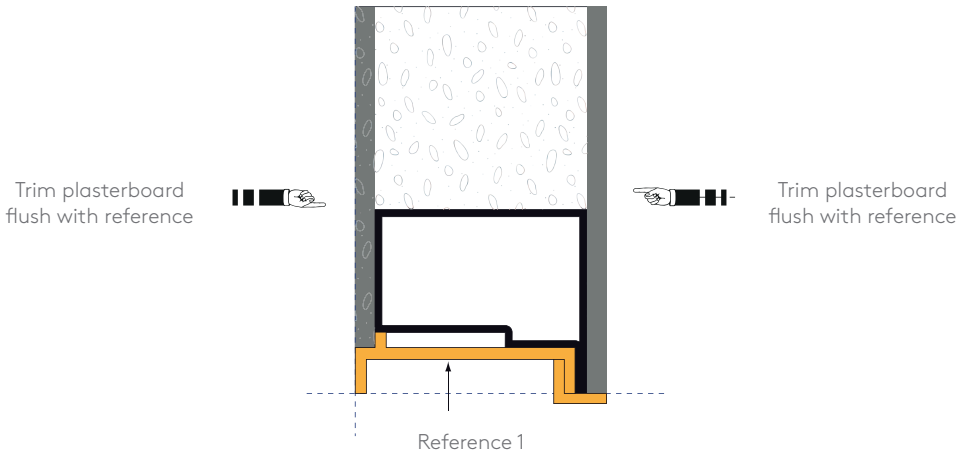


# Horizontal section - PROJECT flush with external - internal wall

# Project space requirement flush with external - internal wall



# Reference for frame fitting





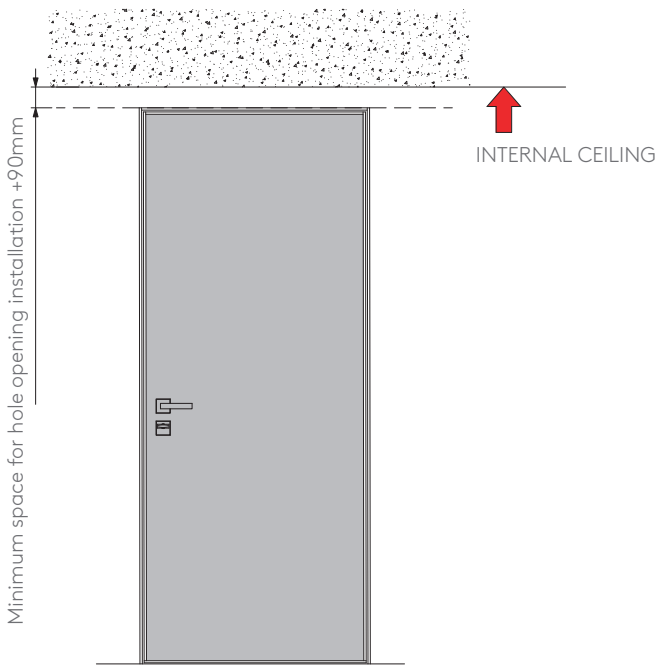
# Minimum height between door and ceiling

Minimal space for fitting between upper door edge and ceiling without removing hinges for installation. In this situation it is necessary, at the moment of the order, to ask to move the batteries pack because it will not be possible the eventual replacement of the batteries.

Minimum height

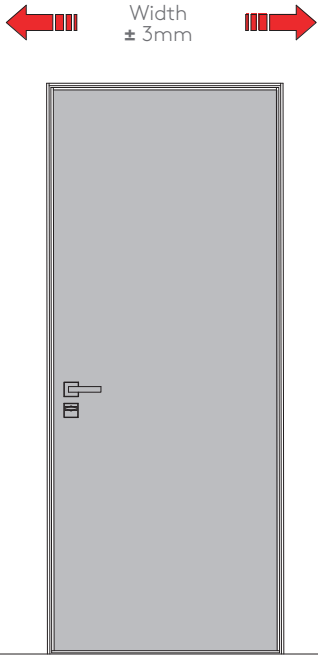


INTERNAL VIEW



# Adjustable concealed hinges

A unique hinge, absolutely invisible when the door is closed, allows the door to open 100°. These special hinges allow easily adjusting the height and plumbing of the door using an Allen wrench in the event of settling, even after many years.



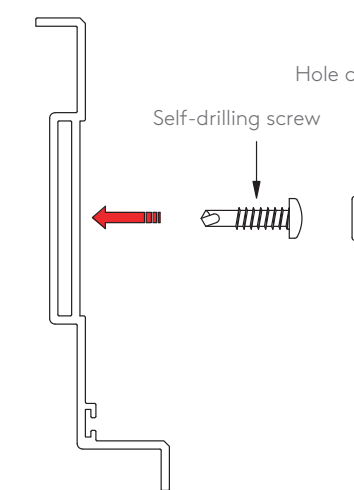


# Covering aluminum elements

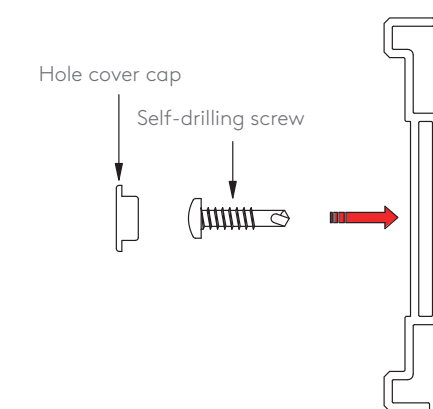
The covering aluminum elements (casings) for leaf and frame are easily installed by acting on the fastening screws hidden by the hole cover caps.



Frame covering profile



Leaf covering profile





# Panic-room door

An elegant way to create a safe zone within the home.

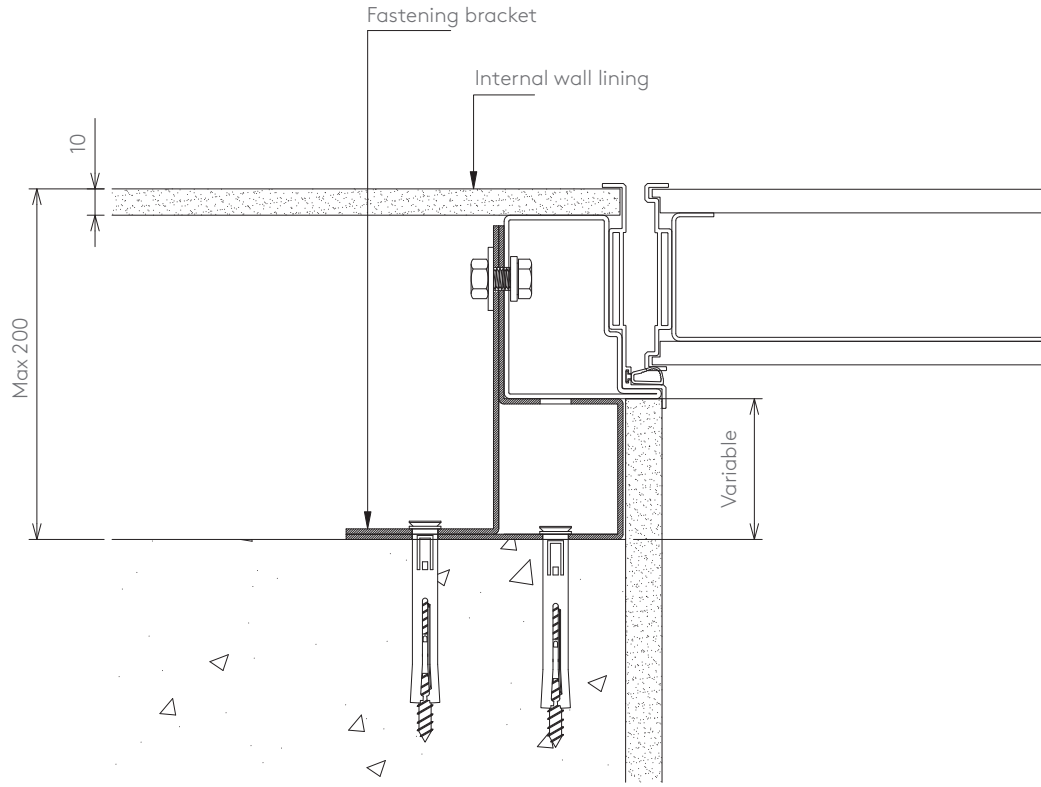
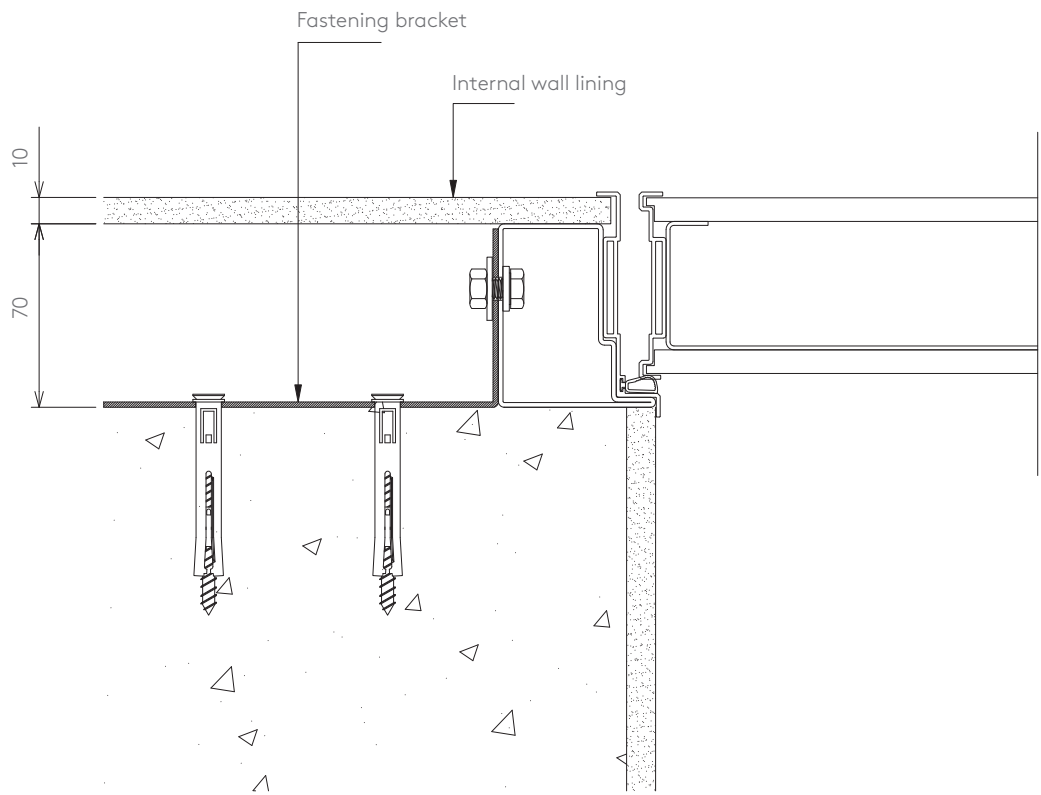


# Non-invasive door

The Project door does not present visible aesthetic differences compared to a normal interior door; it manages to be discreet in its appearance but at the same time very safe.



# Brackets for wall fitting





# Evolution

Classical aesthetics interpreted with wood, colors and refined workmanship to enhance the safety door in a wide range of shapes and sizes.

## Door with exposed hinges:

- 180° Opening
- Maximum feasible measures 1300x3000mm single leaf  
1900x3000mm double leaf
- Other measurements on request
- Door profiles and frame cover in aluminum painted RAL 8022
- Motorized electronic lock with integrated access control system on request
- Version with heat barrier frame and leaf on request

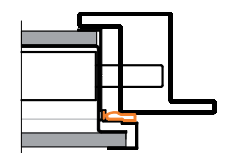
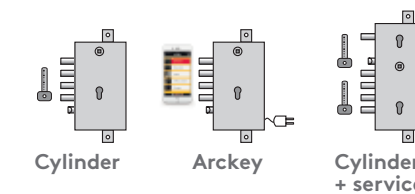
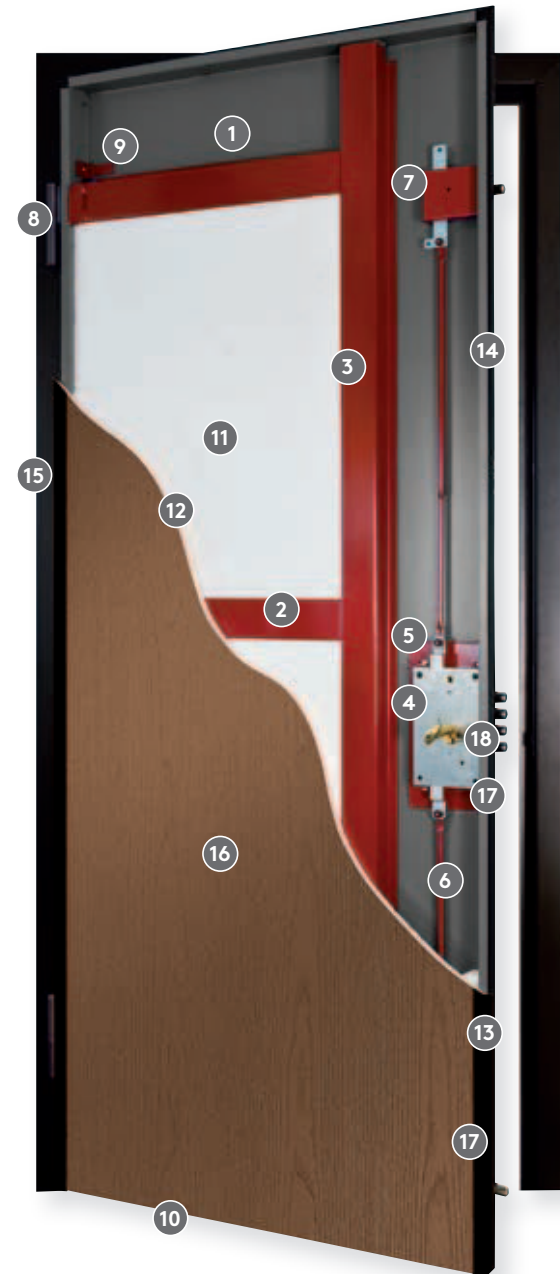


# Evolution specifications

Safety door EVOLUTION 3: New Steel door leaf 15/10, 3 horizontal reinforcing bars, 1 vertical reinforcing bar, lock protection plate 30/10, wrap aluminum frame profiles with perimeter rubber sealing strip, internal insulation, cold protection blade, internal handle and fixed external brass knob, wide-angle spy hole, 20/10 closed-section frame painted with polyester powders in RAL 8022 color, 2 adjustable hinges, 2 side switchlocks, 3 fixed hinge bolts, cylinder lock with PLUS PVD defender. 20/10 counterframe in electro-galvanized sheet steel.

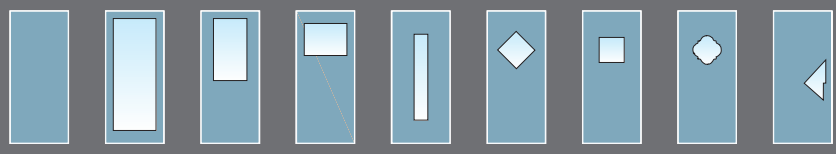


- 1 Leaf tray
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Cylinder lock
- 5 Lock protection and support plate
- 6 Lock connecting rods with closure points
- 7 Self-locking switchlock
- 8 Two axis adjustable hinge
- 9 Tear-proof hinge bolt
- 10 Draught excluder
- 11 Insulation
- 12 Heat barrier mat
- 13 Tubular rubber sealing strip
- 14 Wrap aluminum frame profiles
- 15 Closed hollow frame RAL 8022
- 16 Internal covering panel
- 17 Set of brass-plated knobs and handles
- 18 PVD brass defender plus





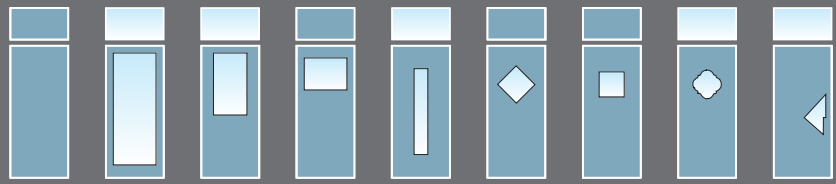
# Shapes and solutions



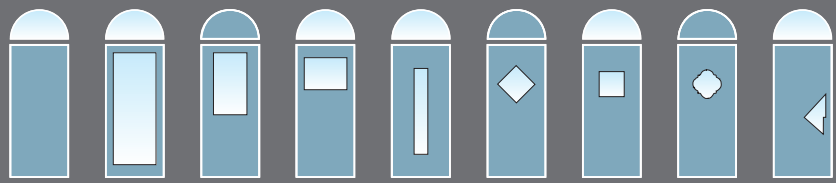
Single leaf



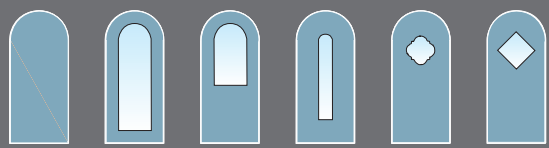
Pull opening leaf (note: all shapes and solutions can be supplied with pull opening)



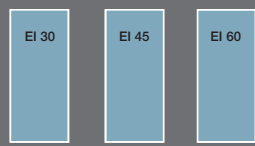
Single leaf with rectangular transom window



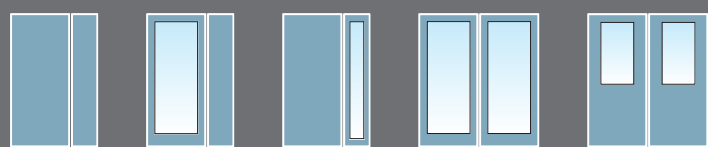
Single leaf with arched transom window



Arched single leaf



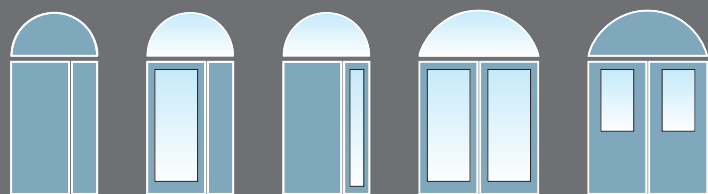
Single leaf EI



Double leaf



Double leaf with rectangular transom window



Double leaf with arched transom window



Leaves with side panel



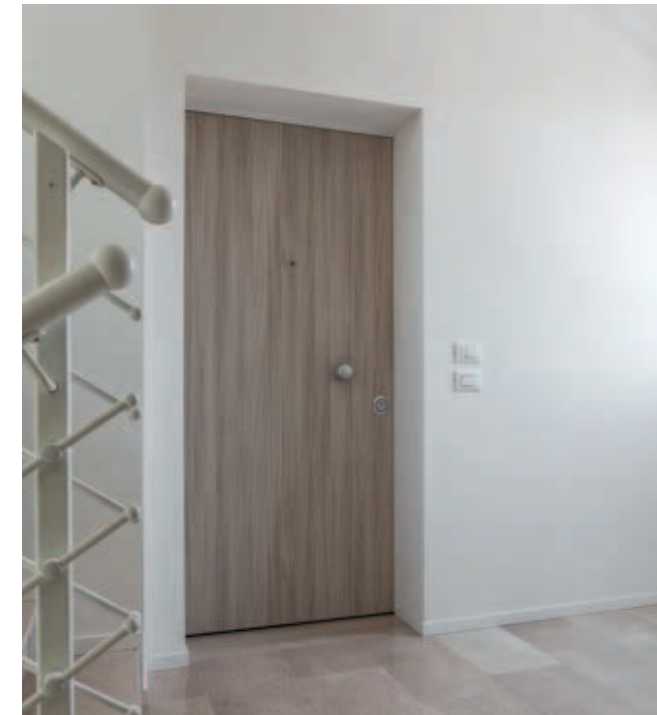
Leaves with rectangular transom window and side panel

REMARK: the break-in certification is tested for single leaf doors with a maximum wall opening of 1030x2400 mm, for double leaf doors with a maximum wall opening of 1600x2400 mm, and for doors with side panel with a maximum wall opening of 1100x2400 mm.

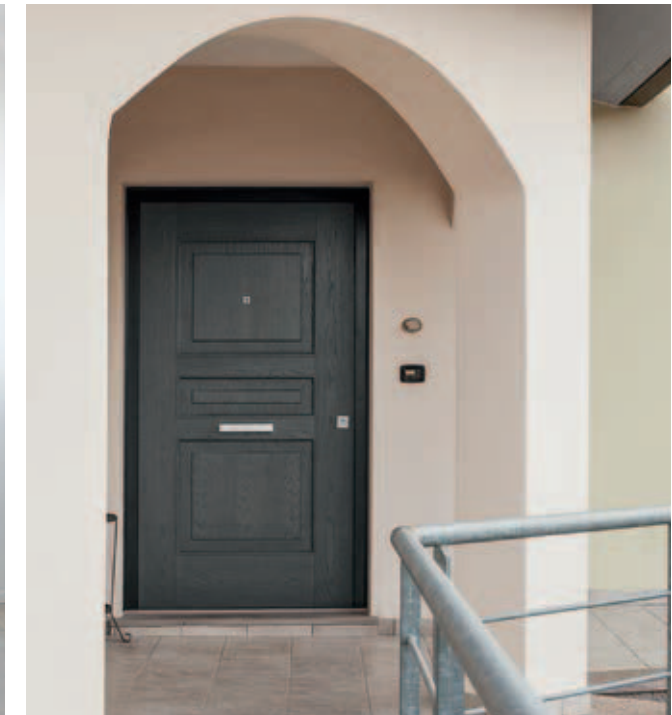
# Performance

For single door with standard counterframe fitting

**Interior safety door**  
(dividing two environments with very similar climatic conditions)



**Exterior safety door**  
(dividing two environments with different climatic conditions)



Performance	standard	Upon request	size tested sample	Max certified realizable measures
break-in resistance	Class 3	Class 4	850 x 2100	1030 x 2400
acoustic	40 dB	45 dB	900 x 2100	± 0%
air	2	Mose Kit 4 Dam Kit 4	900 x 2100	Area + 50%
water	0	Mose Kit 5A Dam Kit 5A	900 x 2100	Area + 50%
wind	C4	Mose Kit C5 Dam Kit C5	900 x 2100	Area + 0% -100%
thermal	1.8	1.6 1.2 1	1230 x 2180	Area ≤ 3.6sqm

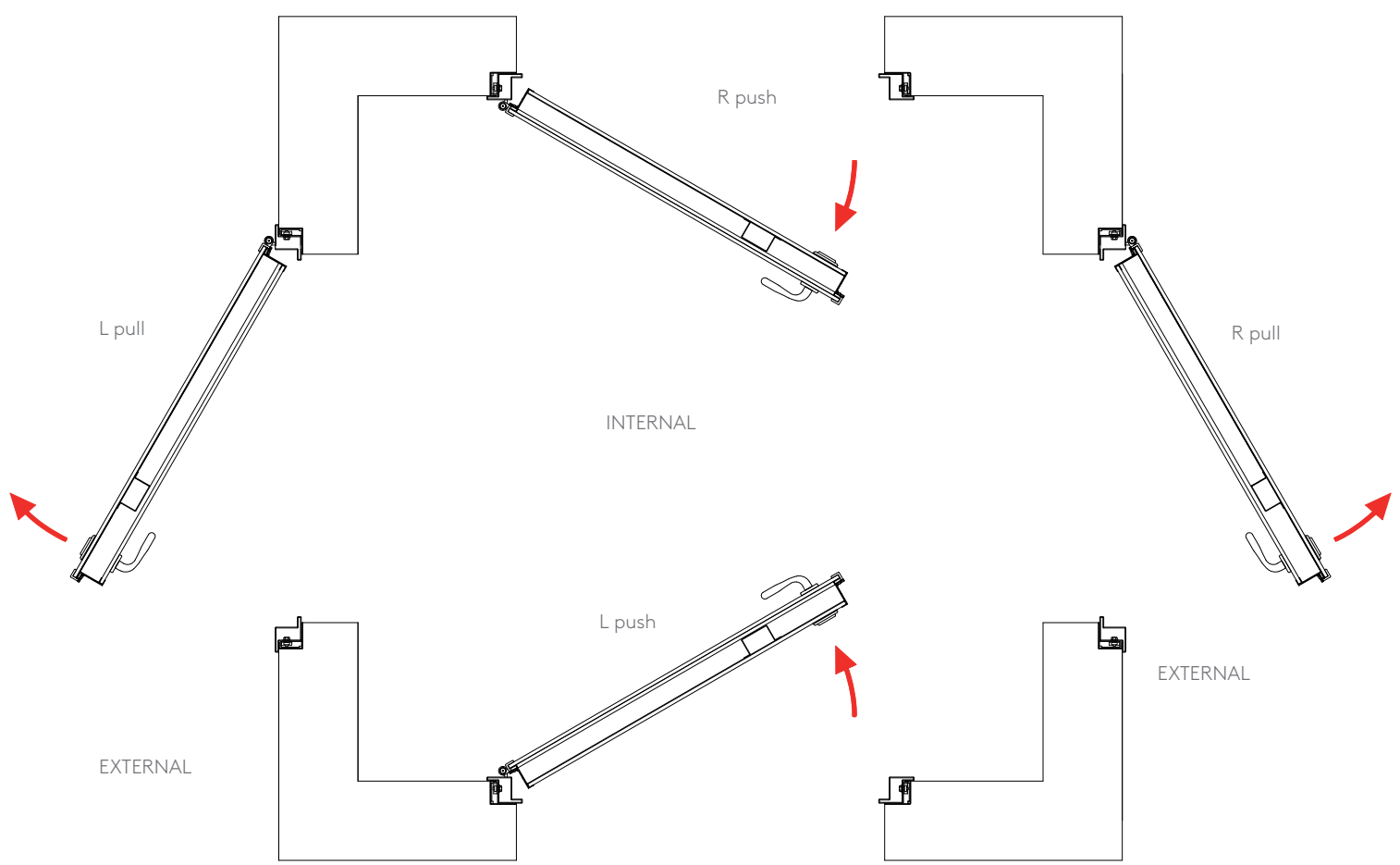
Performance	sample size tested	Max certified realizable measures
EI 30	900 x 2100	width + 15% height +15% max 20% area
EI 45	900 x 2100	width + 15% height +15% max 20% area
EI 60	820 x 1925	width + 15% height +15% max 20% area
VKF EI 60	820 x 1925	width + 15% height +15% max 20% area

The declared performances are valid for intact doors installed according to the official installation instructions of Oikos Venezia srl.

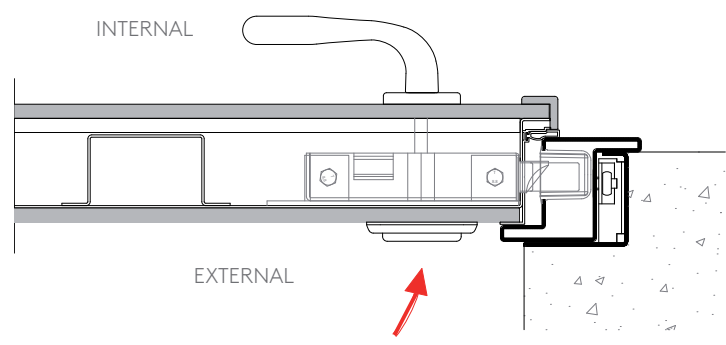


# Evolution door opening directions

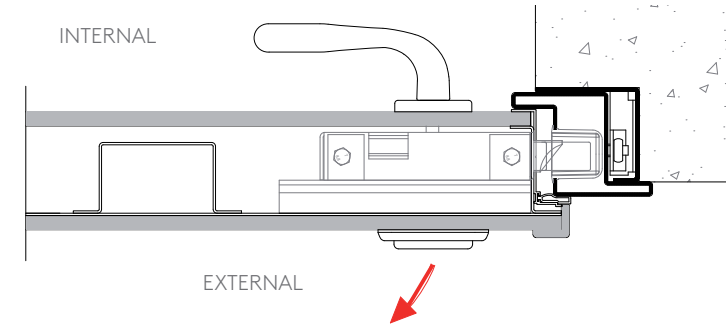
Opening directions



Door joint with push opening



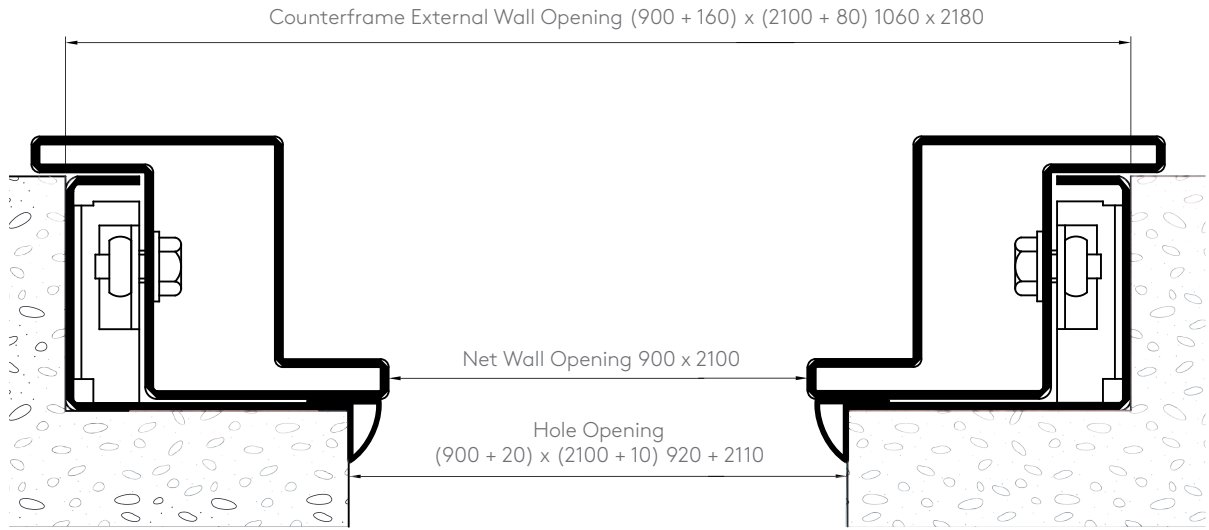
Door joint with pull opening



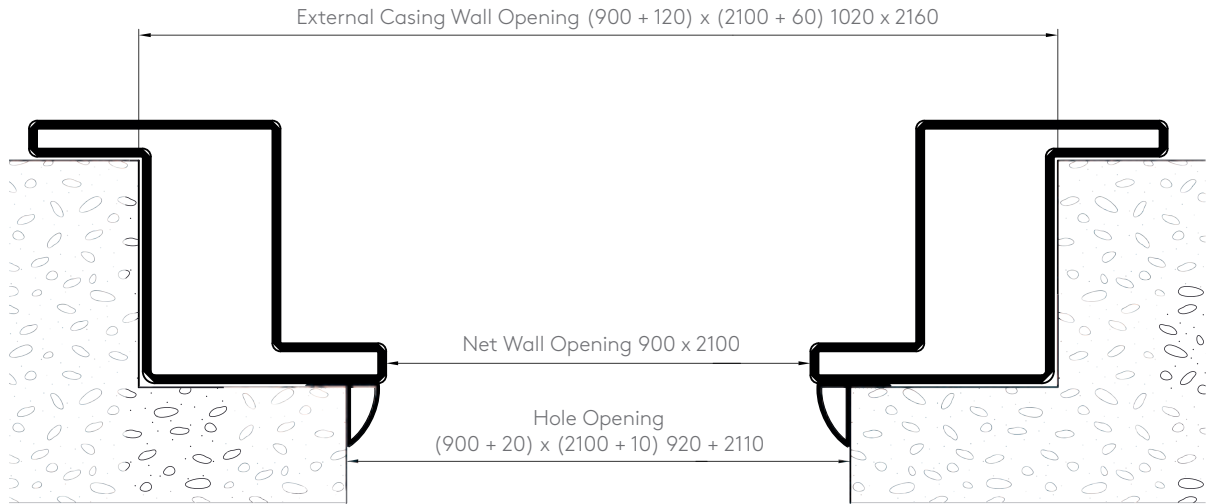


# Types of fitting and measurement conversions - Evolution

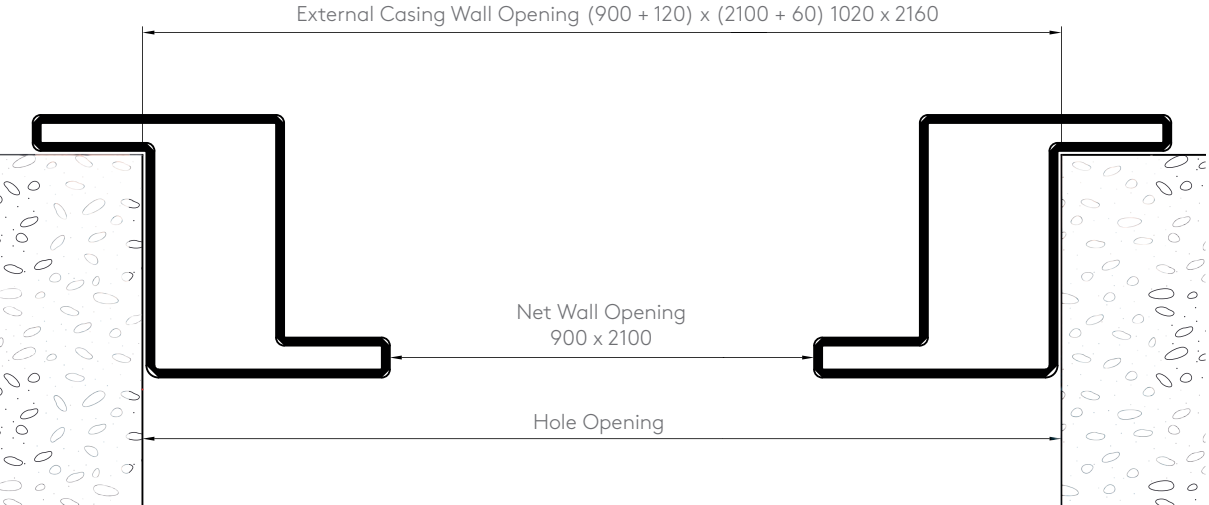
**Mounting on counterframe** Suitable case for new construction or renovation with counterframe to be pre-walled



**Direct mounting in embrasure** Suitable case for the fitting as replacement on jamb of wood or marble or bare wall

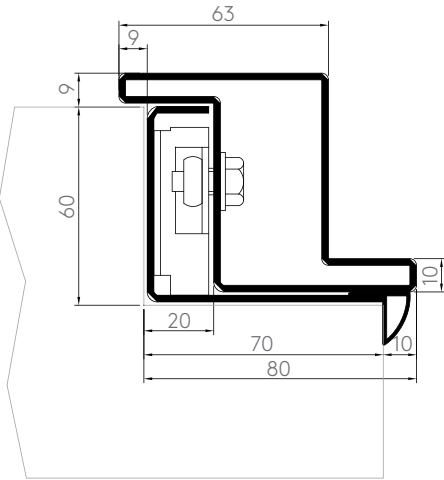


**Wall opening fitting without counterframe** Recommended for wall opening closures or hole narrowing

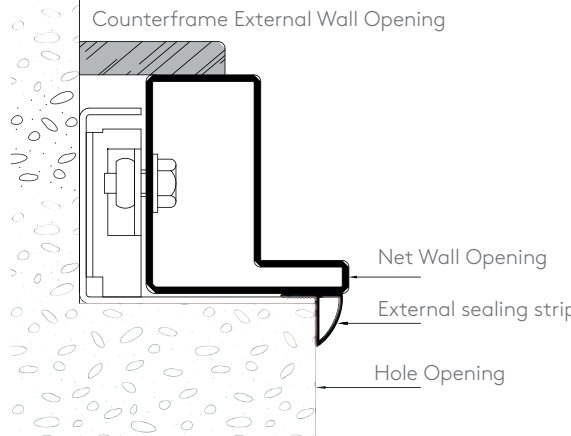


# Measurement conversions for Evolution frame and parts

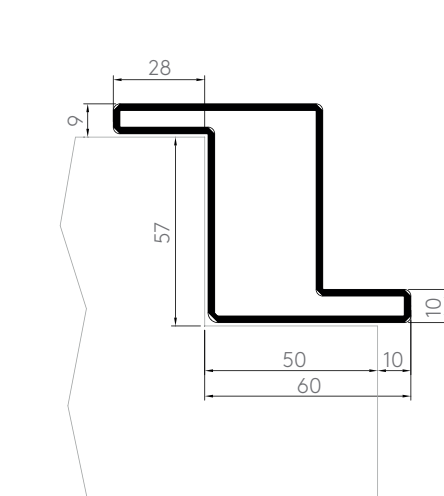
**A Frame and counterframe**



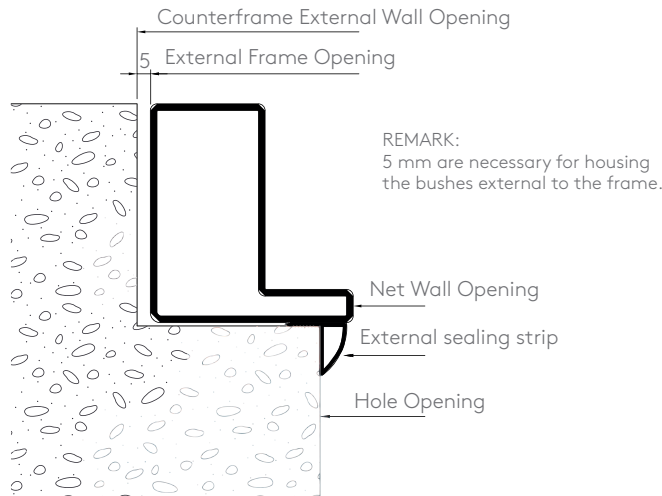
**B Frame without fin on counterframe**



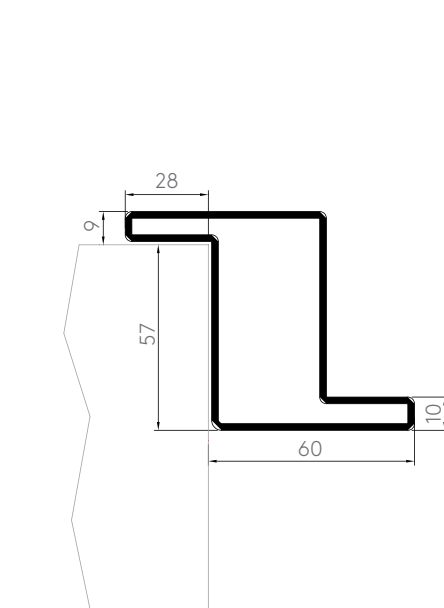
**A Standard frame**



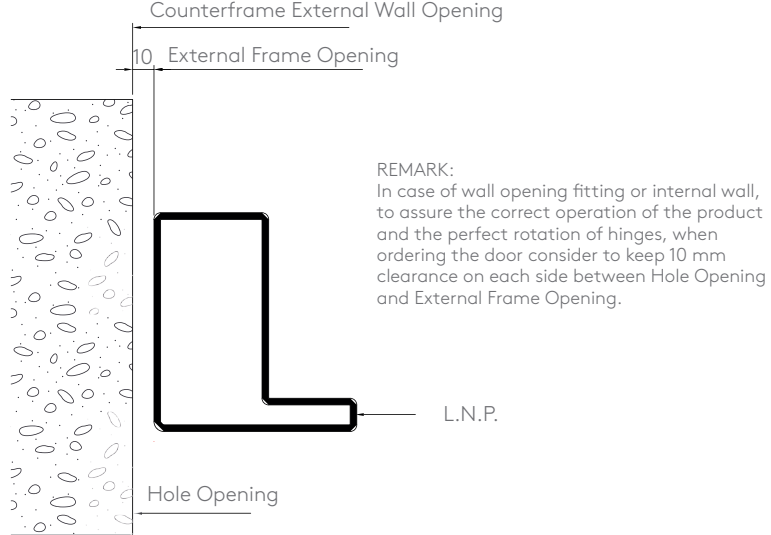
**B Frame without fin**



**A Standard frame**



**B Frame without fin**

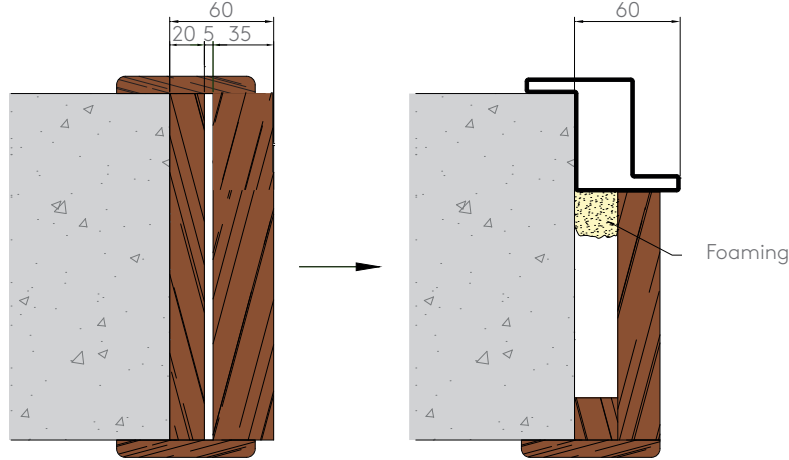


# Installation without counterframe

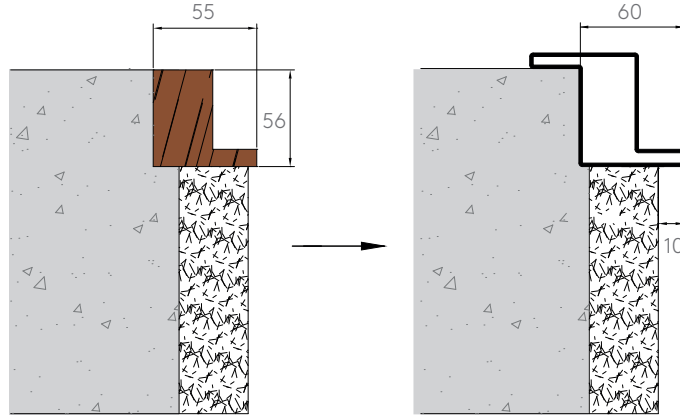
Because of its rigidity, the particular closed section of the frame allows the installation of the door even without counterframe, in absolute security and maintaining the certification; it is the ideal solution for renovations.



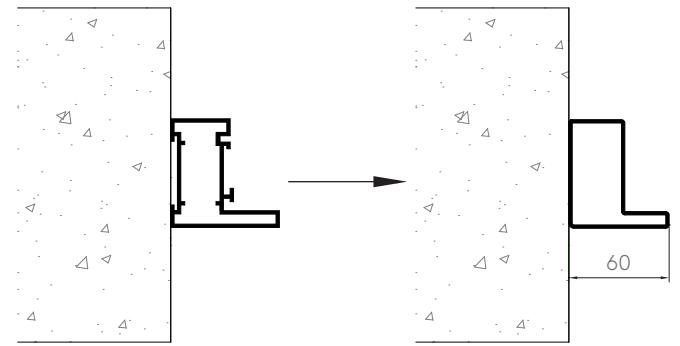
Evolution on wooden jambs



Evolution on marble anchor site

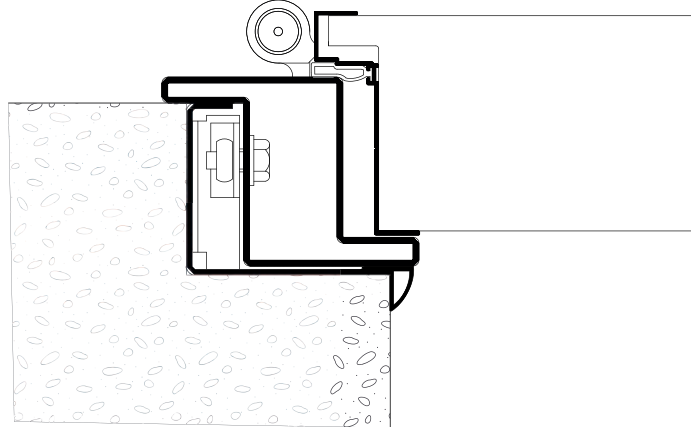


Evolution wall opening fitting

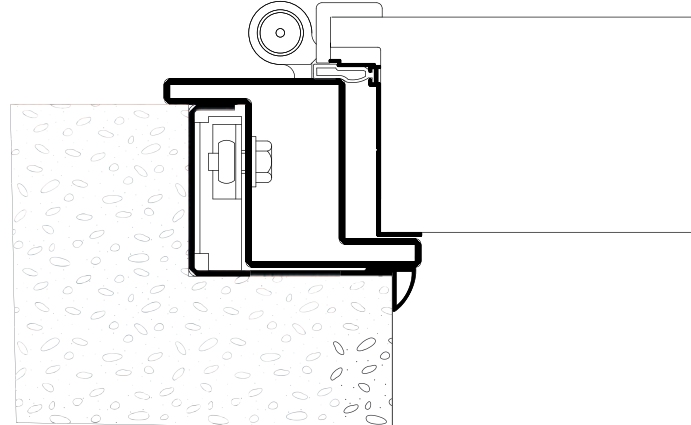


# Evolution leaf frame detail

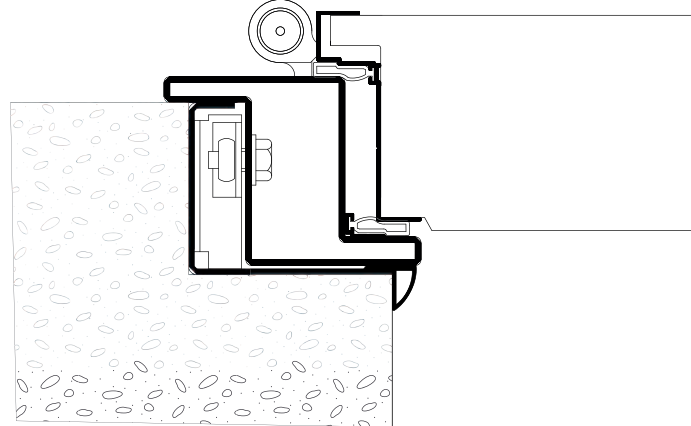
Evolution leaf frame detail with sealing strip and standard supplied wrap profile



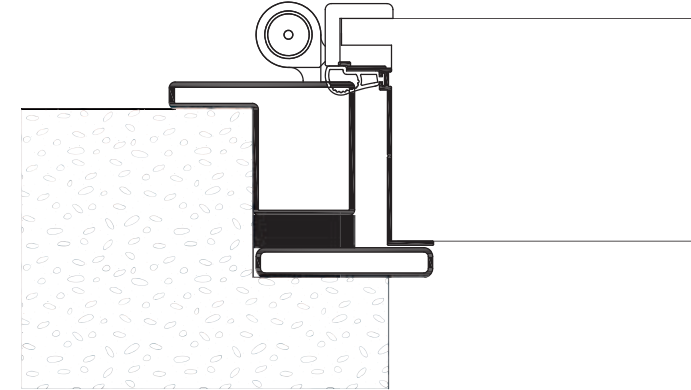
Evolution frame detail with sealing strip and wooden surround non standard supplied



Mose Kit frame detail with double sealing strip



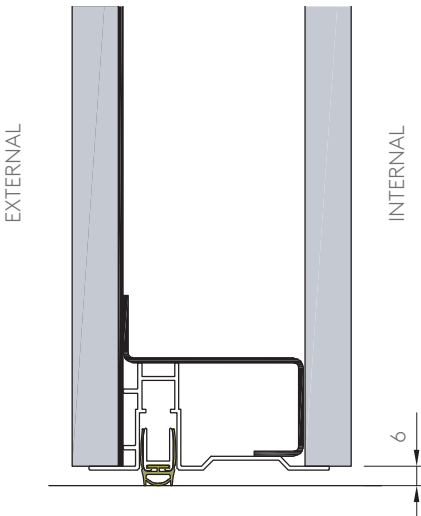
Evolution frame detail with heat barrier



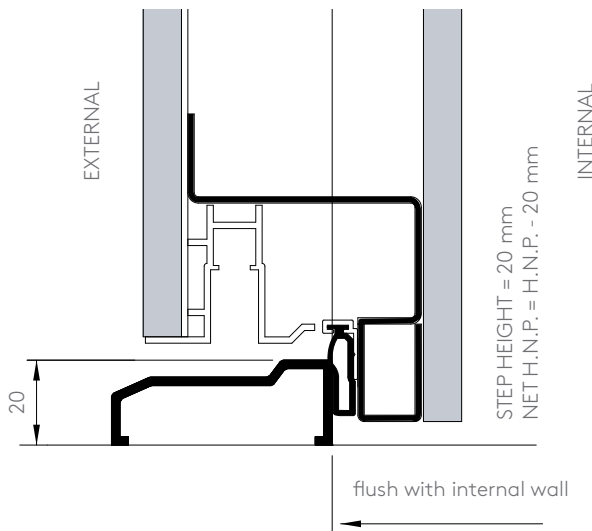


# Evolution floor sections

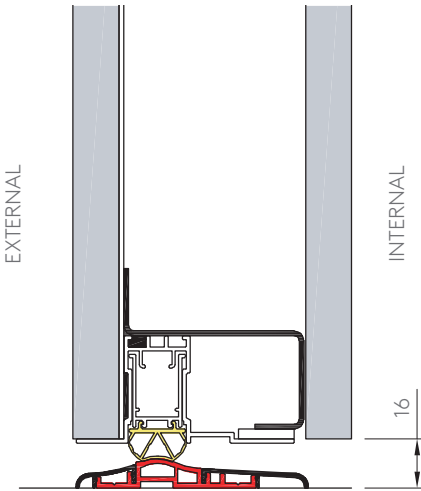
Standard solution with draught excluders



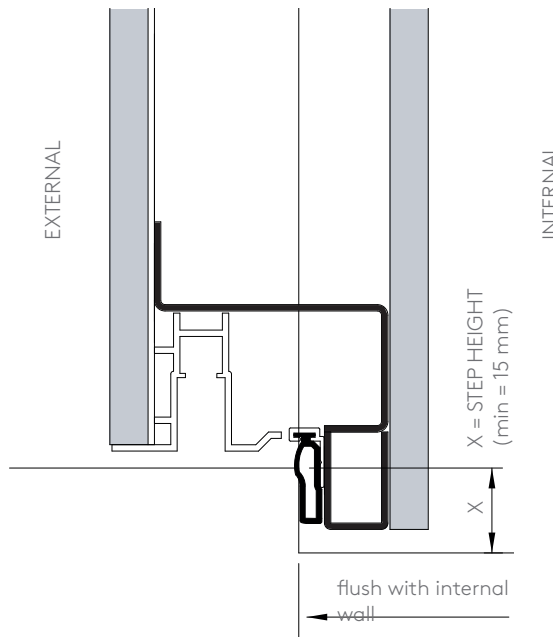
Floor section with Oikos step



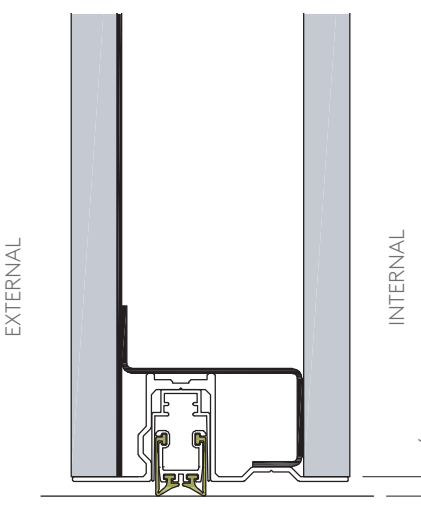
Solution with Mose kit



Floor section with step flush with internal wall



Solution with Dam kit



# Evolution counterframe

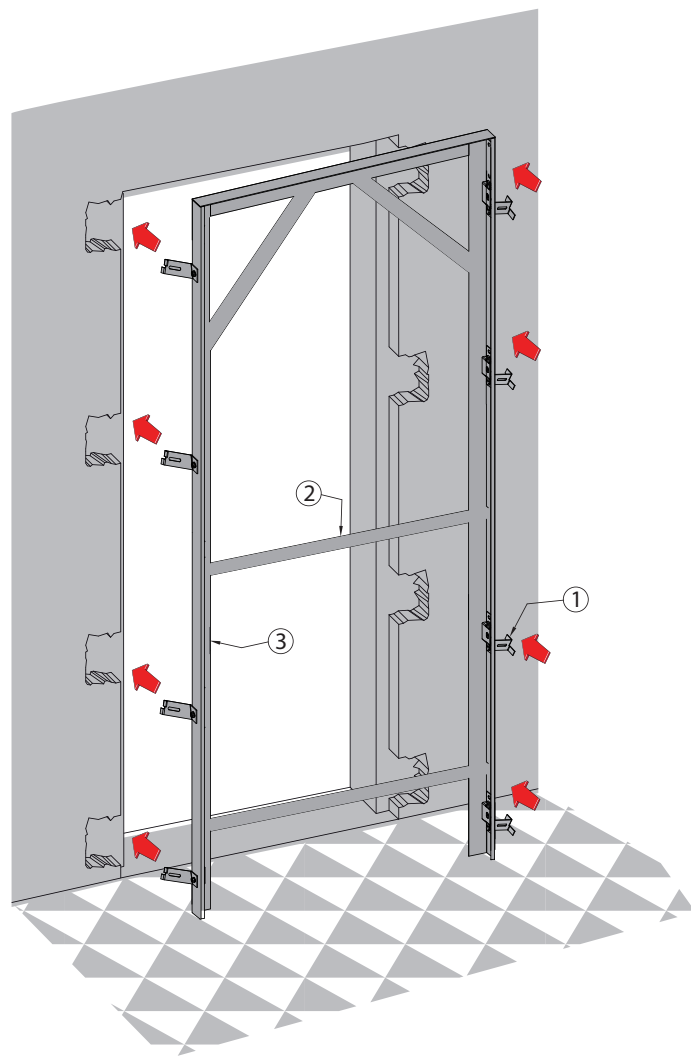
**1 Counterframe fastening elements**

**2 Reinforcement protection braces 3**

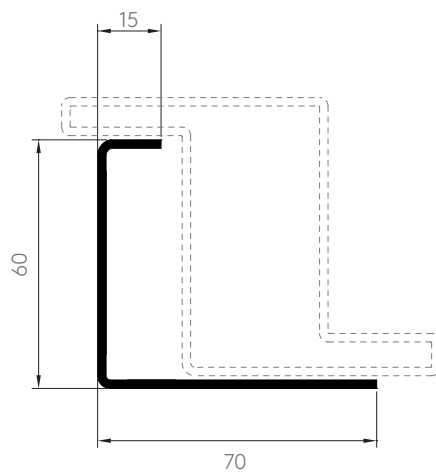
(To be removed only after the complete solidification of concrete)

**3 Measure reference + 100 cm from the finished floor**

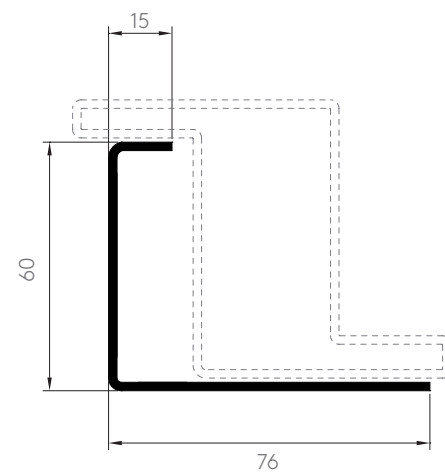
It is recommended to fit the counterframe very carefully; any misalignment may jeopardize the correct installation of the door.



Evolution counterframe section



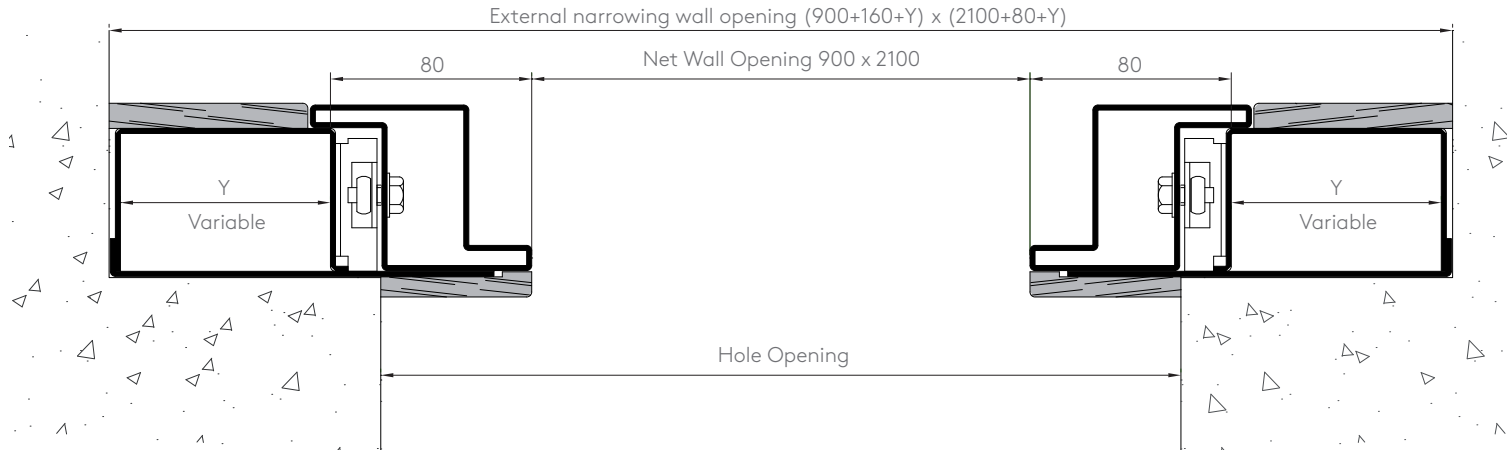
Evolution EI counterframe section



# Fitting with narrowing

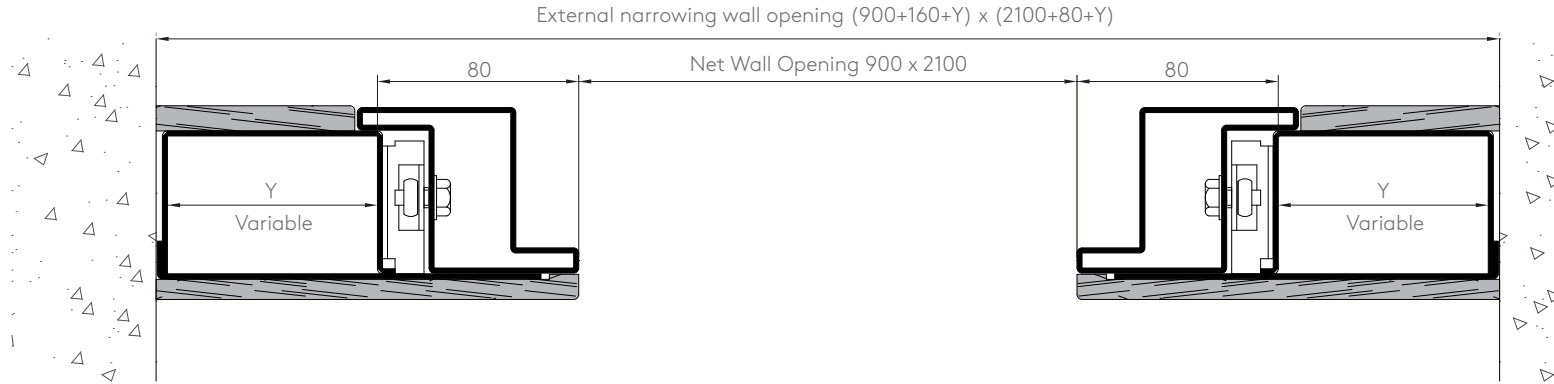
Recommended in case of replacement fitting on wooden, marble or bare wall jamb

Horizontal section



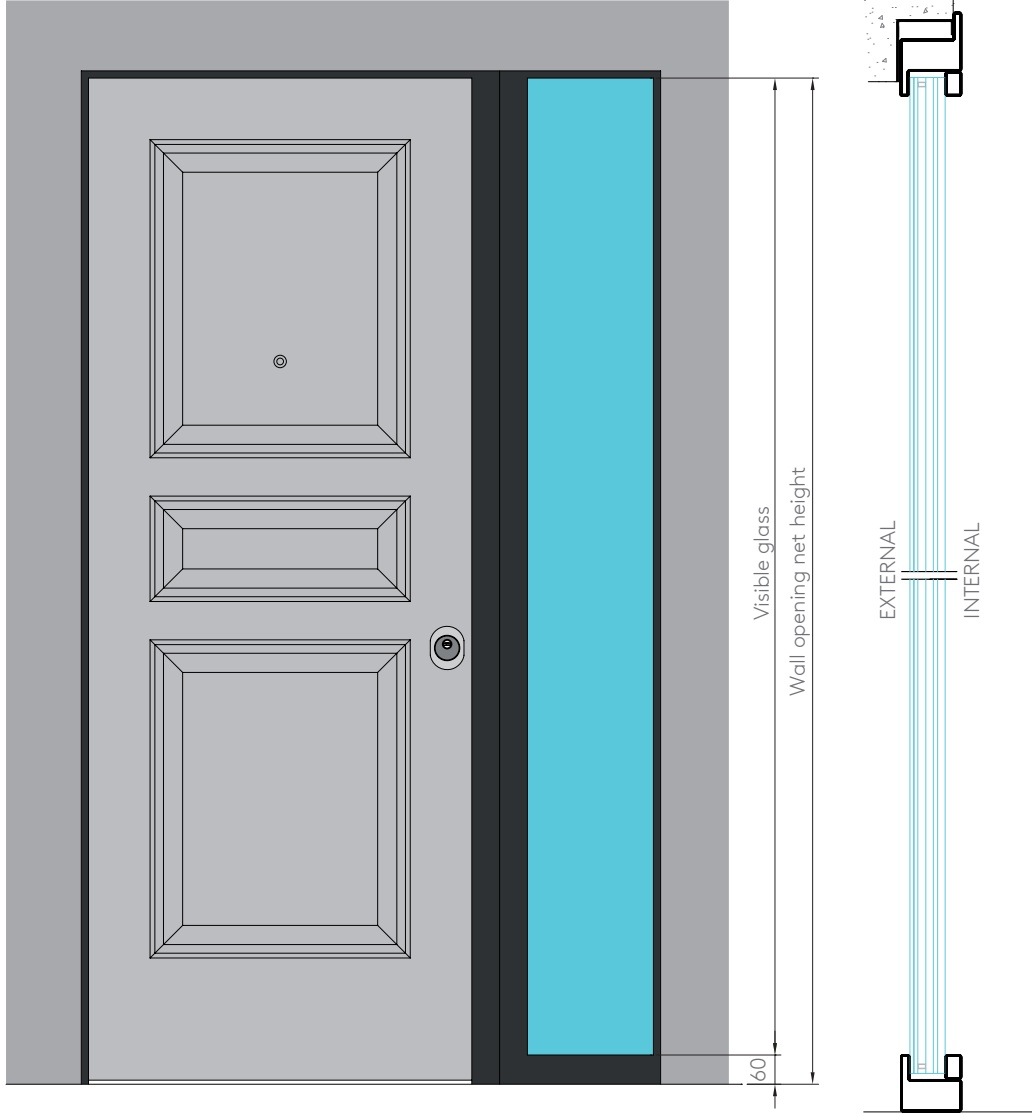
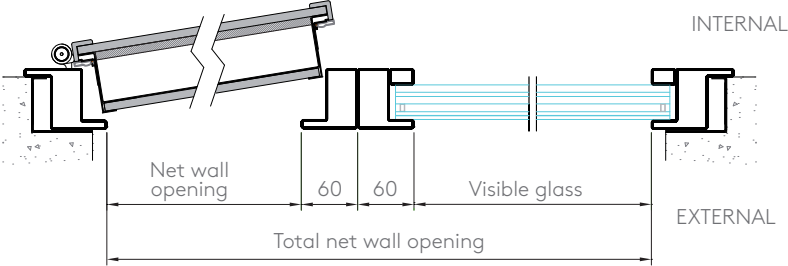
Recommended case for fitting with wall opening narrowing

Horizontal section





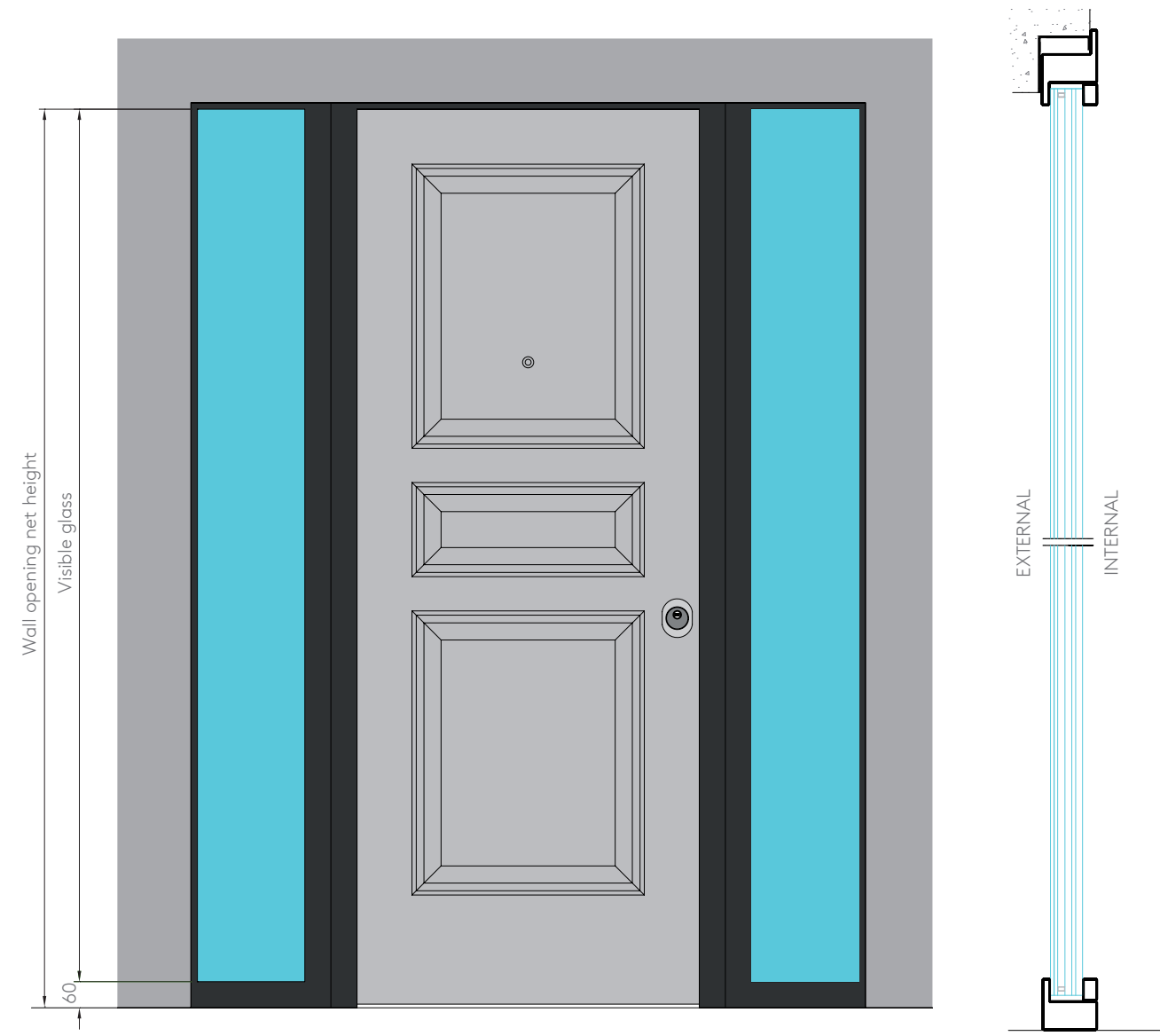
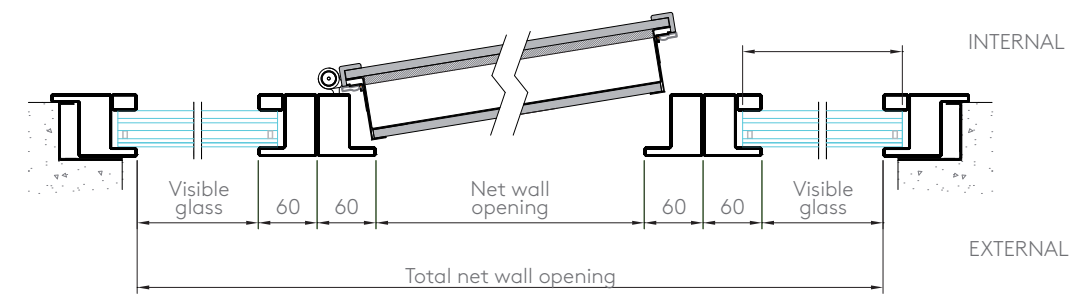
# Single side panel





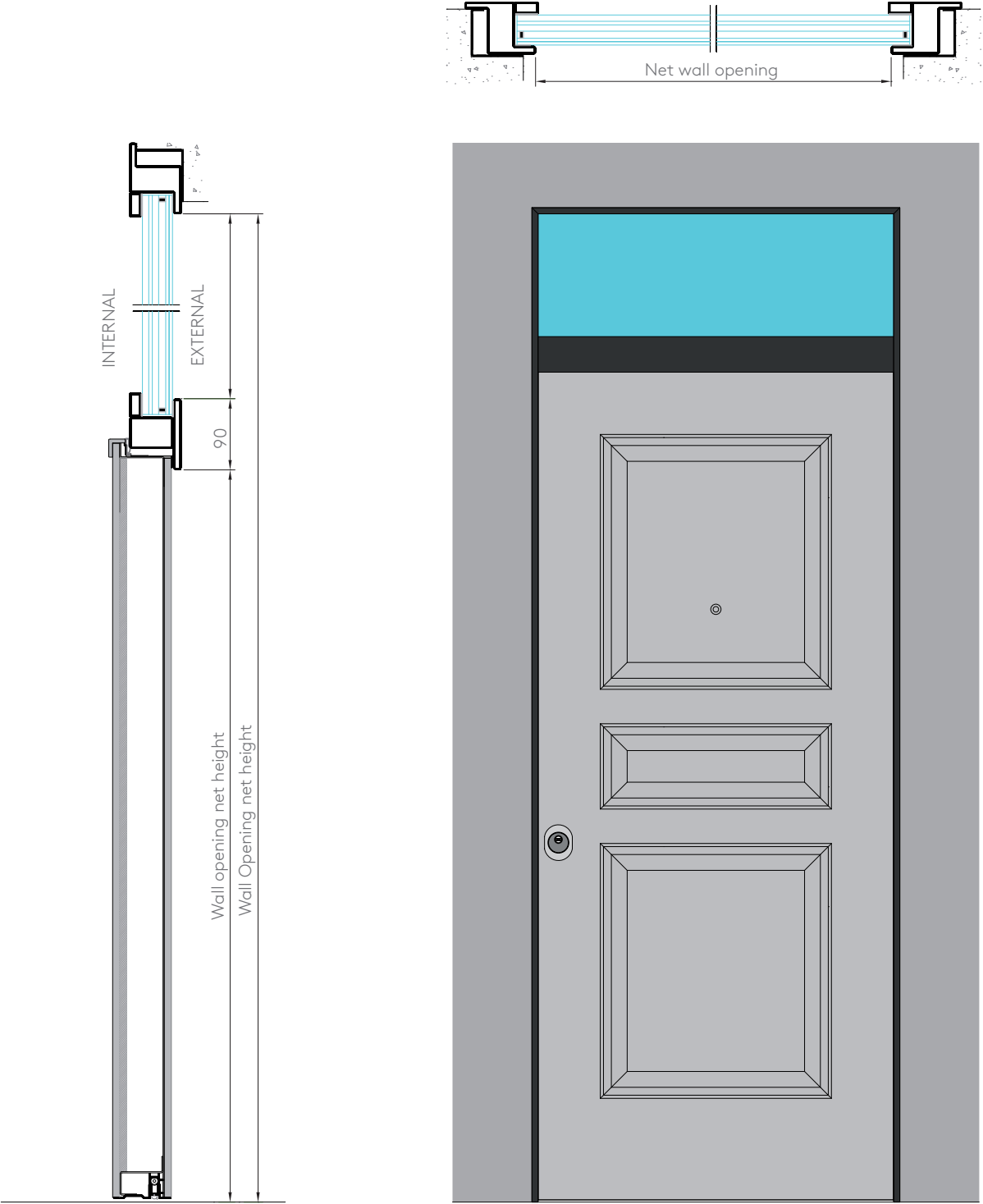


# Double side panel

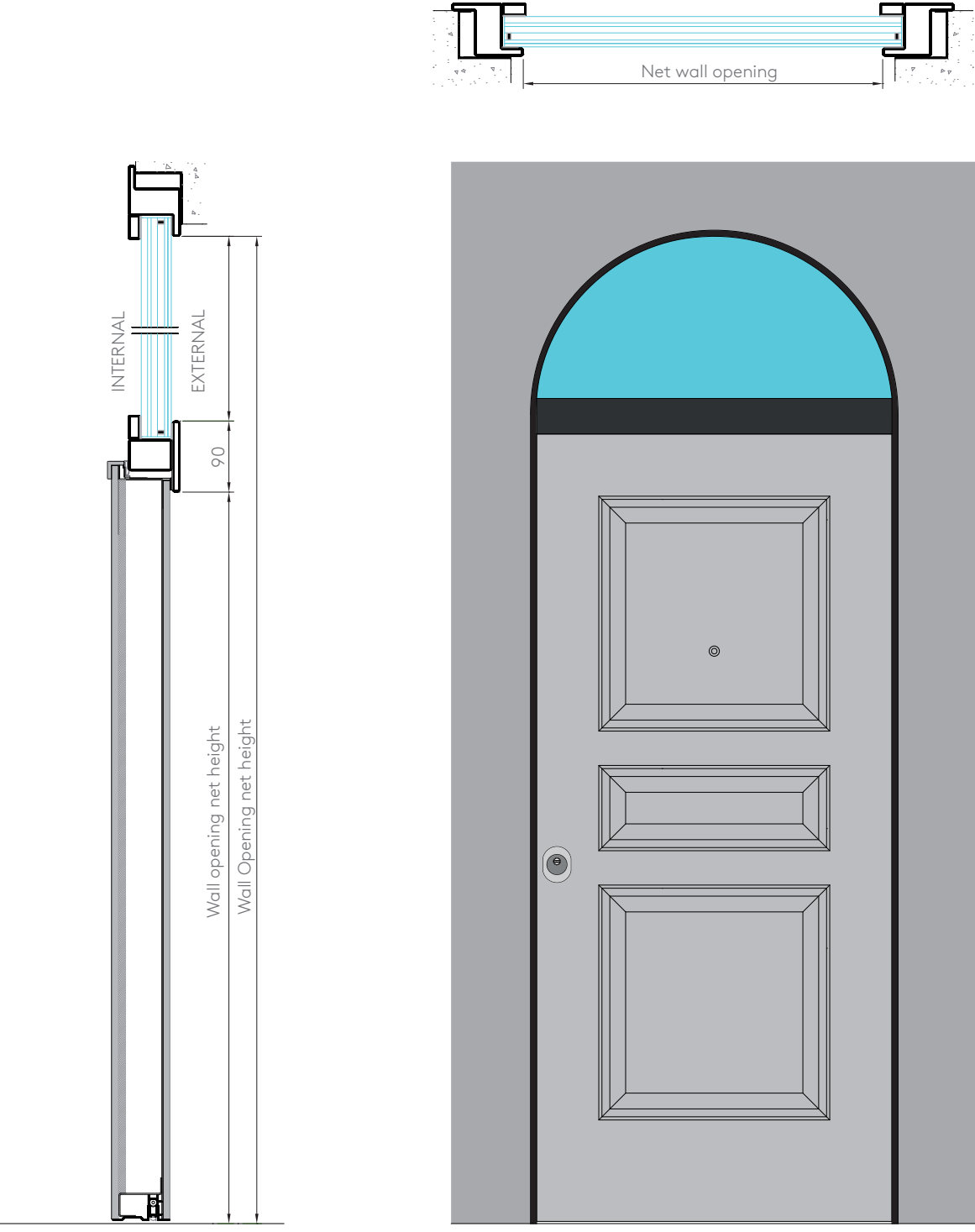




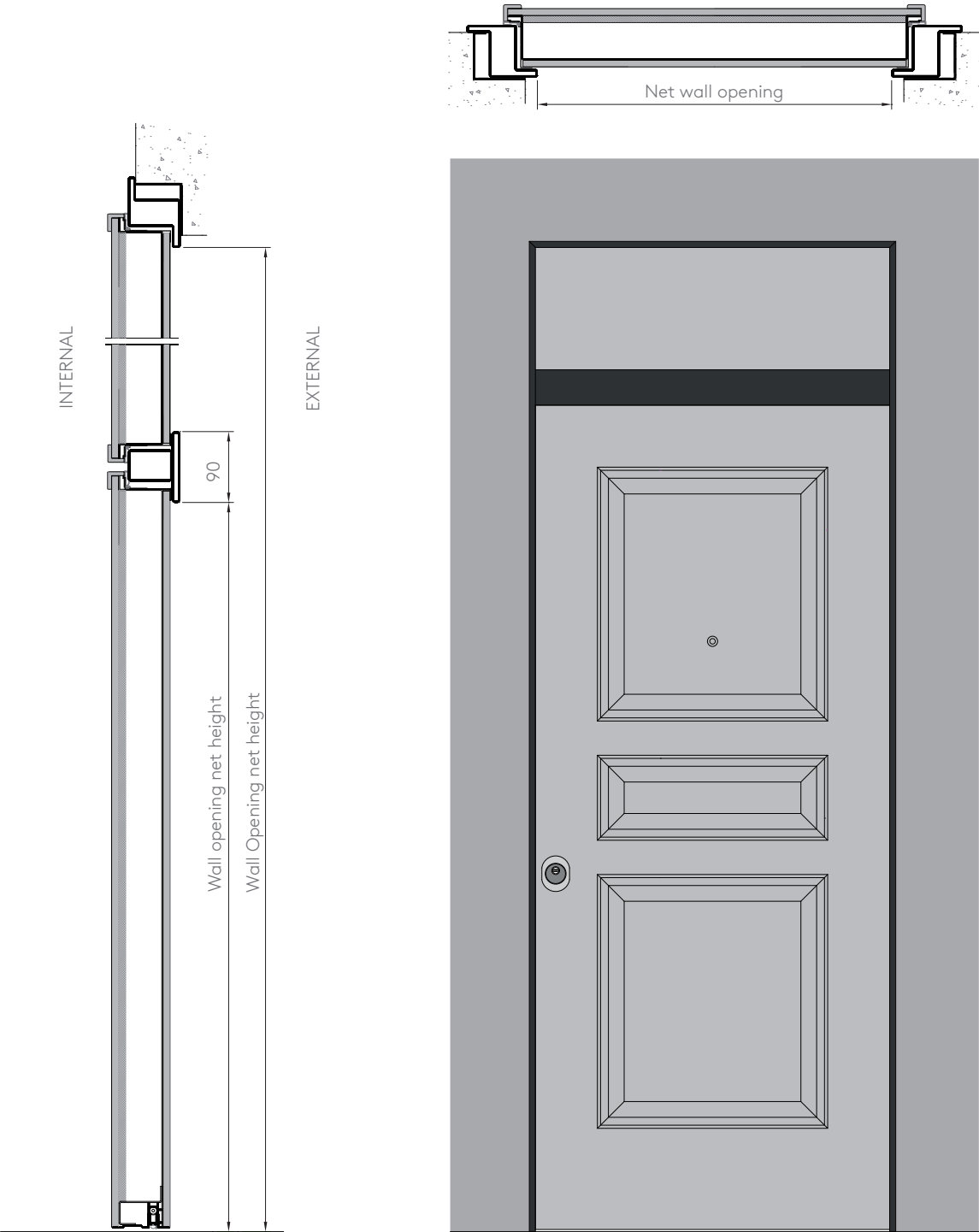
# Transom window with glass



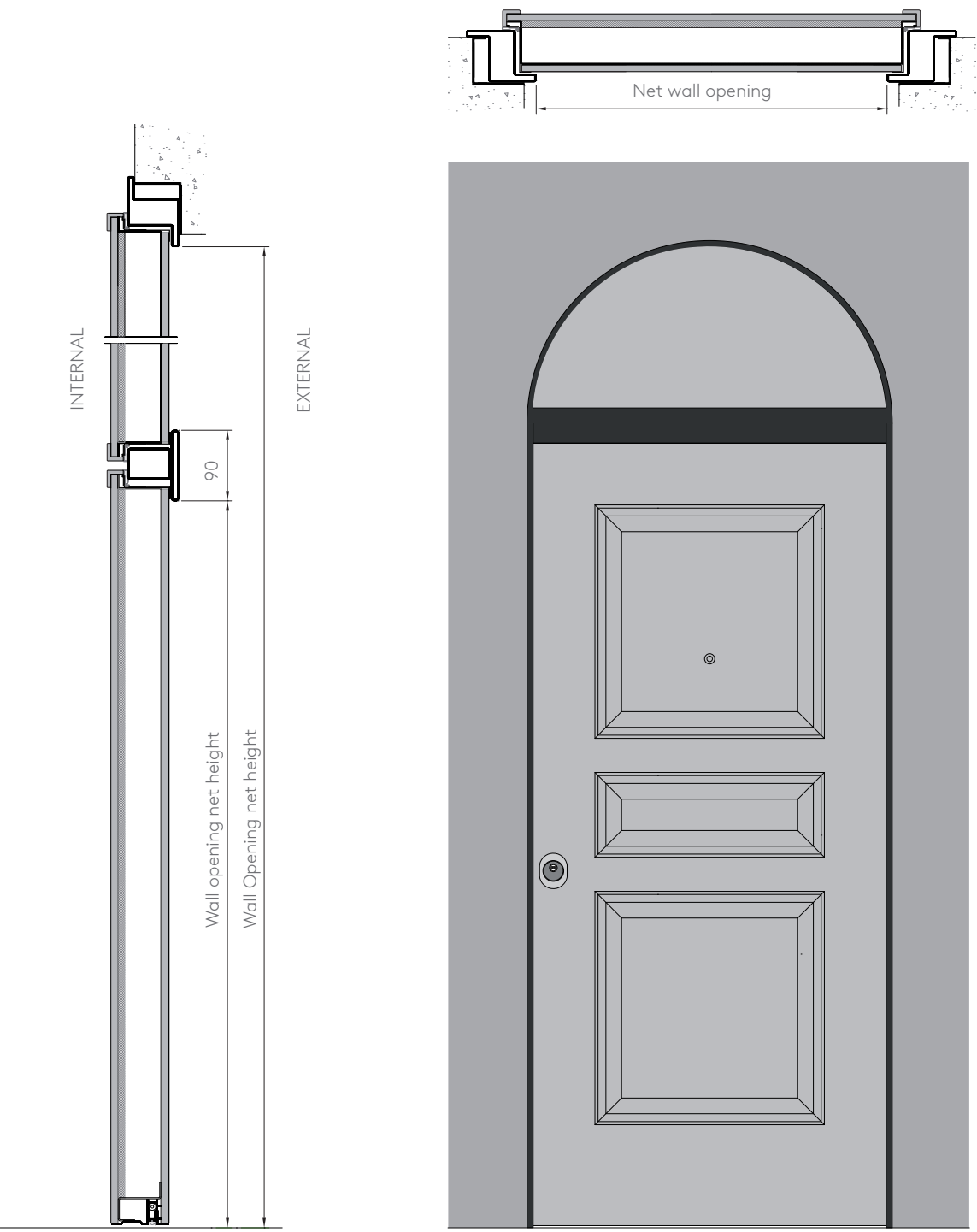
# Arched transom window with glass



# Blind transom window



# Blind arch transom window

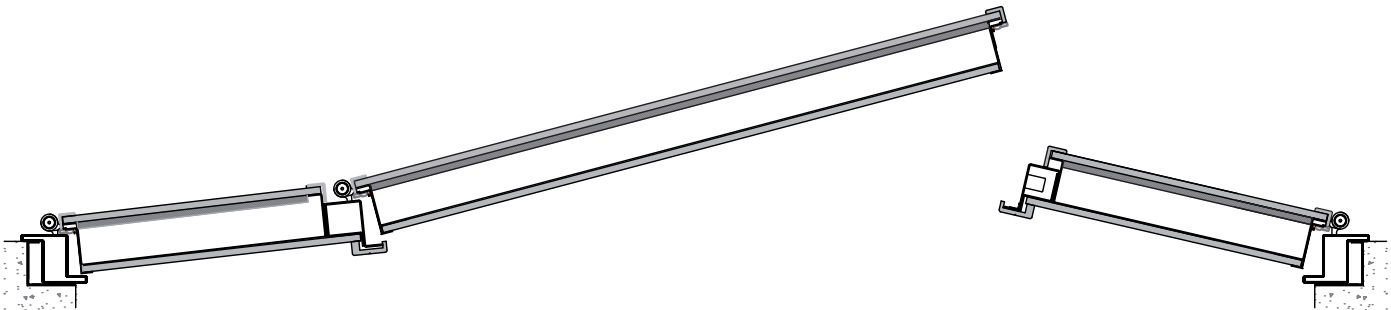




# Multi-leaf



$$X = \frac{\text{Total Net wall opening} - \text{Net wall opening}}{2}$$



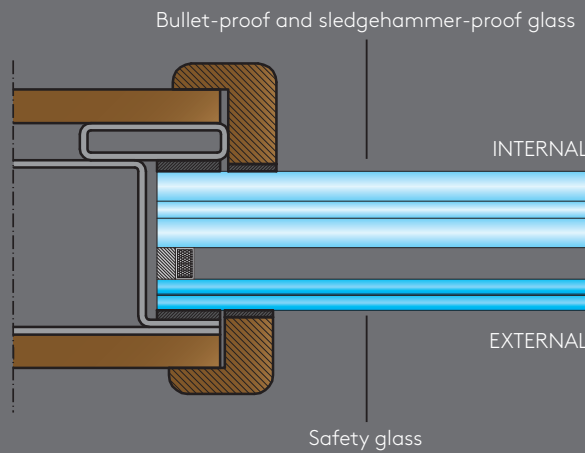


# Armored glass

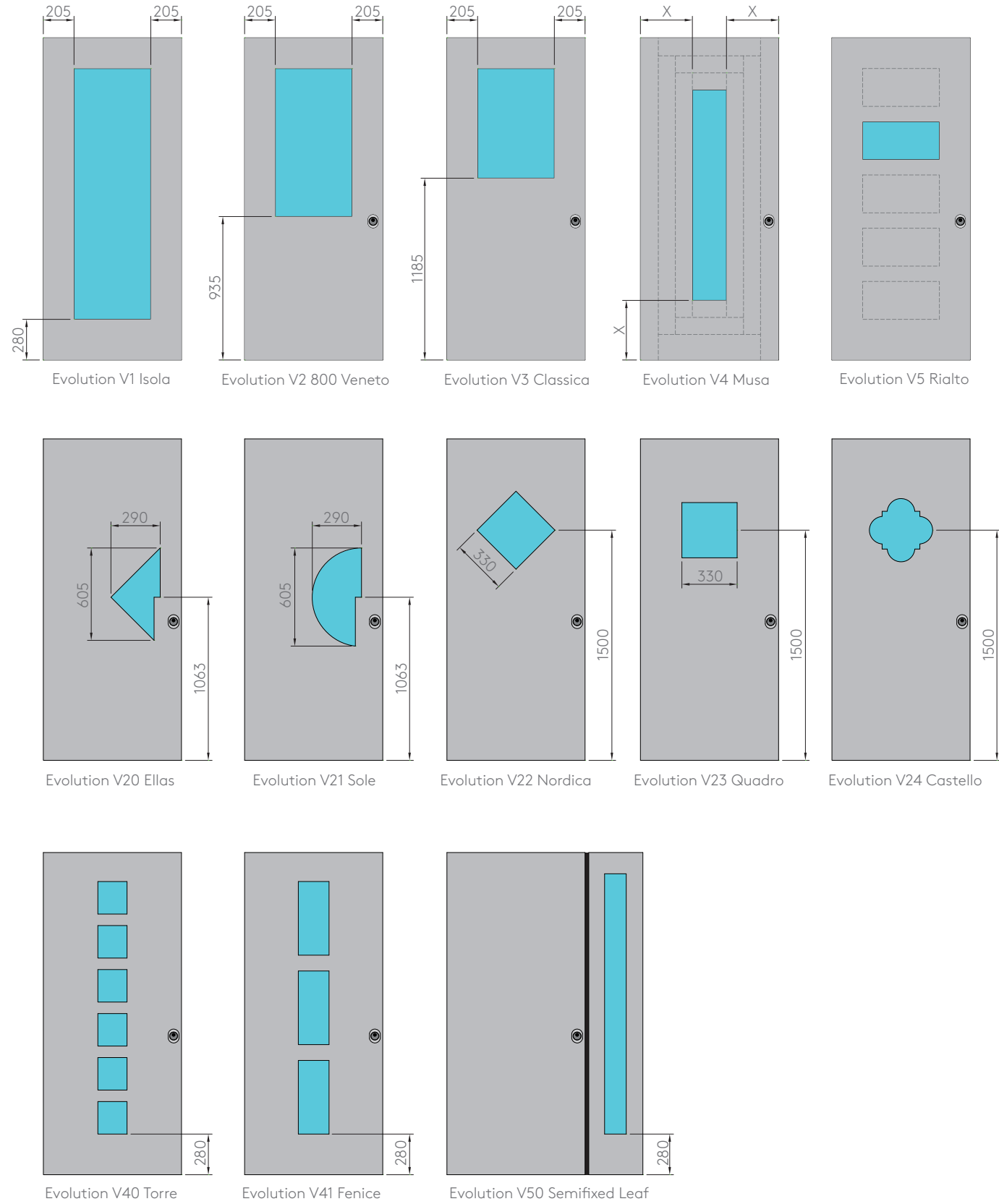
In doors with glass fitting, in glass transom windows, in glass side panels combined with Oikos doors, only panes with double bullet-proof and sledgehammer-proof certification, with double-glazed frame and with double safety glass, are always used.



Laminated glass with double certification according to UNI EN 1063: bullet-proof class BR2, UNI EN 356 classification against manual attack (sledgehammer) class P6B. Always supplied coupled with double-glazed frame with the external side made of safety glass, on paneled leaf, complete with steel glass-stop and surrounds made of covering wood, excluding V24. The standard finishing double glazing frame has a minimum thickness of 38 mm and it can reach up to 44 mm according to the composition, with an increase in the thermal performance (glass thermal insulation 1.0 w/sqm.k).



# Glass fitting Variable and fixed measurement

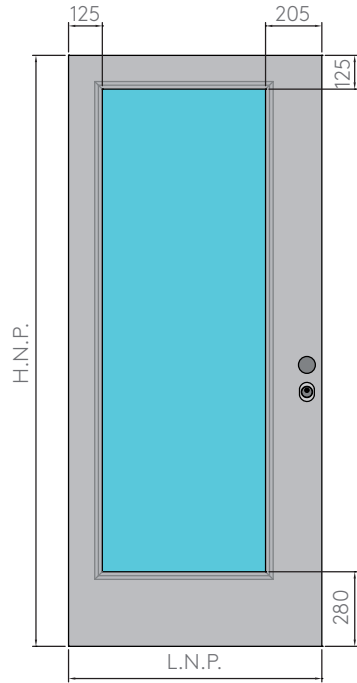






# Glass fitting with clear zones

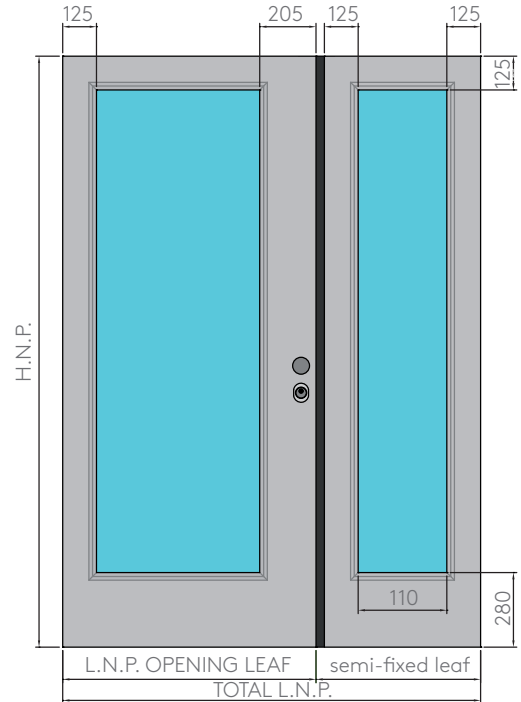
## Single leaf



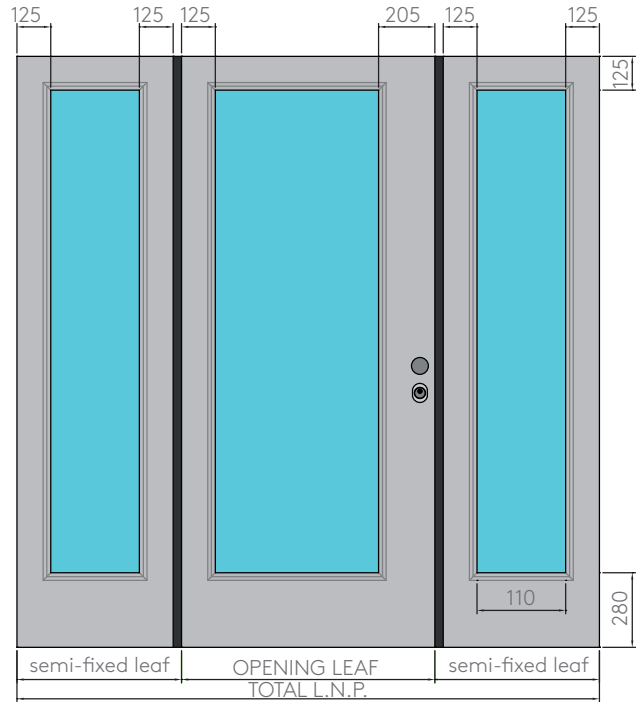
**MAX VISIBLE GLASS** = L.N.P. - 330) x (H.N.P. - 405)

- Legend**  
 L.N.P. Total Net Wall Opening  
 L.N.P. TOT Total Net Wall Opening  
 H.N.P. Net Wall Opening Height

## Double leaf



## Multi-leaf



**SEMI-FIXED LEAF** = TOTAL L.N.P. - OPENING LEAF L.N.P.) ≥ 400

**OPENING LEAF MAX VISIBLE GLASS** = (OPENING LEAF L.N.P. - 330) x (H.N.P. - 405)

**SEMI-FIXED MAX VISIBLE GLASS** = (TOTAL L.N.P. - OPENING LEAF L.N.P. - 295) x (H.N.P. - 405)

**SEMI-FIXED LEAF** = (TOTAL L.N.P. - OPENING LEAF L.N.P.) / 2 ≥ 400

**OPENING LEAF MAX VISIBLE GLASS** = (OPENING LEAF L.N.P. - 330) x (H.N.P. - 405)

**SEMI-FIXED MAX VISIBLE GLASS** =  $\frac{(TOTAL L.N.P. - OPENING LEAF L.N.P. - 295) \times (H.N.P. - 405)}{2}$



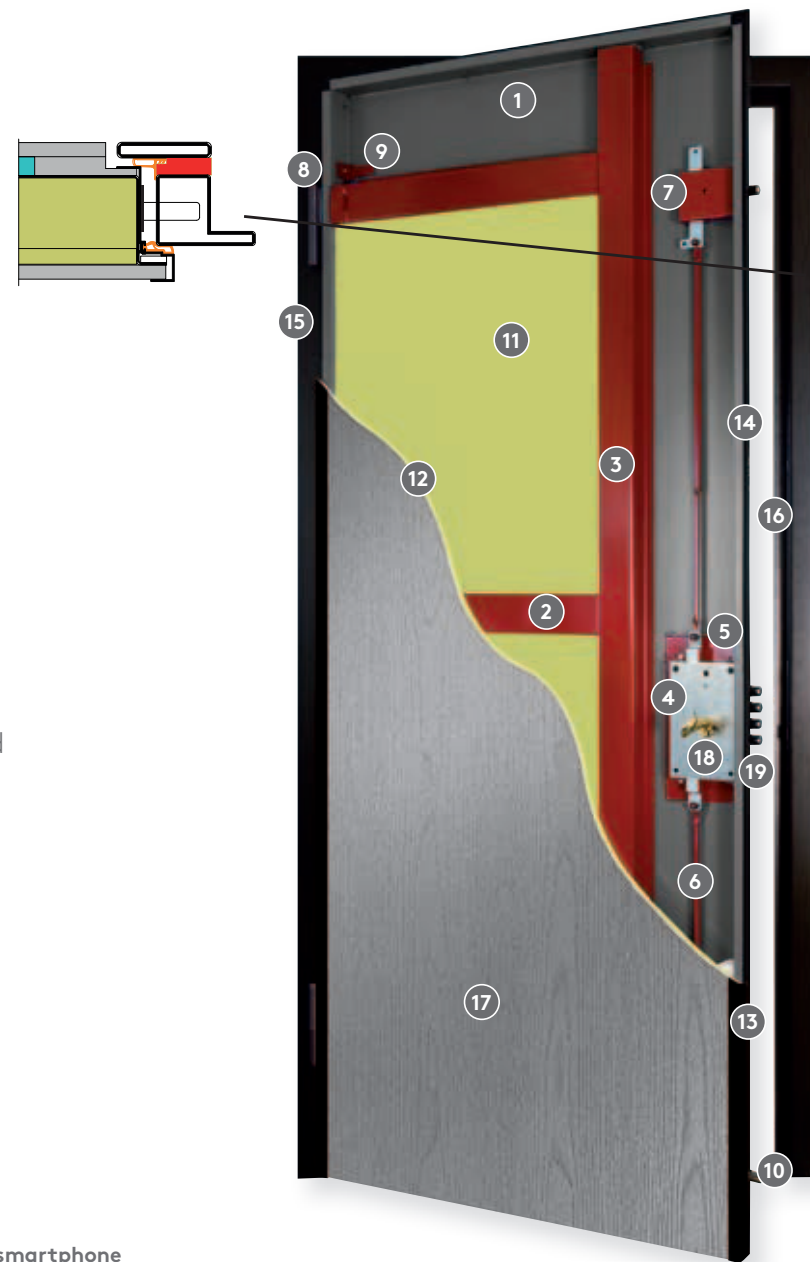
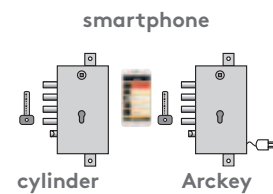
# Evolution 3TT with heat barrier

## Specifications

Safety door EVOLUTION 3 TT with heat barrier frame: leaf in 15/10 New steel, 3 horizontal reinforcing bars, 1 vertical reinforcing bar, 30/10 lock protection plate, wrap aluminum frame profiles with perimeter rubber sealing strip, thermal insulation and vacuum panel, standard supplied floor heat barrier threshold, internal handle and external fixed knob, heat barrier frame with perimeter rubber sealing strip, 2 adjustable hinges, 2 switchlocks on the lock side and 3 hinge bolts on the hinge side, cylinder lock with PVD defender.



- 1 Leaf tray
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Cylinder lock
- 5 Lock protection and support plate
- 6 Lock connecting rods with closure points
- 7 Self-locking switchlock
- 8 Two axis adjustable hinge
- 9 Tear-proof hinge bolt
- 10 Standard supplied floor heat barrier threshold
- 11 Thermal Insulation
- 12 Vacuum thermal insulation
- 13 Tubular rubber sealing strip
- 14 Wrap-around aluminum with heat barrier
- 15 Heat barrier frame RAL 8022
- 16 Perimeter sealing strip on frame
- 17 Internal covering panel
- 18 Set of brass-plated knobs and handles
- 19 PVD brass defender plus



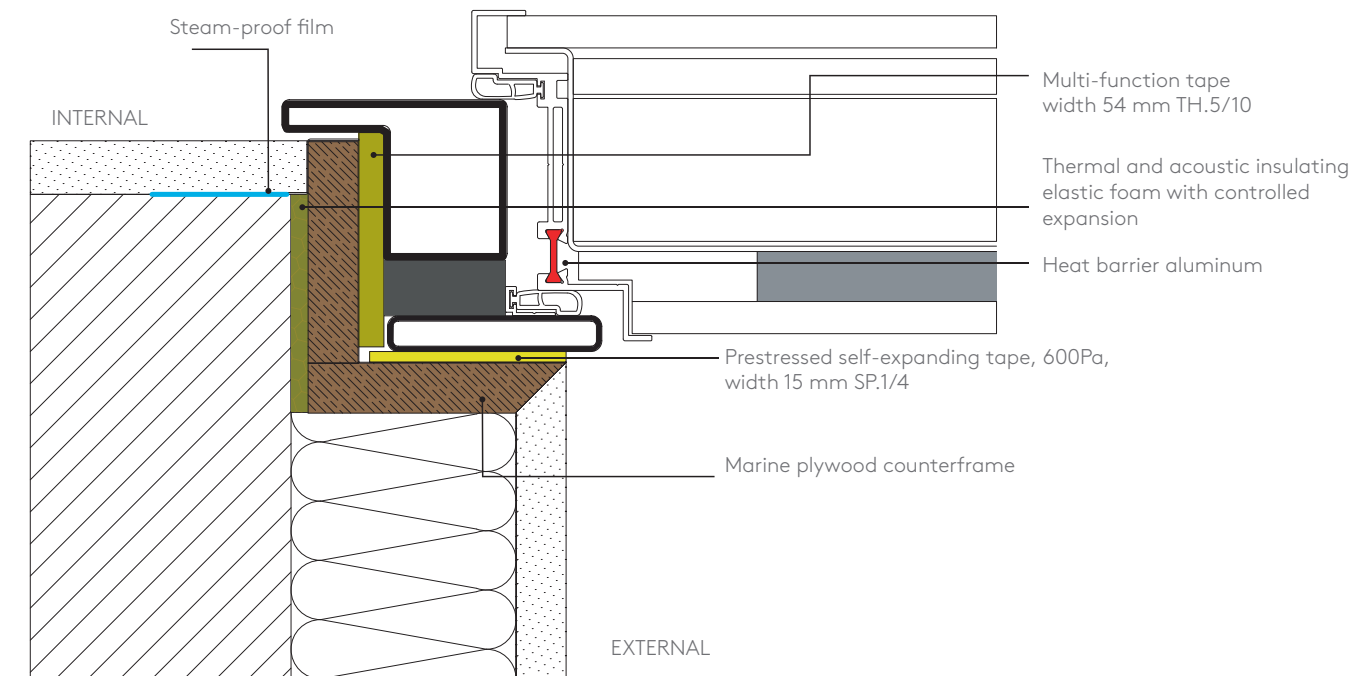
# Performance

For doors with standard fitting on marine plywood counterframe

Performance	standard	Upon request	size tested sample	Max certified realizable measures
break-in resistance	Class 3	-	900 x 2100	Area -20% + 10%
acoustic	38 dB	-	900 x 2100	± 0%
air	Mose Kit 4	Plus Kit 4	900 x 2100	Area + 50%
water	Mose Kit 5A	Plus Kit	900 x 2100	Area + 50%
wind	Mose Kit C5	Plus Kit C5	900 x 2100	± 0%
thermal	1	0.75	1230 x 2180	Area ≤ 3.6sqm

The declared performances are valid for intact doors installed according to the official installation instructions of Oikos Venezia srl.

# Evolution 3TT leaf frame detail



## Materials for correct installation EVOLUTION 3 TT

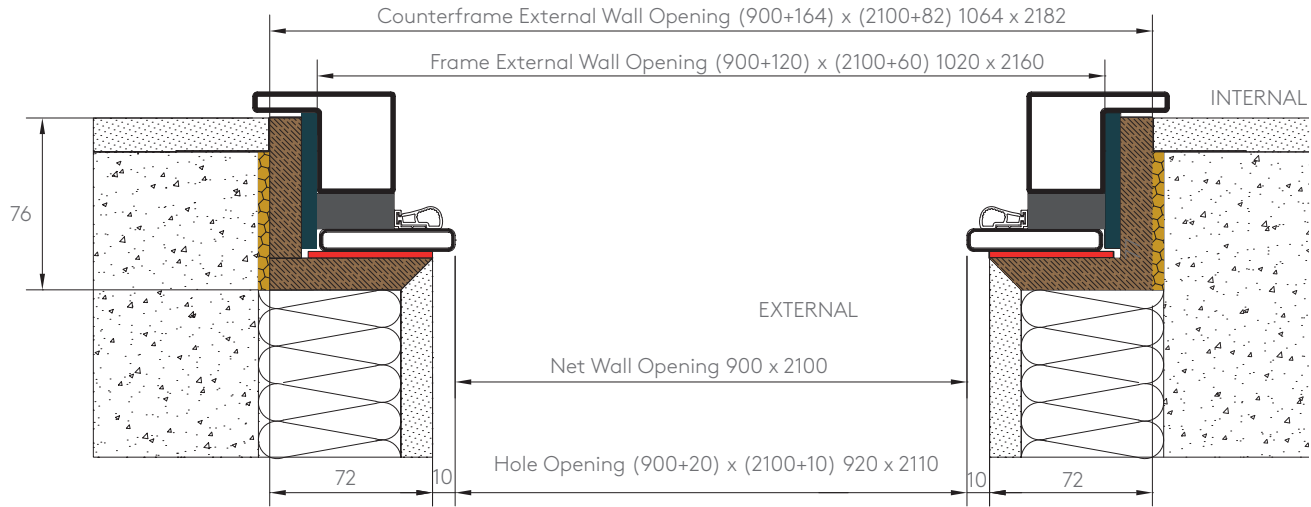
- Elastic PU foam cylinder 750 ml
- Internal/external vapor barrier 100 mm With 6 mt double sided e-butyl tape
- Multi-function tape wide 54 mm thick. 5/10 (No. 2 5.6 mt packages)
- Self-expanding pre-stressed tape 600Pa width 15 mm sp.1/4 (13 m package)
- Fluid butyl in 290 ml cartridge



# Types of fitting and measurement conversions - Evolution 3TT

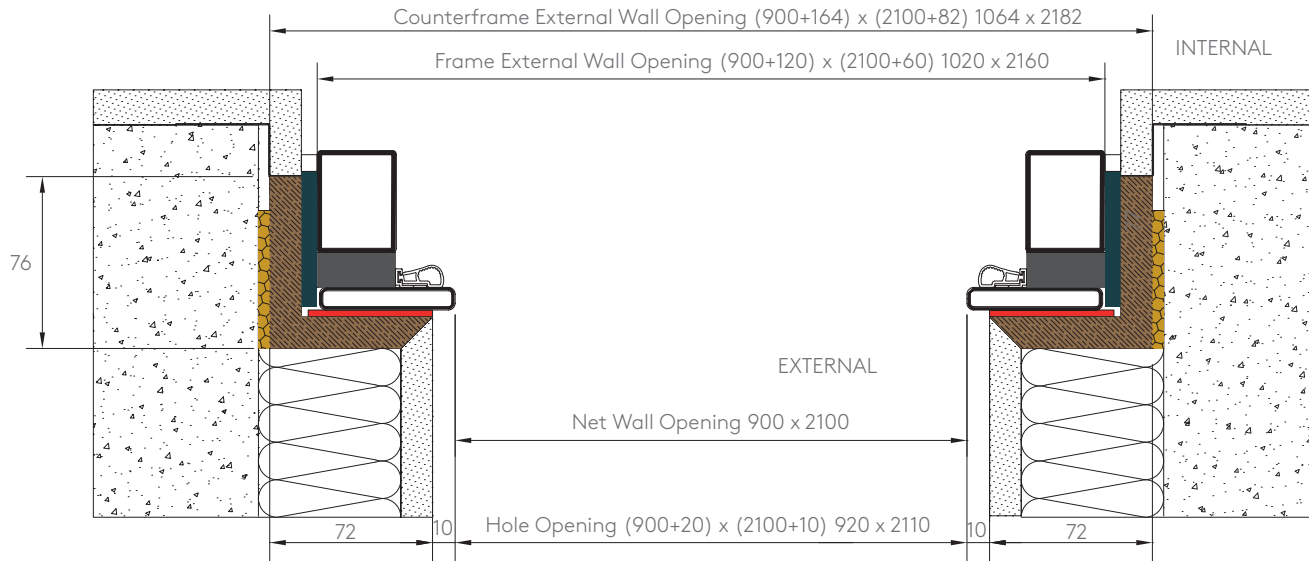
## Internal flush fitting on counterframe Clima with heat barrier frame A

Suitable case for new construction or renovation with counterframe to be pre-walled

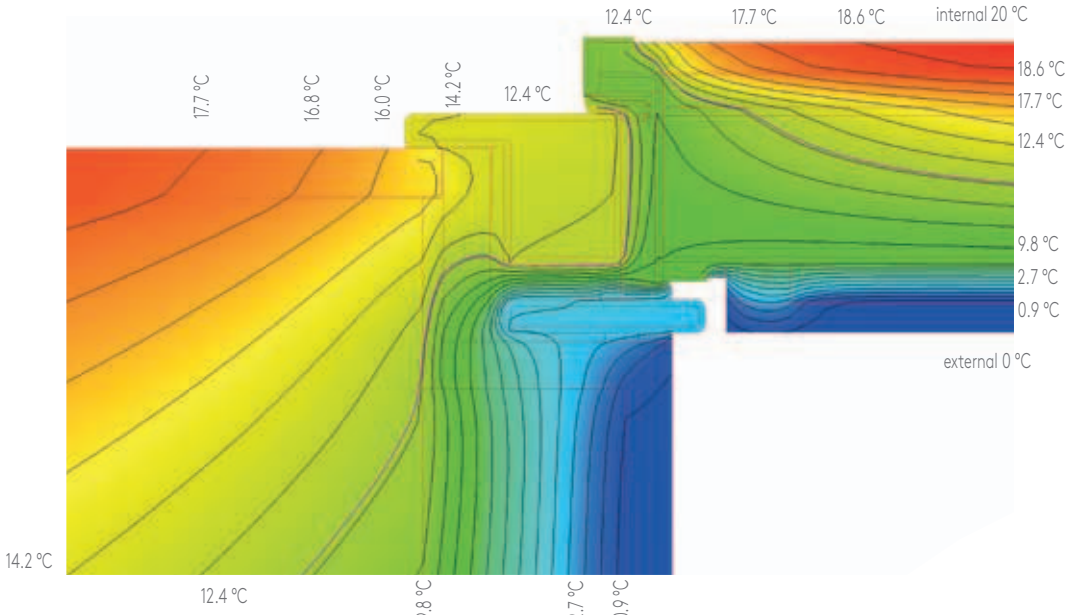


## Wall opening fitting on counterframe Clima with heat barrier frame B

Suitable case for new construction or renovation with counterframe to be pre-walled

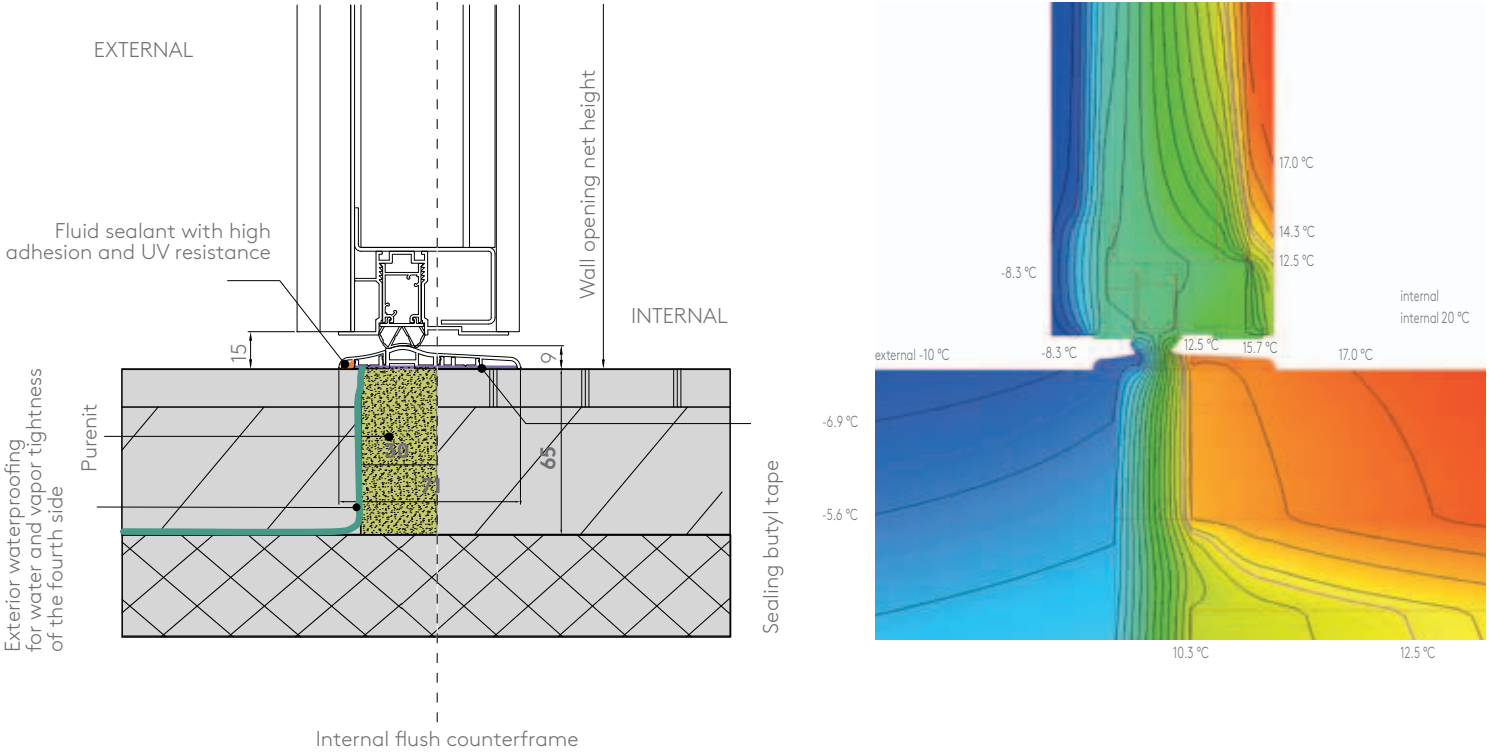


## Section - thermal transmittance analysis U=0.75 (UNI EN ISO 10077-2)

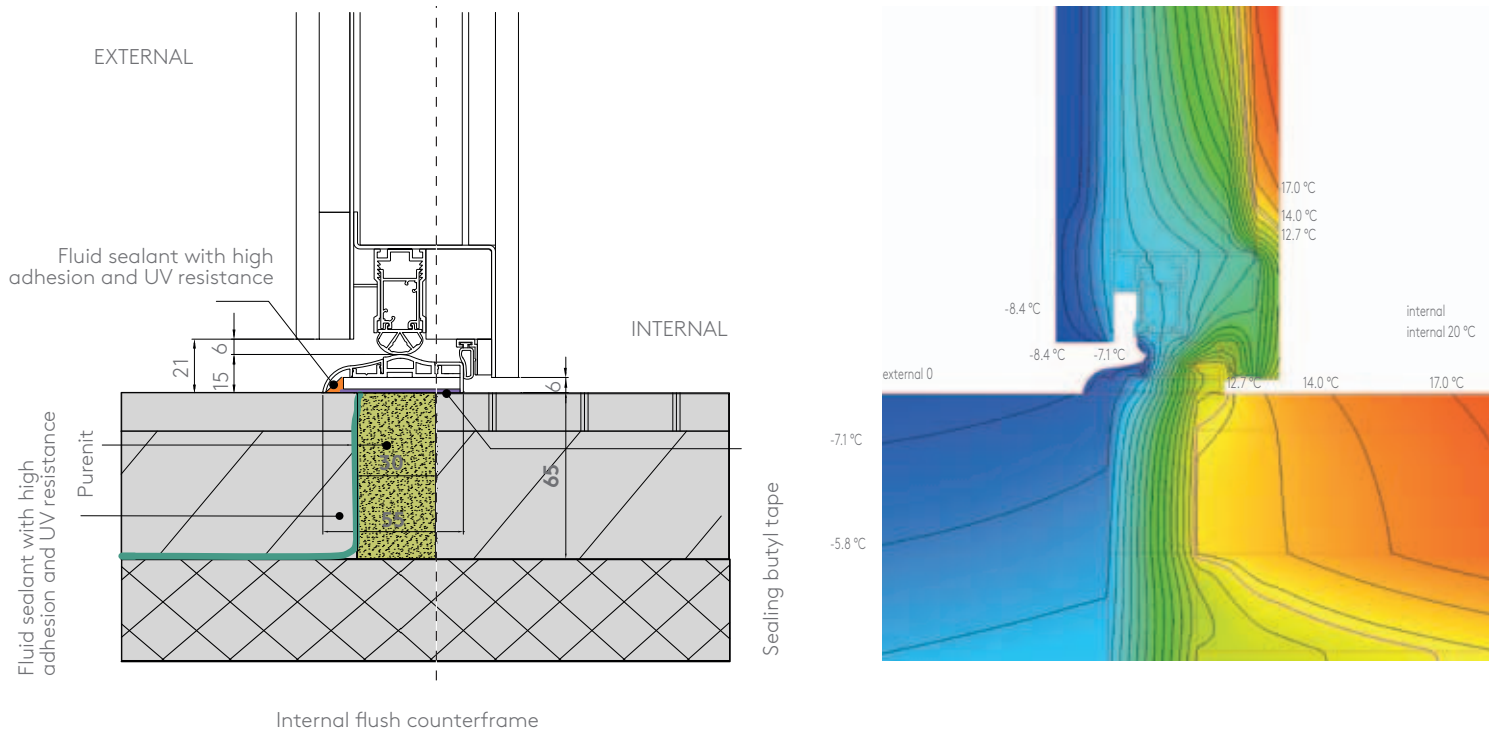


# Evolution 3 TT floor sections

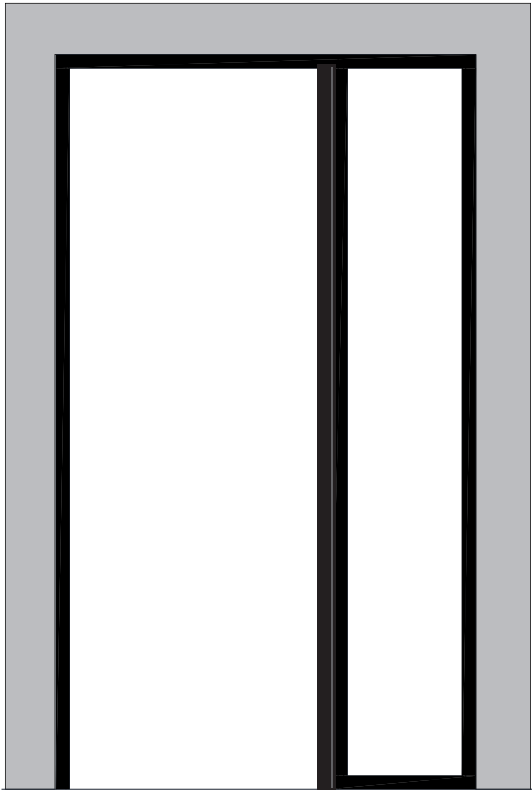
Floor section with STANDARD thermal threshold and inner surfaces temperature analysis (UNI EN ISO 13778)



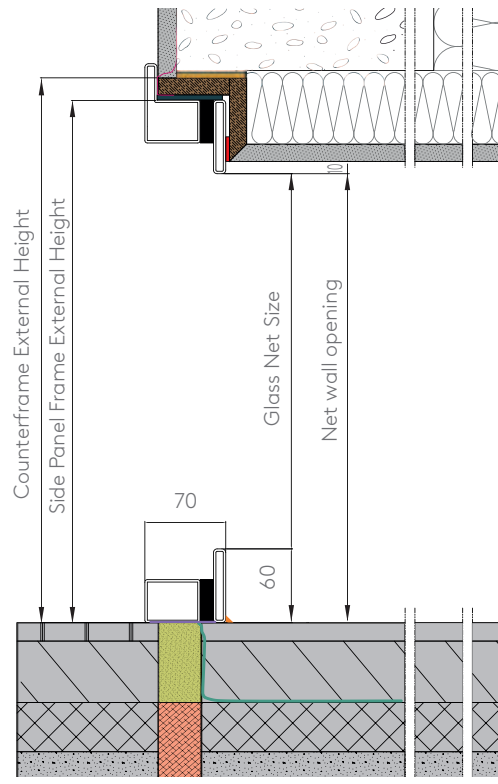
Floor section with PLUS thermal threshold, upon request, and inner surfaces temperature analysis (UNI EN ISO 13778)



# Evolution 3TT side panel frame

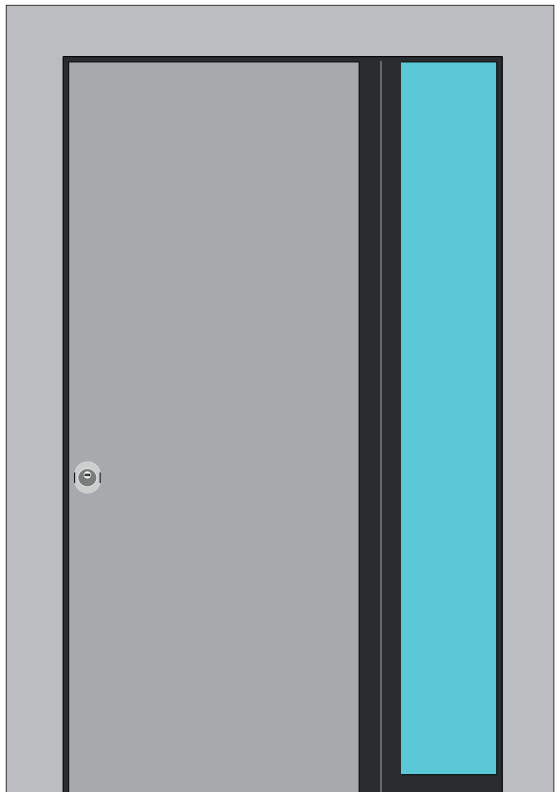


External view

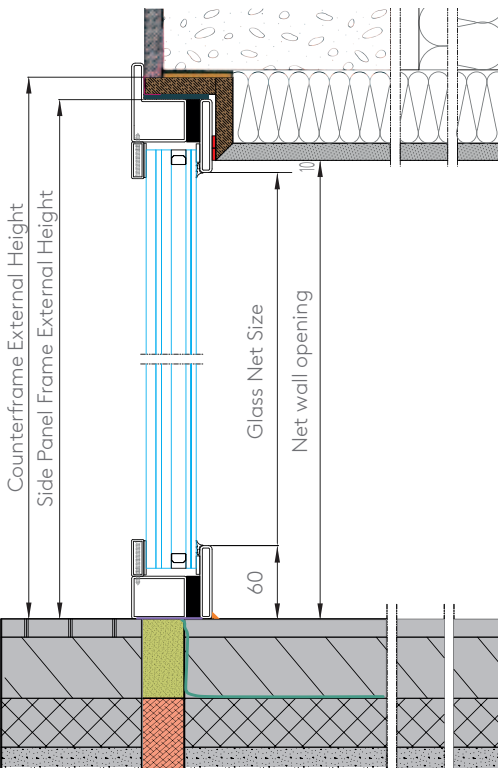


INTERNAL EXTERNAL

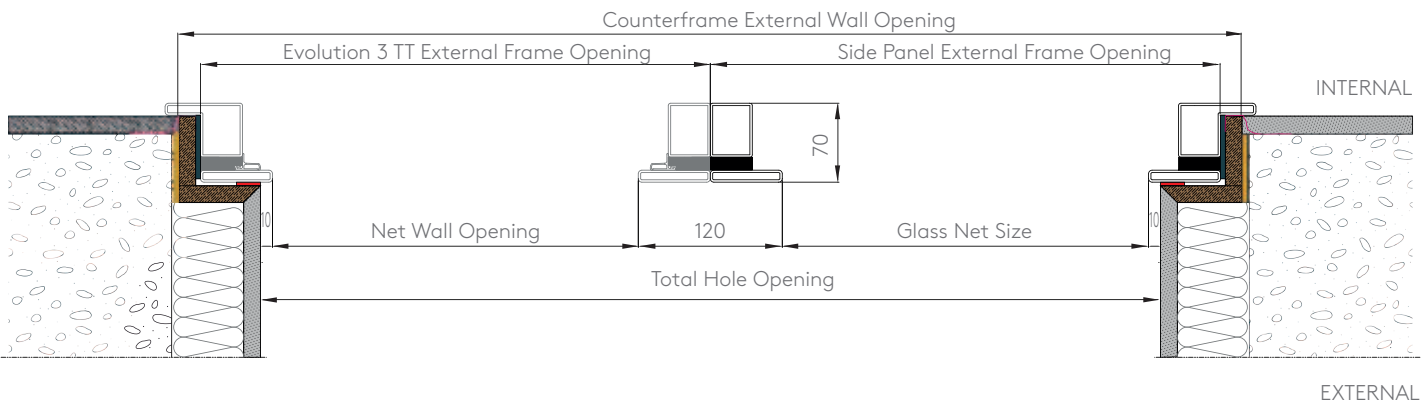
# Single side panel 3TT



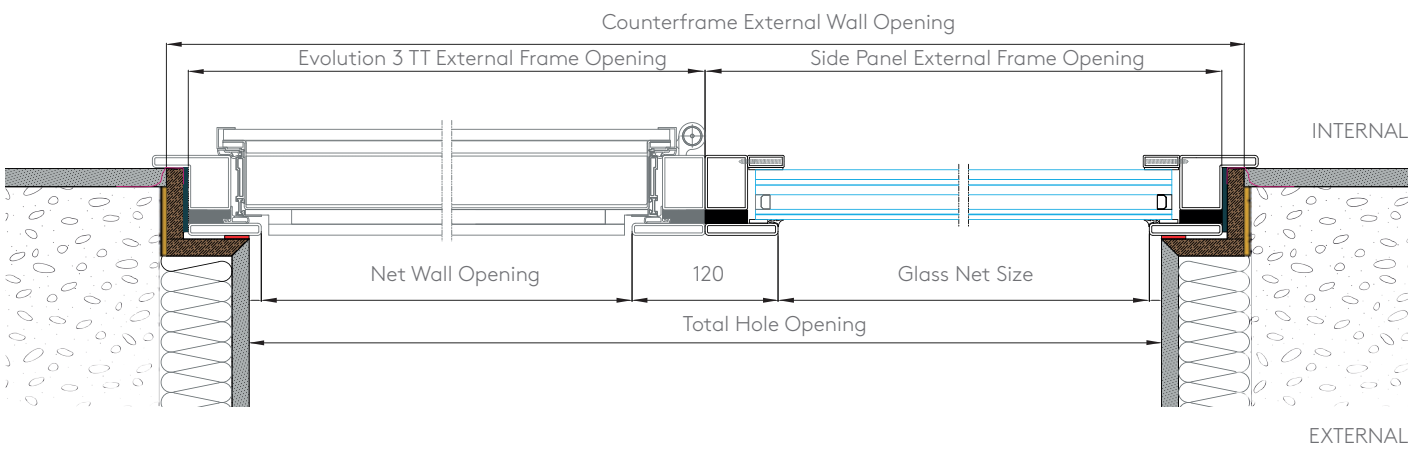
External view



INTERNAL EXTERNAL



INTERNAL EXTERNAL

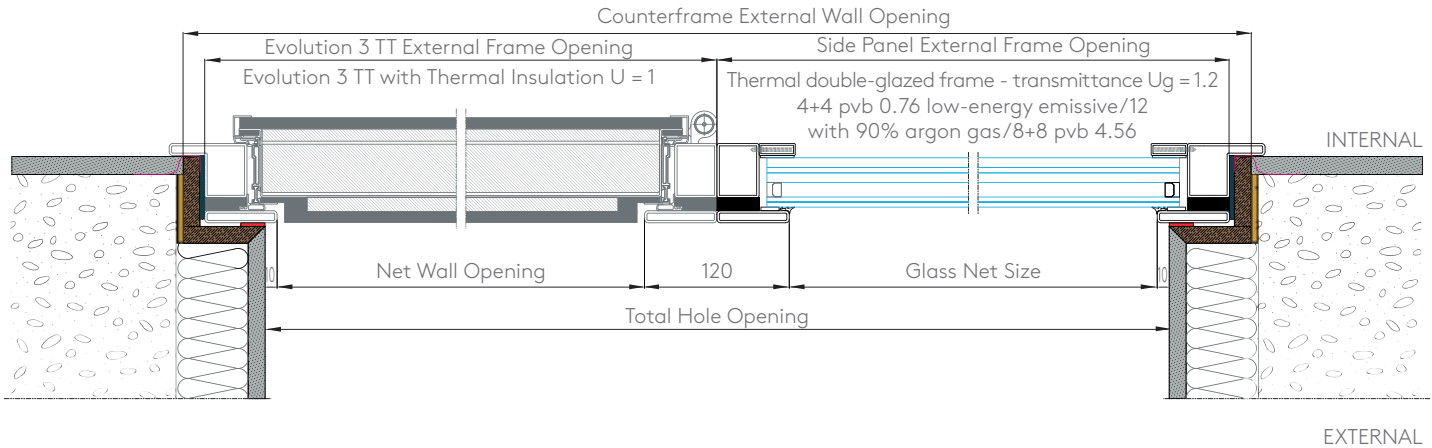


INTERNAL EXTERNAL

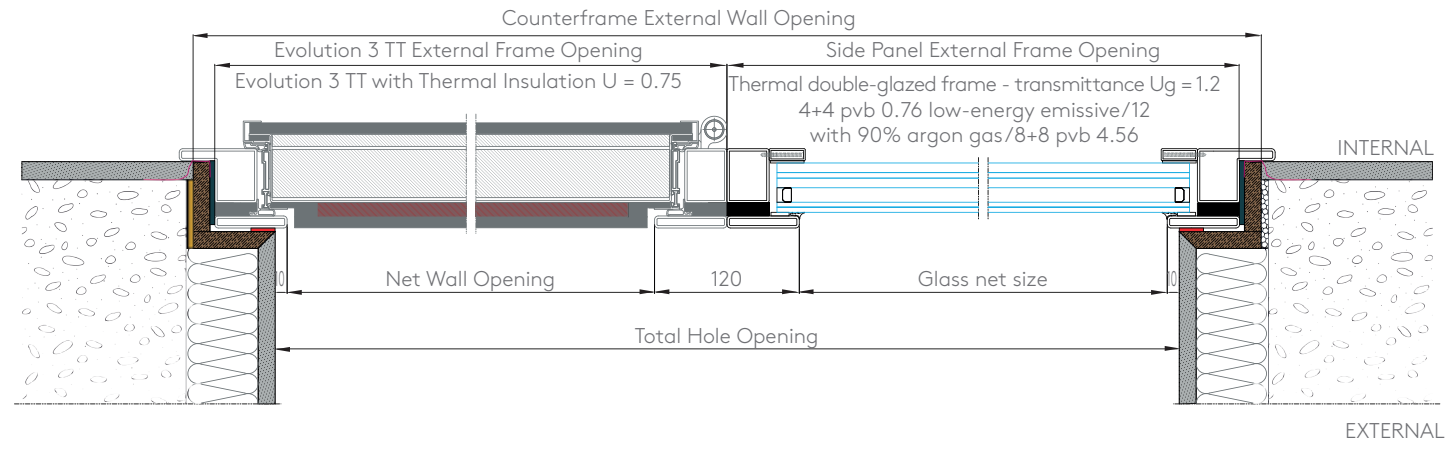


# 3TT Side panel

Side panel thermal insulation U = 1.4 (with EVOLUTION 3 TT U = 1)

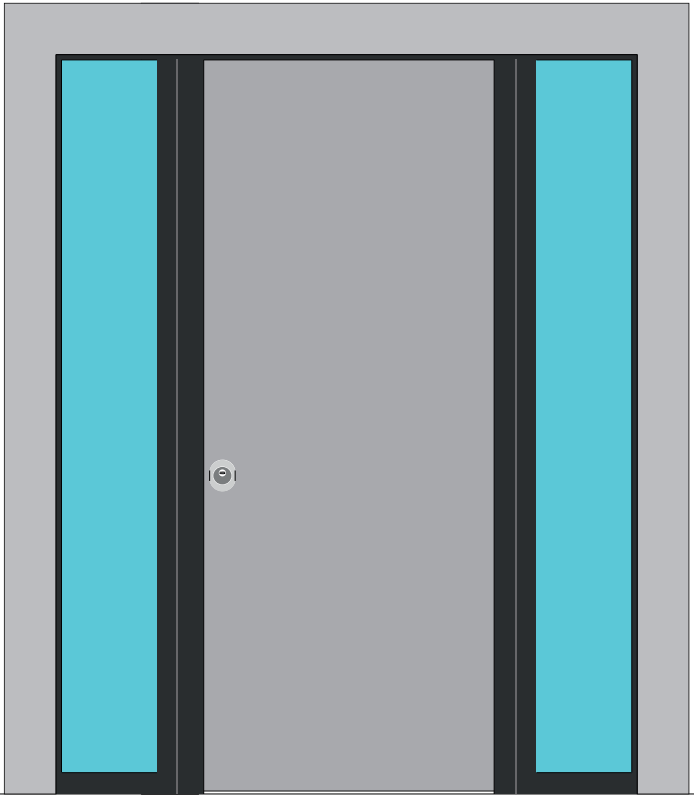


Side panel thermal insulation U = 1.2 (with EVOLUTION 3 TT U = 0.75)

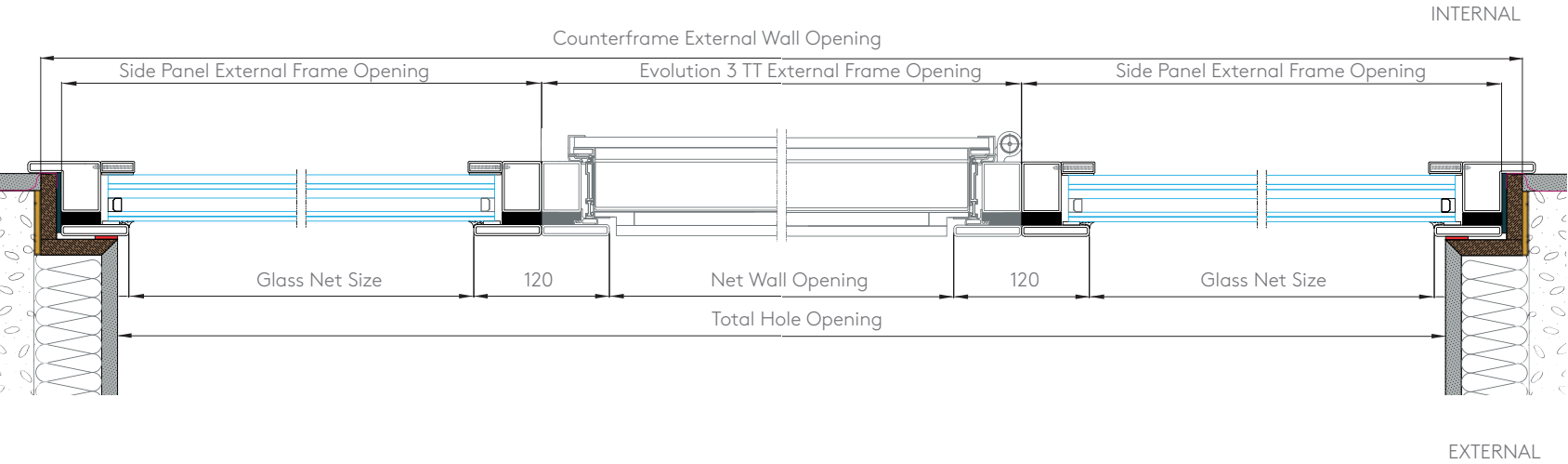
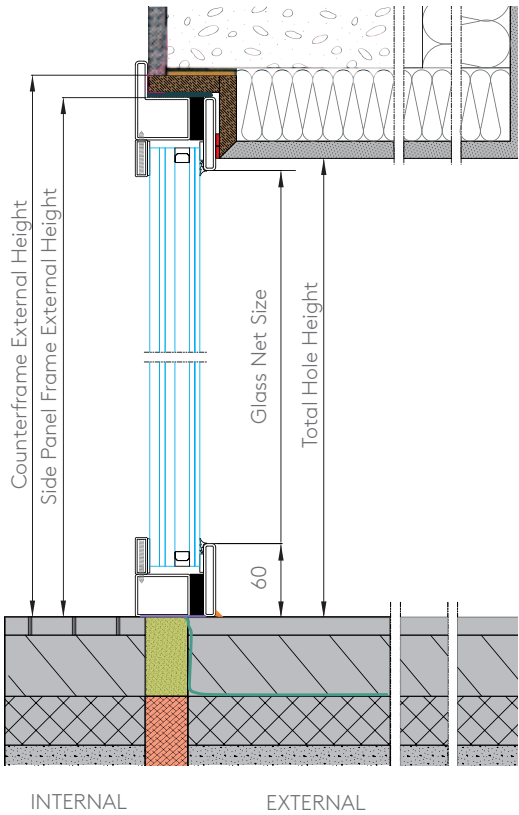


Caution: in the solution with pull door the heat barrier is not maintained

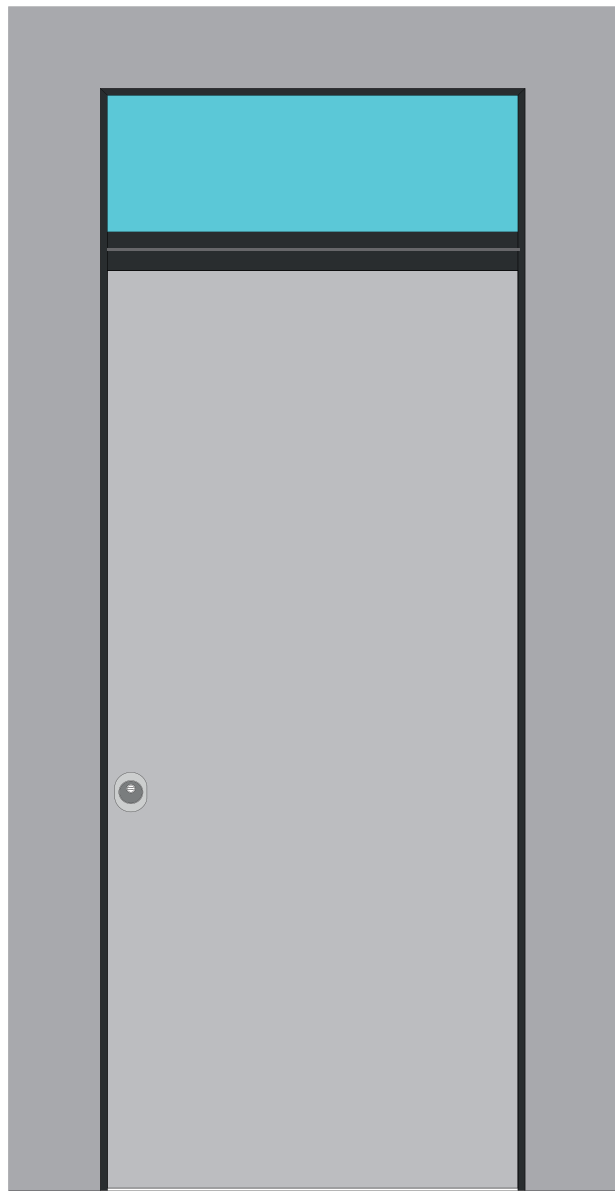
# Double side panel 3 TT



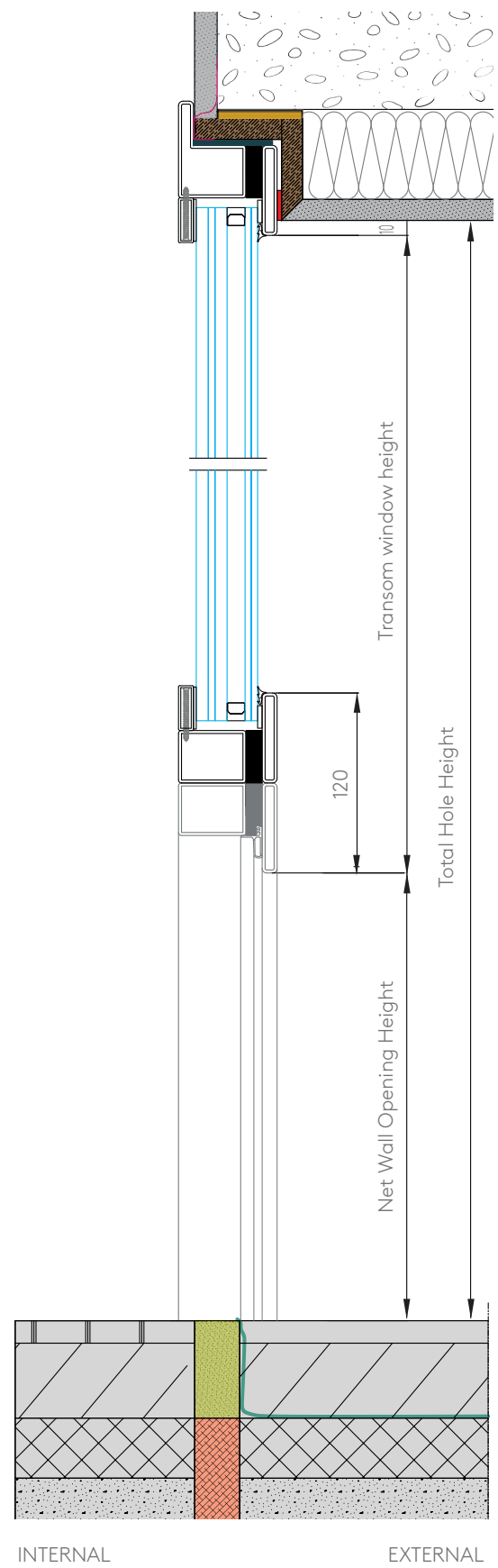
External view



# Evolution 3TT transom window



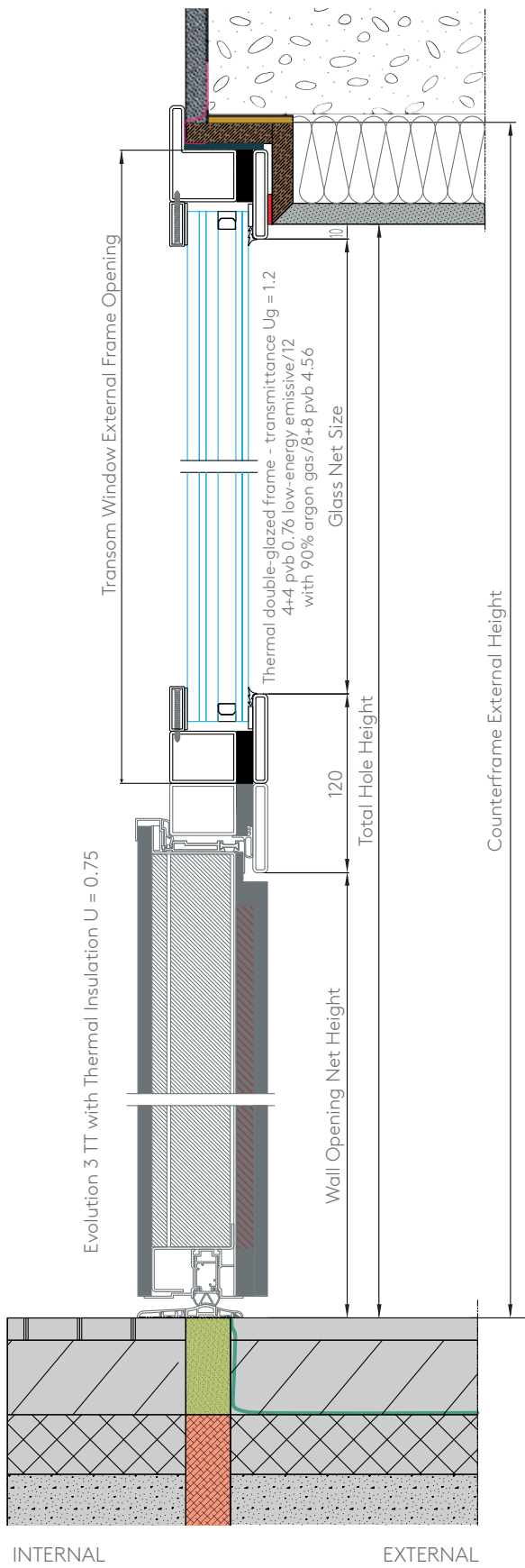
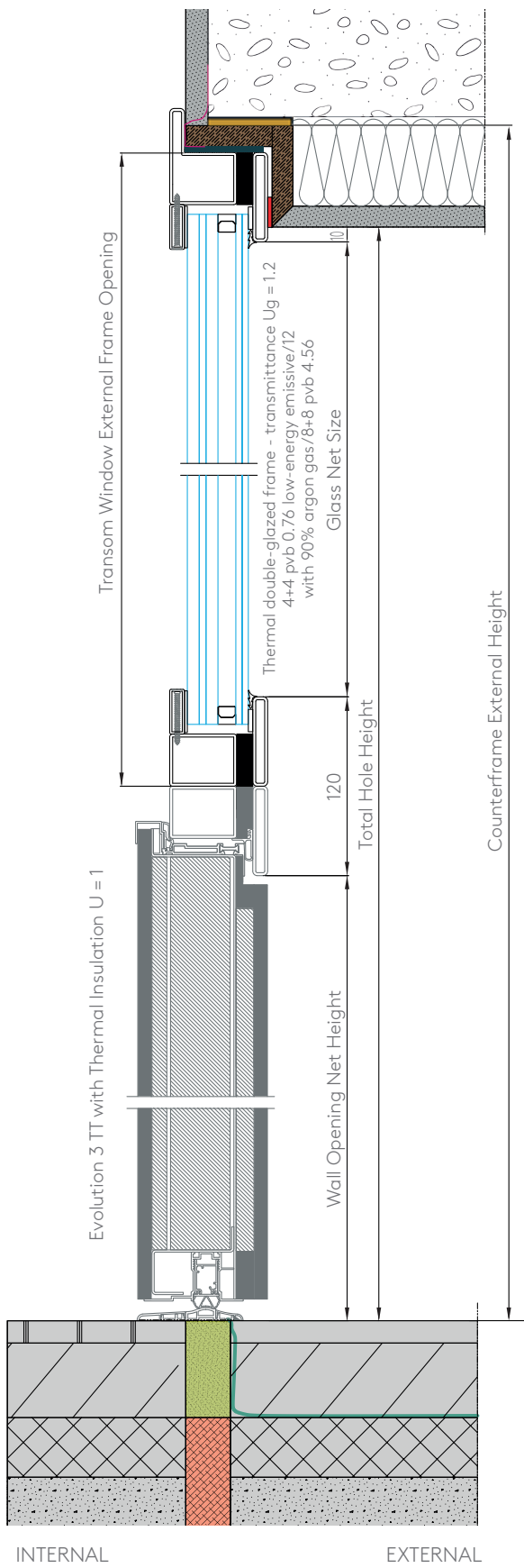
External view



# Evolution 3TT transom window

Transom window thermal insulation  $U = 1.3$   
(with EVOLUTION 3 TT  $U = 1$ )

Transom window thermal insulation  $U = 1.1$   
(with EVOLUTION 3 TT  $U = 0.75$ )





# Evolution 4

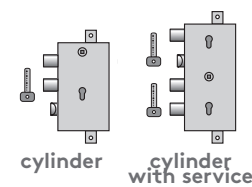
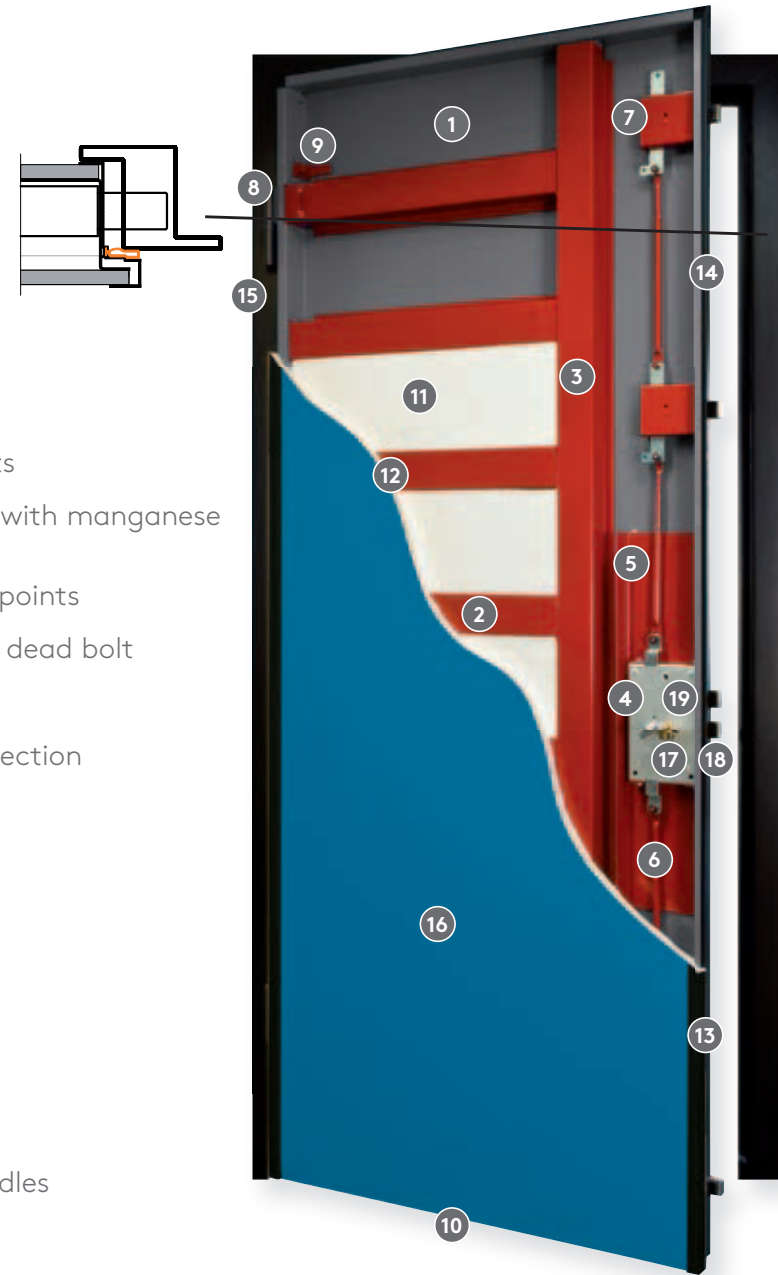
## Specifications

Safety door EVOLUTION 4: leaf in 15/10 New steel, with 7 horizontal reinforcing bars, 1 vertical reinforcing bar, 30/10 reinforced and shaped lock protection plate plus manganese insert, wrap aluminum frame profiles with perimeter rubber sealing strip, internal insulation, draught excluder, brass internal handle and external fixed knob, wide angle spy hole, 20/10 closed sector frame coated with polyester powders RAL 8022, 2 adjustable hinges, 3 side switchlocks, 3 fixed hinge bolts. Cylinder lock with PVD defender PLUS and additional anti-tear bushing. 20/10 counterframe in electro-galvanized sheet steel.

 Break-in resistance Class 4

 CE marking

- 1 Leaf tray
- 2 Horizontal reinforcing bar
- 3 Vertical reinforcing bar
- 4 Cylinder lock with ROND dead bolts
- 5 Lock protection and support plate with manganese and reinforcement blade insert
- 6 Lock connecting rods with closure points
- 7 Self-locking switchlock with ROND dead bolt
- 8 Two axis adjustable hinge
- 9 Tear-proof hinge bolt with bigger section
- 10 Draught excluder
- 11 Insulation
- 12 Heat barrier mat
- 13 Wrap aluminum frame profiles
- 14 Aluminum frame profiles
- 15 Closed hollow frame RAL 8022
- 16 Internal covering panel
- 17 Set of brass-plated knobs and handles
- 18 PVD brass defender plus
- 19 Tear-proof Defender reinforcement for Class 4





# Cylinder with knob



As standard on all cylinder version Oikos doors, the knob allows the lock to be operated from the inside without key, for a convenient everyday use. This guarantees a quick exit in case of emergency.

# PVD-treated defender



In all the cylinder versions, the barrel (defender) providing external protection to the cylinder has a manganese steel rotating ring. The defender and the brass finish mask are PVD treated.

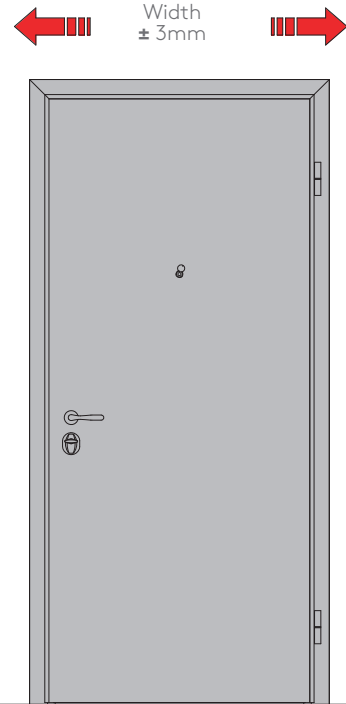
# Brass knobs and handles

All Oikos doors are equipped as standard with internal handle and external knob with polished brass finish; other finishes are always available upon request.



# Adjustable hinges

The special Oikos hinges, our exclusive design, allow easily adjusting the height and plumbing of the door using an Allen wrench in the event of settling, even after many years.



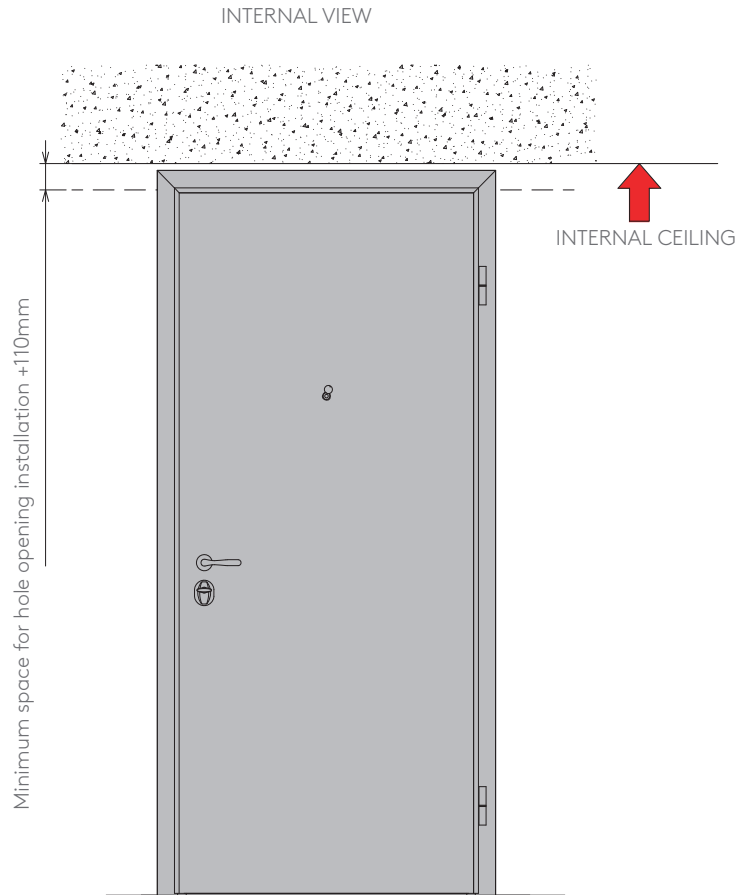


# Minimum height between door and ceiling

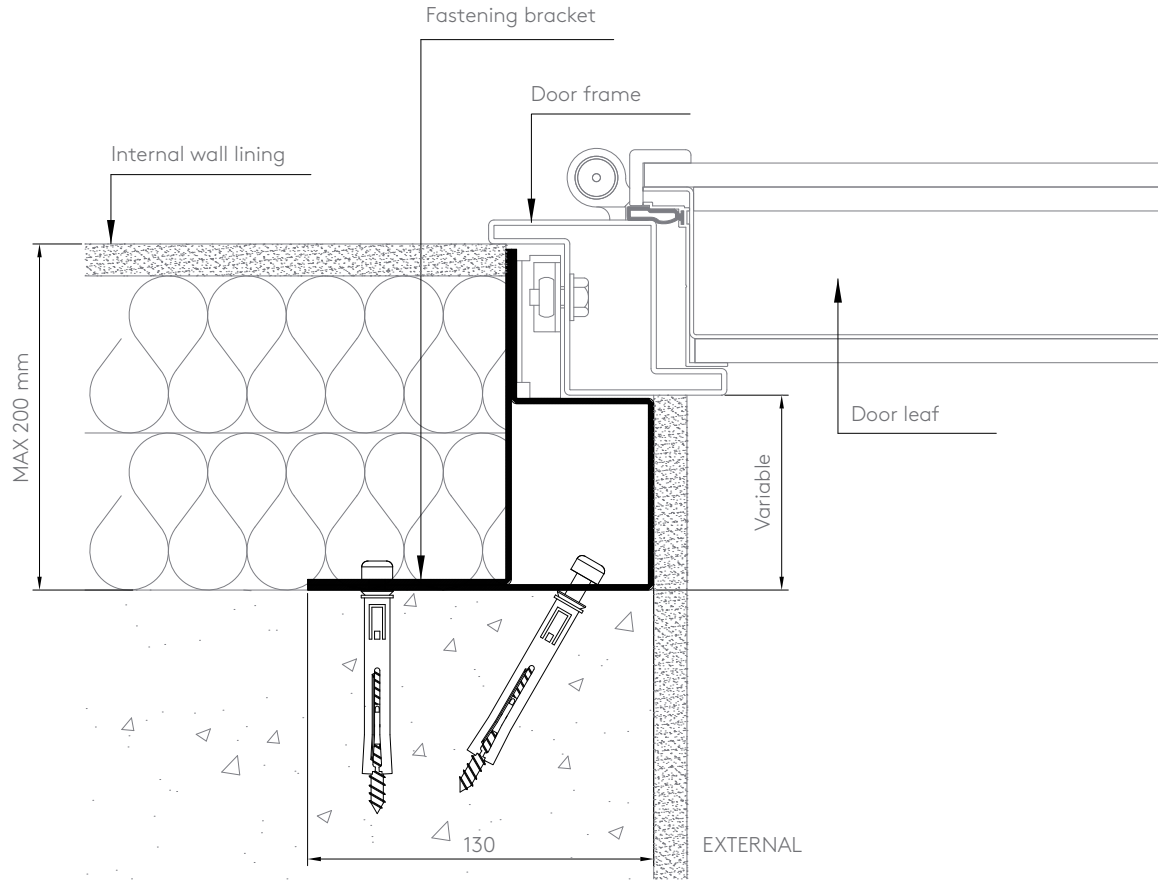
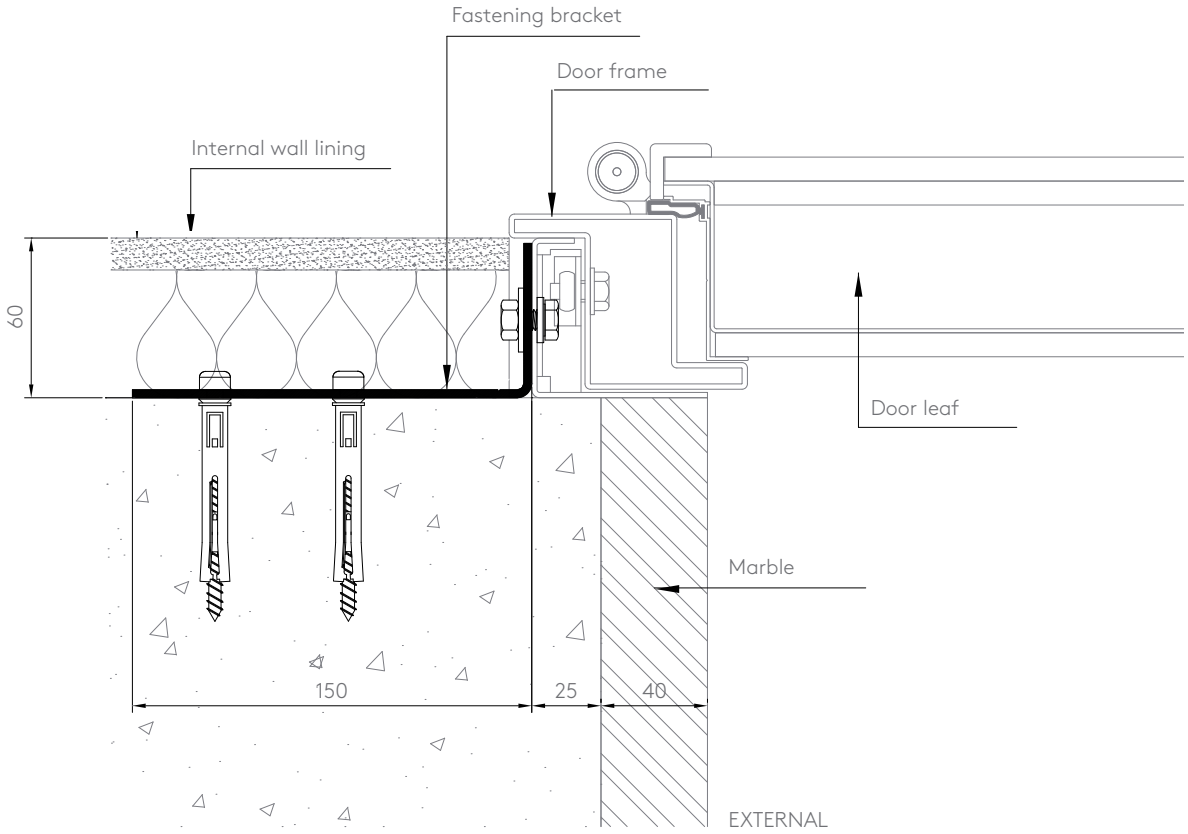
Minimal space for fitting between upper door edge and ceiling without removing hinges for installation. In this situation it is necessary, at the moment of the order, to ask to move the batteries pack because it will not be possible the eventual replacement of the batteries.



Minimum height

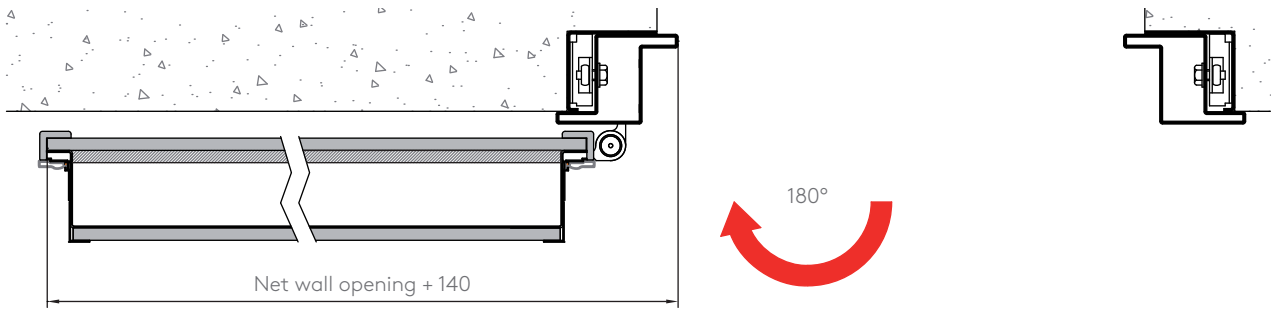


# Fastening bracket for wall linings

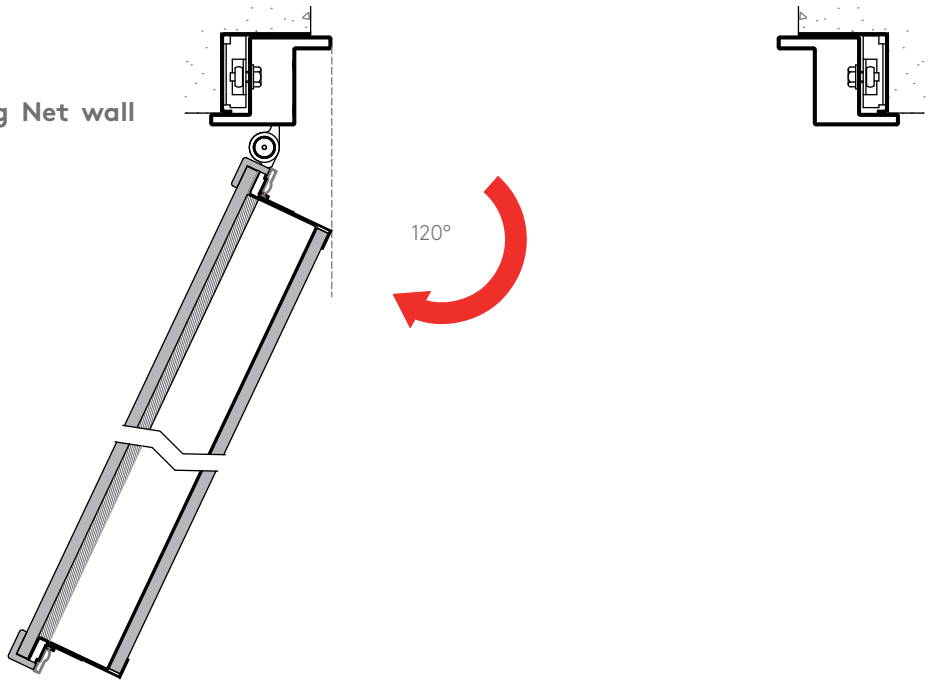


# Space requirement

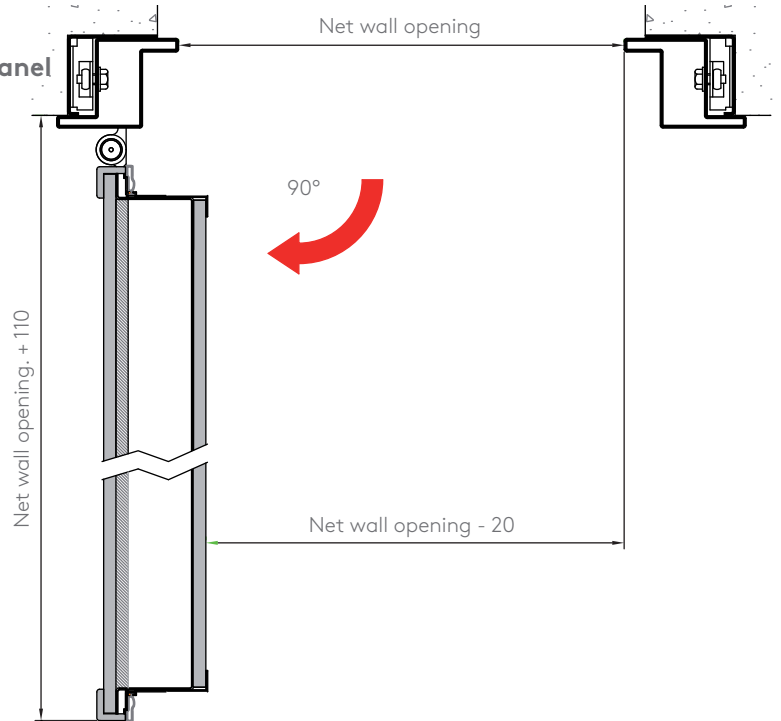
Maximum space requirement for single leaf door with 180° opening



Minimum opening degrees for keeping Net wall opening

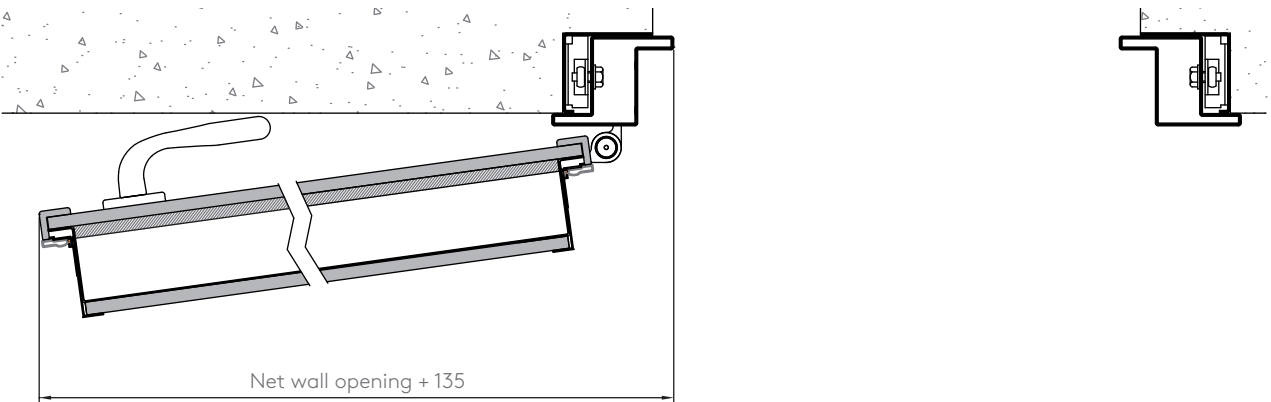


Maximum space requirement for single leaf door with 90° opening with 10 mm thick external panel

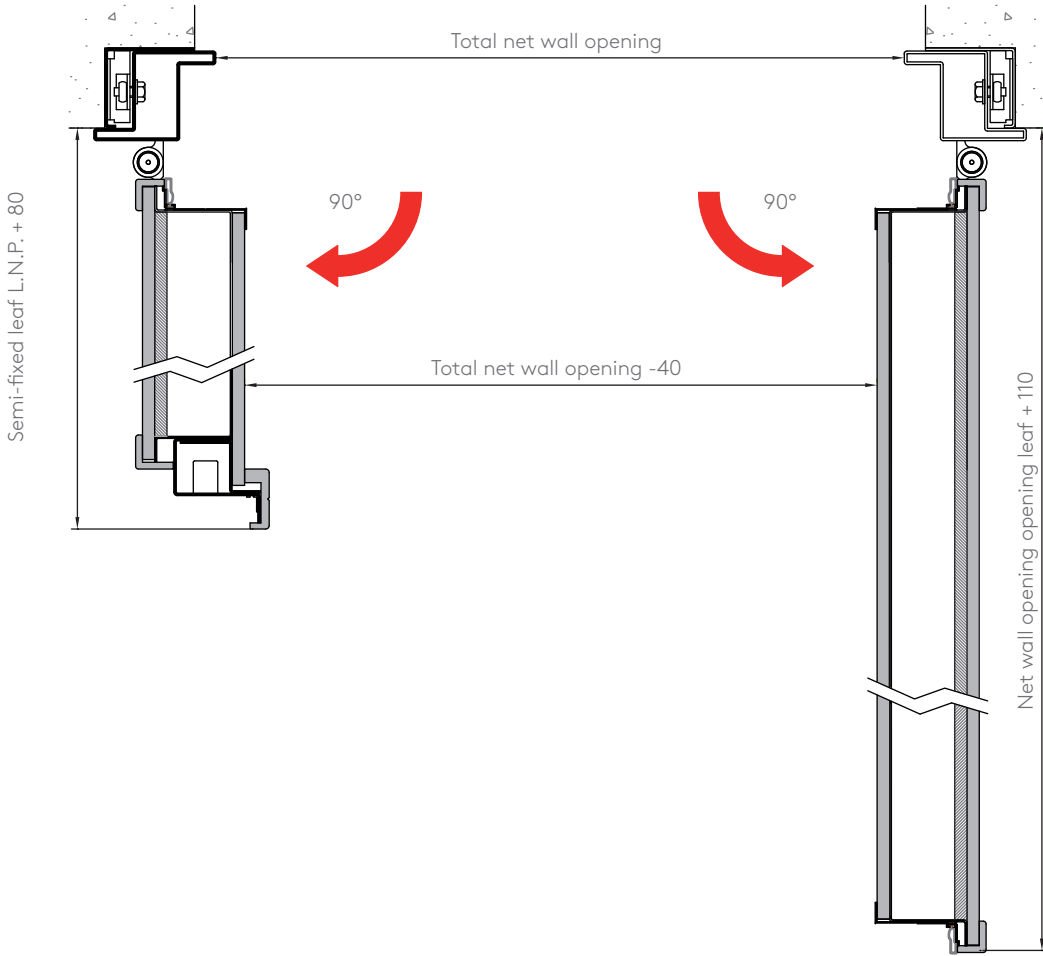


# Space requirement

Actual maximum opening for single leaf door with handle space requirement



Maximum space requirement for double leaf door with 90° opening with 10 mm thick external panel





**Dedicated to those who, instead of following already traced paths,  
create new ones never imagined before.**





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