



secco

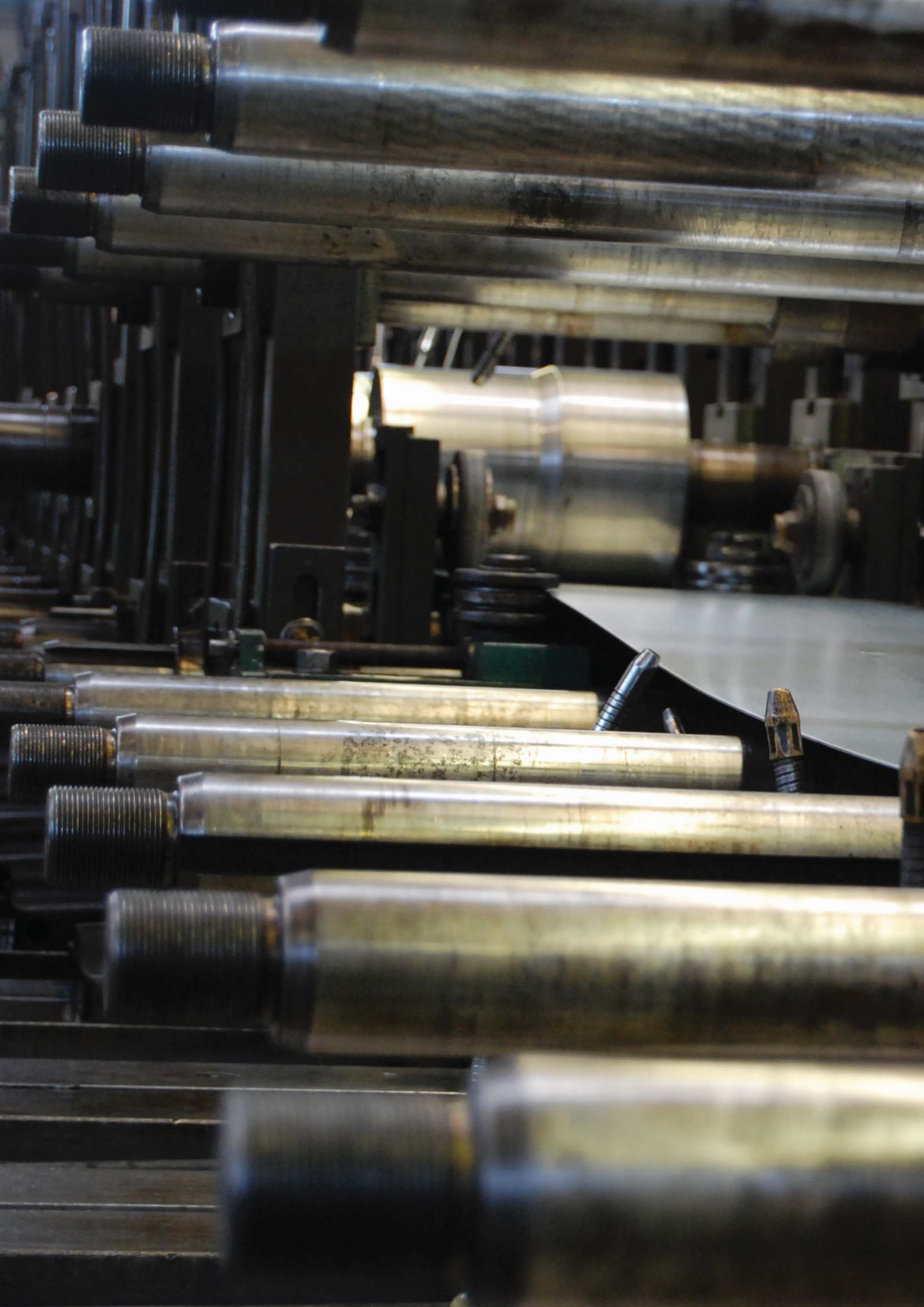


Secco Sistemi is an Italian trademark leader in the production of systems for doors, windows and facades in galvanized steel, stainless steel corten steel and brass.

Every year, 2 million linear metres of profile bars are used to produce 200.000 doors and windows.

Secco Sistemi boasts 60 years of experience and constant commitment dedicated to achieve high quality and innovation for their products.









shaping steel

**offering solutions
in galvanized,
stainless,
corten steel
and brass with
higher technical
and functional
performance
meeting different
needs**

The use of metallic profiles to realise doors and windows starts in the mid-40s from bending technology, which only allowed the production of open sections. During the mid-50s Secco Industrie started manufacturing the first machines for continuous profiles production, equipped with a series of rollers that could generate tubular profiles thanks to a combined system of crimping and soldering. 60 years of constant and progressive technological development have made Secco Sistemi an established and consolidated company in the metal profiles sector for the building industry. They combine industrial tradition and technological innovation, turning them into an ongoing development of the over 100 profiles currently available in 4 different materials – galvanized steel, stainless steel, corten steel and brass – and in 8 different finishes. 2 million linear metres of profile bars producing 200,000 doors and windows, on a yearly basis, are the best testimonial of the energy of a company that knows how to meet in advance the technical and functional performance demands of an ever more demanding market, also anticipating the changes in the architectural trends.



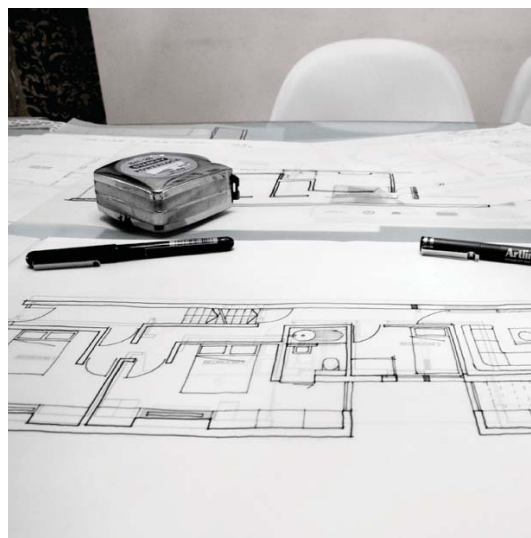


designing with steel

Secco Sistemi supports the designer not only as a proponent of modern technologies for doors and windows, but also - and above all - as a competent interlocutor ready to suggest any tailored solutions that can enhance the spirit of each specific plan.

This is a personal service, devised by the company and provided to the designer with the aim to understand the various design issues and at the same time setting out and providing all the possible alternatives in terms of materials and systems. The wide range of products, tested and certified by the best European labs, meets the most diverse needs in terms of performance, energy efficiency, safety, design and living comfort, always in compliance with the current regulations.

**design assistance
and support
to achieve
the best solutions
for living comfort
and energy
efficiency**





building with steel

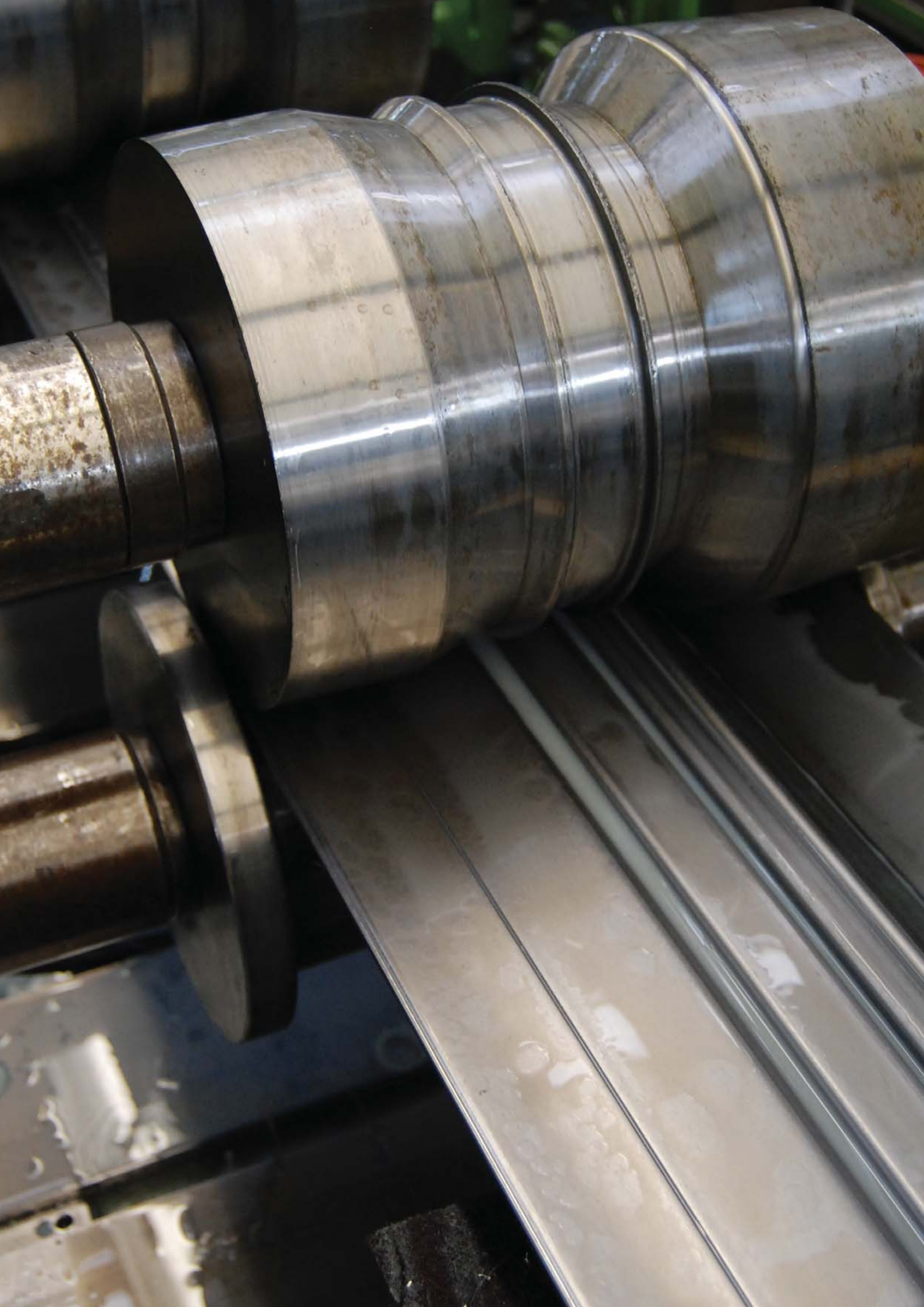
**a network of more
than 500 selected
partners to shape
the final product
on a worldwide
basis and ensure
its quality**

The final aim of Secco Sistemi is to provide the national and international market with high-level tailored solutions for the building industry. This is possible thanks to a consolidated network of more than 500 partners with great experience and proven professionalism.

Specialised and qualified staff from the Secco Sistemi commercial and technical departments follow the training activity of their partners and work with them as a team in order to create, at the same time, a synergic flow of information and experiences aimed at the continuous improvement of the products.

This ongoing co-operation between the company and their partners is the main condition to provide both the designer and the final customer with high quality products that can meet the ever increasing demands by the market in term of formal appearance, performance efficiency, energy value and safety.





steel nature

For decades environmental issues and the protection of our planet have been the basis of companies' philosophy. Secco Sistemi and their partners have developed eco-friendly products with high thermal insulation and performance efficiency, thus contributing to minimise energy consumption.

Secco Sistemi carefully evaluates the environmental impact of their products, starting from the use of raw materials to the final disposal stage, through the optimisation of the technical-functional features and the use of their final products.

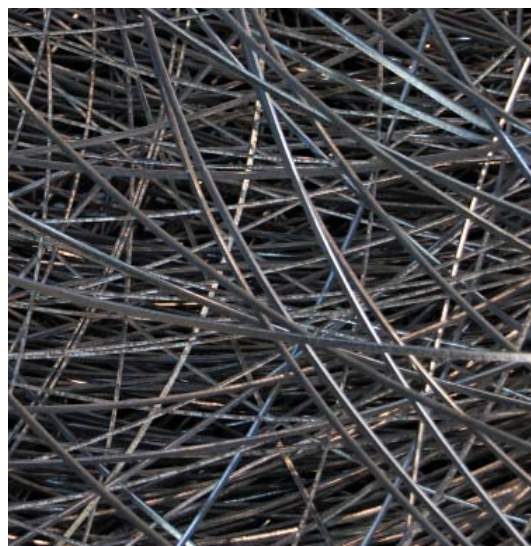
This vision drives the company to design, produce and offer systems created with materials of the highest level: completely natural, eco-friendly, long lasting and with a reduced need for maintenance.

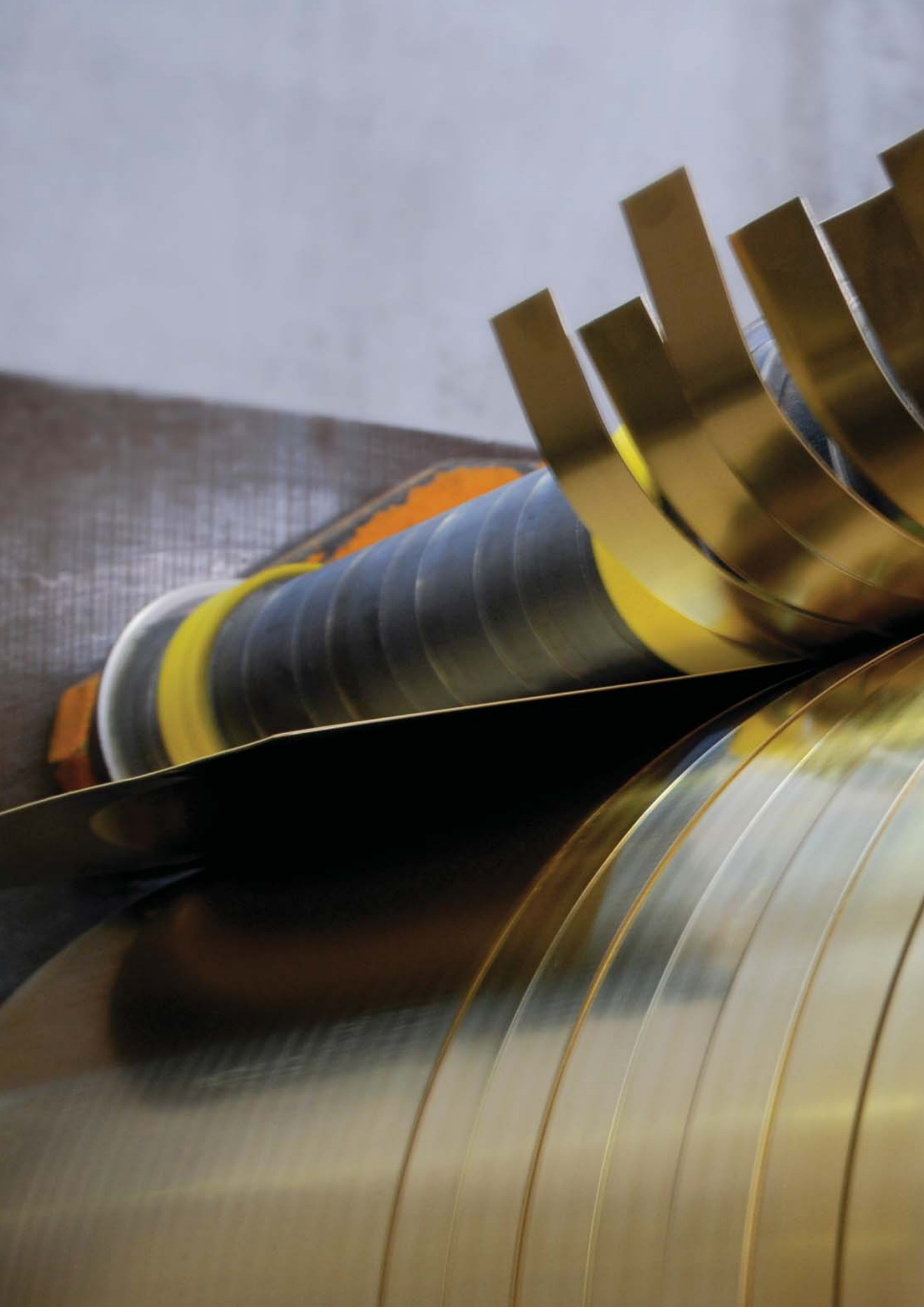
The constant commitment to a safe work environment and the desire to carefully respect the anti-pollution regulations are also part of the company's values.

The territory is protected through monitoring systems that allow the identification and timely removal of any possible environmental damage from any processing or treatments.



**technology and
quality for the
environment:
raw material with
low environmental
impact generate
products for a
sustainable
building industry**









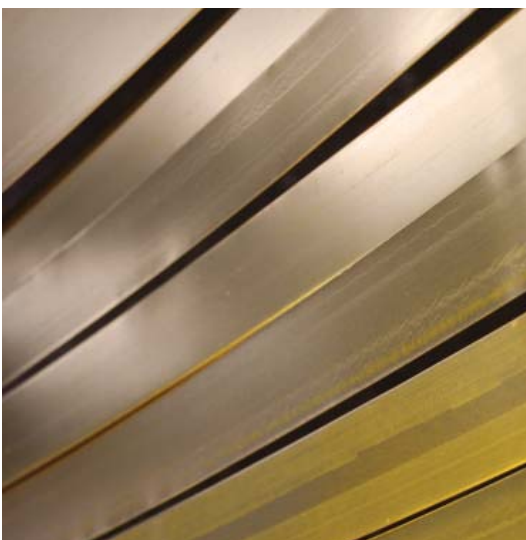
choosing steel

an extensive
experience
and a profound
knowledge
of the different
steel qualities
for a better offer

The designer faces a great number of different aspects while choosing, time after time, the most appropriate material to use. One of these aspects is the achievement of a synergy between the material used and the required stylistic and functional features of the building together with the choice of a material that can strongly and consistently define a project.

Secco Sistemi primarily aims to provide the designer with all the necessary information that will allow him/her to choose the most convenient, innovative and rational solution among the wide range of systems and materials available. The 4 materials available, in their different finishes and use, all have similar features: antique or historical origins, natural, safe, elegant, technological, eco-friendly and are appreciated for their structural resistance, long life and minimal need for maintenance. For what concerns the cost of the materials, painted steel occupies the lower end of the range, followed by corten steel, stainless steel and finally burnished brass.

Secco Sistemi offers its co-operation to designers from the very beginning of the project and to their partner in the following set up stage, supporting both with a specific consulting activity aimed at optimising the use of the chosen material.



galvanized steel

the strength
of steel
joined with
an infinite range
of different
colours:
a specific
solution
for every
design need

The use of steel doors and windows has antique production origins, but it has significantly developed only in the second half of the 19th century thanks to the industrial revolution. The Bauhaus movement finally consecrated steel as an indispensable architectural component during the 20s and 30s, giving it authority and dignity.

In the second half of the 50s, the development of cold profiling contributed to the evolution of the simple L, T and Z shaped profiles by enriching the product range with more complex shapes that could meet the ever growing market demand for innovative systems, particularly for doors and windows with thermal break.

Secco Sistemi uses a specific steel alloy, the FeP02 with a GZ200 hot zinc coating (equivalent to 200 gr/sqm on both sides) that can protect the profile from oxidation both on the inside and outside face. The subsequent finishing process, called skin-passing, allows a better paint grip thanks to polyester powders cooked at 180° and supplied in a wide range of colours available in polished, semi-polished, or sablè finishing. The technical-physical features of the steel allow the realisation of profiles with small sections and subsequent lower visual impact and increased indoor brightness.



Some important features of galvanized steel are: an elastic modulus 3 times higher and thermal conductivity 4 times lower than aluminium alloys.

stainless steel

the inalterability
of the surface
through the
years makes
stainless steel
the ideal solution
in difficult
environments

The advent of stainless steel, an alloy made with iron, chrome, nickel and molybdenum that have the property of protecting the surfaces of material from corrosion, dates back to the beginning of the 20th century. During the years, stainless steel has undergone continuous technical improvements, thus universally becoming famous for its inalterability and high durability.

The different alloys produced during the last decades are now able to provide the designers with a range of products that meet the needs resulting from their use in aggressive environments. For the production of their profiles, Secco Sistemi uses the AISI 304 and AISI 316L stainless steel, depending on the environment they need to be fitted in: AISI 304 stainless steel - more currently used and provided in a satin or polished finish - is mainly used in not so aggressive environments; AISI 316L stainless steel - provided in scotch-brite or polished finish - is mainly used in marine environments.

The physical features of these alloys allow for small sections, with subsequent lower visual impact and increased indoors brightness and they guarantee an unlimited life and a minimal maintenance. Its reduced thermal conductivity, moreover, makes stainless steel suitable for the realisation of doors and windows with thermal break with a low transmittance value.



Stainless steel is characterised by a thermal conductivity 10 times lower than aluminium and by its extremely high resistance to corrosion.

corten steel

a material with high aesthetic value that turns the final product into a unique and exclusive specimen

Corten steel is a high-resistance self-passivating alloy containing copper, chrome and phosphorus, characterised by a high resistance to corrosion and to tensile yield; these alloys are self-protective through the formation of a superficial coating that prevents the progressive extending of the corrosion process.

The natural oxidation process, when in contact with air, can be accelerated through appropriate oxidising baths.

Thanks to this process, the resulting material will have a porous surface and unique colour features with warm shades of brown and orange, providing it with an antique feel.

The advent of corten dates back to the mid 30s and it was used mainly for heavy construction and sculptures. Secco Sistemi, thanks to their innovative and technological vocation, was the first one to use this material for doors and windows, producing profiles with physical and aesthetic features particularly appreciated in the architectural world.

The high mechanical resistance values of this alloy allow for small sections and therefore with a lower visual impact and higher indoor brightness while, at the same time, making it possible to realise large and heavy doors and windows with excellent performance.



This material has a double structural resistance compared to traditional steel and a resistance to corrosion 6 or 8 times higher.

brass

the high
resistance
to corrosion,
typical of OT67
alloy, meets
with the high
aesthetic value
of bronze for
prestigious
architectural
solutions

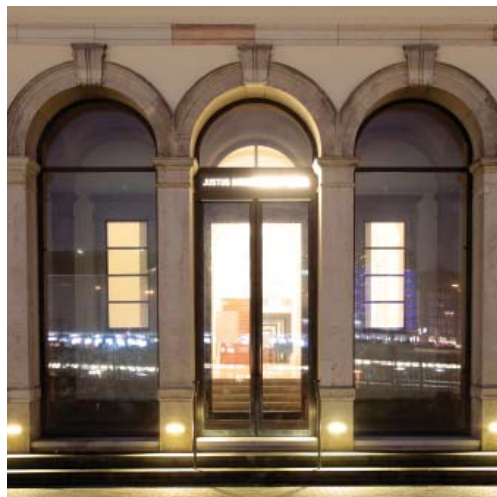
This copper-zinc alloy – known since the 1st century – can be dated back, in its current version, to the 17th century. Its typical feature is to naturally oxidise when in contact with air, while keeping unchanged its physical features, to obtain that particular antique bronze finishing that makes it ideal for prestigious refurbishment of historical buildings and for new, high-level buildings with a look that joins elegance with tradition.

For the production of their profiles, Secco Sistemi uses OT67 alloy in which a high percentage of copper (67%) determines the high resistance to corrosion, while the remaining percentage of zinc (33%) improves its mechanical properties, such as hardness and tensile strength.

Secco Sistemi has developed a particular treatment (burnishing) for this alloy that accelerates its natural oxidation process.

This is not only a colouring process; it's mainly a natural chemical protection process that doesn't affect the characteristics of the metal but it increases its resistance to corrosion. Thanks to this, the alloy requires less maintenance and displays a variety of warm and elegant colour shades that recall the old bronze metal and make the final product unique and exclusive.

The self-protection generated by the natural oxidation process makes the final product ideal for difficult environments such as the marine environments. The technical-physical features of OT67 alloy allow the realisation of profiles with small sections, with a subsequent lower visual impact and higher indoor brightness.



The prestige of this alloy is due to its look and high resistance to corrosion, which make it the ideal material for high-level architecture.

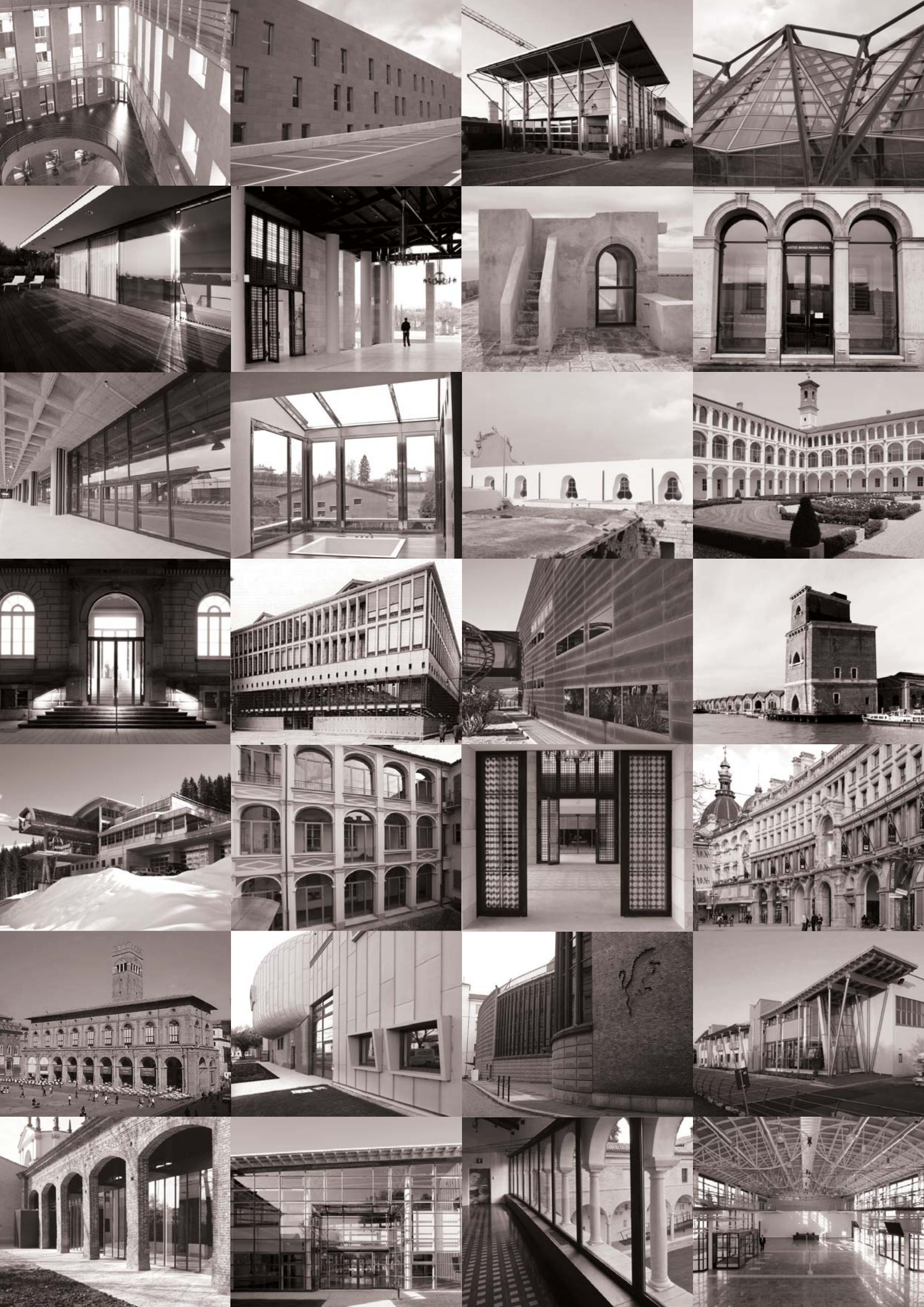


Aldo Rossi, BBPR, Carlo Mollino, Giò Ponti,
Carlo Scarpa, Gino Valle, Giovanni Muzio,
Giancarlo De Carlo, Marco Zanuso,
Giovanni Michelucci, Ignazio Gardella,
Lucio Passarelli, Melchiorre Bega,
Nizzoli Associati, Pier Luigi Nervi,
Pierluigi Spadolini, Tommaso Valle,
Vico Magistretti, Vittoriano Viganò...

**Secco Sistemi has worked with
the masters of Italian architecture
and continues to co-operate with
the most qualified contemporary
architects in search for innovation
and sustainable quality**







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OS2

an innovative door
and window frame
system with minimal
bulk for sustainable
architecture

OS2 system has been studied, designed and made by Secco Sistemi in order to provide historical and monumental buildings with door and window frames that could visually recall those used from mid 19th to mid 20th century (the typical iron windows). Thanks to its smaller sections and the use of materials like stainless steel, **OS2** system is perfect for the need of contemporary architecture.

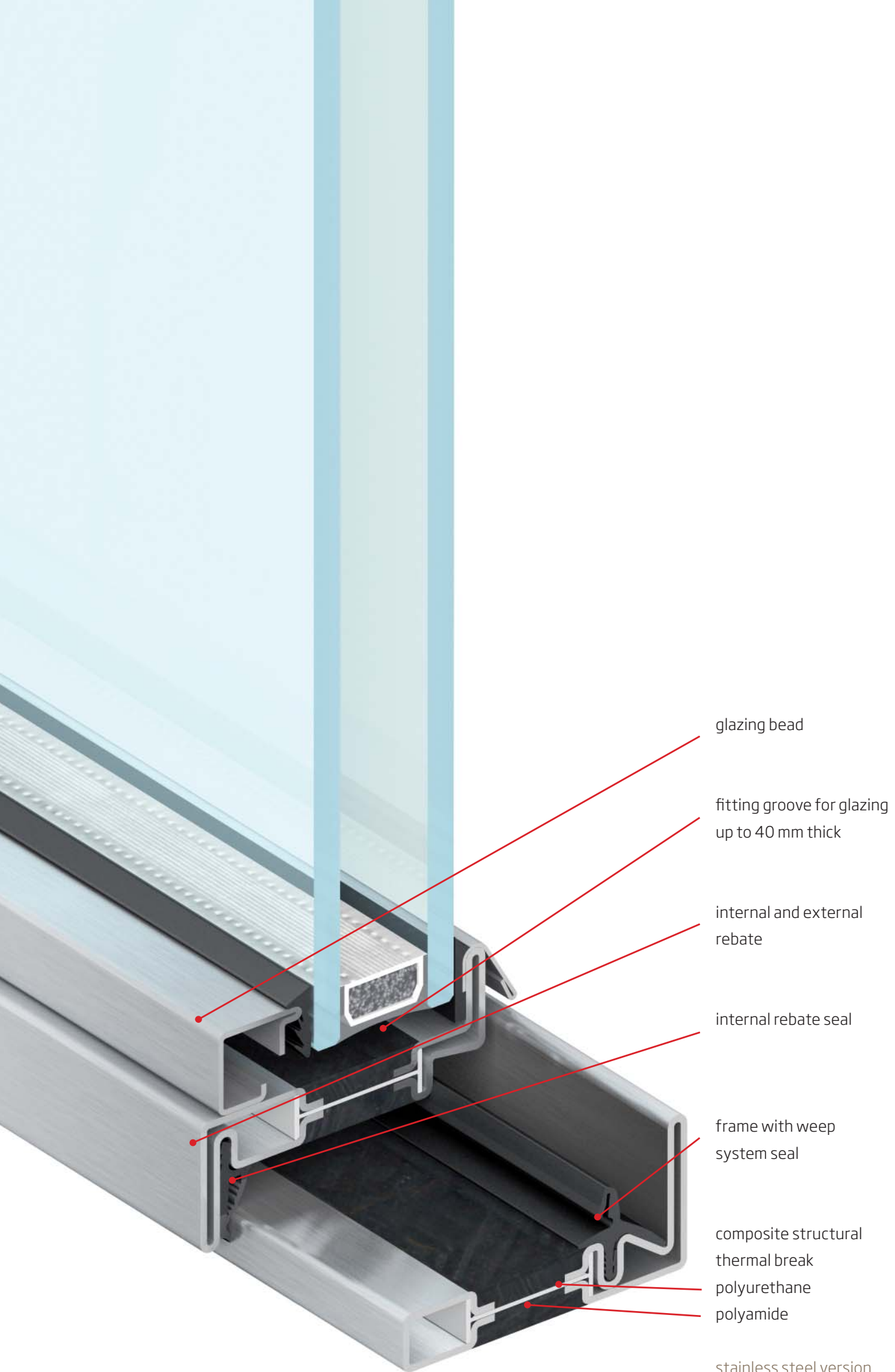
OS2 system combines in one product the need to integrate those architectural aspects and to meet current regulations in terms of energy saving, living comfort and sustainability of products and processes used.

OS2 system is equipped with a 47 mm lateral and a 62 mm central section, made with thermal break profiles - integrated with a complete range of system accessories - allowing for a wide range of openings.



areas of application

- doors
- windows



glazing bead

fitting groove for glazing
up to 40 mm thick

internal and external
rebate

internal rebate seal

frame with weep
system seal

composite structural
thermal break
polyurethane
polyamide

stainless steel version

windows
and doors with
thermal break

facade
and cladding

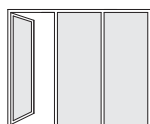
safe and fireproof
windows
and doors

steel
windows
and doors

OS2

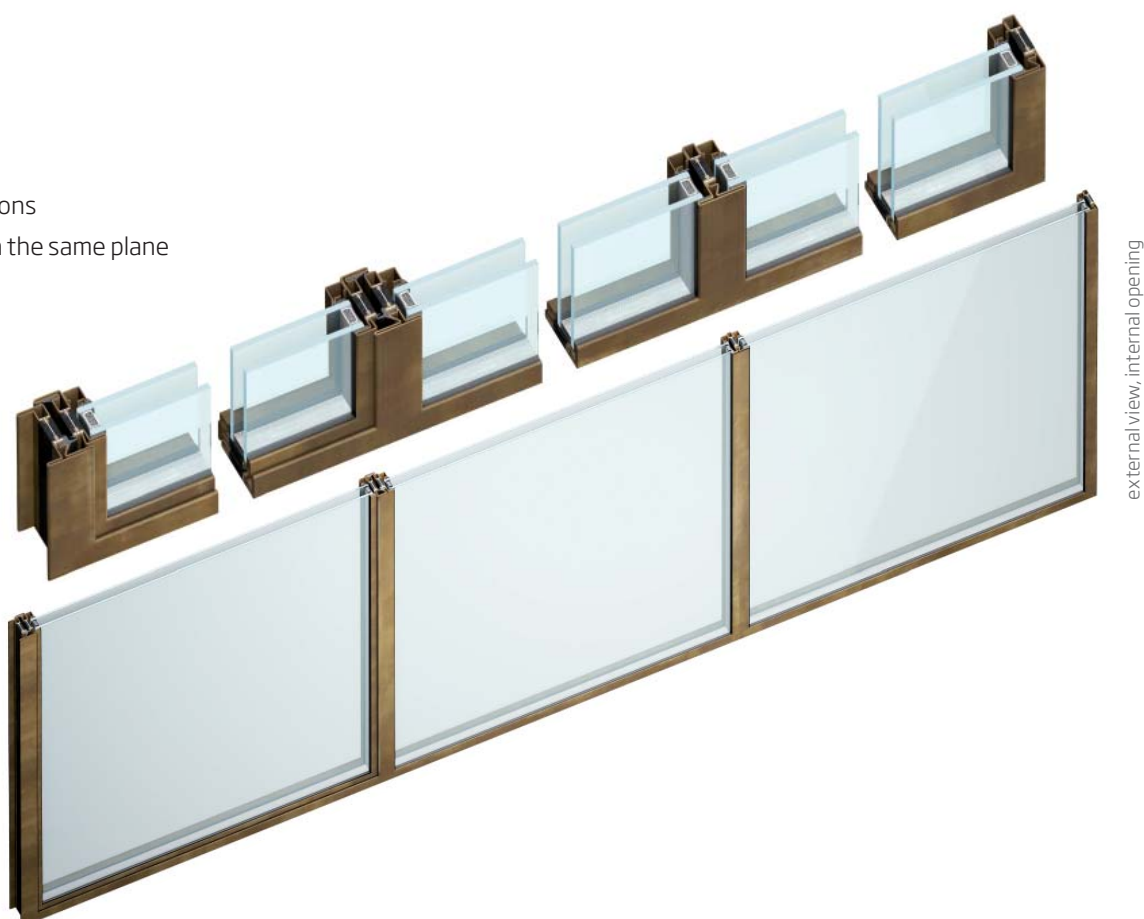
for the designer:
a flexible system that
guarantees the best
solution for the facade

OS2 is an extremely simple, ample and flexible system for the designer that cares for details. It encompasses 37 different profiles and three sub-systems and thus allows for an accurate design of the facade of the building through the articulate use of the shadows of its openings. The glass windows become integral part of the architecture, with their choice of flush or non-flush windows and visible or invisible openings. **OS2** uses minimised sections with profiles ranging from 27 to 62 mm.

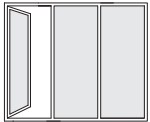


47/62 mm

reduced sections
glazing not on the same plane
visible leaf



external view, internal opening



42/62 mm

reduced sections
glazing on the same plane
visible leaf



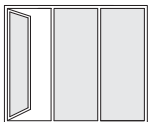
external view, internal opening

windows
and doors with
thermal break

facade
and cladding

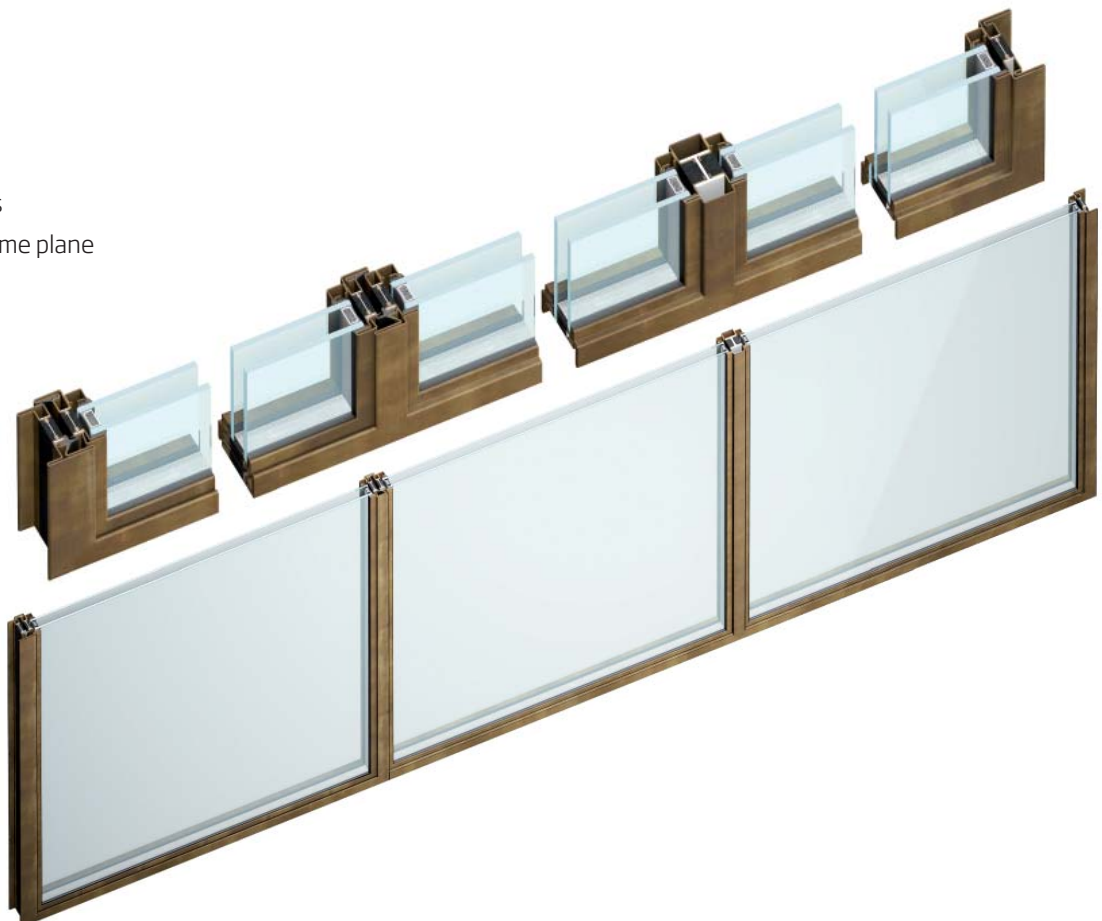
safe and fireproof
windows
and doors

steel
windows
and doors



62/62 mm

reduced sections
glazing on the same plane
non visible leaf

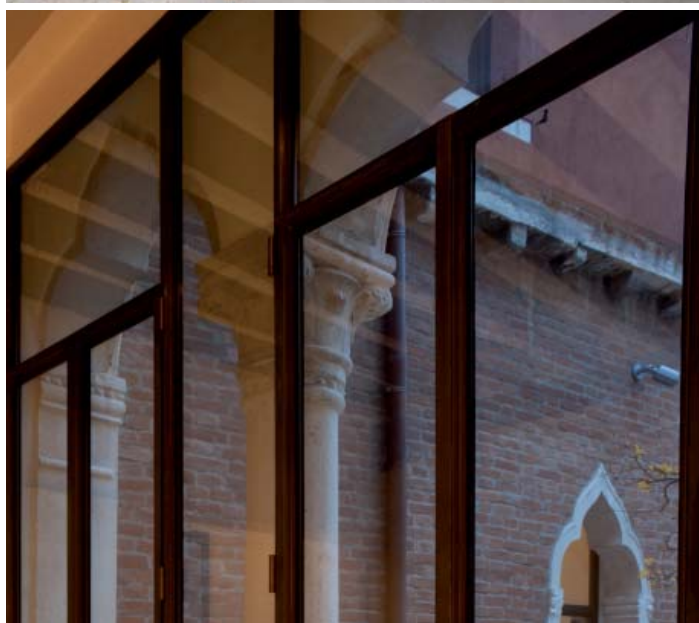
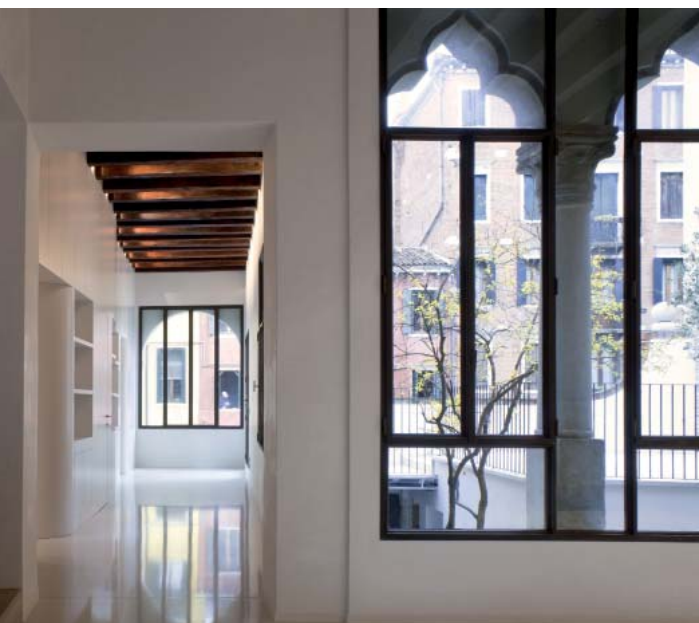


external view, internal opening

13th century palace | Venice

The palace is located in Dorsoduro, Venice, and it's made of two overlapping rooms plus yard representing a typical example of minor architecture of the 13th century. The restoration and redevelopment project was mainly aimed at the layout of the building, in order to ensure an articulated yet easy and modern usage of it.

The restoration works have occurred at different stages but were still closely linked one to another: the architectural and artistic restoration of the valuable finishes, on one side, and the functional adaptation of the spaces, on the other. With this view in mind, the stairs were reshaped as an overall vertical link unit to enhance the spacial "feeling".



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

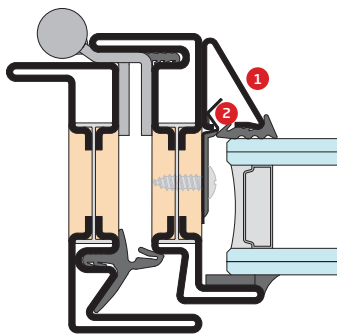
steel
windows
and doors

The important architectural context has required a particular care in the choice of the finishes and accessories. It was decided to follow the local building tradition (use of the stone, seamless floors, Venetian plaster, metal) while respecting the current building and

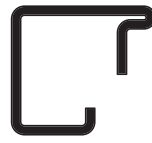
fitting innovations. OT67 burnished brass OS2 door and window frame system was chosen. This particular system, in fact, combines the slenderness of its profiles with the elegance and sturdiness of the material. On top of this, it fits perfectly into the Venetian historical and unique setting.

OS2

for the designer:
different types
of glazing beads
for a wide choice
of details

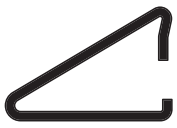


- 1. glazing bead
- 2. glazing bead mounting clips

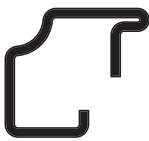


straight square glazing bead





triangular glazing bead



rounded square glazing bead



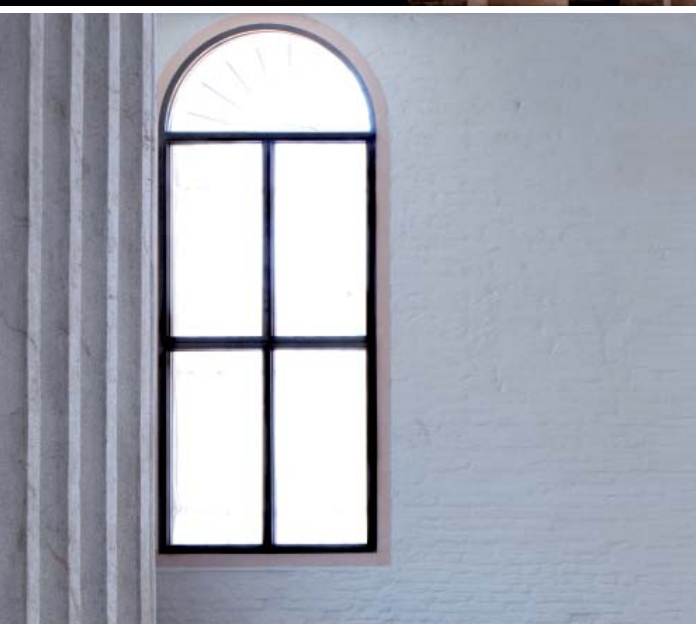
windows and doors with thermal break
facade and cladding
safe and fireproof windows and doors
steel windows and doors

Gallerie Dell'Accademia | Venice



The monumental complex of the Gallerie Dell'Accademia stands in the site once occupied by the big complex formed by the church of Santa Maria della Carità, the nunnery of Canonici Lateranensi and the Scuola Grande di Santa Maria Della Carità.

From the 16th century until the second half of the 1940s, several architects worked on the complex of the Gallerie: Palladio, Gianantonio, Selva, up to Carlo Scarpa who was in charge of an important, although partial, recovery intervention.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

The renovation aimed at expanding the space for exhibitions in the vast and articulated museum and it has required a delicate yet significant intervention by the designer under the strict and competent supervision of the Soprintendenza ai Beni Architettonici (Superintendence for Architectural Heritage). The requirements for door and window frames were very precise: minimal visual impact, high thermal and acoustic performance, low

maintenance and, finally, the use of a material that would fit with the architectural context. For this reason, OS2 door and window frames in burnished brass were used. These not only fully meet the initial restoration requirements but also have a high resistance to corrosion, which is a vital requirement in a difficult and aggressive marine environment like the one in Venice.

OS2 window inward opening

system and performance



OS2 inward opening window is an integrated system with accessories, seals and thermal break profiles 65 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with double glazing up to 40 mm thick. Each solution is equipped with a related set of accessories integrated in the system.



The sealing of the door and window frames is guaranteed by a weep system with central sealing gasket and internal rebate seal. The performance of OS2 thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	4
wind resistance - frame bending	C
water tightness	8A
acoustic performance (with R_w per IGU 42dB)	43 (-1;-4) dB
thermal transmittance (with U_g glass 1.0 W/m ² K)	1,60 W/m ² K
air permeability	4

maximum achievable performance

size and variations



lower section | frame section 47 mm



lateral section | frame section 47 mm



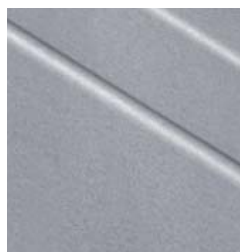
central section | frame section 62 mm



muntin | frame section 36 mm

OS2 is a rebated system with 47 mm face lateral sections and 62 mm central section. For frames with multiple lights a 36mm thermal break profile is used.

materials



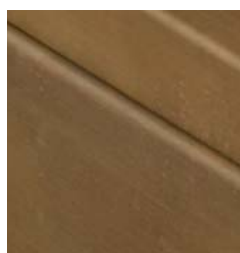
galvanized steel



stainless steel



corten steel



brass

OS2 is available in galvanised steel - in a wide range of colours and superficial finishes - in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



squared



grooved



triangular

Squared, grooved and triangular: the wide range of glazing beads allows for a variety of different design for your internal window light. the great choice available visually recalls the traditional "iron window" profiles.

vitruvio handles



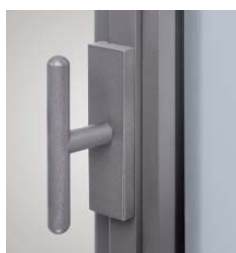
"small" cut round
h.116 | d.12 mm



"small" sphere round
h.116 | d.12 mm



"small" cut square
h.116 | d.12 mm



"kids"
h.116 | d.15 mm



"oval"
h.80 | l.30 mm

hinges



weld-on hinge
h.60/80/116 mm
d.10 /13/16 mm



two-wing hinge
h.81 | d.12 mm



three-wing hinge
h.90 | d.15 mm

Two and three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel and corten steel. weld-on hinges are in galvanized steel. The following models are adjustable: h.80|d.13mm and h.116|d.16mm.

Handles are available in paintable raw, burnished, chrome polished and polished brass: the medium cut square version is provided also in corten steel.

main type



1



2



3



2



2



1

3



2

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

**Custom solutions
are available in
co-operation with Secco
Sistemi technical office.**

**Maximum wing size
Maximum wing weight**

1. w.1000 | h.2700
100 Kg
2. w.2000 | h.2700
100 Kg
3. w.1300 | h.800
40 Kg

Siemensstadt | Berlin



The district called Siemensstadt in Berlin was built between 1929 and 1931 on a 19-acre area and it was intended as a residential area for the employees of Siemens factories. It's one of the most famous experimental development ever realised in Germany during the 20s and it's a clear evidence of the research and ideals of

German Rationalism. A team of architects (Scharoun, Häring, Forbat, Henning, Bartning) took part in its realisation, under the lead of Gropius. The building are modern but still designed with the traditional load bearing walls technology. In these building the "full" parts prevail on the "empty" ones, which are conceived merely as horizontal holes; the series of

continuous and parallel balconies develop on the building front. On July 7th, 2008 the district has been listed in the UNESCO World Heritage list.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

During the restoration work of this district, which has recently started, the replacement of doors and windows has been the object of a specific evaluation by the designers. The old iron windows needed to be replaced with new window systems that could guarantee not only living comfort, but also the preservation of the previous design and size while guaranteeing, at the same

time, the performance of a modern window system in terms of thermal and acoustic insulation and resistance to weather conditions. **OS2** in painted galvanized steel could fulfil all the above requirements and was the ideal choice also for the bigger elements where the reduced size of the sections was balanced by the higher structural resistance of the steel.

Thanks to the thermal break and **OS2** gasket system, it was possible to achieve those standards of thermal and acoustic insulation required by the project. (On top of this, the thermal break, the double rebate seals, the frame with weep system and the ironware with multi-point locking system have guaranteed the internal living standard required by the project).

OS2 door inward opening

system and performance



OS2 inward opening door is an integrated system with accessories, seals and thermal break profiles 65 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with double glazing up to 40 mm thick. The sealing of the door and window frames is guaranteed by a weep system with central sealing gasket, a three-side internal rebate seal and an automatic retractable seal.



Each solution is equipped with a related set of accessories integrated in the system. The performance of **OS2** thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	1
wind resistance - frame bending	C
water tightness	1A
thermal transmittance (with Ug glass 1.0 W/m²K)	1,48 W/m²K
air permeability	2

maximum achievable performance

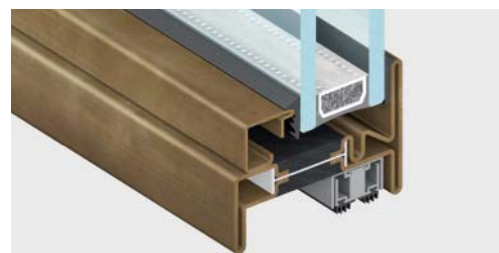
size and variations



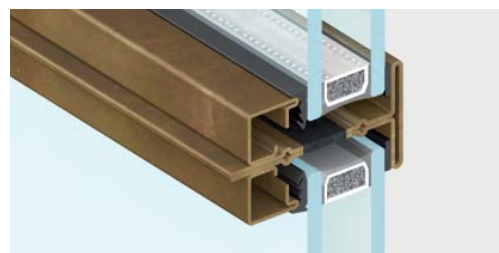
lateral section | frame section 47 mm



central section | frame section 62 mm



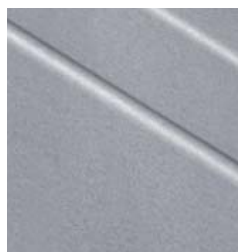
bottom rail | frame section 47 mm



muntin | frame section 36 mm

OS2 is a rebated system with 47 mm face lateral sections and 62 mm central section. For frames with multiple lights a 36mm thermal break profile is used.

materials



galvanized steel



stainless steel



corten steel



brass

OS2 is available in galvanised steel - in a wide range of colours and superficial finishes in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



squared



grooved



triangular

Squared, grooved and triangular: the wide range of glazing beads allows for a variety of different design for your internal window light. the great choice available visually recalls the traditional "iron window" profiles.

vitruvio handles



"medium" cut round
h.116 | d.15 mm



"medium" sphere round
h.116 | d.15 mm



"medium" cut square
h.116 | d.15 mm

Handles are available in paintable raw, burnished, chrome polished and polished brass: the medium cut square version is provided also in corten steel.

hinges



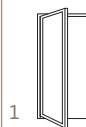
weld-on hinge
h.60/80/116 mm
d.10 /13/16 mm



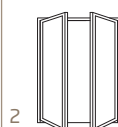
three-wing hinge
h.90 | d.15 mm

Three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel and corten steel. Weld-on hinges are in galvanized steel: the following models are adjustable: h.80 | d.13mm and h.116 | d.16mm.

main type



1



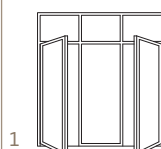
2



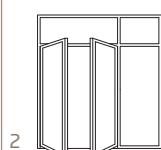
2



2



1



2

Custom solutions are available in co-operation with Secco Sistemi technical office.

**Maximum wing size
Maximum wing weight**

1. w.1000 | h.2700
100 Kg
2. w.2000 | h.2700
100 Kg

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

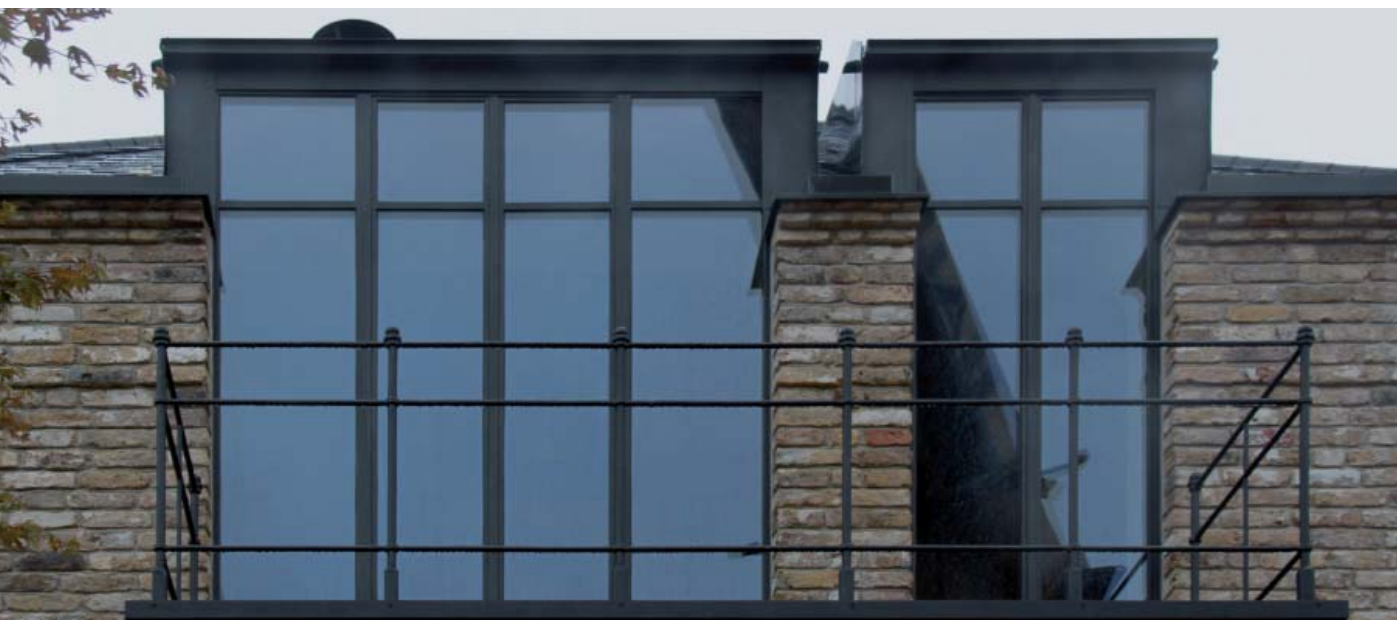
steel
windows
and doors

Privathaus | Bonn



Located close to the historical centre of Bonn, this new residence is faced on the one hand with the private park in which it is set, on the other with the local

traditional architecture, characterised by buildings in exposed brick work with wide glass walls using very thin sightlines in order to better capture the sunlight.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

The use of the **OS2** system made of painted galvanized steel is essential for this type of project where a

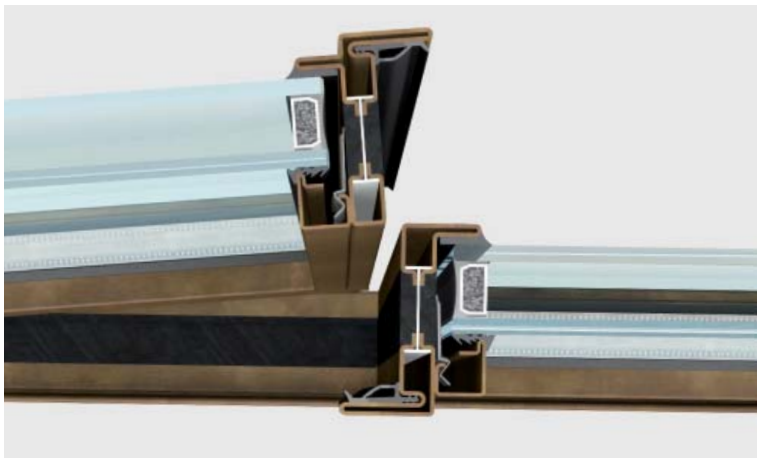
slim profile is needed but at the same time guaranteeing, high thermal performance and acoustic insulation.

OS2 window outward opening

system and performance



OS2 outward opening window is an integrated system with accessories, seals and thermal break profiles 65 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with double glazing up to 30 mm thick. Each solution is equipped with a related set of accessories integrated in the system.

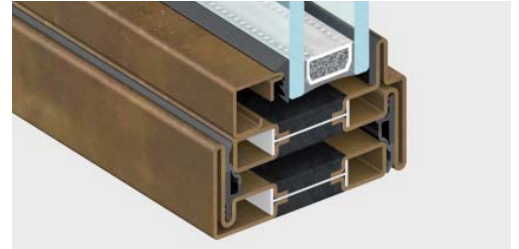


The sealing of the door and window frames is guaranteed by a double rebate seal system. The performance of OS2 thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	4
wind resistance - frame bending	C
water tightness	8A
thermal transmittance (with Ug glass 1.0 W/m²K)	1,60 W/m²K
air permeability	3

maximum achievable performance

size and variations



lower section | frame section 47 mm



lateral section | frame section 47 mm



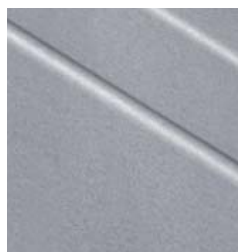
central section | frame section 62 mm



muntin | frame section 36 mm

OS2 is a rebated system with 46 mm face lateral sections and 47/62 mm central section. For sashes with multiple lights a 36mm thermal break profile is used.

materials



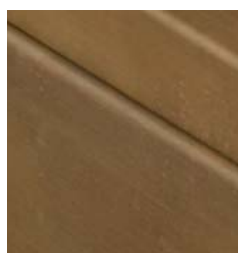
galvanized steel



stainless steel



corten steel



brass

OS2 is available in galvanised steel - in a wide range of colours and superficial finishes in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



squared



grooved



triangular

Squared, grooved and triangular: the wide range of glazing beads allows for a variety of different design for your internal window light. the great choice available visually recalls the traditional "iron window" profiles.

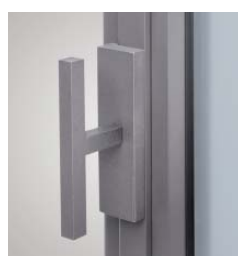
vitruvio handles



"small" cut round
h.116 | d.12 mm



"small" sphere round
h.116 | d.12 mm



"small" cut square
h.116 | d.12 mm



"oval"
h.80 | l.30 mm



handle for second leaf
h.50 mm

hinges



weld-on hinge
h.60/80/116 mm
d.10 /13/16 mm



two-wing hinge
h.81 | d.12 mm



three-wing hinge
h.90 | d.15 mm



pivot system
h.80

Two and three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel and corten steel. weld-on hinges are in galvanized steel. The following models are adjustable: h.80/d.13mm and h.116/d.16mm.

Handles are available in paintable raw, burnished, chrome polished and polished brass: the small cut square version is provided also in corten steel. "vitruvio" small is made in both "T" and "L" version.

main type



1



2



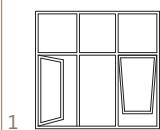
3



2

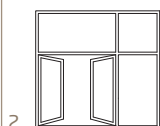


2

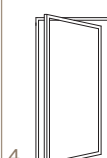


1

3



2



4

Custom solutions are available in co-operation with Secco Sistemi technical office.

Maximum wing size
Maximum wing weight

1. w.1000 | h.2700
100 kg
2. w.2000 | h.2700
100 kg
3. w.800 | h.1300
60 kg
4. w.1000 | h.2700
80 kg

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors



The villa is nestled harmoniously among the gentle hills of California, among vineyards and olive groves, thanks to the simplicity of the architectural language adopted and the choice of materials and finishes such as stone, wood and recycled metal doors and windows.

The desire to build relationships with the surrounding nature determines the design solutions. On the one hand, geometric volumes are hidden from view by vigorous tall trees, the other large windows projecting the interior into the landscape.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

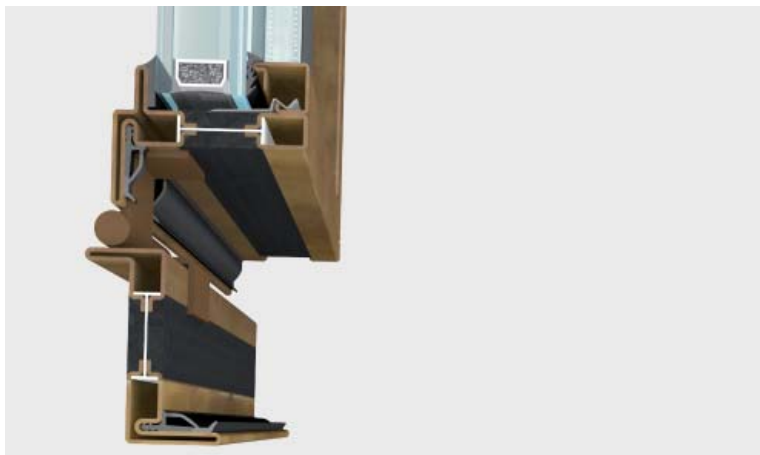


steel
windows
and doors

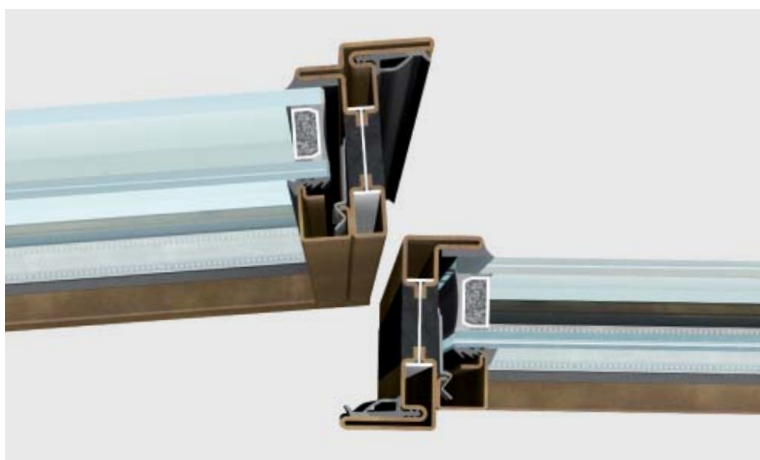
The use of thin profiles of the **OS2** system in painted galvanized steel assures rigorous and essential partitions of windows that frame the landscape at any time of the day.

OS2 door outward opening

system and performance



OS2 outward opening door is an integrated system with accessories, seals and thermal break profiles 65 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with double glazing up to 30 mm thick. The sealing of the door and window frames is guaranteed by a double rebate seal system and an automatic retractable seal.



Each solution is equipped with a related set of accessories integrated in the system. The performance of OS2 thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	1
wind resistance - frame bending	C
water tightness	1A
thermal transmittance (with Ug glass 1.0 W/m²K)	1,48 W/m²K
air permeability	2

maximum achievable performance

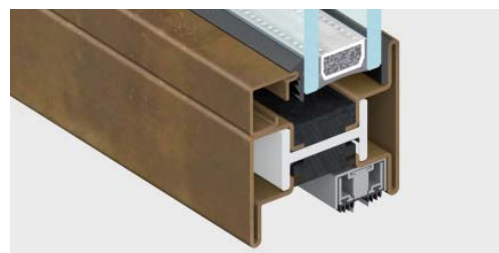
size and variations



lateral section | frame section 47 mm



central section | frame section 62 mm



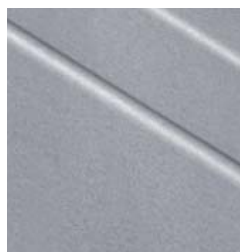
bottom rail | frame section 54 mm



muntin | frame section 36 mm

OS2 is a rebated system with 47 mm face lateral sections and 62 mm central section. For sashes with multiple lights a 36mm thermal break profile is used.

materials



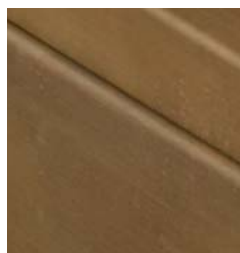
galvanized steel



stainless steel



corten steel



brass

OS2 is available in galvanised steel - in a wide range of colours and superficial finishes - in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



squared



grooved



triangular

Squared, grooved and triangular: the wide range of glazing beads allows for a variety of different design for your internal window light. the great choice available visually recalls the traditional "iron window" profiles.

vitruvio handles



"medium" cut round
h.116 | d.15 mm



"medium" sphere round
h.116 | d.15 mm



"medium" cut square
h.116 | d.15 mm

Handles are available in paintable raw, burnished, and chrome polished and polished brass: the medium cut square version is provided also in corten steel.

hinges



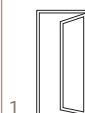
weld-on hinge
h.60/80/116 mm
d.10 /13/16 mm



three-wing hinge
h.90 | d.15 mm

Two and three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel and corten steel. Weld-on hinges are in galvanized steel. The following models are adjustable: h.80|d.13mm and h.116|d.16mm.

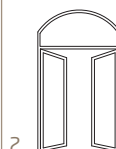
main type



1



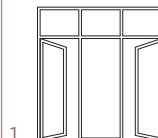
2



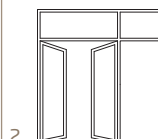
2



2



1



2

Custom solutions are available in co-operation with Secco Sistemi technical office.

**Maximum wing size
Maximum wing weight**

1. w.1000 | h.2700
100 Kg
2. w.2000 | h.2700
100 Kg

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

Prestigious residence in Salviatino | Fiesole (FI)

This building in "Liberty" style is located just outside Florence, at the foot of the hills around Fiesole. It was built in 1909 as an innovative hospital. It became later an aid centre for unmarried women and, afterwards, a hospital for children. It was abandoned in ruin until the late 90s.

In 2002 it was bought by an important real estate company, specialised in the recovery of prestigious buildings, and turned into a luxurious residence with 13 apartments.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

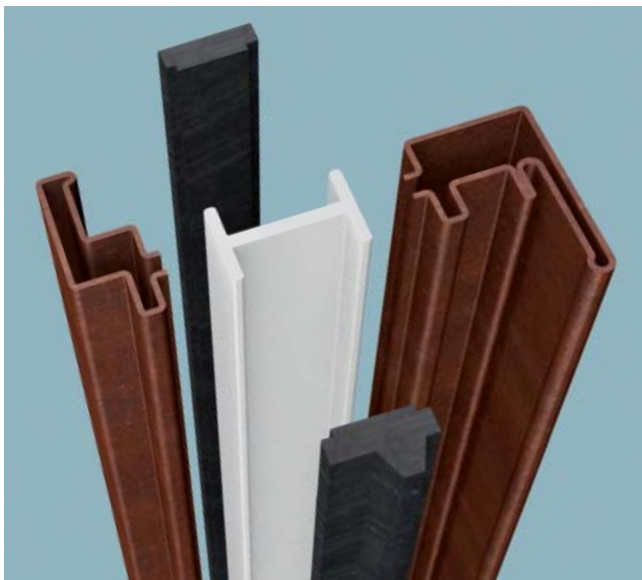
The designers have carried out a radical conservative and artistic restoration while maintaining, at the same time, the charm of the original design and demanding, for the new project, the highest quality for internal and external finishes. Special care was paid to the external door and

window frames in order to try and make the rooms as bright as possible. Thin **OS2** profiles in painted steel were used to this end, making it possible to define the large windows - 160 x 360 cm - while maintaining their original design. The use of **OS2** thermal break system has allowed

for high thermal insulation performance and great acoustic comfort, the last one being particularly appreciated in this context. It's clear, from the pictures, the difference in dimensions between the new metal door and window frames and the restored wooden ones on the lower level.

EBE 65

the technological
answer to the ever
demanding building
performance
requirements: safety,
energy saving,
maximum comfort,
low maintenance costs



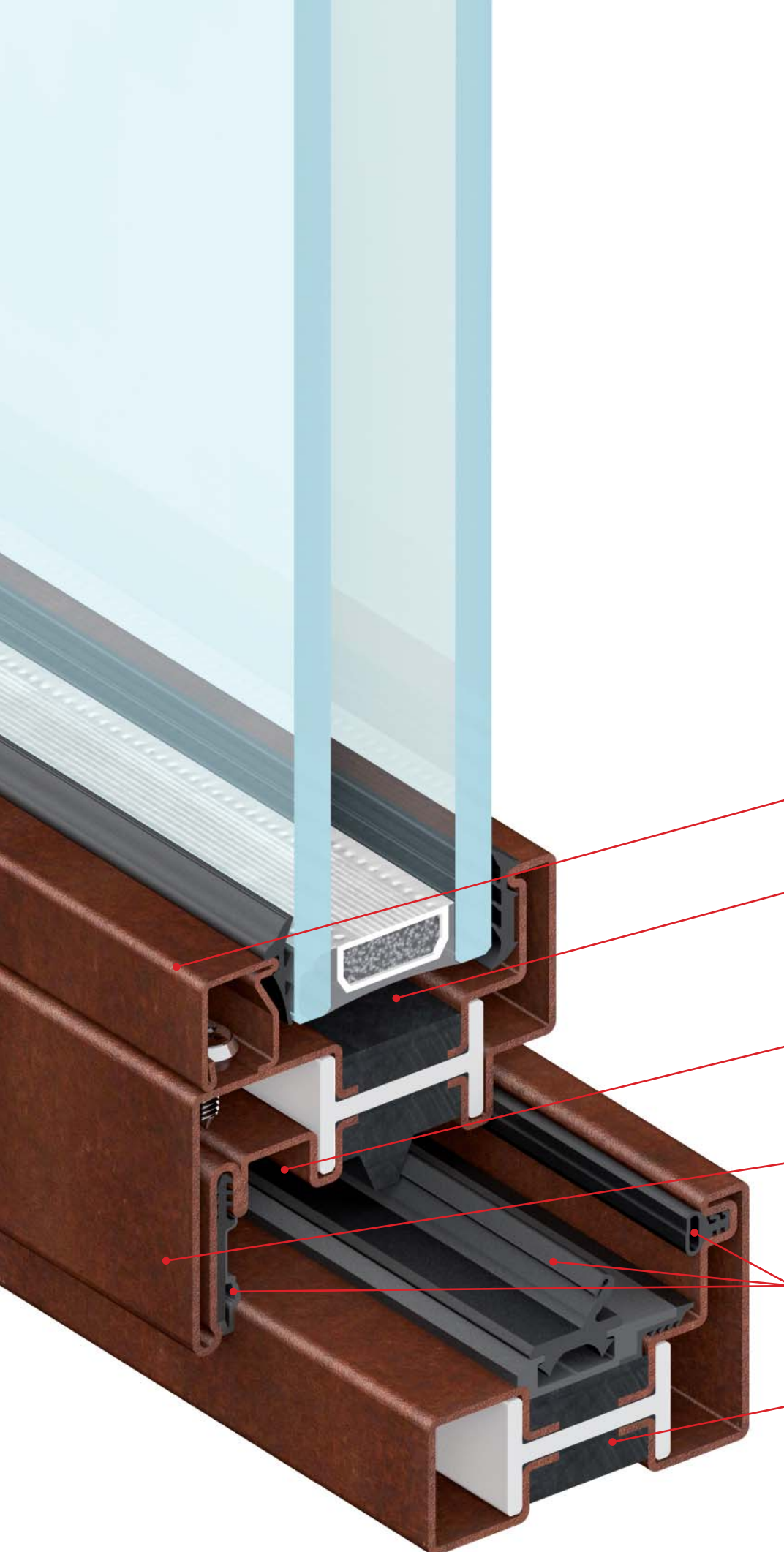
Doors and windows have a very complex role: on one hand they define the design of a building, on the other they separate the internal and external environment. In line with sustainable architecture requirements, they have to guarantee the highest standards of energy saving, maximum comfort, acoustic performance, maximum resistance to weather agents, active and passive safety and low maintenance costs.

EBE 65 is the technological answer by Secco Sistemi to the ever demanding building performance requirements. The innovative technological solution, known as “thermal break” that is made of polyamide and polyurethane, allows for highly structural profiles with low visual impact. Moreover, the four materials used – galvanized steel, stainless steel, corten steel and brass – can be combined to taste for the internal and external part of the profile.

EBE 65 system meets the most demanding requirements while offering, at the same time, different design solutions. This is possible thanks to its performance features, its wide choice of opening systems and its complete set of system accessories.

areas of application

- doors
- windows



glazing bead

fitting groove for glazing
up to 48 mm thick

fitting groove
for hardware

flush on the exterior and
rebat on the interior

frame with weep system
and triple gasket

structural thermal break
in polyamide and
polyurethane

corten steel version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

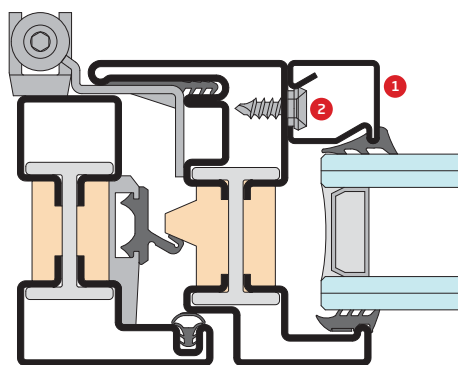
steel
windows
and doors

EBE 65

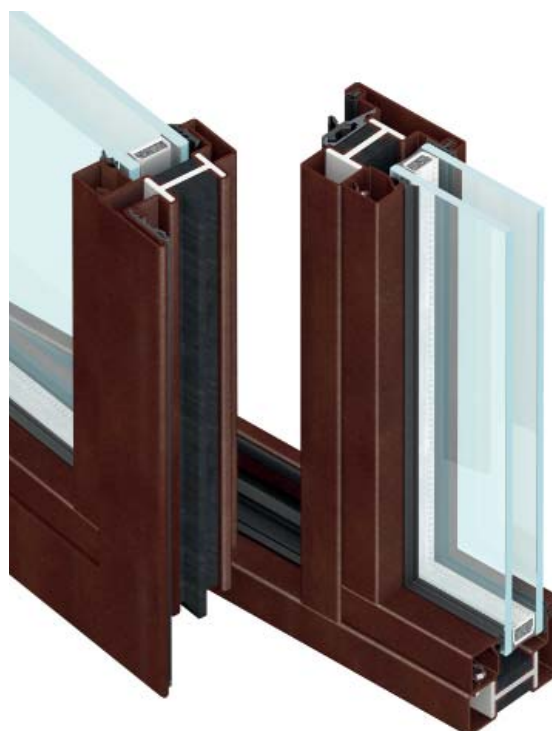
for the designer:
different types
of glazing beads
for a wide choice
of details

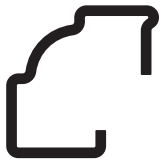


rectangular glazing bead

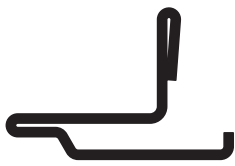


- 1. glazing bead
- 2. bushing for fixing of glazing bead

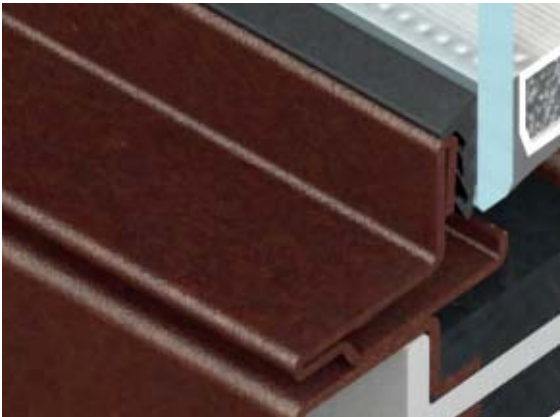




gothic glazing bead



thin glazing bead



windows and doors with thermal break
facade and cladding
safe and fireproof windows and doors
steel windows and doors

Centre for Contemporary Art in Punta della Dogana | Venice



At the time of the Republic of Venice, Punta della Dogana (the Custom) was used as a salt storage area. Later, the use of the warehouse was extended to a complete different set of commercial activities. In the 17th century, thanks to its strategic location, it was turned into the mercantile custom. The building, designed by Architect Benoni, has a triangular shape and its

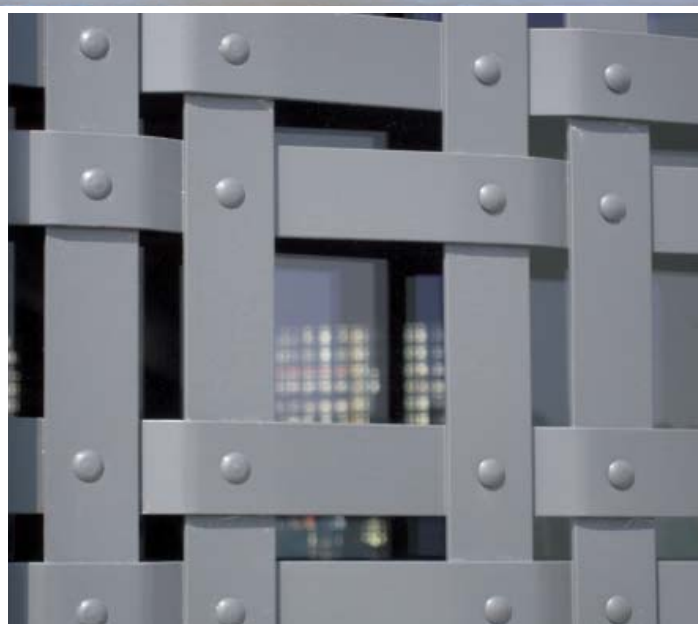
crowned by a tower topped by a bronze sphere held by two statues of Atlas: it represents the world on which sits a statue of Fortune acting as a wind marker and, symbolically, representing the fickleness of luck itself. In 2009, significant restoration works have turned the old Custom building into an important centre for contemporary art wanted by Pinault Foundation.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

The designer has kept the existing layout of the building and removed only late restructuring, designing instead a more simple and rational structure. The beautiful external walls, made of stone, have been carefully kept and only the wooden window frames have been replaced with **EBE 65** window frames in painted galvanized steel with thermal brake. These are

the perfect solution for the big glass doors on the ground floor and the arch-shaped ones on the upper floor. Some of these doors are fixed, some can be opened. The use of **EBE 65** door and window frames make the space brighter and guarantee a perfect acoustic and thermal insulation, all these being vital features for a building that is visited daily by a large crowd.

EBE 65 window

system and performance



EBE 65 window is an integrated system with accessories, seals and thermal break profiles 65 or 73,5mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with insulating glass up to 48 mm thick. Each solution is equipped with a related set of accessories (also concealed) integrated in the system.



The sealing of the window frames is guaranteed by a three-level sealing weep system. The performance of **EBE 65** thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

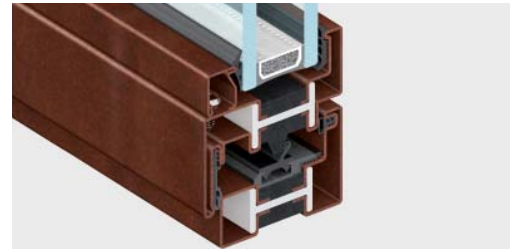
wind resistance - test pressure	5
wind resistance - frame bending	C
water tightness	9A
acoustic performance (with R_w per IGU 45 dB)	47 (-2;-5) dB *
thermal transmittance (with U_g glass 1.0 W/m ² K)	1,16 W/m ² K **
air permeability	4
break-in resistance	(RC)3

ref: single-sash stainless steel 1200X2400mm window | ** calculation ref. EN ISO 10077/1
*ref: single-sash galvanized steel 1230X1480mm window

size and variations



reduced lower / lateral section** | frame section 74mm



lower / lateral section* | frame section 85mm



reduced central section** | frame section 85mm



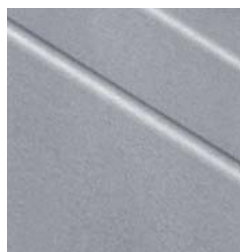
double-sash window central section* | frame section 145mm

EBE 65 window is rebated on the interior and flush on the exterior. The standard solution has a 85 mm lateral frame section. A solution with 74mm lateral frame section and 85mm central section profiles is available for two-sash.

*solution for single or double-sash window - max weight 130 kg

**solution for double sash window - max weight 70 kg

materials



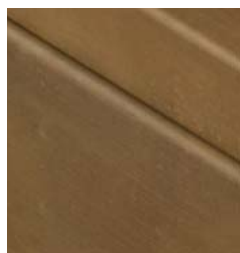
galvanized steel



stainless steel



corten steel



brass

EBE 65 is available in galvanized steel – in a wide range of colours and superficial finishes – in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



DK stainless steel 5056
h.135 | d.20 mm



DK "vitruvio medium"
cut round
h.116 | d.15 mm



DK "vitruvio medium"
sphere round
h.116 | d.15 mm



DK "vitruvio medium"
cut square
h.116 | d.15 mm

The DK "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted, picture 7.

hinges



AR standard
h.85 | d.15 mm



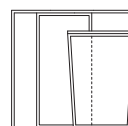
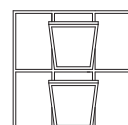
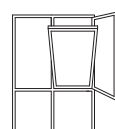
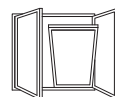
AR stainless steel
h.85 | d.15 mm



AR concealed

Standard three-wing hinges are adjustable and supplied in galvanized steel with "e-look" finish and coloured plastic cover. Stainless steel hinges are available in polished, Scotch-Brite or burnished finishing.

main type



Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

Franciscan Cloisters in Ravenna



The reopening of the Monumental Complex of the Franciscan cloisters in Ravenna, located very close to Dante's Tomb, provides the city with an exclusive area dedicated to the public: after the restoration work, in fact, it will soon host the Historical Archives and the Library of Cassa

di Risparmio, a 70-seat conference room and a multifunctional room, as well as the historical Dante's Museum, the Library of the Dantesque Centre and Enzo Bettiza's book collection, which includes volumes of Northern European and Balkan literature and philosophy.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



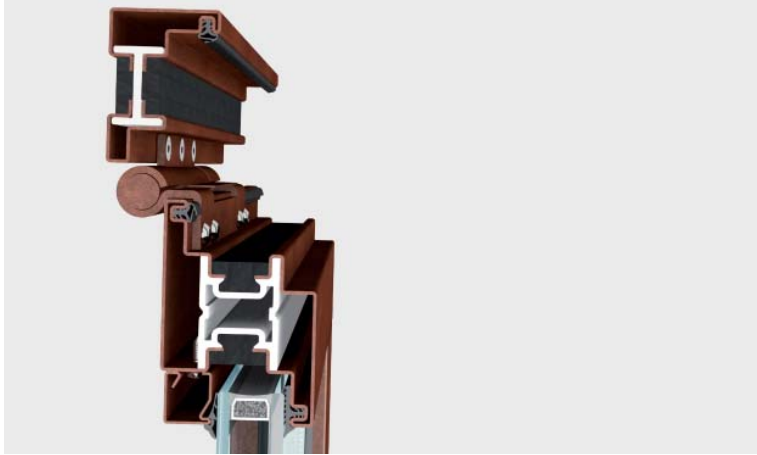
steel
windows
and doors

The project has been developed by an architecture firm in Ravenna and the complicated restoration work has lasted for 3 years. The choice of the material and the shape of the doors and windows have been carefully evaluated in order to guarantee the best possible harmonisation with the building fronts. One of the prerogatives of the design was, in fact, to join the need for

functional performance to the need for minimal visual space that would fit with the current architectural context. For these reasons, corten **EBE 65** profiles have been used for the the windows of the upper loggias in both courtyards, which are divided by columns made of Istrian stone with Doric capitals. The same profiles were also used for the doors and internal partitions on the ground level.

EBE 65 door

system and performance



EBE 65 door is an integrated system with accessories, seals and thermal break profiles 65 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with triple glazing up to 40 mm thick.



The sealing of the door frames is guaranteed by a three-side rebate double seal system and an automatic retractable seal. Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of **EBE 65** thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	4
wind resistance - frame bending	C
water tightness	2A
acoustic performance (with R_w per IGU 42 dB)	42 (-1;-3) dB *
thermal transmittance (with U_g glass 1.0 W/m ² K)	1,57 W/m ² K **
air permeability	3
break-in resistance	(RC)3

ref: two-leaf galvanized steel 2400x2400 mm door | ** calculation ref. EN ISO 10077/1
*ref: single-leaf galvanized steel 900X2235 mm door

size and variations



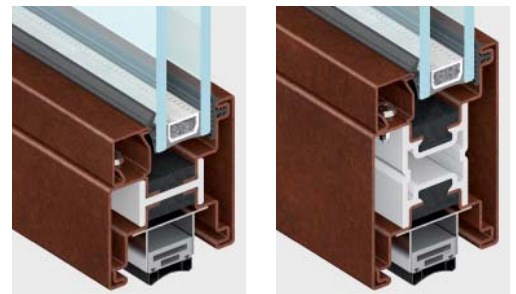
reduced lateral section | frame section 109mm
solution for butt and weld-on hinges



lateral section | frame section 134mm
solution for three-wing and concealed hinges



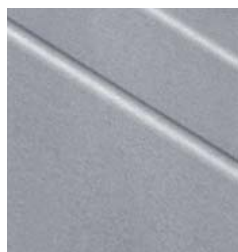
central section | frame section 156 mm



normal and reduced bottom rail | frame section 69 and 94mm

EBE 65 is an interior and exterior flush door. The solution with butt or weld-on hinge has a 109mm lateral frame section. By using three-wing or concealed hinges, the lateral face section becomes 134 mm.

materials



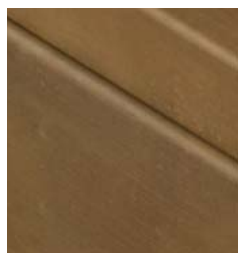
galvanized steel



stainless steel



corten steel



brass

EBE 65 is available in galvanized steel - in a wide range of colours and superficial finishes - in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



stainless steel 5002
h.150 | d.20 mm



"vitruvio medium"
cut round
h.116 | d.15 mm



"vitruvio medium"
sphere round
h.116 | d.15 mm



"vitruvio medium"
cut square
h.116 | d.15 mm

The "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted.

hinges



weld-on
h.145 | d.20 mm



three-wing flush
h.130 | d.20 mm



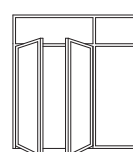
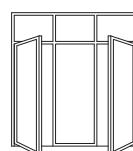
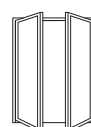
three-wing butt hinge
h.160 | d.22,5 mm



concealed

Weld-on hinges are in galvanized and stainless steel. Three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel. A three-wing hinge is provided also in corten steel.

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

Archeological Museum, former SS Salvatore Monastery | Noto (SR)



The corner formed by the church of San Francesco dell'Immacolata and the south-east side of the former SS. Salvatore Monastery is one of the most striking spots in the Sicilian city, capital of the old district "Noto Valley", which was declared UNESCO World Heritage Site for its typical Baroque style. It's believed that its origins date back to mid 18th century and its construction is attributed to Gagliardi's

school, one of the most representative Architects in the reconstruction of Noto during the 18th century. The facade of the monastery stretches with two orders of pilasters and it's characterised by bulging grates made of wrought iron and by a multi-storey tower with overlying lodges. The complex now hosts an important multipurpose Archeological Museum with a vocation for innovation.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

The recent restoration has focused on an accurate structural consolidation and on a specialised restoration of the stone elements and of the original plasters, while paying careful attention to meet the need for architectural and structural conservation with the historical and artistic value of the monument. Door and window frames have been realised with

brass, particularly suited for a monumental building requiring the use of "natural" material such as, that is, burnished brass.

EBE 65 system in burnished

EBE 85

small frame sections
combined with
cutting-edge energy
saving performance:
EBE 85 is the
perfect solution for
sustainable design

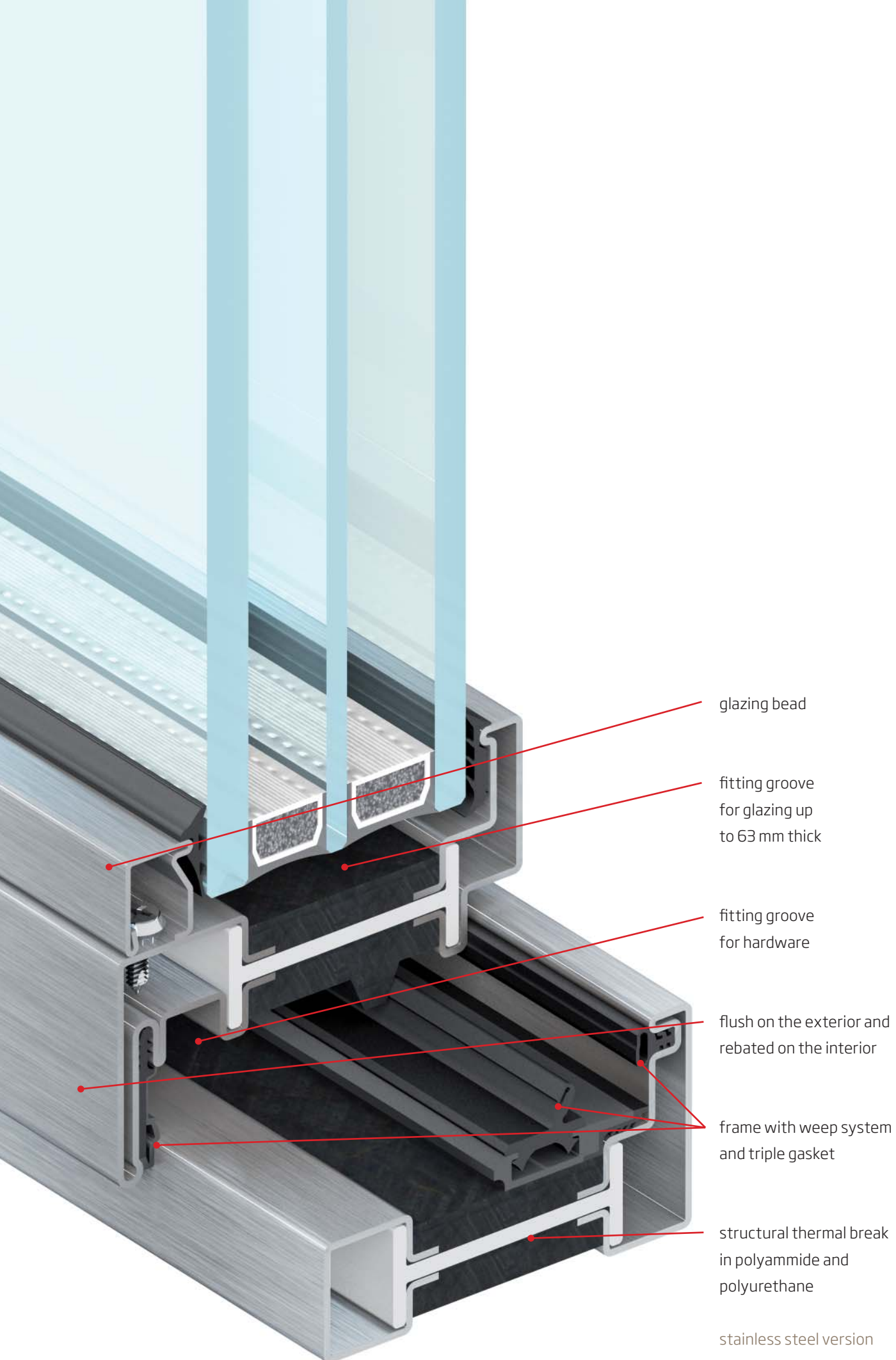
The growing importance of energy related matters raise new challenges for architecture. Designers are ever more careful to carry out eco-friendly projects with a low energy consumption.

EBE 85 represents a new generation of cutting-edge energy-efficient door and window frames. Thanks to the enhancement of the insulating area and to the reduction of visible sections, **EBE 85** combines in one product all the functional advantages and the architectural aspects thus meeting all the requirements for sustainable projects. On a technical side, the width of the profiles makes it possible to use thick triple glazing windows, with high thermal, acoustic and safety performance and to use concealed hinges and locks for a more elegant design. From an architectural point of view, the slender sections of the **EBE 85** windows and the possibility of having concealed wings leave space for bigger window light, giving more drawing freedom to the designer.



areas of application

- doors
- windows



glazing bead

fitting groove
for glazing up
to 63 mm thick

fitting groove
for hardware

flush on the exterior and
rebated on the interior

frame with weep system
and triple gasket

structural thermal break
in polyamide and
polyurethane

stainless steel version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

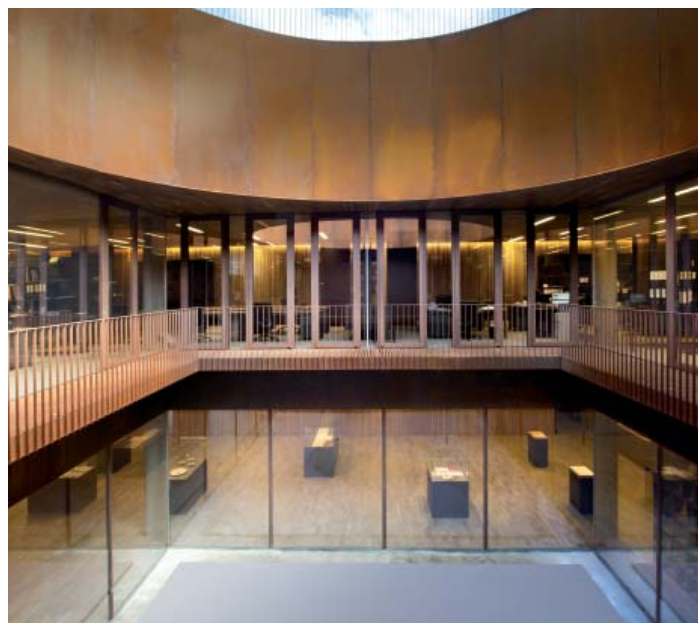
EBE 85

Antinori Wine Cellar | Florence



Halfway between Florence and Siena, in the midst of the charming surroundings of the Classic Chianti area, Cantina Antinori is as much a successful experiment as one abounding in images of an industrial plant that is deeply attached to its environment and its rural traditions. This close symbiosis is expressed through an almost completely underground operation

that re-shapes the slope of the hill, resulting in a stretch of vineyard that extends for almost 45,000 square metres. This vineyard covering is marked by two horizontal cuts that frame the landscape and through openings channel the light down towards the heart of the wine-cellar where the wine ages in the darkness of the terracotta vaults in natural and optimum thermal-hygrometric conditions.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

Several circular openings give onto a series of inner courtyards. Transparency and wide-ranging experience and knowledge are guaranteed also to the visitor who walking up from the parking place discovers the areas dedicated to production, exposition and services: from the oil-press to the area reserved for fine dessert wine, the restaurant, and on up to the level which hosts the

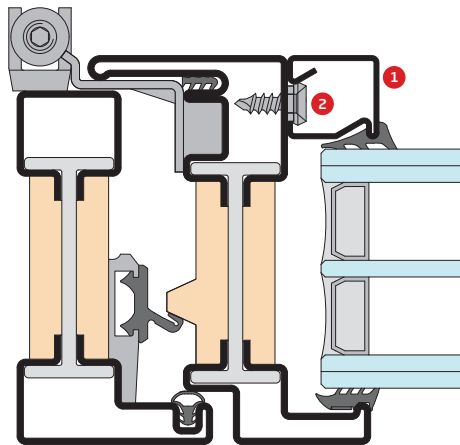
auditorium, the museum, the library and the tasting rooms. Mindful of the engineering challenges while still with extreme attention to the environment, the spaces and the large glazed doors which give shape to the transparent surfaces are all realized with the **EBE 85** system in corten steel.

EBE 85

for the designer:
different types
of glazing beads
for a wide choice
of details

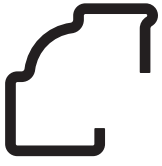


rectangular glazing bead

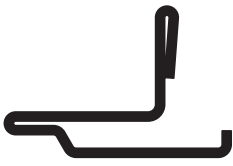
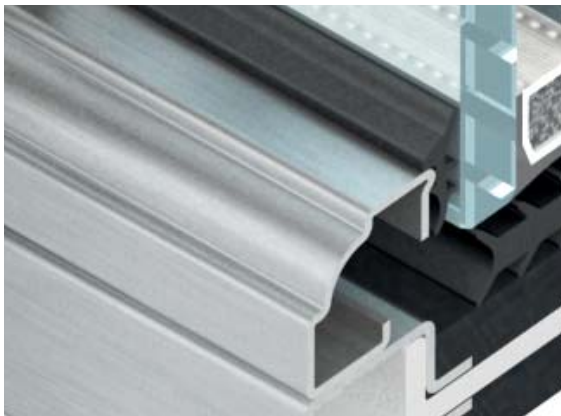


- 1. glazing bead
- 2. bushing for fixing of glazing bead

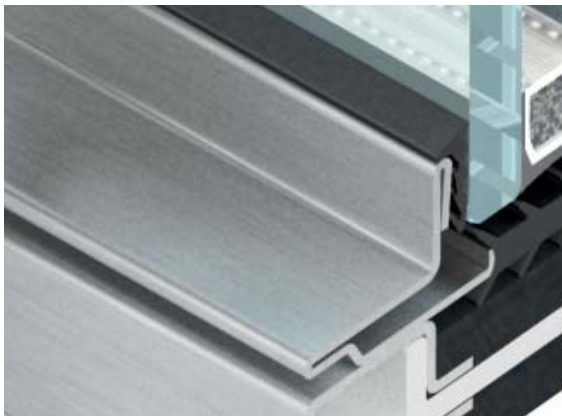




gothic glazing bead



thin glazing bead



windows and doors with thermal break
facade and cladding
safe and fireproof windows and doors
steel windows and doors

Carlo Felice's House | La Maddalena (OT)



The current hotel complex is the result of an articulated environmental and structural regeneration project, which on one hand has turned the former Ospedale Militare (Military Hospital), dating back to the beginning of 1900, into an accommodation facility; on the other hand it has required the construction

of a new building with minimal environmental impact. The former Ospedale Militare (Military Hospital), despite not having major architectural relevance, has been restored with a faithful preservation of its external fronts while reorganising, at the same time, the internal space to ensure maximum comfort for the guests.

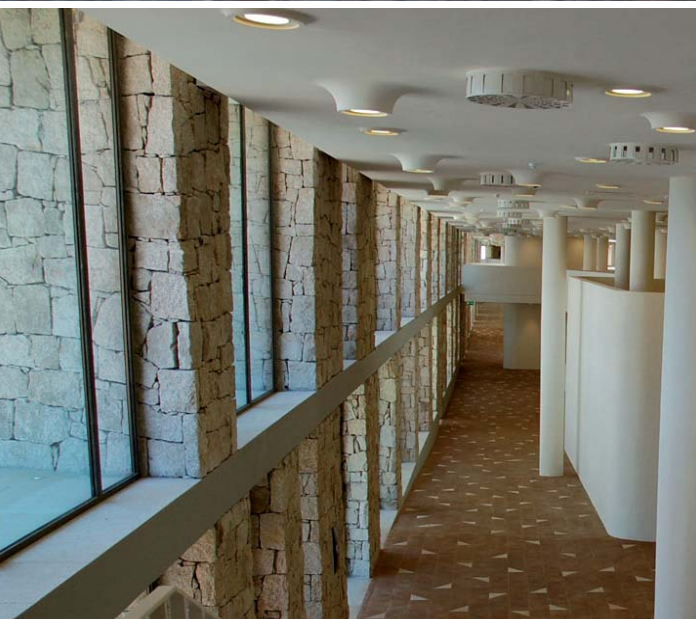
The new building was set in the headland behind the Ospedale in order to minimise the visual impact. The roofing of the building goes beyond the idea of the garden-roof and it becomes a whole with the surrounding landscape.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

Burnished brass **EBE 85** door and window frames with thermal break have been installed in both the pre-existing and the newly built building, thus guaranteeing maximum thermal and acoustic comfort. Thanks to **EBE 85** system, it was possible to realise

both the big fixed glass window, which give brightness to the rooms, and the large opening doors. A further reason for choosing this material was the possibility to use it in a particular aggressive environment, such as the marine environment.

EBE 85 window

system and performance



EBE 85 window is an integrated system with accessories, seals and thermal break profiles 85 or 93,5 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with insulating glass up to 68 mm thick. Each solution is equipped with a related set of accessories (also concealed) integrated in the system.



The sealing of the window frames is guaranteed by a three-level sealing weep system. The performance of **EBE 85** thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	5
wind resistance - frame bending	C
water tightness	9A
acoustic performance (with R_w per IGU 45 dB)	47 (-2; -5) dB **
thermal transmittance (with U_g glass 0,6 W/m ² K)	0,99 W/m ² K *
air permeability	4
break-in resistance	(RC)3

ref: single-sash **EBE 65** stainless steel 1200x2400 mm window

* calculation ref. EN ISO 10077/1

ref: single-sash **EBE 65 galvanized steel 1230X1480mm window

size and variations



lateral section | frame section 85 mm



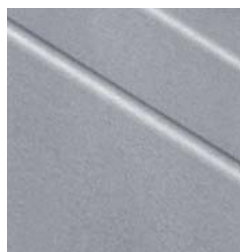
bottom section with threshold | Frame section 77 mm



central section | frame section 145 mm

EBE 85 window is available in two versions: one rebated on the interior and flush on the exterior with 85 mm frame sections; the other is with concealed sashes (and therefore invisible) with only an external 47 mm frame section.

materials



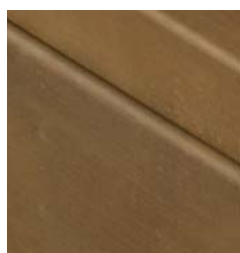
galvanized steel



stainless steel



corten steel



brass

EBE 85 is available in galvanized steel – in a wide range of colours and superficial finishes – in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



DK inox 5056
h.135 | d.20 mm



DK "vitruvio medium"
cut round
h.116 | d.15 mm



DK "vitruvio medium"
sphere round
h.116 | d.15 mm



DK "vitruvio medium"
cut square
h.116 | d.15 mm

The DK "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted, picture 7.

hinges



tilt and turn standard
h.85 | d.15 mm



tilt and turn stainless steel
h.85 | d.15 mm



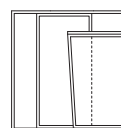
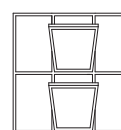
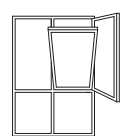
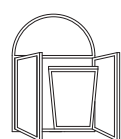
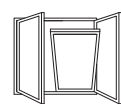
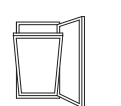
tilt and turn concealed



butt hinges
h.160 | d.15 mm

Standard three-wing hinges are adjustable and supplied in galvanized steel with "e-look" finish and coloured plastic cover. Stainless steel hinges are available in polished, Scotch-Brite or burnished finishing.

main type



Custom solutions are available in co-operation with Secco Sistemi technical office.

size limitations
w.1200 | h.2400 - 1 leaf
w.1480 | h.3710 - 2 leaves
weight limitations
180 kg leaf
130 kg tilt and turn

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

EBE 85

Ernst-Reuter-Haus | Berlino (D)



This grand structure was built in a “neo-classic” style at the end of the 30s on a project by Karl Elkart. It represents the only example of an east-west co-operation wanted by architect Albert Speer to give magnificence to the capital of the Third Reich. It was planned as the head office of the infrastructures and various local associations

and it’s situated on the current Straße des 17 Juni in the Berliner quarter in Charlottenburg. The building, unfinished and damaged during the war, was partly recovered during the 50s and destined as head office of the association for the municipal administration in Berlin and named after the former mayor of the city, Ernst Reuter.

Considered now national monument (therefore protected by the relevant authority) the building hosts various important services and national associations such as the Senate’s library, the national health service, the German institute for city-planning, a congress centre and a restaurant.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

The restoration project was carefully designed in order to safeguard both the monumental external look and the 50s style of the internal decorations. The particular and complex destination of the building has persuaded the designers to redraw the lobby and the grand entrances. Big doors and windows were installed here

(4,2 meters in height) made with **EBE 85** brass profiles with thermal break. The polished finish bestows the required elegance for such meaningful part of the building set in the heart of the German capital. Moreover, the thermal break guarantees high performances in terms of energy saving and acoustic insulation.

EBE 85 door

system and performance



EBE 85 door is an integrated system with accessories, seals and thermal break profiles 85 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with triple glazing up to 60 mm thick.



The sealing of the door frames is guaranteed by a three-side rebate double seal and an automatic retractable seal. Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of **EBE 85** thermally insulated system has been tested by the best European certifying labs under the reference standard EN 14351-1.

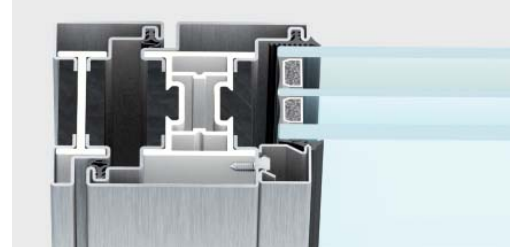
wind resistance - test pressure	5
wind resistance - frame bending	C
water tightness	2A
acoustic performance (with R_w per IGU 42 dB)	42 (-1;-3) dB *
thermal transmittance (with U_g glass 0,6 W/m ² K)	1,12 W/m ² K **
air permeability	3
break-in resistance	(RC)3

ref: two-leaf **EBE 65** galvanized steel 2400x2400 mm door

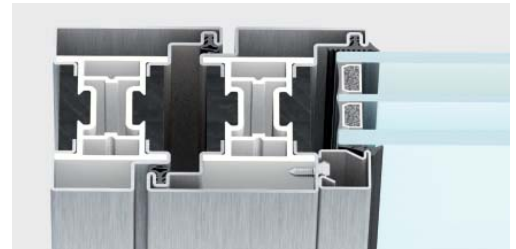
** calculation ref. EN ISO 10077/1

*ref: single-leaf **EBE 65** galvanized steel 900x2235 mm door

size and variations



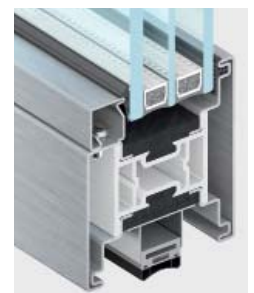
reduced lateral section | frame section 109 mm
solution for butt and weld-on hinges



lateral section | frame section 134 mm
solution for three-wing and concealed hinges



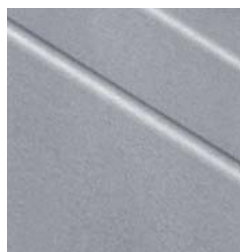
central section | frame section 156 mm



normal and reduced bottom rail frame section 69 and 94 mm

EBE 85 is an interior and exterior flush door. The solution with butt or weld-on hinge has a 109mm lateral frame section. By using three-wing or concealed hinges, the lateral face section becomes 134 mm.

materials



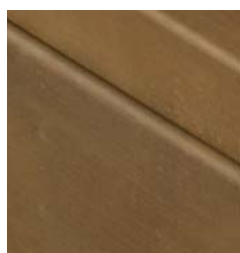
galvanized steel



stainless steel



corten steel



brass

EBE 85 is available in galvanized steel – in a wide range of colours and superficial finishes – in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



inox 5002
h.150 | d.20 mm



"vitruvio medium"
cut round
h.116 | d.15 mm



"vitruvio medium"
sphere round
h.116 | d.15 mm



"vitruvio medium"
cut square
h.116 | d.15 mm

The "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted.

hinges



weld-on
h.145 | d.20 mm



three-wing flush
h.130 | d.20 mm



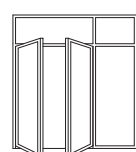
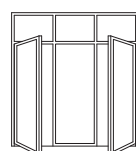
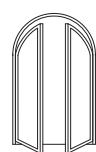
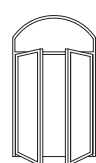
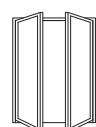
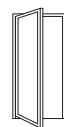
three-wing butt hinge
h.160 | d.22,5 mm



concealed

Weld-on hinges are in galvanized and stainless steel. Three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel. A three-wing hinge is provided also in corten steel.

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

EBE 85 AS

this is an eco-friendly lift and slide door that combines living comfort to multiple-performance features and slenderness to large size





EBE 85 AS is a sliding door/window that can be fit with large glasses and fulfils the countless needs of the eco-friendly designs in a professional and guaranteed way.

EBE 85 AS offers excellent performances for higher living comfort. This is possible thanks to the combination of high-performing thermal-insulating features with outstanding air-permeability, water-proof, wind-load-resistance and acoustic-insulation features.

EBE 85 AS is available in two different solutions. It can be provided with overall 94 mm sections, or with 69 mm central sections, side and upper jambs.

Thanks to the choice of different materials offered by Secco Sistemi (galvanised steel, corten steel and brass), **EBE 85 AS** is the perfect tool for the designer wishing to interpret different architectural styles.

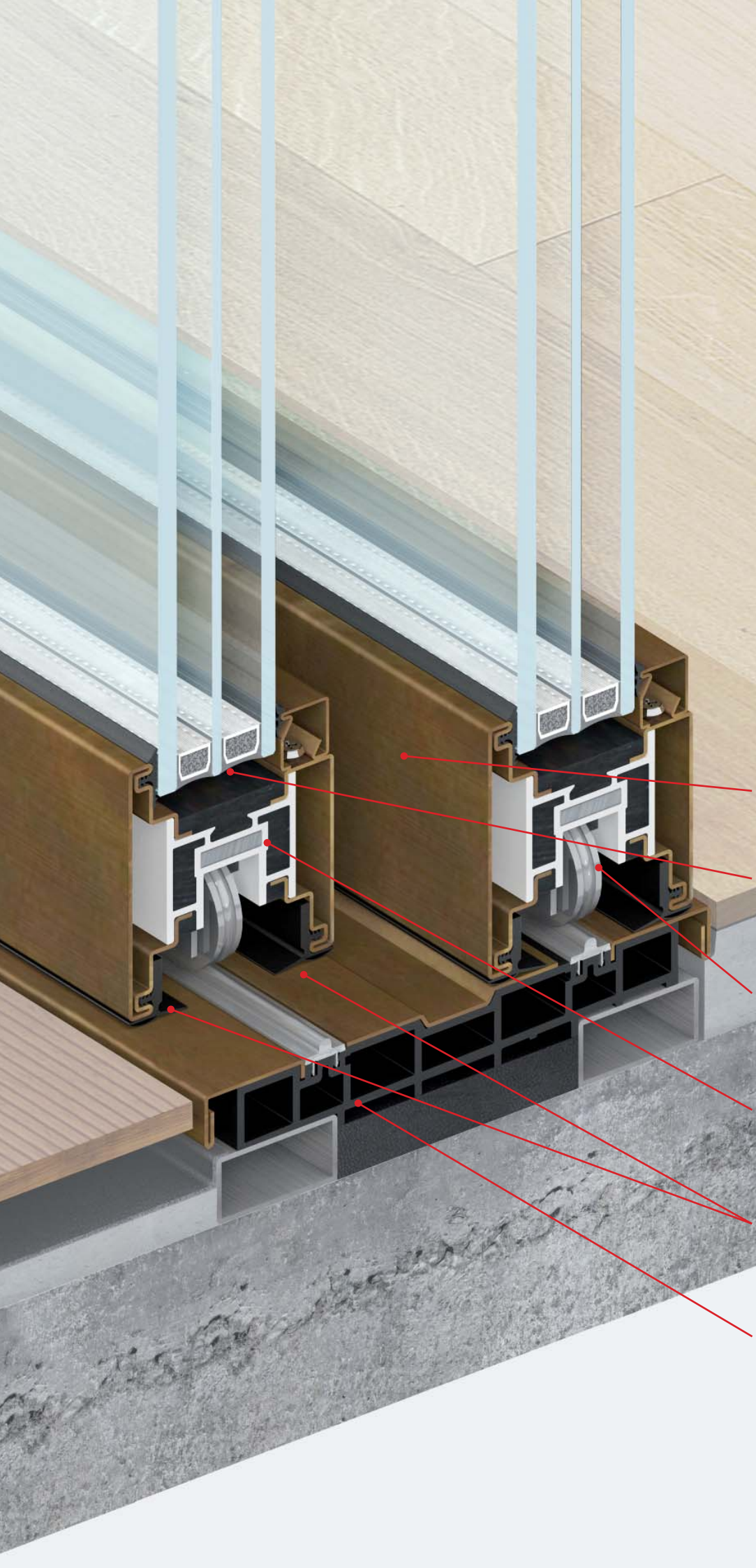
The system is completed by a full range of accessories including a concealed motorised solution, which is ideal for opening doors and windows weighing up to 400 kg.

	wind resistance C3
	water tightness 8A
	acoustic performance 43 dB
	thermal transmittance up to 1,0 W/m²K
	air permeability 4



areas of application

- lift and slide



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

same visible lines on
four sides

fitting groove for glazing up to
54 mm thick

special groove for the allocation
of wheels

structural thermal break in
polyamide and polyurethane

double weather gasket

special shaped threshold for
water evacuation

burnished brass version

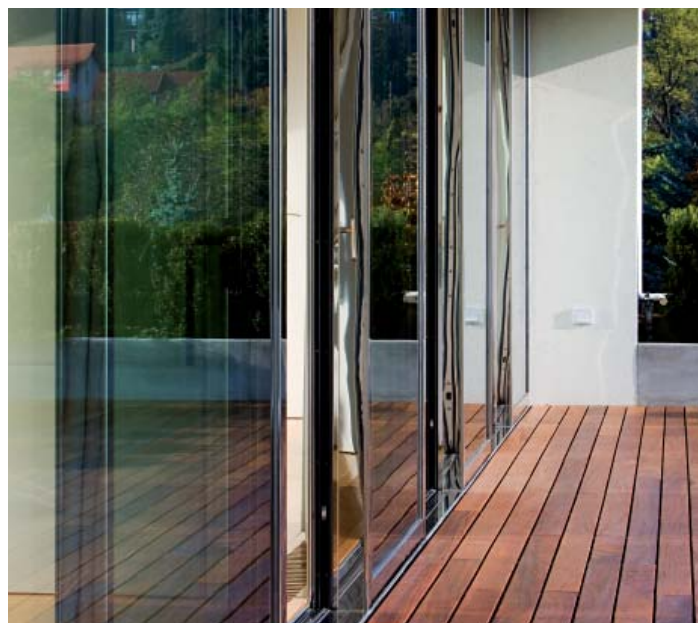
EBE 85 AS

Detached Villa | Szentendre (H)



Szentendre is a Hungarian town on the river Danube near Budapest at the feet of the Pilis hills. From the top of these hills one can enjoy a breathtaking view on the bigger island on the Danube. The town has slowly developed from holiday destination to a new residential area, with isolated buildings

surrounded by ample gardens. Although the majority of the buildings in the area have pitched roofs, the designer has built a detached villa with plain roof. The result is overall positive: the villa and the terraces perfectly fit in the natural sloping ground and in the surrounding landscape.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

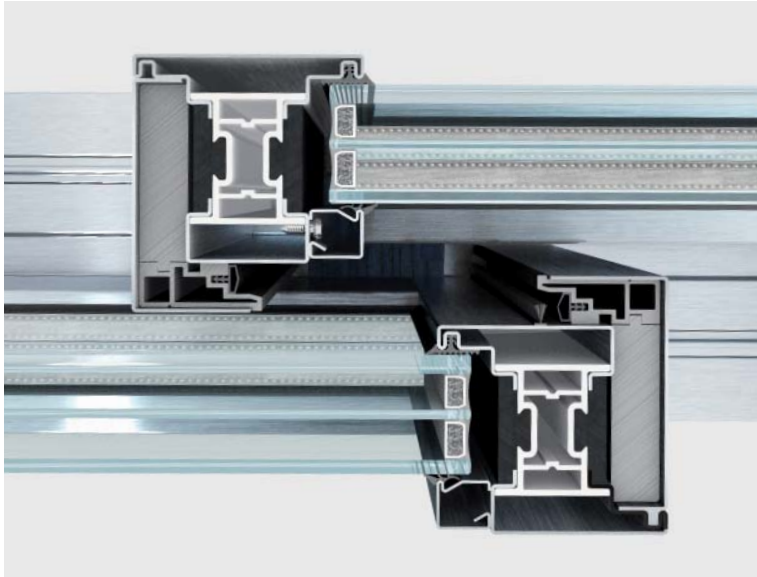


The sliding doors, the windows and the ample glasses have been realised with polished stainless steel **EBE 85 AS** profiles with thermal break, a system that makes it possible to work with large surfaces without compromising the performance standards.

An invisible barrier is therefore created between the garden and the house, a barrier that doesn't interfere with the spectacular view of the surrounding landscape. The polished finishing makes the villa unique.

EBE 85 AS

system and performance

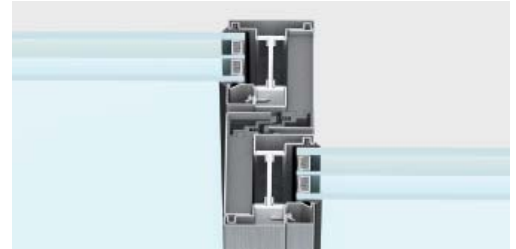


EBE 85 AS is an integrated system with accessories, seals and thermal break profiles 85 mm deep. This makes it possible to realise lift and slide door and window frames with one to four wings of big dimensions and weight (up to 400 kgs.). They can be equipped with triple glazing up to 60 mm thick. The sealing of the lift and slide frame is guaranteed by a four-side double seal system. Each solution is equipped with a related set of concealing accessories integrated in the system. The performance of **EBE 85 AS** thermally insulated sliding system has been tested by the best European certifying labs under the reference standard EN 14351-1.

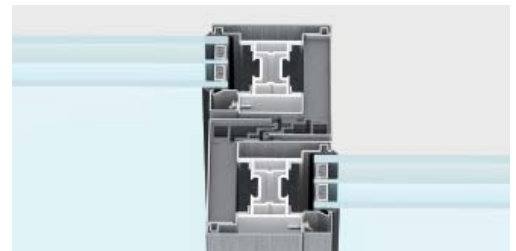
wind resistance - test pressure	3
wind resistance - frame bending	C
water tightness	8A
acoustic performance (with R_w per IGU 52 dB)	43 (-1; -4) dB **
thermal transmittance (with U_g glass 0,6 W/m ² K)	1,1 W/m ² K *
air permeability	4
break-in resistance	(RC)2

Ref: two-leaf **EBE 85** brass lift and slide door 3800x3000mm | *calculation ref. EN ISO 10077/1 | **Ref: single-leaf **EBE 85** brass lift and slide door with fix frame 4380x3000 mm

size and variations



reduced central section | frame section 69mm



standard central section | frame section 94mm



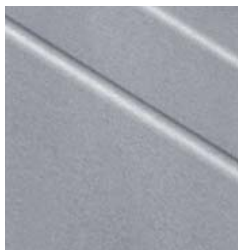
floor rail with threshold | h 8 mm



floor rail with integrated threshold | h 20mm

EBE 85 AS is available with 69 or 94 mm frame sections. There are two solutions available for the threshold: with floor guide track or with guide track integrated in the frame with a drainage system.

materials



galvanized steel



stainless steel



corten steel



brass

EBE 85 AS is available in galvanized steel - in a wide range of colours and superficial finishes - in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



stainless steel handle for lift and slide doors
h.280 | d.20 mm



brass handle for lift and slide doors
h.250 | w.25 mm

Stainless steel handle available in satin or scotch-brite finishing. Brass handle available in paintable untreated, burnished, polished or polished chrome finishing. The system allows for different handles to be fitted.

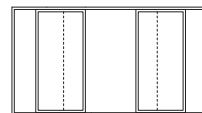
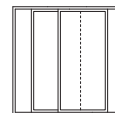
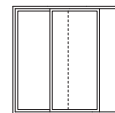
accessories



concealed integrated motorisation

The integrated automated system for sliding doors can be fitted with door-leaves up to 400 kgs heavy.

main type



Single or two-leaf lift and slide doors can be realised with or without.

Custom solutions are available in co-operation with Secco Sistemi technical office.

leaf size limitations
w.2208 | h.2907
weight limitations
400 kg.

windows and doors with thermal break

facade and cladding

safe and fireproof windows and doors

steel windows and doors

EBE 85 AS

Le Vedute Residence | Orciano Pisano (PI)



This village is set on the hills near Pisa, few kilometres away from the sea and set in a breathtaking landscape, characterised by natural terraces with isolated houses, rows of cypresses, groups of pine-trees and traced by the white tracks of the dirt roads. In this delicate and unique landscape,

the designers had a challenging time in building a residential complex of 14 villas. The result, however, was positive: the houses are almost set in the folds of the ground, which is traced with ditches and walls made of dry stone, and the landscape literally bursts into the houses through their big glass walls.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

The sturdiness of the **EBE 85 AS** profiles in painted steel and their low volume have allowed for big sliding windows. These have created a division between indoor and outdoor without interfering with the

view on the beautiful surrounding landscape. The use of steel, moreover, has allowed for lower maintenance costs while guaranteeing the required safety standards.

EBE Style

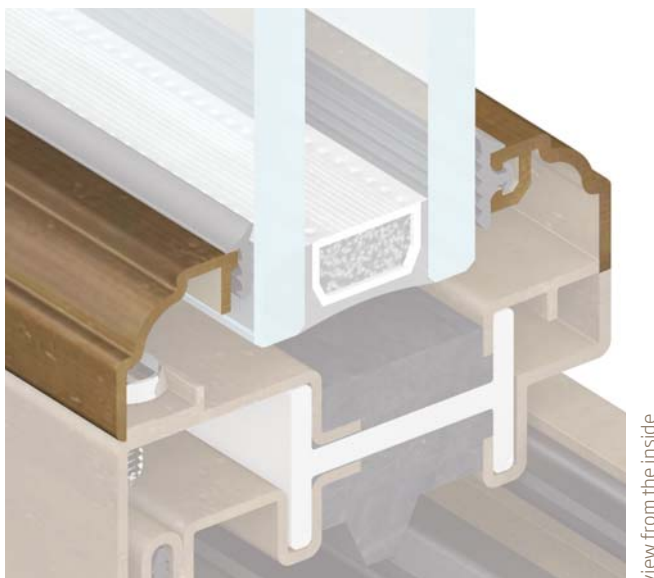
EBE Style is intended for a design based on traditional forms. Classic design is matched with high acoustic and insulating performance

EBE Style is a very sophisticated door and window system with a classic style. Characterised by symmetrical decorative patterns of the door's outer frame and glazing bead, **EBE Style** is conceived as a stylistic variation of the EBE 65 and EBE 85 system, of which it keeps the technological core without modifying the high level of performance, and it's intended for traditional-style architecture.

EBE Style is a combination of different technologies, such as the forming and extrusion of brass, with the new thermal-break system. The final result is a product that combines the technological side typical of the industrial manufacturing world with the sartorial side typical of the artisan world.

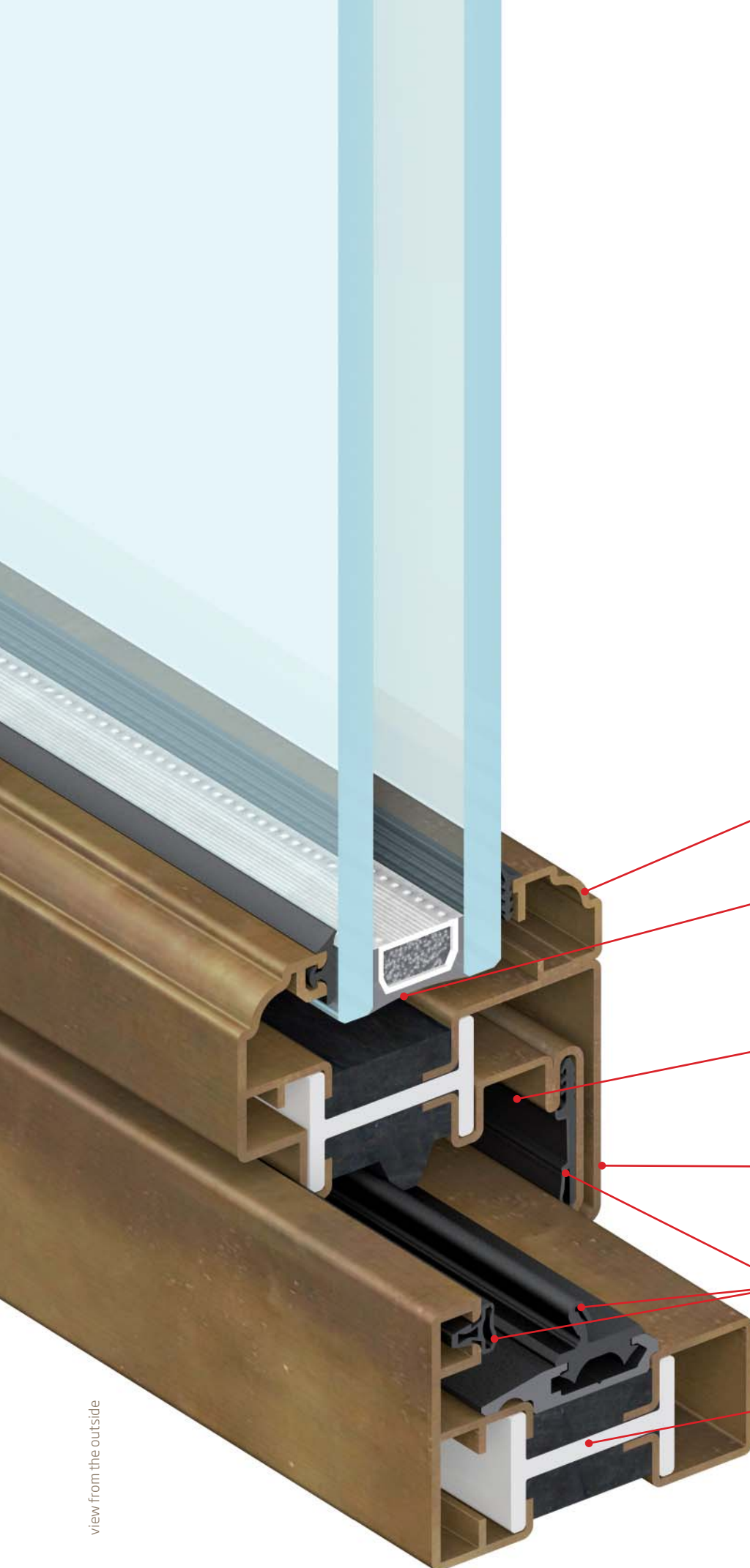
EBE Style is available in brass OT67 for the 65 and 85 versions as guarantee of maximum flexibility. Brass is the most noble material in the Secco Sistemi range. Once burnished, it acquires a warm and cosy feel.

EBE Style can be used for inward or outward opening doors, inward-opening windows and bottom-hinged windows, also in arch-shaped models.



areas of application

- doors
- windows



view from the outside

glazing bead

fitting groove for glazing up
to 52 mm thick
(85 version)

fitting groove
for hardware

flush on the exterior and
rebated on the interior

frame with weep system
and triple gasket

structural thermal break
in polyamide and
polyurethane

burnished brass version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

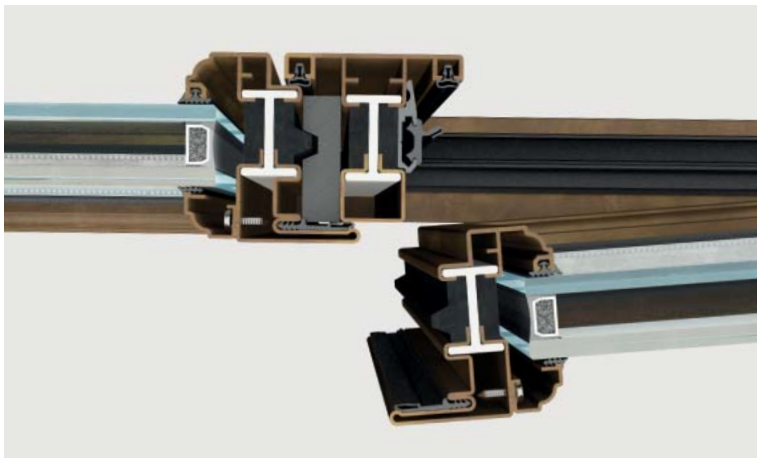
steel
windows
and doors

EBE Style window

system and performance



EBE Style Window is an integrated system comprising accessories, gaskets and thermal-break profiles available in two versions, 65 and 85. **EBE Style** allows for a wide range of windows in different shapes (rectangular, curved or custom-made) and they can be fit with double-glazing of up to 52 mm thickness. Every solution comes with dedicated accessories (also concealed) integrated with the system.



The sealing is guaranteed by a three-level weep sealing system. The performance of the **EBE Style** thermal-break system has been tested by the best European Certifying Laboratories in line with the EN 14351-1 regulations.

wind resistance - test pressure	5
wind resistance - frame bending	C
water tightness	9A
acoustic performance (with R_w per IGU 45 dB)	47 (-2;-5) dB **
thermal transmittance (with U_g glass 0,6 W/m ² K)	0,99 W/m ² K *
air permeability	4

maximum achievable performance

size and variations



lateral section | frame section 85mm



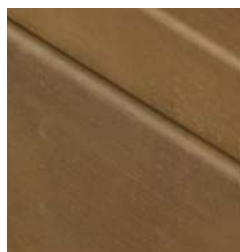
central section | frame section 145mm



Glazing bar | frame section 31mm

EBE Style Window comes as internal rebate and flush. The lateral frame section is 85 mm wide.

materials



brass

EBE Style is available in brass.

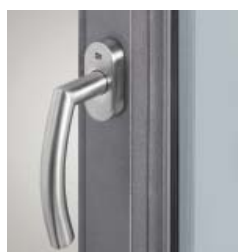
glazing bead



style

The Style glazing bead is perfectly symmetrical with the EBE Style profile keeping the same decorative pattern both on the inside and the outside of the window.

handles



DK inox I 5056
h.135 | d.20 mm



DK "vitruvio medium"
cut round
h.116 | d.15 mm



DK "vitruvio medium"
sphere round
h.116 | d.15 mm



DK "vitruvio medium"
cut square
h.116 | d.15 mm

The DK "vitruvio" handles are available in burnished brass, chrome polished brass and polished brass. The system allows for different handles to be fitted, picture 7.

hinges



AR standard
h.85 | d.15 mm



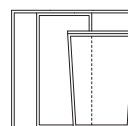
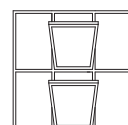
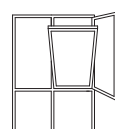
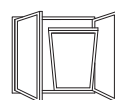
AR stainless steel
h.85 | d.15 mm



AR concealed

Standard three-wing hinges are adjustable and supplied in galvanized steel with "e-look" finish and coloured plastic cover. Stainless steel hinges are available in polished, Scotch-Brite or burnished finishing.

main type



Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

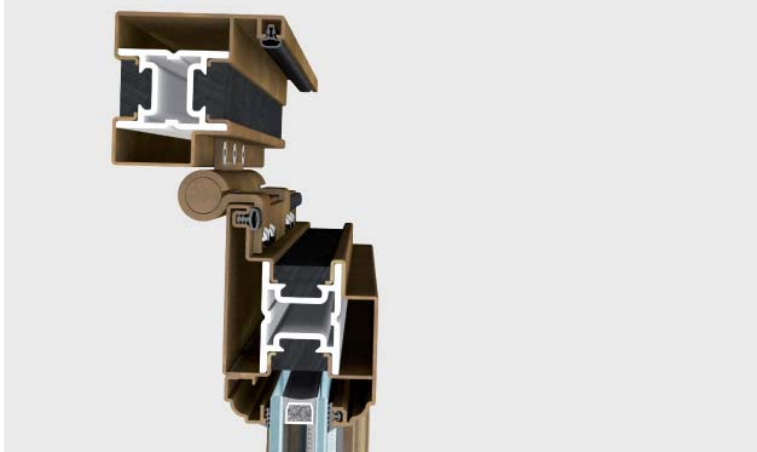
facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

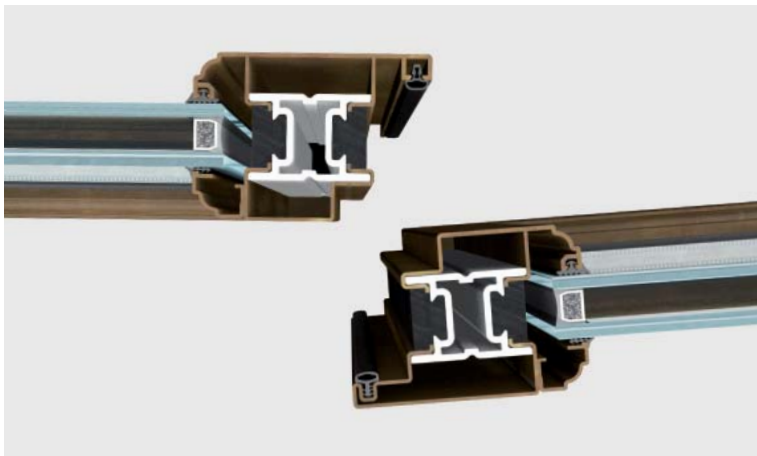
EBE Style door

system and performance



EBE Style Door is an integrated system comprising accessories, gaskets and thermal-break profiles available in two versions, 65 and 85.

EBE Style allows for a wide range of doors in different shapes (rectangular, curved or custom-made) and they can be fit with double-glazing of up to 45 mm thickness.



The sealing is guaranteed by a double internal weather-strip on three sides and by an automatic retractable seal under the bottom rail. All solutions come with dedicated accessories (also concealed) integrated with the system. The performance of the **EBE Style** thermal-break system has been tested by the best European Certifying Laboratories in line with the EN 14351-1 regulations.

wind resistance - test pressure	5
wind resistance - frame bending	C
water tightness	2A
acoustic performance (with R_w per IGU 42 dB)	42 (-1;-3) dB *
thermal transmittance (with U_g glass 0,6 W/m ² K)	1,12 W/m ² K **
air permeability	3

maximum achievable performance

size and variations



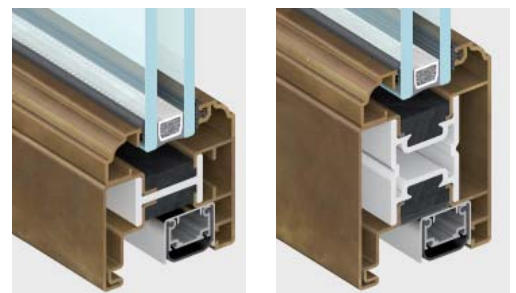
reduced lateral section | frame section 107 mm



lateral section | frame section 132 mm



central section | frame section 152 mm

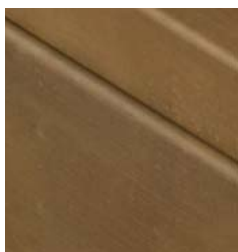


normal and reduced bottom rail frame section 67 and 92 mm

EBE Style doors are flush doors.

The reduced profile version comes with a 107 mm frame available only for inward opening.

materials



brass

EBE Style is available in brass.

glazing bead



style

The Style glazing bead is perfectly symmetrical with the **EBE Style** profile keeping the same decorative pattern both on the inside and the outside of the window.

handles



stainless steel 5002
h.150 | d.20 mm



"vitruvio medium"
cut round
h.116 | d.15 mm



"vitruvio medium"
sphere round
h.116 | d.15 mm



"vitruvio medium"
cut square
h.116 | d.15 mm

The "vitruvio" handles are available in burnished brass, chrome polished brass and polished brass. The system allows for different handles to be fitted, picture 7.

hinges



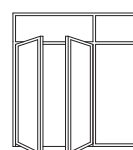
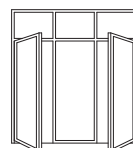
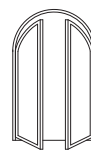
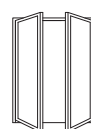
three-wing butt hinge
h.160 | d.22,5 mm



concealed

Three-wing hinges are adjustable and supplied in stainless steel scotch brite, satin and polished

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

ML

EBE 65 technology meets the warmth of wood to create windows with smaller profiles but with an extremely high structural resistance and acoustic and thermal insulation



Wood, metal and glass are basic natural components in the history of building. Time after time, the designer needs to mix these components trying to leave as much space as possible for window light in order to maximise brightness, using wood to provide a warm and natural feeling and metal for its sturdiness and resistance.

ML system has been conceived to meet all these specific requirements at once. In fact, thanks to the structural rigidity of steel profiles with thermal break, it's possible to realise large windows with a mere 85 mm visible section, much smaller than the traditional wooden ones.

The width of the metal profile - which allow for the use of thick triple glazing glass - and the range of accessories integrated in the system make it possible to achieve high acoustic, thermal and safety performances, in order to meet all the modern building requirements.

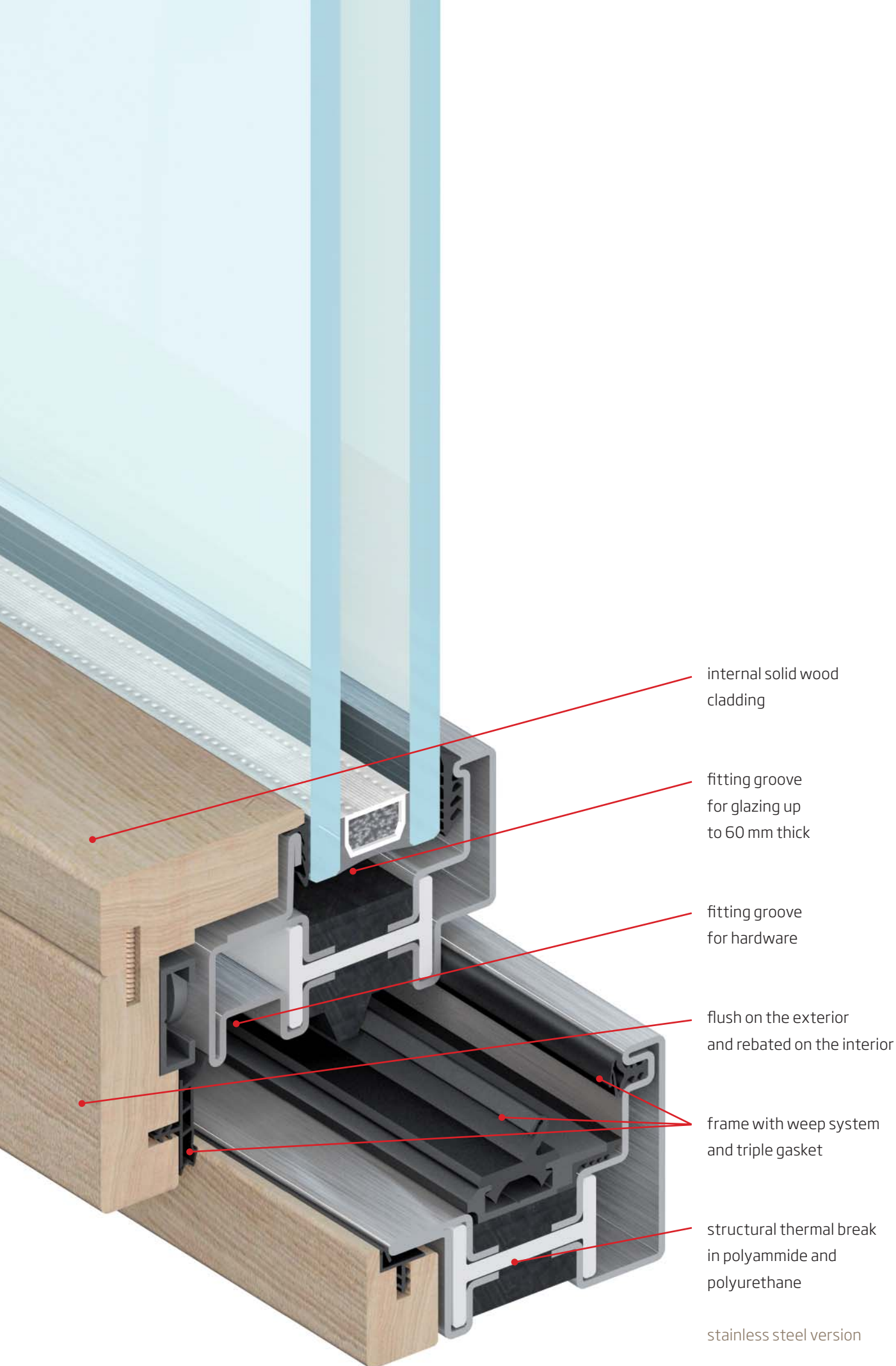
The **ML** profile is coated with solid wood on the internal face - thus making it easier to match it with the room furnishing - while it uses metal on the external face, thus lowering the need for maintenance.

ML doors and windows are available in steel-wood, stainless steel-wood, corten steel-wood and in brass-wood.

There are different wood finishes available making it easier to adapting it to the different architectural needs.

areas of application

- windows
- glass door



internal solid wood
cladding

fitting groove
for glazing up
to 60 mm thick

fitting groove
for hardware

flush on the exterior
and rebated on the interior

frame with weep system
and triple gasket

structural thermal break
in polyamide and
polyurethane

stainless steel version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

ML window

system and performance



ML is an integrated system with accessories, seals and thermal break profiles 91 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with insulating glass up to 50 mm thick. The sealing of the window frames is guaranteed by a three-level sealing weep system. It's possible to replace the internal wooden profile face without removing the window.



Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of the **ML** system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	5
wind resistance - frame bending	C
water tightness	9A
acoustic performance (with R_w per IGU 42 dB)	47 (-2;-5) dB*
thermal transmittance (with U_g glass 1,0 W/m ² K)	1,16 W/m ² K**
air permeability	4
break-in resistance	(RC)3

ref: single-sash **EBE 65** stainless steel 1200x2400mm window

*ref: single-sash **EBE 65** galvanized steel 1230x1480mm window

**calculation ref. EN ISO 10077/1

size and variations



lower section | frame section 85 mm



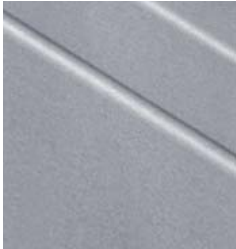
lateral section | frame section 85mm



central section | frame section 145mm

ML window is rebated on the interior and flush on the exterior. The standard solution has a 85 mm lateral frame section.

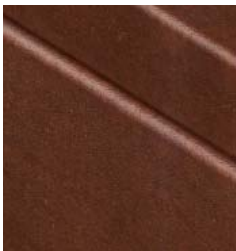
materials



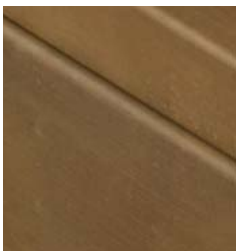
galvanized steel



stainless steel



corten steel



brass

ML is available in the following:

- in wood and galvanized steel, in a wide range of colours and superficial finishes.
- in wood and AISI 304 brushed stainless steel
- in wood and AISI 316 polished or Scotch-Brite stainless steel.
- in wood and corten steel
- In wood and brass (OT67 copper alloy).

The internal cover can be made with different type of wood, styles and finishes according to the furnishing requirements.

glazing bead



rectangular

The glazing bead is in wood and is available in different shapes and material according to the architectural needs.

handles



DK inox I 5056
h.135 | d.20 mm



DK "vitruvio medium"
cut round
h.116 | d.15 mm



DK "vitruvio medium"
sphere round
h.116 | d.15 mm



DK "vitruvio medium"
cut square
h.116 | d.15 mm

The DK "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted, picture 7.

hinges



AR standard
h.85 | d.15 mm



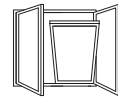
AR stainless steel
h.85 | d.15 mm



AR concealed

Standard three-wing hinges are adjustable and supplied in galvanized steel with "e-look" finish and coloured plastic cover. Stainless steel hinges are available in polished, Scotch-Brite or burnished finishing.

main type



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

Custom solutions are available in co-operation with Secco Sistemi technical office.

infinities HT

a front cladding system with high energy efficiency and aesthetic value designed for sustainable architecture

Cladding a building represents a double opportunity to add value to it. In fact, on one hand the technical nature of cladding can add “life” to an area that traditionally only provides structural support to buildings and separates the outside from the inside. On the other hand cladding, intended as a combination of material and design, can characterise the overall building in a distinctive way.

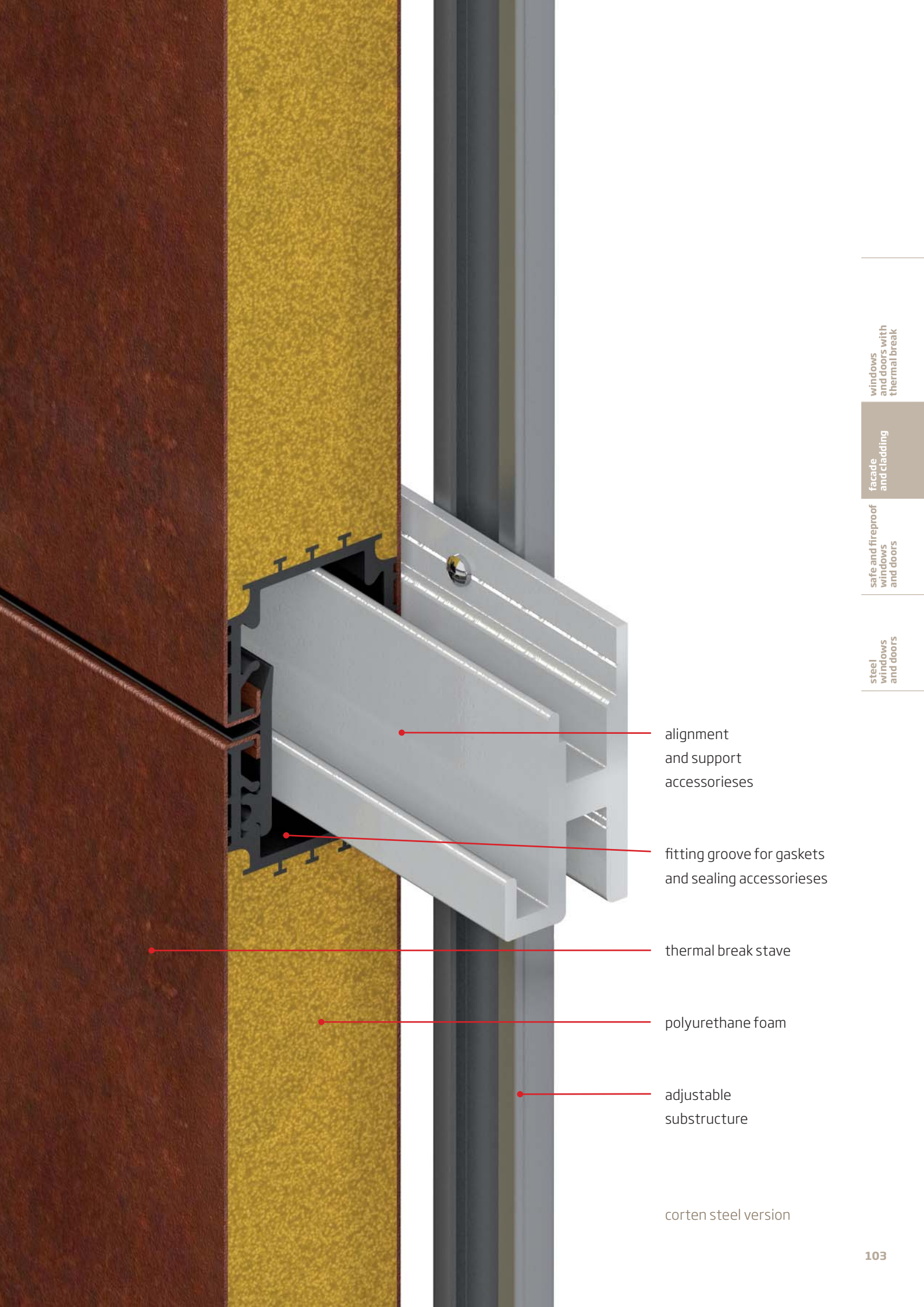
The ventilated **infinities HT** wall system is technologically suitable for new buildings as well as for the restoration of existing ones in terms of energy efficiency, thus optimising the exchange of thermal inflows and outflows during winter and summer.

The main advantages from the use of this system are: prestigious finishes from the use of four different materials, providing the building with a high aesthetic and architectural value; energy efficiency and a remarkable improvement of the thermal performance thanks to the interaction between insulation and natural ventilation; finally, the possibility of generating renewable energy given the option of installing photovoltaic panels that perfectly integrate in the front wall.



areas of application

- application options
- ventilated front/facade
- photovoltaic front/facade



alignment
and support
accessories

fitting groove for gaskets
and sealing accessories

thermal break stave

polyurethane foam

adjustable
substructure

corten steel version

infinities HT

Desalination Plant | Alicante (E)



The big desalination plant in Canaes del Taibilla is one of many made in Spain to try and meet the water needs of the country. It is also the twin plant of another one near Alicante in Murcia. It affects 34 counties and produces 300,000 cubic metres of fresh water through reverse osmosis.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

Particular care was paid to soften the environmental impact of the building, the technical shell of which was covered with almost 1100 square metres of corten **infinities HT** panels. These are 330 mm high, 46 mm thick, made of

corten on the outside and galvanized steel on the inside and have been fixed to a metal substructure. The door and window frames have been realised with **EBE 65** profiles with thermal break of the same material.

infinities HT

the system



infinities HT is a system designed for cladding existing structures by applying horizontal or vertical thermal break staves. These staves have a high physical, mechanical and aesthetic performance and are available in four different materials: galvanized steel, stainless steel, corten steel and brass.

infinities HT system has a variable ventilation duct for differential heat flow control during summer or winter periods.



The basic element of the system, the stave, is made of two metal parts joint and hardened by lateral extruded pieces in polyamide and an internal foam in open-cell polyurethane. The **infinities HT** stave is 46 mm thick and 333 mm high. The particular shape of the lateral extruded pieces allows for EPDM seals to be inserted and for special aluminium accessories to be secured. This makes it easier for staves to be safely and quickly secured to the supporting structure..

weight of infinities HT stave	8,2 kg/m	
moment of inertia of the section on axis X	$J_x = 54,3 \text{ cm}^4$	$W_x = 23,6 \text{ cm}^3$
moment of inertia of the section on axis Y	$J_y = 2195 \text{ cm}^4$	$W_y = 131,8 \text{ cm}^3$
elongation for a delta T of 80°C	1 mm/m	
thermal insulation	0,7 W/m²K	

materials



galvanized steel



stainless steel



corten steel



brass

infinities HT thermal break slats are made in galvanized still on the internal part and in galvanized steel - in a wide range of colours and superficial finishes - AISI 304 brushed stainless steel, AISI 316L polished or scotch brite stainless steel, in corten steel and in brass (OT67 copper alloy) on the external part.

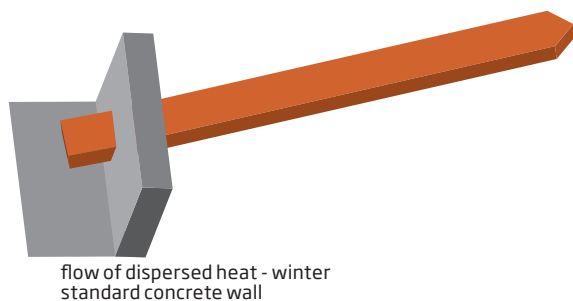
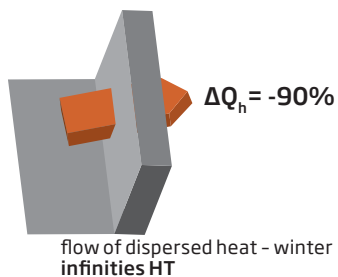
integrated photovoltaic



photovoltaic laminate

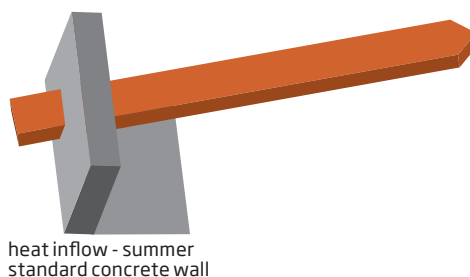
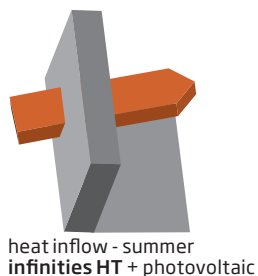
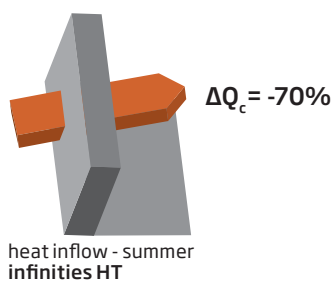
The ventilated front/ facade can be fitted, as an alternative to steel panels, with photovoltaic plates for energy production. The panels, in amorphous silicon cells, have a 6 to 10% efficiency and, when integrated in a south facing front, can produce around 45-65 kWh/m² per year. This is also depending on the available sunlight at the installing site (taking into account the Italian weather data).

winter performance



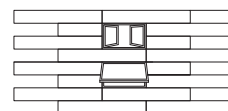
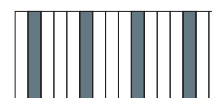
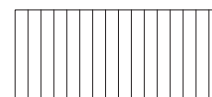
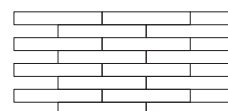
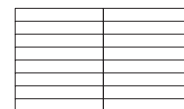
Thanks to the possibility of adjusting the air flow in the cavity wall through a set of lower and upper grids, **infinities HT** system allows for a sharp reduction of heat loss compared to a standard concrete wall.

summer performance



During summer, the air flow naturally circulating in the ventilated wall cavity stops the heat inflow thus increasing insulation. Ventilation, moreover, avoids condensation.

main type



infinities HT can be mounted with horizontal and vertical slats and or vertical slats integrated with photovoltaic panels.

Custom solutions are available in co-operation with **Secco Sistemi** technical office.

windows
and doors with
thermal break

facade
and cladding




safe and fireproof
windows
and doors

steel
windows
and doors

AF

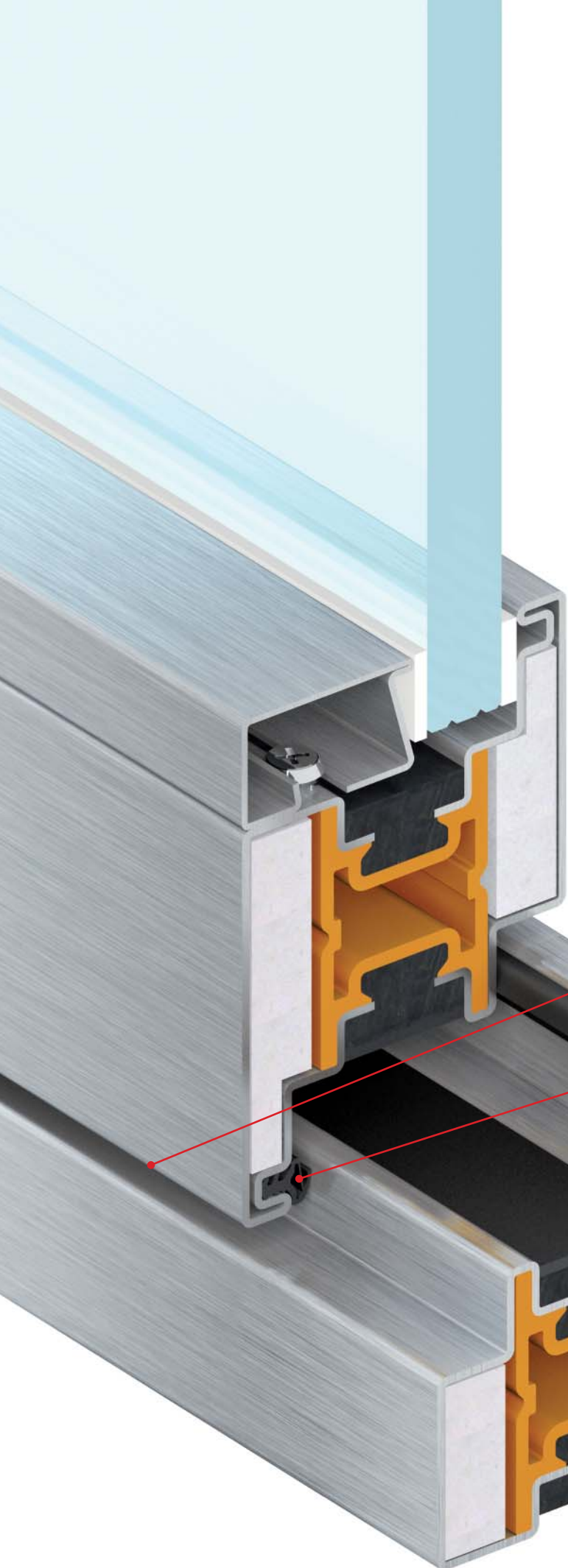
firebreak doors and glazed partitions that blend in with all other door and window frames of the building

Partitioning the space to protect people from the danger of smoke and fire poses a further challenge for the designer. The difference in shape and look given by the firebreak technology makes it difficult to visually integrate firebreak doors and glazed partitions with all the other door and window frames. On the contrary, despite its high specificity, the **AF E/EI** system has a wide range of doors and glazed frames – for internal and external use – that bear the same aesthetic nature of all other products by Secco Sistemi. Same materials (painted galvanized steel, stainless steel and corten steel), same shapes and look, same accessories (handles, hinges, panic bars, door closers): all the elements are easy to identify without clashing with the rest of the building. Thanks to an accurate research on specific materials and internal components, including accessories and seals, **AF** system makes it possible to obtain door and window frames that are able to meet different fire protection standards: EI30 using the technology of EBE thermal insulated system and EW 30/60/90 door and window frames using **sistemacciaio** profiles.

	sealing capability of the door frame to contain fire, fumes and flammable gases.
	irradiation capability of the door frame to contain the irradiation to one metre on the non-exposed side.
	insulation capability of the door frame to contain the temperature on the non-exposed side.

areas of application

- doors
- fixed partitions and glazed doors
- complex glazing



internal and external
flush

double rebate
fire seal

expanding seal

cooling inert
material

fireproof thermal break
resins

AF E130 stainless steel
version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

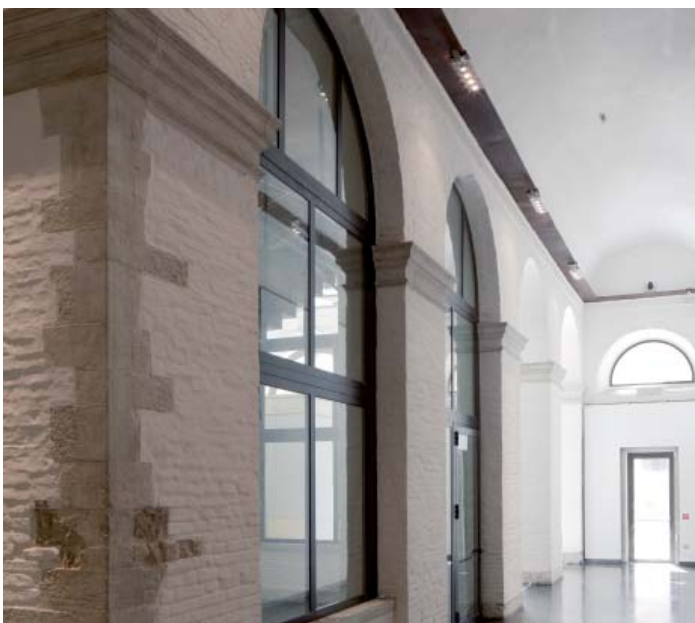
steel
windows
and doors

Gallerie Dell'Accademia | Venice



The monumental complex of the Gallerie Dell'Accademia stands in the site where once was, until the beginning of 19th century, the big complex formed by the church of Santa Maria della Carità, the nunnery of Canonici Lateranensi and Scuola Grande di Santa Maria Della Carità. From the 16th century until the second half of the 1940s, several architects

worked on the complex of the Gallerie: Palladio, Gianantonio, Selva and up to Carlo Scarpa who was in charge of an important although partial recovery intervention. The renovation work aimed at expanding the space for exhibitions in the articulated and elaborate museum and it has required a delicate yet considerable functional restoration.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

All the space previously occupied by the Accademia was cleared in order to increase the area available to the museum. To do so, it was necessary to connect the first floor to the ground floor of the 18th century building with a new set of stairs and to separate the two areas with a firebreak barrier. The door and window frames have been realised with AF Ew 30 system,

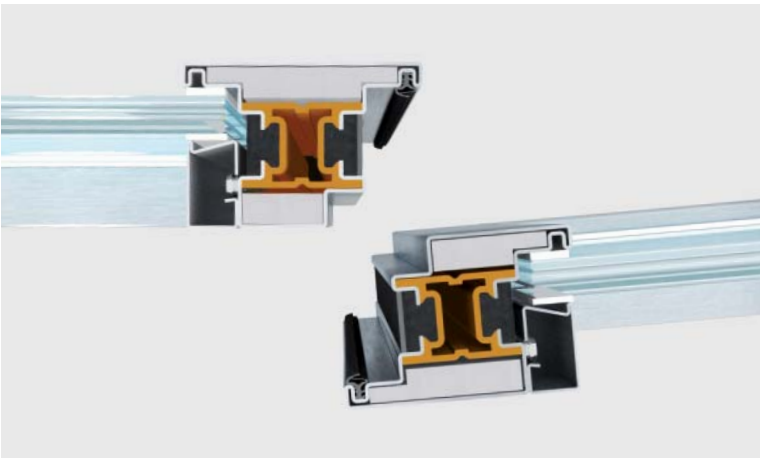
according to the new government requirements and the new fire safety concept based on the "fire engineering" notion. These large, brown, arched-shaped door and window frames in galvanized steel match, architecturally and aesthetically, all the others used in the building and realised with OS2 system in burnished brass.

AF EI 30

system and performance



AF EI 30 is an integrated system with accessories, seals and thermal break profiles 65 mm deep that allows for a wide range of fireproof doors and glazed partitions. They can be equipped with single or double glazing up to 40 mm thick. Each solution is equipped with a related set of certified accessories integrated in the system. The ability of not letting fire or hot fumes through (fire resistance E) is guaranteed by the particular structure of the profile and by a rebate double seal system.



The ability to contain the temperature level on the side not exposed to the fire (insulation I) is guaranteed by the thermal break made of special fire resistant resins. The performance of **AF EI 30** system has been tested by the best European certifying labs under the reference standards EN 1634-1.

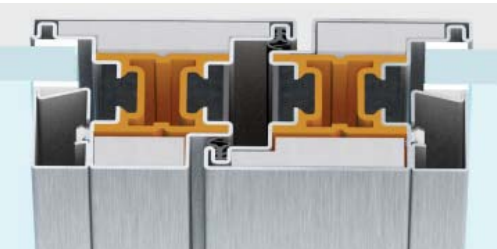
fire performance	EI ₂ 30
smoke seal	Sm - C5
mechanical strength: durability	200.000 cycle

under reference standards EN 1364-1 and EN 1364-3

size and variations



lateral section | frame section 134mm



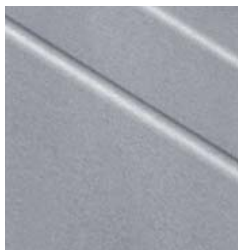
central section | frame section 156 mm



bottom rail | frame section 94mm

AF EI 30 is an interior and exterior flush door. The lateral and central sections have the same frame size of the **EBE 65** system, 134 mm lateral frame sections.

materials



galvanized steel



stainless steel



corten steel

AF EI 30 is available in galvanized steel - in a wide range of colours and superficial finishes - in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel and corten steel.

glazing bead



rectangular

The rectangular glazing bead is available in various sizes for different glazing thickness. It allows for high resistance required to meet the fireproof performance without the application of visible screws.

handles



inox 1502
h.135 | d.20 mm

hinges



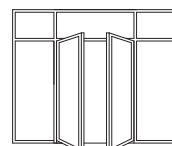
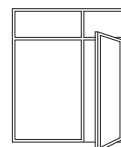
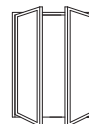
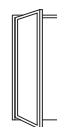
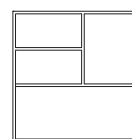
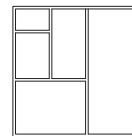
three-wing butt hinge
h.160 | d.22,5 mm



three-wing flush
h.100 | d.20 mm

Three-wing butt hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel and corten steel. A three-wing hinge for flush doors is provided available in stainless steel.

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

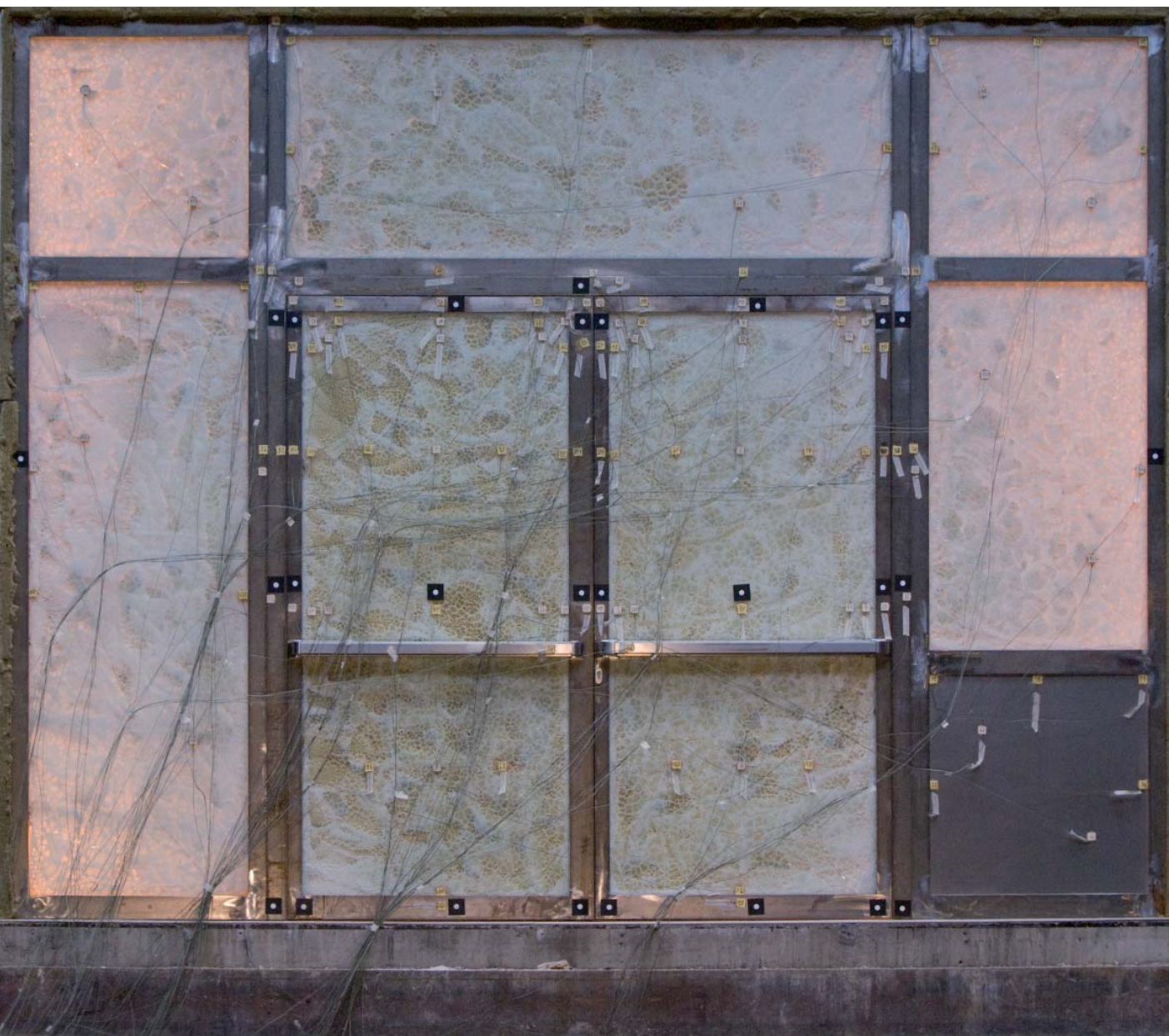
steel
windows
and doors

Fire resistance test



The ability of a door or a window frame to resist to the high stress induced by a fire is tested in specific labs equipped with special burners and tools following strict European procedures. The test is performed on a real-size specimen in which all components - profiles, glass, seals, locks, door closers - are tested in real conditions of use after being

subjected to a number of opening and closing cycles. Furthermore, the supporting structures are the same on which the door and window frames will be mounted (plasterboard, wall, concrete, etc.). The burners in the lab can quickly raise the temperature to nearly 1000°C and keep it at this level for the whole duration of the test.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

Sensors are applied on the specimen, which can test the compliance of the unit with the grading specifications. During the test not only the temperature on the "cold" side of the specimen is measured and evaluated but also possible deformities and the nature of the fumes coming from the heating of the various components.

The test is considered successful if, after the time specified by the specific grade, the door remains intact, there's no fire on the outside, there are no gaps in the frame and the fumes are not flammable.

AF system guarantees such results thanks to the materials of which the thermal break is made, to the cooling components inserted in the door and

to the use of special types of glass and seals that, in rising temperatures, produce gels and foams able to lower the temperature and seal any gaps from any deformities occurred.

AF Ew 30/60/90

system and performance



AF Ew 30/60/90 is an integrated system with accessories, seals and thermally non-insulated profiles 55 mm deep allowing for a wide range of fireproof doors and glazed partitions. They can be equipped with single or double glazing up to 35 mm thick. Each solution is equipped with a related set of certified accessories integrated in the system.



The ability of not letting fire or hot fumes through (fire resistance E) is guaranteed by the particular structure of the profile and by a rebate double seal system. The ability to keep the irradiation from the side not exposed to the fire (irradiation W) is guaranteed by special glass provided. The performance of **AF Ew 30/60/90** system has been tested by the best European certifying labs under the reference standards EN 1634-1.

fire performance	E 30 Ew 60 Ew 90
smoke seal	Sm - C5 *
mechanical strength: durability	200.000 cycle *

ref: EN 1364-1 standard
* ref: EN 1364-3 standard, ref: single-leaf galvanized steel 1300 x 2300 mm door

size and variations



lateral section | frame section 131 mm



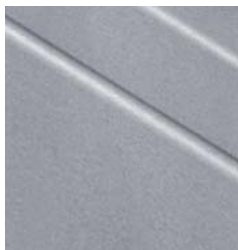
central section | frame section 151 mm



bottom rail | frame section 140 mm

AF Ew 30/60/90 is an interior and exterior flush door. The lateral and central sections have the same frame size of the sistemacciaio system, 131 mm lateral frame sections.

materials



galvanized steel



stainless steel



corten steel

AF Ew 30/60/90 is available in galvanized steel - in a wide range of colours and superficial finishes - in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel and corten steel.

glazing bead



rectangular

The rectangular glazing bead is available in various sizes for different glazing thickness. It allows for high resistance required to meet the fireproof performance without the application of visible screws.

handles



inox 1502
h.135 | d.20 mm

hinges



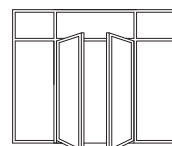
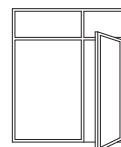
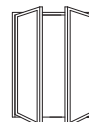
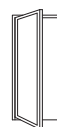
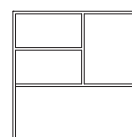
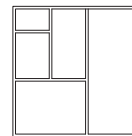
inox 6006 three-wing
h.130 | d.20 mm



weld-on 5001
h.145 | d.20 mm

Weld-on hinges are in galvanized and stainless steel. Three-wing butt hinges are adjustable and are supplied in galvanized steel, stainless steel and burnished stainless steel.

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

blindacciao

elegance and
technology for
external protection
in traditional building

The design and manufacturing of blindacciao stems from the need to combine safety and partial room darkening, with an elegance that could visually recall the use of blinds in traditional building.

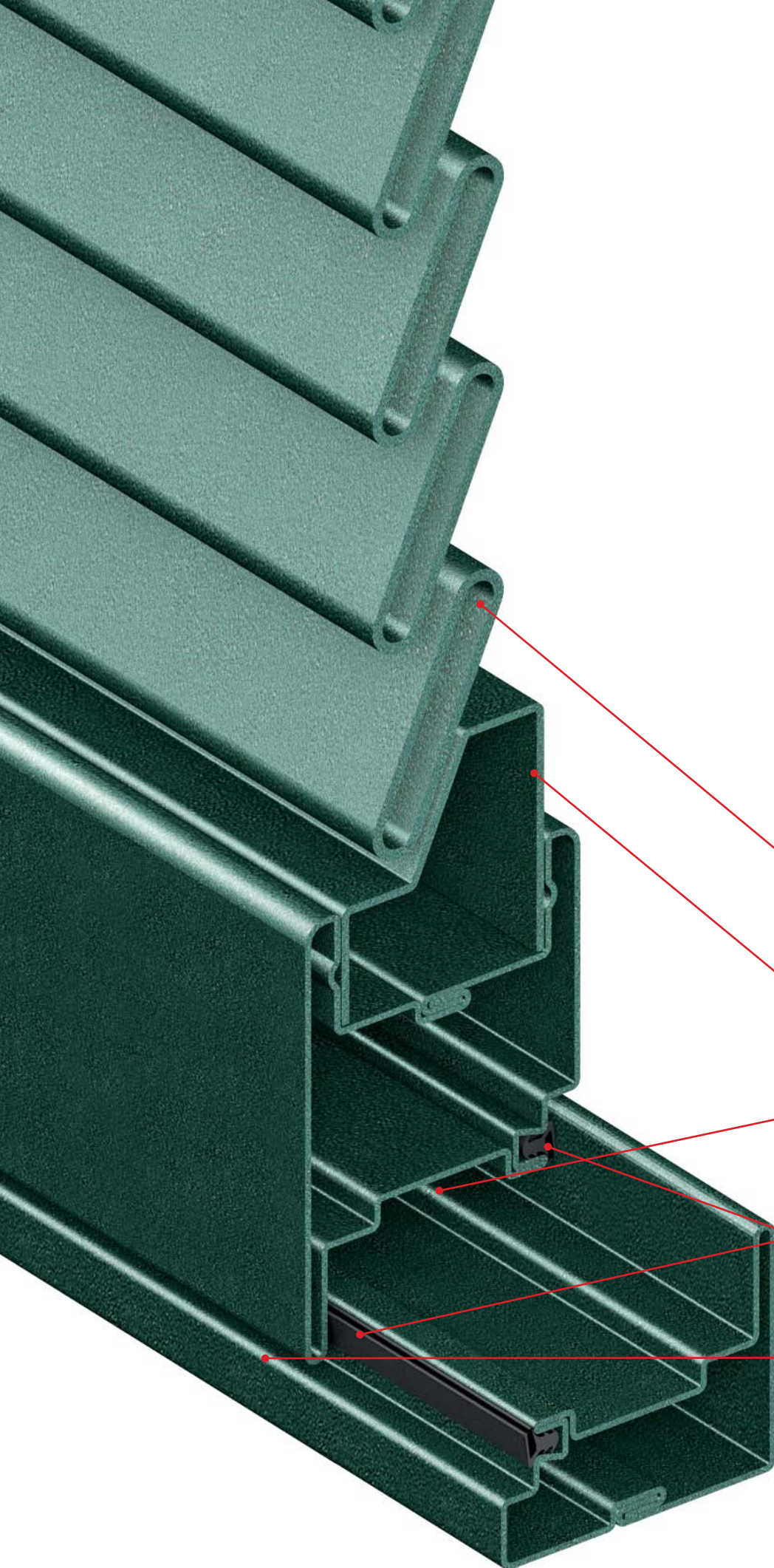
blindacciao system offers external protection, which is highly resistant to burglary thanks to its galvanized steel profiles, subsequently painted in a wide range of colours and superficial finishes (polished, semi-polished or metallic).

The system is made of a fully welded perimeter frame and fixed slats without visible welding. The elegance of the shapes meets safety thanks to the use of an integrated set of accessories such as stainless steel tamper-proof studs, bolts with saw-proof ends, three point locking system with cremone bolt and handles and weld-on adjustable hinges.



areas of application

- safety shutters for doors and windows



welding free slats

compensation profile
for slats

fitting groove for safety
hardware

double acoustic rebate seal

internal and external flush

painted galvanized steel
version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

blindacciaio

Farmhouse on the hills near Pistoia



The building is located on the hills near Pistoia, and it's a typical farmhouse surrounded by vineyards and olive trees. The isolated location has required the use of **blindacciaio** system to guarantee an appropriate safety

level for the building. Thanks to its simple yet elegant lines and to the high resistance of the steel, **blindacciaio** blends nicely in this traditional building, protecting the existing wooden doors and windows from breaking-in.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

On top of guaranteeing safety to the building, **blindacciaio** allows partial darkening of the rooms thanks to the tilted position of its slats made of galvanized steel and

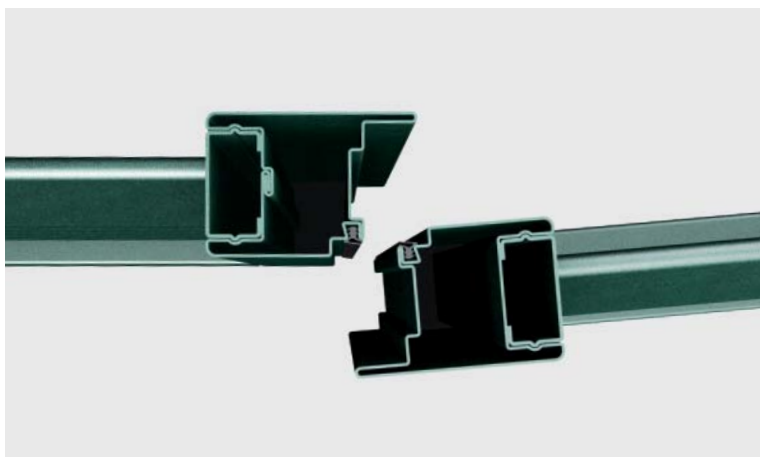
with concealed welding. The galvanized steel has been painted with a green colour to visually recall the features of a simple and traditional architecture.

blindacciaio door and window

system and performance



blindacciaio is a system including profiles, accessories and seals with a 55 mm cross section and a thickness of 15/10 for shutters and armoured gratings. The high safety standards of the finished products is achieved thanks to the 15/10 thickness of the profiles, to the tilted positioning of the frames and slats within the profiles and to the special structure of the internal section, which makes it possible to use high quality hardware and accessories.



The set of accessories include: three point security locking system (with cremone bolt or handles) and saw-proof carbonitrided ends; weld-on hinges with bearing, for windows, and with adjustable, lubricated ball bearing for doors; lever bolts with internal rods and saw-proof carbonitrided ends; stainless steel break-in resistant studs.

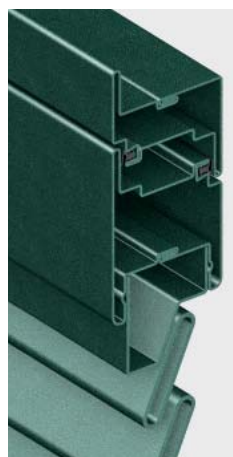
size and variations



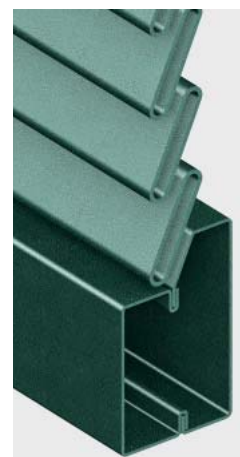
lateral section | frame section 96 mm



central section | frame section 131mm



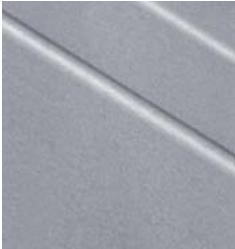
upper section
frame section 127 mm



bottom rail
frame section 95 mm

blindacciaio is a flush system. The standard solution has a 96mm frame section; the central section of the double-wing solution has a 131mm frame section.

materials



galvanized steel

handles



stainless steel 5002
h.150 | d.20 mm



stainless steel cremone bolt
h.135 | d.20 mm

hinges



weld-on
h.150 | d.20 mm

accessories

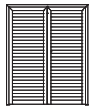


three point locking
system



stainless steel stud
d.20 mm

main type



blindacciaio is available in galvanized steel in a wide range of colours and superficial finishes.

The system allows for different handles to be fitted.

Adjustable weld-on hinge in galvanized steel.

Safety accessories in stainless steel; three point locking system with nitrocarburised saw-proof ends.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows and doors with thermal break

facade and cladding

safe and fireproof windows and doors

steel windows and doors

sistemacciaio

large glass surfaces,
high sturdiness
and performance
in line with the latest
regulations

sistemacciaio, thanks to the slenderness of its profiles, makes it possible to realise glass surfaces with a metal frame reduced in size without compromising the performance required by the latest strict regulations.

The particular structure of the steel profiles allows for sturdy frames with high performance, resistance to the weather agents and safety. Despite not being a thermal break system, **sistemacciaio** guarantees a good thermal insulation thanks to the possibility of using insulating glass with low thermal transmittance and to the small dispersing metal surface.

sistemacciaio door and window frames are available in four materials (painted galvanized steel, stainless steel 304 and 316, corten steel and brass) and two versions, rebated and flush.

They are ideal when in need to recreate the antique charm of intersecting small transoms and mullions or when an all-glass, highly technological solution is needed.



areas of application

- doors
- windows



glazing bead

fitting groove
for glazing up
to 40 mm thick

fitting groove
for hardware

frame with weep system
and double sealing gasket

internal and external
flush

burnished brass version

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

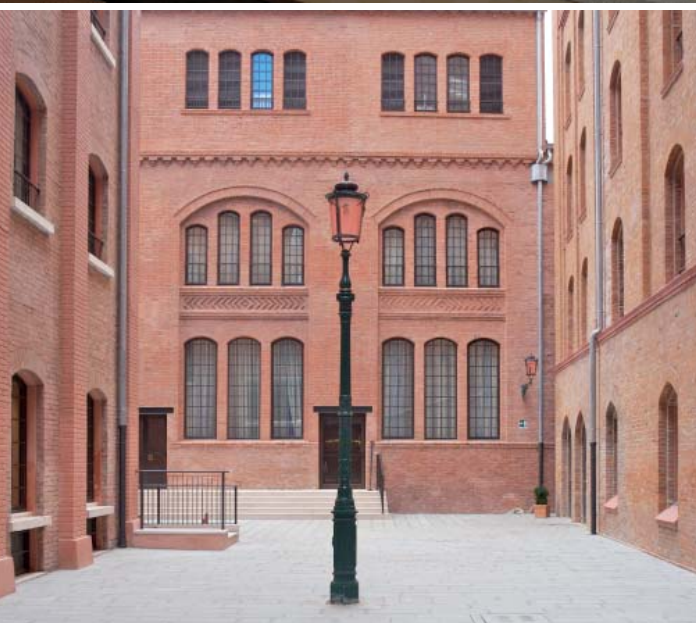
sistemacciaio

Hilton Hotel, former Molino Stucky | Giudecca, Venice



The majestic shape of Molino Stucky, designed in 1884 by Architect Ernst Wullekopf in aneathic neo-gothic style, has been defining the Venetian skyline, and in particular the Giudecca Canal, for more than 120 years. It has been active for almost 70 years and it was using cutting edge technology in the milling industry for steam cylinders grinding. When the activity ceased, in the 50s, the big complex

remained an empty monument continuously degrading until it was purchased by an important real estate group and turned into a luxury hotel. It quickly became a 5 star hotel with 380 rooms, 84 lodgins, 46 suites, 5 restaurants, a wellness area and a congress centre for 2000 people. The complex restoration work represents one of the largest conversions of an industrial structure in the world.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

The restoration concerned 1950 doors and windows, which have been kept to their original shape. These have been realised with **sistemacciaio** profiles in burnished brass to which an external grid was then applied so that the architectural impression remained unchanged. The system versatility has allowed for low visual impact, while still meeting

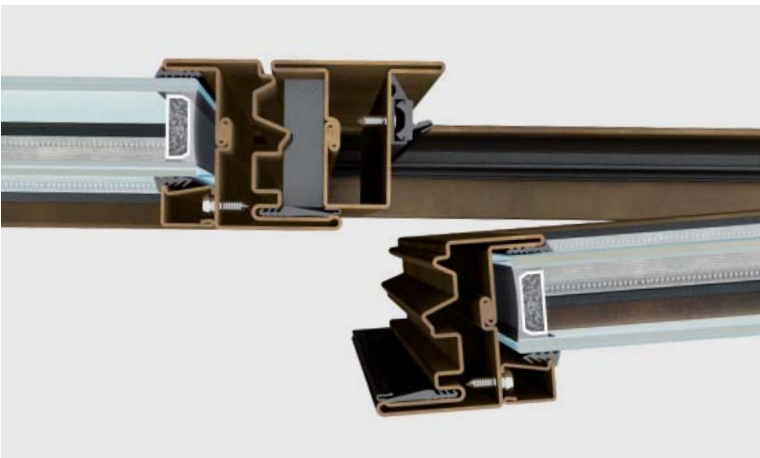
the regulation, functional and performance requirements. Moreover, it made it possible to maintain the original opening shapes: rectangular, segmental arch, pointed arch and round arch. The use of burnish brass has, finally, solved many deterioration and oxidation problems due to the marine location of the building.

sistemacciaio window

system and performance



sistemacciaio window system is an integrated system with accessories, seals and thermally non-insulated profiles 55 and/or 63,5 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with insulating glass up to 40 mm thick. The system has two versions: one is the flush, water tight version with double sealing system; the other is the rebated, weep system version with a two-level sealing gasket.



Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of sistemacciaio has been tested by the best European certifying labs under the reference standard EN 14351-1.

	flush ¹	rebated ²
wind resistance - test pressure	5	5
wind resistance - frame bending	C	C
water tightness	E750	E1350
acoustic performance (with Rw per IGU 40 dB)	40 (-2;-5) dB *	-
acoustic performance (with Rw per IGU 42 dB)	-	44 (-1;-5) dB *
thermal transmittance (with Ug glass 1,0 W/m²K)	2,12 W/m²K**	1,93 W/m²K**
air permeability	4	4

¹ref: single-sash galvanized steel 900x2130mm window

²ref: single-sash stainless steel 1230x1480mm window

*ref: single-sash stainless steel 1230x1480mm window | ** calculation ref. EN ISO 10077/1

size and variations



lower/lateral section | flush | frame section 81 mm



central section | flush | frame section 101 mm



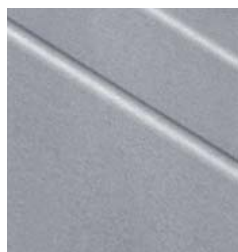
lower/lateral section | rebated | frame section 85 mm



central section | rebated | frame section 145 mm

sistemacciaio the window is available in two versions; one rebated on the interior and flush on the exterior with 85 mm frame section; the other flush on the interior and exterior with 81 mm frame sections.

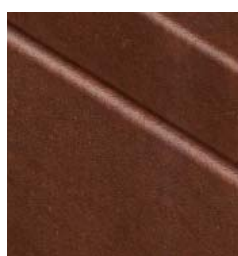
materials



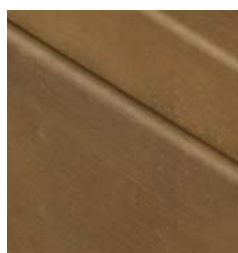
galvanized steel



stainless steel



corten steel



brass

sistemacciaio is available in galvanized steel - in a wide range of colours and superficial finishes - in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



DK inox 5056
h.135 | d.20 mm



DK "vitruvio medium"
cut round
h.116 | d.15 mm



DK "vitruvio medium"
sphere round
h. 116 | d.15 mm



DK "vitruvio medium"
cut square
h. 116 | d.15 mm

The DK "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted, picture 7.

hinges



AR flush
h.85 | d.14 mm



AR rebated
h.85 | d.15 mm



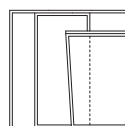
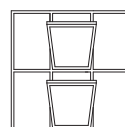
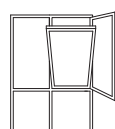
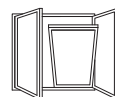
two-wing for flush
h. 126 | d.13 mm



three-wing flush
h. 82 | d.14 mm

Tilt and turn rebated hinges are adjustable and supplied in galvanized steel with coloured plastic cover. Tilt and turn hinges and two, three-wing hinges are supplied in polished, scotch brite or burnished steel.

main type



Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

sistemacciaio

La Fattoria building in Villa Emo | Fanzolo (TV)



The Emo family, after taking over the Villa belonging to the noble Family Barbarigo in 1535, commissioned Palladio with the construction of their new home right next to the Barbarigo's, which was later demolished. A new building called "La Fattoria" was built on this land the during following century.

La Fattoria was to be used as a "headquarters" for the property and to carry out those duties deriving from farming. The person in charge of the restoration, who worked closely with the Superintendence, has decided for a complete preservation of the existing building even with regards to its

characteristics of "passive building" requiring, that is, a very low energy consumption. After a complex restoration work, the Villa has been turned into the central offices of a major credit institution.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors



steel
windows
and doors

The striking setting of the Palladian mansion, with its "barchessa", the large park and the village, have required door and window frames with minimal visual impact for the Fattoria, without compromising its functional features and performance. For these reasons, corten sistemacciaio was used.

Thanks to its look, this material is well suited for a setting where the elegance of the mansion meets the rustic nature of all other buildings. A further advantage is the reduced maintenance due to the fact that the material doesn't require any further superficial intervention.

sistemacciaio door

system and performance



sistemacciaio door system is an integrated system with accessories, seals and thermally non-insulated profiles 55 mm wide allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with triple glazing up to 35 mm thick. The sealing of the door and window frames is guaranteed by a three-side rebate double seal and an automatic retractable seal.



Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of **sistemacciaio** has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	3
wind resistance - frame bending	C
water tightness	1A
acoustic performance (with R_w per IGU 40 dB)	41 (-1;-4) dB *
thermal transmittance (with U_g glass 1,0 W/m ² K)	1,85 W/m ² K **
air permeability	3

ref: single-leaf stainless steel 900x2235 mm door
*ref: two-leaf stainless steel 2400x2400 mm door | ** calculation ref. EN ISO 10077/1

size and variations



reduced lateral section | frame section 106 mm



lateral section | frame section 131mm



central section | frame section 151 mm



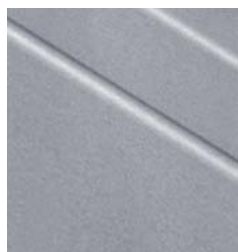
reduced bottom rail
frame section 90 mm



bottom rail
frame section 140 mm

sistemacciaio is an interior and exterior flush door. The solution with butt or weld-on hinge has a 106 mm lateral frame section. By using three-wing or concealed hinges, the lateral face section becomes 131 mm.

materials



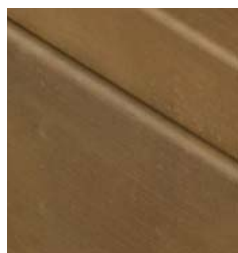
galvanized steel



stainless steel



corten steel



brass

sistemacciaio is available in galvanized steel - in a wide range of colours and superficial finishes - in AISI 304 brushed stainless steel, in AISI 316L polished or Scotch-Brite stainless steel, corten steel and in brass (OT67 copper alloy).

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped): the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



stainless steel 5002
h.150 | d.20 mm



"vitruvio medium"
cut round
h.116 | d.15 mm



"vitruvio medium"
sphere round
h.116 | d.15 mm



"vitruvio medium"
cut square
h.116 | d.15 mm

The "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted.

hinges



weld-on 5001
h.145 | d.20 mm



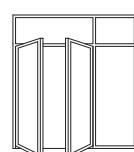
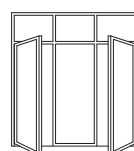
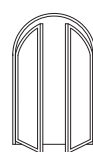
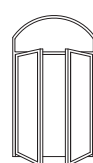
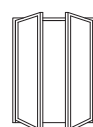
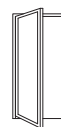
three-wing flush
h.130 | d.20 mm



concealed

Weld-on hinges are in galvanized and stainless steel. Three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel.

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

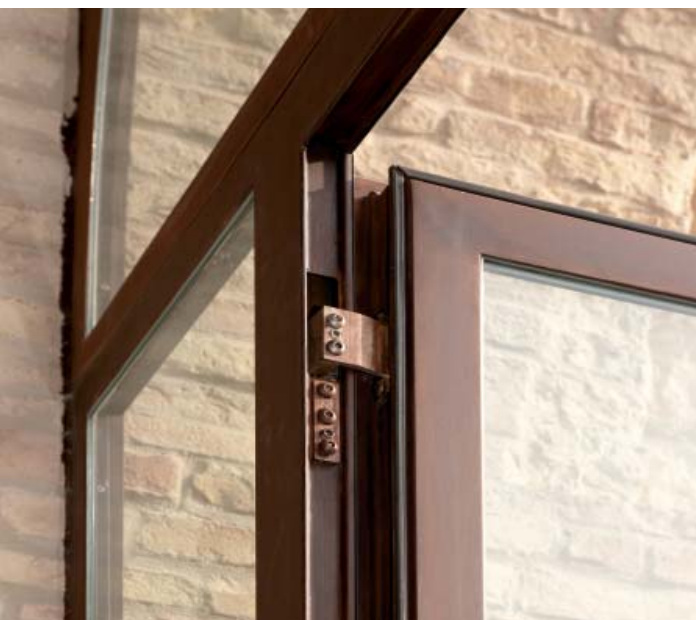
sistemacciaio

Mole Vanvitelliana | Ancona



The Mole Vanvitelliana, an impressive five-side building commenced in 1732 by architect Luigi Vanvitelli, was originally an island used for quarantine and a warehouse for the ships docking. It then became a hospital for leprosy (Lazzaretto), a fortress, a military hospital, a sugar refinery, and finally a tobacco mill.

In 1990, the municipality of Ancona got hold of the building and few years later it presented it to its citizens completely restored and suitable for shows and high-level artistic exhibitions, hence not only giving new life to an important architecture but also new cultural stimulus to the city.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

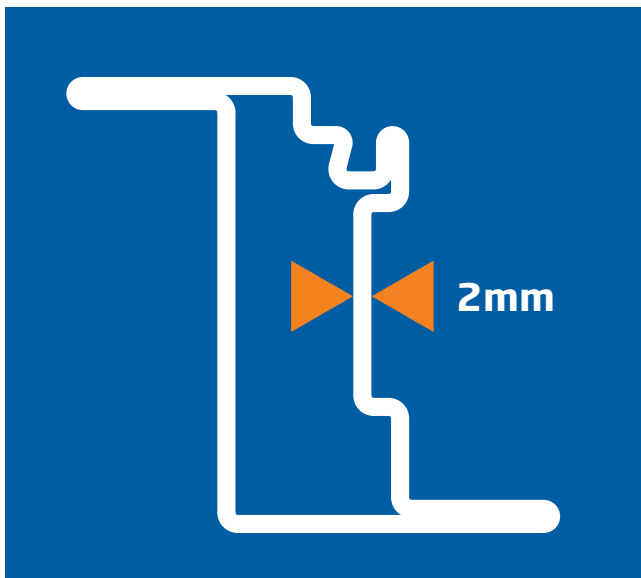
For the door and window frames, the designer and the customer wanted to use a material that could combine sturdiness, required by its public destination, to the historical and

monumental setting as well as to the sea vicinity. Corten **sistemacciaio** was chosen for the ample entrance doors, the emergency exits and the near display cabinets, all of them are arch shaped.

security

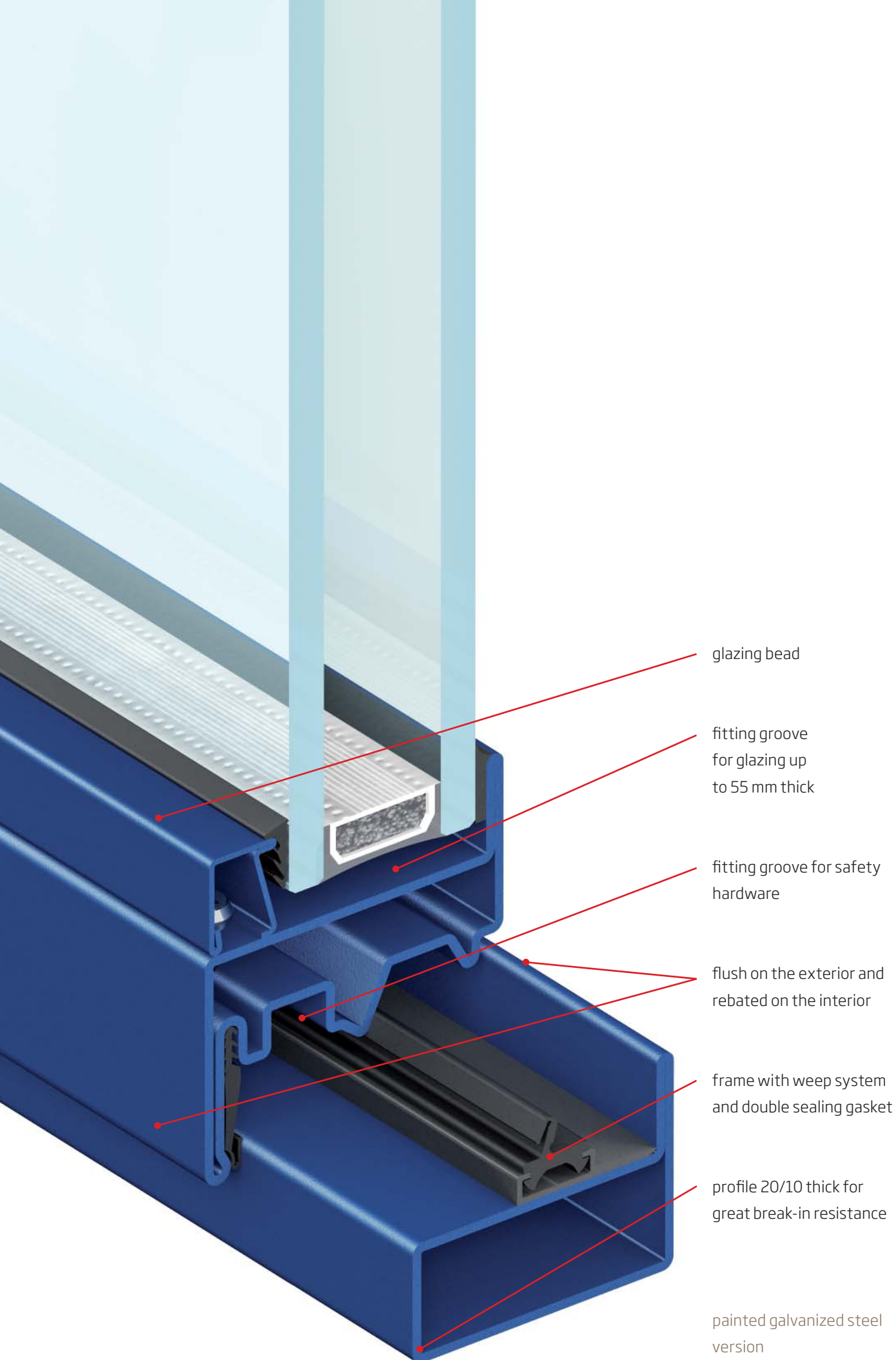
highly sturdy doors
and windows
are made with
profiles 2 mm thick.
they guarantee
safety and resistance
to burglary

security is best fit for those architectural settings where sturdiness and safety are needed, even on big surfaces. Specifically: banks, luxury shops in which a protection against burglary is vital, judicial offices or museums where valuable pieces of art are kept. The 2 mm thick plate in galvanized steel guarantees solidity and resistance to burglary also thanks to the welding assembly system, which allows for high-resistance one-piece door and window frames. The thickness and structure of the Eurogroove profiles allow for certified accessories to be secured for any kind of inward or outward opening.



areas of application

- doors
- windows



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

security

University branch, former Convent of Santa Monica | Savigliano (CN)



Built originally as Monastery of Santa Monica in 1642, it became a workhouse, after the abolition of the religious orders, then a Caserma di Cavalleria in 1814, and finally a Ospedale Militare until 1973. After a long period of degradation it has been finally turned into the faculty of

Scienze della Formazione e Farmacia (Science of Education and Pharmacy) for the degree of Tecniche Erboristiche (Herbal Techniques). The building hosts classrooms, computer labs, individual classrooms, library, offices for teachers, administration offices.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

The designer had a hard task in framing the big arches with frames that needed to bear the consistent weight of the glass. Moreover, he had to guarantee ease of cleaning and he had to conceal as much as possible the metal frames made of galvanized steel painted in grey.

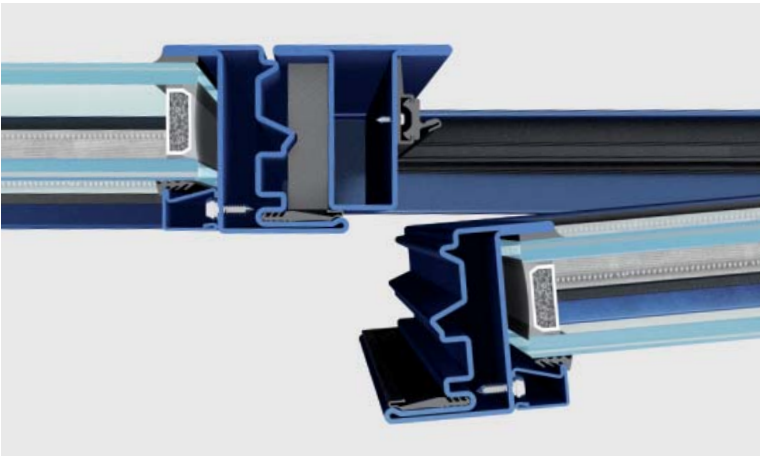
All this was possible thanks to the **security** system technology, which could guarantee maximum window transparency and resistance to the structural stress from the specific destination of the building as university, in line with the current building regulations.

security window

system and performance



security window system is an integrated system with accessories, seals and thermally non-insulated profiles 60 or 68,5 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with insulating glass up to 48 mm thick. The system has two versions: one is the flush, water tight version with double sealing system; the other is the rebated, weep system version with a two-level sealing gasket.



Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of **security** has been tested by the best European certifying labs under the reference standard EN 14351-1.

	flush ¹	rebated ²
wind resistance - test pressure	5	5
wind resistance - frame bending	C	C
water tightness	E750	E1350
acoustic performance (with Rw per IGU 40 dB)	40 (-2;-5) dB*	-
acoustic performance (with Rw per IGU 42 dB)	-	44 (-1;-5) dB*
thermal transmittance (with Ug glass 1,0 W/m²K)	2,17 W/m²K**	2,16 W/m²K**
air permeability	4	4

¹ref: single-sash sistemacciaio galvanized steel 900x2130mm window
²ref: single-sash sistemacciaio stainless steel 1230x1480mm window
 *ref: single-sash sistemacciaio stainless steel 1230x1480mm window
 ** calculation ref. EN ISO 10077/1

size and variations



lower/lateral section | flush | frame section 81 mm



central section | flush | frame section 101 mm



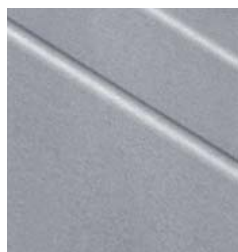
lower/lateral section | rebated | frame section 85 mm



central section | rebated | frame section 145 mm

security window is available in two versions: one rebated on the interior and flush on the exterior with 85 mm frame section; the other flush on the interior and exterior with 81 mm frame sections.

materials



galvanized steel

security is available in galvanized steel - in a wide range of colours and superficial finishes.

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped); the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



DK inox 5056
h.135 | d.20 mm



DK "vitruvio medium"
cut round
h.116 | d.15 mm



DK "vitruvio medium"
sphere round
h.116 | d.15 mm



DK "vitruvio medium"
cut square
h.116 | d.15 mm

The DK "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted, picture 7.

hinges



AR flush
h.85 | d.14 mm



AR rebated
h.85 | d.15 mm



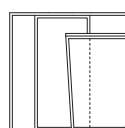
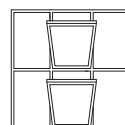
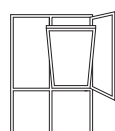
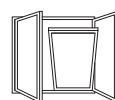
two-wing for flush
h.126 | d.13 mm



three-wing flush
h.82 | d.14 mm

Tilt and turn rebated hinges are adjustable and supplied in galvanized steel with coloured plastic cover. Tilt and turn hinges and two, three-wing hinges are supplied in polished, scotch brite or burnished steel.

main type



Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

security

Castle of Marne | Filago (BG)



The Castle of Marne is located in the small town of Filago (BG) in a strategic position at the border between the land owned by Bergamo, dominated by the Republic of Venice, and the Duchy of Milan. Marne was considered of strategic importance also because it was fortified and easy to defend thanks to the vicinity to the river Brembo and Adda. The castle, built with medieval features,

was also the home of Bartolomeo Colleoni. After having been destroyed and pillaged several times, it was brought back to its original splendour at the beginning of the 19th century when it became residence to some of the famous families from Lombardia. It is currently one of the most requested venues for luxurious banquets and entertainment due to its romantic and charming location.



windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors

The 19th century wing was heavily damaged by a recent blaze and the designer planned to use window frames in painted steel made with 20/10 **security** system profiles. Part of the mullioned windows frames are characterised by two big shutters spaced with a smaller fixed part by the central column. The big windows of the salons provide significant brightness to the interior rooms as well as

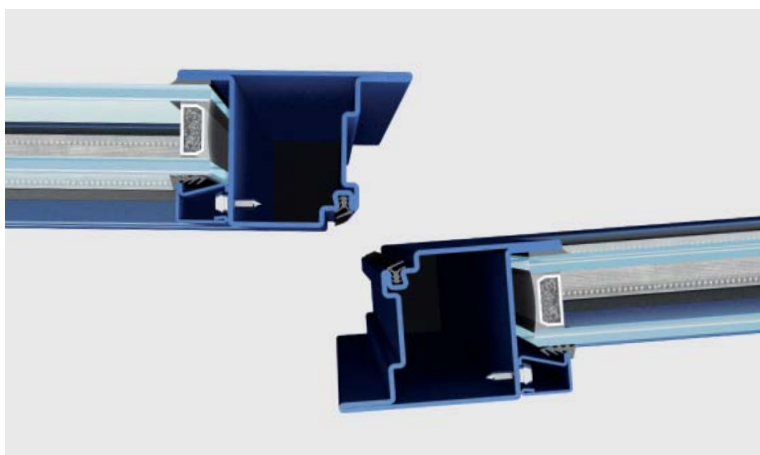
ensuring specific safety requirements thanks to the thickness of their profiles.

security door

system and performance



security door system is an integrated system with accessories, seals and thermally non-insulated profiles 60 mm deep allowing for a wide range of windows, rectangular, shaped or curved. They can be equipped with triple glazing up to 40 mm thick. The sealing of the door frames is guaranteed by a three-side rebate double seal and by an automatic retractable seal.



Each solution is equipped with a related set of accessories (also concealed) integrated in the system. The performance of the **security** system has been tested by the best European certifying labs under the reference standard EN 14351-1.

wind resistance - test pressure	3
wind resistance - frame bending	C
water tightness	1A
acoustic performance (with R_w per IGU 40 dB)	41 (-1;-4) dB *
thermal transmittance (with U_g glass 1,0 W/m ² K)	2,19 W/m ² K **
air permeability	3

ref: two-leaf **sistemacciaio** stainless steel 2400x2400 mm door
 *ref: single-leaf **sistemacciaio** stainless steel 900x2235 mm door
 ** calculation ref. EN ISO 10077/1

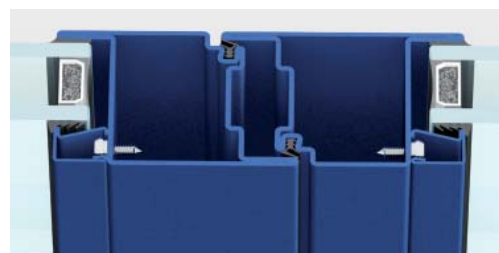
size and variations



reduced lateral section | frame section 106 mm



lateral section | frame section 131mm



central section | frame section 151 mm



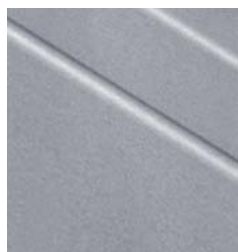
reduced bottom rail
frame section 90 mm



bottom rail
frame section 140 mm

security is an interior and exterior flush door. The solution with butt or weld-on hinge has a 106 mm lateral frame section. By using three-wing or concealed hinges, the lateral face section becomes 131 mm.

materials



galvanized steel

security is available in galvanized steel - in a wide range of colours and superficial finishes.

glazing bead



rectangular



gothic



thin

Rectangular, gothic, thin (L shaped): the wide range of glazing beads allows for different internal frame look according to architectural needs.

handles



stainless steel 5002
h.150 | d.20 mm



"vitruvio medium"
cut round
h.116 | d.15 mm



"vitruvio medium"
sphere round
h.116 | d.15 mm



"vitruvio medium"
cut square
h.116 | d.15 mm

The "vitruvio" handles are available in paintable raw brass, burnished brass, chrome polished brass and polished brass. Medium square model is provided also in corten steel. The system allows for different handles to be fitted.

hinges



weld-on 5001
h.145 | d.20 mm



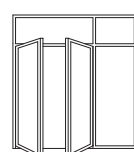
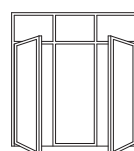
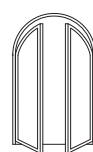
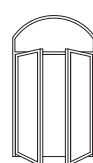
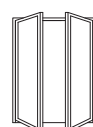
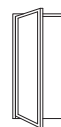
three-wing flush
h.130 | d.120 mm



concealed

Weld-on hinges are in galvanized and stainless steel. Three-wing hinges are adjustable and are supplied in galvanized steel, stainless steel, burnished stainless steel.

main type



All models can be made to open inward or outward.

Custom solutions are available in co-operation with Secco Sistemi technical office.

windows
and doors with
thermal break

facade
and cladding

safe and fireproof
windows
and doors

steel
windows
and doors





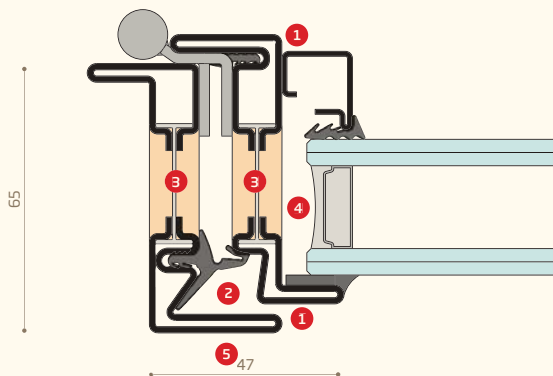
designing together

the Secco Sistemi
team works with
the designer,
with enthusiasm
and competence,
looking for
the right solution.
Its work is our
main strength

- alongside those who design
to shape solutions that are
customised and tailored;
- alongside those who design
to support the development
of the technical-operational
process and the cost estimates
- alongside those who design
to provide consultancy
and constant update
on the current regulations
- alongside those who design
to identify the most suitable
window and door frames provider
to carry out the project
- alongside those who design
to assist to the entire project
development and final work,
from the manufacturing
to the final set-up

OS2 inward opening

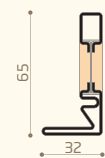
main sections



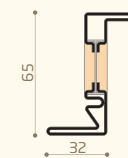
1. internal and external rebate
2. frame with weep system and double gasket
3. structural thermal break in polyamide and polyurethane
4. fitting groove for glazing up to 40 mm thick
5. section with reduced size

profiles

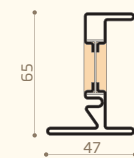
P.2801



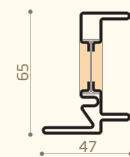
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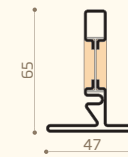
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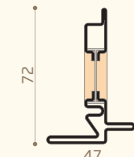
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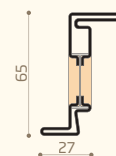
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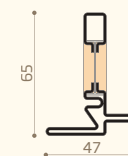
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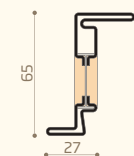
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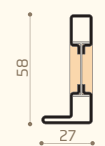
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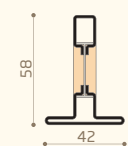
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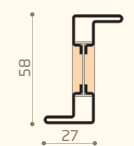
P.2871



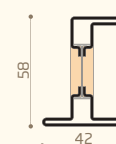
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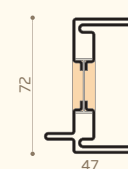
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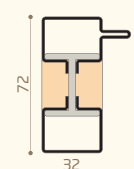
P.2874



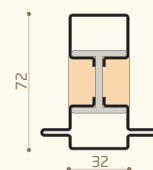
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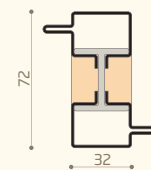
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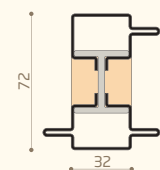
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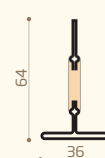
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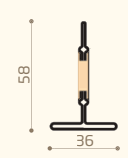
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P.2654



P.2664



P.2606



P.2607



P.2627



P.2629



PA 2606



PA 2607



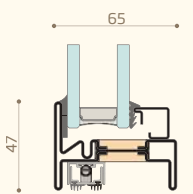
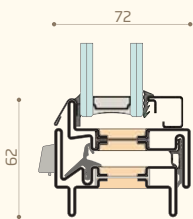
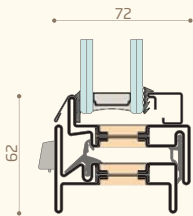
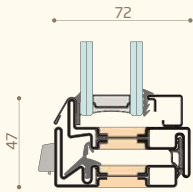
P.2608



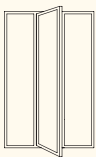
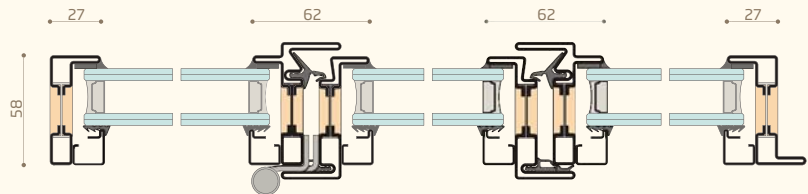
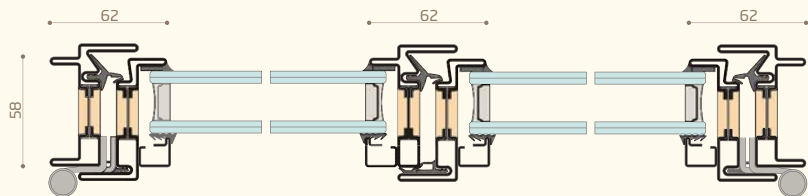
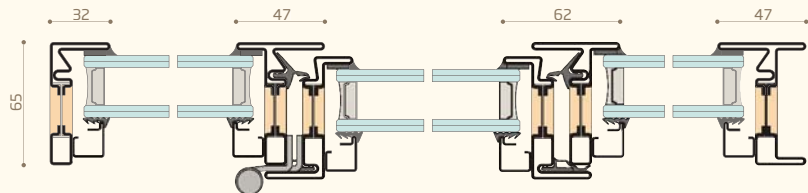
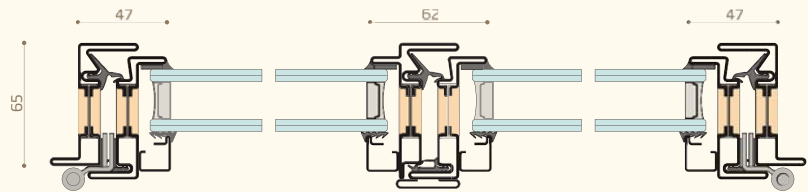
P.2638



vertical section

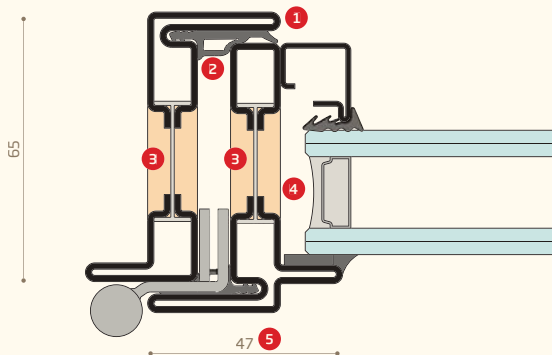


horizontal section



OS2 outward opening

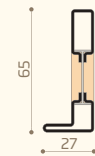
main sections



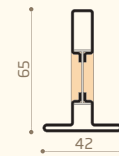
1. internal and external rebate
2. double rebate seal
3. structural thermal break in polyamide and polyurethane
4. fitting groove for glazing up to 30 mm thick
5. section with reduced size

profiles

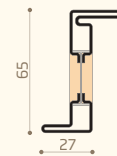
P.2851



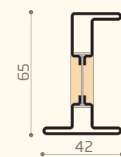
P.2852



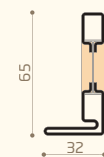
P.2853



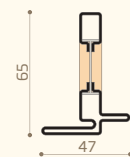
P.2855



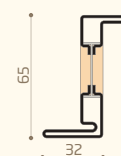
P.2861



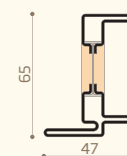
P.2862



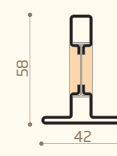
P.2863



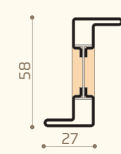
P.2865



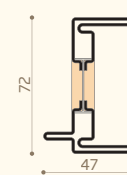
P.2872



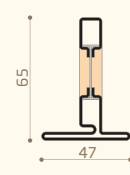
P.2873



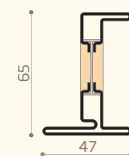
P.2875



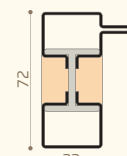
P.2882



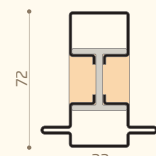
P.2885



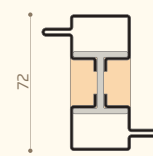
P.2891



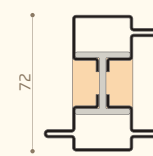
P.2892



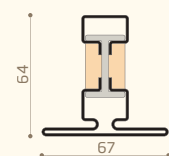
P.2893



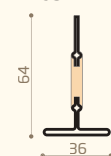
P.2895



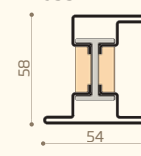
P.2652



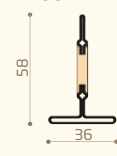
P.2654



P.2655



P.2664



P.2606



P.2607



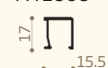
P.2627



P.2629



PA 2606



PA 2607



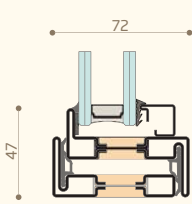
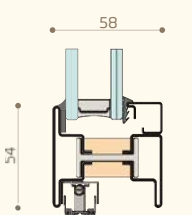
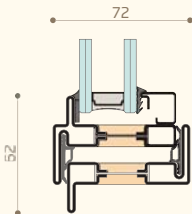
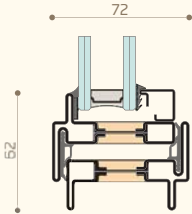
P.2608



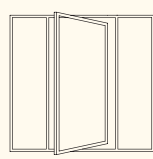
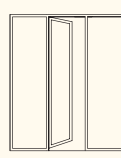
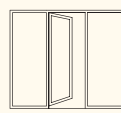
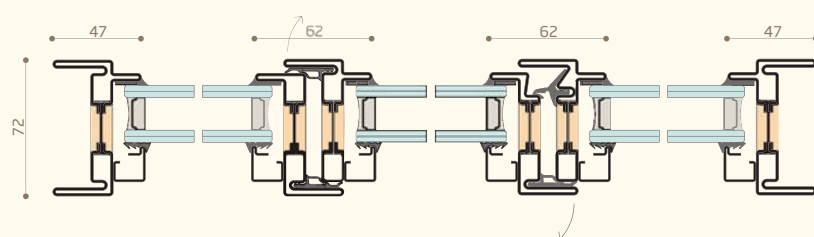
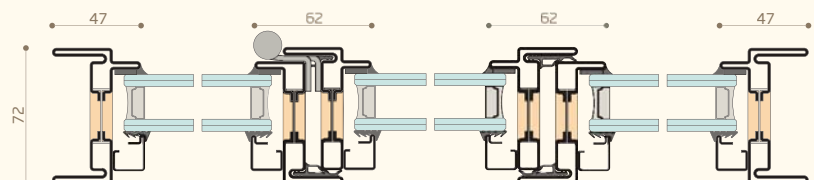
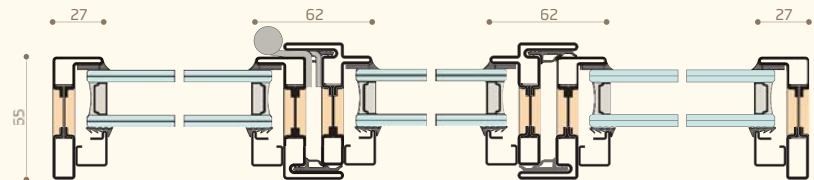
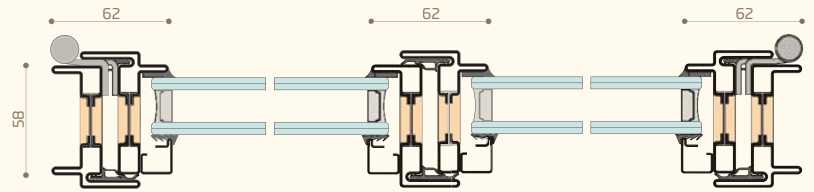
P.2638



vertical section

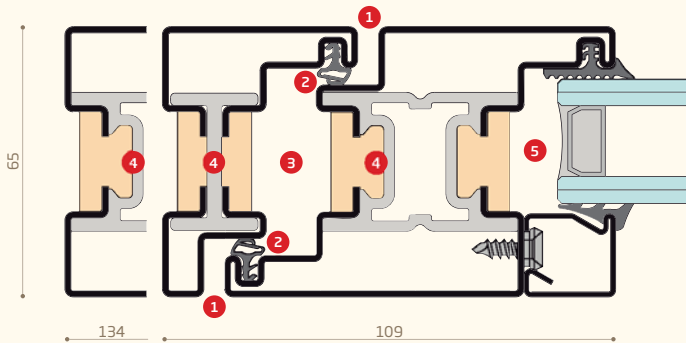


horizontal section

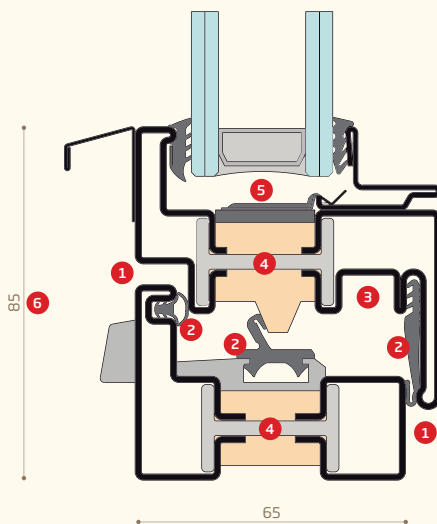


EBE 65

main sections

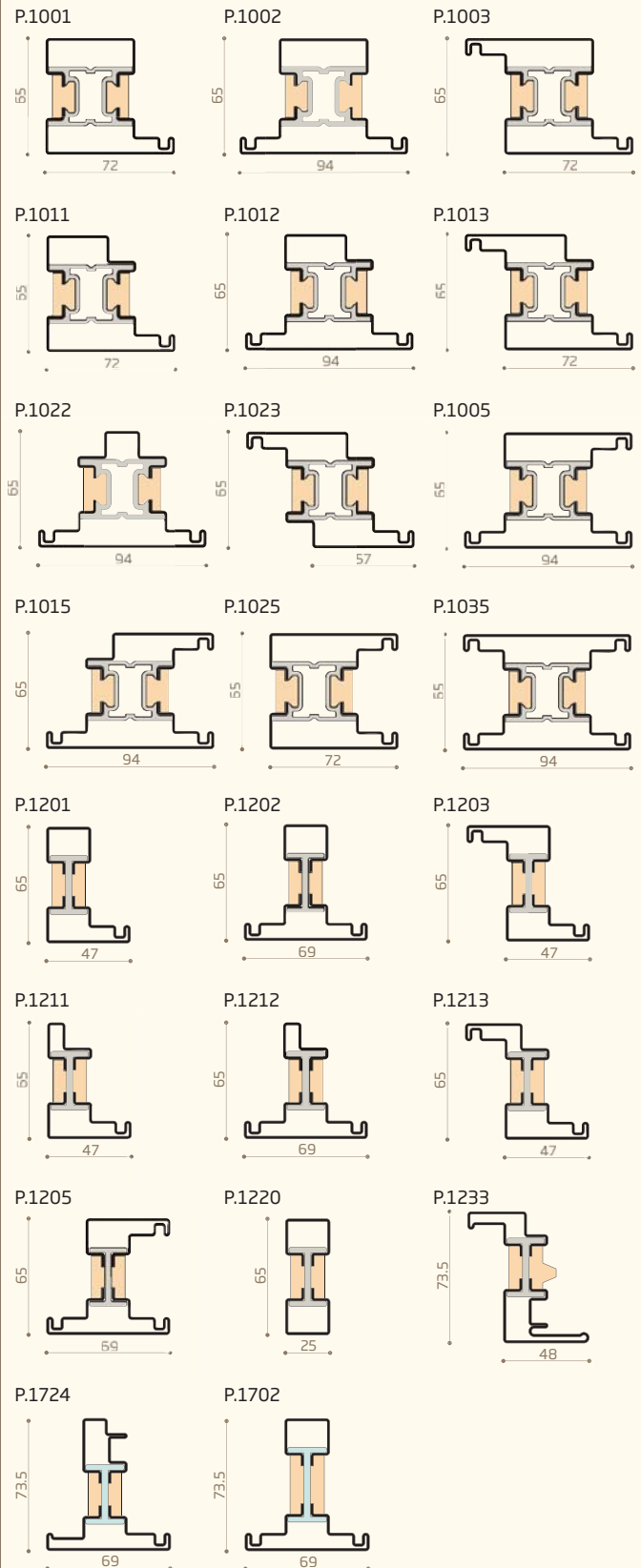


1. internal and external flush
2. double rebate seal
3. eurogroove for accessories
4. structural thermal break in polyamide and polyurethane
5. fitting groove for glazing up to 40 mm thick

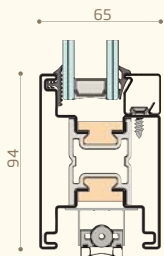
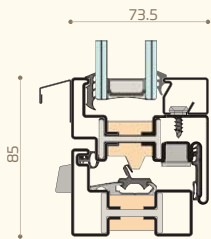
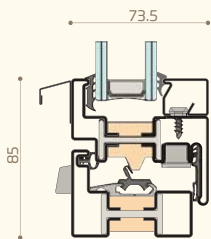


1. flush on the exterior and rebated on the interior
2. frame with weep system and triple gasket
3. wood/pvc fitting groove for hardware
4. structural thermal break in polyamide and polyurethane
5. fitting groove for glazing up to 48 mm thick
6. section with reduced size

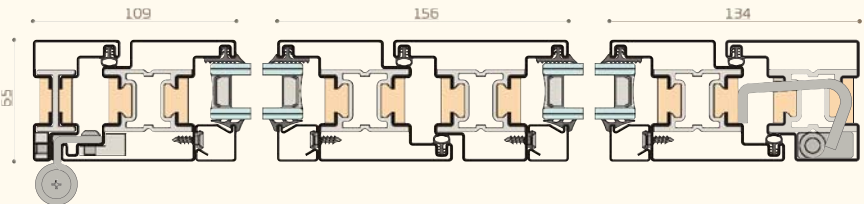
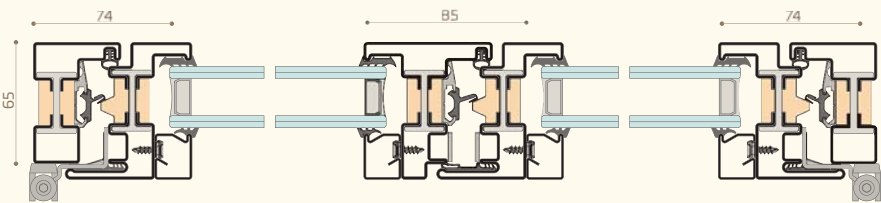
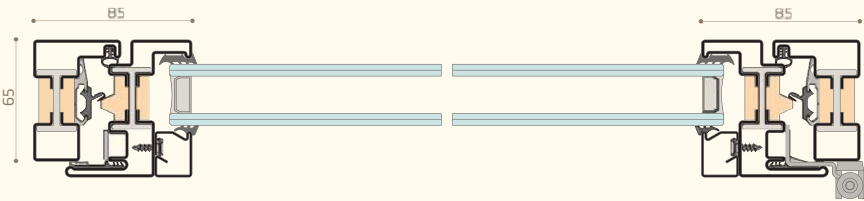
profiles



vertical section

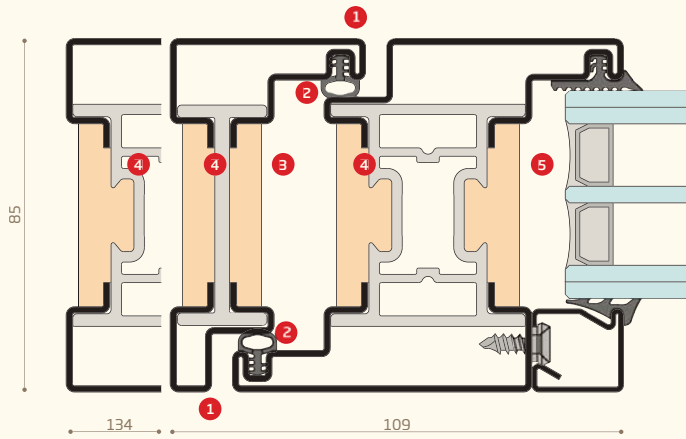


horizontal section

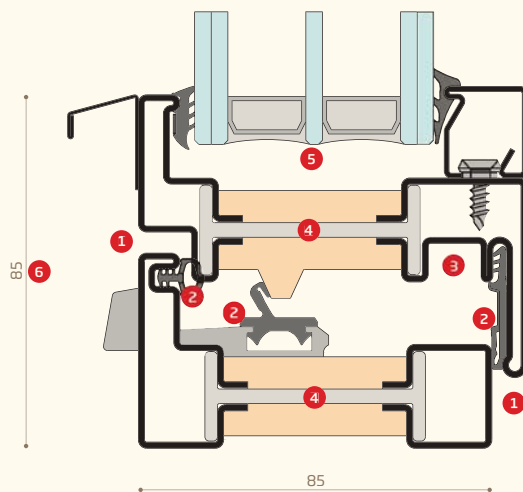


EBE 85

main sections

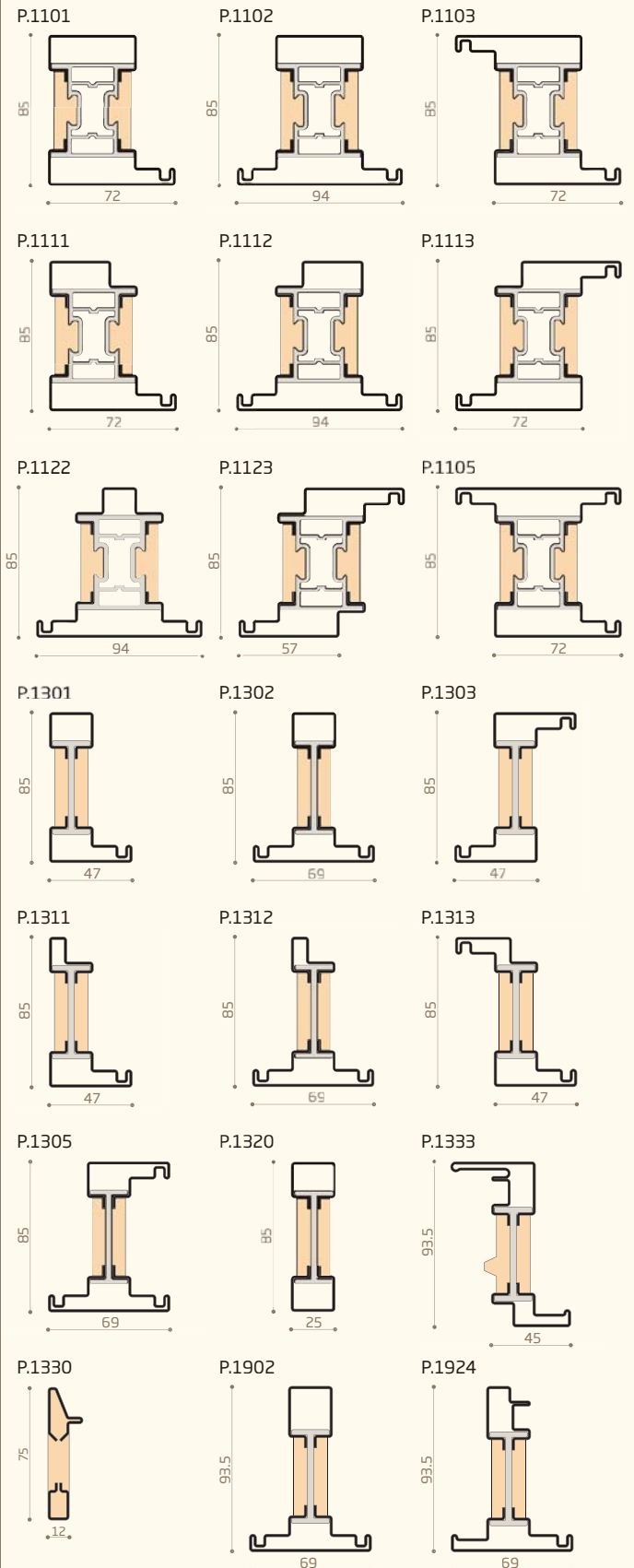


1. internal and external flush
2. double rebate seal
3. eurogroove for accessories
4. structural thermal break in polyamide and polyurethane
5. fitting groove for glazing up to 60 mm thick

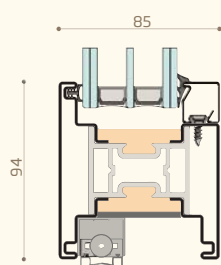
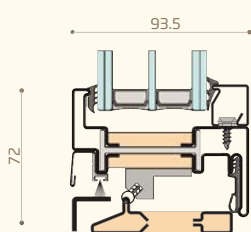
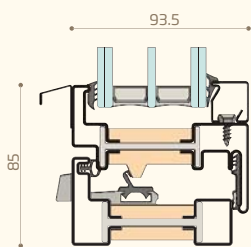


1. flush on the exterior and rebated on the interior
2. frame with weep system and triple gasket
3. wood/pvc fitting groove for hardware
4. structural thermal break in polyamide and polyurethane
5. fitting groove for glazing up to 68 mm
6. section with reduced size

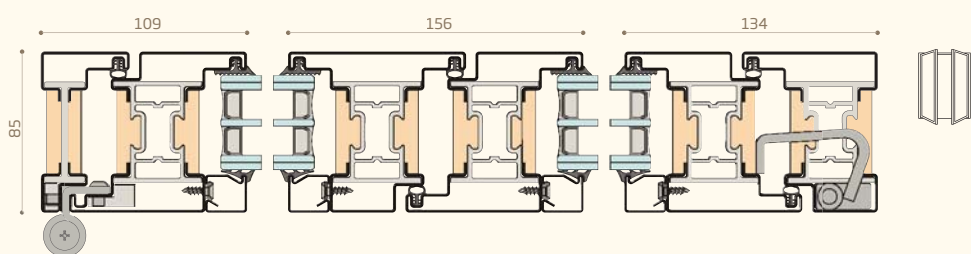
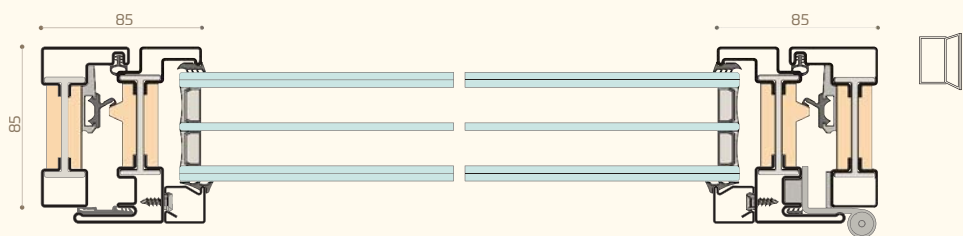
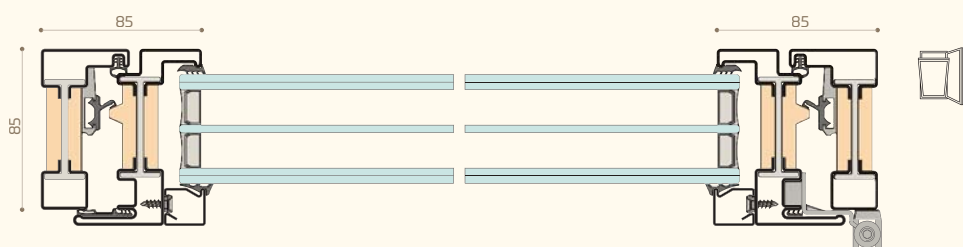
profiles



vertical section

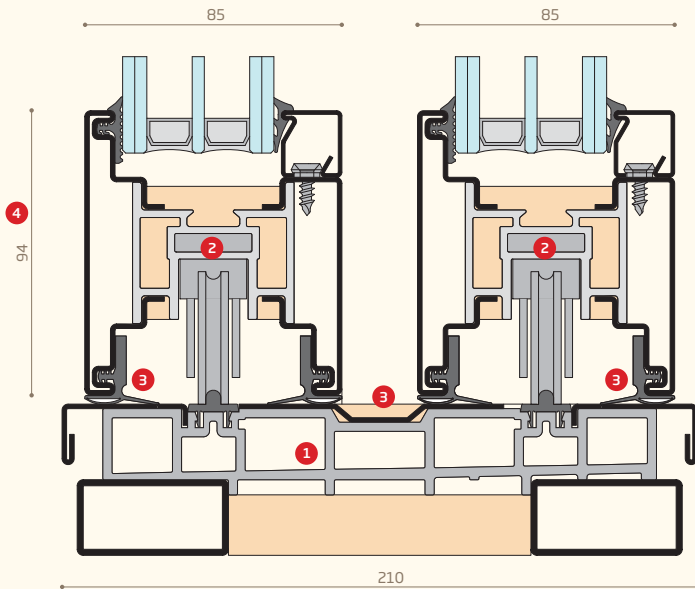


horizontal section

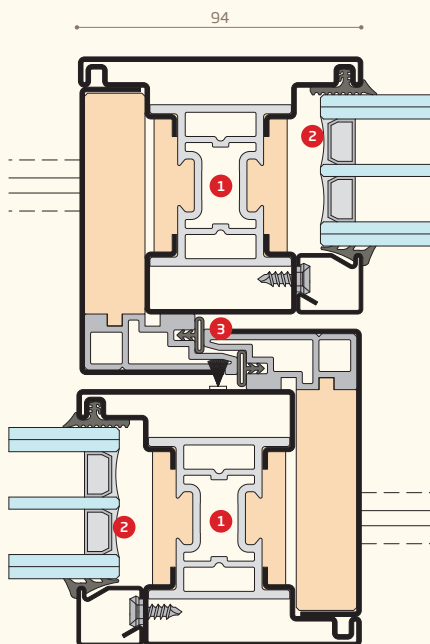


EBE 85 AS

main sections

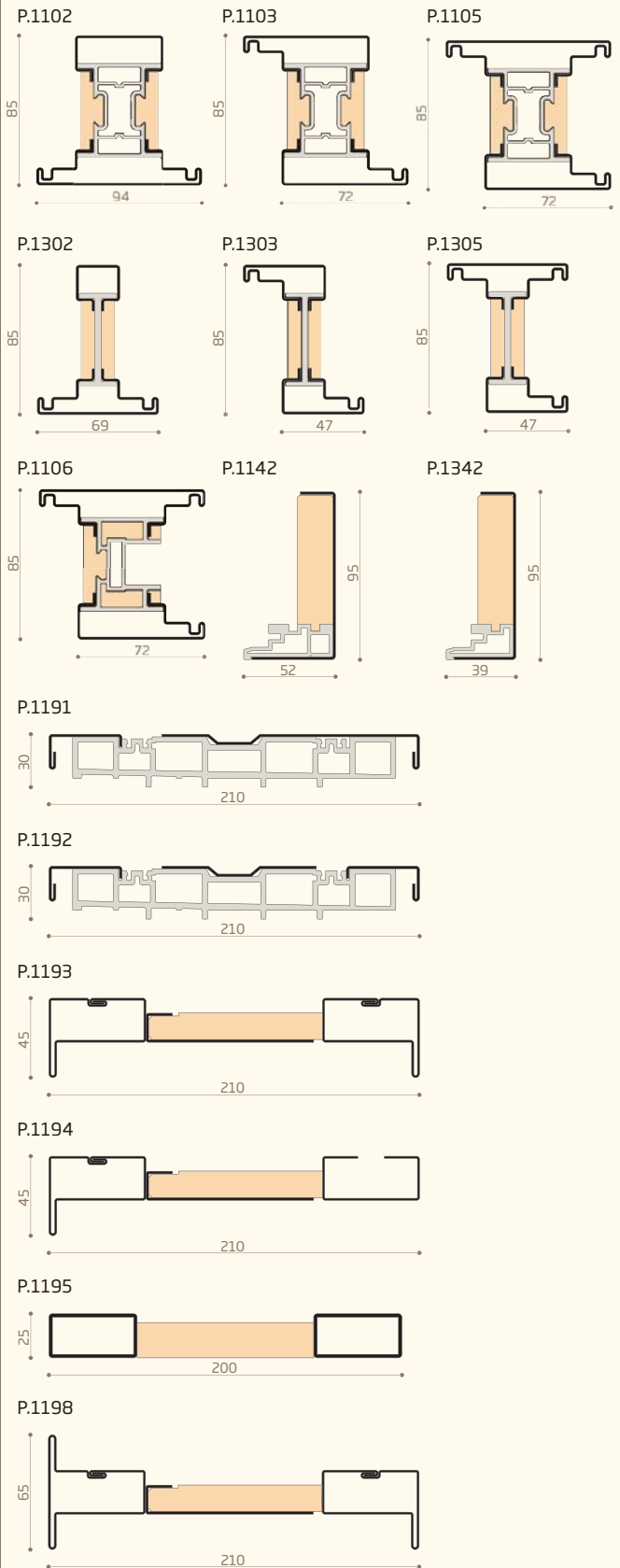


1. special shaped threshold for water evacuation
2. special groove for the allocation of wheels
3. double weather gasket
4. same visible lines on four sides

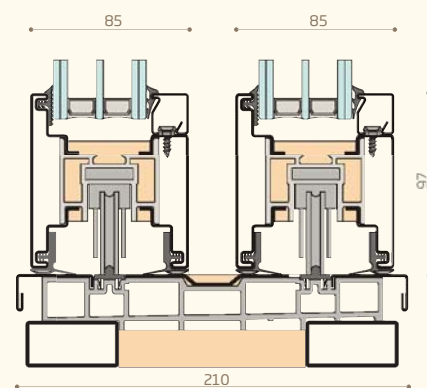
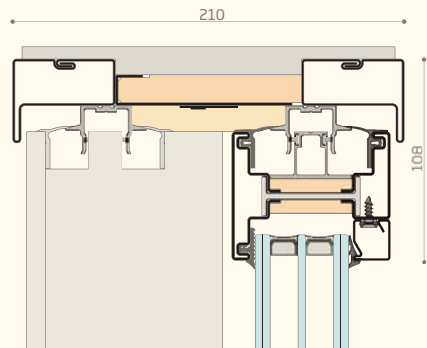
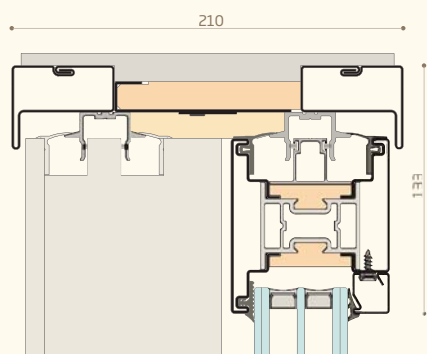


1. Structural thermal break in polyamide and polyurethane
2. fitting groove for glazing up to 60 mm thick
3. Two levels of gasket and one brush

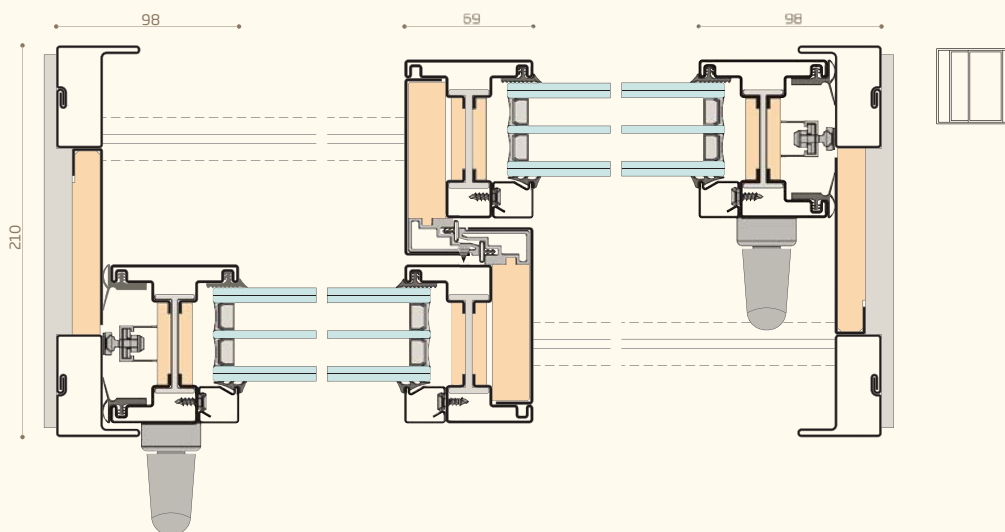
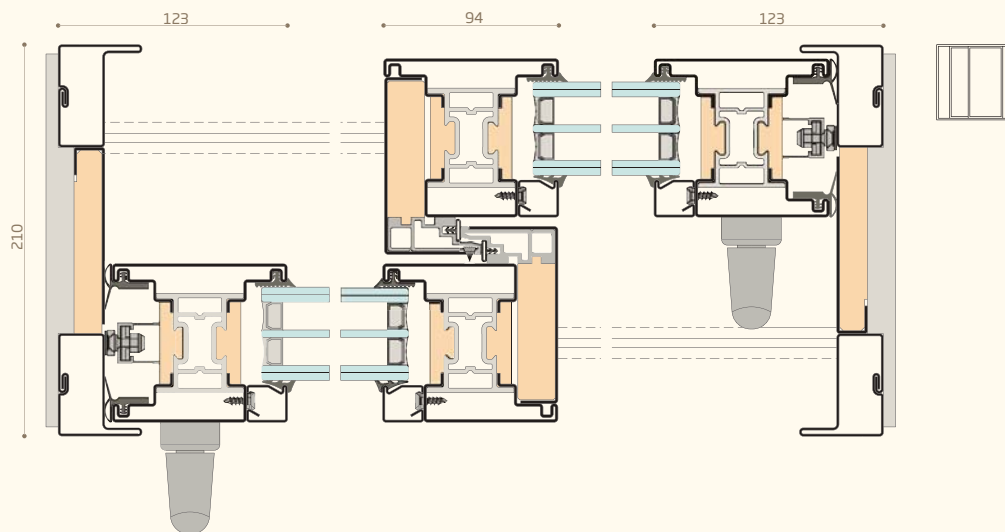
profiles



vertical section

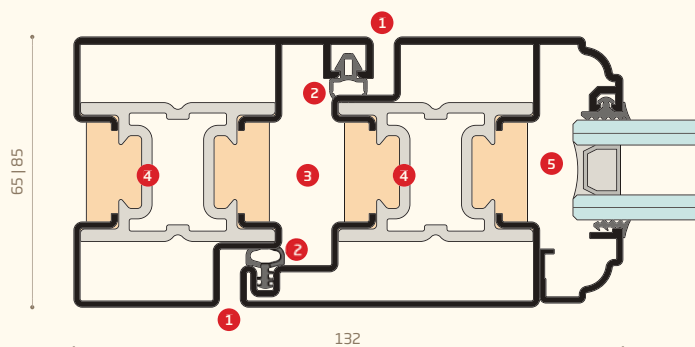


horizontal section

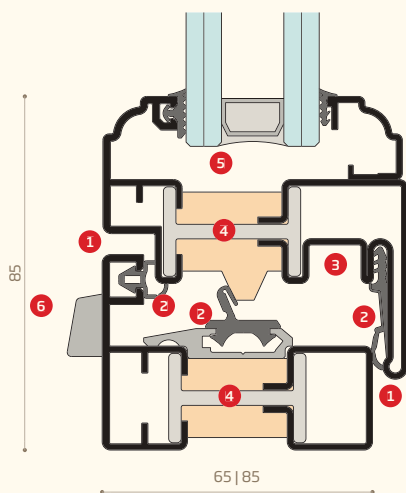


EBE Style

main sections



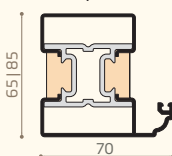
1. internal and external flush
2. double rebate seal
3. eurogroove for accessories
4. structural thermal break in polyamide and polyurethane
5. fitting groove for glazing up to 44 mm thick



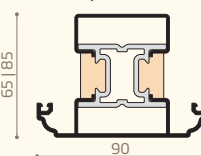
1. flush on the exterior and rebated on the interior
2. frame with weep system and triple gasket
3. wood/pvc fitting groove for hardware
4. structural thermal break in polyamide and polyurethane
5. fitting groove for glazing up to 52 mm
6. section with reduced size

profiles

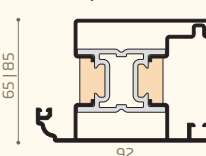
PBE001 | PBE101



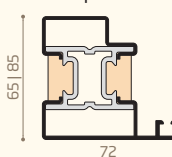
PBE004 | PBE104



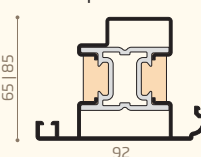
PBE005 | PBE105



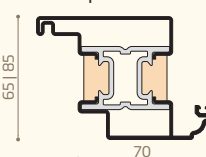
PBE011 | PBE111



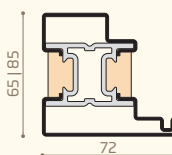
PBE012 | PBE112



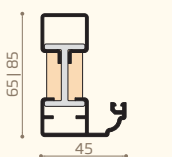
PBE013 | PBE113



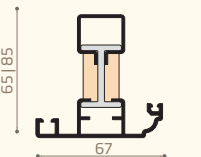
PBE021 | PBE121



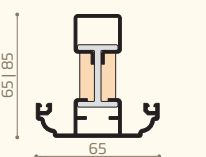
PBE201 | PBE301



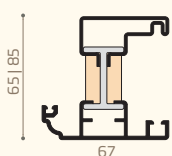
PBE202 | PBE302



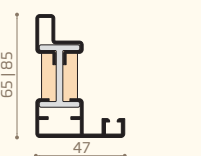
PBE204 | PBE304



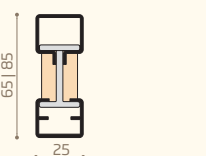
PBE205 | PBE305



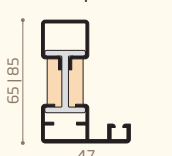
PBE211 | PBE311



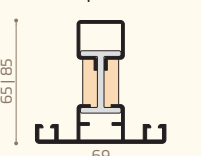
PBE220 | PBE320



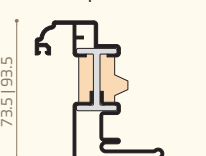
PBE221 | PBE321



PBE222 | PBE322



PBE233 | PBE333



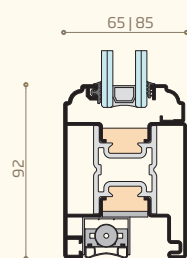
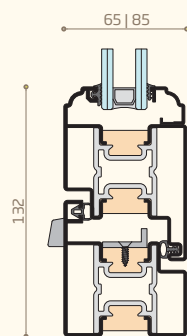
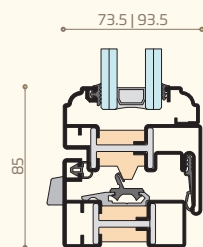
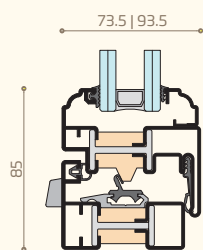
PBE028



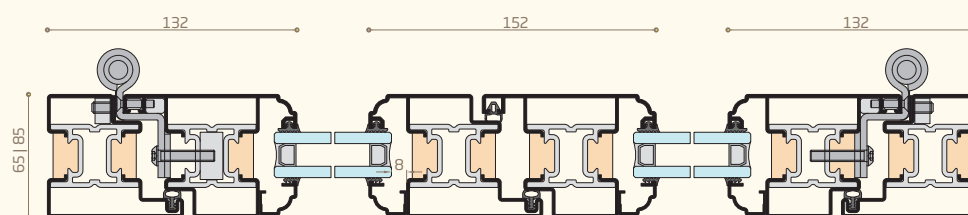
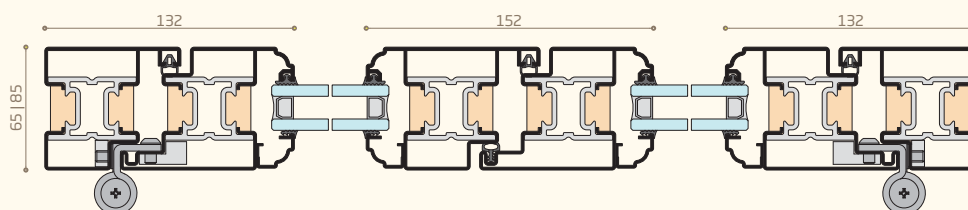
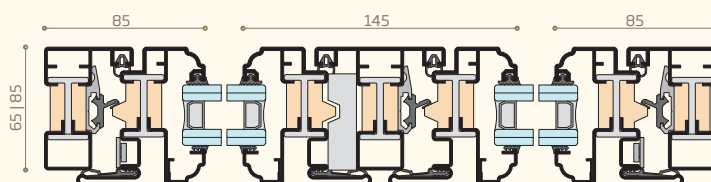
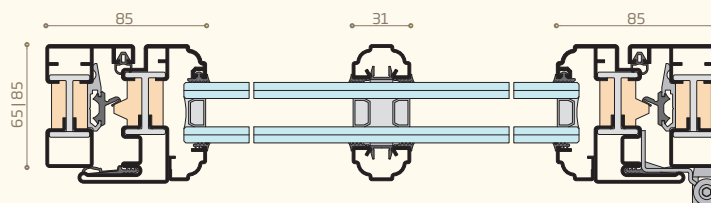
PBE030



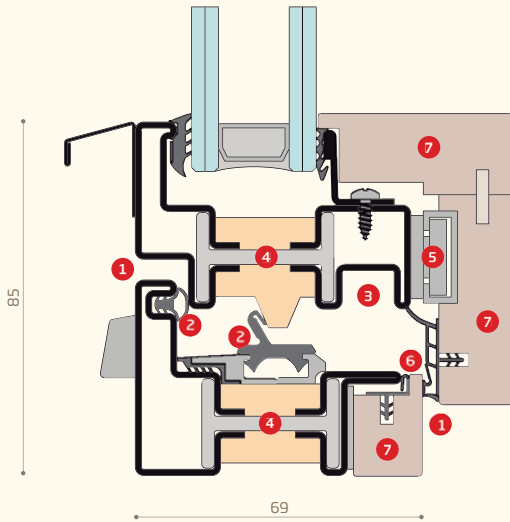
vertical section



horizontal section



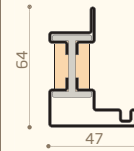
main sections



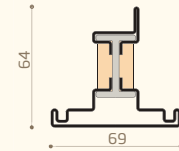
1. flush on the exterior and rebated on the interior
2. frame with weep system and triple gasket
3. lodging for anti break-in ironware on steel profile
4. structural thermal break in polyamide and polyurethane
5. point fixed curtain walls in plastic material
6. finishing and levelling seals
7. internal frames in solid wood

profiles

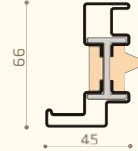
P.1411



P.1412



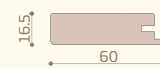
P.1433



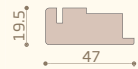
PL.1411



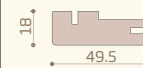
PL.1403



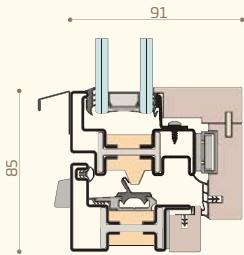
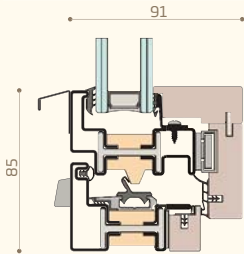
PL.1408



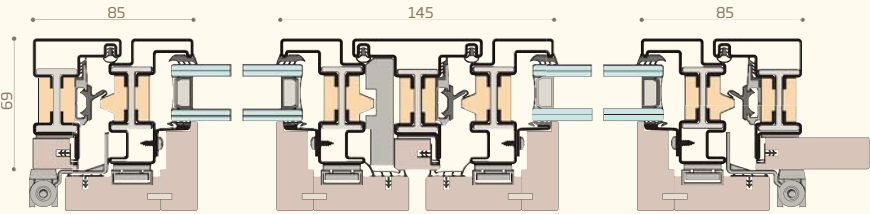
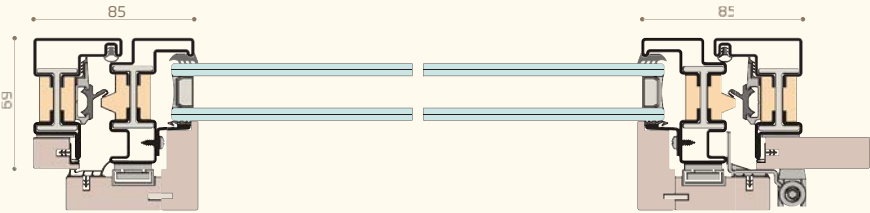
PL.1433



vertical section

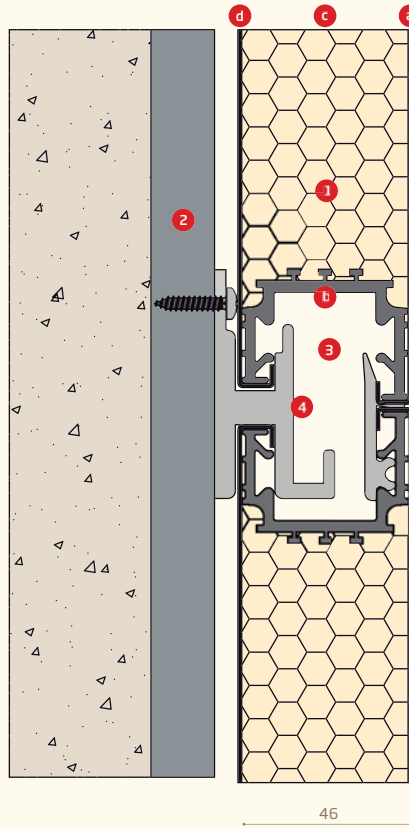


horizontal section



infinities HT

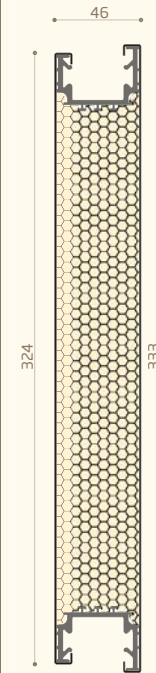
main sections



1. stave (a. corten steel, b. polyamid, c. polyurethan, d. galvanized steel)
2. adjustable substructure
3. fitting groove for gaskets and sealing accessories
4. alignment and support accessories

profiles

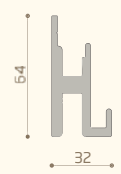
P.7751



P.7611



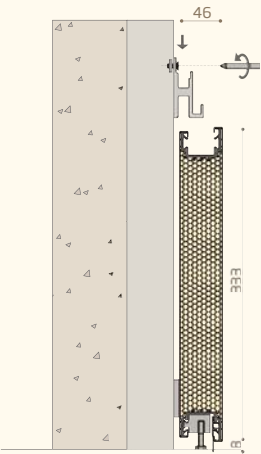
AC.7732/1-2



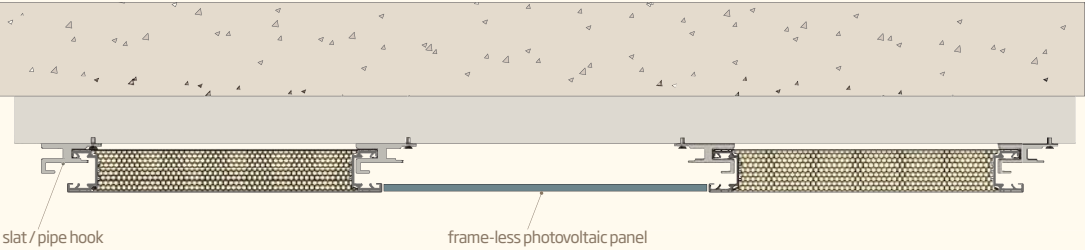
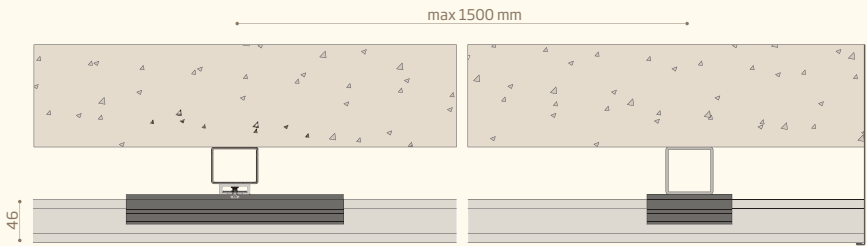
GE.7711



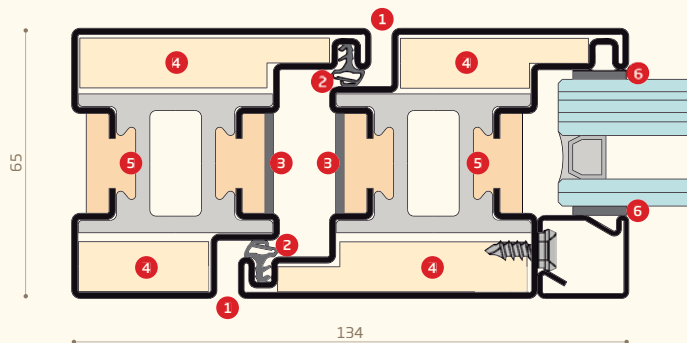
vertical section



horizontal section

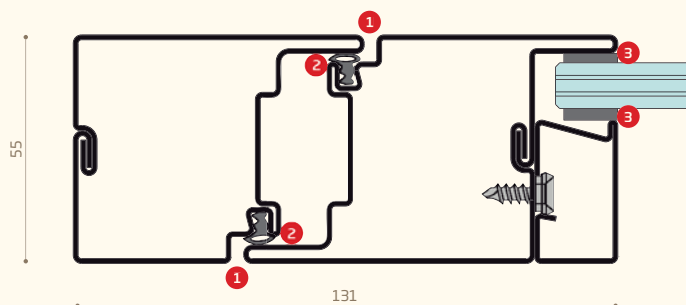


main sections



AF EI 30

1. internal and external flush
2. double rebate fire seal
3. expanding seal
4. cooling inert material
5. fireproof thermal break resins
6. special glazing gasket

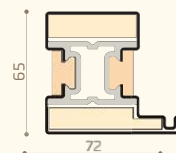


AF Ew30/60/90

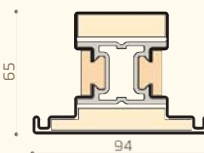
1. internal and external flush
2. double rebate fire seal
3. special glazing gasket

profiles

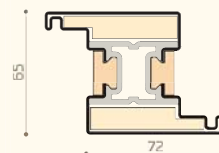
P.1501



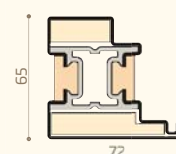
P.1502



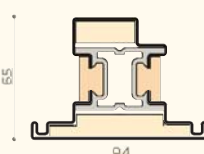
P.1503



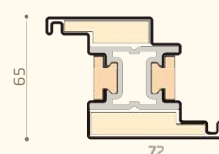
P.1511



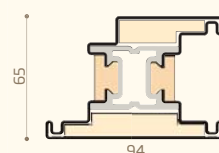
P.1512



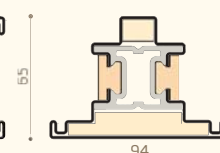
P.1513



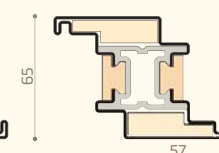
P.1515



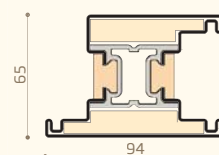
P.1522



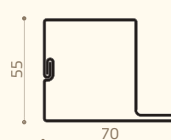
P.1523



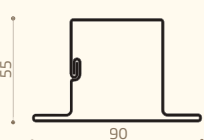
P.1505



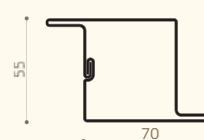
P.2001 | P.3001



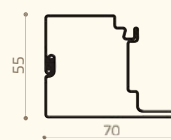
P.2002 | P.3002



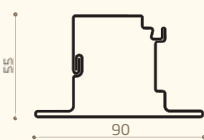
P.2003 | P.3003



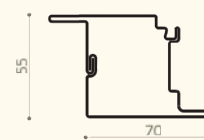
P.2011 | P.3011



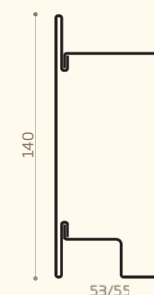
P.2012 | P.3012



P.2013 | P.3013

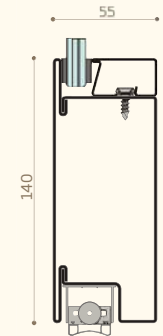
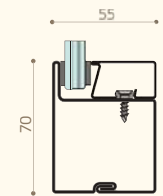
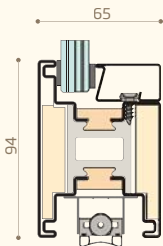
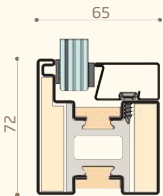


P.2005 | P.3005

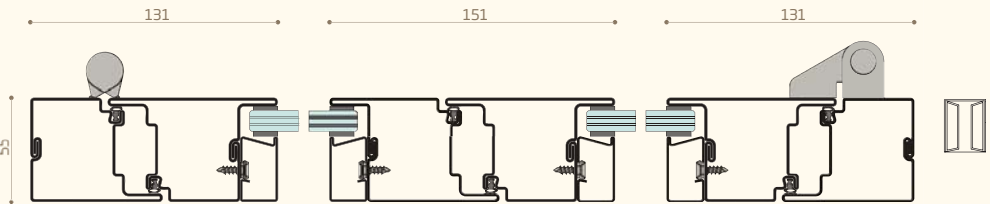
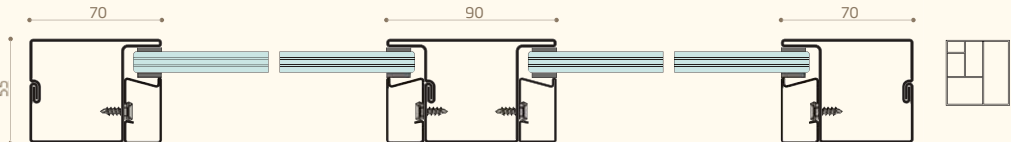
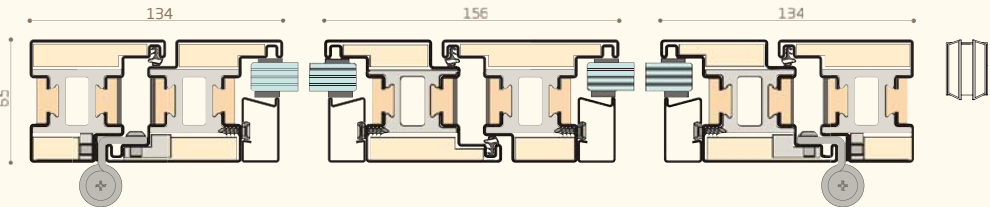
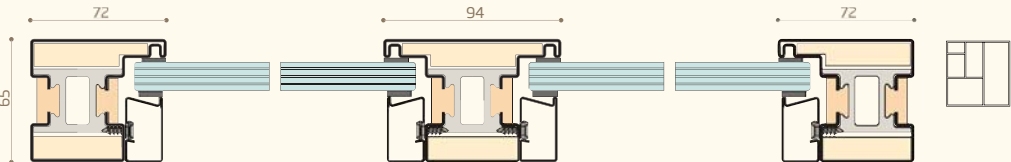


AF P.2 --- profiles are provided in stainless steel 12/10 thick
AF P.3 --- profiles are provided in stainless steel and corten steel 15/10 thick

vertical section

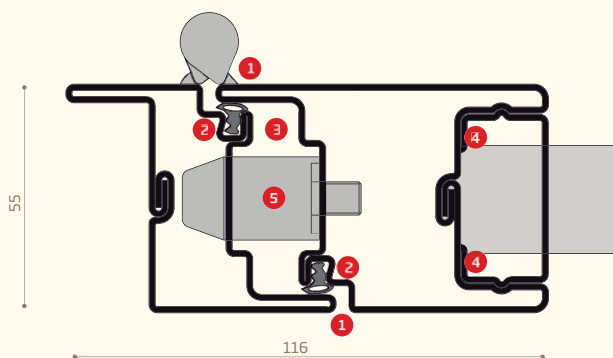


horizontal section



blindacciaio

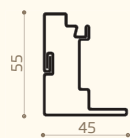
main sections



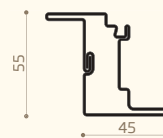
1. internal and external flush
2. double acoustic rebate seal
3. fitting groove for safety hardware
4. armoured wings/studs welded inside the profile
5. stainless steel safety studs

profiles

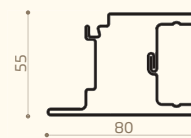
P.3111



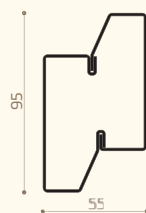
P.3113



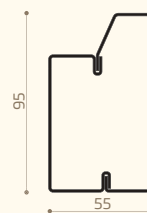
P.3201



P.3224



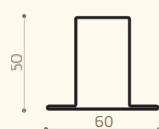
P.3225



P.3207



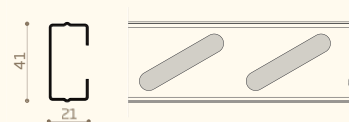
P.3208



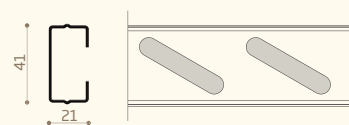
P.3209



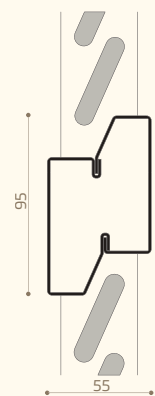
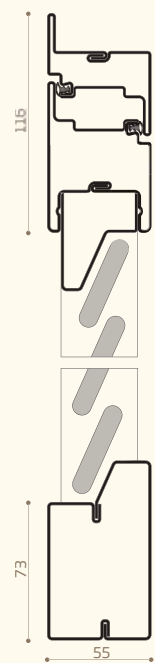
P.3202



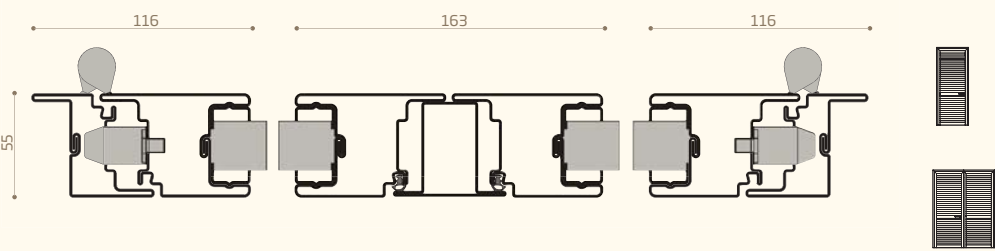
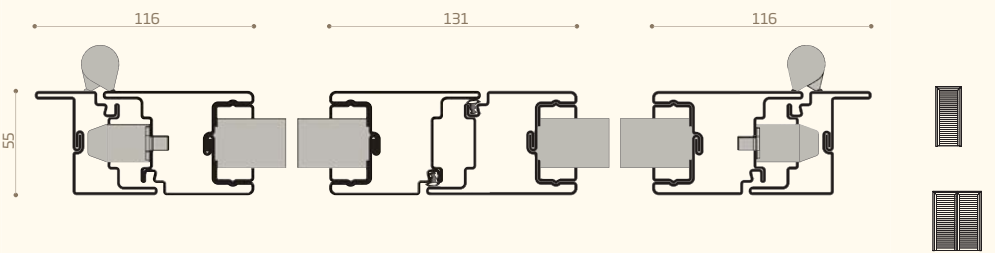
P.3203



vertical section

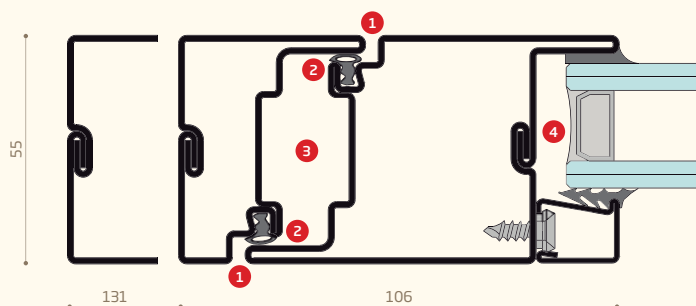


horizontal section

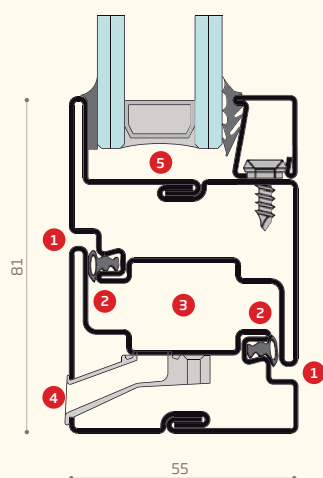


sistemacciaio

main sections



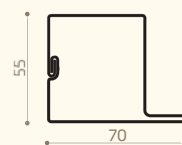
1. internal and external flush
2. double rebate seal
3. eurogroove 25x21 for certified hardware
4. fitting groove for glazing up to 35 mm thick



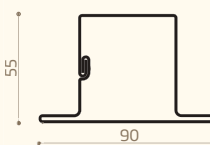
1. internal and external flush
2. double rebate seal
3. eurogroove 25x21 for certified hardware
4. integrated accessory for water drainage
5. fitting groove for glazing up to 35 mm thick

profiles

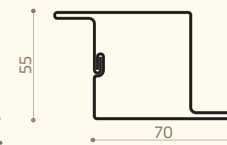
P.2001 | P.3001



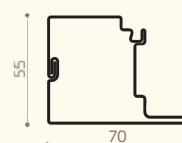
P.2002 | P.3002



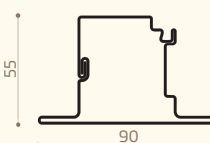
P.2003 | P.3003



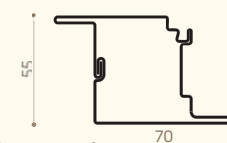
P.2011 | P.3011



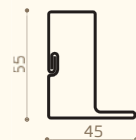
P.2012 | P.3012



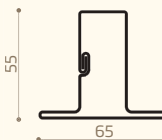
P.2013 | P.3013



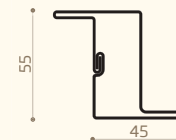
P.2101 | P.3101



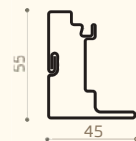
P.2102 | P.3102



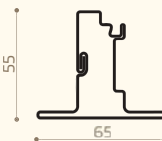
P.2103 | P.3103



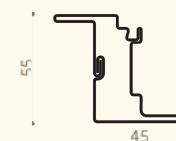
P.2111 | P.3111



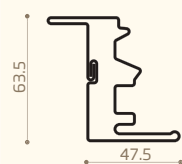
P.2112 | P.3112



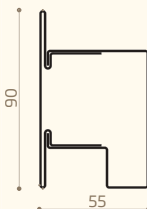
P.2113 | P.3113



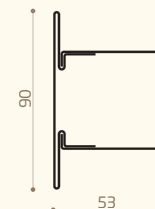
P.2133 | P.3133



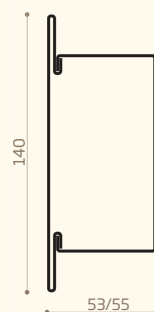
P.2025 | P.3025



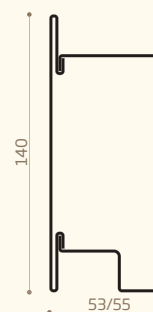
P.2014



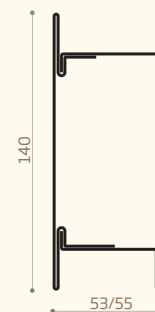
P.2004 | P.3004



P.2005 | P.3005

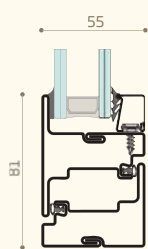
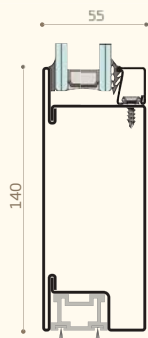
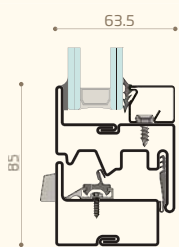
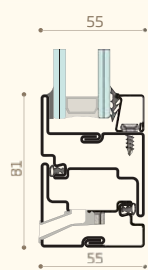


P.2305 | P.3305

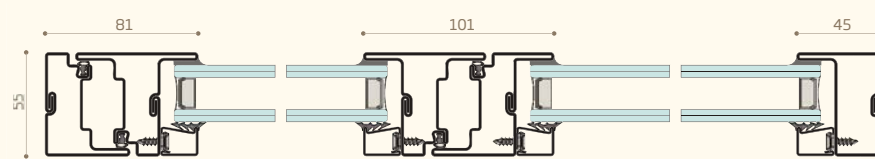
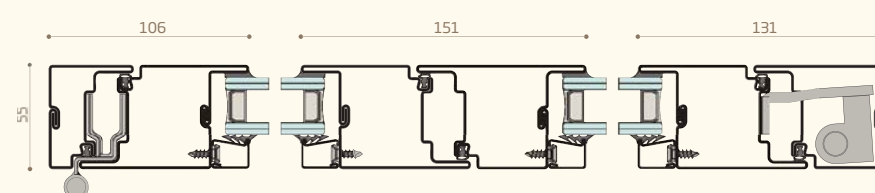
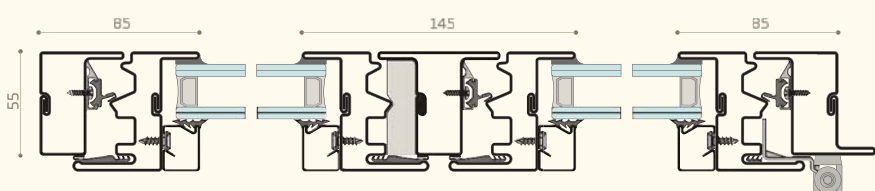
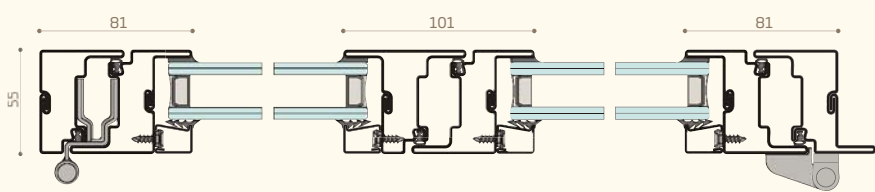


sistemacciaio P.2--- profiles are provided in stainless steel and brass 12/10 thick
sistemacciaio P.3--- profiles are provided in galvanized steel and corten steel 15/10 thick

vertical section

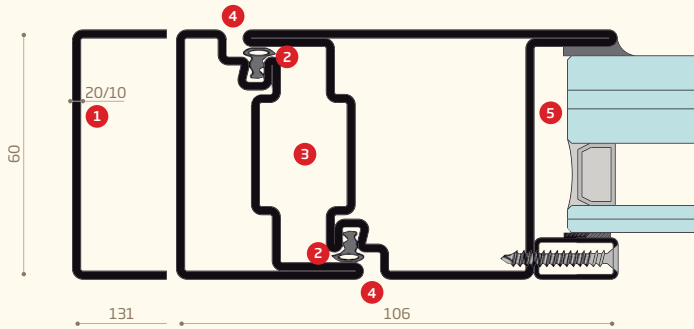


horizontal section

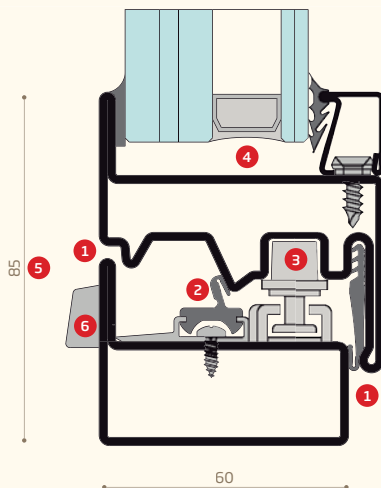


security

main sections



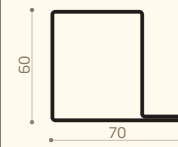
1. high break-in resistance thanks to the 20/10 profile thickness
2. double rebate seal
3. eurogroove 25x21 for certified hardware
4. internal and external flush
5. fitting groove for safety glazing up to 40 mm thick



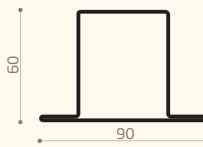
1. flush on the exterior and rebated on the interior
2. frame with weep system and double sealing gasket
3. wood/pvc fitting groove for hardware
4. fitting groove for safety glazing up to 48 mm thick
5. section with reduced size
6. integrated water drainage system

profiles

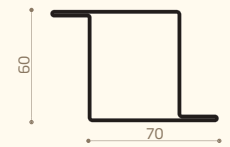
P.6001



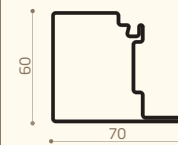
P.6002



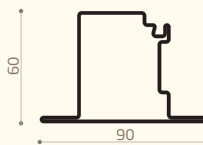
P.6003



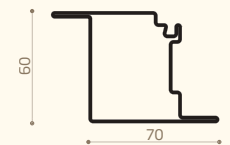
P.6011



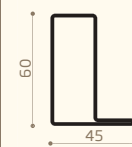
P.6012



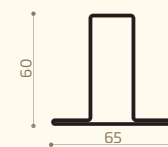
P.6013



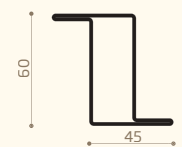
P.6101



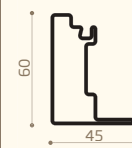
P.6102



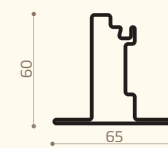
P.6103



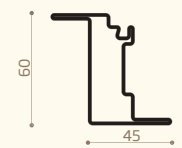
P.6111



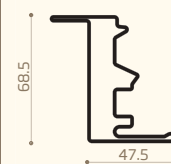
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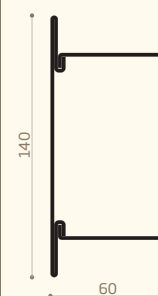
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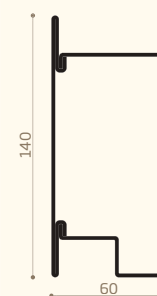
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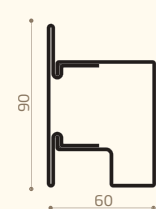
P.6004



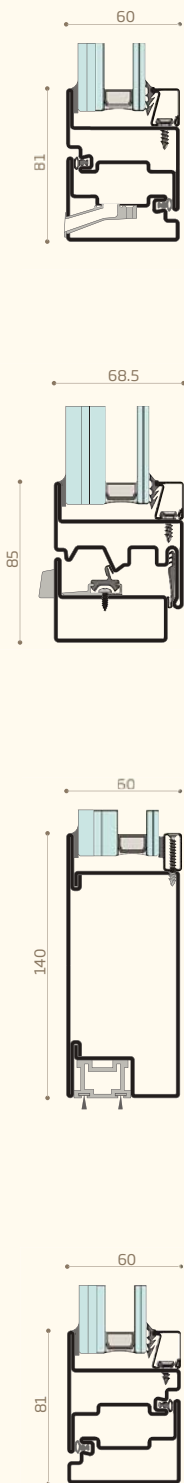
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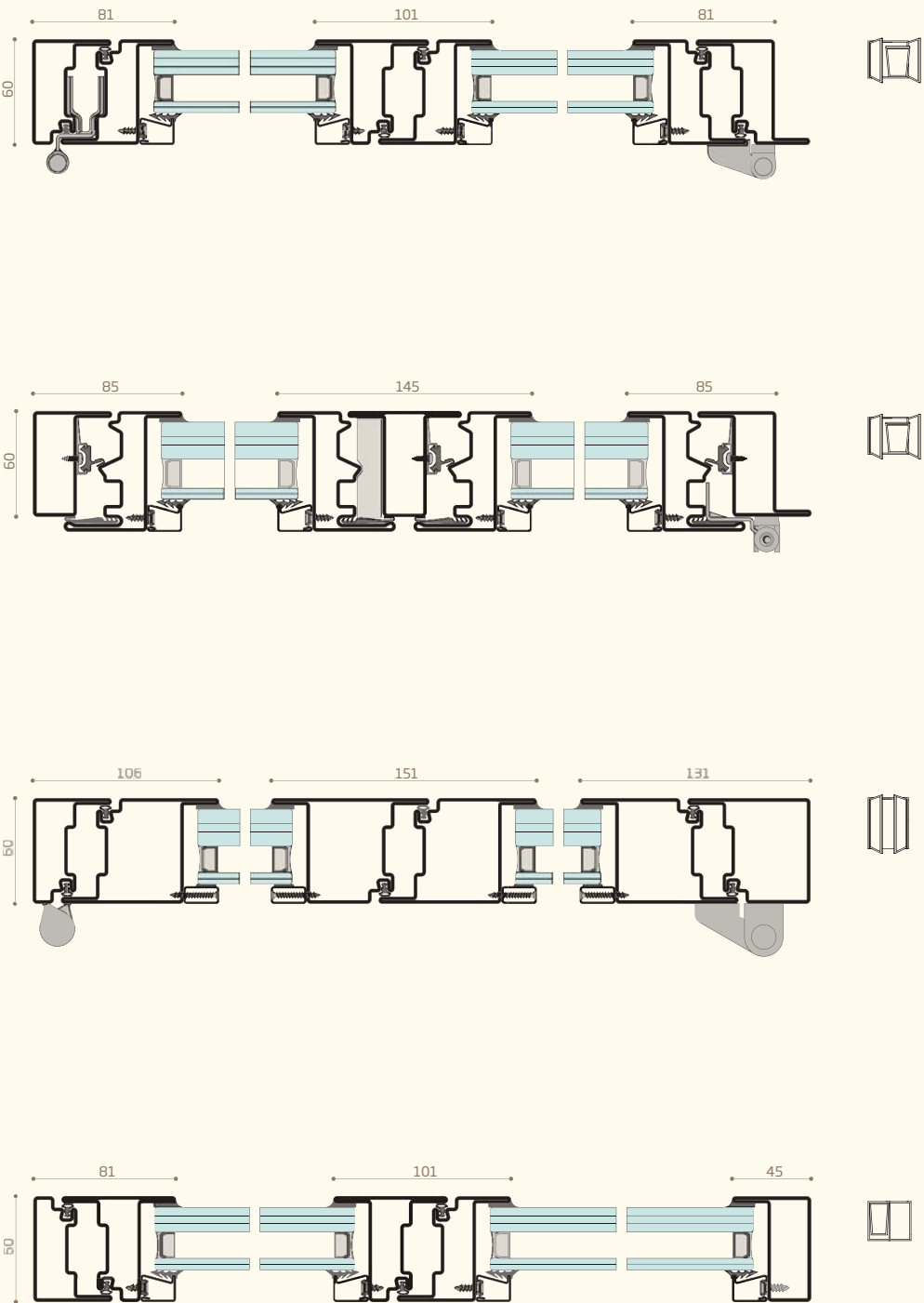
P.6025



vertical section



horizontal section



subframe for wall mounting

system and performance

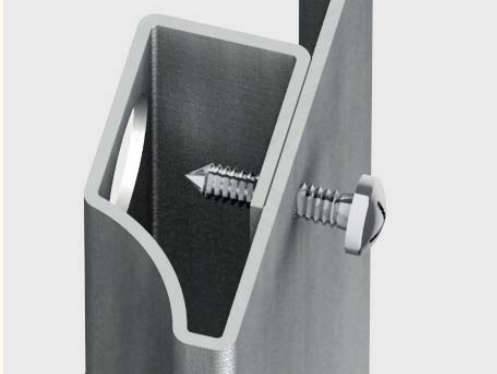


subframe is a system with profiles and accessories for the construction of sub-frames to be mounted on load bearing walls. It's available in two versions: galvanized steel and galvanized steel with thermal break, and it comes in different sizes. The steel profiles, closed mechanically thanks to overlap technology, are provided with integrated anchor bolts and pitch holes for a perfect fixing to the wall. They are also provided with a double-thickness metal plate in the area where the doors and windows will be secured. The system is equipped with accessories for a quick set-up of the frame. The version with thermal break consists of a profile made of two elements, steel and a plastic compound, which have been joined by a bi-component glue. This process has made the profile extremely solid and resistant to torsional stiffness.



1. profile made of insulating plastic material
2. profile in galvanized steel
3. overlap mechanical closing technology
4. extractable metal anchor bolts
5. holes for mortar application
6. smaller sections in contact with the plaster

torsional stiffness and securing



double-thickness plate for added support
The area of the sub-frame where doors and windows will be secured is provided with a double-thickness metal plate. This guarantees a perfect and stable support even with heavier doors and windows.

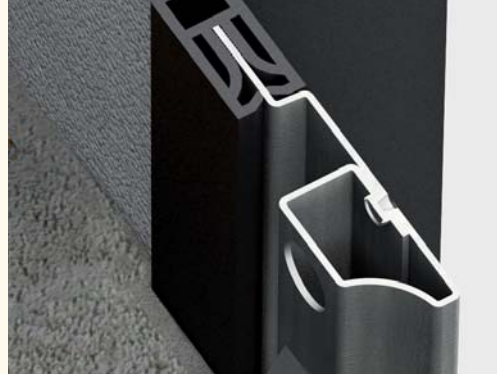


profiles closed with overlap technology
Free from welding, which would reduce its performance against corrosion, the **subframe** sub-frame is able to reach high torsional stiffness values thanks to the overlap mechanical closing technology. This technology provides joining by compenetration of the surfaces.

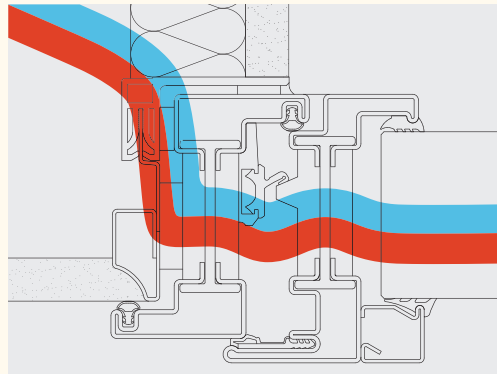


extractable integrated anchor bolts
The anchor bolts, together with pitch holes, make it possible for the mortar to perfectly fix the **subframe** to the walls. Moreover, the smaller area of the **subframe** in contact with the plaster reduces the risk of cracking in the future.

thermal insulation



The perfect joining of steel and plastic material, thanks to a special bi-component glue, provides **subframe** with extremely high stiffness values.



The perfect joining of steel and plastic material, thanks to a special bi-component glue, provides **subframe** with extremely high stiffness values. **subframe's** special TT shape acts as a natural extension of the walls' insulation and redirects the heat flow outwards. This has two important results: a reduced thermal flow, which increases the insulating performance; an increase in the internal temperature of the profiles, which reduces the risks of condensation and mold formation even in those situations with high internal humidity.

accessories



rectangular assembling brackets



corner braces

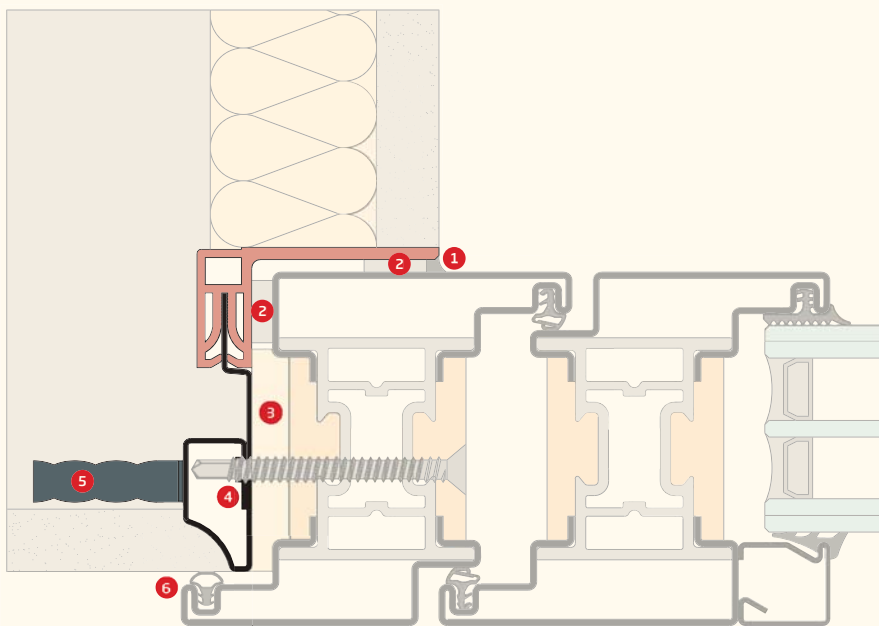
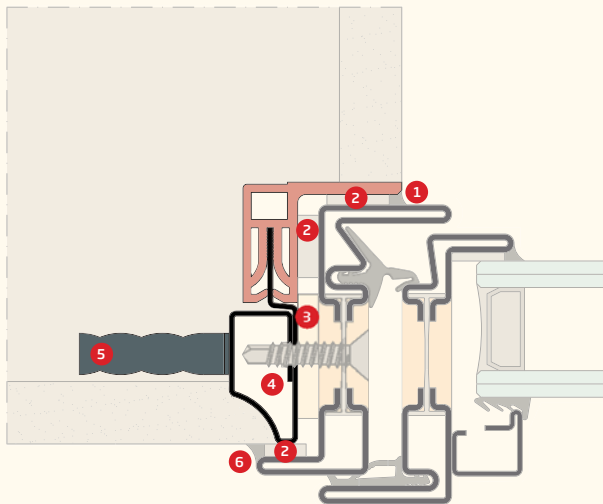


mounting spacers

The system is provided with accessories that make assembling the profiles quick and easy.

subframe for wall mounting

base and thermally broken version



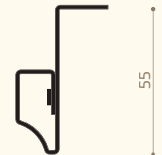
1. neutral silicone
2. pre-compressed self-adhesive tape
3. thermal and acoustic polyurethane foam
4. double thickness steel profile mounting
5. wall anchor bolt
6. EPDM or paintable seal in acrylic

profiles

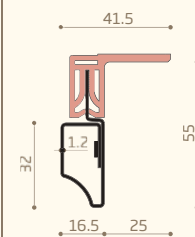
PZ0955



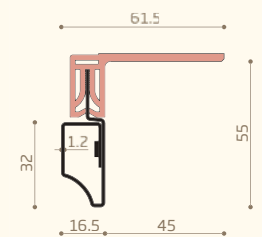
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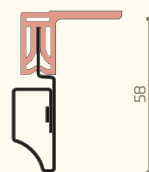
PZT055



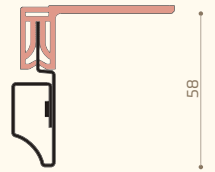
PZT455



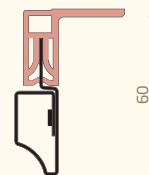
PZT058



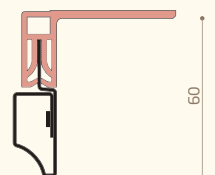
PZT458



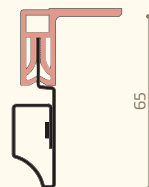
PZT060



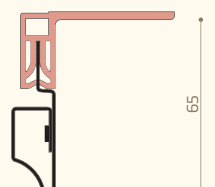
PZT460



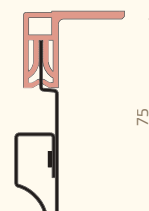
PZT065



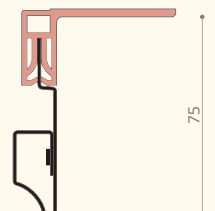
PZT465



PZT075

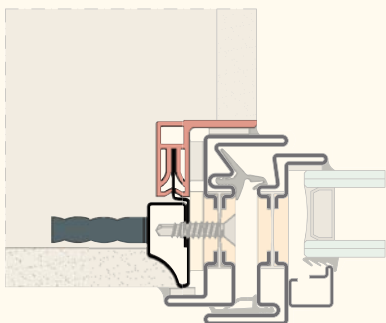


PZT475

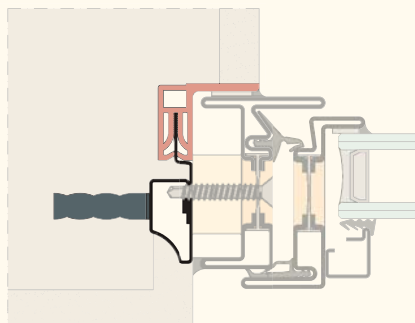


main sections

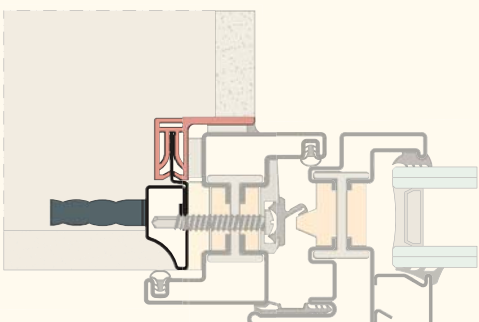
PZT060 with OS2



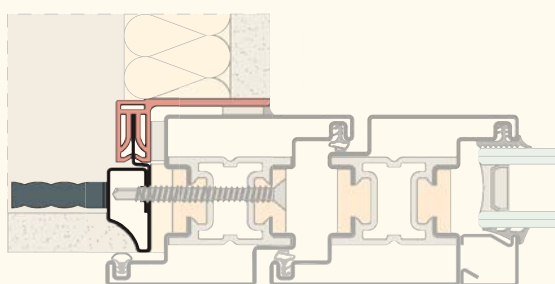
PZT065 with OS2



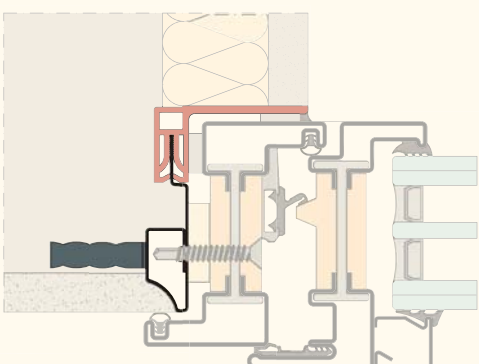
PZT055 with EBE 65



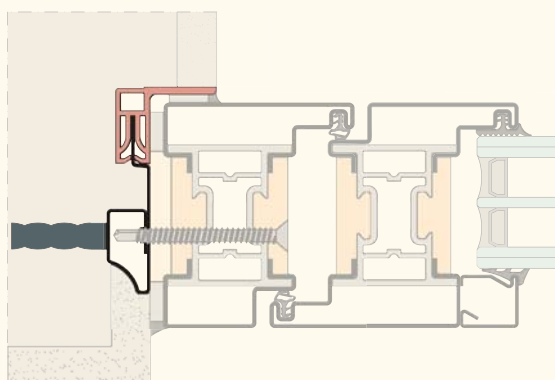
PZT455 with EBE 65



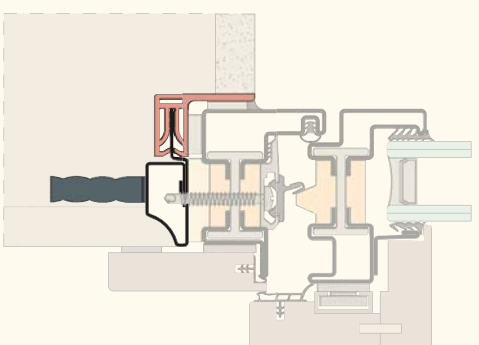
PZT475 with EBE 85



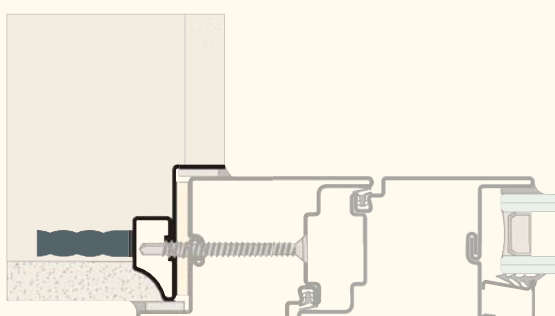
PZT075 with EBE 85



PZT055 with ML



PZ0955 with sistemacciaio



material properties

galvanized steel

ALLOY UNI 10142:90	Fe P02 GZ200	Fe E 250 GZ275 MA-C
Symbol Code	DX 51D	S 250 GD+Z
Numerical Code	1.0226	1.0242

CHEMICAL COMPOSITION	(% of the mass)
Fe	99,5
Si	0,27
Mn	0,37
P max.	0,014
S	0,009
Cr	0,071
Cu	0,25
Mo	0,016
Ni	0,012
Others	0,05

PHYSICAL FEATURES	
Specific weight (kg / dm³)	7,87
Thermal conductivity at 20°λ (W / m K)	60
Coefficient of thermal expansion c (mm / m °C)	0,0123
Module of elasticity E (N / mm²)	210.000
Electric conductivity Ω (Ω / mm / m)	0,0934

MECHANICAL FEATURES	
Yield Re (N / mm²)	220 - 300
Tensile strength Rm (N / mm²)	500
Elongation at break A _{80mm} % min	22
Vickers Scale	200 - 250

REFERENCE STANDARDS

UNI EN 10326:2004 Continuously hot-dip coated strip and sheet of structural steels - Technical delivery conditions
UNI EN 10327: 2004 Continuously hot-dip coated strip and sheet of low carbon steels for cold forming - Technical delivery conditions

stainless steel

ALLOY	X5CrNi 18-10	X2CrNiMo 17-12-2
AlSi acronym	304	316L
DIN acronym	1.4301	1.4404

CHEMICAL COMPOSITION*	(% of the mass)
C	≤0,07 ≤0,030
Si	≤1,00 ≤1,00
Mn	≤2,00 ≤2,00
P max.	0,045 0,045
S	≤0,030 ≤0,030
N	≤0,11 ≤0,11
Cr	17,5 - 19,5 16,5 - 18,5
Mo	- 2 - 2,50
Ni	8,0 - 10,5 10 - 13
Others	- -

PHYSICAL FEATURES*	
Specific weight (kg / dm³)	7,91 8,00
Thermal conductivity at 20°Cλ (W / m K)	17 17
Coefficient of thermal expansion (mm / m °C)	0,0103 0,0103
Module of elasticity E (N / mm²)	196.000 196.000
Electric conductivity Ω (Ω / mm / m)	0,714 0,714
Melting point (°C)	1400 - 1420 1400 - 1420

MECHANICAL FEATURES* (for cold-rolled strip)	
Tensile strength Rm (N / mm²)	540 - 750 530 - 680
Proportionality limit stress	0,2 % Rp _{0,2} 230 240 1,0 % Rp _{1,0} 260 270
Elongation at break A _{80mm} % min	45 40
Brinell Scale HB (kg / mm²)	<165 <170

*UNI 10088-2: 1997

REFERENCE STANDARDS

EN 10088 - 1 Stainless steel - List of stainless steels
EN 10088 - 2 Stainless steel - Material standard for stainless steel sheet, plate and strip for general purposes
EN 10088 - 2 Stainless steel - Material standard for stainless steel semi-finished products, bars, rods and sections for general purposes
EN 114 - Determination of the resistance to the corrosion for austenitic stainless steel

corten steel

ALLOY	(Corten A)
EN 10027 - 1 ECISS IC10	S355J0WP
CHEMICAL COMPOSITION (% of the mass)	
C max	0,12
Si max	0,75
Mn max	1,0
P	0,06 - 0,15
S max	0,04
Ni max	0,65
Cr	0,30 - 1,25
Cu	0,25 - 0,55

PHYSICAL FEATURES	
Specific weight (kg / dm³)	7,87
Thermal conductivity at 20°C λ (W / m K)	60
Coefficient of thermal expansion c (mm / m °C)	0,0108
Module of elasticity E (N / mm²)	210.000
Electric conductivity Ω (Ω / mm / m)	0,0934

MECHANICAL FEATURES		
Yield Re (N / mm²)		355
Tensile strength Rm (N / mm²)		510 - 680
Elongation at break A _{80 mm} % min	< 1,5 ≤ 2	14 - 16
	< 2 ≤ 2,5	15 - 17
	< 2,5 ≤ 3	16 - 18

REFERENCE STANDARDS

UNI EN 10131 Cold rolled uncoated and zinc or zinc- nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming - Tolerances on dimensions and shape

brass (OT67 copper alloy)

ALLOY	Cold rolled laminate 10 H10
Alloy code	CW 506L
Designation	R350 / H095
CHEMICAL COMPOSITION* (% of the mass)	
Cu	66 - 68
Pb max	0,20
Fe max	0,15
Al max	0,05
Sn max	0,20
Si max	0,15
Mn max	0,10
Ni max	0,30
impurità	0,40
Zn	resto

PHYSICAL FEATURES*	Cold rolled laminate 10 H10
Specific weight (kg / dm³)	8,50
Specific heat capacity at 20°C (cal / g)	0,09
Thermal conductivity at 20°C [cal / (s cm °C)]	0,278
Linear thermal expansion coefficient - 25 to 300°C (1 / °C)	20,2 x 10 ⁻⁶
Electrical resistivity an 20 °C (μ Ω cm)	6,63
Module of elasticity E (N / mm²)	110.000
Melting point (°C)	905 - 940
Structure	Alfa

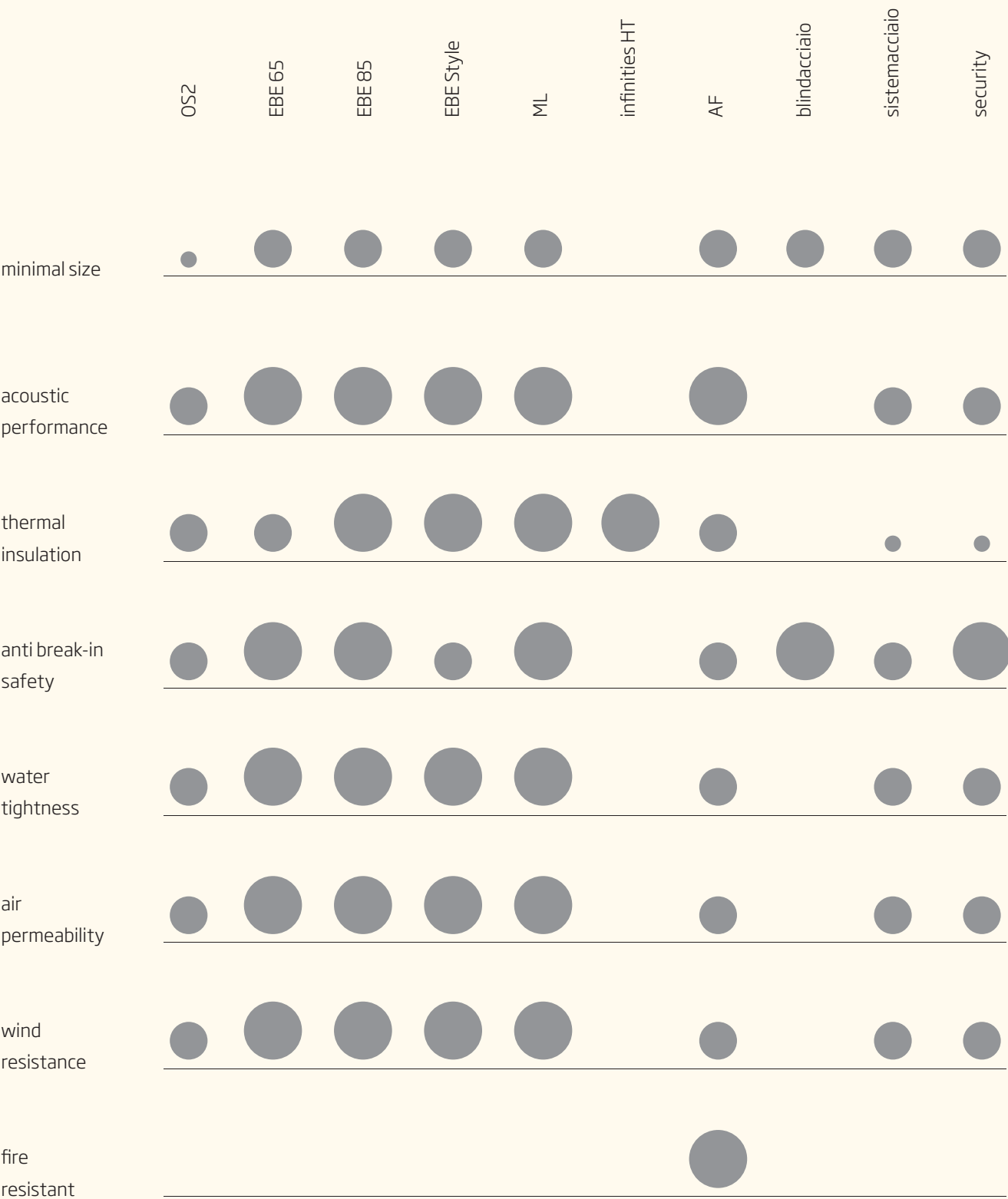
MECHANICAL FEATURES*	Cold rolled laminate 10 H10
Ultimate tensile strength R (N / mm²)	350 - 430
Yield strength S _(0,2) (N / mm²)	200 - 360
Elongation A ₅ (min %)	23
Brinell Scale HB	95 - 125

*UNI 4894:1962

REFERENCE STANDARDS

UNI EN 1652: Copper and copper alloys - Plate, sheet, strip and circles for general purposes

products comparison: performance, heat flow, safety and face dimension



products comparison: design options

	OS2	EBE 65	EBE 85	EBE Style	ML	infinities HT	AF	blindacciaio	sistemacciaio	security
galvanized steel	•	•	•		•	•	•	•	•	•
stainless steel		•	•		•	•	•		•	
corten steel	•	•	•		•	•	•		•	
brass	•	•	•	•	•	•			•	
flush door/window		•	•	•			•	•	•	•
rebated door/window	•	•	•	•	•				•	•
concealed sashes			•							
concealed hinges for windows		•	•	•	•				•	•
concealed hinges for doors		•	•	•					•	•
concealed door closer			•	•					•	•

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