

camaleante

VESCA
JERRAMETAL

100% MADE IN ITALY

"CASAMODERNA UDINE" TRADE FAIR
3/11 OTTOBRE 2015

S.A.I.E. DI BOLOGNA
14/17 OTTOBRE 2015

INNOVATIVE WINDOW AND DOOR FRAME TECHNOLOGIES



IN OUR METALWORKING

DEPARTMENT WE MAKE:

WROUGHT IRON

GRATINGS: electrofused, stainless steel,
aluminium and resin (available on stock)

STAIR TREADS

FENCES

MANHOLE COVERS

STREET FURNITURE: benches,
bicycle stands, waste bins, bus stop
shelters, leisure areas-playgrounds

POWER OPERATED GATES

with certificates of correct assembly

Income tax deduction for energy
saving interventions and for
interventions on buildings for the
recovery of the existing building
stock, restoration, refurbishment and
renovation.

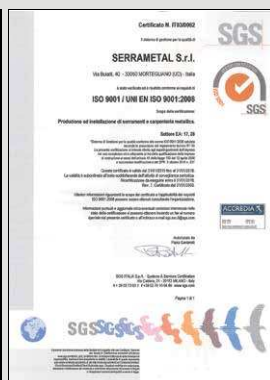
Our company has been a point of reference in the Friuli Venezia Giulia region since 1962. Thanks to our over fifty-year-long experience in the making, supply and installation of window and door frames, metalworks, gratings, curtain walls and rainscreens, industrial gates and other products, Serrametal has become a well-established company in the private and public building sectors.

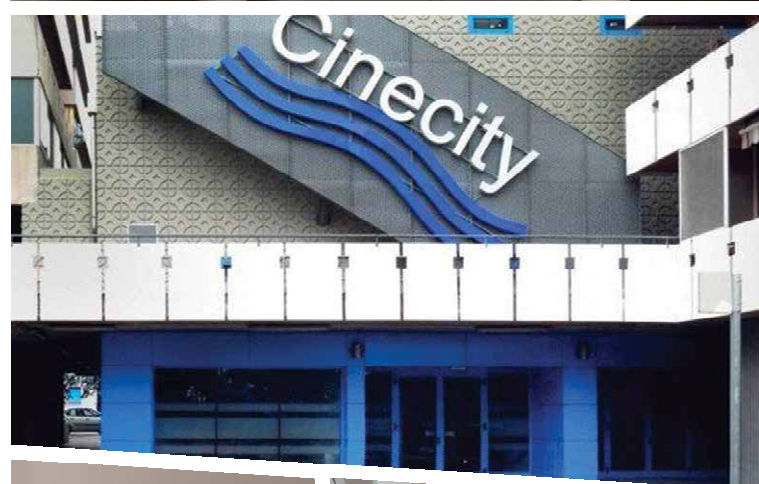
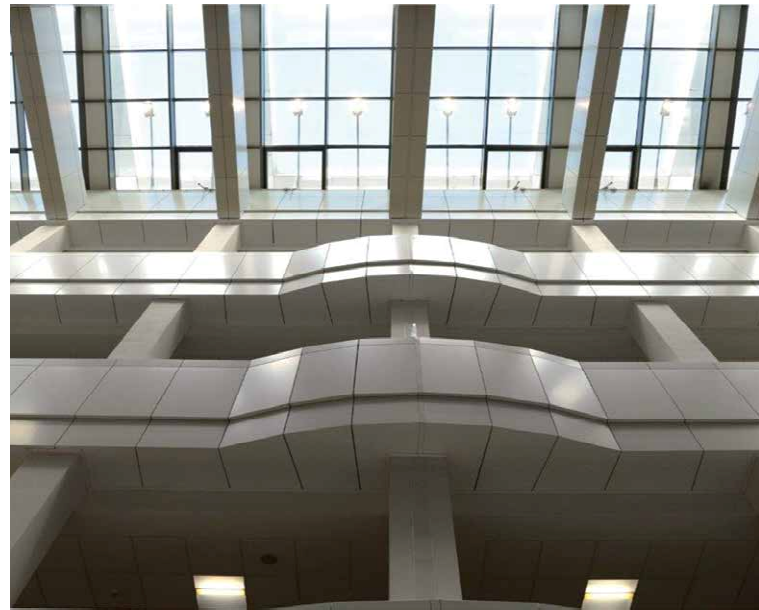
Serrametal, as a steel processing centre, is certified under the following standards: ISO 9001, SGS 1090, SGS 3834 and Attico SOA cat. OG 1 III-BIS, OS 6 III-BIS, OS 30 I, OS 18-A II, OS 18-B I, Chamber of Commerce Certification of Electrical and electronic systems, welding processes certified by the Rina and British Engine Insurance institutes.

We provide: window and door frames, interior and exterior doors, custom-made windows, gates and metalworks, safety and fire doors.

Free cost estimates.

certifications





camaleante

a new technology for window and door frames



| INSIDE | CENTRE | OUTSIDE |
|---|---|--|
| WOOD WOOD + LEATHER WOOD + FABRIC | PULTRUDED MATERIAL ABS POLYAMIDE ALUMINIUM | ALUMINIUM FOR STRENGTH WOOD BRASS COPPER BRONZE STEEL BURGLAR-PROOF PVC LOW-COST GOLD TOP CLASS |
| | | SUITABLE FOR OLD TOWNS AND VILLAS |

advantages

High thermal/sound insulation

Brightness +20%

100% environmentally friendly

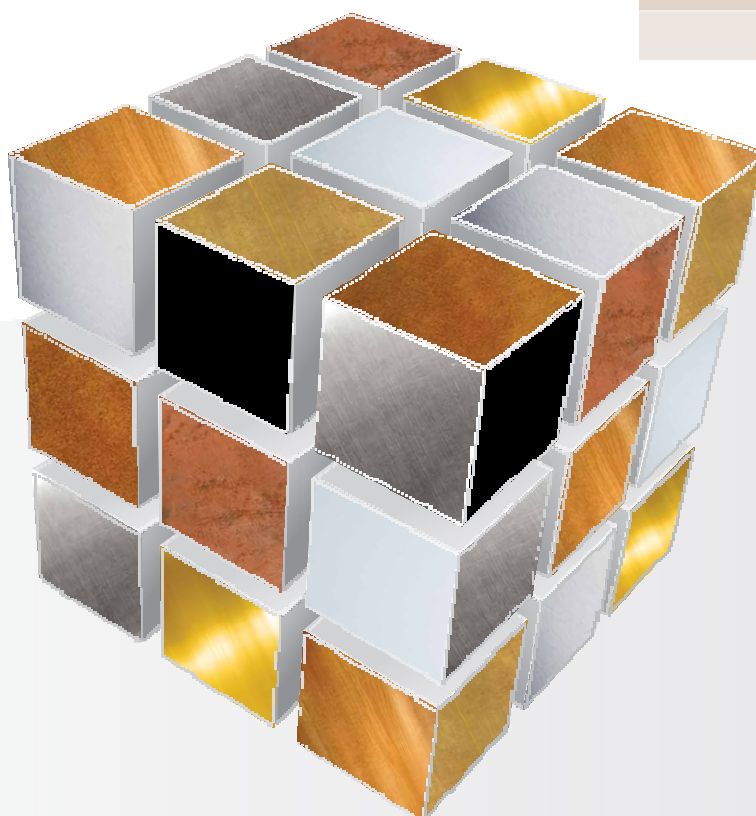
100% recyclable

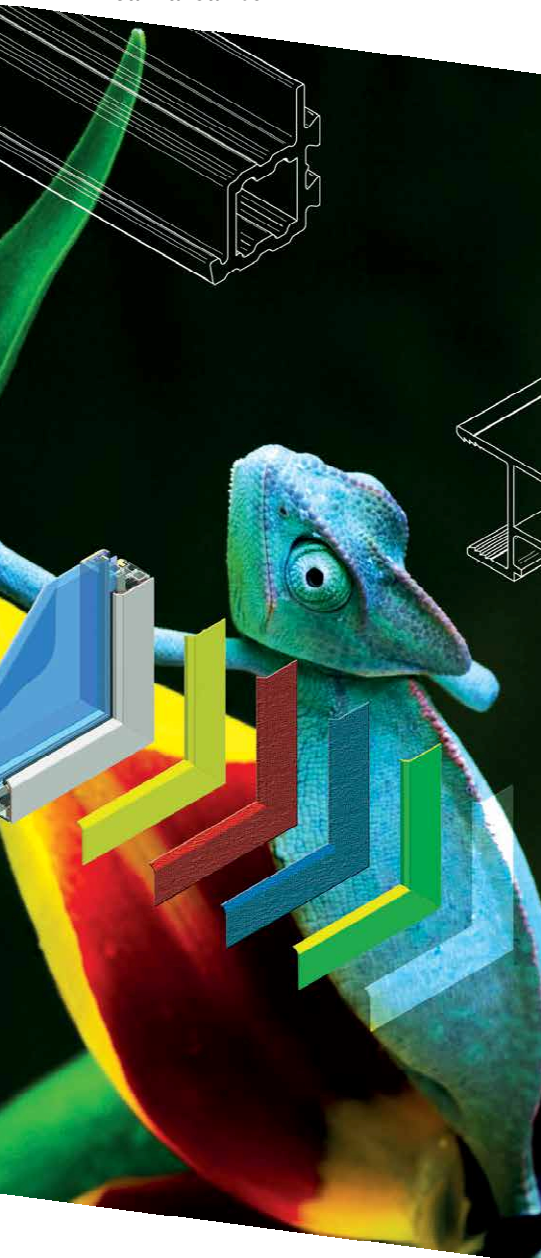
100% customizable

NO dioxins

NO formaldehyde

NO chlorine





A REVOLUTION IN DOOR AND WINDOW FRAMES

EXTERNAL FINISHES: aluminium, stainless steel, copper, brass, heat-treated wood

INTERNAL FINISHES:
45° or 90° cut solid wood

The CAMALEANTE series provides the greatest possible freedom of choice and customization of a door or window frame. A new “CASING-WIND-GLASS” insulated central core (**International patent application**), on which one will insert:

- Central rabbet gasket, for weep system
- Specific hardware elements for tilt and turn systems, distance between centres 13 mm (traditional, concealed, and burglar-proof)
- Low-e glass (max thickness 50 mm).

It is possible to complete the frame with internal and external finishing elements to be chosen from the various solutions provided in the series, or according to your requirements.

Furthermore, the design of a REDUCED and SYMMETRICAL solution in the central node leads to a 20% reduction in the overall dimensions, which is important from the functional and aesthetic point of view, and to an increase in brightness by 20%.

You will be able to erase the signs of time and to change the colours of your window and door frames without further inconvenience. Our “Casing-wind-glass” structure, in fact, will remain installed, enabling the maintenance of the finishing elements only.

Our system aims at optimizing the various elements making up the door or window frame. We also aim at reducing the number of components present in the windows achieving synergy between the fixed casing and the openable wing, a completely new system on the market, with structural simplicity.

Thanks to our system’s innovative technical features, a frame can be made according to one’s requirements because the internal and external insulation layer can be of wood, plastic material, aluminium, steel or any other materials, even precious materials like copper, brass, gold.

“Camaleante” is an innovative product, a small-sized (both as to its width and to its height) section, which provides high thermal insulation (assessed by laboratory tests).

Its innovation lies in the fact of having significantly reduced the materials with high thermal transmittance and, on the other hand, having increased the materials with low transmittance. Furthermore, the same sections are used both for the fixed casing and for the openable casing (wing). The fixing of the various screws of the hardware both on the wing and on the fixed casing is guaranteed. “Camaleante” was born out of our intuition and technical experience in the sector. We may say that it can be considered one of the most innovative systems ever, with an eye to the future market as well. In fact, it provides excellent insulation even with a small-sized section. Its strength and stability derive from a revolutionary and innovative concept in the use and in the combination of special components. The section is characterized by elegant design, thus being able to be installed in all types of buildings, both new and renovated.

All the aluminium sections are made of extruded aluminium alloy 6060 UNI 9006/1 T5 and they can be subjected to stove enamelling with polyester powders or to electrocolouring (anodizing); the internal sections are being studied, at the moment they are of solid wood; thanks to an accurate design of the sections and to specific techniques it is possible to insert all kinds of panes of glass having a variable thickness (from 28 to 50 mm). The continuous insulation joint is innovative too. The processes necessary for assembling the sections are very simple, thus allowing to reduce processing times (and, as a consequence, final costs).

All the door and window frame systems currently available on the market (aluminium, thermal break aluminium, PVC, Aluminium/wood, Wood aluminium, etc.) feature different components making up the fixed casing and the mobile casing (wing) and are always different with respect to each other. This implies very large stocks for door and window installers. So far attention had been mostly focused only on optimizing and/or making stylish the various components, but nobody had never created synergy between them. Thanks to our experience, we have managed to create said synergy.



camaleante

The Serrametal company, pursuing the goal set in the quality manual (page 1 section 1), carried out a feasibility, research, management and organization study for “Camaleante” achieving the expected results in terms of innovation and efficiency.

HIGH RELIABILITY

The “Camaleante” system aims at optimizing the various elements, which normally make up a door or window frame. Such an optimization was possible thanks to a specific design intended to reduce the number of components usually present in windows. We thus managed to create synergy between the fixed casing and the openable wing, which had not been available on the market yet. All this was possible while maintaining structural simplicity along with aesthetic versatility and a reduction in assembly and production costs. Consumers will therefore be able to choose and change the materials and the colours according to their tastes and requirements. The door and window manufacturer will be able to produce and sell a product reducing energy impact, increasing profits with lower expenditure for raw materials. The innovative “Camaleante” system beats all the other door and window frame systems available on the market thanks to the advantage of reducing the usual large stocks normally needed to install even a simple casing.



GLASS AND SEALANTS

The present and future potentials of these elements are fully exploited.

GASKETS

Top quality elastomer gaskets with limited geometric shapes but with high technical performance.

HARDWARE

Our patent's novelty lies in its great marketability, in the possibility to use accessories, which are available on the market, thus being able to satisfy demanding - and at the same time thrifty - customers.

The increasingly greater aesthetic and housing differences and the increasingly demanded construction and design peculiarity enhance our product in modern and simple architectures.

All types of openings are provided, such as side-hung, hopper window, tilt and turn, horizontal movement (SIEGENIA-MAICO), side sliding systems. Furthermore, it is possible to have several types of openings in the same element.

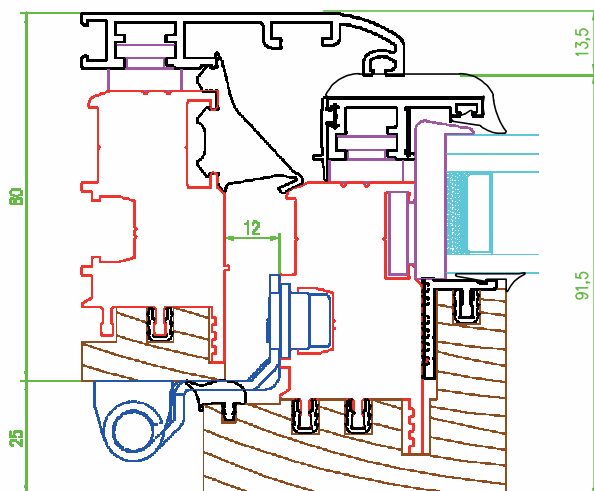
Technical data available. Our watchword is versatility.

| | |
|----------------------|--------------|
| Section height | 80 ÷ 91.5 mm |
| Section thickness | 100 ÷ 113 mm |
| Max. glass thickness | 28 ÷ 50 mm |

*The system is versatile and suits present and/or future customer requirements, such as finish change, higher thermal and sound insulation, reinforcements.



“CAMALEANTE” Series, “GHOST” model technical features



ALUMINIUM SECTIONS:

Extruded aluminium alloy EN AW-6060 pursuant to EN 573/3 standard
TEMPERING:

T6 pursuant to EN 515 standard

DIMENSIONAL TOLERANCES:

pursuant to EN 12020/2 standard

POLYAMIDE SECTIONS:

Extruded polyamide PA 6.6+25% glass fibre

DIMENSIONAL TOLERANCES:

pursuant to DIN 16941/2 B standard

AIR-WATER SEALING:

Central gasket (weep system)

TYPE OF SECTION:

Central section of polyamide reinforced with glass fibres to obtain good thermal transmittance, completely insulating the hardware.

External aluminium shell, mechanically locked with rotating cams.

Internal wooden shell of 45° and 90° cut wood (like in wooden frames), available in various finishes.

“GHOST” MODEL DIMENSIONS

FIXED CASING DEPTH: 80 mm

MOBILE CASING DEPTH: 91.5 mm

CENTRAL NODE IN 2 VERSIONS: REDUCED 100 mm, and TRADITIONAL 113 mm

GLASS FIN HEIGHT: 20 mm

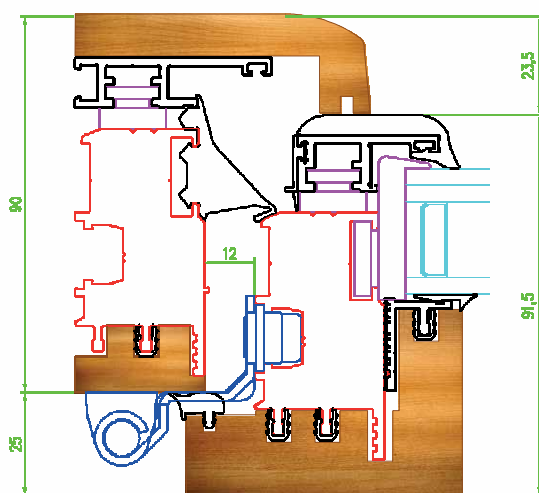
GLAZING SPACE: from 34.5 to 47.5 mm depending on the glazing bead positioning

TYPE OF GLAZING BEAD: Aluminium glazing bead fixed with screws, and wooden cover

HARDWARE SEAT: Specific hardware elements for tilt and turn systems, both visible and concealed

USE: The sections allow to manufacture windows and doors with 1, 2, 3 side-hung wings, normal and concealed tilt and turn systems, fixed lights and hopper windows. The frames are rebated on the exterior (13.5 mm) and rebated on the interior (25 mm)

“CAMALEANTE” Series, “GHOST LEGNO” model technical features



ALUMINIUM SECTIONS:

Extruded aluminium alloy EN AW-6060 pursuant to EN 573/3 standard
TEMPERING:

T6 pursuant to EN 515 standard

DIMENSIONAL TOLERANCES:

pursuant to EN 12020/2 standard

POLYAMIDE SECTIONS:

Extruded polyamide PA 6.6+25% glass fibre

DIMENSIONAL TOLERANCES:

pursuant to DIN 16941/2 B standard

AIR-WATER SEALING:

Central gasket (weep system)

TYPE OF SECTION:

Central section of polyamide reinforced with glass fibres to obtain good thermal transmittance, completely insulating the hardware.

External shell of Wood + Aluminium, mechanically locked with rotating cams.

Internal wooden shell of 45° and 90° cut wood (like in wooden frames), available in various finishes.

“GHOST LEGNO” MODEL DIMENSIONS

FIXED CASING DEPTH: 80 mm

MOBILE CASING DEPTH: 91.5 mm

CENTRAL NODE IN 2 VERSIONS: REDUCED 100 mm, and TRADITIONAL 113 mm

GLASS FIN HEIGHT: 20 mm

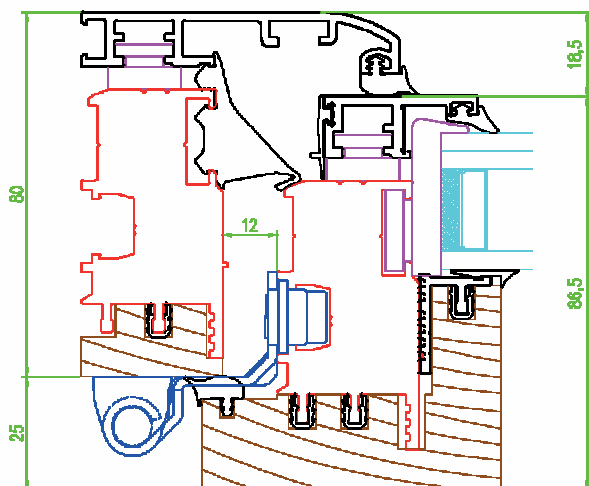
GLAZING SPACE: from 34.5 to 47.5 mm depending on the glazing bead positioning

TYPE OF GLAZING BEAD: Aluminium glazing bead fixed with screws, and wooden cover

HARDWARE SEAT: Specific hardware elements for tilt and turn systems, both visible and concealed

USE: The sections allow to manufacture windows and doors with 1, 2, 3 side-hung wings, normal and concealed tilt and turn systems, fixed lights and hopper windows. The frames are rebated on the exterior (23.5 mm) and rebated on the interior (25 mm)

“CAMALEANTE” Series, “LINEO” model technical features



“LINEO” MODEL DIMENSIONS

| | |
|-----------------------------|---|
| FIXED CASING DEPTH: | 80 mm |
| MOBILE CASING DEPTH: | 86.5 mm |
| CENTRAL NODE IN 2 VERSIONS: | REDUCED 100 mm, and TRADITIONAL 113 mm |
| GLASS FIN HEIGHT: | 20 mm |
| GLAZING SPACE: | from 34.5 to 47.5 mm depending on the glazing bead positioning |
| TYPE OF GLAZING BEAD: | Aluminium glazing bead fixed with screws, and wooden cover |
| HARDWARE SEAT: | Specific hardware elements for tilt and turn systems, both visible and concealed |
| USE: | The sections allow to manufacture windows and doors with 1, 2, 3 side-hung wings, normal and concealed tilt and turn systems, fixed lights and hopper windows. The frames are rebated on the exterior (18.5 mm) and rebated on the interior (25 mm) |

ALUMINIUM SECTIONS:

Extruded aluminium alloy EN AW-6060 pursuant to EN 573/3 standard

TEMPERING:

T6 pursuant to EN 515 standard

DIMENSIONAL TOLERANCES:

pursuant to EN 12020/2 standard

POLYAMIDE SECTIONS:

Extruded polyamide PA 6.6+25% glass fibre

DIMENSIONAL TOLERANCES:

pursuant to DIN 16941/2 B standard

AIR-WATER SEALING:

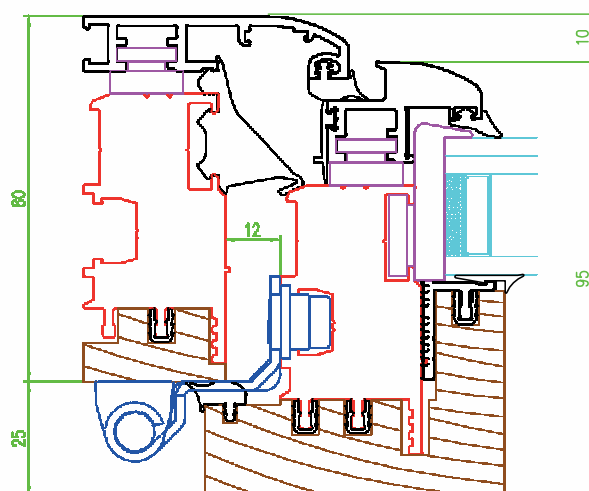
Central gasket (weep system)

TYPE OF SECTION:

Central section of polyamide reinforced with glass fibres to obtain good thermal transmittance, completely insulating the hardware. External aluminium shell, mechanically locked with rotating cams.

Internal wooden shell of 45° and 90° cut wood (like in wooden frames), available in various finishes.

“CAMALEANTE” Series, “SUPER” model technical features



“SUPER” MODEL DIMENSIONS

| | |
|-----------------------------|---|
| FIXED CASING DEPTH: | 80 mm |
| MOBILE CASING DEPTH: | 95 mm |
| CENTRAL NODE IN 2 VERSIONS: | REDUCED 100 mm, and TRADITIONAL 113 mm |
| GLASS FIN HEIGHT: | 20 mm |
| GLAZING SPACE: | from 34.5 to 47.5 mm depending on the glazing bead positioning |
| TYPE OF GLAZING BEAD: | Aluminium glazing bead fixed with screws, and wooden cover |
| HARDWARE SEAT: | Specific hardware elements for tilt and turn systems, both visible and concealed |
| USE: | The sections allow to manufacture windows and doors with 1, 2, 3 side-hung wings, normal and concealed tilt and turn systems, fixed lights and hopper windows. The frames are rebated on the exterior (10 mm) and rebated on the interior (25 mm) |

ALUMINIUM SECTIONS:

Extruded aluminium alloy EN AW-6060 pursuant to EN 573/3 standard

TEMPERING:

T6 pursuant to EN 515 standard

DIMENSIONAL TOLERANCES:

pursuant to EN 12020/2 standard

POLYAMIDE SECTIONS:

Extruded polyamide PA 6.6+25% glass fibre

DIMENSIONAL TOLERANCES:

pursuant to DIN 16941/2 B standard

AIR-WATER SEALING:

Central gasket (weep system)

TYPE OF SECTION:

Central section of polyamide reinforced with glass fibres to obtain good thermal transmittance, completely insulating the hardware. External aluminium shell, mechanically locked with rotating cams.

Internal wooden shell of 45° and 90° cut wood (like in wooden frames), available in various finishes.

thermal transmittance

CENTRAL NODE

TRANSMITTANCE (UF): 1.742 W/M²K INTERIOR T: 20.000°C
 CONDUCTANCE (LF2D): 0.562 W/MK EXTERIOR T: 0.000°C
 CASING LENGTH (BF): 110.00 MM

**Thermal transmittance (Uf)
 calculated according to the UNI
 EN ISO 10077-2:2012 standard**

NODE DETAILS

Primitives used for the simulation: 52364
 Casing width (Bf): 110.00 mm
 Visible width of insulation panel (Bp): 190.00 mm
 Thickness of insulation panel (Dp): 30.00 mm

EXTERIOR BOUNDARY CONDITIONS

Temperature: 0.000 °C
 Surface resistance: 0.04 m²K/W

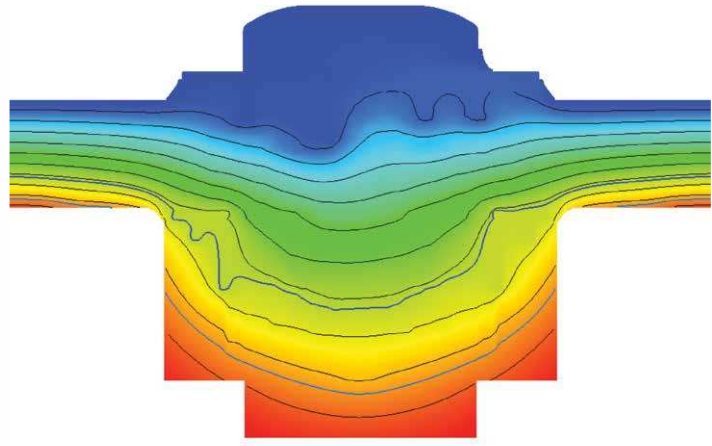
INTERIOR BOUNDARY CONDITIONS

Temperature: 20.000 °C
 Surface resistance: 0.13 m²K/W
 Humidity: 60.00 %

RESULTS CALCULATED ACCORDING TO THE

UNIEN ISO 10077-2:2012 STANDARD

Interior/exterior temperature difference: 20.000 °C
 Conductance 2D (Lf2D): 0.562 W/mK
 Transmittance (Uf): 1.742 W/m²K



LIST OF BOUNDARY CONDITIONS:

| NAME | COL. | Boundary T [°C] | R [m ² K/W] | H [%] |
|-------------------------------|------|-----------------|------------------------|-------|
| Interior | | 20.000 | 0.1300 | 60.0 |
| Increased interior resistance | | 20.000 | 0.2000 | 60.0 |
| Exterior | | 0.000 | 0.0400 | 60.0 |

SIDE NODE

TRANSMITTANCE (UF): 1.476 W/M²K INTERIOR T: 20.000 °C
 CONDUCTANCE (LF2D): 0.321 W/MK EXTERIOR T: 0.000 °C
 CASING LENGTH (BF): 92.00 MM

**Thermal transmittance (Uf)
 calculated according to the UNI
 EN ISO 10077-2:2012 standard**

NODE DETAILS

Primitives used for the simulation: 34172
 Casing width (Bf): 92.00 mm
 Visible width of insulation panel (Bp): 190.00 mm
 Thickness of insulation panel (Dp): 30.00 mm

EXTERIOR BOUNDARY CONDITIONS

Temperature: 0.000 °C
 Surface resistance: 0.04 m²K/W

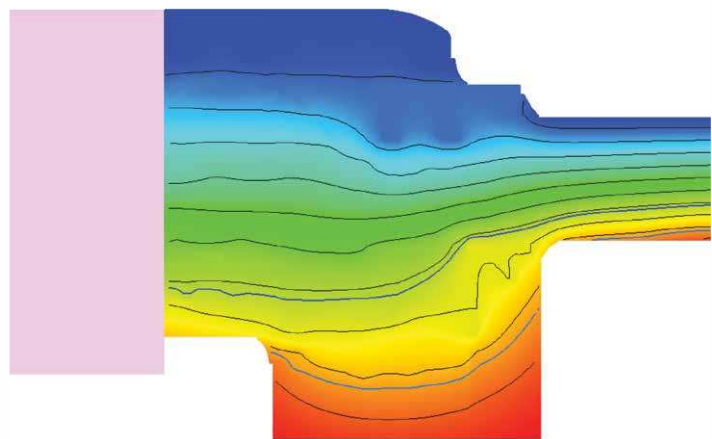
INTERIOR BOUNDARY CONDITIONS

Temperature: 20.000 °C
 Surface resistance: 0.13 m²K/W
 Humidity: 60.00 %

RESULTS CALCULATED ACCORDING TO THE

UNIEN ISO 10077-2:2012 STANDARD

Interior/exterior temperature difference: 20.000 °C
 Conductance 2D (Lf2D): 0.321 W/mK
 Transmittance (Uf): 1.476 W/m²K



LIST OF BOUNDARY CONDITIONS:

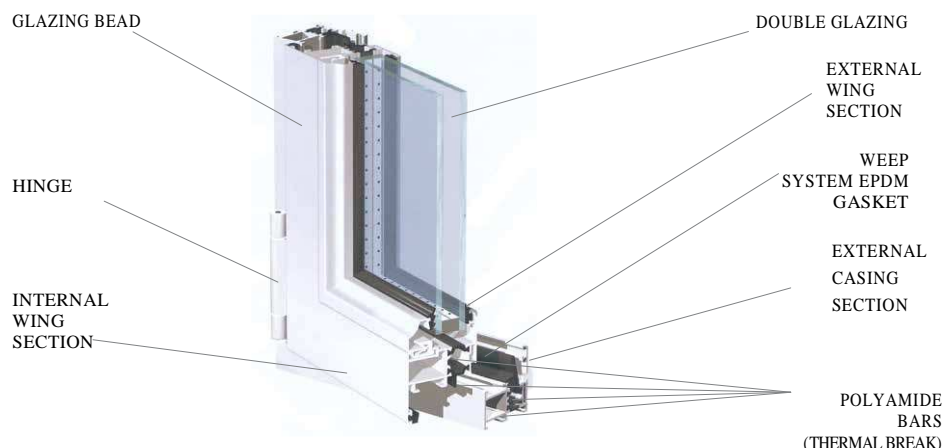
| NAME | COL. | Boundary T [°C] | R [m ² K/W] | H [%] |
|-------------------------------|------|-----------------|------------------------|-------|
| Interior | | 20.000 | 0.1300 | 60.0 |
| Increased interior resistance | | 20.000 | 0.2000 | 60.0 |
| Exterior | | 0.000 | 0.0400 | 60.0 |

THERMAL BREAK INSULATION SYSTEMS

AVAILABLE TYPES

Windows, with one, two or more wings, with tilt and turn systems, balcony doors, doors, hopper windows, with vertical and horizontal pivot hinges, parallel sliding systems and monobloc frames.

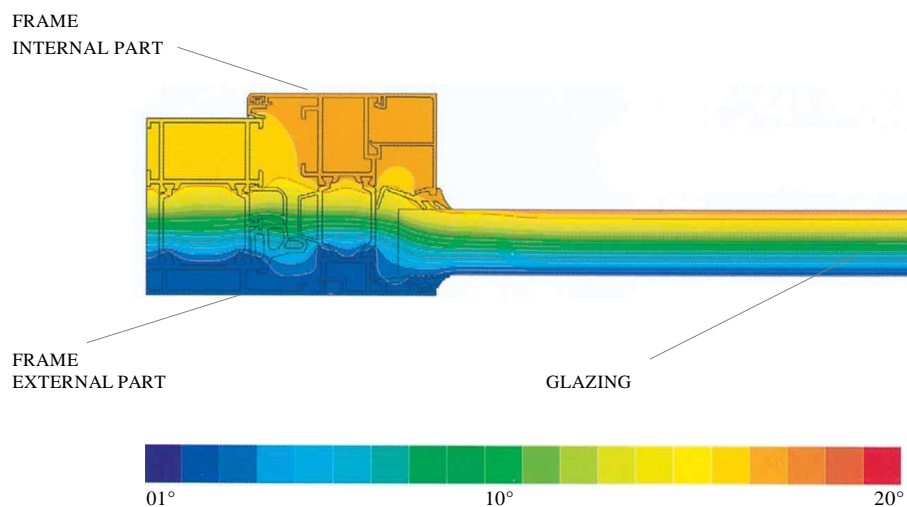
Door and windows - aluminium - wood sliding doors and windows



These series for thermal break doors and windows are characterized by a particular, innovative aesthetic approach to aluminium. The geometries reflect the traditional shapes of wooden frames, ideal for renovated buildings and for residential buildings in general. The thermal break systems are called in this way due to their particular processing. The insertion of POLYAMIDE bars within the frame, installed between the two aluminium components, interrupts the transmission of heat and cold from outside to inside and is ideal for door and window frames in buildings of the residential type.

DIAGRAM OF EXTERIOR- INTERIOR TEMPERATURES

This diagram shows the temperatures from outside to inside, highlighting the difference between them (about 15°) both in summer and in winter. The example refers to the cold season, in this case the insulation of the frame leads to a significant saving in energy and consumptions.



WHY CHOOSING THE “THERMAL BREAK” TECHNOLOGY

The so-called “thermal break” door and window frames, thanks to their particular processing, provide comfort and insulation from external agents, such as heat, cold, wind, noise and pollution. They are recommended for doors and windows of new and renovated houses and they are tested and certified by important European institutions.

POLLUTION
INSULATION

COLD INSULATION

HEAT INSULATION

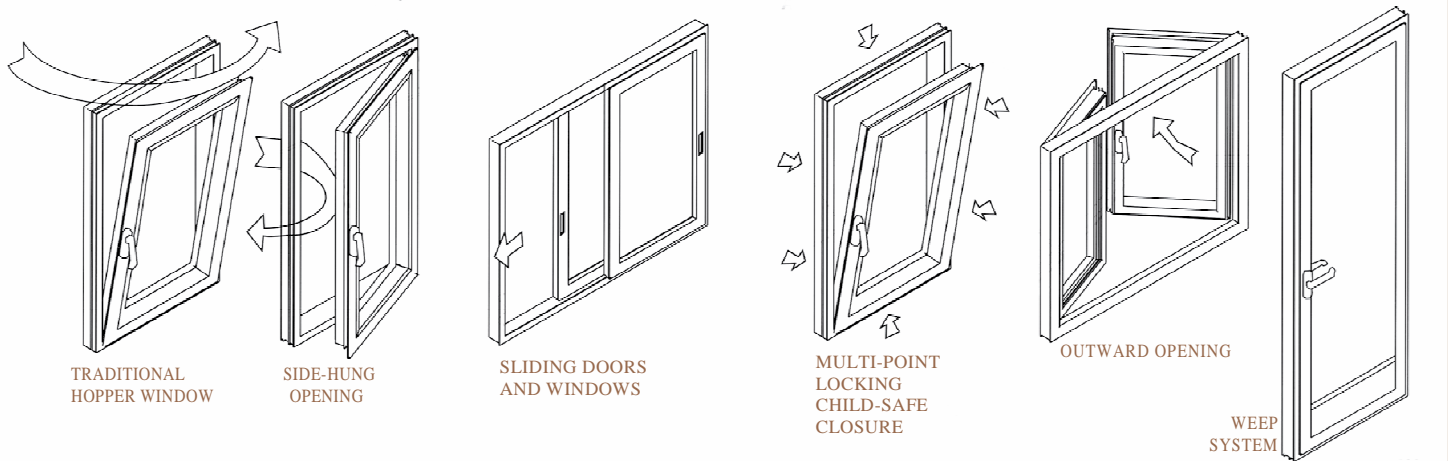
WIND INSULATION

NOISE INSULATION

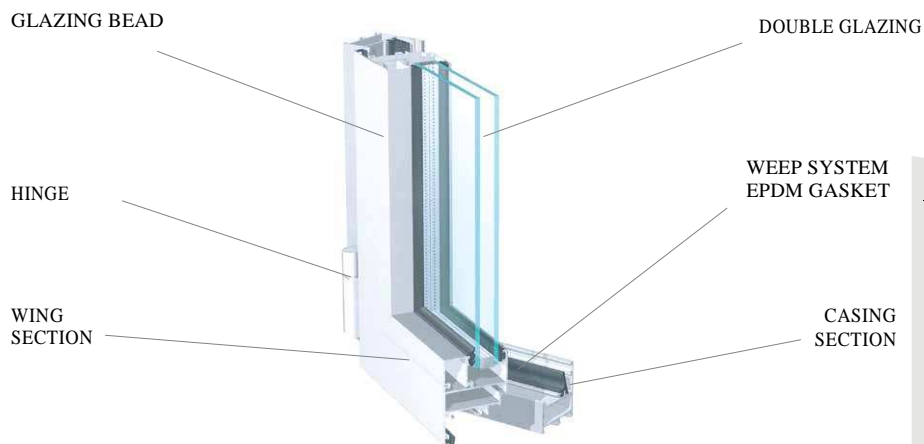


CLOSING SYSTEMS

Doors and windows are intended to protect your house from external agents like noise, pollution, cold and heat. Made of aluminium, they are long-lasting and almost need no maintenance. Thanks to accurate design and to a wide range of products they suit all needs and tastes. The following short description of our products, types of openings, insulating systems (thermal break) and non-insulating systems, catalogues of the series and examples will help you understand the world of door and window frames.



NON-INSULATING SYSTEMS



The non-insulating systems are suitable for making doors and windows of the most varied kinds, the range for windows employs the weep system technology to provide the product with a high resistance to atmospheric conditions.

AVAILABLE TYPES

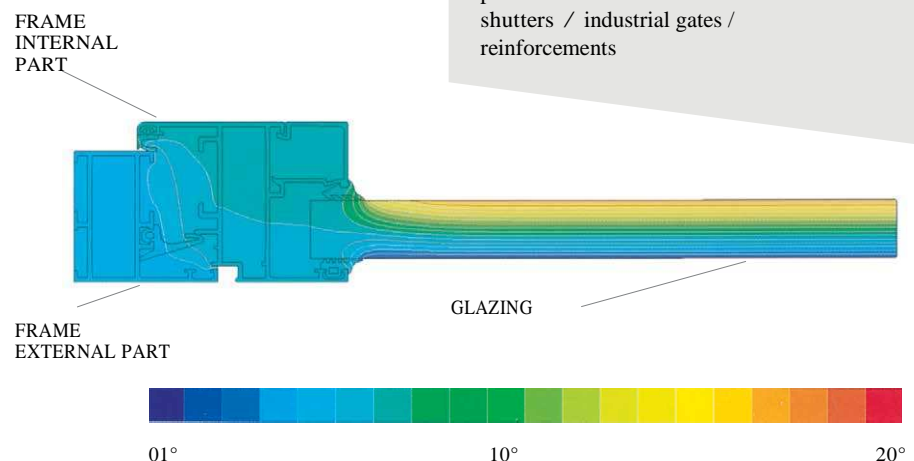
Windows with one or two outward opening wings, inward opening windows and balcony doors, hopper windows, with one, two, three or four wings, with tilt and turn systems, with vertical and horizontal pivot hinges, parallel sliding systems.

Series:

side-hung frames / shutters / sliding patios / interior doors / Venetian shutters / industrial gates / reinforcements

DIAGRAM OF EXTERIOR-INTERIOR TEMPERATURES

This diagram shows the temperatures from outside to inside, highlighting the difference between them both in summer and in winter.



DOORS AND WINDOWS



This series for thermal break doors and windows is characterized by a particular, innovative aesthetic approach to aluminium. The geometries of the sections reflect the traditional shapes of wooden frames. The door and window frames of this series are ideal for use in renovated buildings in old town centres and in residential buildings in general.

This series was the first - and is probably still the only one - on the market to provide excellent thermal insulation although with small-sized sections and, as a consequence, with reduced costs.

This series was specifically created as an extension of the original one in order to meet the requirements of customers who prefer traditional doors (co-planar doors). The sealing and thermal insulation technology is identical to that of the series of origin: in fact, it employs the same thermal break bars and the same weep system central gasket.

Thanks to the increased depth of the sections, it is possible to install large panes of glass and is particularly suitable for making doors and shop windows.



The thermal break series are designed for making windows and doors. They provide top performance in their respective categories in terms of thermal insulation, sound insulation and resistance to atmospheric conditions.

The system is made up of a complete range of insulating sections for creating the most advanced types of door and window frames demanded by the market.



DOORS GATES FRAMES FOR YOUR HOME

SPECIAL FRAMES

DOOR CANOPIES REINFORCED DOORS
SPECIAL GLAZING



SECTIONAL UP AND OVER DOORS



GRATING STAIR TREADS



THERMAL BREAK
DOORS - ALUMINIUM -
PVC - WOOD



SLIDING FRAMES

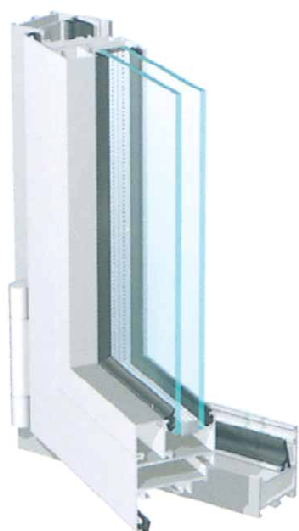
This series for windows and doors allows to realize, in addition to the classic frames with two, three and four sliding leaves, also casings with fixed lower light and/or fixed upper light.

The sliding leaves are locked by means of an exclusive multi-point locking system, operated by the same cremone bolt used in side-hung windows, thus providing safety and reliability.

The frame's traditional line is enhanced by the particular glazing bead cut at 45° like the sliding leaf casing. This top-quality series of lift-and-slide and sliding frames is characterized by robustness, which allows to make large-sized frames, such as floor-to-ceiling sliding patios.

The lift-and-slide mechanism, designed to facilitate opening and closing, makes these products extremely functional; in fact, it is possible to install strong burglar-proof glazing without affecting ease of use.

DOORS AND WINDOWS



A series of non-insulating doors and windows, available in the most varied types demanded by the market. The range for windows employs the weep system technology to provide the product with a high resistance to atmospheric conditions.

By skilfully combining the wide range of extruded elements and accessories, we can meet all our customers' design requirements.

By using the same hardware employed on the more prestigious thermal break series, we can offer solutions characterized by remarkable weight and size features.



SHUTTERS

These products are intended to meet various aesthetic and functional requirements in compliance with local building traditions.

All our shutters are characterized by the fact that they need no maintenance: the painting of the sections, carried out at our plants, makes these products extremely long-lasting.

Our shutters do not need to be re-painted periodically, as it occurs, for example, in wooden shutters or in low-quality metal shutters.

Looking exactly like wooden shutters, our aluminium shutters can be advantageously used both in renovated buildings and in new buildings.

In addition to the classic monochromatic versions, various stylish wood finishes are available.

Our range of shutters includes various versions called:
Classica, Storico, Scurone, Scorrevole

WINTER GARDENS



This series is specifically conceived to make top hung folding sliding patio doors.

The reduced number of sections and the compatibility with the system make this series extremely practical and versatile.

A strong aluminium top track and the related four-wheeled trolleys support the leaves as they slide.

The bottom track can be embedded in the floor, thus avoiding undesired protrusions, or it can be external, using the same casing side section.

The leaves engage the same section over the whole perimeter, and their sealing is guaranteed by long-lasting elastic gaskets.

The patios can be provided with a walk-through door, with double handle and lock.

INTERIOR DOORS

The interior door series is characterized by smooth and rounded lines; the doors produced by this system are ideal in private residential buildings as well as in public buildings like schools and hospitals, that is to say, places in which safety and hygiene are fundamental.

Essential design prevents dust and dirt build-up and facilitates cleaning.



The “Venetian shutters” range, which is the natural completion of the shutters series, was designed to meet the requirements coming from a specific geographical area.

The wide range of Venetian shutters - Belluno, Padova, Rovigo, Treviso, Verona and Vicenza - allows to suit all applications. They need no maintenance: the painting of the sections, carried out at our plants, makes these products extremely long-lasting. Our Venetian shutters do not need to be re-painted periodically, as it occurs in wooden shutters or in low-quality metal shutters.

In addition to the classic monochromatic versions, various stylish wood finishes are available.

VENETIAN SHUTTERS



STRUCTURAL FAÇADES AND CURTAIN WALLS

A series for making thermal break vertical curtain wall systems.

This series provides the following versions:

- The system is attached to the cells of the façade exclusively by bonding with structural silicone.
- Along with structural bonding, a small continuous perimeter mechanical retaining element, inclined by 45° and nearly invisible, is used.
- Structural bonding is no longer used and is replaced by a more or less visible external and continuous mechanical retaining element.

All the versions feature the load-bearing grid, conceived and proposed both in the SPLIT WALL solution and in the classic STICK WALL solution.

All the versions of the range of façades provide top performance in terms of resistance to atmospheric conditions and thermal insulation.



The classic stick curtain wall systems with external mechanical glass retaining element are the basis of the project, which has evolved over time, having been integrated by a full range of additional solutions, finally being able to make polygonal façades or three-dimensional structures for roofs and tunnels. Thanks to this series it has also been possible to insert hermetically sealed protruding openings on sloping roofs.

Afterwards, due to specific requirements, the range of internal load-bearing grids has been enriched with the T-shaped mullions and transoms normally used in supporting metal framing.

The basic structure of the curtain wall system is the same mullion and transom grid used in the building sector.

The wide range of sections for mullions and transoms allows to choose the most suitable section from the structural point of view depending on the modular dimensions of the façade and on the pressure of the wind.

The possibility of assembling the elements from the outside allows to cover buildings having masonry parapets or blind wall sections. The main characteristic of this kind of construction is the absence of visible metal elements on the outside of the façade.

