



Woodwork Factory
WOODEN WINDOWS AND DOORS







Welcome,

We have the pleasure to present the product catalogue of WIWATOWSKI – Wooden Windows and Doors Manufacturer. Here you will find an overview of our collection and basic descriptions of the products.

As a company dealing exclusively with wood windows and doors, we focus only on the highest aesthetic and quality requirements of our products. Our products combine quality and aesthetics whilst following the latest trends in design and technology.

Our 20 years long experience helps us to provide the highest quality wooden windows and doors at the best possible price and guarantees outstanding performance of our products.

Please do not hesitate to contact us if you require any further information on design or technical service.

One of our goals is loyalty to our Customers during and after the warranty period. In case of wood windows and doors it is especially important.

Thank you for your interest in our offer.

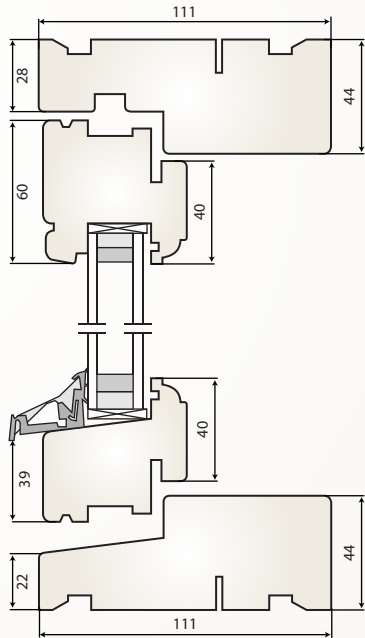
Regards,
Waldemar Wiwatowski

*Scandinavian
functionality.*

MILJO windows opening outwards. Such windows are standard on the Danish, Swedish, Norwegian, British and Irish markets. We use laminated pine, oak, meranti and sapeli wood for the production of Scandinavian-style windows.

There is also a variety of opening systems for such windows in our offer, using various types of casement bolts, shears, hinges and hooks. Opening systems offered by our company eliminate the problem of accessibility for cleaning the outside of the window.

MILJO Scandinavian windows



Cross-section of a MILJO system window

Following the latest trends...

Scandinavian windows guarantee **warmth** (double pane packages), **aesthetics and functionality**. Painted with opaque paints of RAL or NCS palette. This allows to match them to any facade or interior decor colour.

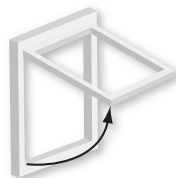
Miljo windows are also painted with transparent varnishes. There is a possibility of making oiled windows.

Window systems offered:

- fixed, top hung, side hung and side swing windows in horizontal and vertical axis.

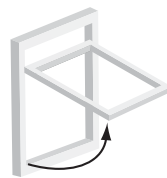


"Shear" fittings in MILJO system



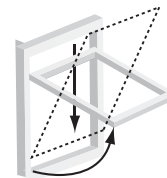
Top hung type I

Window opened by hinges placed on the top sill of the casement. Casement closed with a casement bolt with a handle or hooks.



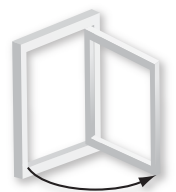
Top hung type II 90 degrees

Window opened upwards on shears with easy clean function.



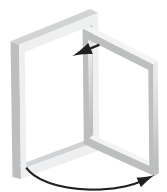
Top swing

A horizontal top swing window. A very functional system, allowing for easy cleaning of the casement.



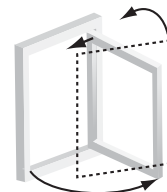
Side hung type I

Window opened by hinges placed on the left or right casement sill. Window closed with a casement bolt with a handle or hooks. Also a casement bolt with a brake can be used.



Side hung type II 90 degrees

Window opened to the side, on shears with easy clean function.



Side swing

A side swing window in vertical axis. A very functional system, allowing for easy cleaning of the casement.

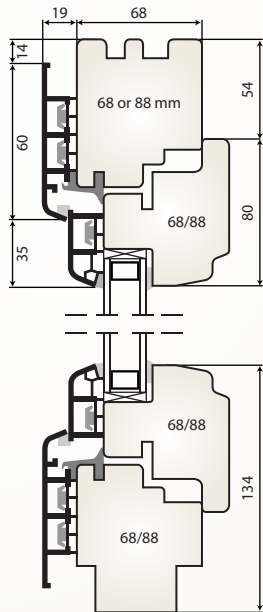
*Aesthetics
and durability.*



GEMINI Windows is a system of windows with wood and aluminium construction.

GEMINI Windows have an innovative design based on the concept of joining two independent frames – wood and aluminium – with energy-saving glass unit in between.

They have features of both wooden (**warmth and aesthetics**) and aluminium windows (**durability of the aluminium outer frame**).



Energy-saving

Using GEMINI system **reduces heat transfer through the windows by about 20%**, this significantly affects the reduction of energy losses.

This construction is the **most durable solution**, appreciated by architects, designer and individual investors.

Many possible applications

The variety of finishes provides **unlimited design possibilities** and allows harmonious adaptation of the item into the existing surroundings. GEMINI system allows for **any window shape**. Rectangular, arc, trapezoid, triangle, triangular and oblique windows are possible to achieve.

GEMINI offer includes tilt, tilt and turn, sliding, low threshold doors, side swing and folding windows.



Cross-section of a GEMINI window



Our windows use aluminium profiles of:



Aluminium

We offer **hundreds of colours** from RAL and NCS palette, in many shades and structures, for coating the surface with powder varnish. It is also possible to use **wood resembling structures**.

Wood

Internal wooden frame is made of laminated wood and can be painted with a wide range of paints with visible wood structure and opaque colours of RAL and NCS palette.



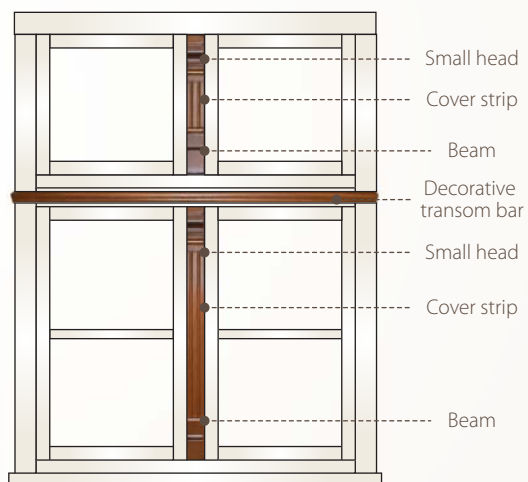


*Non-standard
window and door
shapes available.*

Renovation of windows in historical buildings entails the need for copying the existing woodwork. **Unusual shapes are not an obstacle for changing windows anymore.**

Thanks to high-quality machines and the experience of our personnel **we are able to meet the requirements of the most complex orders.** We can make arch, trapezoidal, round and oval windows, as well as template shapes.

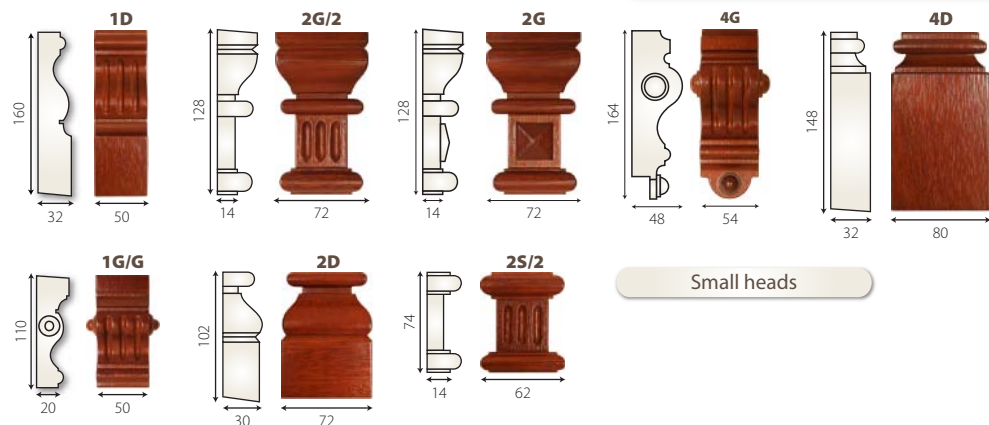
Non-standard shape windows



Assembly diagram of small heads

Decorative elements

Window caps, beams, transom bars and cover strips are additional elements of stylized or historical windows. We also offer a number of patterns and designs to suit your aesthetic needs.



Small heads



Projects with unusual window shapes.

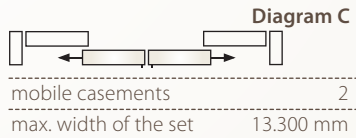
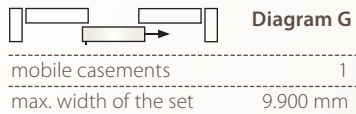


*Functionality
guarantees
satisfaction
from the choice
you made.*

Large, glazed surfaces and wide garden doors **significantly increase the status of our homes** while blurring the boundaries between what is inside, and what is outside...

HS type lift-slide doors **allow to have a large terrace entry while keeping full security and functionality.**

HS type sliding doors



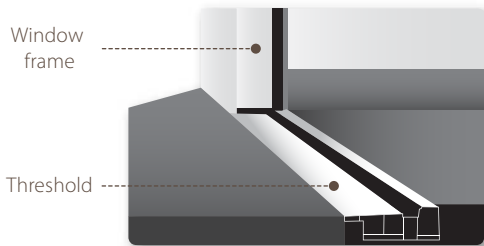
Chosen ways of casements opening

Small effort – huge results

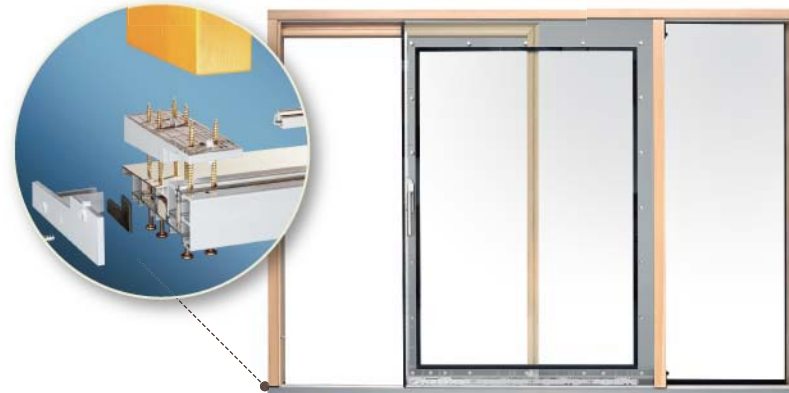
The **low threshold** of HS sliding doors allows for maximum comfort and freedom of movement out and into the house. Our sliding doors are based on SIEGENIA-AUBI fittings systems.

The new threshold for MACO Fiber-Therm sliding doors, made of fibreglass, **perfectly insulates from high and low temperatures**. Thermal conductivity is so small that a thermal plate is not required.

GFK material is **tractable and resistant to extreme loads**, which is an important advantage in comparison to conventional materials in use.



Cross-section of a threshold in the HS system



Assembly diagram of the threshold and the frame in an HS window





*More light
and space...*

PSK tilt-sliding and FS folding windows grant you the freedom of design. The possibility of using sliding systems in the Softline 68 and 88 profiles allows to integrate the windows into the woodwork in your apartment or house.

PSK fittings **allow the use of floor area**, which normally would be occupied by standard hinged casements. FS-type balcony doors grants the possibility to create a **wide passage to a terrace or into a garden**. Tilt-sliding and folding systems are secure large format woodwork.

PSK and FS balcony windows



Diagram 2-2-0; frame width to 1,8 m



Diagram 3-2-1; frame width to 2,7 m



Diagram 4-4-0; frame width to 3,6 m



Diagram 5-4-1; frame width to 4,0 m

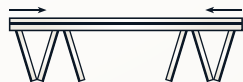


Diagram 6-3-3; frame width to 5,4 m

Sample diagrams of FS solutions

PSK balcony doors

Even 200kg door leaves can be easily handled with one hand. It is possible thanks to **PSK 200 Z** fitting with forced control, equipped also with an integrated snap protection.

Roller mushroom cam at each corner guarantees the basic safety standard.

FS folding doors


Softline 68 and 88 window systems, using FS-type fittings, **enable you to connect up to 7 elements**, and the maximum door leaf weight is 80kg. **Folding of the wings has become simple, easy and quiet** thanks to ball bearings and rolls made of special materials.



Threshold in the folding system



Method of moving the door leaf using PSK system



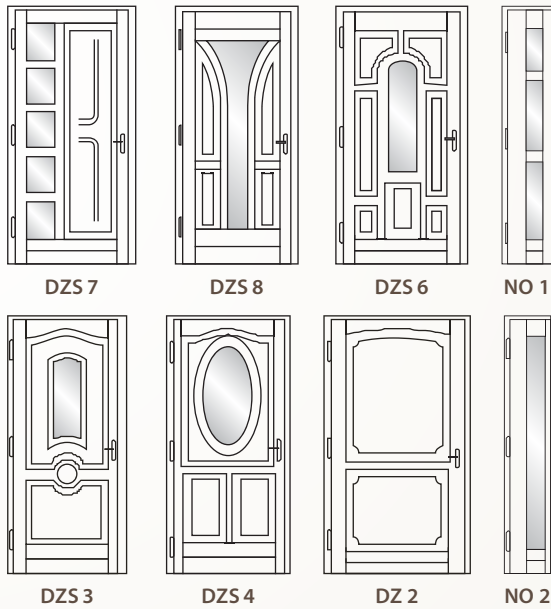
*Entrance doors
are the showpiece of
every house and office.*

WIWATOWSKI entrance doors ensure the highest quality and safety of your home.

Our standard doors include: handle-controlled 3-point locking system with a pad, SIMONSWERK Baka Protect 3D door hinges, STADUR door panel insulation, mahogany, pine or oak wood. A wide range of transparent and opaque colours enables us to arrange a door for every facade.

At your request, **we are able to make the doors according to individual projects of our Clients.**

Traditional exterior doors

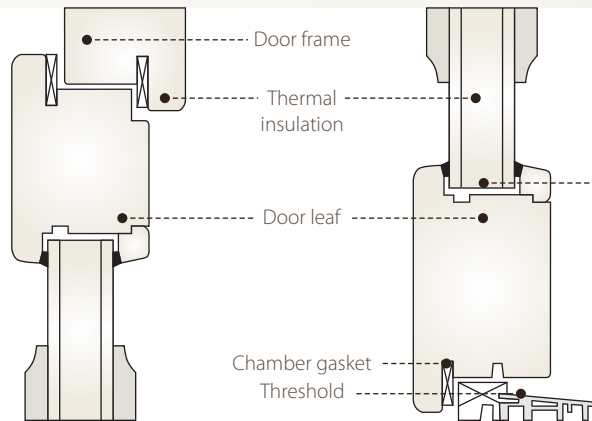


Sample designs

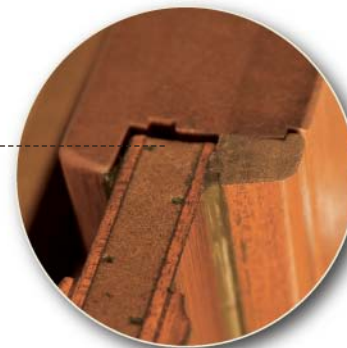
Diagrams of sample doors



Cross-section of standard door



Cross-section of traditional door (horizontal and vertical)



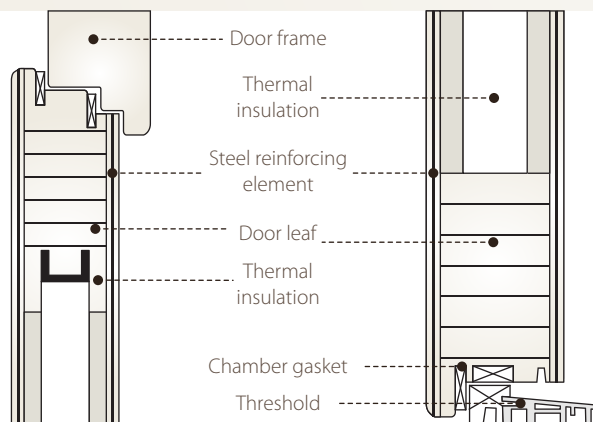
ROHLING exterior doors



To meet the new trends in door woodwork design, we introduced **ROHLING** doors into our offer. Their **innovative door leaves** harmonize perfectly with modern buildings. Many possibilities of individual arrangement and design provide us with unique results and models.



ROHLING system door cross-section



ROHLING system door cross-section (vertical and horizontal)

ROHLING door panel – parameters

Type of door panel: VARIO - PUR

Standard formats: 950 x 2150 / 2250 mm
1050 x 2150 / 2250 mm
1150 x 2150 / 2250 mm

Special formats: _____

Thickness: 55 mm, 60 mm, 68 mm

Type of wood: Finline meranti, Finline pine,
Finline spruce,
SF red wood, MDF

Additional information: Thermal insulation W(m2K) 1,42 ÷ 0,99
Sound insulation 30 dB

ALLWETTER

950 x 2150 / 2250 mm
1050 x 2150 / 2250 mm
1150 x 2150 / 2250 mm

do1500 x 3490 mm

68 mm, 74 mm

Finline meranti, Finline pine,
Finline spruce, MF beech, MF oak,
MF teak, Finline larch, MF ash,
SF/ MF red wood, MDF

Thermal insulation W(m2K) = 0,82 and 0,99
Sound insulation 30 and 34 dB
(34 and 38 dB or 43 and 44 dB versions)



PINE

1. Distribution:
- Europe, Asia.

2. Wood description:
- sap-wood: yellowish-white or reddish white, width from 5 to 10cm,
- heart-wood: reddish-yellow darkening to red-brown,
- fibres: straight, sometimes intertwined,
- texture: average, fine.

3. Technical characteristics:
- average specific gravity at 12% humidity (kg/m3): 330-510-890.

MERANTI MAHOGANY (red meranti)

1. Distribution:
- south-east Asia.

2. Wood description:
- sap-wood: well marked, yellow to light grey-beige, width from 4 to 8cm,
- heart-wood: salmon-pink to reddish brown, sometimes with purple streaks,
- fibres: partially straight, partially intertwined irregularly, give mirror effects,
- texture: partially visible.

3. Technical characteristics:
- average specific gravity at 12% humidity (kg/m3): 390-870.

SIBERIAN / EUROPEAN LARCH

1. Distribution:
- central and northern Europe, northern Asia.

2. Wood description:
- sap-wood: bright, yellow-white, narrow,
- heart-wood: red-brown,
- fibres: straight fibrous,
- texture: distinct (annual growth perfectly visible).

3. Technical characteristics:
- average specific gravity at 12% humidity (kg/m3): 590.

POLISH OAK

1. Distribution:
- Europe, USA.

2. Wood description:
Borderline between sap-wood and heart-wood is very clear. Sap-wood is generally narrow, of yellowish-white colour. It is not weatherproof, thus it does not have a significant economic impact and it is being separated before processing. Fresh heart-wood – grey-yellow, with time darker than light- and then dark brown.

3. Technical characteristics:
- average specific gravity at 12-15% humidity (kg/m3): 430-690-960.

SAPELI

1. Distribution:
- west, central and eastern Africa.

2. Wood description:
- sap-wood: pink-grey to whitish, separated, width from 7 to 10cm,
- heart-wood: red-brown to purple-brown colour,
- fibres: slightly intertwined,
- texture: fine to average.

3. Technical characteristics:
- average specific gravity at 12 humidity (kg/m3): 660.



SELECTED PINE (solid):
uniform structure of wood, no joints.



PINE WITH MINI DOVETAIL:
Fragments joined by mini dovetails – designated for opaque paint.



Wood:

To provide you with the highest quality product we use **only carefully dried and seasoned material**, at the same time eliminating all kinds of defects such as knots, blue stain and fibre rolls. The process of three-layer gluing of wood **guarantees structural strength and construction stability** in changing climatic conditions.



Colours

To meet your expectations, **we offer a wide range of both transparent and opaque colours.** This will allow you to match the windows with any interior or facade. Care and precision in the multi-stage process of applying varnish provides the ideal woodwork surface.

Using the products of the best companies on the market, **we provide excellent quality and long-lasting protection against external factors** such as water, ultraviolet radiation and fungi.

WOOD: PINE



WOOD: MERANTI



Samples presented on pages 17 and 18 are only a visualisation. Their colours may vary in reality.

Colours:

The primary colours can be chosen from the palette of high quality TEKNOS water-based acrylic paints.

This is a template created with the participation of clients, and it reflects the window and door market trends. It contains the most commonly used transparent paint colours.

As a leading Scandinavian manufacturer of paints for industry and construction, TEKNOS offers water-based paints, which **are completely harmless for the environment.**

The high quality of these products is certified by ISO 9001 quality system certificate and ISO 14001 environmental management system certificate.

As far as the suggested woodwork painting systems are concerned, TEKNOS is certified by the German Rosenheim Institute.

In addition, we provide other manufacturers' varnish colour palettes.



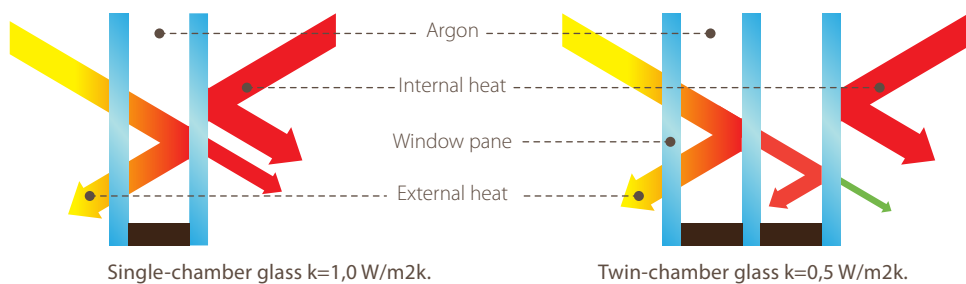
WIWATOWSKI standard window frames are equipped with **low-emission thermal window panes with thermal conductivity of $k=1,0 \text{ W/m}^2\text{k}$ (Softline 68) and $k=0,5 \text{ W/m}^2\text{k}$ (Softline 88).**

We use standard Thermo-Float windowpane cartridges with thermal conductivity of $k=1,0 \text{ W/m}^2\text{K}$ or $k=0,5 \text{ W/m}^2\text{K}$. They provide **maximum thermal insulation** and thereby **contribute to energy saving**.

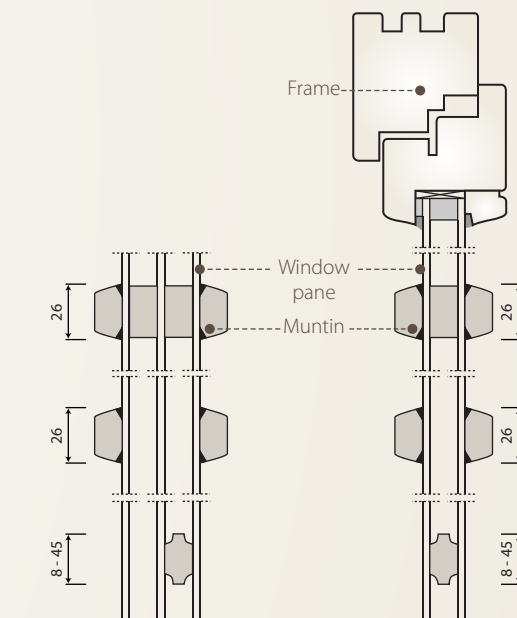
At Customer's request, apart from these combined windowpanes, **we also use safety packages, anti-burglar or reflective glass**. All panes are sealed with white, brown or colourless silicone, depending on the window colours.

Precision, window installation and glass used along with high-quality gaskets **provide sound protection up to 42 dB**.

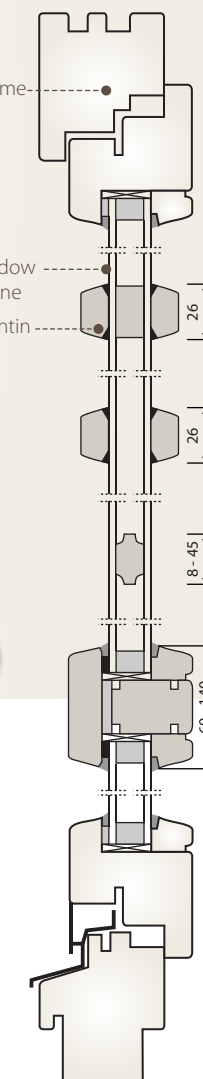
Additionally, windows can be fitted with muntins of various widths and colours between panes, as well as glued wooden muntins in the colour of woodwork.



Thermal conductivity



Muntins in triple pane windows - vertical section



Muntins - vertical section

Fittings

High class MACO fittings are used for WIWATOWSKI windows and balcony doors production. They guarantee a multi-point hold down of the casement to the frame and **the possibility of tilt, turn, tilt and turn, or slide opening**. Every tilt and turn casement **includes a micro-ventilation function, that allows constant air flow, even with a closed window**. The visible parts of fittings take up very little space. Good placement of hinges in the frame enables to fit larger panes allowing for more light. Top and bottom hinges blend into the window casement, it is in perfect harmony with the whole thanks to appropriately matched covers. **It is equipped with plastic sleeves that reduce the wear of movable parts of fittings**. The construction of this element excludes the possibility of unwanted, spontaneous opening and closing of the casement. Bottom hinge includes a bearing. The use of adjustable pin allowed for free regulation of casement position. Covers for hinge and hold down elements in colours matched to the windows **ensure the aesthetic look of our products**.

The success of MACO is connected to the quality of its products. MACO was the first company in the branch to receive the AGQS certificate according to DIN ISO 9001. Our company is aware of the great responsibility before the client and because of this "QUALITY" is spelled with capitals. All products undergo rigorous quality control processes from design through production all the way to delivery to the client.

FAM



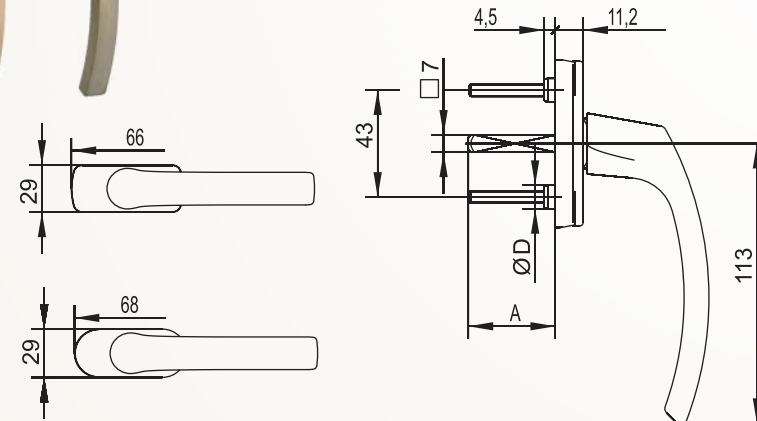
ZL/NI
Gold



CH/SA
Matt Chrome



PA/MO
Patina on brass



Drip caps



Multi-point fittings

Every type of fitting has a special certificate of conformity to the construction standard and final designation.

Handles:

As an indispensable element of our windows we offer HOPPE, MACO or FAM handles, in colours and models available in our templates. We also offer handles with anti-burglar protection (button or key).

Covers:

The visible part of hinges is equipped with covers in colours similar to handle and drip cap, according to templates available.

Drip caps:

Aluminium drip caps are used for draining water from the casement and the window frame, available in white, bronze, silver and antique gold colours.

Photographs thanks to:
– EUROSTYL Sp. z o.o. S.K.A. – front cover, page 3 and 11,
– ALURON Sp. z o.o. – page 7,
– SIEGENIA-AUBI Sp. z o.o. – page 10, 11, 12, 13
(owner: SIEGENIA-AUBI Group),
– MACO POLSKA Sp. z o.o. – page 11 i 20,
– FAM Technika Odlewnicza Sp. z o.o. – page 20.

Other photographs: PNEUMA and own materials.



Woodwork Factory

WOODEN WINDOWS AND DOORS



Office – Network Service, ul. Lelewela 28b, 87-100 Toruń, phone/fax 56 655 97 67, e-mail: biuro@wiwatowski.pl
Production Plant, ul. Ogrodowa 17, 87-721 Raciążek, phone 54 283 18 04, fax 54 283 80 66, e-mail: firma@wiwatowski.pl

www.wiwatowski.pl