



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**

TYPICAL WINDOWS. COMFORT IS OUR STANDARD.

Pine timber and Meranti mahogany of the best quality ensure the longevity of window construction in changing weather conditions. At our clients' request our company is able to apply woodwork made from oak- and larch-timber.

The growing expectations of our clients in terms of thermal insulation and developing technology have allowed to introduce windows of **"Softline 92"** type into our offer. This type of windows may have the glazing unit of up to 52 mm thickness.

All types of Wiwatowski windows are equipped with the high quality of MACO fittings which guarantee friendly service and high reliability. In order to strengthen security, there is a possibility of application of WK1 or WK2 fittings of increased anti-break-in protection. Warmth and safety are ensured by the glazing unit of increased thermal insulation, namely of U-value of 0,5 W/m²K ("Softline 92" type) or U-value of 1,0 W/m²K ("Softline 68" type).

A wide range of solid and transparent TEKNOS colours enables to match windows to every interior. The quality of TEKNOS products means safety of woodwork in terms of protections against pests and atmospheric agents.

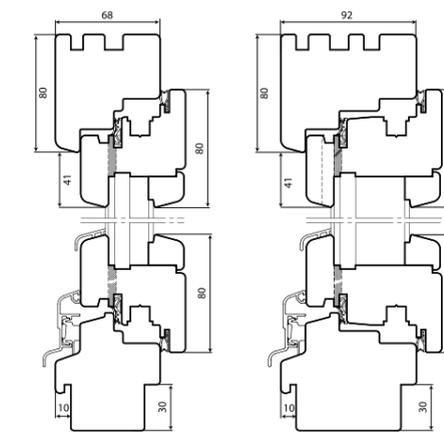


SOFTLINE 68 AND 92 WINDOWS

WORK QUALITY STANDARD:

- Three- or four-layer glued pine, meranti, oak and larch **wood** ("Softline 92").
- MACO lock **fittings** with micro-ventilation, incorrect handle position lock and wing elevator.
- TEKNOS transparent **varnishes** and opaque paints.
- HOPPE, FAM or MACO **handles**.
- Single pane windows "Softline 68" **k=1,0** and dual pane windows "Softline 92" **k=0,5**.
- **Hinge shields** in white, brown, silver or antique gold.
- **Thermal drip-cap** and an additional drip cap for a casement.
- Double **chamber gasket** on the casement.
- Possibility of using **WK1** and **WK2** fittings, as well as anti-burglar windowpanes.

By increasing the profile thickness of **"Softline 92"** Windows using the U=0,5 W/1m²k pane packages **with warm SWW frames** and a double gasket, ensures much better thermal and acoustic insulation. An additional drip-cap fitted on the casement as a standard for every window secures the window elements that are most exposed to damage from water and UV rays.



Cross-section of the "Softline 92" and "Softline 92" windows



Cross-section of the "Softline 68" and "Softline 92" windows

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

“MILJO” SCANDINAVIAN WINDOWS



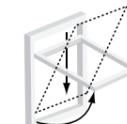
TOP HUNG TYPE I

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



TOPSTYRET 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.



SIDESTYRET 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.

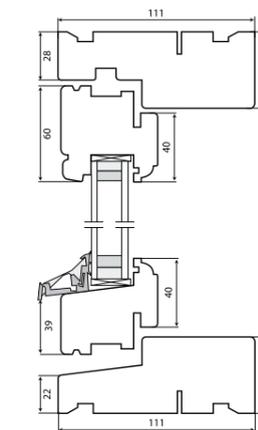
FOLLOWING THE LATEST TRENDS...

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.



Cross-section of a “MILJO” system window



“Shear” fittings in “MILJO” system

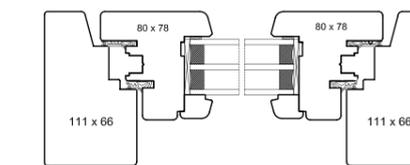
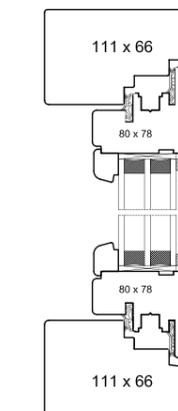
CASEMENT WINDOWS

Windows of the casement type are windows which open outside, and are devoted to the British market. A characteristic construction is based on English traditional design and the way of opening.

Profile "Casement" enables to make use of the 3-shift packet of thermal $U_g=0,6W/m^2K$, thanks of which we can fulfill up-to-date law requirements in terms of window and building thermal.



"CASEMENT" WINDOWS



Cross-section of the "CASEMENT" windows

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).

MANY POSSIBLE APPLICATIONS

The variety of nishes 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.

ENERGY-SAVING

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

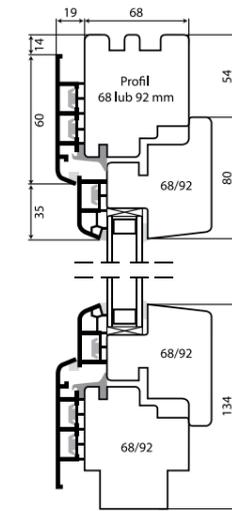
This construction is the most durable solution, appreciated by architects, designer and individual investors.



“GEMINI” WINDOWS



Our windows use aluminium profiles of:



Cross-section of a “GEMINI” window



Cross-section of a “GEMINI” window



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.

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.

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.

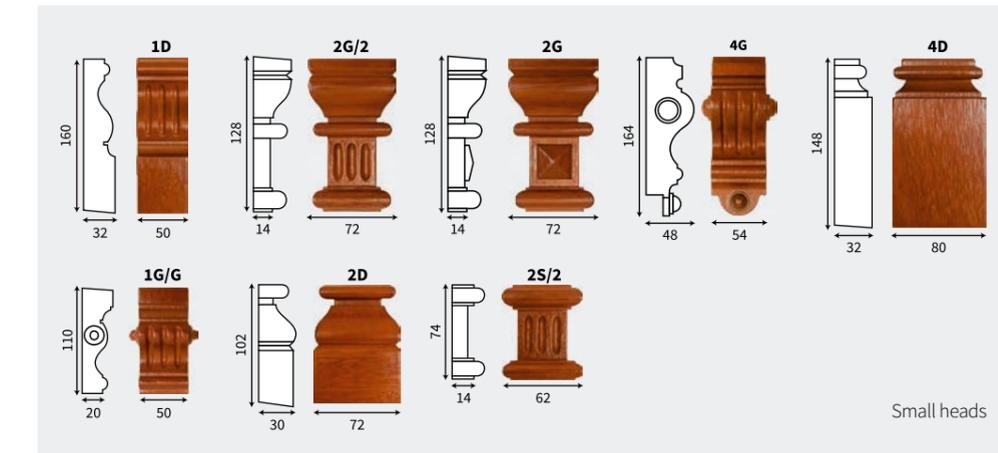
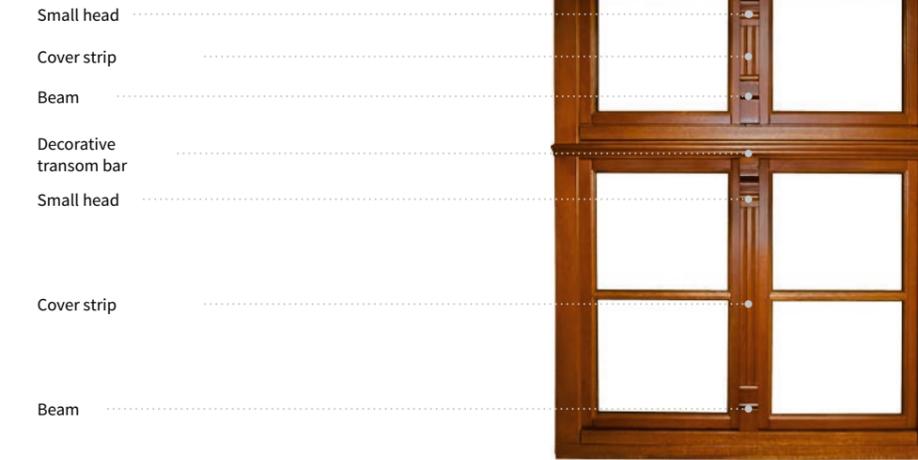
DECORATIVE ELEMENTS

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.



NON-STANDARD SHAPE WINDOWS

Assembly diagram of small heads



Small heads



Projects with unusual window shapes.



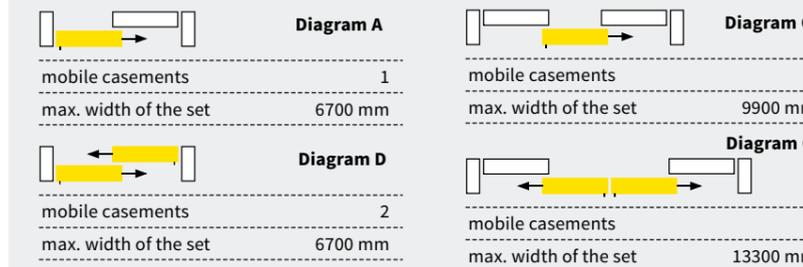
Large, glazed surfaces and wide garden doors significantly increase the status of our homes while blurring the boundaries between what is inside, and what is outside...

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

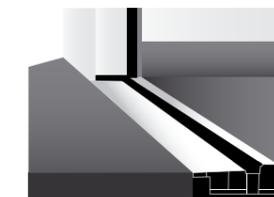
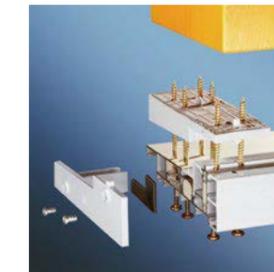
SMALL EFFORT – HUGE RESULTS

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 tttings systems.

**“HS” TYPE SLIDING DOORS
FUNCTIONALITY GUARANTEES
SATISFACTION FORM THE
CHOICE YOU MADE.**



Chosen ways of casements opening



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

“PSK” AND “FS” BALCONY WINDOWS. 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 92 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 BALCONY DOORS

Even 200 kg 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 92 window systems, using FS-type fittings, enable you to connect up to 7 elements, and the maximum door leaf weight is 80 kg. Folding of the wings has become simple, easy and quiet thanks to ball bearings and rolls made of special materials.



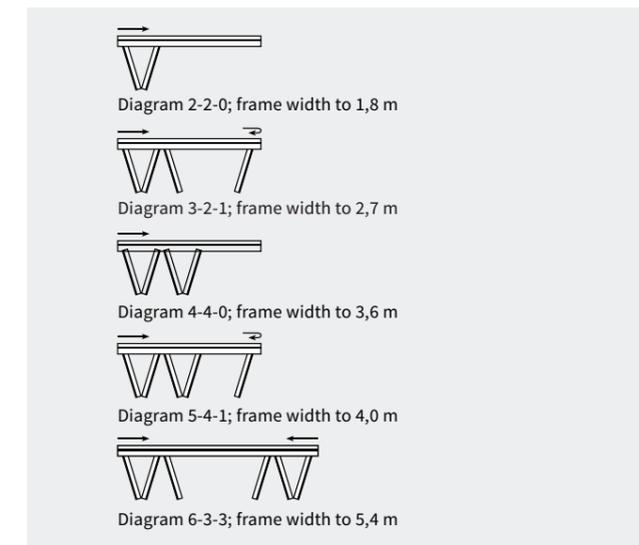
“PSK” AND “FS” BALCONY WINDOWS



“PSK” system



Method of moving the door leaf using “FS” system



Sample diagrams of “FS” solutions



Threshold in the folding system

ENTRANCE DOORS ARE THE SHOWPIECE OF EVERY HOUSE AND OFFICE.

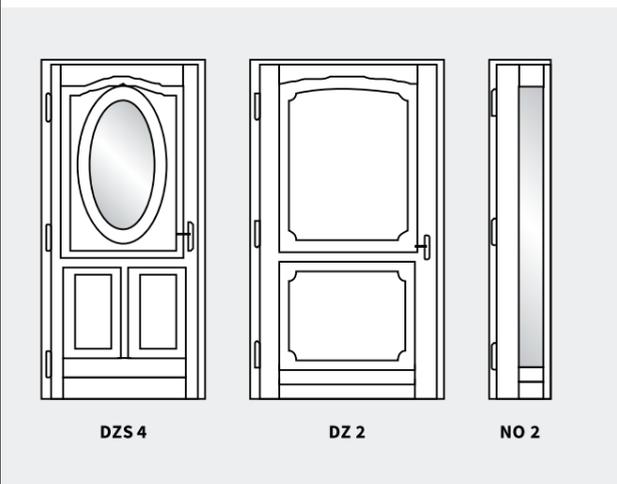
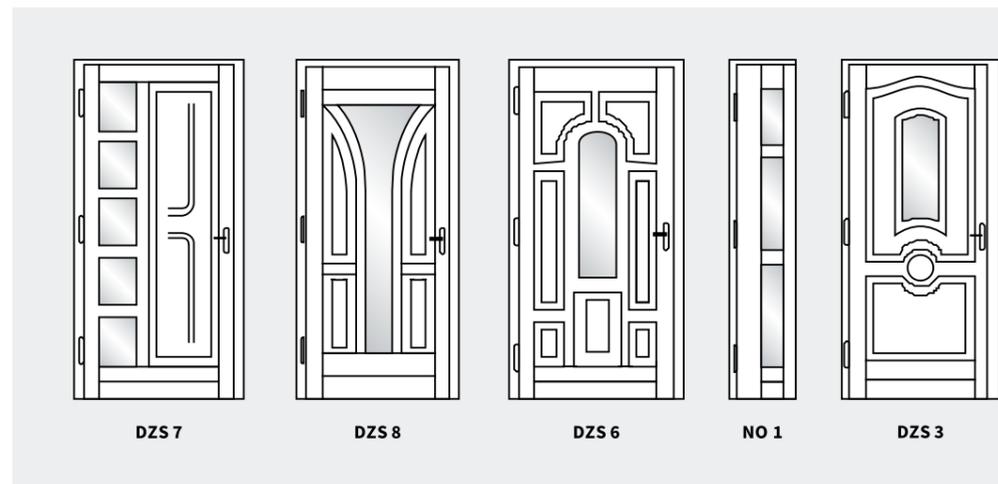
WIWATOWSKI entrance doors ensure the highest quality and safety of your home.

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.

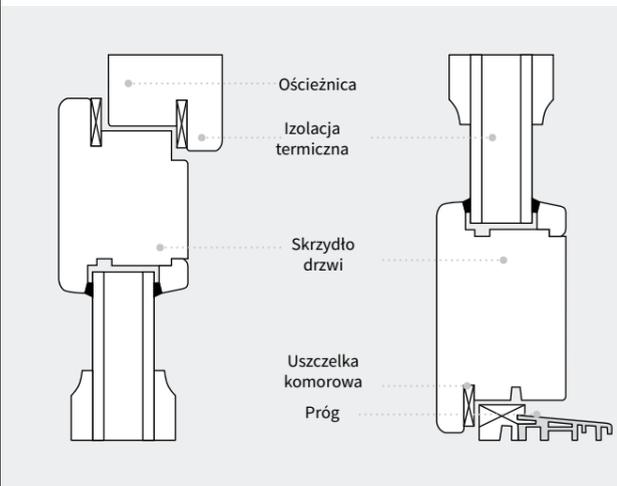
At your request, we are able to make the doors according to individual projects of our Clients.



Cross-section of standard door



Diagrams of sample doors

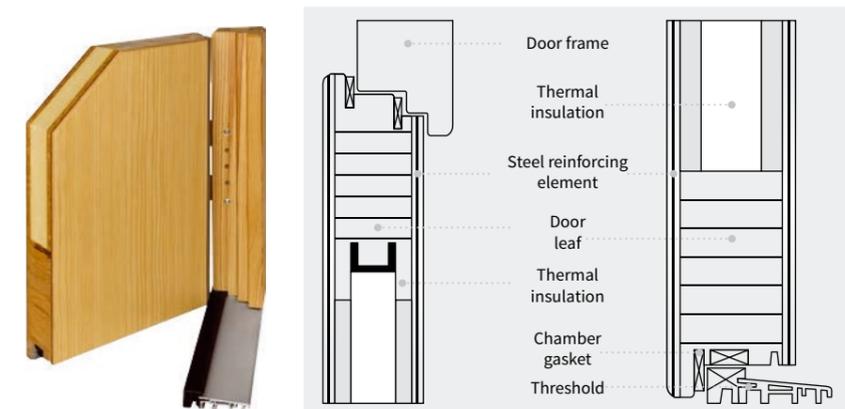


Cross-section of traditional door (horizontal and vertical)



“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 (vertical and horizontal)

Type of door panel:	VARIO - PUR	ALLWETTER
Standard formats:	950x2150/2250 mm 1050x2150/2250 mm 1150x2150/2250 mm	950x2150/2250 mm 1050x2150/2250 mm 1150x2150/2250 mm
Special formats:	—	do 1500x3490 mm
Thickness:	55 mm, 60 mm, 68 mm	68 mm, 74 mm
Type of wood:	Fineline meranti, Fineline pine, Fineline spruce, SF red wood, MDF	Fineline meranti, Fineline pine, Fineline spruce, MF beech, MF oak, MF teak, Fineline larch, MF ash, SF/ MF red wood, MDF
Additional information:	Thermal insulation $W(m^2K)=1,42 \div 0,99$ Sound insulation 30 dB	Thermal insulation $W(m^2K) = 0,82 \div 0,99$ Sound insulation 30 i 34 dB (34 and 38 dB or 43 and 44 dB versions)

“ROHLING” door panel – parameters

WOOD

PINE

1. Distribution:

- Europe, Asia.

2. Wood description:

- sap-wood: yellowish-white or reddish
- white, width from 5 to 10 cm,
- heart-wood: reddish-yellow darkening to red-brown,
- bres: straight, sometimes intertwined,
- texture: average, ne.

3. Technical characteristics:

- average specic 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 8 cm,
- heart-wood: salmon-pink to reddish brown, sometimes with purple streaks,
- bres: partially straight, partially intertwined irregularly, give mirror effects,
- texture: partially visible.

3. Technical characteristics:

- average specic 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,
- bres: straight brous,
- texture: distinct (annual growth perfectly visible).

3. Technical characteristics:

- average specic 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 specic 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,
- bres: slightly intertwined,
- texture: ne to average.

3. Technical characteristics:

- average specic 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 bre 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 21 and 22 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.



GLASS

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 92").

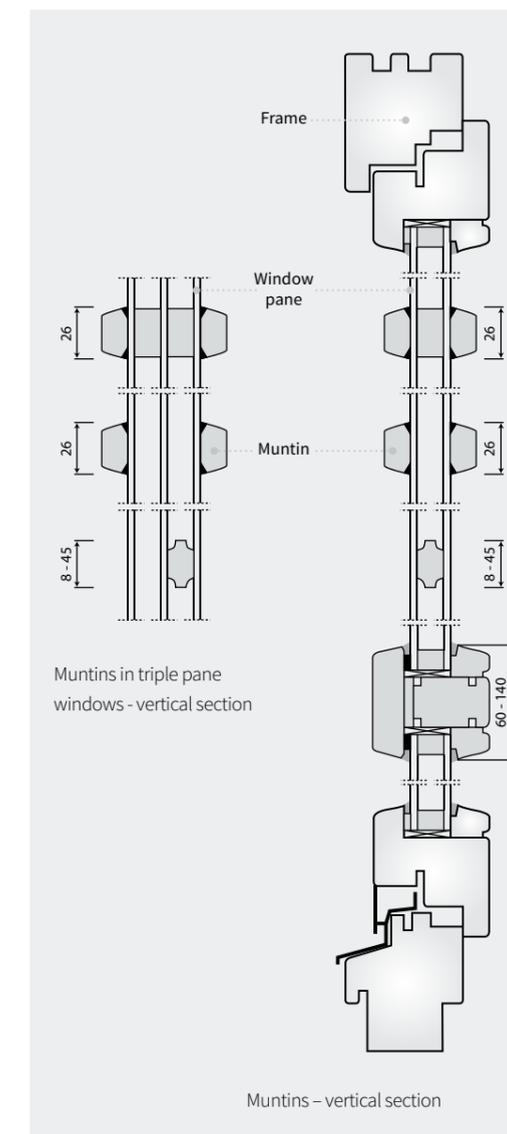
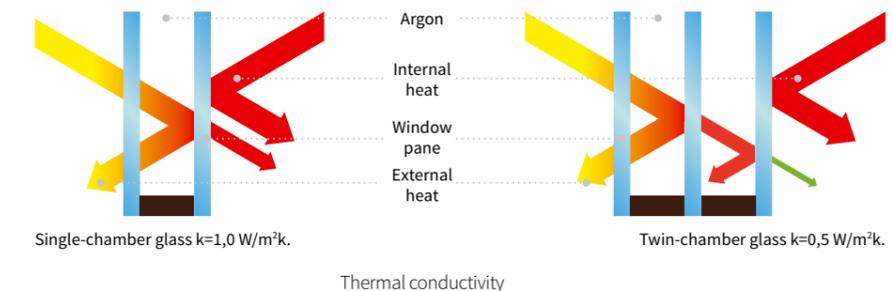
We use standard Thermo-Float windowpane cartridges with thermal conductivity of $k=1,0 \text{ W/m}^2\text{K}$ or $k=0,5 \text{ W/m}^2\text{K}$. They provide maximum thermal insulation and thereby contribute to energy saving.

At Customer's request, apart from these combined windowpanes, we also use safety packages, anti-burglar

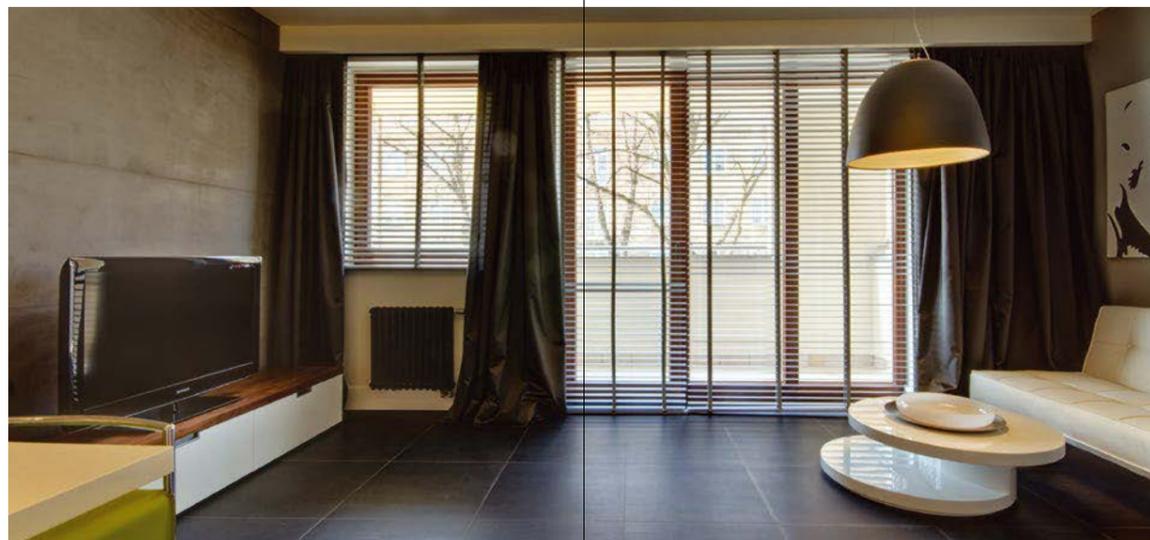
or reactive glass. All panes are sealed with white, brown or colourless silicone, depending on the window colours.

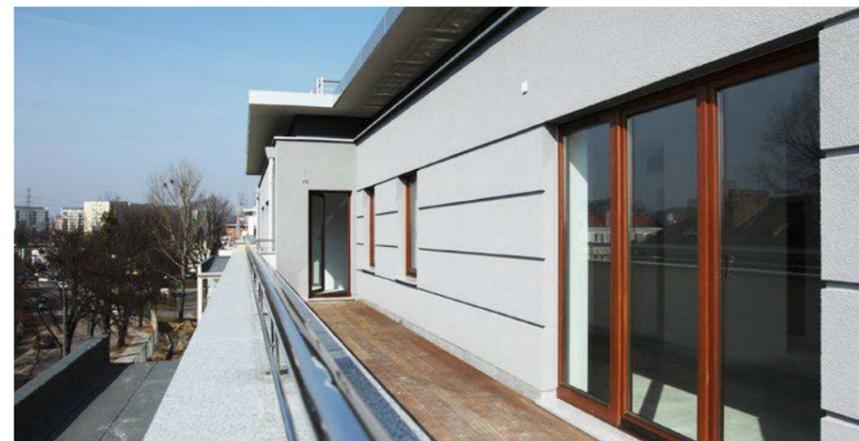
Precision, window installation and glass used along with high-quality gaskets provide sound protection up to 45 dB.

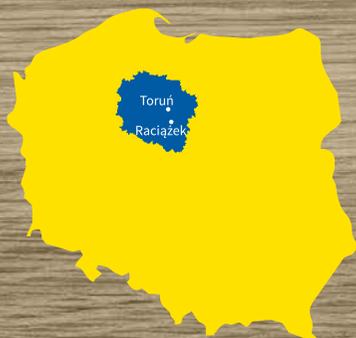
Additionally, windows can be fitted with muntins of various widths and colours between panes, as well as glued wooden muntins in the colour of woodwork.



OUR REALISATIONS







WOODWORK FACTORY

WOODEN WINDOWS AND DOORS



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