



PREMIUM WINDOWS

In solid  
frames



## IN SOLID FRAMES

We guarantee that our windows will remain durable for many years by respecting four complementary principles for professional window joinery.

- › **Consulting** – conscious and competent team of experts trained at the Vetrex Academy
- › **Products** – outstanding parameters confirmed by independent tests
- › **Installation** – performed by authorized Vetrex specialists
- › **Guarantee** – one of the longest available in the market, even up to 9 years



# Professional advice

We select products  
adapted to your needs  
and preferences.

Thanks to our experts trained at the  
Vetrex Academy, you can be sure that  
you will be offered a suitable solution  
taking into account your requirements.



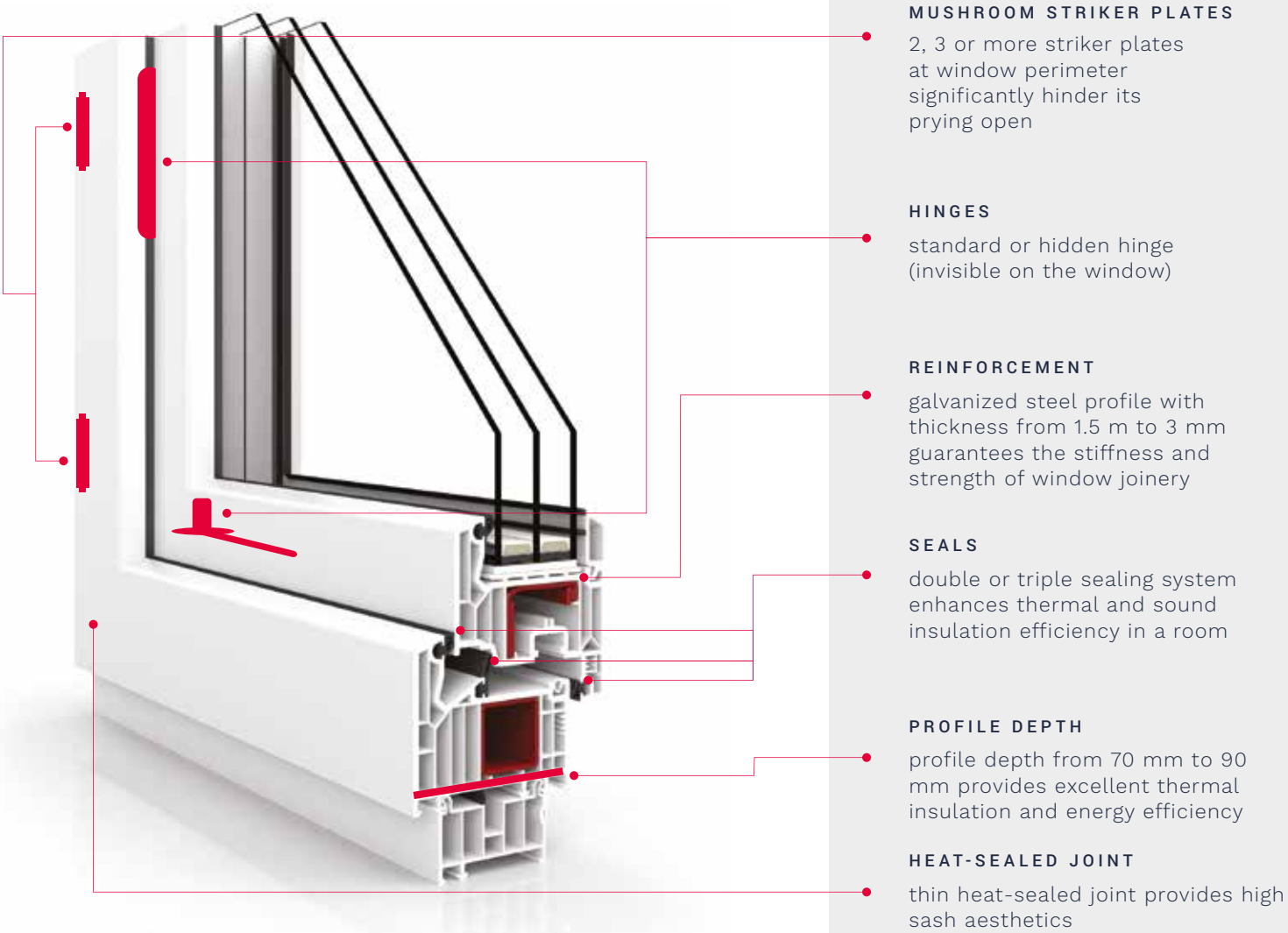


# Proven quality

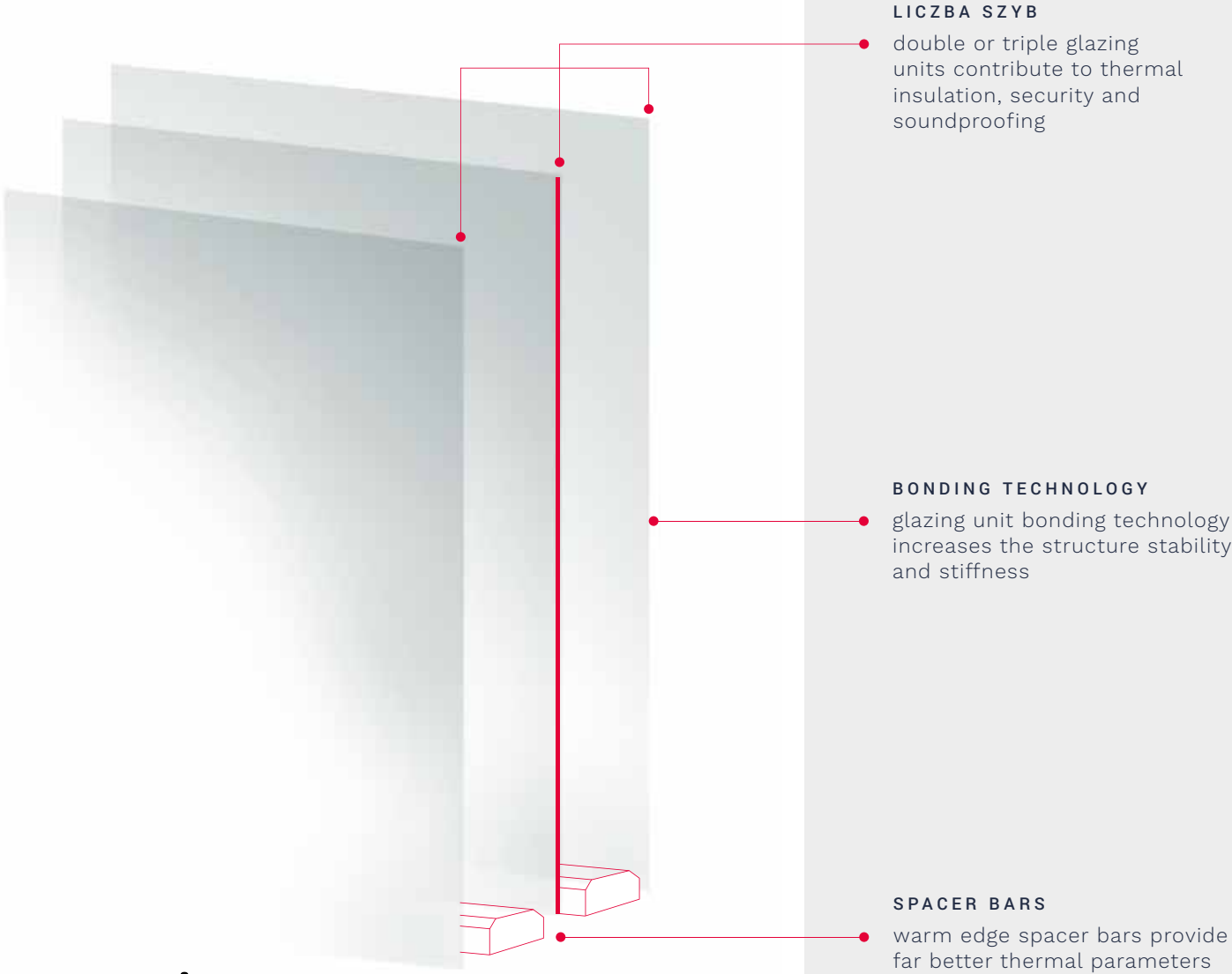
We introduce exclusive solutions enabling us to constantly improve product quality.

All of our windows undergo specialist tests at notified test facilities, so we can guarantee our customers the highest standards of energy efficiency, security, sound insulation and aesthetics.

# What to consider when choosing a window?



## The most important properties of professional window joinery



# Window parameter guide

## Wind load resistance coefficient



Wind load resistance, the so-called stiffness, determines the wind resistance of the window. It is designated by a symbol from A-1 (the lowest stiffness) to C-5 (the highest stiffness). Standard windows are classified as B-2 to B-4.

## Uw coefficient



Heat transfer coefficient relates to the entire window. The lower its value, the more heat remains inside. Currently, according to the regulation of the Minister of Transport, Construction and Maritime Economy, the maximum allowable value of Uw should not exceed 1.1 W/(m<sup>2</sup>·K).

## Air permeability



Air permeability is a parameter relating to window tightness. It is expressed in classes from 1 to 4. The lower the numerical value of the coefficient, the less air penetrates through the window.

## Light transmission coefficient Lt



Lt coefficient describes the relation of the amount of sunlight reaching the glass pane to the amount of light passing through it. The higher the percentage of light passing through, the better lit rooms.

## Rw coefficient



Sound insulation coefficient describes the level of the outside noise reduction. The higher the Rw coefficient value, the better window sound insulation.

## Watertightness



The level of watertightness indicates at what wind force during rainfall the water from precipitation starts to leak into the room. 1A is the lowest class, indicating that the window will leak even when there is no wind. 9A is one of the highest classes, guaranteeing tightness during storms with wind speed up to 112 km/h.



At first sight  
outside





Surround yourself  
with light

**BEDROOM**





Bedroom is a place where you can regenerate and energize.

A sunlit room guarantees a bright mind, as natural light has a positive impact on human body. It is stimulating, comforting and health boosting.

Sunny mornings contribute to positive thinking and light your inner fire.

You look through the window at the vast horizon, enjoying the beauty of nature. The proximity to nature helps to reduce stress and relax. You are a part of nature without leaving your home.







## Full of light

We realize how important is natural light in your home. That is why we design windows which enable more sunlight to enter the rooms.

Thanks to a low sash profile, **LUM'UP** can provide even up to **27%** more light than a standard window. Additionally, the thinner **LUM'UP** sashes highlight the view outside, providing broader, more attractive perspective.





Steam up  
for more

KITCHEN



Like the life itself, the kitchen  
can be full of surprises.

You meet culinary challenges  
with a cool head. A pinch of  
inspiration and a wealth of  
scents accompany you everyday.  
You crave for more.



## The kitchen is the heart of every home.

Here, you can nourish your love with the best. And when it is filled with fresh air, it can take you on a long, not only culinary, journey.







## Recipe for comfort

Our tilt and slide system will make using the kitchen extremely comfortable.

When opening, the window sashes hide behind one another, and they are not blocking the surrounding space. With this solution, you don't have to worry that the sash will crash into the sink tap or accidentally hit an object on the windowsill. The system enables you to fully open the window, not just crack it, which is particularly important in rooms such as the kitchen.



Create  
focused

OFFICE





Wherever you look, you see uniqueness.

You draw inspiration from the space around you. And while others may think that you have achieved a great deal already, you do not limit yourself, still looking for new challenges.



Working at home is both comfortable and efficient.

One of the most important factors contributing to concentration is quiet, free space where you can unleash your creative potential. If you take good care of the appropriate acoustics of the office, it will be easier for you to work fully focused.





## Quiet potential

Our windows have a high  $R_w$  coefficient describing the outside noise reduction.

If traffic, neighbor's lawnmower or children playing noises interfere with your everyday work, we will adapt your windows to suppress unwanted sounds.

The effectiveness of noise protection is determined, among others, by the glazing unit consisting of several glass panes coated with sound suppressing film. A significant role is also played here by professional window installation which is of key importance for the preservation of high sound insulation efficiency.





Get ready for the  
future

CHILDREN'S ROOM





The room of your child reflects his/her personality.

It may be that this small plane rising over the horizon is one of the first major designs of your little one. You can quietly and curiously watch where the imagination takes him/her this time.

You are concerned about the safety of your children, and you want the space around them to guarantee your peace of mind.

Through appropriate solutions securing the windows, you can be sure that the young ones can develop their creativity in a safe place.







## Trustworthy

Our proven solutions, such as additional mushroom striker plates in the windows, Protect hardware, burglar-resistant P4 glazing units, Safe+ reed switches or anti-drill plates will increase the level of your home safety.

With a view to care for the youngest family members, we have created the Safe Child system. The Tilt-First technology blocks the window sash in a tilted position. Handle with a key locks the sash in this position. The key must be turned in order to release the lock and open the window.





Best together

LIVING ROOM





Long conversations  
and meals together are  
perfect opportunities for  
celebrating togetherness.

The omnipresent joy gets to  
everyone, making your home even  
more lit up.





The living room is full of life.  
It is here that you write your  
own handbook of emotions  
for your loved ones.

The panoramic glazings expand your  
home by its surroundings.





## Sliding standard

Our patio windows will become the showcase of your living room.

We manufacture large-sized structures with impressive glazings, without visible divisions, mullions or connectors. We obtain a smooth, transparent space perfectly emphasizing the green on the other side of the window.

The patio windows are not only pleasing to the eye, but above all functional.

Their sashes hide or fold behind one another, thus saving space and enabling you to arrange the interiors more freely. Even a huge sash can be moved with one hand, and the low-height threshold prevents tripping. The mechanisms used in the patio windows enable their unobstructed and trouble-free movement, and the Soft Close system helps to gently introduce the sash into the frame again, protecting against entrapment.

Discover the premium  
window collection



# Quality down to the finest details



## LOW-HEIGHT THRESHOLD

The low-height threshold in patio windows eliminates the risk of tripping and makes the patio surface flush with the interior of the house.

## V-PERFECT HEAT-SEALED JOINT

The V-Perfect heat sealing technology provides high aesthetics through thin and visually appealing window corner connections.

## DESIGNO HIDDEN HINGES

In this unique hardware, the hinges are invisible to the eye and do not deform the seals, thus maintaining high window tightness and increasing aesthetic qualities.

## MASTER THERM

The Master Therm warm edge spacer bars reduce the risk of condensation on the glass pane in the room, and increase the energy efficiency of the entire window.

## GLASS CORNER

The permanent Glass Corner glazing does not employ a traditional angle connector. This visually attractive solution not only fits into the fashionable trend of minimalism, but also provides maximum illumination of the interior and enables you to enjoy a broad perspective.

## SOFT CLOSE

The Soft Close system slows down the sash movement in the final stage of window closing, and then gently introduces it into the frame, alleviating the risk of entrapment, and protecting the sash against damages resulting from incorrect operation.

## NANO GLUE

The innovative Nano Glue pane gluing technology increases the structure stability and stiffness, and enhances the window resistance to pane cracking during transport, installation and subsequent operation.

## EXCLUSIVE REINFORCEMENT SYSTEM

Sash reinforcement with galvanized steel with thickness of 3 mm guarantees the stiffness and strength of window joinery, and significantly increases its overload resistance.

## WINDOW WIDTH EVEN UP TO 6.5 M

The lift and slide window is ideal for large-sized patio glazings. Due to the strength of the structure, the windows can reach an impressive width of 6.5 m.

## ➤ LUM'UP WINDOW

**LUM'UP** introduces more design and natural light into the interior. The classic lines of the sash and glazing bead give it a minimalist, elegant shape.

Invisible corner finish significantly increases the aesthetic values, and the exclusive handle design complements the window styling. The attractive appearance is also the result of the hidden Designo hardware which can hold a sash weighing 130 kg, but also does not deform the seal, maintaining high tightness of the window joinery.

# Lightens up the interior



### Energy efficiency

- $U_w = 0,8 \text{ W}/(\text{m}^2\cdot\text{K})$

Low frame with sash assembly and narrow floating mullion assembly let a large amount of natural light into the room.

The intensively sunlit interior is also the result of the glazing unit with  $L_t$  coefficient of even 74%.

### Light

- Frame with sash assembly 106 mm
- Floating mullion assembly 108 mm
- $L_t = 82\%$  or 74-75% for 2-chamber unit

**LUM'UP** is also synonymous with durability and tightness – the triple sealing system, exclusive sash reinforcement with steel with thickness of up to 3 mm, and the Nano Glue glazing unit gluing technology constitute additional advantages of the window.

### Durability

- Exclusive reinforcement system with thickness up to 3 mm
- Nano Glue technology



## Visibly warm



### V90 WINDOW

V90 provides warmth for every home

Thanks to triple seals, glazing unit  $U_g = 0.5 \text{ W/(m}^2\cdot\text{K)}$  and extremely durable and aesthetic Designo hardware (hidden hinges), the window maintains the  $U_w$  coefficient of  $0.75 \text{ W/(m}^2\cdot\text{K)}$ . The frame is additionally insulated with a special thermal insulation element.

#### Energy efficiency

- $U_w = 0.75 \text{ W/(m}^2\cdot\text{K)}$
- Standard glazing unit  $U_g = 0.5 \text{ W/(m}^2\cdot\text{K)}$
- Designo hardware
- Triple sealing system

- Seal selection available
- Thermal insulation wedge
- 3 mushroom striker plates as a standard



### V82 WINDOW

## Visible benefits

V82 is an offer for those who are looking for proven and economical window solutions meeting high requirements for tightness and durability.

The  $U_w$  coefficient of  $0.77 \text{ W/(m}^2\cdot\text{K)}$  and the possibility to use the glazing unit  $0.5 \text{ W/(m}^2\cdot\text{K)}$  with Master Therm warm edge spacer bars constitute the declaration of high energy efficiency. Together with the triple sealing system, V82 is compliant with the requirements of the highest (4) class of air permeability.



#### Energy efficiency

- $U_w = 0.77 \text{ W/(m}^2\cdot\text{K)}$
- Glazing unit  $U_g = 0.5 \text{ W/(m}^2\cdot\text{K)}$  available
- Master Therm warm edge spacer bar

#### Tightness

- Triple sealing system
- Sub-sill with a seal
- Tightness class 4

➤ **V82 PROSAFE WINDOW**



## New security class

The ProSafe system is an expansion of the V82 window making it RC2 class burglar resistant.

The following components deserve particular attention: special mushroom striker plates and hinges, counter-rotating hardware, handle with a key lock, safe P4 glazing unit and steel reinforcements cut at 45 degrees. The V82 ProSafe window installation is performed by teams trained in the installation of the joinery of this type.

### Energy efficiency

- $U_w = 0,77 \text{ W/(m}^2\cdot\text{K)}$

### Security

- Burglar-resistant P4 glazing unit
- Dedicated anti-burglar hardware system
- Bonded glazing unit
- Handle with a key lock
- Anti-drill plates
- Safe+

➤ **V70 WINDOW**



## Reaching for balance

V70 is an offer for those who are looking for a product with the best possible value for money.

The windows have classic and elegant design fitting every interior. The main advantage of V70 is its functionality. Tilt position adjustment, micro-ventilation and mishandling device offered as standard will make the window use fun and easy.

### Energy efficiency

- $U_w = 0,92 \text{ W/(m}^2\cdot\text{K)}$

### Functionality

- Mishandling device
- Micro-ventilation
- Tilt stabilizer
- Tilt position adjustment



## ➤ LIFT AND SLIDE

Large glazings can naturally combine the living room space with the backyard patio or garden.

## Large potential

They make the interiors light, functional and elegant. The lift and slide window is ideal for exceptionally large-sized patio glazings. Due to the strength of the solution, the windows can achieve impressive dimensions up to 6.5 m (width) and 2.7 m (height). Despite its size, the structure remains functional.

Depending on the selected profile width, the windows can be retrofitted with soundproof or burglar-resistant glazing units with width of up to 52 mm. As a standard, it has a low-height threshold reducing the risk of tripping.



## ➤ PARALLEL AND SLIDE

The retracted parallel and slide windows are a perfect solution for those who appreciate space and comfort of use.

The specific nature of this design results in the movement parallel to both sashes while one of them remains stationary. Whether the windows are open or closed, they occupy exactly the same surface area. Maximum dimensions for this solution are 3.38 m (width) and 2.5 m (height). The system is characterized by a special micro-

ventilation design. The window sash retracted from the frame at its entire perimeter provides effective air exchange without impairing the aesthetics of the glazing; the ventilation slots are practically invisible from the outside.



## A breath of comfort

## ➤ TILT AND SLIDE

The advantage of the tilt and slide system is easy window opening and not obstructing the space inside the home; after opening, the sashes do not enter the room, but are hidden in parallel one behind the other.

The solution provides light and precise sash movement, and the control is so easy that the window can be moved with one hand; the sash very smoothly changes position from closed to tilted. The tilt and slide system is most commonly used in patio doors, but it is also a perfect

choice wherever every square centimeter of space is important, e.g. in the kitchen or office. Maximum dimensions for this design are 2.7 m (width) and 2.5 m (height).



➤ V90, V82, V70 profiles available

➤ Max width 2,700 mm

## Lightweight operation

## ➤ FOLD AND SLIDE

The greatest asset of the fold and slide windows is the possibility to slide all sashes together.

This provides space without visible mullions, divisions and connectors required for other solutions. The windows of this type, with maximum width of 6.3 m and maximum height of 2.34 m, will fulfill their purpose wherever unobstructed passage

and free space comfort count. Standard sliding elements and special hinge design provide smooth and easy operation.



➤ V70 profiles available

➤ Max width 6,300 mm

## Folding together



# Premium window accessories variants

Security	LUM'UP	V90	V82	V70
2 mushroom striker plates	●	-	●	●
3 mushroom striker plates	○	●	○	○
4 mushroom striker plates	○	○	○	○
All mushroom striker plates	-	○	○	○
RC2 certificate	-	-	○	-
Safe+ reed switches	○	○	○	○
Anti-drill plate	○	○	○	○
Safe Child hardware (Tilt-First)	○	○	○	○
Hinges with load capacity of 100 kg	●	●	●	●
Hinges with higher load capacity of 130 kg	-	○	○	○
Bonded glazing unit	○	○	○	○
Safe glazing units (laminated, tempered)	○	○	○	○
Handles with a key lock or button	○	○	○	○

Thermal insulation	LUM'UP	V90	V82	V70
Double glazing units WITH Ug = 1.1 W/(m2•K)	●	-	●	●
Triple glazing units with Ug = 0.6 W/(mŁK)	○	○	○	○
Triple glazing units with Ug = 0.5 W/(m2•K)	○	●	○	-
Steel spacer bars	●	-	●	●
Master Therm warm edge spacer bars	○	●	○	○
2 seals	-	-	-	●
3 seals	●	●	●	-
Thermal insulation wedge in the frame	-	●	-	-

Acoustics	LUM'UP	V90	V82	V70
Double and triple glazing units with increased sound insulation	○	○	○	○

Comfort	LUM'UP	V90	V82	V70
Micro-ventilation in R/U sashes	●	●	●	●
Tilt position adjustment	-	●	●	●
Mishandling device	●	●	●	●
Hidden hinges	○	●	○	○
Brake in handle	○	○	○	○
Balcony catch	○	○	○	○
Double-sided handle and lock cylinder in balcony door	○	○	○	○
Low-height threshold	○	○	○	○
Outward opening capability	-	-	-	○
Tilt and slide windows	○	○	○	○
Lower hardware groove seal (anti-dust)	○	●	○	○
Gentle closing of the large sliding sash (Soft Close)	-	-	-	-
Spectral film palette colors	○	-	○	-
V-Perfect heat-sealed joint	○	○	○	-
Aluminium cover plates	-	○	○	○
Trickle vents	○	○	○	○
Hardware (tilt and slide, retracted parallel and slide)	○	○	○	○
Ornament glazing units	○	○	○	○
Sunshade glazing units	○	○	○	○
Remote control of sliding window	-	-	-	-

● standard      ○ optional      - not available

# Patio window accessories variants

Security	retracted parallel and slide	fold and slide	tilt and slide	lift and slide 70	lift and slide 82
2 mushroom striker plates	-	●	-	●	●
3 mushroom striker plates	-	○	-	○	○
4 mushroom striker plates	●	○	●	○	○
All mushroom striker plates	-	-	○	○	○
RC2 certificate	-	-	○	-	○
Safe+ reed switches	○	○	○	○	○
Anti-drill plate	-	○	○	○	○
Safe Child hardware (Tilt-First)	-	-	-	-	-
Bonded glazing unit	○	○	○	○	○
Safe glazing units (laminated, tempered)	○	○	○	○	○
Handles with a key lock or button	○	○	○	-	-

Thermal insulation	retracted parallel and slide	fold and slide	tilt and slide	lift and slide 70	lift and slide 82
Double glazing units	●	●	●	●	●
Triple glazing units (standard for V90)	○	○	○	○	○
Steel spacer bars	●	●	●	●	●
Master Therm warm edge spacer bars (standard for V90)	○	○	○	○	○







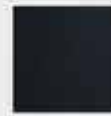
Acoustics	retracted parallel and slide	fold and slide	tilt and slide	lift and slide 70	lift and slide 82
Double and triple glazing units with increased sound insulation	○	○	○	○	○

Comfort	retracted parallel and slide	fold and slide	tilt and slide	lift and slide 70	lift and slide 82
Clear opening width over 3 m	-	○	-	-	-
Double-sided handle and lock cylinder	-	○	○	○	○
Low-height threshold	-	-	-	●	●
Lower hardware groove seal (anti-dust)	○	○	○	-	-
Gentle closing of the large sliding sash (Soft Close)	-	-	-	-	○
Spectral film palette colors	○	-	○	-	○
V-Perfect heat-sealed joint	○	○	○	-	-
Ornament glazing units	○	○	○	○	○
Sunshade glazing units	○	○	○	○	○
Remote control of sliding window	-	-	-	○	○










# And it's pleasing to the eye












## Standard Colors

			
Golden Oak	Mahogany	Dark Oak	Walnut
			
Winchester	Dark Grey (82 and 76)	Dark Grey Silk (82 and 76)	

## Special Colors

						
Agate Grey	Brushed Aluminium	Silver Brushed Aluminium		Basalt Grey	Basalt Grey Smooth	Grey White (Veneer)
						
Red Brown	Douglas Fir	Rustic Oak		Light Grey	Ivory	Cream White
						
Slate Grey Smooth	Monumental Blue	Papyrus White		Platinum Crown (Metallic)	Platinum Earl	Platinum Quartz
						
Siena Noce	Siena Rosso	Silver Grey		Silver Grey Smooth		

## Spectral Colors

			
Brown	Black Brown	Spectral Anthracite Ultramatt	Spectral Dark Blue Ultramatt
			
Quartz Grey	Slate Grey	Spectral Graphite Black Ultramatt	Spectral Umbra Ultramatt
			
Sheffield Oak Light	Shogun AC	Spectral Platinum Grey Ultramatt	

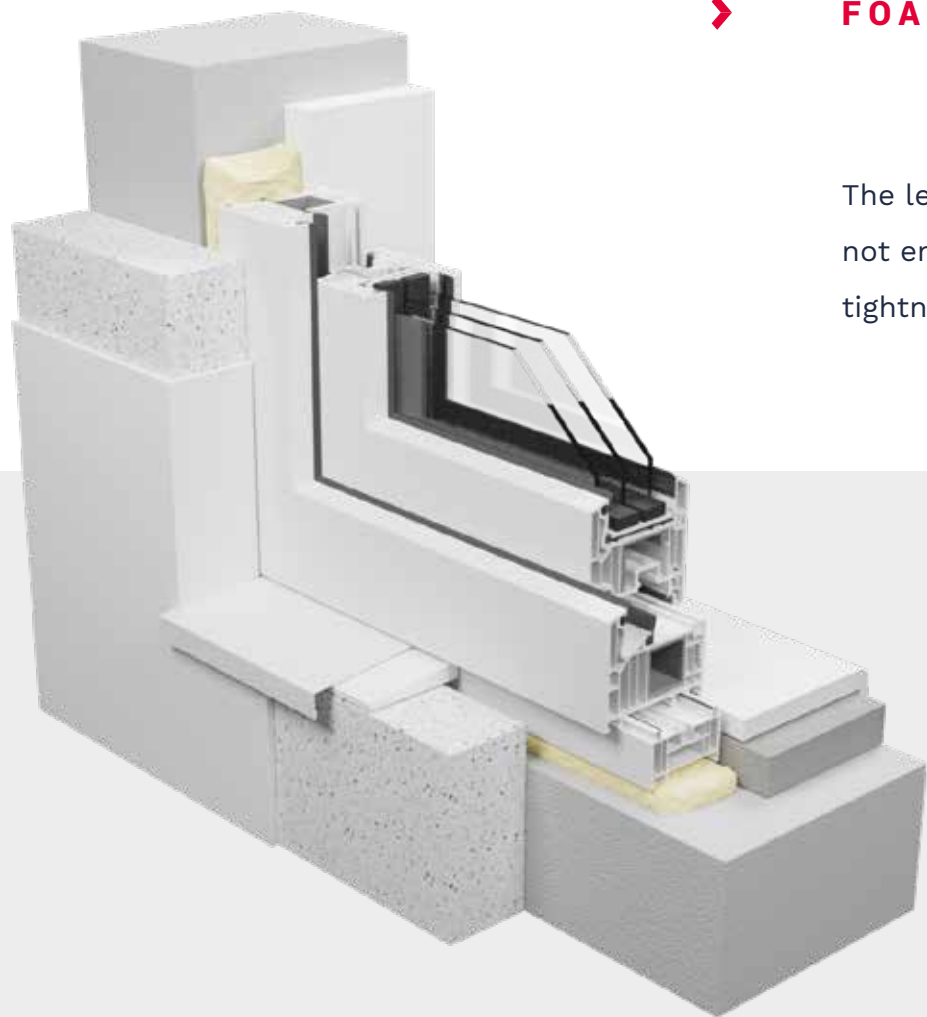
# Professional installation

Correct installation is as important as the selection of high quality windows. Only when you take care of both these issues, you can enjoy the durable beauty and functionality of your windows.

Authorized Vetrex specialists guarantee that your window joinery will be installed in a manner utilizing its full potential.

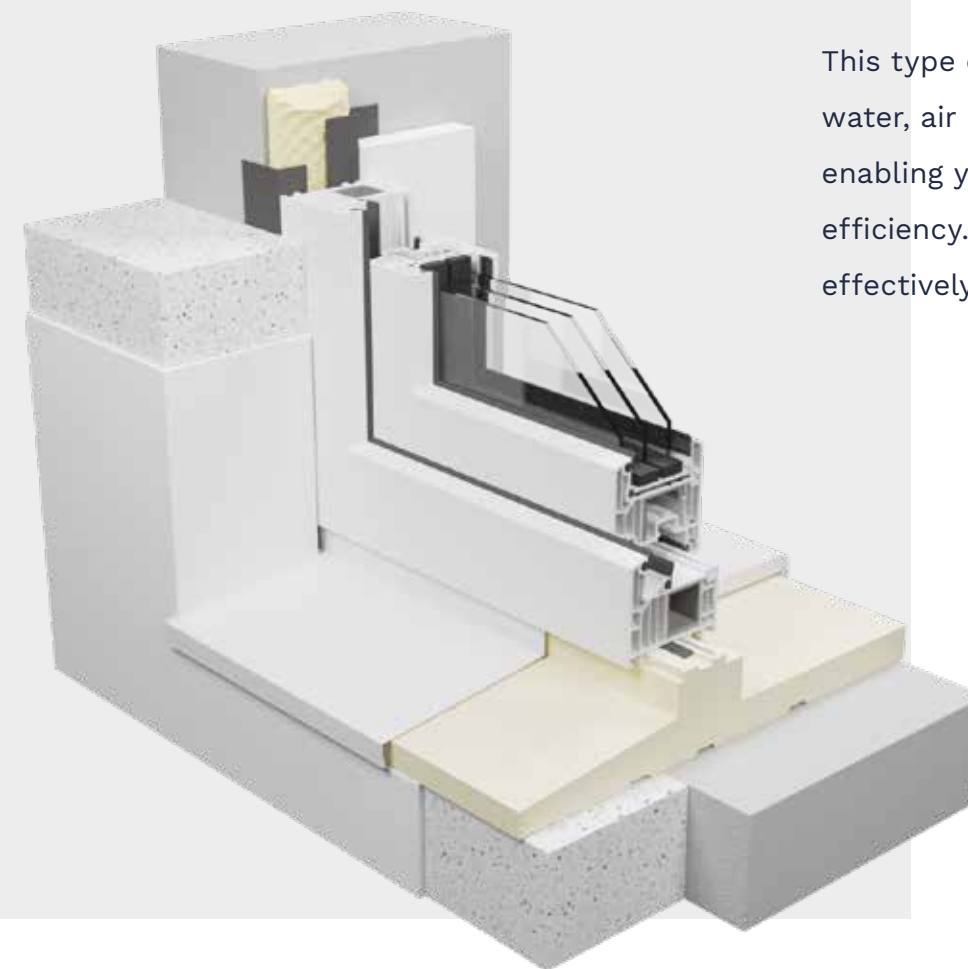






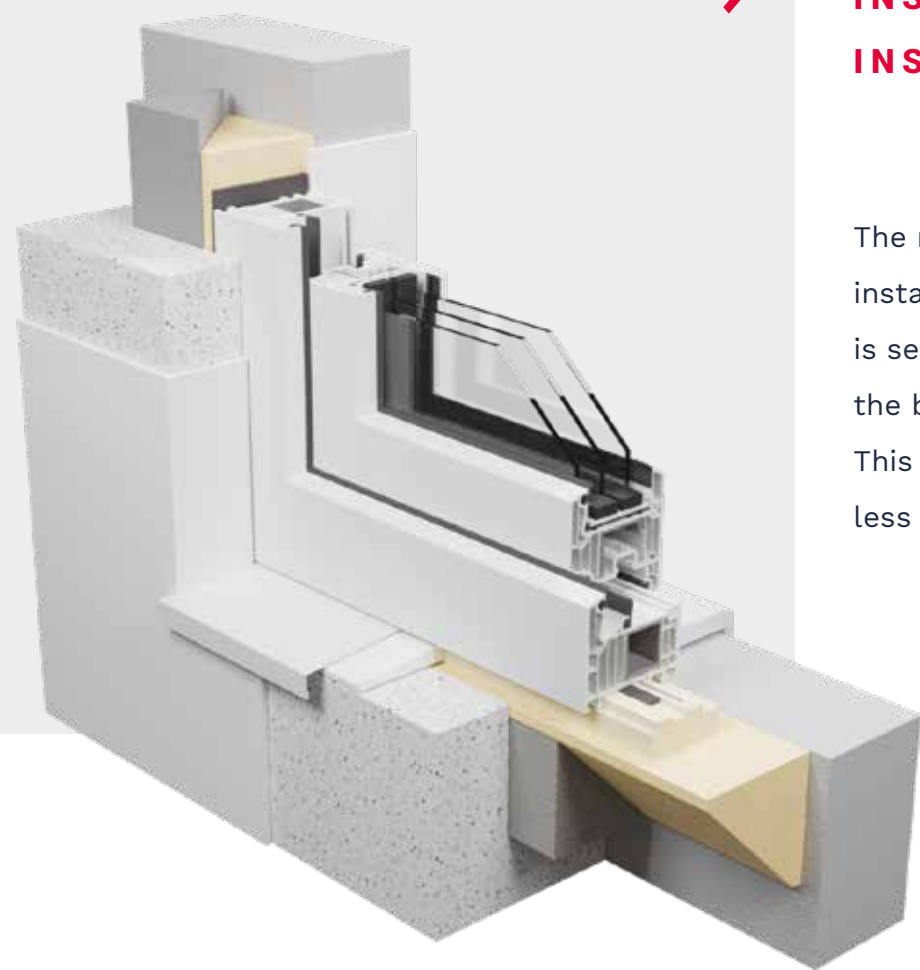
## FOAM-BASED INSTALLATION

The least expensive type of installation, not ensuring water, air and water vapor tightness.



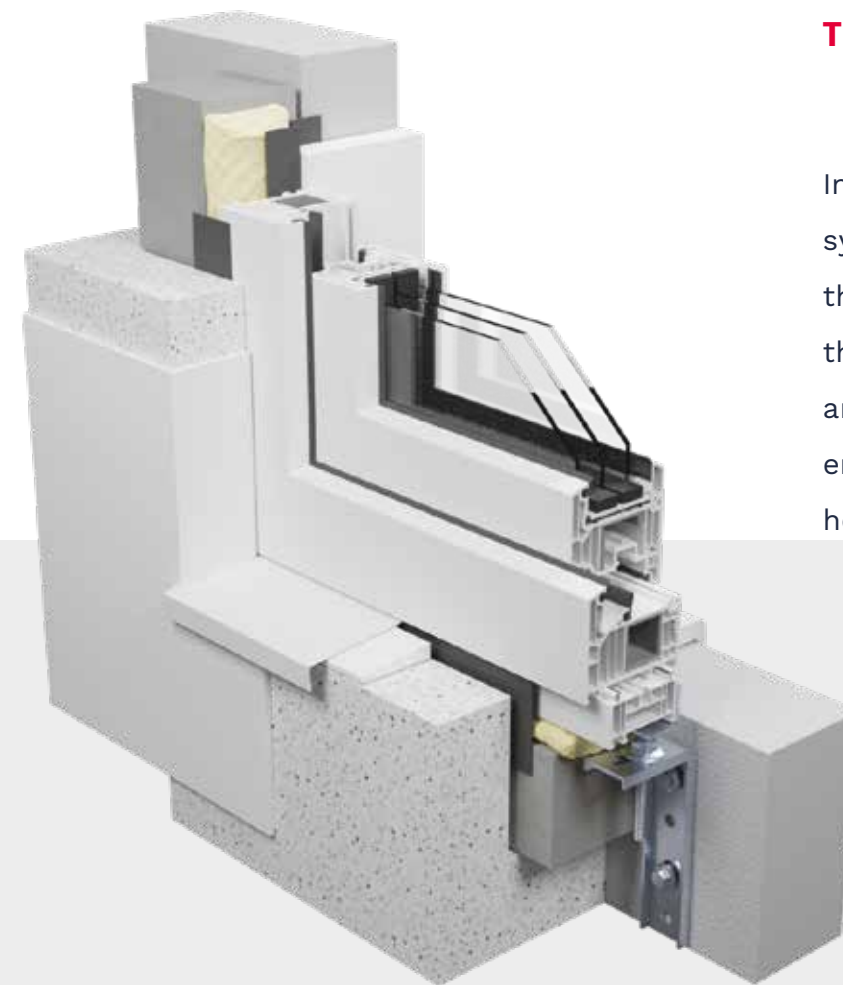
## LAYER SEALING INSTALLATION WITH ENERGY-EFFICIENT SILL

This type of installation provides maximum water, air and water vapor tightness, enabling you to fully enjoy energy efficiency. The sill acts as insulation effectively preventing heat loss.



## INSTALLATION IN THERMAL INSULATION

The most advanced type of installation of window joinery which is set in the thermal insulation of the building, and not in the wall. This solution enables you to use less energy for heating.



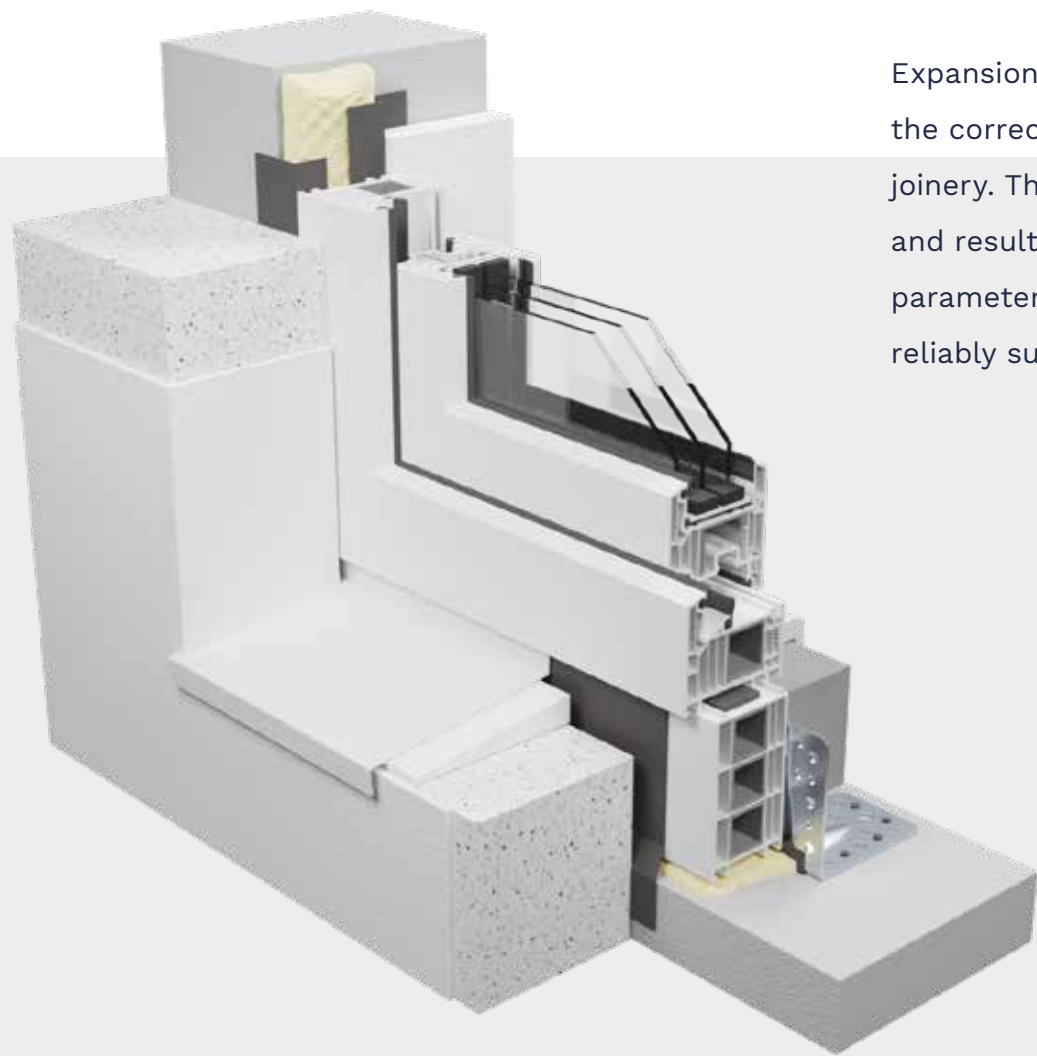
## INSTALLATION IN THE FIELD OF THERMAL INSULATION - CONSOLE

In this advanced installation system, window joinery is set with the use of steel brackets in the thermal insulation of the building, and not in the wall. This solution enables you to use less energy for heating.



## ➤ EXPANSIONS

Expansion profiles perfectly complement the correct installation of window joinery. They not only guarantee tightness and resulting highest thermal insulation parameters, but also the safety of the reliably supported structure.



**We offer one of the longest warranties available in the market, even up to 9 years.**

You can be sure that you will use our windows for many years.

By participating in the guarantee program and properly maintaining your windows, you will obtain a longer guarantee of their reliability.



## Why you should ensure regular window adjustment?

- **Energy saving** – the tightness of the windows is maintained, the interiors are effectively protected against heat loss, you pay lower bills for heating.
- **Peace of mind** – well-maintained windows guarantee good sound insulation effectively reducing the outside noise.
- **Security** – perfect condition of window seals protects against harsh weather conditions, safeguarding the interior against flooding.
- **Unlimited use** – the high quality of the windows is maintained, allowing their trouble-free operation for many years.





We have over 20 years of experience. We are known for our wide range of windows and entrance doors distributed throughout Europe.

We create energy-efficient solutions and bold architectural structures. Our products represent diverse design, technical precision and high functionality.

- We have a state-of-the-art technological park with the area of 6,000 m2.
- We have two fully automated production lines equipped with a punching machine and polyurethane injection capability.
- Thanks to our own quality assurance and control service, we are able to guarantee timeliness, completeness and the highest level of workmanship.

## HIGH PRODUCTIVITY



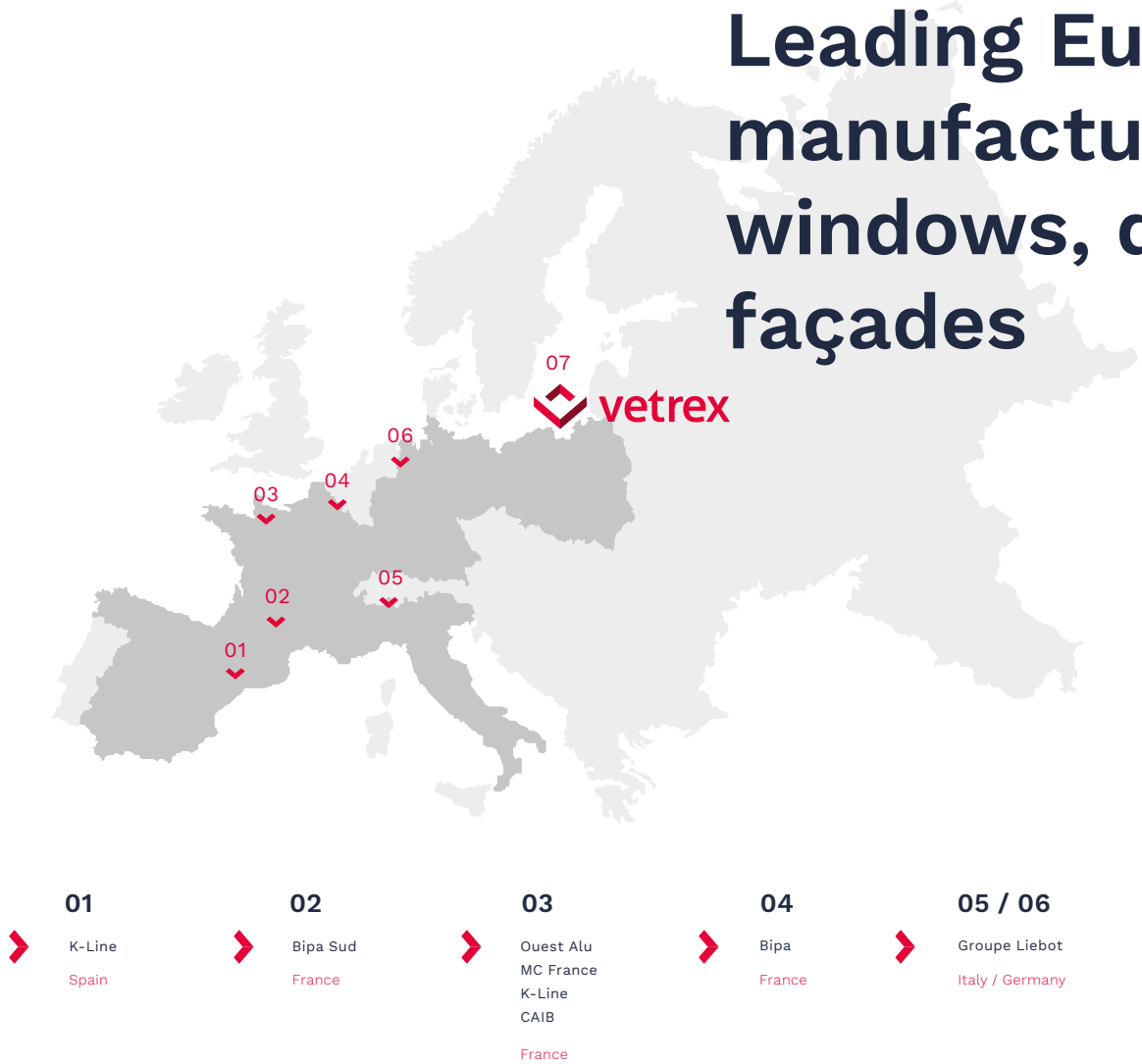


Groupe Liebot owes its leading market position to many years of experience, investments in innovative technologies, and the development of its own manufacturing tools.

Choosing joinery from the leading European manufacturer of windows, doors and façades is a guarantee of unsurpassed material quality and high safety.

- € 580 million of annual turnover
- Own foundry and galvanizing plant
- 50 years of experience in window and door manufacturing
- Onsite production of manufacturing tools and machine components makes the company totally independent
- 12 companies
- 3,200 employees

# Leading European manufacturer of windows, doors and façades







Find your nearest  
showroom at: [www.vetrex.eu](http://www.vetrex.eu)

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