



VIKONDA
windows and doors

**The Vikonda
Company**

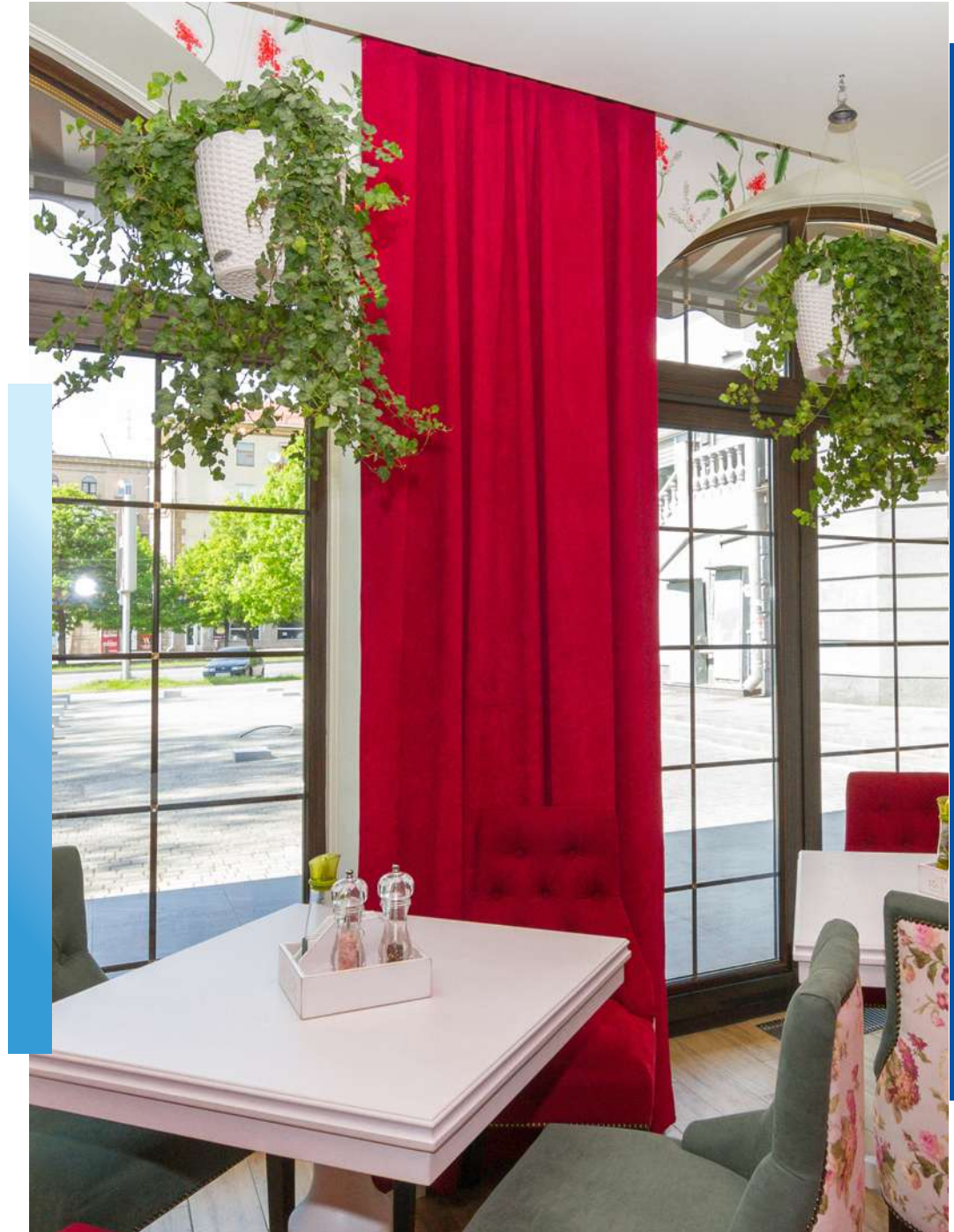
/2023


Vikonda LLC is a leading manufacturer of PVC windows since 2001 with a high capacity production of energy efficient metal-plastic structures.

Corporate offices and warehouses are present across the entire country. Currently, there are more than 125 Vikonda® branded showrooms operating available.

Vikonda LLC is a part of the Windows, Doors and Facades Association with a recognized brand name across the country and well known manufacturer of PVC windows and metal-plastic structures overseas.

Vikonda Company is manufacturer that has passed one of the stringiest standards in Europe successfully and obtained ift – Rosenheim certification in Germany.





**Vikonda LLC is a modern
manufacturer of PVC
windows and metal –
plastic structures**

Thanks to the modern in-house production plant in Ukraine, Vikonda° products are produced in accordance with the stringiest international standards and norms and there are no impossible tasks for Vikonda LLC.

The process of plastic windows design and production begins with computer modeling of

prospecting structures. With the plastic windows cost calculation software it is possible to create outline drawings of windows and determine the amount of material necessary for their manufacture.



**Production
capacity
is 1 product
per minute .**



Vikonda LCC:

- **20 years** of experience

- **one of the biggest** manufacturers of translucent structures

- production capacity **1500** structures/day

- **high-level** quality control system

- **European certification**



Sales channels:

In the market the Vikonda Company sells its products through:

- corporate and franchise network - 125 showrooms

- local distributors- 1000 companies

- commercial projects

- government projects



High quality and strict compliance with the international environmental standards ensure a high demand for Vikonda® products on the local market and globally.

International distributorship network: **USA, Canada, Italy, Spain, Belgium, Poland, Slovakia, Sweden, UK, Germany, Romania, Moldova.**



Each and every single product is strictly checked by the quality control department in order to meet all the related production criteria.

Standards and Certification:

- EN – 14351-1
- **ift-Rosenheim Institute** of Window Technologies certification. Germany.




Vikonda® products

- Metal-plastic windows based on PVC profile
- Entrance, office, and interior door designs
- Doors with HPL filling
- Sliding systems
- Decorative designs
- Non-standard products
- Laminated products
- Painting in line with RAL
- Glass curtain systems
- Smart home systems

All the products produced by Vikonda® are energy efficient, and environmental friendliness with high resistance to operational loads.





Main products – metal – plastic structures based on Vikonda® PVC systems, as well as Kömmerling profile systems.

Technical product parameters directly depends on installation purpose.



PVC windows

Window systems

Window systems based on PVC profiles are the basis of the company's assortment. The product line includes profiles with various characteristics, which allows you to choose a complete set for the implementation of a variety of tasks:

- Kömmerling 76AD
- Kömmerling 76MD
- Kömmerling 70ST plus
- Vikonda Cottage
- Vikonda Comfort
- Vikonda Thermo
- Vikonda Standard plus



Kömmerling window systems



76AD

Number of cameras	5
Mounting width, mm	76
Maximum glass unit thickness, mm	16-50
Thermal conductivity coefficient, W/m2K	1,1
Sound insulation,	47
Air permeability class	4
Water resistance	up to 9A
Resistance to wind load	up to C5/ B5
Safety class	up to RC2 (WK2)



76MD

Number of cameras	6
Mounting width, mm	76
Maximum glass unit thickness, mm	16-50
Thermal conductivity coefficient, W/m2K	1,0
Sound insulation,	47
Air permeability class	4
Water resistance	up to 9A
Resistance to wind load	up to C5/ B5
Safety class	up to RC2 (WK2)



70ST plus

Number of cameras	6
Mounting width, mm	70
Maximum glass unit thickness, mm	40
Thermal conductivity coefficient, W/m2K	1,15
Sound insulation,	45
Air permeability class	4
Water resistance	E1500
Resistance to wind load	up to C5
Safety class	up to RC2 (WK2)

PVC windows

Modern windows based on PVC profile. Excellent mechanical and thermal performance, elegant design, high functionality and protection against burglary.



Reinforcing profile

1,5 mm

1,5 mm

1,5 mm

1,5 mm

Mounting depth

82 mm

82 mm

70 mm

70 mm

Resistance factor of the profile system

1,2 W/(m²*K)

1,2 W/(m²*K)

1,3 W/(m²*K)

1,4 W/(m²*K)

Insulated glass unit

44

44

24/32/40

24/32/40

Colors lamination are available

all are possible

all are possible

all are possible

all are possible

 **Віконда КОТЕДЖ**

 **Віконда КОМФОРТ**

 **Віконда ТЕРМО**

 **Віконда СТАНДАРТ plus**



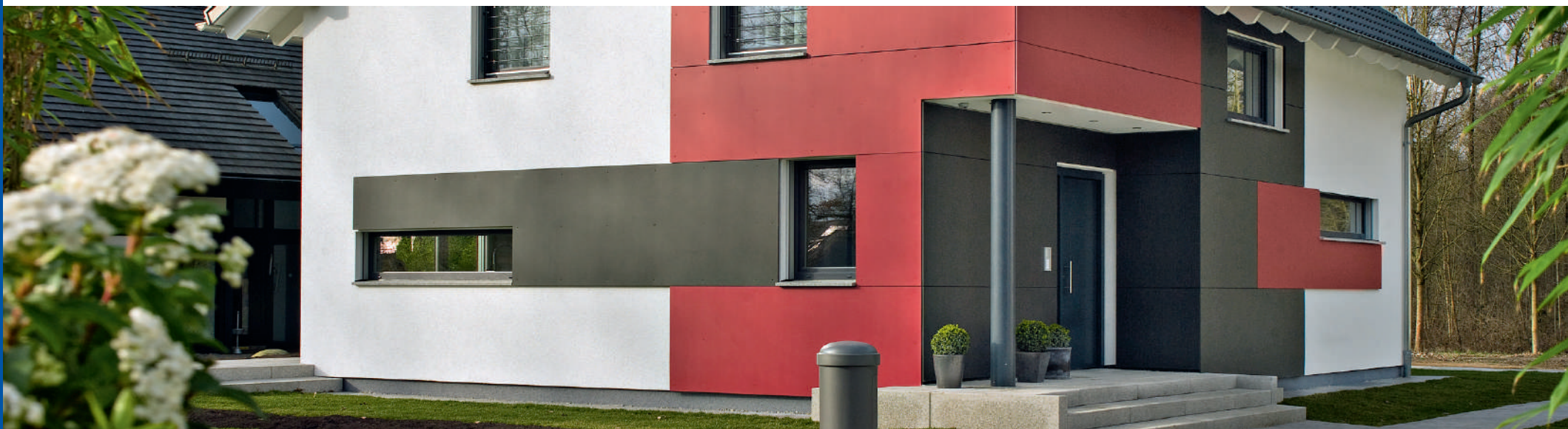
Entrance doors

Entrance doors

Entrance doors from the company «Vikonda» can have different equipment. Profiles are used to create doors with different properties and parameters:

- Kömmerling 70
- Kömmerling 76
- Vikonda 60 mm
- Vikonda 70 mm

The doors can be equipped with HPL panels in various installation options.

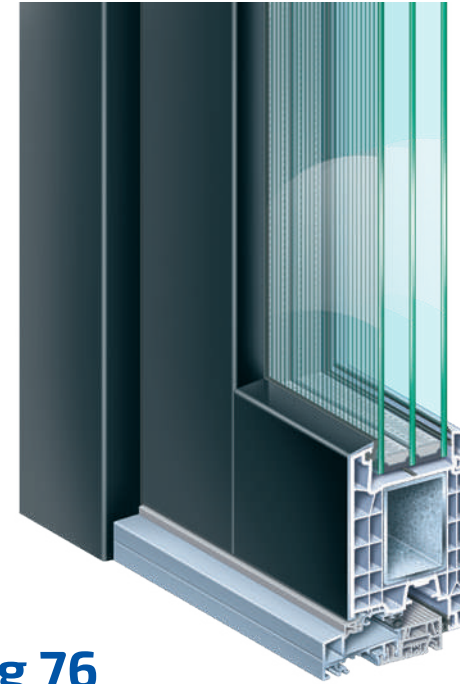


Kömmerling door systems



Kömmerling 70

Mounting width, mm	70
Maximum thickness of double-glazed unit, mm	40
Thermal conductivity coefficient, W/m ² K	1,3
Sound insulation, dB	45
Air permeability class	4
Water resistance	E1500
Resistance to wind load	C5
Safety class	RC2 (WK2)



Kömmerling 76

Mounting width, mm	76
Maximum thickness of double-glazed unit, mm	16-50
Thermal conductivity coefficient, W/m ² K	1,0
Sound insulation, dB	47
Air permeability class	4
Water resistance	up to 9A
Resistance to wind load	C5/B5
Safety class	RC2 (WK2)

Kömmerling door systems

Kömmerling door systems allow you to create entrance and office doors with excellent functional characteristics.

Their advantages:

- High rigidity and resistance to deformation
- Excellent tightness and thermal insulation
- Sound insulation that provides maximum comfort
- Effective protection against burglary, which can be further improved



Door frame

Mounting depth	70 mm
Door leaf	inside opening/ outside opening
Outer side panel thickness	class A
Insulated glass unit	24/32/40 mm
Rabbit ledge width	17 mm



Mounting depth	60 mm
Door leaf	inside opening/ outside opening
Outer side panel thickness	class B
Insulated glass unit	24/32 mm
Rabbit ledge width	14 mm



Entrance doors

Door sashes based on Vikonda profile with mounting width of 70 mm or 60 mm, internal or external opening - in our assortment there is a solution for any task.

Protection against blowing

To protect against blowing, Vikonda doors are equipped with a special Windstop element. Windstop prevents cold air from entering the room and significantly improves thermal insulation. Vikonda doors are also equipped with a threshold seal, which provides a tight hermetic junction of the sash to the threshold.

Warm threshold

Vikonda doors are equipped with a combined threshold, which combines a «warm» plastic base and a durable aluminum lining.

Reinforced construction

Vikonda door profile and internal reinforcement are designed specifically for use in conditions of increased load. They ensure stable operation of door structures throughout the entire service life.





Vikonda Thermo PVC door profile with a frame height of **77 mm**.

The color of the base matches the color of the door.

Reliable anti-burglary locks: **hookLock M2**, **autoLock AV3** and **blueMatic EAV3** from **Winkhaus**

or a standard door choice

Matte metal and concise forms are designer accessories

COSMO Therm HPL/HD.
They are made of HPL with a thickness of 2.0 mm, decorated with a film, and the filler made of extruded polystyrene foam (XPS).

Insulated glass unit with polished facets and tempered glass. Decorative filling is available.
INOX overlaying is contemporary-styled metal decorative overlaying.

Door hinges from a European manufacturer. Perfect design and quality. Both surface-mounted door and cylindrical hinges **Simonswerk RB Wala Inox** are available

the sample shows the Thermo EXCLUSIVE model with opening outside

The anatomy of doors:

the details of perfect component parts

Vikonda Company offers three options of up-to-date doors with innovative HPL-filling based on Vikonda Thermo profile system:
Thermo COMFORT
Thermo PREMIUM
Thermo EXCLUSIVE



Termo COMFORT

filling thickness

40 mm

standard sill

20 mm

handle

Medos: Handle DUBLIN35
+ Handle DUBLIN35

door hinges

Wala Inox stainless

locks*

hookLock M2, autoLock
AV3, blueMatic EAV3

security level
(RC standard)

up to RC 2

type of filling

**The HPL panel under
moulding fillets**



Termo PREMIUM

54 mm

20 mm

Medos: Handle DUBLIN35
+ Pull handle DUBLIN35

Simonswerk RB Inox stainless

hookLock M2, autoLock
AV3, blueMatic EAV3

up to RC 2

**The HPL panel with
single-sided shield**



Termo EXCLUSIVE

76 mm

20 mm

Medos: Handle DUBLIN35
+ Pull handle PR

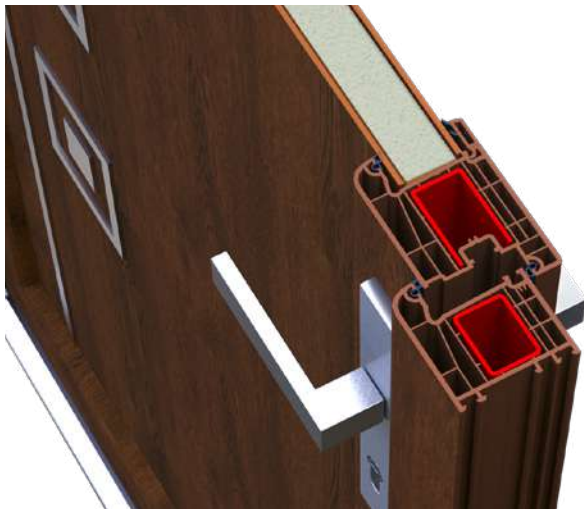
Simonswerk RB Inox stainless

hookLock M2, autoLock
AV3, blueMatic EAV3

up to RC 2

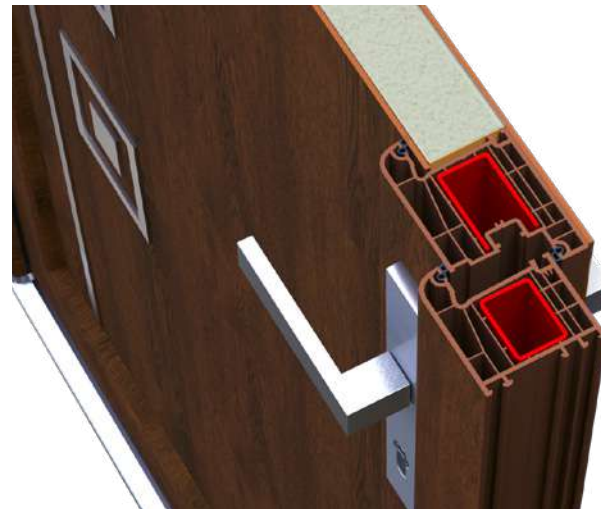
**The HPL panel with
two-sided shield**

A detailed description of the differences between the three types of the door leaf filling with HPL panels: **under moulding fillets**, **with single-sided shield**, and **with two-sided shield**.



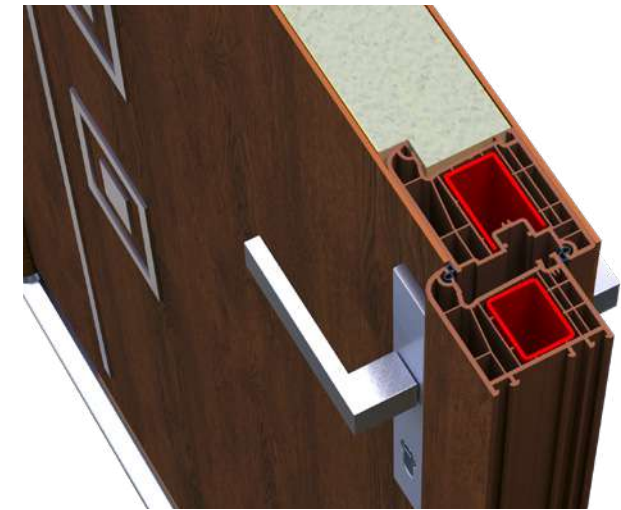
Termo COMFORT

The HPL panel is placed inside the T or Z leaf, glued into it and fixed with moulding fillets from the inside of the room. At that, the profile of the door structure remains visible.



Termo PREMIUM

The HPL panel is glued to the Z leaf from the outside making the profile invisible completely. The appearance of the door is more perfect and concise due to the fact that only the laminated panel is visible. From the inside, the profile of the door structure remains visible.



Termo EXCLUSIVE

The HPL panel is glued to the Z leaf both from the outside and from the inside. This ensures a natural combination of doors with both the facade and the interior and makes them as energy efficient and attractive as possible.

Visual differences for different types of filling the door leaf with HPL panels



Design Series: lines

Termo EXCLUSIVE



Termo PREMIUM



Termo EXCLUSIVE



Design Series: vertical

Termo EXCLUSIVE



Termo EXCLUSIVE



Termo EXCLUSIVE



Design Series: horizontal

Termo COMFORT



Termo PREMIUM



Termo EXCLUSIVE



Design Series: radius

Termo EXCLUSIVE



Termo PREMIUM



Termo EXCLUSIVE



Design Series: square





Sliding systems

Sliding systems

Following the latest trends in architecture, we actively implement and promote sliding door systems.

- KÖMMERLING PD76
- KÖMMERLING PS76
- KÖMMERLING PremiLine
- duoPort



Kömmerring sliding systems


PD76

PS76

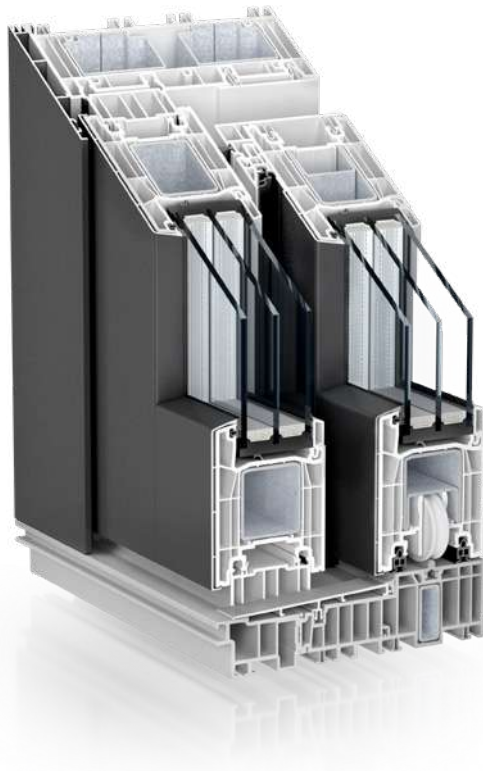
PremiLine

	PD76	PS76	PremiLine
Mounting width, mm	179	158	80
Maximum thickness of insulating glass unit, mm	50	50	28
Thermal conductivity coefficient, W/m²K	1,4	1,3	2,2
Sound insulation, dB	45	-	35
Air permeability class	4	4	3
Water resistance	9A	9A	E750
Resistance to wind load	B3/C2	C4/B5	C5
Safety class	до RC2 (WK2)	до RC2 (WK2)	-

KÖMMERLING PD76

Premium lifting and sliding system. It has all the advantages of the innovative line with a mounting depth of 76 mm.

- **Maximum light**
- **Comfortable opening thanks to the spring system**
- **Maximum tightness - better than all systems with brush sealing**
- **Minimum threshold height**



KÖMMERLING PS76

Innovative sliding system, perfectly suited for large multi-sectional facade elements.

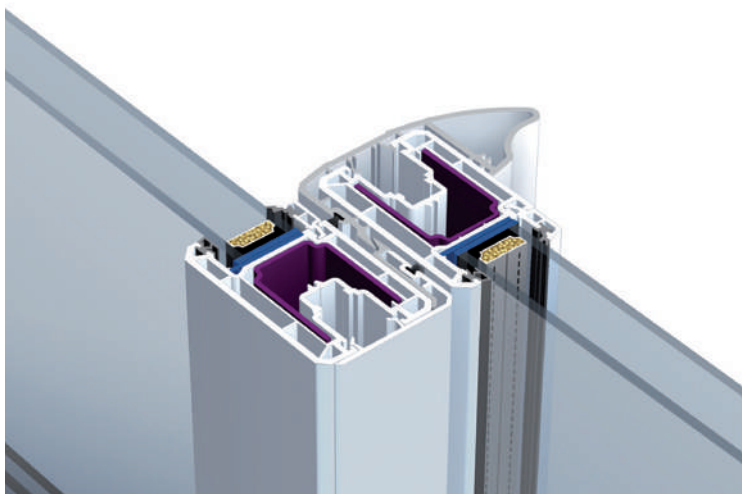
- **The open sash does not protrude into the room**
- **Maximum heat and sound insulation**
- **Easy movement of heavy sashes thanks to improved trolleys**
- **Safe gap ventilation**



KÖMMERLING PremiLine

The sliding system that is ideal for the production of large-sized structures.

- **Rigid and robust profile.**
- **Stylish appearance.**
- **Simple and silent sash movement.**
- **Possibility to install up to 4 leaves**
- **The presence of the third guide for an additional sash**



DuoPort



The duoPort tilt-and-slide fittings from Winkhaus
Large glazed areas that do not limit the living space are a characteristic feature of modern architecture.

The duoPort fittings allow easy and effortless opening, sliding and tilting PVC windows with a maximum leaf weight of up to 200 kg.

These are doors that eliminate the borders between inside and outside of the house.

Specifications

The TM Vikonda profile system

Mounting depth: 60 to 82 mm depending on the profile system

The heat transfer resistance of the structure is up to 1.00 m² C/W

The heat transfer resistance of the profile is 0.81 to 1.45 m² C/W
depending on the profile system

The possibility of installing an insulated glass unit 24 to 44 mm thick
depending on the profile system

Class of resistance to burglary is up to RC2

Weight

- duoPort SK-S up to 160 kg
- duoPort SK-Z up to 200 kg
- duoPort PAS up to 160 kg

The leaf height-to-width aspect ratio: up to 2.5/1 (Height / Width)

Opening design: two-section, three-section, four-section
(with a post) blocks

A window frame functions as a sill

The handle is inside. A double-sided handle with a cylinder is optionally available



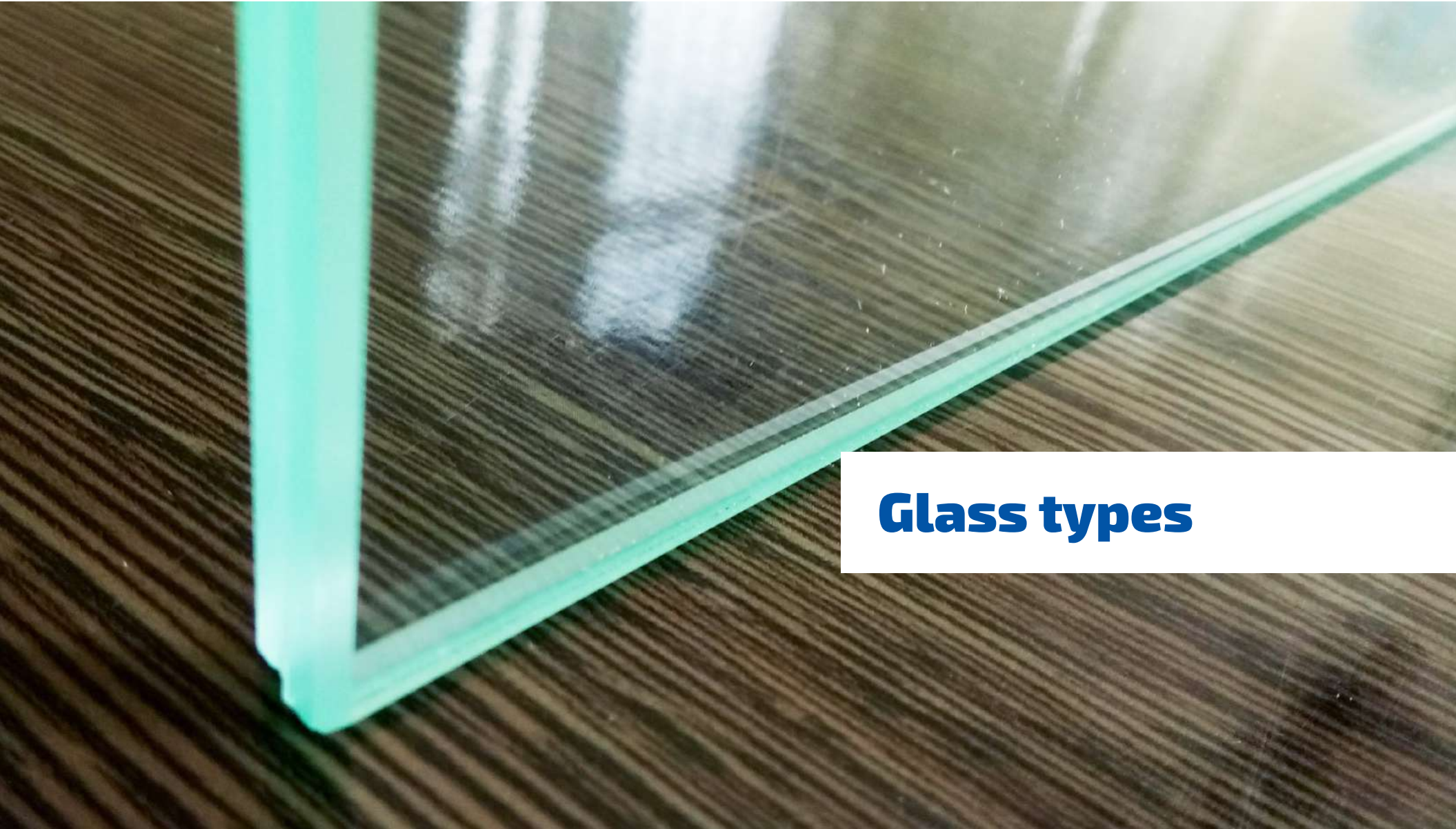
Laminated PVC structures

Laminated PVC structures

The decorative potential of the Vikonda® structures is significantly expanding by applying profile lamination:

- Lamination color range includes 37 colors
- High-quality PVC film with the natural wood texture and color imitation
- Profile coating in any RAL color





Glass types

Dope-dyed glass

The internal walls, ceilings, and furniture accumulate the incoming heat and heat from the sun. The so-called «greenhouse effect» is created. You may feel a similar effect, for example, when getting into a car that has been standing in the sun for a long time.

Therefore, in construction, special dope-dyed glass is used, also known as sun-protective, heat-absorbing or absorption glass, because such glass absorbs more solar thermal energy and light than ordinary transparent glass.



Energy efficient glass

The main idea in low-emissivity technologies is the covering of float glass surface with a conductive coating made of non-ferrous metals or semiconducting metal oxides containing free electrons. This is the way to make the glass designed to reduce heat consumption in the room due to the reflection of heat waves in the infrared range. Such glass is also may be called selective due to the selectivity of waves transmission. We use only glass with a soft coating - i-glass for our insulated glass units.



Tempered glass

Tempering is the process of thermal strengthening of glass based on its special physical properties. For the glass changing from a liquid state to a solid state, there is no a specific solidification point on the temperature scale. So, it can be heated to a temperature slightly above when molecules similar to a viscous liquid are still capable of plastic shear without internal stresses.

If the entire volume of the glass is evenly heated up to the same temperature (a little above 570 °C), and then quickly cooled, its surface will harden with the inner layer remaining plastic. With further gradual cooling, the inner layer will also harden. Thus, as a result of heat treatment consisting in heating the glass to the tempering temperature and subsequent rapid cooling, the glass outer layers come into a state of strong compression and the inner layers into a state of stretching. As a result, in the glass, a system of stresses is formed ensuring its high mechanical and thermal strength compared to ordinary glass that can bear only a small tensile load.

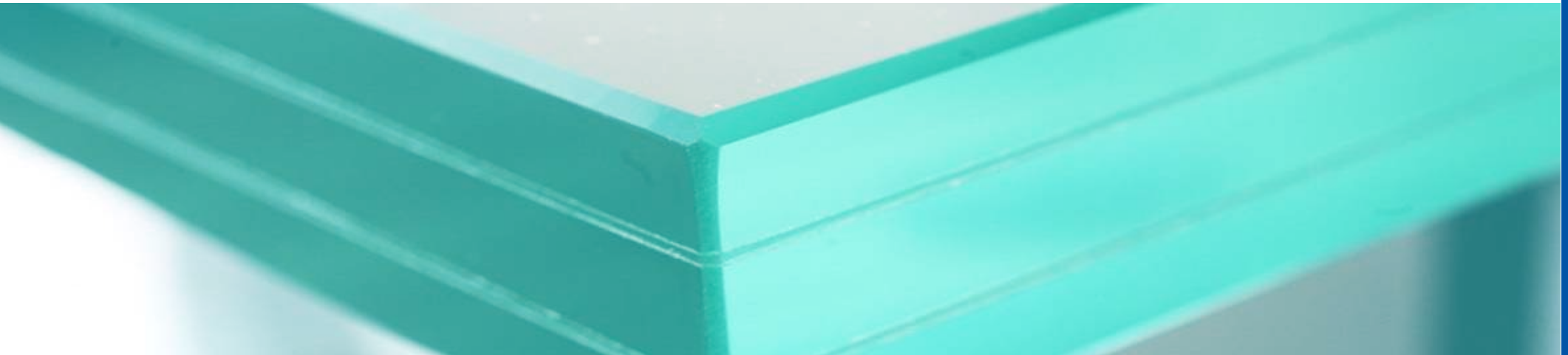


Triplex

Triplex is a structure consisting of two or more glass sheets connected by means of a polymer film or a special resin. Triplexes are classified as safe glass due to the fact that the glass does not shatter into sharp pieces on impact significantly reducing the risk of injury from the sharp edges of broken glass. It is recommended for use where it is necessary to achieve a high level of protection against burglary: a various combination of layers of glass and film allows achieving different classes of strength, starting from resistant to ordinary impact glass and ending with bulletproof.

Triplexes can also protect against ultraviolet light; as an example, they are recommended for use in store windows where goods placed behind the window can discolor.

Triplexes can be laminated with both transparent and colored film. They can be assembled from any type of glass: standard, energy-saving, and dope-dyed. Triplex also has increased sound insulation.



Decorative glazing

In addition to multifunctional glass units, decorative glazing is also offered combining the functions of heat insulation, noise and sun protection. Due to the availability of various decorative solutions, the range of the TM Vikonda glass units includes more than 100 configuration options.

Decorative insulated glass units include the following elements and techniques:

- sandblasted patterns
- ultraviolet printing
- textured glass
- glazing bars, etc.





Refleksol

Refleksol

Glass facades let in solar radiation heating the interior of the building and illuminating it with natural daylight. On the other hand, too much sunlight in the summer means excessive heat gain, spots of light on screens and possible blinding effects. All this reduces the comfort level of those who live and work in the building, and also contributes to the increase in electricity consumption for ventilation and air conditioning.



Refleksol

The balance between light and shade is guaranteed by the use of Refleksol textile blinds, which, in addition to the blinding function, are an excellent decorative element. The fabrics used in roller blinds are made of extremely strong polyester fiber coated with a thick layer of PVC making them resistant to adverse weather conditions, fire or dust. (this is confirmed by relevant certificates).

In addition, the relevant tension of the fibers affects the stability of the fabric during its use, and the quality of the polymers used in their production significantly improves colors stability. Thanks to their properties, such fabrics prevent the greenhouse effect maintaining a constant comfortable temperature in the rooms directly exposed to sunlight.



Refleksol

- + maximum wind resistance
- + protection against overheating (blinds block up to 97% of heat entering the room)
- + efficiency regardless of the sun position
- + internal or external assembling
- + cleaning is not required
- + good view from inside
- + smaller installation dimensions
- + the possibility of connecting a module for automatic control

Internal:

- + a large selection of fabrics
- + smaller sizes
- + lower price
- less protection from solar heat

External:

- + heat insulation efficiency up to 97%
- + additional function of a mosquito net
- + non-combustible material with high operational properties
- less choice of fabrics





**Facade
Blinds**
(Sun Louvre)

Facade blinds

(Sun Louvre)

Modern architecture is not only an interesting design, but also, first of all, the functionality of engineering solutions that will ensure ease of use and operating costs reduction. This also applies to the selection of a suitable sun shield, which will protect the interior of the room from excessive heating, without limiting visibility from the outside and providing sufficient optical comfort.



Facade blinds (Sun Louvre)

The system of facade blinds meets all these requirements contributing to the reduction of the use of air conditioning devices and thus saving electricity. The type of this structure is a kind of «airbag» because the wind takes away the air and the glass remains cold. In addition, the function of adjusting the angle of the front flap allows adjusting the degree of blinding according to the individual preferences of the user. The sunlight can be controlled by means of an automation system that records the position of the sun stepwise and smoothly controls the blind.



Facade blinds (Sun Louvre)

Slats made of profiled aluminum have a C- or Z -shape geometry. In combination with properly selected guides and covers (steel or aluminum cassette with an oval or square section), they make the facades modern and attractive. The slat supporting textile elements are made of heat-resisting materials. This ensures their resistance to weather conditions and UV radiation.

At the design stage, it is worth considering sun shields that will make possible hiding the blinds in a layer of thermal insulation providing a number of aesthetic and functional advantages. The color tone of the structure can be selected according to the color of the window frame or the facade of the building.



Facade blinds *(Sun Louvre)*

Facade blinds are equipped with two types of drives: manual and automatic.

The latter option is considered more convenient:

- It allows controlling the blinds at a distance using a remote control
- It can be integrated into the Smart Home system
- It has a wide range of settings, including an automatic activation timer.





Roller shutters

Roller shutters

Roller shutters give you a feeling of comfort and privacy, and will protect you from prying eyes. Besides, all the proposed options will protect your windows from thrown stones and intruders, thus increasing your security.

One of the biggest benefits of installing such structures is the reduction of electricity costs. In summer, the roller shutters in the closed position provide excellent protection from the sun and high temperatures preventing high-speed heating of your house. In winter, they act as a dense barrier to protect from cold effectively reducing heating costs.



Roller shutters

- installed on the upper part of the window frame
- prior planning of the window opening is required



- universal — a good match with windows of any type
- perfectly matches with any facade thanks to a wide range of color solutions
- prior planning during designing is not required
- a good match with any type of window
- perfectly mounted on a wall or in a niche



External shutters

External shutters

The flexibility of external shutters is amazing. Both the classic folding design and the new original slatted shutters are available.

A standard profile 48 mm width is used for production. This allows installing of classic universal fittings on the shutters easily.



External shutters

Wide reinforcement cameras allow using powerful cast corner brackets and reinforcing agents ensuring the structure stability and reliability.

Three types of external shutters are available to order:

- The slats of the shutters are fixed in an inclined position
- The slats of the shutters are fixed in the closed position
- The slats with variable position





Security solutions



Security solutions

The use of various technical solutions ensures effective protection of the structure against attempts of unauthorized entry:

- anti-burglary fitting sets
- reliable locks (including ones with locking rods)
- triplex as external glass in insulated glass units
- sensors actuated in case of the leaf opening



Winkhaus control sensors for windows and balconies

Solutions for monitoring security alarm systems for those who prefer electronic control systems, climate control, and for owners of «Smart Homes».

Sensors are available to order in two versions:

1. security (alarmed)
2. security + climate control

To control access to the premises, it is possible to equip structures with stand-alone activPilot Control Winkhaus sensors actuated in case of any attempt to open the leaf:

Sensors:

- are mounted in the gap between the frame and the leaf (invisible from the outside)
- effectively protected against moisture and dust
- provide the possibility of monitoring the condition of the leaf in three positions: open / closed / tilted for ventilation (in those systems with the option of tilt opening for ventilation)





Winkhaus control sensors for windows and balconies

Easy integration

One of the main advantages of the system is its easy integration in the standard fittings of activPilotConcept, as well as the possibility of integration in other fitting systems (if necessary).

Compatibility with security systems

Invisible interlocking sensors ensures letting you know which windows and balcony doors are open and which are closed. These sensors are compatible with almost any security systems!

Also, these sensors are identified by the VdS (PropertyInsurerAssociation) security alarm system and are VdS Class B certified.

Control of devices

Sensors can also be used to monitor radiators or air vents. It is especially important when it comes to gas safety, for example, gas leak control.



Application of sensors

- **Alarm system monitoring:**
 - VdS class B
 - VdS class C
- **Climate control**
- **Ventilation control**
- **Air vents**

M2 and AV3

The lock of hookLock M2 type

The lock with 3 locking points and massive locking rods for the entrance door.

- 3rd class of security that is appropriate for installation in anti-burglary designs of classes WK2 — WK3 (DIN EN 1627-30)
- 2 massive locking rods made of hardened steel with chrome coating
- The locking rods are activated by turning the key in the cylinder twice, they cannot be pressed down by one or both - the door opens only after turning the key
- The lock cassette is closed from all its sides
- Corresponding bars with a built-in pressure adjustment function and additional fixation with a latch in the frame.
- In the closed position, the latch presses the bar against the frame and prevents it from being pulled out



The lock of autoLock AV3 type

The lock for entrance doors with automatic multi-point locking with latches.

- the lock is equipped with a magnetic sensor on the frame for automatic locking by means of magnetic pulses.
- two strong steel latches are fully inserted into the corresponding bars ensuring a solid contact of the leaf and the frame. The force, while pressing the leaf to the frame is evenly distributed over the entire height of the door
- 3rd anti-burglary class according to DIN 18251-3 (class A in the VdS system)
- AV3 lock sealing elements ensure dynamic contact pressure.

The lock can be equipped with an electric drive and a switch for day mode (OneTouch function)



Standard cylinder

- It has protection against scanning, drilling out, and two steel pins
- The cylinder can be fixed from both sides. Even if the key is from one side of the door, it can be opened or closed
- From the other side, the door remains locked.



The cylinder with high security level

- 3D patented protection against scanning and drilling out, personal security card
- The cylinders rearrangement method prevents the key bending and breaking
- The key can be fixed from both sides.
- The key design makes it easier to open and close the door.



Fingerprint scanner

The built-in fingerprint scanner is much more convenient than traditional buttons. The control module is placed inside the door leaf without protruding outward.

- **Easy.** You can open the door simply with one finger and you decide who will get access.
- **Convenient.** Your «key» is always with you. Intelligent software adapts to your changing habits and even to the growth of your children's fingers.
- **Precise.** A standard key can be stolen and lost. Fingerprints are unique and cannot be duplicated.

The scanner is programmed using a smartphone or tablet (iOS/Android). Bluetooth is used for connection. An intruder simply will not be able to intercept the signal or reprogram the scanner from the outside.





**Turnkey
solutions**



Vikonda Company implements numerous projects for glazing residential and commercial facilities of any type:

- country houses
- shopping centers
- apartment property
- budgetary institutions, etc.











VIKONDA
windows and doors

vikonda.com