

WINDEX JSC is fully specialized, innovative, quality driven, and one of the leading manufacturers of plastic (PVC-u) windows/doors in Lithuania. Company offers wide range of different type's products and from different systems: windows (fixed, outward or inward opening), doors (ingoing or incoming balcony, terrace, sliding or folding doors) and windows/doors types customized specifically to individual needs, and adapted to different countries/regions (Scandinavia, France, and others).

WINDEX activity dates back to 1994, and is based on gained experience, focus on production/modern machinery, skilled experienced staff, high quality control standards, continuous improvement of manufacturing/administrative processes, fairness/partnerships to the customers/suppliers, and selection of best materials supplied by well-known European manufacturers (PROFINE group, WINKHAUS etc.). This guarantees high stability, functional perfection and long-lasting products. The philosophy of the company involves also the environmental and sustainable handling of the resources.

PVC-U windows and doors are economical, low maintenance, and easy care and do not need painting. Their material is antibacterial and antifungal. They are therefore ideal for allergy sufferers and are the preferred choice in clinics, hospitals, nurseries, and old people's homes. People are becoming increasingly concerned about the environmental impact of their purchasing decisions. Perhaps somewhat surprisingly, on all the major green issues – from energy efficiency and recycling, to sustainability and whole-life-costs – by purchasing PVC-u windows/doors you show you care about the environment.



#### Why WINDEX is the right partner if you decided to purchase PVC-u windows/doors?

- Expertise in production of PVC-u windows/doors
- Reliability in terms of quality, delivery, warranty and liabilities
- Competitive production time and price level
- Fast and efficient customer service
- Continuous improvement and process integration that expectations of our customers would be met.

#### **Quality and environment policy**

The production processes are strictly controlled and monitored in accordance with EU requirements and standards. Currently the quality standard is measured by quality management system DIN EN ISO 9001, environment management system DIN EN ISO 14001, CE guidance, constant implementation of LEAN production practices, and integration of all these processes, what guarantees the high quality our customers deserve.

Company is a member of Lithuanian Association of Manufacturers of Windows and Doors, and Kaunas Chamber of Commerce, Industry and Crafts.





#### **Production**

In 2011 WINDEX acquired one of the biggest and most modern production lines in Baltic countries. Manufacturing processes are semi-automated with implemented barcode system. Frames/sashes are welded with 6 head Rotox machinery, welding seams are cleaned with CNC machinery from outside, inside and under the gaskets in the frame corners, what ensures better tightness. There is separate production line for non-standard doors and windows. The annual window production capacity is  $300.000\,\mathrm{m}^2$ .









### Most popular windows

Most popular windows are produced out of KBE 5-chamber double seal system 70 mm installation depth profiles. Such windows meet everyday needs, stringent manufacturing requirements and are compliant with general construction standards. This is an excellent quality-price ratio option for customers which are looking for a good and economical solution.

One key ecological and economical advantage of PVC-U windows is the superior recyclability of their PVC constituents. In the face of dwindling raw material reserves all over the world we must take care in the utilization of our resources: for the protection of the environment and the elimination of all waste. In order to meet the requirements of the future, KBE is investing today in trendsetting products and the processes they need (development, technology, production, quality assurance, and logistics) – for great strides on the road to consistent recycling. The use of recycled material in our 70 mm standard system underscores our confidence in this subject. Recycled material is not visible in the finished window, and there are no differences in quality.



#### The main features of KBE70 system (basic layout):

- 5-chambers 70 mm installation depth KBE profile with best thermal insulation of up to  $U_w = 1.0 \text{ W/m}^2 \text{K}$  for statistical size 1230x1480 mm window with 36 mm thickness insulated 3-layer glass unit with two low emission glass floats
- · Lead-free "Greenline" profiles
- Double seal system with black or grey colour rubber gaskets
- 2-layer (24 mm) or 3-layer (36 mm) insulated glass units
- Galvanized steel reinforcement according to Profine GmbH technical requirements
- WinkHaus ActivePilot Concept fittings with minimum security level, Secustik handle





Fixed window



DK window (incoming)



TILT window (incoming)



Top-hung window (incoming)



Side-hung window (incoming)



Projecting side-hung (outgoing)



Projecting top-hung (outgoing)





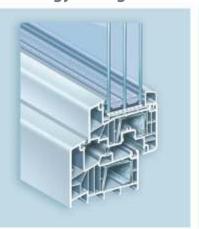








#### **Energy saving windows**



Energy saving windows are produced out of KÖMMERLING 88plus 6-chamber triple seal system 88 mm installation depth profiles. KÖMMERLING 88plus represents a quality level unmatched in the development of PVC-U window profiles. It is the intelligent underlying design of the new profile generation that has provided an unusual boost to value in the form of thermal and sound insulation, security, and economic efficiency. With KÖMMERLING 88plus a top product was created for a new quality of building and living. With 6-chamber technology and ability to glaze profiles with thicker insulated glass units in KÖMMERLING 88PLUS profile system it is possible to achieve the highest thermal conductivity and energy cost saving targets consistent with the requirements for the passive house.

#### The main features of KÖMMERLING 88 plus system (basic layout):

- 6-chambers 88 mm installation depth KÖMMERLING profile with best thermal insulation of up to U,, = 0,8 W/m<sup>2</sup>K for statistical size 1230x1480 mm window with 48 mm thickness insulated 3-layer glass unit with two low emission glass floats
- Lead-free "Greenline" profiles
- Triple seal system with black or grey colour rubber gaskets
- 3-layer (48 mm) insulated glass units
- Galvanized steel reinforcement according to Profine GmbH technical requirements
- WinkHaus ActivePilot Concept fittings with higher security level, Secustik handle



Fixed window



TILT&TURN window (incoming)



**TILT** window (incoming)



Top-hung window (incoming)



Side-hung window (incoming)

























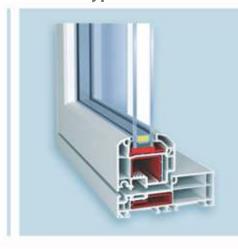




#### **Scandinavian type windows**

Unlike European type windows, the old architectural tradition used outward opening windows for Scandinavian homes. Scandinavian type windows are produced out of ALUPLAST Nordline 4/5-chamber single seal system 120 mm installation depth profiles. These are basically windows for the Danish, Norwegian and Swedish homes, which bring more light to the room than windows made from inward opening profile systems.





## The main features of ALUPLAST Nordline system (basic layout):

- 4/5-chambers 120 mm installation depth ALUPLAST Nordline profile with best thermal insulation of up to  $U_w = 0.9 \text{ W/m}^2\text{K}$  for statistical size 1230x1480 mm window with 36 mm thickness insulated 3-layer glass unit with two low emission glass floats
- Single seal system with grey colour rubber gaskets
- 2-layer (24 mm) or 3-layer (36 mm) insulated glass units
- Galvanized steel reinforcement according to Aluplast sp. z.o.o. technical requirements
- IPA or PN fittings





Fixed window



Top-hung window (outgoing)



Side-hung window (outgoing)



Projecting side-hung (outgoing)



Projecting top-hung (outgoing)



Top-swing window (outgoing)





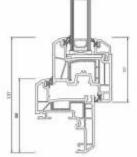


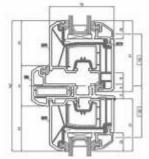
#### **Renovation type windows**



Adapting to the specifics of individual markets WINDEX manufactures also customized PVC-u renovation type windows for such markets as France, Switzerland and Italy. Renovation type windows are produced out of KBE 5-chamber double seal system 70 mm width profiles with special shape frame for renovation purposes. Specific distinctive features of renovation type windows are Z-type window frame shape and double-sash opening. Such window system solves not only the installation and finishing issues, but also heritage building renovation problems.







#### The main features of KBE70 renovation system (basic layout):

- 5-chambers 70 mm width depth KBE profile with best thermal insulation of up to  $U_w = 1.0 \text{ W/m}^2 \text{K}$  for statistical size  $1230 \times 1480 \text{ mm}$  window with 36 mm thickness insulated 3-layer glass unit with two low emission glass floats
- Z-shape 88 mm height frame profile
- · Lead-free "Greenline" profiles
- Double seal system with black or grey colour rubber gaskets
- 2-layer (24 mm) or 3-layer (36 mm) insulated glass units
- Galvanized steel reinforcement according to Profine GmbH technical requirements
- WinkHaus ActivePilot Concept fittings with minimum security level, Secustik handle



Fixed window



DK window (incoming)



TILT window (incoming)



Top-hung window (incoming)



TURN window (incoming)



Projecting side-hung (outgoing)



Projecting top-hung (outgoing)

















#### **Residential doors**

The front door is the visual representation of your entrance area – and you can naturalize it to individual character with a PVC-U door of KBE70 or KÖMMERLING 88PLUS profiles. These doors rank among the best that demanding homeowners can wish for today. They provide outstanding thermal insulation, perfect sound insulation, a high level of protection against forced entry, and a rich range of appealing designs. As a distinct visual element, the front door should merge seamlessly into the architecture of your home. There are virtually no limits to your imagination: with the wide range of colours and wood grain laminates you can design your own door, just as you wish. PVC-U doors not only look good, they are also extremely resistant to wind, cold, and driving rain. Their convincing features are longevity and permanent dimensional stability, and they are light resistant, colour fast, and very easy to clean. Painting and varnishing are a thing of the past. Doors opening might be either inward or outward direction.



#### The main features (basic layout):

- 4-chambers 70 mm installation depth KBE70 profile or 5-chambers 88 mm installation depth KÖMMERLING 88PLUS profile
- Lead-free "Greenline" profiles
- Double or triple seal system with black or grey colour rubber gaskets
- 2-layer or 3-layer insulated glass units
- 24, 36 or 48 mm thickness thermo panels (depending on profile system)
- Galvanized steel reinforcement according to Profine GmbH technical requirements
- · Stylish and durable Jocker hinges
- · Low 20 mm height thermo-aluminium threshold
- Well sealed and reliable 3 or 5 point locking latches
- Handle from both sides and cylinder lock















#### The Winkhaus roller cam

Cotter pin locking systems are an easy-to-install alternative for main or secondary entrance doors made of plastic. The lock has four additional drawing points and thereby guarantees a tighter seal and improved protection against opening of the door by force. The roller cams, adjustable manually, allow the door situation to be adapted accordingly and thus facilitate optimum locking. This allows door design tolerances to be balanced out.

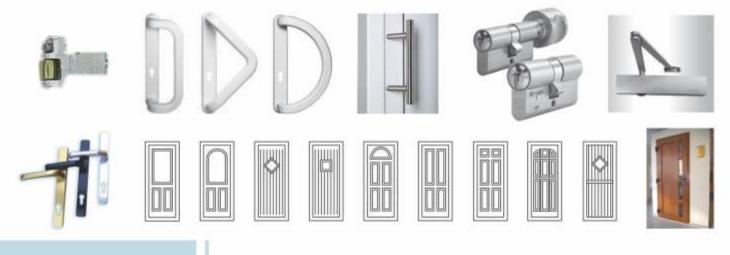
#### Winkhaus mushroom pin

The mushroom pins slide behind the security keep when the door is bolted. This prevents the door leaf and frame from being pulled apart horizontally. The contact pressure can be conveniently adjusted using a hexagon socket. This guarantees easy bolting and high door movement in the frame - a major plus for security and tightness at the door element.

## **Actively secured lock technology**

Very robust sintered metal gearwheels guarantee long-lasting function. When bolted, the lock mechanism is blocked. The roller cam and mushroom pin are also blocked securely and cannot be compressed either individually or together. Therefore the lock mechanism can therefore only be unblocked using the appropriate key and optionally unlocked by means of the locking cylinder or by actuating the handle.

#### **Options of accessories for residential doors:**







#### **Balcony doors**

- Common single or double-sash doors from KBE70 or KÖMMERLING 88plus profiles system
- TILT&TURN (incoming) balcony doors with same parameters as TILT&TURN window
- SIDE-HUNG (incoming or outgoing) balcony doors with high PVC window frame as threshold or low 20 mm height thermo-aluminium threshold



# 7

#### **Terrace doors**

- Common single or double-sash doors from KBE70 or KÖMMERLING 88plus profiles system
- SIDE-HUNG (incoming or outgoing) doors with low 20 mm height thermo-aluminium threshold, Jocker hinges, turn limiter
- 5-point locking latch or mushroom head multi-point locking system









#### **Parallel sliding-tilting doors**

It is never too late to make your living environment more beautiful, more worth living in, and more comfortable. Particularly renovations benefit from the parallel sliding-tilting door. For smaller sliding elements, the parallel sliding-tilting door is the ideal complement to the established lift/sliding door. Different to this, the sashes on the parallel sliding-tilting door can be tilted. The parallel sliding-tilting doors are made of the usual window profiles and so ensure a very high tightness owing to the sealing, which extends over two or three sealing levels, depending on the system. This benefits the thermal and sound insulation.

- Wide range of opening modes from KBE70 or KÖMMERLING 88plus profiles system
- Stable profile cross section with outstanding static properties for long service lives
- User definable measurements: sash sizes depending on the system up to 1.90 m wide x 2.10 m high
- Excellent thermal and sound insulation properties



#### **Folding doors**

Create an expansive scenic addition to your design project with folding doors which can be produced in numerous configurations. Door leafs can be folded to one side, split and folded to either side, or floating.

- Smooth operation, easy adjustable hinges, multi-point locking from KBE70 or KÖMMERLING 88 plus profiles system
- Stable profile cross section with outstanding static properties for long service lives
- User definable measurements: overall sizes depending on the system from 1.60 to 6.00 meters, maximum height of 2.40 m  $\,$
- Excellent thermal and sound insulation properties



#### Other type of doors





**Opening modes** 



two-part element with sliding sash and fixed glazing



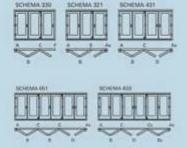
three-part element with sliding sash and fixed panes



four-part element with two sliding sashes and two fixed panes



three-part element with two sliding sashes and fixed glazing



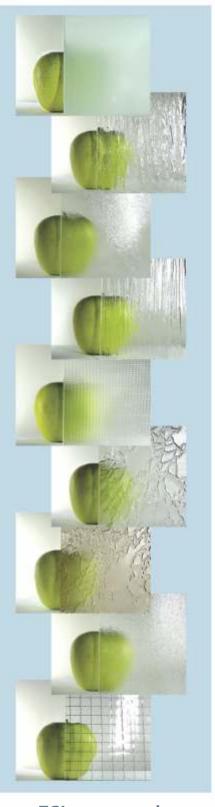








#### **Glazing options**



#### Thermal-insulating glazing

Thermal insulation properties of the glazing are better than single glass due to isolated dry chamber between the glasses reduces the heat transfer by convection mode. Low thermal specific conductivity of air is limiting the heat transfer in conduction way. The heat transfer reduces more when chamber of glazing is filled by gas of low conductivity (usually argon). Even greater effect of heat insulating can be achieved by double chambered glazing, but at least two glass packages must be cover by selective coating. The two-chambered glazing is made from three sheets of glass – thus consists two completely isolated chambers filled with argon gas.

#### Sound-insulating glazing

What part of noise will penetrate to the building depend on properties of window sound insulation. The most effective way to isolate the sound is use of laminated glass in the window glazing. Although all types of laminated glass has a sound-insulating properties, but there is a special laminated glass, which detain 2 - 5 dB more than others. Greater sound insulation effect can be achieved by double chambered glazing. Three sheets of glass, which are separated by two frames, make two-chambered glazing, thus result two completely isolated chambers filled with argon gas.

#### **Protective glazing**

Protective glazing provides adequate protection from hacking, vandalism, is fire-resistant, and protects from bullets and blast wave in emergency cases. Glazing with laminated glass may arise in mentioned cases, but its integrity will be preserved. The glass could be more resistant if the laminated glass would be toughened – thus the possibility of splits will reduce. Mechanical strength of toughened glass increase by 5 - 6 times and glass spills into small details with mild edge in the case of cleave. Laminated glass installed at glazing in order to: protect from ultraviolet radiation, improve the insulation properties of window or protect from sharp glass splinter in case if the glass would be crashed.

#### **Solar-control glazing**

Solar control glass skips only a certain part of sun rays, which ensure adequate lighting, what do not let to overheat the room. This glass helps to create "visual comfort" in room – there is enough daylight without dazzling sun flare. There are different kinds of solar control glasses with different sun protection factor, and light transmission values. Besides solar-control glass can be of various shades - silver, bronze, blue, pink, green, blue gray, blue. In order to avoid ultraviolet radiation effect for objects which are inside, it is appropriate to use the glass with a low ultraviolet radiation transmission coefficient in glazing. For example, it could be laminated glass.

#### Self-cleaning glazing

Self cleaning glass has a special coating that performs two functions: first - reacts in sunlight with ultraviolet (UV) radiation which breaks down organic dirt and, second – when glass becomes wet water draining from a glass surface with a stream but not the drops.

#### Reflective, darkened, tinted or ornament glass

In order to create a visual effect, it can be chosen glass of different colours and shades. Reflective or darkened glass is used for exterior facades. Ornament and enamel painted glass are used for creation of special image inside the buildings and for opaque partitions as well.

2-layer glass units with reflective glass are used in order to reflect the view and to create lower visibility of the internal view. Glazing with reflective glass characterizes not only reflection of view but also the property of solar control. Reflective glass like a mirror reflects objects. Because of this feature reflective glasses are very loved by architects, especially when you want to highlight an excellent strategic location of the house. Reflective glass also protects your home from out of sight during the day. Tinted glass is not only ideal for the implementation of complex architectural decisions but also reduce the entry of daylight into the room. This is especially important when working or living in a room where major parts of the glass are. Glazing with darken glass is used in order to get some window tone, darken glass is installing into the glazing. Darken glass does not characterize by high light transmission, but its colour creates a beautiful visual effect. It can be bronze, gray, green, pink and of many shades. Glazing with ornament glass can be chosen from more than 20 types of glass ornaments.

#### TGI spacers and sprosses



The TGI-Spacer is a bendable warm edge spacer bar that offers the ultimate combination of good thermal performance, high productivity and value for money. Made of a high performance synergy of stainless steel and polypropylene, the TGI-Spacer offers the highest levels of resistance against gas leakage. The heat transfer is minimized. TGI-Spacer features low Psi-values for the glass edge and improves Uw-Values and Window Energy Ratings whatever frame material is used.

The TGI-Spacer with warm edge technology insulates windows more effectively. While contributing to help you save more money on energy bills, it will also help the environment by reducing CO<sub>2</sub> emissions.

- Less condensation at the edge of the window when the room's air is moist, for example in a bath room
- $\bullet \ \mathsf{More} \, \mathsf{comfort} \, \mathsf{near} \, \mathsf{the} \, \mathsf{window} \, \mathsf{due} \, \mathsf{to} \, \mathsf{reduced} \, \mathsf{air} \, \mathsf{circulation}$
- High insulating properties
- Higher surface temperature of the inside glass edge
- Increased life of the window.

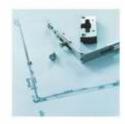




#### Winkhaus fittings

With the unique advantages many Winkhaus products enjoy an exclusive position in the market. The established Winkhaus enjoys an excellent reputation amongst manufacturers, architects, and public contracting bodies. As a leading European supplier of window hardware, Winkhaus offers the customers a sophisticated product range of premium quality turn and tilt, casement window, and tilt and slide hardware. Windex products are equipped with the solid locking systems for commercial entrance doors which also comply with the high security requirements. Optimum quality hardware technology and sophisticated locking systems provide effective protection against break-ins and theft. Winkhaus ActivPilot turn-tilt fitting system for PVC-u windows offers you and your customers real added value. Surprising details, discreet accents, ergonomic design and comprehensive functions characterize the overall concept of the fitting system. In short, its attractive design will be a crucial factor when it comes to your customers making a purchase decision. ActivPilot also offers other convincing arguments such as outstanding durability, easy-to-clean surfaces, intuitive operation and, last but not least, aesthetically pleasing windows.

ActivPilot gives you the ability to react flexibly to customer requests. Innovative multi-purpose components make it easy to retrofit features at any time. The use of a duo and/or tri functional element makes it simple to add a failsafe device with integrated limiter support and balcony door catch. The variable tilt device supports different sash tilt angles and thus fast, easily adjustable ventilation settings.













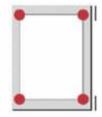






## Other options

















**Ventilation** 

























Contact information

JSC "Windex"

Draugystės st. 14, LT-51259 Kaunas

Lithuania

Mob.: +370 610 31838 Fax. +370 37 40 69 82 E-mail: export@windex.lt

www.windex.lt