

# WINDOW



The window is one of the most important element of a building. Advanced technologies make it possible to achieve ever better energy-saving and thermal insulation parameters. The choice of a window profile is one of the basic criteria of future satisfaction, comfort and lower bills for heating your home.

In our offer you will find solutions combining classics with modernity, allowing to achieve unusual shapes of windows with parameters which meet expectations of all types of buildings, including passive ones.

# STANDARD

## WINDOW EQUIPMENT

German profiles of Schüco meet rigorous standards of energy-saving construction

The minimum thickness of the glass is 4 mm. This ensures better safety and allows to make larger windows

Extremely transparent glazing packages SunEnergy made of low carbon glass

*\*For the package  
U = 0,5, Lt = 74%,  
g=53%*

The newest generation of fittings, standard equipped with octagonal bolts and four security keeps, bolted to steel frame reinforcements

Wide range of original, aluminum Schüco handles

Closed steel profile in the frame, improving security and window parameters

Warm edge spacer bar increases the thermal insulation parameters of the window

Sash lifter used by wider sashes, improving the functioning of the fittings and opening of the window



Modern style of glazing slats

Profile core available in four colours:  
white, gray (RAL7015),  
caramel and cream

EPDM weldable gasket  
with exceptional durability

Mechanism with 5-degree tilt,  
helping to match intensity  
room ventilation

Wide range  
of veneers:  
smooth, wood-like  
renolites, aluminum  
cladding available  
in every RAL-colour.

Wide range of different frame  
sash heights, and additional  
profiles

The standard height of the  
frame and sash combination  
is only 120 mm, which ensures  
a lot of light entering the room

Transport profile added  
below each window  
to increase security  
during the transport  
and provide comfort  
during assembly

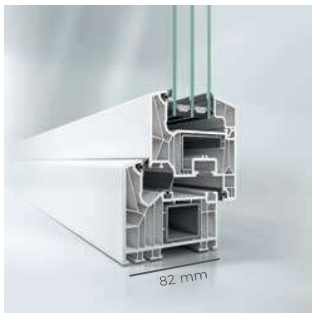
The technology of aesthetic  
corner joining, available thanks  
to the newest production lines

# SCHÜCO LIVING 82 MD/AS

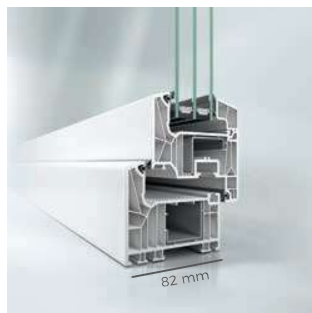
This is a proposal that meets the highest criteria for energy efficiency, tightness, functionality and design. Seven heat-insulating chambers with the installation depth of 82 mm and three innovative gaskets made of flexible EPDM material make it possible to enjoy a modern window combining high technical and aesthetic parameters.

Thanks to these advantages the windows based on the Living system can be installed even in rigorous passive houses. High flexibility of the material allows you to enjoy the functionality of the window for many years without having to replace the seals. In addition, the low folding height of the frame and sash (120 mm as standard) emphasizes the neat appearance and provides good lighting of the room.

Schüco Living 82 MD



Schüco Living 82 AS



**$U_w = 0,74 \text{ W/m}^2\text{K}^*$**   
**U-Factor =**  
 **$0.13 \text{ BTU/hr-ft}^2\text{-}^\circ\text{F}^{**}$**

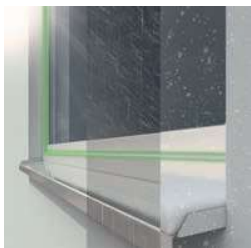
\*Parameter calculated for a reference window 1230 mm x 1480 mm,  $U_g = 0.5$ , with Multitech Premium warm edge spacer bow frame 9411 70 mm with closed steel 20271700 and sash 9431 83 mm with steel 20272500.

\*\*Uw-Value is based on the ISO/Passive House thermal performance rating program.

**$U_w = 0,77 \text{ W/m}^2\text{K}^*$**   
**U-Factor =**  
 **$0.14 \text{ BTU/hr-ft}^2\text{-}^\circ\text{F}^{**}$**

\*Parameter calculated for reference window 1230 mm x 1480 mm,  $U_g = 0.5$ , with Multitech Premium warm edge spacer bow frame 9421 70 mm with closed steel 20271700 and sash 9431 83 mm with steel 20272500.

\*\*Uw-Value is based on the ISO/Passive House thermal performance rating program.



EPDM has been used for over 50 years in industry and medicine. Numerous tests to which it has been subjected, clearly show that the use of EPDM in windows and doors allows for the highest tightness, and thus resistance to cold, noise and wind. For householders this means comfort of use and full satisfaction for many years.

A comparison of the durability of Schüco EPDM gaskets and other gaskets clearly shows that high-quality EPDM material remains highly elastic for a long time. A gasket made from another material loses elasticity significantly already in the first years of use and gradually becomes more and more brittle and fragile. After about 7 years, the seal will have lost about 50% of its elasticity.





## ENERGY SAVING WITH SCHÜCO LIVLNG, IT'S EASY!

- 7-chamber profile designed with optimized chamber geometry and 82 mm installation depth, providing excellent thermal insulation parameters.
- Factory inserted into the profile EPDM thermo-weldable gaskets of very high quality, providing optimum protection against wind, rain, and noise.
- MD system made in three-gasket AquaStop technology.
- Optimally selected glazing package (up to 52 mm) allows acoustic tightness at the level of 47dB, which allows you to find at home the desired peace and quiet.
- Burglar resistance is in accordance with DN EN 1627 (Rc2). Thanks to the high strength of plastic (high-impact PVC), increased depth of installation and appropriately selected fittings, burglars have a hard time.
- Original, aluminum handles with modern design and extreme durability. Optionally, they can be equipped with an "audible safety element". - patented Akustic system, blocking the possibility of opening the window from the outside.
- The possibility of using AwiKids fittings, allowing children only to tilt the window.
- Narrow profiles, in standard 120 mm, guarantee optimal access of light.
- Classical geometry with unflush sash contour.
- Aesthetic light grey seals in white profiles, black seals in veneered profiles.
- Aesthetic core in profiles ensuring harmonious appearance: dark grey in anthracite and caramel in wood-like profiles.
- Wide range of veneers: smooth, wood-like renolites, aluminum cladding available in every RAL-colour.
- Possibility of using a system of hidden hinges with sash weight up to 150 kg.



Meets the requirements of the Institute of Window Technology ift Rosenheim for Passive Construction ROSENHEIM for the variant with middle seal.

# SCHÜCO LIVING ALU INSIDE

This is definitely a top product. Created for those who desire the latest and most advanced technological solutions, combined with refined aesthetics.

The window is constructed on a 7-chamber profile and is successfully used in passive houses, where the most important aspect is energy savings. Certificate of the German Institute for Passive Houses in Darmstadt, confirms the fulfillment of rigorous standards, created for passive constructions. Modern, classic shape of the wing emphasizes its uniqueness, and a wide range of colors and above-average equipment make this window an exclusive element of any interior.

- Patented PVC Schüco Living Alu Inside profile system reinforced with aluminum partitions, certified by Passivhaus Institut Darmstadt.
- 82 mm frame width, 82 mm sash width.
- 7 thermo-insulated chambers in the frame and sash with the possibility of using additional thermal inserts increasing the thermal parameters.
- The windows are made with the use of three seals AquaStop technology increasing insulation and acoustic parameters, package in standard with the Sunenergy+.
- Warm edgspacer bow additionally increases thermal insulation parameters of the window.
- Standard installation of modern fittings with increased to 100 kg sash weight.
- Original, aluminum handles of modern design and extraordinary durability.
- AWI Kids package available which blocks the opening and only allows children to tilt the window.
- Wide range of veneers: smooth, wood-like renolites, aluminum cladding available in every RAL-colour.



**$U_w = 0,69 \text{ W/m}^2\text{K}^*$**   
**U-Factor =**  
 **$0.12 \text{ BTU/hr-ft}^2\text{-}^\circ\text{F}^{**}$**

\*Parameter calculated for a reference window 1230 mm x 1480 mm with Sunenergy+ glazing package and thermal inserts.

\*\*Uw-Value is based on the ISO/Passive House thermal performance rating program.



# SCHÜCO CT 70

CT 70 - is a very good window constructed on a 5-chamber profile. It is an ideal choice for those of you who look for a very good quality combined with a friendly price.

The sash is available in two variants to satisfy all technological and aesthetic needs. Providing very good thermal insulation, it also ensures good static performance, making it possible to construct large glazing.

- 5 thermo-insulating chambers in the frame and sash,
- Energy-saving SunEnergy glazing package  $U_g = 0,6$ ,  $U_g = 0,7$ ,
- Standard installation of modern fittings with increased to 100 kg sash weight,
- Original, aluminum handles with modern design and extraordinary durability. Optionally, they can be equipped with an „audible safety element“. - patented Akustic system, blocking the possibility of opening the window from the outside,
- Possibility of using a system of invisible, hidden hinges with sash weight up to 150 kg,
- AWI Kids package available which blocks the opening and only allows children to tilt the window,
- Wide range of veneers: smooth, wood-like renolites, aluminum cladding available in every RAL-colour.



WINDOW CLASSIC



WINDOW RONDO

**$U_w = 0,95 \text{ W/m}^2\text{K}^*$**

**U-Factor = 0.17 BTU/hr-ft<sup>2</sup>-°F\*\***

\*Parameter calculated for a reference window size of 1230 mm x 1480 mm with SunEnergy+ glazing unit.

\*\*Uw-Value is based on the ISO/Passive House thermal performance rating program.



# COMPARATIVE TABLE OF WINDOWS

Living 82

Living Alu Inside

CT 70

## THERMAL INSULATION PROPERTIES

Sash width [mm]	82	82	70
Frame depth [mm]	82	82	70
Number of thermo-insulated chambers in the sash	7	7	5
Number of heat-insulating chambers in the frame	7	7	5
3-gasket system AquaStop	✓	✓	-
Thermal insulation insert in frame and sash	-	+	-
Warm plastic frame	✓	✓	✓
Window slat with additional seal	✓	✓	✓
System corner connectors of the middle seals	✓	✓	-

## Uw coefficient of thermal transmittance of the reference window 1230\*1480 [mm] for individual glazing packages

SunEnergy+ glazing $U_g = 0,5 \text{ W/m}^2\text{K}$	0,74	0,69	-
SunEnergy glazing package $U_g = 0,6 \text{ W/m}^2\text{K}$	0,82	0,79	0,95

## FUNCTIONALITY

Number of anti-theft strikers in UR sash	4	4	4
Multi-stage tilt mechanism	✓	✓	✓
Handle misplacement blockade	✓	✓	✓
Sash guiding slide	✓	✓	✓
Bottom hinge with additional regulation	✓	✓	✓
Aluminum handle	✓	✓	✓
UR sash weight up to 100 kg	✓	✓	✓
Concealed hardware (up to 150 kg)	+	-	+
Balcony with low threshold	+	+	+
Pivot window system	-	-	+
Warranty period 5 years	✓	✓	✓

Dust seal in the frame	+	+	+
Thin-seal technology in veneer windows	✓	✓	✓
Grey seals in white windows	✓	✓	✓
Black seals in 1 and 2 ply veneered windows	✓	✓	✓
Aluminum sill protector in the balcony	+	+	+
Number of standard colors	33	33	33
Aluminum attachment cover system in any RAL color	+	+	+
Low thermally insulated balcony threshold	+	+	+
Outer stops replaced by UR hardware on Turn-Only sashes	✓	✓	✓

- <sup>1</sup> applies to wings on veneered windows
- ✓ standard equipment
- +
- additional equipment
- not available



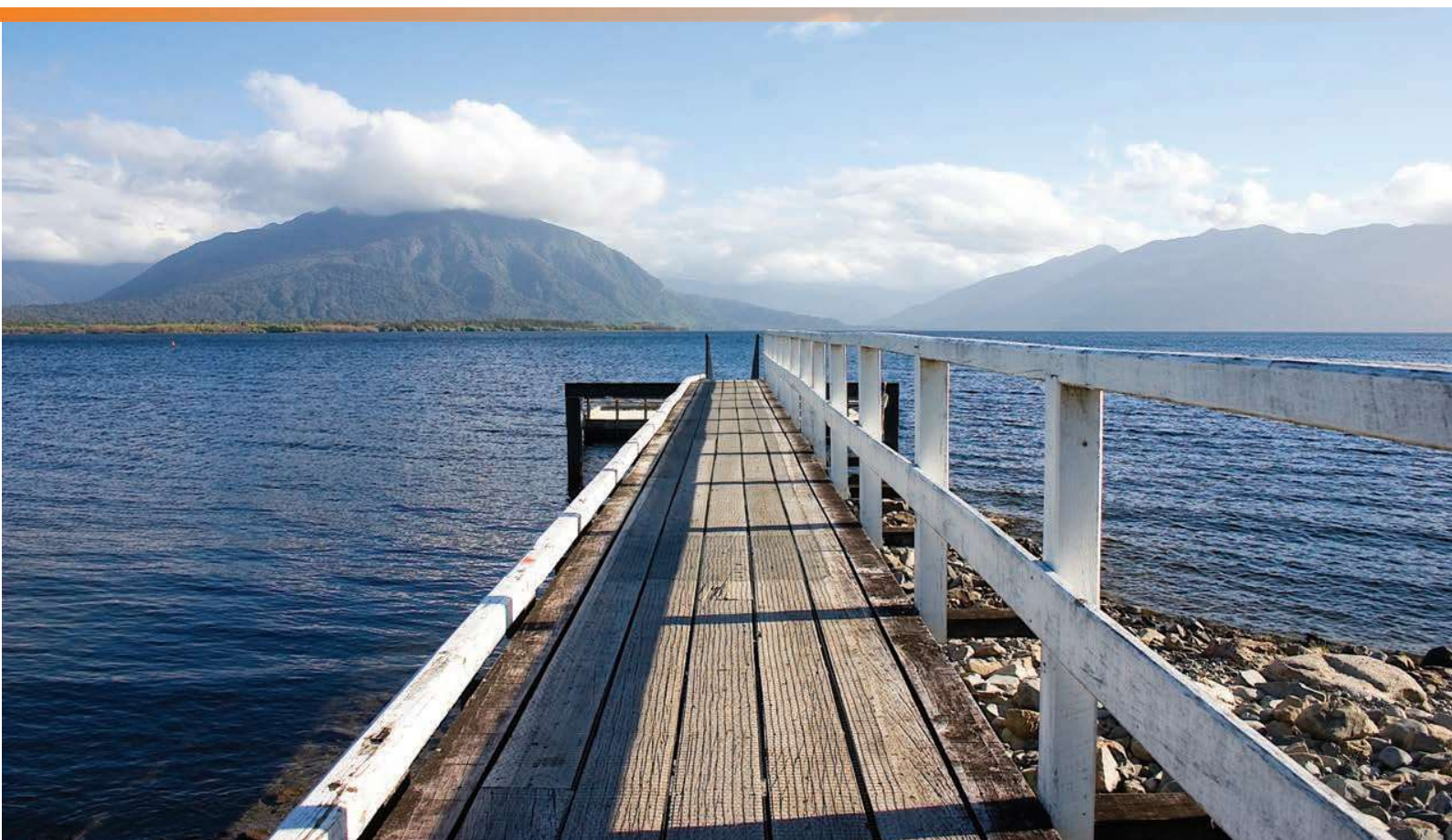
# SLIDING SYSTEMS

## The most important is the view behind the window...

For a few years now, large glazing's have been a frequent and natural choice for people, who fulfill their dreams of having their own home. Comfortable, spacious, with a captivating view.

Lighted rooms have very good influence on our health and mood. Regardless of the season we are close to nature, and we feel a part of it. Sliding doors are installed not only in newly built buildings. They are also designed in older houses, which thanks to them gain an interesting and attractive look and allow for modern arrangement.

- We have based the production of our sliding and terrace doors on the German Schüco technology,
- We manufacture both lift-and-slide and tilt-and-slide doors in a wide range of sizes,
- A low aluminum threshold with a thermal break equalizes the levels between the interior of the house and the terrace,
- It is a solution facilitating independent movement of children, the elderly or disabled people,
- We take care of comprehensive solutions, offering for sliding doors a system of roller blinds and mosquito nets, additionally increasing safety, and comfort of household members.



# SCHÜCO LIVINGSLIDE

Rooms full of light and phenomenal views? All this is possible thanks to the Schüco LivingSlide lift and slide door system. With a few simple movements, the terrace becomes an extension of the living room.

The Schüco LivingSlide system offers many design possibilities, both in new and modernized buildings.

The system has wings with a depth of 82 mm and is dimensionally consistent with the Schüco Living system, which provides access to a wide range of additional profiles, glazing beads and accessories. The Isash profile uses heat-weldable EPDM gaskets. After welding, they are soft in the inside corners and ensure optimal tightness and therefore warmth.

The excellent thermal isolation is also confirmed by a thermally isolated threshold and aluminum reinforcement profiles in the window frame, as well as a special thermal break integrated with additional isolations, which prevents the formation of thermal bridges, water condensation and the formation of drafts.

The system is also distinguished by an attractive design. The narrow central contact zone of the profiles ensures maximum illumination of the interior. Schüco LivingSlide extends the design freedom with a systemic surface finish concept and a wide range of colors.



**$U_w = 0,77 \text{ W/m}^2\text{K}^*$**

**U-Factor = 0.14 BTU/hr-ft<sup>2</sup>-°F\*\***

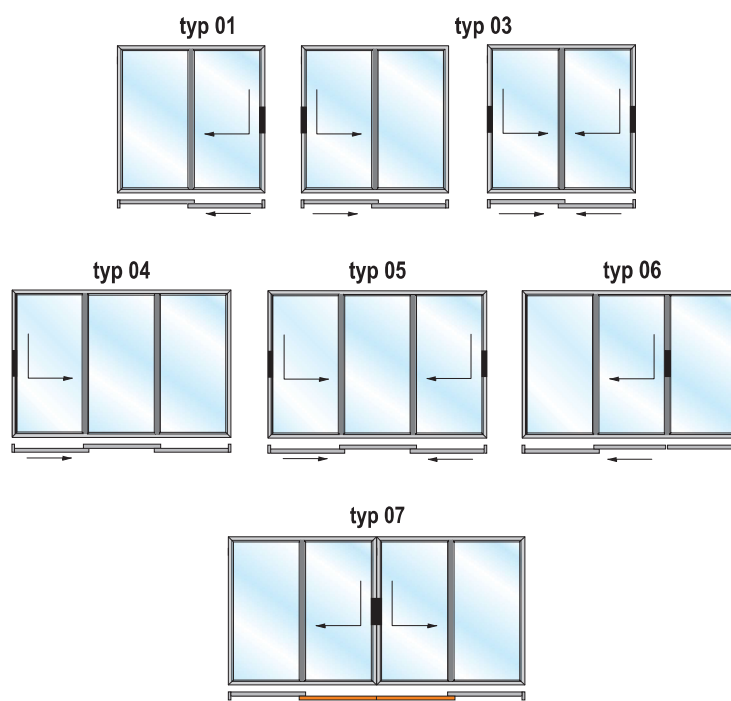
\*Parameter calculated for reference window 3500 mm x 2300 mm.  $U_g = 0.5$ .

\*\*Uw-Value is based on the ISO/Passive House thermal performance rating program.



## MAXIMUM COMFORT OF LIVING AND EXCELLENT VIEWS

- protection against noise thanks to optimal sound isolation,
- maximum ease of use - even with large components,
- maintenance and care are kept to a minimum according to the use of durable materials,
- installation depth 194 mm, sash 82 mm,
- a thermo-insulated threshold and heat-insulated aluminum reinforcement profiles in the frame provide excellent results, thermal insulation and optimal course of isotherms,
- low threshold, equalizing the levels between the interior of the house and the terrace,
- innovative, durable EPDM gaskets ensure proper functioning and tightness,
- the heat transfer coefficient for the frame is  $U_f = 1.3 \text{ W/m}^2\text{K}$ ,
- a special thermal break integrated with additional insulators prevents the formation "Thermal bridges",
- circumferential sealing at several levels between the sash and the frame prevents water condensation and the formation of drafts,
- optional panoramic glazing of the fixed part,
- the possibility of using the handle also from the outside,
- modern fittings in the option of increasing the load capacity of the sash to 400 kg,
- exceptionally transparent SunEnergy low-emission glass packages, the maximum thickness of the glazing is 52 mm,
- as standard with a warm edge spacer bar,
- a rich palette of available colors in three groups: trend, standard and special colors, as well as aluminum covers,
- aesthetic core for a harmonious look: dark gray, caramel, cream and white,
- possibility to use a sliding mosquito net,
- a variety of door opening options:



# HS EASYSLIDE

Ideal lift and slide doors for those seeking a compromise between very good thermal insulation parameters and a reasonable price. Used for exits to the terrace, balcony or winter garden.



- Frame width 168 mm, sash width 70 mm,
- Ideal solution for rooms with large glazing,
- Low aluminum threshold with a thermal break to even out the level between the inside of the house and the terrace,
- It is a solution facilitating independent movement of children, the elderly, or the disabled,
- The possibility of using the energy-saving SunEnergy,  $U_g = 0,7$ , glazing package,
- Warm edge spacer bar,
- Warm inter-pane spacer,
- Possibility of using fittings with increased resistance to burglary,
- Modern fitting with option of increased to 400 kg load capacity of the sash,
- Ergonomic and aesthetic handle, additional option to use handle also from outside,
- Special protection against impacts of the sliding sash,
- Wide range of wood veneers, possibility of using aluminum overlays (Aludeckschale) in all RAL colors,
- The ideal system for large glazing and panoramic views,
- Maximum frame width is 6500 mm and maximum height 2600 mm for white colours\*,
- System compatible with roller blinds and shutters,
- Possibility to use a sliding mosquito net,
- Variety of door opening options:

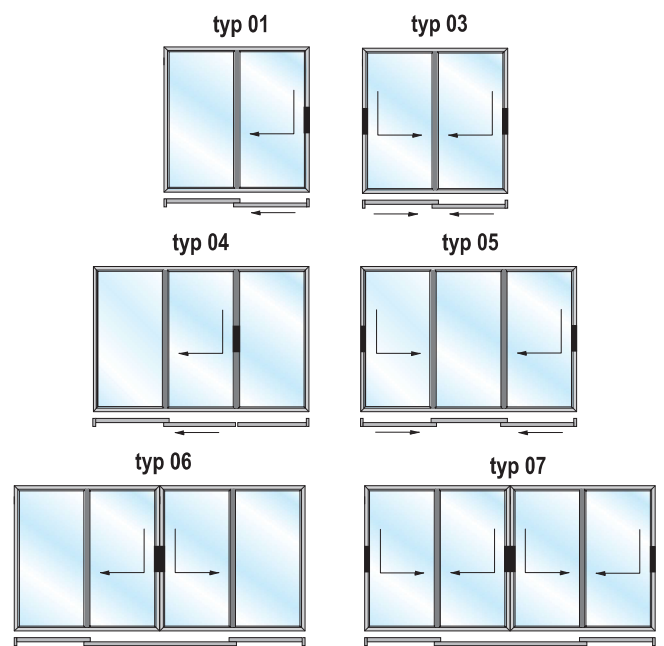


**$U_w = 1,1 \text{ W/m}^2\text{K}^*$**

**$U\text{-Factor} = 0.19 \text{ BTU/hr-ft}^2\text{-}^\circ\text{F}^{**}$**

\*Parameter calculated for reference window 3500 mm x 2300 mm,  $U_g = 0.7$ .

\*\*Uw-Value is based on the ISO/Passive House thermal performance rating program.



# SLIDING DOORS PSK IN SCHÜCO CT 70 AND LIVLNG SYSTEMS

Very interesting solution, which is an alternative for balcony doors. Using the PSK system we have the possibility of both tilting and sliding the sash.

- 5 thermal insulation chambers in leaf and frame in Schüco Corona CT 70 doors and 7 chambers in leaf and frame in Schüco Living doors,
- Frame height 78 mm and sash height 103 mm in CT 70 and frame height 80 mm and sash height 110 mm in Living,
- Modern ferrule with sash weight up to 160 kg, with possibility to increase it to 200 kg,
- The fitting supports automatic closing and opening of the sliding doors by turning the handle,
- The possibility of using the Comfort fitting, which allows for 6 mm wide unsealing around the entire perimeter while meeting the requirements of increased burglary resistance class RC2,
- Wide range of veneers: smooth, wood-like renolites, aluminum cladding available in every RAL-colour.

## PSK SCHÜCO LIVING

**$U_w = 0,68 \text{ W/m}^2\text{K}^*$**

**$U\text{-Factor} = 0.12 \text{ BTU/hr-ft}^2\text{-}^\circ\text{F}^{**}$**

## PSK SCHÜCO CT 70

**$U_w = 0,91 \text{ W/m}^2\text{K}^*$**

**$U\text{-Factor} = 0.16 \text{ BTU/hr-ft}^2\text{-}^\circ\text{F}^{**}$**

\*Coefficient for a door size 3500 mm x 2300 mm with glazing  $U_g = 0.5$ .

\*\*Coefficient for door size 3500 mm x 2300 mm with glazing  $U_g = 0.6$ .

\*\*\* $U_w$ -Value is based on the ISO/Passive House thermal performance rating program.



# GLAZING

The SunEnergy+ glazing package available from AWILUX Polska has excellent thermal insulation parameters, an unprecedentedly light and neutral color and exceptional transparency.

Thanks to all these parameters, householders in buildings with installed SunEnergy+ glazing can enjoy perfectly illuminated rooms. This is extremely important in our temperate climate. Well-lit rooms have recently become one of the leading architectural themes. There are various additional solutions that allow you to enjoy well-being and health in your own home at any time of the year. SunEnergy+ glazing is precisely such a solution

COMPARISON OF LIGHT AND ENERGY TRANSMISSION PARAMETERS

	SunEnergy+	Standard glazing	SunEnergy	Standard glazing
$U_g$ coefficient	0,5	0,5	1,1	1,0
Package construction	4/18/4/18/4	4/16/4/16/4	4/16/4	4/16/4
Light transmittance coefficient $L_T$	74	57	84	71
Energy transmittance $g$	53	35	64	50



# ORNAMENTAL GLASS

There are rooms in which we want to keep our privacy, however it is also important to have daylight which will reach them. Such rooms certainly include a bathroom, pantry, hall or utility room. How to reconcile these needs?

A good choice is a window with ornamental glass. It not only provides intimacy and allows us to enjoy the daylight but with the right choice it gives an interesting atmosphere to the room. Large selection of ornamental motifs will satisfy the most sophisticated taste of both people with traditional tastes and those who go hand in hand with the avantgarde.



Altdeutsch



Atlantic



Chinchilla



Crepi



Decormat



Delta



Flutes



Cathedral



Kura



Listral-K



Master-Carre



Master-Point



Niagara



Screen



Silvit



Waterdrop

# HANDLES

Both comfort and safety are the features characterizing our windows. We care not only about what is most visible, we are equally careful with the details. We know that they largely determine your satisfaction and comfort.

We use Schüco handles in the Design, Basis and Akustik versions, which are elements of very high quality, also in terms of aesthetics. The range of colors and interesting designs allow the handle to match the color of the window, with which it forms a perfect whole.



Basis



Akustik



with button



with key  
50Nm



with key  
100Nm



Design  
Akustik



Design  
with button



Design  
with key

# SAFE HOME, SAFE FAMILY

Modern windows not only provide the natural light, but also perform many additional functions, as burglary protection.

According to research, burglary in single-family houses most often occurs through windows and balcony doors with a low level of anti-burglary protection. For maximum security, we offer you packages checked by research institutes, caring for the safety of the home and its residents.

## AWI Safe (WH1)

- Circumferential fitting with 4 hooks in anti-burglary standard
- Standard handle with key 50 Nm

## AWI Safe+ (WH1)

- Circumferential fitting with 4 hooks in anti-burglary standard
- Standard handle with key 50 Nm

## AWI Protect (RC1N)

- All-round fitting with 4 hooks in anti-theft standard
- Standard handle with key 100 Nm
- Anti-drilling insert

## AWI Guard (RC2N)

- Full circumferential fitting in anti-burglary standard
- Minimum 7 anti-theft strikers in each sash
- Standard 100 Nm handle with key
- Anti-drilling insert
- Security system preventing movement of the sash in the frame
- Glued basic glass (certified glue)
- Reinforced steel

## AWI Guard+ (RC2)

- Full circumferential fitting with hooks in anti-theft standard
- Minimum 7 anti-theft strikers in each sash
- Standard 100 Nm handle with key
- Anti-drilling insert
- Security system preventing movement of the sash in the frame
- Anti-burglary glass A3/P4 (certified glue)
- Reinforced steel



## MONITORING

All offered packages can be additionally equipped with special sensors, which are connected to the home alarm system.

The sensors do not interfere with free movement in the house, they even allow you to open the window while you sleep, for example, even if the system is on. The alarm will sound only when the sash is opened.



# CUSTOM SOLUTIONS



## MULLIONS

In order to make the appearance of our house even more attractive, a corresponding division of the glass surface can be used, which gives the building a special character.

This division emphasizes the building's characteristic features or alters the visual appearance of the building. In our offer we have bars between the discs: 8 mm, 18 mm, 26 mm and 45 mm, Viennese bars and adhesives with widths: 27 mm, 34 mm, 45 mm and 65 mm. The available color spectrum makes it possible to adapt the bars to the most different window colors in order to create a uniform whole.

## AWI Kids

Safety of our children is the highest value. Home is a special place where we should create conditions for them to play without danger. AWI Kids is a solution for children's rooms, kindergartens and institutions where there are children.

In this version of the fitting, turning the handle tilts the sash, and only after turning the handle to the vertical position, the function of full window opening is activated. An additional safety feature is the special handle, which is locked with a keyed cylinder.

The AWI Kids package uses laminated safety glass. This is a type of glass which does not shatter when broken, and at the very point of impact there is a weave of radially spreading cracks.



## LOW THRESHOLD FOR BALCONY DOORS

The low threshold of balcony doors is an extremely convenient solution that eliminates the differences in level between the interior of the house and the terrace.

It allows for a full connection of indoor and outdoor space. For children, the elderly and the disabled, it is a condition of free movement in the building.