





The history of FAKRO dates back to 1991 in Nowy Sacz, Southern Poland with the production of a range of Roof Windows and Loft Ladders for the Polish market. Soon after the exportation of products began which contributed to the dynamic growth of FAKRO products across Europe.

Now after more than 25 years FAKRO are acknowledged as the second largest manufacturer of roof windows in the world with an estimated global market share in excess of 15%

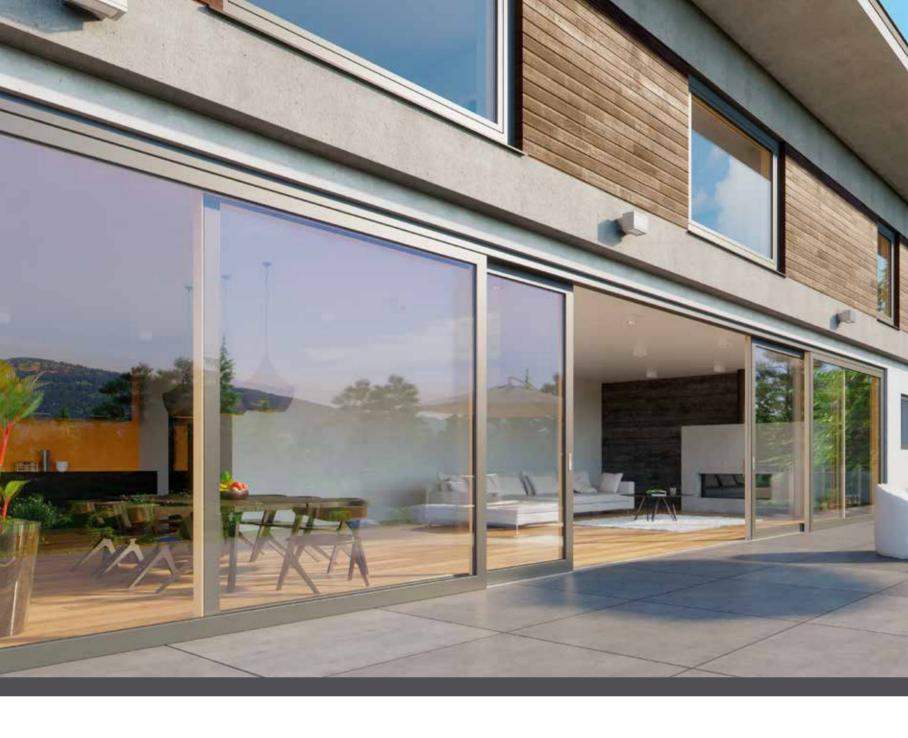
### POSITION OF FAKRO

in the field of joinery is defined by the production of top quality and high performing products. Windows installed in the roof are required to be of the highest durability to withstand the constant changes in weather conditions. Their design and workmanship must not only meet these demands but also incorporate quality, air and water tightness, comfort of operation and be aesthetically pleasing on the eye. FAKRO have been manufacturing an aluminium and timber clad roof windows to customers all across the world for more than 25 years and continue to lead the way in product innovation.

The vast experience gained in the design of the roof window has allowed us to transfer our knowledge and values to the manufacture of high quality INNOVIEW vertical windows and doors.



The FAKRO Group, which employs more than 3 300 people, consists of 12 production plants and 16 distribution companies located across Europe, Asia and America. Having an extensive distribution network means that our products are available wherever there is a demand. FAKRO products can be found in over 50 countries around the World. Over 100 design engineers work in the FAKRO Research & Development Centre which is located in the Group Head Office, where they transform ideas into innovative solutions and new products. Innovation is in the DNA of FAKRO and one of the main driving forces behind its continual development. This philosophy of thinking outside the box provides new solutions and greater functionality as well as high quality products. FAKRO have over 160 patent applications reflecting the desire of the Company to keep improving the products offered.



#### INNOVIEW BRAND NEW LOOK AT LIVING SPACE

FAKRO products are designed to change the concept of the interior and allow the room to be flooded with natural daylight. A home is no longer just about what is inside, its about blending the external environment into the living areas and creating interiors that are brought to life with natural daylight.



#### LARGE-SIZED WINDOWS AND DOORS CHANGE THE PERCEPTION OF LIVING SPACES

FAKRO windows open the space found inside the home. Having the ability to offer wide configurations of INNOVIEW windows and doors can transform the interior design and change the perspective as well as the view, making them an important consideration in the design of your home.





INNOVIEW windows can provide stunning views which reveal more with every day and bring the outside to the inside. The world seen through the windows of your home is more exciting than you could have ever expected. Just simply get a closer look.







1. VISIT WWW.FAKRO.COM/INNOVIEW OR SCAN QR CODE



- 2. DOWNLOAD AND INSTALL APP
- 3. RUN APP AND AIM YOUR MOBILE DEVICE AT PICTURE
- 4. SEE MORE

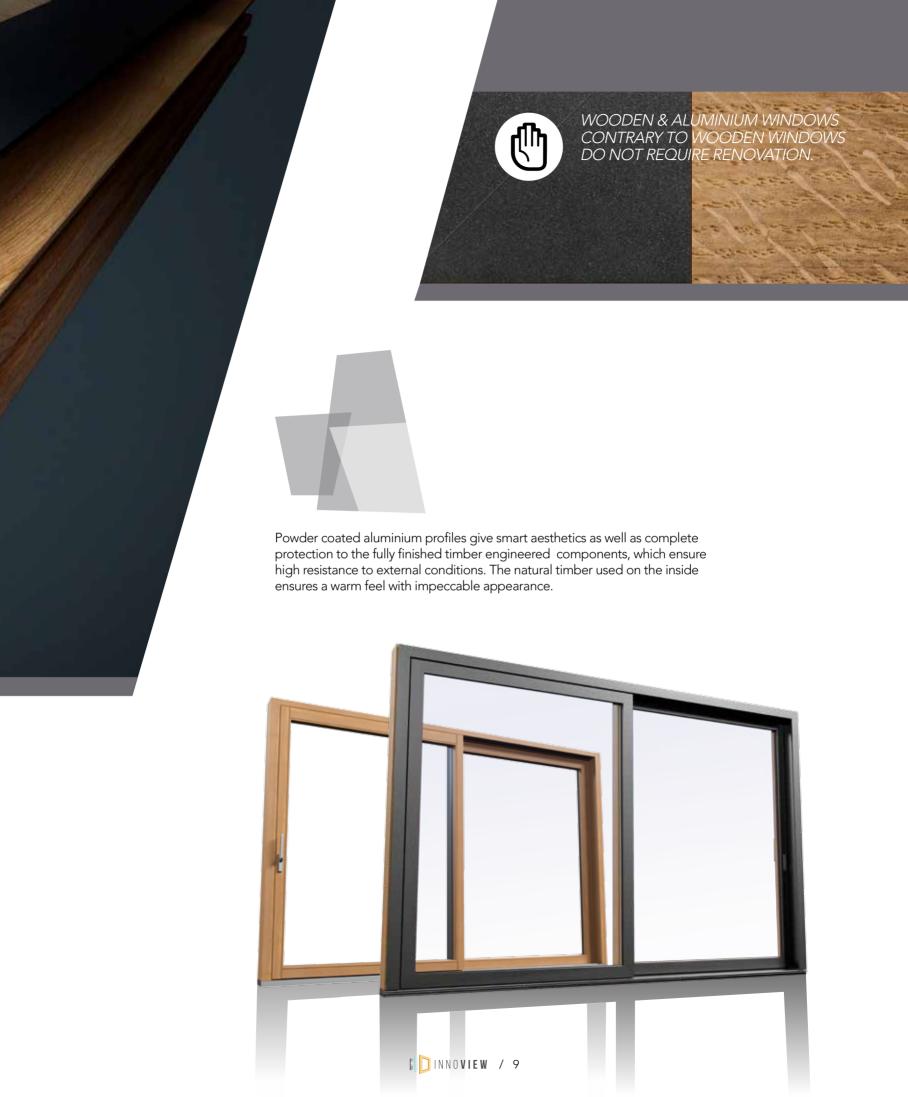


# PERFECT COMBINATION OF WOOD AND ALUMINIUM

The FAKRO design engineers have joined forces with the leaders in the supply of hardware and aluminium to develop the most advanced technology in combining aluminium profiles with timber which has resulted in a seamless connection to give a unique and visually appealing product.

The Innovative combination of wood and aluminium in INNOVIEW products is the engineering of tomorrow that you can enjoy today.







#### **DURABILITY**

Windows for many years to come

The innovative combination of the timber frame and aluminium cladding is not only a new trend in architecture and design, it also enhances the durability of vertical windows and doors. The technology applied and the appropriate materials allow for long-term operation of wooden-aluminium windows without the need for their maintenance. The latest hardware elements provided by Siegenia secure trouble-free use for many years to come. Advanced production techniques and high quality materials give longevity in both appearance and operation of INNOVIEW windows, where the requirements for maintenance is greatly reduced. Using the latest hardware components provided by Siegenia ensures trouble free operation and ease of use.

#### **SAFETY**

House as an oasis of peace and security

By using modern hardware and locking systems in conjunction with RC1 anti burglary glazing units as standard all INNOVIEW windows feature increased resistance to unwanted entry and provide the homeowner with the comfort of being both safe and secure. It is also possible to produce windows characterised by a greater number of security features in class RC2.

#### **ENERGY-EFFICIENCY**

#### Warmth in your house

In addition to providing rooms with a spectacular view and an abundance of natural daylight INNOVIEW windows and doors also provide excellent thermal performance. Windows are required to protect against heat loss and a vital element in achieving this is the glazing unit. INNOVIEW windows are available in both triple and quadruple glazed variants thus giving the homeowner a choice. With the larger timber sections applied to the quadruple glazing the energy efficient parameters of the window are further enhanced.

#### **COMFORT**

#### Operating the window is simply a pleasure

By using state of the art ironmongery and hardware the operation of the window is comfortable. Built in solutions ensuring long-term and trouble-free use will be appreciated by every user.

#### **TIGHTNESS**

Windows resistant to extreme weather conditions

With a quadruple sealing system the INNOVIEW windows offer complete protection from extreme weather conditions making them ideal for exposed locations.

Technical solutions applied in external seals prevent rainwater.

Technical solutions applied in external seals prevent rainwater from entering the room and having direct contact with timber structure.

#### **AESTHETICS**

#### Beauty in your house and all around

Using a modern design coupled with a wide range of colour options INNOVIEW windows and doors are available in a range of shapes and sizes giving the designer the opportunity to use their imagination in creating the ideal solution.

The latest technology and technical solutions in the use of timber and aluminium provide a perfect combination of appearance, functionality and ergonomics.

The seamless jointing method of the aluminium profiles provides a visually pleasing appearance.

The timber is perfectly finished on the inside and the handles come with a beautiful polished finish to create unique and very aesthetically pleasing product.



# INDIVIDUAL SOLUTIONS

Tailor-made windows

INNOVIEW windows and doors can be manufactured to suit individual projects allowing each property to have its own unique identity and allow the design to perfectly fit the character of the house.

With the choice of three types of aluminium profile, three types of timber and two options of timber profile coupled with a wide range of colour schemes (to both the internal and external finishes) it is now possible to create an infinite number of combinations.

#### **SELECTED WOOD** Wood types 14 Wood profile shapes 15 Wood aesthetics 16 17 Wood sample colours **DURABLE ALUMINIUM** CLADDING 19 Corner connection types 20 Aluminium profile options Sample aluminium colours 21 Profile SOFT 22 24 Profile MODERN Profile PURE 26 **ENERGY-EFFICIENT** GLAZING UNITS Double and tripe chamber glazing unit 29 Sample glazing structures 31 **CUTTING-EDGE HARDWARE** Concealed hinge side 34 35 Classic hinge side Hardware in class RC1 & RC2 36 37 Anti-burglary lock 38 Handle TECHNICAL DATA Wooden-aluminium systems 40 **LARGE-SIZED DOORS** Lift and slide doors HST 42 Lift and slide doors HST-SKY 48 Tilt and slide doors PSK 50 **COLOURS** Sample wood colours 52 Sample aluminium cladding colours 53 **AWNING BLINDS** FOR VERTICAL WINDOWS

**CAREFULLY** 

Advantages of awning blinds

54



Timber has traditionally been used in the construction industry for many centuries due to its durability and ecofriendly properties. The use of selected timber in the construction of joinery ensures a very high thermal insulation performance as well as providing a rigid and stable structure even when used with large glazing areas. The fully finished INNOVIEW Timber windows and doors provide a modern and pleasing style to the room that will be long lasting in performance and appearance



#### **WOOD TYPES**

INNOVIEW windows and doors are available in three species of timber allowing a choice to suit the internal décor.

#### Meranti

- a hardwood that offers high durability and resistance to moisture.

#### Oak

 a hardwood that gives high strength and resistance to abrasion.

#### **Pine**

 high strength, durability and resistance to moisture.







#### **WOOD PROFILE SHAPES**

Two finish options of the sash inner side allow individual selection of windows to suit many room types:



#### Wooden profile Classic

- With a slight angled profile of 12° to give a soft and smooth line. This angle is the same as that of the FAKRO roof windows and will naturally allow the use of FAKRO internal accessories.



### Wooden profile Regular - This is a straight and more modern profile

- This is a straight and more modern profile which is designed for use with interiors that have a more modern feel to them.



# **AESTHETICS** & COLOURS

Modern techniques allow the timber elements to be offered in different colours. Complete RAL palette in two types of finish – matt and satin in connection with specially designed covering structures (including wood-like layers) enables complete freedom in window design.

By applying modern colours it is easy to adapt the character of the room from classic to very modern.





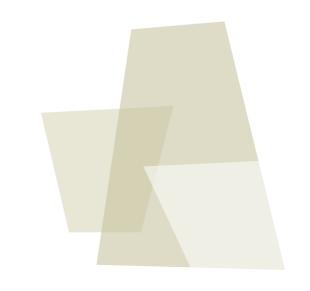
### SAMPLE WOOD COLOURS



# DURABLE ALUMINIUM CLADDING

Aluminium cladding provides excellent resistance to the ever changing external weather conditions and by using the highest quality raw material INNOVIEW windows and doors are extremely durable, easy to maintain and very aesthetically pleasing on the eye. This type of construction also provides the perfect protection to the wooden internal elements, while enhanced durability eliminates the need for maintenance. An additional benefit is the increased rigidity of the complete structure.



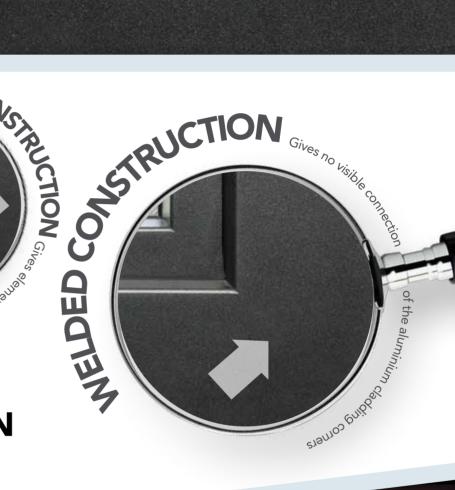




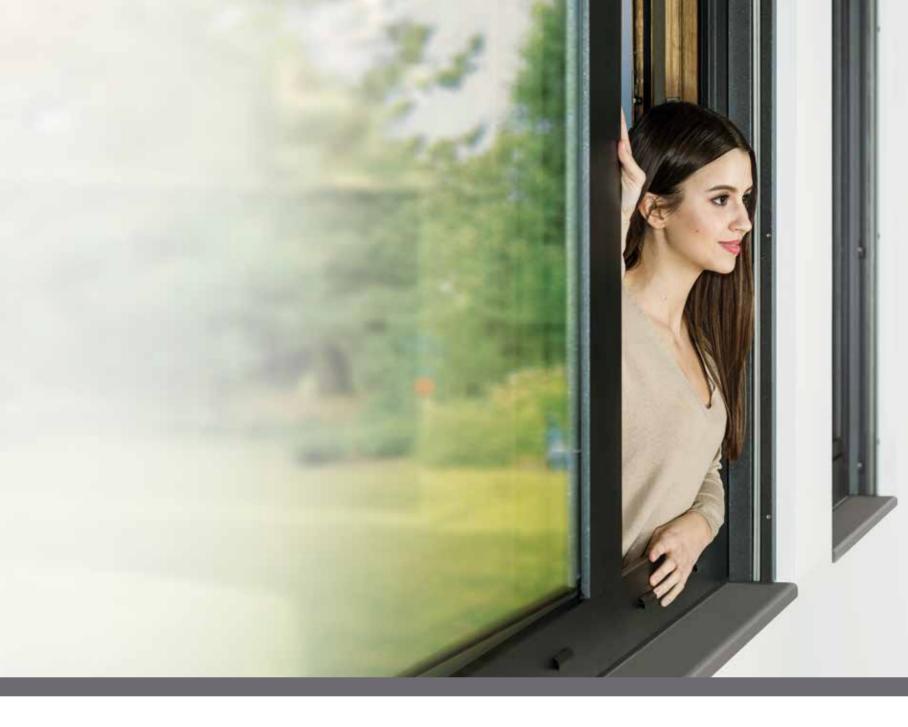
PERFECTLY SMOOTH ALUMINIUM CORNERS WITH NO VISIBLE WELDS TO GIVE A SEAMLESS LOOK.



CORNER CONNECTION TYPES







#### **ALUMINIUM PROFILE OPTIONS**

The main feature and hallmark of INNOVIEW windows is shape of the outer aluminium cladding – available in three options: SOFT, MODERN and PURE.



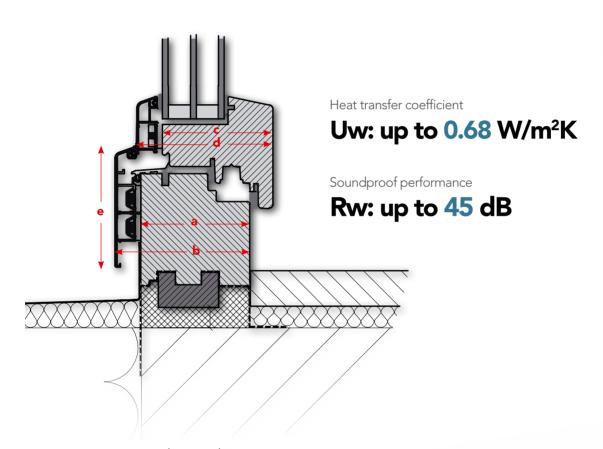






# SOFT

A classic shape for external sash profiles found in many solutions. With a soft and delicate shape the profile blends perfectly well with both classic and more modern architectural designs. The SOFT profile covers the widest range of options available and is characterised by high functionality and a classic appearance, whilst giving a high level of performance that can be applied to many universal applications.



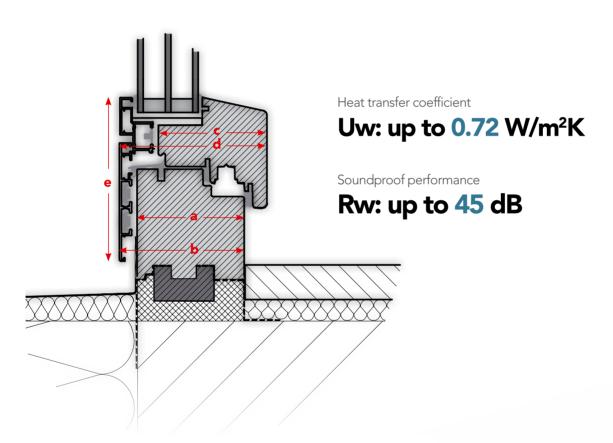
SOFT		68 mm	78 mm	92 mm
Aluminium cladding height (e)		66 mm / 86 mm / 96 mm		
Frame thickness	Wood (a)	68 mm	78 mm	92 mm
	Wood + aluminium (b)	87 mm	97 mm	111 mm
Sash thickness	Wood (c)	69 mm	79 mm	93 mm
	Wood + aluminium (d)	88 mm	98 mm	112 mm
Threshold sizes of a single chamber (excluding fixed windows and hidden sashes)		305 – 1500 x 310 - 1500 mm 305 – 1100 x 310 – 2200 mm		



# **MODERN**

A modern sash design which is set flush into the profile of the window frame to create a one plane visual effect. The special shape of the aluminium sash which moves the window pane 15mm further forward that more traditional design, allows for the use of a wider glazing unit with a smaller timber section.

The MODERN profile lends itself to modern architectural designs and brings a new design to joinery products.

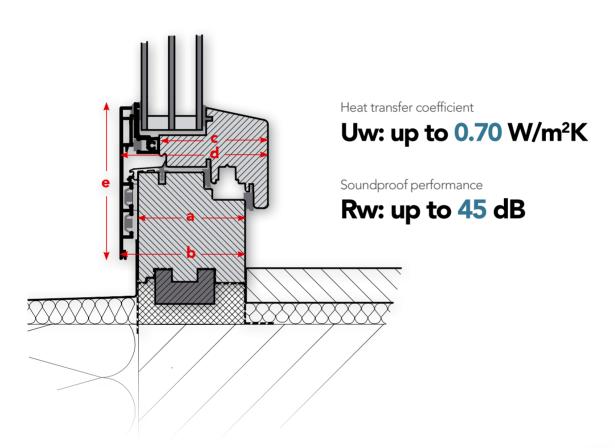


MODERN		68 mm	78 mm	92 mm
Aluminium cladding height (e)		66 mm / 86 mm		
Frame thickness	Wood (a)	68 mm	78 mm	92 mm
	Wood + aluminium (b)	81 mm	91 mm	105 mm
Sash thickness	Wood (c)	69 mm	79 mm	93 mm
	Wood + aluminium (d)	97 mm	107 mm	121 mm
Threshold sizes of a single chamber (excluding fixed windows and hidden sashes)		305 – 1500 x 310 - 1500 mm 305 – 1100 x 310 – 2200 mm		



## **PURE**

A pure and simple design that incorporates a flat aluminium surface with a very modern shape. PURE is characterized by the use of a concealed sash profile which creates the effect of a single frame (as in the case with fixed windows). With the sash hidden behind the frame it gives the impression that it is non opening, but it remains fully functional. This gives the design the appearance of a modern and minimalist building.



PURE		68 mm	78 mm	92 mm
Aluminium cladding height (e)		81 mm / 100 mm / 110 mm		
Frame thickness	Wood (a)	68 mm	78 mm	92 mm
	Wood + aluminium (b)	81 mm	91 mm	105 mm
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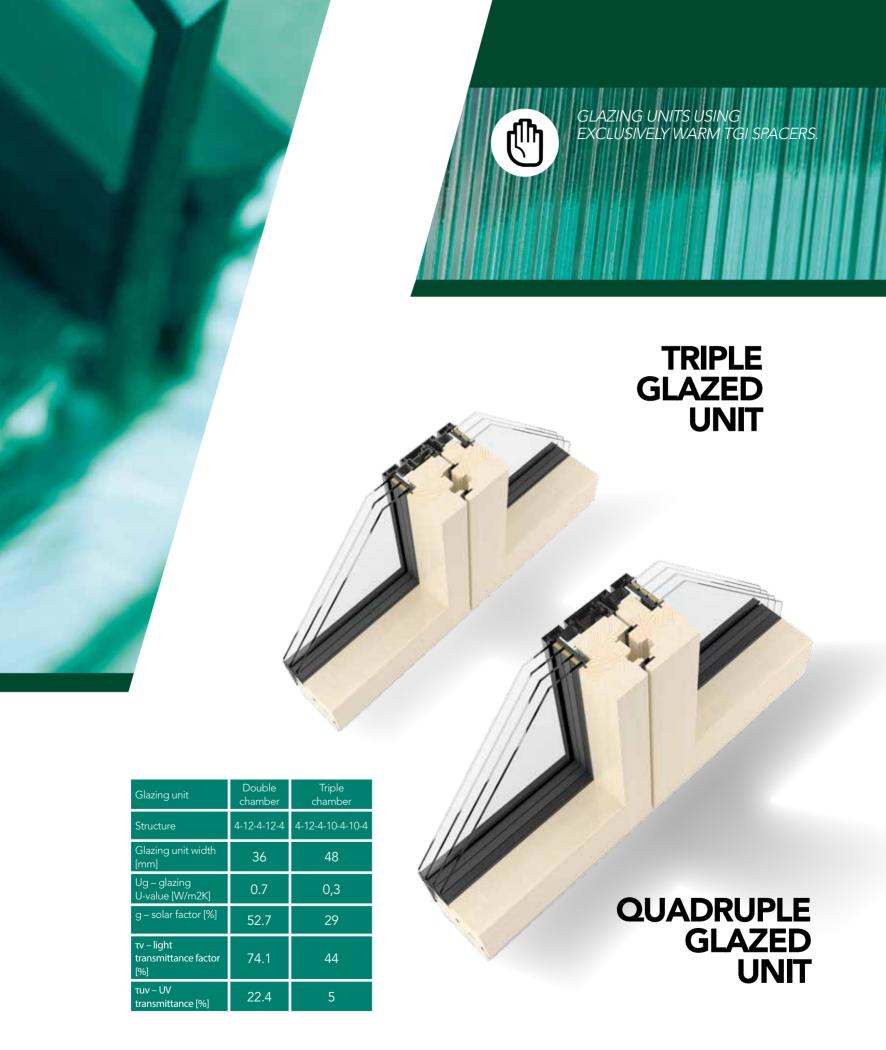
# ENERGY-EFFICIENT GLAZING UNITS

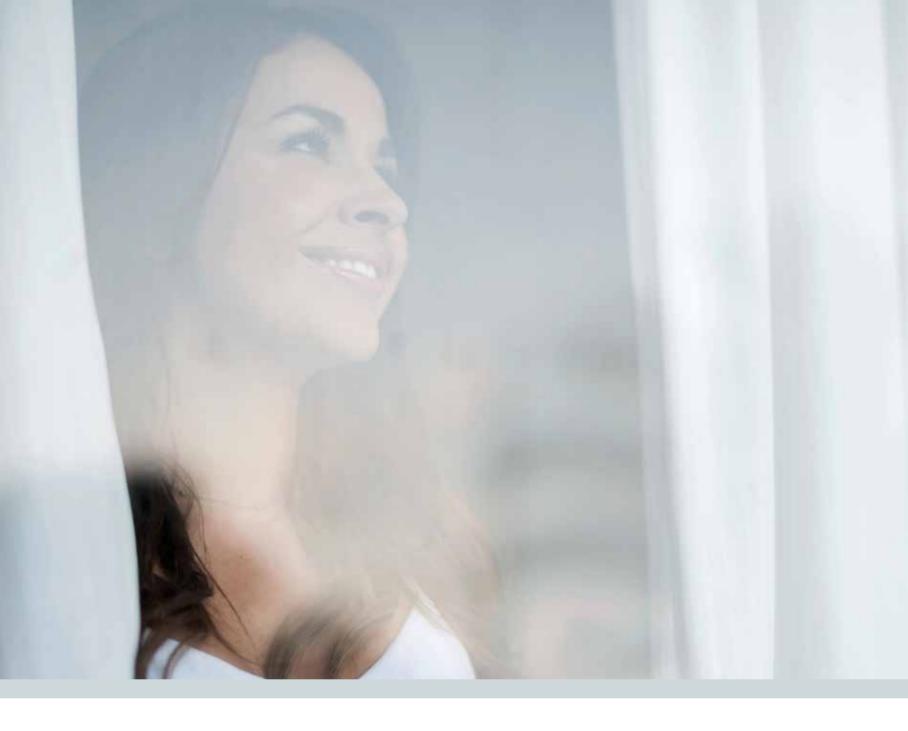
To enhance the thermal performance of the glazing units they come with warm and durable spacers. They all are constructed with low emission coasting to reduce heat gain in the room and the glazing cavity is filled with argon, an inert gas.

### **ENERGY BALANCE**

INNOVIEW windows can be equipped with energy-efficient glazing units which not only allow for the influx of natural light, but also ensure high energy savings. Large-sized windows also act as means of passive heating on sunny winter days. Living rooms with large glass areas on the south or south-west elevation feature very good exposure to the sun. Naturally, warm rays of the sun heat up the room, reducing the heat demand in the building during winter days.







INNOVIEW windows do not contain silicone which over time loses its quality and aesthetic parameters. The glazing unit used in all INNOVIEW windows is fitted to the frame by the use of seals made from EPDM material to give a secure and durable connection of glass to the timber. This is not only much more aesthetically pleasing but most importantly it gives a very high level of tightness and resistance to the external weather conditions.





GLAZING UNIT IS MOUNTED IN THE SASH WOODEN STRUCTURE BY MEANS OF "DRY GLAZING" TECHNIQUE. SEALS ARE APPLIED INSTEAD OF SILICONE.

### SAMPLE GLAZING STRUCTURES



ORN NIAGARA



SGG WATERFALL



SGG MASTER-POINT



SGG ALTDEUTCH



SGG WATERDROP



SGG SILVIT



SGG MASTER-CARRE



**ORN SATINOVO** 



SGG MIRASTAR

Should the glazing unit need to be replaced it is a simple and non-inasive operation. In direct contrast to traditional wooden windows or timber-aluminium combi windows there is no requirement to remove glazing beads and remove silicone etc. The use of a dry glazing technique and aluminium profiles it is a simple operation to remove the external profiles and replace the glazing unit.

The ability to offer glazing with

through the glass

a clearly marked structure not only gives very good aesthetics it also gives the feeling of privacy by dispersing the view



**Special sliders** and a roller lifter ensure that the positioning of the sash in the window frame is always correct. This allows for comfortable closing and easy locking of the window or door which leads to increased durability and ensures a long service life of the window.



**Mushroom cam** with integrated height adjustment automatically adapts to the hardware and saves the location, thus ensuring optimum position and durable closing system.





#### MULTI-POINT LOCK HARDWARE

Very easy operation of any type of the sash irrespective of its size.

### MULTI-FUNCTIONAL CORNER

In comparison to other corners, it can simultaneously perform the following functions:

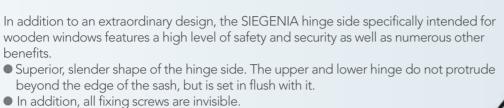
- tilt fastener
- locking by means of rotary mushroom cam
- sash lifter
- lock of improper sash operation



### CONCEALED HINGE SIDE



#### **CLASSIC HINGE SIDE**



• Range of use up to 150 kg with identical hinge dimensions.

• Hinge lined with plastic to reduce friction.

Integrated window opening restrictor.

• Anti-burglary security when the window left ajar.

Possibility to use covers or lacquering.



#### **AESTHETICS**

Hinges do not protrude beyond the edges of the sash as they are set in flush with it, while screws are concealed by hinges.



#### **HARDWARE IN SAFETY CLASS**



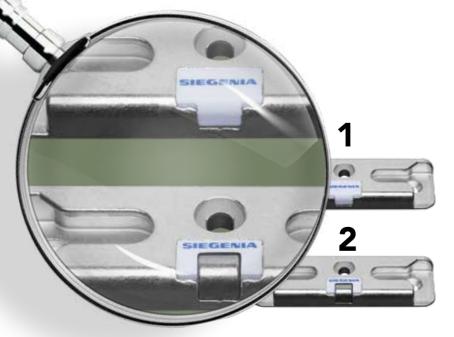




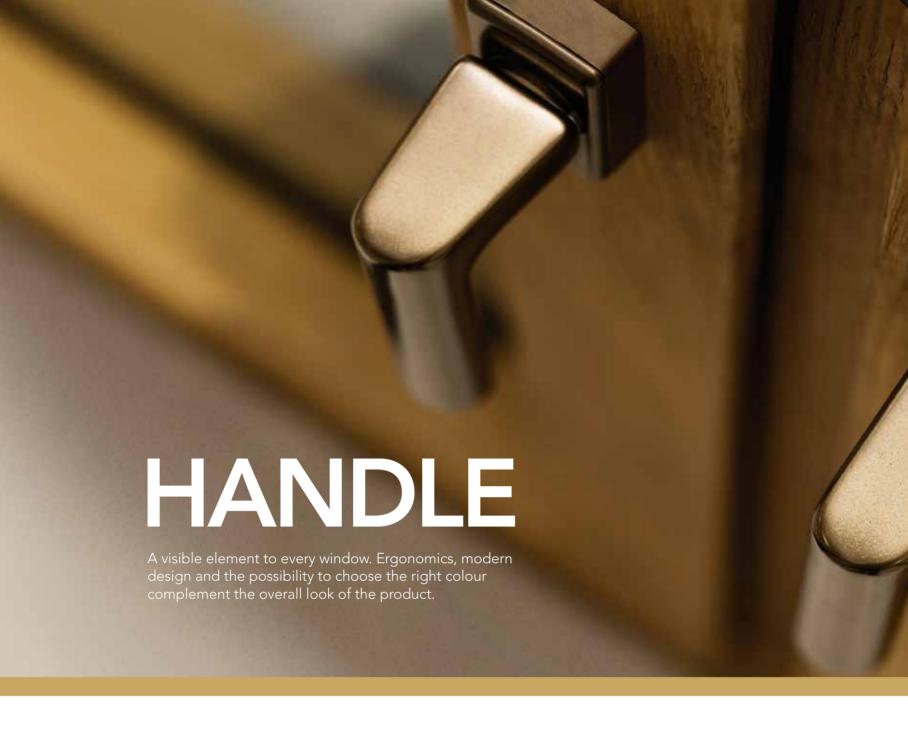
STANDARD WINDOWS ARE MANUFACTURED IN RC1 SAFETY CLASS. POSSIBILITY OF EXTENSION TO RC2 SAFETY CLASS FOR THE WHOLE STRUCTURE.

# ANTI-BURGLARY LOCK

- High security level.
- Comfort of operation thanks to the use of roller lifter.
- In combination with rotary mushroom cam enables easy window operation.
- Resistant to wear.
- Attractive design of anti-burglary locks. Homogeneous appearance with other frame elements thanks to them being the same length.







#### ATLANTA HOPPE



#### LUXEMBURG HOPPE



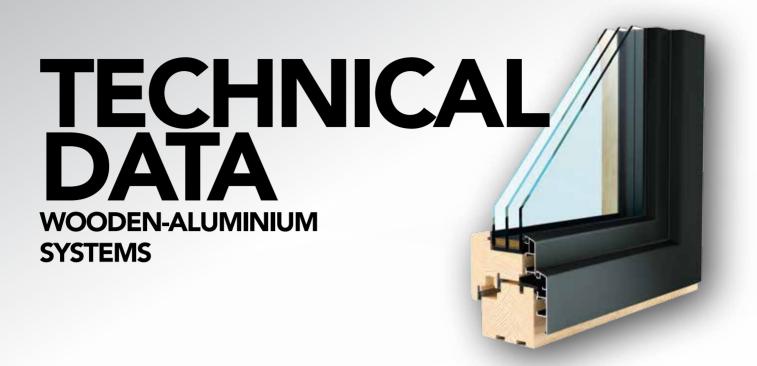
### **AMSTERDAM**





### **TOULON**HOPPE





### **SOFT**

INNER FRAME	Wood Pine / Oak / Meranti (exotic)	
WOOD CROSS-SECTION THICKNESS	68 mm, 78 mm, 92 mm	
WOOD FINISH OPTIONS	CLASSIC REGULAR	
STRUCTURES POSSIBLE TO BE MANUFACTURED	<ul> <li>Tilt and turn window</li> <li>Fixed window</li> <li>Arc window</li> <li>Multi-sash windows with fixed mullion</li> <li>Multi-sash windows with movable mullion</li> <li>Structural mullion bar</li> <li>Balcony doors with low aluminium threshold</li> <li>Tilt and slide doors PSK</li> <li>Lift and slide doors HST</li> </ul>	
BENDING OF SASH AND FRAME PROFILES	Rmin = 550 mm	
OUTER FRAME	High-strength aluminium cladding	
CORNER CONNECTION	WELDED KNEADED	
CLADDING HEIGHT ON FRAME	66 mm, 86 mm (standard), 96 mm	
HARDWARE	SIEGENIA AXXENT CONCEALED HINGE SIDE SIEGENIA CLASSIC HINGE SIDE	
HARDWARE SAFETY CLASS	RC1 AS STANDARD RC2	
SEALS	4	
GLAZING UNIT TYPE	TRIPLE GLAZING (THREE PANES)	QUADRUPLE GLAZING (FOUR PANES)
GLAZING UNIT THICKNESS	36-64 mm	48-64 mm
Glazing U-value [W/m²K]	0.5 W/m <sup>2</sup> K	0.3 W/m²K
Window U-value [W/m²K]	0.82 W/m²K	0.68 W/m²K
Soundproof performance Rw	up to 45dB	up to 45dB





### **MODERN**

### **PURE**

14/	Dime	/ Oak	/ Meranti	/\
vvood	rine /	Oak .	/ ivieranti	(exolic)

68 mm, 78 mm, 92 mm

#### CLASSIC **REGULAR**

- Tilt and turn window
- Fixed window
- Multi-sash windows with fixed mullion
   Multi-sash windows with movable mullion
   Structural mullion bar
- Balcony doors with low aluminium threshold
  Tilt and slide doors PSK
  Lift and slide doors HST

#### Rmin = 360 mm

High-strength aluminium cladding

WELDED **KNEADED** 

66 mm, 86 mm (standard)

SIEGENIA AXXENT CONCEALED HINGE SIDE SIEGENIA CLASSIC HINGE SIDE

RC1 AS STANDARD

TRIPLE GLAZING (THREE PANES)	QUADRUPLE GLAZING (FOUR PANES)
36-64 mm	48-64 mm
0.5 W/m <sup>2</sup> K	0.3 W/m <sup>2</sup> K
0.85 W/m²K	0.72 W/m²K
up to45dB	up to 45dB

Wood Pine / Oak / Meranti (exotic)

68 mm, 78 mm, 92 mm

#### CLASSIC REGULAR

- Tilt and turn window
- Fixed window
- Multi-sash windows with fixed mullion
  Multi-sash windows with movable mullion
  Structural mullion bar
- Balcony doors with low aluminium threshold
  Tilt and slide doors PSK
  Lift and slide doors HST

High-strength aluminium cladding

WELDED KNEADED

81 mm, 100 mm, 110 mm (standard)

SIEGENIA AXXENT CONCEALED HINGE SIDE SIEGENIA CLASSIC HINGE SIDE

RC1 AS STANDARD

4		
TRIPLE GLAZING (THREE PANES)	QUADRUPLE GLAZING (FOUR PANES)	
36-64 mm	48-64 mm	
0.5 W/m <sup>2</sup> K	0.3 W/m <sup>2</sup> K	
0.83 W/m <sup>2</sup> K	0.70 W/m <sup>2</sup> K	
up to 45dB	up to 45dB	



## LIFT AND SLIDE DOORS INNOVIEW HST

Large-sized doors are setting new trends in the construction industry which change the perception of living spaces. Opportunities they offer are invaluable, while the perception of staying in the building is changing significantly. Applying large, completely usable, easily opened, safe and aesthetically pleasing glazing brings to our lives an added value. Proximity to the environment, nature as well as the fusion of the building interior with its surroundings. Large glazed areas offer spectacular views and the ability to see vivid pictures behind the window.



provide the room with even greater amount of natural light.

When in the open position as well as during the opening they do not occupy additional space in the room. They enhance visual space of the room.





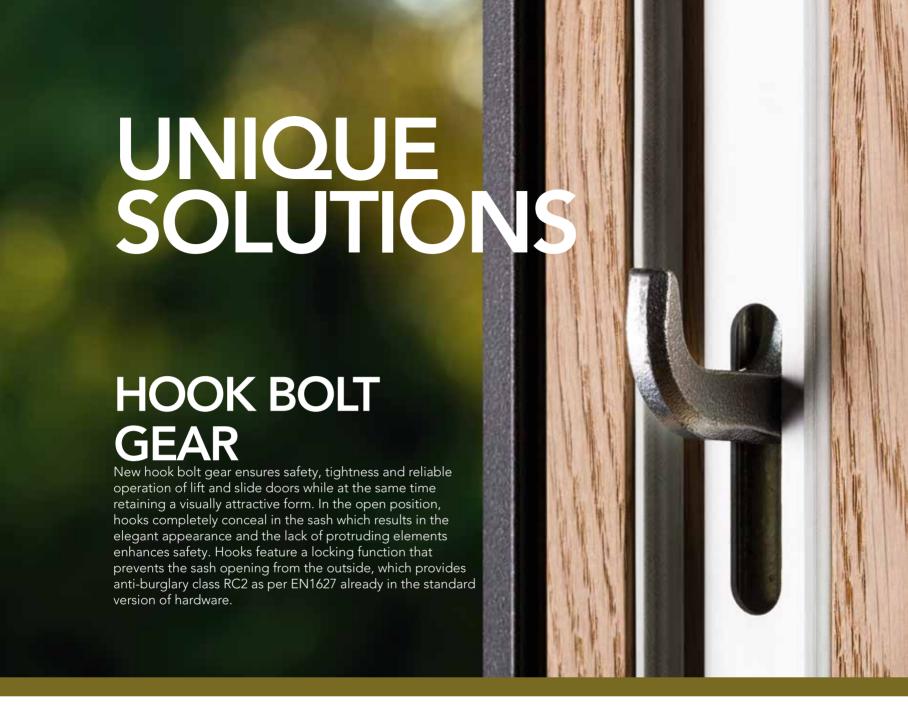




### Electrically opened INNOVIEW HST doors

Electrically operated mechanism opens, closes and locks the sash, moving glass panes to the desired position. Controlling is very convenient by means of the remote control or the switch situated on the sash. Ideal solution for people who appreciate ultimate comfort. This solution allows to operate single- and double-sash lift and slide doors with a weight of up to 400 kg. Low threshold ensures a barrier-free movement, while programmed microventilation function provides good climate in the room.







## SOFT CLOSE SYSTEM

is a unique mechanical solution that slows down the movement of the sash in the final stage of closing, and then gently presses it against the frame of slide doors. It minimizes the risk of pinching when closing the door. SOFT CLOSE system is a visually appealing solution suiting the most demanding tastes. A guide rail completely hidden in the profile ensures exceptional operation by combining smooth sliding movement with attractive design.







SCAN CODE AND SEE ANIMATION

## LOW THRESHOLD ECO PASS

The low threshold considerably facilitates movement between the room and terrace. The threshold is only 5mm high, allowing the resident to move freely in both directions and ensuring completely free use of both the building interior and terrace. The 10-chamber profile of low ECO PASS threshold meets the requirements of applicable regulation on energy saving, which brings benefits in terms of energy-efficiency.

### SLIDING MECHANISM HS 400 COMPACT

Despite its large dimensions, lift and slide doors are extremely comfortable to use. Innovative design of the sliding mechanism offers high comfort of operation thanks to optimal distribution of the load on eight sliding rollers, and thus ensures exceptionally light sliding of the sash.



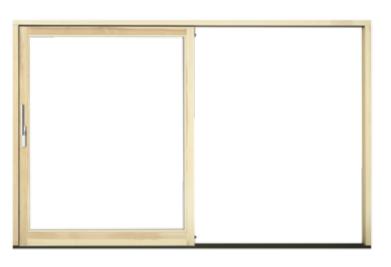


### LIFT AND SLIDE DOORS INNOVIEW HST-SKY

The development of the concept of the HST door brings a remarkable product to the market. Thanks to the use of specially developed technical solutions the fixed sashes have no frame. This solution increases the field of view and the boundary between the interior and the surrounding environment disappears. These doors have all the latest solutions integrated in one product, providing unprecedented quality and comfort of operation. Despite their large dimensions, the doors are extremely comfortable and easy to use, while the huge glass areas provide the room with even greater amount of natural light.

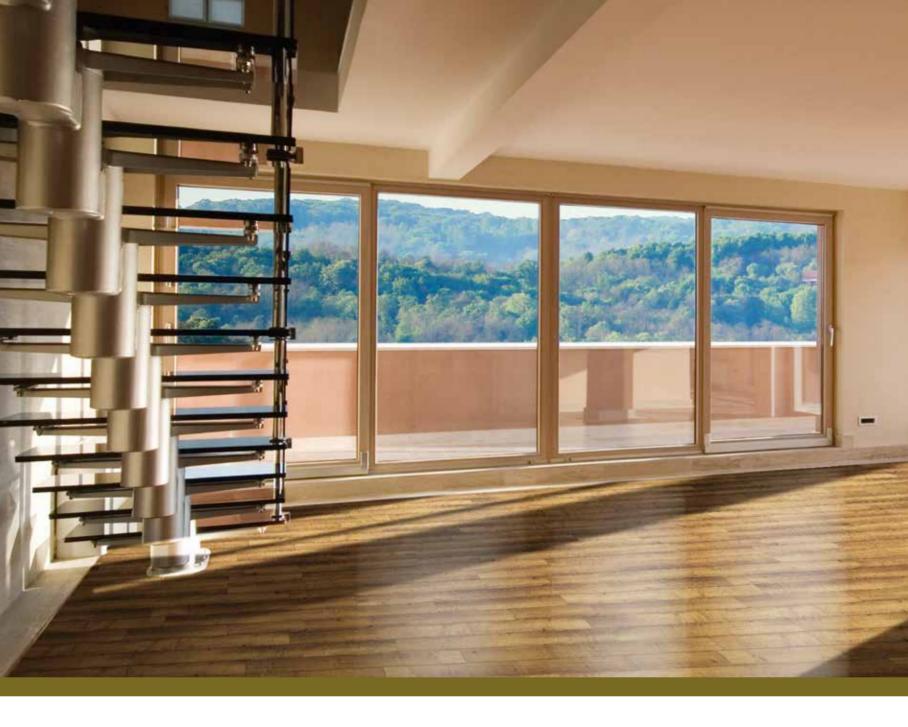


FRAME-FREE SASHES CONSTANTLY INCREASE THE GLAZING SURFACE AND FIELD OF VIEW



The glazing unit in the fixed sash is fitted directly on the threshold and profiles of the frame, therefore its surface is fully utilized to illuminate the interior.





### TILT AND SLIDE DOORS INNOVIEW PSK

In addition to a sliding function, the PSK tilt and slide doors enable micro-opening which allows for ventilation of the room while maintaining a high level of safety. The shape of the aluminium frame as well as the wooden profile makes tilt and slide doors blend perfectly with other wood-aluminium window systems.

With this design, the door does not occupy any space inside the room no matter whether in the closed or open position and makes the room feel even more spacious.

An extensive range of colours and shapes of the aluminium frame allows a virtually infinite number of combinations to be created.



# SAMPLE WOOD COLOURS

#### **PINE WOOD**



#### **OAK WOOD**



OAK ISOPUR GIO

GRAPHITE

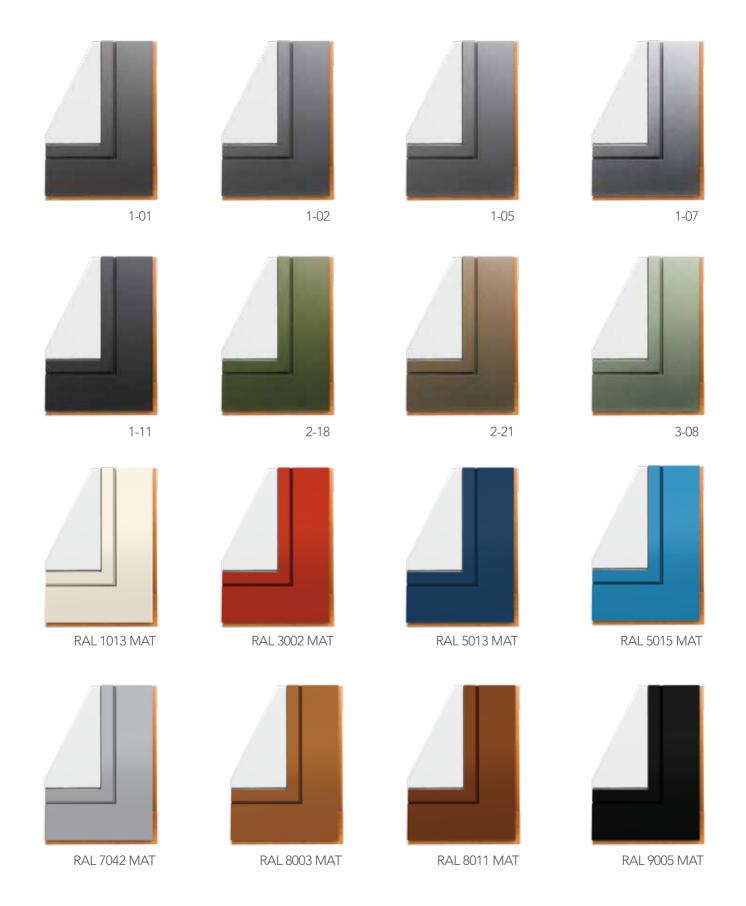


OILED OAK

NUTTREE

**CONCRETE GREY** 

# SAMPLE ALUMINIUM CLADDING COLOURS





### PROTECTION AGAINST OVERHEATING

INNOVIEW products are characterized by the highest quality, safety, comfort and aesthetics as well as guaranteeing harmony with other products available in this range.

#### **ENERGY-EFFICIENCY**

Awning blinds limit energy consumption in air conditioning systems, therefore residents do not have to pay high bills for electricity. Moreover, when unrolled on cold nights, protect against heat loss by improving Uw heat transfer coefficient up to 16%. Using these awning blinds results in lower heating bills.

### **IMPROVED ERGONOMICS**

With the awning blind pulled down, the light distribution in the room is even and definitely more friendly to the human eye. There are no harmful light reflections on computer or TV screens, therefore awning blinds are very useful in rooms used for work or leisure.





AWNING BLINDS OFFER UP TO 8
TIMES MORE EFFECTIVE PROTECTION
AGAINST EXCESSIVE HEAT GAIN IN
COMPARISON WITH USUALLY USED
INTERNAL BLACKOUT BLINDS.



### ROLL-UP AWNING

comes with a special tilting bar which creates a small roof over part of the window. Thanks to dense weave material it protects the room against excessive heat gain. It enables easy access to the sill and provides a view to the outside...

## VIEW TO THE OUTSIDE

Awning blinds provide effective shading without restricting view to the outside. There is no need to turn on the light as it may be required in case of unrolled internal or external roller shutters. They have a clearance which does not cover the view to the outside, while at the same time protecting the interior against viewers and ensuring a feeling of privacy.















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