

WOODEN WINDOWS CATALOGUE

2016

www.bako-okna.pl

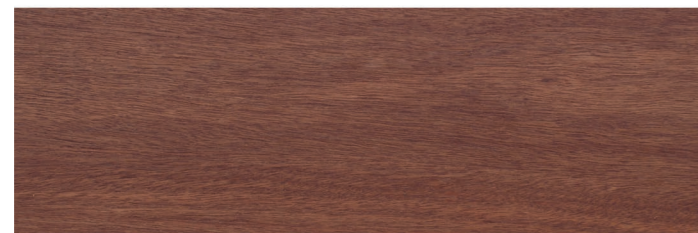
**BAKO**



MATERIAL



Pine - preferably selected raw material for production of windows. Pine has a bright fresh colour, durability, excellent resistance to weather conditions and excellent thermal and acoustic insulation. Accessible, easy to handle and cost-effective. It is recommended for customers who value traditional solutions and economical use.



Meranti - this exotic species of hardwood timber from Indonesia has extremely high resistance to weather conditions. The windows made of this material are not only durable but also very warm and quiet. Meranti wood density strongly depends on the species and can range from 300 kg/m³ to 1050 kg/m³. It is recommend for places exposed to moisture. In windows and doors production most commonly used meranti is the one with a density above 450 kg / m³, which ensures consistent quality of the final product.



Oak - is the best building material out of native broadleaved trees, better than pine or even larch. Oak wood is hard, very durable and resistant to abrasion. It is characterised by high durability and resistance to changing moisture conditions. It has been widely appreciated all around the world for centuries.

Dear Sirs,

BAKO Bartnik Kowalczyk General Partnership company is a manufacturer and a supplier of exclusive wooden windows and doors.

A window is an image of a house, part of an apartment, which like no other connects us with the external world. We manufacture and distribute high-quality wooden joinery. We specialise in production of windows typical for multi-dwelling buildings as well as individual projects according to customers' specifications. Wooden windows have accompanied us for centuries. They are designed to protect against cold, wind, rain, noise, and therefore selection of the best solutions and products provide long-term protection, comfort and safety.

Our offer of exterior wooden window and door frames has been created in line with modern trends in the construction industry, but also with regards to a variety of tastes and requirements of our customers. The recent technological solutions, highly qualified technical and engineering staff as well as skilled production employees guarantee the highest quality of our products. A wide range of colours, shapes and patterns allow for unlimited arrangements of elevation. Our wooden windows are made of natural, eco-friendly materials which not only are sustainable but also renewable at the same time.

We offer our Clients the most convenient cooperation solutions which are economically attractive for both parties. As an effective and reliable partner we guarantee complete customer satisfaction. Our standards are quality, timeless and reliance.

Please be welcome to check our offer.

STANDARD / HISTORIC 68mm profile

WOODEN WINDOWS



Construction:

Single frame construction, a three-ply square timber, joined at the length. Frame thickness 68mm. Any shape and size of the window available.

Material:

Pine, meranti or oak.

Acoustic insulation:

Acoustic insulation at $R_w=32-39dB$ (depending on the selected glazing unit).

Thermal transmittance for window 68 mm profile:

The heat transfer coefficient U_w ranges from 1,31 to 1,42 W/m^2K .

Glazing:

Standard:

Double glazing unit - 4/16Ar/4 - single chambered system.

Thermal insulation glass of $U_g = 1.1 W/m^2K$.

Inter-pane space is filled with argon gas.

The possibility of obtaining heat transfer coefficient up to 0,7 W/m^2K .

Choice of any glass panes with maximum thickness up to 40mm.

Distance frame is offered as standard.

Extra insulation frame matching window colour is also available.

Fittings:

Standard multi point G-U fittings with micro ventilation and anti-burglar catch.

Optional fittings with extra safety class are available:

RC 1 - minimum of four anti-forcing catches in a window.

RC 2 - all anti-forcing catches applied in a window.

Optional use of sash turn limiter, limited tilt, a balcony latch.

Opening methods:

R (turn), U (tilt), RU (tilt and turn).

Colour:

Coating colours from RAL palette or azure colour (emphasizing wood structure) from a catalogue of transparent colours.

The same colour from the inside and outside as standard.

A four-layer coating system: impregnation and triple painting.

Seals:

As one of very few in Poland we use two seals Q-LON (inside and outside applied) as standard. The core is made of polyurethane foam, outer coating of polyethylene is weatherproof, resistant to UV radiation and pollution. Compatible with cleaning agents.

Available colours are brown, white, black, grey, beige, light oak and chestnut.

Drip cap:

Aluminium drip cap available in colours: white, golden, silver, brown and olive.

Optional aluminium drip cap covered by wood - matching window colour (RAL or azure) and aluminium drip cap available in colour from a RAL palette (matching window colour).

Silicone:

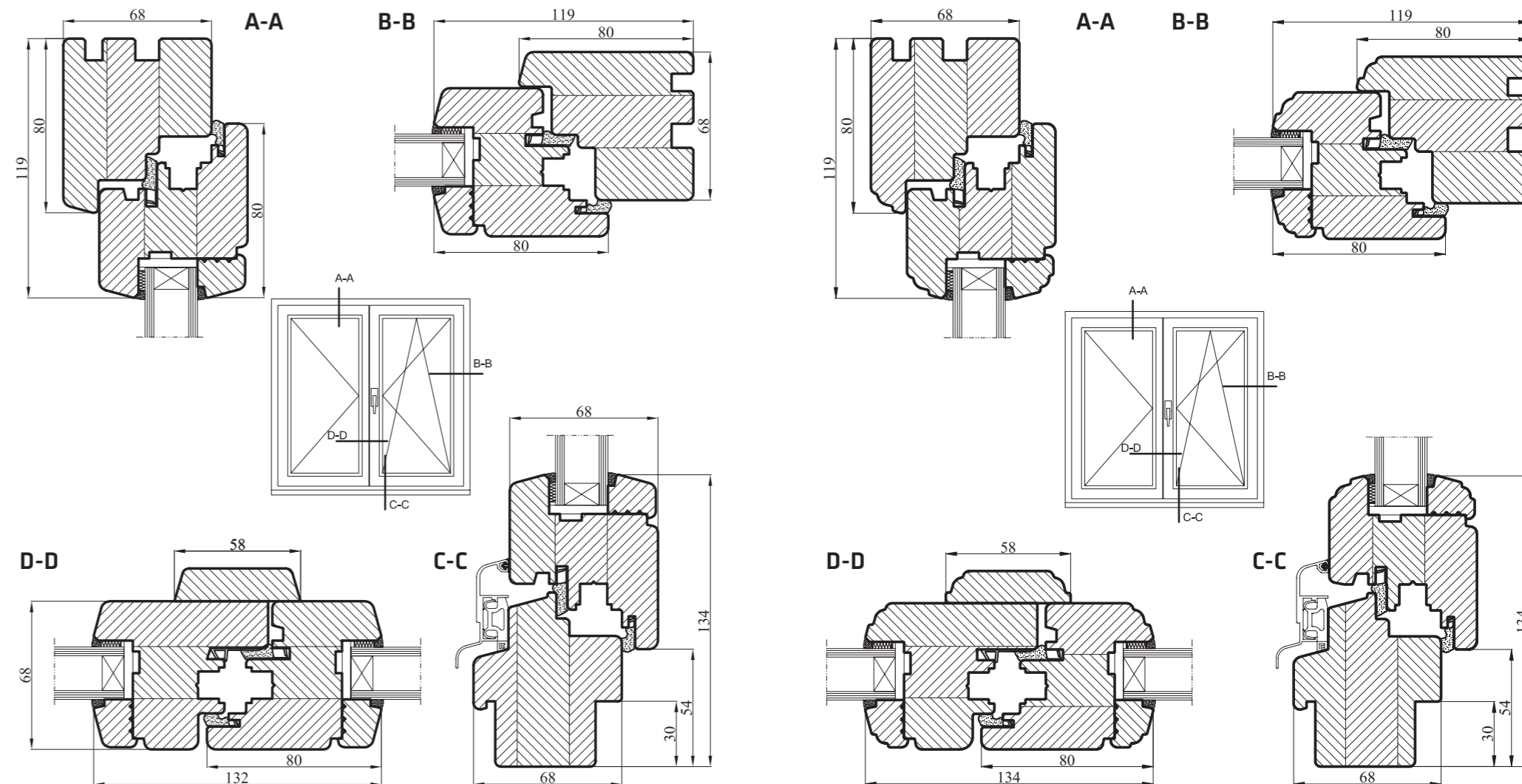
Silicone colour matching wood colour: white, black, transparent, chocolate brown, pine, rustic oak, dark brown, walnut, mahogany.

Extras:

SECUSTIK® handles of HOPPE company are available in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).

titanium (F9).

Optional: A handle with a key or a button in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).



STANDARD 68mm profile windows are characterised by a line profile highlighted by rounding of $r 4mm$ radius. They are made of three-ply square timber which is 68mm thick. A wide range of colours, shapes and accessories allow to fit the window into any décor. This provides additional aesthetic value or character to any building. They are perfect for a single and multi-family dwellings as well as public buildings.

HISTORIC 68mm windows can be used in a single and multi-family dwellings as well as public buildings where it is necessary to preserve the historic style of joinery and building. Profile provides old-style windows and functionality is guaranteed by the latest technology. The success of the final product is a result of proper selection of divisions, sashes, width of the profiles, ornaments (columns, heads, decorative frames) as well as compromise between the requirements of a conservator and modernity.



STANDARD / HISTORIC 68mm

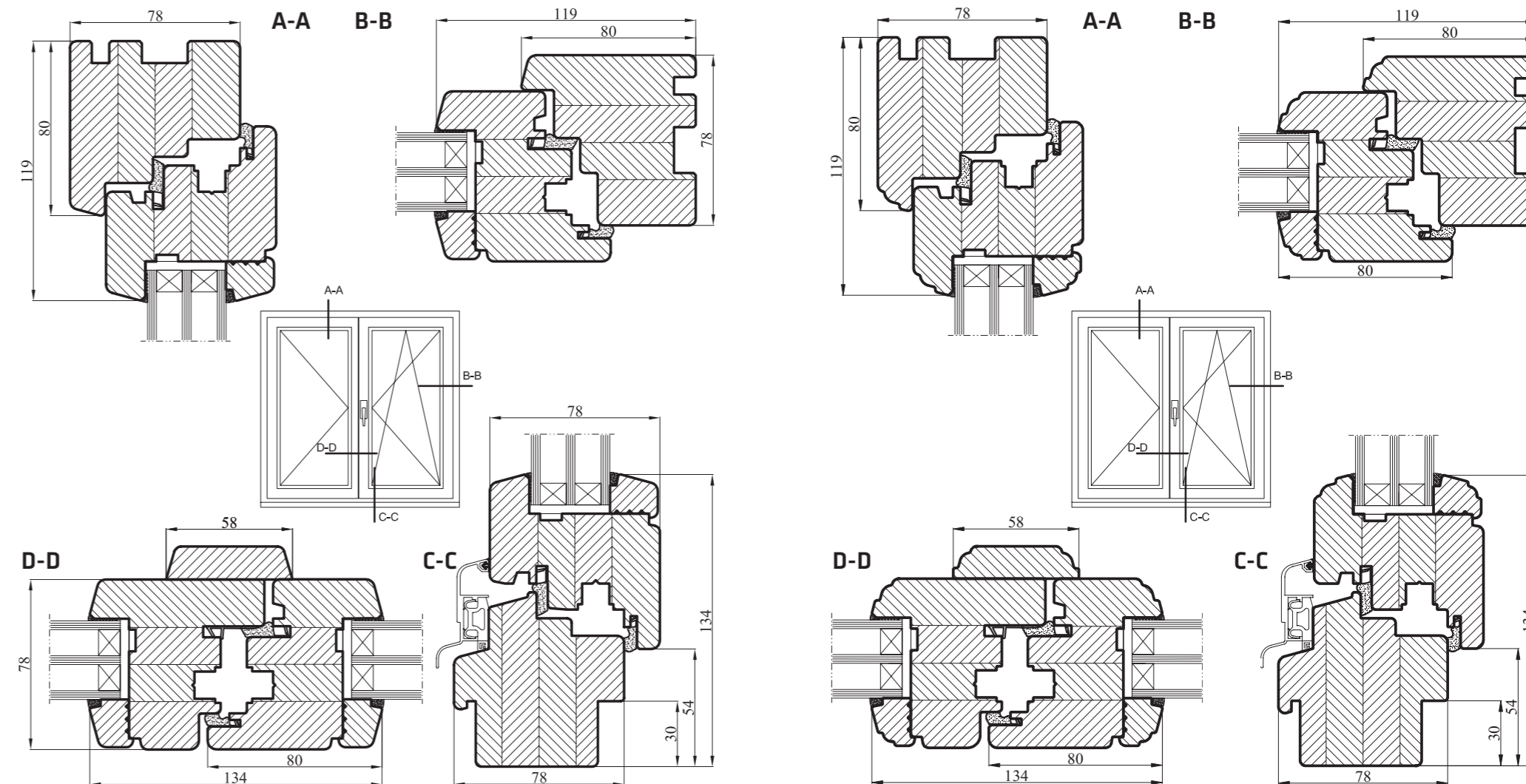


ENERGY LINE / HISTORIC 78mm profile

WOODEN WINDOWS



Construction:	Single frame construction, a four-ply square timber, joined at the length. Frame thickness 78mm. Any shape and size of the window available.
Material:	Pine, meranti or oak.
Acoustic insulation:	Acoustic insulation at $R_w=32-39dB$ (depending on the selected glazing unit).
Thermal transmittance for window 78 mm profile:	The heat transfer coefficient U_w - ranges from 1,20 to 0,97 W/m^2K .
Glazing:	Standard: Triple glazing unit - 4/14/4/14/4 - double chambered system. Thermal insulation glass of $U_g = 0,7 W/m^2K$. Inter-pane space is filled with argon gas. The possibility of obtaining heat transfer coefficient up to 0,5 W/m^2K . Choice of any glass panes with maximum thickness up to 50mm. Distance frame is offered as standard. Extra insulation frame matching window colour is also available.
Fittings:	Standard multi point G-U fittings with micro ventilation and anti-burglar catch. Optional fittings with extra safety class are available: RC 1 minimum of four anti-forcing catches in a window. RC 2 all anti-forcing catches applied in a window. Optional use of sash turn limiter, limited tilt, a balcony latch.
Opening method:	R (turn), U (tilt), RU (tilt and turn).
Colour:	Coating colours from RAL palette or azure colour (emphasizing wood structure) from a catalogue of transparent colours. The same colour from the inside and outside as standard. Optional double colour: RAL/azure, azure/RAL. A four-layer coating system: impregnation and triple painting.
Seals:	As one of very few in Poland we use two seals Q-LON (inside and outside applied) as standard. The core is made of polyurethane foam, outer coating of polyethylene is weatherproof, resistant to UV radiation and pollution. Compatible with cleaning agents. Available colours: brown, white, black, grey, beige, light oak and chestnut.
Drip cap:	Aluminium drip cap available in colours: white, golden, silver, brown and olive. Optional aluminium drip cap covered by wood - matching window colour (RAL or azure) and aluminium drip cap available in colour from a RAL palette (matching window colour).
Silicone:	Silicone colour matches wood colour: white, black, transparent, chocolate brown, pine, rustic oak, dark brown, walnut, mahogany.
Extras:	SECUSTIK® handles of HOPPE company are available in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9). Optional: A handle with a key or a button in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).



ENERGY LINE 78mm windows are characterised by a line profile highlighted by rounding of $r 4mm$ radius. They are made of four-ply square timber which is 78mm thick. These are energy efficient windows with a frame thickness of 78mm. Such a deep profile guarantees a much better parameters for energy save than standard windows with a profile of 68mm. Energy efficiency rating of our windows has been increased by nearly 30% by using glass with thermal conductivity coefficient of $U=0,7$.

HISTORIC ENERGY LINE 78mm windows. Profile provides the old-style windows and functionality is same as in ENERGY LINE 78mm windows. They are suitable for modern construction buildings which imitate classic design solutions and termo-modernisation of restored historical buildings.

ENERGY LINE / HISTORIC 78mm

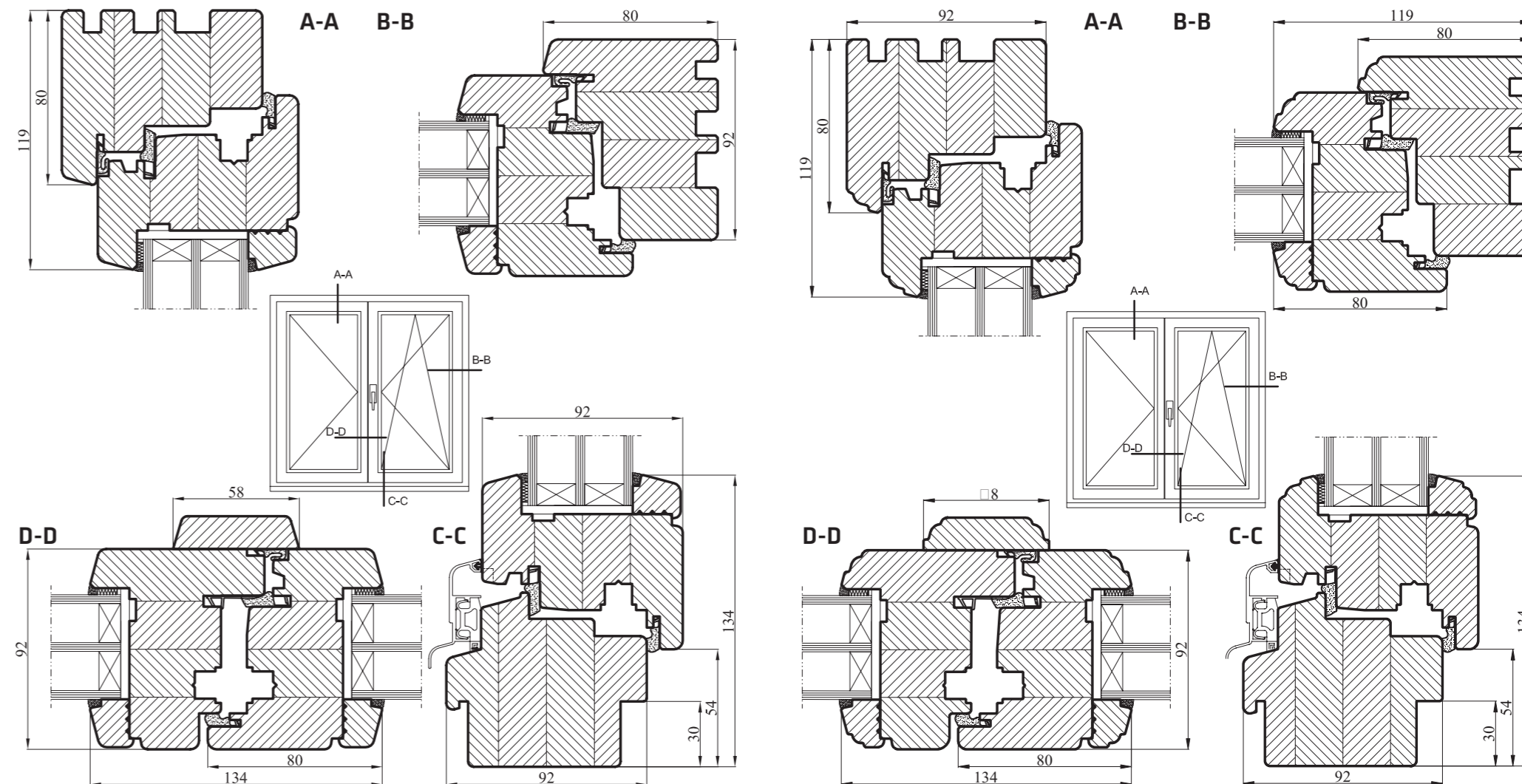


THERMO LINE / HISTORIC 92mm profile



WOODEN WINDOWS

Construction:	Single frame construction, a five-ply square timber, joined at the length. Frame thickness 92mm. Any shape and size of the window available.
Material:	Pine, meranti or oak.
Acoustic insulation:	Acoustic insulation at $R_w=32-39\text{dB}$ (depending on the selected glazing unit).
Thermal transmittance for window 92 mm profile:	The heat transfer coefficient U_w - ranges from 0,95 to 0,80 $\text{W/m}^2\text{K}$.
Glazing:	Standard: Triple glazing unit - 4/18/4/18/4 - double chambered system. Thermal insulation glass of $U_g = 0,5 \text{ W/m}^2\text{K}$. Inter-pane space is filled with argon gas. Choice of any glass panes with maximum thickness up to 60mm. Extra insulation frame matching window colour is also available.
Fittings:	Standard multi point G-U fittings with micro ventilation and anti-burglar catch. Optional fittings with extra safety class are available: RC 1 minimum of four anti-forcing catches in a window, RC 2 all anti-forcing catches applied in a window. Optional use of sash turn limiter, limited tilt, a balcony latch.
Opening method:	R (turn), U (tilt), RU (tilt and turn).
Colour:	Coating colours from RAL palette or azure colour (emphasizing wood structure) from a catalogue of transparent colours. The same colour from the inside and outside as standard. Optional double colour: RAL/azure, azure/RAL. A four-layer coating system: impregnation and triple painting.
Seals:	As one of very few in Poland we use two seals Q-LON (inside and outside applied) as standard. The core is made of polyurethane foam, outer coating of polyethylene is weatherproof, resistant to UV radiation and pollution. Compatible with cleaning agents. Available colours: brown, white, black, grey, beige, light oak and chestnut.
Drip cap:	Aluminium drip cap available in colours: white, golden, silver, brown and olive. Optional aluminium drip cap covered by wood - matching window colour (RAL or azure) and aluminium drip cap available in colour from a RAL palette (matching window colour).
Silicone:	Silicone colour matches wood colour: white, black, transparent, chocolate brown, pine, rustic oak, dark brown, walnut, mahogany.
Extras:	SECUSTIK® handles of HOPPE company are available in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9). Optional: A handle with a key or a button in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).



THERMO LINE 92mm windows are characterised by a line profile highlighted by rounding of $r 4\text{mm}$ radius. They are made of four-ply square timber which is 92mm thick. Energy efficiency rating of THERMO LINE 92mm windows has been increased by 50% by using glass with thermal conductivity coefficient of $U=0,5$ (in comparison with STANDARD 68mm windows with $U=1,1$).

HISTORIC THERMO LINE 92mm windows. Profile provides the old-style windows and functionality is same as in THERMO LINE 92mm windows. These windows are suitable for buildings which imitate classic design solutions and termo-modernisation of restored historical buildings.



THERMO LINE / HISTORIC 92mm

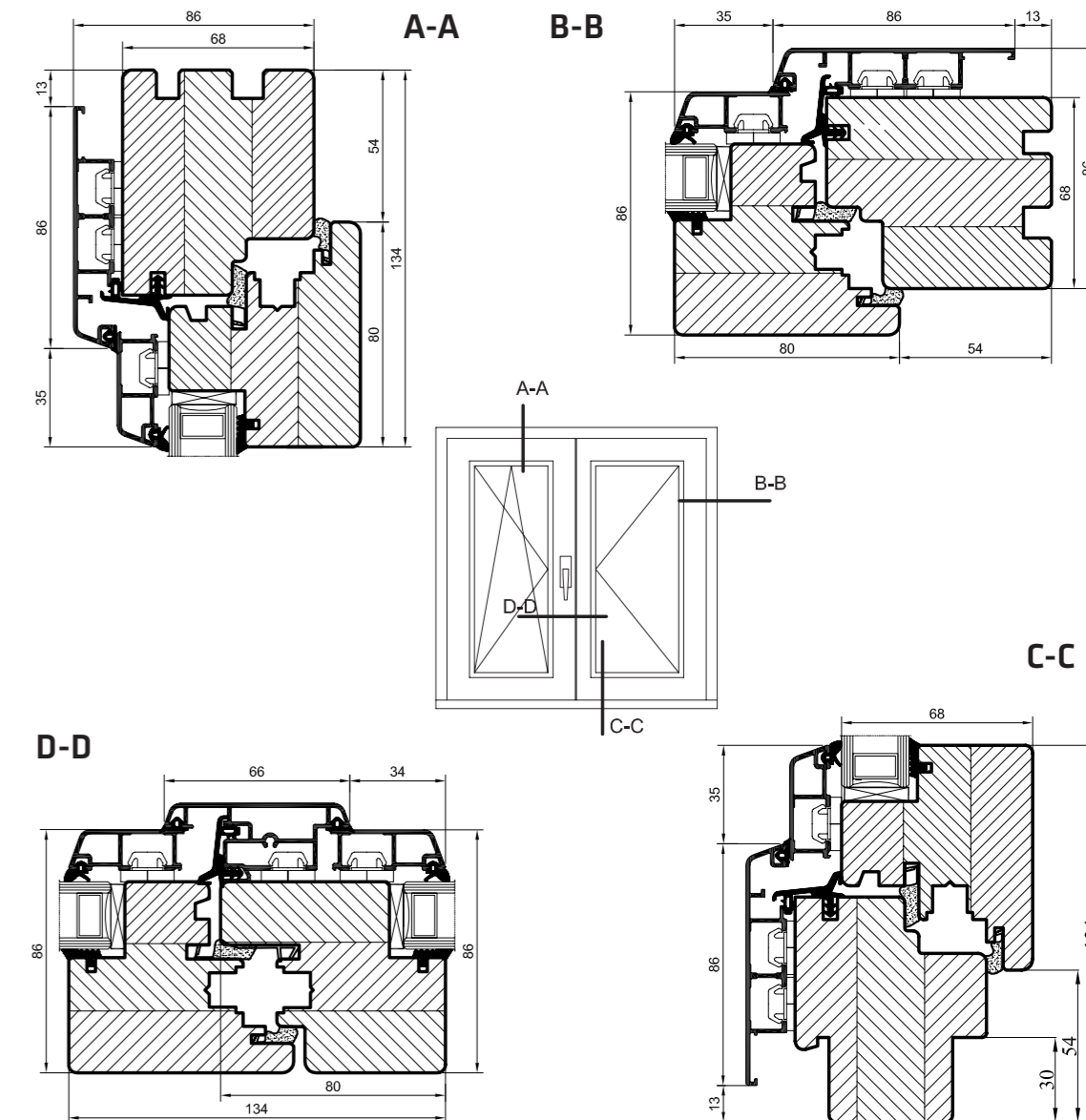


ALU-HOLZ 68mm profile

WOODEN WINDOWS



Construction:	Aluminium - wooden profile. Wooden frame thickness 68mm + 18,5mm aluminium profile from the outside. Any shape and size of the window available.
Material:	Pine, meranti or oak plus aluminium.
Acoustic insulation:	Acoustic insulation at $R_w=32-39dB$ (depending on the selected glazing unit).
Glazing:	Standard: Double glazing unit - 4/16Ar/4 - single chambered system. Thermal insulation glass of $U_g = 1.1 W/m^2K$. Inter-pane space is filled with argon gas. The possibility of obtaining heat transfer coefficient up to $0,7 W/m^2K$. Choice of any glass panes with maximum thickness of 24/30/36mm, quadrat FB of 38(+1)/44(+1)/50(+1). Distance frame is offered as standard. Extra insulation frame matching window colour is also available.
Fittings:	Standard multi point G-U fittings with micro ventilation and anti-burglar catch. Optional fittings with extra safety class are available: RC 1 minimum of four anti-forcing catches in a window, RC 2 all anti-forcing catches applied in a window. Optional use of sash turn limiter, limited tilt, a balcony latch.
Opening method:	R (turn), U (tilt), RU (tilt and turn).
Colour:	Coating colours from RAL palette or azure colour (emphasizing wood structure) from a catalogue of transparent colours. The same colour from the inside and outside as standard. Optional double colour: RAL/azure, azure/RAL. A four-layer coating system: impregnation and triple painting.
Seals:	As one of very few in Poland we use two seals Q-LON (inside and outside applied) as standard. The core is made of polyurethane foam, outer coating of polyethylene is weatherproof, resistant to UV radiation and pollution. Compatible with cleaning agents. Available colours: brown, white, black, grey, beige, light oak and chestnut.
Extras:	SECUSTIK® handles of HOPPE company are available in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9). Optional: A handle with a key or a button in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).



ALU-HOLZ 68mm windows. A delicately rounded shape frame which is protected by aluminium cover from the outside. It not only provides additional protection to the wood frame but also a decoration to the facade. Joining wood and aluminium allows for maximum usage of its functionality and decoration of each of these materials. Outside aluminium frame guarantees real durability. Inside wooden frame provides warmth and beauty.



ALU-HOLZ 68mm



ENERGY ALU-HOLZ 78mm profile

WOODEN WINDOWS

Construction:

Aluminium - wooden profile.
Wooden frame thickness 78mm + 18,5mm aluminium profile from the outside.
Any shape and size of the window available.

Material:

Pine, meranti or oak plus aluminium.

Acoustic insulation:

Acoustic insulation at $R_w=32-39dB$ (depending on the selected glazing unit).

Glazing:

Standard:

Triple glazing unit - 4/14/4/14/4 - double chambered system.
Thermal insulation glass of $U_g = 0,7 W/m^2K$.
Inter-pane space is filled with argon gas.
The possibility of obtaining heat transfer coefficient up to $0,5 W/m^2K$.
Choice of any glass panes with maximum thickness of 34/40/46mm, quadrat FB of 48(+1)/54(+1)/60(+1). Distance frame is offered as standard.
Extra insulation frame matching window colour is also available.

Fittings:

Standard multi point G-U fittings with micro ventilation and anti-burglar catch.
Optional fittings with extra safety class are available:
RC 1 minimum of four anti-forcing catches in a window,
RC 2 all anti-forcing catches applied in a window.
Optional use of sash turn limiter, limited tilt, a balcony latch.

Opening method:

R (turn), U (tilt), RU (tilt and turn).

Colour:

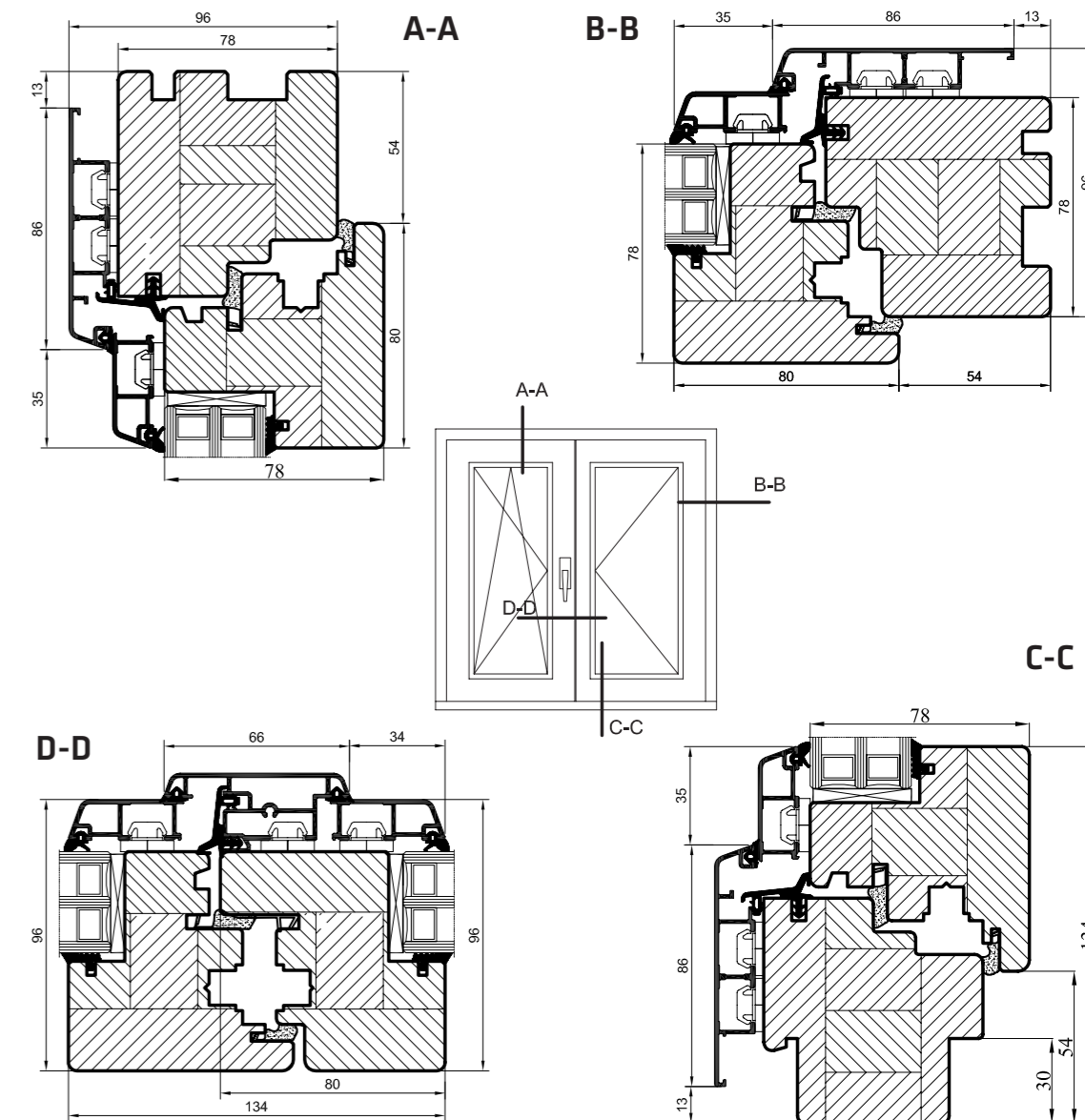
Coating colours from RAL palette or azure colour (emphasizing wood structure) from a catalogue of transparent colours.
The same colour from the inside and outside as standard.
Optional double colour: RAL/azure, azure/RAL
A four-layer coating system: impregnation and triple painting.

Seals:

As one of very few in Poland we use two seals Q-LON (inside and outside applied) as standard. The core is made of polyurethane foam, outer coating of polyethylene is weatherproof, resistant to UV radiation and pollution. Compatible with cleaning agents.
Available colours: brown, white, black, grey, beige, light oak and chestnut.

Extras:

SECUSTIK® handles of HOPPE company are available in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).
Optional: A handle with a key or a button in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).



ENERGY ALU-HOLZ 78mm windows. Energy efficiency rating of ENERGY ALU-HOLZ 78mm windows has been increased by 30% by using glass with thermal conductivity coefficient of $U=0,7$ (to compare with ALU-HOLZ 68mm windows with $U=1,1$). ENERGY ALU-HOLZ 78mm windows, with their outstanding technical parameters and natural look, fit perfectly to modern construction buildings as well as to those more traditional design buildings.



ENERGY ALU-HOLZ 78mm



THERMO ALU-HOLZ 88mm profile

WOODEN WINDOWS

Construction:

Aluminium – wooden profile.
Wooden frame thickness 88mm + 18,5mm aluminium profile from the outside.
Any shape and size of the window available.

Material:

Pine, meranti or oak plus aluminium.

Acoustic insulation:

Acoustic insulation at $R_w=32-39dB$ (depending on the selected glazing unit).

Glazing:

Standard:
Triple glazing unit - 4/16/4/16/4 – double chambered system.
Thermal insulation glass of $U_g = 0,6 W/m^2k$.
Inter-pane space is filled with argon gas.
The possibility of obtaining heat transfer coefficient up to $0,5 W/m^2k$.
Choice of any glass panes with maximum thickness of 44/50/56mm, quadrat FB of 58(+1)/64(+1)/70(+1). Distance frame is offered as standard.
Extra insulation frame matching window colour is also available.

Fittings:

Standard multi point G-U fittings with micro ventilation and anti-burglar catch.
Optional fittings with extra safety class are available:
RC 1 minimum of four anti-forcing catches in a window,
RC 2 all anti-forcing catches applied in a window.
Optional use of sash turn limiter, limited tilt, a balcony latch.

Opening method:

R (turn), U (tilt), RU (tilt and turn)

Colour:

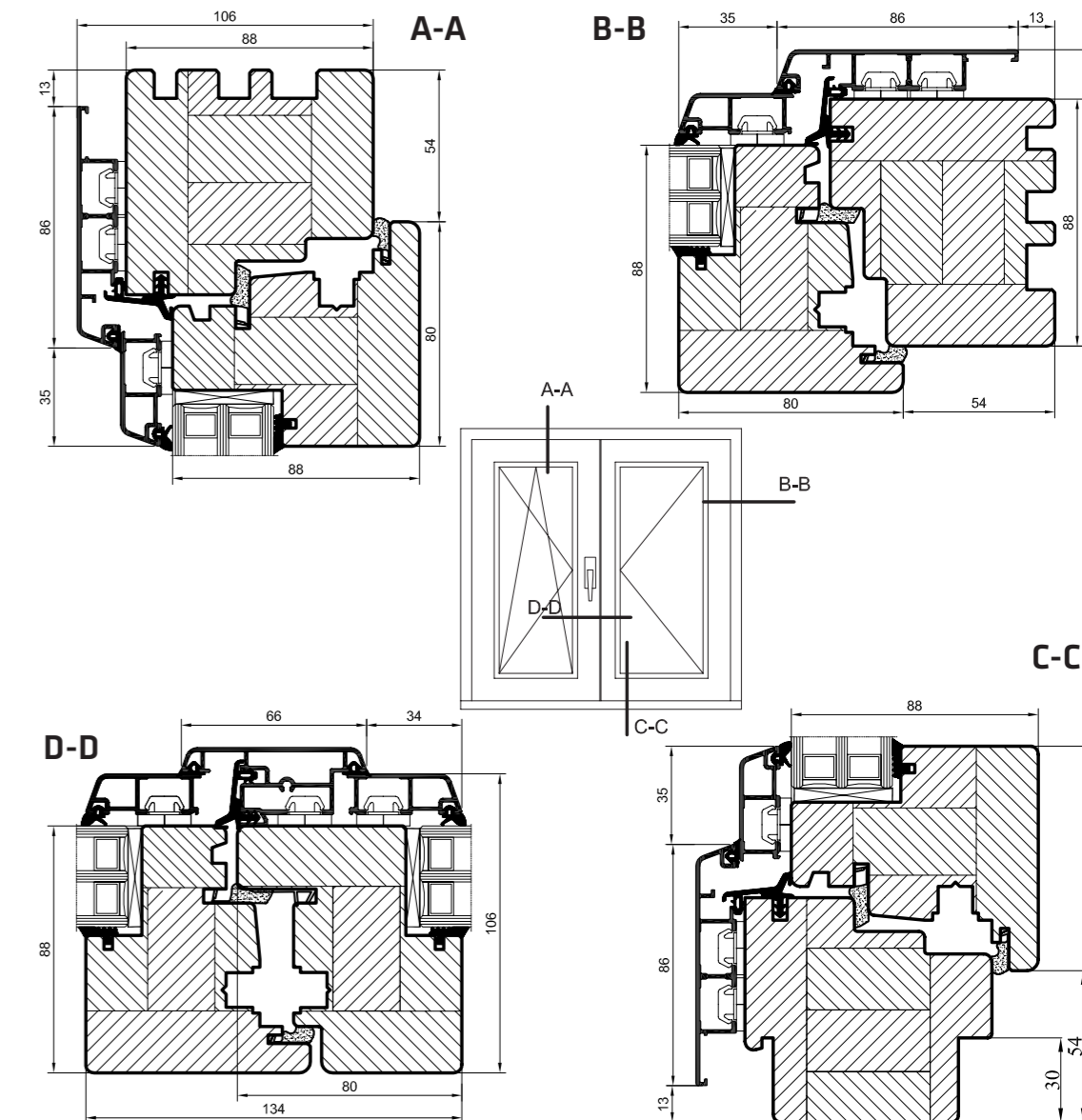
Coating colours from RAL palette or azure colour (emphasizing wood structure) from a catalogue of transparent colours.
The same colour from the inside and outside as standard.
Optional double colour: RAL/azure, azure/RAL.
A four-layer coating system: impregnation and triple painting.

Seals:

As one of very few in Poland we use two seals Q-LON (inside and outside applied) as standard. The core is made of polyurethane foam, outer coating of polyethylene is weatherproof, resistant to UV radiation and pollution. Compatible with cleaning agents.
Available colours: brown, white, black, grey, beige, light oak and chestnut.

Extras:

SECUSTIK® handles of HOPPE company are available in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).
Optional: A handle with a key or a button in colours: white (F9016), brown (F8077), silver (F1), antique gold (F4), titanium (F9).



THERMO ALU-HOLZ 88mm windows. Energy saving in today's construction is fundamental. Because of that, the role of the windows with higher thermal parameters is becoming more significant. Energy efficiency rating THERMO ALU-HOLZ 88mm windows has been increased by 50% by using glass with thermal conductivity coefficient of $U=0,5$ (to compare with ALU-HOLZ 68mm windows with $U=1,1$).

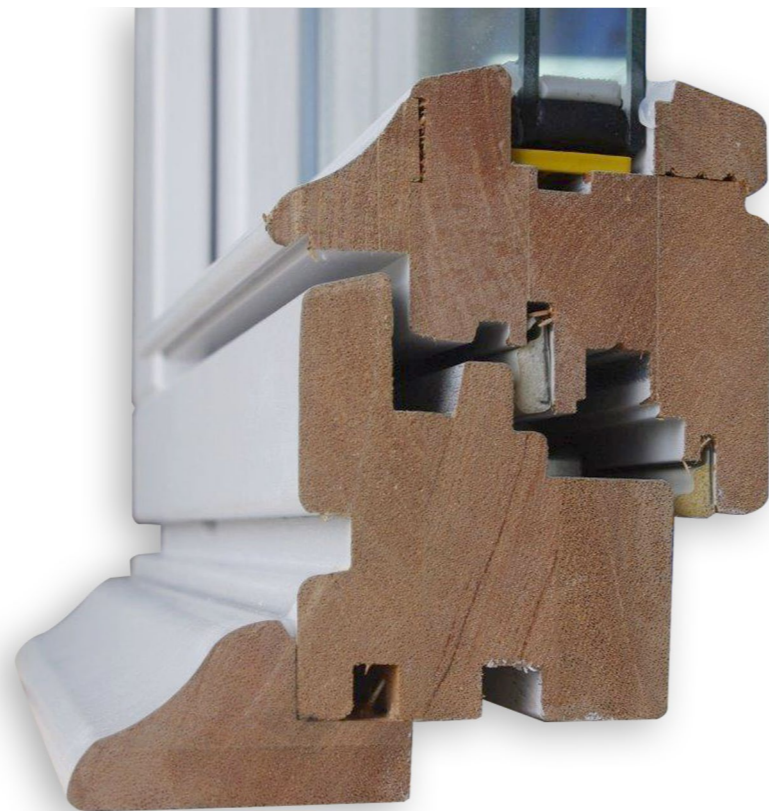


THERMO ALU-HOLZ 88mm



BELGIAN PROFILE

WOODEN WINDOWS

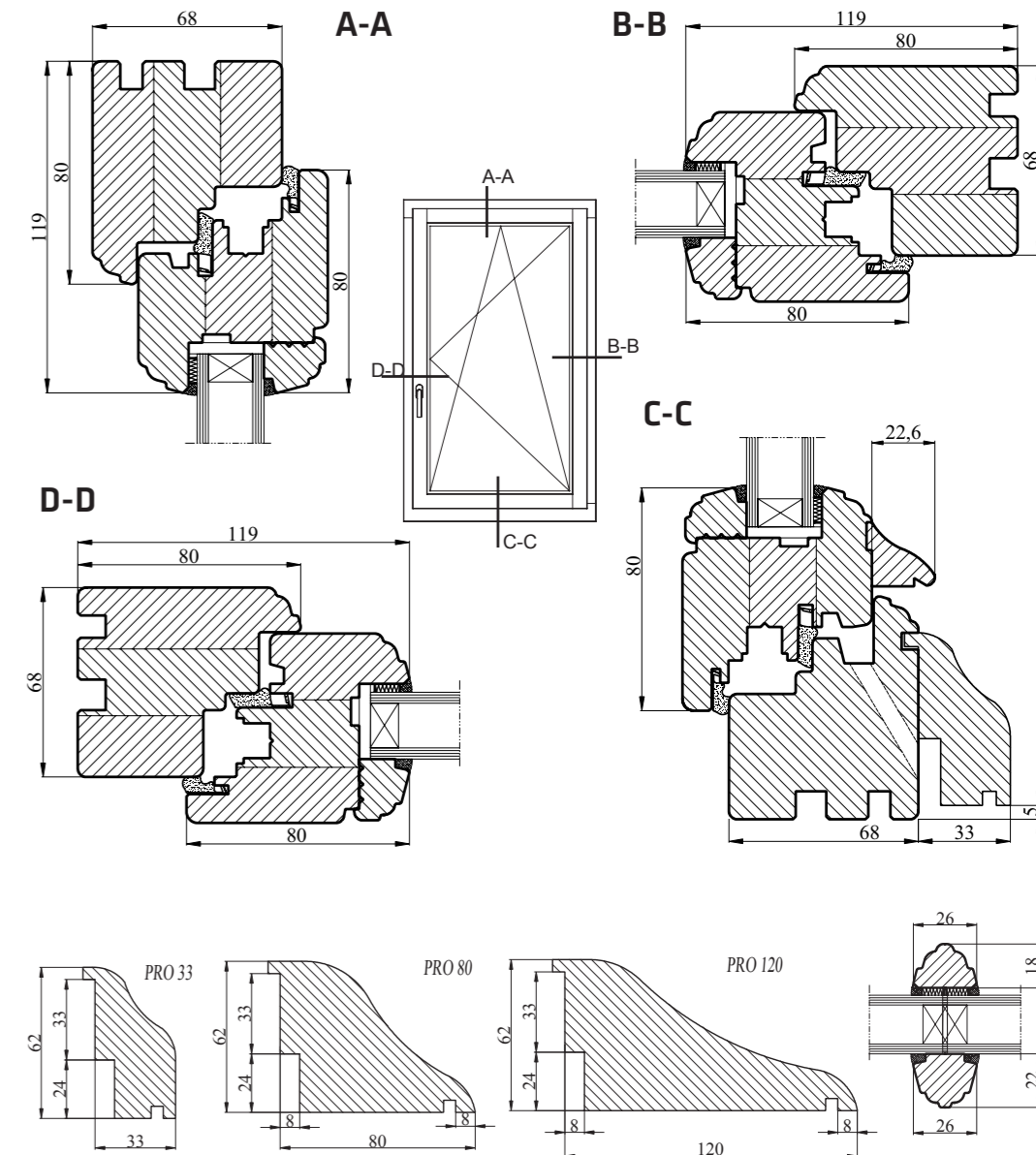
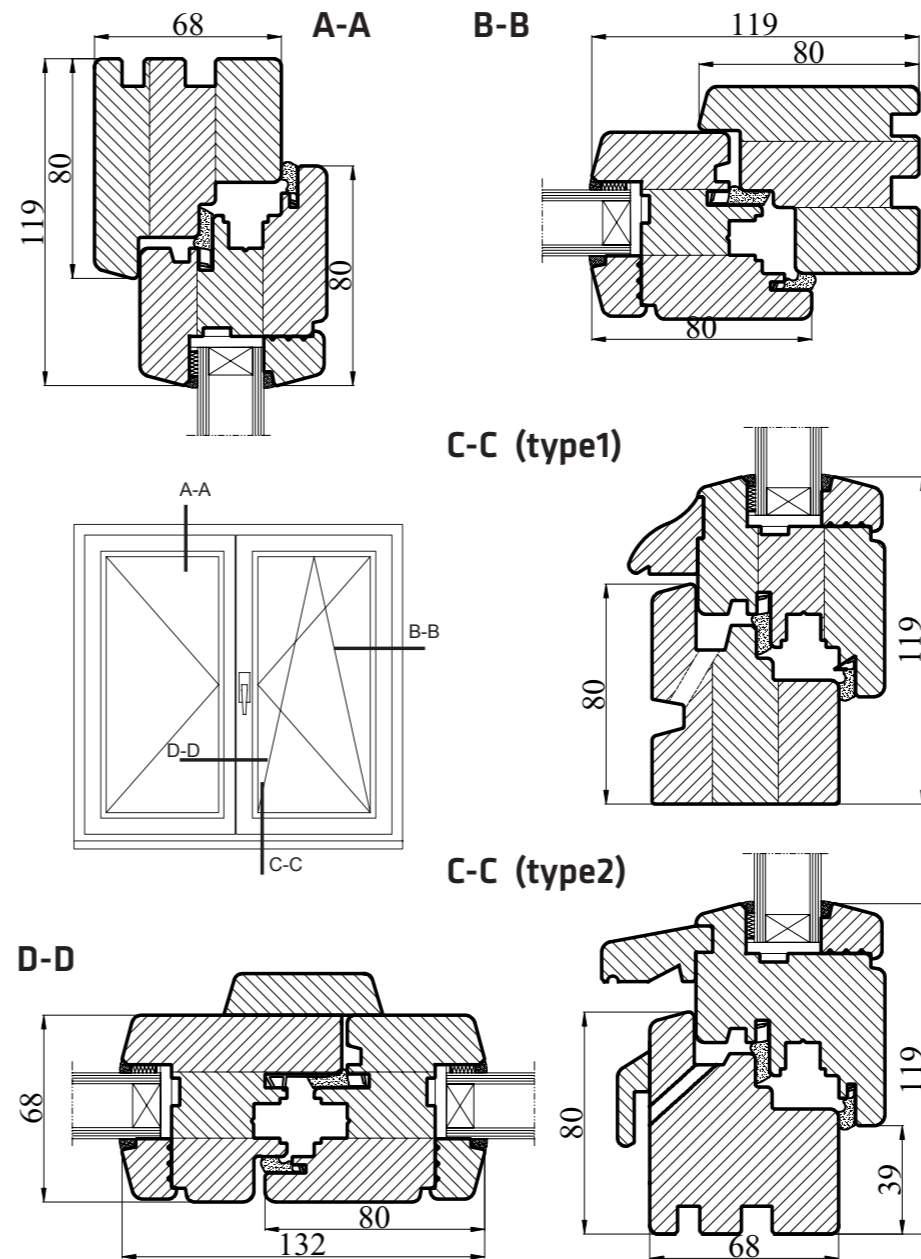


If the house is located in a zone covered by a conservation area and all works have to be carried out according to the guidelines conservator or architect who's responsible for Your building and window can't have any metal elements we could help meet these conditions. In our offer You could find few options of hold without any aluminium drip. This profile we named Belgian profile because mostly windows in this profile are installed in France, Belgium and Holland.

Belgian profile window we offer in three thickness 68, 78 and 92 mm and two types of profile Standard and Retro. In our offer we have three options of hold which we could use, customer choose which one of them looks better for him. Moreover on sash window we could install wooden slats which was made from the same material as the window.

Furthermore in this profile are available few type of Stick on bars and many kinds of unit glass (triple glazed, safety glass or acoustic glass). Moreover, it's possible to perform arched windows and windows with an imitation of arc (false arch).

Everything is tailored to the needs of the customer.



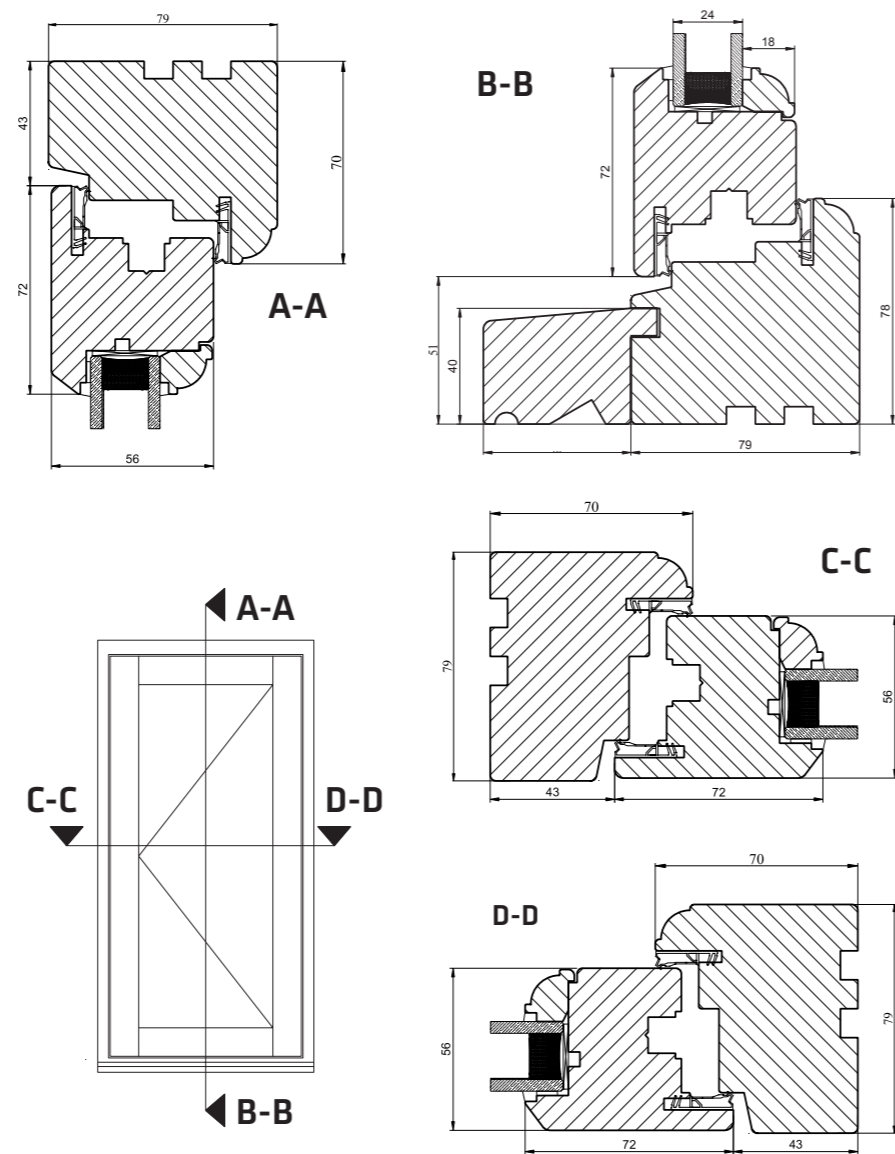
BELGIAN PROFILE



CASEMENT INLINE



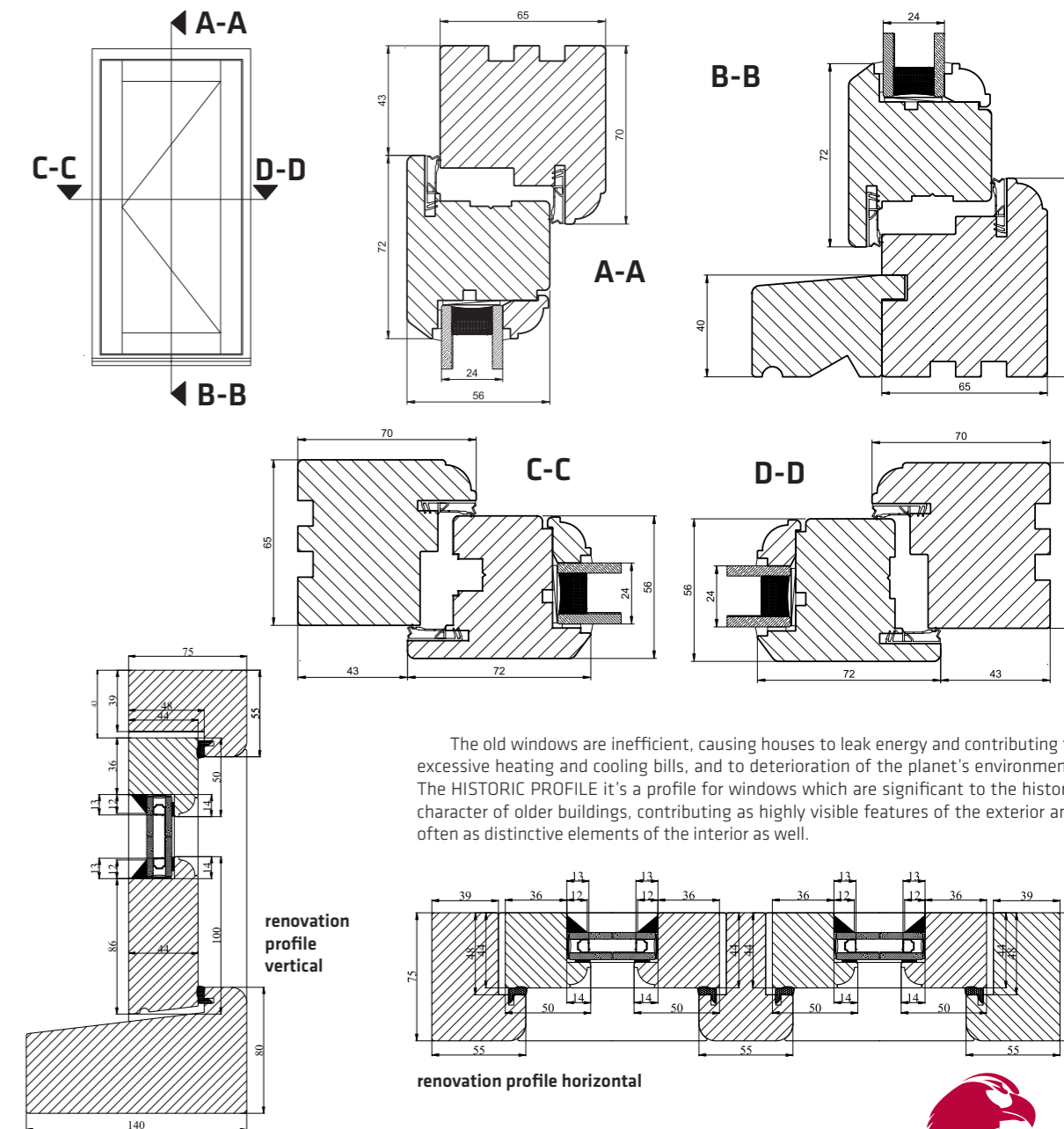
WOODEN WINDOWS



The **INLINE CASEMENT** is specifically designed to replicate a period window whilst incorporating the latest modern operation and security features. Often referred to as a conservation window, the design is characterised by a sash that sits within the frame to create a flush finish externally.



The outward opening **STORMPROOF CASEMENT** is the most frequently chosen timber window design in the UK. The profile is reflecting a proven ability to withstand exposure to adverse weather conditions. Internally glazed with a modern concealed multi point locking system the design provides high security features compliant with Secured by Design conditions. The sash stands proud of the frame giving excellent gasket compression and the best weather rating available.



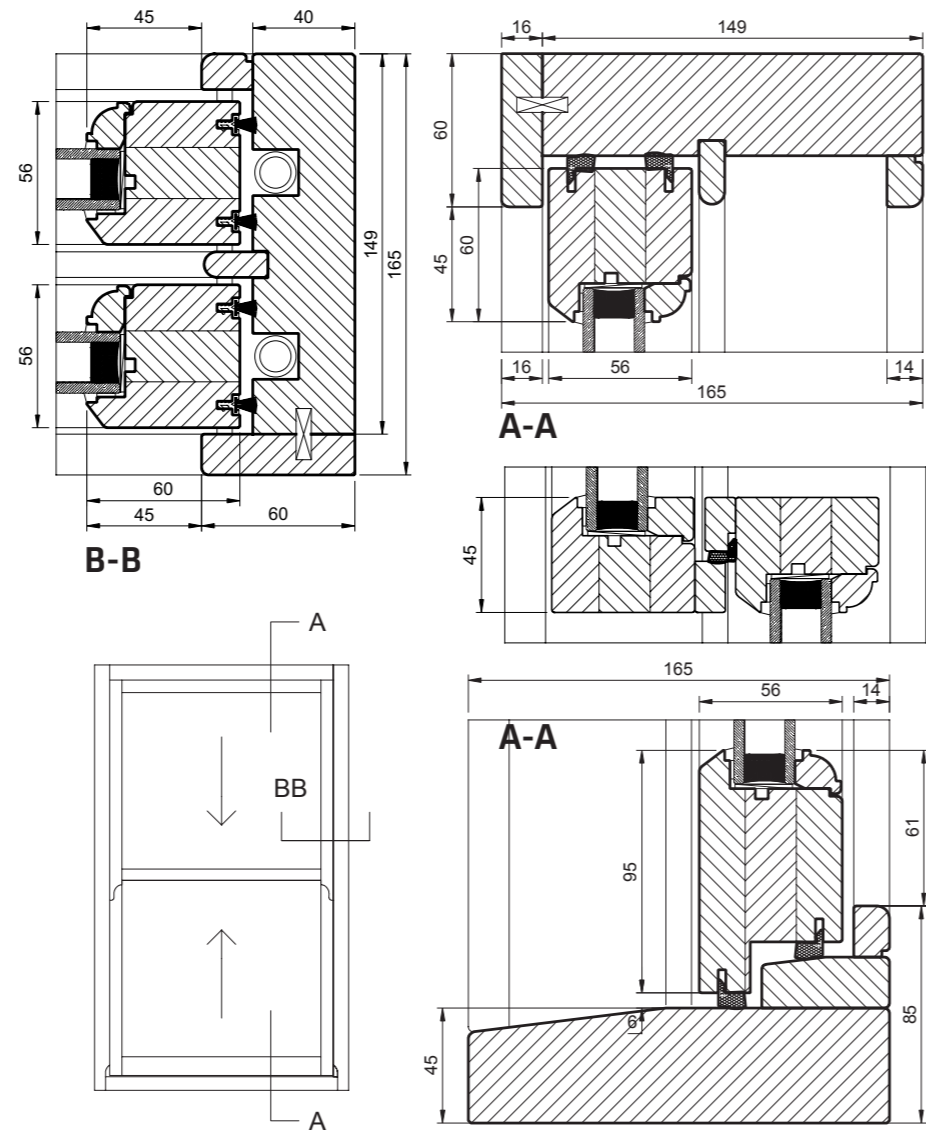
The old windows are inefficient, causing houses to leak energy and contributing to excessive heating and cooling bills, and to deterioration of the planet's environment. The **HISTORIC PROFILE** it's a profile for windows which are significant to the historic character of older buildings, contributing as highly visible features of the exterior and often as distinctive elements of the interior as well.

CASEMENT STORMPROOF



SLIDING SASH SPIRAL BALANCE

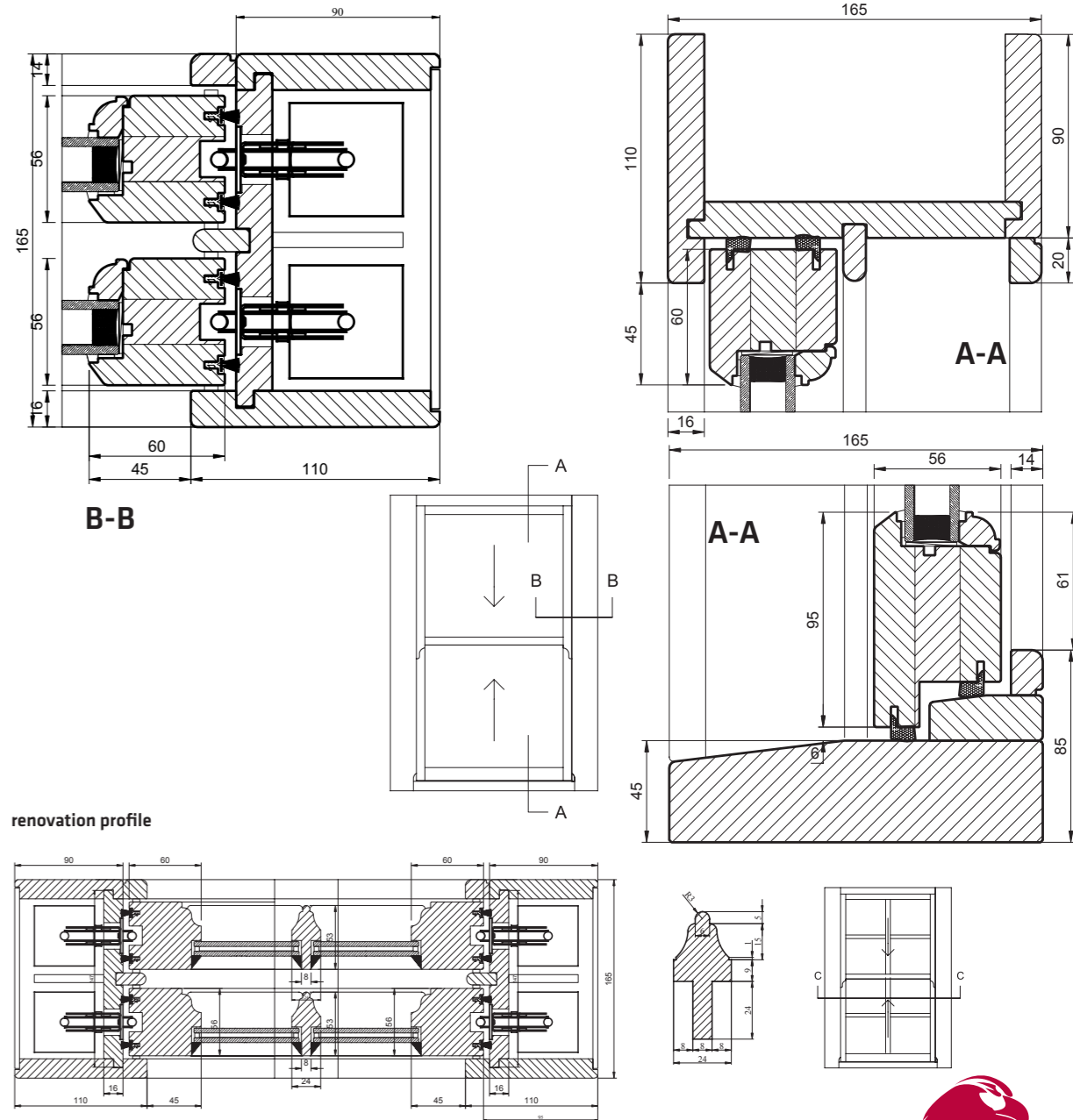
WOODEN WINDOWS



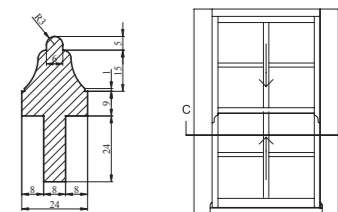
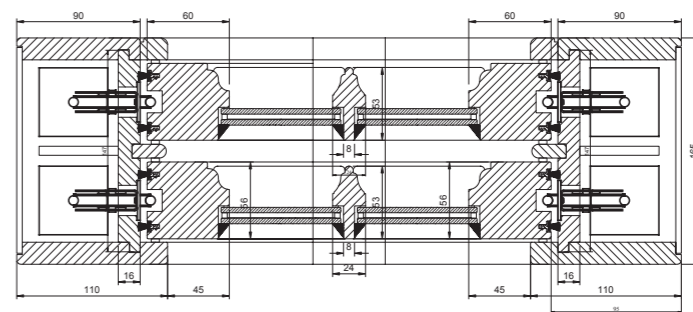
The SLIDING SASH SPIRAL BALANCE window or tensioned spring provides the mechanism of lift to the system. Predominantly used in new build construction, it provides a cost effective solution to this style whilst retaining all the unique features of a sash window. It's possibility to make sliding sash spiral balance in thinner profile - 145mm.



The SLIDING SASH CORDS & WEIGHTS window utilises pulleys and weights as the lift system. Primarily used when build circumstances dictate or when conservation requirements are a consideration. Ensuring the character and charm of the building is maintained whilst incorporating modern technologies, security and performance. For customer request we are able to do sliding sash cords & weights in thinner profile - 145mm.



renovation profile

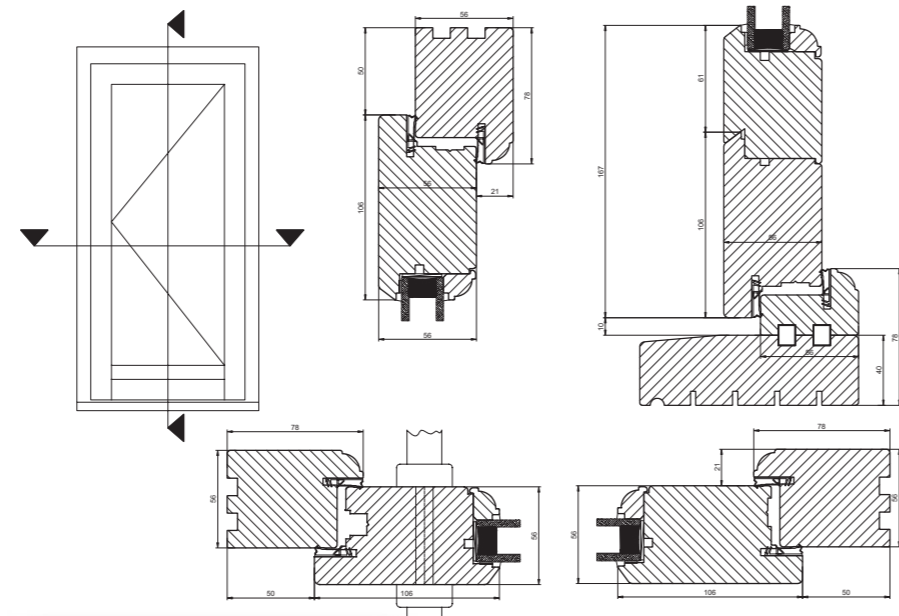
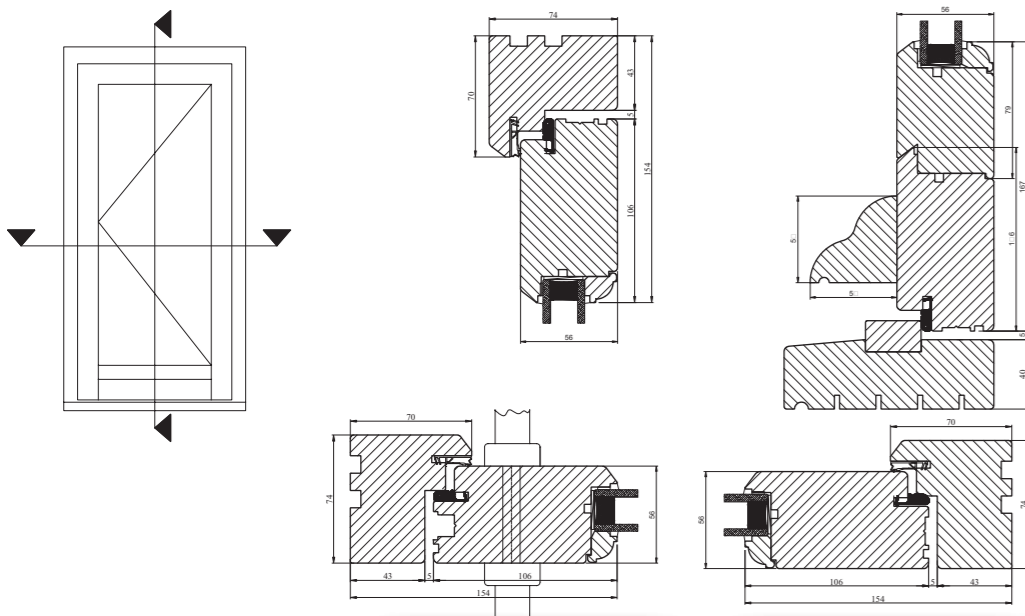


SLIDING SASH CORDS & WEIGHTS



INLINE DOOR

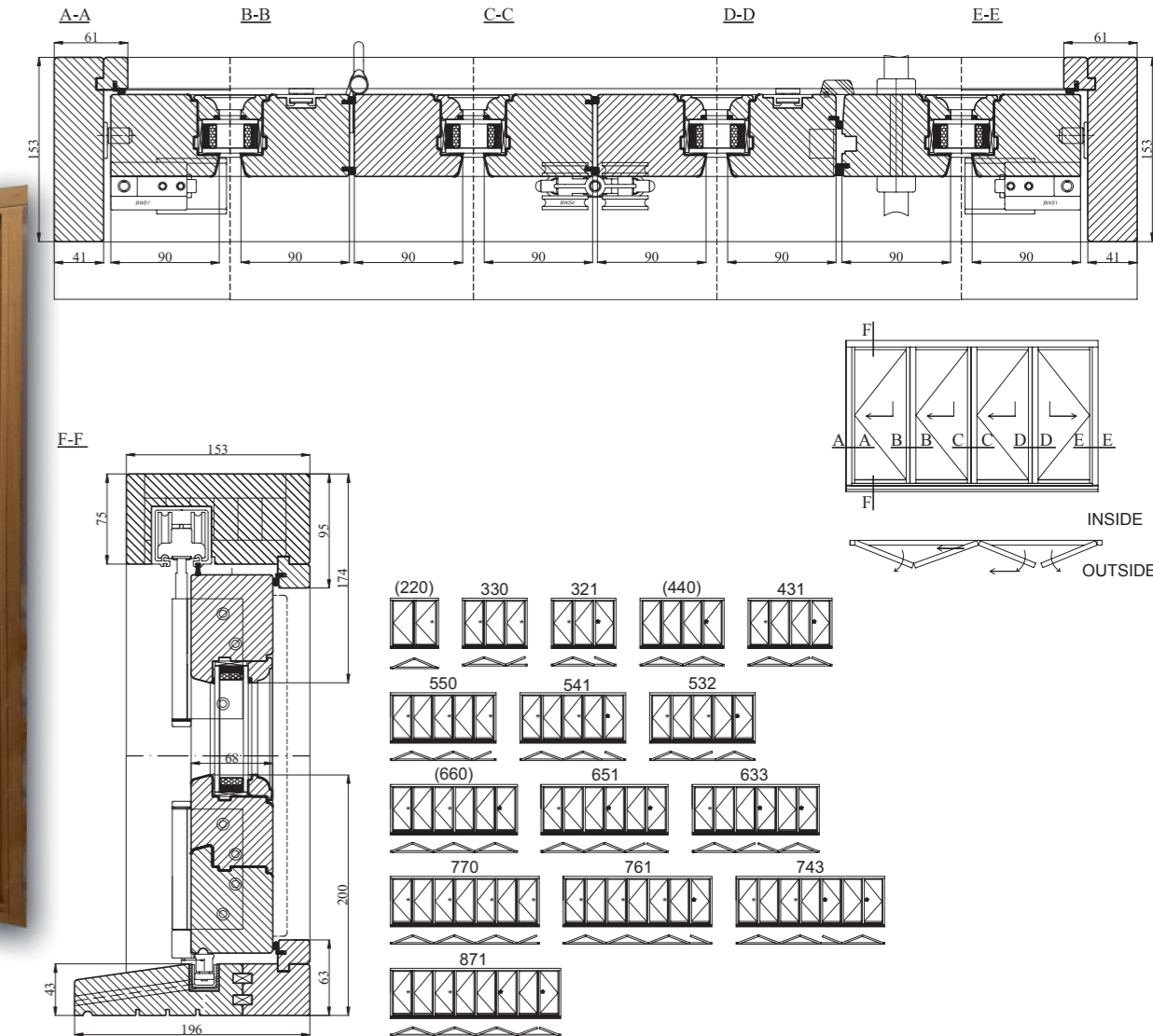
STORMPROOF DOOR



The perfect way to introduce maximum light into any room give you a **INLINE DOOR**. This door can be designed to incorporate a number of single and double door leaf configurations. Flush finish sash with double handle and high security espagnolette locking system give You maximum safety.



The **STORMPROOF DOOR** as a stormproof case-ment are resistant to changing weather condition. Door could have single or double leaf configuration. Ideal for use in conservatories, sunrooms and garden rooms, where maximum naturallight is required. Supplied as standard, multipoint espagnolette locking provides the safest locking system for your door.



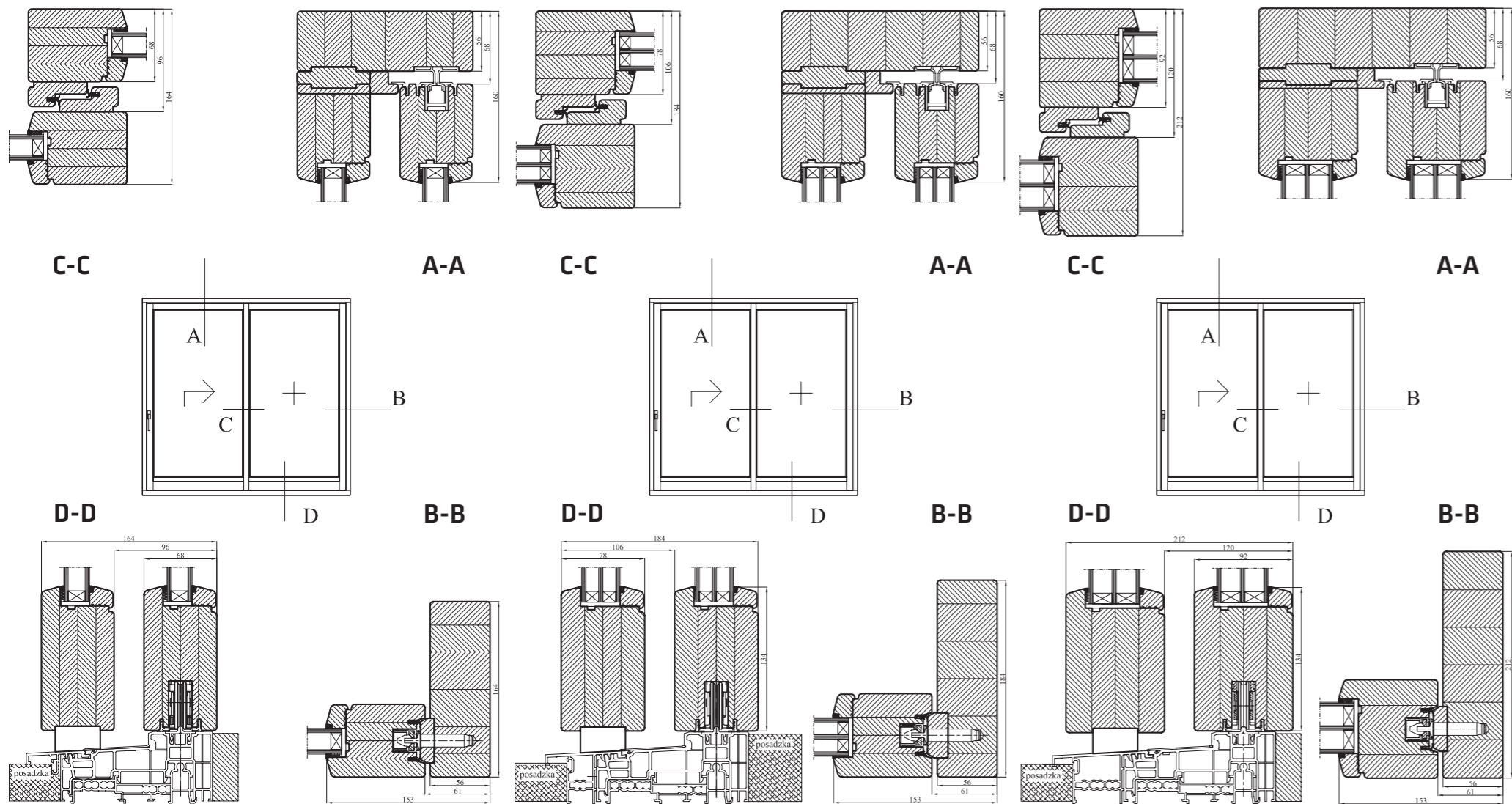
The **BI-FOLD DOORS** are without doubt the new vogue. Folding doors open and close effortlessly and stack unobtrusively to create wide open vistas and bringing us closer to nature. This design offers the ideal solution for creating large glazing areas with minimal timber allowing for uninterrupted views to be enjoyed from a property.

BI-FOLD DOOR



Sliding versions of HS profiles

SLIDING WOODEN WINDOWS



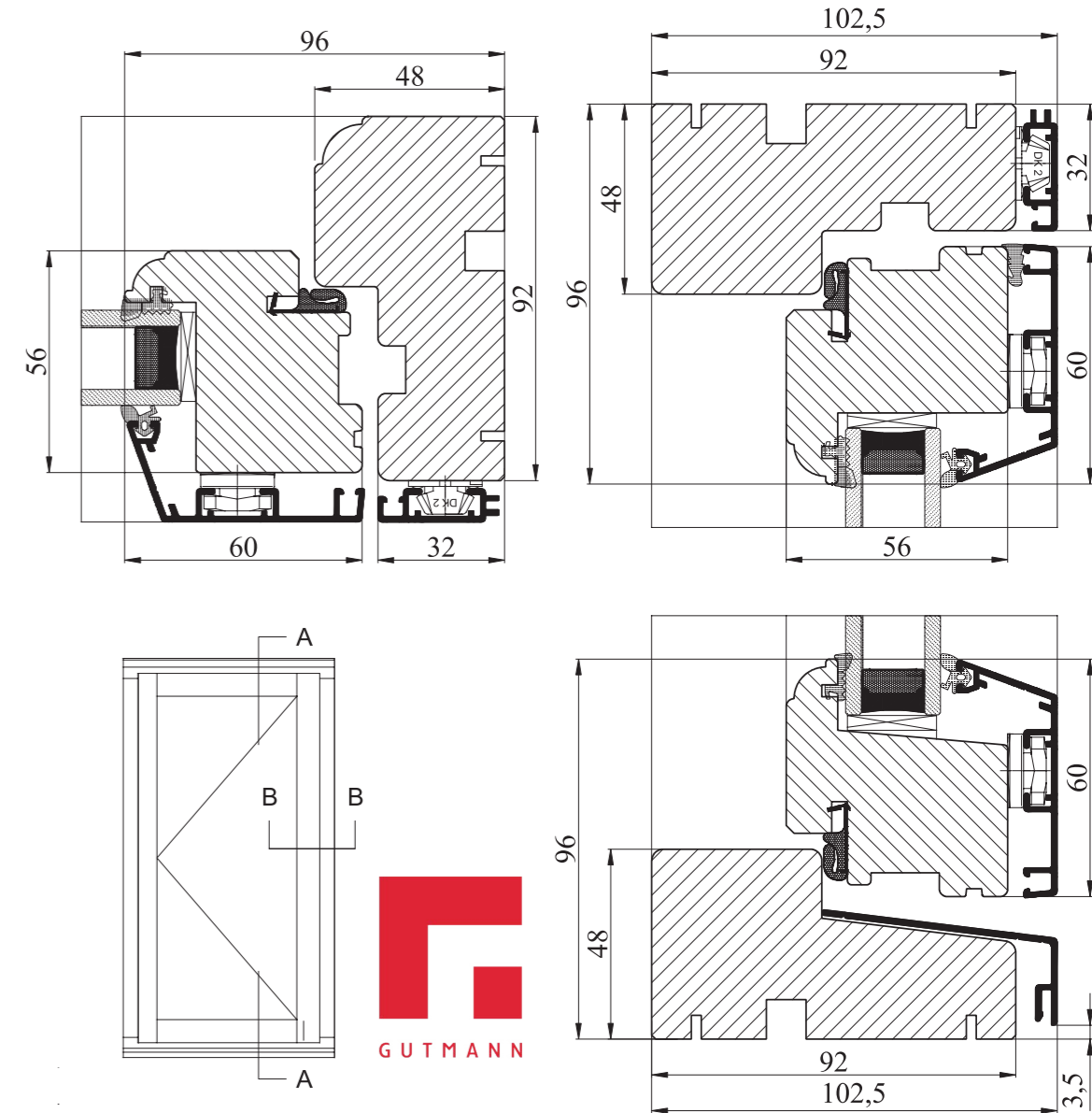
HS - 68mm thick

HS - 78mm thick

HS - 92mm thick



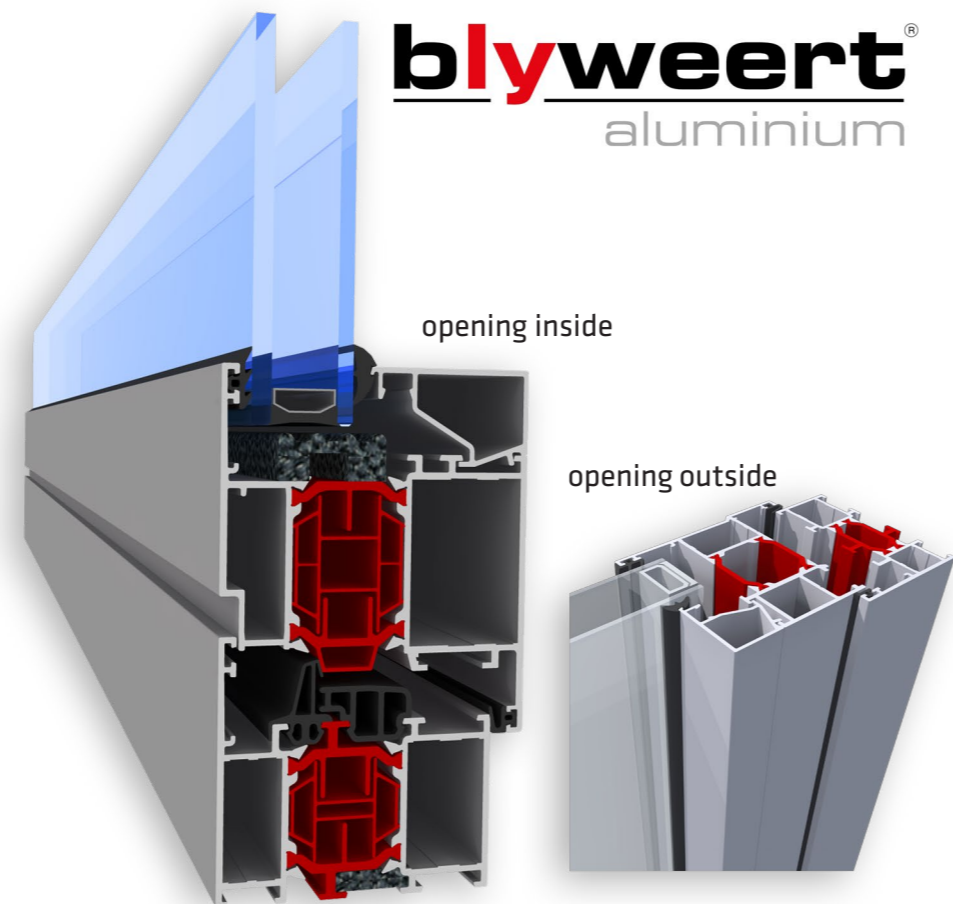
The NORDWIN aluminium system may be mounted without changes in the wood cross-section. The additional processing of glass beads, which is normally time-consuming and costly, is not necessary here as the aluminium sash profile replaces the glass beads. Aluminium frames are mounted field-by-field onto a multipart window, which allows for efficient installation of the aluminium frames. Mullion, transom, fixed glazing, double rebated, and component coupling are possible as well. Profiles create clear lines with small radii at the exposed edge
 Thermal insulation values of one-sash window measuring 1230x1480 mm
 Double-pane insulating glass unit (1,0 W/m²K) Uw =1,2 W/m²K



NORDWIN



TRITON



blyweert[®]
aluminium

Triton HI is a high insulation aluminium window and door system with the construction depth of 72 mm. 3-chamber profiles, patented Spidertech[®] ABS strips and other incorporated isolating elements ensure optimal thermal insulation. Windows offer single and double casements, side hung and inward opening bottom hung, tilt and turn and turn and tilt, tilt and slide and vertical and horizontal pivots.

Triton Doors are available as opening in or out, single or double doors, with complementing sidelights and toplights and a range of cill sections. A continuous plastic insulation strip in PE foam neutralises considerably the heat losses around the glazing. The system is used in the constructions requiring high thermal insulation.

Available in any RAL colour or dual colour option.

Frame insulation value $1,34 < U_f < 1,75$ W/m²K

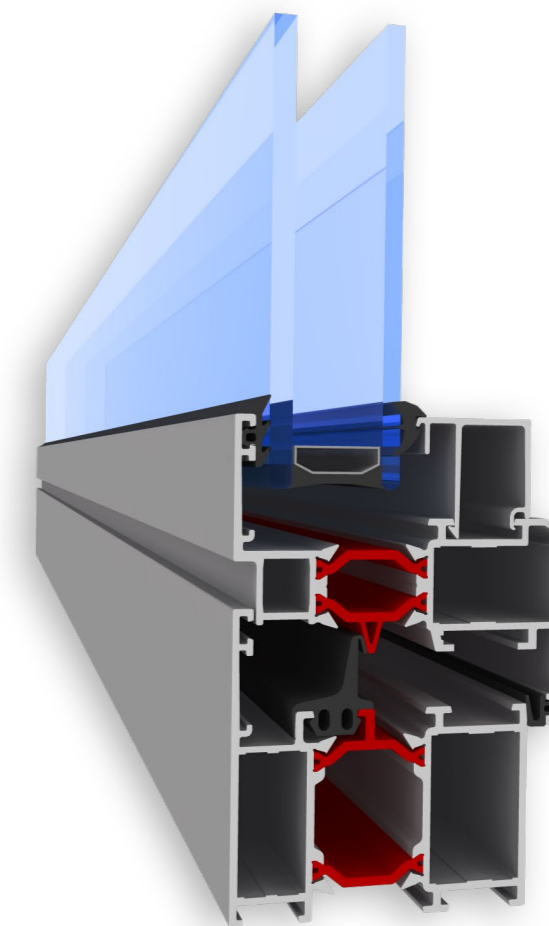
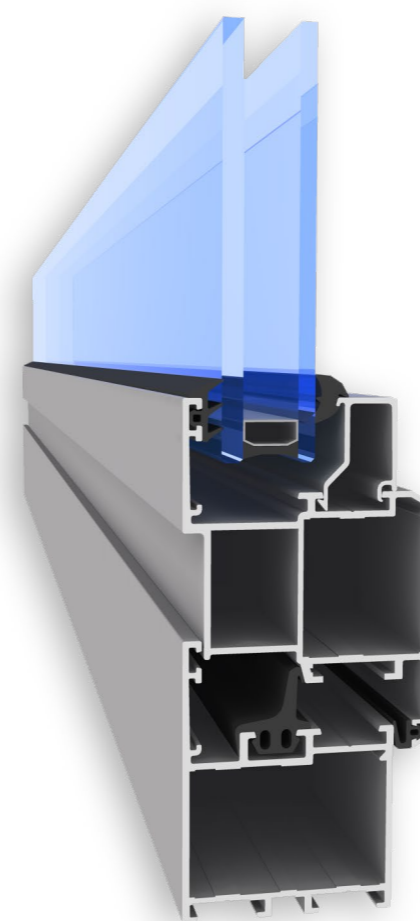
Thermal insulation values of one-sash tilt&turn window measuring 1230x1480 mm

Double-pane insulating glass unit (1,0 W/m²K) $U_w = 1,3$ W/m²K

Triple-pane insulating glass unit (0,6 W/m²K) $U_w = 1,0$ W/m²K

APOLLO

Apollo is a 2 chamber, high performance aluminium window and door system with the construction depth of 51 mm. Apollo is designed to offer an affordable aluminium window with high specification. Apollo provides a solution to most standard window and door sizes and with its wide range of profile options, it allows you to create any style and design. Available in any RAL colour or dual colour option. Frame insulation value $2,6 < U_f < 3,1$ W/m²K



HERCULES

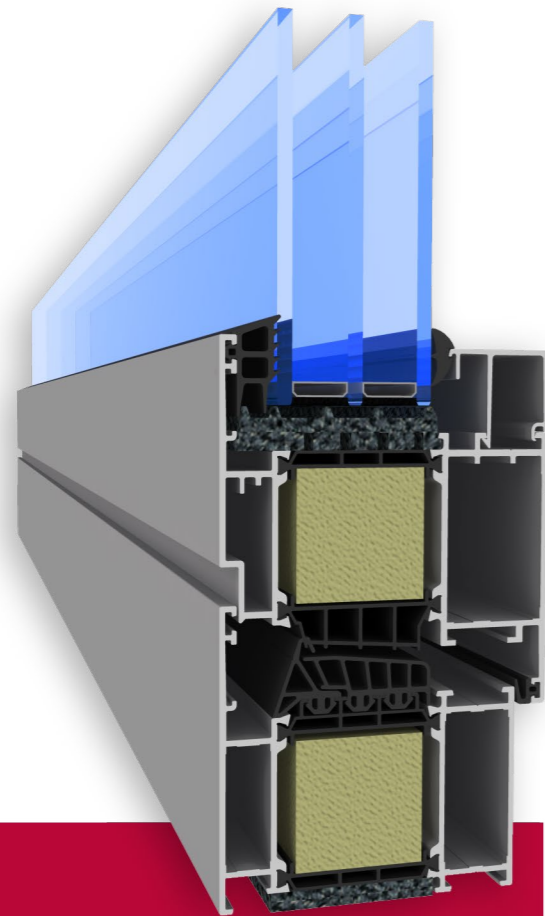
Hercules is a 3 chamber, high performance aluminium window and door system with the construction depth of 67 mm. Both frame and sash profiles incorporate a third chamber allowing greater strength, functionality and thermal performance. Hercules incorporates polyamide thermal breaks strengthened with fibreglass which ensure high thermal insulation ($U_w = 1,46$ W/m²K, depending on the selected frame-panel combination and glazing). Hercules provides a solution to most standard window and door sizes. Available in any RAL colour or dual colour option.

Frame insulation value $1,97 < U_f < 2,82$ W/m²K



OLYMPIA

Olympia HI is a high insulation aluminium window and door system with the construction depth of 82 mm. 3-chamber profiles include a number of insulating elements to provide maximum thermal insulation. The construction of the profile ensures excellent stability. The system has been designed in response to the growing market demand for high insulation windows and doors suitable to be used in passive houses. Available in any RAL colour or dual colour option. Frame insulation value $0,79 < U_f < 1,01 \text{ W/m}^2\text{K}$



COLORS

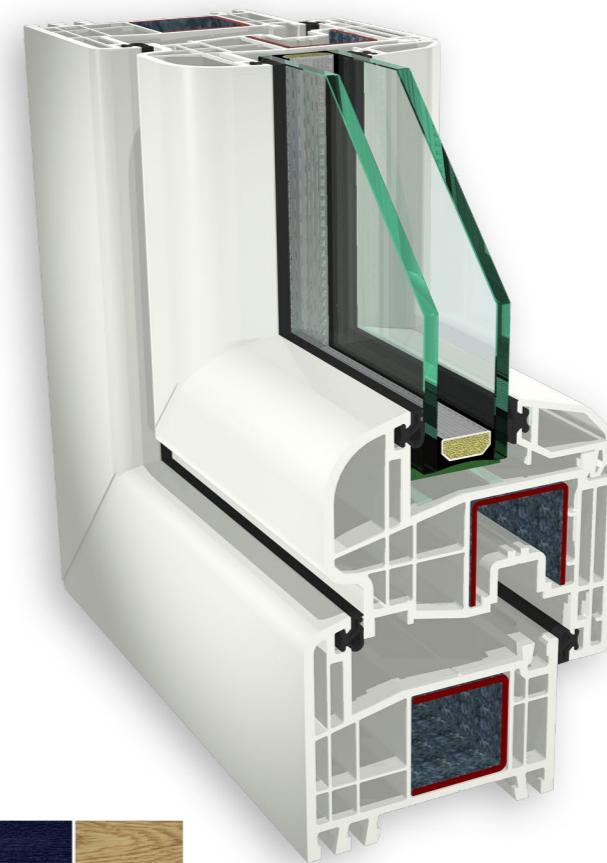
Colors available for systems: TRITON, APOLLO, HERCULES, OLYMPIA



blyweert[®]
aluminium

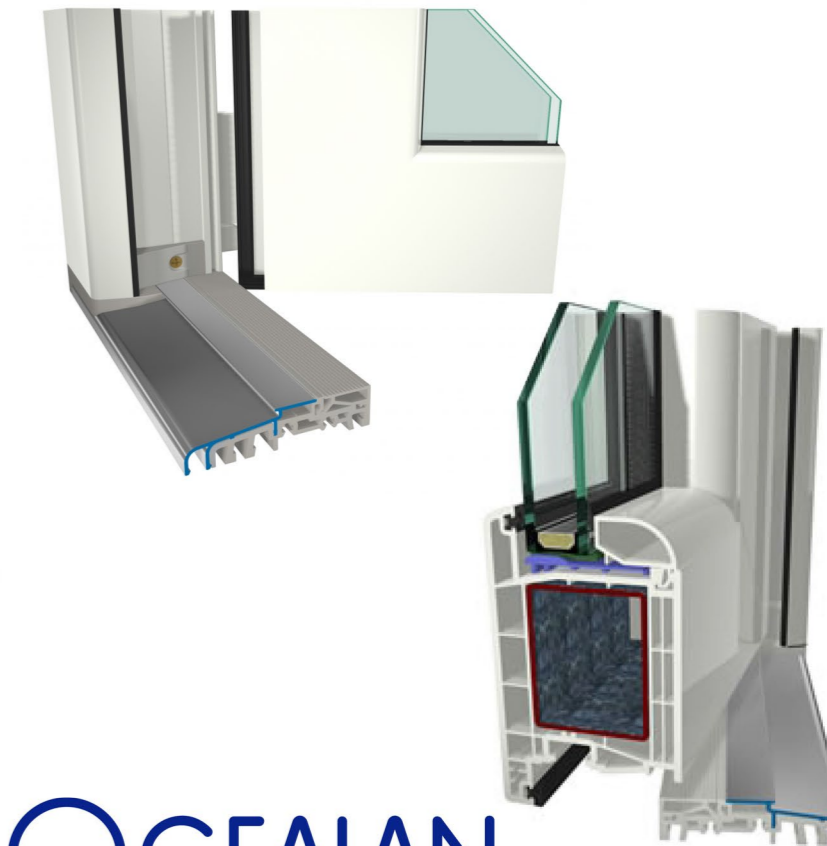
WINDOW S8000 IQ

S8000IQ - the classic among the systems. Elegant profiles in the S8000 IQ series are optically convincing with their modern, straightforward design and soft contours. Coloured profiles will make any house as individual as its inhabitants, or turn any building into an eye-catcher. A wide construction depth of 74 mm and 6 chambers ensure excellent thermal and sound insulation. Very good structural stability is reached thanks to large steel stiffeners and a wide construction depth. To prevent mould and improve the room climate, the patented GECCO (GEALAN CLIMA CONTROL) ventilation system can be installed. Frame value $U_f = 1,24 \text{ (STV)}$
Window value $U_w = 0,81 \text{ (triple glazing)}$
* for the reference window 1,23 x 1,48



DOOR S8000 IQ

Entrance Door in profile Gealan S8000 combined with an attractive filling highlight unique character of your home (the ability to choose any of the door panel or glass thickness to 40mm). By using hardware G-U get a greater sense of security for you and your loved ones. The construction of the wings with large chamber allows the use of larger steel reinforcements, which are guaranteed the long-term trouble-free door.



GEALAN



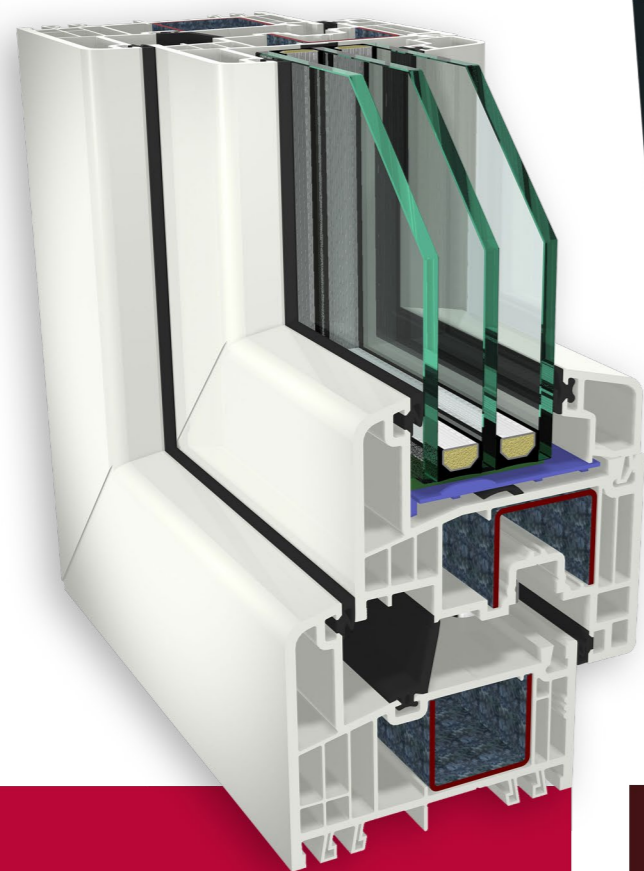
WINDOW S9000

As a combined system, GEALAN's new S9000 system combines the characteristics and advantages of central and compression seals with its installation depth 82,5mm. The huge installation depth, six profile chambers in window frames, sash and shafts and true end-to-end sealing levels guarantee outstanding thermal insulation. This way the windows themselves meet the highest requirements.

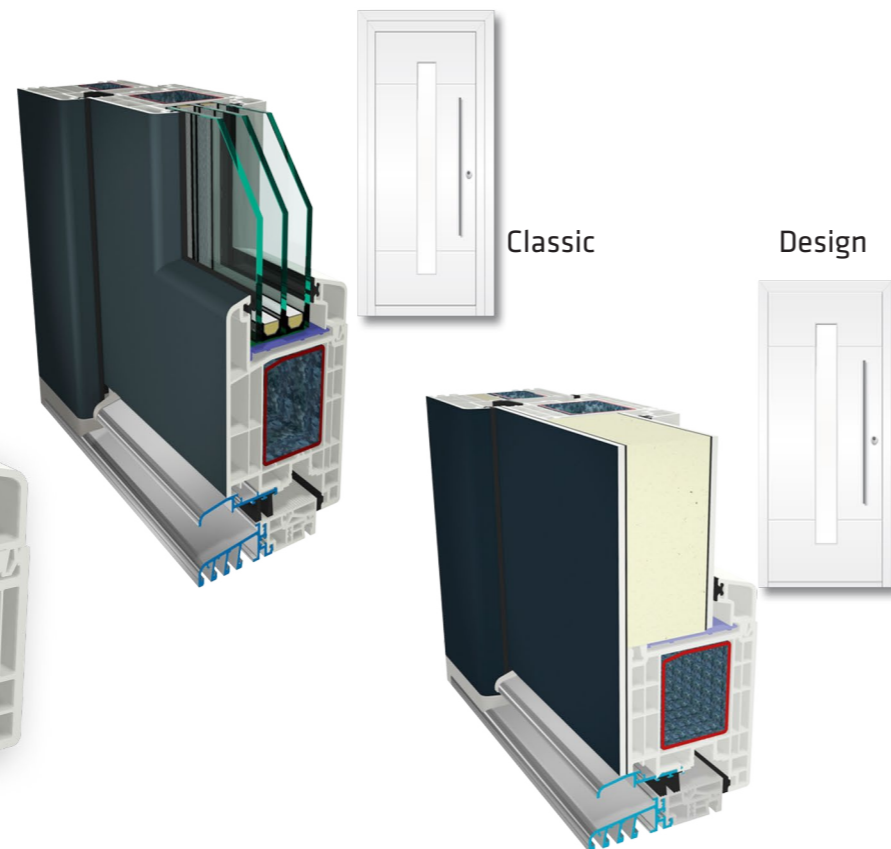
Frame value $U_f = 0,92$ (STV)

Window value $U_w = 0,79$ (triple glazing)

* for the reference window 1,23 x 1,48



Due to depth profile 82,5 mm and a modern 5-chamber construction Entrance Door in profile Gealan S9000 provide superior thermal insulation. Moreover, this profile convinces its stability, which is a result of careful design of details such as the large main chamber, ideal matched steel reinforcement or effective strengthening the corners in this profile. The durable connection elements of PVC and aluminum in two planes in the area threshold give us stronger construction. The applicability of unit glass or the door panel to 54 mm in thickness.



 **GEALAN**

DOOR S9000

Burglars can force the window open by moving the window fitting from the outside. They can pry the sash with a screwdriver in few seconds without any noise or leaving any marks. SECUSTIK® handle of HOPPE company can be a perfect prevention from burglary.

The handle is equipped with patented locking mechanism which increases protection against such "smart burglary". When we turn the handle from the inside in a correct way, the fitting moves. When we try to push the fittings by inserting a screwdriver from the outside, Secustik® mechanism blocks the movement of the window and impedes opening the window in an undesirable way. This solution is designed to surprise and discourage burglars from entering a house fitted with Secustik® handles. Burglars are always in a hurry and forcing windows with this type of handles will take time. An additional feature of Secustik® handle is its characteristic sound while opening. It is similar to a sound of digital lock safe. This sound assures us that blocking mechanism works correctly. Secustik® handles are produced with the highest quality materials which not only increase their functionality but also emphasize their elegance. All Secustik® handles have modern and smart shape and the range of available colour goes along with actual fashion trends. The most popular colours are: silver aluminium, stainless steel, antique gold (colour obtained by galvanic process so called anodizing) and invariably popular white. We can match individual tastes by choosing Secustik® handles which will look beautifully on the window and at the same time fit the interior design.

HOPPE Secustik® New York handles are offered as standard in our company. Their design perfectly matches the technological solutions of our joinery. They come in standard option as well as with the button and a key. This handle model is designed to meet customer expectations.



HANDLES



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