

uni_one 



U
NI
ONE

THE CONTEMPORARY WINDOW



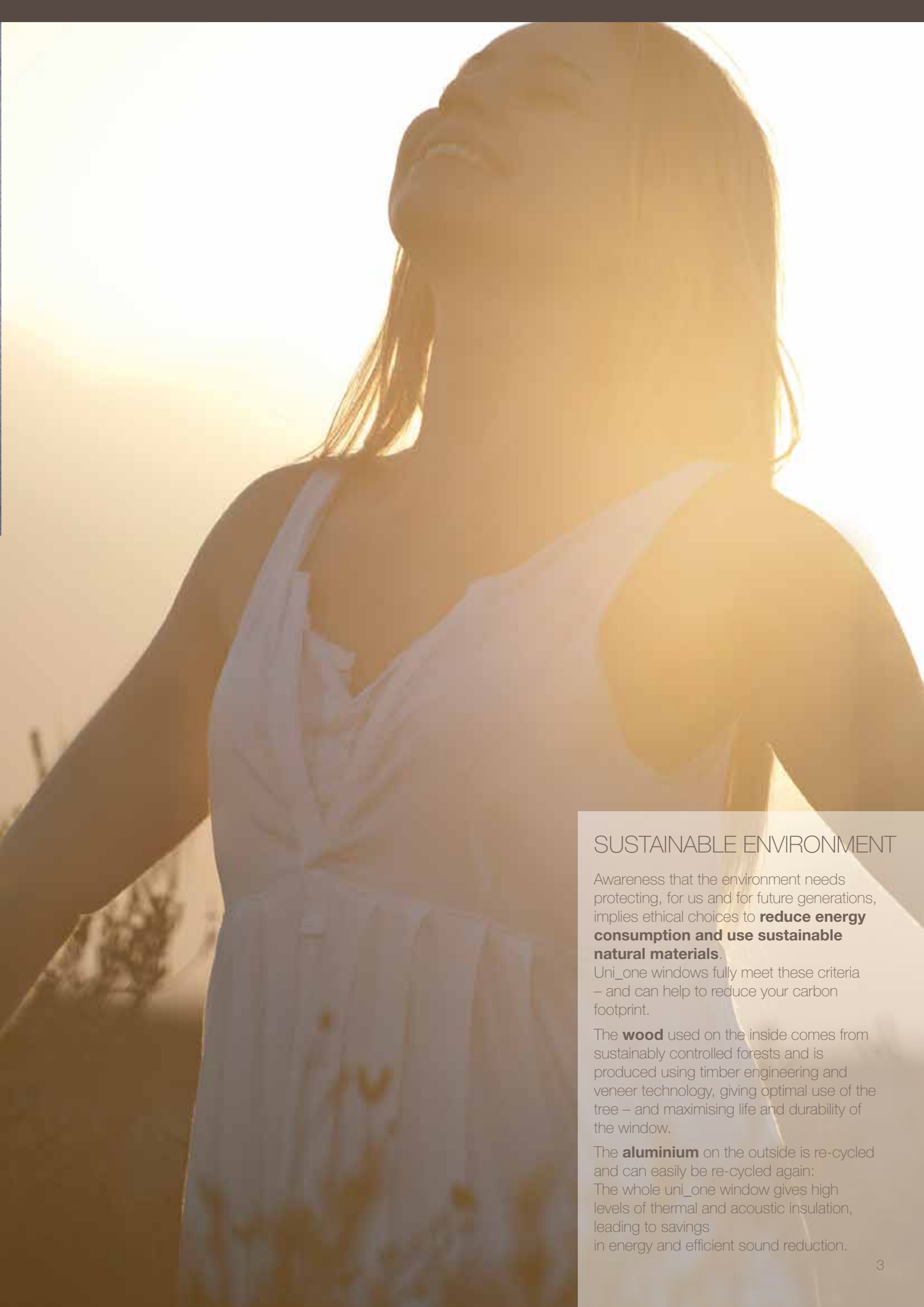
uni_one 

IN HARMONY

uni_one is a window designed for modern living. Uncompromising in quality, beauty and environmentally – for those who seek the highest standards of excellence.

More than skin deep, uni_one also meets the stringent technical and performance criteria demanded today, to keep occupants safe from the extremes of weather, temperature, noise and intruders.

uni_one achieves these exacting standards whilst also providing a virtually unlimited kaleidoscope of colour, texture and finish options, to most closely harmonise with you and your individual style.



SUSTAINABLE ENVIRONMENT

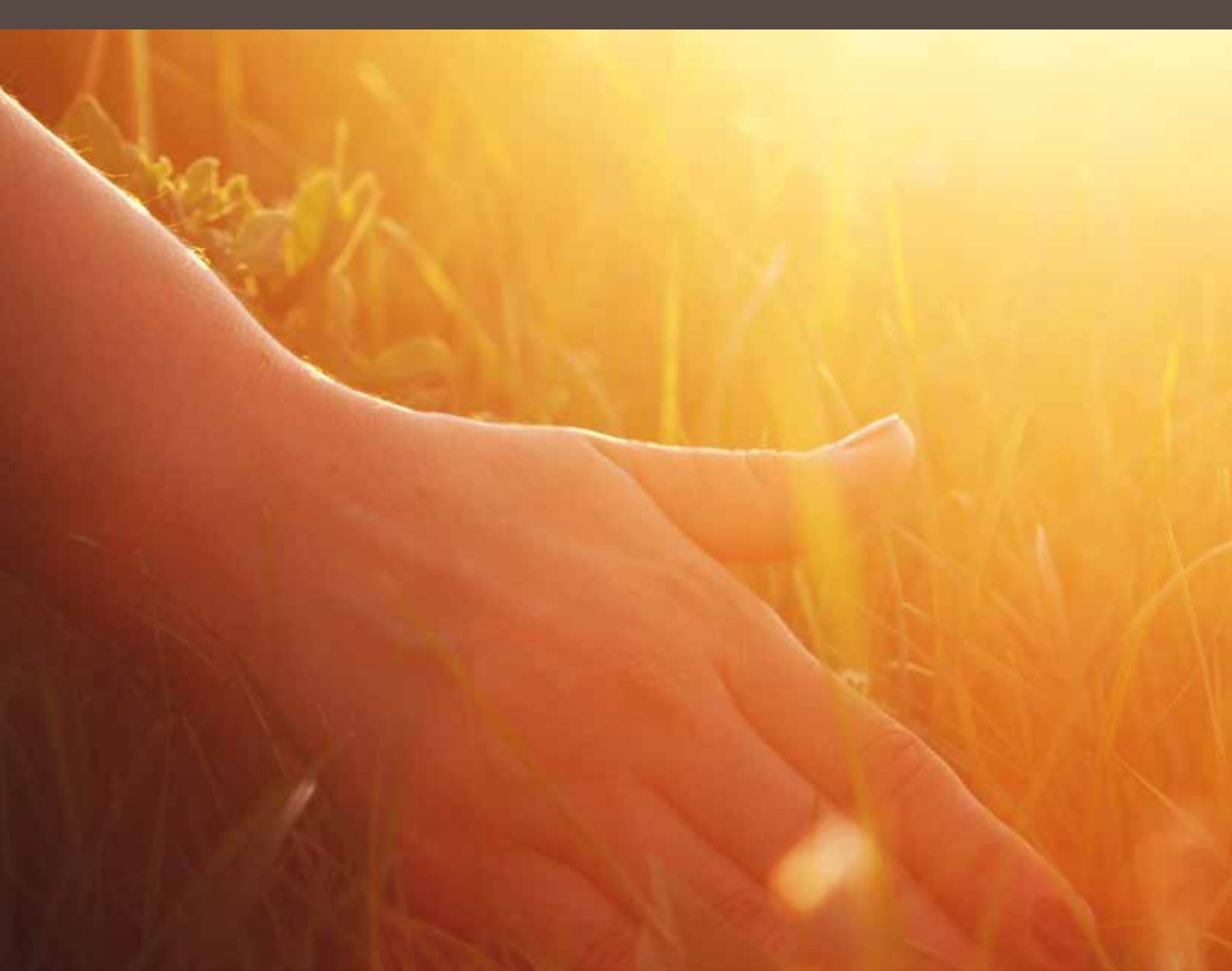
Awareness that the environment needs protecting, for us and for future generations, implies ethical choices to **reduce energy consumption and use sustainable natural materials.**

Uni_one windows fully meet these criteria – and can help to reduce your carbon footprint.

The **wood** used on the inside comes from sustainably controlled forests and is produced using timber engineering and veneer technology, giving optimal use of the tree – and maximising life and durability of the window.

The **aluminium** on the outside is re-cycled and can easily be re-cycled again:

The whole uni_one window gives high levels of thermal and acoustic insulation, leading to savings in energy and efficient sound reduction.



uni_one 

ENERGY EFFICIENCY AND COMFORT

uni_one windows are designed to achieve the highest thermal insulation, even below Passiv Haus 'U' values of 0.8 W/m²K, if required. This provides customers with maximum energy efficiency and comfort, whilst reducing their carbon footprint

The performance, proven by independent test houses, demonstrates high levels of achievement by uni_one in every configuration of window opening.

Climate House

ClimateHouse (aka. KlimaHaus or CasaClima) is a rapidly growing and internationally recognised construction standard and system of low energy certification for buildings. Therefore, ClimateHouse is synonymous with energy-efficient building techniques, materials and components. There are three categories of ClimateHouse:

ClimateHouse "Gold" - ("Ultra-low energy")

Energy consumption lower than 10 kWh/sq.m./year. for a "1 litre" house*. (PassivHaus is <15 kWh/sq.m./year)

(* 1 litre of heating oil for each square metre of room for space heating, per year)

ClimateHouse "A" - ("Low energy")

Energy consumption lower than 30 kWh/sq.m. for a "3 litre" house

ClimateHouse "B" - ("Low energy")

Energy consumption lower than 50 kWh/sq.m. for a "5 litre" house

In the construction of sustainable buildings which are compatible with climate criteria, low energy or ultra-low energy quality products which can demonstrate energy efficiency must be specified at the planning stage. Uni_one windows can achieve all of the above standards when required to do so.

MATERIALS



OAK - a beautiful, durable hardwood, which is the first choice of many for the interior design and furniture in their home. Often termed, 'noble oak' for the high esteem in which it is held, it is available in a selection of options, so as to sit perfectly with any interior design project and budget.

PINE - pine is a softwood whose beauty is its simplicity and practicality, containing a higher proportion of air, which makes it ideal for thermal and sound insulation. Pine is the perfect vehicle where a lighter timber appearance is required, or as a base for a rich variety of alternative veneers to be applied to maximise your colour options and minimise cost.

ALUMINIUM - Its resistance to all weathers makes it the perfect shield for protecting your timber window, thus minimising unsustainable and expensive maintenance. Moreover, the possibility of choosing from an incomparable number of finishes and texture combinations, makes the aluminium on uni_one windows, easy to match with any facade or architectural style.

TEST RESULTS FOR UNI_ONE:



Air permeability: class 4 (Achieved the highest classification)

WHAT DOES THIS MEAN? With a Hurricane* Force wind speed of 75 mph: no air leakage, no draughts, thus, a warmer and quieter, more comfortable atmosphere and greater energy saving.

Water tightness: Method A - class E 1050 (Exceeded the highest classification)

WHAT DOES THIS MEAN? No leakage when the glass is completely wet, despite a severe Hurricane* Force wind speed of 95 mph and horizontal rain.
*Hurricane wind speeds according to The Beaufort Scale.

Wind resistance: Class 5C (Achieved the highest classification)

WHAT DOES THIS MEAN? Extremely robust, minimal distortion even under high wind pressure, excellent resistance to gusts, no damage to fastenings, providing greater safety for occupants.

Energy saving: thermal transmittance 'U' values between 0.79 W/m²K and 1.2 W/m²K with high-performance glass

WHAT DOES THIS MEAN? Insulating double or triple glazed glass units, made with panes covered in a low emissivity coating (Low-E) combined with Argon gas between panes and warm-edge spacer bars, allow optimum performance values to be reached, guaranteeing enhanced comfort inside the building in all climatic conditions, reducing heat loss. Solar control glass also enables energy gains to be obtained from outside, as well as reducing heat excesses in Summer months.

Sound Reduction: insulation up to 49 dBR

When requested, the glass panes can be laminated, built with the insertion of a transparent, acoustic, PVB interlayer of soundproofing material which, allows noise insulation to be greatly enhanced, reaching outstanding levels of sound attenuation.



uni_one

THE FULFILMENT
OF YOUR DESIGN

The evocative beauty and tactile sensuality of natural materials can create an additional dimension to your decor choices. Thus uni_one becomes a finishing element of interior design for those who leave nothing to chance and seek perfection in the details of their own home.

Imagine the harmony you can create in a room if you use the same finish for windows, doors and furniture.

uni_one windows are born of nature but designed with interior decor in mind, to bring together technology and design in the home: your home.

What you see here are not enlargements of the details of furniture elements: they are uni_one finishes!
Thanks to uni_one's wide range of exquisite finishes, you can achieve perfect co-ordination for each room.





FINISHES: EMOTION AND SENSES IN MATERIAL FORM

Like our fingerprints, every uni_one finish is unique.

A perfectly balanced tactile and sensory experience enhances each element, adding to the structural qualities, nobility and refinement of wood.

Words have never been more superfluous: touch the finish of a uni_one window and you will understand in an instant what we are talking about.

finishes shown in this brochure are solely indicative



feel
finishes.sensuous.tactile

frames treated with Feel finishes



Real wood veneer



finishes shown in this brochure are purely indicative

frames treated with real wood veneer finishes



uni_one  INTERIOR

FRAMES WITH REAL WOOD VENEER FINISH

Real wood veneer is produced with veneered wood technology.

These techniques make it possible to create any variety of timber veneer, without defects and imperfections.

Multiple sheets of wood, layered under high pressure are fixed to a special fabric which makes it particularly suited to soft forming.

The flexibility of the backing fabric allows curved surfaces to be formed, whilst the wood veneer remains intact.

Such innovative veneering highlights the natural grain of the wood surface, which is then varnished with a silk-effect matt finish which gives it excellent resistance to scratches, abrasions and chemicals, retaining its original aesthetic qualities over time.

FRAMES WITH FEEL FINISH

FEEL finish is based upon the purest cellulose from broad-leaf wood, treated with special lacquers and embossed with synchronised pores and completely free from formaldehyde emissions.

FEEL is distinguished by its high resistance to abrasions, scratches and stains and its colour stability on exposure to light. For cleaning, the usual types of detergent can be used, avoiding build-up of wax or oily substances.







uni_one^{■ ■ ■ ■} INTERIOR

FRAMES IN TECHNO-OAK

Techno-oak frames are produced by an innovative system of fingerjoints which creates the characteristic effect of parquet thanks to the joining of many carefully selected slats.

This kind of lamination is extremely stable and particularly suited to large-sized windows as it avoids the natural tensions present in solid wood.

In the world of furniture, this kind of engineered wood construction is highly valued and used for panels, kitchen worktops, tables, stairs and floors.

FRAMES IN *AGED* TECHNO-OAK

The aging treatment which enhances the beauty of wood grain is applied to techno-oak frames to give the window the look of time-aged oak, especially appropriate where the aim is to create an atmosphere of warmth and 'olde-worlde' charm.

The aging process is accomplished using special abrasive brushes which remove the softer wood between the hard grain of the oak, giving the wood more depth and character.



ALUMINIUM FINISHES

The sample kit of colours and exterior finishes comes in an elegant case containing:
RAL COLOUR FINISHES
OXIPULVER - OXIDIZATION
WOOD and METAL FINISHES
SPECIAL FINISHES





ALUMINIUM

Due to the high quality protection from our factory applied powder coating paint system, the exterior aluminium on uni_one windows requires minimal maintenance and provides excellent resistance to water, sea spray and air-borne pollutants, allowing the designer free expression with new shapes and colours.

Painting is done after welding, ensuring perfectly sealed corners which are completely protected by the paint, and improving the aesthetics of the finished product.

The process of painting uni_one aluminium is as follows:

- Pre-treatment by immersion in chrome-free products in a closed circuit.
- Powder coating with polymerisation at heat.

The painting process is carried out in compliance with European Qualicoat standards.

Aluminium frames are produced using welding technology for corners which give them maximum strength and quality.

The connecting system of aluminium corner blocks glued and crimped is used for oxidised, decorative wood and metal frames.







BRONZE

The special brass alloy used in frames does not need any surface protection or maintenance. The patina which forms naturally is the best and most hard-wearing protection, guaranteeing unlimited use – as seen on statues for hundreds of years!

Finishes in bronze, copper and antique bronze are obtained by chemical reaction on the surface of frames made of a special brass alloy, known as architectural bronze.



antique bronze



copper bronze

FRAMES WITH WELDED CORNERS

The bronze frames are welded at the corners to achieve maximum strength and quality. The welding process is done with oxy acetylene, using rods with a high proportion of silver (at low melting point to reduce distortions to a minimum).





uni_one  ACCESSORIES
AND DETAILS



ORO - gold



CRL - polished steel



CRS - satinised steel

The internal corners of the opening windows can be, optionally, fitted with a special, decorative ABS insert, an identifying feature of uni_one windows, which can be matched with the wood finish or that of the handles and hinges, in line with the uni_one philosophy.

You can chose from the elegance of a gold finish, the technology of steel, the neutrality of metallic grey or the minimalism of white.

Like everything about uni_one: designed to suit you.



GMT - metallic grey



BCO - white

THE ADVANTAGES OF WOOD-GLASS STRUCTURAL BONDING

All uni_one models use structural bonding between glass and wood on opening sashes.

The glass is fixed to the untreated wood using a structural silicon glue, which forms a definitive and permanent bond between the two materials.

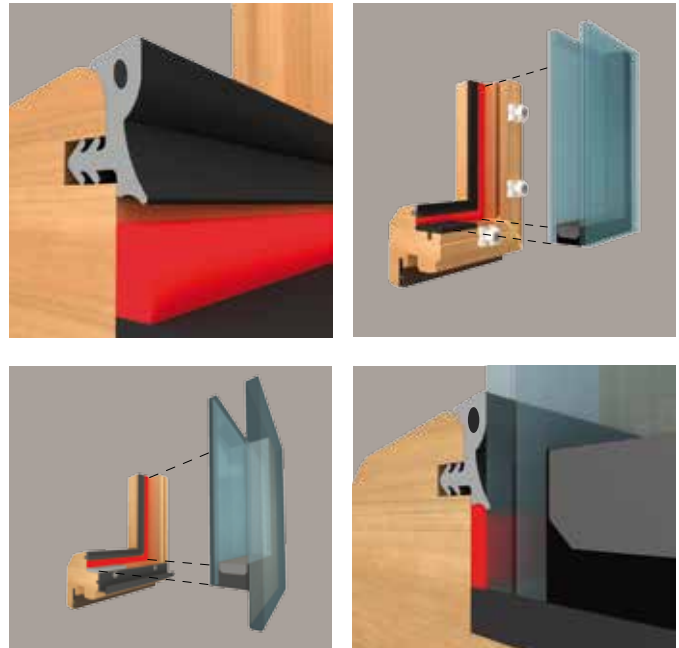
The fixing of the glass to the wooden structure makes the window significantly more stable and resistant to distortion, allowing very large, bright openings to be created.

In traditional windows, the fixing of the glass causes stresses at certain points only, when the window flexes, which concentrates the flow of forces on the pane, which can cause breakage.

Structural bonding of the glass to the wood, however, distributes the load equally, all round, avoiding stress points on the pane from optimising the flow of forces.

In the uni_one integral system the opening sashes are built using only wood and glass: the best possible combination in a modern window. The glass unit is extended on the outer pane, only, to completely replace the aluminium, for improved aesthetics, narrower sight-lines and greater durability.

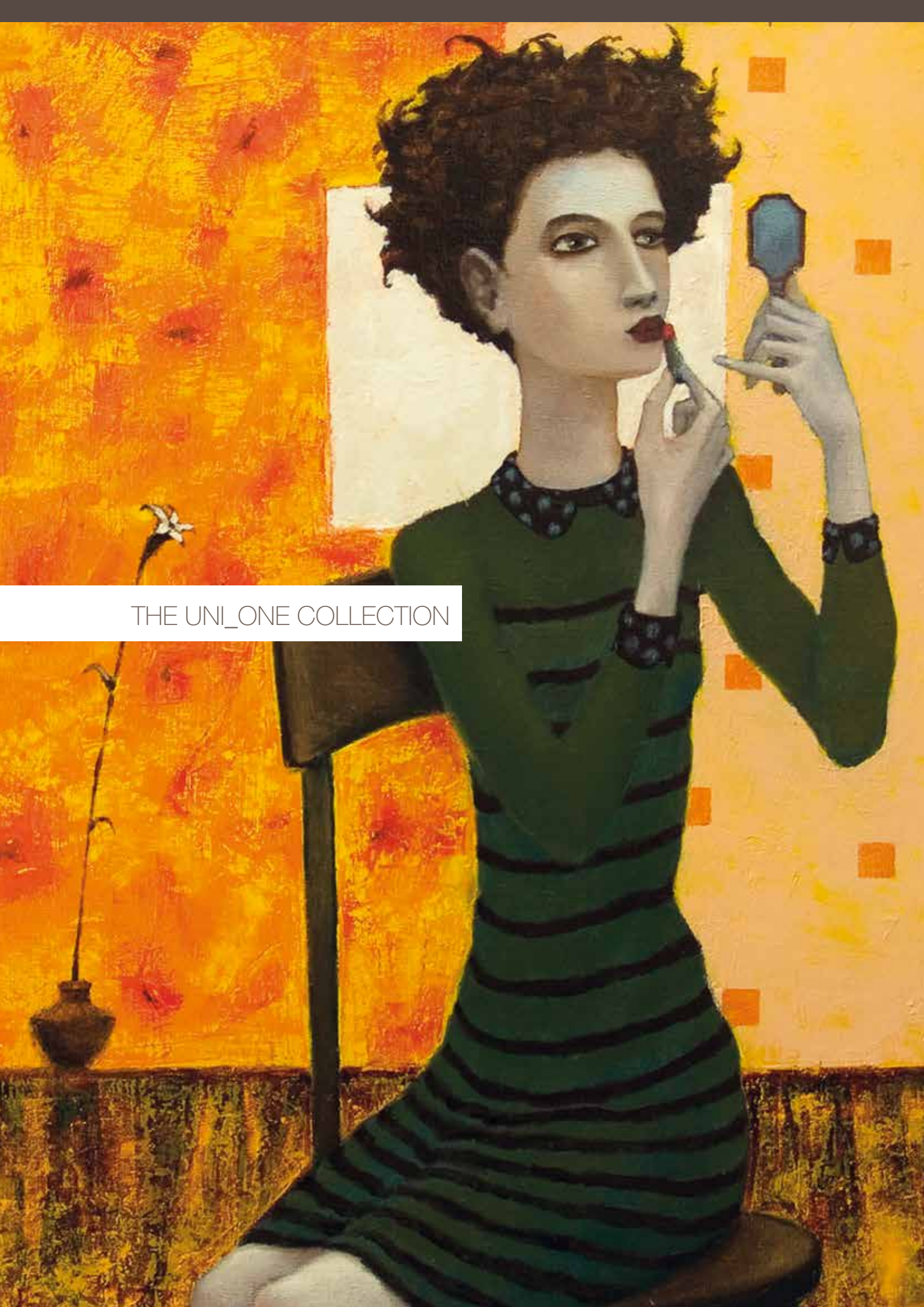
Structural bonding of the glass also improves thermal and acoustic insulation, gives greater protection against burglary and optimum functionality throughout the window's lifetime.



FIXING TO WOOD USING CLIPS

The aluminium frame is fixed to the wood using robust nylon screw clips. The clips snap onto the aluminium edge; the frame can be dismantled by unscrewing the clips with a suitable tool.





THE UNI_ONE COLLECTION



STANDARD



BRONZE



INTEGRAL



ZERO



COPLANAR



VERBUND



COMFORT



TERMOSCUDO



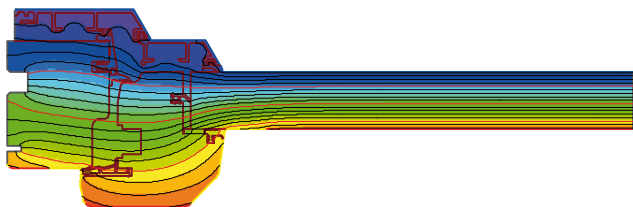
HS-ZERO

THE UNI_ONE COLLECTION

UNI_ONE STANDARD

Uw=1,2 W/(m²K)

Material		Wood-Aluminium
Thermal insulation		Uw= 1,2 W/(m²K)
Acoustic insulation		up to 41 rw (dB)
Insulating glass		double glazing, thickness 28/32mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		81,5 x 70 mm
Thickness of frame		77,5 x 70 mm
Section sash + frame		106 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Fixed	•	
Doors and windows with sash/wing	•	
Transom window	•	
Parallel sliding window	•	
Lift and slide window	•	
Horizontal pivot hinge	•	
Entry gate with inward opening	•	
Outward opening doors	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: Uf=1,2 W/(m²K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		

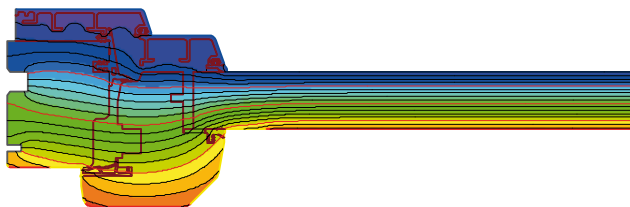
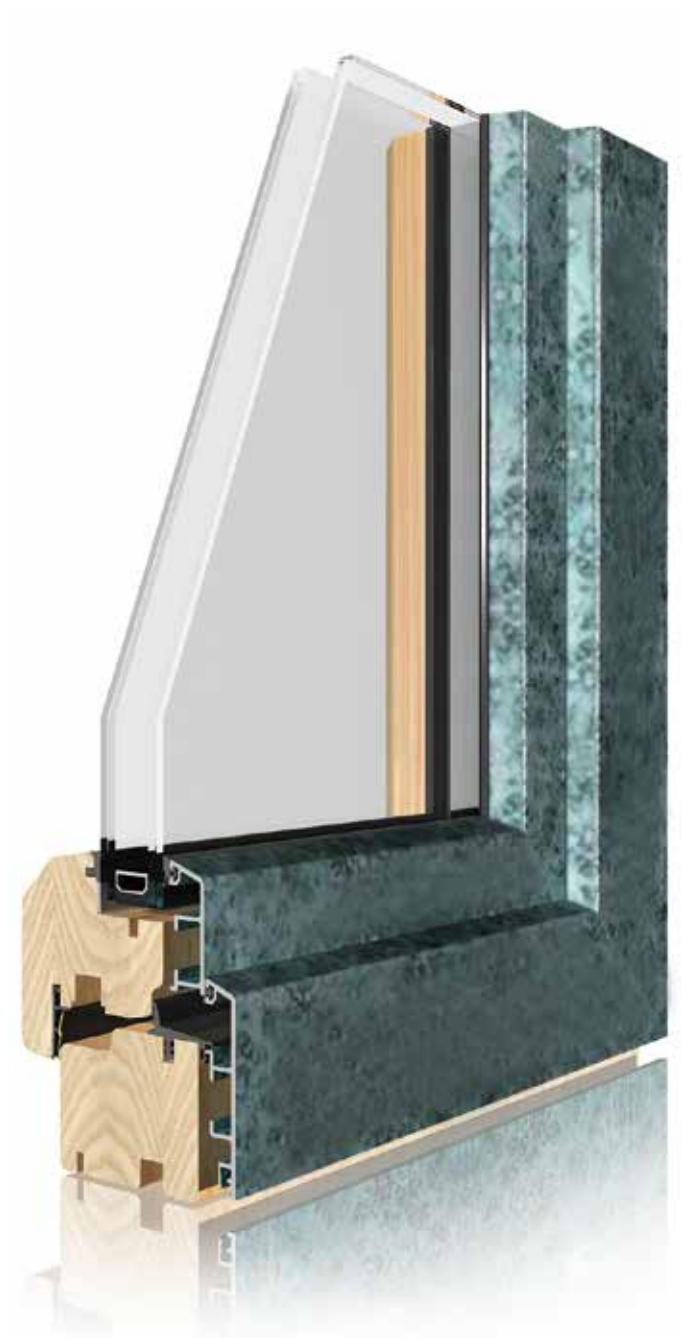


uni_one Standard's design is always up-to-date: its elegance and neutrality come from its simple yet rigorous lines, which fit perfectly in every architectural context, from contemporary to restoration.

UNI_ONE BRONZE

Uw=1,2 W/(m²K)





Material		Wood-Bronze
Thermal insulation		Uw= 1,2 W(m²K)
Acoustic insulation		up to 41 rw (dB)
Insulating glass		double glazing, thickness 28mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		81,5 x 70 mm
Thickness of frame		77,5 x 70 mm
Section sash + frame		106 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Fixed	•	
Doors and windows with sash/wing	•	
Transom window	•	
Parallel sliding window	•	
Lift and slide window	•	
Horizontal pivot hinge	•	
Entry gate with inward opening	•	
Outward opening doors	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: Uf=1,2 W(m²K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		

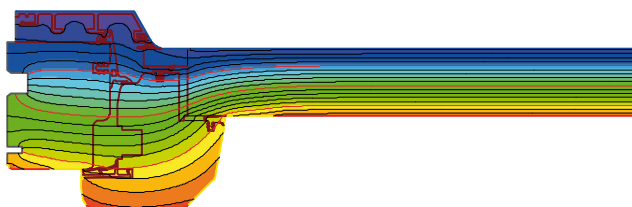


uni_one Bronze is made from a special brass alloy, known as “architectural bronze”, which does not require any surface protection or maintenance. The patina that forms naturally over time is the best and most hard-wearing protection, ensuring exceptional durability for the window.





UNI_ONE
INTEGRAL

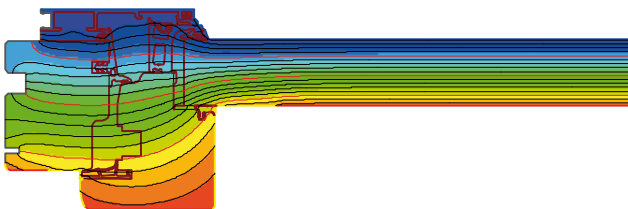
Uw=1,2 W/(m²K)

Material		Wood-Aluminium
Thermal insulation		Uw= 1,2 W(m²K)
Acoustic insulation		up to 42 rw (dB)
Insulating glass		double patterned glass, thickness 33mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		78 x 70 mm
Thickness of frame		77,5 x 70 mm
Section sash + frame		106 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Fixed	•	
Doors and windows with sash/wing	•	
Transom window	•	
Parallel sliding window	•	
Lift and slide window	•	
Horizontal pivot hinge	•	
Outward opening doors	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: Uf=1,2 W(m²K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		



uni_one Integral is a window made in wood with structural double glazing and exterior cladding in aluminium; modern and clean-cut in design. The sashes are solely wood and glass, the best combination in a modern window. The system allows large glazed surfaces to be created while maintaining excellent thermal and sound-proofing properties.

Material		Wood-Aluminium
Thermal insulation		Uw= 1,2 W(m²K)
Acoustic insulation		up to 42 rw (dB)
Insulating glass		double glazing, thickness 32mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		89 x 65 mm
Thickness of frame		77,5 x 91 mm
Section sash + frame		101 mm
Section of intersection 2 sashes		134 mm
Types of opening		
Doors and windows with sash/wing	•	
Transom window	•	
Lift and slide window	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: Uf=1,2 W(m²K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		

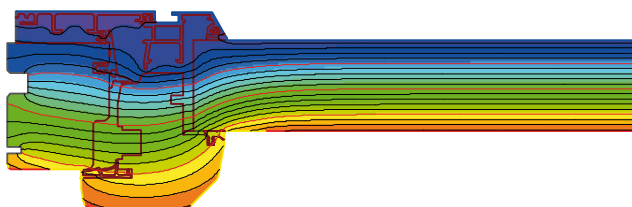


uni_one Zero is the expression of architectural minimalism, but without sacrificing excellent levels of thermal insulation. On the outside, the aluminium frame completely hides the outline of the sash, allowing the bright transparency of the glass to become the only true protagonist of this window. uni_one Zero finds its ideal home in contexts of modern and clean-cut design.


UNI_ONE
COPLANAR

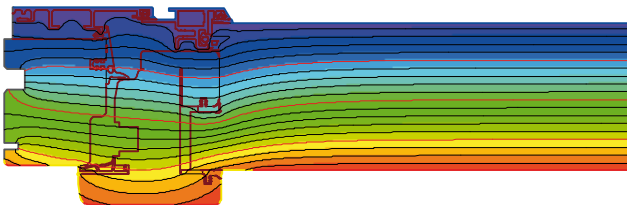
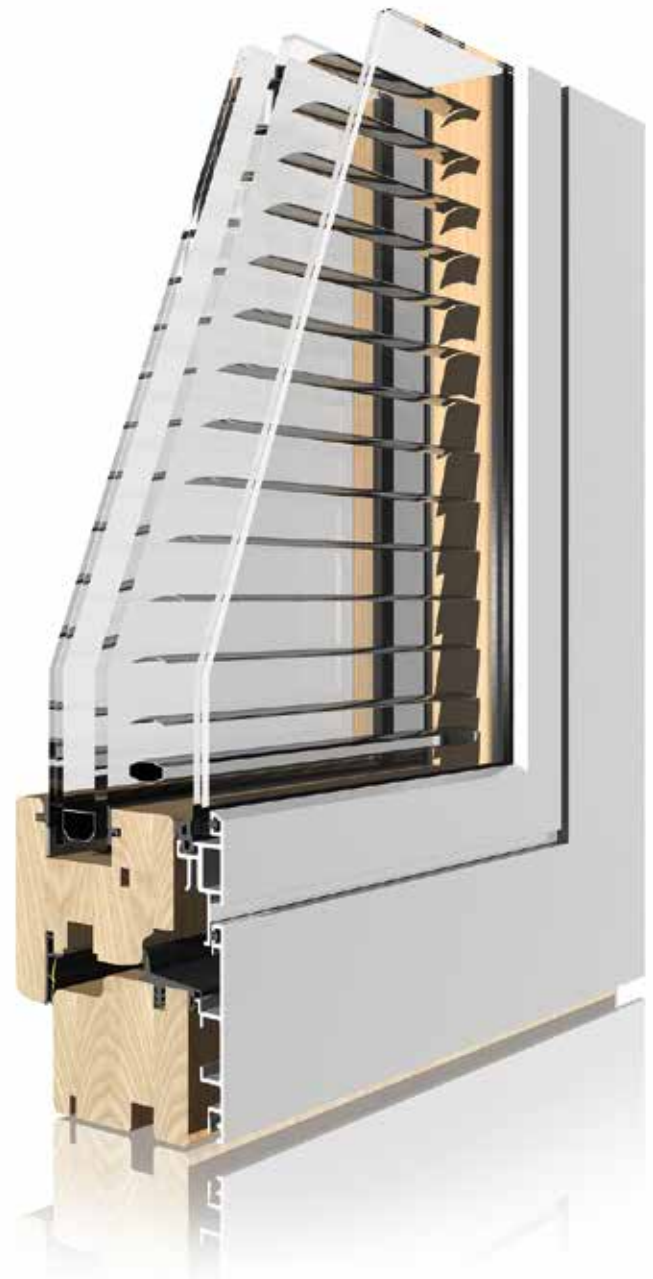
U_w=1,0 W/(m²K)

Material		Wood-Aluminium
Thermal insulation		U _w = 1,0 W/(m ² K)
Acoustic insulation		up to 43 rw (dB)
Insulating glass		triple glazing, thickness 44/50mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		96 x 70 mm
Thickness of frame		77,5 x 70 mm
Section sash + frame		106 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Fixed	•	
Doors and windows with sash/wing	•	
Transom window	•	
Parallel sliding window	•	
Lift and slide window	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: U _f =1,3 W/(m ² K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		



uni_one Coplanar is severe and linear in design: the external aluminium profiles of the frame are flush with the sash. This system allows the range of application of wood/aluminium to be extended to residential and business environments which tend to have flat doors and windows lying flush with the building's facade. The flat surfaces of the frames allow perfect blending of all the elements.

Material		Wood-Aluminium
Thermal insulation		Uw= 1,0 W/(m²K)
Acoustic insulation		up to 42 rw (dB)
Insulating glass		double glazing, thickness 28mm + exterior pane 6mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		96 x 70 mm
Thickness of frame		77,5 x 70 mm
Section sash + frame		106 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Doors and windows with sash/wing	•	
Transom window	•	
Parallel sliding window	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: Uf=1,1 W/(m²K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		



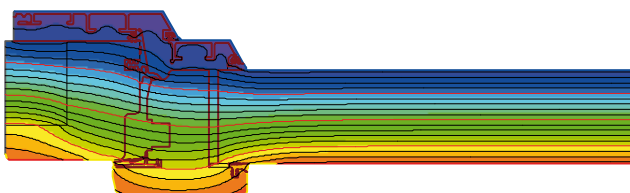
uni_one Verbund allows the insertion of a Venetian blind or a blackout blind between the double glazing and the external aluminium frame fitted with laminated glass.

It is the perfect solution for schools, hospitals, business premises and modern residential buildings. Among the many advantages of this system are improved thermal and sound insulation, protection from dust, light diffusion is controlled electrically or by solar powered battery, and trouble-free maintenance of the blind, facilitated by opening the interior pane.

UNI_ONE
COMFORT

U_w=1,0 W/(m²K)

Material		Wood-Aluminium
Thermal insulation		U _w = 1,0 W/(m ² K)
Acoustic insulation		up to 43 rw (dB)
Insulating glass		triple glazing, thickness 49mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		81,5 x 70 mm
Thickness of frame		77,5 x 90 mm
Section sash + frame		126 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Fixed	•	
Doors and windows with sash/wing	•	
Transom window	•	
Parallel sliding window	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 2 sashes window)		
Soft wood: Weighted average U _f =1,2 W/(m ² K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		



uni_one Comfort is the result of technological progress combined with the development of new insulating materials which can reach extremely high levels of thermal and acoustic insulation.

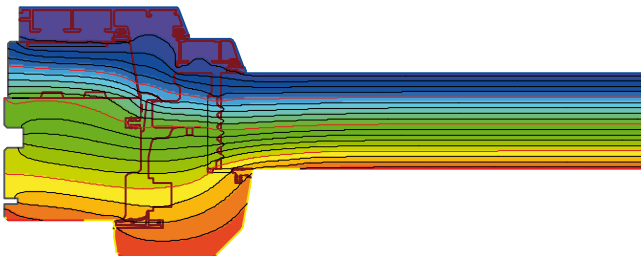
The application of an EPS insulating profile to the frame has reduced the weighted average U_f value to 1.2 W/(m²K), enabling the thermal transmittance of the window to be reduced to 1.0 W/(m²K).

uni_one Comfort is certified A class by the ClimateHouse agency in Bolzano, Italy.

UNI_ONE TERMOSCUDO

U_w=0,8 W/(m²K)

Material		Wood-Polystyrene-Aluminium
Thermal insulation		U _w = 0,8 W/(m ² K)
Acoustic insulation		up to 43 rw (dB)
Insulating glass		triple glazing, thickness 49mm
Security hardware		YES
Dimensions in mm.		
Thickness of sash		111,5 x 70 mm
Thickness of frame		108,5 x 86,5 mm
Section sash + frame		126 mm
Section of intersection 2 sashes		144 mm
Types of opening		
Fixed	•	
Doors and windows with sash/wing	•	
Transom window	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: U _f =0,78 W/(m ² K)		
Acoustic insulation values are estimated, for a window with 2 sashes, width by height 1500 x 1500 mm		



In uni_one's Termoscudo system, a frame and sash of XPS are inserted between the wood and the aluminium, allowing extremely low thermal transmittance values to be achieved.

The new Termoscudo technology means the aesthetics of the window remain unchanged.

There is therefore very little visible obstruction: the result is a perfect balance of aesthetics and energy efficiency.

UNI_ONE
HS-ZERO

Uw=0,8 W/(m²K)

Material		Wood-Aluminium
Thermal insulation		Uw= 0,8 W/(m²K)
Acoustic insulation		up to 43 rw (dB)
Insulating glass		triple glazing, thickness 44mm
Types of opening		
Lift and slide window	•	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement HS Scheme A-Mis. Outer frame width x height 2800 x 2500 mm		

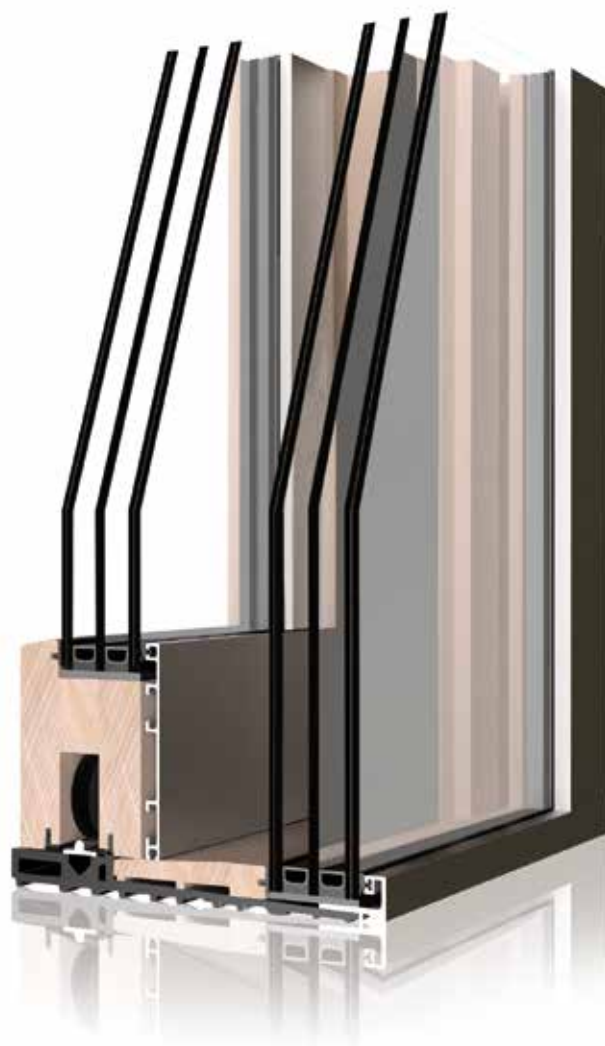
The uni_one lift and slide window has an elegant minimalist look.

The slim wooden frame disappears in the jamb of the wall and the sill is embedded in the floor, allowing the bare essentials to be seen: the transparency of glass and the movable sash on the inside; the brightness of glass and the aluminium cladding with welded corners on the outside.

The window is no longer the centre of attention; now the light, the landscape and the sky become the focus of interest.

Glazed walls slide from floor to ceiling, glazed joints align perfectly, either in a continuous line or at an angle, light modulation can be built into the glass or outside it, according to the requirements of the project.

Thermal insulation, soundproofing, weather resistance, ease of cleaning and countless design combinations of fixed elements and sliding sashes with cutting-edge security systems built in - all make the uni_one Zero lift and slide window the most innovative system for your project, or your home.



WE OFFER 10 YEARS' GUARANTEE

OUR PRODUCTS ARE DESIGNED WITH YOUR WELL-BEING IN MIND



All uni_one systems are certified and guaranteed for 10 years because we believe that a window, as well as being beautiful, should last for many years and add value to your house. This is why, before being launched on the market, all uni_one systems are certified according to the strictest quality standards: your well-being and safety are always uppermost in our mind.

Thanks for photographic
input are due to:



200-200.1



uni_one 

find out more at:
www.sistema-uni-one.it