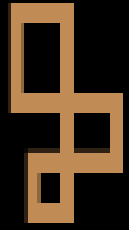


EUROTECH WINDOWS

crafted wooden windows and doors



Windows and doors – built to last

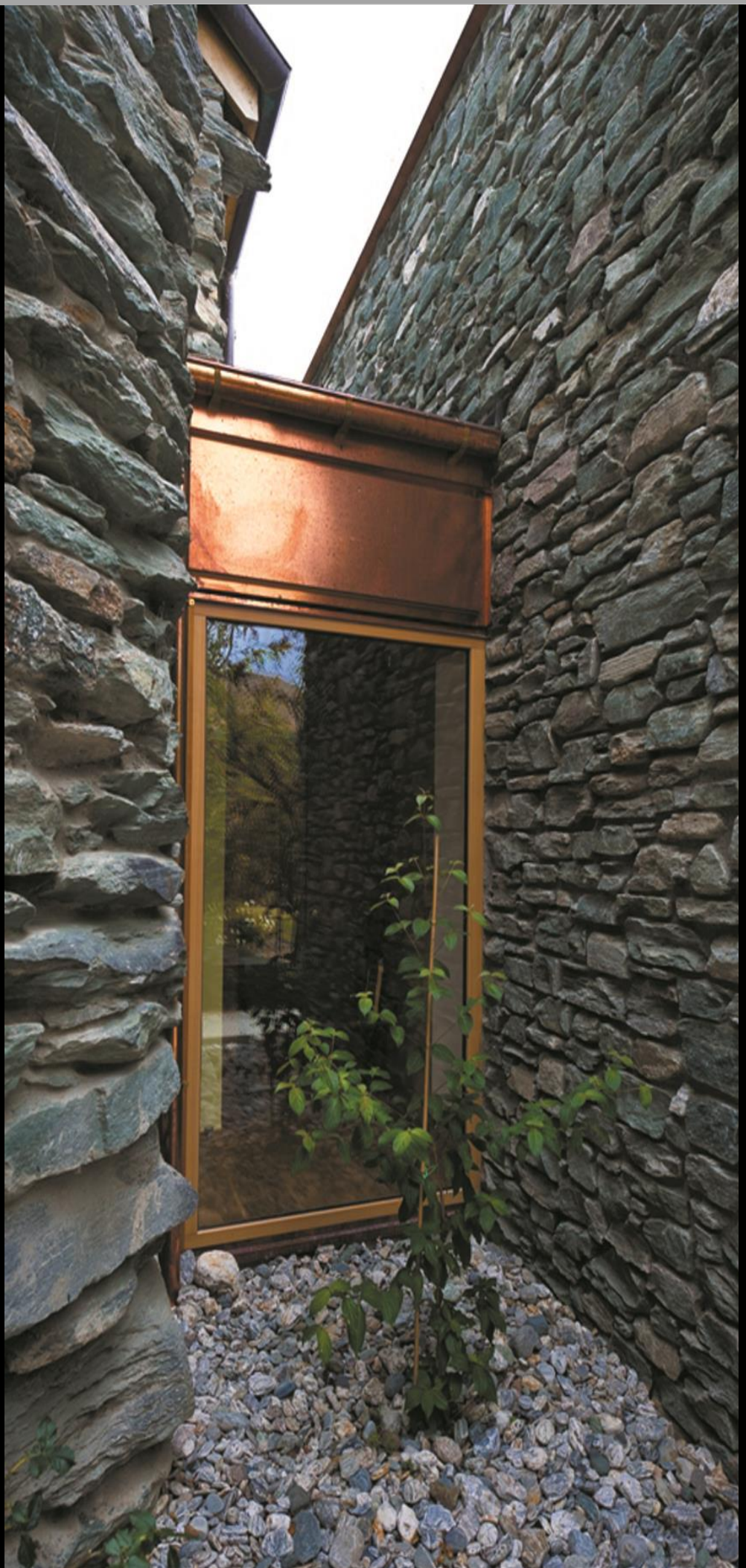
Eurotech WinDoor's handcrafted bespoke timber windows and doors can add value, style and character to your home. We bring the best innovative design features from the tradition of fine European craftsmanship to create unlimited design options for your home.

The strength and beauty of timber, the double tenon corner joints and quality hardware means you are no longer constrained in your window design choices. We believe we produce the best quality windows and doors in New Zealand.

Our windows are at the cutting edge of sustainable window design, taking thermal performance to a new level. Combining double or triple glazing with FSC® Oak or Siberian Larch to create truly beautiful and sustainable homes.

Eurotech WinDoors was established in 2007 and has grown rapidly as architects, builders and home owners all over New Zealand have been quick to appreciate the quality, fine craftsmanship and beauty of its wooden windows and doors

We have European and New Zealand trained joiners who have a passion to deliver a top-quality product to our customers.



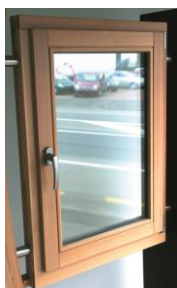


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Tilt & Turn Windows

Tilt & turn windows and doors have been the standard in Germany and other European countries for over 40 years and can be opened from either the side or the top. They can be used anywhere in the house and provide excellent ventilation and security. All window functions are operated with one hand, in one motion.



Closed Position

A multipoint locking mechanism with several cam locks, for a burglarproof security level, keeps the sash tightly locked into its frame.

The concealed multipoint locking system also ensures a 100% draft free window. All locking points are operated by one handle.



Tilt Position

Tilted inwards on top for optimal, draft-free ventilation. This opening position is still secure against intruders. The ventilation gap is adjustable from 140mm to 80mm.

A traditional open window often causes a draft due to the direct path of the outside wind into the room. With a tilt & turn window, the outside air is channeled through the sides of the window, while warm used air escapes through the top.



Turn Position

Turn completely open – use for maximum ventilation, as an emergency escape or for easy cleaning from the inside. Hinges can open 180 deg. unless stopped by the reveal or a stay.



Tilt & Slide Windows

The tilt & slide window provides secure ventilation and a multipoint locking system in areas where internal space is restricted, e.g. above a kitchen bench. The hardware is 3d adjustable and available in four different colours.



Tilted position



Sliding position



Bifold Windows

Bifold windows are a great option in kitchens and in areas where a wide opening is desired. Thanks to the optimized bogie technology and pin guided rollers, you can be assured of a perfectly smooth operation with your bifold windows.

Adjustable hinges and an uninterrupted non-rotting rubber seal are standard with all our bifold windows. A tilt & turn sash can be integrated for secure ventilation. Hardware and hinges are available in four different colours.



Tilt Windows

Tilt windows are often used when the opening sash is wider than it is high. They are also popular as garage windows, bathroom windows or windows in high positions. Tilt windows are equipped with an uninterrupted non-rotting rubber seal and adjustable hinges. If the tilt window is situated high above the floor, special manual or electronic opener hardware can be supplied to operate the window from a convenient height.



Fixed Windows

Fixed windows are a good way to bring light into the room when no ventilation is needed as well as being the most cost effective option for windows. Fixed windows can be designed in a combination with all window and door designs.



French Windows



French windows can be completely opened without having obstructing mullions in the view. One sash is a tilt and turn sash; the other a turn sash.

Only one handle can be seen when the window is closed while the second sash handle is concealed and can only be accessed when the first sash is open. Both sashes open 180 deg. unless restricted by the reveal.

French windows can be combined with many other window designs, e.g. fixed windows or an additional tilt & turn sash.



Tilt & turn WinDoor

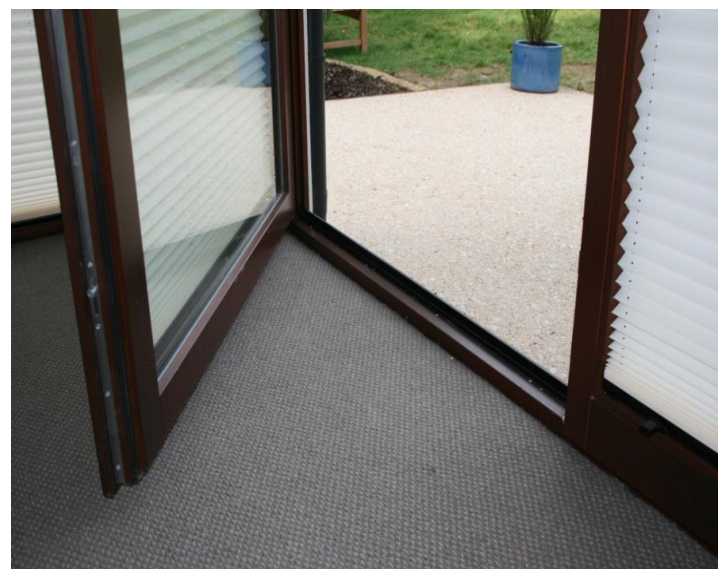
Tilt & turn WinDoors can be designed as single doors, French doors or in combination with fixed sidelights.

French doors are a popular option for access to a deck. Both sashes can be opened or one sash can be used as an ordinary door. One sash can be tilted for ventilation which is a great advantage for bedrooms as no additional windows for ventilation are required. This keeps cost down while enhancing your home's design.



Single doors are used as back doors or side entrance doors. The single tilt & turn WinDoors can be tilted and thus work as a window for secure ventilation.

Tilt & turn WinDoors offer a great flexibility, but are also the most economic door solution.



Tilt & Slide WinDoor

Tilt & Slide WinDoors allow ventilation and egress without taking up valuable space because they do not protrude into the room or patio floor area. Roto Patio tilt & slide doors enable either the tilted ventilation position or the fully open mode to be achieved with a single handle operation.

All-round locking on the sash makes high levels of security possible. Using components from Roto's tried and tested hardware system, the locking points give an exceptional degree of security and weather seal.

The tilt & slide WinDoor is the most economical sliding door option.



Tilted position



Sliding position



Closed position

Bifold WinDoor

Bifold WinDoors open inwards and have an additional tilt option for one door sash. This means you can open the door like a window for additional ventilation. The hinges on the sashes and frame are adjustable.

One sash can be used as a single door for daily use or all sashes can be opened for an indoor-outdoor flow.

The bifold WinDoor is the most economical bifold door option.





Bifold Doors

The bifold doors open up rooms in a particularly elegant and efficient way. All doors conveniently slide and fold to the side, opening up the width of each room. This enables you to bring the “outside in” with spacious access to the deck or the conservatory; and to open up whole rooms for conferences, visitors or business purposes.

An additional optional safety feature is the comfort threshold which ensures that there are no chances of stumbling or slipping. This is particularly important for restaurants, retirement homes or homes for the disabled.

Bifold doors in the comfort sill system open outwards and can be supplied in a width up to 7500mm. The hinges on the sashes and frame are adjustable.



Inward opening comfort sill doors (Front entrance doors)

Front entrance doors make the first and strongest impression. *Eurotech WinDoors* supplies beautiful doors to suit every home. Every door is custom made and the options are endless. With glass sidelights, glass tiles in the door sash, cladding or a smooth surface – design it and we will build it!



Outward opening comfort sill doors

Outward opening doors can be designed as single doors or French doors. All outward opening doors are equipped with a multipoint locking system and extra seals on the outside.

Outward opening doors do not tilt, but can be combined with windows as seen in the picture on the right.



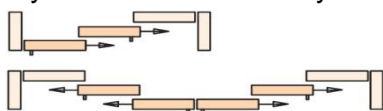
Lift & slide doors

This door provides all you should expect from a sliding door and more - it is easy to operate, and keeps the moisture and drafts outside where they belong. The “Siegenia Aubi hardware” lift & slide door also has a secure ventilation option, a thermally broken threshold and double gaskets on all sides. Lift and slide doors are the best option to maximize the view as large glass panes can be accommodated. Lift & slide doors can be build up to 13.3m wide and 2.85m high for a high wind zone. The hardware can carry up to 400kg per sliding sash.



Stacker doors

Eurotech WinDoors also offers stacker doors based on the lift & slide system. The stacker system allows a wide opening with 2 sashes sliding past each other. The maximum width of the whole unit with 4 sliding and 2 fixed sashes can be up to 19.8m (depending on wind zone).



Eurotech WinDoors specialises in highly efficient timber windows and doors. Mira and Miratherm Timber-Aluminium windows and doors combine two benefits: the highly effective insulating & stability qualities of timber with the low maintenance of aluminium.



Eurotech WinDoors
MIRA

Timber – Aluminium system Mira

The *Eurotech WinDoors* Mira range enables designers to choose from a wide range of window and door options for private homes or commercial projects. The timber frame is made of 68mm timber and the sashes and frames can accommodate up to 44mm triple glazing. A total of four different seals can be fitted (optional).



Eurotech WinDoors
Miratherm

Timber – Aluminium system Miratherm - “Passive House” certified!

What is a Passive House? A Passive House provides a comfortable and healthy indoor climate without the need to use active heating or cooling appliances. It heats and cools itself. Windows and doors are the crucial part when designing a passive house.

Advanced development of the *Eurotech WinDoors* Miratherm system has created a product that sets new standards - the Miratherm fulfills the highest demands of energy efficiency on international level.

In combination with a triple-isolated glass unit and our 68mm insulated timber frame, Miratherm is Passive house certified and provides U-values of below 0.8 (R= 1.25). If you are interested in building a Passive House please contact us. We will get you in touch with a New Zealand Passive House consultant in your area.



Marrying different materials

The aluminium frames are mounted on the timber with stable fasteners so that they are tension free: This allows the timber to breathe and the aluminium frame to expand and contract without constraints during temperature fluctuations. It is crucial to keep the 2 materials separated to provide ventilation between the timber and the aluminium.

Solid corner joints and solid timber

The Mira and Miratherm windows and doors are built to last with strong double tenon corner joints instead of mitre joints. All the timber used is true and solid to the core. *Eurotech WinDoors* does not use thin veneers on inferior timber.



Design Options



Windows			
Tilt-turn windows	✓	✓	✓
Fixed windows	✓	✓	✓
Tilt-slide windows	✓	✓	-
Bifold windows	✓	✓	-
WinDoors			
WinDoor tilt-turn	✓	✓	✓
WinDoor tilt-slide	✓	✓	-
WinDoor bifold	✓ inward	✓ inward	-
Comfort sill doors			
Outward op. door	✓	✓	-
Inward op. door	✓	✓	-
Bifold door	✓ outward.	✓ inward	-
Lift-slide door	✓	✓	-
Stacker door	✓	-	-
Glass options			
Double glazing	24mm	24mm	24mm
Triple glazing	32mm	44mm	44mm

Powdercoating

Eurotech WinDoors uses Dulux colours for the exterior aluminium shell of the windows and doors. You can select from a wide range of Dulux products and colours.

Interior timber finish

For the timber finish on the inside we use waterbased paints, clear coats or natural oils.

Optional: Eurotech WinDoors customers can choose to finish the inside of the windows and doors themselves to reduce cost.

Specifications

Windows and doors are the most important components when designing a house. No other component has to manage so many tasks. Windows and doors have to be operational for many years, have to keep the warmth inside and the cold outside and have to be secure to keep your belongings and your family safe.

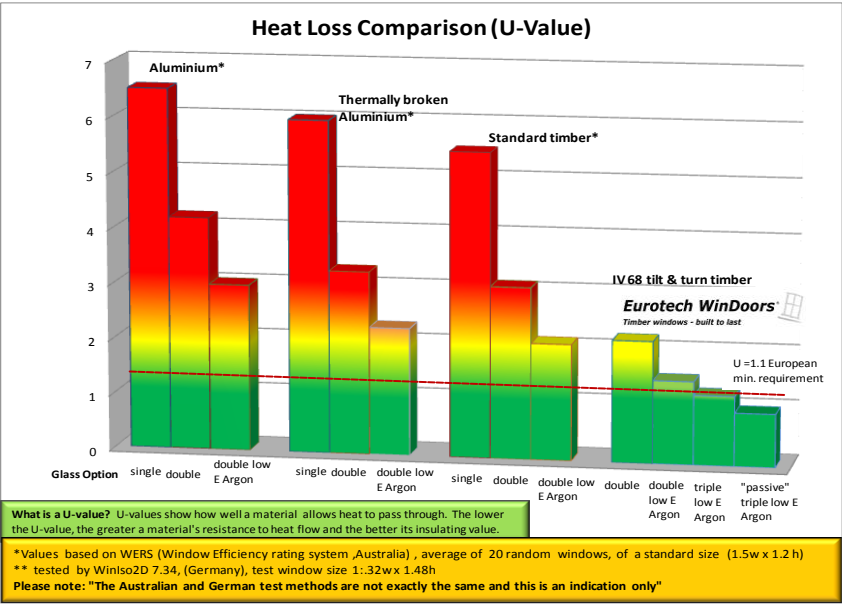
Compliance

Eurotech WinDoors products meet or exceed the requirements of the New Zealand building code (NZS 4211:2008), which has been certified by an independent NZ window engineer. Eurotech WinDoors products are also tested to the strict European standards (CE EN12210, CE EN1026, CE EN1027) by independent test institutes. Additionally all handles and hardware used by Eurotech WinDoors are tested for durability. Flashing details for different claddings for architects and designers are available on request.



Thermal properties

At Eurotech WinDoors we are 100% committed in manufacturing a product that keeps your family healthy and comfortable - even in extreme weather conditions. For this reason we provide the thermal properties for the window as a whole – glass and frame. It does not make sense to use double glazing in frames which condensate. Windows and doors manufactured by Eurotech WinDoors are completely sealed units. Condensation channels are not needed with Eurotech WinDoors timber, Mira or Miratherm products. Timber acts as a thermal break with superior insulation properties compared to other materials.



Glass	U-Value (glass)	U-Value (frame)	U- Value (unit)	R-Value (unit)
4/16/4	2.81	1.4	2.1	0.48
4/16Ar/4 Low E	1.67	1.4	1.54	0.65
4/16Ar/4 Low E (Softcoat LowE)	1.1	1.4	1.25	0.8
4LowE/10Ar/4/10Ar/4 Low E (Softcoat LowE)	0.8	1.4	1.1	0.91



Glass	U-Value (glass)	U-Value (frame)	U- Value (unit)	R-Value (unit)
4/16/4	2.81	1.4	2.11	0.47
4/16Ar/4 Low E	1.67	1.4	1.54	0.65
4/16Ar/4 Low E (Softcoat LowE)	1.1	1.4	1.25	0.8
4 Low E/16Ar/4/16Ar/4 Low E (Softcoat LowE)	0.6	1.4	1.00	1.00



Glass	U-Value (glass)	U-Value (frame)	U- Value (unit)	R-Value (unit)
4 Low E/16Ar/4/16Ar/4 Low E (Softcoat LowE)	0.6	0.77 insulated	0.79	1.27

Frame: Values based on Siberian Larch

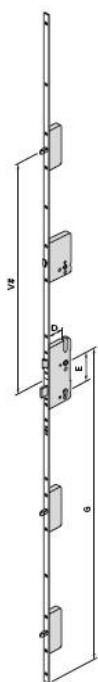
Technical - Hardware

The Roto tilt & turn hardware system has redefined hardware technology in Europe. Single-handed effortless turning, tilting and locking of the window sash is now regarded there as a matter of course. New Zealand is now embracing the many benefits of tilt & turn hardware.

Material

The hardware is protected with RotoSill Nano. This is a surface treatment providing first class corrosion protection, enabling the hardware to endure the most varied climatic conditions worldwide.





Security

A high level of security is provided by even the standard version of the hardware. A mushroom cam engages the tilt & turn striker on the bottom of the horizontal sash-plane, resulting in better protection against break-ins. Compared to an ordinary 40mm timber sash window with 1 locking point, a *Eurotech WinDoors* window is equipped with 5 and more locking points – and all locking points are operated by one handle! Roto tilt & turn hardware conforms to all European burglary-resistance standards.

Handles

Eurotech WinDoors carries the Hoppe Tokyo handle as a standard option in 4 colours. Other Hoppe handles can be used and we also offer the option of custom made handles (made in New Zealand). Please also have a look on www.hoppe.com for further information.



Tokyo
Silver



Tokyo
Bronze



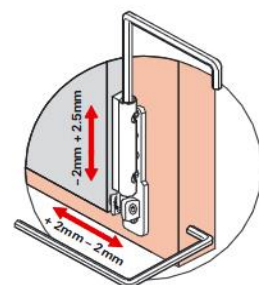
Tokyo
Gold



Tokyo
Titan

3d adjustability

All our window and most of the door hardware is 3d adjustable. The 3d adjustability (adjustable in all directions) is a must for a window or door that is designed to last a lifetime. Many things can happen in time (e.g. earthquakes, settling of the building, extreme winds) that can cause ordinary windows to get stuck in the frame. With *Eurotech WinDoors* you have the ability to adjust the sash in the frame yourself - with the simple use of an allen key.



Child safety locks

In New Zealand it is compulsory to restrict the opening of windows in multi-storey buildings. We use a small lock at the bottom of the sash. If locked, the sash can only be tilted. If unlocked, the window can be opened completely for cleaning or maximum ventilation.

Uninterrupted seals

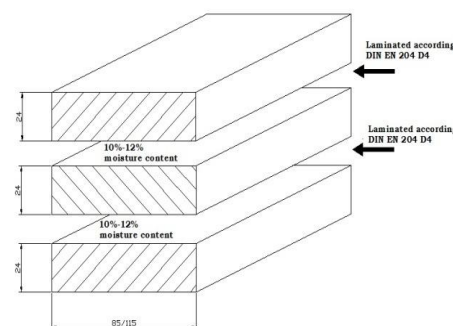
We only use uninterrupted wrap-around seals which are mechanically fitted into grooves to ensure a draft free window and door for the years to come. The seals are designed to be able to expand back to full width after they have been compressed. All seals are non-rotting rubber seals with a firm back to prevent contraction.



Technical – Timber

Timber quality

Eurotech WinDoors uses only three-layer laminated timber as this system ensures that there is no twisting or warping of the sashes and frames. All timber for frames and sashes has the optimum moisture content of 10-12%. The lamellas are laminated with a D4 exterior glue without knots or defects in the outside lamellas. All the timbers used for frames and sashes are naturally durable without chemical treatment. Siberian Larch and Oak are high density timbers which are not prone to mechanical wear and are an excellent base for paint & woodstains.



Timber dimensions and timber joints

The *Eurotech WinDoors* timber system, Mira system and Miratherm system are made of 68mm thick joinery profiles to provide maximum dimensional stability, excellent insulation and strength to accommodate heavy double and triple glazed glass units. All corner joints of frames and sashes are designed as double tenon corner joints to ensure maximum strength.

Siberian Larch (*Larix Sibirica*)

Siberian Larch grows in Siberia, Europe and in North America (as Canadian Larch) and has a high natural resistance against decay. This has been shown in scientific investigations as well as from archaeological discoveries and practical observations. The harsh climate in Siberia results in very hard durable timber with a density of 0.64 (g/cm³). Higher density makes it more difficult for the organisms that cause decay to penetrate the wood. Siberian Larch is widely used as a durable timber for windows, decking and weatherboards.



European/American Oak (*Quercus Alba*)

The colour of oak heartwood is from light brown to brown. The heartwood is classified as class 2 durable (BS EN 350-2). The density ranges from 0.67 to 0.73 (g/cm³). Oak has been known as an excellent durable boat building timber for centuries. Today it is widely used for flooring, wine barrels, exclusive furniture and joinery. European Oak is slightly more expensive than Siberian Larch. Timber can stain when in contact with metal fittings. European Oak is sustainably harvested.

Technical –Finish

Strong brands as a quality insurance

Designing one's own house means more than just tracing the basic concept or outlines. Today, every builder-owner, planner and architect must ensure from the very beginning that all parts contribute to the whole. Therefore, colour is of fundamental significance when selecting the windows and doors.

At *Eurotech WinDoors* we know the impact of such effects. This is why we place so much value on offering you a wide diversity of colours right from the start. You are certain to find your favourite! We use Sikkens and Resene water-based products which are applied by a special air-coat system to the correct film thickness. *Eurotech WinDoors* believes that only the best products are good enough for your windows and doors.



V-joint sealing and endgrain sealing

Wooden windows will only have a long term lifespan if they are properly designed and protected. Corner joints of windows are always subject to stress. At these points the timber is moving in different directions, which can lead to open joints. We at *Eurotech WinDoors* seal these joints with a special formulated Sikkens sealant that allows the timber to expand and contract. In addition all endgrain of the sashes are sealed with a Sikkens endgrain sealer.

Maintenance of wooden frames and sashes

To extend renovation intervals we can supply the Sikkens maintenance set. This set consists of a special cleaner and maintenance milk for window frames and sashes and can be used for lacquered or stained windows and doors. The maintenance set provides your windows frames and sashes with new gloss and gives even more protection against weather influences. You do not need sand paper, a brush or to mask anything off, simply apply it with a cloth.

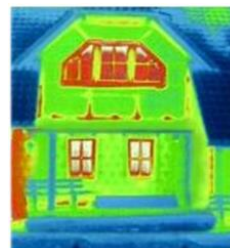
The special cleaner cleans deep into the pores, dries quickly and is water-borne. Maintenance milk restores the colour and gloss and protects against weather influences.



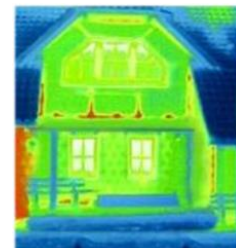
Technical –Glass

Windows and doors from *Eurotech WinDoors* give you that extra feeling of cosiness – something that you may have been missing. An average home loses 30-50% of its heat or air-conditioning energy through its single glazed panes and uninsulated aluminium frames.

Double glazing is now the established insulation standard for all kinds of buildings. The benefits are obvious - double glazing keeps the warmth inside and helps to reduce energy costs, it reduces noise, controls the moisture level in the room and much, much more.... Double and triple glazing works by trapping air between two or three panes of glass. This creates an insulating barrier that stops heat being lost, prevents condensation on your windows, and reduces outside noise.



Heat loss single glazing



Heat loss double glazing

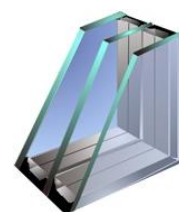
The thermal performance is measured in the U-value. The lower the U-value the lower the heat loss. As both the U-value of the glass and the U-value of the frame count, we provide the U-value of the whole unit on page 14 under "Specifications".

Low E glass & Argon gas

Windows with Low E (low emissivity) film have a thin, transparent Low E film suspended between two panes of glass in order to reflect heat energy back into the room. In triple glazing two Low E panes are used. By adding Argon gas, the glass is significantly better at reflecting heat back inside the room.

Triple glazing

Triple glazing has three panes of glass (any glass combination can be used) with sealed spaces of ideally 16 mm in between. *Eurotech WinDoors'* Mira and Miratherm frames can accommodate 44mm triple glazing which can achieve a U-value of 0.5W/(m²k). Besides the thermal advantages, triple glazing greatly reduces noise and is often used near motorways or airports.



Triple glazing

Thermix spacer

Conventional spacers made of aluminium act like a thermal bridge, causing the edge of the glazing panel to cool down rapidly when outside temperatures drop, despite a good level of warmth in the room. This results in the loss of valuable heating energy. Using Thermix® spacers helps to significantly reduce heat loss at the glass edge, while the periphery of the window on the room side remains warmer, lending the glass a "warm edge".



Thermix spacer

Other glass options

- Tinted glass
- Self cleaning glass
- Sound proofing glass
- Lead glass
- Structured glass
- Trans - opaque glass

Standard Architraves

Eurotech WinDoors can supply architraves for the windows and doors. The architraves can also be finished in the window interior color if desired. 3 different widths are available. Custom architraves can be machined on request.



Bevelled architrave
Width: 60/85/135



Colonial architrave
Width: 60/85, 17



Replica architrave
Width: 60/85/135



Splayed architrave
Width: 60/85/135

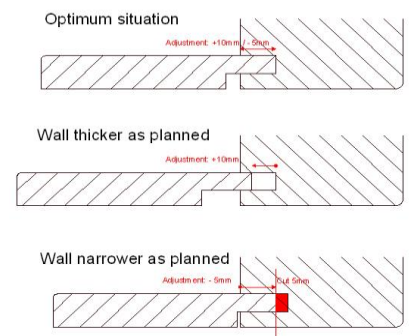


Reveals

Eurotech WinDoors®
Flexi-Reveal

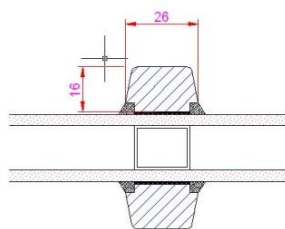
Eurotech WinDoors has designed a reveal system which combines a premium quality work result and efficient installation procedures. Flexi-Reveal offers the solution for varying wall thicknesses, allows the timber to expand and contract and enables concealed fixing of the joinery. Reveals can be sprayed in window colour on request. Flexi Reveals are used for Timber, Mira and Miratherm joinery.

The Flexi Reveals are all labelled, predrilled and pre cut for quick assembly on site. After the joinery is installed the Flexi Reveals slide into the frames grooves. The reveals will be delivered together with the joinery, but will be flat packet on a pallet.



Colonial bars

Colonial bars can be fitted to every door and window we provide. We use 26 mm wide timber beads on the inside and outside of the units to achieve the desired effect.



Interior sills



The standard option is to have architraves on all 4 sides of the window. For a more traditional look a protruding interior sill can be fitted at the bottom with the upright architraves sitting on top of the sill.

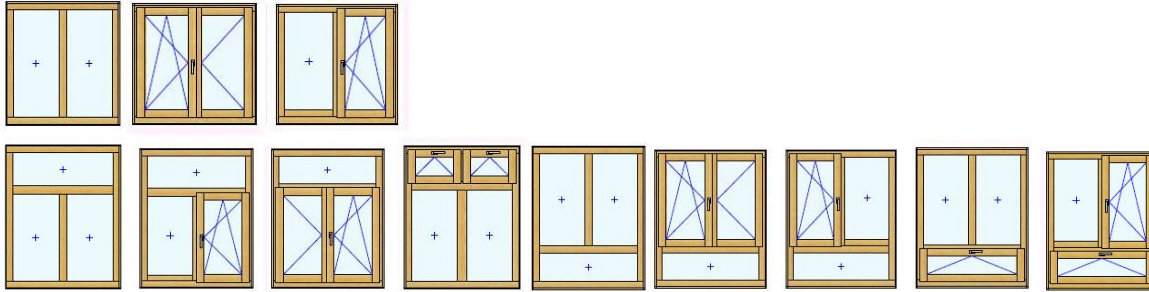
Configuration ideas

The following configuration ideas show some of the most common designs- all windows and doors are custom build to suit you requirements and many different options are available!

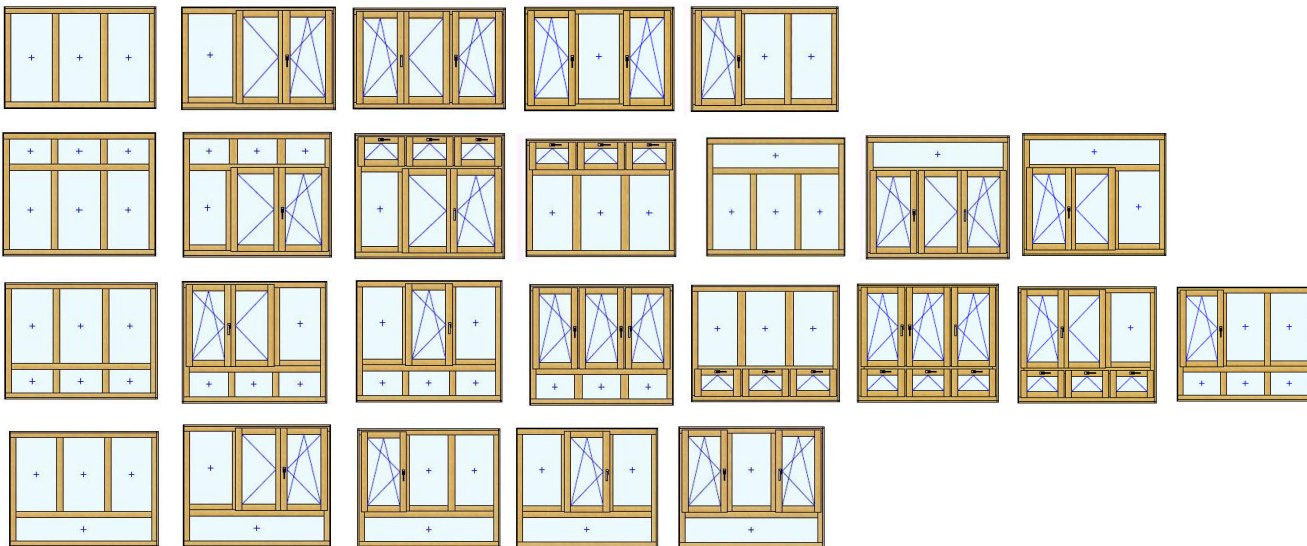
Single Sash windows:



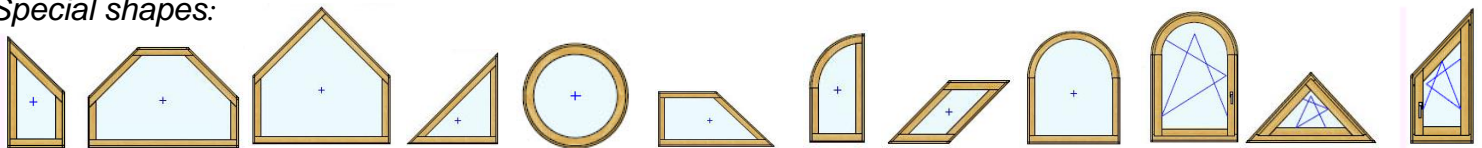
Double Sash windows:



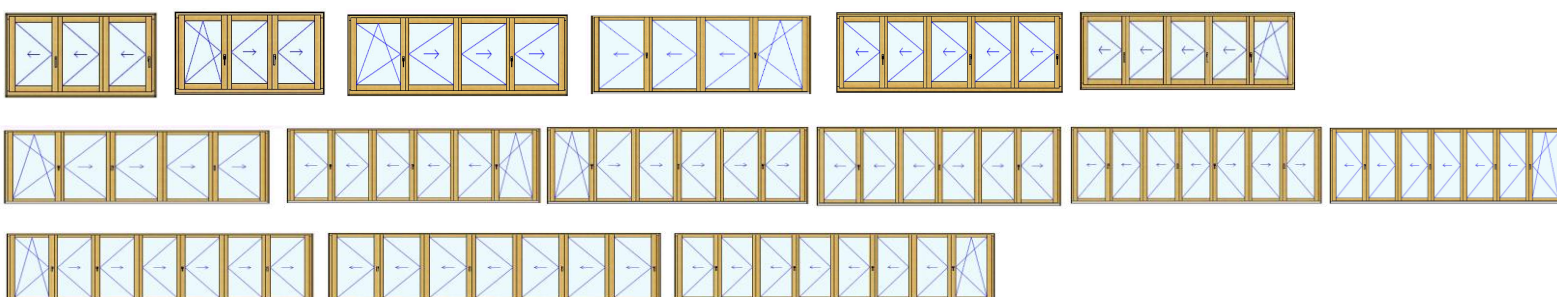
Triple Sash windows:



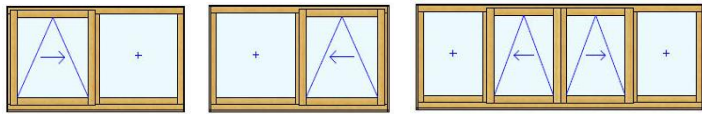
Special shapes:



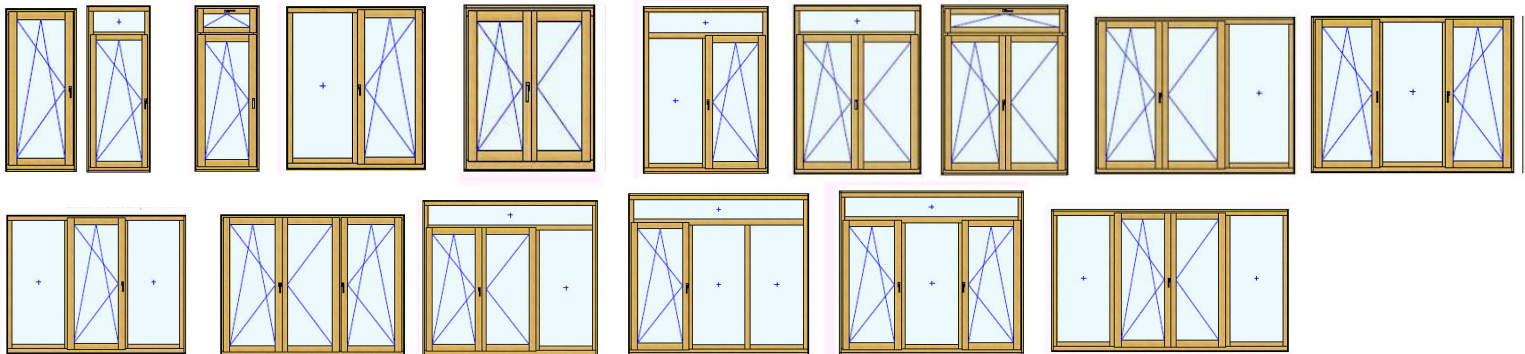
Bifold windows and bifold WinDoors:



Tilt & Slide windows and Tilt & Slide WinDoors:



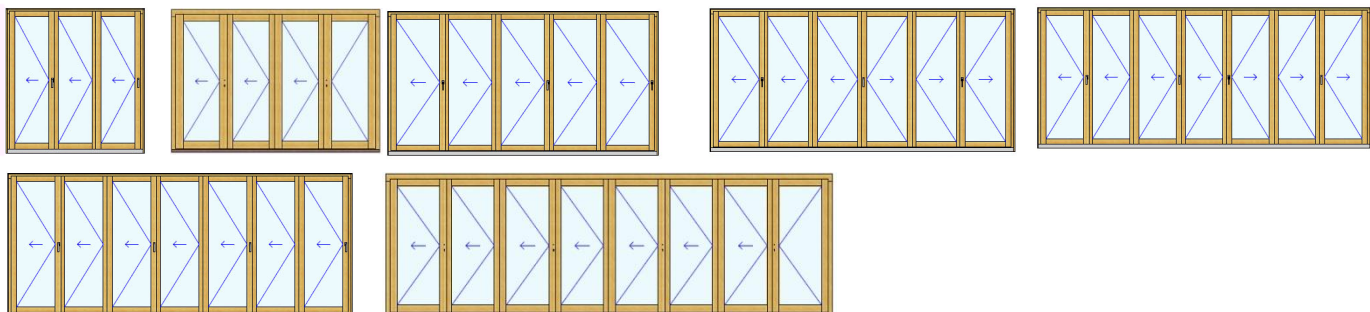
WinDoor system (French doors):



Comfort sill door system (inward or outward opening doors with one or two sashes, front entrance doors):



Comfort sill door system (bifold doors outward opening):



Comfort sill door system (lift & slide doors, stacker doors):

