

PASSIVE ULTRA & ULTRA PLUS Windows & Doors



Windows for
Future Generations



www.vikingwindows.ie

WELCOME

TO



Showrooms Nationwide

Ireland's

No. 1

Bespoke Supplier
of Nordic &
Scandinavian
Windows & Doors



Find Your
Local Supplier

VIKING WINDOW'S

Viking Windows is a globally renowned window and door manufacturer with a wide product range. Our range includes Scandinavian, English, and German windows, exterior doors, folding and sliding doors. In addition to timber windows and doors, the selection also includes aluminium clad windows and doors whose exterior side is covered with resilient aluminium profiles. Windows and doors may be tailor-made, according to the building's needs!

We are focused on offering customer-friendly and energy efficient solutions. Thanks to the high quality Grade A1 & A2 Timber we use, our windows and doors have a long life span. Water based finishing materials guarantee the environmental friendliness of Viking Window's cavity

fillers; glazing units, hardware and seals are

supplied by leading manufacturers in their respective fields, ensuring ease of use and compliance with modern building standards.

Having supplied to Ireland for 16 years we believe in Local, that's why we have partner showrooms throughout Ireland in Dublin, Cork, Galway, Nenagh, Northern Ireland and local agents to support you locally.



www.vikingwindows.ie

Estonia | Norway | Iceland | Latvia | Lithuania
| Sweden | Denmark | UK | France | Japan

U Value 0.63 w /m² k



Passive Ultra TIMBER

Timber is nature's choice and the most sustainable window you will choose. The natural timber finish provides a feeling of warmth, comfort and a fresh soft appearance to the eye. Whilst looking through your natural timber windows you can relax and know you're close to the environment!

Passive Ultra Plus Timber/ Aluminum Clad

For the best of two worlds you can choose Aluclad windows from Viking, you will achieve the natural timber feel and look inside with the maintenance free external skin prolonging the life of the window and removing the hassle of maintaining your windows.

WER
25Kwh/Msq/year
A Rated

0.63
W/m²k
U VALUE

10
Years
Warranty



NATURES
CHOICE

What is **SUSTAINABILITY**?

Drive to Zero Carbon Homes

Never has climate change been so important for us and our families and the future of planet Earth! With the extreme weather conditions we face, we are being driven by the EU towards reducing energy consumption, using renewable energy and reducing Carbon emissions; sustainability and nature impact on our way of living.

Could carbon tax on housing become a reality? Like the car industry that was forced to reduce CO2 emissions, the construction industry is also being driven down this road. Governments are driving us towards carbon-neutral homes; within the UK the government are aiming for all homes to be carbon-neutral by 2016. With this said choosing windows which are sustainable, with low energy consumption is the future.

The facts about the importance of the environment!

Fact 1:

Global warming is the result of an increase in the Earth's average surface temperature due to greenhouse gases like carbon dioxide and methane. These gases are required for the presence of human life on earth. However, global warming is happening due to over-emittance of these gases.



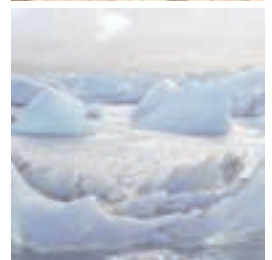
Fact 2:

The last two decades of the 20th century have been the hottest in the last 400 years, according to climate studies.



Fact 3:

The Arctic ice is melting rapidly. By 2040 the region is expected to have a completely ice free summer, or even earlier.



Fact 4:

Sea levels have risen about 7 inches in the last 100 years, which is more than the previous 2000 years combined. The rising sea levels due to global warming could threaten the lives of people living along the coastal areas.



Fact 5:

The carbon dioxide levels in the 20th century have been the highest in 650,000 years. Till 1950, the levels rose by 11% and recently the levels have risen by 40%.





What is a **PASSIVE HOUSE**?

The term **passive house** (Passivhaus in German) refers to a rigorous, voluntary standard for energy efficiency in a building, reducing its ecological footprint. It results in ultra-low energy buildings that require little energy for space heating or cooling.

For a building to be considered a Passive House, it must meet the following as set out by the passive house institute:

- 1.** The **Space Heating Energy Demand** is not to exceed 15 kWh per square meter of net living space (treated floor area) per year or 10 W per square meter peak demand.
- 2.** The **Primary Energy Demand**, the total energy to be used for all domestic applications (heating, hot water and domestic electricity) must not exceed 120 kWh per square meter of treated floor area per year.
- 3.** In terms of **Airtightness**, a maximum of 0.6 air changes per hour at 50 Pascals pressure (ACH50), as verified with an onsite pressure test (in both pressurised and depressurised states).
- 4.** Thermal **comfort** must be met for all living areas during winter as well as in summer, with not more than 10 % of the hours in a given year over 25 °C.

All of the above criteria are achieved through intelligent design and implementation of the 5 Passive House principles: thermal bridge free design, **superior windows**, ventilation with heat recovery, **quality insulation** and **airtight construction**.



The GREEN SOLUTION



Certifications Guarantee



PASSIVE

What is a **PASSIVE WINDOW?**

A **passive window** is a very low energy window system which significantly reduces heat loss from a building and the CO2 emissions into the atmosphere. Passive windows utilise the free energy from the sun to optimise free solar gain through the window

Passive Window's

The window frames of Viking Passive Ultra and Ultra Plus can be produced from either spruce or pine to increase the energy efficiency of the timber material.

For most cool-temperate climates, this means a whole window U-value of 0.80 W/(m²K) or less, with g-values around 50% (g-value= total solar transmittance, proportion of the solar energy available for the room).

The recommended approach to the design of a passive house is to avoid excessive areas of north facing glazing and place relatively large windows

facing south or due south. Minimising heat losses through the north facing elevation, which receives no direct sunlight, while maximising 'free' solar heat gains on the south.

Large windows in the south or due south facades increase interior day light levels which in turn reduce the need for use of electricity for artificial lighting and also ensure a more pleasant natural light filled living environment. There is, however, a balance to be achieved between heat losses through the glazing and solar heat gains through the south/east/west facing windows.



REASONS

TO CHOOSE VIKING **Passive**

1. **Certified Window's**

Viking Ultra is available certified by the PassivHaus Institute.
A brand you can trust!

2. **WER 25 kwh/msq/year**

Creating energy as opposed to losing energy.
Saving you money!

3. **Three Air Tight Gasket Seals**

(Conventional windows have one)

Creating a ring tight defence against water, wind and air penetration.
The primary function of the outer gasket being for weathering with the inner one serving to improve airtightness and the middle to increase the warmth and U Value.

4. **Solar Gain g value 0.50 ***

Maximising free solar radiation
Helping to maximise the amount of sunlight available in the short days of winter

* solar factor depends on choice of glass

5. **Eight Point Locking System ***

The most secure Windows
Provides Peace of Mind

* locking system varies depending on size of window

6. **Air Tightness Class 4**

Windows which perform in hurricane condition's.

7. **E1500 Water Tightness**

Shielding you from the harshness of environmental conditions.

8. **Sound Insulation 40dB can be achieved**

Creating a relaxing peaceful sleeping environment!



Window's The Sustainable Choice!



9. Windows Installed 0.85 w/msqk

Installation you can trust
As certified by the passive house institute.

10. Uf 0.85 w/msq/k

Modern Clean Frame Design which maximises Energy

11. Natural Timber

Reducing Home CO2 emissions
Helping to protect the environment.

12. Average Room Temperature 18 degree C.

Creating a comfortable indoor climate
Making you feel relaxed and warm.

13. Outward opening Windows

Perform better in the Irish climate
Helping to prevent restrictions with curtains and blinds and they don't intrude in the room space.

14. Light Transmission 75%

Brighten up your home and preventing loss of daylight (visible light transmittance).

15. Elegant Ironmongery

Clean design
Selection available

16. Friction Break

Preventing wind catching your windows
Secure your window at various opening positions

17. Storm Proof Hinges

You want to ensure the hinges can hold the weight of the triple glazing
Hinges painted to the same colour as your windows!

Architectural **DESIGN SOLUTIONS**

PERFECT DESIGN COMBINATIONS



Timber Window's

INSPIRED BY NATURE



Windows are such an important feature of your home construction today! Why not bring the external environment into your home with Viking Window's Slim Fixed Frames.

With glass sizes available up to 2,500mm x 3,500mm. Viking Slim Fixed Glass Solutions can achieve:

- > U Values of 0.63 w/msqk
- > More light through large glass areas
- > Maximising Solar Gain – G Value 0.53
- > Minimal timber frame 62.5mm
- > Structural Stable frame (132.5mm depth)solution allows you to create architectural screen solutions
- > Max measurements 2.5m x 3.5m – as one pane of glass. The max size of the glazing unit is 6msq.

Clear Views

GLASS CORNER SOLUTIONS



With Viking glass to glass corner solutions you can achieve unspoilt views, maximising light and increasing light transmission which makes you feel more comfortable, relaxed and at ease..

With glass to glass corners sizes are available up to 2m x 1 m x 2.8 m, The Viking Passive Ultra Glass to Glass solution offers slim line frames:



Extend Your Home TO YOUR GARDEN

Viking Bi Fold Door Solutions

Viking Bi Fold Doors bring the external environment into your home by opening up complete walls.

Aesthetically a solution your friends will talk about, structurally a solution you can rely on for strength and stability, making you feel comfortable with the superior energy performance.

In addition Viking Bi-Fold Doors tilt at the top for ventilation.



Opened Bi
Folding doors



Closed Bi
Folding doors

Technical data of folding door:

- > **Thermal transmittance**
- > DK88 profile system: $U_w = 0,80 \text{ W/m}^2\text{K}$
- > **Sound insulation:**
- > With triple glazing: $R_w (C; C_{tr}) = 35\text{db} (-1; -5)$;
- > Cross sections: 78 mm and 88 mm profile system (for more details see drawings);
- > Pine wood with quality class A1–A3;
- > Wooden profiles treated with water based preservative;
- > Triple glazing 40 mm ($U_g = 0,6 \text{ W/m}^2\text{K}$) and 50 mm ($U_g = 0,5 \text{ W/m}^2\text{K}$);
- > Hardware: ROTO;
- > Frame dimensions: $W \times H$ max. 4,3 x 2,5 m;

Contemporary **SLIDING DOOR SOLUTIONS**



Viking Lift and Slide Patio Doors

Viking Life and Slide Patio doors are the best performing timber/Aluclad sliding doors on the market today.

You can achieve wide expanses of glazing up to 9.2 x 2.8m and maximise the nature daylight, brighten your home and creating a comfortable modern energy efficient environment. Without any effort the Viking Lift and Slide patio door is openable by an effortless finger push, gliding elegantly within the threshold track offering a seamless connection between the inside and the outside environment.



BRING THE DOORS IN



The timber and timber aluminium offer modern unique design with exceptional comfort with superior technology.

- > Available in sizes of:
 - Four Part 9.2 x 2.8m
 - Two Part 5.9m x 2.8m
 - Three Part 5.9m x 2.8m
- > Maximise daylight and solar gain transmission
- > Slide frame sizes, now available without a door sash offering even more light.
- > Easy to lift and slide with your finger.
- > Superior structural performance with frame of 184mm x 63mm
- > Superior energy performance saving heating costs – **triple glazing** (Ug = 0,6 W/m²K)
- > Maximising Free Solar Heat Gain – Solar Factor 0.7
- > Low Level Threshold offering a seamless entrance / exist from your home.
- > Safety glass solutions increase security and protect from injuries if glass breaks.
- > Cross sections: frame 63 x 184 mm; leaf 97 x 78 mm; transom/mullion 85 x 78 mm; glazing bar 63 x 78 mm.
- > Sound insulation Rw (C;Ctr) = 34dB (-1;-4)
- > Timber Glued Laminated redwood; quality class A1 – A3.
- > Superior structural performance and Storm resistant:
 - Water Tightness – Class E750 (EN 12208:2001)
 - Air Tightness – Class 4 (EN 12207:2000)
 - Wind Loading – Class C4 (EN 12210:2001)



Viking Window GU
lükanduks - vaade toast

Maximise

WINDOW OPENINGS

Viking Inward Opening Window Solutions



Viking Energy Efficient Inward Opening Windows & Doors – DK88

For one off houses with high energy efficiency requirements or passive home requirement's Viking Window's have developed an inward opening 88 mm window with a thermal transmittance U Value $U_w = 0,74 \text{ W/m}^2\text{K}$.

Viking DK88 Inward Opening window solutions are perfect when you want unobstructed views, maximum ventilation and floor to ceiling opening sections. Whether you want to open the complete window for cleaning internally or just have the window opened partially for ventilation DK88 Windows are the solution. DK 88 offers a 8 point locking system which provides maximum security and peace of mind. A modern inward opening energy efficient window solution for your home!





The timber and timber aluminium offer modern floor to ceiling openable windows and doors a unique design with exceptional comfort with superior technology.

- Available in sizes of:
 - Maximum Width 1,700 mm
 - Maximum Height Window 2,472 mm
 - Maximum height Door 2,572 mm
- Maximise daylight and solar gain transmission
- Inward opening for ease of cleaning and ventilation
- Easy to use tilt only and tilt and turn mechanism
- 8 point ROTO lever bolts and lever bolt strikers for maximum security and peace of mind.
- Superior energy performance saving heating costs – **50mm triple glazing** ($U_g = 0,47 \text{ W/m}^2\text{K}$)
- Available with Low Level Aluminium Threshold
- Modern Square edge design
- Safety glass solutions increase security and protect from injuries if glass breaks.
- Cross sections: frame 88 x 78 mm; sash 88 x 78 mm
- Sound insulation $R_w (C;Ctr) = 35\text{dB} (-2;-5)$
- Timber Glued Laminated redwood; quality class A1 – A3
- Available with concealed hinges
- Superior structural performance and Storm resistant:
 - Water Tightness – Class E1050 (EN 12208:2001)
 - Air Tightness – C 4 (EN 12207:2000)
 - Wind Loading – Class C4 (EN 12210:2001)



A photograph of a modern house's entrance. The building features a mix of white and light-colored wood siding. A prominent feature is a large glass entrance door with a black frame and a vertical silver handle. To the left of the door is a white wall with a silver mailbox and a small window. The roof is dark with a white gutter. The foreground shows a grey stone patio and some green shrubs.

ENTRANCE DOOR –
THE SYMBOL
OF HOME

Viking

PASSIVE ULTRA ENTRANCE DOORS



0.70 W/m²K

U VALUE

- 1.** With Viking Passive Ultra Entrance Doors with 50 mm triple glazing units or insulated panel you can achieve overall U-values of $U_w = 0,7 \text{ W/m}^2\text{K}$.
- 2.** The hardware system used is German the manufacturer being Maco.
- 3.** Viking Ultra Passive doors are available as single or double leaf doorsets, with fiber thresholds and a wide selection of finish's available in both wood and Aluclad.



Combinability

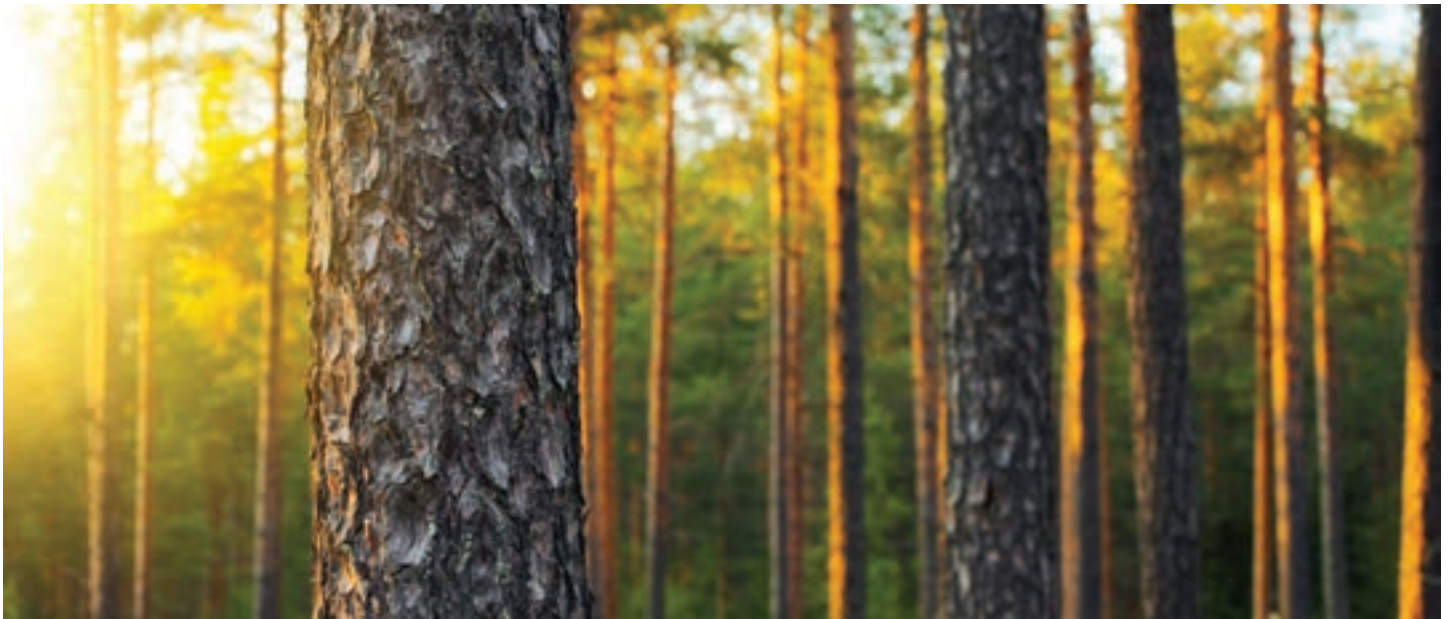
PERFECTLY COMBINED



Viking Passive Ultra Combination Windows **Varied Solutions which can be combined together!**

With modern energy efficient homes it makes sense to have large glass elevations to the south facing façade.

Internationally Recognised **SKILLS**



Wood is a natural material for a human's living environment. It carries the character, beauty and style. As such, it requires special care.

Viking Window's pays special attention to the quality requirements.

The company is certified with Quality Management Standard ISO 9001 and Environmental Management Standard ISO 14001. It has also been certified with Norwegian NDVK standards. Since 2013 Viking Window's AS owns Russian Federation's compliance certificate GOST.

Viking Window's products are CE-marked and company also offers windows that are made of FSC®-certified wood.

Since 2014 the passive window is added to Viking Window's AS product line. It is developed and produced by Viking Window's AS and is part of the passive house components certified by Passive House Institute in Germany.

Viking Window's is many years proud member of British Woodworking Federation and Wood Window Alliance initiative.



Popular **stain colors** for doors and windows



RAL-color chart

Window profiles (wood and aluminium) can be painted in any color from the RAL-color chart. We also offer dual-color finish for the products.



Viking Window's doors and windows are made of high quality engineered/laminated wood, without visible finger joint *



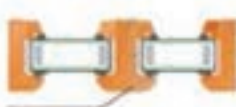
* Wooden details, that are over 2 m long, can have limited amount of finger jointed connections.



SELECTION OF DIFFERENT GLAZING UNITS



BARS



WITH STRUCTURAL GLAZING BAR DIFFERENT GLASS UNITS ARE USED



REMOVABLE GLAZING BAR IS INSTALLED ON OUTER SIDE OF THE WINDOW



TAPED GLAZING BARS ARE GLUED ON BOTH SIDES OF THE WINDOW



TAPED BAR WITH SPACER BAR IN THE GLASS UNIT LEAVING IMPRESSION OF DIVIDED GLAZING UNITS

Excellent DETAILS



HANDLES FOR OUTWARD OPENING WINDOWS



HANDLES FOR INWARD OPENING WINDOWS





HANDLES FOR ENTRANCE DOORS

Selection comprises ASSA handles 6640, ASSA 6638 and from Epok series 1956 and 1918.

ASSA 6640



ASSA 6638



EPOK 1956



EPOK 1918





Windows for **Future Generations**

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