



*Windows & Doors*



*The best for my home -  
Lammin windows.*



*These are made with  
skilled hands  
and warm hearts*

“ This is anything but assembly line work. Each window is unique and made according to the customer’s wishes using the latest technology. I feel that windows are part of a greater vision, and I treat them accordingly. Not a single window leaves the factory before I or my colleague have inspected it. Quality is a matter of honour to us, and not just on the company level, but also on a personal level.”

# QUALITY THAT GOES BEYOND THE SURFACE.

What can a good window be identified by? The Lammin logo. Even though windows may appear similar on the surface, their closer inspection will reveal the differences. You can always rely on the quality of the Lammin windows in every situation: they also look good in the light of these facts:

## 97 %

*Highest domestic content in the industry*

The Lammin windows and doors are manufactured in Finland. The domestic content percentage is up to 97%.



*With respect for nature*

We operate in a responsible way that respects nature and protects the environment. Surplus wood is converted into wood energy. All recyclable waste is recycled.

## A++

*Best energy-efficiency on the market*

Eko Watti is the first openable energy class A++ window on the market. The window is equipped with quadruple panes and a unique protected outer sash structure. The Finnish Patent and Registration Office has granted design protection for Eco Watt.



*Custom-made for your home*

Our design service helps you to choose and actualise the best windows and doors for your needs. Houses are individuals, just like windows and doors. The customisation service will provide you with products that fit perfectly.

## 92 %

*Recommendation percentage*

Reliability and recommendations are closely connected. Of our customers, 92% are willing to recommend Lammin windows.

## 0,5 %

*Least complaints*

According to surveys, ours are the product and service on the market receiving the least customer complaints.

Lammin Ikkunatehdas has been operating since 1972. We began the serial production of custom-made products in the 1970s. Our extensive experience, innovative design and first-rate production guarantee the quality of our products. We use carefully selected certified Finnish heartwood as raw material. We offer wooden windows, aluminium-protected wooden windows, energy-efficient windows, window walls, thermal exterior doors, terrace, balcony, and fire doors, and special products, all designed for Finnish weather conditions. We manufacture the products precisely according to your wishes. For instance the measurements, models, shapes, surface treatment, and pane composition can be freely selected. The Lammin products have been awarded the Key Flag Symbol by the Association for Finnish Work.



## *Trust is earned with actions*

Everyone wants to offer their loved ones a safe home. A home where the atmosphere is warm and trusting and everything is all right. When life is rocky, your home is the place where wounds heal and energy is restored. Nothing can compare to the warmth and feeling of home.



# FINNISH MATERIALS WITHSTAND ALL WEATHER CONDITIONS

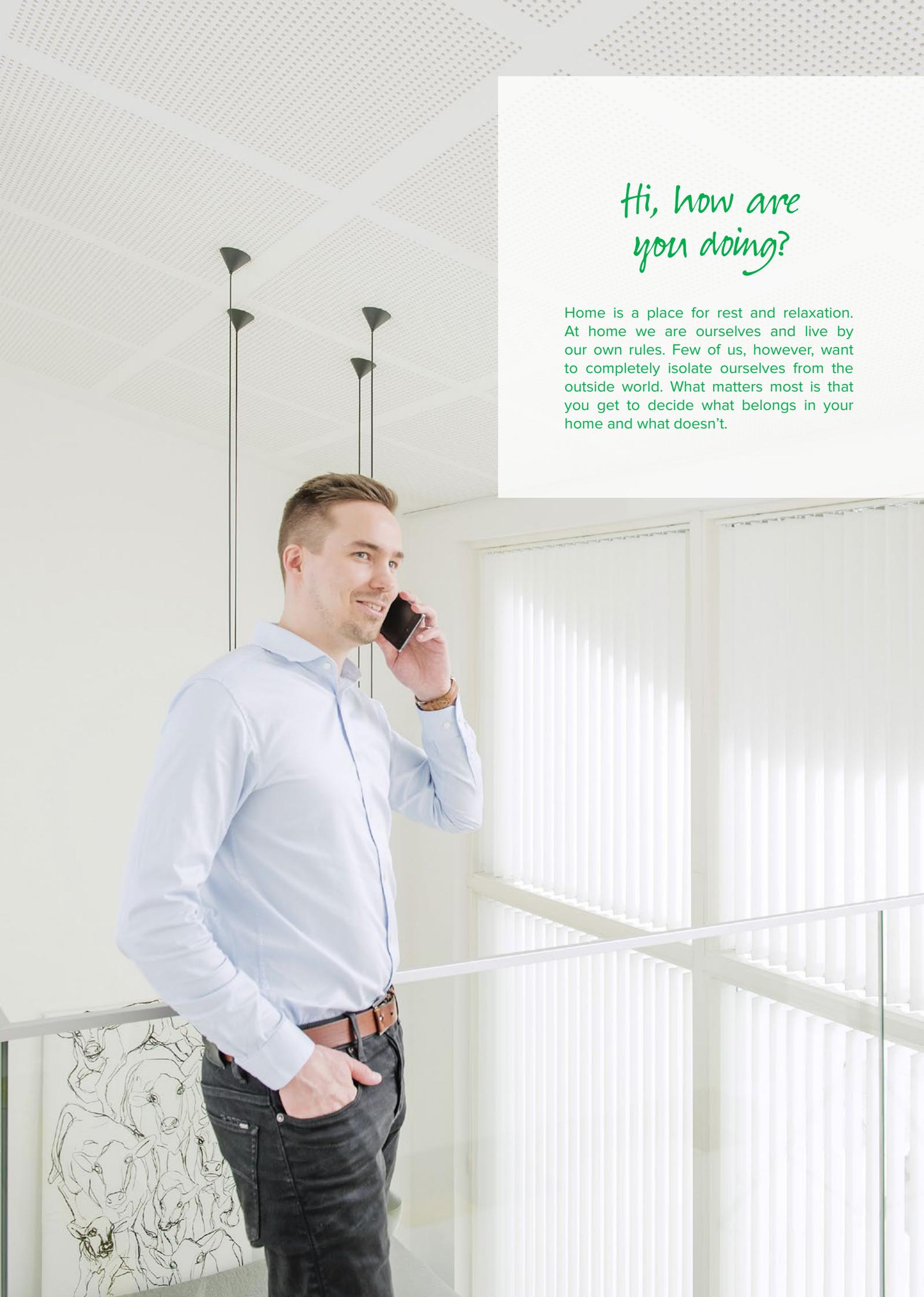
It all starts with high-quality materials. The domestic content of the Lammin windows is the highest in the industry. Finnish raw material producers ensure the high quality and reliability of our products.

We manufacture all our windows from carefully selected Finnish wood. We use the heartwood of the slow-growing pine, which is naturally very rot and moisture-resistant. In addition to being the most dimensionally stable choice, it is also an extremely durable solution for outdoor use.

We want you to feel both comfortable and safe at home. All our windows have been tested by VTT, the Technical Research Centre of Finland, and they meet all the highest classification requirements of Standard EN 14351 in terms of air and watertightness, and resistance to wind load. We make significant investments in the personal safety and durability of our products.

## **Warranty up to 35 Years**

The Lammin doors and windows are manufactured to meet today's highest building standards. In addition to the high domestic content, our technical competence and almost 50 years of experience are reflected in our products, making them reliable and durable.

A man in a light blue button-down shirt and dark jeans is standing on a balcony, talking on a mobile phone. He is smiling and looking towards the right. The balcony has a white railing with a glass panel. In the background, there are large windows with white vertical blinds. The ceiling is white with a grid pattern of small holes. There are three black pendant lights hanging from the ceiling. On the railing in the foreground, there is a black and white line drawing of a group of cows.

*Hi, how are  
you doing?*

Home is a place for rest and relaxation. At home we are ourselves and live by our own rules. Few of us, however, want to completely isolate ourselves from the outside world. What matters most is that you get to decide what belongs in your home and what doesn't.

# HEAT STAYS IN AND NOISE STAYS OUT

Lammin Eco Watt is the first openable energy class A++ window on the market. Its exceptionally low U-value, 0.62 , indicates its excellent thermal insulation properties. The energy consumption is also unparalleled: only 36 kilowatts a year. Eco Watt is equipped with quadruple panes and a unique outer sash structure. The Finnish Patent and Registration Office has granted design protection for it. You can choose the best glazing option from the extensive Lammin energy-efficient window selection, which meets the current and future requirements of the official energy regulations.

The excellent soundproofing properties of the Lammin windows keep excess noise outside. With careful sealing, thicker glass, and a deeper frame, domestic comfort can also be guaranteed in areas with a lot of traffic or other noise. If you wish, you can equip the outer sashes with laminated multi-layered glass or glass that is specifically designed for soundproofing.

## **The First Window Allowing Radio Signal Penetration**

The selective glass panes in modern windows impede the penetration of mobile phone signals through the window. This may be manifested as calls being cut off or even as a complete lack of signal. Lammin has launched, as the only one in Finland, windows which allow the penetration of radio signals. The Signal Window® allows the penetration of mobile phone frequencies, regardless of the conditions, as much as ten times more effectively than ordinary windows without impairing the window's thermal insulation ability!

**[SIGNAL-WINDOW.COM](https://www.signal-window.com)**



*Stay true  
to your style*

Why compromise when you can have exactly what you want? Each person has their own taste, and we have the perfect solution for every taste. Let your character show: individuality is what makes the world beautiful and interesting.

# SELECT WINDOWS THAT REFLECT YOUR TASTE

It matters what kind of window you view the world through. The Lammin windows are manufactured according to your wishes and to perfectly fit your home. The dimensions, models, shapes, pane composition, insect screens, and surface treatment method – you can decide all of this down to the tiniest detail. For instance, the wood and aluminium parts can be surface-treated and tinted the way you want. They can also be dual coloured, i.e., the inside can be white and the outside dark grey.

Our extensive selection includes wooden windows, aluminium-protected wooden windows, energy-efficient windows, window walls, and special products. Our design service helps you to find and actualise the best solutions. In the course of the past decades, we have delivered doors and windows for countless different types of Finnish buildings, varying from construction and remodelling projects to museums, protected locations, and public spaces. In addition to Finland, our principal market, we have also delivered products to thousands of foreign sites during the past 20-plus years.

EXPLORE OUR WINDOW MODELS:

**[IKKUNASTUDIO.FI](https://www.lammin.fi)**

## *Windows on your own terms*

Some people know what they want straight away. Others need time, inspiration, and guidance. With us, you can use the method that suits you best. Our individualised service means that we encounter each customer as an individual with needs and wishes.



# HERE'S ALL THAT YOU NEED

We provide you with competent service that will suit your needs perfectly. If you wish, you can leave everything to us, meaning that we will plan, manufacture and install the windows and doors for you in accordance with the 'turnkey' principle.

When building and renovating, everything has to be timed perfectly and carried out in the correct order. Our efficient production and seamless service chain guarantee that you will receive the windows and doors at the site exactly when you are supposed to. Some of our products are available with quick delivery in only a few days.

In addition to proper equipment, the installation of doors and windows requires true professional skill. We have both. Our retailers serve you locally and take care of your project from start to finish. If you contact us, we'll be happy to help you.

FIND OUR NEAREST RETAILER:  
**LAMMIN.FI/YHTEYSTIEDOT**

---

## **Online Store Serves 24/7**

Explore the most innovative solutions on the market and custom order windows and doors that will fit your home perfectly. You can test and compare various options on the screen and place your order with ease right then and there!

**Explore and order: [lammin.ikkunaverkkokauppa.fi](https://lammin.ikkunaverkkokauppa.fi)**

# EXPLORE, COMPARE AND SELECT

Modern day construction and renovation demand that the windows and doors meet all requirements in terms of reliability, thermal insulation, and overall quality. In addition to being beautiful and unique-looking, a good window is also durable, safe, easy-to-maintain, and tight.

The Lammin window sashes and frames are manufactured from warp-proof glue-laminated PEFC-certified Finnish pine. The inner sashes of the windows are painted to furniture quality, and the back of the frame structure, which is laminated to be knotless, also comes surface treated. The frame depths are: 110, 131, 145, 175 and 200 mm.

The windows are fitted with ASSA-ABLOY hinges, locks, lever handles, and stays. The strike plates of the window locks and handles and outer sashes are made of steel. The aluminium outer sash of the windows is multi-layered and reinforced at the fittings. They are sealed with special triple draught proofing seals. The soundproofing in the windows is very effective. The replacement air vents are integrated into the windows with concealed installation. Individual measurement options and a wide colour and accessory selection available.

## ALUMINIUM-PROTECTED WOODEN WINDOWS

The Lammin aluminium-protected wooden windows can be used for building something new or cherishing the traditions of the old construction culture with the aid of modern products. Our selection offers you suitable windows for both construction and remodelling sites, where windows are modernised while retaining their old style.

Wooden and aluminium parts can be surface treated and tinted according to the customer's specifications. The aluminium-protected wooden fixed-pane windows complement the collection.

The bevelled shape of the inner sash of the Elegant collection makes the Lammin sturdy inner sash appear elegant, and the rectangular shape of the surface fittings matches the style. The decorative shape of the Piquant collection has a unique and refined look complemented by the matching fittings in which the same decorative elements are repeated.

## WOODEN WINDOWS

Windows play a visible part in distinctive and stylish interior decoration. Select the window model that reflects your taste and best suits the character of your house. Wooden and aluminium parts can be surface treated and tinted according to the customer's specifications.

The decorative yet moderate shape and details of the wooden windows give the house a unique and refined touch. On the other hand, there are buildings in which windows and doors can act as elements that maintain and even increase their value. In this case, it is advisable to select an individualised window solution, using which an impressive and polished overall look can be obtained.

## ENERGY-EFFICIENT WINDOWS

While bodies responsible for establishing building regulations are constantly tightening the regulations, the Lammin product development team always tries to stay one step ahead. With the best glazing selection, the Lammin energy-efficient windows meet the current and future requirements of the official energy regulations.

The Lammin energy-efficient window models include aluminium-protected wooden windows with an aluminium outer sash and a wooden inner sash as in the current MSE windows\*.

The aluminium-protected energy-efficient window with a wooden inner and outer sash represents the unquestionable elite of energy-efficient windows. The window is equipped with quadruple panes and a unique protected outer sash structure.

\*The MSE window is an inward-opening side hinged two-sash window with an inner sash equipped with double pane thermal glass and an outer sash with float glass.



**Lammin Watt**  
U-value 0.75–0.85  
for low energy  
construction



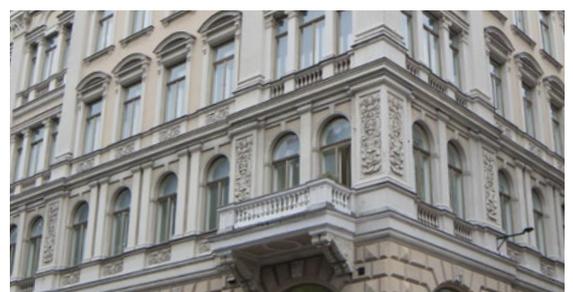
**Lammin MSE-A**  
U-value 1.0, meets  
basic construction  
standards



Elegant



Piquant



**Lammin  
Eco Watt**  
U-value 0.6–0.7  
and

**Lammin  
Eco Watt Plus**  
U-value less than 0.5  
for passive energy  
construction

## ECO WATT. THE FIRST OPENABLE ENERGY CLASS A++ WINDOW ON THE MARKET.

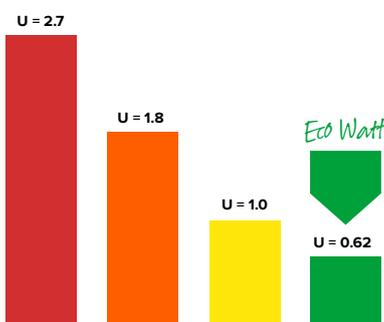
Lammin Eco Watt is the first openable energy class A++ window on the market as classified by Motiva\*. The window is equipped with quadruple panes and a unique protected outer sash structure (PRH FI 7415/2007).

The inner and outer sashes of the aluminium-protected energy-efficient window are made of durable Finnish pine, and their manufacturing process consumes significantly less energy than aluminium refining. Only the external parts exposed to rain and sunlight are made of aluminium profile. The entire protection on the wooden outer sash is made of edge-polished glass, so the sash does not require any care or maintenance aside from washing.

The Finnish Patent and Registration Office has granted design protection for Eco Watt. Its low energy consumption is unparalleled: only 36 kilowatts per square metre a year when the U-value is 0.62.

The U-value, i.e. the thermal transmittance factor, indicates to what extent the window transmits heat. The smaller the U-value is, the better the thermal insulation in the window is.

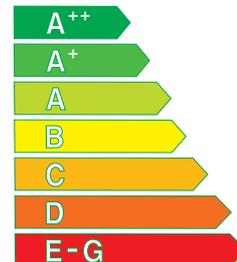
\*In the energy classification of windows, windows are divided into energy classes on a scale of A++ – G. More information on the energy efficiency of windows is provided at [www.motiva.fi](http://www.motiva.fi).



**Energia** IKKUNA

Manufacturer Lammin Ikkuna Oy  
Model WATT ECO WNS-A61

Low consumption



**A++**

High consumption

E-value (calculated annual energy consumption, kWh/m<sup>2</sup>/a)

**36**

(Based on the classification system's calculation formula and a 1.23 x 1.48 m window.)

$$E = 140 \times U - 160 \times g + 20 \times L$$

The actual energy consumption is also affected by the indoor temperature, climate, and cardinal point.

Thermal insulation factor (U), W/m <sup>2</sup> K	0.62
Overall solar transmittance (g)	0.35
Airtightness figure (L), m <sup>3</sup> /m <sup>2</sup> , h	0.30

Voluntary energy labelling



\*Energy Window® is a trademark registered by Puutoteletecolisuus ry.

## SIGNAL WINDOW®

Signal Window® is an international trademark developed and registered by Lammin Ikkuna Oy. The Signal Window® does not weaken the U-value of the window but enables the significant strengthening of mobile signals depending on the conditions.

The Signal Window® does not differ from regular windows in terms of appearance, properties or installation, and it provides a cost-effective way of improving indoor mobile phone reception. The Signal Window® is does not require maintenance or electricity in order to operate.

The Signal Window® is not directed only at low energy buildings. This product is recommended for use in all kinds of locations to increase the strength of mobile phone signals now and in case of future changes, due to which signal levels may be lowered by external factors.

**The Signal Window® technological feature is available for most products by Lammin Ikkuna Oy. For the windows equipped with this feature, the dimensions, models, shapes, and colours; energy-efficiency of the glass portion; safety-related characteristics of the glass panes; and additional features and accessories are always selected individually for each order and product to meet the customer's needs.**

## 24-H WINDOWS

Despite careful planning of construction and remodelling projects, surprises may occur and tighten the schedule. In such cases it's convenient that the 24-h-labelled Lammin windows and doors can be delivered from the factory warehouse to the construction site within just a couple of days.

We keep a diverse selection of various-sized 24-h products in stock at the factory. When you place an order for them on a weekday by 12 pm, the shipment will leave the factory at the same time on the following workday, at the latest!

Each product will be separately covered in plastic, and the shipment will be delivered directly to the site or the retailer's warehouse in customer-specific packaging. Due to the exceptionally quick delivery schedule, the in-stock product orders cannot be cancelled.

The Lammin in-stock products are easy to order from your nearest retailer.



RR20

RR21

RR22

RR23

RR33

RR24

RR26

RR30

RR31

RR32

RR750

RR29

RR36

RR37

RR11

RR34

RR35



## SPECIAL PRODUCTS

We manufacture special products according to designs without any restrictions. Double-opening window structures without an intermediate frame and drip moulds, for instance. We have also delivered many of our special products abroad. Special products also include fire and soundproofing products.

## SURFACE TREATMENT OPTIONS AND COLOURS

The wooden and aluminium parts of windows can be surface treated and tinted according to your specifications. You can choose your favourite combination from the standard surface treatment methods and colours. You have the countless colour choices of the colour charts in general use to choose from. We can also prepare special colours according to your wishes.

### Standard Surface Treatments and Colours of Wooden Parts

- The opaque surface treatment of the wooden parts is a coating of white paint.
- The transparent wood protection treatment can be performed in the colours honey, red-hearted pine, oak, autumn maple, old pine, red teak, teak, mahogany, walnut, palisander, or dark walnut. Alternatively, a neutral treatment that preserves the natural colour of the wood can be applied.

### Standard Surface Treatments and Colours of Aluminium Parts

- The aluminium parts are surface treated by powder coating.
- The standard colours are: white RAL 9010, light grey RR21, dark grey RR23, and dark brown RR32.
- Special order colours: other colours in the RAL and RR colour charts.

A more extravagant look can be obtained with dual-coloured outer sashes. For instance, when looking out from the inside, the colour scheme of the window and the adjacent door is white, but the dark grey used on the exterior of the house is also repeated in all outer surfaces of the windows and doors.



## FITTINGS AND ACCESSORIES

Imagination is the limit for the selection of window fittings and accessories. The usability of the windows is mainly affected by the choice of lever handles, multifunctional lever handles, and stays. The handles and turn knobs are one of the visible elements in the window structure. All details will be gone over when the order is placed so that the whole will serve its purpose as well as possible, also in terms of appearance.

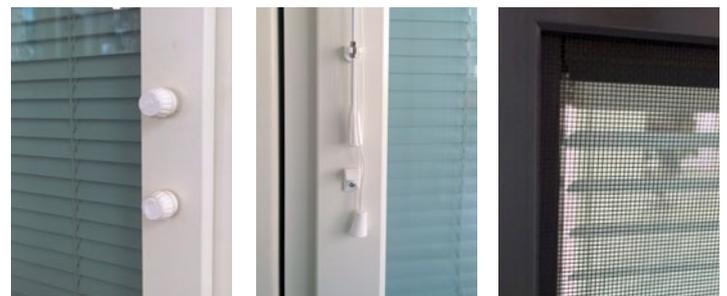
Whether you like chrome, brushed steel, brass, hardwood or even plastic, we can provide you with windows that meet your wishes down to the last detail – from start to finish.

We also offer shutters and insect screens as accessories!



Fittings

Eco Watt stay fastener



Integrated blinds

Traditional blinds

Insect screen

Due to printing technical reasons, the colours may differ from the actual colours!

# You can save money by changing the windows

In Finland, many houses still have the original 30 or 40-year-old, or even older, windows. Significant amounts of energy and money are wasted due to the old windows.



## ENERGY SAVING POTENTIAL

### Detached house 125 m<sup>2</sup>

- Window area approx. 15%
- The new windows are Lammin WattEco 200 windows, and the Motiva energy window classification is based on the VTT test report VTT-S-04085-15, U-value 0.62 W/m<sup>2</sup>K and E=36.
- Energy class A++

### The situation before window renovation:

- Old two-pane windows in poor condition with a U-value of over 2.5 W/m<sup>2</sup>K and the calculated E-value, i.e., the energy consumption value of the windows, approximately 275 kWh/m<sup>2</sup>.
- Direct electric heating
- Electricity price approx. €0.11/kWh

### Annual consumption difference per window area:

$$275 - 36 = 239 \text{ kWh/m}^2$$

$$125 \text{ m}^2 \times 15 \% / 100 \% = 18.75 \text{ m}^2$$

$$239 \text{ kWh/m}^2 \times 18.75 \text{ m}^2 = 4,481 \text{ kWh}$$

$$4,481 \text{ kWh} \times €0.11 \text{ kWh} = €493$$

When evaluated with the current average price of electricity, the heating energy consumption may decrease by up to

**€500** a year

### Detached house 200 m<sup>2</sup>

- Window area approx. 15%
- The new windows are Lammin WattEco 200 windows, and the Motiva energy window classification is based on the VTT test report VTT-S-04085-15, U-value 0.62 W/m<sup>2</sup>K and E=36.
- Energy class A++

### Annual consumption difference per window area:

$$275 - 36 = 239 \text{ kWh/m}^2$$

$$200 \text{ m}^2 \times 15 \% / 100 \% = 30.00 \text{ m}^2$$

$$239 \text{ kWh/m}^2 \times 30.00 \text{ m}^2 = 7,170 \text{ kWh}$$

$$7,170 \text{ kWh} \times €0.11 \text{ kWh} = €789$$

When evaluated with the current average price of electricity, the heating energy consumption may decrease by up to

**€800** a year

## SOUND REDUCTION OF WINDOWS

Here are some sound reduction values (dB) typical for the Lammin windows with standard glazing:

The sound reduction capabilities of windows can, on a case by case basis, be improved by changing the distance between the window's glass elements as well as the air gaps.

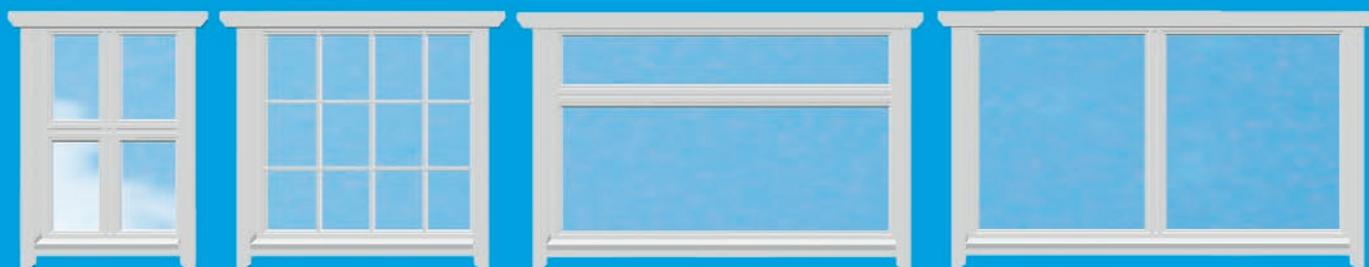
	R <sub>w</sub> dB	R <sub>w</sub> +C dB	R <sub>w</sub> +C <sub>tr</sub> dB
<b>MEKA</b>	35 - 42	32 - 40	28 - 37
<b>MSEA</b>	44 - 48	42 - 47	37 - 45
<b>Eco Watt</b>	44 - 50	43 - 49	41 - 47

The sound reduction index according to Standard SFS-EN ISO 717-1:

- R<sub>w</sub> medium frequency generic noise
- R<sub>w</sub> + C<sub>tr</sub> low and medium frequency noise, usually from urban traffic
- R<sub>w</sub> + C medium and high frequency generic noise, typically from air as well as fast vehicle and rail traffic.

# The best for my home

In addition to the standard windows generally in use, you can also design a model to your liking or construct an assembly with us according to your wishes.





# REFERENCE LOCATIONS



Hotel Torni, Tampere, Finland



Veturitalit, Hotel Torni, Tampere



Shopping Centre Kamppi, Helsinki



Perttula Special Vocational College, Hämeenlinna



Meri-Porin yhtenäiskoulu (primary school), Pori



Mattliden IB World School, Espoo



Ohjelmakaari, Jyväskylä



Trikkokuja, Tampere



Linna Golf, Hämeenlinna



The Staraya Derevnya Restoration and Storage Centre, St. Petersburg, Russia



Koukkuniemi administrative building, Tampere



Nekalan koulu (Nekala school), Tampere



Martinlaakso tennis centre, Espoo



Uusi Lastensairaala, Helsinki



Tampere University Hospital, Tampere



Virastotalo (public office building), Kotka



Tampereen Sähkölaitos (power plant), Tampere



Kela (the Social Insurance Institution of Finland), Turku



HOAS (student housing foundation), Helsinki



Retirement home, Kangasniemi





*Windows & Doors*

## *Good things take time*

The formation of the Lammin windows begins in the familiar nearby forest. The qualities of the slow-growing pine, hardened by Finnish weather conditions, are ideal for windows. That's why the Lammin windows and doors are the natural choice for all Finnish houses.

### **Lammi showroom/factory**

Paarmamäentie 2, FI-16900 Lammi, Finland  
Tel. +358 10 8411 700

### **Kangasniemi showroom/factory**

Hallitie 15, FI-51200 Kangasniemi, Finland  
Tel. +358 10 8411 700

### **Espoo showroom**

Vallikallionkatu 1, FI-02650 Espoo, Finland  
Tel. +358 10 8411 702

### **Turku showroom**

Matinkatu 4, FI-20810 Turku, Finland  
Tel. +358 10 8411 705

