

Genuine Ekorex house.  
Modern and warm log home.



**EKO<sup>®</sup>**  
**REX**



**RANTASALMI**  
[www.rantasalmi.com](http://www.rantasalmi.com)



## New freedom and richness of forms.

Ekorex offers architects, builders, interior decorators and inhabitants of a log home freedom to fulfil their wishes.

The Ekorex log structure offers plenty of possibilities for a rich form language. The warm and durable logs can be transformed to suit the scenery and your wishes. New dimensions in height, corners, arches and window solutions give architects free hands in creating unique log homes for everyday life and leisure, for the countryside and towns.





## Unlimited number of combinations.

Ekorex is a unique continuation to the Finnish log traditions. It allows freedom of choice, because now logs can be smoothly combined with rock, glass, metal and many other materials.

Just the right room solutions. Colours and shapes. Calming enchantment of a genuine material. An Ekorex home will make both builders and homeowners happy.





## Natural solution for healthy living.



The Ekorex log structure is the result of long-term product development. It combines traditional logs and recycled wood fibre Ekovilla in a unique way.

The Ekorex structure breathes freely, insulates effectively, and does not sag. It's a perfect solution for healthy living in log houses around the year.

### Completely plastic-free structure.

The Ekorex log structure contains air-proof paper instead of plastic. The structure that is completely made of wood fibre acts like natural wood. It keeps the humidity of indoor air steady. It is good to live and easy to breathe in an Ekorex house.

### Genuine logs in outer wall.

Outer walls of Ekorex structures are made of carefully selected, Finnish timber with few knots. They will last through the heat of the summer and the cold of the winter. Year in, year out.

### Freedom of choice with interior materials.

Ekorex offers full freedom in material choices inside the house. As much or little wood can be visible inside the house as the homeowners like.

### Ekorex breathes right.

Not only people with allergies will enjoy the clean, natural indoor air of an Ekorex house. Thanks to the respiring structure, the quality of indoor air stays good, also at night. There is less need for air-conditioning. People and animals feel well – as do all interior materials.

### Ekorex is suitable also for towns.

The corners of an Ekorex log house are most often built with traditional, massive joint ends. When built without the joint ends, an Ekorex house is also excellent for an urban environment.

### Ekorex, a solution with a multitude of options.

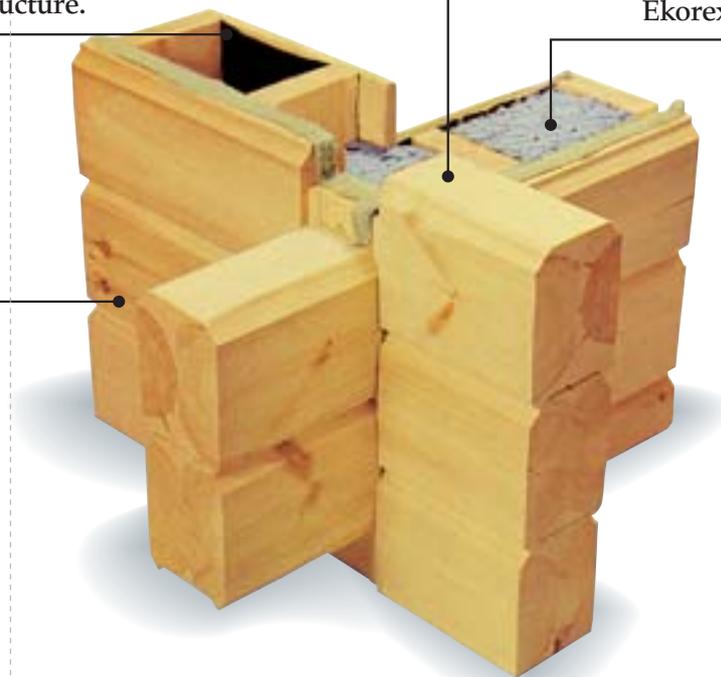
Windows and doors can be fixed firmly and tightly to the frame of the house. It is easy to add various steps both to the upper and lower part of the building. Other materials can also be easily combined with the Ekorex structure.

### Ekorex does not sag.

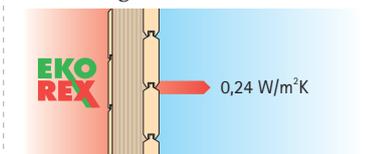
The Ekorex wall structure has a strong vertical frame. Due to the frame, sagging that is typical to wall structures does not occur. The structure enables realisation of versatile log houses of many looks.

### Ekorex provides efficient insulation.

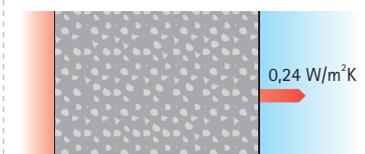
Manufactured of natural materials, the Ekorex wall structure meets the highest requirements of thermal insulation even as such. Heat is not wasted and the air remains naturally humid. The fine-grained Ekovilla insulation fills all the gaps and sticks to the structures. The wall surfaces remain warm, and there is no draught. Furthermore, the structure insulates sound very effectively.



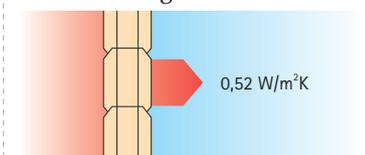
#### Ekorex log wall 235mm



#### Stone wall 950mm



#### Laminated log 210mm



Also with, e.g., round logs with diameter of 230mm, the heat loss is 0.6 W/m<sup>2</sup>K

## Fire resistance and air permeability of Ekorex log structure has been studied and found excellent.



The following properties of the Ekorex structure have been proven excellent in tests conducted by VTT Technical Research Centre of Finland.

**Air permeability:** during measurements taken by VTT, the air permeability of an Ekorex house (n<sub>50</sub>) received the value of 1.8 l/h that is excellent compared to the normal level (VTT Research Report No. RTE498/05).

**Fire resistance:** the fire resistance time of the Ekorex wall structure was confirmed as 75 minutes in a fire test conducted by VTT. This is more than adequate as comes to the REI30 and REI60 requirements commonly used in construction (VTT Research Report No. RTE2723/04).

For additional information, please contact Rantasalmi Oy, tel. +358 (0) 15 730 020.



## Ekorex structure lasts. And bears comparison.

Due to its sturdy structure, an Ekorex log house will last and stay in good shape. The natural materials are well suited to their environment, now and in the future as well. Living costs will be kept under control and the house will retain its value. A log house is a choice that supports sustainable development.



IN CO-OPERATION WITH FINNISH ALLERGY AND ASTHMA FEDERATION

Ekorex is the first structural solution that has been awarded the right to use the co-operation logo of the Finnish Allergy and Asthma Federation.

## Sturdy Finnish logs and Ekovilla insulation from clean nature.

Main material of the Rantasalmi Ekorex houses is split heartwood: non-checking, durable and beautiful Rex log. The visible joint ends of the logs and the log railings are made of massive laminated logs that retain their form. Ekovilla that is manufactured of organic natural fibre is used as the insulation material between the vertical frame and the wall panel. The primary raw material of Ekovilla is recycled wood fibre that accounts for about 80%. The remaining 20 % consist of non-evaporating boron minerals. Boric compounds act as anti-rot agents in Ekovilla, as well as slow down burning. Ekovilla does not burn actively, so the structure is fire-safe.

## It is easy to breathe and live in an Ekorex log house.

The quality of indoor air affects the well-being and comfort of people. High quality indoor air and the correct humidity percentage are particularly important for those with allergies.

The plastic-free Ekorex houses breathe, in the proper way. The humidity of indoor air stays constantly at the right level, since logs and the Ekovilla insulation bind and release humidity according to the conditions keeping the humidity of indoor air steady. Allergies and respiratory symptoms are also reduced by the fact that a minimal amount of dust is released to the air inside the house.

## Non-sagging and durable structure opens up new opportunities.

The Ekorex structure is also well-suited for multi-storey houses made of logs. The Ekorex wall does not move or sag. Non-sagging is achieved by using a supporting vertical frame. There is no need for sag allowance for doors or windows. Electrical and pipe installations can be easily hidden out of view. Thanks to the non-sagging structure, wallpapers and tiles can also be used in interior decoration.

# Traditions and new expertise.

Due to the durable Ekorex structure, maintenance of the house is affordable.  
Costs of living will be kept in check and the house will retain its value.



Rantasalmi Oy is Finland's oldest manufacturer of log houses.  
Solid experience, respect for the material and the latest know-how open up a world of opportunities.  
Today, Rantasalmi manufactures log homes that will stay alive, both today and tomorrow.

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