



*In Partnership with Nature*

# Health and Energy Efficiency Benefits of Honka Log Homes

**Nearly 50 Years and 70,000 Log Homes is the Experience Honka has to offer it's Clients**

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Atrium Log Homes, LLC PO Box 536 Evergreen, CO 80437 720.352.7022

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***Natural Lifestyle from  
Cabins to Castles***



## Energy Efficiency:

### the Truth about R-Values and the Importance of Quality

Despite the high popularity and resale value of your log home, it is important to recognize its value to you while you live in it. This value is best recognized when evaluating the benefits of the energy efficiency gained in quality log home construction.

“Log Homes can be expected to perform from 2.5% to over 15% more energy efficiently compared to an identical wood-frame home, considering annual purchased heating and cooling energy needs.” — Technical Committee of the Log Homes Council, NAHB.

In real terms this means an owner of a log home can expect to expend \$150-\$400 less per year on their heating and cooling-related utility bills, while maintaining equal or superior comfort under real-world weather conditions.

“Tests performed by the federal

government found a log structure to perform as well or better than other types of construction including an R-11 insulated 2x4 framed wall structure, even though the nominal R-Value of the log wall was less than 9.” — Log Homes Council of the NAHB.

Many people ask, “How is this possible?” Experts attribute the higher energy efficiency of log structures to thermal mass of the solid wood walls despite a lower measured R-Value. In addition, a quality well-sealed and maintained log home does not exhibit the energy loss due to convection or air infiltration that is characteristic of framed wall construction.

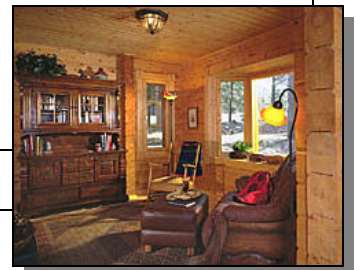
The quality you find in Honka’s products ensures



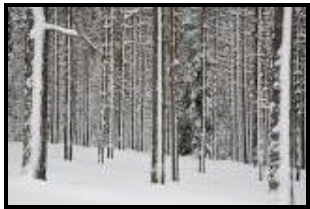
better thermal insulation value and savings on your energy bill. The nature of dense Nordic pine, and the special

tight-fitting wedge profiles of the round and rectangular logs allows heating energy to remain inside your HONKA log home. Furthermore, Honka’s joint system makes our log walls absolutely solid, ensuring longevity in your home and continued energy efficiency. Even after many decades, the walls are just as solid as on the first day.

***“Government tests have shown, when measuring energy efficiency, log structures perform as well as or better than other types of construction.”***



## ***Honka’s Quality Nordic Pine***



~ Nordic pine has a much higher thermal insulation value than most of the wood all over the world.

~ Short growing seasons result in a slow growth pattern, creating a tight ring structure and a highly dense, insulated material.

~ Reduced moisture balance means less cracking when dried.

~ The results of this highly insulated material is seen directly in the energy efficiency seen in the environmentally “green” homes people live in all over the world.

# HONKA'S SUSTAINABLE PRACTICES



Honka's devotion to the preservation of Finland's forests and the minimizing of environmental impacts on the environment is quite apparent in every step of their closed loop manufacturing process. Honka has always adhered to Finland's strict harvesting rules, and plants 7 trees for every tree they harvest. This effort has resulted in the growth of Finish forests to exceed the volume of trees being removed from forests naturally and through harvesting.



Within the factory, Honka implements a "no-waste" manufacturing process. The process begins by stripping 25-30% of the outside diameter of each tree. This stripped wood is then sold for profit to paper manufacturing companies. As the use of many saws within the factory produces an immense amount of saw dust, Honka has placed a vacuum at each manufacturing process point. These large vacuums suck up all wood by-products, which are then burned to supply energy to the entire plant and local community. This burning process uses a smoke filtration system, protecting the environment from the pollution the smoke would otherwise cause. So much energy is created from this burned by-product that the energy not used by the factory is sold to the town of Karstula, supplying them with 1/3 of their energy. After harvesting the trees, the logs are kiln dried in Honka's computerized drying sheds

prior to production. This helps prevent undesirable twisting, warping, or checking.

Due to the cost savings of creating their own energy, Honka has been able to put that money into improving their manufacturing process through advanced technology. Honka has increasingly incorporated the use of computers in their production process. The use of computers in the cutting process increases the number of logs cut per day, reduces Honka's cost of labor, and allows for extremely accurate cutting and thus less wasted trees from miss cuts. This too only provides more confidence in Honka's promise of a quality energy saving product.



## Healthier Home Cleaner Air for Cleaner Living

In contrast to other building materials, wood "breathes." This means that it is open for diffusion in both directions, because billions of tiny cells ensure there is an on-going renewal of the air molecules in the inner room. At the same time, the surface temperature of wooden elements in the inner rooms of the building is always similar to the corresponding room air temperature and, therefore, always pleasant for the people living there. The log walls regulate humidity by absorbing moisture and discharging it again when the outer conditions change.

The electrostatic properties of wood means that it does not get charged up with static electricity causing minimal dust to be whirled around in the rooms. This is appreciated particularly by people suffering from allergies.

