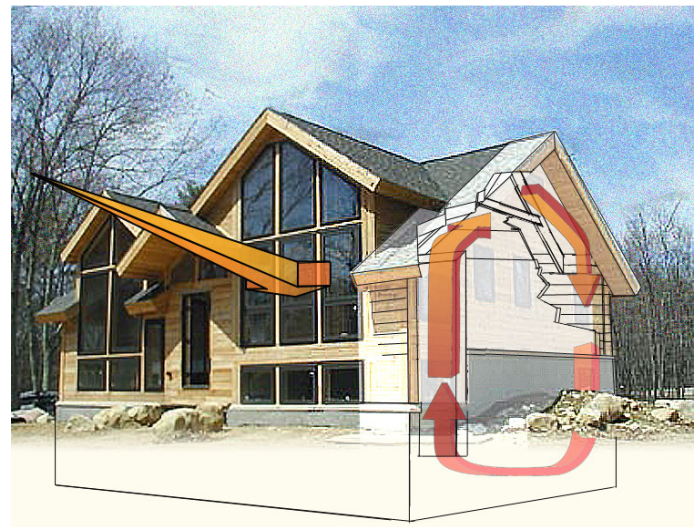




Enertia®-- energy-from-a-shift-in-time-- makes self-sufficient homes practical, and affordable.

The earth stays warm in the minus 459 degree cold of space by its atmosphere, and its huge mass allows it to store and release energy from the sun. All that natural energy gave builder Michael Sykes an idea- "What if a house could store and release energy through convection currents, just like the Earth?" So, Sykes set out to design a house which has a miniature atmosphere surrounding a massive structure that can store energy.

Since the late 1980's, his company-- Enertia® Building Systems, Inc.-- has been producing homes that heat and cool by design, rather than through mechanical systems like furnaces or air conditioners. Sykes makes his Enertia® homes available nationwide as pre-cut, numbered kits. Enertia®'s manufacturing division in Youngsville, North Carolina has shipped more than 70 homes to 25 states.



The Enertia envelope in action

From the outside the homes look like traditional wood sided homes, constructed on a full basement with lots of windows on the South. These windows capture heat during a winter day, when the sun is low on the horizon, and store that heat in the solid pine walls. The logs then slowly release the heat at night. During a summer day, the sun is higher in the sky, enabling most of the sunlight to be shed by the insulated roof. The sunlight which does enter the southern exposure- called passive solar gain- rises through the outer envelope. This pulls cooled air from the basement, enveloping the house and tempering the heated air. The result is a house that heats and cools by design, rather than energy-intensive mechanical systems.

The timbers have the additional function of replacing siding, studs, sheeting, insulation, and interior wallboard. All these stages of construction become one step as each solid timber is placed and secured. The resulting structure has much greater mass than a stick-built home. The major benefit of the additional mass are thermal storage capacity and unequalled strength to combat harsh, even devastating, weather.

Not only is the energy needed to run a conventional house expensive, so is the equipment. Heat pumps and furnaces cost money and have to be replaced every 10-15 years. By substituting active heating and cooling with passive strategies, Enertia®'s homes are able to heat and cool by design. Homeowners save initial equipment costs, as well as long term "repair and replace" costs.

Over their lives, conventional homes that use mechanical systems also create tremendous amounts of pollution. Reductions in energy consumption mean reductions in the pollution created by burning coal and natural gas to generate electricity. According to US DOE numbers, heating and cooling account for 55% of the energy used in our homes. Eliminating almost all of this consumption- through building a home that heats and cools by design- saves between four to five tons per year of CO₂ emissions alone.

The pre-cut kits save on the construction costs as timber kit are much lower than home. "One of our clients in southern California going total-cost square-foot rate," says Sykes; is a noble cause, the main incentive to any make more money by acting differently?" through the addition of active energy hydro turbines, and windmills, are able to electric grid.

The end result is a beautiful, new use for multiple partners. The mill gets top dollar for reduces their overhead, the customer gets a our planet gets a break on Greenhouse Gas and

well. Labor costs for assembling a solid construction/framing costs for a stick-built built his Enertia® home for 25% of the local "While building green to reduce pollution economic change is profitability- can I Enertia® has built several homes that, technologies, such as solar panels, micro-operate without being connected to the

renewable forest products that benefits American species of wood, the builder storm-resistant, ultra-efficient house, and other emissions.

For more information, contact Michael Sykes at 919-556-2391 or enertia.com