

# Enertia

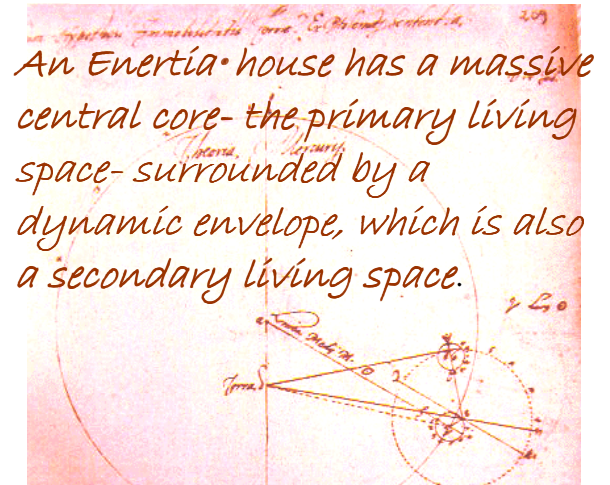
Natural Materials  
Natural Energy



## Nature's Flywheel

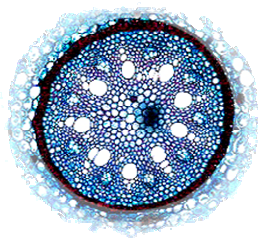
Anything massive, once warmed, tends to stay warm. The earth maintains a habitable environment in the minus 459 degree cold of space because our atmosphere allows the planet to capture, distribute, and store energy from the Sun. The atmosphere, like the glass skin of a greenhouse, contains this energy, and thermal currents- the wind, the jet streams, and ocean currents- distribute it over the Earth. This system is an example of thermal inertia.

The thermal inertia of Earth is best visualized by using the analogy of the flywheel. A flywheel takes a lot of energy to get up to speed, but once moving- only a small thump on a regular basis is needed to keep it going. Each day's sunshine is the thump that keeps the thermal flywheel going. In a twenty-four hour rotation, the planet takes this one-sided blast of solar energy and distributes it through thermal currents, to create our solar system's only habitable environment.



## Nature's Solar Collector

Every day, our planet receives millions of watts of solar energy. Trees use this radiation along with minerals, CO<sub>2</sub>, and water to make energy that the tree uses to grow. An Enertia home is designed to take advantage of this free solar energy, too.



pine cell

Enertia homes are constructed using logs made from Southern Yellow Pine. This soft lumber is known for its high resin content. At room temperature- 72 to 80 degrees Fahrenheit- the resin under goes a phase transition or phase change, which creates huge energy storage potential. During the day, an Enertia house is able to take in heat, store it, and then distribute it through its atmosphere- the outer envelope of the home.

**Just** like the Earth, an Enertia home takes its daily quota of solar energy and uses it to create a comfortable environment, all by using materials created through that same energy source.

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