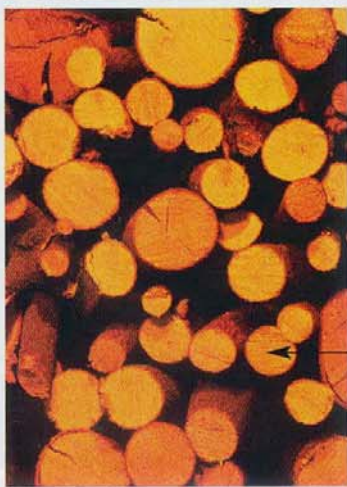


6°

A HOUSE BUILT OF STRAW



Essential connections only a click or call away



Earthships and Cordwood

While Home Alive! somewhat resembles a normal residence, its spiritual predecessor is called an earthship. Invented by New Mexico architect Michael Reynolds (www.earthship.org), earthships are partly underground homes built using recycled materials—most importantly, discarded tires packed firmly with soil and interlocked like bricks to form walls. They were the first structures to demonstrate that by wisely harvesting wind, water and solar power, a home could actually be a net energy generator—even in our cooler latitudes.

Another more traditional building technique is called cordwood or stackwall construction. Seasoned logs are cut to a consistent length then mortared together in wall form. Check out Cliff Shockey's double stackwall house in Vanscoy, Sask. (www.daycreek.com/dc/HTML/dcshockey1.stm).

Smarter Materials

Like hardwood, only better—the elegant tongue-and-groove bamboo flooring called Silkroad, from Markham, Ont.'s K&M Bamboo Products (www.silkroadflooring.com), is stronger, harder, longer-lasting and more dimensionally stable than oak or maple (while comparably priced), but it takes only four years to grow instead of 50 years.

Besides bales, straw has other applications. It can be fashioned into wall or floorboards that perform as well as wood-based press boards. Goldboard (www.goldboard.com) is a Vancouver-based leader in the field.

Not only are they manufactured without creating effluent pollution, Marvin Windows and



Doors (www.marvin.com) fiberglass-framed double-paned Integrity windows are super energy efficient, blocking 84 percent of ultraviolet rays. They also have a Low E II coating, which means that in summer, when the sun is high, they reflect away the hot rays, while the low angle of the winter sun permits maximum heat to enter the house.

The SUN is free

The Home Alive! house will use two kinds of active solar power (as distinguished from the sun shining through a window, which is termed passive). Actual electricity is produced by photovoltaic panels from Arise Technologies (www.arisetech.com), based in Kitchener, Ont. Like huge bands of duct tape, these photovoltaic laminates stick to and look like any ordinary steel roof, while sending power to batteries or back into the power grid. For standard-sized homes, such systems cost anywhere from \$40,000 to \$60,000.

The other method is roof-mounted evacuated-tube solar collectors from Solarco Manufacturing (www.solarcoman.com). This sealed system transfers heat from the solar collector to a storage tank that supplies either household heat or hot water, and it works year-round, even in diffuse sunlight. A domestic hot-water system for an average-sized house (installed) costs about \$4,000. A space heating system for the same house would run \$15,000 to \$20,000.