

This solar home takes a hot idea and makes it cool-looking

Although "Home, sweet, home" applies to Shane Black's residence, a slightly different twist on the popular phrase may be more apropos.

"Home, neat, home."

Black's solar-powered house - easily identified by its all-white exterior and striking geometric design - was just completed this month.

In October, Black's \$225,000 "ultramodern" home was selected as one of 100 homes and businesses statewide to be part of the Wisconsin Tour of Solar Buildings - the only such place in Manitowoc County — and more than 300 curious people analyzed every nook and cranny.

"I wanted to show people you could incorporate these features into something unique, that you don't have to stay within the box to use solar power," said Black, who designed and built the home almost entirely by himself despite having no formal schooling in architecture.



Shane Black

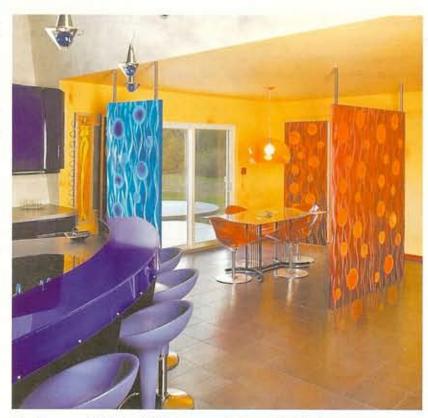
## LAKESHORE 7 LIFE & STYLE

Black constructed the 2,500square-foot home on 12 acres of land bought from his father. He started building in spring 2000 and just finished the last project, the master

Looking at the unique designs both inside and outside the home, it's easy to forget the home is solar-powered. It utilizes passive solar, active solar, super insulation, continuous vapor barrier and air-to-air heat exchanger:

Passive solar: Two-thirds of the total window area is facing south, with 25 percent of the windows located on an angled wall, preventing all solar gain in summer.

Active solar: Seven 4-foot-by-10foot solar panels just outside the home heat a water/glycol mixture, which heats a 21/2-foot sand bed beneath the home's concrete floor. The stored heat is gradually released through the floor, even on cloudy days. This system also preheats the



The bar area (left) and dining area of Shane Black's home are accent-Continued on 8 ed by custom illuminated room definition panels. Deen Wanek photo

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potable water.

**Super insulation:** A 6inch wood frame construction with blown-in blanket, fiberglass insulation and 1-inch Styrofoam beneath the stucco finish.

Continuous vapor barrier: This barrier seals all penetrations, preventing air infiltration, which can waste more than 20 percent of your heat.



The custom bar at Shane Black's solar-powered home has Bombo Italian stools. Deen Wanek photo

Air-to-air heat exchanger: This unit brings in fresh air. It exchanges heat with the outgoing air.

"I've just always been close to nature," Black said. "My father had 40 acres of woods, so I've been concerned for the environment and I wanted to incorporate as many environmentally friendly things as possible."

It's more than just environmentally friendly — he estimates 50 percent of the power comes from solar energy — it's unique, too.

"I wanted to build a house, and I couldn't find anything I liked so I tried

designing myself," Black said. "Everything I was doing in it, I just wanted to come up with different ideas for what I thought were cool ideas."

His mother, Rita Janda of Two Rivers, is impressed with her son's creation every time she sees it.

"It's the most extreme home north of Milwaukee," Janda said. "It's a wonderful experience to see creativity blossom like this."

Black hopes the exposure from the open house leads to bigger and better things. Now that the home is finished, he'd like to contact HGTV and national magazines to receive more exposure for his Shane Black Design business.

It also would be nice, Black said, if people came away impressed and hired him to build unique homes or furniture.



One of Shane Black's custom illuminated room definition panels. Deen Wanek photo