



For his own house, architect David Hertz designed a bridge of energy-efficient glass to link living areas in front with children's quarters in back. The bridge overlooks a secure interior courtyard made possible by eliminating an attached garage. Hertz's Syndecrete tiles cover the main wall that can be warmed in winter and cooled in summer.

A n E X P E R I M E N T

This house is an opportunity to practice what I preach," says architect David Hertz, who teaches a course on the ecology of architecture at UCLA. Known for using recycled and environmentally safe building materials, Hertz sees his recently completed home in Venice "as a working experiment to test and live with concepts I believe in."

Instead of installing conventional air conditioning, for example, Hertz developed an elaborate system of windows, front and rear, to take advantage of the coastal location by capturing and circulating cool ocean breezes throughout the rooms. Strategically placed electric skylights open and close automatically to allow hot air to escape. "If it rains, they close. If it gets too hot, they open," Hertz says. "You don't have to be here for them to work."

To heat the house, Hertz recycled a solar panel from an old commercial building. Radiant heat from water warmed by the panel circulates through tubes to heat the concrete slab floors as well as tubs, the built-in living room bench and the main south-facing wall that cuts through the house. "It may look like a cold surface, but it's warm," Hertz says of the floor, which ranges in temperature between 65 and 72 degrees Fahrenheit. By forgoing a forced-air heating system, he also gained 2½ feet of ceiling space and eliminated ducting and attic space where dust and mold love to grow.



in EFFICIENCY

PUTTING SOLAR ENERGY, RADIANT
HEAT, RECYCLING AND NONTOXIC
BUILDING MATERIALS TO THE TEST

By Barbara Thornburg • Photographed by Tim Street-Porter



Top left: Hertz, his wife, Stacy, and their three children enjoy the upstairs sleeping porch which is shaded by structural timbers incorporated into a trellis. Bottom left: The children's bathroom has an in-swinging hopper window for ventilation and movable wood steps for access to cabinets and the Syndcrete sink



In the living room, the coffee table and fireplace are arranged around a concrete bench, designed by architect and interior design associate David Thomas. The concrete floor can be w

Inside and out, the home features products fashioned from recycled materials. Countertops, sinks, tubs and fireplaces are made of Syndecrete, a lightweight concrete Hertz developed out of 50% recycled materials, which can include decorative machine parts, bottle glass and ground-up vinyl records. Colorful sample tiles from his Syndesis showroom line the parkway. Wood forms used for poured-

in-place concrete were dismantled and turned into the front deck. "Wherever I could," he explains, "I tried to use construction waste, especially wood."

Hertz also wanted a nontoxic environment for his wife, their three young children. "Even though people spend 80% of their time indoors, we are just on the threshold of imp



bove: Near the Syndecrete dining table and benches are a wall terrarium by Santa Monica artist Dodd Hollisapple and steel, wood and rubber stools by Krab Design. Below: Max, 10 months, relaxes on the master bedroom's Douglas fir platform bed. With no forced-air heating to accommodate, Hertz gained space for exposed ceilings.



door air quality," says Hertz, who often speaks publicly on air-quality issues. To that end, he chose zero-VOC (volatile organic compounds) interior paint, which emits no pollutants. And instead of solvents, he went with natural linseed and tung oils on exposed wood beams. Finally, Hertz opted for burnished concrete floors instead of carpet, which can also harbor unwanted mold. The surface, as it turns out, has another bonus. "The kids ride their bicycles on it," he says. "And if they spill something, we can hose it off right out the front door." ■



Sophie, 4, and Collin, 5, play on the Douglas fir stairs designed by Hertz to resemble a tansu chest and built by craftsman David Albert.