



Eco-Homes Get the Green Light

THERE ARE MANY REASONS to build sustainable houses, and they're not all about saving the planet. Many homeowners cite lower utility bills and healthier indoor air quality as compelling factors to go green. So it's not so much that it's "good for the environment" as it is "good for you, good for your health and good for your wallet."

Whether you build from the ground up or decide to do major renovations, it's good to think green. After all, wouldn't it be nice to park your fuel-efficient hybrid car on a porous driveway that collects rainwater for non-potable uses?

*Coconut House
Designed by lee + mundwiler architects, AIA
Santa Monica, Calif.*

COCONUT HOUSE



photo: Juergen Vogal

Designed by *lee + mundwiler architects, AIA, Santa Monica, Calif.*



CLIENT: Single, professional woman seeking a sense of security while simultaneously creating a feeling of wide-open space infused with light and air. A major requirement was for the house to be made with as many sustainable materials as possible.

DILEMMA: A narrow, substandard lot (25' x 100'), nestled in a densely populated Los Angeles neighborhood of stucco houses hastily built after World War II for workers and families of returning soldiers. The neighbors are within arm's reach and the owner didn't feel secure or protected.

SOLUTION: Among the dwelling's many distinguishing features is the large center courtyard, created by subtracting volume from the house's bulk. This allows for light and breezes to permeate the living space. Deliberate openings such as this help blur the boundaries of the narrow lot. A movable louver system helps shield exposure to nearby neighbors and a busy street.

The facade of dark fiber-core panels with natural wood veneer emulates the tough shell of a coconut, which provides security both physical and psychological. The panels also provide a maintenance-free facade that will eliminate the need for petroleum products such as paints and sealers for many years.

Sustainable features such as passive solar energy and active cross ventilation are used rather than installing expensive solar panels. Other eco-minded elements include recycled cement wood/particleboard fencing and eco resin panels, together with drought-tolerant fertilizer- and pesticide-free landscaping plants such as kangaroo paws and hairy muhly grass.

STRAW-BALE HOUSE

CLIENT: A young family looking for an architectural antidote for (and perhaps an alternative to) an overly compartmentalized urban existence, symbolized by their Victorian row home in San Francisco.

DILEMMA: The clients were dedicated to building a green home and had a specific interest in straw-bale construction, which has a tendency to generate traditional-looking, Lego-like houses. They were also looking for a contemporary and site-specific design to allow natural light in and permit a visual and physical connection to the outdoors.

SOLUTION: Our conceptual response to these competing and seemingly incongruous aesthetic desires was to link three prototypical "L-shaped" courtyard plans, each with a thick, protective outer wall composed of straw bale and a "thin" inner wall with generous openings out to the garden and the hills beyond. The deep outer straw-bale walls insulate the home, while the concrete floor absorbs the heat generated by the sun pouring in through the openings in the southeastern facade.

By combining the lightness and transparency of a contemporary home with the "heaviness" of straw-bale construction, we were able to create a sustainable modern home, inextricable from its site, where distinctions between interior and exterior intentions are interchangeable and

where the clients' desire for environmental sustainability is directly compatible with their need for a comfortable and quiet escape.



photo: Robert Karosis



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Look for our next LH&E special edition on September 24



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