



HERMOSA BEACH HOUSE

HERMOSA BEACH, CALIFORNIA

Sustainable Jury Comments: *This playful home is 36% more energy efficient than California's tough standards and qualifies as a Green Point Rated home. Energy efficiency is achieved with shading, high performance windows, orientation, and thermal stack ventilation. Masonry provides color and texture on the ground floor, and a sturdy base for the wood, steel, and glass structure above. Materials are chosen to be durable and recyclable (some are salvaged).*

Architect's Commentary: An active family of four approached the Architect with one condition: Design a "green," 3-bedroom, 2-bath house, per 2005 Build-it-Green standards, on a tiny 30' x 50' lot that suited their beach lifestyle. The site is in a very dense urban area of Hermosa Beach, one block from the beach, where privacy and personal outdoor space are very precious commodities, and where the marine climate is harsh on building materials.

The resulting multi-story, tower-like structure is sheathed with pre-finished metal panels, stucco, and concrete masonry, all well-suited for long life in a marine climate. Concrete masonry is used exclusively at the ground level where durability and strength are required. Colorful glazed concrete masonry block are used in large murals at the house entry and at the street to reflect the playful beach atmosphere. Split face concrete masonry, the color of the beach sand, is used at other visible locations for texture and beauty.

The house uses 2005 "Build-it Green" guidelines to achieve 81 points (50 minimum). The house is also 36% below the Title-24 base line. Additional Build it "Green" features:

1. The stairwell acts as a natural-cooling chimney with a thermostatically-operated skylight at the top.
2. Non-wood, durable and non-combustible exterior materials and windows appropriate for marine environment that require minimal maintenance (stucco and CMU) or no maintenance (fluoro-carbon "Kynar," pre-finished metal siding, aluminum windows). Exterior materials are recycleable.
3. Fluoro carbon paint on pre-finished metal siding is rated

"cool" and reduces heat gain through south and west walls. Foil-backed, shear plywood reduces radiant heat gain on the south and west walls.

4. All windows are double-glazed with Low-E glass, thus reducing heat gain from radiant and conductive sources.
5. House is heated by a hybrid hydronic/forced air system that uses a tank-less natural gas water heater (25% improvement over standard). The same tank-less water heater also furnishes hot water for the house (41% improvement over standard).
6. Roof terrace provides outdoor space and 66 square feet of planters deep enough for medium-sized plantings.
7. Aluminum trellis reduces heat in primary south-facing rooms.
8. House is pre-wired for photovoltaic panels to be mounted on the flat roof areas.
9. All building insulation is recycled cotton.
10. Pre-engineered wood framing throughout.
11. Cabinetry uses teak recycled from demolished houses.
12. Use of low VOC interior paint.
13. High-efficiency kitchen appliances and washer/dryer unit.
14. Water saving toilets.

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STRUCTURAL ENGINEER:
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GENERAL CONTRACTOR:
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MASONRY CONTRACTOR:
Madison Masonry
BLOCK PRODUCER:
Trenwyth Industries, Inc. (a subsidiary of Oldcastle APG West)
OWNERS:
Barbara and Joe Gunning



Photography: David Duncan Livingston Photography

2008 CMACN Awards Edition, "CMU Profiles in Architecture"