

Home Feature | A New Attitude



Home Feature | By Thomas Shess • Photography by Martin Mann

North County Couple Go Green For Eco-Savvy and Healthy Beach House

Rich Williams, an established builder of luxury homes, and his wife Allison Renshaw, an accomplished artist, put their heart and soul into making an environmental difference. A case in point is the remarkable coastal home in Leucadia that they remodeled as an eco-friendly residence.



With ocean views from La Jolla to Dana Point, the Neptune Avenue project, called ArtHaus-2, is the second certified "LEED for Homes" single-family project for the region (the first was the cover article in San Diego Home/Garden Lifestyles' August 2010 issue).

The residence not only has the U.S. Green Building Council's highest certification rating of LEED Platinum, it also is San Diego's first LEED for Homes and GreenPointRated certified project. There are only a few California homes that have qualified for this certification. Williams says both programs require an independent third-party verification on the home's green features. This assures homebuyers that the residence truly has been built in a sustainable manner and helps eliminate what is known as "greenwashing," the practice of some residential developers to simply tout their homes as eco-friendly.

Originally, a non-descript, non-historic stucco "beach box", the two-level project has a new attitude that balances wood, stone and metal elements, and maximizes durability — one of the important tenants of LEED for Homes because a durable home -retains its value, requires much less maintenance and provides for healthier living. Ultimately, LEED claims, durability provides higher value, which Williams says is an important point to consider given the fact that building a rigorously green home can be more expensive. A quick compensation for the added green costs in this residence is the tried-and-true real-estate axiom "location, location, location" as oceanfront property always will be rare.

Other compensations are the cost-saving measures built into this seaside remodel — many of which come from water and energy efficiency. For example, utility bills are lower because domestic hot water is provided with a solar water heater and electricity is produced with a solar photovoltaic ray. In fact, the expandable photovoltaic system is projected to supply 42 percent of the home's electricity needs and, says Williams, "the projected landscape water use is 80-percent better than standard landscaping."

With these systems and other green features (see lists*) it's no wonder the home is forecasted to be 47 percent more efficient than California's Title-24 energy-code requirements.

Renshaw says that one of the most valuable aspects of this home is its amazing indoor air quality. Typically the average American home's indoor air is 10 to 20 times more polluted than the air outdoors. Meticulous attention was paid to assuring construction materials were chosen for non-toxicity. The indoor air is ultra-filtered, and fresh air is constantly brought into the home with a calibrated mechanical ventilation system. The house also boasts a whole-house water-filtration system. This home is one of the "healthiest" homes ever built in San Diego, Renshaw adds.

Energy and Water Efficiency



Designed to perform 47 percent better than Title-24 standards
 Advanced "Dual Insulation" envelope insulation
 High-performance Loewen doors and windows
 Engineered HVAC system
 Dual-zone heating and air conditioning
 Energy Star Miele refrigerator and appliances
 Energy Star Whirlpool "Duet" HE steam washer and dryer
 100-percent high-efficacy lighting
 "Smart Home" equipped for systems automation
 Expandable 2.14 kW (AC) solar electric PV system
 Advanced dual-zone plumbing design
 Solar hot-water heater
 "Push-button demand" hot-water delivery
 Smart-Skylight with thermostatic control and rain sensor
 Low-flow Hans-Grohe bathroom and kitchen fixtures
 Toto HET WaterSense dual-flush "Aquia II" toilets
 Water-efficient landscaping and irrigation system



Materials

FSC-certified wood for cabinetry
 FSC-certified wood for flooring
 SFI-certified wood for framing, sub floors and sheathing
 Front entry door specified with 316 marine-grade stainless steel

Indoor Environmental Quality

Radon and formaldehyde tested (negligible levels)
 100-percent low/zero VOC paints, stains, caulking, adhesives, etc.
 High-performance MERV-10 air filtration
 Calibrated automatic fresh-air ventilation system
 Ultra-violet light-treatment system for forced-air unit coils
 Sealed duct system
 Mold-resistant ducting installed where possible
 Carbon-monoxide detectors
 Sealed supply and exhaust on furnace and hot-water heater
 100-percent hard surfaces for reduction of indoor pollutants
 Quiet-rock drywall in critical areas
 Electronic shading system in great room and kitchen


Other Green Features

Durability planning
 Non-toxic sodium borate treatment of framing for termite control
 Whole-house "Nano Water Filtration"
 Caesarstone countertops for high durability
 "Safety Pan" with water sensing alarm under dishwasher
 Construction waste management

Cool roof and two living "green roofs"

Garage pre-wired for hybrid/electric vehicle plug-in

* LEED is the U.S. Green Building Council's acronym for Leadership in Energy and Environmental Design. The LEED green building -certification program is the nationally accepted benchmark for eco-friendly design, construction and operation.

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