

BUILD GREEN

A “green” home in the 21st century doesn’t mean having a special place for growing plants or decorating in shades of avocado and sage.

Green building is the construction or renovation of homes in a way that conserves natural resources. Building houses with an environmentally friendly focus started in the 1970s and is a movement gaining momentum in the construction industry, says Nate Kredich, vice president of residential marketing with the U.S. Green Building Council (USGBC) in Washington, D.C.

“Potential buyers and homeowners are more discerning and educated regarding the sustainability of resources,” he says. “The building green philosophy can save the homeowner more money on energy bills, create a healthier home and help conserve natural resources.”

The Leadership in Energy and Environmental Design certification program, or LEED, was started in 2008 by the USGBC. It provides an independent, third-party verification that a home was built using strategies aimed at achieving high performance in environmental benchmarks.

Since the program’s inception four years ago, LEED has certified 16,000 homes across the country. Kredich says the number of LEED-certified homes has been growing by about 25 percent every year. Last year, 7,000 new construction projects were LEED-certified, while 50,000 buildings have applied for certification upon building completion.

Josh Wynne, owner of Josh Wynne Construction in Sarasota, Fla., bristles at the mention of “green building” and says too often the terminology is tossed around as a marketing ploy or gimmick. “Green building isn’t a style, a counter-top or a brand, it’s a concept that should define good building,” he says. “I’ve been in business since 1998 and build homes that make sense for the homeowner, while conserving and utilizing natural resources as much as possible. To me, it’s just common sense building.”

Last year, Wynne completed building a contemporary “Florida Cracker” architecturally designed home in Lakewood Ranch, Fla. Called Power Haus, it received a platinum LEED designation for its construction and energy efficiency.

“Even before breaking ground, we surveyed the site to take advantage of not only the expansive views, but also the natural ventilation and lighting provided by the breeze and shade of 162 trees on this hardwood swamp,” Wynne says. “The idea was to bring as much of the outdoors inside the house.”

The house was situated to catch and take advantage of the westerly winds emanating from the Gulf of Mexico. To aid in the natural ventilation of the house, it is equipped with ceiling fans, including a commercial one that spans



HT: The great room of the Power Haus in Lakewood Ranch, Fla., (receiving a platinum LEED designation for its construction and energy efficiency), features an open, functional design that opens up into the kitchen and backyard. To aid in the natural ventilation of the house, it is equipped with a commercial ceiling fan that spans eight-feet in diameter over the great room with large expanses of operable doors and windows that lead outside. CREDIT: Matt McCourtney, McCourtney Photographics

eight feet in diameter over the great room. Power Haus has large expanses of operable windows and doors to the outside. The open floor plan includes indoor accordion doors, which allow the breeze to blow through this 3,200 square-foot home, built on a four-square design with a breezeway.

Large four-foot eaves were built to provide protection from the Florida sun, while rainwater is captured from the roof area and feeds a cistern for future use. Solar panels export more kilowatt-hours to the electrical grid than are used by the house.

Inside, polished concrete floors, clay walls over mold-resistant drywall and Forest Stewardship Council-certified native cypress timbers were used for doors, trim, cabinets and roof framing. Cabinet doors in the kitchen were fabricated from lumber scraps, including plantation teak, mahogany, birds-eye maple and alder woods.

But, building green doesn’t have to be an all-or-nothing endeavor, Wynne says. “Building this way is more about being responsible stewards of resources and creating a comfortable, livable home.”

Having a home LEED-certified is an independent verification of a home’s design that conserves natural resources and is based on a number of criteria including:

-- Sustainable Site Conservation -- Land planning and design techniques preserve the natural environment, reduce erosion and protect vegetation, especially trees.

-- Water Efficiency -- Water reduction is typically achieved through the use of water-efficient appliances, rainwater collection systems and an outdoor land-

scaping that utilizes native plants.

-- Energy Use -- This includes a variety of energy-wise strategies including an efficient design and construction; energy-efficient appliances, systems and lighting; insulation; and the use of renewable and clean sources of energy, such as solar power.

-- Material Selection -- The choice of construction materials is based on durability, product sustainability, the reduction of waste, as well as recycling efforts.

-- Indoor Environmental Quality -- Installation of home ventilation and filtration systems reduce the possibility of mold and allergens inside a home. Design that improves natural lighting and acoustics also make a home more livable and aesthetically pleasing.

-- Awareness and Education -- A concerted effort to reduce waste and recycle natural materials happens during the construction phase, and is continued when people inhabit the house.

Wynne says a responsible building project should have a holistic, integrated approach to design and the construction process. Before potential homeowners break ground, they should detail their priorities in terms of energy efficiency, while keeping in mind any budgetary or timeline constraints.

“Green is a color, not a standard of measurement in building practices,” he says. “What may -- but not necessarily -- cost a little more on the front end to build in terms of sustainability and conservation, has the potential to save homeowners money on energy bills, have less maintenance costs and create a comfortable home.”