

Building LEED Platinum is about as green as a home can get

By Bonnie Lewis
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Once two Tucsonans started thinking outside the typical building box, it just got easier to think green.

The recent changes to the U.S. Green Building Council's LEED 2009 rating system make it more attractive and applicable to anyone with an interest in sustainability. And building a home to LEED standards isn't always more expensive; either. Many of the materials are less bulky, less labor-intensive, and some are even less costly.

That's what Dave and Drew Lutz of Lutz Construction gradually discovered with the home they're building on Blackledge Drive in mid-town Tucson. Over Halloween weekend, a crowd of 170 self-guided Tucsonans traipsed through the unfinished home on the Tucson Innovative Home Tour.

What's the attraction? It's one of Tucson's soon-to-be LEED Platinum certified homes. This high energy father/son team volley thoughts back and forth about the home they're building just as fast as they bounce up ideas about material choices and concepts that will contribute to making their house one of Tucson's highest rated LEED homes.

"We didn't start off even trying to obtain LEED certification," explains Dave. "This home is just the latest iteration of our building techniques."

A LEED certified green home must have elements or green measures that increase sustainability in six broad categories: locations and linkages; sustainable sites; water efficiency; energy efficiency; material and resource efficiency; and indoor air quality. The Lutz home satisfies all of those elements.

"When we found out about the LEED for Homes process, we knew that this home would be a match," says Drew. "As the project progressed, we went from Silver to Gold. We now feel that Platinum will be the final rating on this home."

Dave explains the reasoning for choosing the midtown location. "We felt that part of the home being green is its location in the City - close to work, shopping, dining. If you don't have to travel far to do these things, you'll spend less in gas, time in traffic, and will be able to spend more time at home." LEED awards points for locations like this.

The ground floor will have scored and polished concrete floors, with sustainable hardwood floors upstairs. Low-VOC paint and stains will be used throughout, energy-saving Energy Star appliances will be installed as well as Pella low-E sliding glass doors and windows.

The home is constructed of Mikey Blocks. Manufactured in South Tucson, the

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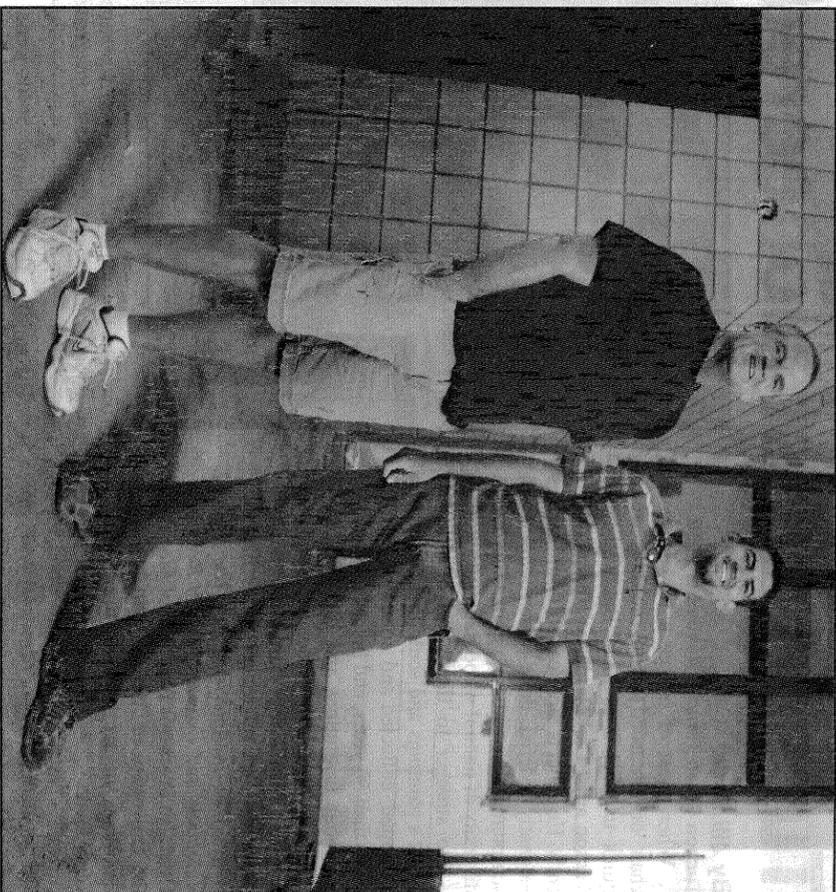


PHOTO: James Patrick
Tucson builders Dave and Drew Lutz have LEED Platinum on their minds for their mid-town home project.

MORE ON LEED

LEED building is still largely voluntary in the private building sector, though many state and federal agencies now require LEED Certified construction for all new building projects. So why should homeowners ask for LEED Certification with new homes, major remodels, and even smaller projects? Let's start with savings.

Because LEED Certified homes comply with green building standards they are far more energy efficient than traditionally built homes. That translates to substantially lower heating and cooling costs and lower utility bills. And since LEED building also utilizes many Energy Star rated building materials, from insulation to appliances to roofing materials, you can expect to get substantial tax breaks from a LEED approved home, as well.

Construction features that score high LEED points in the Lutz home are:

- Spray foam insulation by Demilec

- Sealection 500
- 3.2Kw PV system with Tucson-made solar panels
- Seven Solartube skylights upstairs for natural lighting
- High efficiency HVAC that pulls in fresh air for constant air exchange
- Gas tankless water heater with on-demand hot water recirculation (the last one the home owner will ever have to buy)
- Dual-flush toilets
- Plumbed for grey water on all, showers, tubs and dual-plumbed laundry
- Rainwater harvesting
- Reclaimed wood porch (constructed with materials from the building torn down to prepare the lot)
- Built-up reflective roof
- Motion-detection lighting
- Corrugated metal fence with lighted rock-cage pillars
- Perpetually vented garage
- Six rechargeable battery smoke detectors (battery change every 10-20 years)

LEED Platinum Home

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blocks are made of expanded polystyrene foam (EPS). They are set in a grid pattern that is stronger, seismic-wise. If something breaks or cracks in one block, the damage is restricted to one small grid area that won't compromise the entire structure, and making for easy repair.

The list goes on - to be a LEED Platinum home, you need over 90 points and Drew estimates this house will be well over that milestone.

Both of the Lutzes agree that building a home to LEED standards is critical.

"What we're continually seeing is that green is highly valued by the consumer," says Drew. "A green home translates to a healthier home but also a much more energy-efficient and cost-efficient home. All of these factors mean more dollars in the buyer's pocket on the long-term."

The future residents of the Lutz home will enjoy significant savings on utilities as well as less environmental impact and maintenance. An energy rater has estimated that total energy costs per year on the home will be around \$400.

But the real bottom line is sustainability. "[Our effort] proves to us - and to others - that this isn't just an ordinary home," says Drew. "This home has the future built in and the durability to last for generations."

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