

# Making green standard

Architects' focus on environmentally friendly building offers city new opportunities

## **San Antonio Business Journal - by Randy Lankford**

One of the world's foremost frogs once sang, "It's not easy being green."

While still true, Kermit's lyrics might need to be updated because, while it's still not easy being green, it's, at least, getting easier.

That's because it's gone mainstream. Being green, still at the heart of conservation magazines, is now getting ink in other publications.

"It's not just Mother Earth News anymore," says Anita Ledbetter, executive director of San Antonio's Metropolitan Partnership for Energy (MPE). "Now it's in Business Week too. That's a huge paradigm shift.

"When we talk about emissions or air pollution, people automatically think about cars. Actually, 40 percent of our air pollution comes from buildings. That's the part that we work on. San Antonio's in a great position to join Austin in leading Texas toward high performance building," she says.

The MPE is a consortium of entities including Bexar County, the city of San Antonio, San Antonio Water System (SAWS), VIA Metropolitan Transit, Alamo Area Council of Governments, Greater Bexar County Council of Cities and Solar San Antonio. The partnership's goal is to increase San Antonio's energy efficiency and growth potential through sound energy policies, renewable alternatives and green building implementation.

### **Green architecture**

One example of how green is growing will be on May 3 when The American Institute of Architects (AIA) convention opens in San Antonio with the theme of "Growing Beyond Green."

"That used to be just one segment of the 200,000-square-foot show. Now we expect all exhibitors to respond to the green initiative," explains Torrey Carleton, executive director of the San Antonio chapter of the AIA.

The show's Web site adds that, "We are driven to reduce waste, maximize efficiency and recycle at every opportunity."

This year's show is a sellout, hosting around 830 exhibitors and 24,000 attendees. Those figures are comparable to the ones from last year's convention in Los Angeles.

The timing to promote green building was on San Antonio's side, however. The Alamo City was chosen as the site of the convention celebrating the AIA's sesquicentennial more than a decade ago because of its central location and diverse cultures.

Exhibitors are bringing green alternatives for everything from floors to roofs.

Steven Wagner, marketing director for BR-111 Flooring of Miami, will be showing off the company's Triangulo engineered flooring products. "The industry standard for solid hardwood floors is 3/4-inch thick. The premise with an engineered floor is to use less hardwood and more filler," he explains. "The overall thickness of our product is about a half inch. Of that, only about a quarter inch is hardwood. The rest is plywood. That means you use less of the hardwood making the product more environmentally friendly. Also, a wear layer that thick means it can be sanded and refinished a couple of times so you're not replacing it every few years with even more hardwood."

While Wagner is advocating putting wood on the floor, Kelly Luckett, president of Green Roof Blocks in St. Louis, wants people to put plants on their roofs.

"What we're doing," explains Luckett, "is basically replacing the green space that was sacrificed by the building's footprint by putting vegetation up on the rooftop."

Luckett adds that green roofs address a host of environmental issues. "It soaks up much of the storm water runoff which lessens the load on water treatment plants. It also keeps the sun's rays off the roofing material. That can make a roof last up to three times longer. And, of course, it keeps the building much cooler than a gravel or blacktop roof so there's less energy used."

Luckett's rooftop plants are hardy, drought resistant sedums. The Chicago city hall has a green roof and Green Roof Blocks are currently being installed on the two-acre Chicago Convention Center.

"The AIA is a huge show for us," Luckett adds. "It's one of the biggest shows every year and this year, with the green theme, it's even more important."

#### **Walk the talk**

That green theme is not only being stressed for products. People at the show are also expected to act green as well. Exhibitors are encouraged to cut down on paper handouts and attendees are asked to find hotel rooms within walking distance of the Henry B. Gonzalez Convention Center. Spokespeople are even being told to "be assertive stewards of a more sustainable environment."

That assertive attitude is part of the AIA's 2030 Challenge. The organization is calling on mayors all over the country to reduce their cities' energy consumption to its 1990 levels by the year 2030.

"It's sort of like our own version of the Kyoto Protocol," says Stephen Colley, certified architect and green building program coordinator for the MPE. "What can we do to lower our energy

impact? Just asking that question makes a lot of difference in big suburban areas like San Antonio."

One of the toughest parts of being green is defining it. The term has become shorthand for being environmentally friendly or energy conscious or ecologically aware or a number of other Earth-friendly attributes. Colley compares being green to being mature.

"It's not a place. It's a process," he says. "There is no ultimate green. I suppose if someone said, 'money is no object, what's the most ultimate green house you can build?' it would probably be a mud hut somewhere in Africa. You're using the dirt that's right there and whatever water and energy you can get at the site, but that's not going to be a big selling house in San Antonio."

Still, architects and builders can "approach green," Colley contends, building conventional structures that are durable and healthy.

"What we have is like the story of the five blind men and the elephant," he continues. "The elephant here is green building. There are really five different ways of looking at it, depending on where you're coming from. For some people, it's energy and water conservation. They want to live somewhere that's going to save them money. For some, it's durability. For some it's using materials that have a small ecological impact on the planet. With some people it's all about indoor air quality."

### **3 R's**

Most of the exhibits at the AIA convention are expected to be variations on the three R's of environmentalism: Reduce, recycle and reuse. Efficiency, air quality and awareness are also big topics at this year's show. Any conservation breakthroughs or "gee whiz" innovations are being kept under wraps until the show opens.

While the global warming debate has pushed green issues to the front page, the movement isn't new. Chris Schultz, president of the AIA in San Antonio, remembers the topic from decades ago. "You can't really say this is a sudden interest in the environment. It's been going on at least 30 years. In fact, the AIA had a national convention in 1993 on the subject of sustainability.

"We're probably past, or at least close to, the tipping point where the majority of people believe the scientific evidence that there have been global warming changes due to man's occupation of the Earth. Individuals are beginning to understand that it's not just something the government needs to do something about, it has to be something that individuals take on."

Where it once referred only to saving the planet, today being green means saving money as well. There's still a premium to be paid for being environmentally friendly, but it's shrinking and the payback is becoming almost instantaneous.

"Payback is immediate if you're building a new home," explains Colley. "Let's say you pay a 5 percent premium to build a green house. You're not going to pay that all at once. It's going to be part of your mortgage.

"For example, if you pay \$8,000 for a geothermal heat pump, that's going to bump your mortgage, let's say \$75 a month. In return, you're going to get a \$50 a month electric bill. You're saving \$200 a month on your electric bill and paying \$75 a month more on your mortgage. That's a no-brainer."

"It's a perfect storm," Colley adds. "I really believe most of the people who are building green were environmentalists anyway. And all of the green building people are saying, 'We don't have to sell it to the environmentalists, they get it. What we have to do is show the rest of the public that it actually saves money.'

"And we're able to prove that now," he continues. "We can say, 'Look, this is going to cost you 5 percent more than conventional construction but it's going to give you a return on that investment immediately.'"

John Friesenhahn, president of Imagine Homes, contends the premium is closer to 2 percent. "Our houses probably cost, on average, about 2 percent more than our competitors and we're certifying every home we build through the Build San Antonio Green program. That certification is based on energy efficiency, water conservation, materials, site development and indoor air quality," he says. "Every house we build is Energy Star certified. That alone means the house is going to be 15 percent more energy efficient than a house that's built to the state's minimum code.

"Instead of looking at each piece of the house individually, we take a systems approach. Maybe we're going to spend more money putting in better windows and insulation and higher efficiency air conditioning and doing testing on the duct work to make sure it's tight," he says. "When we put all those factors together and look at the analysis of the house, we're then able to properly size the air conditioner. By increasing the efficiency of the house we can downsize the air conditioner. It's basically just some cost trading."

### **Growing demand**

Friesenhahn adds that it's becoming more important in his business, just as it is in all industries, to be green. "We're starting to hear it more from home buyers. The demand is definitely growing. Over the last year, green building accounted for less than half of a percent of all new homes built. But over the last seven years, I've started seeing major manufacturers step up to address green demands that are being consumer driven. That's making it easier for builders to be green since there are so many new products on the market to choose from."

"That's a big factor," Colley agrees. "You don't see a lot of car ads in the paper or on TV about good gas mileage until gas gets to \$3 a gallon and, all of the sudden, you start seeing MPG becoming important again. It's the same with green building. When it starts hitting people's pocketbooks, they realize, 'Wow, there's something else we should be doing.'"

### **AIA convention**

When: May 3-5

Where: Henry B. Gonzalez Convention Center

Exhibitors: 830, including 201 that identify themselves as representing green products or services

Web site: [www.aiaconvention.com](http://www.aiaconvention.com)