

**KNOW THE FACTS RE ECO BUILDING**  
**“It’s Not Easy Being Green”** (*Kermit the Frog*)  
By Sue Mayfield-Geiger



About one hundred years ago, you could order a house from the Sears catalog for about \$452.

It would arrive via railcar in a ready-to-assemble kit. Most of the materials consisted of cypress siding and cedar shingles. Thus began the formation of mass home construction leading to what most of us refer to today as “suburbia.” The population of the United States in 1908 was about 88 million. Today, that number has grown to 300 million and counting.

The majority of homes today are still built from wood products, yet most new construction comes from lumber companies

that farm trees. Faster growing trees means more sapwood, which means more shrinkage and warping, less strength and more likelihood of damage. However, there are builders who are experts at using antique materials in the construction of new homes. They even find and resell quality antique materials to other builders and homeowners. Antique and weathered materials have a rare patina that cannot be duplicated. They have been sculpted by the wind, rain and sun to expose the hardwood grain in its purist fashion. These materials create surfaces that are truly one of a kind.

ICFs (insulated concrete forms), SIPs (structural insulated panels) and straw bale construction are alternative materials gaining in popularity among architects and contractors. Buildings built out of these materials have a chance at getting LEED certification (Leadership in Energy and Environmental Design), the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings’ performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

LEED was developed by the U.S. Green Building Council (USGBC), the nation's foremost coalition of leaders from every sector of the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. With more than 6,400 member organizations and a network of more than 80 regional chapters, they are united in their mission of transforming the building industry to sustainability. Also, USGBC's Emerging Green Builders is a coalition of students and young professionals intent on promoting the integration of future leaders into the green building movement.

In May 2001, the City of Frisco, Texas became the first city in the United States to adopt a mandatory residential Green Building Program, which mandates the Environmental Protection Agency's "Energy Star" program requirements as the minimum building standard for new homes. Any home final platted after May 23, 2001 is a "green" home. That city's Residential Green Building Program is designed to ensure a higher quality of life for its citizens and focuses on several areas including: waste reduction, pollution reduction, water conservation, energy conservation, and sustainable development. By making the standards of this program mandatory, Frisco hopes to give future generations the legacy of environmental sensitivity, functionally efficient homes, and a commitment to conservation.

Presently there are LEED projects in all 50 states and 12 countries. Here are some LEED projects being built or already completed in the state of Texas: Pearland Pediatric Building, Pearland, TX; Austin City Hall; Austin, TX; SpawGlass Corporate Offices, Houston, TX; NASA Building 27 Astronaut Quarantine Facility, Houston, TX; and Police Headquarters, City of Dallas, TX.

The Greenbuild International Conference & Expo (presented by USGBC) is gearing up for its fifth year, to be held Nov. 15-17 in Denver, Colorado. The members and attendees will come together to learn, to educate and to transform. Here are some things they'd like you to know: Building green saves money (cuts energy usage); green building occupants are more productive (more natural daylight); green building occupants are healthier (better ventilation and less carbon dioxide concentrations).

The EPA estimates that 136 million tons of building-related construction and demolition debris was generated in the U.S. in a single year.

Kermit would like you to know that he has compiled a partial list of eco and green architects and builders locally. Here they are:

Environment Associates Architects & Consultants ([www.environmentassoc.com](http://www.environmentassoc.com));  
Green Haus Builders, Houston, TX ([www.greenhausbuilders.com](http://www.greenhausbuilders.com));  
Texas Country Home, Warrenton, TX ([www.texascountryhome.com](http://www.texascountryhome.com)); and  
W. E. Gilbert Company, Houston, TX ([www.wegilbert.com](http://www.wegilbert.com)).