

## Green Building Fact Sheet

- Green Building is incorporates a whole building design approach into every phase of the home building process, including design, construction, energy, water efficiency, lot development, resource efficient building design to enhance the well-being of occupants, and to minimize negative impacts on the community and natural environment.
- According to NAHB Guidelines, we cannot avoid impacting the environment when we build a house, but we can work toward reducing that environmental impact.
- Both *Builder* and *Professional Builder* magazines have recognized Green Building as one of the most important trends in residential construction today.
- The Greater Houston Builders Association (GHBA) has used both the NAHB guidelines and several established Green Building Programs from across the country, as a reference guide in developing a voluntary Green Building Program specific for the Greater Houston area.
- NAHB recently introduced voluntary Model Green Home Building Guidelines ([www.nahb.org/gbg](http://www.nahb.org/gbg)) to bring environmentally-friendly building techniques to mainstream builders and home builders associations.

### National Activity

The first official green home building program began in 1991 in the city of Austin, Texas.

The Home Builders Association of Metropolitan Denver introduced the first HBA-owned green building program in 1995. Over the years, Built Green® Colorado has become the largest green building program in the nation, with more than 100 builder members across the state.

In 2004 alone, more than 14,000 green homes were constructed.

Green building is a growing trend among home builders nationwide, with more than 30 successful green building programs now in existence. Eleven green building programs are owned or operated by members or affiliates of the National Association of Home Builders in Arizona, California, Colorado, Georgia, Hawaii, Missouri, New York, Ohio and Washington.

On a National Level, the US Department of Energy's Building America program is providing technical support to High Performance – Green Building Homes and will help provide additional technical support to the Houston region.

## Texas

Green Building activity is occurring throughout Texas. Besides the original program in Austin, other green building initiatives have arisen in San Antonio, Denton, Flower Mound and Frisco. Green Building tours have taken place in El Paso, Dallas, Austin and San Antonio. US Department of Energy has sponsored High Performance Homes/Zero Energy Homes in Texas and HUD's Partnership in Assisting Technology in Housing has provided technical support to homes in El Paso to Brownsville.

The Texas Commission for Environmental Quality State Implementation Plan includes emission reductions from local green building standards.

### Advantages to Green Building

- For the environment: Reduces a home's environmental impact.
- For the Builders: Reduces callbacks, product differentiation, increased profit
- For the consumer: Increased durability, comfort and health; reduces energy and water usage; healthier environment

More specifically, homes built today use a myriad of green building techniques and technologies that

***Lower operating costs*** -- homes are equipped with more efficient heating and cooling systems and use less water, resulting in lower monthly utility bills.

***Improved construction methods*** -- better protect homes from rain and ground water and reduce upkeep and replacement costs, while use of recycled materials helps conserve natural resources.

***Reduce maintenance issues*** -- landscaping uses native or drought-resistant plants and grasses, and decks made of pressure-treated lumber or synthetic materials need no sealing or staining.

***Increase home value*** -- homeowners with documented lower monthly utility bills are reporting higher re-sale values.

***Improve environmental quality*** -- moisture-control products and low VOC paints contribute to a more comfortable indoor environment, and efficient use of materials helps conserve natural resources.

### GHBA Green Building Program Components

- Site Development
- Materials
- Energy
- Health
- Water
- Operations, maintenance and homeowner education

## **Cost Impacts**

Builder Energy Star: Zero to \$300 upgrade

Builder non-Energy Star:

Affordable Housing/Habitat

## **Builder Supporting Statements**

- GHBA through their Green Building initiative are taking the lead in encouraging responsible environmental building practices to keep operating energy costs low.

**Additional Supporting Sites:** GHBA, GBI, NAHB, HARC, DOE