Sandcastle Home Owners reap the benefits of our Green Building Commitment:

Building to a Higher Standard: Green Built Gulf Coast Certification

Did you know that your new Sandcastle Home has been built, scored, verified, and certified to the National Green Building Standard? This task has not been simple and the certification process we follow is anything but easy! Your home carries the distinctive label of being Green Built Gulf Coast certified. What this means is that from design to completion six core components of new home construction have been evaluated, scored and assigned a green rating by GBGC! These core components have all been verified and approved by a third party inspection service to provide credibility to our process of providing a sustainable, energy efficient home.

Owning a home that has been scored and certified gives reassurance that you have purchased a well built home. Third party verification and inspections in addition to the City of Houston inspection process assures accurately applied construction practices and building science techniques. This translates to a more sustainable home and increased energy efficiency. The bottom line is reduced maintenance and operations costs to you the homeowner.

Sandcastle Homes is a committed partner to the GBGC program. As part of the program we hope to promote credible, practical, and affordable green building approaches for residential construction.

Green Built Gulf Coast Criteria: Six Areas of Compliance

The six core components that are evaluated and scored to earn GBGC certification are:

- Lot Design, Preparation and Development
- Resource Efficiency
- Energy Efficiency
- Water Efficiency
- Indoor Environmental Quality
- Operations, Maintenance, and Building Owner Education

Lot Design, Preparation, and Development

This section of criteria evaluates the environmental impact of the new development of the home and onsite supervisory staff overseeing the lot redevelopment. Because most homes we construct are on infill lots which utilize existing infrastructure such as city sewers, power lines, and water utilities we successfully avoid detrimental environmental impact which occurs commonly in suburban development. To minimize environmental impact our diverse staff has education in landscaping and drainage, tree protection, and storm water management to optimally schedule and minimize soil disruption and stabilize development sites quickly.

Resource Efficiency

The design and construction practices executed in your home can have the largest effect on its overall performance. Material selection and proper installation techniques are

critically important when designing a resource efficient home. These carefully selected materials reduce construction waste, promote higher quality construction performance, and reduce home maintenance. Engineered wood products such as glue lam beams, OSB plywood, MDF trims and moldings, and cement fiberboard sidings are just a few examples of these materials. Properly installing flashings and moisture barriers facilitate the high performance of these materials and help to ensure optimal performance.

Energy Efficiency:

Your home is at least 15% and many times as much as 30% more energy efficient than a standard home built to the IRCC code. Sandcastle Homes takes great care to build homes that achieve excellent Energy Ratings, lasting environmental benefits, financial savings, and a healthier living environment for you and your family. Sandcastle Home's standard features include energy efficient practices and products such as low-e glass windows, radiant attic barrier, and grade one insulation installation practices. The HVAC system of your home was specifically designed and sized to provide comfort and efficiency for your floor plan. The design manual is commonly known as the manual J. Incorporating these practices correctly, ensures a tight thermal enclosure which prevents cooling loss in the summer months and heat loss in the winter months. Each home is blower door and duct leakage tested to insure high performance and a great HERS rating.

HERS Rating: Home Energy Rating System

A home energy rating involves an analysis of a home's construction plans and onsite inspections. Based on a home's plan and building specifications provided by the builder, the third party home rater provides an analysis using specialized software to predict a homes energy efficiency rating. Once the home is constructed, it is tested to ensure its performance. Since the rating quantifies the energy performance of a home, the HERS index provides an easily understandable means to compare the relative energy efficiency of different homes. The lower the HERS index, the more energy efficient the home is in comparison to other HERS rated homes. Each point decreased in the HERS score corresponds to a 1% reduction in energy consumption. A typical HERS score for a Sandcastle Home ranges from 62-70. The variation is dependent on the floor plan and number of windows. For more information on the HERS rating system, please visit www.resnet.us

Water Efficiency

Water efficiency of a home is measured by the implementation methods used to reduce water consumption both indoors and outdoors. Steps we have taken to reduce water consumption include Energy Star rated dishwashers, Moen brand flow efficient plumbing hardware in kitchens and baths, and hydro-zoned landscaped areas. Designing kitchens, baths, and utility rooms in close proximity to water heaters reduces water waste while waiting for water to come to temperature. For additional ideas of how you as a consumer can reduce your water usage please visit http://www.epa.gov/WaterSense/

Indoor Environmental Quality

Most of us spend a great amount of time indoors enjoying our homes. Living in the intense climate of the Houston area with varying degrees of heat, rain, and relative humidity sometimes mandates our activity take place indoors. It is important to recognize that the quality of the air you breathe indoors is just as important as the air quality outdoors. Understanding and controlling some of the common pollutants found in your home may improve your indoor air quality and reduce your family's risk of health concerns. Sandcastle has taken steps to reduce hazards such as combustible pollutants, VOC's, and mold. Placing furnaces and water heaters in attic spaces that are properly sealed and ventilated to the outside reduce combustion pollutants. Flooring adhesives, paint and urethane coatings used in your home have low VOC levels. While mold is present everywhere excessive mold can be hazardous. Constructing the home with effective moisture barriers and flashings prevent moisture infiltration through the building envelope which can cause damage and excessive mold growth. Efficiently operating HVAC systems to acclimate and eliminate excessive humidity from the home will also help to improve indoor air quality. When cooking, showering, and washing and drying close, operating exhaust fans will help remove unwanted pollutants and humidity in the home. For additional information on indoor air quality and how you can improve an already healthy indoor lifestyle please visit http://www.epa.gov/iaq/pubs/careforyourair.html

Operation, Maintenance, and Building Owner Education

Providing homeowners with the knowledge to operate and maintain a newly constructed home is very important. Operating the home features as they are designed and intended to function results in the homes optimal performance and homeowner comfort. Our home introductory walk through process provides personal instruction time encompassing operational instructions on HVAC, home security, lighting controls, appliance settings, water heater settings, electrical panel settings, and much more. The home owner maintenance manual has pictorial instructions for operating the home in the aforementioned areas as well trouble shooting simple features in the home.