



**EXTREME MAKEOVER: HOME EDITION
WESTWEGO, LOUISIANA**

37% improved energy efficiency over International Energy Conservation Code, according to HERS rating

52% builder's projected water use reduction, compared to a conventional home

78% waste reduction in prefabricated structural shell

85% permeable lot

LEED® Facts

**Extreme Makeover: Home Edition
Westwego, Louisiana**

LEED for Homes
Certification awarded April 23, 2008

Platinum 88.5*

Sustainable Sites 17/22

Location & Linkages 10/10

Water Efficiency 8/15

Energy & Atmosphere 24/38

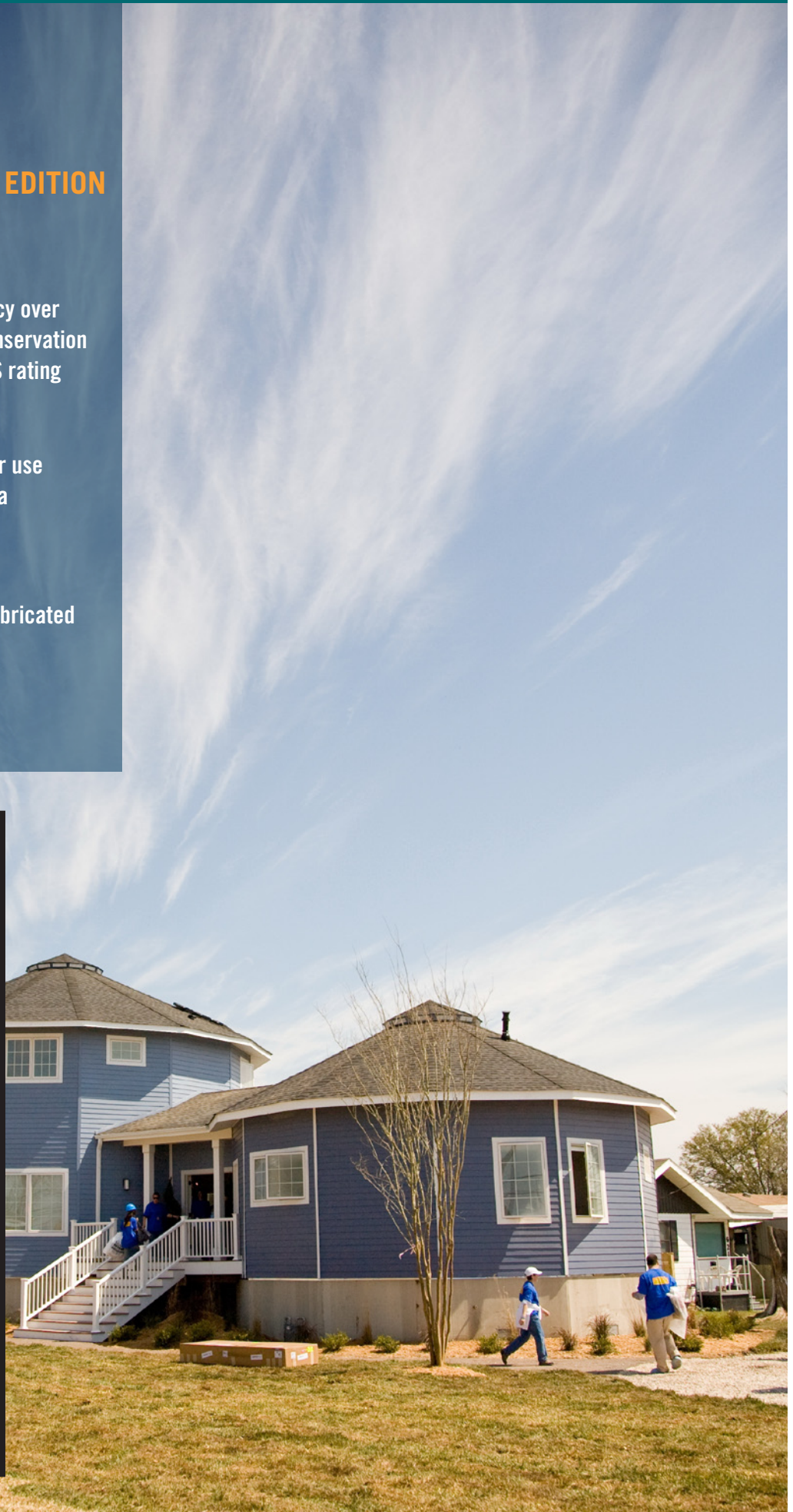
Materials & Resources 8/16

Indoor Environmental Quality 14/21

Innovation & Design 5.5/11

Awareness & Education 2/3

*Out of a possible 136 points



EXTREME MAKEOVER: HOME EDITION

From Tragedy to Platinum in 106 Hours

“Extreme Makeover” volunteers help family rebuild after Hurricane Katrina

PROJECT BACKGROUND

For the Usea family in Westwego, La., disaster struck twice: First, Hurricane Katrina destroyed the home shared by mother Grace and brothers Chad and Chris in August 2005, forcing them to move in with Chad and Chris’ brother Brad. Then a tornado hit Brad’s home, destroying the backyard trailer where Chris lived and damaging the main house. But the tragedy became an opportunity when ABC’s “Extreme Makeover: Home Edition” asked Deltec Homes to lead a team of builders to rebuild the Usea home. TV crews documented the process for audiences of the popular show, which dedicates each episode to rebuilding a house in less than seven days. The crew working on the Useas’ home did it all in 106 hours stretched over five days, and in the end, they had Louisiana’s first LEED-certified home, as well as the first green-certified “Extreme Makeover” home.

Deltec was selected for its expertise building hurricane-resistant houses – eight Deltec homes in Katrina’s path escaped without structural damage – but they soon decided the project would also provide an opportunity to showcase the best in green building practices for a worldwide audience. They used LEED for Homes because it ensured a holistic, integrated process from design to finish and provided confidence that the home would be as efficient, healthy and sustainable as possible.

THE UNIQUE CHALLENGES OF GOING GREEN ON TV

The all-volunteer team building the Useas’ home had to work under a whole set of constraints that other green homebuilders don’t face – and they still managed to build a model of efficiency and health at the Platinum level. One design challenge was lighting: The TV production crews needed a certain amount of light to be able to properly film the home, and even though the team worked to reach a compromise with the crew on the number of lights, the amount of light far exceeded what a typical home requires. The energy-efficiency solution was threefold: All lights were fluorescent, the home was built with a conditioned attic to prevent light heat loss, and additional switches were installed to give the homeowner greater control over downlighting.

Waste management was difficult because the show’s staging area took over a couple of blocks in the neighborhood, with hundreds of people needing to be bunked and fed onsite. The extra waste was offset by Deltec’s prefabrication process, which produces 78% less waste than the construction of a conventional home’s shell. The tight time schedule meant some low-flow water fixtures were not available in time for the production deadlines, and the show’s producers did not want to sacrifice aesthetics for more readily available water-wise products from another manufacturer. So to make up for the opportunities lost by tough plumbing choices, the crew pushed harder in other areas, such as rainwater collection and irrigation.

STRATEGIES AND RESULTS

The “Extreme Makeover” home made use of several unique opportunities to maximize certain green features, and other features it managed despite special challenges. The home received all 10 available Links & Locations points. It also earned two Awareness & Education points, with about 1 billion people worldwide watching the show.

The home maintains a sustainable site by being completely devoid of conventional, water-guzzling turf. Some 85% of the lot is permeable, allowing rainwater to filter into the ground rather than polluting the aquifer as runoff. The home’s Home Energy Rating System (HERS) rating predicts energy use reduction of 37% over International Energy Conservation Code. Cooling efficiency is 45% better than a conventional new home, a major coup in muggy Louisiana. Three separate water-heating systems serve three zones of the house to minimize travel distance for hot water. The house is stocked with ENERGY STAR®-rated windows and appliances.

ABOUT DELTEC HOMES

Deltec Homes has been building energy-efficient homes across the United States for 40 years. It uses 100% renewable energy to produce the structural components of its homes and ships them directly to the job site, where they are assembled and finished by local labor.

“Deltec Homes has been an innovative company for 40 years, and now with the help of LEED for Homes, we are able to bring homeowners the next generation of home. This project shows that green building is not limited by time but rather enhanced by the heartfelt dedication of a group of people committed to a cause greater than the sum of its parts.”

David Hall, President of Deltec Homes



Lead Builder, Designer, Structural Engineer: Deltec Homes
Partner Builder: The EcoBuilders
LEED Consultant/Mechanical Engineer: Vandemusser Design
Landscape Designer: All About Your Yard
Project Size: 3,860 square feet
Bedrooms: 6
Cost per square foot: All labor and materials donated

Photograph Courtesy of: Deltec Homes

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council’s Web site at www.usgbc.org to learn more about LEED and green building.



www.usgbc.org
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