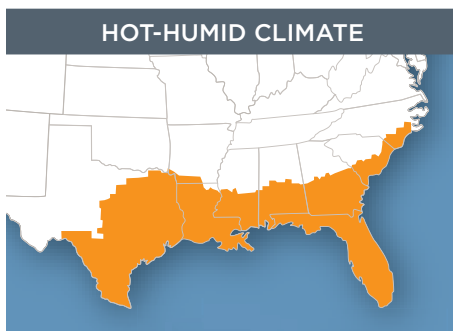




Located in Gainesville, Florida, the Kempsford is G.W. Robinson Homes' first zero energy home.



## BUILDER PROFILE

**Builder:** G.W. Robinson Homes ,  
Gainesville, FL

**Founded:** 1968

**Square Footage:** 1,700 - 4,400 sq. ft

**Price Range:** \$180,000 and up



## Builders Challenge

Recognizing Energy Leadership in Homebuilding

## High Performance Builder Spotlight

# G.W. Robinson Homes

Zero Energy Home (ZEH) –  
Kempsford, Garison Way

## ZEH Kempsford - Garison Way Statistics

2,081 square feet, 3 bedroom, 2 bath + study

### Performance Features

- Home Energy Index (HERS)/EnergySmart Home Scale™ (E-Scale) = -3

### Thermal Shell

- R-38 ceiling insulation (R-19 knee wall Insulation), vented attic with radiant barrier
- 10" heel trusses for improved insulation coverage
- ENERGY STAR® double pane Low-E vinyl framed windows (U=0.34, SHGC=0.26)
- ENERGY STAR® Certified including Thermal Bypass Checklist Compliance

### Airtightness & Indoor Environment Quality

- Penetrations & openings sealed to achieve 2.6 natural air changes under blower door testing at 50 Pa
- Ducts (sealed with mastic)
- VOC source control including zero VOC paint
- Outside air ventilation

### HVAC

- ACCA Manual D sized duct system
- ACCA Manual J sized heating/cooling equipment
- Programmable thermostat
- 2.75 ton high efficiency, CFC/HCFC free refrigerant, heat pump (SEER 16, HSPF 9.5)

### Hot Water

- Solar domestic hot water system (64sq. ft. collector) 120 gallon storage with drain back tank

### Efficient Appliances & Renewable Energy

- 100% Compact Fluorescent Bulbs
- 6.6kWp Centrosolar 220 PV System (inverter avg. eff. = 0.97)
- ENERGY STAR® rated dishwasher & refrigerator

**Builders Challenge - PIONEER BUILDER**

In April 2010, G.W. Robinson Homes unveiled its first “zero-energy” home in the Garison Way community. Final inspection and testing of the home resulted in an impressive HERS of -3, exceeding the Builders Challenge level of performance. As a Builders Challenge “Pioneer Builder”, G.W. Robinson has been building homes for over 40 years.

“One of our core values has been to build homes that represent the latest technology for energy savings, safety, and durability.”

– G.W. ROBINSON, Founder of G.W. Robinson Homes



6.6kW p photovoltaic system and 120 gallon solar hot water system

**Contact Information**

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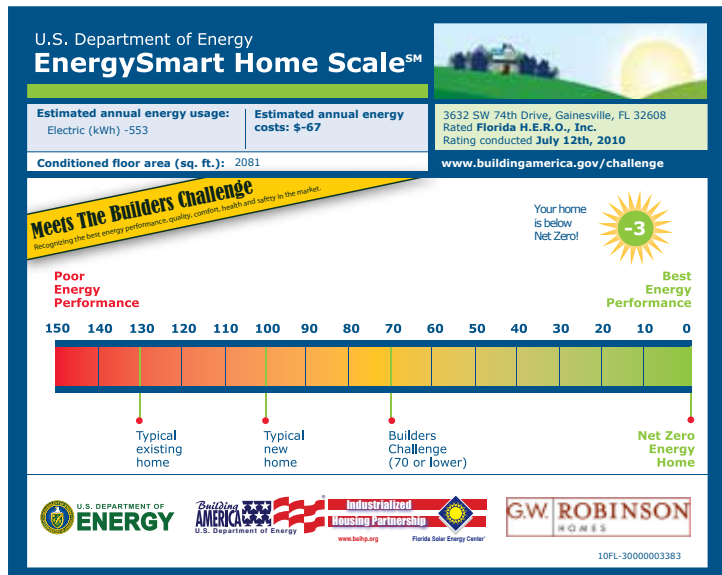
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**US Department of Energy Builders Challenge**

DOE has posed a challenge to the homebuilding industry-to build 220,000 high performance homes by 2012. Homes that actually qualify for this Builders Challenge must meet 70 or better on the EnergySmart Home Scale (E-Scale). The E-Scale allows homebuyers to understand-at a glance-how the energy performance of a particular home compares with others. Through the Builders Challenge, participating homebuilders will have an easy way to differentiate their best energy-performing home from other products in the marketplace and to make the benefits clear to buyers. The figure below shows a sample E-Scale for G.W. Robinson Homes’ zero energy house. The E-Scale is based on the well-established Home Energy Rating System (HERS) Index, developed by the Residential Energy Services Network. To learn more about the Index and HERS Raters visit [www.natresnet.org](http://www.natresnet.org).



To learn more about the Builders Challenge and find tools to help market your homes visit [www.buildingamerica.gov/challenge](http://www.buildingamerica.gov/challenge).

U.S. DEPARTMENT OF  
**ENERGY**  
Energy Efficiency &  
Renewable Energy

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1-877-EERE-INF (1-877-337-3463)  
[www.eere.energy.gov/informationcenter](http://www.eere.energy.gov/informationcenter)  
FSEC-BAIHP-39 September 2010

For information on Building America visit [www.buildingamerica.gov](http://www.buildingamerica.gov). The website contains expanded case studies, technical reports, and best practices guides.