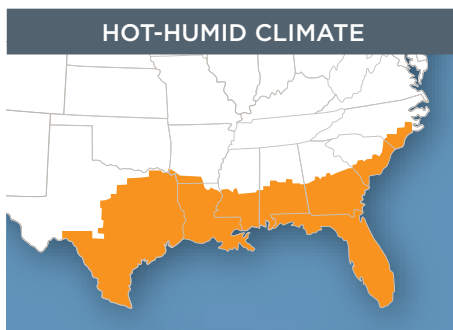




# RESNET Raters Volunteer with Habitat for Humanity

Orlando, Florida

Volunteer raters assisted Orlando Habitat for Humanity with energy ratings in Stag Horn Villas, a 58-townhome development in Orlando, Florida.



## BUILDER PROFILE

### Affiliate:

Orlando Habitat for Humanity, Orlando, FL

### Founded:

1986

### Homes Built in Florida:

166 homes

(15 built in 2009)

### Homes Built Internationally:

90+ homes

## Overview

Since 1995, The U.S. Department of Energy's Building America program has provided technical assistance to Habitat for Humanity International and local Habitat affiliates interested in building cost effective, energy efficient homes. RESNET supports Building America efforts by encouraging their members to provide free home energy ratings to their local Habitat affiliates. Partnerships between RESNET and Habitat for Humanity increase awareness of the home energy rating process and help affiliates identify areas of improvement and set goals such as ENERGY STAR® or the Department of Energy's Builders Challenge by conducting preliminary ENERGY STAR® ratings.

## RESNET Volunteers

RESNET member Rod Kosares of Professional Testing Associates, Inc. has committed to providing free Home Energy Rating System evaluations (HERS ratings) to Orlando Habitat for Humanity since 2009. When Orlando Habitat approached him about energy ratings for their new Stag Horn Villas community, Kosares says he was intrigued by the project. Not only was it an opportunity to participate in the affiliate's first multi-family community, but it was also a chance to assist the affiliate in creating a potential model for future Habitat developments in urban areas, he explains.

Orlando Habitat's high levels of energy-efficiency and careful research helped them achieve standards that exceeded ENERGY STAR® qualifications. Kosares explains that the affiliate required very little input from him on their initial homes. "As far as specifications, it was more about best practices," states Kosares, regarding his recommendations to Orlando HFH. Kosares provided on-site training to the affiliate for their first building in Stag Horn Villas, and as ENERGY STAR® standards change, Kosares continues to assist the affiliate in adapting modifications to their building process.

Florida Green Building Coalition rater, David Cobb, also participated in the home energy assessment of Stag Horn Villas by providing free green ratings to the affiliate. Once again, Orlando Habitat received praise for their efforts. Through their high-standard approach to energy efficiency, the affiliate was able to meet FGBC's Gold standard. Cobb says the Stag Horn project is exceptional because the level of efficiency was achieved in an extremely affordable way. "It's really partly the design of the building, partly the energy efficiency components and ability to qualify for the HERS rating and then the other practices that they were doing related to sustainability that enable them to perform at that level," states the FGBC rater. According to Cobb, the sustainability and "green" sectors play an important role in FGBC rating for affordable housing. "The design of the home had already anticipated being energy efficient, so they [Orlando HFH] put in good insulation, double pane low-e glass windows, high SEER air conditioning. Things like that kept the energy use down," explains Cobb.

RESNET is a membership organization that produces national standards for building energy efficiency rating systems.

## Habitat Advantages

Orlando Habitat initially contacted BAIHP researchers to complete an energy efficiency analysis and testing. Since then, the affiliate has made great strides in developing energy-efficient housing. Current ratings in Stag Horn Villas have an average HERS Index of 72 compared to the maximum allowed ENERGY STAR® requirement of HERS Index 77 in Florida.



Stag Horn town homes are ENERGY STAR® certified. They also received a “Gold” designation from the Florida Green Building Coalition.

Terry Eckert, Director of Construction at Orlando HFH, recognizes the many benefits of energy ratings. “Number one, of course, we get the ENERGY STAR® [certification], which we think is really important for our homeowners to see we have a low operating cost, and also to be able to show prospective donors and sponsors that we’re in the forefront of what’s happening in the building business right now,” states Eckert.

Combined with the affiliate’s staff-wide personal commitment to excellence and ethic of preventing problems in building homes, energy raters, such as Rod Kosares and David Cobb, also provide Orlando Habitat with an important quality control measure in building energy-efficient, affordable housing. Eckert explains that raters assist the affiliate in checking the homes for possible issues that might be difficult to repair later in the construction process. “Having that extra set of eyes is important,” says Eckert.

In addition, Rod Kosares is certified in thermography and says he plans to conduct a case study to test the actual energy performance inside the homes. Results of the study will potentially assist the affiliate in meeting additional energy qualifications. Habitat homeowners will especially benefit from these energy efforts. “I believe that everybody at least deserves a decent place to live, so it’s my way of helping that along a little,” states Kosares.

## Join the Partnership

In terms of the benefits of becoming a volunteer rater with Habitat for Humanity, Kosares says that it is mostly a sense of what he is trying to give back to the community. “As far as other raters, I would think that just the association with the people involved would be something that they would need to consider because you’re working with architects, designers, mechanical contractors, and all the different trades. Potentially there is more business available through them, so it’s a networking thing,” he adds.

For more information on how you can become a volunteer RESNET rater with Habitat for Humanity please visit: [www.natresnet.org/rater/partnership/application.aspx](http://www.natresnet.org/rater/partnership/application.aspx)

For more information on Building America’s Partnership with Habitat for Humanity, see [www.baihp.org/habitat](http://www.baihp.org/habitat)



### Systems and Appliances

- Compact fluorescent light fixtures
- ENERGY STAR® refrigerators and front load washers
- 14-SEER heat pump systems
- Programmable thermostat

### Enclosure

- R-30 ceiling insulation
- R-13 exterior frame walls
- Low VOC interior paint
- White roof shingles
- Step and kick-out flashing detail directs rainwater from foundation
- Low-e double insulated windows
- 6’ x 15’ front porch provides shade

### Green & Safety

- Carpet made from recycled carpet and is recyclable
- Rot proof jambs on exterior doors
- Monitored fire sprinklers
- Burglar alarm system
- Whole site illuminated at night for security
- Sealed and tested ducts

### Average HERS Index

- All homes exceed ENERGY STAR® certification criteria
- Staghorn Villas HERS ≈ 72
- FGBC Certified Florida Green Home: Gold