

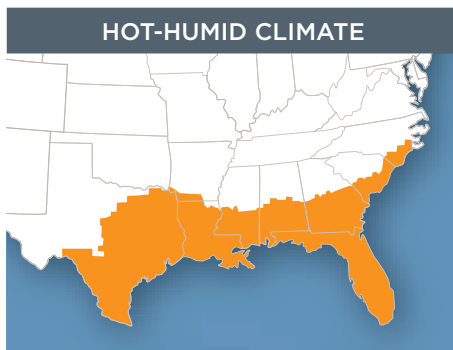


RESNET Raters Volunteer

Habitat for Humanity

South Sarasota County, Florida

Volunteer RESNET raters assisted South Sarasota County HFH with ENERGY STAR® ratings for Garden Park, the affiliate's new townhome community in Nokomis, Florida.



BUILDER PROFILE

Affiliate: South Sarasota County
Habitat for Humanity
Venice, FL

Founded: 1992

Homes Built: 52 homes (4 built in 2009)

Retrofit Homes: 11 homes

Awards: 2010 Aurora for Green Construction
Affordable Housing, Garden Park

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



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

Habitat for Humanity of South Sarasota County, Florida approached RESNET member Dennis Stroer of Calcs-Plus more than five years ago for assistance with the ENERGY STAR® program. Since then, Stroer has provided free energy ratings for every home built by this Habitat affiliate. As part of the rating process, Calcs-Plus provides valuable recommendations that have been implemented to improve energy efficiency in the Habitat homes. "Window upgrades (vinyl, insulated low-E, impact resistant), properly sized a/c systems with Manual J & D designs, spray foam insulation, and installed duct work in conditioned space were some of the most important changes made to our homes," says South Sarasota HFH Construction Manager, Michael Sollitto.

All of the homes exceed ENERGY STAR® standards with an average Home Energy Rating System (HERS) Index of 60 to 65. "We were amazed at how a few changes to our building could make such dramatic changes," said Sollitto regarding his initial reaction to the overall energy rating.

In addition to new home construction, Calcs-Plus also provides free ratings on existing homes for the affiliate. South Sarasota Habitat purchases these homes as part of the HUD Neighborhood Stabilization Program (NSP). Part of this program is improving energy efficiency through the use of high performance retrofits.



Energy ratings improve energy efficiency and promote better building practices for Habitat affiliates.

After the homes undergo a series of modifications, they are sold to prospective Habitat homeowners. “The program has been a great fit for us because it allows us to help restore a neighborhood by taking an abandoned home off the market, performing a renovation and beautification of the home, and providing affordable, safe housing at the same time,” states Sollitto.

Habitat Advantages

HFH of South Sarasota is continually on the lookout for better building practices that will make their homes more affordable and sustainable, says Sollitto. Their participation in the volunteer RESNET rater program is helping them to achieve these goals. Although the affiliate did incur some costs when implementing the energy recommendations, Sollitto explains that these costs have resulted in not only improved home construction but also reduced energy bills for homeowners. “They [Calcs-Plus] know we are building affordable housing and do not make recommendations that would be too cost prohibitive,” he adds.

Partnerships between Habitat affiliates and raters create a winning situation for those involved. “A partnership with a local rater can only lead to a better built home,” says Sollitto.

Join the Partnership

For more information on how you can become a volunteer RESNET rater with Habitat for Humanity and to learn more about this partnership please visit:
<http://www.natresnet.org/rater/partnership/application.aspx>

Information on Building America’s Partnership with Habitat for Humanity, including case studies of other participating Habitat affiliates, is available at www.baihp.org/habitat



Specifications for New Construction

Enclosure

- Concrete block (downstairs) with ¾ inch continuous interior rigid insulation (see photo, right)
- R-21 open cell spray foam insulation on upstairs 2 x 6 frame walls and under roof deck (see photo, left)
- Vinyl, double pane, Low-E, impact resistant windows (SHGC = 0.30, U-value factor = 0.34)

Durability

- ACCA Manual J&D designed HVAC systems
- SEER 15.5 heat pump
- Passive outside air ventilation
- Standard electric water heater
- ENERGY STAR® refrigerator and dishwasher
- 100% compact fluorescent lighting throughout (hard wired fluorescent fixtures in storage area and laundry)
- Ducts installed in conditioned space

Average HERS Index

- All new homes exceed ENERGY STAR® certification criteria
- HERS Index ≈ 60-65

Retrofit Average HERS Index

- HERS Index ≈ Average 75



Upstairs insulation strategy: R-21 open cell spray foam insulation on 2 x 6 frame walls and under roof deck



Downstairs insulation strategy: Continuous foil faced rigid insulation on concrete block