BUILDING TECHNOLOGIES PROGRAM



RESNET Raters Volunteer

with Habitat for Humanity

Austin, Texas

RESNET raters assist Habitat affiliates in building energy-efficient housing such as this Habitat home in Austin, TX



BUILDER PROFILE

Affiliate:

Austin Habitat for Humanity Austin, Texas

Founded: 1985

Homes Built:

250+ homes (24 built in 2009)

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 HFH affiliates have resulted in numerous benefits to each group including an increased awareness of the home energy rating process and valuable recommendations for energy efficiency in homes.

HFH affiliates significantly benefit from a preliminary ENERGY STAR® rating to identify areas of improvement. RESNET recommendations take into consideration HFH's volunteer construction process and cost restraints.

RESNET Volunteers

In 2006, RESNET member Matt Stevens approached Austin Habitat with an offer of free ratings. Since their partnership began, his company, Green Zone Home, Inc. in Austin, Texas has rated nearly every Austin Habitat home. He found several energy efficiency opportunities in the homes he tested, and Austin Habitat was able to improve efficiency by incorporating his recommendations. Most notably, the homes were experiencing high duct leakage – in excess of 20%. Stevens worked with Austin Habitat staff and their HVAC contractors to reduce leakage to below 6%. The HERS index was also improved; one home that would have had a HERS Index of 87 with leaky ducts now scores a HERS Index of 80.

Habitat Advantages

Austin Habitat Design Coordinator, Catherine Lee Doar, and Site Leader, Devon Lehman, agree that Stevens has been a good fit for them. Regarding the advantage of this partnership, Doar states, "For me, the most significant benefit of working with a rater is that until an affiliate has its families' homes rated, staff has no way of knowing whether or not they are building an energy-efficient house."



RESNET raters provide recommendations that help affiliates raise the standards of energy efficiency in Habitat homes.

Lehman and Doar recommend that Habitat affiliates explore partnership with a RESNET rater in their area. The partnership is described on the RESNET website which also includes a link to the Rater directory organized by state at:

www.natresnet.org/rater/partnership

Join the Partnership

By assisting this Habitat for Humanity affiliate, Green Zone Home, Inc. is helping to raise expectations of affordable housing performance. Stevens says he is rewarded personally by assisting families and enjoys giving back to his community. He also admits that building awareness of his company name as a RESNET rater and partnering with Habitat for Humanity is good for business.

There are many benefits to becoming a RESNET volunteer rater. Not only do you increase awareness of the home energy rating process in your community, but you also have the opportunity to meet with other construction industry Habitat volunteers and expose them to the rating process.

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

For more information on Building America's Partnership with Habitat for Humanity, see www.baihp.org/habitat



R-13 fiberglass wall insulation blown-in-batt system (BIBS) will not settle or shift over time and fills the wall cavity completely.



Insulation in corners and interior and exterior wall intersections reduce thermal bridging which can lead to moisture and comfort issues.







CHANGE LIVES"



Durability Features

- Drainage directed away from house
- Metal roof with covered fasteners
- Sprinkler systems that prevent fires from spreading

Enclosure

- Double-pane low-E windows
- Air sealing & thermal bypass checklists
- R-13 fiberglass wall insulation blown-inbatt system (BIBS) (shown photo left)
- Unvented attic with 5.5 inches of closed cell foam insulation sprayed under roof deck
- Insulation in corners and interior/exterior wall intersection (shown photo right)

Systems and Appliances

- SEER 14, 1.5 ton air conditioning
- Bathroom exhaust fans attached to a dehumidistat
- Central manifold plumbing system
- Sealed and tested ducts in unvented attic

