

DOE Challenge Home Program

A note from Sam Rashkin: 100,000 builders ready for Challenge Home

2013 was an amazing year. Nearly 220,000 homes were rated with an average HERS Index Score of 64. Assuming a basic bell distribution curve, that means upwards of a 100,000 homes last year achieved HERS Index Scores on or about the [DOE Challenge Home](#) performance threshold from low to high 50's. In other words, nearly half of the U.S. single-family housing market can easily step up to DOE Challenge Home certification with some basic tried-and-true best practices, additional indoor air quality measures, and solar ready details where there is a strong solar resource. This in turn would allow builders to provide compelling value propositions to attract new homebuyers while delivering performance that far exceeds their expectations. Zero energy ready homes sounded like such a huge leap for the housing industry when we began DOE Challenge Home a few years ago; now it sounds like a no-brainer. Please join us in this remarkable transformation to great homes.

Verifiers recognized at 2014 RESNET Conference

Sam Rashkin recognized two extraordinary companies who have proven key to the success of the DOE Challenge Home. Justin Erickson with E3 Energy LLC and Robby Schwarz and Steve Byers with ENERGYLogic Inc. accepted certificates for their work guiding builders to make optimal decisions and incorporate the best innovations and practices in their homes. They do the painstaking work of interpreting the program criteria and verifying that their builder clients meet those criteria. Congratulations to both companies.

Webinars: Tech talks on ducts and comprehensive building science

DOE Challenge Home is a blueprint for zero energy ready homes. These ultra high performance homes include critical systems that ensure energy efficiency, comfort, quality, health and long-term durability. Each [webinar in this series](#) features an expert who will go into detail on how to get these systems right.

Ducts in Conditioned Spaces – Thursday, March 20th from noon – 1:30 PM ET

With such high performance homes, it's impossible to justify huge thermal losses from ducts in unconditioned spaces. That's why one of the program's mandatory specs calls for ducts in conditioned space. However "ducts in conditioned space" isn't a one-size-fits-all design requirement in a DOE Challenge Home. Over the last several years, DOE's Building America research partners have worked out the kinks on a toolkit of duct design strategies. In this session, Bill Zoeller, Steven Winter Associates, a leading expert on thermal performance of air, will share the pros and cons of these strategies so you can specify effective distribution systems

for any type of project. Register here: <https://www1.gotomeeting.com/register/252839560>

Comprehensive Building Science – Wednesday, March 26th from noon to 1:30 PM ET

DOE Challenge Homes aren't just really energy efficient – they're designed and built using solid building science principles. Version 3 of the ENERGY STAR Certified Homes program, a prerequisite for every Challenge Home, delivers three key systems that improve comfort, indoor air quality, and durability – a complete thermal enclosure system, a complete HVAC system, and a complete water management system. In this webinar, Dean Gamble of EPA will cover the building science basics that underlie these key systems, as well as discuss the top three challenges of each system and how to overcome them. Register here: <https://www1.gotomeeting.com/register/19446>

Training: Nothing like the real thing

Sam Rashkin and other talented trainers continue to tour the country delivering the [Zero Energy Ready Home training](#). The training highlights the business case for building high performance homes as well as the technical details to construct these high-value homes. Here are some upcoming training locations:

[March 12, 2014: Brattleboro, VT](#)

Partner: Vantem Panels

[March 14, 2014: Raleigh, NC](#)

Partner: Panasonic / Advanced Energy

March 24, 2014: Lexington, KY

Partner: HBA of Lexington

Building America Resources

Each month [Building America](#) provides an update on top innovations, the latest technical resources and case studies coming out of the program. Among the features in the [March issue](#) that are particularly relevant to the DOE Challenge Home are a measures guideline on condensing boilers and a case study on technical strategies for affordable housing.

You've probably heard us reinforce the critical importance of both efficiency **and** performance for zero energy ready homes. For our partners who use high efficiency hydronic systems, you'll be interested in a new resource from Building America titled "[Measure Guideline: Condensing Boilers—Optimizing Efficiency and Response Time During Setback Operation](#)." This guide, designed for heating and hydronic contractors, explains the factors and steps for properly designing a hydronic system for setback operation to optimize efficiency **and** system performance.

Another new offering this month is "DOE Challenge Home Case Study" on a [Volusia Habitat for Humanity project](#) in Edgewater, Florida. This case study describes the home's specifications and systems to meet DOE Challenge Home – including their strategies for locating ducts in

conditioned space and providing whole-house mechanical ventilation.

Partners in the news

Here are some stories about the DOE Challenge Home program and our partners. Be sure to [send us](#) your news.

- Katie Weeks mentions the DOE Challenge Home program in "[Four Do's of Selling High Performance Homes](#)," on Ecobuildingpulse.com.
- KB Home's DOE Challenge Home certified [ZeroHouse 2.0](#) is featured on Builderonline.com.
- Ithaca Neighborhood Housing Services, a winner of the 2013 DOE Housing Innovation Awards, is featured on page 4 of [Tomkins Weekly](#).
- [Addison Homes](#) announces their participation on a zero energy ready home builder panel at the [2014 RESNET Building Performance Conference in Atlanta](#).
- [Christian Builders & Remodelers](#) meets the challenge in Minnesota (Parade of Homes Magazine, March 1-30, 2014, p. 36).

You deserve credit

Don't forget to send in your DOE Challenge Home verification form from your RESNET-accredited software to doechallengehome@newportpartnersllc.com to get credit for your hard work on your profile in the [partner locator](#).

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