

Building America Update – November 9, 2012



This announcement brings you the latest information about news, activities, and publications from the U.S. Department of Energy's [Building America](#) program.

DOE Challenge Home Technical Training

The [DOE Challenge Home](#) team invites you to attend a training webinar on **Thursday, November 15, 2012**, titled "The Future is Now: Design Options for Locating Ducts within Conditioned Space."

Locating the forced-air duct system within the home's air and thermal barriers is a "must-have" for high performance homes, and is a mandatory requirement of DOE Challenge Home. DOE recognizes several compliance approaches, including locating ducts within insulated vented attics, use of plenum truss systems, and encapsulating ducts with spray foam and burying them in insulation. Done right, these alternative approaches can be cost effective to build and provide highly efficient distribution systems, but getting them right means understanding the details.

In this training, DOE and team members from Building America Research Partner Steven Winter Associates will review several possible approaches to locating ducts within the home's air and thermal barriers. Builders, raters, and contractors will learn about:

1. Challenge Home requirements for duct system location
2. Strategies for locating ducts within conditioned space in new residential construction
3. Key design and installation details for encapsulating ducts within spray foam and then burying them with attic insulation.

Space is limited.

Reserve your Webinar seat now at:

<https://www1.gotomeeting.com/register/631195728>

New Publications from Building America

The Building America [Publications Library](#) offers an extensive collection of technical reports, measure and strategy guidelines, case studies, and other resources to help you boost energy efficiency in new and existing homes. Here is a sampling of some of our most recent publications:

[Air Leakage Testing and Air Sealing in Existing Multifamily Units](#)

This report describes envelope air sealing that was included in the retrofit of a 244-unit low-rise multifamily housing complex in Durham, N.C. On average, total leakage was reduced by nearly half, from 19.7 ACH50 to 9.4 ACH50. Important air leakage locations identified included plumbing and electrical penetrations, dropped ceilings/soffits, windows, ducts and wall-to-floor intersections. Specifications and a pictorial guide were developed for contractors performing the work.

[Building America Summer 2012 Technical Update Meeting Report](#)

This report summarizes key findings and outcomes from the U.S. Department of Energy's Building America Summer Technical Update Meeting, held on July 24-26, 2012, in Denver, CO. This meeting served to create a forum to discuss issues related to energy efficiency in housing—specifically nine critical challenges without current definitive guidance—and to define recommendations from the Building America program for housing industry stakeholders.

[Measure Guideline: Basement Insulation Basics](#)

This guideline is intended to provide good practices for insulating basements in new and existing homes. Several insulation systems are described in this guideline, including a list of systems that work well, comply with current codes, and can be practically implemented by builders and contractors.

[Measure Guideline: High Efficiency Natural Gas Furnaces](#)

This measure guideline covers installation of high efficiency gas furnaces, including: when to install a high efficiency gas furnace as a retrofit measure; how to identify and address risks; and the steps in the selection and installation process. It includes information provided by manufacturers and researchers, as well as recent research results from the Partnership for Advanced Residential Retrofit (PARR) Building America team.

Additional reports published recently are:

- [Byggmeister Test Home: Cold Climate Multifamily Masonry Building Condition Assessment and Retrofit Analysis](#)
- [Communication of Energy Efficiency Information to Remodelers: Lessons From Current Practice](#)
- [Developing an Energy Performance Modeling Startup Kit](#)
- [Housing Stock Characterization Study: An Innovative Approach to Measuring Retrofit Impact](#)
- [Long-Term Results: New Construction Occupied Test House, Urbana, Illinois](#)
- [2011 EnergyValue Housing Award Report](#)
- [Winchester/Camberley Homes New Construction Test House Design, Construction, and Short-Term Testing in a Mixed-Humid Climate](#)

Visit the Building America [Publications Library](#) to access the entire collection of publications.

Latest Climate Guides from Building America

As a reminder, Building America has updated several of the popular guides for specific climate zones. The new guides can help you apply Building America research to your own projects to achieve even greater energy savings, and are available for the following climate zones:

- [Cold and Very Cold](#)
- [Hot-Dry and Mixed-Dry](#)
- [Hot-Humid](#)
- [Marine](#)
- [Mixed-Humid](#)

You may also want to refer to the helpful report, [Guide to Determining Climate Regions by County](#). Please update your bookmarks to use these latest energy-saving climate guides.

Please forward this announcement to colleagues who may be interested in subscribing to future Building America Updates.