

“Shaping the Future”

RESNET 2011 Conference

1:30 – 3:00 Monday, February 28, 2011

Grand Ballroom Salon VII

EnergySmart Contractor Guidelines



Introduction

- EnergySmart Contracting--this may be one of the most important trends for HERS raters, contractors, RESNET, the consumer, and the World!
- Benjamin Franklin said, “**Well done** is better than **well said.**”
- The market is there now, and we know the way to get it done!

Following are brief biographies for your three Presenters:



Orlo Stitt

- Design-Build contractor for 32 years
- Chairman, RESNET EnergySmart Contractors Committee
- President, Stitt Energy Systems, Inc. Rogers, AR
- Author of book, *Holistically Green Homes*
- Eighteen EnergyValue Housing awards
- LEED Platinum corporate office
- B.Sc. Iowa State and MBA, U. of Iowa
- RESNET Board of Directors
- orlos@stittenergy.com



Dallas Jones

- President, Home Energy Team Institute
- Develops and administers online and hands-on training for BPI and RESNET certifications
- Over 20 years experience in training and course development
- 6000 hours of classroom teaching
- HERS Rater
- BPI Analyst and building envelope specialist
- Certified Thermal Imaging Technician
- Board of Directors, American Association of Radon Scientists and Technicians
- RESNET Education Committee
- dallas@homeenergyteam.com



Wes Davis

Executive Director, Air Conditioning Contractors of America (ACCA)

- ACCA provides support and education for participating HVAC contractors
- Provides Quality Assurance (QA) for HVAC systems
- Fifteen years as a licensed HVAC contractor
- Serves on the RESNET Strategic Planning Committee
- B.Sc. Southwestern Oklahoma State
- wes.davis@acca.org

RESNET EnergySmart Contractor Guidelines Set Procedures For:

- The approval of CEQ Providers
- How to become an EnergySmart Contractor
- How an alliance of EnergySmart Contractors can partner with a CHERS Rater or BPA to become recognized as an EnergySmart Home Performance Team.

What is a CEQ Provider?

- ***A Contractor Education and Qualification Provider is approved to:***
 - train & prepare individuals to be an EnergySmart Contractor's Designated Qualification Representative
 - to perform the other duties of a CEQ

Requirements for CEQ Provider Approval

- Accreditation as a Rating or HEA Provider
- Staff member/rep with minimum 10 years of residential construction or home improvement contractor experience
- Submit min 8-hour EnergySmart Contractor curriculum
- Provide a min of 2 hrs of CE courses annually
- Provider shall delist an ES Contractor that does not renew every three (3) years.

Minimum Standards for CEQ Providers

- A dedicated CRO to manage & resolve consumer complaints:
 - Consumer complaints about ES Contractors
 - Rater/Auditor complaints about ES Contractors
 - ES Contractor or Rater/Auditor complaints about CEQ
- Written discipline procedures & CEQ QA Requirements are defined in the Guideline

Required EnergySmart Course Content

- The Importance of ES Contractors
- The House as a System
 - Building Science Basics
 - Building Shell Fundamentals
 - Energy Efficiency Concepts
 - Energy Related Consequences of Common Construction Practices
- Intro to how a Rater/Auditor utilizes Air Leakage Testing, Duct Leakage Testing, & IR Technology
- Understanding & Completing Scopes of Work
- Work Orders, Sequence & Priority of Work, & Respect for other Contractors
- Introduction to RESNET Standards & RESNET Code of Ethics

How Does a Company Earn EnergySmart Contractor Designation?

- Must have a DQR who's met the following:
 - Taken an accredited 8-hour EnergySmart Contractor Course from a CEQ Provider.
 - Passed the National ES Contractors Exam administered by CEQ Provider (50 multiple-choice)
 - Sign Agreement with a CEQ Provider
 - Complete 2 hrs of CE annually (delivered by a CEQ)
 - Renew agreement with CEQ Provider every 3 years.

Maintaining EnergySmart Designation

- Failure to maintain certification results in deletion from the CEQ's Registry & from the RESNET promotional Directory.
- ES Contractor shall designate at least 1 certified Rater/Auditor whom they will routinely recommend to clients
- Reciprocity with the ACCA: RESNET recognizes contractors trained & designated by ACCA to be ES Contractors provided ACCA meets the RESNET CEQ requirements.

EnergySmart Exam Competency Categories

- Air Sealing 10%
- Client Communication 6%
- Combustion Safety 6%
- Ducts/Distribution 10%
- Energy Fundamentals 10%
- Ethics 6%
- Health/Safety 6%
- Insulation 10%
- Lighting/Appliances 4%
- Moisture Management 10%
- Structure 6%
- Ventilation 6%
- Heating/AC 10%

Designated Rater/Auditor Responsibilities

When Working With EnergySmart Contractors

- A Project that involves air sealing or enclosed cavity insulation representing 15% or more of the total building shell area, and/or sealing of the ducts outside the thermal envelope, must include pre & post-installation blower door tests & duct leakage evaluation
- An Independent Rater/Auditor conducting the final inspection and test-out must obtain (from the PM) the initial rating or audit file and documentation of all improvements, so they can be input into a RESNET approved Home Performance Software.

Designated Rater/Auditor Responsibilities

When Working With ES Contractors

- A Rater/Auditor must perform test-in & test-out safety inspections of all combustion appliances if changes to the envelope and/or heating system are part of the Project
- Rater/Auditors must make specific Project info available upon request for at least 3 years to their Provider.
- Designated Rater/Auditor may be an employee of an ES Contractor or have financial interest in the Company
 - For QA, the test-out following air-sealing the must be performed by an *Independent* Rater/Auditor who has no financial interest in any company performing retrofit work on the Project.

Designated Raters/Auditors Must Be Either a:

- **BPA** - certified by a HEA Provider to diagnose & test an existing home's performance & provide a prioritized work scope. A BPA is competent in building analysis, envelope/shell evaluation & work scope preparation.
- **CHERS Rater** – certified by HERS Provider to diagnose & test an existing-home, prepare a *comprehensive* HERS rating, & provide a prioritized work scope for cost-effective energy saving measures
- A **CHERS Rater** has completed approved training on combustion safety diagnostics & retrofit work scope preparation & requirements.

EnergySmart Home Performance Teams

- A team consisting of independent contracting companies and a RESNET certified Rater/Auditor who can collectively prescribe and complete a home performance retrofit

A Home Performance Team shall include:

- At least 1 certified Rater/Auditor
- At least 1 state licensed HVAC Contractor who's a recognized participant ACCA QA Program
- At least 1 ES Contractor that specializes in Air Sealing & Insulation & employs at least 1 senior tech who's an ICAA Certified Insulation Installer.
- A PM for each Project - either a designated ES Contractor or a certified Rater/Auditor.
- Any number of other home improvement contractor companies working under the oversight of the PM according to work scope requirements of a certified Rater/Auditor

Home Performance Team Requirements

- Only companies with ES Contractor designation eligible for posting on RESNET's Promotional Directory.
- The PM must ensure final test-out is performed by an **Independent Rater/Auditor**
- ES Contractors & Rater/Auditors may work with multiple teams

Project Manager Responsibilities

- The company that contracts with the homeowner will serve as the PM
- PMs must defer to the Designated Rater/Auditor for diagnosis & prep of work scope whenever air sealing of the enclosed cavity insulation representing 15% or more of the total building shell area, and/or sealing of the ducts outside the thermal envelope are being considered.
- The PM is responsible for ensuring Work Scope Standards & industry best practices are followed

Project Manager Requirements

- The PM must be either a designated EnergySmart Contractor or a certified Rater/Auditor:
 - Ensure an initial rating or audit is performed on each Project
 - Ensure test-in/test-out of combustion appliances is completed if changes to envelope and/or HVAC are part of Project.
 - Provide general oversight of all contractors performing work to ensure proper sequence and compliance with the work scope
 - Deliver the initial rating or audit report & work documentation to the **Independent** Rater/Auditor prior to final inspection & test-out
 - Ensure all Project documentation is provided to client.

Project Manager's Documentation

- The PM must maintain Project records for a minimum of 3 years:
 - Initial rating or audit report
 - Documentation of all energy-saving retrofits & installations
 - The final rating or audit report with test-out results

RESNET New EnergySmart Contractor Guidelines



QA Program

Wes Davis

Director, QA Program



Air Conditioning Contractors of America

ACCA QA Program Overview

- Recognizes HVAC Contractors*
- QA Elements
 - License
 - Insurance
 - QI Standard
- Participation in the program

* (ACCA membership not required)



ACCA QA Program Overview

- QA Elements
 - Business Prerequisites
 - Business Operations
 - Training and Certification
 - Customer Relations



ACCA QA Program Overview

- QA Elements
 - Business Prerequisites
 - Licensing (verified)
 - Insurance (verified)
 - Code Requirements
 - Refrigeration Certifications, Training, and Equipment
 - Hazardous Materials Regulations



ACCA QA Program Overview

- QA Elements
 - Business Operations
 - Employment
 - Safety Programs
 - Fleet Management
 - Quality Installation
 - Quality Maintenance
 - Quality Restoration
 - Instrumentation/Measurement Tools



ACCA QA Program Overview

- QA Elements
 - Training and Certification
 - Continuing Education
 - Certification (NATE, etc.)



ACCA QA Program Overview

- QA Elements
 - Customer Relations
 - Interactions with Building Owners and Homeowners
 - Warranties
 - Service Agreements



ACCA QA Program Overview

- QA Elements
 - Business Prerequisites
 - Business Operations
 - Training and Certification
 - Customer Relations



ACCA QA Program Overview

- QA Program Participation
 - Orientation
 - Application
 - Participation
 - Addressing Mistakes



ACCA QA Program Overview

- QA Program Participation
 - Orientation– Provides overview of:
 - ENERGYSTAR
 - Checklists
 - QA Program (QA Elements and Participation)



ACCA QA Program Overview

- QA Program Participation
 - Application
 - Company information
 - Verify:
 - Mechanical License (as applicable)
 - Insurance (ACCA listed as certificate holder)



ACCA QA Program Overview

- QA Program Participation
 - Participation
 - QA Program Directory
 - Recognition Certificate
 - EnergySmart Teams
(under development)
 - New checklists
 - Listed affiliations
 - Provider-like oversight



ACCA QA Program Overview

- QA Program Participation
 - Addressing Mistakes
 - Feedback loop
 - Respond and “Cure” Nonconformance
 - Corrective Actions
 - Warning
 - Probation (30 Days)
 - Dismissal (6 Months)
 - Re-apply



ACCA QA Program Overview

Wes Davis

Director, Quality Assured Program
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Opportunities

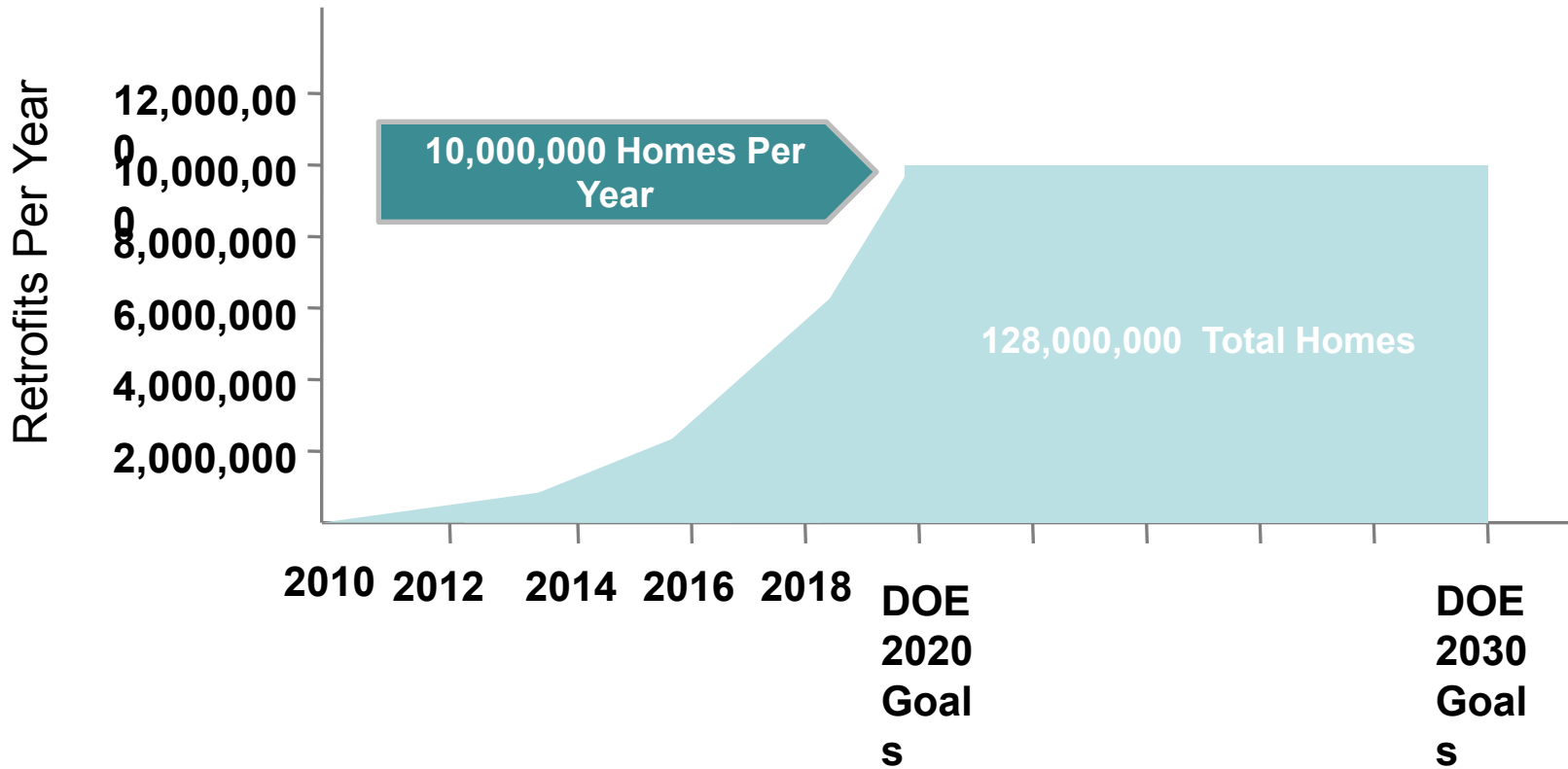
Coalition of Stakeholders Aligning with RESNET in Support of EnergySmart Guidelines

- Air Conditioning Contractors of America (ACCA)
- Insulation Contractors Association of America (ICAA)
- Home Depot
- Blow-In-Blanket Contractors Association (BIBCA)
- Spray Polyurethane Foam Alliance (SPFA)
- CertainTeed Corporation
- Service Partners, LLC.
- *More in the process*

Market Potential

US Growth in Residential Energy Retrofitting (Retrofitting Per Year)*

*Department of Energy Statistics



RESNET Philosophy on Comprehensive Home Performance Improvements

- *“To not to restrict business models or duplicate existing industry quality installation standards*
- *To recognize existing industry quality standards*
- *To allow marketplace to determine who’ll lead the project*
- *To facilitate partnerships between RESNET certified auditors & trained qualified contractors to work as a team”*

» Steve Baden, RESNET Executive Director

Why The *EnergySmart* Credential is Valuable to Contractors

- Essential tool for marketing/differentiating company
- Puts contractors into a community of pros from energy-related fields - dealing with the same issues
- **Required to Be Part of a RESNET Recognized Home Performance Team**
- Shows customers that the contractor goes above & beyond everyday requirements
- Demonstrates well-rounded knowledge, skills and abilities they should expect from their contractor

Additional Value of *EnergySmart* Qualification

- Raters/Auditors will drive business to Qualified Contractors AND..
- Qualified contractors will drive business to RESNET Raters/Auditors



RESNET Promotional Directory

- RESNET is **AGGRESSIVELY** Promoting to Homeowners

<http://www.resnet.us/main/profile>