A Habitat X Webinar

Codes and Programs That Work

Wednesday January 20, 2016

Today's Topics:

The Compliance Project ENERGY STAR Verified Installation (ESVI)



The Compliance Project

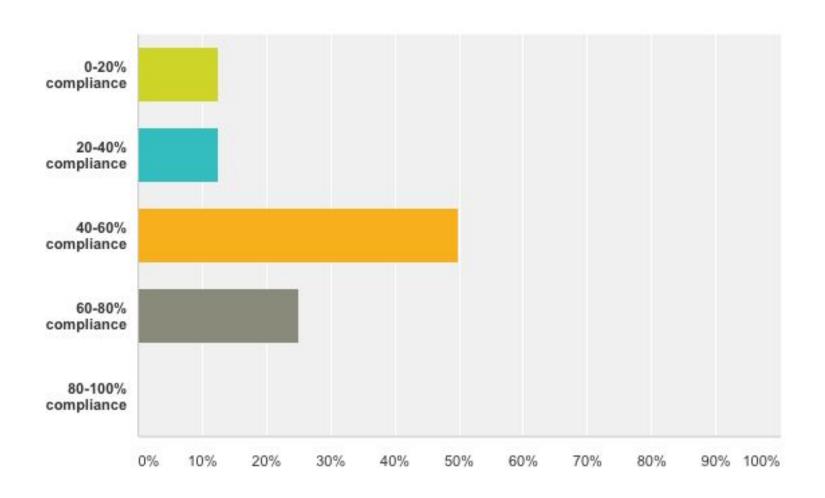
A Nationwide Initiative to Speed the Implementation of Energy Codes

With Griffin Hagle and Colin Genge

Learn more at www.ComplianceProject.us



Rate of Compliance, from our social survey





Poll Question

What do you think is the rate of compliance with the energy code in your region?



What Homebuyers Want

- 2013 National Association of Homebuilders <u>study</u>
- 90% chose "efficient home with lower bills than one costing 2-3% less without those features"
- Willing to pay average of \$7,095 more upfront to save \$1,000 in annual utility costs
- 73% say projected utility costs would influence purchase
- Energy codes give them what they want (and more!)
- But they don't know it yet



Our Media Campaign to Homeowners

- "The Building Sector's Continuous 'Volkswagen'
 Moment" October 2015 GPBN article
- News peg to frame issue for consumer media
- "Is your new home a Volkswagen?"
- Create concerted call-to-action from expert voices
- Act fast -- compete for attention with Instagram, Twitter
- Collaborators participate at level they're comfortable



Our Media Campaign to Professionals

- There is plenty of awareness of the problem, but it's often expressed as simple frustration
- Professionals each enter the industry at a different point
 - Contractors, program managers, auditors, consultants
- The Compliance Project acts as a clearinghouse -providing guidance and support for those who are
 motivated to improve code compliance



We're Targeting These Publications

Sought by relevance, circulation volume

- AARP Magazine (retired people prefer new houses)
- Better Homes & Gardens (energy codes affect lifestyle)
- Popular Mechanics (heavy coverage of VW scandal)
- Mother Earth Living, HGTV, Sunset, Sierra, Wired, etc.
- "New" media: Vox, Grist, Slate, etc.

Plus social media: LinkedIn, Home Energy Pros, etc.



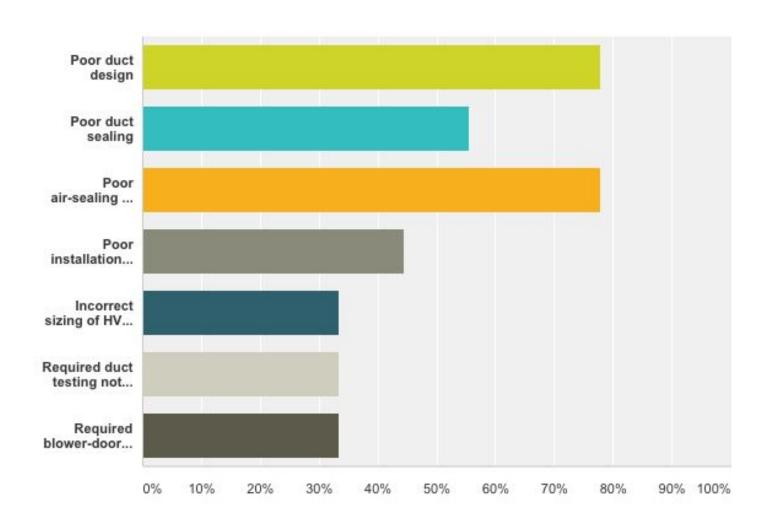
The Compliance Project

Development Process and Timeline





Common Fails, from our social survey





Feedback

What are the most common energy code fails you see in your marketplace?

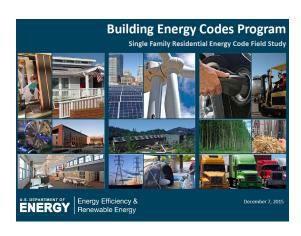
Submit comments via the Question tool.





DOE Residential Energy Code Field Study

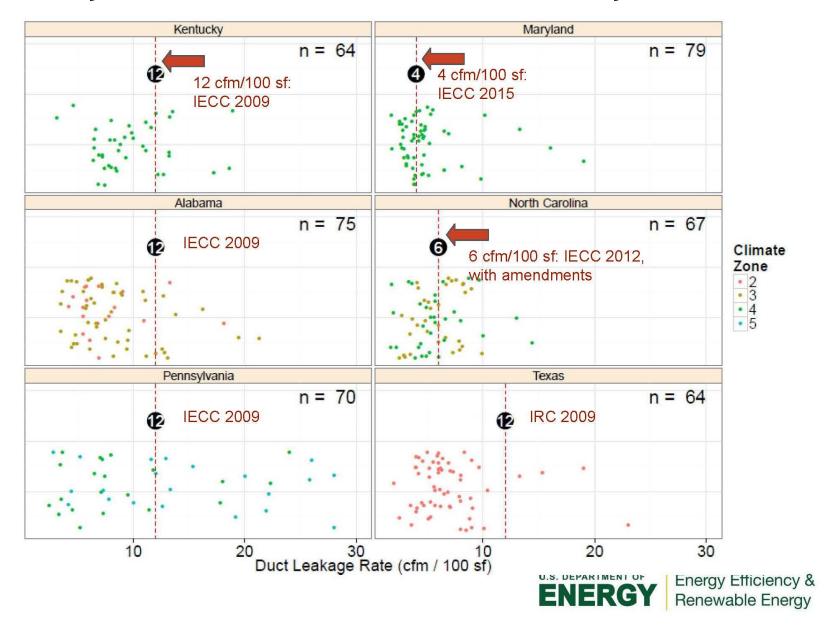
- Four-year study with three stages
- Conducted in 6 Southeastern and 2 Eastern states
- Results recently released from Year One.



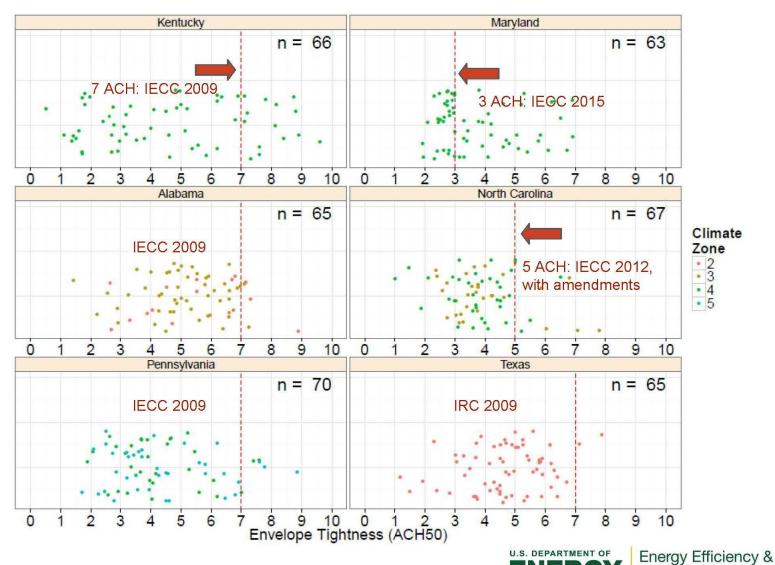
Download at <u>www.ComplianceProject.us</u>



Analysis from DOE Field Study: Ducts



Analysis from DOE Field Study: Envelope



Renewable Energy

The Compliance Project: Current Work Plan

- Engage in policy and legal initiatives
- Perform evaluations of new and near-new homes
- Develop media campaigns targeted to homeowners
- Develop brandable media kits for housing professionals
- Maintain a professional collaborative network





A Nationwide Initiative to Speed the Implementation of Energy Codes

Submit comments via the Question tool:

Would you like to be more involved?

What type of assistance could you use?



Complete the survey at <u>www.ComplianceProject.us</u>



ESVI: ENERGY STAR Verified HVAC Installation

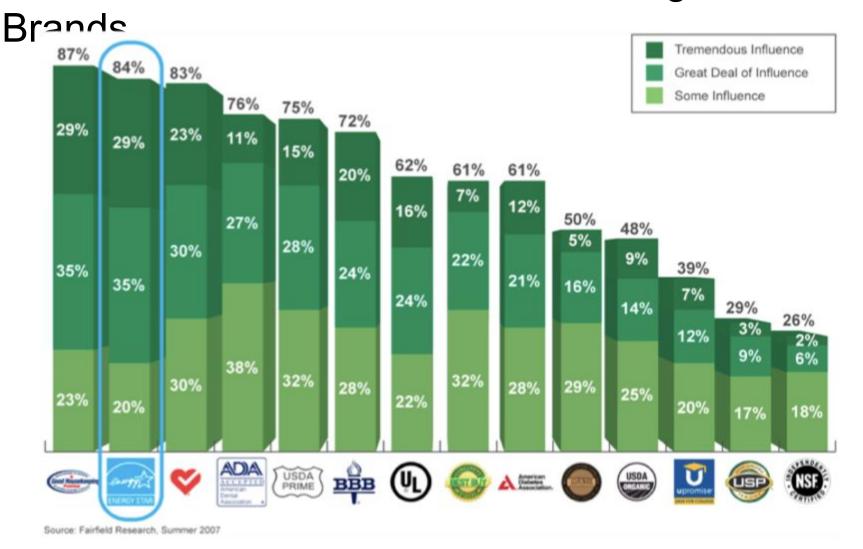
Chandler von Schrader, Project Manager, U.S. EPA





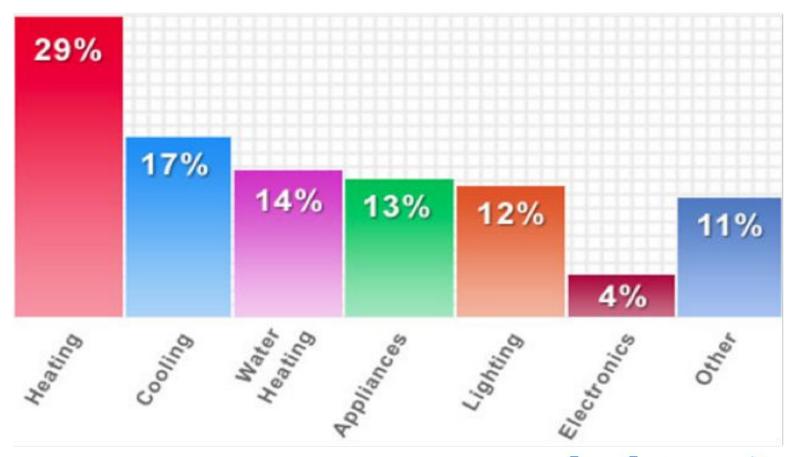


ENERGY STAR: It's One of the Strongest





HVAC: The Numbers May Vary, But it's Still the Big Dog in the Fight





It's Common: the HVAC Does Not Perform

- "Research shows 50 to 70% of HVAC systems were improperly installed." "HVAC systems were 10 to 50% less efficient than if they received quality design, specification, and installation."-- Mowris and Jones
- "The average delivered efficiency of an installed system was less than 60%." -- National Comfort Institute



ESVI: How It Fits Into Existing Programs

- New home market
 - ENERGY STAR Certified Homes (ESCH)
 - Previous struggles with complexity of ESVI now solved



- Existing home market
 - Home Performance with ENERGY STAR (HPwES)
 - ESVI kicks in with HVAC changeout





ESVI Kick Off Event and Industry Soapbox

- At the ACI Home Performance Conference
- Austin, Texas
- Monday April 4 5:00 7:00





Feedback

Submit comments via the Question tool:

What do you think is the most valuable thing about ESVI?

What are your biggest concerns?

Would you like more information?





Half Time

- If you are short of time, this is an OK time to leave.
- Thanks for joining us!
- Watch your email box for the White Paper.





Contacts

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Questions and Answers

Interested in The Compliance Project? Complete the survey.

www.ComplianceProject.us



The Return of the Recovery Act:

A Posthumous Energy Code Promise

Ryan Boswell Albuquerque, NM







The Crash Felt Around the World

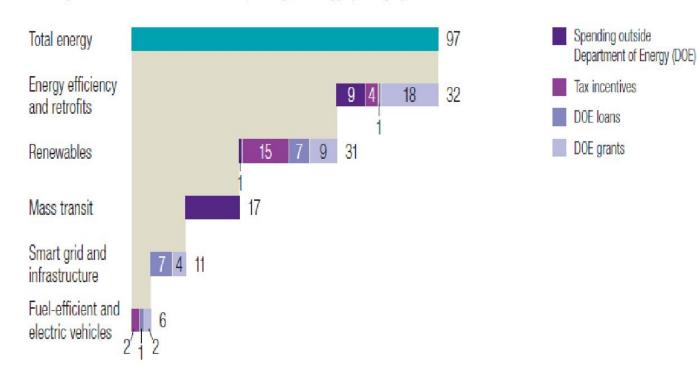


- 20% subprime mortgages by 2006/90% adjustable rate mortgages
- Financial institutions, consumers leveraged at unprecedented rates
- Mortgage-backed securities collapsed
- \$8 trillion loss of wealth by stockholders of US corporations



ARRA Birthed From Turmoil

American Recovery and Reinvestment Act stimulus spending on energy by category, \$ billion



¹ Figures may not sum to totals, because of rounding.

Source: United States Congressional Budget Office (2/13/2009), House Committee on Appropriations



The Strings Attached

Governors of all 50 states promised to:

ADOPT and implement latest residential (IECC 2009) and commercial building energy codes

ENFORCE the code to achieve 90% compliance within eight years



Who's Counting?

DOE Code Compliance Pilot Report of 2011

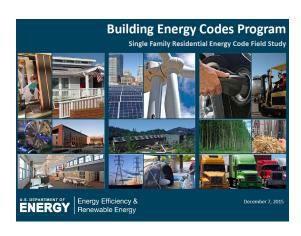
- No solid conclusions on compliance
- Lessons learned regarding measurement protocol

DOE Residential Code Field Study of 2015

- Only preliminary results available
- Consistent approach developed to compliance measurement
- 2009 testing requirement helps to identify major failures

DOE Residential Energy Code Field Study

- Four-year study with three stages
- Conducted in 6 Southeastern and 2 Eastern states
- Results recently released from Year One.



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Feedback

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Do you think your state can meet the goal of 90% compliance with IECC 2009 by next year?

What opportunities do you see here?





Outstanding Questions



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