

SUCCESS WITH LOUISIANA ENERGY CODE

Recommended Practices for Optimized Energy Savings
for Builders/Trades & Code Officials



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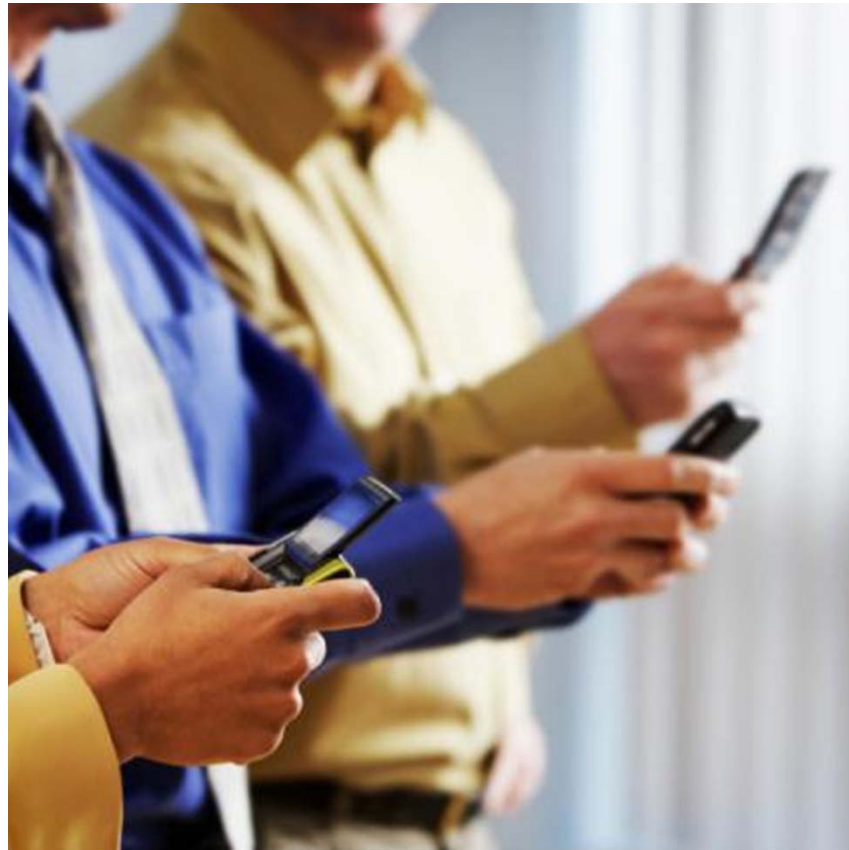
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LOGISTICS

- Emergency exits
- Restrooms
- Cell phones
- Breaks



PARTICIPANT HANDOUTS



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THE TECHNICAL GUIDE

- Information Sheets
- Checklists
- Tech Tips
- Critical Details

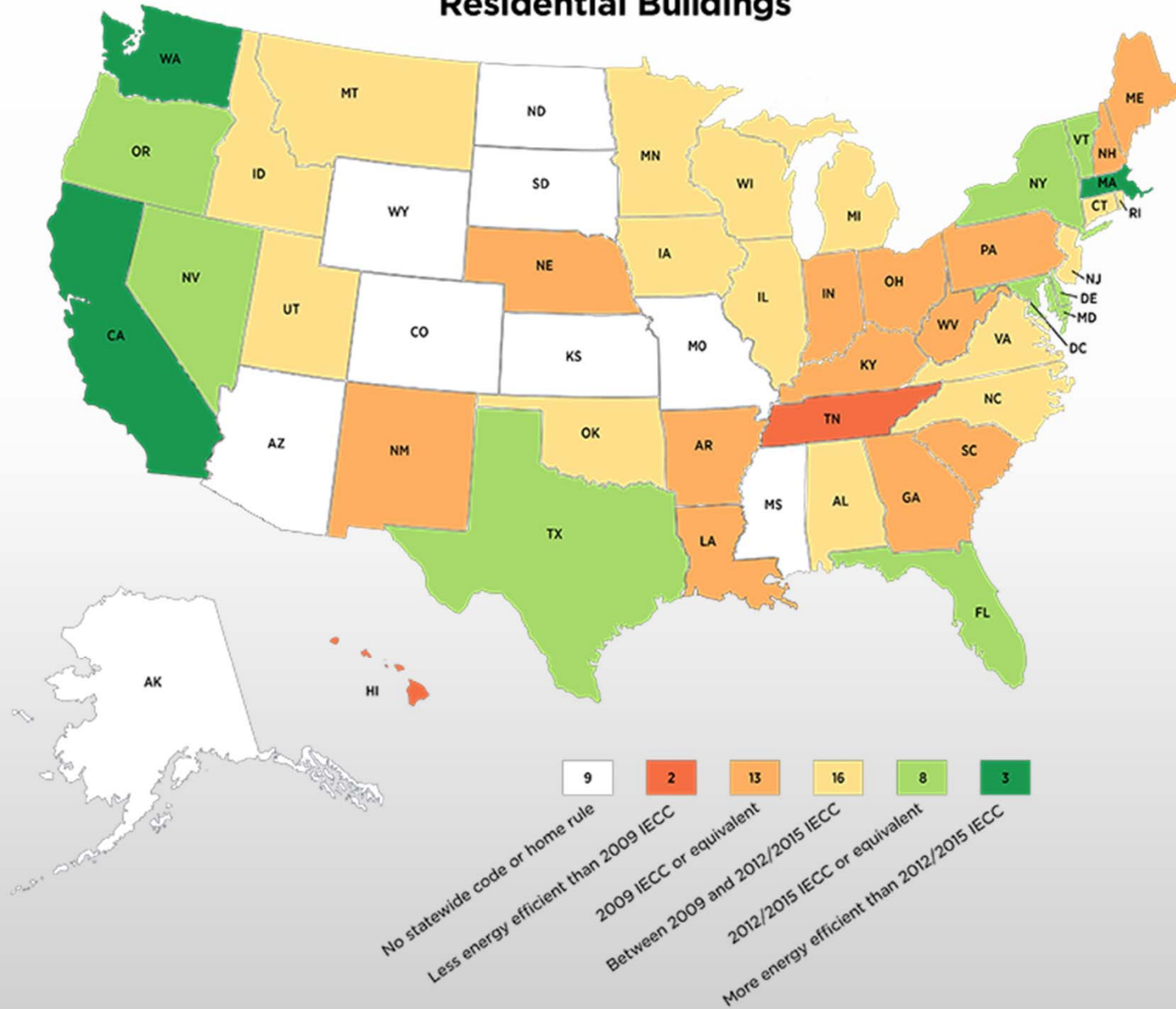


AGENDA

- Introduction
- Code background
- Code changes
- **Implementing code and**
 hopefully add some “why” to the “how”

Disclaimer

Residential Buildings



PRESCRIPTIVE PATH

- Simple + Straight forward
- No trade-offs
- Additional paths available

Performance Path

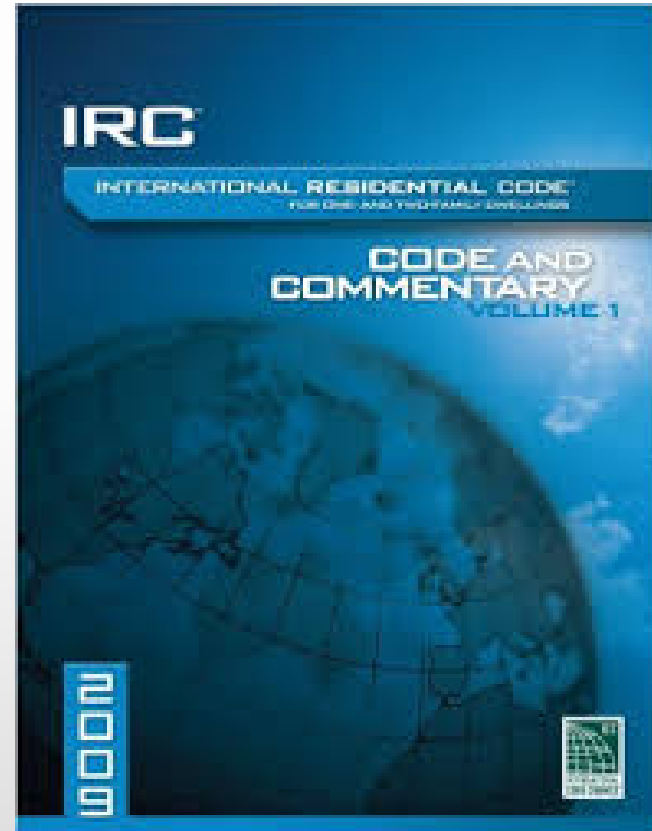
Overall Uo Average

Rating
HERs - BPI



RESIDENTIAL BUILDINGS

- 2009 IRC Chapter 11
- Mandatory statewide
- Effective: **January 1, 2015**



Products vs. Process

Major changes to construction standards can be separated into two categories:

- PRODUCT CHANGES
- PROCESS CHANGES

Which has resulted in the need for

- PERFORMANCE TESTING

Performance Testing



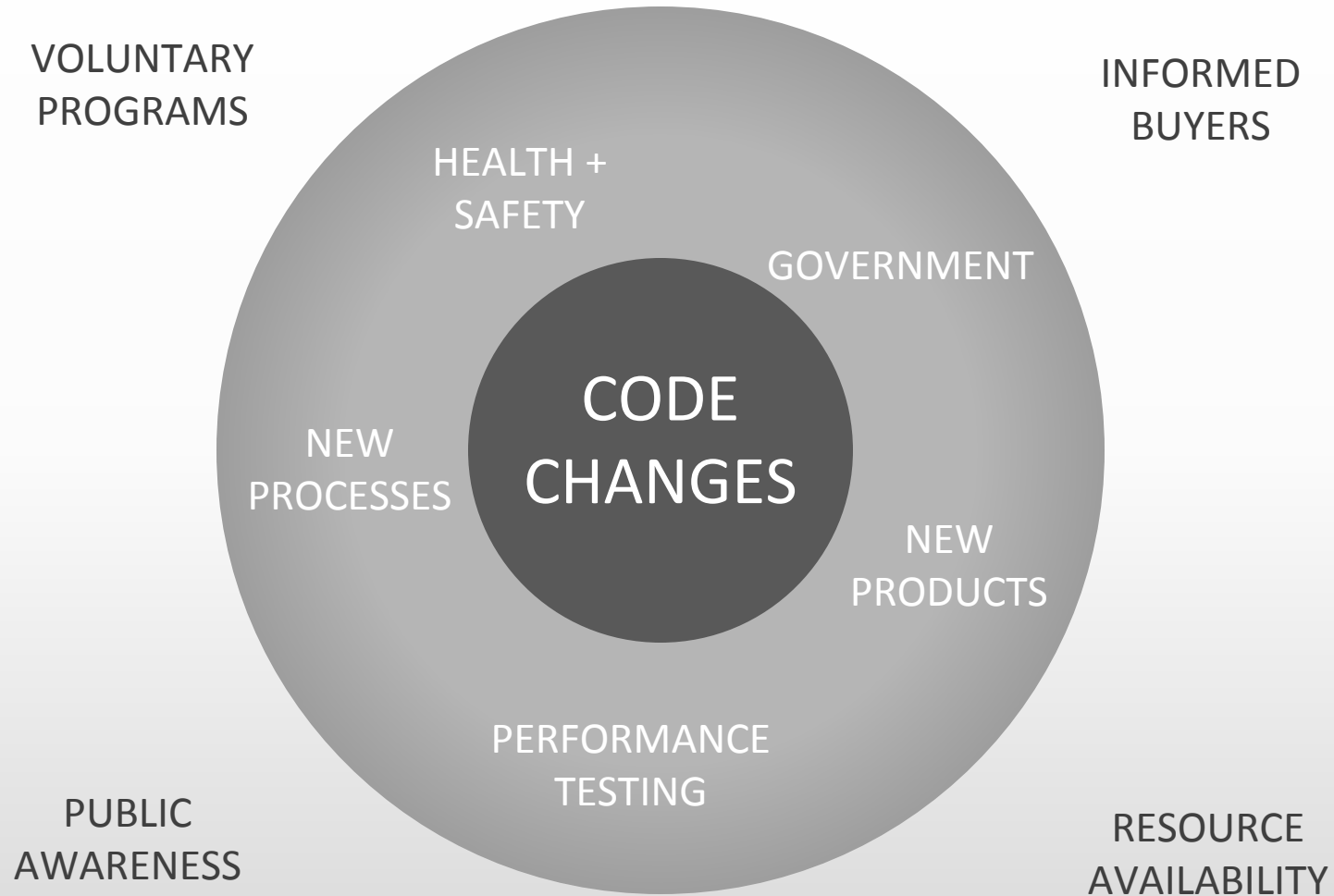
What are the goals of codes?



OCCUPANT HEALTH + SAFETY



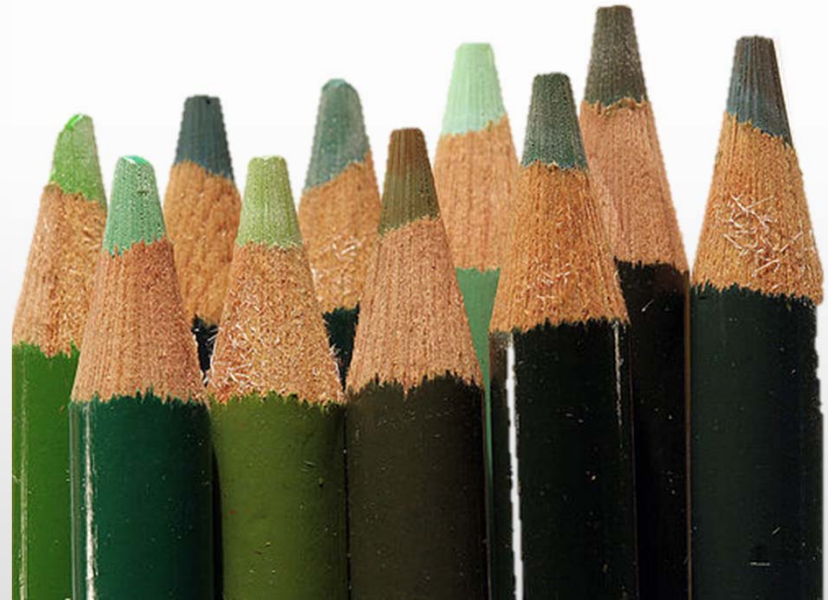
CODE INFLUENCES



Minimum Codes

Above code VOLUNTARY PROGRAMS

- ENERGY STAR for New Homes
- LEED For New Homes
- NAHB Green

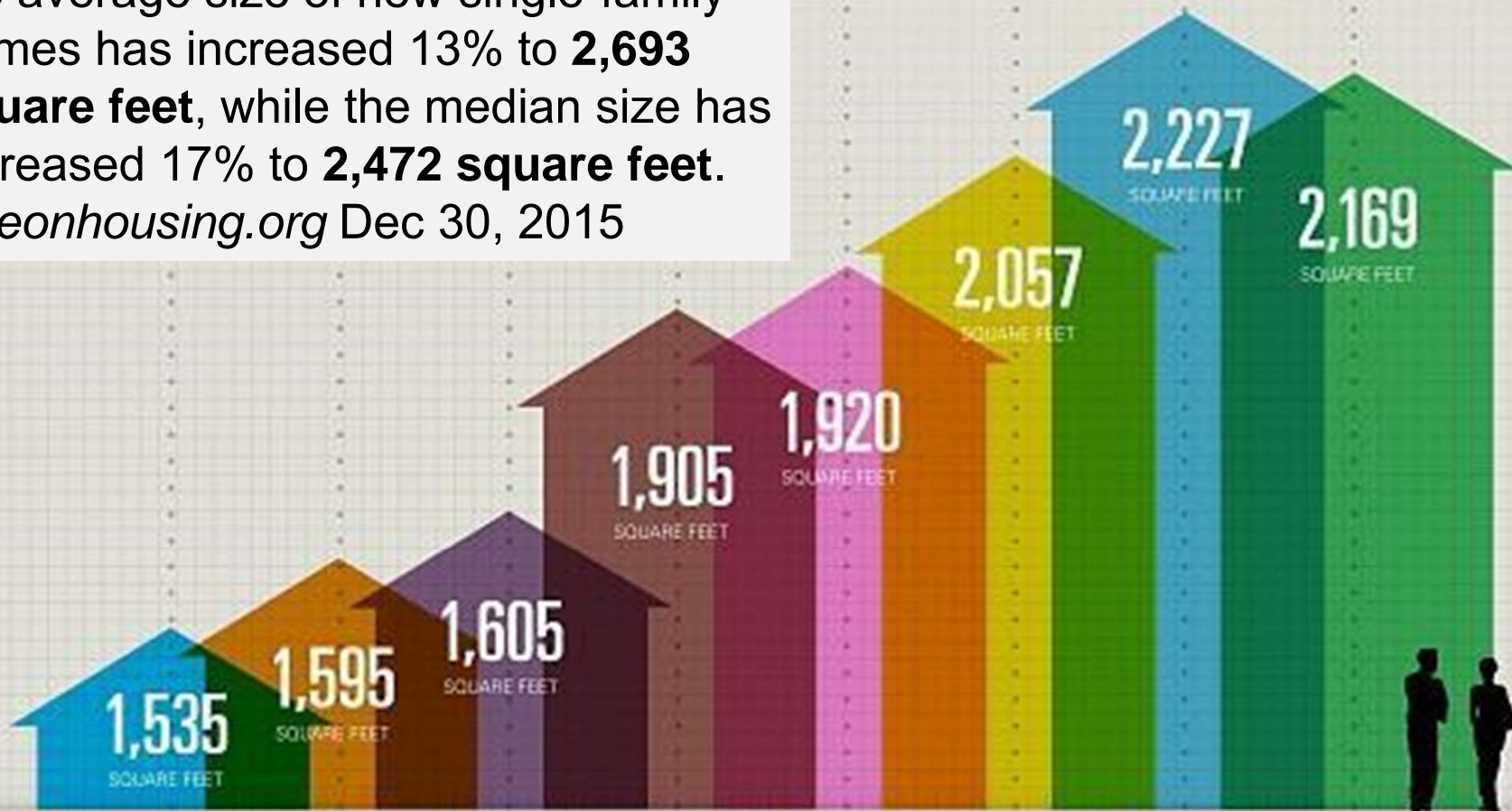


AVERAGE HOME SQUARE FOOTAGE

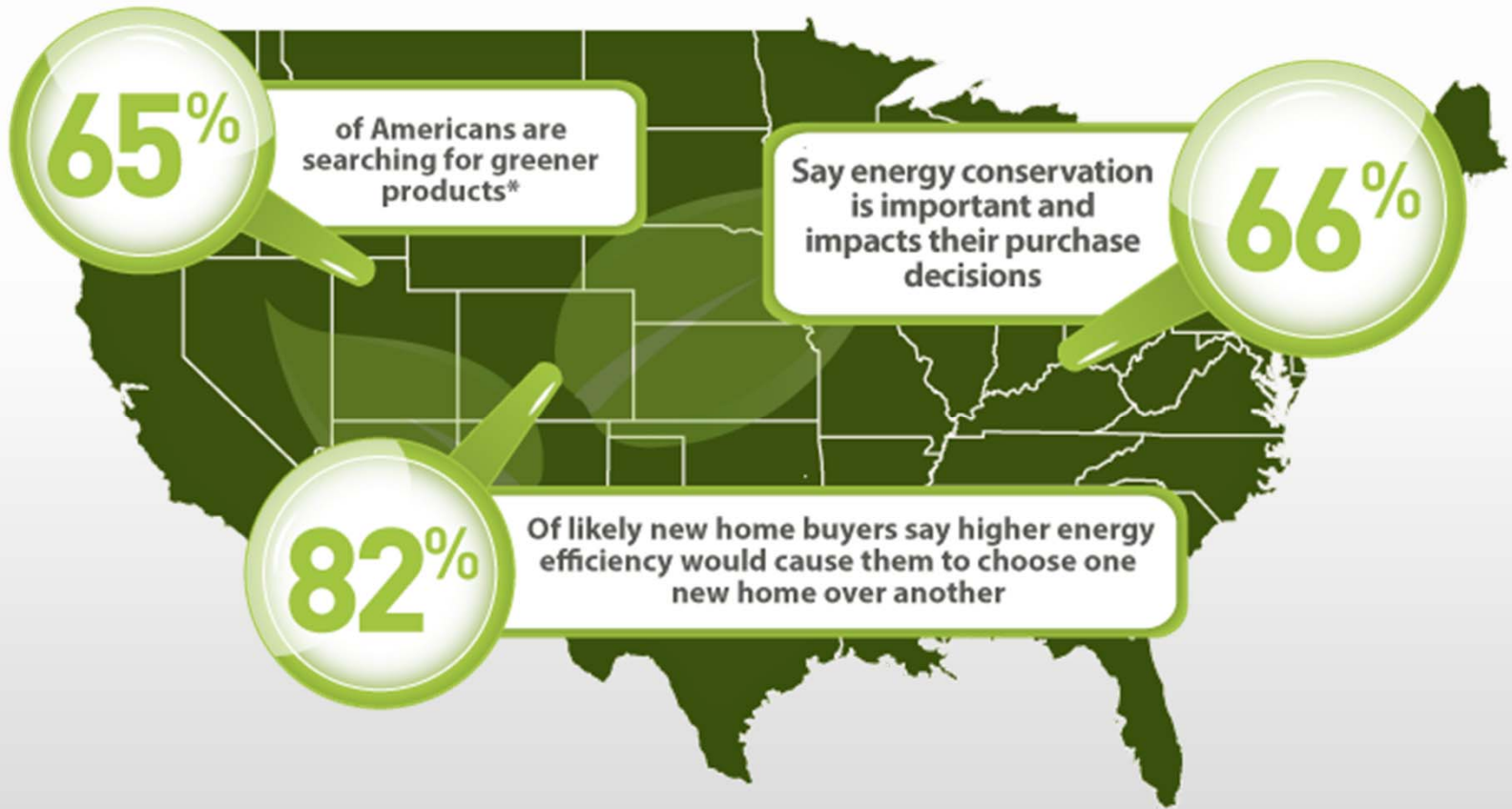
in the United States

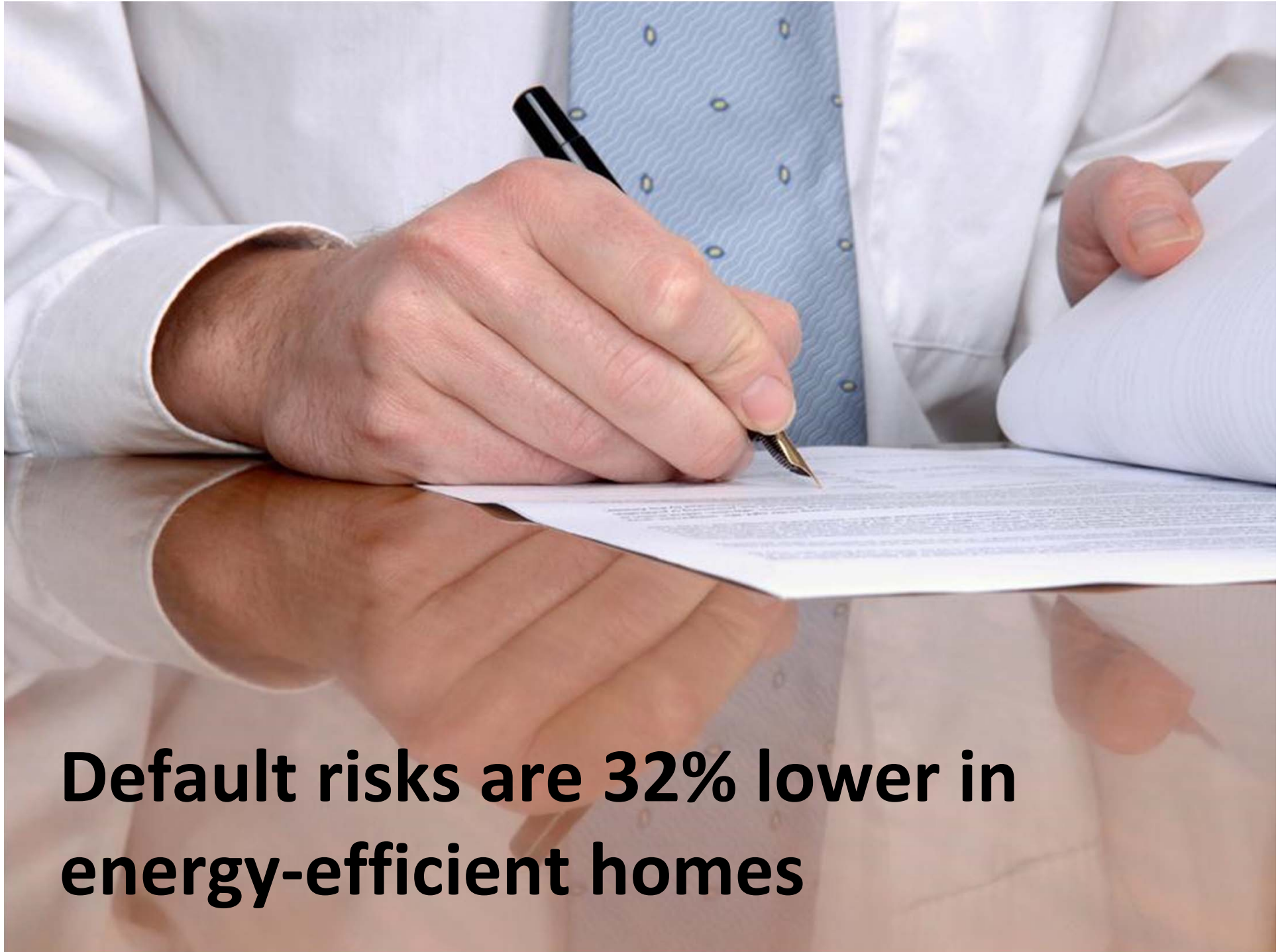
1975 1980 1985 1990 1995 2000 2005 2010

the average size of new single-family homes has increased 13% to **2,693 square feet**, while the median size has increased 17% to **2,472 square feet**.
Eyeonhousing.org Dec 30, 2015



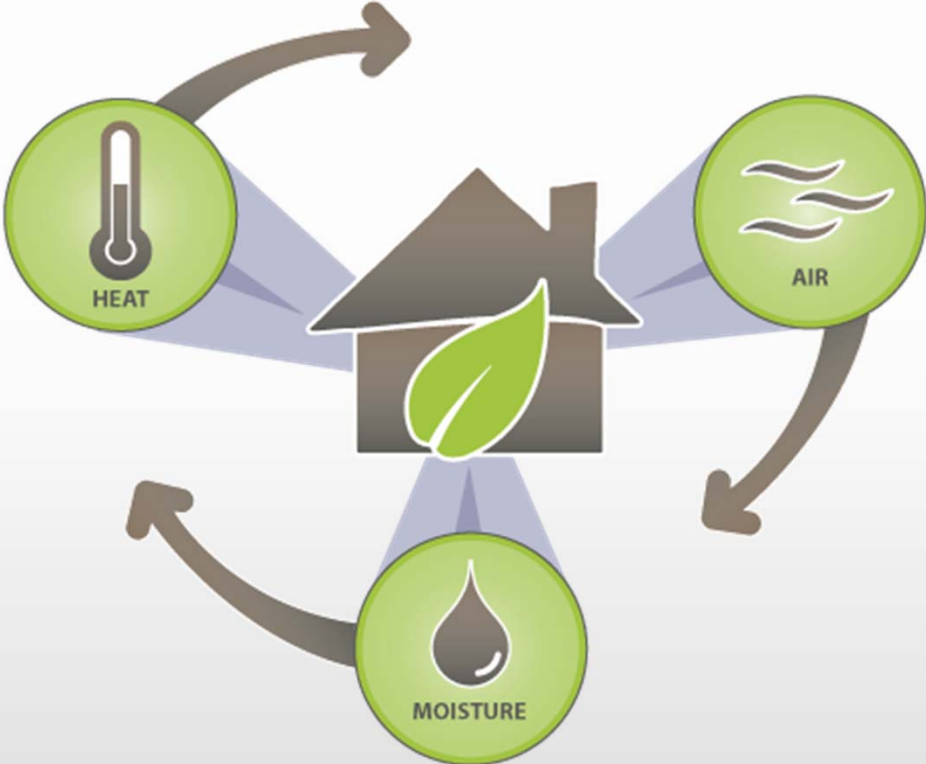
SHELTON GROUP



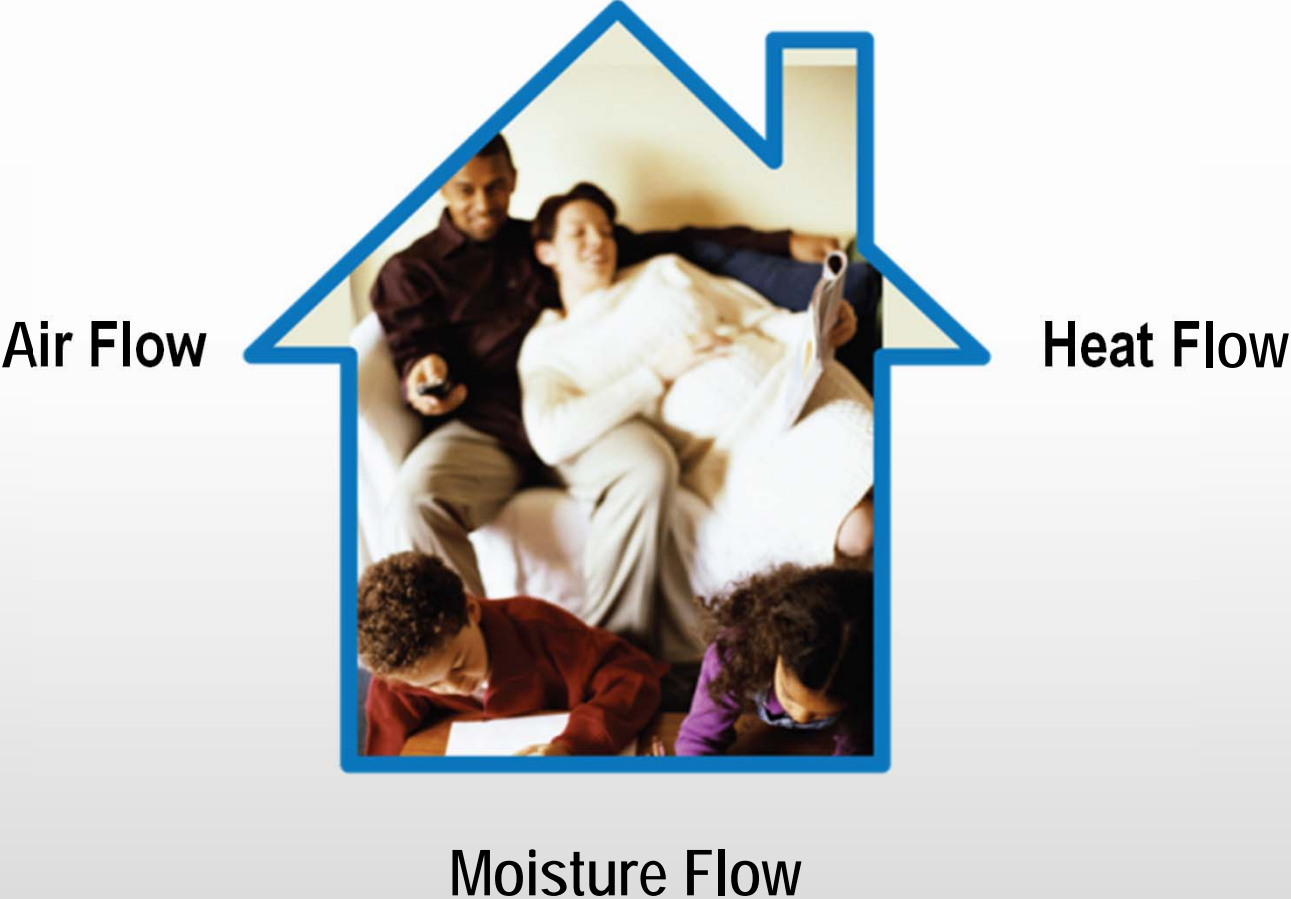


**Default risks are 32% lower in
energy-efficient homes**

BUILDING INFLUENCES



AN INTERACTIVE SYSTEM

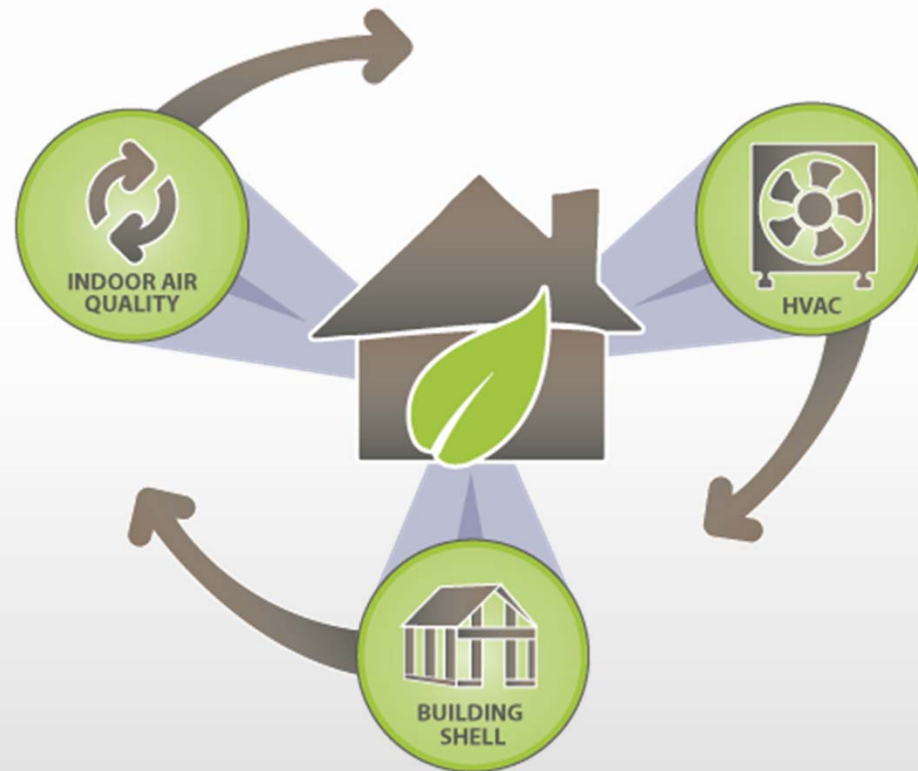


House as a System: Outcome

- Lower operating costs
- Comfort for occupants
- Durable structures
- Fresh air to breathe
- Less impact on the environment



BUILDING SYSTEMS





PROCESS

FRAMING

HVAC

ELECTRICAL

PLUMBING

SEALING

CODE
CHANGES



PERFORMANCE



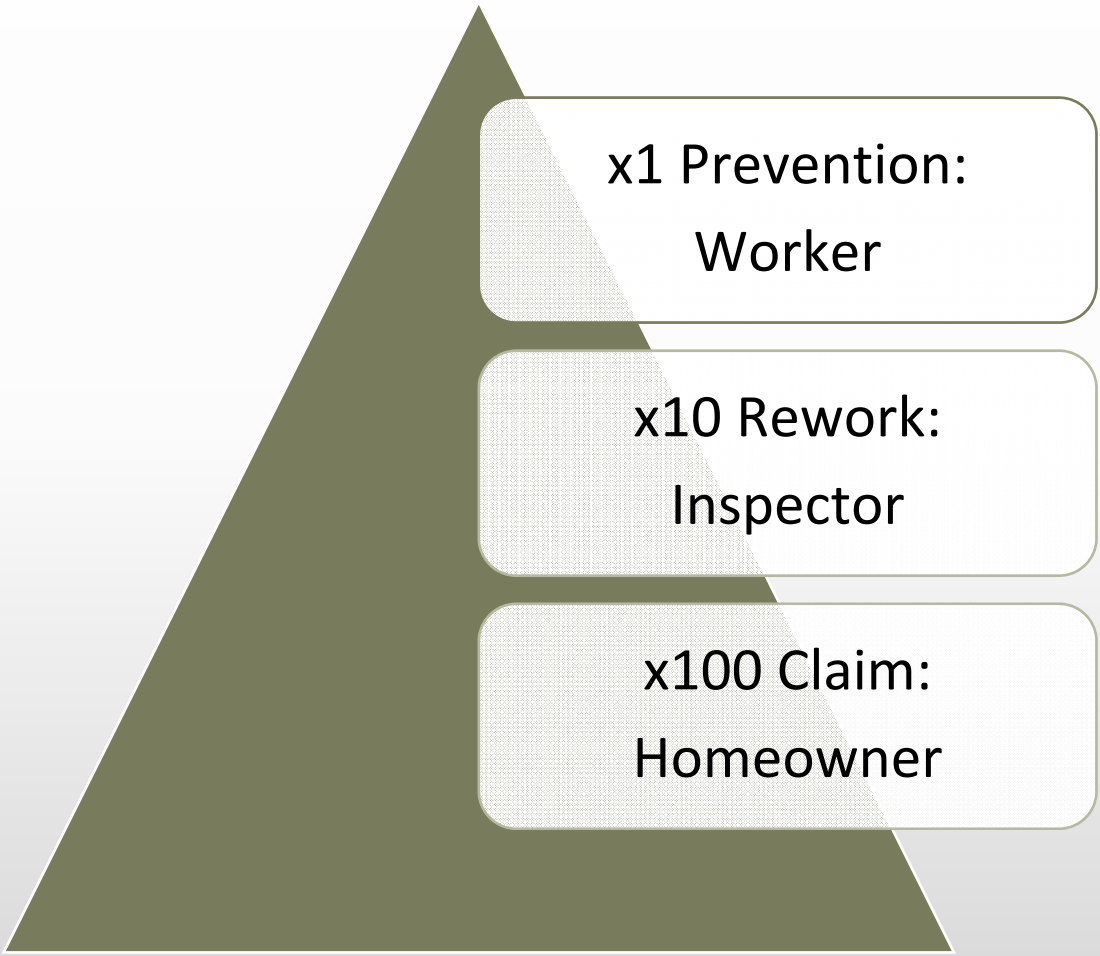
PRODUCT

INSULATION

Common Language Building Science Terms

- Air barrier
- Air sealant
- Radiant surfaces
- Insulation Grading
- Mechanical Ventilation:
Point Source vs Whole house
- CFM
- ACCA: Manual J, Manual D, Manual S & Manual T

1 – 10 – 100 RULE



x1 Prevention:
Worker

x10 Rework:
Inspector

x100 Claim:
Homeowner

ENERGY EFFICIENCY BENEFITS

- Customers: Realistic payback period
- Lenders: Lower default risk
- Appraisal Industry: Great value in energy efficiency
- Customers: Lot's of non-energy benefits

RESOURCES

- <http://publicecodes.cyberregs.com/icod/index.htm>
- <https://basc.pnnl.gov/>
- <http://www.ba-pirc.org>
- www.buildingscience.com



What
resources
would you
recommend?

Questions?

