

HUD Webcast
September 17, 2007

ENERGY STAR Qualified Homes
Top 5 List:

Myth vs. Reality

Sam Rashkin, R.A.
National Director, ENERGY STAR for Homes

Myth **#5**:

Build Tight, Ventilate Right

Reality:

**Build Tight,
Maximize Source Control,
Ventilate as Needed**

Myth #4:

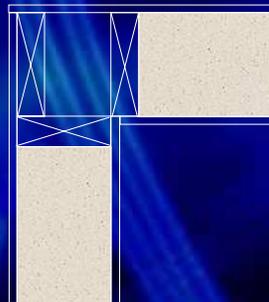
R-Value

Reality:

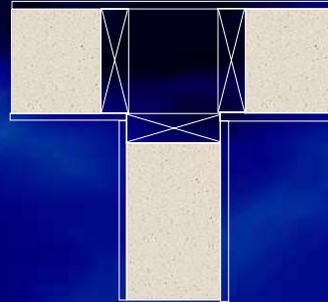
Effective R-Value

**Un-insulated corners/intersections
add up!**

uninsulated corner



uninsulated wall intersection

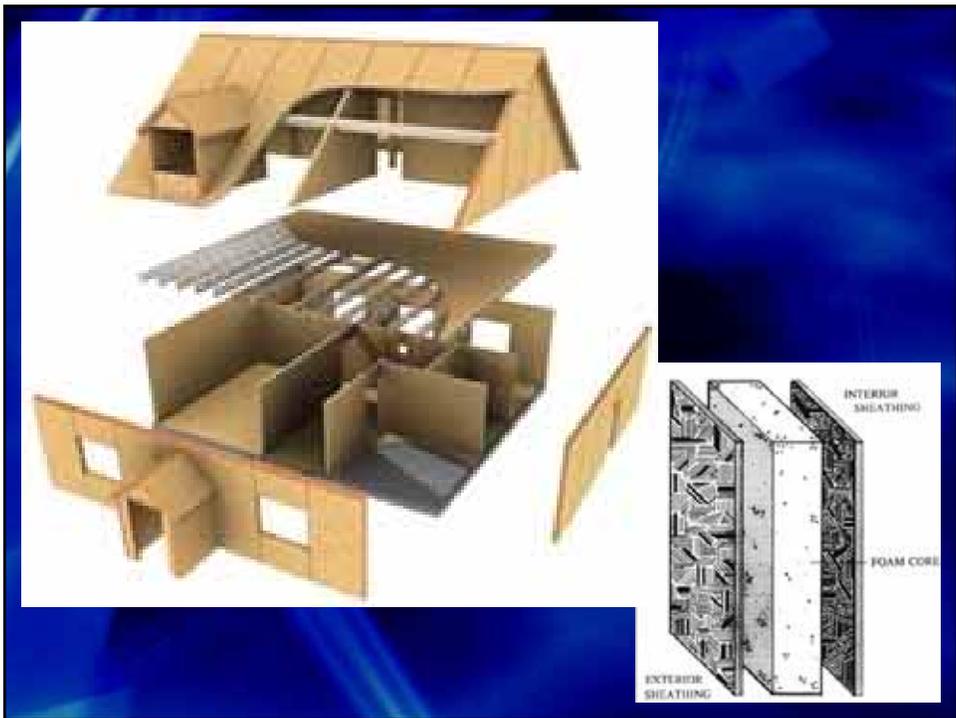


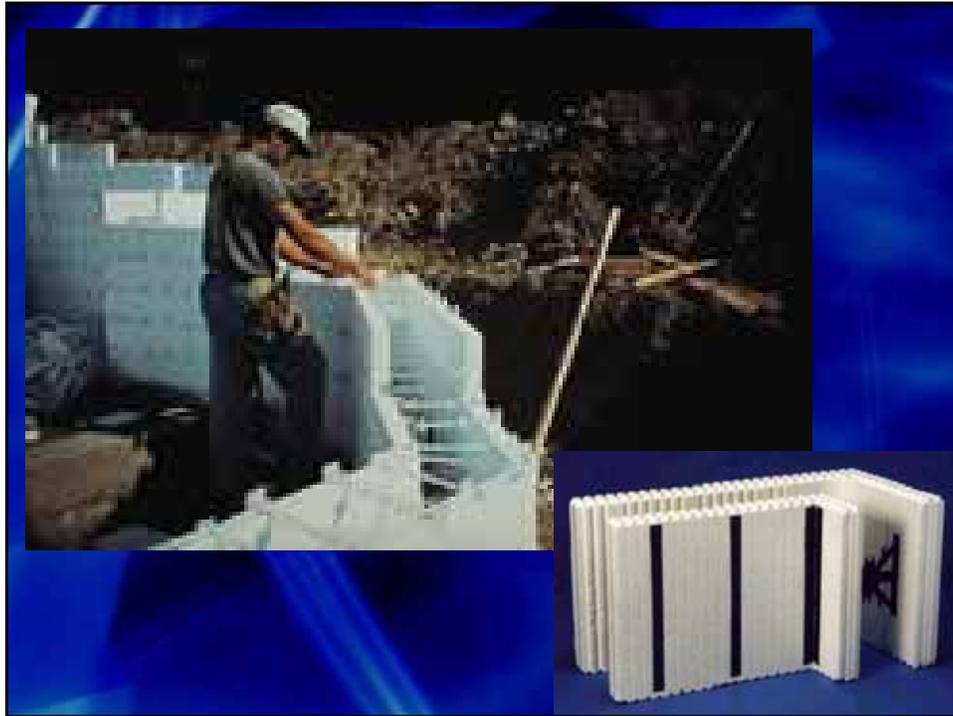


Example:
~48 wall corners and intersections
= 12 - 80 feet uninsulated wall!



Courtesy of
Building Science Corp.





Myth #3:

% > Code Defines Efficiency

Reality:

**% > Code Misses
Low Hanging Fruit**

**Low Hanging Fruit
Missed by Code-Based Programs***

- **Moisture Control**
- **Effective R-Value**
- **Solar Orientation**
- **Efficient Water Distribution**
- **Best Practice HVAC Systems**
- **Advanced Lighting**
- **Size**

* some exceptions

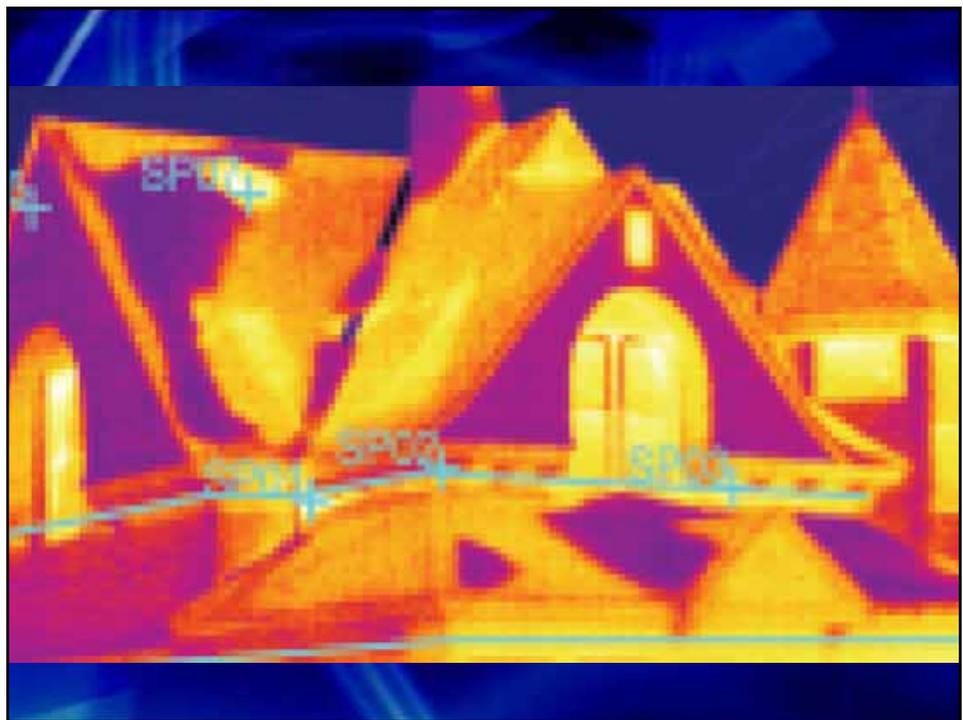
Myth #2:

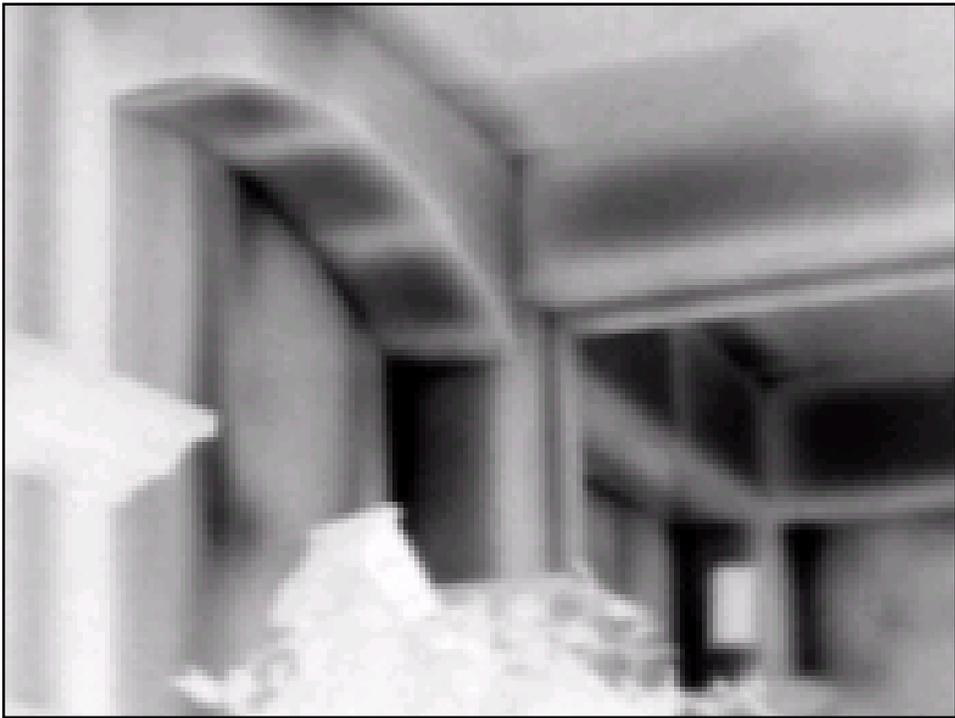
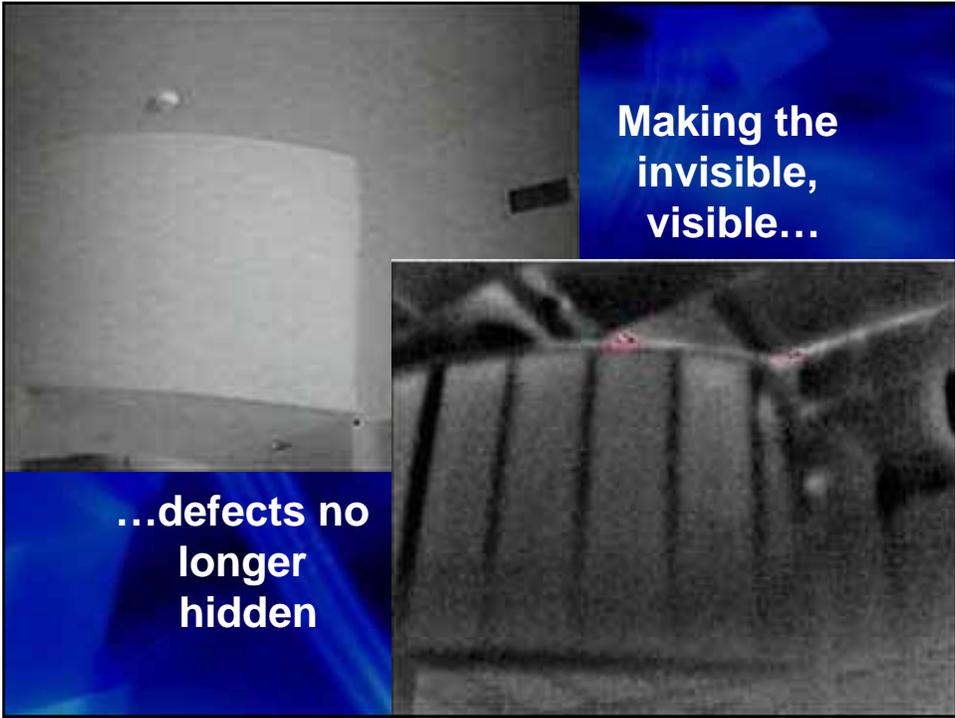
**Defects Out Of Sight,
Out of Mind**

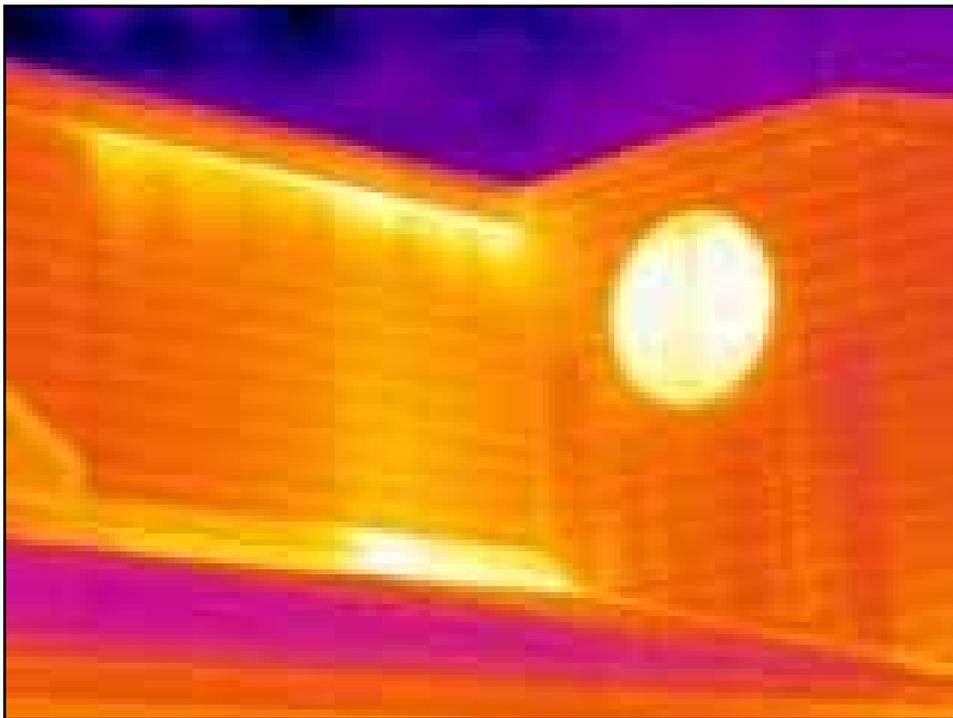
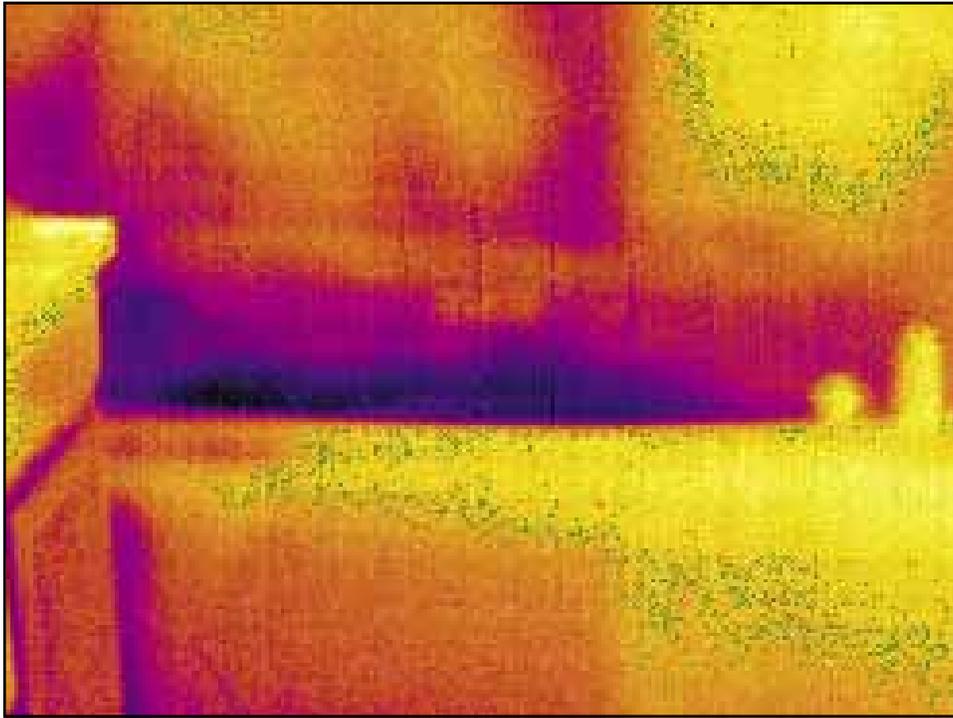
Reality:

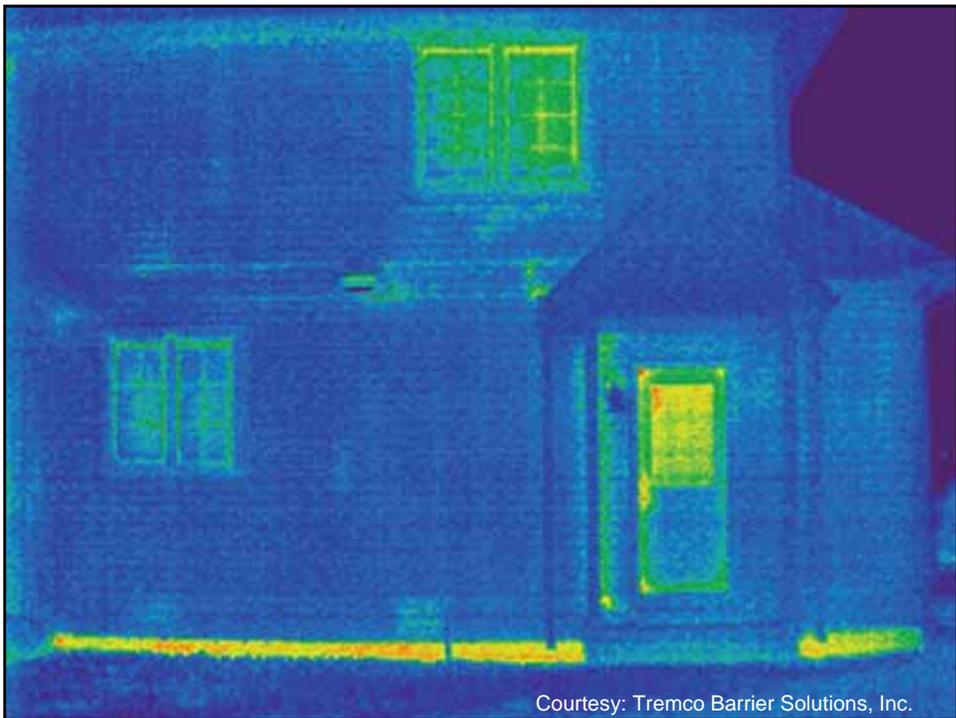
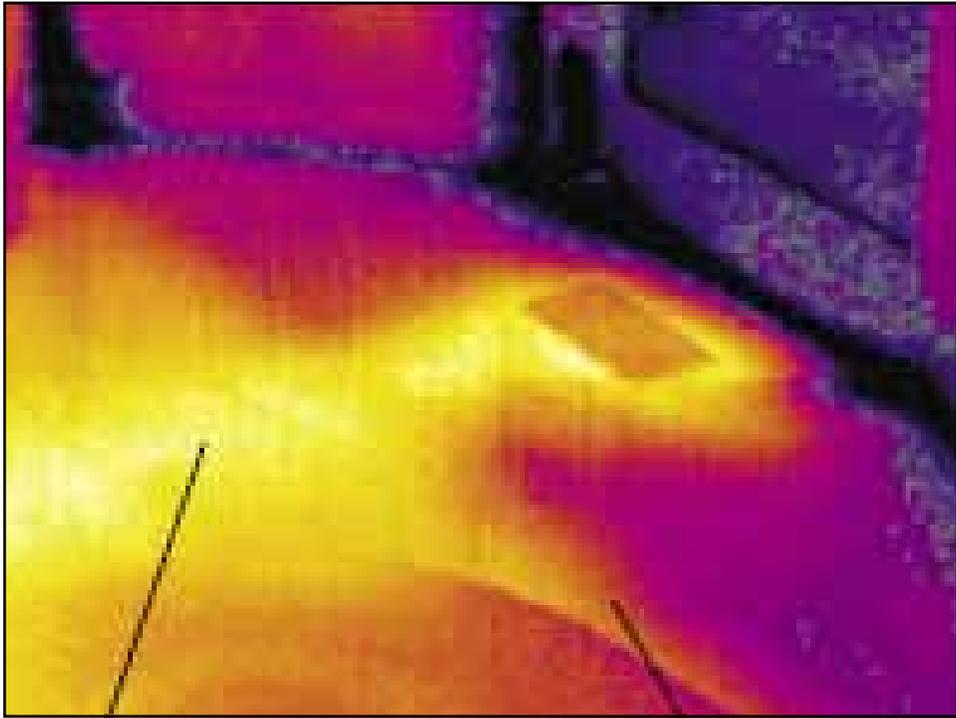
Defects No Longer Invisible











Myth #1:

Green

Reality:

Wild, Wild, West

Point Categories = Complexity:

- **Innovation and Design Process**
- **Location and Linkages**
- **Sustainable Sites**
- **Water Efficiency**
- **Energy and Atmosphere**
- **Materials and Resources**
- **Indoor Environmental Quality**
- **Awareness and Education**

4 Shades of Green

- **Certified**
- **Silver**
- **Gold**
- **Platinum**

Other Attributes Competing w/Green

- **Schools**
- **Low Maintenance**
- **Security**
- **Energy Efficiency**
- **Indoor Air Quality**
- **Allergy Resistance**
- **Disaster Resistance**
- ...and the list goes on

What if every
valued attribute
was offered in
4 shades?

Does Green Still Pass the 'Laugh Test'?

- **Water Efficiency in Dry Climates**
 - Limited turf
 - Drought tolerant plants
 - High efficiency irrigation system
 - High efficiency fixtures
- **Bulk Moisture Control**
 - Water managed wall, roof, foundation system
- **High VOC Materials**
 - Low formaldehyde materials (boards, carpets/pads)
- **Maximum Job-Site Waste**

Myth Busting Strategy:



ENERGY STAR For Homes Old Spec



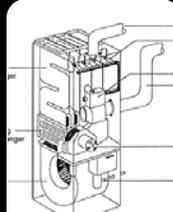
Tight Ducts



Air Sealing



Advanced Windows



Efficient Equipment

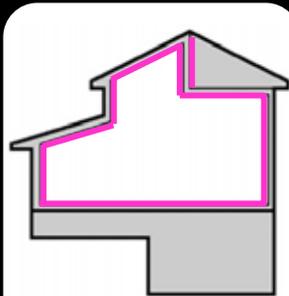


Field Verified

ENERGY STAR For Homes New Spec



Insulation Installation



Thermal Bypass



Right Sizing



ENERGY STAR For Homes Future Spec



Defining Green and Making it Simple with ENERGY STAR



Energy Efficiency

- Envelope
- Distribution
- Equipment
- Lighting
- Appliances

Indoor Environment

- Bulk Moisture
- Radon
- Pest Control
- HVAC
- Combust. Safety
- Materials

Resource Efficiency

- Water
- Materials
- Waste

ENERGY STAR

ENERGY STAR IAP

**EPA Water Sense
+ 7 Mandatory Items**

For More Information:

On the Web at:

<http://www.energystar.gov/homes>

Sam Rashkin

(202) 343-9786

rashkin.sam@epa.gov