

Why HERS and not BOPs, or can they coexist ?

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HERS rating is a benchmark for Energy Star Homes



- The Energy Star Homes Program has, from inception, used a HERS rating of 86 points or better to identify a qualified home.
- The HERS rating of 86 points is the cornerstone of the Energy Star Homes Program.

Expectations

- The total certification goal for Energy Star Homes was initially set at 15,000 new homes for 1999.
- It subsequently became clear that this was unachievable and the goal was reduced to 12,000.
- The following year (2000) the goal was doubled to 24,000 nationally.

The down side



- Without significant builder acceptance, these escalating certification goals would not be sustained.
- If goals are not met, political support for the program could be jeopardized.

Builders resist Energy Star



- Builders generally have been selling houses faster than they can build them, so why should they do anything different - change is a hassle.
- Production builders build cookie cutters and do not want to make variations to individual houses in order to achieve ratings.
- Builders are in a very competitive market and do not want to pay for additional plan reviews and inspections, the cost of which ultimately get passed through to the consumer.
- The same applies to the specification changes that may be necessary for the homes to qualify.

Why were BOPs developed?



- Easier to communicate Energy Star requirements to prospective builders.
- Alternative verification method in states where HERS ratings are not available.

What is a BOP?

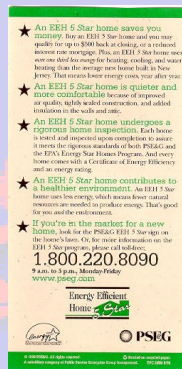
- The BOP is a set of specifications that includes a designed HVAC system and specific requirements for air sealing, insulation and glazing.
- Adoption and implementation of a BOP will produce a house equivalent to a rating of 86 points but does not constitute a home energy rating score.

Utility Company View



Suppose a house is certified but then it does not perform as advertised!

- The Utility Company may be held liable.
- Negative publicity for the Utility Company and Builder would result.
- The credibility of the program would be compromised.



It only takes one bad apple



- Realtors afraid of the liability would not promote the program.
- Banks and mortgage companies who stretched the terms of the mortgage on the assumption that the buyer would save money would also suffer.

HERS Perspective



- BOP performance requirements are difficult to meet consistently in the field.
- 100% testing and extensive training of contractors cannot guarantee compliance with envelope and duct leakage standards.
- BOPs package does not allow flexibility.
- HERS rating approach gives that flexibility.

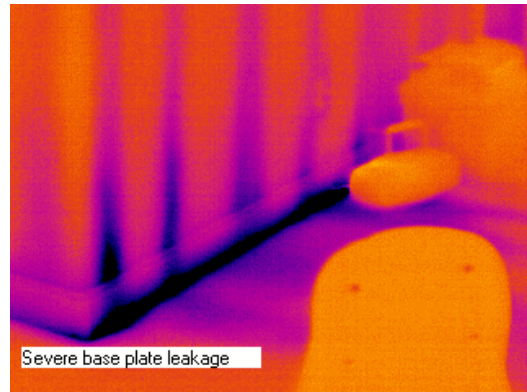
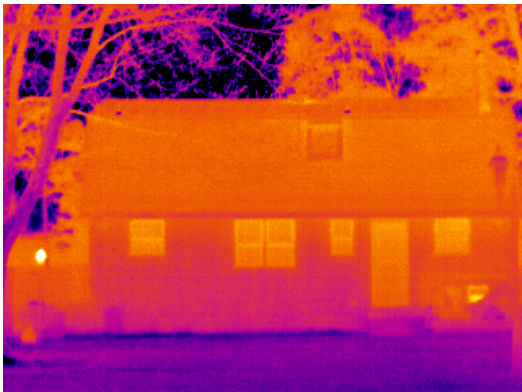
Flawed Assumptions

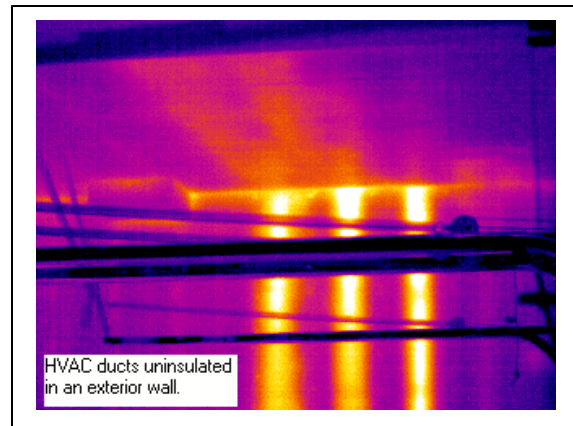
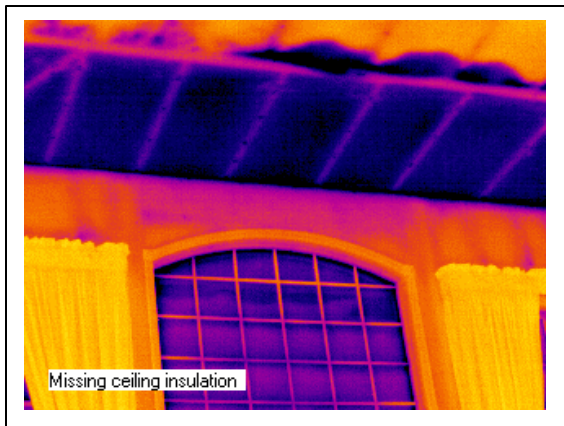


- The builder is the client who we are selling on the idea of Energy Star Homes, not the home buyer.
- Home builders have good quality control and build their houses strictly to specification.

2000 INSPECTIONS

<u>Inspection Type</u>	<u>Total</u>	<u>Percent</u>
• Initial Inspection	1388	
• Initial Re-inspection	275	20%
• Final Inspection	1403	
• Final Re-inspection	106	8%
• Certified Homes	1472	





Adequate Funding



- The availability of funding makes the difference between a successful HERS based program and a BOPs based program.
- Most builder objections can be overcome if the price is right!

HERS ratings and BOPs unite



Full HERS ratings of every production built home is actually a customized BOP with an as-built rating.