

to Know About BOPs, But Were Afraid to Ask

Sam Rashkin
National Director, ENERGY STAR® for Homes



First, What is ENERGY STAR?

A marketing program that makes it easy for consumers to identify and purchase upper tier energy efficient products



How Does ENERGY STAR Work?

Partners meeting ENERGY STAR specifications can use the logo to label and promote their products, homes or buildings.



What is the Spec for Homes?

- 30% more efficient than Model Energy Code (MEC) (HERS 86)
- Third-Party Verified



Builder Partner Requirements

- Build at least one ENERGY STAR labeled home every 12 months
- Use ENERGY STAR Logo correctly



How is Homes Different?

- There is no BAU technical verification for builder partners.
- Have to work to get product on the shelf.



Why BOPs,

or What We Know About Builders

Builders:

- Build to Spec
- Like Quick Answers
- Hard to Get Their Time
- Will Game Systems

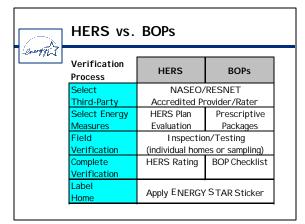
Why BOPs:

- Flexible Spec
- Understandable Marketing Tool
- I mmediate Negotiations
- Know What You're Getting
- Observed Patterns



Technical Verification Options

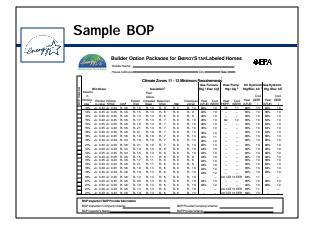
- HERS Ratings
- BOPs
- · Equivalent Programs





How are BOPs Configured?

- 19 MEC/I ECC Climate Zones
- Three Bundles Sets of Pkgs.
 - minimum efficiency equipment
 - high efficiency equipment
 - highest efficiency equipment
- Variations
 - window percent of floor area (12-21%)
 - window efficiency
 - insulation levels





How are BOPs Developed

- Worst Case Scenario
- cities with most severe climate
- 62.5% glazing on worst orientation
- largest footprint (2,500 sq. ft./floor)
- Model HERS 86 Upgrades
 - DOE-2.1
- Complete for Variations
 - window area/efficiency
 - insulation levels
 - equipment efficiency



Status of BOP Verification

- Initial BOPs in Place
 - 5 Climate Zones
 - Generic and Technology-Specific
 - Limited Use
- New 19 CZ BOPs Vetted
- Finalize New BOPs/ Phase Out Old BOPs (spring)
- BOP Web Tool (summer)



How to Do BOPs

- Secure NASEO/RESNET Accreditation
- Oversee BOP Inspectors
- Participate in Sticker Labeling/Reporting Process



How to Get More BOP Info

- ENERGY STAR for Homes Technical Coordinator: Glenn Chinery 202-564-9784 chinery.glenn@epa.gov
- ENERGY STAR Web Site: energystar.gov/homes