

How to Make Money with LEED for Homes

Presenters
Kelly Parker
Jay Hall
Donney Dorton



What is LEED?

Leadership in Energy & Environmental Design





A Word about USGBC



- HOMES NEIGHBORHOOD DEVELOPMENT (IN PILOT) COMMERCIAL INTERIORS **CORE AND SHELL** NEW CONSTRUCTION EXISTING BUILDINGS SCHOOLS, RETAIL, HEALTHCARE DESIGN CONSTRUCTION OPERATIONS
- Non Profit, not a government agency
- Owns the LEED brand
 - Developed the LEED for Homes Green Rating System
 - (Home Depot grant)
 - LEED for Homes rolled out of Pilot in November, 2007

A Word about USGBC

LEED For Homes





Provider Network

- LH Certification
- Rater Training
- Quality Assurance

Ferrier Custom Homes
Heather's Home
Weatherford, Texas
SIP
1st LEED Platinum in Texas

LH Program Provider





- 13 Original Providers, 20 new Providers in 2008
- Providers Certify the LEED Homes
- LH Green Raters contract with a Provider
 - Local Provider not a necessity

LEED for Homes Program





First LEED- H Certified Home in the Nation

Ideal Homes, production home Oklahoma City, Oklahoma

- 1. Voluntary Program
- 2. Simple 2-page Checklist
- 3. Planning Team
- 4. Durability Planning
- 4. Third Party Inspections
- 5. Energy Star Certification

LEED for Homes



LEED for Homes is a floating point rating system with 4 Certification Levels.

This scale slides per a calculation which considers the square footage of the house per bedroom ratio. For a 4 bedroom 2,600sf Home the scale is:



Platinum: 90 – 129

Gold: 75 – 89

• Silver: 60 – 74

Certified: 45 – 59

8 Categories of Points



- 1. Innovation and Design
- 2. Location and Linkages
- 3. Sustainable Sites
- 4. Water Efficiency

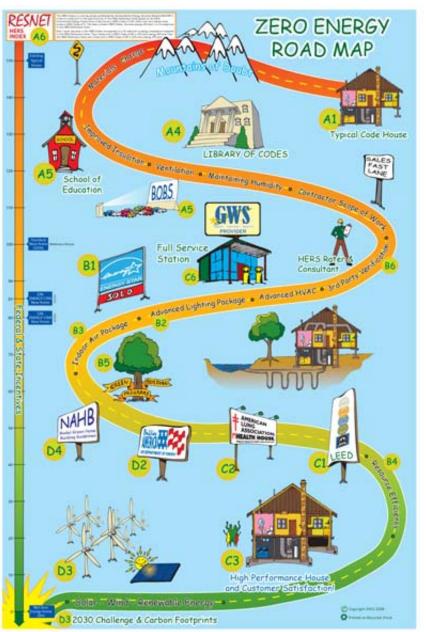
- 5. Energy and Atmosphere
- 6. Materials and Resources
- 7. Indoor Environmental Quality
- 8. Awareness and Education





Where does LEED for Homes

fit in the market?

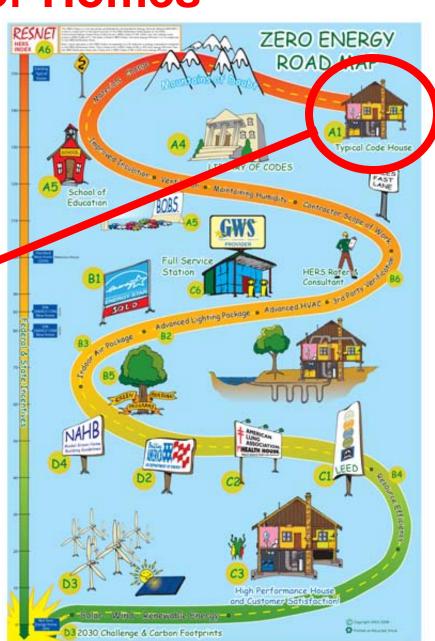




Where does LEED for Homes

fit in the market?

TYPICAL BUILDER





Where does **LEED for Homes**

fit in the market?

RATER

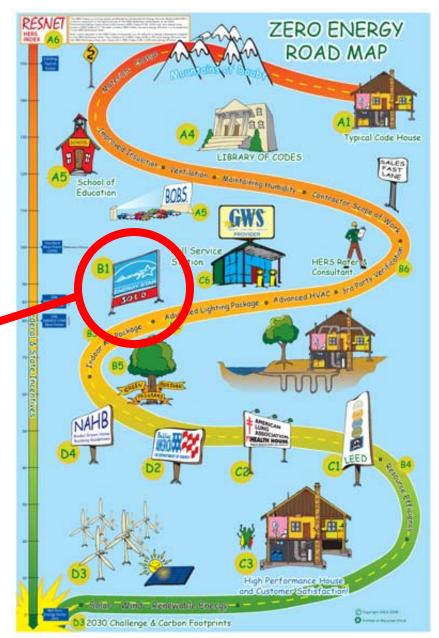


 $\left\{ \left\| \right\| \right\}$

Where does LEED for Homes

fit in the market?



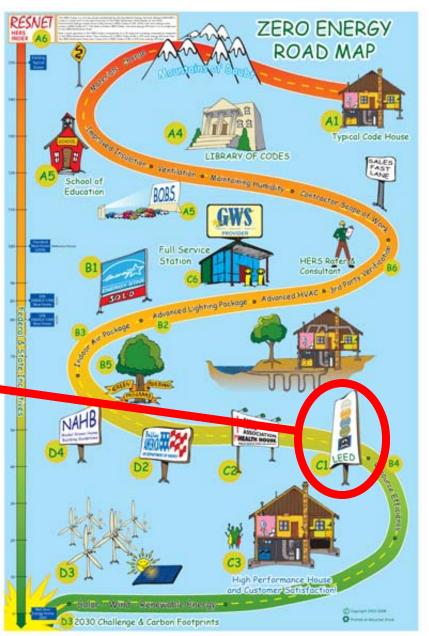


 $\left\{ \left\| \right\| \right\}$

Where does **LEED for Homes**

fit in the market?







LEED for Homes Current Statistics

• 12,940 Registered Homes

490 Certified Homes



720 Registered Buildings



How to develop the LEED for Homes market?

- Join the local USGBC Chapter
- http://www.usgbc.org/Chapters/



USGBC Chapters



How to develop the LEED for Homes market?

Find your local LEED for Homes Advocate



Offer to help your advocate.

 Offer to speak about Energy Star, a major component of LEED for Homes

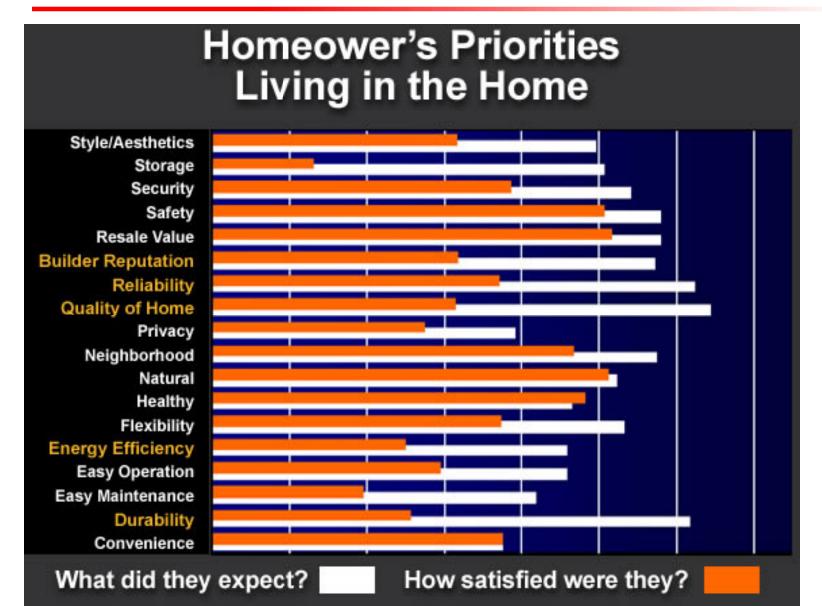


How to develop the LEED for Homes market?

- LEED for Homes decision makers
 - Architects
 - Developers
 - Government projects
 - Habitat for Humanity
 - Custom Builder
 - Production Builder
- Become knowledgeable of the benefits of LEED for Homes

Home Buyer's Expectations





LH Certification Cost



LEED for Homes Fees

USGBC

Builder Registration \$250 - \$350
 Certification Fee \$250 - \$450 Per Home

Provider

LEED for Homes Ratings (Ask Your Local Provider)
 Preliminary Design Review
 Inspections and Certification
 With Sampling (high volume)
 \$ 300 - 600
 \$ 600 - 1,200
 \$ 250 - 500

Other Support

Design Assistance \$ VariableTraining \$ Variable



LH Home Owner Cost



How Much Does a LEED Home Cost?

| Comparison Criteria | Code Home | LEED Home | Differ | ence |
|--------------------------|------------|--------------|------------|-----------|
| | | | (\$.Month) | (\$/Day) |
| Sticker Price | \$ 300,000 | \$ 308,500 | | |
| Mortgage Payment | \$1,890 | \$ 1,945 | + \$ 55 | + \$ 1.80 |
| Energy Bill | \$150 | 105 | - \$ 45 | -\$1.50 |
| Water Bill | \$ 30 | \$ 20 | - \$ 10 | - \$ 0.30 |
| Net Cost of Ownership | \$ 2,070 | \$ 2,070 | - \$ 0 | - \$ 0 |
| LEED. for HOMES | | | | |

LH Builder Cost





Possible increase of 0.5% to 3%

Benefits of a Certified LEED Home



- Higher quality
- 30-50% more energy efficient
- More comfortable living environment
- 30-50% more water efficient
- More durable home design and materials
- 100 cfm of fresh air every hour
- 50% better air filtration
- 30-50% of building materials are environmentally preferable
- Non-toxic pest management
- Ozone safe refrigerant
- 50% less waste to landfill (during construction)
- 30% less storm water run-off (less pollution into watersheds)
- Higher resale



LEED for Homes



BENEFITS OF GREEN



Clean

Healthy

Durable

Marketable

Comfortable



Lower Environmental Impact

Visual Verifications vs. Inspections

So What Inspections Can a HERS Rater Do for a LEED for Homes Provider?



Visual Verifications vs. Inspections

- Visual Verification
 - The Builder is solely responsible for
 - Choosing LEED for Homes Features
 - Proper Installation
 - USGBC representatives only verify completion
 - Not a warranty
 - Not Appropriateness
 - Not Quality of installation
- Third Party Inspection
 - Energy Star
 - Proper Installation



Visual Verifications

- LEED for Homes verifications
 - Visually Verify
 - Formal documentation does not need to be submitted to or held by the LH Green Rater or LH Provider
 - Photo documentation is acceptable upon the discretion of the LH Green Rater or LH Provider

 Calculations, simply that they were done, need not recalculate for errors

| - | i | Lot 8, Blk 4 120' wide | - 1 | 1 |
|----------------------------|-----|---|-----|---------------------------------|
| Transmission line Easement | 30. | Patio 400sf 1,700 sf w/ Garage Drive 450sf Walk 180sf | 5* | 150' deep Lot Limit Esaement 5' |

- Visually Verify
 - Things that can be verified from the office
 - Office Verifications
 - Housing Density
 - » Calculated from plot plans
 - Things that must be verified on site
 - Field Verifications
 - Erosion Controls
 - Rain water harvesting installed



- Innovation and Design
 - Durability Checklist, 3rd Party, 3 points
- Location and Linkages
 - Edge development, Infill, Previously developed, access to open spaces, community resources

| ATTACHMENTS | | | | |
|---|---|--|--|---|
| | | | | |
| | | | | |
| | | | | |
| Durability Inspection C | Checklist | | | |
| Builder N | lame: 0 | | | |
| Address of LEED Home (Street, City, S | tate): 0 | | | |
| Durability Strategies by Issue Type For each of the high and moderate risk areas indicated in the Enclosure Evaluation, list the durability of | entenies used in the envi | anne ar if anne ar | a used provide a | helef etodement |
| explaining why not. Remove "example strategies"; add lines as needed. | nategies used in the ener | osare or, ir none a | e used, provide a | Direr statement |
| | | | | |
| Exterior Water | Location in Drawings, Spees, andler Seases | Pro-work Acknowledgement (Ruildectrade) | Completion Acknowledgement (Buildertrade) | Construction Verified (Rater) |
| Evample Strategy: Site graded to drain rainwater away from building | | | | |
| Exterior Water Example Strategy: Site graded to drain rainwater away from building Strategies/Exptensition: | Drawings, Spees, | Acknowledgement (Builderftrade) | Acknowledgement (Buildertrade) | |
| Example Strategy: Site graded to drain rainwater away from building Strategies/Explanation: | Drawings, Spees, and/or Seeges | Archinosfedgersent (Buildertrade) | Acknowledgement (Buildertrade) | Verified (Rater) |
| Example Strategy: Site graded to drain rainwater away from building Strategie (Explanation: Interior Water (Wet Rooms) | Drowings, Spees, and/or Scopes | Acknowledgement (Buildertrade) | Acknowledgement (Builderftrade) | Varified (Roter) |
| Example Strategy: Site graded to drain rainweter away from building Strategles(Explanation: Interior Water (Wet Rooms) Example Strategy: Cibites waster - use stainless steel hoses & position washer on drainage basin | Drawings, Spees, an abor Seeges Lecution in Drawings, Spees, | Acknowledgement (Buildectrade) Pre-work Acknowledgement | Acknowledgement (Buildertrade) Completion Acknowledgement | Verified (Rater) |
| Example Strategy: Site graded to drain rainwater away from building | Drawings, Spees, an abor Seeges Lecution in Drawings, Spees, | Arckmonfedgement (Builderftrade) Pre-work Arckmonfedgement (Builderftrade) | Acknowledgement (Builderkrade) Completion Acknowledgement (Builderkrade) | Verified (Roter) Construction Verified (Roter) |

Sustainable Sites

 Erosion control measures in place, no-disturbance zones marked, terraces, retaining walls, Pest controls

Water Efficiency

Rain water harvesting, gray-water reuse, low flow fixtures and fittings



- Energy and Atmosphere
 - Hot water distribution system, Pipe insulation, renewable energy system
- Materials and Resources

Advanced framing techniques used, panelized or

modular components



- Indoor Environmental Quality
 - Energy Star Indoor Air Package
 - Enhanced combustion venting
 - Moisture equipment installed
 - Thermostat controls
 - Walk off mats
 - vacuum systems
 - No attached garage



Third Party Inspections

- Innovation and Design
 - Durability Checklist, 3rd Party, 3 points
- Water Efficiency
 - Irrigation system inspection
- Energy and Atmosphere
 - Energy Star



Third Party Inspections

- Indoor Environmental Quality
 - Combustion Venting
 - Outdoor air ventilation
 - Room vent flows
 - Kitchen exhaust flows
 - Bathroom exhaust flows
 - Radon resistant construction
 - No HVAC in garage
 - Garage exhaust



How to Sell LEED for Homes

Join a Provider

- Contact a Provider and become a LH Green Rater for them.
- Contact USGBC LH Advocate and Chapter
- Sell LH directly to:
 - Architects
 - Builders
 - Affordable Housing
 - Developers

How to Sell LEED for Homes

Sell Verification & Inspection Services

- Contact a Provider and develop a pricing for verification and inspections for LH Category Points.
- Sell those verification and inspections services to a Green Rater or Provider

(Become a Rater's Rater)



How to Make Money with LEED for Homes

THANK YOU

Presenters
Kelly Parker
Jay Hall
Donney Dorton

