Agenda

• Who is USGBC?
• What is LEED?
• How does LEED for Homes work?
U.S. Green Building Council

- Founded in 1993
- Non-profit: 501(c) 3
- Mission-based organization
- Committed to expanding sustainable building practices
- Headquarters in Washington D.C. (residential: San Diego, CA)
4 Levels of LEED Certification
Varying Performance Levels
87% of home buyers are at least moderately knowledgeable about green homes
(This has jumped 16% in 1 year)
with 59% very/extremely knowledgeable

According to Green Home Owners, the top 3 benefits of a Green Home are:

1. Healthier place to live
2. Lower operating costs (avg. 18% savings on energy and water)
3. Part of a more sustainable lifestyle

Market Trend

Market tripled in past three years and is now estimated to be between $12 and $20B

Credit Categories

- Sustainable Sites (SS)
- Locations & Linkages (LL)
- Indoor Environmental Quality (IEQ)
- Water Efficiency (WE)
- Materials & Resources (MR)
- Energy & Atmosphere (EA)
- Awareness & Education (AE)
- Innovation & Design Process (ID)
LEED for Homes Checklist

LEED for Homes Project Checklist

Project Description

Builder Name:

Project Team Leader:

Home Address (Street/City/State):

Adjusted Certification Thresholds

Certified: 45.0
Gold: 75.0
Silver: 60.0
Platinum: 90.0

Floor Area: 0

Project Point Total

Prelim: 0 + 0 maybe pts
Final: 0

Certification Level

Prelim: Not Certified
Final: Not Certified

Date Most Recently Updated: Updated by:

Final Credit Category Point Totals

ID: 0   SS: 0   EA: 0   EQ: 0
LL: 0   WE: 0   MR: 0   AE: 0

Min. Point Thresholds Not Met for Prelim. OR Final Rating

Innovation & Design Process (ID) (Minimum 0 ID Points Required)

Max: 11 Y:0 M:0 Notes Final

1. Integrated Project Planning

1.1 Preliminary Rating

Target performance tier: __________

Prereq:

1.2 Integrated Project Team (meet all of the following)

a) Individuals or organizations with necessary capabilities
b) All team members involved in various project phases

1.3 Professional Credentialed with Respect to LEED for Homes

1.4 Design Charrette

1.5 Building Orientation for Solar Design (meet all of the following)

a) Glazing area on north/south walls 50% greater than on east/west walls
b) At least 450 sq. ft. of south-facing roof area, oriented for solar applications
LEED for Homes Delivery Team

- Green Rater
- Provider
- USGBC
- LEED AP Homes (optional)
- Design & Construction Team
Providers: 36 Nationwide Provider Organizations

Find a list of providers here: www.usgbc.org/homes
VALUE OF 3RD PARTY CERTIFICATION

INDEPENDENT VERIFICATION OF ACHIEVEMENTS
QUALITY ASSURANCE
AUDITABLE RESULTS
Home Energy Rating System (HERS)

Performance Testing:

- Heating and cooling
- Water heating
- Lighting
- Appliances
- Building envelope

HERS Index:

- Existing “Typical” Home
- EPA ENERGY STAR New Home
- Average LEED Certified Home
- 2030 Challenge New Home (2010)=52
- 2030 Challenge New Home (2020)=26
- 2030 Challenge New Home (2025)=13
- Net Zero Energy Home (ZEH)=0

RESNET
Residential Energy Services Network
# LEED for Homes Performance Testing

<table>
<thead>
<tr>
<th>List of Special Measures</th>
<th>Responsibility</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. ENERGY STAR Home</td>
<td>Rater</td>
<td>x</td>
</tr>
<tr>
<td>3. Envelope Air Leakage</td>
<td>Rater</td>
<td>x</td>
</tr>
<tr>
<td>5. Duct Leakage</td>
<td>Rater</td>
<td>x</td>
</tr>
<tr>
<td>11. Refrigerant Charge</td>
<td>HVAC</td>
<td>x</td>
</tr>
<tr>
<td>Indoor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3. Outdoor Air Flow Test</td>
<td>Rater</td>
<td>x</td>
</tr>
<tr>
<td>5.3. Exhaust Air Flow Test</td>
<td>Rater</td>
<td>x</td>
</tr>
<tr>
<td>6.3. Supply Air Flow Test</td>
<td>Rater</td>
<td>x</td>
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39% of Certified LEED Homes are Affordable Homes

*As of March 2009
### Solar Decathlon 2009

#### Registration and Certification Costs

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Registration</th>
<th>Certification</th>
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</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>USGBC Member</td>
<td>$150</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$225</td>
<td>$300</td>
</tr>
<tr>
<td>Multifamily</td>
<td>USGBC Member</td>
<td>$450</td>
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<tr>
<td>Non-Member</td>
<td>$600</td>
<td>$0.045/SF*</td>
</tr>
</tbody>
</table>

* For multifamily buildings greater than 50 units, USGBC member certification fee reduced to $0.03/SF and non-member certification fee reduced to $0.04/SF.
87% of green home owners are likely to recommend a green home to friends and family (with 47% saying highly likely)

Next Steps

Visit www.usgbc.org/homes for:

✓ Rating system
✓ List of Providers
✓ Purchase Reference Guide
✓ Project checklist
✓ Education
✓ Affordable housing info
✓ Other info