2012 NGBS Highlights

Agenda

• 2012 NGBS Schedule
• Transition Proposal for Projects
• Registration Process
• Transition for Verifiers
• 2012 NGBS Highlights
• Marketing Materials
• Questions / Feedback

Home Innovation Research Labs

• Formerly NAHB Research Center
• Originated as a small product testing laboratory
• Improving the quality, durability, affordability, and environmental performance of homes since 1964
• Full-service consulting, product testing, & accredited third-party certification agency
• Dedicated solely to issues related to the home building industry
• Serves as Adopting Entity for ICC-700 National Green Building Standard
Transition to 2012 NGBS

Headlines

- Registration free, but mandatory
- 2012 NGBS projects must use Verifier accredited to 2012 NGBS
- All certification information & resources available at www.nahbrc.com/green
- The online Green Scoring Tool will not be revised for 2012 NGBS
  - No new projects can be entered after 2012 NGBS approved
  - Users can access previously scored projects

Registration Process

Mandatory

- Registration started November 1, 2012
- Objectives
  - Establish what version of the Standard [2008 or 2012] the building will use for compliance
  - Get homes into the system quicker, to market them earlier
  - Streamline the process for verifiers

Verifiers Will Register New Projects

- Verifiers responsible for registering all projects
- Project = SF home, MF building, community of multiple MF buildings, land development, renovations
- Must have client commitment prior to registration
- Will not accept non-verifier to register project
- Registration is free
- Can register multiple SF homes for each builder with simplified process
- Registration assigns a unique Project ID
Registration Form
Collects Following Information

- Project Name
- Version of the Standard [2008 or 2012]
- For multifamily projects only
  - Number of MF buildings
  - Total number of units
- Project Contact Name
  - Name of Company for Project Contact
  - Project Contact email
  - Project Contact phone

Registration Assigns Unique Project ID

- Project ID follows project through certification
- Verifiers use for inspection notifications
- Verifiers use on Verification Reports
- Projects in system prior to November 1st automatically assigned Project ID

Accredited Verifiers Training
Training and Testing Requirements

- All Verifiers must take training on 2012 NGBS and pass test BEFORE they can inspect a project to 2012 NGBS (Deadline is July 1, 2013.)
- RC will not accept inspection notifications or verification reports for 2012 certification from verifiers that have not passed 2012 NGBS test
- New verifiers have to pass test on both 2008 & 2012 NGBS
- Verifiers cannot renew accreditation in 2013 without completing training and passing test
2012 NGBS Highlights

- New Practices
- Higher Energy Baseline
- Revised chapter point thresholds
- New certification opportunities

Chapter 4: Land Development

Headlines

- More practices
- Rewards building certification
- Great alignment with contemporary land use and planning issues
- Certification thresholds raised
- New Mandatory Items:
  - Natural Resources Inventory used to create site plan
  - Plan to protect / maintain natural resources priority areas is created

Threshold Points Required
Land Development Certification

<table>
<thead>
<tr>
<th>Site Design and Development</th>
<th>One Star</th>
<th>Two Stars</th>
<th>Three Stars</th>
<th>Four Stars</th>
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</thead>
<tbody>
<tr>
<td>2008 NGBS</td>
<td>79</td>
<td>104</td>
<td>134</td>
<td>175</td>
</tr>
<tr>
<td>2012 NGBS</td>
<td>95</td>
<td>122</td>
<td>149</td>
<td>176</td>
</tr>
</tbody>
</table>
Chapter 5: Lot Design, Prep

- More points for flat, infill lots
- Rewards land development certification
- Additional stormwater management practices
- Points for community-based practices
- Greater specificity for wildlife habitat practices
- Community gardens

Chapter 6: Resource Efficiency

- Durability practices from IAQ Chapter moved here
- Life Cycle Analysis expanded
- Universal Design Elements added
- Points for certified sustainable products

Chapter 7: Energy Efficiency

- Baseline is 2009 IECC
- Whole house improvement, not just heating, cooling, water heating
- Three compliance paths remain
  - Performance (required for Emerald)
  - Prescriptive
  - Alternative bronze (Energy Star or 2012 IECC / 2012 IRC Chapter 11)
Chapter 7: Energy Efficiency

- New MANDATORY Requirements:
  - HVAC & Duct system sizing
  - Inspection criteria for building thermal envelope
  - Insulation must be inspected – Grade 3 not allowed
  - Option for testing or visual inspection
  - Window air infiltration less than 0.3 cfm/ft²
  - 50% of hardwired lighting must be high efficacy
  - Smart appliances and systems get points
  - Prescriptive path is better tailored to climate zone

Chapter 8: Water Efficiency

- Hardest category to attain higher levels of certification under 2008 version
- Headlines
  - Added more available points
  - Improved alignment of points with water usage
  - More points available for rainwater collection and distribution, particularly multifamily
  - Advanced wastewater treatment system

Chapter 9: Indoor Environmental Quality

- Durability practices moved, except those that impair IAQ
- Sealing per 701 now mandatory
- Whole house ventilation mandatory if ACH50 < 5
- VOC levels set, allows independent, third-party certification (not exclusive GreenGuard)
  - VOC table listed for ease of reference
Chapter 10: Operation and Maintenance Headlines

- Few changes
- Information on stormwater practices as option
- More points for occupant training

### Available Points

<table>
<thead>
<tr>
<th>Green Building Categories</th>
<th>Available Points</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>Lot Design, Prep, &amp; Development</td>
<td>216</td>
<td>382</td>
<td></td>
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<tr>
<td>Resource Efficiency</td>
<td>231</td>
<td>297</td>
<td></td>
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<tr>
<td>Energy Efficiency (Performance Path without PV)</td>
<td>280</td>
<td>163</td>
<td></td>
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<tr>
<td>Water Efficiency</td>
<td>111</td>
<td>257</td>
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<tr>
<td>IEQ</td>
<td>215</td>
<td>212</td>
<td></td>
</tr>
<tr>
<td>Operation, Maintenance, &amp; Owner Education</td>
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</table>

### Point Threshold Levels

<table>
<thead>
<tr>
<th>Green Building Categories</th>
<th>Performance Level Points</th>
<th>BRONZE</th>
<th>SILVER</th>
<th>GOLD</th>
<th>EMERALD</th>
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<tbody>
<tr>
<td>Lot Design, Prep, &amp; Development</td>
<td>39</td>
<td>64</td>
<td>93</td>
<td>119</td>
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<tr>
<td>Resource Efficiency</td>
<td>45</td>
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<td>Energy Efficiency</td>
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<td>Water Efficiency</td>
<td>14</td>
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<tr>
<td>IEQ</td>
<td>18</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
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<tr>
<td>Operation, Maintenance, &amp; Owner Education</td>
<td>8</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
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<tr>
<td>Additional points from any category</td>
<td>50</td>
<td>75</td>
<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Total Points</td>
<td>222</td>
<td>406</td>
<td>558</td>
<td>697</td>
<td>641</td>
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</tbody>
</table>
New Chapter 11: Remodeling

- Renovations, additions, or both
- Separate section as opposed to integrated
  - No renovation or addition notes
- Similar to, but more comprehensive than, 2008 Green Remodel Path
- Applicable mandatory practices
- Energy & water reductions
- Additional points required from lot design, resource efficiency, IEQ, and Operation, but no minimum thresholds in each category

New Chapter 12: Small Projects

- Bathroom
- Kitchen
- Basement
- Small Addition
- Seeking feedback on demand, verification requirements, pricing

Marketing NGBS Certification
Our New Look!

www.homeinnovation.com/marketgreencertified
LOW-VOC PAINT

Volatile organic compounds (VOCs) are considered indoor pollutants and can cause negative impacts to people who are exposed to them. The use of low-VOC emitting paints can help to improve indoor air quality.

SEEKING NGBS CERTIFICATION

Home Innovation
NGBS GREEN REGISTERED

SEEKING NGBS CERTIFICATION

Home Innovation
NGBS GREEN REGISTERED
www.homeinnovation.com/green

Green Certified Products:
Pre-approved for NGBS Points

http://homeinnovation.com/greenproducts
### Certification Activity Report

**As of September 18, 2013**

<table>
<thead>
<tr>
<th>HGfB Project Type</th>
<th>Units Certified</th>
<th>Units In Process</th>
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<tbody>
<tr>
<td>Single-Family Homes (now &amp; remodel)</td>
<td>6,771</td>
<td>2,269</td>
</tr>
<tr>
<td>Multifamily Buildings (now &amp; remodel)</td>
<td>407</td>
<td>954</td>
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<tr>
<td>Units within HGfB Multifamily Buildings</td>
<td>16,576</td>
<td>45,750</td>
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<tr>
<td>Land Developments</td>
<td>19</td>
<td>9</td>
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<tr>
<td>Lots within HGfB Land Developments</td>
<td>1,273</td>
<td>21,557</td>
</tr>
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**Home Innovation**

HGfB Green Certified

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**Weyerhaeuser Lumber-Framing Series**, **Green Stud, Premium** Joint

**Product Information**

Weyerhaeuser offers consistent, quality lumber products made from Douglass Fir, Spruce-Pine-Fir (SPF), and Southern Pines.

**Wood Frame Details**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>WRF</td>
<td>Structural dimension framing application (minimum)</td>
</tr>
<tr>
<td>WRD</td>
<td>Batten product area and 6 joints</td>
</tr>
</tbody>
</table>

**Manufacturer's Comments**

- Lumber products are made from trees in a managed and sustainable manner.
- Product must be used in accordance with local building codes and standards.
Contact Home Innovation

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ICC-700 National Green Building Certification Group

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