



National Green Building Certification

June 2010



National Green Building Certification

Benefits of Green Homes

- Increased durability
- Better indoor air quality
- Reduced environmental impact
- Lower utility bills
- More comfortable home
- Reduced waste / pollution

Total Cost of Homeownership

Conventional Home

| House Cost | \$150,000 |
|--------------------------|-----------|
| Mortgage | \$135,000 |
| Monthly Payment | \$991 |
| Utility Bills | \$186 |
| Total Cost Homeownership | \$1177 |

Green Certified Home

| House Cost | \$154,000 |
|--------------------------|-----------|
| Mortgage | \$139,334 |
| Monthly Payment | \$1023 |
| Utility Bills | \$93 |
| Total Cost Homeownership | \$1116 |
| Savings | \$61 |

Builder Interest in Green

| | |
|--|-------------|
| No Interest | 12% |
| Considering Green | 20% |
| Learning How to Build Green | 23% |
| Build Non-Certified Green Homes | 28% |
| Build Certified Green Homes | 17% |
| TOTAL | 100% |

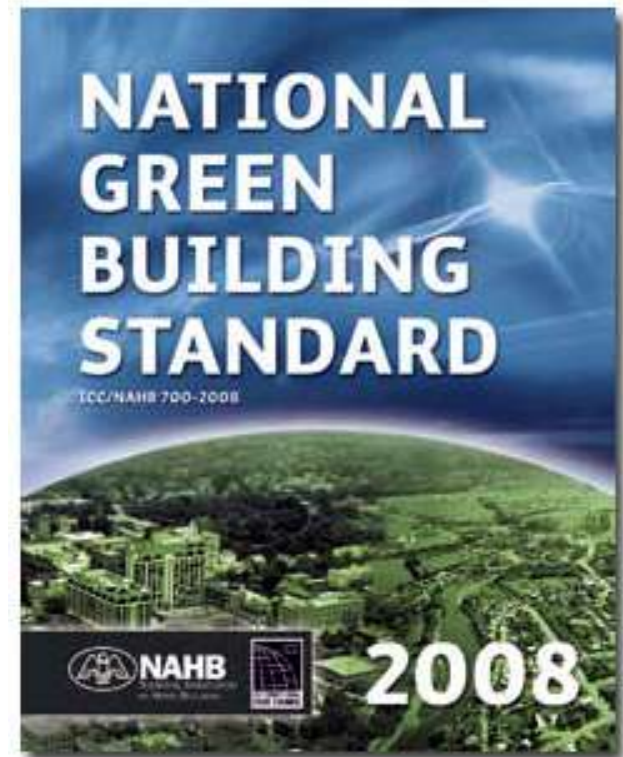
Source: 2009 Home Builder Omnibus Survey, NAHB Research Center



National Green Building Certification

National Green Building Standard

- Approved Jan 2009
- Collaboration between ICC and NAHB
- Only ANSI-approved green building rating system



Importance of Certification

- Buyers wary
- Certification mark - proof of compliance
- RC protective of misleading claims
- Heightened Scrutiny
 - New FTC Green Guides
 - Energy Star GAO Report



National Green Building Certification

5

Key Elements

1. ANSI-approved consensus standard
2. Free web-based Green Scoring Tool
3. Third-party verification of all points claimed
4. Applies to all residential projects
5. Requires progressively higher levels of environmental performance in every category to obtain higher levels of green certification



6 Green Practices Categories

Lot Design

Indoor Air
Quality

Operation &
Maintenance

Energy
Efficiency

Water
Efficiency

Resource
Efficiency

National Green Building Standard

- Hallmarks of ANSI process include:
 - consensus by balance of stakeholders;
 - broad-based public review and comment;
 - consideration of public comments;
 - incorporation of approved changes into standard; and
 - right to appeal for anyone who believes that due process was not respected

Performance Levels

| Green Building Categories | | | Performance Level Points ^{(1) (2)} | | | |
|---------------------------|------------|--|---|------------|------------|------------|
| | | | BRONZE | SILVER | GOLD | EMERALD |
| 1. | Chapter 5 | Lot Design, Preparation, and Development | 39 | 66 | 93 | 119 |
| 2. | Chapter 6 | Resource Efficiency | 45 | 79 | 113 | 146 |
| 3. | Chapter 7 | Energy Efficiency | 30 | 60 | 100 | 120 |
| 4. | Chapter 8 | Water Efficiency | 14 | 26 | 41 | 60 |
| 5. | Chapter 9 | Indoor Environmental Quality | 36 | 65 | 100 | 140 |
| 6. | Chapter 10 | Operation, Maintenance, and Building Owner Education | 8 | 10 | 11 | 12 |
| 7. | | Additional Points from any category | 50 | 100 | 100 | 100 |
| Total Points: | | | 222 | 406 | 558 | 697 |

Certification to the Standard



DOE Builders Challenge

- Goal cost-neutral net-zero energy home by 2030
- 220,000 homes by 2012
 - Incremental increases to 2030
- Seamless integration with Green Certification
 - Green Scoring Tool
 - Dual Certification



Multi-family Buildings



- All units must have green practice for points
- Includes MF remodeling
- One verification report per building
- Mixed-use ok

Green Remodel Path

- Available for homes pre-1980
- Requires:
 - Improve energy efficiency
 - Reduce water usage
 - Implement indoor air quality measures
- Strictly performance based

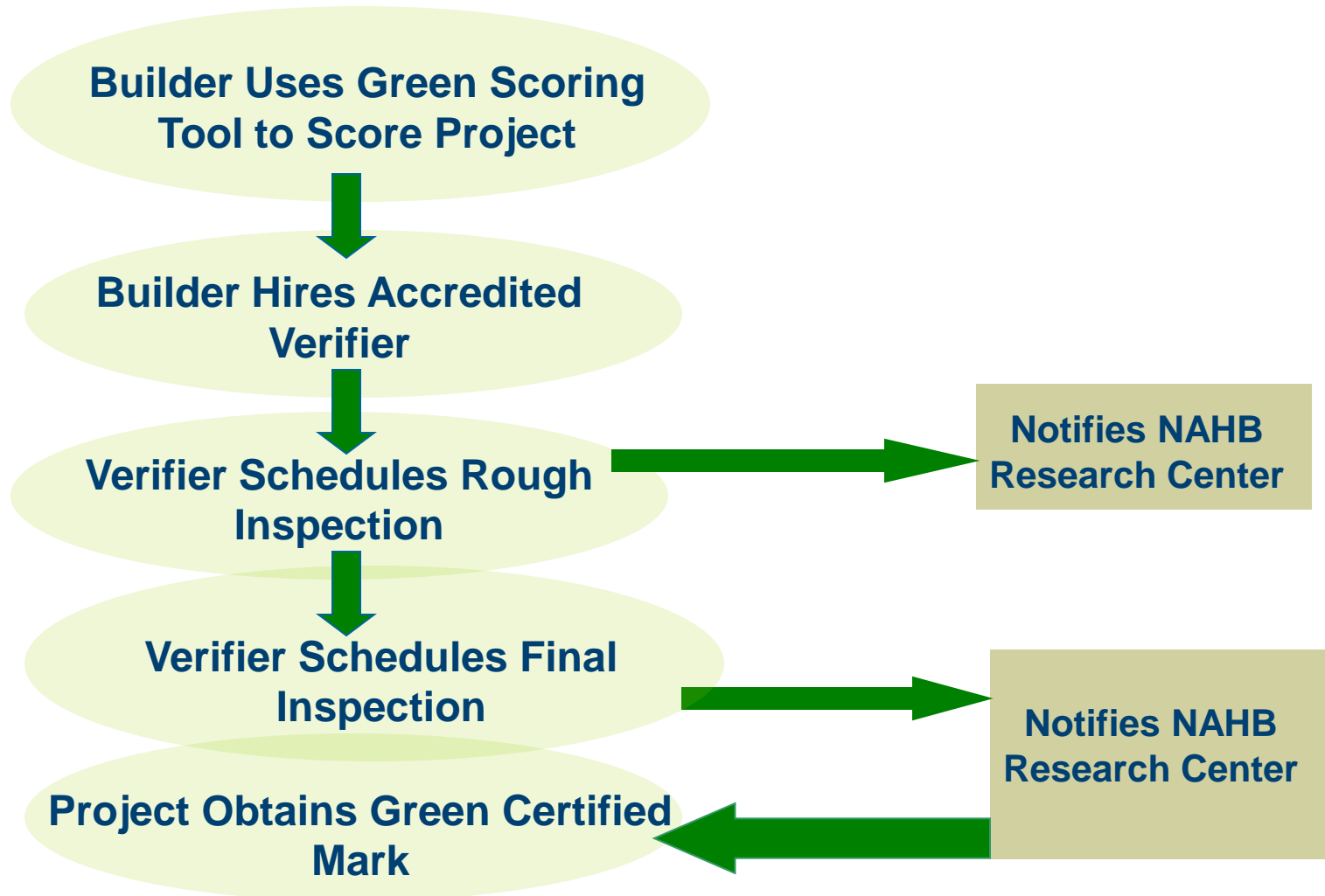


Land Development



- Certify to One, Two, Three, and Four Stars
- Performance criteria Chapter 4 in Standard
- Certification at either design stage, completion, or in phases

Project Certification Process



Green Rating Cost Comparison

| Rating System | Bronze / Certified | Silver | Gold | Emerald/ Platinum |
|----------------------------------|--------------------|--------|---------|-------------------|
| National Green Building Standard | 1 - 2% | 3% | 7% | 16% |
| LEED-H | 3-6% | 5 – 7% | 11 –13% | 17 – 23% |

The TurboTax® for the Standard

THE GREEN SCORING TOOL



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About NAHB Green

Who is Green?

Green Scoring Tool

Rating Systems

Certification

Education

:: Home : Green Scoring Tool

Greening the American Dream

NAHB Green Scoring Tool

Quick Links

[CGP - Certified Green Professional Designation](#)

[Become a Verifier](#)

[Home Certification](#)

[Find a Local Program](#)

[Find a Verifier](#)

SIGN IN

You are currently signed in to the NAHB Green Scoring Tool.

[View My Projects](#)

[Sign out](#)

DOWNLOAD

[NAHB Model Green Home Building Guidelines](#)



[Verifier's Resource Guide](#)

Section Total:

37

37 82 100+

Bronze Silver Gold

Ready to build green? Score your home design using this interactive tool based on the *NAHB Model Green Home Building Guidelines*.

The NAHB Green Scoring Tool is useful to skilled professionals as well as novices, providing information about the why and how of green building at every step.



Sign in or register using the box to the left to begin scoring your green home.

Ready to go green? [Register](#) or sign in to determine how many points your project would earn using the *NAHB Model Green Home Building Guidelines*.

The Green Scoring Tool uses the *NAHB Model Green Home Building Guidelines* as its basis. Additional tools are currently under development to be released when the National Green Building Standard is officially available to the public.

Consumers can develop ideas to discuss with their builders or remodelers. Builders or remodelers can develop green home designs to discuss with their trades or customers, and if they are intending to get the homes certified, they can develop their designs to

It doesn't really cost more to build green. It's not a matter of what materials you use, it's how you use them. Green building is about best practices.

Jeff Junkert, Jeff Junkert Construction, Billings, MT



[Brochures](#)
[View Guidelines Projects](#)
[Sign Out](#)

[Scoring Tool Checklist](#)
[Reports](#)
[Project Scoring Analysis](#)

Scoring Requirements Tally

Please read carefully

Additional Points

According to 601.1 of the National Green Building Standard, a dwelling greater than 4,000 square feet will require an increase in the additional points needed to reach a particular level (1 point per every 100 square feet over 4,000).

For this project:

Square Footage = 1234

Additional Points needed for Bronze = 50

Additional Points need for Silver, Gold, or Emerald = 100

Energy Efficiency Path

Path chosen = Performance Path

Because this project follows the Performance Path, it is eligible to attain the Emerald

The Project Scoring Analysis provides an overview of the points achieved for your project, and allows you to see what points are necessary to reach each level of green building.

Hide Bronze Scoring Analysis

| Chapter | Required Points | Claimed Points | Additional Claimed Points Above Bronze | Point Shortfall | Mandatory Status |
|--|-----------------|----------------|--|-----------------|------------------|
| Chapter 5: Lot Design, Preparation, and Development | 39 | 58 | 19 | | Not Applicable |
| Chapter 6: Resource Efficiency | 45 | 25 | | 20 | Not Met |
| Chapter 7: Energy Efficiency | 30 | 60 | 30 | | Not Met |
| Chapter 8: Water Efficiency | 14 | 4 | | 10 | Not Applicable |
| Chapter 9: Indoor Environmental Quality | 36 | 53 | 17 | | Not Met |
| Chapter 10: Operation, Maintenance, and Building Owner Education | 8 | 3 | | 5 | Met |
| SECTION TOTALS | 172 | 203 | 66 | 35 | |
| Additional Points Above Bronze | 50 | -- | 66 | 0 | |
| TOTAL POINTS | 222 | 203 | -- | 35 | |

To achieve Bronze:

- Reach required Bronze score for each chapter
- Reach required Additional Points for this project
- Meet all mandatory items



Third-Party Verification



Verifier Prohibitions

- No HBA employees
- Builders and their employees may not verify their own homes
- No trade contractors or suppliers or product supply companies who work or provide products can verify that project

Verification Principles

- Verifier's Resource Guide sets verification policy
 - Not the Standard, personal opinion, previous experience, other programs
 - All interpretations documented for consistency
- Points approved only if home meets intent of Verifiers Resource Guide
- Practices must be observed by Verifier
 - Unless documentation review is allowed
 - Builder can not self-certify any points

Products pre-approved for points under Standard

GREEN APPROVED PRODUCTS



National Green Building Certification

Green Approved Products

- Pre-approved points for products
- Assists builders with making product choices
 - Link in Green Scoring Tool
 - Simplifies specifications and field inspections
 - Simple and seamless process for builders to select products

Program Accomplishments

**LOOK FOR THIS MARK.
IT'S PROOF THAT YOUR HOME IS
GREEN!**



National Green Building Certification



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