




Learning Objectives



After this session, you'll be able to:

- Introduce the National Green Building Standard
- Describe unique aspects of the NGBS Green certification program
- Recognize the NGBS Green Certified mark
- Recognize new ways to connect with green builders



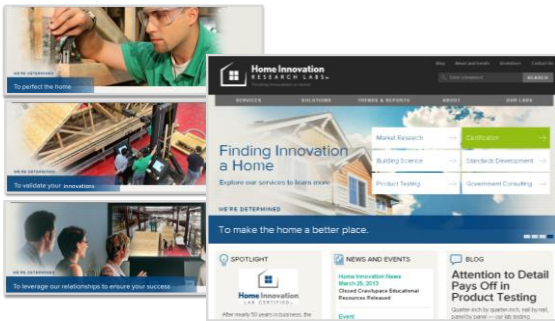
Equity Residential, New York, New York

NGBS Overview

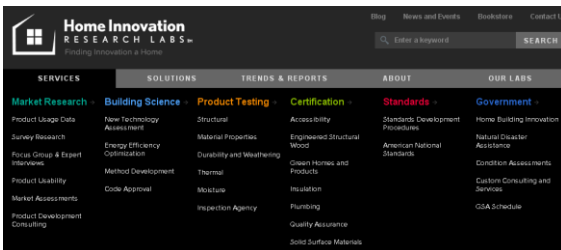


- Home Innovation Research Labs provides national certification
- Certification based on ICC-700 National Green Building Standard
- Our program philosophy is to remove all barriers to building green, high-performance certified homes
- Our value proposition is that NGBS certification is affordable, flexible, easy-to-use, and rigorous
- Our goal is to help our clients deliver a quality, high performance asset

We Help Find Innovation a Home



Our Services



SERVICES	SOLUTIONS	TRENDS & REPORTS	ABOUT	OUR LABS
Market Research Product Usage Data Survey Research Focus Groups & Expert Interviews Product Liability Market Assessments Product Development Consulting	Building Science New Technology Assessment Energy Efficiency Optimization Method Development Code Approval	Product Testing Structural Material Properties Durability and Weathering Thermal Moisture Inspection Agency	Certification Accessibility Engineered Structural Wood Green Homes and Products Insulation Plumbing Quality Assurance Solid Surface Materials	Standards Standards Development Procedures American National Standards Home Building Innovation Natural Disaster Assistance Condition Assessments Custom Consulting and Services GSA Schedule

Multifamily is Hot. Why Seek NGBS Certification?

- Market Differentiation
- Institutional Investors
- Energy Price Volatility
- Corporate Reputation
- Streamlined Entitlement Process, Development Review, Public Participation

- BONUS REASON: Employee Retention



Metro 808, Charlotte, North Carolina

ICC-700 National Green Building Standard



- Approved by American National Institute of Standards (ANSI)
- Provides rating system of a project's environmental impact
- Four certification levels for residential buildings
- Designed to be voluntary, above-code program



Comparing Green Building Rating Systems



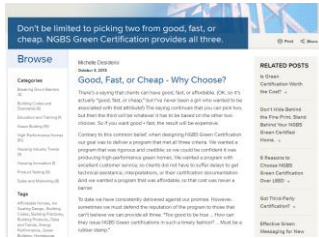
- ANSI-approved consensus standard
- Written in code language
- Few mandatory provisions
- Expansive, flexible point-based system
- Multiple paths for energy compliance
- All residential

Unique Program Philosophy



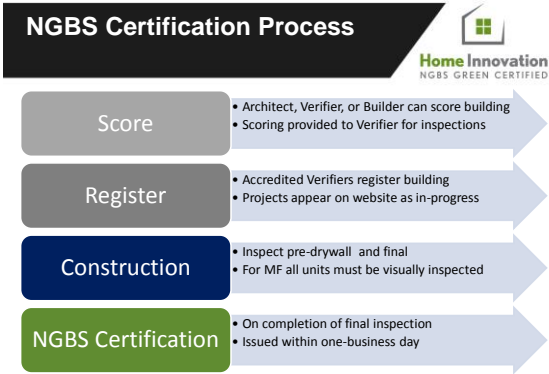
Goal: To eliminate barriers to green certified residential buildings

- Costs (real or perceived – direct and indirect)
- Difficulty / Inflexibility
- Processing hurdles

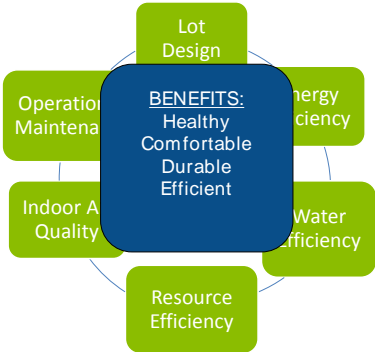


NGBS Certification Process





NGBS Categories of Green Practices



2012 NGBS Performance Levels

Green Building Categories			Rating Level Points ^{(1) (2)}			
			BRONZE	SILVER	GOLD	EMERALD
1.	Chapter 5	Lot Design, Preparation, and Development	50	64	93	121
2.	Chapter 6	Resource Efficiency	43	59	89	119
3.	Chapter 7	Energy Efficiency	30	60	80	100
4.	Chapter 8	Water Efficiency	25	39	67	92
5.	Chapter 9	Indoor Environmental Quality	25	42	69	97
6.	Chapter 10	Operation, Maintenance, and Building Owner Education	8	10	11	12
7.		Additional Points from Any Category	50	75	100	100
Total Points:			231	349	509	641



Gables Tanglewood, Houston, Texas. In-progress

Verify:
100% Independent, Third-Party



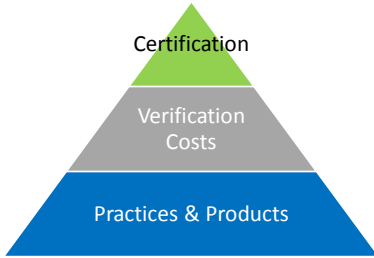
- Qualify, Train, & Test
 - Experience in residential construction and green building
 - Standardize inspection process for projects
- Accredit
 - Must have sufficient insurance, auto and liability
 - Continuing education requirements
- Quality Assurance
 - 100% review of all inspection reports
 - Home Innovation Labs performs quality assurance audits

Independent, Third-Party Verification

- Nationwide network of 400 verifiers
 - Smaller group specializing in multifamily buildings
- Verification Costs
 - Market rate price
 - \$50-200 / unit
- Rigor
 - Every home or apartment must be inspected before drywall installation (rough) and when complete (final)
 - Rough and final inspection reports submitted for review
- www.homeinnovation.com/FindNGBSVerifier



Certification Costs





Verde Vista, Asheville, North Carolina

- > 252 units; 280,000 total SF
- > 0.124% Increased cost (as a % of total) or \$79/unit for NGBS Silver
- > 0.62% or \$396/unit for Energy Star certification

2012 NGBS Highlights



- New Practices
- Higher Energy Baseline: Bronze roughly equivalent to 2012 IECC
- Rewards land development certification
- Improved alignment of water efficiency points with expected water usage
- Universal design practices added
- Revised chapter point thresholds
- New certification opportunities

Land Development





Land Development Certification Requirements

- Green development Practices
 - Site Selection
 - Site Design
 - Site Development & Construction
- Two Approval Options:
 - Letter of Approval *or*
 - Certified when and development activities complete
- Streamlines entitlement & permitting, market green commitment early





Daybreak - Salt Lake City, Utah

Building Certification:
Single Family Homes





Building Certification:
Multifamily, Student Housing, Hotels



Building Certification:
Multifamily, Student Housing, Hotels





Chapter 6: Resource Efficiency
Headlines

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



Chapter 7: Energy Efficiency Headlines

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



Energy Efficiency

- New MANDATORY Requirements:
 - HVAC & Duct system sizing
 - Building thermal envelope
 - Insulation must be graded – 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





Center at Fort Lee, New Jersey

Chapter 8: Water Efficiency Headlines

- Hardest category to attain higher levels of certification under 2008
- 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 Headlines

- Durability practices moved, except those that impair IAQ
- Sealing per 701 now mandatory
- Whole house ventilation mandatory if after testing ACH50 < 5
- VOC levels set, allows independent, third-party testing (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



Certification Marks

- FTC specifically concerned with certification marks
- 80% respondents found certification by independent, third-party organizations provides extra credibility and assurance
 - And they influence purchasing decisions significantly
- State basis for certification
 - First Party
 - Second Party
 - Independent, Third-Party



Process & Cost Structure



- *Process*
 - Interested manufacturers apply to be pre-approved for specific practices of the NGBS.
 - Third-party documentation is necessary to validation point claims.
 - Currently accepting applications for both 2008 and 2012 practices.
- *Pricing*
 - Cost is assessed based on the number of products and practices approved.
 - Multiple discount options exist.
 - Pricing starts at \$1,250 for 1 product and approved practice.

Utilizing the NGBS Mark —Advertising



Utilizing the NGBS Mark —Product Data Sheets



Organize product information and NGBS practices to help architects, designers, and green builders spec your company's products for their projects:

- Distinguish your company as a green building leader/expert
- Info is all in one-place, marked by your company logo
- Way to encourage existing clients to explore a whole suite of "green" products

Utilizing the NGBS Mark —Product Data Sheets



OVERVIEW: COMING 2008 NATIONAL GREEN BUILDING STANDARD GUIDE												
Green Building Strategy ENERGY EFFICIENCY	Energy Star		LEED		GreenSource		GreenSource		GreenSource		GreenSource	
	1 Star	2 Stars	1 Star	2 Stars	1 Star	2 Stars	1 Star	2 Stars	1 Star	2 Stars	1 Star	2 Stars
Energy Star Certified												
Energy Star 1 Star												
Energy Star 2 Stars												
LEED Green Building												
LEED Green Building 1 Star												
LEED Green Building 2 Stars												
GreenSource Green Building												
GreenSource Green Building 1 Star												
GreenSource Green Building 2 Stars												

Utilizing the NGBS Mark —Product Data Sheets



TechUpdate

CertainTeed Gypsum Sustainable Materials Data Sheet

Date: March 13, 2013

Subject: **CertainTeed Level V Wall and Ceiling Primer/Surfacers with M2Tech Data Sheet for LEED® Green Building Rating Systems and National Green Building Standard® (NGBS) (ICC 700-2008)**

CertainTeed Gypsum certifies and provides the following information for use in achieving LEED Credit or National Green Building Standard Credit for the specification of CertainTeed Level V Wall and Ceiling Primer/Surfacers with M2Tech.

LEED MR Credit 4.1 and 4.2 Recycled Content:
NGBS 5.0 Recycled Content Building Materials:

CertainTeed Level V Wall and Ceiling Primer/Surfacers with M2Tech contains the following recycled content. Percentages are averages by weight.

Total Recycled Content, %	Post-Consumer Recycled Content, %	Pre-Consumer Recycled Content, %
7.4	0	7.4

Special Visibility at 2014 IBS Show!



Strategic Collaboration For Green Certified Products



- Generic Bronze Cookbook
- Bronze manufacturer-specific (CertainTeed, OC, etc.) Cookbook
 - Reaching other levels with company's products
- Add spec link for each listed product
- Presentations and materials, AIA-approved for architects
- Co-branded Silent Salesperson Signs
- Sales staff coordination with local or multifamily verifiers
- Find Your Green Home
- Certification numbers by state and type

Lunch-and-Learn Presentations



NGBS partners are welcome to present NGBS Overview presentation and grant CEUs to attendees.

Home Innovation staff will share presentation, script, and meeting materials.



In Summary: NGBS Green Certified Products



NGBS Green Certified products help builders and verifiers connect with the manufacturers whose products help achieve practices of the standard.

- FTC-compliant, third-party certification mark
- Marketing benefits
- Position your company as a green building leader/expert
- Strategic collaboration

Marketing Green Off-the-Shelf Materials



- Lessons Learned
 - All builders needed off-the-shelf materials
 - Few builders marketed green well or understood market opportunities
 - NAHB as identifier did not help company, program, or builders
- Solutions
 - Believe it or not, rename 50-year old company
 - Rebrand entire certification program
 - Redesign entire web site along with strategic SEO component
 - Develop turn-key marketing collateral

Marketing Guidance to Builders



- What Matters to Consumers
 - Independent, third-party certification
 - Survey Says...
 - Busting the green myths
- What Matters to the FTC
 - Independent, third-party certifications (*SFI complaint filed*)
 - Be Specific
 - Quality Claims
 - Substantiate Statements









CLOTHES WASHERS

ENERGY STAR® clothes washers use 40 to 50 percent less energy and about 55 percent less water than standard washers.



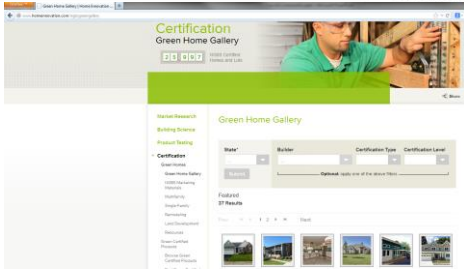
LOW-VOC PAINT

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

NGBS Green Gallery



www.homeinnovation.com/NGBSGreenGallery

NGBS Green Team



Cindy Wasser:
cwasser@homeinnovation.com
www.homeinnovation.com/green
MAIN: 301-430-6200



@NGBSgreen



Home Innovation Research Labs
(follow our NGBS Green Certified Products Board!)



ICC-700 National Green Building Certification Group
