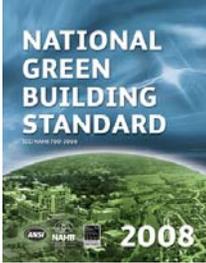




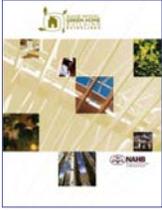
**An Introduction
to the
National
Green
Building
Standard**
 ICC 700-2008



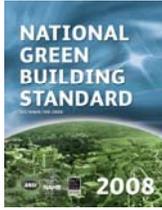
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Guidelines vs. Standard



vs.



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An Overview

- ⇒ First ANSI Consensus Standard on Sustainable Green Building for Residential Construction
- ⇒ Collaborative Effort between ICC and NAHB

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The Green Practices in the Standard Can be Incorporated into

- ⇒ Single-Family Detached Homes
- ⇒ Single-Family Attached Homes
- ⇒ Multi-Family Buildings
- ⇒ Home Remodeling and Additions
- ⇒ Hotels and Motels
- ⇒ Site Development

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The Green Practices include

- ⇒ Site Design and Development
- ⇒ Lot Design, Preparation and Development
- ⇒ Resource Efficiency
- ⇒ Energy Efficiency
- ⇒ Water Efficiency
- ⇒ Indoor Environmental Quality
- ⇒ Operation, Maintenance, and Building Owner Education

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The Standard is Organized into 10 Chapters

- ⇒ Chapter 1 - Scope and Administration
- ⇒ Chapter 2 - Definitions
- ⇒ Chapter 3 - Compliance Method
- ⇒ Chapter 4 - Site Design and Development
- ⇒ Chapter 5 - Lot Design, Preparation, and Development
- ⇒ Chapter 6 - Resource Efficiency
- ⇒ Chapter 7 - Energy Efficiency
- ⇒ Chapter 8 - Water Efficiency
- ⇒ Chapter 9 - Indoor Environmental Quality
- ⇒ Chapter 10 - Operation, Maintenance, and Building Owner Education

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Chapter 1 - Scope and Administration

Chapter 2 - Definitions

Chapter 3 - Compliance Method

Environmental Performance Levels

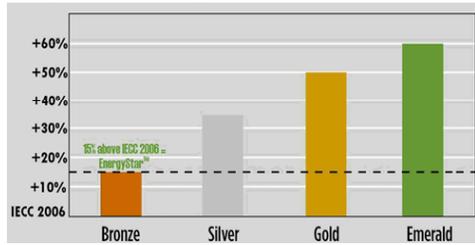
Mandatory Requirements plus

Points assessed using the point system

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Chapter 3 – Compliance Method



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Table 302
Threshold Point Ratings for Site Design and Development

Green Subdivision Category	Performance Level Points			
	One Star	Two Stars	Three Stars	Four Stars
Chapter 4 Site Design and Development	79	104	134	175

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Chapter 4 – Site Design and Development

- 401 Site Selection
- 402 Project Team, Mission Statement, and Goals
- 403 Site Design
- 404 Site Development and Construction
- 405 Innovative Practices

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Chapter 5 - Lot Design, Preparation and Development

- 501 Lot Selection
- 502 Project Team, Mission Statement, and Goals
- 503 Lot Design
- 504 Lot Construction
- 505 Innovative Practices

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Chapter 6 – Resource Efficiency

- 601 Quality of Construction Materials and Waste
- 602 Enhanced Durability and Reduced Maintenance
- 603 Reused or Salvaged Materials
- 604 Recycled Content Building Materials
- 605 Recycled Construction Waste
- 606 Renewable Materials
- 607 Resource-Efficient Materials

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Chapter 6 – Resource Efficiency

- 608 Indigenous Materials
- 609 Life Cycle Analysis
- 610 Innovative Practices

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Chapter 6 – Resource Efficiency

- 601 Quality of Construction Materials and Waste
 - 601.1 Conditioned Floor Area
 - 601.2 Material Usage
 - 601.3 Building Dimensions and Layout
 - 601.4 Framing and Structural Plans
 - 601.5 Stacked Stories
 - 601.6 Site Applied Finishing Materials
 - 601.7 Foundations
 - 601.8 Above-Grade Wall Systems

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Chapter 6 – Resource Efficiency

- 602 Enhanced Durability and Reduced Maintenance
 - 602.1 Exterior Doors
 - 602.2 Roof Overhangs
 - 602.3 Foundation Drainage
 - 602.4 Drip Edge
 - 602.5 Roof Water Discharge Systems
 - 602.6 Finished Grade
 - 602.7 Termite Barrier
 - 602.8 Termite Resistant Materials
 - 602.9 Water-Resistive Barrier

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Chapter 6 – Resource Efficiency
602 Enhanced Durability and Reduced Maintenance

- 602.10 Ice Barrier
- 602.11 Foundation Waterproofing
- 602.12 Flashing
- 602.13 Roof Surfaces
- 602.14 Recycling

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Chapter 6 – Resource Efficiency
603 Reused or Salvaged Materials

- 603.1 Reuse of Existing Building
- 603.2 Salvaged Materials
- 603.3 Scrap Materials

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Chapter 6 – Resource Efficiency
604 Recycled Content Building Materials

- 604.1 Recycled Content

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Chapter 6 – Resource Efficiency
605 Recycled Construction Waste

- 605.1 Construction Waste Management Plan
- 605.2 On-site Recycling
- 605.3 Recycled Construction Materials

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Chapter 6 – Resource Efficiency
606 Renewable Materials

- 606.1 Bio-based Products
- 606.2 Wood-based Products
- 606.3 Manufacturing Energy

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Chapter 6 – Resource Efficiency
607 Resource-Efficient Materials

- 607.1 Resource-efficient Materials

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Chapter 6 – Resource Efficiency
608 Indigenous Materials
608.1 Indigenous Materials

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Chapter 6 – Resource Efficiency
609 Life Cycle Analysis
609.1 Life Cycle Analysis

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Chapter 6 – Resource Efficiency
610 Innovative Practices
610.1 Manufacturer's Environmental Management System Concepts

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Chapter 7 – Energy Efficiency

- 701 Minimum Energy Efficiency Requirements**
- 702 Performance Path**
- 703 Prescriptive Path**
- 704 Additional Practices**
- 705 Innovative Practices**

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Chapter 7 – Energy Efficiency

- 701 Minimum Energy Efficiency Requirements**
- 701.1 Mandatory Requirements
- 701.2 Emerald Level Points
- 701.3 Adopting Entity Review
- 701.4 Mandatory Practices
 - 701.4.1 HVAC Systems
 - 701.4.2 Duct Systems
 - 701.4.3 Insulation and Air Sealing
 - 701.4.4 Fenestration

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Chapter 7 – Energy Efficiency

- 702 Performance Path**
- 702.1 Point Allocation
- 702.2 Energy Cost Performance Levels

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Chapter 7 – Energy Efficiency

703 Prescriptive Path

- 703.1 Building Envelope
- 703.2 Insulation and Air Sealing
- 703.3 Fenestration
- 703.4 HVAC Equipment Efficiency
- 703.5 Water Heating Design, Equipment, and Installation

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Chapter 7 – Energy Efficiency

704 Additional Practices

- 704.1 Application of Additional Practice Points
- 704.2 Lighting and Appliances
- 704.3 Renewable Energy and Solar Heating and Cooling
- 704.4 Ducts
- 704.5 HVAC Design and Installation
- 704.6 Installation and Performance Verification

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Chapter 7 – Energy Efficiency

705 Innovative Practices

- 705.1 Energy Consumption Control
- 705.2 Renewable Energy Service Plans

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Chapter 8 – Water Efficiency
801 Indoor and Outdoor Water Use
802 Innovative Practices

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Chapter 8 – Water Efficiency
801 Indoor and Outdoor Water Use
801.1 Indoor Hot Water Usage
801.2 Water Conserving Appliance
801.3 Food Waste Disposers
801.4 Showerheads
801.5 Faucets
801.6 Water Closets and Urinals
801.7 Irrigation Systems
801.8 Rainwater Collection and Distribution
801.9 Water Filters

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Chapter 8 – Water Efficiency
802 Innovative Practices
802.1 Gray Water
802.2 Composting or Waterless Toilets and/or Urinals
802.3 Automatic Shut Off Water Devices

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Chapter 9 – Indoor Environmental Quality

- 901 Pollutant Source Control
- 902 Pollutant Control
- 903 Moisture Management: Vapor, Rainwater, Plumbing, HVAC
- 904 Innovative Practices

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Chapter 9 – Indoor Environmental Quality

- 901 Pollutant Source Control
 - 901.1 Space and Water Heating Options
 - 901.2 Fireplaces and Fuel Burning Appliances
 - 901.3 Garages
 - 901.4 Wood Materials
 - 901.5 Carpets
 - 901.6 Hard-surface Flooring
 - 901.7 Wall Coverings
 - 901.8 Architectural Coatings
 - 901.9 Adhesives and Sealants

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Chapter 9 – Indoor Environmental Quality

- 901 Pollutant Source Control
 - 901.10 Cabinets
 - 901.11 Insulation
 - 901.12 Carbon Monoxide Alarms
 - 901.13 Building Entrance Pollutants Control
 - 901.14 Non-smoking areas
 - 901.15 Renovation Note (Lead based paint)

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Chapter 9 – Indoor Environmental Quality

902 Pollutant Control

- 902.1 Spot Ventilation
- 902.2 Building Ventilation Systems
- 902.3 Radon Control
- 902.4 HVAC System Protection
- 902.5 Central Vacuum Systems
- 902.6 Living Space Containments

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Chapter 9 – Indoor Environmental Quality

**903 Moisture Management:
Vapor, Rainwater, Plumbing, HVAC**

- 903.1 Tile Backing Materials
- 903.2 Capillary Breaks
- 903.3 Crawl Spaces
- 903.4 Moisture Control Measures
- 903.5 Plumbing
- 903.6 Duct Insulation
- 903.7 Relative Humidity

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Chapter 9 – Indoor Environmental Quality

904 Innovative Practices

- 904.1 Humidity Monitoring System
- 904.2 Kitchen Exhaust
- 904.3 Renovation Note

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Chapter 10 – Operation, Maintenance, and Building Owner Education

- 1001 Building Owner's Manual for One and Two-Family Dwellings
- 1002 Training of Building Owners on Operation and Maintenance for One and Two Family Dwellings and Multi-Unit Buildings
- 1003 Construction, Operation, and Maintenance Manuals and Training for Multi-Unit Buildings
- 1004 Innovative Practices

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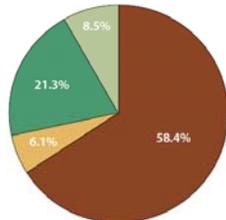
What is your primary motivation for wanting to build a "Green" home?

- ☑ Energy savings & lower energy bills
- ☑ Real or perceived health benefits
- ☑ Belief that helping the environment is not only your responsibility but that you can make a difference.

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- Greenback Greens
- Healthy Greens
- Forest Greens
- Others



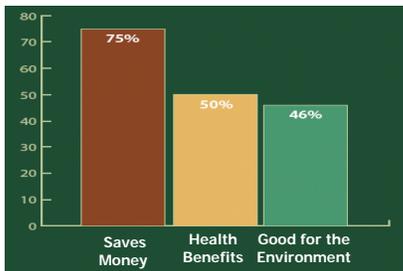
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Are you willing to spend additional money for the benefits associated with a green home?

- ‡ If you can recoup your cost over time?
- ‡ How much time?

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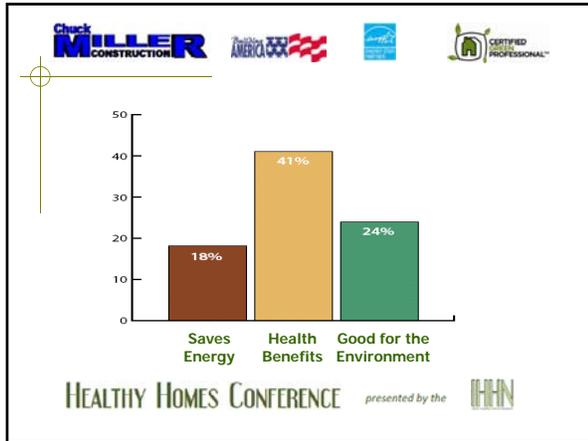
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What if you can't recoup your cost?

Are you still willing to spend additional money for the benefits associated with a green home?

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Any Questions?

Chuck Miller GMB GCB CGP MIRM CMP MCSP CSP









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