

# Georgia State Amendments to the National Green Building Standard

(2008 Edition)



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**Revised January 1, 2011** 

## GEORGIA STATE MINIMUM RESIDENTIAL GREEN BUILDING STANDARD (NATIONAL GREEN BUILDING STANDARD WITH GEORGIA STATE AMENDMENTS)

The NATIONAL GREEN BUILDING STANDARD, 2008 Edition, published by the International Code Council, when used in conjunction with these Georgia State Amendments and all other Georgia State Amendments to the NATIONAL GREEN BUILDING STANDARD, 2008 EDITION, shall constitute the official Georgia State Minimum Residential Green Building Standard.

#### **GEORGIA STATE AMENDMENTS**

\*Revise the National Green Building Standard, 2008 Edition, as follows:

# CHAPTER 1 SCOPE AND ADMINISTRATION

#### SECTION 101 GENERAL

\*Add new Section 101.4, 'Local Ordinances', to read as follows:

**101.4 Local Ordinances.** Where the provisions of this Standard are in conflict with local ordinances, the provisions of the local ordinances shall prevail. (Effective January 1, 2011)

#### SECTION 102 APPLICABILITY

\*Revise Section 102.1, 'Applicability', to read as follows:

**102.1 Applicability.** The provisions of this standard shall apply to one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures; subdivisions, building sites, alterations, additions, and renovations. (Effective January 1, 2011)

\*Add new Section 102.2.1, 'Supplementary document', to read as follows:

**102.2.1 Supplementary document.** The National Green Building Standard Commentary may be used as a supplementary document to the National Green Building Standard. (Effective January 1, 2011)

# SECTION 103 CONFORMANCE

\*Revise Section 103.3, 'Documentation', to read as follows:

**103.3 Documentation.** Certification of conformance to green building practices shall be the appropriate construction documents, architectural plans, site plans, specifications, inspection reports and the report of the Special Green Inspector as provided in section 104.2. (Effective January 1, 2011)

\*Add new Section 103.4.1, 'Deemed to comply', to read as follows:

**103.4.1 Deemed to comply.** Homes certified under the EarthCraft or LEED for Homes certification programs are deemed to meet this Standard. (Effective January 1, 2011)

# SECTION 104 ADMINISTRATION

\*Revise Section 104.1, 'Administration', to read as follows:

**104.1 Administration.** The Adopting Entity shall specify the minimal performance level to be achieved as identified in Chapter 3. (Effective January 1, 2011)

\*Add new Section 104.2, 'Special Green Inspector', to read as follows:

# **104.2 Special Green Inspector.**

**104.2.1 General.** Where construction is proposed under this Standard, a Special Green Inspector shall provide inspections and verify work performed in compliance with this Standard. The owner shall be responsible for any costs incurred by the Special Green Inspector. The inspector shall be an independent third party.

**104.2.2 Qualifications.** The Special Green Inspector shall be a qualified person who shall be a NAHB Accredited Green Verifier or posses a G1 ICC Certified Green Building Inspector Certification and comply with the insurance and prerequisite requirements in Appendix C. If any verification performed under this Standard requires additional qualifications, the Special Green Inspector shall ensure that the verification is performed by a qualified party.

Exceptions:

1. Section 701.1.1 shall be verified by an accredited HERS Rater working under the supervision of a RESNET Provider

**104.2.3 Report requirement.** The Special Green Inspector shall keep records of the verifications performed in compliance with this Standard and shall furnish inspection reports to the building official and owner. Reports shall state that the verification has been performed in compliance with the requirements of this Standard. A final report certifying compliance with this Standard shall be made to the building official and owner upon completion of the project.

(Effective January 1, 2011)

# CHAPTER 2 DEFINITIONS

# SECTION 202 DEFINITIONS

\*Add definition of 'ACESSORY STRUCTURE' as follows:

**ACCESSORY STRUCTURE**. A structure not greater than 3,000 square feet (279 m2) in floor area, and not over two stories in height, containing conditioned space, the use of which is customarily accessory to and incidental to that of the dwelling(s) and which is located on the same lot.

(Effective January 1, 2011)

\*Revise definition of 'GROUND SOURCE HEAT PUMP' as follows:

**GROUND SOURCE HEAT PUMP.** Space conditioning and/or water heating systems that employs a geothermal resource such as the ground, ground water, or surface water or a lake or pond, utilizing an approved closed loop heat exchanger as both a heat source and a heat sink using a reversible refrigeration cycle to provide both heating and cooling. (Effective January 1, 2011)

\*Add definition of 'TOWNHOUSE' as follows:

**TOWNHOUSE**. Multiple single-family dwelling units, separately owned, constructed in a group of three or more attached units in which each unit extends from foundation to roof and with a yard or public way on at least two sides. (Effective January 1, 2011)

# CHAPTER 3 COMPLIANCE METHOD

# SECTION 301 GENERAL

\*Revise Section 301.2, 'Awarding of points', to read as follows:

(Beginning of section left unchanged)

(3) The Adopting Entity's building official, building inspector or designee shall allow new products and practices to be added where deemed to meet the intent of this Standard. Points assigned for any new product or practice shall be determined by the Adopting Entity's building official, building inspector or designee.

(Effective January 1, 2011)

## SECTION 304 GREEN MULTI-UNIT BUILDINGS

\*Delete Section 304, 'GREEN MULTI-UNIT BUILDINGS', in its entirety without substitution.

#### SECTION 305 GREEN RENOVATIONS AND ADDITIONS

\*Revise Section 305.5.4(1), as follows:

**305.5.4 (1) Energy consumption:** Energy consumption shall be based on the estimated annual energy use due to heating, cooling, and water heating as determined by Chapter 7 of this Standard. *(Remainder of section left unchanged)* (Effective January 1, 2011)

# CHAPTER 4 SITE DESIGN AND DEVELOPMENT

### SECTION 405 INNOVATIVE PRACTICES

\*Revise Section 405.6, 'Mass transit', to add # 3 as follows:

(3) A selected site with a main entrance within one-half mile (805 m) of six or more community resources [e.g., recreational facilities (such as pools, tennis courts, basketball courts), parks, grocery store, post office, place of worship, community center, daycare center, bank, school, restaurant, medical/dental office, laundromat/dry cleaner].

[**3** points] (Effective January 1, 2011)

# CHAPTER 5 LOT DESIGN, PREPARATION, AND DEVELOPMENT

# SECTION 505 INNOVATIVE PRACTICES

\*Add new Section 505.1.1, 'Minimum pavement design', to read as follows:

**505.1.1 Minimum pavement design.** The design of ground supported pavement for driveways and parking areas shall comply with one of the following:

(1) Concrete surfaces. The minimum compressive strength of the concrete  $(f_c)$  for concrete pavements shall be 4000 psi. The minimum thickness of the concrete pavement shall be 4.0 inches on uniform compacted subgrade with a maximum joint spacing of 10 feet by 10 feet

[2 points]

(2) Asphalt surfaces. The asphalt pavement shall comply with Item a) or b).

**a. Full depth asphalt pavement:** Where full depth asphalt pavements are constructed using asphalt and emulsified asphalt base mixes the minimum thickness of the asphalt pavement shall be one of the following on compacted subgrade:

1. A minimum of 1 inch of asphalt for the top surface and 3.5 inches of asphalt or Type I emulsified asphalt mix for the base.

2. A minimum of 2 inches of asphalt for the top surface and 2.5 inches of Type II emulsified asphalt mix for the base.

3. A minimum of 2 inches of asphalt for the top surface and 4.5 inches of Type III emulsified asphalt mix for the base.

[**2** points]

**b.** Asphalt pavement with untreated aggregate base and sub-base: Where asphalt pavements are constructed using asphalt placed over untreated aggregate bases and sub-bases the thickness of the asphalt pavement shall be a minimum of 1 inch of asphalt for the top surface, 2.5 inches of asphalt base and 4.0 inches of untreated aggregate base on compacted subgrade.

[**2** points]

(3) **Interlocking concrete paver surfaces:** Interlocking concrete pavers shall be installed on a minimum 1-inch thick bedding sand supported by a compacted road base material with a minimum thickness of 6-inches. The joints of the interlocking concrete pavers shall be filled with a polymeric sand.

[**2** points]

(4) **Permeable interlocking concrete paver surfaces.** Permeable interlocking concrete pavers shall be installed on three layers of aggregate base as follows:

- a. The first layer shall be a compacted aggregate base of No. 2 or No. 4 stone with a minimum thickness of 8 inches.
- b. The second layer shall be a compacted aggregate base of No. 57 stone with a minimum thickness of 4 inches.
- c. The third layer shall be a compacted aggregate base of No. 89 stone with a minimum thickness of 2 inches.

The joints of the permeable interlocking concrete pavers shall be filled with No. 89 stone.

[**2** points]

- (5) **Pervious concrete pavement surfaces:** Pervious concrete pavement shall be a minimum thickness of 6 inches. The pervious concrete pavement shall be placed on a base in accordance with the following:
  - a. For parking areas with light traffic the pervious concrete pavement shall be placed on an aggregate base of No. 57 stone at a minimum thickness of 6 inches. The aggregate base shall be separated from the subgrade by non-woven geotextile fabric.
  - b. For driveways the pervious concrete shall be permitted to be placed on the subgrade provided it is separated from the subgrade with a non-woven geotextile fabric

[**2** points]

(6) Alternative pavement designs. Other approved pavement surface designs. (Effective January 1, 2011)

# CHAPTER 7 ENERGY EFFICIENCY

### SECTION 703 PRESCRIPTIVE PATH

\*Revise Section 703.4.6, as follows:

Delete Item (1) in its entirety.

Revise Item (4) to read as follows:

(4) Any type (closed, direct expansion):  $\geq$  24 EER /  $\geq$  4.3 COP (Effective January 1, 2011)

\*Revise Table 703.5.1(2), 'Electric Water Heating', to read as follows:

Size (gallons)	Energy Factor	POINTS
30 to <40	0.95	1
40 to <50	0.94	1
50 to <65	0.93	1
65 to <80	0.91	1
80 to <100	0.90	1
≥100	0.86	1

Table 703.5.1(2)Electric Water Heating

(Effective January 1, 2011)

# CHAPTER 8 WATER EFFICIENCY

\*Revise Section 801.8, 'Rainwater collection and distribution', to read as follows:

(1) Rainwater is collected and used to offset municipal and well water use.

(a) Systems up to 300 gallons	[1 point]
(b) Systems more than 300 gallons	[5 points]

(*Remainder of section left unchanged*) (Effective January 1, 2011)

# CHAPTER 9 INDOOR ENVIRONMENTAL QUALITY

# SECTION 903 MOISTURE MANAGEMENT: VAPOR, RAINWATER, PLUMBING, HVAC

\*Revise Section 903.2.1 to add exceptions as follows:

# **Exceptions:**

- A. Driveways
- B. Sidewalks

C. Patio/Porch (Effective January 1, 2011)

\*Add item # 4 to Section 903.4.1, to read as follows:

(4) Implement five (5) of the best practices from ANSI/GREENGUARD Environmental Institute Mold And Moisture Management Standard For New Construction (ANSI/GEI – MMS1001), an overall moisture management program, as part of the overall building design, construction and operation.

[5 Points] (Effective January 1, 2011)

# CHAPTER 10 OPERATION, MAINTENANCE, AND BUILDING OWNER EDUCATION

# SECTION 1002

\*Revise Title of Section 1002 to read as follows:

1002 TRAINING OF BUILDING OWNERS ON OPERATION AND MAINTENANCE FOR ONE-AND TWO-FAMILY DWELLINGS (Effective January 1, 2011)

\*Revise Section 1002.1, 'Training of building owners', to read as follows:

**1002.1 Training of building owners.** Building owners are familiarized with the green building goals and strategies implemented and the impacts of the owners practices on the costs of operating the building. Training is provided to the responsible party(ies) regarding all equipment operation and control systems. Systems include, but are not limited to, the following: (*Remainder of section left unchanged*)

(Effective January 1, 2011)

# SECTION 1003 CONSTRUCTION, OPERATION, AND MAINTENANCE MANUALS AND TRAINING FOR MULTI-UNIT BUILDINGS

\*Delete Section 1003, 'CONSTRUCTION, OPERATION, AND MAINTENANCE MANUALS AND TRAINING FOR MULTI-UNIT BUILDINGS', without substitution. (Effective January 1, 2011)

# CHAPTER 11 REFERENCED STANDARDS

## SECTION 1101 GENERAL

\*Add new Section 1101.2.1, to read as follows:

**1101.2.1** Replace all International Code Council (ICC) references with the corresponding current Georgia State Minimum Standard Code as adopted and amended by the Department of Community Affairs.

(Effective January 1, 2011)

\*Add new 'Appendix C' as follows:

# **APPENDIX C**

# SPECIAL GREEN INSPECTOR PREREQUISITES

# SECTION F101 GENERAL

**C101.1 Scope.** This appendix specifies the prerequisite insurance and qualification requirements for individuals possessing a G1 ICC Certified Green Inspector Certification to be considered a Special Green Inspector.

**C101.2 Eligibility.** To be eligible to become a Special Green Inspector an individual shall have the following computer skills:

- 1) Microsoft Office 2003 or later and a working knowledge of Word and Excel
- 2) The ability to scan and e-mail a copy of a signed form
- 3) The ability to send an electronic photo attachment to an e-mail

**C101.3 Professional or field experience.** In addition to meeting the requirements in Section C101.2, an individual shall have at least one year of professional or field experience in home building, including at least one of the following:

- 1) Residential trade contractor or builder experience either on the jobsite or in management
- 2) Superintendent or other jobsite supervision
- 3) Licensed or qualified home inspector

- 4) Residential design or architectural work
- 5) Residential land development management
- 6) Green building verification for another green certification
- 7) Construction consulting or training
- 8) Construction inspection

**C101.4 Green building experience.** In addition to meeting the requirements in Sections C101.2 and C101.3, an individual shall have at least one of the following:

- 1) Three years of professional field experience in green and/or sustainable home building
- 2) At least 12 hours of formal green training
- 3) Designation by the National Association of Home Builders Research Center as a Certified Green Professional
- 4) NARI Green Building Certification from the National Association of the Remodelers Industry
- 5) Professional certification from Green Advantage
- 6) RESNET Green Rater Certification
- 7) LEED Accredited Professional Certification
- 8) EarthCraft Technical Advisor
- 9) Experience as a green building verifier for another program for at least two years

**C101.5 Insurance.** An individual shall also obtain the following minimum insurance coverage prior to conducting work as a Special Green Inspector:

- 1) General Liability: \$1,000,000
- 2) Automobile Liability: \$500,000
- 3) Workers Compensation: As required by law

4) Employer's Liability: \$500,000 (typically part of Workers Compensation) (Effective January 1, 2011)

# End of Amendments.