Georgia State Supplements and Amendments to the International Energy Conservation Code

(2000 Edition)

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Revised January 1, 2005

GEORGIA STATE
ENERGY CODE FOR BUILDINGS
(INTERNATIONAL ENERGY CONSERVATION CODE)

The GEORGIA STATE ENERGY CODE FOR BUILDINGS (International Energy Conservation Code), 2000 Edition, published by the International Code Council, when used in conjunction with these Georgia Supplements and Amendments and the Georgia Supplements and Amendments adopted effective January 1 of 2003, shall constitute this official *Georgia State Minimum Standard Code.*

GEORGIA STATE AMENDMENTS

SCOPE:

Each chapter of these Georgia Supplements and Amendments corresponds with a chapter of the *International Energy Conservation Code* (*IECC*).

- Chapter 1: Administration and Enforcement.
- Chapter 2: Definitions.
- Chapter 3: Design Conditions. 'The criteria of this chapter establish the design conditions for use with Chapters 4, 5, 6 and 8.'
- Chapter 4: Residential Building Design by Systems Analysis and Design of Buildings Utilizing Renewable Energy Sources. 'This chapter establishes design criteria in terms of total energy use by a residential building, including all of its systems.' (One method by which to achieve compliance for low-rise residential construction.)
- Chapter 5: Residential Building Design by Component[1] Performance Approach. 'Residential buildings or portions thereof that enclose conditioned space shall be constructed to meet the requirements of this chapter.' (One method by which to achieve compliance for low-rise residential construction.) This chapter offers the use of 'trade-offs,' whereby values between building components may be substituted or traded-off for compliance. A properly completed Georgia Trade-Off Worksheet[2] or the use of appropriate computer software (*REScheck*[3]) may be used to validate any trade-off.
- Chapter 6: Simplified Prescriptive Requirements for Residential Buildings, Type A-1 and A-2. 'This chapter sets forth energy-efficiency-related requirements for the design and construction of Type A-1 and A-2 residential buildings.' (One method by which to achieve compliance for low-rise residential construction.)
- Chapter 7: Building Design for All Commercial Buildings. Commercial buildings [except those that comply with Chapter 8, Design by Acceptable Practice for Commercial Buildings; the Single Step Compliance for Simple Commercial Buildings; or appropriate computer software (*COMcheck*[3])] shall meet the requirements of *ANSI/ASHRAE/IESNA Standard 90.1-2001*. (One method by which to achieve compliance for commercial and high-rise residential construction.)
- Chapter 8: Design by Acceptable Practice for Commercial Buildings. 'The requirements contained in this chapter are applicable to commercial buildings, or portions of commercial buildings.' (One method by which to achieve compliance for commercial and high-rise residential construction.)

- Chapter 9: Referenced Standards.
- Appendix A.
- Appendix B. Provides additional prescriptive methods by which to achieve compliance, simple methods and forms to assist in compliance calculations, and illustrations to assist in the understanding of compliance requirements.

Individual structures should follow a single compliance method and not a combination of compliance methods. The 'basic requirements' of the *International Energy Conservation Code* (*IECC*) apply to all compliance methods.

Where these Georgia Supplements and Amendments conflict with either the *International Energy Conservation Code* (*IECC*) or *ANSI/ASHRAE/IESNA Standard 90.1-2001*, these Georgia Supplements and Amendments shall take precedence.

Air infiltration accounts for substantial heat loss, heat gain and moisture migration in a building. Proper sealing around all doors, windows and other envelope penetrations through the walls, ceiling and foundation is as important to code compliance as are proper insulation R-values and component U-values.

It is not the intention of this code to abridge safety or health. Where the *International Energy Conservation Code* (*IECC*) and these Georgia Supplements and Amendments conflict with other mandatory *State Minimum Standard Codes*, the *International Energy Conservation Code* (*IECC*) and these Georgia Supplements and Amendments shall be enforced as written provided safety, health or environmental requirements of other mandatory *State Minimum Standard Codes* are not abridged.

CODE REFERENCE:

(a) Replace all references to *ASHRAE/IESNA 90.1-1999* with references to *ANSI/ASHRAE/IESNA 90.1-2001*.

APPENDICES:

Appendices are not enforceable unless they are specifically referenced in the body of the code or adopted by the Department of Community Affairs or the authority having jurisdiction.

1. 'Component' refers to a particular element of a building, such as a ceiling, an exterior wall, a floor, etc.
2. For the 'Georgia Trade-Off Worksheet,' see Appendix B.
3. *REScheck* and *COMcheck* are computer programs developed by Pacific Northwest National Laboratories for the U.S. Department of Energy to assist in demonstration of compliance with the *International Energy Conservation Code* (*IECC*). They can be obtained from the D.O.E. by calling (800) 270-CODE (2633) or free of charge online at www.energycodes.gov.

Revise the Georgia State Energy Code for Buildings (International Energy Conservation Code), 2000 Edition, as follows:

CHAPTER 3
DESIGN CONDITIONS

SECTION 302
THERMAL DESIGN PARAMETERS

*Revise Figure 302.1(11) 'Georgia[a]' to change Cherokee County and Forsyth County from Climate Zone 8 to Climate Zone 7A.
(Effective January 1, 2005)

CHAPTER 5
RESIDENTIAL BUILDING DESIGN BY COMPONENT PERFORMANCE APPROACH

SECTION 502
BUILDING ENVELOPE REQUIREMENTS

*Revise Note #2 of Section 502.2.1.2 'Roof/ceiling.'

502.2.1.2 Roof/ceiling.
Note #2:
Weather-stripped access doors (minimum *U*-0.35), weather-stripped hatches/scuttle hole covers (minimum *R*-19 insulation or *U*-0.05), or weather-stripped disappearing/pull-down stairs (minimum *U*-0.35) shall be calculated as a sub- element with a *U*-factor of *U*-0.05 or insulation *R*-value of *R*-19. Weather-stripping, factory applied or approved by the local Building Official, shall be deemed to meet Table 502.2[a] Footnote a, Sections 502.1.4 Air leakage and 502.1.4.2 Caulking and sealants and Table 502.2.1 in Appendix B.
(Effective January 1, 2005)

*Revise Section 502.2.1.6 'Basement walls,' add superscript '1' to title and add exceptions and notes.

502.2.1.6 Basement walls[1]. The exterior walls of conditioned basements[2] shall have a thermal transmittance value not exceeding the valve given in Table 502.2 from the top of the basement wall to a depth of 10 feet (3048 mm) below grade, or to the level of the basement floor, whichever is less.
Exceptions:
1. For conditioned basements in Climate Zones 4B, 5A, 6B and 7A, insulate the Mass Wall with minimum *R*-5 insulation and the cavity in Stud Walls, Cripple Walls and Bands with minimum *R*-11 insulation.
2. For conditioned basements in Climate Zone 8, insulate the Mass Wall with minimum *R*-6 insulation and the cavity in Stud Walls, Cripple Walls and Bands with minimum *R*-11 insulation.

When using Exceptions 1 or 2, the basement is "Deemed to Comply" with the Georgia State Energy Code; if the rest of the dwelling complies by any method in Chapters 5 or 6 or by another approved compliance method, the whole dwelling is "Deemed to Comply."

Note 1: IECC defines a 'basement wall' as 'the opaque portion of a wall which encloses one side of a basement and having an average below-grade area greater than or equal to 50 percent of its total wall area, including openings.'
Note 2: 'Basement' is defined in the Georgia Amendments to the CABO One and Two Family Dwelling Code (International Residential Code), revised January 1, 2002.
(Effective January 1, 2005)

*Revise Section 502.2.3.6 'Basement walls,' add superscript '1' to title and add exceptions and notes.

502.2.3.6 Basement walls[1]. The exterior walls of conditioned basements[2] shall have a thermal transmittance value not exceeding the valve given in Table 502.2 from the top of the basement wall to a depth of 10 feet (3048 mm) below grade, or to the level of the basement floor, whichever is less. The *U*-factor of the wall shall be determined by selecting the *U*-factor for the wall section from Appendix A Table 502.2.3.6 or Appendix B Tables 502.2.3.1(1a) or 502.2.3.1(1b).

Exceptions:

1. For conditioned basements in Climate Zones 4B, 5A, 6B and 7A, insulate the Mass Wall with minimum *R*-5 insulation and the cavity in Stud Walls, Cripple Walls and Bands with minimum *R*-11 insulation. When using this Exception, include all openings and exclude any opaque area of the walls in the basement when calculating Percent of Openings.
2. For conditioned basements in Climate Zone 8, insulate the Mass Wall with minimum *R*-6 insulation and the cavity in Stud Walls, Cripple Walls and Bands with minimum *R*-11 insulation. When using this Exception, include all openings and exclude any opaque area of the walls in the basement when calculating Percent of Openings.

When using Exceptions 1 or 2, the basement is "Deemed to Comply" with the Georgia State Energy Code; if the rest of the dwelling complies by any method in Chapters 5 or 6 or by another approved compliance method, the whole dwelling is "Deemed to Comply."
Note 1: IECC defines a 'basement wall' as 'the opaque portion of a wall which encloses one side of a basement and having an average below-grade area greater than or equal to 50 percent of its total wall area, including openings.'
Note 2: 'Basement' is defined in the Georgia Amendments to the CABO One and Two Family Dwelling Code (International Residential Code), revised January 1, 2002.
(Effective January 1, 2005)

*Add new Table 502.2.3.6 'Conditioned Walls in Basements.'
See page 7.
(Effective January 1, 2005)

*Revise Section 502.2.4 'Compliance by prescriptive specification on an individual component basis.'

Section 502.2.4 Compliance by prescriptive specification on an individual component basis. For buildings with a window area less than or equal to 15 percent, 18 percent, 25 percent, or 30 percent (Type A-1 residential buildings) or 22 percent or 25 percent (Type A-2 residential buildings) of the gross exterior wall area, the thermal resistance of insulation applied to the

opaque building envelope components shall be greater than or equal to the minimum *R*-values, and the thermal transmittance of all fenestration assemblies shall be less than or equal to the maximum *U*-factors shown in Tables 502.2.4(1), 502.2.4(2), 502.2.4(3), 502.2.4(4), 502.2.4(5), 502.2.4(6), or 502.2(7), as applicable. Sections 502.2.4.1 through 502.2.4.12 and 502.2.4.15 through 502.2.4.17 shall apply to the use of these tables.
Note: Percent refers to the Percent of Opening to be determined by dividing the total openings (including conditioned basement openings) by the Gross Wall Area. For these tables the Gross Wall Area is the normal projection of all exterior walls above grade enclosing conditioned space, including all windows and doors therein. When using these tables, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings. Percent of Openings = 100 x (Openings in Floors Above Grade + Openings in Basement) / (Gross Wall Area Above Grade + Openings in Basement).
(Effective January 1, 2005)

CHAPTER 9
REFERENCED STANDARDS

*Revise Chapter 9 'Reference Standards' to update NFRC Standard Reference Numbers.
(Effective January 1, 2005)

National Fenestration Rating Council, Inc.
Suite 120
1300 Spring Street Park

NFRC

Silver Spring, MD 20910

Standard reference number	Title	Referenced in code section number
100—97, —01	Procedure for Determining Fenestration Product U-Factors	102.5.2, 601.3.2, 601.3.2.1
200—97, —01	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	102.5.2, 601.3.2, 601.3.2.1

GA STATE SUPPLEMENTS AND AMENDMENTS

*Revise Table 502.2.1 of Appendix B of the Georgia Supplements and Amendments revised January 1, 2003 to add Note 1 and renumber notes.
See page 7.
(Effective January 1, 2005)

Revise Table 502.2.3.1(1a) 'Wall R-values 2 x 4 Wood Studs 16" OC (Insulation plus sheathing)' of Appendix B of the Georgia Supplements and Amendments revised January 1, 2003.
See page 8.
(Effective January 1, 2005)

*Delete Tables 502.2.4(1-9) and Tables 502.2.4(1-5) and 602.1 of the Georgia Supplements and Amendments revised January 1, 2003 and substitute with new Tables 502.2.4(1-7) and 602.1. See pages 9-12.
(Effective January 1, 2005)

*Revise Table 701 'Minimum Thermal Component Requirements' of the Georgia Supplements and Amendments revised January 1, 2003.
See page 13.
(Effective January 1, 2005)

*Delete Single Step Residential Energy Code Compliance Tables of Appendix B of the Georgia Supplements and Amendments revised January 1, 2003 and substitute.
See pages 14-28.
(Effective January 1, 2005)

End of Amendments.

TABLE 502.2.1 SUMMARY OF MINIMUM INSULATION VALUES MAXIMUM U-FACTOR FOR ENVELOPE COMPONENTS		
		TYPE A-1 & A-2 RESIDENTIAL BUILDINGS
ELEMENT[1]	**MODE**	**R-value**
Walls Stud	Heating or cooling	R-11
Walls Masonry/CMU[2]	Heating or cooling	R-5
Attic Knee Walls[3]	Heating or cooling	R-19
Roof/ceiling	Heating or cooling	R-19
Floor over unheated spaces	Heating or cooling	R-11
Windows[4]	Heating or cooling	U-0.65 with max. SHGC 0.40

Note 1: Weather-stripped access doors (minimum *U*-0.35), weather-stripped hatches/scuttle hole covers (minimum *R*-19 insulation or *U*-0.05), or weather-stripped disappearing/pull-down stairs (minimum *U*-0.35) shall be deemed to meet the minimum insulation *R*-values of any Element.
Note 2: Any Mass wall above or below grade.
Note 3: Attic Knee wall for purpose of Georgia Energy Code is defined as any vertical or near vertical wall in the building envelope that has conditioned space on one side and attic space on the other side.
Exception: When the attic space formed by the Attic Knee Wall, the ceiling of the floor below and the sloped roof is not vented and the sloped roof is insulated (the insulated roof is the building envelope).
Note 4: Maximum window U-factor shall be 0.65 and maximum SHGC shall be 0.40. These window requirements were implemented on January 1, 2004.

TABLE 502.2.3.6 CONDITIONED WALLS IN BASEMENTS REQUIRED INSULATION R-VALUE FOR COMBINATION BASEMENT MASS WALLS AND STUD WALLS			
CLIMATE ZONE FROM FIGURE 302.1(11)	**Mass Wall**	**Stud Wall**	**Bands**
4B	R-5	R-11	R-11
5A	R-5	R-11	R-11
6B	R-5	R-11	R-11
7A	R-5	R-11	R-11
8	R-6	R-11	R-11

Note: Include all openings and exclude any opaque area of the walls in the basement when calculating Percent of Openings when using this Table.

TABLE 502.2.3.1(1A)
WALL R-VALUES 2 X 4 WOOD STUDS 16'' OC (INSULATION PLUS SHEATHING)

R-11	R-12	R-13	R-14	R-15	R-16	R-17	R-18	Attic Knee Wall	R-19	R-20
R-11 Batts & Plywood/OSB (R-10.91) (U-0.0916)	R-11 Batts & Fiberboard (R-11.68) (U-0.0859)	R-11 Batts & R-2 Foam (R-12.42) (U-0.0805)	R-11 Batts & R-3 Foam (R-13.50) (U-0.0741)	R-11 Batts & R-4 Foam (R-14.56) (U-0.0686)	R-11 Batts & R-5 Foam (R-15.62) (U-0.0640)	R-11 Batts & R-6 Foam (R-16.66) (U-0.060)	R-11 Batts & R-7 Foam (R-17.70) (U-0.0565)	2x6 wall R-19 Batts (R-15.42) (U-0.0648)	R-11 Batts & R-8 Foam (R-18.73) (U-0.0534)	R-11 Batts & R-9 Foam (R-19.77) (U-0.0506)
R-11 Batts & Gypsum 2 sides (Garage) (R-10.61) (U-0.0942)	R-11 Batts & Plywood/OSB Fiberboard (R-12.36) (U-0.0809)	R-13 Batts & Gypsum on Two Sides (Garages) (R-11.52) (U-0.0868)	R-13 Batts & Fiberboard (R-12.64) (U-0.0791)	R-13 Batts & R-2 Foam (R-13.42) (U-0.0745)	R-13 Batts & R-3 Foam (R-14.53) (U-0.0688)	R-13 Batts & R-4 Foam (R-15.63) (U-0.0640)	R-13 Batts & R-5 Foam (R-16.71) (U-0.0598)	2x4 wall R-19 Batts (R-13.08) (U-0.0764)	R-13 Batts & R-6 Foam (R-17.79) (U-0.0562)	R-13 Batts & R-7 Foam (R-18.85) (U-0.0530)
R-11 Batts & Plywood/OSB Unfinished Basement wall (R-10.41) (U-0.0960)		R-13 Batts & Plywood/OSB (R-11.83) (U-0.0846)	R-13 Plywood/OSB Fiberboard (R-13.35) (U-0.0749)	R-15 Batts & Plywood/OSB (R-12.66) (U-0.0790)	R-15 Batts & Fiberboard (R-13.51) (U-0.0740)	R-15 Batts & R-2 Foam (R-14.32) (U-0.0698)	R-15 Batts & R-3 Foam (R-15.48) (U-0.0646)	2x4 wall R-13 Batts & R-6 Foam (R-17.68) (U-0.0565)	R-15 Batts & R-4 Foam (R-16.62) (U-0.0602)	R-15 Batts & R-5 Foam (R-17.73) (U-0.0564)
		R-13 Batts & Plywood/OSB Unfinished Basement wall (R-11.3) (U-0.0884)		R-15 Batts & Gypsum on Two Sides (Garages) (R-12.32) (U-0.0811)	R-13 Batts R-0.62 OSB R-3 Foam (R-15.22) (U-0.0657)	R-13 Batts R-0.62 OSB R-4 Foam (R-16.3) (U-0.0613)	R-13 R-0.62 OSB R-5 Foam (R-17.38) (U-0.0575)	2x4 wall R-15 Batts & R-4 Foam (R-16.50) (U-0.0606)	R-19 Batts & Plywood/OSB (R-15.84) (U-0.0631)	R-19 Batts & Fiberboard (R-16.65) (U-0.0601)
								2x6 wall R-15 Batts & R-4 Foam (R-17.94) (U-0.0557)	R-19 Batts & OSB Unfinished Basement wall (R-15.75) (U-0.0635)	
									R-19 Batts & Gypsum on Two Sides (Garages) (R-15.53) (U-0.0644)	

Wall R-values shown in this chart are for the insulated (opaque) wall areas based on 25% framing factor (bands uninsulated); does not include any openings (windows and doors). Per FTC Regulation 16 CFR 460, the R-value of the insulation shall not be more than 10% below the R-value shown in a label, fact sheet, ad, or other promotional material for that insulation. R-values shown in labels, fact sheets, ads, or other promotional materials shall be rounded to the nearest tenth. However, R-values of 10 or more may be rounded to the nearest whole number. Therefore, an R-2 Foam shall be an aged/stabilized R-1.8 or higher, an R-3 Foam shall be an aged/stabilized R-2.7 or higher, an R-4 Foam shall be an aged/stabilized R-3.6 or higher and etc. For full details on LABELING AND ADVERTISING OF HOME INSULATION see: http://www.access.gpo.gov/nara/cfr/waisidx_03/16cfr460_03.html.

TABLE 502.2.4(1)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-1 RESIDENTIAL BUILDINGS
WINDOW AREA 15 PERCENT OF GROSS EXTERIOR WALL AREA

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value [2,3]	Exterior Wall R-value[4]	Floor R-value	Basement Wall R-value[5]	Slab perimeter R-value[6]	Crawl space wall R-value
4B	0.65	0.4	R-30	R-11	R-11	R-5	R-0	R-5
5A	0.65	0.4	R-30	R-13	R-11	R-5	R-0	R-6
6B	0.65	0.4	R-30	R-13	R-19	R-5	R-0	R-7
7A-1	0.65	0.4	R-38	R-16	R-19	R-5	R-0	R-8
7A-2	0.60	0.4	R-38	R-13	R-19	R-5	R-0	R-8
8	0.60	0.4	R-38	R-16	R-19	R-6	R-0	R-10
8	0.55	0.4	R-38	R-13	R-19	R-6	R-0	R-10

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: Where ceiling is R-38 and up to 25% R-19 insulation, may use R-30 on 100% of ceiling area.
Note 4: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 5: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 6: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 502.2.4(2)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-1 RESIDENTIAL BUILDINGS
WINDOW AREA 18 PERCENT OF GROSS EXTERIOR WALL AREA

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value [2,3]	Exterior Wall R-value[4]	Floor R-value	Basement Wall R-value[5]	Slab perimeter R-value[6]	Crawl space wall R-value
4B-1	0.60	0.4	R-30	R-11	R-11	R-5	R-0	R-5
4B-2	0.65	0.4	R-30	R-13	R-11	R-5	R-0	R-5
5A-1	0.60	0.4	R-30	R-13	R-13	R-5	R-0	R-6
5A-2	0.55	0.4	R-30	R-13	R-11	R-5	R-0	R-6
6B-1	0.60	0.4	R-30	R-15	R-19	R-5	R-0	R-7
6B-2	0.55	0.4	R-30	R-13	R-19	R-5	R-0	R-7
7A-1	0.55	0.4	R-38	R-16	R-19	R-5	R-0	R-8
7A-2	0.51	0.4	R-30	R-16	R-19	R-5	R-0	R-8
7A-3	0.50	0.4	R-38	R-13	R-19	R-5	R-0	R-8
8-1	0.50	0.4	R-38	R-16	R-19	R-6	R-0	R-10
8-2	0.47	0.4	R-30	R-16	R-19	R-6	R-0	R-10
8-3	0.45	0.4	R-38	R-13	R-19	R-6	R-0	R-10

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: Where ceiling is R-38 and up to 25% R-19 insulation, may use R-30 on 100% of ceiling area.
Note 4: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 5: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 6: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 502.2.4(3)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-1 RESIDENTIAL BUILDINGS
WINDOW AREA 18 PERCENT OF GROSS EXTERIOR WALL AREA
R-13 WALL WITH PLYWOOD/OSB SHEATHING AND R-30 CEILING

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value [2]	Exterior Wall R-value[3]	Floor R-value	Basement Wall R-value[4]	Slab perimeter R-value[5]	Crawl space wall R-value
4B-13 Wall	0.65	0.4	R-30	R-13	R-11	R-5	R-0	R-5
5A-13 Wall	0.62	0.4	R-30	R-13	R-13	R-5	R-0	R-6
6B-13 Wall	0.58	0.4	R-30	R-13	R-19	R-5	R-0	R-7
7A-13 Wall	0.48	0.4	R-30	R-13	R-19	R-5	R-0	R-8
8-13 Wall	0.43	0.4	R-30	R-13	R-19	R-6	R-0	R-10

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 4: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 5: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 502.2.4(4)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-1 RESIDENTIAL BUILDINGS
WINDOW AREA 25 PERCENT OF GROSS EXTERIOR WALL AREA

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value [2,3]	Exterior Wall R-value[4]	Floor R-value	Basement Wall R-value[5]	Slab perimeter R-value[6]	Crawl space wall R-value
4B-1	0.55	0.4	R-30	R-16	R-13	R-5	R-0	R-5
4B-2	0.50	0.4	R-30	R-13	R-13	R-5	R-0	R-5
4B-3	0.45	0.4	R-30	R-11	R-11	R-5	R-0	R-5
5A-1	0.49	0.4	R-30	R-16	R-13	R-5	R-0	R-6
5A-2	0.45	0.4	R-30	R-13	R-13	R-5	R-0	R-6
5A-3	0.40	0.4	R-30	R-11	R-11	R-5	R-0	R-7
6B-1	0.45	0.4	R-30	R-15	R-19	R-5	R-0	R-7
6B-2	0.43	0.4	R-30	R-13	R-19	R-5	R-0	R-7
6B-3	0.40	0.4	R-30	R-11	R-19	R-5	R-0	R-7
7A-1	0.39	0.4	R-30	R-16	R-19	R-5	R-0	R-8
7A-2	0.37	0.4	R-30	R-13	R-19	R-5	R-0	R-8
8-1	0.35	0.4	R-38	R-13	R-19	R-6	R-0	R-10
8-2	0.36	0.4	R-30	R-16	R-19	R-6	R-0	R-10

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: Where ceiling is R-38 and up to 25% R-19 insulation, may use R-30 on 100% of ceiling area.
Note 4: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 5: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 6: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 502.2.4(5)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-1 RESIDENTIAL BUILDINGS
WINDOW AREA 30 PERCENT OF GROSS EXTERIOR WALL AREA

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value [2,3]	Exterior Wall R-value[4]	Floor R-value	Basement Wall R-value[5]	Slab perimeter R-value[6]	Crawl space wall R-value
4B-1	0.50	0.4	R-30	R-19	R-13	R-5	R-0	R-5
4B-2	0.45	0.4	R-30	R-13	R-13	R-5	R-0	R-5
5A-1	0.45	0.4	R-30	R-19	R-13	R-5	R-0	R-6
5A-2	0.40	0.4	R-30	R-13	R-13	R-5	R-0	R-6
6B-1	0.43	0.4	R-30	R-19	R-19	R-5	R-0	R-7
6B-2	0.40	0.4	R-38	R-16	R-19	R-5	R-0	R-7
6B-3	0.04	0.4	R-30	R-13	R-19	R-5	R-0	R-7
7A	0.35	0.4	R-38	R-16	R-19	R-5	R-0	R-8
8	0.34	0.4	R-38[7]	R-16	R-19	R-6	R-0	R-10

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: Where ceiling is R-38 and up to 25% R-19 insulation, may use R-30 on 100% of ceiling area.
Note 4: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 5: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 6: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.
Note 7: 100% of the ceiling shall be minimum R-38.

TABLE 502.2.4(6)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-2 RESIDENTIAL BUILDINGS
WINDOW AREA 22 PERCENT OF GROSS EXTERIOR WALL AREA

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value	Exterior Wall R-value[3]	Floor R-value	Basement Wall R-value[4]	Slab perimeter R-value[5]	Crawl space wall R-value
4B-5A	0.65	0.4	R-19	R-11	R-11	R-5	R-0	R-5
6B-8	0.65	0.4	R-30[2]	R-13	R-19	R-5	R-0	R-7

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 4: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 5: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 502.2.4(7)
PRESCRIPTIVE BUILDING ENVELOPE REQUIREMENTS, TYPE A-2 RESIDENTIAL BUILDINGS
WINDOW AREA 25 PERCENT OF GROSS EXTERIOR WALL AREA

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value[2]	Exterior Wall R-value[3]	Floor R-value	Basement Wall R-value[4]	Slab perimeter R-value[5]	Crawl space wall R-value
4B	0.65	0.4	R-19	R-11	R-11	R-5	R-0	R-5
5A	0.65	0.4	R-19	R-13	R-11	R-5	R-0	R-6
6B	0.60	0.4	R-30	R-13	R-19	R-5	R-0	R-7
7A	0.58	0.4	R-30	R-13	R-19	R-5	R-0	R-8
8	0.58	0.4	R-30	R-13	R-19	R-5	R-0	R-10

Note 1: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 2: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 3: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 4: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 5: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 602.1
SIMPLIFIED PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA
MINIMUM REQUIRED THERMAL PERFORMANCE (U-FACTOR AND R-VALUE)[1]

	Maximum		Minimum					
CLIMATE ZONE [FIGURE 302.1(11)]	Glazing U-factor[1]	SHGC[1]	Ceiling R-value[3,4]	Exterior Wall R-value[5]	Floor R-value	Basement Wall R-value[6]	Slab perimeter R-value[7]	Crawl space wall R-value
4B	0.65	0.4	R-30	R-13	R-11	R-5	R-0	R-5
5A	0.60	0.4	R-30	R-13	R-13	R-5	R-0	R-6
6B	0.55	0.4	R-30	R-13	R-19	R-5	R-0	R-7
7A-1	0.55	0.4	R-38	R-16	R-19	R-5	R-0	R-8
7A-2	0.50	0.4	R-38	R-13	R-19	R-5	R-0	R-8
8-1	0.50	0.4	R-38	R-16	R-19	R-6	R-0	R-10
8-1	0.45	0.4	R-38	R-13	R-19	R-6	R-0	R-10

Note 1: Maximum 18% fenestration area.
Note 2: Up to 5% of the fenestration may be exempt from meeting the window/door U-factor and Solar Heat Gain Coefficient (SHGC) requirements to allow for decorative glazing.
Note 3: Up to 25% of ceiling area may be R-19 for sloped ceilings & under HVAC.
Note 4: Where ceiling is R-38 and up to 25% R-19 insulation, may use R-30 on 100% of ceiling area.
Note 5: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 40% of the gross wall area may be plywood/OSB (for corner bracing/structural requirements) or gypsum fastened direct to the garage wall studs.
Note 6: Insulate the Mass wall with listed R-value and Stud wall and Bands with Min R-11. When using this table, include openings in the basement and exclude the opaque wall area in the basement when calculating Percent of Openings.
Note 7: Foam plastic shall not be installed on the exterior of below grade foundation walls or below grade on slab foundations. See Paragraph 502.2.1.4.

TABLE 701
MINIMUM THERMAL COMPONENT REQUIREMENTS

Element	Type Nonresidential & Residential Conditioned	Minimum R-value of Insulation	Maximum U-factor SHGC
Roof	Metal Buildings[1]	R-19 with Thermal Block	0.065
	Insulation Entirely above Deck except Metal Buildings	R-15	0.063
	Attic and Other[2]	R-30	0.034
Walls above Grade	Metal Building	R-13	0.113
	Cavity Walls[3]	R-13	
	Mass Walls[4]	**Per ASHRAE 90.1**	N/A
Glazed Fenestration	Any	N/A	U-0.65 / SHGC 0.60

Note 1: Metal buildings with purlins 5' on center and 1" x 3" thermal block.

Note 2: See appropriate ANSI/ASHRAE/IESN 90.1-2001 Tables B-5, B-6, B-8, B-9 or B-11 and Tables A-1, A-2, A-3 or A-4 for Attic and other Building Roof Minimum Thermal Requirements.

Note 3: Steel Framed or Wood Framed and Other Walls. See ANSI/ASHRAE/IESN 90.1-2001 Tables B-5, B-6, B-8, B-9 or B-11.

Note 4: Masonry, concrete, CMU, or other solid walls with a minimum weight of 30 pounds per square foot. See ANSI/ASHRAE/IESN 90.1-2001, Page 13, Definitions, Mass Wall.

"Single-Step" Residential Energy Code Compliance

Climate Zone 4B – South Georgia – Option 4B-2-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

1. Your building shall be a one or two family detached dwelling built using wood framing.
2. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
3. Your building site shall be located in Climate Zone 4B, as shown in the IECC 2000 Figure 302.1(11).
4. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
5. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
6. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
7. Equipment minimum efficiencies shall be observed:
   Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-% Openings in gross area of exterior wall[1]	**18.0% Max.**
-Solid Doors Max. U-factor[2]	**0.35**
-Glazed Doors Max. U-factor[2]	**0.65**
-Windows[2]	**0.65**
-Solar Heat Gain Coefficient (SHGC)	**0.40 Max.**
-Ceiling insulation[3]	**R-30**
-Wall cavity insulation[4]	**R-13**
-Knee Wall cavity insulation	**R-19**
-Wall Sheathing [4]	**OSB/Plywood**
-Floor Insulation (over unconditioned space)	**R-11**
-Basement Mass Wall insulation Min.	**R-5**
-Basement Stud Wall & Bands cavity insulation[5]	**R-11**
-Slab Perimeter Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 4B – South Georgia – Option 4B-3-2005-25%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

8. Your building shall be a one or two family detached dwelling built using wood framing.
9. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
10. Your building site shall be located in Climate Zone 4B, as shown in the IECC 2000 Figure 302.1(11).
11. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
12. Your window and door openings shall not exceed 25.0 percent of the gross wall area.
13. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
14. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-% Openings in gross area of exterior wall[1]	**25.0% Max.**
-Solid Doors Max. U-factor[2]	**0.35**
-Glazed Doors Max. U-factor[2]	**0.50**
-Windows[2]	**0.50**
-Solar Heat Gain Coefficient (SHGC)	**0.40 Max.**
-Ceiling insulation[3]	**R-30**
-Wall cavity insulation[4]	**R-13**
-Knee Wall cavity insulation	**R-19**
-Wall Sheathing [4]	**OSB/Plywood**
-Floor Insulation (over unconditioned space)	**R-13**
-Basement Mass Wall insulation Min.	**R-5**
-Basement Stud Wall & Bands cavity insulation[5]	**R-11**
-Slab Perimeter Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 5A – South Central Georgia – Option 5A-2-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

15. Your building shall be a one or two family detached dwelling built using wood framing.
16. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
17. Your building site shall be located in Climate Zone 5A or 4B, as shown in the IECC 2000 Figure 302.1(11).
18. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
19. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
20. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
21. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-% Openings in gross area of exterior wall[1]	**18.0% Max.**
-Solid Doors Max. U-factor[2]	**0.35**
-Glazed Doors Max. U-factor[2]	**0.62**
-Windows[2]	**0.62**
-Solar Heat Gain Coefficient (SHGC)	**0.40 Max.**
-Ceiling insulation[3]	**R-30**
-Wall cavity insulation[4]	**R-13**
-Knee Wall cavity insulation	**R-19**
-Wall Sheathing [4]	**OSB/Plywood**
-Floor Insulation (over unconditioned space)	**R-13**
-Basement Mass Wall insulation Min.	**R-5**
-Basement Stud Wall & Bands cavity insulation[5]	**R-11**
-Slab Perimeter Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 5A – South Central Georgia – Option 5A-3-2005-25%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

22. Your building shall be a one or two family detached dwelling built using wood framing.
23. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
24. Your building site shall be located in Climate Zone 5A or 4B, as shown in the IECC 2000 Figure 302.1(11).
25. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
26. Your window and door openings shall not exceed 25.0 percent of the gross wall area.
27. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
28. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-% Openings in gross area of exterior wall[1]	**25.0% Max.**
-Solid Doors Max. U-factor[2]	**0.35**
-Glazed Doors Max. U-factor[2]	**0.45**
-Windows[2]	**0.45**
-Solar Heat Gain Coefficient (SHGC)	**0.40 Max.**
-Ceiling insulation[3]	**R-30**
-Wall cavity insulation[4]	**R-13**
-Knee Wall cavity insulation	**R-19**
-Wall Sheathing [4]	**OSB/Plywood**
-Floor Insulation (over unconditioned space)	**R-13**
-Basement Mass Wall insulation Min.	**R-5**
-Basement Stud Wall & Bands cavity insulation[5]	**R-11**
-Slab Perimeter Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 6B – Central Georgia – Option 6B-3-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

29. Your building shall be a one or two family detached dwelling built using wood framing.
30. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
31. Your building site shall be located in Climate Zone 6B, 5A or 4B, as shown in the IECC 2000 Figure 302.1(11).
32. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
33. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
34. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
35. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-% Openings in gross area of exterior wall[1]	**18.0% Max.**
-Solid Doors Max. U-factor[2]	**0.35**
-Glazed Doors Max. U-factor[2]	**0.55**
-Windows[2]	**0.55**
-Solar Heat Gain Coefficient (SHGC)	**0.40 Max.**
-Ceiling insulation[3]	**R-30**
-Wall cavity insulation[4]	**R-13**
-Knee Wall cavity insulation	**R-19**
-Wall Sheathing [4]	**OSB/Plywood**
-Floor Insulation (over unconditioned space)	**R-19**
-Basement Mass Wall insulation Min.	**R-5**
-Basement Stud Wall & Bands cavity insulation[5]	**R-11**
-Slab Perimeter Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 6B – Central Georgia – Option 6B-4-2005-25%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

36. Your building shall be a one or two family detached dwelling built using wood framing.
37. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
38. Your building site shall be located in Climate Zone 4B, 5A or 4B, as shown in the IECC 2000 Figure 302.1(11).
39. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
40. Your window and door openings shall not exceed 25.0 percent of the gross wall area.
41. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
42. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-% Openings in gross area of exterior wall[1]	**25.0% Max.**
-Solid Doors Max. U-factor[2]	**0.35**
-Glazed Doors Max. U-factor[2]	**0.43**
-Windows[2] **Max. U-factor**	**0.43**
-Solar Heat Gain Coefficient (SHGC)	**0.40 Max.**
-Ceiling insulation[3]	**R-30**
-Wall cavity insulation[4]	**R-13**
-Knee Wall cavity insulation	**R-19**
-Wall Sheathing [4]	**OSB/Plywood**
-Floor Insulation (over unconditioned space)	**R-19**
-Basement Mass Wall insulation Min.	**R-5**
-Basement Stud Wall & Bands cavity insulation[5]	**R-11**
-Slab Perimeter Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values
All Windows shall have labels listing U-factor, SHGC, and Key Features

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 7A – Greater Atlanta Area – Option 7A-4-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

43. Your building shall be a one or two family detached dwelling built using wood framing.
44. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
45. Your building site shall be located in Climate Zone 7A, 6B, 5A or 4B as shown in the IECC 2000 Figure 302.1(11).
46. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
47. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
48. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
49. Equipment minimum efficiencies shall be observed: Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.50**
-**Windows**[2]	**0.55**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-38**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**R-3**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-5**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area. Also complies if 100% of ceiling is R-30.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-16 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 7A – Greater Atlanta Area – Option 7A-5-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

50. Your building shall be a one or two family detached dwelling built using wood framing.
51. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
52. Your building site shall be located in Climate Zone 7A, 6B, 5A, or 4B as shown in the IECC 2000 Figure 302.1(11).
53. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
54. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
55. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
56. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.50**
-**Windows**[2]	**0.51**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-30**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**R-3**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-5**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-16 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 7A – Greater Atlanta Area – Option 7A-6-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

57. Your building shall be a one or two family detached dwelling built using wood framing.
58. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
59. Your building site shall be located in Climate Zone 7A, 6B, 5A, or 4B as shown in the IECC 2000 Figure 302.1(11).
60. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
61. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
62. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
63. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.50**
-**Windows**[2]	**0.50**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-38**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**OSB/Plywood/FibBd**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-5**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area. Also complies if 100% of ceiling is R-30.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 7A – Greater Atlanta Area – Option 7A-7-2005-25%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

64. Your building shall be a one or two family detached dwelling built using wood framing.
65. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
66. Your building site shall be located in Climate Zone 7A, 6B, 5A, or 4B as shown in the IECC 2000 Figure 302.1(11).
67. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
68. Your window and door openings shall not exceed 25.0 percent of the gross wall area.
69. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
70. Equipment minimum efficiencies shall be observed: Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**25.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.40**
-**Windows**[2]	**0.37 Max.**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-30**
-**Wall** cavity insulation[4]	**R-13**
-**Attic Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**OSB/Plywood/FibBd**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-5**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. Up to 40% of the gross wall area can be gypsum fastened direct to the garage wall studs and the entire exterior and basement walls may be Plywood/OSB.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 7A – Greater Atlanta Area – Option 7A-8-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

71. Your building shall be a one or two family detached dwelling built using wood framing.
72. Your building is three stories or less in height and above grade conditioned floor area is not larger than 5,000 sq. ft.
73. Your building site shall be located in Climate Zone 7A, 6B, 5A, or 4B as shown in the IECC 2000 Figure 302.1(11).
74. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
75. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
76. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
77. Equipment minimum efficiencies shall be observed:
78. Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.55**
-**Windows**[2]	**0.55**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-38**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**R-3**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-5**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area. May also insulate 100% with R-30.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-16 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 7A – Metro Atlanta – Option 7A-OSB-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

79. Your building shall be a one or two family detached dwelling built using wood framing.
80. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
81. Your building site shall be located in Climate Zone 7A, 6B,5A or 4B as shown in the IECC 2000 Figure 302.1(11).
82. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
83. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
84. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
85. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.48**
-**Windows**[2]	**0.48**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-30**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**OSB/Plywood**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-5**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 8 – North Georgia – Option 8-3-2005-25%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

86. Your building shall be a one or two family detached dwelling built using wood framing.
87. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
88. Your building site may be located in any Climate Zone, as shown in the IECC 2000 Figure 302.1(11).
89. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
90. Your window and door openings shall not exceed 25.0 percent of the gross wall area.
91. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
92. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**25.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.35**
-**Windows**[2]	**0.35**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-38**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**OSB/Plywood**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-6**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area. Also complies if 100% of ceiling is R-30.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 8 – North Georgia – Option 8-4-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

93. Your building shall be a one or two family detached dwelling built using wood framing.
94. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
95. Your building site may be located in any Climate Zone, as shown in the IECC 2000 Figure 302.1(11).
96. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
97. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
98. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
99. Equipment minimum efficiencies shall be observed:
    Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.47**
-**Windows**[2]	**0.47**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-30**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**R- 3**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-6**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-16 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.

"Single-Step" Residential Energy Code Compliance

Climate Zone 8 – North Georgia – Option 8-OSB-2005-18%

You are "deemed to comply" with the *Georgia State Energy Code for Buildings* if your residential structure meets the following conditions:

100. Your building shall be a one or two family detached dwelling built using wood framing.
101. Your building is three stories or less in height and the above grade conditioned floor area is not larger than 5,000 sq. ft.
102. Your building site may be located in any Climate Zone, as shown in the IECC 2000 Figure 302.1(11).
103. You shall not make any substitutions of any kind for R-values/U-factors listed below in conditioned space.
104. Your window and door openings shall not exceed 18.0 percent of the gross wall area.
105. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures in ceilings with attics and seal all ductwork with mastic.
106. Equipment minimum efficiencies shall be observed:
Gas furnace: AFUE min 78%; A/C or Heat pump: SEER 10.0; Heat pump: HSPF 6.8; other (explain) _____

-**% Openings** in gross area of exterior wall[1]	**18.0% Max.**
-**Solid Doors Max. U-factor**[2]	**0.35**
-**Glazed Doors Max. U-factor**[2]	**0.43**
-**Windows**[2]	**0.43**
-**Solar Heat Gain Coefficient** (SHGC)	**0.40 Max.**
-**Ceiling** insulation[3]	**R-30**
-**Wall** cavity insulation[4]	**R-13**
-**Knee Wall** cavity insulation	**R-19**
-**Wall Sheathing** [4]	**OSB/Plywood**
-**Floor** Insulation (over unconditioned space)	**R-19**
-**Basement Mass Wall** insulation Min.	**R-6**
-**Basement Stud Wall & Bands** cavity insulation[5]	**R-11**
-**Slab Perimeter** Insulation [6]	**R-0**

All R-values shall be printed on the actual insulation and be stabilized (aged) R-values.
All Windows shall have labels listing U-factor, SHGC, and Key Features.

Foam Plastics shall not be installed below grade on exterior side of foundation walls or below grade on slab foundations. These R-values may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in Georgia. If you must change one or more of the R-values/U-factors listed to a lower R-value or higher U-factor, then do not use this method. **No substitutions are allowed here.**

Instead, you may use one of the other methods to show compliance, such as The Trade-off Worksheet or the free REScheck software (available at www.energycodes.gov). You may also use one of the Chapter 4, 5, or 6 approaches of the 2000 IECC with Georgia modifications.

At the time a permit is requested, you shall show how you plan to meet the Georgia Energy Code. When using the ***"Single-Step" Residential Energy Code Compliance*** method, you may not be required to turn in additional paperwork to obtain a building permit, except calculation on Percent of Openings (Take-off Worksheet may be used to calculate % Openings).

Note 1: "% Openings" is defined by the total area of the openings of windows and doors divided by the total gross area of the exterior wall. % Openings = 100 x (windows + doors) / (opaque walls + windows + doors – basement opaque walls).

Note 2: One Door or up to 5% of the opening area (whichever is greater area) may be exempt from meeting the window/door U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, and space under HVAC equipment may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area.

Note 4: Any combination of Cavity Insulation + Sheathing R-value that = R-13 or greater is permitted. 40% of the gross wall area and all basement walls, may be Plywood/OSB (for corner/structural requirements) or gypsum fastened direct to the garage wall studs.

Note 5: Unfinished conditioned basements require unfaced insulation, Class 1 facer (0-25 Flame Spread) or other approved insulation.

Note 6: Unheated slabs.