

Table of IECC Building Envelope Requirements for Georgia

Prescriptive Path for Compliance with the 2006 IECC with 2008 Georgia Amendments

WINDOWS AND INSULATION

FOUNDATION TYPE

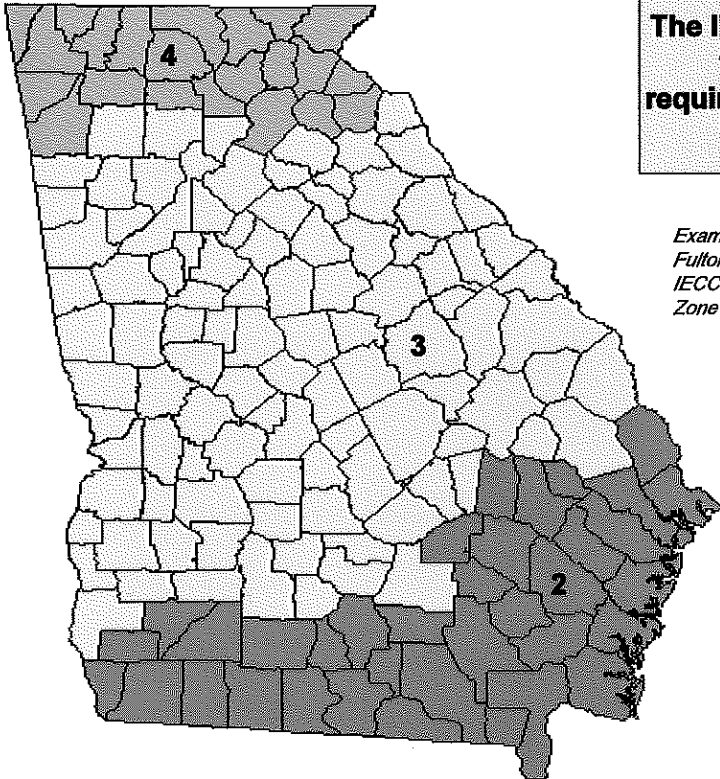
Package	Window and Skylight				Wood Frame Wall	Attic & Knee Wall	Mass Wall	Duct	Floor	Basement Wall	Slab R-Value and Depth	Crawl Space Wall
	Window U-factor	Skylight U-Factor	Skylight SHGC	Ceiling R-Value	R-Value	R-Value	R-Value	R-Value	R-Value	R-Value	R-Value	R-Value
Climate Zone 2	0.65	0.75	0.40	R-30	R-13	R-18	R-5	R-6/8	R-13	R-0	R-0	R-0
Climate Zone 3	0.65	0.65	0.40	R-30	R-13	R-18	R-5	R-6/8	R-19	R-5/13	R-0	R-5/13
Climate Zone 4	0.40	0.60	0.40	R-38	R-13	R-18	R-5	R-6/8	R-19	R-5/13	R-0	R-5/13

NOTES:

1. This table applies to new construction, as well as all additions, alterations and replacement windows and is based upon the envelope performance requirements for Climate Zones 2-4, Table 402.1.1 in the 2008 Georgia State Supplements and Amendments to the IECC. This table applies to residential buildings, as defined in the IECC, with wood framing and/or mass walls. For steel-framed buildings, refer to Section 402.2.4 of the IECC.
2. Window refers to any translucent or transparent material (i.e., glazing) in exterior openings of buildings, including skylights, sliding glass doors and glass block, along with the accompanying sashes, frames, etc.
3. Window and skylight U-factor and SHGC values are maximum acceptable levels. An area-weighted average of fenestration products shall be permitted to satisfy the U-factor and SHGC requirements, but all windows must not exceed a U-factor of 0.65 or an SHGC of 0.40, pursuant to Table 402.7.1. Window U-factor and SHGC must be determined from a National Fenestration Rating Council (NFRC) label on the product or from a limited table of product default values in the IECC. Up to 15 square feet of glazed fenestration is permitted to be exempt from the U-factor and SHGC requirements.
4. The code requires that windows be labeled in a manner to determine that they meet the IECC's air infiltration requirements; specifically, equal to or better than 0.30 cfm per square foot of window area (swinging doors below 0.50 cfm) as determined in accordance with NFRC 400 or AAMA/WDMA/CSA 1011/S.2/A440 by an accredited, independent laboratory.
5. Opaque exterior doors must meet the window U-factor requirements. One exempt door is allowed.
6. Insulation R-values are minimum acceptable levels; R-19 shall be permitted to be compressed into a 2x6 cavity. R-values for walls represent the sum of cavity insulation plus insulated sheathing, if any. Wall insulation shall have an air barrier on all six sides, except as noted in Table 402.1.1.
7. If structural sheathing covers 25% or less of the exterior, insulated sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% of the exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.
8. Supply and return ducts in unconditioned attics and exterior locations shall be insulated to a minimum of R-8. All other ducts located outside the building thermal envelope shall be insulated to a minimum of R-6. Ducts shall be designed and sized according to ACCA Manual D or other approved methods.
9. Where there are two different values for basement and crawl space insulation requirements, the first R-value applies to continuous insulation, the second to framing cavity insulation. Crawl space wall R-value shall only apply to unventilated crawl spaces. Sealed crawl space wall insulation must leave appropriate inspection gaps. R-5 shall be added to the required slab edge R-values for heated slabs; and floors over outside air must meet ceiling requirements.
10. Prescriptive packages are based upon normal HVAC equipment efficiencies (NAECA minimums). The code also requires the HVAC system to be properly sized using a computational procedure like the ASHRAE Handbook of Fundamentals or ACCA Manual J.

IECC Compliance Guide for Homes in Georgia

Code: 2006 International Energy Conservation Code with 2008 Georgia Amendments



The IECC assigns the counties in the state of Georgia into three climate zones. The envelope performance requirements vary for each zone as detailed in the building requirements found on the back of this sheet.

Example: If you are constructing a home in Fulton County, you will comply with the 2006 IECC if you follow the requirements for Climate Zone 3.

Step-by-Step Instructions

1. Use the color-coded map or list of counties to locate the IECC climate zone in which construction is taking place.
2. Use the "Table of IECC Building Envelope Requirements for Georgia" (on the back of this sheet) to determine the envelope performance requirements associated with the climate zone.
3. Construct the building according to the envelope performance requirements and comply with certain other basic code requirements, which include:
 - a. providing preventative maintenance manuals
 - b. attaching a permanent certificate listing insulation, window & HVAC performance information
 - c. installing temperature controls
 - d. limiting window and door leakage
 - e. caulking or sealing joints and penetrations
 - f. installing vapor retarders (in certain circumstances)
 - g. sealing and insulating ducts

The 2006 International Energy Conservation Code

The 2006 IECC was adopted by reference by the Georgia Department of Community Affairs (with 2008 Georgia-specific amendments) and is effective January 1, 2008. For additional details on Georgia's building energy code, contact the DCA by phone or visit their website at www.dca.state.ga.us

Limitations

This guide is an energy code compliance aid for Georgia based upon the 2006 IECC and the 2008 Georgia State Supplements and Amendments. It does not provide a guarantee for meeting the IECC. The guide does not provide a guarantee for meeting the state energy code. For more details on Georgia's energy code, please contact your local building code official.

IECC Climate Zone 2

Appling	Bryan	Decatur	Lanier	Pierce
Atkinson	Camden	Echols	Liberty	Seminole
Bacon	Charlton	Effingham	Long	Tattnall
Baker	Chatham	Evans	Lowndes	Thomas
Barren	Clinch	Glynn	McIntosh	Toombs
Brantley	Cotquitt	Grady	Miller	Ware
Brooks	Cook	Jeff Davis	Mitchell	Wayne

IECC Climate Zone 3

Baldwin	Crawford	Henry	Muscogee	Taylor
Barrow	Crisp	Houston	Newton	Telfair
Bartow	De Kalb	Irwin	Oconee	Terrell
Ben Hill	Dodge	Jackson	Oglethorpe	Tift
Bibb	Dooly	Jasper	Paulding	Treutlen
Bleckley	Dougherty	Jefferson	Peach	Troup
Bulloch	Douglas	Jenkins	Pike	Turner
Burke	Early	Johnson	Polk	Twiggs
Butts	Elbert	Jones	Pulaski	Upson
Calhoun	Emanuel	Lamar	Putnam	Walton
Candler	Fayette	Laurens	Quitman	Warren
Carroll	Forsyth	Lee	Randolph	Washington
Chattahoochee	Fulton	Lincoln	Richmond	Webster
Cherokee	Glascok	Macon	Rockdale	Wheeler
Clarke	Greene	Madison	Schley	Wilcox
Clay	Gwinnett	Marion	Screven	Wilkes
Clayton	Hancock	McDuffie	Spalding	Wilkinson
Cobb	Haralson	Meriwether	Stewart	Worth
Coffee	Harris	Monroe	Sumter	
Columbia	Hart	Montgomery	Talbot	
Coweta	Heard	Morgan	Taliaferro	

IECC Climate Zone 4

Banks	Fannin	Habersham	Rabun	White
Catoosa	Floyd	Hall	Stephens	Whitfield
Chattooga	Franklin	Lumpkin	Towns	
Dade	Gilmer	Murray	Union	
Dawson	Gordon	Pickens	Walker	



Department of
Community Affairs

