

“Single-Step” Residential Energy Code Compliance
Climate Zone 8 –North Georgia– Option 8-1
(R-38 ceiling, R-13 Batt + R-3 Sheathing)

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 not larger than 5,000 square feet of conditioned area.
3. Your building site must be located in Climate Zone 8, as shown in the IECC 2000 Figure 302.1(11), an area of
4. the state where the climatic conditions of approximately 4,000 Heating Degree Days or less apply.
5. You shall not make any substitutions of any kind for R-values/U-factors listed below.
6. Your window and door openings shall not exceed 18 percent of the gross wall area.
7. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures
8. in ceilings with attics and seal all ductwork with mastic.
9. Equipment minimum efficiencies shall be observed:
10. 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% Max.
Doors U factor	0.55 Max.
Windows , Double Pane, U factor ²	0.50 Max.
Solar Heat Gain Coefficient (SHGC) ²	0.40 Max.
Ceiling insulation ³	R38
Wall cavity insulation	R13
Knee Wall insulation	R19
Insulating Sheathing ⁴	R3
Floor Insulation	R19
Basement Masonry wall insulation	R8
Slab Perimeter Insulation ⁵	R0

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

Foam Plastics shall not be installed below grade on foundation walls or below grade on slab foundations. These Rvalues may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in North 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 Tradeoff Worksheet or the free MECcheck 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.

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).

Note 2: Up to 5% of the window area may be exempt from meeting the window U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area and provided the flat portions of the ceiling are insulated to R-38.

Note 4: When the Exterior Wall R-value is cavity insulation and continuous insulated sheathing, 25% 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: Unheated slabs.

“Single-Step” Residential Energy Code Compliance
Climate Zone 8 –North Georgia– Option 8-2
(R-38 ceiling, R-13 Batt + OSB/Plywood)

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 not larger than 5,000 square feet of conditioned area.
3. Your building site must be located in Climate Zone 8, as shown in the IECC 2000 Figure 302.1(11), an area of the state where the climatic conditions of approximately 4,000 Heating Degree Days or less apply.
5. You shall not make any substitutions of any kind for R-values/U-factors listed below.
6. Your window and door openings shall not exceed 18 percent of the gross wall area.
7. You shall comply with code requirements for envelope air sealing including all air tight, I. C. rated light fixtures
8. in ceilings with attics and seal all ductwork with mastic.
9. Equipment minimum efficiencies shall be observed:
10. 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% Max.
Doors U-factor	0.35 Max.
Windows , Double Pane, U-factor ²	0.45 Max.
Solar Heat Gain Coefficient (SHGC) ²	0.40 Max.
Ceiling insulation ³	R38
Wall cavity insulation	R13
Knee Wall insulation	R19
Wall Sheathing ⁴	Plywood/OSB
Floor Insulation	R19
Basement Masonry wall insulation	R8
Slab Perimeter Insulation ⁵	R0

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

Foam Plastics shall not be installed below grade on foundation walls or below grade on slab foundations. These Rvalues may result in some degree of "over-design". However, this method will apply to a majority of one and two family residences built in North 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 Tradeoff Worksheet or the free MECcheck 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.

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).

Note 2: Up to 5% of the window area may be exempt from meeting the window U-factor and SHGC requirements to allow for decorative glazing.

Note 3: Sloped ceilings, such as cathedral & tray ceilings, which require batt insulation, may be insulated with R-19 batts, provided the R-19 portion does not exceed 25% of the total ceiling area and provided the flat portions of the ceiling are insulated to R-38.

Note 4: Insulating values for plywood, OSB or other structural sheathing are already accounted for in the approach. Garage walls may be R-13 cavity insulation with gypsum on both sides.

Note 5: Unheated slabs