gwinnettcounty

Department of Planning and Development

Affidavit for Residential Dwellings Compliance with the Georgia State Minimum Standard Energy Code

(2009 International Energy Conservation Code with Georgia State Supplements and Amendments)



| Notice: This form shall be completed, signed and submitted | to the Building Permits Section at the time a | huilding permit is obtained |
|--|--|---|
| Building Permit number: | _ | bunding permit is obtained. |
| Subdivision: | | |
| Job site address: | | |
| Contractor/Builder: | | |
| The 2009 International Energy Conservation Code, published State Supplements and Amendments, shall constitute the official minimum regulations for energy-efficient design, erection, consminimum requirements of the Georgia State Minimum Standard on this affidavit form shall be provided. References to "see forms shall be listed by title. | l Georgia State Minimum Standard Energy Coc struction, and/or alteration of one and two fa d Energy Code by designers and builders is ma | le for buildings. This code establishes mily dwellings. Compliance with the andatory. All information requested |
| I do certify that the above permitted structure shall be built in a dard Energy Code for one and two family dwelling buildings using | | f the Georgia State Minimum Stan- |
| Please select one of the compliance methods as follow GA State Amendments Table 402.1.1 INSULATION AND RECA IECC Compliance Guide for Homes in Georgia bas RESCheck – Refer to GA State Amendments Table 402.1.4 An approved Energy Code Compliance Table by IECC Section 405 Simulated Performance Alternative using | FENESTRATION REQUIREMENTS BY CON sed on GA State Amendments Table 402.1.1 For minimum R-values and maximum U-facto | (Climate Zone 3). |
| The following are additional requirements of the energy Heating and cooling sized per ACCA Manual J and Duct De A permanent compliance certificate per GA State Amendmelectrical distribution panel or air handler – Refer to GA State Air Barriers installed on all vertical sides of insulation (exception). Air barrier at eaves to prevent "wind washing". | isign per ACCA Manual D with R-8 Ducts in a nents section 401.3 shall be readily accessible te Supplements and Amendments Appendix D | ttics (required). and shall be posted on or near the |
| Indicate with "X" the following applicable items: Unvented/sealed crawl space shall comply with GA State Ar Pull down/disappearing stairs in conditioned space weather- Scuttle hole access to attic with minimum R-19 — Refer to Co | stripped with R-5 – Refer to GA State Amend | ments section 402.2.3. |
| List following R-values: Flat CLG R; sloped CLG/RFG R; Wall Cavity R Attic Knee Wall (min R-18) R; Floor over unconditione Number of stories; Conditioned basement:YN Window U-factor; Window SHGC; Heating | d space (min R-19) R; N; Slab-on-grade: □Y □N g Efficiency %; Cooling Efficiency SEE | ER |
| Any Comments: | | |
| Signature (original): | Printed name: | |
| Company name: | | |
| Address: | City: | Zip: |
| County staff signature: | Date: | RFV 10 13 |

*Add new Table 402.7.1, 'Summary Of Minimum Insulation R-Values And Maximum U-Factors For Envelope Components', as follows:

TABLE 402.7.1
SUMMARY OF MINIMUM INSULATION R-VALUES
AND MAXIMUM U-FACTORS FOR ENVELOPE COMPONENTS

| ELEMENT ¹ | MODE | MINIMUM R-VALUE OR MAXIMUM U-FACTOR | |
|--------------------------------|--------------------|--|--|
| Walls Stud | Heating or Cooling | R-13 | |
| Walls Masonry/CMU ² | Heating or Cooling | R-5 | |
| Attic Kneewalls ³ | Heating or Cooling | R-18 | |
| Roof/Ceiling | Heating or Cooling | R-19 | |
| Floor Over Unheated Spaces | Heating or Cooling | R-13 | |
| Windows ⁴ | Heating or Cooling | U-0.65 with Maximum 0.40 SHGC | |

- 1. Weather-stripped access doors (maximum U-0.35), weather-stripped hatches/scuttle hole covers (minimum R-19 insulation or maximum U-0.05), or weather-stripped disappearing/pull-down stairs (maximum U-0.35) shall be deemed to meet the minimum insulation R-values of any element.
- 2. Any mass wall above or below grade.

Exception: Climate Zone 2.

- 3. See definition of 'ATTIC KNEEWALL' in these Georgia State Supplements and Amendments.
- 4. Maximum window *U*-factor shall be 0.65 and maximum SHGC shall be 0.40.

(Effective January 1, 2008)

SECTION 403 SYSTEMS (Mandatory)

*Revise Section 403.2.1, 'Insulation', to read as follows:

403.2.1 Insulation. 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.

Exception: Ducts or portions thereof located completely inside the building thermal envelope.

(Effective January 1, 2008)

*Revise Section 403.2.2, 'Sealing', to read as follows:

403.2.2 Sealing. All ducts, air handlers, filter boxes, and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.3.1 of the *International Residential Code*. Air handlers with a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested at an air pressure of 1-inch water gauge when all air inlets, air outlets, and condensate drain port(s) are sealed shall be deemed sealed. Air handlers with filter boxes shall be tested with the filter box in place. (Effective January 1, 2008)

*Delete Tables 402.1.1, 'Insulation And Fenestration Requirements By Componenta', and 402.1.3, 'Equivalent *U*-Factorsa', and substitute by adding new Table 402.1.1, 'Insulation And Fenestration Requirements By Componenta', as follows:

TABLE 402.1.1
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a

| CLIMATE ZONE | FENESTRATION U-FACTOR ^b | SKYLIGHT U-FACTOR ^b | GLAZED FENESTRATION SHGC ^b | CEILING R-VALUE | WOOD FRAME WALL R-VALUE ^d | ATTIC KNEEWALL |
|-----------------|---------------------------------------|-----------------------------------|---|---------------------------------|---|--------------------|
| 2 | 0.65 | 0.75 | 0.40 | R-30 or U-0.030 | R-13 or U-0.082 | R-18 or U-0.065 |
| 3 | 0.65 | 0.65 | 0.40 | R-30 or U-0.030 | R-13 or U-0.082 | R-18 or U-0.065 |
| 4 | 0.40 | 0.60 | 0.40 | <i>R</i> -38 or <i>U</i> -0.025 | R-13 or U-0.082 | R-18 or U-0.065 |

| , | CLIMATE ZONE | MASS WALL R-VALUE | FLOOR R-VALUE | BASEMENT WALL R-VALUE ^{gj} | SLAB R-VALUE AND DEPTH ^h | CRAWL SPACE WALL R-VALUE ^U |
|---|-----------------|-------------------------------|------------------------------------|---|---|---|
| | 2 | <i>R-5</i> or <i>U-</i> 0.141 | <i>R</i> -13 or <i>U</i> -0.064 | R-0 U-0,36 | 0 | R-0 U-0.477 |
| | 3 | R-5 or U-0.141 | R-19 or U-0.047 | 5/13 <i>U</i> -0.136 | 0 | . 5/13 U-0.136 |
| | 4 | R-5 or U-0.141 | R-19 or U-0.047 | 5/13 <i>U</i> -0.136 | 0 | 5/13 <i>U</i> -0.136 |

For SI: 1 foot = 304.8 mm.

- a. R-values are minimums. U-factors and SHGC are maximums. R-19 shall be permitted to be compressed into a 2×6 cavity. Nonfenestration U-factors shall be obtained from measurement, calculation or an approved source.
- b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration, including doors 50 percent or more glazed. One door or window (or up to 15 square feet [1.4 m²] of glazed fenestration) may be exempt from meeting the *U*-factor and SHGC.
- c. Ends and sides of ceiling joist cavity shall be blocked with an approved air barrier. Flat ceiling insulation shall be in contact with interior side of ceiling. Ceiling areas without attic space in Climate Zone 4 may be R-30 (maximum of 25 percent of ceiling area). For HVAC platform and floored access path areas, ceiling insulation may be reduced to R-19.
- d. All vertical insulation shall be in substantial contact with an air barrier on all six (6) sides.

Exceptions:

- 1. Unfinished basements (insulation shall be restrained to stay in place).
- 2. On interior side of wall in Climate Zones 2 and 3 behind tubs, showers and fireplaces (insulation shall be restrained to stay in place).
- e. R-13 + R-5, R-15 + R-3, or R-19 compressed into a 2×6 cavity is deemed to meet R-18 minimum requirement. Attic side shall have a sealed air barrier.
- f. Floor insulation shall be installed to maintain permanent contact with the underside of the subfloor decking, and insulation ends shall be blocked. Cantilevered floors shall be R-30 and band area above exterior wall shall be blocked.
- g. R-5 is mass and R-13 is cavity and band. For basements with no direct conditioning, either the floor or all of the basement walls shall be insulated. For basements with direct conditioning, all of the basement walls shall be insulated.
- h. Unheated slabs. Heated slabs shall have exterior edge insulated to R-5 to a depth of 2 feet (610 mm). Insulation located below grade shall be in compliance with Section 402.2.7.
- i. See Section 402.2.8 of these Georgia State Supplements and Amendments.
- j. Consideration should be given for mold, moisture, and for termite inspection and treatment.

Georgia is Climate Zone 3

Exceptions:

- Climate Zone 2 Counties: Appling, Atkinson, Bacon, Baker, Berrien, Brantley, Brooks, Bryan, Camden, Charlton, Chatham, Clinch, Colquitt, Cook, Decatur, Echols, Effingham, Evans, Glynn, Grady, Jeff Davis, Lanier, Liberty, Long, Lowndes, McIntosh, Miller, Mitchell, Pierce, Seminole, Tattnall, Thomas, Toombs, Ware and Wayne.
- Climate Zone 4 Counties: Banks, Catoosa, Chattooga, Dade, Dawson, Fannin, Floyd, Franklin, Gilmer, Gordon, Habersham, Hall, Lumpkin, Murray, Pickens, Rabun, Stephens, Towns, Union, Walker, White and Whitfield.