

Instructions for the Residential Building Data Collection Checklist 2009 International Energy Conservation Code with 2011 Georgia Amendments

Use of these instructions with a residential data collection checklist assumes a general understanding of the provisions of the International Energy Conservation Code (2009 IECC) with 2011 Georgia Amendments and key concepts and definitions applicable to those provisions. Consult the 2009 IECC and relevant support materials when in doubt about a particular item in the checklist. Each checklist item contains the corresponding 2009 IECC code section(s) for quick reference. While most of the code provisions are included in the checklists, there are a few requirements that are deemed administrative and/or without significant impact, and these are not included.

The checklist is divided into stages corresponding to traditional building inspection stages. A building may require more than one field visit to gather compliance data during each stage of construction.

Completing the General Information Section. All inputs at the top of the first page of the checklist should be completed. Some of these inputs are repeated at the start of each new construction stage.

- **Compliance Approach:** Compliance with the energy code can be demonstrated by the prescriptive, trade-off, or simulated performance approach. In evaluating building compliance, the prescriptive approach should be assumed unless documentation is obtained from the building department or responsible authority demonstrating compliance with either the trade-off or simulated performance approach. The *Code Value* column on the checklist contains the prescriptive requirement which must be met under the prescriptive approach.
- If a trade-off or performance approach is used to demonstrate compliance, the building may NOT comply with these prescriptive values and yet may still be deemed to comply with the code (and therefore should be marked as compliant for the given checklist item) on the basis that some other aspect of the building exceeds the code. For example, assume a trade-off approach was used and a valid REScheck software report was submitted showing a compliant building in Climate Zone 3 with R-3 basement insulation. In Climate Zone 3, the code's prescriptive insulation R-value requirement for a basement wall is listed as R-5. In this example, the basement insulation should be marked as compliant even though it does not meet the prescriptive requirement given on the checklist. If the trade-off submission is valid, there will be some other building component that exceeds code requirements and offsets the non-compliant basement wall.

Complies Column. Each checklist item must be selected as compliant (Y), not compliant (N), or not applicable (N/A). Some examples of where a checklist item might be considered N/A include pool requirements for buildings that do not have a pool, basement requirements for a building that has a slab-on-grade foundation, or sunroom requirements for buildings that do not have a sunroom. When evaluating a renovation or addition, it is also appropriate to select N/A for code provisions that do not apply. N/A should **not** be selected for cases where the code provision cannot be inspected because it has been covered or can't be observed.

Verified Values Column. The checklists are used to collect information about the building as well as to determine compliance. Provide the observed value (R-value, U-factor, depth of insulation, etc) in the *Verified Value* column. In many cases, you may observe more than one value, in which case all values observed should be recorded. For example, windows in the building may have a different U-factor than sliding glass doors. How compliance is determined when multiple values are found may vary depending on the compliance approach:

- **Prescriptive Approach – Insulation R-values:** All insulation R-values must be equal to or greater than the prescriptive code value. Enter all observed R-values into the *Verified Value* column. If any are less than the prescriptive code value, this checklist item is deemed to fail.
- **Prescriptive Approach – Fenestration U-factors and SHGC:** Enter all observed U-factors into the *Verified Value* column. If all values are less than or equal to the code value, the checklist item is deemed to pass. Alternatively, if the area-weighted average glazing U-factor is less than or equal to

the prescriptive code value, then the checklist item is deemed to pass. Where multiple U-factors are observed, and some are above and some below the code value, it may be necessary to check the area-weighted average, which will require glazing areas. The areas, U-factors, and calculations can be provided in the *Additional Comments* area of the checklist or on a separate worksheet. A similar approach should be taken for fenestration SHGC. Note that up to 15 ft² of fenestration can be exempted from the prescriptive U-factor and SHGC requirements, and one side-hinged door up to 24 ft² (apart from the attic access door) can be exempted from the prescriptive door U-factor requirements.

- **Trade-Off and Simulated Performance Approaches:** Under alternative approaches, the values and areas to be verified are those on the compliance documentation. Where multiple values are present enter the observed R-values, U-factors, and their corresponding areas into the *Verified Value* column if space permits. Where space does not allow this, use the *Additional Comments* area of the checklist or a separate worksheet.

Item Number	Foundation Inspection
402.1.1 [FO1] ¹	Slab Edge Insulation R-Value. Determine and record the R-value of slab insulation from the label on the insulation or from manufacturer shipping materials available onsite. Slabs are required to be insulated where the floor surface is less than 12 in. below grade. Slab insulation must be inspected prior to pouring the slab—when the insulation installation is completely visible. If the area has been designated as having heavy termite infestation (applies to all of GA), then insulation for an unheated slab is not required and should be so noted.
303.2, 402.2.8 [FO2] ¹	Slab Edge Insulation Installation. Insulation location can be vertical or horizontal inside the foundation wall, however, it must start at the top surface the slab and extend downward to completely cover the slab edge. It can also be located outside the foundation wall. Where insulation is located outside the wall and where it extends horizontally away from the building, it must be protected by pavement or at least 10 in. of soil. Verify that insulation is installed according to manufacturer’s instructions.
402.1.1 [FO3] ¹	Slab Edge Insulation Depth/Length. Measure and record the length of the slab insulation from the top of the insulation, which must be at the same level as the top of the floor slab, vertically and/or horizontally along the insulation path. The insulation application must be continuous in order to comply with the code.
402.1.1 [FO4] ¹	Basement Wall Exterior Insulation R-Value. Determine and record the R-value of exterior insulation applied to a wall associated with a conditioned basement or a basement that is indirectly conditioned by the floor above (e.g., the floor above and other components do not thermally separate the basement from the rest of the building envelope) . A basement wall is one that is at least 50% below grade. This inspection must be done immediately prior to backfilling when the insulation installation is completely visible. Note: If REScheck is used, minimum insulation for basement walls is R-5 in CZ3 and CZ4.
303.2 [FO5] ¹	Basement Wall Exterior Insulation Installation. Verify that the insulation is installed according to manufacturer’s instructions.
402.2.7 [FO6] ¹	Basement Wall Insulation Depth. Measure and record the length of basement wall insulation on the exterior of the wall from the top of the basement wall to the basement floor or until the insulation stops. For the prescriptive approach, the insulation length must be the lesser of 10 feet or to the top of the basement floor. For alternative approaches, verify the installation by reviewing the energy code compliance documentation.
402.2.9 [FO7] ¹	Crawl Space Wall Insulation R-Value. Determine and record the R-value of insulation applied to the interior or exterior of walls associated with crawl spaces that are not ventilated to the outside. Insulation installed on the exterior of the foundation wall must be inspected

	when the insulation is completely visible; immediately prior to backfilling. Insulation installed on the interior of the foundation wall will typically be inspected during the insulation inspection, in which case this checklist item may be left blank until that inspection stage.
303.2 [FO8] ¹	Crawl Space Wall Insulation Installation. Insulation must be installed according to manufacturer's instructions. Crawlspace wall insulation shall be permanently fastened to the wall and extend downward from the floor to within 9 inches of the finished interior grade. A 3-inch inspection/view strip immediately below the floor joists shall be provided to permit inspections for termites. If the crawl space is ventilated, the floor above the crawl space must be insulated instead of insulating the crawl space walls.
402.2.9 [FO9] ¹	Crawl Space Vapor Retarder. Where a crawl space is unvented (e.g. not open to the building exterior) the energy code requires that a Class I vapor retarder must be applied to the entire floor and run at least 6 in. up the walls of the crawl space and sealed to the walls. A Class I vapor retarder has a perm rating of less than 0.1 perm (such as polyethylene). If the product is not readily identified as to its perm rating then ask for supporting information or record the manufacturers information and validate it later. Any seams in the vapor retarder must have an overlap of at least 6 in. and be sealed or taped.
303.2.1 [FO10] ²	Insulation Protection. Determine that all slab, basement wall, or crawl space insulation exposed to the outside is protected from damage by an opaque covering.
403.8 [FO11] ²	Snow Melt. If the building is provided with a snow or ice melting system supplied through the building energy service, verify that the system has controls to automatically shut the system off when above 50 °F when precipitation is falling, and if no precipitation is falling then manual controls or automatic controls that allow shutoff when above 40 °F. Verification can be through direct inspection of the controls or, if not already installed, then verification that the system being installed is listed and labeled as having such controls. Note: this is uncommon in Georgia.

Item Number	Framing / Rough-In Inspection
402.1.1, 402.3.4 [FR1] ¹	Door U-Factor. Determine and record the U-factor(s) for the door assemblies installed in the building envelope. This information should be available from a label applied to the assembly, from packaging associated with the product or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . Under the prescriptive approach only, up to 24 ft ² of side-hinged door need not meet the specified U-factor in the code. This exemption does not apply to attic access doors. Indicate in the comments the total area of any non-complying products.
402.1.1, 402.3.1, 402.3.3, 402.5 [FR2] ¹	Glazing U-Factor. Determine and record the U-factor(s) for the window, door, and glass block assemblies installed in the building envelope that are not skylights (e.g., are at least 15 degrees from vertical), and excluding glazing installed in a sunroom that is thermally isolated from the rest of the building. This information should be available from the NFRC label applied to the assembly, from packaging associated with the product, or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . If default U-factors were used from Table 303.1.3 of the IECC, verify the frame type found in the field matches those on the approved plans. An area-weighted average can be used to satisfy the U-factor requirement. For the prescriptive approach only, up to 15 ft ² of the total glazed fenestration, including skylights, need not meet the specified U-factor in the code. Note: If REScheck is used, maximum U-factor is 0.50 for windows in CZ2 and CZ3, or 0.48 in CZ4.
402.1.1, 402.3.2, 402.3.3 [FR3] ¹	Glazing SHGC Values. Determine and record the SHGC for the window, door, and glass block assemblies installed in the building envelope that are not skylights (e.g., are at least 15 degrees from vertical). Glazing installed in a sunroom is subject to this requirement. This information should be available from the NFRC label applied to the assembly, from

Item Number	Framing / Rough-In Inspection
	packaging associated with the product or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . If default U-factors were used from Table 303.1.3 of the IECC, verify the frame type found in the field match those on the approved plans. An area-weighted average can be used to satisfy the U-factor requirement. For the prescriptive approach only, up to 15 ft ² of glazed fenestration need not meet the specified SHGC requirement. Indicate in the comments column the total area of any non-complying products. Note: If REScheck is used, maximum SHGC is 0.30 for windows.
303.1.3 [FR4] ¹	Glazing Labeled for U-factor and SHGC. Determine if vertical windows, doors, or glass block are labeled and certified as meeting referenced NFRC standards. If not, verify that compliance was based on the default U-factor and SHGC values from Table 303.1.3 in the code. SHGC requirements apply to Climate Zones 1-3 only.
402.1.1, 402.3.3, 402.5 [FR5] ¹	Skylight U-Factor. Determine and record the U-factor for skylights and roof windows (e.g., glazing that is at least 15 degrees from vertical) installed in the building envelope, but excluding skylights installed in a sunroom that is thermally isolated from the rest of the building. This information should be available from an NFRC label applied to the assembly, from packaging associated with the product, or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . If default U-factors were used from Table 303.1.3 of the IECC, verify the frame type found in the field match those on the approved plans. For the prescriptive approach only, up to 15 ft ² of the total glazed fenestration, including skylights, need not meet the specified U-factor in the code. Note: If REScheck is used, maximum SHGC is 0.75 for windows in CZ4.
402.1.1, 402.3.3 [FR6] ¹	Skylight SHGC Values. Determine and record the SHGC for skylights and roof windows (e.g., glazing that is at least 15 degrees from vertical) installed in the building envelope, including skylights installed in a sunroom that is thermally isolated from the rest of the building. This information should be available from the NFRC label applied to the assembly, from packaging associated with the product or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . If default U-factors were used from Table 303.1.3 of the IECC, verify the frame type found in the field match those on the approved plans. For the prescriptive approach only, up to 15 ft ² of glazed fenestration need not meet the specified SHGC requirement. Indicate in the comments column the total area of any non-complying products.
303.1.3 [FR7] ¹	Skylights Labeled for U-factor and SHGC. Determine if skylights and roof windows are labeled and certified as meeting referenced NFRC standards. If not, verify that compliance was based on the default U-factor and SHGC values from Table 303.1.3 in the code. SHGC requirements apply to Climate Zones 1-3 only.
402.3.5 [FR8] ¹	Sunroom Glazing U-factor. Determine and record the U-factor(s) for fenestration assemblies installed in a sunroom that is thermally isolated from the rest of the building. This information should be available from the NFRC label applied to the assembly, from packaging associated with the product, or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . If default U-factors were used from Table 303.1.3 of the IECC, verify the frame type found in the field matches those on the approved plans.
402.3.5 [FR9] ¹	Sunroom Skylight U-factor. Determine and record the U-factor for skylights and roof windows installed in a sunroom that is thermally isolated from the rest of the building. This information should be available from an NFRC label applied to the assembly, from packaging associated with the product, or by recording the manufacturer make and model number and frame type and looking up the information from the manufacturer's web site or www.nfrc.org . If default U-factors were used from Table 303.1.3 of the IECC, verify the frame type found in

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	the field match those on the approved plans.
402.1.1 [FR10] ¹	Mass Wall Exterior Insulation R-Value. Determine and record the R-value(s) of insulation applied to the mass walls associated with the building thermal envelope other than basement walls. An above-grade mass wall is one that is less than 50% below grade. This inspection must be done prior to application of interior finish and after service systems are installed within the wall and/or before exterior finish that would hide the insulation and prohibit complete inspection of the installation. If insulated concrete forms are used, consult the manufacturer's specified R-value for the product. If more than half the insulation is on the interior, the mass wall interior insulation requirement applies, and this requirement should be marked N/A. Note: If REScheck is used, minimum insulation value for mass walls is R-4 in Climate Zone 2 and R-5 in Climate Zone 3 and 4.
303.2 [FR11] ¹	Mass Wall Insulation Installation. Determine that mass wall insulation is installed in accordance with the manufacturer's installation instructions and all places in or on the mass wall that will accommodate insulation are insulated. Verify that the instructions are available onsite or are readily available to the insulation contractors/installers.
403.2.1 [FR12] ¹	Duct Insulation. Determine and record the R-value(s) of insulation applied to, or used in, the manufacture of heating and/or cooling ducts that are not completely inside the building thermal envelope (e.g., are located outside the conditioned space).
403.2.4 [FR13] ¹	Duct Sealing. Verify that all ducts, air handlers, filter boxes, and building cavities used as return air ducts have joints and seams sealed with mastic that is at least 0.08 inches (2 mm) in thickness. This should be verified before application of any duct insulation and before the ducts are made inaccessible for inspection by subsequent construction.
403.2.3 [FR15] ¹	No Building Cavities as Supply or Return Ducts. Verify that no building cavities are used as supply or return ducts (e.g., function to actually form the duct). All supply and return ducts must be lined with metal, flex duct, ductboard or other material approved in section M1601 of the IRC.
402.4.5 [FR16] ²	IC-Rated Recessed Lighting Fixtures. Identify all recessed lighting fixtures installed in the building envelope. Verify that they are rated for installation in areas with insulation (e.g. IC rated), have a label on them from an approved third party indicating that they have an air leakage rate not exceeding 2 cfm at 75 Pa (1.57 psf) when tested under ASTM E283 and have a gasket or caulk applied between the fixture housing and the interior finish of the space where they are located.
403.3 [FR17] ²	HVAC Piping Insulation. Determine and record the R-value(s) of insulation applied to HVAC system piping, regardless of location, and the design temperature of the fluids being conveyed in the piping. This inspection must be done prior to application of additional pipe coatings or subsequent construction that would make the piping inaccessible for inspection.
403.4 [FR18] ²	Circulating Hot-Water Piping Insulation. Determine and record the R-value(s) of insulation applied to circulating service hot water piping, regardless of location. This inspection must be done prior to application of additional pipe coatings or subsequent construction that would make the piping inaccessible for inspection. Also identify all pumps associated with the circulating service hot water system and verify that they have an automatic or readily accessible manual control that can turn the pump off when the system is not in use. This inspection should be done by loading (e.g., turning on) each affected system and observing pump operation.
403.5 [FR19] ²	Outdoor Intake/Exhaust Openings. Identify all outdoor intake and exhaust openings and verify that they have either manual (self-closing) or automatic dampers that will close when the system associated with the air intake or exhaust is not functioning. This inspection should be done by cycling each affected system and observing damper operation.
402.4.4	Fenestration Air Leakage. Inspect each window, skylight, and sliding glass door to validate

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[FR20] ²	that it has been tested to the referenced NFRC 400 or AAMA/WDMA/CSA standards and was found to satisfy the required air infiltration rate. If the tested rate is not shown on the assembly, determine the make and model number and consult the manufacturer's web site or other source of data to determine the air leakage of the assembly as tested by an independent laboratory. Site-built windows, skylights, and sliding glass doors are not required to meet this requirement. If any window, skylight, or sliding glass door is site-built, note that in the comments column.
402.4.4 [FR21] ²	Swinging Door Air Leakage. Inspect each swinging door to validate that it has been tested to the referenced NFRC 400 or AAMA/WDMA/CSA standards and was found to satisfy the required air infiltration rate. If the tested rate is not shown on the assembly, determine the make and model number and consult the manufacturer's web site or other source of data to determine the air leakage of the assembly as tested by an independent laboratory. Site built swinging doors are not required to meet this requirement. If the swinging door is site-built, note that in the comments column. .
402.4.4 [FR22] ²	Fenestration and Doors Labeled for Air Leakage. Inspect each window, skylight, sliding glass door and swinging door to validate that it has a label, seal, symbol or other identifying mark indicating the test results or compliance with the code. Site-built fenestration is not required to meet this requirement. If the fenestration is site-built, note that in the comments column.

Item Number	Insulation Inspection
402.1.1, 402.2.5, 402.2.6 [IN1] ¹	Floor Insulation R-Value. Determine and record the R-value(s) of insulation applied to any wood-framed, steel-framed, or raised (e.g., not slab on grade) concrete floor associated with the building thermal envelope. If continuous insulation is installed, record the R-value of foam board insulation from the label on the insulation or from manufacturer shipping materials available onsite. This inspection must be done prior to completion of subsequent construction that would make the insulation inaccessible. Note: If REScheck is used, minimum insulation value for floors over unheated spaces is R-13.

303.2 [[IN2]] ¹	Floor Insulation Installation. Verify that floor insulation is installed in accordance with the manufacturer's installation instructions, that all places in the floor that will accommodate insulation are insulated, and that the insulation is installed in permanent continuous contact with the underside of the subfloor decking. Verify the installation instructions are onsite or are readily available to the insulation contractors/installers.
402.1.1 402.2.4, 402.2.5 [[IN3]] ¹	Wall Insulation R-Value. Determine and record the R-value(s) of insulation applied to wood-framed, steel-framed, and mass walls that are above grade and associated with the building thermal envelope. An above-grade wall is one that is more than 50% above grade. Mass walls are those of concrete block, concrete, ICFs, masonry cavity, brick (non-veneer), earth/adobe, and solid timber/logs. If continuous insulation is installed, record the R-value of foam board insulation from the label on the insulation or from manufacturer shipping materials available onsite. This inspection must be done prior to application of interior finish and after service systems are installed within the wall and/or before exterior finish that would hide the insulation from inspection. Note: If REScheck is used, minimum insulation value for cavity (stud) walls is R-13 and minimum insulation for mass walls is R-4 in CZ2 or R-5 in CZ3 and CZ4.
303.2 [[IN4]] ¹	Wall Insulation Installation. Determine that wall insulation is installed in accordance with the manufacturer's installation instructions and all places in the wall that will accommodate insulation are insulated. Verify the instructions are onsite or are readily available to the insulation contractors/installers. If the insulation is integral to a masonry wall (e.g., applied to concrete masonry unit open areas or integral to insulated concrete forms), verify that the insulation is uniformly applied throughout the wall.
402.1.1 [[IN5]] ¹	Basement Wall Interior Insulation R-Value. Determine and record the R-value(s) of insulation applied to the interior of a wall associated with a conditioned basement or a basement that is unconditioned but does not have the floor above and other components separating the basement from the rest of the building insulated as part of the building envelope. A basement wall is one that is at least 50% below grade. This inspection must be done prior to application of interior finish and after service systems are within the wall and/or before exterior finish that would hide the insulation from inspection. Note: If REScheck is used, minimum insulation value for basement walls is R-0 in Climate Zone 2 and R-5 in Climate Zone 3 and 4.
302.2 [[IN6]] ¹	Basement Wall Interior Insulation Installation. Determine that basement wall insulation is installed in accordance with the manufacturer's installation instructions and all places in the wall that will accommodate insulation are insulated. Verify the instructions are onsite or are readily available to the insulation contractors/installers. If the insulation is integral to a masonry basement wall (e.g., applied to CMU open areas or integral to insulated concrete forms), verify that the insulation is uniformly applied throughout the basement wall.
402.2.7 [[IN7]] ¹	Basement Wall Interior Insulation Depth. Report the depth of insulation as measured from the top of the basement wall to the bottom of the insulation. Confirm insulation extends to the basement floor or to 10 ft.
402.2.11 [[IN8]] ¹	Sunroom Wall Insulation R-Value. Determine and record the R-value(s) of insulation applied to any sunroom walls. A sunroom wall is one thermally isolated from the conditioned space. If not so isolated, the wall is considered an above grade wall that is part of the building thermal envelope. This inspection must be done prior to application of interior finish and after service systems are within the wall and/or before exterior finish that would hide the insulation from inspection.
303.2 [[IN9]] ¹	Sunroom Wall Insulation Installation. Determine that wall insulation applied to sunroom walls is installed in accordance with the manufacturer's installation instructions and that all places in the wall that will accommodate insulation are insulated. Verify that instructions are onsite or are readily available to the insulation contractors/installers. If the insulation is integral to a masonry wall (e.g., applied to CMU open areas or integral to insulated concrete forms), verify that the insulation is uniformly applied throughout the wall.
402.2.11	Sunroom Ceiling Insulation R-Value. Determine and record the R-value(s) of insulation

[IN10] ¹	applied to any sunroom ceiling. A sunroom ceiling is one thermally isolated from the conditioned space. If not so isolated, the ceiling is considered a framed ceiling and is part of the building thermal envelope. This inspection must be done prior to application of interior finish and after service systems are within the ceiling.
303.2 [IN11] ¹	Sunroom Ceiling Insulation Installation. Verify that insulation applied to sunroom ceilings is installed in accordance with the manufacturer's installation instructions and all places in the ceiling that will accommodate insulation are insulated. Verify that the instructions are onsite or are readily available to the insulation contractors/installers.
303.1 [IN13] ²	Insulation R-values. Verify that all insulation installed in the building thermal envelope has a label on the insulation indicating the R-value of the insulation or the insulation installer has provided a certificate verifying the type of insulation, the installed thickness and installed R-value. In addition, a certificate for blown in insulation must provide the installed density, coverage and number of bags of insulation.
402.4.1, 402.4.2 [IN14] ³	Air Sealing of Openings and Penetrations. Determine compliance with the air sealing requirements via visual inspection of openings in and penetrations through the building thermal envelope. If all openings and penetrations are sealed, mark this requirement as compliant (Y). If one or more sources are not adequately sealed, mark N. Diagrams of air-sealing requirements are located in Appendix A of the Georgia Amendments and the Georgia Residential Energy Code Field Guide.
402.4.1, 402.4.2 [IN15] ³	Air Sealing of Joints and Seams. Determine compliance with the air sealing requirements via visual inspection of all joints and seams in and associated with the building thermal envelope. If all applicable joints and seams are sealed, mark this requirement as compliant (Y). If one or more sources are not adequately sealed, select N. Diagrams of air-sealing requirements are located in Appendix A of the Georgia Amendments and the Georgia Residential Energy Code Field Guide.
402.4.1, 402.4.2 [IN16] ³	Air Sealing of Other than Openings, Penetrations, Joints and Seams. Determine compliance with the air sealing requirements via visual inspection of any sources of air infiltration not addressed in the previous two air sealing requirements (visual inspection). This requirement includes sealing of the air barrier. If all sources of infiltration other than openings, penetrations, joints, and seams are sealed, mark this requirement as compliant (Y). If one or more sources are not adequately sealed, select N. Diagrams of air-sealing requirements are located in Appendix A of the Georgia Amendments and the Georgia Residential Energy Code Field Guide.

Item Number	Final Inspection
402.1.1 402.2.1 402.2.2 [F11] ¹	<p>Ceiling Insulation R-Value. Determine and record the R-value(s) of insulation applied to any framed ceiling. For blown-in attic insulation, verify that the thickness of the insulation is written on markers at a rate of one every 300 ft² of attic space and compare this with the insulation certificate. This inspection must be done prior to application of interior finish and after service systems installed within the ceiling and/or before exterior finish that would hide the insulation from inspection. If credit is taken for a raised heel, energy or oversized truss rafter system, verify such a system has been installed. For attic HVAC platforms, R-19 shall be deemed acceptable to meet the requirements of R-30/R38 in the ceiling for up to 32 ft² of attic decking per HVAC system. R-19 shall also be deemed acceptable underneath a maximum 32" wide passage to the HVAC system.</p> <p>Note: If REScheck is used, minimum insulation value for ceilings with attic spaces is R-30. For attics with air-permeable insulation installed on the roofline, a minimum of R-19 insulation is required and additional R-5 air-impermeable insulation shall be installed in Climate Zone 2 and 3 / R-15 air-impermeable insulation shall be installed in Climate Zone 4. If air-impermeable insulation is installed on the roofline, R-19 is the minimum when</p>

	REScheck is used.
303.1.1.1, 303.2 [F12] ¹	Ceiling Insulation Installation. Verify that insulation is installed in accordance with the manufacturer's installation instructions.
402.2.3 [F13] ¹	Access Insulation. Determine and record the R-value(s) of insulation applied to any access hatches and doors from conditioned spaces to unconditioned spaces. A wood framed or equivalent baffle or retainer is required where loose fill insulation is installed.
402.1.1 [F113ga] ¹	Attic kneewall. Determine and record the R-value(s) of insulation applied to all attic kneewalls. Note: Even if REScheck is used, minimum insulation value for attic kneewalls is R-18 with attic-side air barrier.
402.2.1.1 [F114ga] ¹	Wind wash baffle and air-permeable insulation dam. For air permeable insulation in vented attics, verify that baffles are installed adjacent to soffit and eave vents. A minimum of a 1-inch of space shall be provided between the insulation and the roof sheathing and at the location of the vent. The baffle must extend over the top of the insulation inward until it is at least 4 inches vertically above the top of the insulation. Any solid material such as cardboard or thin insulating sheathing is permissible as the baffle /insulation dam.
403.2.2 [F14] ¹	Duct Tightness Testing. Verify that the ducts and air handler, if not completely located inside the conditioned space, were tested for tightness. The leakage rate (CFM25) from the test, the zone area served, the percent duct leakage, and the specifications under which the test was administered (PCT (Post-construction Total Leakage), PCO (Post-construction Leakage to Outside) or RIT (Rough in Total Leakage) should be available on the energy code compliance certificate. Testing for duct tightness must be conducted by a certified Duct and Envelope Tightness (DET) verifier. Duct tightness testing is not required if 50% or less of the duct system is modified or if the air handler, furnace, or evaporator coil is replaced on an existing system. If the air handler, furnace or evaporator is replaced, all joints, seams and connections to plenums shall meet the sealing requirements of the code and be verified by visual inspection by the state licensed conditioned air contractor or a DET verifier.
403.6 [F15] ¹	Heating and Cooling Equipment. Heating and Cooling Equipment types and efficiencies must be located on the energy code compliance certificate. .
403.6.1 [F115ga] ¹	Primary Heat Source. For new dwelling unit central HVAC systems, or replacement HVAC systems installed in dwelling units that were originally permitted after January 1, 1996, verify that electric-resistance heat is not installed as the primary heat source. Primary heat source is defined as the heat source for the original dwelling unit system. This requirement does not apply to alterations or additions of 50% or less than the original conditioned floor area, in which case the requirement should be marked N/A.
404.1 [F16] ¹	Lighting. Determine how many permanently installed lamps there are in the dwelling unit and how many of those have high efficacy lamps: Compact fluorescent lamps, T8 or T5 linear fluorescent lamps, or other lamps (such as LEDs) with an efficacy of >=60 lumens per watt when over 40 watts, >50 lumens per watt for 15 to 40 watts, and >40 lumens per watt for 15 watts or less. One fixture may have multiple lamps. To be deemed compliance under the prescriptive or trade-off approach, the building must have at least 50% high-efficacy lamps or be controlled with an occupancy/vacancy sensor or automated lighting control system. If the building complies via the simulated performance approach, mark this requirement N/A.
402.4.2, 402.4.2.1 [IN12] ¹	Air Sealing (Blower Door Test). Determine compliance with the air sealing requirements via testing of the building. The leakage rate from the test, the volume of the building envelope and the specifications under which the test was administered should be available on the energy code compliance certificate. Testing for building envelope tightness shall be conducted by a certified duct and envelope tightness (DET) verifier. Where a building is classified as R-2, envelope testing of less than 100 percent is acceptable. Buildings classified as R-2 (low-rise multifamily), can also undergo a rigorous visual inspection as

	detailed in table 402.4.2 of the energy code. For additions, renovations, alterations or repairs, testing is only required when construction affects all aspects of the building envelope. For more information on who is a certified duct and envelope tightness verifier, see the 2011 Georgia Amendments.
401.3 [F17] ²	Certificate. Verify that a certificate identifying the energy-related features of the building is located on or near the electrical distribution panel or air handler. The certificate should include the calculated heating load, sensible cooling load, latent cooling load, and cfm for space conditioning, as well as duct tightness test results for each system and envelope tightness test results (or indicate that visual inspection was used for envelope tightness for R-2 occupancies).
403.6 [PR2] ²	HVAC Load Calculations. Verify that HVAC load calculations and air-handler cfm have been completed and summarized on the compliance certificate. Verify the methodology used in the load calculations. List the resultant heating and/or cooling loads as applicable in the Verified Value column.
402.4.3 [F18] ²	Wood Burning Fireplaces. Verify that all masonry* wood burning fireplaces have outside combustion air and gasketed doors. (*For more information, see the clarification on this provision for the Georgia DCA from the International Codes Council.)
403.1.1 [F19] ²	Programmable Thermostat. Where primary heating is forced-air furnace, verify that each dwelling unit has at least one programmable thermostat that can control the heating and cooling system to allow heating temperatures down to 55 °F and cooling temperatures up to at least 85 °F.
403.1.2 [F110] ²	Heat Pump Thermostat. Verify that heat pumps have a thermostat that will prevent supplemental electric-resistance heat from operating when the heating load can be satisfied by the heat pump.
403.4 [F111] ²	Circulating Hot Water System Controls. Verify that circulating service hot water systems have readily accessible controls to allow manually or automatically turning off the pump(s) when the system is not in use.
403.9 [F112] ²	Swimming Pools. Verify that swimming pools are provided with vapor retardant covers, that an R-12 blanket is provided for all pools where the water is greater than 90 °F, and that there are controls to allow automatic time control of the circulating pumps and to automatically turn off the pool heating equipment.
403.10 [F116ga] ²	Power Attic Ventilators. Verify that power attic ventilators are not connected to the electric grid. Power attic ventilators connected to a solar panel are allowed.

KEY	¹ High Impact (Tier 1)	² Medium Impact (Tier 2)	³ Low Impact (Tier 3)
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