

RESIDENTIAL ENERGY CONSERVATION CODE DOCUMENTATION CHECKLIST**Florida Department of Business and Professional Regulation
Simulated Performance Alternative (Performance) Method**

Applications for compliance with the 2023 Florida Building Code, Energy Conservation via the Residential Simulated Performance Alternative shall include:

- This checklist
- Form R405-2023 report
- Input summary checklist that can be used for field verification (usually four pages/may be greater)
- Energy Performance Level (EPL) Display Card (one page)
- HVAC system sizing and selection based on ACCA Manual S or per exceptions provided in Section R403.7
- Mandatory Requirements (five pages)

Required prior to CO:

- Air Barrier and Insulation Inspection Component Criteria checklist (Table R402.4.1.1 - one page)
- A completed 2023 Envelope Leakage Test Report (usually one page); exception in R402.4 allows dwelling units of R-2 Occupancies and multiple attached single family dwellings to comply with Section C402.5
- If Form R405 duct leakage type indicates anything other than "default leakage", then a completed 2023 Duct Leakage Test Report - Performance Method (usually one page)

INPUT SUMMARY CHECKLIST REPORT

PROJECT														
Title.	Davis - XXX TBD				Address type.	Street Address								
Building Type.	User		Bedrooms.	1	Lot #.	---								
Owner			Conditioned Area.	660	Block/SubDivision.	---								
Builder Home ID			Total Stories	1	PlatBook.	---								
Builder Name.			Worst Case.	Yes	Street.	XXX								
Permit Office.	Lake City		Rotate Angle.	270	County	Columbia								
Jurisdiction.	221200		Cross Ventilation	No	City, State, Zip.	Lake City, FL, 32064								
Family Type.	Detached		Whole House Fan.	No										
New/Existing.	New (From Plans)		Terrain	Suburban										
Year Construct			Shielding.	Suburban										
Comment														
CLIMATE														
<input checked="" type="checkbox"/>	Design Location	Tmy Site		Design Temp	97 5%	2 5%	Int Design Temp	Winter	Summer	Heating Degree Days	Design Moisture	Daily temp Range		
___	FL, Gainesville	FL_GAINESVILLE_REGIONA		32	92		70	75	1305 5	51	Medium			
BLOCKS														
<input checked="" type="checkbox"/>	Number	Name	Area	Volume										
___	1	Entire House	660	6600 cu ft										
SPACES														
<input checked="" type="checkbox"/>	Number	Name	Area	Volume	Kitchen	Occupants	Bedrooms	Finished	Cooled	Heated				
___	1	BA1	80	800	No	0		Yes	Yes	Yes				
___	2	Laundry	48	480	No	0		Yes	Yes	Yes				
___	3	Kit Liv Din	532	5320	Yes	2	1	Yes	Yes	Yes				
FLOORS (Total Exposed Area = 660 sq.ft.)														
<input checked="" type="checkbox"/>	#	Floor Type	Space	Exposed Perim(ft)	Area	R-Value Perim	U-Factor Joist	Slab Insul Vert/Horiz	Tile	Wood	Carpet			
___	1	Slab-On-Grade Edge Ins	BA1	18	80 sqft	0 0	---	0 710	2 (ft)/0 (ft)	1 00	0 00	0 00		
___	2	Slab-On-Grade Edge Ins	Laundry	6	48 sqft	0 0	---	0 710	2 (ft)/0 (ft)	1 00	0 00	0 00		
___	3	Slab-On-Grade Edge Ins	Kit Liv Din	80	532 sqft	0 0	---	0 710	2 (ft)/0 (ft)	1 00	0 00	0 00		
ROOF														
<input checked="" type="checkbox"/>	#	Type	Materials	Roof Area	Gable Area	Framing. Fract.	Roof Color	Rad Barr	Solar Absor	SA Tested	Emitt	Emitt Tested	Deck Insul	Pitch (deg)
___	1	Gable or Shed	Composition shingles	696 ft²	110 ft²	0.11	Medium	N	0 85	No	0 9	No	0	18.43
ATTIC														
<input checked="" type="checkbox"/>	#	Type	Ventilation		Vent Ratio (1 in)	Area	RBS	IRCC						
___	1	Full attic	Vented		150	660 ft²	N	N						

INPUT SUMMARY CHECKLIST REPORT

COOLING SYSTEM

#	System Type	Subtype/Speed	AHRI #	Efficiency	Capacity kBtu/hr	Air Flow cfm	SHR	Duct	Block
1	Central Unit	Split/Single		SEER2.17 0	17 0	0	0 80	Ductless	1

HOT WATER SYSTEM

#	System Type	Subtype	Location	EF(UEF)	Cap	Use	SetPnt	Fixt Flow	Trap	Pipe Ins	Pipe length
1	Electric	None	Exterior	0 95 (0 93)	40 0 gal	40 gal	120 deg	Standard	Yes	None	50
Recirculation System		Recirc Control Type	Loop length	Branch length	Pump power	DWHR	Facilities Connected	Equal Flow	DWHR Eff	Other Credits	
1	No		NA	NA	NA	No	NA	NA	NA	None	

DUCTS

Duct #	Location	Supply R-Value	Supply Area	Return R-Value	Return Area	Leakage Type	AHU Location	CFM 25 TOTIOUT	QN OUT	AHU SEALED	RLF	HVAC # Heat Cool
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TEMPERATURES

Programable Thermostat Y				Ceiling Fans N								
Cooling	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input checked="" type="checkbox"/> Jun	<input checked="" type="checkbox"/> Jul	<input checked="" type="checkbox"/> Aug	<input checked="" type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input type="checkbox"/> Nov	<input type="checkbox"/> Dec
Heating	<input checked="" type="checkbox"/> Jan	<input checked="" type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input checked="" type="checkbox"/> Dec
Venting	<input type="checkbox"/> Jan	<input type="checkbox"/> Feb	<input checked="" type="checkbox"/> Mar	<input checked="" type="checkbox"/> Apr	<input type="checkbox"/> May	<input type="checkbox"/> Jun	<input type="checkbox"/> Jul	<input type="checkbox"/> Aug	<input type="checkbox"/> Sep	<input checked="" type="checkbox"/> Oct	<input checked="" type="checkbox"/> Nov	<input type="checkbox"/> Dec
Thermostat Schedule. HERS 2006 Reference	Hours											
Schedule Type	1	2	3	4	5	6	7	8	9	10	11	12
Cooling (WD)	AM 78	PM 78	78	78	78	78	78	78	78	78	78	78
Cooling (WEH)	AM 78	PM 78	78	78	78	78	78	78	78	78	78	78
Heating (WD)	AM 66	PM 68	66	66	66	66	66	66	66	66	66	66
Heating (WEH)	AM 66	PM 68	66	66	66	66	66	66	66	66	66	66

ENERGY PERFORMANCE LEVEL (EPL) DISPLAY CARD

ESTIMATED ENERGY PERFORMANCE INDEX* = 69

The lower the EnergyPerformance Index, the more efficient the home.

XXX,Lake City,FL,32064

<p>1. New construction or existing New (From Plans)</p> <p>2. Single family or multiple family Detached</p> <p>3. Number of units, if multiple family 1</p> <p>4. Number of Bedrooms 1</p> <p>5. Is this a worst case? Yes</p> <p>6. Conditioned floor area above grade (ft²) 660 Conditioned floor area below grade (ft²) 0</p> <p>7. Windows** Description Area</p> <p> a. U-Factor: Dbl, U=0.34 63 17 ft² SHGC: SHGC=0.21</p> <p> b. U-Factor: Dbl, U=0.30 40.00 ft² SHGC: SHGC=0.19</p> <p> c. U-Factor: N/A ft² SHGC:</p> <p> Area Weighted Average Overhang Depth: 6.535 ft Area Weighted Average SHGC: 0.202</p> <p>8. Skylights Description Area</p> <p> U-Factor:(AVG) N/A N/A ft² SHGC(AVG). N/A</p> <p>9. Floor Types Insulation Area</p> <p> a. Slab-On-Grade Edge Insulation R= 0.0 660.00 ft² b. N/A R= ft² c. N/A R= ft²</p>	<p>10. Wall Types(1040.0 sqft.) Insulation Area</p> <p> a. Frame - Wood, Exterior R=13 0 1040.00 ft² b. N/A c. N/A d. N/A</p> <p>11. Ceiling Types(660.0 sqft.) Insulation Area</p> <p> a. Flat ceiling under att (Vented) R=38.0 660.00 ft² b. N/A c. N/A</p> <p>12. Roof(Comp Shingles, Vented) Deck R=0.0 696 ft² R ft²</p> <p>13. Ducts, location & insulation level R ft²</p> <p> a. b. c.</p> <p>14. Cooling Systems kBtu/hr Efficiency</p> <p> a. Central Unit 17.0 SEER2:17.00</p> <p>15. Heating Systems kBtu/hr Efficiency</p> <p> a. Electric Heat Pump 17.0 HSPF2:9.00</p> <p>16. Hot Water Systems Cap: 40 gallons a. Electric EF: 0.950</p> <p> b. Conservation features None Pstat</p> <p>17. Credits None Pstat</p>
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I certify that this home has complied with the Florida Energy Efficiency Code for Building Construction through the above energy saving features which will be installed (or exceeded) in this home before final inspection. Otherwise, a new EPL Display Card will be completed based on installed Code compliant features.

Builder Signature: 

Address of New Home: XXX

Date: 24 Nov 25

City/FL Zip: Lake City,FL,32064



*Note: This is not a Building Energy Rating. If your Index is below 70, your home may qualify for energy efficient mortgage (EEM) incentives if you obtain a Florida Energy Rating. For information about the Florida Building Code, Energy Conservation, contact the Florida Building Commission's support staff.

**Label required by Section R303.1.3 of the Florida Building Code, Energy Conservation, if not DEFAULT.

Florida Building Code, Energy Conservation, 8th Edition (2023)

Mandatory Requirements for Residential Performance, Prescriptive and ERI Methods

ADDRESS. XXX Lake City, FL 32064	Permit Number:
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MANDATORY REQUIREMENTS - See individual code sections for full details.

SECTION R401 GENERAL

- R401.3 Energy Performance Level (EPL) display card - (Mandatory).** The building official shall require that an energy performance level (EPL) display card be completed and certified by the builder to be accurate and correct before final approval of the building for occupancy. Florida law (Section 553.9085, Florida Statutes) requires the EPL display card to be included as an addendum to each sales contract for both presold and nonpresold residential buildings. The EPL display card contains information indicating the energy performance level and efficiencies of components installed in a dwelling unit. The building official shall verify that the EPL display card completed and signed by the builder accurately reflects the plans and specifications submitted to demonstrate code compliance for the building. A copy of the EPL display card can be found in Appendix RD.

SECTION R402 BUILDING THERMAL ENVELOPE

- R402.2.10.1 Slab-on-grade floor insulation installation (Mandatory).** Where installed, the insulation shall extend downward from the top of the slab on the outside or inside of the foundation wall. Insulation located below grade shall be extended the distance provided in Table R402.1.2, or the distance of the proposed design as applicable, by any combination of vertical insulation, insulation extending under the slab or insulation extending out from the building. Insulation extending away from the building shall be protected by pavement or by not less than 10 inches (254 mm) of soil. The top edge of the insulation installed between the exterior wall and the edge of the interior slab shall be permitted to be cut at a 45-degree (0.79 rad) angle away from the exterior wall.
- R402.2.11.1 Crawl space walls insulation installation (Mandatory).** Where crawl space wall insulation is installed, it shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the Florida Building Code, Building, or Florida Building Code, Residential, as applicable. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.
- R402.4 Air leakage (Mandatory).** The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.
 - Exception:** Dwelling units of R-2 Occupancies and multiple attached single family dwellings shall be permitted to comply with Section C402.5.
- R402.4.1 Building thermal envelope.** The building thermal envelope shall comply with Sections R402.4.1.1 and R402.4.1.2. The sealing methods between dissimilar materials shall allow for differential expansion and contraction.
- R402.4.1.1 Installation.** The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.
- R402.4.1.2 Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding seven air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Dwelling units with an air leakage rate less than three air changes per hour shall be provided with whole-house mechanical ventilation in accordance with Section R403.6.1 of this code and Section M1507.3 of the Florida Building Code, Residential. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380 and reported at a pressure of 0.2 inch w.g. (50 pascals). Testing shall be conducted by either individuals as defined in Section 553.993(5) or (7), Florida Statutes, or individuals licensed as set forth in Section 489.105(3)(f), (g) or (i) or an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Exception: Testing is not required for additions, alterations, renovations, or repairs, of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope.

During testing

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.
7. If an attic is both air sealed and insulated at the roof deck, interior access doors and hatches between the conditioned space volume and the attic shall be opened during the test and the volume of the attic shall be added to the conditioned space volume for purposes of reporting an infiltration volume and calculating the air leakage of the home.

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

- R403.3.5 Building cavities (Mandatory).** Building framing cavities shall not be used as ducts or plenums
- R403.4 Mechanical system piping insulation (Mandatory).** Mechanical system piping capable of carrying fluids above 105°F (41°C) or below 55°F (13°C) shall be insulated to a minimum of R-3
 - R403.4.1 Protection of piping insulation.** Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted
 - R403.5.1 Heated water circulation and temperature maintenance systems (Mandatory).** If heated water circulation systems are installed, they shall be in accordance with Section R403.5.1.1. Heat trace temperature maintenance systems shall be in accordance with Section R403.5.1.2. Automatic controls, temperature sensors and pumps shall be accessible. Manual controls shall be readily accessible
 - R403.5.1.1 Circulation systems.** Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermosiphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water
 - R403.5.1.2 Heat trace systems.** Electric heat trace systems shall comply with IEEE 515.1 or UL 515. Controls for such systems shall automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping in accordance with the times when heated water is used in the occupancy
 - R403.5.2 Demand recirculation water systems (Mandatory).** Where installed, demand recirculation water systems shall have controls that comply with both of the following
 - 1 The control shall start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture or sensing the flow of hot or tempered water to a fixture fitting or appliance
 - 2 The control shall limit the temperature of the water entering the cold water piping to 104°F (40°C)
- R403.5.5 Heat traps (Mandatory).** Storage water heaters not equipped with integral heat traps and having vertical pipe risers shall have heat traps installed on both the inlets and outlets. External heat traps shall consist of either a commercially available heat trap or a downward and upward bend of at least 3 ½ inches (89 mm) in the hot water distribution line and cold water line located as close as possible to the storage tank
- R403.5.6 Water heater efficiencies (Mandatory).**
 - R403.5.6.1.1 Automatic controls.** Service water-heating systems shall be equipped with automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100°F to 140°F (38°C to 60°C)
 - R403.5.6.1.2 Shut down.** A separate switch or a clearly marked circuit breaker shall be provided to permit the power supplied to electric service systems to be turned off. A separate valve shall be provided to permit the energy supplied to the main burner(s) of combustion types of service water-heating systems to be turned off
 - R403.5.6.2 Water-heating equipment.** Water-heating equipment installed in residential units shall meet the minimum efficiencies of Table C404.2 in Chapter 4 of the Florida Building Code, Energy Conservation, Commercial Provisions, for the type of equipment installed. Equipment used to provide heating functions as part of a combination system shall satisfy all stated requirements for the appropriate water-heating category. Solar water heaters shall meet the criteria of Section R403.5.6.2.1
 - R403.5.6.2.1 Solar water-heating systems.** Solar systems for domestic hot water production are rated by the annual solar energy factor of the system. The solar energy factor of a system shall be determined from the Florida Solar Energy Center Directory of Certified Solar Systems. Solar collectors shall be tested in accordance with ISO Standard 9806, Test Methods for Solar Collectors, and SRCC Standard TM-1, Solar Domestic Hot Water System and Component Test Protocol. Collectors in installed solar water-heating systems should meet the following criteria
 - 1 Be installed with a tilt angle between 10 degrees and 40 degrees of the horizontal, and
 - 2 Be installed at an orientation within 45 degrees of true south
- R403.6 Mechanical ventilation (Mandatory).** The building shall be provided with ventilation that meets the requirements of the Florida Building Code, Residential, or Florida Building Code, Mechanical, as applicable, or with other approved means of ventilation including, Natural, Infiltration or Mechanical means. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating

Florida Building Code, Energy Conservation, Mandatory Requirements (2023 Continued)

- R403.7.1.1 Cooling equipment capacity.** Cooling only equipment shall be selected so that its total capacity is not less than the calculated total load but not more than 1.15 times greater than the total load calculated according to the procedure selected in Section R403.7, or the closest available size provided by the manufacturer's product lines. The corresponding latent capacity of the equipment shall not be less than the calculated latent load. The published value for AHRI total capacity is a nominal, rating-test value and shall not be used for equipment sizing. Manufacturer's expanded performance data shall be used to select cooling-only equipment. This selection shall be based on the outdoor design dry-bulb temperature for the load calculation (or entering water temperature for water-source equipment), the blower CFM provided by the expanded performance data, the design value for entering wet-bulb temperature and the design value for entering dry-bulb temperature.

Design values for entering wet-bulb and dry-bulb temperatures shall be for the indoor dry bulb and relative humidity used for the load calculation and shall be adjusted for return side gains if the return duct(s) is installed in an unconditioned space.

Exceptions:

- 1 Attached single- and multiple-family residential equipment sizing may be selected so that its cooling capacity is less than the calculated total sensible load but not less than 80 percent of that load.
- 2 When signed and sealed by a Florida-registered engineer, in attached single- and multiple-family units, the capacity of equipment may be sized in accordance with good design practice.

R403.7.1.2 Heating equipment capacity.

- R403.7.1.2.1 Heat pumps.** Heat pump sizing shall be based on the cooling requirements as calculated according to Section R403.7.1.1, and the heat pump total cooling capacity shall not be more than 1.15 times greater than the design cooling load even if the design heating load is 1.15 times greater than the design cooling load.
- R403.7.1.2.2 Electric resistance furnaces.** Electric resistance furnaces shall be sized within 4 kW of the design requirements calculated according to the procedure selected in Section R403.7.1.
- R403.7.1.2.3 Fossil fuel heating equipment.** The capacity of fossil fuel heating equipment with natural draft atmospheric burners shall not be less than the design load calculated in accordance with Section R403.7.1.
- R403.7.1.3 Extra capacity required for special occasions.** Residences requiring excess cooling or heating equipment capacity on an intermittent basis, such as anticipated additional loads caused by major entertainment events, shall have equipment sized or controlled to prevent continuous space cooling or heating within that space by one or more of the following options.
- 1 A separate cooling or heating system is utilized to provide cooling or heating to the major entertainment areas.
 - 2 A variable capacity system sized for optimum performance during base load periods is utilized.
- R403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with Sections C403 and C404 of the Florida Building Code, Energy Conservation—Commercial Provisions in lieu of Section R403.
- R403.9 Snow melt and ice system controls (Mandatory).** Snow- and ice-melting systems, supplied through energy service to the building, shall include automatic controls capable of shutting off the system when the pavement temperature is above 50°F (10°C), and no precipitation is falling and an automatic or manual control that will allow shutoff when the outdoor temperature is above 40°F (4.8°C).
- 403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections R403.10.1 through R403.10.5.
- R403.10.1 Heaters.** The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater mounted on the exterior of the heater, or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.
- R403.10.2 Time switches.** Time switches or other control methods that can automatically turn off and on according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:

- 1 Where public health standards require 24-hour pump operation.
- 2 Pumps that operate solar- and waste-heat-recovery pool heating systems.
- 3 Where pumps are powered exclusively from on-site renewable generation.

SECTION R405
SIMULATED PERFORMANCE ALTERNATIVE
(PERFORMANCE)

- R405.2 Mandatory requirements.** Compliance with this section requires that the mandatory provisions identified in Section R401.2 be met. All supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6, except site-wrapped supply ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-8.
- R405.2.1 Ceiling insulation.** Ceilings shall have an insulation level of at least R-19, space permitting. For the purposes of this code, types of ceiling construction that are considered to have inadequate space to install R-19 include single assembly ceilings of the exposed deck and beam type and concrete deck roofs. Such ceiling assemblies shall be insulated to at least a level of R-10.
- R405.2.2 Building air leakage testing.** Building or dwelling air leakage testing shall be in accordance with Sections R402.4 through R402.4.1.2. If an air leakage rate below seven air changes per hour at a pressure of 0.2 inch w.g. (50 pascals) is specified for the proposed design, testing shall verify the air leakage rate does not exceed the air leakage rate of the proposed design instead of seven air changes per hour.
- R405.2.3 Duct air leakage testing.** In cases where duct air leakage lower than the default Q_n to outside of 0.080 (where Q_n = duct leakage to the outside in cfm per 100 square feet of conditioned floor area tested at 25 Pascals) is specified for the proposed design, testing in accordance with Section R403.3.2 shall verify a duct air leakage rate not exceeding the leakage rate of the proposed design. Otherwise, in accordance with Section R403.3.3, duct testing is not mandatory for buildings complying by Section R405.

SECTION R406
ENERGY RATING INDEX
COMPLIANCE ALTERNATIVE

- R406.2 Mandatory requirements.** Compliance with this section requires that the provisions identified in Sections R401 through R404 labeled as "mandatory" and Section R403.5.3 of the 2015 International Energy Conservation Code be met. For buildings that do not utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or 402.1.3 of the 2009 International Energy Conservation Code. For buildings that utilize on-site renewable power production for compliance with this section, the building thermal envelope shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table R402.1.2 or Table R402.1.4 of the 2015 International Energy Conservation Code.

Exception: Supply and return ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-6.

- R406.2.1 Site-wrapped supply ducts.** Site-wrapped supply ducts not completely inside the building thermal envelope shall be insulated to a minimum of R-8.