

Question: Why does my air conditioner have to be properly “sized”?

Answer: The Florida Building Code requires the size of your air conditioner to match the size and conditions of your house. Knowing how many windows you have, how efficient they are and the direction they face, as well as how much insulation installed in the walls and ceiling (and other factors) will determine how big the a/c unit has to be to meet the energy “load” of the home.

Question: Why do the indoor air handler and outdoor condenser or evaporator of my air conditioner or heat pump have to “match”?

Answer: Air conditioner/heat pump parts are designed to operate at a given pressure for summer or winter conditions using a specific “refrigerant” (fluid). That’s not to say that it has to be made by the same manufacturer, just that the design conditions for your indoor unit need to match those of your outdoor unit for your air conditioner or heat pump to operate properly.

Question: Does the HVAC equipment replacement requirements of the Energy Code apply to commercial buildings?

Answer: The intent of the Code was for the provisions of Sections 101.4.7.1.1 and 101.4.7.1.2 of the *Florida Building Code, Energy Conservation*, for HVAC equipment replacement to apply to residential buildings. The Florida Building Commission has entered rulemaking to fix certain issues; one of the code changes would be to clarify that these sections apply only to residential buildings.

Question: What are the Energy Code requirements for the total replacement of HVAC equipment (both air handler and condenser/evaporator) in residential buildings?

Answer: Section 101.4.7, Florida Building Code, Energy Conservation, requires the air conditioning contractor or licensed Florida professional engineer to provide the sizing calculations for heating and air conditioning (HVAC) at the time of permit. These sizing calculations can be obtained from the HVAC manufacturers or software approved by the building officials.

Original systems installed on buildings constructed under the 1993 Energy Code or later have already been sized for the building and, without changes to the building, may be assumed to have been sized per code subject to approval by the building official. If a copy of a previous sizing calculation is provided, it is within the authority of the building official to accept said alternative.

Question: What type of inspections should the contractor conduct during a total replacement of HVAC units?

Answer: For a total replacement of HVAC evaporators and condensing units in residential buildings, contractor must certify the equipment meets the minimum energy efficiencies and all accessible (minimum “30” clearance) joints and seems have been inspected and sealed where needed.

This inspection can occur through observation. Investigation or testing is not required. The contractor must seal only joints and seems identified through observation.

Question: What are the Energy Code requirements for the partial replacement of HVAC equipment (either the air handler or condenser/evaporator)?

Answer: Per Section 101.4.7, Florida Building Code, Energy Conservation, if the unit being replaced is itself a functional unit, such as a condenser, that does not constitute a repair. Matched systems are required. The Energy Code allows matched systems to be verified by several methods, including a letter from the equipment manufacturer or a registered Florida professional engineer

The matched system does not have to meet the code minimum equipment efficiencies, but should be returned to its original condition. Associated ducts and wiring do not need to be replaced. The units do not have to be made by the same manufacturer.

Building Energy Rating System

Question: Where can I find brochures notifying the purchaser of the option for an energy-efficiency rating on the building?

Answer: The residential brochure is available at <http://www.energygauge.com/usares/INFO-BROCHURE.pdf> and at www.floridabuilding.org/fbc/committees/energy/EnergyBrochure-110602.pdf

The commercial building brochure is not available online, but can be obtained from the Florida Solar Energy Center, EnergyGauge Office, at (321) 638-1715.

Question: Where should building departments send the Energy Code-reporting forms?

Answer: University of Florida, Shimberg Center
Post Office Box 115703
Gainesville, Florida 32611-5703