Load computations are to be submitted with all requests for new equipment installation.

**§ECR403.7** Equipment sizing and efficiency rating (Mandatory). Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. New or replacement heating and cooling equipment shall have an efficiency rating equal to or greater than the minimum required by federal law for the geographic location where the equipment is installed.

**§ECR403.8 Systems serving multiple dwelling units (Mandatory).** Systems serving multiple dwelling units shall comply with the Section ECC403 and ECC404 of the 2015 IECC Commercial Provisions (as amended) in lieu of Section ECR403 of the 2015 IECC Residential Provisions (as amended).

# §ECR403.9 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).

**§ECR403.10 Pools and permanent spa energy consumption (Mandatory).** The energy consumption of pools and permanent spas shall be in accordance with Sections ECR403.10.1 through ECR403.10.3.

### §ECR403.10.1 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.

## §ECR403.10.2 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.

#### **§ECR403.10.3 Covers.**

Outdoor heated pools and outdoor heated permanent spas shall be equipped with a vapor-retardant pool cover or other *approved* vapor-retardant means. Outdoor heated pools and outdoor heated permanent spas heated to more than 90 degrees F (32 degrees C) shall have a pool cover with a minimum insulation value of R-12.

**Exception:** Where more than 60 percent of the energy used for heating an outdoor heated pool or outdoor heated permanent spa is from site-recovered energy or solar energy source, covers or other vapor-retardant means shall not be required.

# §ECR403.11 Portable spas (Mandatory).

The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP-14.

**§ECR403.12 Residential pools and permanent residential spas.** Residential swimming pools and permanent residential spas that are accessory to detached one-and two-family dwellings and townhouses three stories or less in height above grade plane and that are available only to the household and its guests shall be in accordance with APSP-15a.