

Contract 112125

**DS 2016-033**

**initial  
engineer**

<b>FILED</b>	
Department of Business and Professional Regulation Deputy Agency Clerk	
CLERK	Brandon Nichols
Date	<b>4/28/2016</b>
File #	

April 28, 2016

Mr. Mo Madani  
Department of Business and Professional Regulation  
1940 North Monroe Street, Suite 90  
Tallahassee, FL 32399

Re: Petition for Declaratory Statement before the Florida Building Commission  
Florida Building Code - Energy Conservation 2014  
Section C405.7.1

Dear Mr. Madani:

This is to request that the Florida Building Commission issue a Declaratory Statement on the referenced Code section. We have multiple commercial office projects under design at this time that are affected by the referenced section. The projects are law offices in high-rise office buildings. The Florida Building Code - Energy Conservation 2014 compliance option for the projects is governed by Chapter 4 of the Code.

The question is the following:

Does the Florida Building Code - Energy Conservation 2014, Section C405.7.1 require conformance with the requirements of ASHRAE 90.1, 8.4.2, Automatic Receptacle Control?

We offer the following additional comments:

1. ASHRAE 90.1, 8.4.2 reads,  
“At least 50% of all 125 volt 15- and 20-Ampere receptacles, including those installed in modular partitions, installed in the following space types:
  - a. Private offices
  - b. Open offices
  - c. Computer Classroomsshall be controlled by an automatic control device that shall function on:
  - a. a scheduled basis using a time-of-day operated control device that turns receptacles off at specific programmed times – an independent program schedule shall be provided for areas of no more than 25,000 sf but no more than one floor, or
  - b. an occupant sensor that shall turn receptacles off within 30 minutes of all occupants leaving a space, or
  - c. a signal from another control or alarm system that indicates the area is unoccupied.

Exception: Receptacles for the following shall not require an automatic control

Mr. Madani  
April 28, 2016  
page 2

device:

- a. Receptacles specifically designated for equipment requiring 24 hour operation.
  - b. Spaces where an automatic shutoff would endanger the safety or security of the room or building occupant(s).”
2. FBC - Energy Conservation 2014, C405.7.1 states,  
“Electrical Power (Mandatory).  
C405.7.1 Applicability. This section applies to all building power distribution systems. The provisions for electrical distribution for all sections of this code are subject to the design conditions in ASHRAE Standard 90.1.”
  3. ASHRAE Standard 90.1 defines design conditions as, “specified environmental conditions, such as temperature and light intensity, required to be produced and maintained by a system and under which a system must operate.”
  4. I could not find another reference to “design conditions” in ASHRAE 90.1, but when defining HVAC design requirements it states, “...design loads for the purpose of sizing systems and equipment shall be determined in accordance with generally accepted engineering standards and handbooks acceptable to the *adopting authority* (for example, *ASHRAE Handbook - Fundamentals*).”
  5. Neither Item 3 nor Item 4 above, appear to be related to a requirement for switching outlets.
  6. We will not speculate as to the intent behind the verbiage except to say that “...subject to the design conditions in ASHRAE...” should *not* be interpreted to mean, “...subject to all mandatory provisions in ASHRAE...”

Thank you for giving this matter your prompt attention.

Very truly yours,  
INITIAL ENGINEERS, P.A.



ALFONSO FERNANDEZ-FRAGA, P.E.  
President

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