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**FILED**

Department of Business and Professional Regulation  
Deputy Agency Clerk

CLERK Brandon Nichols

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File #

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## **PETITION FOR DECLARATORY STATEMENT BEFORE THE FLORIDA BUILDING COMMISSION**

### **Code section on which the Declaratory Statement is sought:**

- Florida Building Code Code - Energy Conservation Sixth Edition (2017), Residential Provisions:  
Sections 403.5, 403.5.1, and 403.5.1.1

### **Excerpt of this code section:**

**R403.5 Service hot water systems.** Energy conservation measures for service hot water systems shall be in accordance with Sections R403.5.1 through R403.5.6.

**R403.5.1 Heated water circulation and temperature maintenance systems (Mandatory).** Heated water circulation systems 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

### **Background of request:**

There is confusion with the interpretation of sections R403.5, R403.5.1, and R403.5.1.1. Some building departments interpret section R403.5.1 to mean that providing residential, hot water, recirculating systems is **MANDATORY** and others have interpreted R403.5.1 to mean that **IF** an optional recirculating system is installed, then the control systems stated in R403.5.1 are Mandatory.

### **Example:**

I am designing an 850 SF house for Habitat for Humanity. The tank-style water heater is very close to the plumbing fixtures. Hot water from the tank to the fixtures will be instantaneous. A recirculating system is unwarranted and will not solve an energy or water use problem because one does not exist. The Commercial section of the 6th Edition of the Energy Code inserted a new requirement that if the

farthest hot water fixture served was greater than 50 feet from the water heater, then a recirculating system is Mandatory. There is no similar distance stipulation in the Residential Energy Code. Section R403.5 from the Residential Energy Code has the only mention of hot water recirculating systems for single family dwellings and it is confusing whether a hot water recirculating is mandatory.

Question to be clarified:

***Does section R403.5.1 state that all single family dwellings MUST install hot water recirculating systems or does R403.5.1 state that IF a hot water recirculating system is installed in a single family dwelling, it then MUST conform to the control systems stipulated in section R403.5.1?***

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David Porter". The signature is fluid and cursive, with the first name "David" and last name "Porter" clearly distinguishable.

**David Porter AIA**  
President

A member of the AIA Florida Codes Standards Committee

A member of the ICC Commercial and Residential Code Interpretation Committees