

GEW110-14

607.7

Proponent: Brenda Thompson, Chair, representing Sustainability, Energy, High Performance Code Action Committee

Revise as follows:

607.7 Circulating ~~hot~~ heated water systems for service water heating systems. ~~This section shall apply only to systems that circulate heated water from service water heating equipment to plumbing fixtures. Circulation shall be by one or more pumps. Gravity or thermosyphon circulation systems loops are shall be prohibited. Controls that allow~~ Continuous, timer, or water temperature-initiated (aquastat) circulating pump operation of a circulating ~~are shall be prohibited. The pumps on circulating water systems hot water systems shall be activated on demand by either a hard-wired or wireless activation control of one of the following types:~~

1. A normally open, momentary contact switch.
2. Motion sensors that make momentary contact when motion is sensed. After the signal is sent, the sensor shall go into a lock out mode for not less than 5 minutes to prevent sending a signal to the electronic controls while the circulation loop is still hot.
3. A flow switch.
4. A door switch.

The controls for the pump shall be electronic and shall operate on the principal of shutting off the pump with a rise in temperature. Electronic controls shall have a lock-out to prevent operation at water temperatures greater than 105°F (41°C) in the event of failure of the device that senses temperature rise. The electronic controls shall have a lock out mode for not more than 5 minutes that prevents extended operation of the pump if the sensor fails or is damaged.

Reason: The existing section fails to address which circulating pumps that the requirements relate to. This section is not intended to cover circulating pumps for hot water systems for comfort heating or for snowmelt systems but the language isn't specific. The use of the term "are" is not appropriate because the sentence with "are" is just a statement. Changing "are" to "shall" makes the sentence a mandatory command. Aquastat is a registered trademark of Honeywell. Trademarked names and words in parenthesis must not be used in code text. The section is reworded to be clear.

This proposal was submitted by the ICC Sustainability Energy and High Performance Code Action Committee (SEHPCAC). The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). This includes both the technical aspects of the codes as well as the code content in terms of scope and application of referenced standards. In 2012 and 2013, the SEHPCAC has held six two-day open meetings and 50 workgroup calls, which included members of the SEHPCAC as well as any interested parties, to discuss and debate proposed changes and public comments. Related documentation and reports are posted on the SEHPCAC website at: <http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx>

Cost Impact: Will not increase the cost of construction.

GEW110-14: 607.7-THOMPSON419