

Proposed Code Modifications Detail

Code Change Cycle: 2010 Triennial Original Modification 3/1/2010 - 4/2/2010

TAC: Energy

Sub Code: Energy Conservation

EN4415

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Date Proposal Submitted	4/2/2010	Section	504.7
Chapter	5	TAC Recommendation	Pending Review
Affects HVHZ	No	Commission Action	Pending Review
Proponent	Jennifer Hatfield	General Comments	No
Attachments	No	Alternate Language	No

Related Modifications

Summary of Modification

This proposal removes new s. 504.7.4 that would require energy efficiency pool pump and pump motor requirements for commercial pools. The intent of the legislative directive was for these requirements to only apply for residential pools and spas. They are not feasible in commercial applications.

Text of Modification

Note - Changes in Red are changes to what is in the current FL Energy Conservation Code draft language. The rest of the changes were part of the online draft FECC document.

504.7 Pools. Pools shall be provided with energy conserving measures in accordance with Sections 504.7.1 through 504.7.343.

504.7.1 Pool heaters. All pool heaters shall meet the minimum efficiency listed for that type of pool heater in Table 504.2 and shall be equipped with a readily accessible on-off switch that is mounted outside the heater to allow shutting off the heater without adjusting the thermostat setting. Pool heaters fired by natural gas or LPG shall not have continuously burning pilot lights.

504.7.2 Time switches. Time switches that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on swimming pool heaters and pumps.

Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Where pumps are required to operate solar-and waste-heat-recovery pool heating systems.

504.7.3 Pool covers. Heated swimming pools and spas shall be equipped with a vapor retardant pool cover on or at the water surface. Pools heated to more than 90°F (32°C) shall have a pool cover with a minimum insulation value of R-12.

Exception: Outdoor Pools deriving over 70 60 percent of the energy for heating from site-recovered energy or solar energy source computed over an operating season.

~~504.7.4 Pool pump motors. Pool pump motors shall meet the following criteria:~~

- ~~1. Pool pump motors shall not be split phase, shaded pole or capacitor start induction run types.~~
- ~~2. Pool pumps and pool pump motors with a total horsepower (HP) of \geq 1 HP shall have the capability of operating at two or more speeds. The low speed shall have a rotation rate of no more than $\frac{1}{2}$ of the motor's maximum rotation rate.~~
- ~~3. Pool pumps motor controls shall have the capability of operating the pool pump at a minimum of two speeds. The default circulation speed shall be the residential filtration speed, with a higher speed override capability for a temporary period not to exceed one normal cycle or 120 minutes, whichever is less.~~

~~Exception: Solar pool heating systems shall be permitted to run at higher speeds during periods of usable solar heat gain.~~

Rationale

The 2008 legislative directive for pool pumps and pump motors were intended for residential application only. This also follows California Energy Code pool pump and pump motor requirements and draft national standards. These devices currently cannot be used in commercial applications where turnover requirements and other circulation requirements prevent their use.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

No fiscal impact.

Impact to building and property owners relative to cost of compliance with code

No fiscal impact.

Impact to industry relative to the cost of compliance with code

If not clarified, it will amount to an unattainable mandate that will cost industry time and dollars having to address it with every AHJ and public health official.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

Public pools must follow certain circulation and filtration requirements, i.e. turnover requirements, for the health and safety of its public pool users. If the pump motor requirement is not removed this could prevent public pools from meeting these requirements.

Proposed Code Modifications Detail

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This proposal strengthens and improves the code by removing requirements that were only intended for residential application.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This proposal does not discriminate.

Does not degrade the effectiveness of the code

This proposal does not degrade the effectiveness of the code; it actually strengthens the code by removing a requirement that is only applicable to residential pools and spas.

Proposed Code Modifications Detail

EN4410

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Date Proposal Submitted	4/2/2010	Section	504.7.3
Chapter	5	TAC Recommendation	Pending Review
Affects HVHZ	No	Commission Action	Pending Review
Proponent	Jennifer Hatfield	General Comments	No
Attachments	Yes	Alternate Language	No

Related Modifications

Summary of Modification

This proposal removes the cover requirements for pools & spas and clarifies that the R-12 insulation requirement for covers is only required for portable spas. The current requirements pose serious safety hazards and may not be enforceable or realistic in certain commercial applications.

Text of Modification

~~504.7.3 Pool Covers. Heated swimming pools and spas shall be equipped with a vapor retardant pool cover on or at the water surface. Pools heated to more than 90°F (32°C) Portable spas shall have a pool cover with a minimum insulation value of R-12. Exception: Outdoor Pools deriving over 70-60 percent of the energy for heating from site recovered energy or solar energy source computed over an operating season.~~

Rationale

This proposal removes the cover requirements for pools and spas and clarifies that the R-12 insulation requirement for covers is only required for portable spas (hot tubs). Only portable spa cover manufacturers make covers that are R-12 or greater; there is no product available for pools or nonportable spas. The current requirements pose serious safety hazards and may not be enforceable or realistic in certain commercial applications. See attached support file for more information.

Fiscal Impact Statement

Impact to local entity relative to enforcement of code

No fiscal impact besides eliminating time to enforce a provision that can be unenforceable and not viable, and possibly cause serious safety hazards.

Impact to building and property owners relative to cost of compliance with code

This proposal eliminates a requirement that would be costly and impractical in some cases. Public pool rule 64E-9 allows for covers, but does not require it.

Impact to industry relative to the cost of compliance with code

This proposal clarifies the R-12 value is only applicable to portable spas and eliminates all other requirements, eliminating the time and therefore cost to the industry trying to follow a requirement that poses multiple problems.

Requirements

Has a reasonable and substantial connection with the health, safety, and welfare of the general public

If the cover requirement is not removed, with the exception of portable spas, the safety of the consumer may be at risk. See supportive documentation file for further information.

Strengthens or improves the code, and provides equivalent or better products, methods, or systems of construction

This proposal strengthens and improves the code by removing unattainable requirements.

Does not discriminate against materials, products, methods, or systems of construction of demonstrated capabilities

This proposal removes language that would discriminate against certain materials, products, methods, or systems.

Does not degrade the effectiveness of the code

This proposal does not degrade the effectiveness of the code; it actually strengthens and gives consistency throughout the State of Florida by removing unenforceable and vague requirements.

Proposed Code Modifications Detail

Search Criteria

Modification #:	ALL	Code Version:	2010
Code Change Cycle:	2010 Triennial Original Modification 03/01/2010 - 04/02/2010	Sub Code:	Energy Conservation
Chapter & Topic:	Chapter 5 - Commercial Energy Efficiency	Section:	ALL
Date Submitted From:	ALL	Date Submitted To:	ALL
TAC:	ALL	TAC Recommendation:	ALL
Commission Action:	ALL	Proponent Last Name:	ALL
Proponent First Name:	ALL	Text of Modification:	pool
Related Modifications:	ALL	Affects HVHZ:	ALL