

California State Fire Marshal Information Bulletin

Issued: October 26, 2010

Antifreeze Solutions Within Residential Fire Sprinkler Applications

Modifications to the California Code of Regulations, Title 24, Part 2, 2.5, and 9 for the use of Antifreeze within residential fire sprinkler systems

The purpose of this information bulletin is to advise local code enforcement agencies and interested parties of a code adoption change to be effective January 1, 2011. On October 19, 2010, the California Building Standards Commission approved the Office of the State Fire Marshal emergency regulations amending sections of the California Code of Regulations (CCR), Title 24, Part 2, 2.5, and 9 (California Building Code, California Residential Building Code, and California Fire Code).

Summary of Effect:

The approved emergency regulations would require that **only pre-mixed** antifreeze solutions in concentrations **not to exceed 40% propylene glycol** and concentrations of **glycerin not exceeding 50%** in residential occupancies and other dwelling units be permitted for the protection of sprinkler pipe in freezing conditions. The use of antifreeze shall only be used as a last method for protection, with consideration given to recorded prolonged freezing temperatures, and approved by the authority having jurisdiction. This modification is effective on January 1, 2011.

The objectives of the emergency regulations are to continue to ensure the regulations of the California Building Standards Code, establish and/or maintain minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in accordance with Health and Safety Code Section 13100.1 that foster, promote, and develop ways and means of protecting life and property against fire and panic. It also serves to emphasize the importance of residential fire sprinklers in the efforts to reduce fire fatalities in homes and apartments in California. Fire sprinklers in apartments have been required by the California Building Code over the past twenty years; it is suggested those existing structures that have antifreeze as part of their design to protect pipe from freezing should contact a licensed fire sprinkler contractor to verify if appropriate action is needed.

The complete emergency regulation package and more information regarding this Information Bulletin may be obtained by visiting the website for the Office of the State Fire Marshal at http://osfm.fire.ca.gov/