

BBRS Official Interpretation No. 2012_08a

Date: January 8, 2013

Subject: 8th Edition 780 CMR, Requirements for Antifreeze when used in sprinkler systems.

Background/Discussion:

Requirements for sprinklers and for the use of antifreeze in sprinklers are found in a number of sections of the code, including but not necessarily limited to:

- **903.3.1.1** which states that antifreeze can only be utilized in fire sprinkler systems in accordance with requirements of NFPA 13-2010
- **903.3.1.2** which reads like Section 903.3.1.1 but for 13D systems
- **903.3.1.4** which states that antifreeze shall not be used in sprinkler systems that protect dwelling units.

This interpretation is intended to clarify code requirements for when antifreeze may be used in sprinkler systems.

QUESTION 1

Is antifreeze allowed in sprinkler systems?

ANSWER 1

Yes. But compliance to the antifreeze requirements¹ of the 2010 NFPA 13, 13R, and 13D are no longer applicable since these requirements have been superseded by the antifreeze requirements of the 2013 standards. So if antifreeze is used in any sprinkler system, the design must comply with the 2007 standard with the exception of the antifreeze, which must comply with the antifreeze requirements in the applicable 2013 standards. These 2013 standards require antifreeze that is listed. At this point in time the BBRS is not aware of any listed antifreeze products. Note, there is an exception to this in the 2013 NFPA 13D standard which allows non-listed antifreeze, if approved by the authority having jurisdiction.

1. Staff commentary: NFPA has determined that the antifreeze specified in the 2010 standards may be a safety concern when used in certain applications. Because of this, NFPA recommends that the 2013 standards be used instead. The BBRS has begun a review of the 2013 standards for possible code adoption and has issued this official interpretation so that the regulated community can be apprised of this issue and account for it in the design of projects.