Victaulic Memo Adds to CPVC Compatibility Controversy

A memo circulated by the Victaulic Company on September 12th has added to controversy regarding compatibility of CPVC piping with the anti-microbial coatings provided for some steel sprinkler piping products. A copy of the Victaulic memo can be viewed at (need link here). The memo cites test results that contradict those previously reported by the Allied Tube and Lubrizol companies. According to Victaulic, an antimicrobial coating mixed with water "caused a hydrostatic pressure failure rate four times faster than baselines using water alone" in CPVC piping. Based on its testing, Victaulic is recommending that steel pipe with antimicrobial coatings not be used in combination with CPVC products until such time that an appropriate test protocol is developed that would allow issuance of a listing for such combination by a product listing laboratory.

In the August 12, 2008 edition of eTechAlert, NFSA had offered the following advice to its contractor members:

> "Given that there is no effort under way to officially list these piping products as compatible, NFSA member contractors have asked for guidance as to whether they need to be concerned about the use of CPVC downstream of steel pipe protected with antimicrobial coatings. Common sense indicates that the potential for a problem is greatest when the CPVC is downstream of large amounts of coated steel pipe, and when stresses on the CPVC pipe are highest, such as in the case of high-rise buildings. As in many other areas of product usage, there are shades of gray that will ultimately be sorted out, but contractors must use their best judgment until that time."

NFSA Executive Vice President Russ Fleming notes that if contractors are concerned that CPVC could be damaged by upstream steel pipe protected with anti-MIC coatings, they can either avoid the use of such piping arrangements or at least avoid the possibility that water from the steel piping flows through the CPVC piping. This could include the use of alarm test and drain connections located at the riser, such that water flowed for testing purposes does not pass through downstream CPVC. In such case, however, consideration should also be given to the manner in which the CPVC piping is initially filled and pressurized.

As this controversy proceeds, NFSA is addressing it on several fronts. The NFSA engineering staff is participating in discussions at the NFPA Committee on Sprinkler Installation Criteria, and preliminary efforts in the area of testing protocols are being made through the NFSA/UL/FM Standards Review Committee.