

CPVC ISSUE BRIEFING

Would you buy a product that was not certified or tested by the manufacturer for use in the exact manner it was intended to be used?

POLICY CHANGES IN FIRE SPRINKLER INDUSTRY

Effective January 1, 2013, some CPVC manufacturers, as the product experts, are no longer listing steel pipe in their compatibility certification programs. They have since deferred to Factory Mutual Global as the third-party listing agency relating to compatibility of antimicrobial pipe coatings and CPVC. Previously, manufacturers took responsibility for testing and certifying the compatibility of their product for use in fire protection systems.

WHAT THIS MEANS FOR CONTRACTORS AND ENGINEERS

Any contractor or engineer who designs or installs fire protection systems must understand the implications of these changes in manufacturer certification. Contractors, engineers and ultimately AHJs (Authority Having Jurisdiction) are now held liable for the compatibility and safety of the fire sprinkler systems they work on and/or approve—extending well beyond the products used and your direct terms. Contractors may be liable for the compatibility of the system even after you're gone, when it is under the care and supervision of maintenance teams, partners, cleaning crews, etc.

What do I need to know about these policy changes?

First and foremost, there's great risk to safety if CPVC is not well understood and used correctly. For starters, CPVC cannot come into contact with nearly 50 different identified chemicals/materials, including:

- Insecticides
- CAT 5 cable
- Certain fire-stopping material
- Some types of oil that could be found on a worker's glove
- Certain spray-on coatings
- Oil-based paints
- Scented perfumes

What happens to fire sprinkler systems if CPVC comes into contact with incompatible materials?

At minimum, exposure to certain materials that are incompatible with CPVC can potentially cause the system to leak or drip at specific points of failure. At worst, complete system failure could occur during a fire.

What happens to my customer if CPVC is used improperly?

The effects of improper CPVC use can be devastating, and include system failure during a fire, possible loss of life and damage to or total loss of property.

What does this discontinuation of compatibility certification mean to my business?

If improper CPVC exposure results in a faulty fire sprinkler system and you're held liable, you run the risk of sacrificing your hard-earned reputation and your customers' peace of mind. This damage can be great enough to lead to business failure and even financial ruin.

Why has this liability transferred to contractors, AHJs and engineers, when it previously fell on the manufacturer?

The contractor chooses the materials for the fire sprinkler system and submits them to the engineer for approval prior to installation. The AHJ then gives final approval. Thus, if the system fails due to improper CPVC use, the contractor and all involved in the process are held liable for selecting improper materials.

Are there existing solutions that reduce the liabilities inherent to fire sprinkler systems?

All contractors who work on fire sprinkler systems should review any and all information regarding compatibility, from all available unbiased sources, as your first line of defense against system failures.

In terms of ensuring compatibility, there is one choice you can make that brings peace of mind to you and your customers, and that is to specify 100% steel pipe in all fire sprinkler systems. It's easy to remember: 100% steel is 100% compatible with everything. Why spec anything else?

ADVANTAGES OF 100% STEEL SYSTEMS

By installing 100% steel fire sprinkler systems, you get the dependability of total compatibility. The many benefits of choosing 100% steel include:

- Ease of fabrication and installation
- Competitive cost per foot
- Greater longevity
- Recyclability and sustainability
- Multiple applications, from risers to cross-mains to branches
- And more

In short, steel fire sprinkler systems stay compliant for life. Steel was the first choice when fire sprinklers began protecting life and property more than 100 years ago. In fact, many of those systems are still in service. Having been installed with common sense and without enumerable warnings and cautions, steel has and continues to silently stand the test of time. Conversely, CPVC has been in use in sprinkler systems less than 40 years and carries with it many cautions. In fact, there are more than 50 materials and/or products that have been identified as incompatible and cannot come into contact with CPVC. This list continues to grow since the product was first introduced into the fire sprinkler market. Unfortunately, some are identified only after a costly failure investigation is undertaken and blame is accessed.

Are hybrid systems (i.e., those that combine steel and CPVC pipe) still a safe solution?

Hybrid systems can be safe and effective, but it's important that you weigh the cost savings of a hybrid system against the risk of designing a system that's not guaranteed to be 100% compatible. Factory Mutual Global has listed Wheatland product as compatible for use in hybrid systems.*

Wheatland Tube has never warranted compatibility between its steel pipe products and CPVC products, because such a warranty would be impossible. Wheatland does not know, nor has it ever known, the composition of parent materials used to manufacture CPVC from various manufacturers, due to inadequate information.

THE WHEATLAND POSITION

Wheatland Tube guarantees its steel pipe is 100% compatible with systems that use only steel pipe in the fire protection system.

We believe good fire protection should be simple. We focus on two key components:

- **Good materials** — Our steel is 100% Made & Melted in America, recognized industry-wide as the safest, surest choice for fire protection systems.
- **Compatibility** — 100% steel systems are compatible with everything.

WANT TO LEARN MORE?

Bob Bussiere (general manager, fire sprinkler pipe) will deliver a custom-tailored webinar for you and your team. Let us know what specific concerns you have about the changes in CPVC manufacturer certification, and Bob will address them directly.

To schedule your custom webinar with Bob Bussiere, contact Matt Panizzi at **312.275.1562** or matheus.panizzi@jmcsteel.com

*Wheatland assures its complete confidence in Factory Mutual Global. These statements are made by Factory Mutual Global based on their testing, not by Wheatland Tube.