RELMARK GROUP

Risk Management Advocates for Fire Sprinkler Contractors

Tales from the CLAIMS Crypt

Inadequate CPVC Cure Times

Loss: $550,000

What happened?

Our contractor was hired to add two sprinklers to an existing sprinkler system. The location was a small storage room on an upper floor of a residential condominium. A simple job! Or so the contractor thought…

The fitter made a cut-in into a 1.5" CPVC pipe and added a new tee, piping, and two new sprinklers in the storage area. After waiting 3 hours for glue to set, the fitter turned the water back on and everything appeared to be fine. It was late in the afternoon and the fitter left the job with the system back in service, having followed recommended cure time and believing all was fine.

A half hour after leaving the site the 1.5" joint let go, causing the fire pump to start. By the time the system was turned off there had been $550,000 in water damage.

What should have been?

Cure times matter! The longer you wait, before introducing water, the better. The cure time charts are only a starting place to determine how long it will take a joint to cure. The various cure time charts from plastic pipe and fitting manufacturers all caution that many factors such as pressure, humidity, squareness of pipe cut, tightness of fitting and, most importantly, the actual temperature of pipe and fitting (not the room temperature), all directly impact cure time.

Another item to consider is the age and condition of the cement. As soon as a can is opened, the accelerant within it starts to evaporate, moisture enters the can, and the cement properties start breaking down. Major CPVC pipe manufacturers recommend use of a new can of solvent with each cut-in job.

Several years ago, RelMark started educating contractors about different factors that influence cure time and the rising costs of water damage claims. RelMark also started requiring policyholders to follow a ***minimum of 24 hour cure time*** whenever possible. Since that time, water damage claims resulting from cut-ins and cure times have dramatically dropped to the point where these types of claims are almost non-existent when additional curing time is allowed.

What should be done to limit the loss?

As in any loss, quick response is critical. Have someone visit the site immediately and help clean up and dry out. Do not accept liability or acknowledge wrong doing. Take pictures so any resulting claim does not balloon to include things that were not part of the original event. Don't forget to report the claim as soon as possible.

Available Resources

On www.relmarkgroup.com you'll find several loss control resources specific to cut-ins and cure times. Among them:

- Recommended Cut-In Procedures for CPVC Sprinkler Systems
- CPVC 24-Hour Minimum Cure Time - Sample Language for a Shut Down Notification
- Sprinkler Contractor's Guide to Preventing Water Damage

Questions to Get Yourself Started (Best Practices)

- ✓ Does our company have standard procedures for CPVC cut-in work for our service employees? Is it available to field staff as a checklist on the job?
- ✓ Are installers trained appropriately, in case they do a cut-in at the end of a new installation project?
- ✓ Are new cans of cement used for each job?
- ✓ What ongoing and refresher training does your company offer employees working with CPVC?