



Overview:

During recent inspection of fire sprinkler systems using CPVC plastic it has been found that in many installations glue has been allowed to “run down” the inside of the piping and fittings creating a “plug” in the fire sprinkler waterway. This has caused great concern as it adversely effects the operation of the fire sprinkler system and may cause catastrophic failure. As a result, a meeting to resolve this issue with Member Representatives of the Colorado Fire Protection Association, Local 669 and Denver Fire Prevention was conducted. The Colorado Fire Protection Association recommends implementation of the following effective April 2, 2008.

Proposal for installation and inspection of plastic piping in fire sprinkler systems:

1. All piping and components shall be installed per manufacturer’s instructions and National Fire Protection Association (NFPA) 13, 13D, 13R recommendations including but not limited to solvents, pipe dope, pipe cutting, end preparation, temperature restrictions and torque specifications for the fire sprinkler heads.
2. All CPVC piping and components shall only be installed by employees holding a valid certification from the manufacturer of the product, demonstrating that they have been formally trained in the proper installation of CPVC piping and components.
3. The piping shall be visually inspected by the Authority Having Jurisdiction prior to the installation of plugs or sprinkler heads to verify that the waterway to the fire sprinkler is free of glue or other obstructions. It is the Contractors responsibility to provide the Inspector with a suitable implement to mechanically inspect the openings. We recommend that this item be constructed of materials that will not damage the threads of the fitting or leave materials in the fitting. This inspection shall be performed only after installed, including but not limited to, hangers, piping, offsets, and sprinkler adapters. All sprinkler outlets shall be in their final finished configuration. This inspection shall constitute a “Rough Inspection” for the system and will allow the piping to be covered.
4. Upon completion of the rough inspection, when approved by the Authority Having Jurisdiction, hydrostatic testing of the piping is the responsibility of the Contractor and Owners representative. Any damage to the building elements due to leakage is the sole responsibility of Contractor/Owners Representative and shall be repaired prior to final inspection. All appropriate documentation per NFPA requirements shall be signed by the Owners Representative and the Licensed Fitter for the project. Signed test forms shall be kept on the project and must be available to the AHJ upon request.
5. If for any justifiable reason the inspector feels that this procedure has not been followed, he may request a representative sample not exceeding 7% as approved by the Authority Having Jurisdiction, or a specific sprinkler be removed for inspection during the final inspection. If during this inspection it is found that any sprinklers are blocked or the installation guidelines have not been followed, all sprinklers shall be removed and re-inspected.

Enforcement:

1. It shall be the Licensed Installer on the project who is primarily responsible to implement this procedure as well as strict adherence to Manufacturers Installation Guidelines, proper training of personnel under their supervision, and all applicable NFPA standards. Failure to do so will result in corrective measures being implemented including possible revocation of license, fines, and prosecution under Colorado State law.
2. If it is determined that the Licensed Contractor employing the Licensed Installer has directed policies and procedures in violation of these standards, all penalties are transferable.