



California State Fire Marshal Information Bulletin 14-004

May 27, 2014

NON-METALLIC PIPING SYSTEMS, FIRE SPRINKLERS AND SPRAY POLYURETHANE FOAM APPLICATIONS

This information bulletin has been developed to provide basic guidance and important information to contractors, fire sprinkler installers, and local Authorities Having Jurisdictions. It is critical that fire sprinkler and spray foam installers work together to ensure that installation of spray polyurethane foam (SPF) does not adversely affect the integrity of the non-metallic pipe in fire sprinkler systems.

The following guidelines have been developed to provide proper installation of SPF with non-metallic fire sprinkler piping:

- Non-metallic piping and fire sprinklers shall be installed in accordance with the manufacturers' listing criteria, as well as adopted codes and standards.
- The application of SPF insulation shall be installed by a trained and/or certified applicator in accordance with manufacturer's installation instructions and all applicable product listings. See OSFM Information Bulletin 13-007, dated November 18, 2013, regarding fire sprinkler venting.
- When non-metallic piping is used in the fire sprinkler systems, best practices of compatibility and/or protection of non-metallic sprinkler piping and fire sprinklers are necessary with the installation of polyurethane foam-insulation in new and existing construction.
- The contractor installing insulation shall abide by the manufacturer's recommended maximum thickness per pass. This will limit internal foam temperature caused by the exothermic polyurethane reaction.

The following links provide additional resources relating to fire sprinkler installation:

- California Fire Sprinkler Coalition
<http://osfm.fire.ca.gov/codedevelopment/CaliforniaHomeFireSprinkler.php>
- Residential 13-D Installations, Statistics, Components, and Construction
<http://osfm.fire.ca.gov/codedevelopment/pdf/califfiresprinklercoalition/OSFMCEC10142013.zip>
- SPF and CPVC (non-metallic) Pipes and Fittings:
<http://www.sprayfoam.org/component/content/article/39-technical/5153-spf-and-cpvc-pipes-and-fittings>

For more information please visit our website <http://osfm.fire.ca.gov>