



PO Box 1528 • Mount Airy, NC 27030 • 800-346-8229 • [www.ncfi.com](http://www.ncfi.com)

---

**\* APPLICATOR BULLETIN \***

**SPRAYING POLYURETHANE FOAM TO CPVC PIPES**

As a result of two separate and extensive studies, the proper application of sprayed polyurethane foam, both open and closed cell, is not an issue from either a chemical compatibility or exposure to exothermic heat during or after the foaming process.

SPFA, system house partners, including NCFI, and Lubrizol (leading supplier to CPVC resins) conducted a joint study that conclusively shows that sprayed polyurethane foam does not have a chemical compatibility issue and does not cause environmental stress cracking (ESC). CPVC pipes can be damaged from mechanical stress and the foam applicator should take all necessary steps to prevent any movement or stress to the pipe itself while working in proximity to pipes.

In a separate study by NCFI and Lubrizol, NCFI Sealite™ and InsulStar® (open and closed-cell spray foams) were applied to over 50 different pipe samples of Blazemaster® sprinkler pipes ranging from ¾" to 1½" diameter and Flow Guard Gold® plumbing pipes from ½" to 1" diameter. Pipes were tested both wet and dry, to pressures well in excess of those seen in the field with foam thicknesses well in excess to recommended application rates. Foam can be applied to any CPVC pipe size, both standard plumbing and sprinkler types.

NCFI InsulStar®, InsulStar®Plus, InsulBloc® ThermalStop® and AgriThane™ closed cell foams should be applied in the normally recommended maximum pass thickness of 2 inches, waiting 10 minutes between passes.

Application of Sealite™ should be in a single pass thickness not exceeding 12 inches.

When applying foam around sprinkler heads, the head should be masked to prevent any overspray from entering the head area from both a cosmetic and functional view.

Full details of the ESC study can be found at the SPFA website [www.sprayfoam.org](http://www.sprayfoam.org) and a Compatibility and Exotherm Position statement can be found on the Lubrizol website at <http://www.lubrizol.com/BuildingSolutions/ChemicalCompatibility/OtherConcerns.html#foams>

Please contact NCFI with any questions at 800-346-8229.