

UV Sterilization Systems and Closed – Cell Insulations

UV sterilization equipment is sometimes used in air handling systems. These systems give off UV light which is intended to kill mold spores and bacteria. They may be located within ductwork or air handling units.

Flexible closed-cell elastomeric insulation materials are subject to surface degradations due to long term or intense UV exposure. When UV sterilization systems are used in air handling systems insulated with polyolefin or elastomeric insulation materials, it is necessary to provide a protective coating to protect the insulation from this UV exposure. Coatings used in air handling systems must be registered with the EPA.

Foster Fungicidal Protective Coating 40-20 has been recommended by Foster for this application. Comparable products are available from other manufacturers such as Design Polymerics. The coating manufacturer should be consulted to determine acceptability for use elastomeric insulation materials. These coatings should be installed in accordance with the manufacturers' requirements.

Because the strength of the UV sterilization systems vary by manufacturer, we recommend that they be consulted for guidance to determine how far from the UV source the insulation should be protected.