



# Facts About Using Sealants in Fiber Glass Air Handling Systems

*In this issue we address a number of concerns related to the use of sanitizers and biocides for remediating damaged or contaminated surfaces in HVAC systems. These include compatibility with the facing materials and the need for correct application for effective coverage.*

## Introduction

**H**eating, Ventilation and Air Conditioning systems (HVAC) are often a focal point in the investigation of buildings with Indoor Air Quality problems. In such cases, an assessment is made of the performance and conditions of all HVAC system components including the materials that are exposed to the airstream surface.

An assessment may find physical damage or excessive contamination present on the airstream surface. If this is the case, then remediation is required.

Keep in mind that duct liner or duct board materials as supplied by the manufacturer meet strict UL, NFPA, ASTM and ASHRAE 62.1 standards. As a result there is no requirement for additional sealants or encapsulants to be applied to the airstream surface by either fabricators or installers.

A sealant should only be used if the damage to the airstream surface is small and localized.

## Sanitizers and Biocides

The U.S. Environmental Protection Agency (EPA) regulates the use of sanitizers or biocides inside ducts that either kill or inhibit microbial growth. NAIMA recommends that building owners or managers who are considering the application of sanitizers or biocides be aware of a number of issues related to their use in HVAC systems. Please refer to the EPA website: [www.epa.gov/iaq/pubs/airduct.html](http://www.epa.gov/iaq/pubs/airduct.html) (*Should you Have the Air Ducts in Your Home Cleaned?*) for specific information on this issue.

## Compatibility

If it has been determined that the damage or contaminated surface can be remediated by the application of a sealant, care should be taken to assure that the sealant is compatible with the coating or facing materials used by the insulation manufacturers to protect the airstream surface of the duct liner or duct board. Consult the sealant manufacturer to assure

that the sealant is compatible with the insulation material.

Also, the selected sealant needs to meet the building codes, and be handled and installed following the application and safety recommendation provided by the manufacturer. Other important information, such as longevity and durability should be discussed with the sealant manufacturer.

## Installation and Application

For a sealant to be effective, it is important that it be applied correctly. The manufacturer of the sealant should be consulted for their installation recommendation. The information should include the application steps required to achieve the coverage needed for the sealant to be effective. Direct application of the sealant to the damaged surface has been determined to be the only effective way to achieve complete coverage of the damaged area. Spraying a sealant into the airstream will not provide the needed coverage to the damaged surface.

## Summary

The use of a sealant is only recommended for the remediation of localized damage of the airstream surface of duct liners or duct board materials. The use of a sealant as a preventive measure over the airstream surface of these materials is unnecessary.

For information on the cleaning of insulated duct systems, please refer to the NAIMA publication AH 122, titled "Cleaning Fibrous Glass Insulated Air Duct Systems."

Building owners and managers who are considering the use of sanitizers or biocides in the HVAC system should consult the EPA.

### ABOUT NAIMA

NAIMA is the association for North American manufacturers of fiber glass, rock wool, and slag wool insulation products. Its role is to promote energy efficiency and environmental preservation through the use of fiber glass, rock wool, and slag wool insulation, and to encourage the safe production and use of these materials.

The Air Handling Committee of NAIMA provides information about indoor air quality as it pertains to its members' products.

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