

# **HSE-103FS MICROBIOLOGICAL RESISTANCE TESTING**

INDOOR ENVIRONMENTAL QUALITY PRODUCT SAFETY FACT SHEET

**TECHNICAL BULLETIN** 

# MICROBIOLOGICAL RESISTANCE TESTING

- SuperDuct® RC Duct Board
- Linacoustic® RC Duct Liner
- Duct Liner PM Insulation
- Linacoustic® RC-HP Duct Liner
- Linacoustic® R-300 Rigid Plenum Liner Board
- Spiracoustic Plus® Round Duct Liner System
- Micromat<sup>®</sup>
- Micromat® RX

Studies conducted at several independent laboratories show that the Johns Manville products listed above are protected from microbialgrowth. These products have been tested as required by each of the industry standards as follows:

## **UL 181 MOLD GROWTH AND HUMIDITY TEST**

Samples of the material are inoculated with mold mycelia and spores and placed in a closed water vapor vessel for 60 days. The samples are then examined visually for extent of growth. The mold shall not spread beyond the inoculated area and no significant growth of mold is to be observed.

Results: Mold did not spread beyond the inoculated areas and no growth of mold was observed.

### **ASTM C1338 FUNGI RESISTANCE TEST**

This test provides a method to determine the ability of the material to support fungi growth under conditions favorable for their development.

A spore suspension consisting of Asperaillus niger, Asperaillus flavus, Aspergillus versicolor, Penicillium funiculosum and Chaetomium globosum is gently scraped on the sample material and placed in a test chamber at 86°F and 95% humidity for 28 days. Test sample cannot show greater growth than a comparative sample.

Results: Test samples did not show any growth.

# ASTM G21 DETERMINING RESISTANCE OF SYNTHETIC POLYMERIC MATERIALS TO FUNGI ASTM C1338 FUNGI **RESISTANCE TEST**

Samples were placed on a mineral-salt medium and sprayed with a combined inoculum of the following spore suspensions: Aspergillus niger, Penicillium pinophilum, Chaetomium globosum, Gliocladium virens, Aureobasdium pullulans, Cladosporium, Altermaria. After inoculation, the fiber glass samples were placed in a "tropical test chamber" and incubated at a temperature of 30±1°C and relative humidity greater than 85 percent. Total incubation period was 28

Results: ASTM G21 rating of 0: no observed growth.



717 17th St. Denver, CO 80202 1-800-654-3103 JM.com

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Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

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