130 Erick Street
Crystal Lake, IL 60014
(815) 526-0954

Final Report for:

Fabricmate Systems, Inc.
4350 Transport Street, No. 101
Ventura, CA 93003

Test Method:

ASTM C 1338 – 08 – Standard Test Method for Determining Fungi Resistance of Insulation Materials and Facings

MSL Project # R 2011-185

Sample Received: 7/14/11

Testing Initiated: 7/18/11

Testing Completed: 8/15/11

Report Issued: 8/17/11

Judy LaZonby
President – The MicroStar Lab, Ltd

Objective:

To evaluate the mold resistance properties of one insulation sample as seen in the ASTM C 1338 - 08 fungal resistance test.

Test Sample Description:

1. ReCore® 9.4 PCF ½" (100% Polyester Acoustic Panel)

Samples were tested in triplicate. The tested sample size was 2" x 2".

Customer Requested Modifications

None

Procedure:

Inoculum was prepared using working fungal stock cultures that had been incubating for 5 days or longer on Potato Dextrose Agar. The test includes the following fungi:

1. *Aspergillus niger* ATCC # 9642
2. *Penicillium funiculosum* ATCC # 11797
3. *Aspergillus flavus* ATCC # 9643
4. *Aspergillus versicolor* ATCC # 11730
5. *Chaetomium globosum* ATCC # 6205

Each fungal culture was adjusted in concentration to 1.0 X 10^6 ± 200,000 spore/mL. Equal volumes of each adjusted fungal suspension were blended for the final mixed spore suspension. Each test piece was placed into a separate sterile Petri dish. The test pieces were evenly inoculated with the mixed spore suspension using a sterile sprayer. Inoculated samples were then placed into a chamber maintained at 30 ± 2°C and 95 ± 4% relative humidity for 28 days. At the end of the incubation period, samples were examined at 40X magnification. See results below.

Viability plates of each test inoculum were prepared by placing each individual spore suspension onto Potato Dextrose Agar. Sterile filter paper was placed onto the surface of Potato Dextrose agar and inoculated with the spore suspension as a viability control. A sterile tongue blade was also inoculated with the blended spore suspension as a viability control. See results below.

Humidity and temperature are verified using a Vaisala Humidity and Temperature Meter and Probe MI70/HMP75B. The relative humidity reading of the equipment is internally validated to NIST traceable standards using K_2SO_4 saturated salts, FINAS Certificate of Calibration #K008-U00038. Temperature equipment is internally validated to NIST traceable standards using an externally calibrated Cole Palmer Thermometer, Serial #4463; A2LA accredited ISO 17025 Cert. #1746.01.

Test Results:

After 4 weeks of incubation in the C 1338 chamber, the results for the test pieces can be found in the data table below. The criterion used to determine Pass/Fail for this test was growth/no growth. The control test pieces performed as expected, confirming the validity of the test. These results pertain only to the samples tested.

Interpretation of results according to C 1338 – 08 test method
Growth greater than that on the comparative item shall be considered to have failed
Growth not greater than that on the comparative item shall be considered to have passed.
If no growth is the criterion, any growth shall be considered a failure

The criterion used to determine Pass/Fail for this test was growth/no growth. No comparative item was supplied by the customer. The criterion used to determine Pass/Fail for this test was "growth/no growth" criterion.

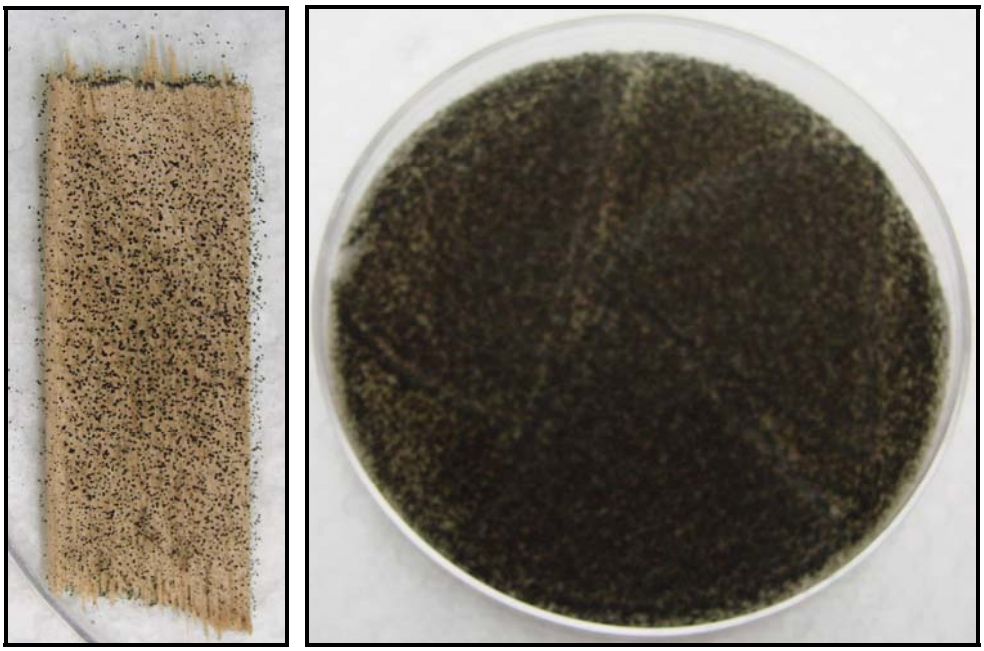
Sample	Results
ReCore® 9.4 PCF ½" (100% Polyester Acoustic Panel)	Pass –No fungal growth found on all three replicates at 40X magnification.

Controls & Conditions				
	Week 1	Week 2	Week 3	Week 4
Temperature (30 ± 2°C)	29.5	29.5	29.5	29.9
Humidity (95 ± 4%)	96.2	95.5	97.0	96.1
Tongue Depressor Control	Heavy Growth			
Filter Paper Control	100 % Coverage			

Note: Below are representative photographs of the tested sample pieces after 28 days incubation.

ReCore® 9.4 PCF ½" (100% Polyester Acoustic Panel)

None of the replicates from the tested sample set: ReCore® 9.4 PCF ½ (100% Polyester Acoustic Panel) had any fungal growth present after 4 weeks of incubation.



On the left is a tongue depressor with heavy fungal growth after 28 days incubation. On the right is the Filter Paper Control after 4 weeks of incubation.

TESTING CERT #2832.01
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