THE MicroStarLab LIMITED

130 Erick Street

Crystal Lake, IL 60014

(815) 526-0954

Final Report for:

XYZ Corporation

9 Corporation Parkway

Anywhere, USA 60014

Test Method:

ASTM D 3273

MSL Project # 2010-XX

Sample Received: 3/5/10

Testing Initiated: 3/5/10

Testing Completed: 4/2/10

Report Issued: 4/5/10

Judy LaZonby

President – The MicroStar Lab, Ltd

Objective:

To evaluate the mold resistance properties of 12 wallboard pieces (4 samples in triplicate) as demonstrated in the ASTM D3273 fungal resistance test.

Product Tested:

Samples were submitted with blind labels: A-1, A-2, A-3
B-1, B-2, B-3
C-1, C-2, C-3
D-1, D-2, D-3

Customer Requested Modifications

None

Procedure:

ASTM D 3273 – Fresh soil was seeded with fungal spores of *Aspergillus niger* ATCC# 6275, *Penicillium citrinum* ATCC# 9849, and *Aureobasidium pullulans* ATCC# 9348 and allowed to grow. After 2 weeks, exposed PDA (potato dextrose agar) plates were placed in the soil chamber for one hour to confirm that fungal spores were being produced by the fungi seeded in the soil. The soil was then placed in a D 3273 chamber maintained at 32.5 ± 1°C with a relative humidity between 95-98%. The test samples were hung in the D 3273 chamber with three pieces of untreated generic wallboard to confirm validity of the fungal inoculum coming from the soil. Samples were examined weekly for fungal growth and defacement and rated according to the grading scale shown below.

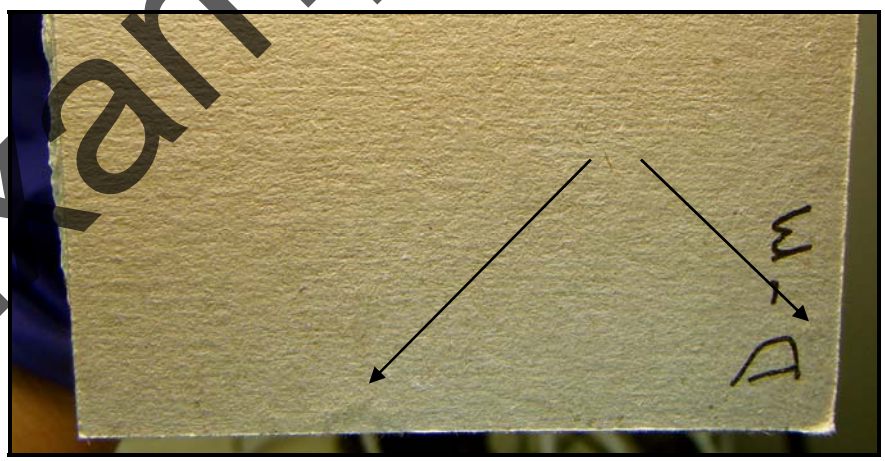
ASTM D 3273 Grading Scale	
Rating	Definition
10	No Defacement
9	90% clear (1 – 10 % defaced)
8	80% clear (11 - 20% defaced)
7	70% clear (21 - 30% defaced)
6	60% clear (31 - 40% defaced)
5	50% clear (41 - 50% defaced)
4	40% clear (51 - 60% defaced)
3	30% clear (61 – 70% defaced)
2	20% clear (71 - 80% defaced)
1	10% clear (81 – 90% defaced)
0	0 % clear (91 – 100% defaced)

Humidity and temperature are checked against a Vaisala Humidity and Temperature Probe HMP75, NIST Calibration Certificate H33-10160085. The Vaisala is validated using NIST traceable K_2SO_4 saturated salts, Certificate #K008-T0000X.

Test Results:

After 4 weeks of incubation in the D 3273 chamber, the results for the test pieces can be found in the data table below. The control pieces performed as expected, confirming the validity of the test. These results pertain only to the samples tested.

Sample	Week 1	Week 2	Week 3	Week 4
	Front/Back	Front/Back	Front/Back	Front/Back
A – 1	10/10	10/10	10/10	10/10
A – 2	10/10	10/10	10/10	10/10
A – 3	10/10	10/10	10/10	10/10
B – 1	10/10	10/10	10/10	10/9
B – 2	10/10	10/10	10/0	9/9
B – 3	10/10	10/10	10/10	10/10
C – 1	10/10	10/10	10/10	9/9
C – 2	10/10	10/10	10/10	10/9
C – 3	10/10	10/10	10/10	9/9
D – 1	10/10	10/10	10/9	9/9
D – 2	10/10	10/10	9/10	9/9
D – 3	10/10	10/10	9/10	9/9
MSL 1 Untreated Control	9/9	8/7	3/2	0/1
MSL 2 Untreated Control	9/9	8/6	2/3	1/1
MSL 3 Untreated Control	9/9	8/7	2/2	1/0
Temperature °C	32.6	32.4	32.2	32.1
Relative Humidity	98	97	98	96



In this picture, fungal growth can be seen along two edges and are pointed out by the arrows. This fungal growth caused this panel to be rated as a “9”.