



# Buckman International

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CC: File, Hachtmann, J. E.

## Technical Service Laboratory Report

Date: 10/13/10

*Chemist:* PAGE, B.  
*Sales Representative:* HACHTMANN, J. E.

*Company:* TPR2  
36D Plains Rd.  
Essex, CT 06426

*Request Dated:* Tuesday, September 7, 2010  
*Sample Received:* Tuesday, September 7, 2010

*Identification of Sample(s):*

- A. F10E sample A
- B. F10E sample B
- C. IB4 sample A
- D. IB4 sample B

*Statement of Problem:*  
None Stated

*Labwork Performed:*

ASTM D-3273-05 "Resistance to growth of mold on the surface of interior coatings in an environmental chamber."

ASTM D-3274-02 "Evaluating degree of surface disfigurement of paint film by fungal growth or soil and dirt accumulation"



TPR2  
WATERBURY, CT  
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## EXPERIMENTAL

### I. ASTM D3273-05 "Resistance to growth of mold on the surface of interior coatings in an environmental chamber."

The test samples were painted onto gypsum wallboard, two coats. After sufficient drying, the samples were exposed for fungal resistance evaluation.

This test was done according to ASTM D-3273-05, which covers the evaluation of a coating's resistance to the growth of mold that might occur on its surface in a severe mold environment. The testing device was an environmental chamber kept at a constant temperature of  $90^{\circ} \pm 2^{\circ}\text{F}$  and a relative humidity of 95 to 98%. Within the chamber are dirt boxes containing soil inoculated with the following known organisms: *Aspergillus niger*, *Aspergillus oryzae*, and an unknown species of *Penicillium*.

The samples were hung vertically, with the bottom approximately three inches above the surface of the inoculated soil and with sufficient spacing to allow circulation of air and to prevent contact between samples or with wall surfaces. Samples were in the chamber for 4 weeks. Table I gives the 4th week mold resistance ratings.



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Results:

TABLE I Fungal Resistance Performance Evaluation		
Sample I.D.	Ratings	
	Panel 1	Panel 2
F10E sample A	10	10
F10E sample B	10	10
IB4 sample A	10	10
IB4 sample B	10	10

The test samples were evaluated according to ASTM D 3274-02, which are photographic reference standards that provide a numerical basis for rating the degree of fungal growth or soil accumulation on paint films.

Rating	Observed Growth on Samples
10	no mold growth
8	slight mold growth
6	medium mold growth
5 or below	heavy mold growth (FAILURE)