



**Summary of BrickImaging, Inc. ASTM testing  
January 2005 through June 2006  
Performed by MPT, Inc.**

**RESULTS SUMMARY**

BrickImaging, Inc. employed the independent laboratories of MPT, Inc. to perform a series of evaluative tests on the Stayntech® treated brick, as well as to potential updates of the Stayntech treatment process including UV fade-protectant and dry-film fungal growth inhibitors. Each test was performed according to ASTM standards and full summary of the results is available at BrickImaging, Inc.

In general the tests demonstrate a sturdy product that withstands the rigors of accelerated, intensive treatment, and by correlation, environmental stresses. Stayntech® treated masonry did not crack, check or blister under any circumstance. In some instances adhesion was affected by highly basic or highly acidic treatments. Color retention was similarly affected, but generally held up to treatments that are likely encountered in a normal commercial or residential environment.

The independent addition of a UV fade-protectant or dry-film fungal growth inhibitors did not cause cracking, checking or blistering or significant changes in color characteristics. The combined addition of the protect and growth inhibitors positively affected adhesion characteristics.

In order to assess the affects of Stayntech® process (both with and without additives) on the physical properties masonry, the initial rate of absorption or suction (IRA) was tested. The IRA reflects how much water is drawn into the brick surface during 1 minute contact with water. While the Stayntech® treatment did cause a decrease in IRA relative to untreated brick, it is still within an average range for brick (> 10 g/min/30in<sup>2</sup>). Furthermore, a change in IRA is much less significant once the brick has been laid.

Testing of the water vapor transmission rate (perm rate) is currently underway at MPT, Inc. and is expected to be completed by July 2006. An industry expert states the likelihood of decreasing the perm rate, or water vapor transmission rate of masonry treated with a water-based coating containing small particles is predicted to be negligible.

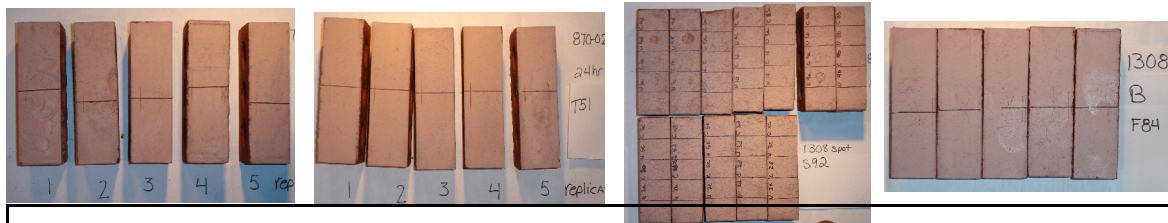


Fig 1 a-d: ASTM testing Jan 2006 results. Left to right (a, b)870-02 12 and 24 hours, respectively, (c) 1308 spot tests, (d)1308 immersion tests.

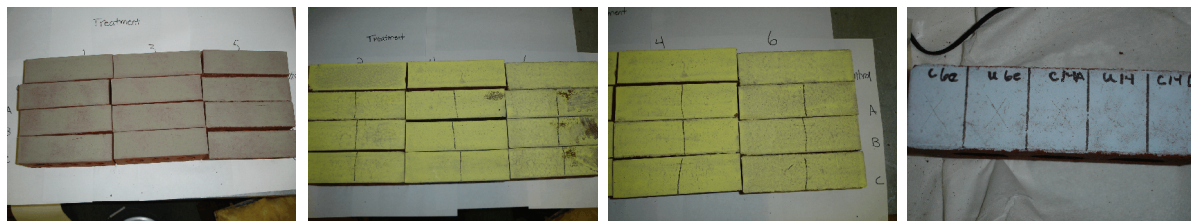


Fig 2 a-d: ASTM testing Sept 2005 results. Left to right (a) 2248-01a, (b and c) 1308 immersion, (d)1308 spot. Note, photo (b) represents testing of a potential formulation change.

## **TEST METHODOLOGY SUMMARY**

ASTM tests ASTM D870-02: Standard Practice for Testing Water Resistance of Coatings Using Water Immersion; ASTM 1308-02<sup>e1</sup>: Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes; ASTM D2248-01a: Standard Practice for Detergent Resistance of Organic Finishes, ASTM C-67-05: Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile, were performed.

Each test was repeated a minimum of 2 times with 3-5 replicates per treatment within each test. The treatments were analyzed according to ASTM Standard D3359-02 Standard Test Methods for Measuring Adhesion by Tape Test; ASTM Standard D1654-05: Standard Test Method for Evaluation for Painted or Coated specimens Subjected to Corrosive Environments; ASTM Standard D714-02 Standard Test Method for Evaluating Degree of Blistering of Paints; ASTM Standard D4214-98 Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films; ASTM Standard D660-93 Standard Test Method for Evaluating Degree of Checking of Exterior Paints; ASTM Standard 661-93 Standard Test Method for Evaluating Degree of Cracking of Exterior Paints; ASTM Standard E1164-02 Standard Practice for Obtaining Data for Object-Color Evaluation.

Respectfully submitted,

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President