

# ASTM 加速老化試驗報告

## NELSON TESTING LABORATORIES

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February 15, 2007

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### REPORT OF TESTS

**SUBJECT:** **Accelerated Weathering Testing**

**PROJECT:** **KeimFarben - Plant Research/Certification Program**

**TEST METHODS:** **ASTM G154-04 "Standard Practice for Operating Fluorescent light apparatus for UV exposure of nonmetallic materials"**

**PRODUCT IDENTIFICATION:** **Keim Royalan - White**

**TEST SCOPE:** The test method covers the basic principles and operation procedures for using fluorescent ultraviolet and condensation apparatus to simulate the deterioration caused by sunlight and water as rain.

**TEST SPECIMENS:** Three concrete masonry unit specimens were constructed and used as the substrate prisms for the application of the Keim Royalan Coating product.

**TEST PROCEDURE:** Three coated test specimens were placed in the test chamber and subjected to alternating cycles of four (4) hours of ultraviolet (UV) lights at 60° C and then four (4) hours of condensation at 50° C. The duration of the test is a period of twelve (12) weeks.

**TEST START DATE:** November 15, 2006

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## ASTM G 154 (continued)

### TEST RESULTS:

Visual Observation  
Accelerated Weathering Test

#### Number of Hours of Exposure

168/1 week	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials
336/2 weeks	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials
504/3 weeks	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials
672/4 weeks	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials
1008/5 weeks	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials
1512/9 weeks	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials
2016/12 weeks	No crazing, cracking, chipping, flaking, chalking or any other deterioration of the materials

### SUMMARY

After 12 weeks of exposure to the ASTM G 154 test apparatus, the Keim Royalan coating showed no signs of crazing, cracking, chipping, flaking, chalking or any other deterioration.

Respectfully submitted

NELSON TESTING LABORATORIES



Mark R. Nelson  
Principal