ASTM 加速老化試驗報告

NELSON TESTING LABORATORIES

Construction Materials 1210 REMINGTON ROAD SCHAUMBURG, ILLINOIS 60173 USA Phone (847) 882-1146 Fax (847) 882-1148

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February 15, 2007

Mr. Ulrich Bethae KeimFarben Keistrasse 16 86420 Diedorf Germany

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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February 15, 2007 KeimFarben – Royalan Test Program Page 2 of 2

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
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deterioration of the materials

336/2 weeks	No crazing, cracking, chipping, flaking, chalking or any other
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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