

NELSON

TESTING
LABORATORIES

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Waterproofing Membrane Evaluation
for
Polycoat
Aquaseal 5000 V

Polycoat Products
14722 Spring Avenue
Santa Fe Springs, California 90670

November 22, 2019

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REPORT OF TESTS

SUBJECT: **Physical Analysis of Waterproofing Membrane**

PROJECT: **Polycoat – Aquaseal 5000 V**

SPECIFICATION: ASTM C836-18, “Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course”

TEST METHODS: ASTM C794, “Standard Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants”

 ASTM C1305, “Standard Test Method for Crack Bridging Ability of Liquid-Applied Waterproofing Membrane”

 ASTM C1522, “Standard Test Method for Extensibility After Heat Aging of Cold Liquid-Applied Elastomeric Waterproofing Membranes”

 ASTM D2240, “Standard Test Method for Rubber Property—Durometer Hardness”

 ASTM D6411, “Standard Specification For Silicone Rubber Room Temperature Vulcanizing Low Outgassing Materials”

MATERIAL: Received by NTL on October 16, 2019

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TEST RESULTS

ASTM D2240 - Hardness

Cast Date: October 2019
Specimen: 60-mil thick 4 x 6-in membrane cured 14 days until testing
Gauge: Type OO

Results: PASS

Aquaseal 5000 V

ASTM C836-18

Reading 1	92
Reading 2	92
Reading 3	93
Reading 4	90
Reading 5	92

AVERAGE

92

50, minimum

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TEST RESULTS (continued)ASTM D6511 – Weight Loss

Test Date: October 2019
Specimens: 10-gram samples tested at 158 deg. F for 72 hours

Results: PASS

	<u>Aquaseal 5000 V</u>	<u>ASTM C836-18</u>
Specimen 1	5.0%	
Specimen 2	5.1%	
AVERAGE	5.0%	20%, maximum

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TEST RESULTS (continued)

ASTM C1305 – Crack Bridging

Cast Date:	October 2019
Specimens:	Five composite mortar specimens coated at 0.060-in dry film thickness, cured at 73 deg F for 14 days, then 158 deg F for 7 days until testing
Cycles:	10 cycles @ -15 deg F.
Results:	PASS

Aquaseal 5000 V

ASTM C836-18

Specimen 1	PASS (no cracking)	
Specimen 2	PASS (no cracking)	
Specimen 3	PASS (no cracking)	
Specimen 4	PASS (no cracking)	
Specimen 5	PASS (no cracking)	
AVERAGE	PASS (no cracking)	<i>no cracking @ 10 cycles</i>

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TEST RESULTS (continued)

ASTM C836 (6.8) – Film Thickness on Vertical Surface

Cast Date: October 2019
Specimen: One coated mortar specimen at 0.060-in placed in a vertical position for 24 hours.

Results: PASS

	<u>Aquaseal 5000 V</u>	<u>ASTM C836-18</u>
Reading 1	65.7 mils	
Reading 2	71.2 mils	
Reading 3	46.0 mils	
Reading 4	63.0 mils	
Reading 5	64.9 mils	
AVERAGE	62.2 mils	<i>55 to 65 mils</i>

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TEST RESULTS (continued)

ASTM C794 – Adhesion-in-Peel

Cast Date: October 2019
Specimens: Four coated composite mortar specimens cured at 73 deg F for 14 days, then 158 deg F for 7 days, then immersed in water for 7 days until testing

Results: PASS

	<u>Aquaseal 5000 V</u>	<u>ASTM C836-18</u>
Specimen 1	13 lbf	
Specimen 2	14 lbf	
Specimen 3	29 lbf	
Specimen 4	9 lbf	
AVERAGE	16 lbf	<i>1.0 lbf, minimum</i>

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TEST RESULTS (continued)

ASTM C1522 – Extensibility After Heat Aging

Cast Date: October 2019
Specimens: Three 6 x 3 x 0.5-in mortar specimens coated at 0.060-in dry film thickness, cured at 73 deg F for 14 days, then 158 deg F for 14 days, then immersed in water for 7 days until testing

Results: PASS

Aquaseal 5000 V

ASTM C836-18

Specimen 1 No cracking at 0.25-in
Specimen 2 No cracking at 0.25-in
Specimen 3 No cracking at 0.25-in

AVERAGE **No cracking at 0.25-in** *0.25-in, minimum*

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SUMMARY

The test results listed above for the Aquaseal 5000 V met or exceeded their corresponding requirements as set forth in ASTM C836-18.

Respectfully submitted,

NELSON TESTING LABORATORIES



Mark R. Nelson
President

***Notes:** The results listed within this report relate only to the materials submitted for testing. This report shall not be reproduced, except in full, without written approval of this laboratory. The test materials not consumed in this testing will be discarded 14 days from the date of this report unless we receive written notification requesting otherwise.*