



CONSTRUCTION MATERIALS TECHNOLOGIES

LABORATORY TEST RESULTS

Report for: Hydro-Stop
1465 Pipefitter Street
Charleston, SC 29405

Date: March 25, 2011

Attention: Steve Heinje

Product Name: Premium FinishCoat-B (Charleston, SC)	Manufacturer: Hydro-Stop
Date(s) Received: November 12, 2010	Sampling: PRI-CMT
PRI-CMT Project No.: HSI-007-02-01	MD Notification No.: PRI10110

Subject: Determine specification properties for *Hydro-Stop's Premium FinishCoat-B* as manufactured in Charleston, SC for compliance with **ASTM D 6083: Standard Specification for Liquid Applied Acrylic Coating Used in Roofing**.

Test Methods: Testing was completed as described in ASTM D 6083-97a, -05, and -05⁶¹: *Standard Specification for Liquid Applied Acrylic Coating Used in Roofing*. Test methods assigned or referenced include ASTM C 794: *Test Method for Adhesion-in-Peel of Elastomeric Joint Sealants*; ASTM D 471: *Test Method for Rubber Property-Effect Liquids*; ASTM D 522: *Test Method for Mandrel Bend Test of Attached Organic Coatings*; ASTM D 562: *Test Method for Consistency of Paints Using the Stormer Viscometer*; ASTM D 624: *Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomer*; ASTM D 1644: *Test Method for Nonvolatile Content of Varnishes*; ASTM D 1653: *Test Method for Water Vapor Transmission of Organic Coated Films*; ASTM D 2196: *Test Methods for Rheological Properties of Non-Newtonian Materials by Rotational (Brookfield) Viscometer*; ASTM D 2370: *Test Method for Tensile Properties of Organic Coatings*; ASTM D 2697: *Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings*; ASTM D 4798: *Test Method for Accelerated Weathering Test Conditions and Procedures for Bitumen Materials (Xenon-Arc Method)*; and ASTM G 21: *Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi*.

Product Sampling: Material was independently sampled/witnessed by PRI-CMT at a point of distribution. PRI-CMT obtained material November 12, 2010.

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Results of Testing:

ASTM D 6083

Property	Test Method	Result	Requirement
Liquid Property Requirements			
Viscosity – Stormer-Type (KU) Temperature @ 77°F	ASTM D 562 Method A Procedure A	111	85 - 141
Viscosity – Brookfield-Type (cps) LV series viscometer Spindle #4; Speed 6rpm; Temperature 77°F	ASTM D 2196 Method A	25,200	12,000 - 85,000
Volume Solids (%) Analyzed in duplicate	ASTM D 2697	52.8	≥ 50
Weight Solids (%) Analyzed in duplicate	ASTM D 1644 Method A	65.5	≥ 60
Film Physical Property Requirements			
Tensile Properties 10 specimens; 3.0" long x 0.5" wide x 20mil dry film Conditioned 336±12h @ 73.4±3.6°F & 50±10%RH Test Speed 1.0±0.2"/min Test Condition 73.4±3.6°F & 50±10%RH	ASTM D 2370		
Initial Percent Elongation (break) (%)		124.0	≥ 100
Initial Tensile Strength (psi)		378.8	≥ 200
Final Percent Elongation (break) (%) Accelerated Weathering – 1,000h		106.3	≥ 100
Permeance (perms) 3 specimens; 20mil dry film Test Chamber @ 73.4±3.6°F & 50±10%RH Tested in an inverted position	ASTM D 1653 Method B Condition A	4.6	≤ 50
Water Swelling (% mass) 3 specimens; 1" x 2" x 20mil dry film Immersed in distilled water for 168±4h @ 73.4±3.6°F	ASTM D 471	11.6	≤ 20

Continued on the following

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Property	Test Method	Result	Requirement
Wet Adhesion to Specified Substrates 4 specimens; 1" wide x 20mil dry film Conditioned 336±12h @ 73.4±3.6°F & 50±10%RH Immersed in distilled water for 168±4h @ 73.4±3.6°F Test Speed 2.0"/min Test Condition 73.4±3.6°F & 50±10%RH	ASTM C 794		
Wet Adhesion to Galvanized Steel (pli) direct to substrate		8.1	≥ 2.0
Fungi Resistance (rating)	ASTM G 21	0	0
Tear Resistance (lbf/in) 3 specimens; Type C (Die C) x 20mil dry film Conditioned 336±12h @ 73.4±3.6°F & 50±10%RH Test Speed 20±2.0"/min Test Condition 73.4±3.6°F & 50±10%RH	ASTM D 624	84.3	≥ 60
Low Temperature Flexibility [Pass/Fail] 2 specimens; 3" x 6" panels x 14mil dry film Conditioned 72h @ 73.4±3.6°F & 50±10%RH followed by 120h @ 122°F Accelerated Weathering - 1,000h Tested 180° around 1/2" mandrel in 1s @ -15°F	ASTM D 522 Method B	Pass	Pass
Accelerated Weathering – 1,000h [Pass/Fail]	ASTM D 4798	Pass	No Cracking or Checking

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Statement of Compliance: This product complies with the requirements of **ASTM D 6083: *Standard Specification for Liquid Applied Acrylic Coating Used in Roofing.***

Limitations: May be applied to Galvanized Steel.

Signed: _____
Brad Grzybowski
Managing Director

Signed: _____
Duc T. Nguyen
Florida Registered Professional Engineer
P.E. Number: 65034

Date: _____

Date: _____

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	03/25/2011	4	NA

END OF REPORT

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