



CONSTRUCTION MATERIALS

TECHNOLOGIES

LABORATORY TEST RESULTS

Report for: Winkler USA
88 South State Street
Hackensack, NJ 07601

Attention: Paul Sancaian

Product ID(s): Scudo	Manufacturer: Winkler USA
Date(s) Received: Feb. 6, 2013	Sampling: Winkler USA
PRI-CMT Project No.: TKP-002-02-01	Date(s) Tested: Feb. 18, 2013 – Sep. 29, 2013

Subject: Evaluate *Winkler USA's Scudo* for dampproofing requirements in accordance with **ICC-ES AC29: Acceptance Criteria for Cold, Liquid-Applied, Below-Grade, Exterior Dampproofing and Waterproofing Materials.**

Test Methods: Testing was completed as described in ICC-ES AC29 (Approved June 2011): *Acceptance Criteria for Cold, Liquid-Applied, Below-Grade, Exterior Dampproofing and Waterproofing Materials.* The test methods assigned included ASTM C 836-06: *Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate wearing Course*, ASTM D 2939-03: *Standard Test Methods for Emulsified Bitumens Used as Protective Coatings*, ASTM D 5385-93(2006): *Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes*, ASTM E 96-05: *Standard Test Methods for Water Transmission of Materials*, and ASTM E 154-99: *Standard Test Method for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or Ground Cover.*

For testing, product was applied at 80mil wet (or 20ft²/gal).

Product Sampling: Product was provided by Winkler USA. Winkler USA shall provide declaration certifying that the product submitted for testing is representative of the standard manufactured product.

WNKL-002-02-01 PRI-CMT Accreditations: IAS TL-189; Miami-Dade 11-0429.05; Florida TST5878; Los Angeles TA24819; CRRC
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Results:

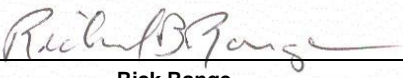
ICC-ES AC29


Property	Test Method	Result	Requirement
Physical Requirements			
Resistance to Deterioration in Contacting Soil Unsterilized Soil; No. 6 Sieve; pH 5.5-7.0; Cond. @ 82.4±1.8°F & 70±3%RH;			
Weight Loss (%) After Soil Conditioning	ASTM E154	0.2	≤ 10
Water Vapor Permeance (Perm) After Soil Conditioning; 5 specimens; 3.5in ø; Weathering side to higher vapor pressure; Proc. A – 50±2%RH to ~0%RH @ 73.4°F	ASTM E96 Procedure A	0.1	≤ 1
Hydrostatic Pressure over cracks (ft of water) After Soil Conditioning; 3 specimens; 4in x 4in; crack = 2in x 0.0625in; Test Condition 73.4±3.6°F & 50±5%RH	ASTM D5385	NR	Report 50% of lowest value
Resistance to Water [<i>Pass/Fail</i>] 3 specimens; 4in x 4in; Cure. 24h @ 140±5°F followed by; Immerse 24h @ 75±5°F	ASTM D2939 Method A	Pass	No blistering or reemulsification
Remain in Place During Application [<i>Pass/Fail</i>] 1 specimen; 6in x 3in; 2 coats @ 40mils (wet) each ≈ 60mils (dry) Cond. vertical 24h @ 73.4±3.6°F & 50±5%RH	ASTM C836	Pass	As recommended by manufacturer ± 5 mils
Adhesion-in-Peel (after water immersion) (lbf/in) 4 specimens; 1in wide; Cond. 14d @ 73.4±3.6°F & 50±5%RH followed by; Cond. 7d @ 158±3.6°F; Immerse in distilled water for 7d @ 73.4±3.6°F Test Speed 2.0in/min; Test Condition 73.4±3.6°F & 50±5%RH	ASTM C794	6.4	≥ 1
Low Temperature Crack Bridging [<i>Pass/Fail</i>] 5 specimens; 2in x 2in; Cure. 14d @ 73.4±3.6°F & 50±5%RH followed by; Cond. 7d @ 158±3.6°F; Test 10 cycles @ -15°F; Test Rate = 0.125in/h from 0.000in to 0.125in; Visual Inspection in extended position	ASTM C1305	NR	No Cracking
Extensibility after Heat Aging [<i>Pass/Fail</i>] 3 specimens; 3in x 4in; Cond. 14d @ 73.4±3.6°F & 50±10%RH followed by; Cond. 14d @ 158±3.6°F; Test Rate = 0.5in/min from 0.00in to 0.25in; Visual Inspection in extended position	ASTM C1522	NR	No Cracking

Notes: NR- indicates Not Required for Dampproofing
 See Appendix for individual specimen results.

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Statement of Compliance: The product evaluated complies with the dampproofing requirements of **ICC-ES AC29: Acceptance Criteria for Cold, Liquid-Applied, Below-Grade, Exterior Dampproofing and Waterproofing Materials.**

Signed: 
Rick Range
Laboratory Technician

Signed: 
Brad Grzybowski
Managing Director

Date: December 3, 2014

Date: December 3, 2014

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	12/03/2014	4	NA

APPENDIX FOLLOWS

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Appendix: Test Data Worksheet

ICC-ES AC29: Acceptance Criteria for Cold, Liquid-Applied, Below-Grade, Exterior Dampproofing and Waterproofing Materials												
Section 3.0 Required Data												
Physical Properties												
Property	Method	Test Data						Test Result		Requirement	Outcome	
		1	2	3	4	5	6	Average	Std. Dev.			
Resistance to Deterioration in Contacting Soil; [Pass/Fail]	ASTM D 226											Pass
Weight Loss (%)	ASTM E154	0.18	0.21	0.21	0.22	0.18	0.20	0.2	0.0	10		
Water Vapor Transmission (Perm)	ASTM E96	0.10	0.11	0.11	0.12	0.10		0.1	0.0	1		
Hydrostatic Pressure (psi)	ASTM D5385							No Data	No Data	Report 50%		
Resistance to Water; [Pass/Fail]	ASTM D2939	No Blister	No Blister	No Blister				No Blister	NA	No Blister		Pass
Remain in Place During Application; [Pass/Fail]	ASTM C836									0.060		Pass
Target 0.060in mils (dry)		0.061	0.062	0.061	0.060	0.061		0.061	0.001			
Adhesion in Peel; (lb/in-width)	ASTM C794									1		Pass
After 7-Day Water Immersion		6.86	6.14	6.14	6.38			6.4	0.3			
Low Temperature Crack Bridging; [Pass/Fail]	ASTM C1305							No Data	NA	No Cracking		NT
Exensibility After Heat Aging; [Pass/Fail]	ASTM C1522							No Data	NA	No Cracking		NT

END OF REPORT

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