

MicroSeal™ Water Repellent



performance
solutions

COAT · PROTECT · RESTORE

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SPECIFICATION SECTION 07 1900 MicroSeal MS001

PART I - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Water repellent coating applied to exterior integrally coloured concrete masonry surfaces.

B. Related Sections: (if applicable)

1. Section 03 3000 – Cast-in-Place Concrete: Curing aid.
2. Section 04 2200 - Concrete Unit Masonry: Substrate for application of water repellent.
3. Section 09 9620 - Graffiti-Resistant Coatings: Fluid applied Graffiti Resistant Coatings

1.2 SUBMITTALS

- A. Certifications: Submit manufacturer's certification of conformance to specified surface preparation and application rates.

- B. Test Results: Submit test results of initial and final RILEM test and final spray test.

- C. Contract Closeout Submittals: Submit Letter of Certification under provisions of Section 01 7700.

1.3 QUALITY ASSURANCE

A. Qualifications:

1. Manufacturer: Company specializing in manufacturing Products specified with minimum 5 years documented experience.

2. Applicator: Company specializing in performing the work of this Section with minimum 5 years documented experience.

- B. Regulatory Requirements: Comply with applicable rules and regulations of Pollution-Control Regulatory Agency having jurisdiction regarding volatile organic compounds (VOC) and use of hydrocarbon solvents. Materials should not exceed 15 grams per liter VOC.

- C. Field Samples:



1. Prior to water repellent application, apply water repellent coating to field mock-up sample specified in Section 04 2200 for determination of coverage rate.
2. Apply water repellent at an initial rate of application as determined by the manufacturer as presumed necessary to pass the RILEM water tube uptake test results specified.
3. Allow five days for the sample to cure. Perform a RILEM water tube uptake test on the treated area conducted by or supervised by the manufacturer's representative. Place one tube on the block surface and one tube on a mortar joint.
4. Results: Absorption shall be not less than 1.0 millilitre of water using a RILEM water uptake tube at 60 mph wind driven rain equivalent. Apply additional repellent when test results indicate failing results and retest until passing tests are achieved.
5. Coverage rate for entire project shall be that which is used to for the mock-up sample passing test.
6. Provide test report and application rates to the building owner Construction Representative.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Materials and Equipment: Transport, handle, store, and protect products.
- B. Protect coating liquid from freezing.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Do not apply Product during the following conditions:
 1. Ambient temperature below 1.7°C.
 2. Substrate surfaces have cured less than 7 days.
 3. Rain or temperatures below 1.7°C are predicted for a period of 24 hours.
 4. Surfaces not dry for minimum 24 hours.
 5. Substrate frozen or surface temperature is below 1.7°C.

1.6 WARRANTY REQUIREMENTS

- A. The Contractor and Installer shall jointly and severally warrant water repellents against failure and workmanship for a period of 1 year from date of Substantial Completion.
- B. Manufacturer shall provide a written material warranty for a period of 10 years for materials applied when, said materials are applied in accordance with manufacturers guidelines. Please refer to manufacturer for material warranty policy.
- C. Before final application for payment will be approved, final closeout submittals must include written manufacturer's material warranty.

PART 2- PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, manufacturer's offering Products which may be incorporated in the Work include the following:

NZ Supplier

Performance Solutions New Zealand Ltd
Jason George, General Manager
0800 999 122

B. NO SUBSTITUTIONS ALLOWED

2.2 MATERIALS

A. Description: Clear penetrating water repellent. Siloxanes, silane or siloxane/silane blend, oligomeric or alkoxysiloxane, must be waterborne and contain less than 15 grams per litre VOC.

B. Product (Note to specifier. Please select time for desired warranty requirement. Ensure to match warranty requirement with Section 1.06 Warranty Requirements, noted above.)

1. Micro-Seal Ready-to-Use 10 year material-only warranty

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces and adjacent areas where products will be applied and verify that surfaces conform to specifications and manufacturer's requirements for substrate conditions. Do not proceed until satisfactory conditions have been corrected.

B. Verify joint sealants are installed and cured.

C. Beginning of application indicates acceptance of substrate conditions.

3.2 PREPARATION

A. Surface cracks, holes, or other imperfections that exceed .39 millimetres shall be filled with pointing mortar. Masonry joints found to be unsound, hollow, or otherwise defective shall be raked out to a depth of 1.2 centimetres and pointed with mortar.

B. Remove loose particles and foreign matter. Remove oil or foreign substance with a cleaning agent which will not affect coating.

C. Scrub and rinse surfaces with water, and let dry.

D. Protect adjacent surfaces not scheduled to receive coating. If applied on unscheduled surfaces, remove immediately, by approved method.

E. Protect landscaping, property, and vehicles from over spray and drift.

3.3 APPLICATION

A. Do not apply until masonry mortar is cured for seven days.

B. Apply coating in accordance with manufacturer's published instructions, using appropriate method and coverage rate.

3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Services: Provide services of a manufacturer-authorized technical service representative to inspect and approve the substrate before application, to instruct the applicator on the product and application method to be used, and to field test the in-place surfaces after application.

B. Spray Test: After water repellent has dried, spray coated surfaces with water. After surfaces have adequately dried, recoat surfaces that show water absorption.

C. Water Uptake Test: Perform a RILEM Water Uptake test on a minimum of 10 locations on the completed project to confirm conformance to minimum results stated in Part I hereinbefore. Conduct test on upper and lower portions of the masonry surfaces and on an equal number of joints and block surfaces. Tests shall be conducted by the manufacturer's representative.

D. Furnish written certification that surface preparation and rate of application is completed in accordance with specification requirements and the manufacturer's recommendations. Furnish results of in-place RILEM and spray test.

3.5 CLEANING

A. Immediately clean water repellent from adjoining surfaces soiled or damaged by water repellent application as work progresses.

B. Repair damage caused by water repellent application.

C. Comply with manufacturer's published instructions for cleaning.

3.6 COATING SYSTEM

SYSTEM: CLEAR WATER REPELLANT
Refer MicroSeal TDS MS 001

Performance Solutions NZ
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