

PART 1 GENERAL

1.1 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install a fluid-applied reflecting pool waterproofing system as outlined in this specification.
- B. The manufacturer's application instructions for each product used are considered part of this specification and should be followed at all times.
- C. Related Sections:
 - 1. Section 03 30 00: Cast-in-Place Concrete
 - 2. Section 03 40 00: Precast Concrete
 - 3. Section 07 26 00: Vapor Retarders
 - 4. Section 07 90 00: Joint Protection

1.2 SYSTEM DESCRIPTION

- A. Pool-Gard C shall be a complete system of compatible materials supplied by Neogard to create a seamless waterproof membrane.
- B. Pool-Gard C shall be designated for application on the specific type of substrate indicated on the drawings.

1.3 SUBMITTALS

- A. Technical Data: Submit manufacturer's product data, Safety Data Sheets (SDS) and installation instructions.
- B. Samples: Submit samples of Pool-Gard C. Samples shall be construed as examples of finished color and texture of the system only.
- C. Applicator Approval: Submit letter from manufacturer stating applicator is approved to install the Pool-Gard C system.
- D. Warranty: Submit copy of manufacturer's standard sample warranty, identifying the terms and conditions stated in section 1.7 Warranty.

1.4 QUALITY ASSURANCE

- A. Supplier Qualifications: Pool-Gard C, as supplied by Neogard, is approved for use on this project.
- B. Applicator Qualifications: Applicator shall be approved to install specified system.
- C. Requirement of Regulatory Agencies: Comply with applicable codes, regulations, ordinances and laws regarding use and application of coating systems.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Materials shall be delivered in original sealed containers, clearly marked with supplier's name, brand name and type of material.
- B. Storage and Handling: Recommended material storage temperature is 75°F (23°C). Handle products to prevent damage to container. All materials shall be stored in compliance with local fire and safety requirements. Avoid high temperatures and direct sunlight.

1.6 PROJECT CONDITIONS

- A. Prior to starting work, read and follow the SDS and container labels for detailed health and safety information.

- B. Proceed with application of materials only when substrate temperature is 40°F (4°C) or greater. Do not proceed if precipitation is imminent. Only apply to dry, clean surfaces; do not apply to damp, dirty, or frosty surfaces. Ambient temperature should be a minimum 40°F (4°C) and rising, and more than 5°F (3°C) above dew point. Take special precautions when ambient and/or substrate temperatures are approaching, at, or above 100°F (38°C); it may be necessary to limit material application to evening hours for exterior exposed decks.
- C. Coordinate waterproofing work with other trades. Applicator shall have sole right of access to the specified area for the time needed to complete the application and allow the fluid applied reflecting pool waterproof coatings to cure adequately.
- D. Protect plants, vegetation or other surfaces not to be coated against damage or soiling.
- E. Keep products away from spark or flame. Do use equipment which may produce sparks during application and until all vapors have dissipated. Post "No Smoking" signs.
- F. Maintain work area in a neat and orderly condition, removing empty containers, rags and debris daily from the site.

1.7 WARRANTY

- A. Upon request, Neogard shall offer a one year Limited Material Warranty for institutional, commercial, industrial, and high-rise/multi-family residential projects only, after substantial completion of the application and receipt of a properly executed warranty request form.

PART 2 MATERIALS

2.1 MANUFACTURER

- A. Neogard, A part of Hempel, 2728 Empire Central, Dallas, TX 75235, (800) 321-6588, www.neogard.com.

2.2 MATERIALS

- A. Pool-Gard C materials (Hempel product numbers in parentheses):
 1. Primer: 7740/7741 (252J9/95WJB) 100% solids epoxy primer.
 2. Flashing Tape: 86218 (62ZJB) flashing tape.
 3. Sealant: 70991 (47XJB) or other polyurethane sealant approved by Neogard.
 4. Base Coat: 7825/7821 (47NJB) polyurethane coating, black in color.
 5. Topcoat: 7825/7821 (47NJB) polyurethane coating, black in color. Note: Exterior applications exposed to UV must have a topcoat with exterior finish primer and exterior finish coat.
 6. Exterior Finish Primer: 33014/99951 (15050) Ureprime HS4 epoxy urethane primer.
 7. Exterior Finish Coat: Hempel Acrylithane urethane enamel, available in a variety of colors.

2.3 MATERIAL PERFORMANCE CRITERIA

- A. Typical physical properties of cured 7825/7821 urethane used on this project are:
 1. Tensile Strength, ASTM D412, 1,500 psi
 2. Elongation, ASTM D412, 300%
 3. Permanent Set, ASTM D412, 20%
 4. Tear Resistance, ASTM D1004, 160 pli
 5. Water Resistance, ASTM D471, < 2%
 6. MVT (20 mils), ASTM E96, 0.5 English Perm
 7. Taber Abrasion, ASTM D4060, 5 mg (1,000 CS-17)
 8. Shore A, ASTM D2240, 80–90
 9. Adhesion, ASTM D4541, 400 psi
- B. The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

2.4 ACCESSORIES

- A. Miscellaneous materials such as cleaning agents, adhesives, reinforcing fabric, closed cell backer rod, drains, etc., shall be compatible with the specified reflecting pool coating system.

2.5 MIXING

- A. Comply with manufacturer's instructions for mixing procedures.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Concrete: Verify that the work done under other sections meets the following requirements:
 1. That due to hydrostatic, capillary and moisture vapor pressure, substrates in contact with ground must have a properly installed, effective vapor barrier.
 2. That the concrete surface is free of ridges and sharp projections. If metal forms or decks are used they should be ventilated to permit adequate drying of concrete on exterior exposed deck.
 3. That the concrete was cured for a minimum of 28 days (Minimum of 3,000 psi compressive strength). Water-cured treatment of concrete is preferred. The use of concrete curing agents, if any, shall be of the sodium silicate base only; others require written approval by Neogard. If membrane-forming curing compounds are present, they must be mechanically removed prior to the application of Pool-Gard C.
 4. That the concrete was finished by a power or hand steel trowel followed by soft hair broom to obtain light texture or "sidewalk" finish.
 5. That damaged areas of the concrete substrate be restored to match adjacent areas. Use 100% solids epoxy and sand for filling and leveling.

3.2 PREPARATION

- A. Concrete Cleaning: Surfaces contaminated with oil or grease shall be vigorously scrubbed with a stiff bristle broom and a strong non-sudsing detergent such as Neogard 8500 BioDegradable Cleaner (089JB). Thoroughly wash, clean, and dry. Areas where oil or other contaminants penetrate deep into the concrete may require removal by mechanical methods.
- B. Acid Etching: Treat concrete surfaces with 18°–20° Baume muriatic acid and water mixed 1:1 to remove laitance and impurities. After acid has stopped foaming or boiling, immediately rinse thoroughly with water. Re-rinse as required to remove muriatic acid solution. Note: If acid etching is not practical, shot blasting or other mechanical abrasion is an acceptable alternative. However, care should be taken to leave the pores of the concrete unopened.
- C. Concrete Patching: Ridges and sharp projections should be ground off and pits, holes and low spots should be filled in with 100% solids epoxy and sand, mixed at a ratio of one part epoxy to four parts sand. The repairs should be done after any chemical or mechanical cleaning or acid etching is complete. Allow the epoxy patching to cure approximately 24 hours at 75°F (23°C).
- D. Cracks and Cold Joints: Visible hairline cracks (less than 1/16" in width) in concrete and cold joints shall be cleaned, primed as required and treated with thoroughly mixed 7825/7821 base coat material a minimum distance of 2" on each side of crack to yield a total thickness of 30 dry mils. Large cracks (greater than 1/16" in width) shall be routed and sealed with 70991 sealant. Sealant shall be applied to inside area of crack only, not applied to substrate surface. Detail sealed cracks with thoroughly mixed 7825/7821 base coat material a distance of 2" on each side of crack to yield a total thickness of 30 dry mils.
- E. Control Joints: Seal control joints equal to or less than 1" in width with 70991 sealant. Depending on the width to depth ratio of the joint, backing material and a bond breaker may be required. Install sealants in accordance with ASTM C1193 and manufacturer's instructions. Sealant shall be applied to inside area of joint only, not applied to substrate surface. Detail sealed joints with thoroughly mixed 7825/7821 base coat material a distance of 2" on each side of joint to yield a total thickness of 30 dry mils.

- F. Flashing Tape: Install 86218 flashing tape where indicated on the drawings and/or where required by the manufacturer prior to the application of base coat.
- G. Surface Condition: Surface shall be clean and dry prior to coating.

3.3 APPLICATION

- A. Factors That Affect Dry Film Thickness: Volume solids, thinning, surface profile, application technique and equipment, overspray, squeegee, brush and roller wet out, container residue, spills and other waste are among the many factors that affect the amount of wet coating required to yield proper dry film thickness. To ensure that specified dry film thickness is achieved, use a wet mil gauge to verify actual thickness of wet coating applied, adjusting as needed for those factors which directly affect the dry film build.
- B. Primer: Thoroughly mix 7740/7741 primer and apply at a rate of 200 sf/gal (0.5 gal/100 sf or 8 wet mils) to yield 8 dry mils. Within 24 hours of application of primer, base coat must be applied. If base coat cannot be applied within 24 hours, inspect surface for contaminants, clean surface as necessary, and re-prime.
- C. Base Coat: Thoroughly mix 7825/7821 and apply at a rate of 66 sf/gal (1.5 gal/100 sf or 24 wet mils) to yield 24 dry mils. Extend base coat over cracks and control joints which have received detail treatment. Note: Vertical surfaces may require additional coats to build film to design thickness.
- D. Topcoat: When base coat is dry to touch, thoroughly mix 7825/7821 and apply at a rate of 66 sf/gal (1.5 gal/100 sf or 24 wet mils) to yield 24 dry mils. Note: Vertical surfaces may require additional coats to build film to design thickness.
- E. Note: Exterior applications exposed to UV must receive a topcoat with Exterior Finish Primer and Exterior Finish Coat.
- F. Exterior Finish Primer: Thoroughly mix 33014/99951 Ureprime HS4 and apply at a rate of 300 sf/gal (0.33 gal/100 sf or 5 wet mils) to yield 3 dry mils.
- G. Exterior Finish Coat: Apply two coats of thoroughly mixed ACRYLITHANE™ series urethane enamel at the rate of 200 sf/gal (0.5 gal/100 sf) per coat to yield 4–5 dry mils per coat.
- H. Caution: Allow entire Pool-Gard C coating system to cure for a minimum of ten days prior to filling with water.
- I. Applicator is responsible for applying sufficient coating to the substrate.

3.4 CLEANING

- A. Remove debris resulting from completion of coating operation from the project site.

3.5 PROTECTION

- A. After completion of application, do not allow traffic on coated surfaces for a period of at least 48 hours at 75°F (23°C) and 50% relative humidity, or until completely cured.

END OF SECTION

Guide Specification

Pool-Gard C

Section 07 14 00 Fluid-Applied Waterproofing



Issued by: Hempel (USA) – Neogard Pool-Gard C

This Guide Specification supersedes those previously issued.

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Neogard®, A part of Hempel
2728 Empire Central - Dallas, Texas 75235 - Phone (214) 353-1600 - Fax (214) 357-7532 - www.neogard.com