

PART 1 GENERAL

1.1 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install a spray or roller applied high performance elastomeric coating system as outlined in this specification to create a seamless weatherproof coating system over masonry surfaces.
- B. The manufacturers 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 04 20 00: Unit Masonry.
 - 4. Section 07 24 00: Exterior Insulation and Finish Systems.
 - 5. Section 07 90 00: Joint Protection.

1.2 SYSTEM DESCRIPTION

- A. Neoflex shall be a complete system of compatible materials supplied by Neogard to create a seamless weatherproof coating system.
- B. Neoflex shall be designated for application on the specific type of surface indicated on the drawings.

1.3 SUBMITTALS

- A. Product Data: Submit Neogard product literature, Safety Data Sheets (SDS) and installation instructions.
- B. Project Reference List: Submit list of projects as required by this specification.
- C. Samples: Submit samples of specified high performance elastomeric coating system. Samples shall be construed as examples of finished color and texture of the system only.
- D. Applicator Approval: Submit letter from manufacturer stating applicator is approved to install the high performance elastomeric coating system.
- E. Warranty: Submit copy of manufacturer's standard warranty.

1.4 QUALITY ASSURANCE

- A. Supplier Qualifications: Neoflex, as supplied by Neogard, is approved for use on this project.
- B. Applicator Qualifications: Applicators shall be approved to install specified system.
- C. Requirements of Regulatory Agencies: Materials used in the decorative concrete and masonry coating system shall meet Federal, State and Local VOC regulations.

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 avoid damage to container. Do not store for long periods in direct sunlight. Protect all materials from freezing.

1.6 PROJECT CONDITIONS

- A. Proceed with application of materials only when substrate temperature is above 40°F (4°C). Substrate shall be dry, clean, and frost-free. Temperature shall be more than 5°F (3°C) above dew point and rising. Do not apply if precipitation or freezing temperatures are imminent.

1.7 WARRANTY

- A. Upon request, Neogard shall offer the manufacturer's standard warranty upon 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 75253, 214-353-1600, www.neogard.com.

2.2 MATERIALS

- A. Primers (Hempel product numbers in parentheses):
 1. Previously Painted, EIFS, Chalky or Porous Concrete/Masonry Primer: 7031-100 (28010) water-based acrylic primer.
 2. New Concrete, Masonry, and Wood Primer: 3090 (181JB) Multi-Grip II primer.
 3. Ferrous Metal Primer: 33304/99953 (15090) Chem-O-Pon Primer or 3090 Multi-Grip II primer.
 4. Galvanized Metal Primer: 3090 Multi-Grip II primer.
- B. Patching Compound: 7032 (61AJB) series Neoflex. patching compound.
- C. Elastomeric Coating: 7100 (58015) series acrylic coating.
- D. Decorative Coating: Neocrylic HB (7170 series) high-build acrylic coating.
- E. Sealant: 70991 (47XJB) series polyurethane sealant or approved equal.

2.3 MATERIAL PERFORMANCE CRITERIA

- A. Typical physical properties of cured 7100 series acrylic used on this project are:
 1. Adhesion, ASTM D903, 5 pli
 2. Elongation, ASTM D2370, 300%
 3. Flexibility, 1/8" Mandrel ASTM D522, No Cracking
 4. Permanent Set, ASTM D412, < 20%
 5. Tensile Strength, ASTM D2370, 125 psi
 6. Water Resistance, ASTM D471, < 20%
 7. Algal Fungal Resistance, ASTM D3274, No Growth
 8. Resistance to Wind-Driven Rain, TT-C-555B, Passes
 9. Accelerated Weathering (3,000 hours), ASTM D4587, Passes
 10. Visual Color Change (3,000 hours), ASTM D1729, Passes
 11. Chalking (3,000 hours), ASTM D4214, Passes
 12. Water-vapor Permeance (10 mils), ASTM D1653, 20 perms
 13. Salt Spray (Fog Resistance, 500 hours), ASTM B117, Passed
 14. Carbon Dioxide Diffusion, PR EN 1062-6, Sd > 100 meters
 15. Dirt Pick-Up % After 12-Month Exposure, ASTM D3719, Passed
 16. Impact Resistance at 120 in-lbs, ASTM D2794, Passed
- B. Typical physical properties of cured 7170 series acrylic used on this project are:
 1. Resistance to Wind-Driven Rain TT-C-555B, Passes
 2. Accelerated Weathering (3,000 hours), ASTM D4587, Passes
 3. Visual Color Change (3,000 hours), ASTM D1729, Passes
 4. Chalking (3,000 hours), ASTM D4214, Passes
 5. Water-vapor permeance, ASTM D1653, 15 perms
 6. Salt Spray (fog) Resistance (500 hours), ASTM B117, Passed

7. Carbon-dioxide Diffusion, PR EN 1062-6, Sd > 100 meters
8. Flexibility, 1/2" Mandrel, ASTM D522, No Cracking
9. Dirt Pick-up % after 12 month exposure, ASTM D3719, Passed
10. Sand Abrasion Resistance (> 1,000 liters @ 10–11 mils), ASTM D968 Method A, Passed
11. Impact Resistance at 30 in-lbs, ASTM D2794, Passed
12. Algal Fungal Resistance, ASTM D3274, No Growth

C. 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, backer rod, polyester fabric, etc., shall be approved by the manufacturer of the high performance elastomeric coatings. All materials used shall be applied in accordance with its manufacturer's recommendations.

2.5 MIXES

- A. In multi-pail applications, mix contents of each new pail into partially used pail to ensure color consistency and a smooth transition from pail to pail.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Concrete (Tilt-Up, Poured-in-Place, Precast): Verify that the work done under other sections meets the following requirements:
1. Concrete is free of ridges and sharp projections.
 2. New concrete should be cured for a minimum of 28 days. Water-cured treatment of concrete is preferred. Resin or wax based curing compound should not be used. Non-compatible curing agents must be removed prior to application.
 3. Concrete surface pH level must not be higher than 11 prior to coating.
 4. All loose concrete, or mortar, is removed.
 5. Damaged areas of concrete, including bug holes, voids and air pockets, should be repaired using a cement-based patching compound.
- B. Masonry (Brick, Low Density Block, Cinder Block, Stucco): Verify that the work done under other sections meets the following requirements:
1. New masonry should be allowed to dry for a minimum of 28 days.
 2. Mortar joints are sound and without voids.
 3. Defective mortar or stucco areas should be repaired using a cement-based patching compound.
- C. Exterior Insulated and Finish Systems (EIFS): Verify that the work done under other sections meets the following requirements:
1. Surface should be clean and free of grease and contaminants.
 2. Caulk joints should be checked, primed and recaulked with sealant.
 3. Defective areas should be repaired following EIFS manufacturer's specified repair procedure.

3.2 PREPARATION

- A. Protection:
1. The overspray from coating material can carry considerable distances and care should be taken to do the following:
 2. Post warning signs a minimum of 100 feet from the work area.
 3. Cover all intake vents near the work area.
 4. Set up wind breaks when needed.
 5. Minimize or exclude all personnel not directly involved with coating application.
 6. Provide adequate ventilation.

7. Protect plants, vegetation and animals which might be affected by coating. Use drop cloths or masking as required.

B. Surface Preparation:

1. **Cleaning:** Surfaces should be clean and free of oil or grease. All loose materials and foreign matter should be removed from the substrate. All mildew and algae must be removed from the substrate with a solution of one tablespoon of Tri-Sodium Phosphate and two pints of liquid bleach in one gallon of water (0.125 to 0.25 liters per liter). Rinse thoroughly with clear water. Surfaces should be pressure-washed and allowed to thoroughly dry prior to application.
2. **Crack and Cold Joints:** Visible hairline cracks (up to 1/16" in width) in masonry should be pretreated with a detail application of 7032 patching compound. Large cracks and construction joints should be filled with 70991 series sealant prior to application. Detail filled cracks with a liberal application of 7032 patching compound. Spun polyester fabric, similar to "Reemay," may be incorporated into the details for added reinforcement.
3. Porous block surfaces should be filled smooth using an acceptable acrylic block filler at a rate of until smooth.
4. **Control Joints:** Seal secondary control joints with 70991 series sealant.

3.3 APPLICATION

A. Primer:

1. Chalky or porous concrete/masonry surfaces should be primed with 7031-100 water-based acrylic primer at a rate of 150–350 square feet per gallon.
2. Chalky painted surfaces should be primed with 7031-100 water-based acrylic primer at a rate of 175–400 square feet per gallon.
3. EIFS should be primed with 7031-100 water-based acrylic primer at a rate of 150–300 square feet per gallon.
4. New concrete, masonry and wood surfaces should be primed with 3090 Multi-Grip II primer at a rate of 100-400 square feet per gallon.
5. Ferrous metal should be clean and rust free. Prime using 33304/99953 Chem-O-Pon or 3090 Multi-Grip II primer at a rate of 200–300 square feet per gallon.
6. Galvanized metal should be solvent-wiped and primed with 3090 Multi-Grip II primer at a rate of 400–500 square feet per gallon.

B. Acrylic Coating Material:

1. **5-Year Warranty System:** Apply 7100 series in one coat at a rate of 80 sf/gal to yield 8-10 dry mils. Coating must exhibit a pinhole-free surface.
2. **10-Year Warranty System:** Apply 7100 series in two coats at a rate of 80 sf/gal to yield 8-10 dry mils per coat. Coating must exhibit a pinhole free surface.
3. Second coat may substitute 7170 for 7100. Apply 7170 at a rate of 80 sf/gal to yield 8-10 dry mils per coat. Coating must exhibit a pinhole free surface.
4. **Optional Topcoat, 5- or 10-Year Warranty System:** For color retention and reduced dirt pickup, thoroughly mix and apply one coat of 7170 series high-build coating at a rate of 75–100 sf/gal to yield 8–10 dry mils.
5. Applicator is responsible for applying sufficient coating to the substrate.

3.4 CLEANING

- A. Clean any splatters or spills with water before material dries. Once dried, Neoflex will be difficult to remove and may require mechanical removal.
- B. Remove temporary coverings and protection from adjacent work areas.
- C. Clean up and properly dispose of debris remaining on project site related to application.

END OF SECTION

Guide Specification

Neoflex

Section 09 96 53 Elastomeric Coatings



Issued by: Hempel (USA) – Neogard Neoflex

This Guide Specification supersedes those previously issued.

Manufacturer warrants that the physical properties of the product reported above will meet the standards and deviations of the associated ASTM test method. MANUFACTURER HEREBY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Buyer must make its own determination of the suitability of any product for its use, whether such product is used alone or in combination with other materials. To the extent this or any of Manufacturer's products is proven to be defective, Buyer's sole remedy shall be limited to the replacement of such defective product, exclusive of any costs of labor. MANUFACTURER SHALL NOT BE LIABLE OR OBLIGATED FOR ANY LOSS OR CONSEQUENTIAL OR OTHER DAMAGE INCURRED DIRECTLY OR INDIRECTLY BY BUYER OR ANY OTHER PERSON OR ENTITY THAT ARISES IN ANY WAY IN RELATION TO THIS OR ANY OF MANUFACTURER'S OTHER PRODUCTS. Nothing contained herein shall be construed to constitute inducement or recommendation to practice any invention covered by any patent without authority of the owner of the patent. No Applicator is or should be viewed as an employee or agent of Manufacturer. Neoflex-GSCSI ksk 04242020.docx

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