Guide Specification

Neocrylic LR

Section 09 97 23 Concrete and Masonry Coatings

PART 1 GENERAL

1.1 SUMMARY

A. Provide labor, materials, equipment and supervision necessary to install a fluid-applied, light reflective concrete and masonry coating 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 41 00: Precast Structural Concrete
   3. Section 04 20 00: Unit Masonry

1.2 SYSTEM DESCRIPTION

A. Neocrylic LR shall be a complete system of compatible materials supplied by Neogard to create a seamless coating system.

B. Neocrylic LR shall be designated for application on the specific type of surface indicated on the drawings.

1.3 SUBMITTALS

A. Technical Data: Submit Neogard product data, Safety Data Sheets and installation instructions.

B. Samples: Submit samples of specified concrete and masonry coating system. Samples shall be construed as examples of finished color and texture of the coating system only.

C. Applicator Approval: Submit letter from manufacturer stating applicator is approved to install the light reflective concrete and masonry coating system.

D. Warranty: Submit copy of manufacturer's standard warranty.

1.4 QUALITY ASSURANCE

A. Supplier Qualifications: Neocrylic LR, as supplied by Neogard, is approved for use on this project.

B. Applicator Qualifications: Applicator shall be approved to install specified system.

C. Requirements of Regulatory Agencies: Materials used in the light reflective concrete and masonry coating system shall meet Federal, State and Local VOC regulations.

D. Field Sample:
   1. Install a field sample of at least 4 square feet at the project site or pre-selected area as agreed to by owner's representative, applicator and manufacturer.
   2. Apply material in accordance with manufacturer's written application instructions.
   3. Field sample will be standard for judging color, coverage and adhesion on remainder of project. Test method for measuring adhesion is ASTM D3359, Measuring Adhesion by Tape, Method A. On the 0–5 scale, a minimum adhesion rating of 4A is required.
   4. Maintain field sample during construction for workmanship comparison.
   5. Do not alter, move, or destroy field sample until work is completed and approved by owner's representative.

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 (24°C). Handle products to avoid damage to container. All materials shall be stored in compliance with local fire and safety requirements. Do not store for long periods in direct sunlight or at high temperatures. Protect all materials from freezing.

1.6 PROJECT CONDITIONS

A. Prior to starting work, read and follow the Safety Data Sheets and container labels for detailed health and safety information.

B. 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.

C. Coordinate coating 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 coating to cure adequately.

D. Protect plants, vegetation or other surfaces not to be coated against damage or soiling.

E. Maintain work area in a neat and orderly condition, removing empty containers, rags and trash daily from the site.

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. Sealant: 70991 (47XJB) Urethane Sealant.

B. Light Reflective Coating: 7051-LR (388JB) Light Reflective Acrylic Concrete and Masonry coating

C. Typical physical properties of cured 7051-LR acrylic used on this project are:
1. Tensile Strength, ASTM D412, 250 psi
2. Elongation, ASTM D412, 90%
3. Permanent Set, ASTM D412, < 20%
4. MVT, ASTM D1653, 2.6 Perms
5. Reflectivity (Diffuse), LM 44 1990, 94.8%
6. Accelerated Weathering (3,000 hours), ASTM G154, No chalking/discoloration/cracking

D. The above tested results are typical values. Individual lots may vary up to 10% from the typical value. For more technical information visit www.neogard.com.

2.3 ACCESSORIES

A. Miscellaneous materials such as cleaning agents, adhesives, reinforcing fabric, backer rod, etc., shall be compatible with the Light Reflective Concrete and Masonry Coating.

2.4 MIXING

A. Thoroughly mix Neocrylic LR at slow speed with drill and mixing paddle to ensure color is uniformly dispersed and to minimize air entrapment.

B. In multi-pail applications, mix the contents of each new pail into the partially used pail to ensure color consistency and smooth transitions from pail to pail.

PART 3 EXECUTION

3.1 EXAMINATION

A. Concrete: 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 waxed based curing compound should not be used. Non-compatible curing agents must be removed prior to application.
3. All loose concrete, or mortar, is removed.
4. 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):
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 spraying coating materials 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 coatings. Use drop cloths or masking as required.

B. Surface Preparation:
1. Surface should be clean, dry and sound. Concrete substrates should have a minimum 28 day cure and be free of all bond-inhibiting contaminants.
2. Cleaning: Surfaces should be 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 (.125 to .25 liters per liter). Rinse thoroughly with clear water. High pressure water blast (or abrasive blast on hard, dense surfaces) surface to medium grit sandpaper texture (ICRI CSP3). Some stains may require chemical removal. Be sure to neutralize the compounds and rinse thoroughly with clean water. Allow to dry prior to application.
3. Porous block surfaces should be filled smooth using an acceptable acrylic block filler at a rate of until smooth.
4. Repair any holes, spalled areas and damaged concrete with appropriate Neogard repair materials.
5. Crack and Cold Joints: Treat cracks larger than 1/4" as standard sealant joints and fill with Neogard 70991 urethane sealant.

3.3 APPLICATION

A. Factors That Affect Dry Film Thickness: Volume of 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. Apply Neocrylic LR a one- or two-coat system, achieving a DFT of 3 dry mils on a single coat system and 6 dry mils on a two coat system.

C. Apply 7051 Light Reflective Concrete and Masonry coating at 200 sf/gal (or 0.5 gal/100 sf) or 3 dry mils, in strict accordance with application procedures outlined by Neogard. Neocrylic LR Light Reflective Concrete and Masonry Coating can be applied by brush, spray, roller or spray and backroll. Spray apply coating for best results.

D. Maintain proper uniform wet-film thickness (WFT) during application to ensure the performance characteristics desired, always working to a natural break. Maintain a wet edge during application.

E. For uniformity of color and coverage, application techniques must be consistent throughout the project. Inconsistent application techniques will produce color and coverage variations.

F. Applicator is responsible for applying sufficient coating to the substrate.

3.4 CLEANING

A. Clean any coating splatters or spills with water prior to cure. Once dried, Neocrylic LR may require mechanical removal. Clean all tools and equipment immediately with water.

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

Issued by: Hempel (USA) – Neogard Neocrylic LR

This Guide Specification supersedes those previously issued.

Neogard®, A part of Hempel
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