



CONSEAL™
CONCRETE SEALANTS INC.

TECHNOLOGY FOR TODAY AND TOMMORROW.
FOR VIRTUALLY ANY CONCRETE APPLICATION.

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Section 09 96 53

Concrete Sealants CS-1800 Elastomeric Waterproofing Coating

PART 1 – GENERAL

1.1 SUMMARY

- A. **Section Includes:** Materials, application, and best practices for the supply and installation of elastomeric waterproofing coatings to concrete substrates.

1.2 SYSTEM DESCRIPTION

- A. **Elastomeric Waterproofing Coating:** Topical, solvent-free coating for use on the interior of most concrete structures including sanitary sewer manholes and other structures in corrosive environments that will experience submergence or intermittent submergence in water and exposure to corrosive gases; also for use on the exterior of most concrete structures that will experience submergence or intermittent submergence in water and groundwater.

1.3 RELATED SECTIONS

- A. Section 03 30 00 – Cast-in-Place Concrete
B. Section 03 40 00 – Precast Concrete
C. Section 09 91 33 – Primers

1.4 REFERENCES

- A. **American Society of Testing and Materials International (ASTM):**
1. ASTM C836, “Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course”
 2. ASTM C1898, “Standard Test Method for Determining the Chemical Resistance of Concrete Products to Acid Attack”
 3. ASTM D5385, “Standard Test Method for Hydrostatic Pressure Resistance of Waterproofing Membranes”

4. ASTM D7088, "Standard Practice for Resistance to Hydrostatic Pressure for Coatings Used in Below Grade Applications Applied to Masonry"

1.5 SUBMITTALS

- A. **General:** If any portion of Contract Documents does not conform to manufacturer's standard recommendations, submit notification of portions of design at variance with manufacturer's specifications.
- B. **Product Data:** Submit manufacturer's product technical data sheet including application instructions.

1.6 QUALITY ASSURANCE

- A. **Manufacturer Qualifications:** Manufacturer shall be ISO 9001 registered.
- B. **Applicator:** Coating applicator shall be experienced in the installation of elastomeric waterproofing coatings.
- C. **Technical Consultation:** The coating manufacturer's representative shall provide technical consultation and support as needed.

1.7 DELIVERY, STORAGE AND HANDLING

- A. **Ordering:** Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- B. **Delivery:** Deliver packaged coating materials to project site or to concrete production facility in original undamaged containers with manufacturer's labels and seals intact.
- C. **Identification:** Containers shall be fully identified with manufacturer's label listing type, grade, class, and other qualifying information. Provide product's safety data sheet.
- D. **Storage:** Store coating materials at a minimum temperature of 40 degrees Fahrenheit. Exposure to temperatures greater than 100 degrees Fahrenheit may reduce product shelf life.

1.8 PROJECT CONDITIONS

- A. **Compliance:** Comply with manufacturer's product technical data sheet regarding condition of the substrate to receive the waterproofing coating, application instructions, weather and temperature conditions before and during installation, and protection of the installed coating system.

1.9 WARRANTY

- A. **Project Warranty:** Refer to conditions of the Contractor for project warranty provisions.
- B. **Manufacturer's Warranty:** *Manufacturer's Warranty:* This information is presented in good faith, but we cannot anticipate all conditions under which this information and our products, or the

products of other manufactures in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combinations for their own purposes. It is the **users' responsibility** to satisfy himself as to the suitability and completeness of such information for his own particular use. We sell this product without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of this product, whether used alone or in combination with other products.

PART 2 – PRODUCTS

2.1 MANUFACTUERS

- A. ***Acceptable Manufacturer:***
Concrete Sealants, Inc.
9325 State Route 201; Tipp City, OH 45371
Phone: (800) 332-7325; Fax: (937) 845-3587
E-mail: hello@conseal.com; Website: www.conseal.com
- B. ***Substitutions:*** No substitutions permitted.
- C. ***Source Quality:*** Obtain all waterproofing coating products from a single manufacturer.

2.2 MATERIALS

- A. ***System Description:*** Topical solvent-free elastomeric coating.
- B. ***Compliance:*** The product shall conform to ASTM C836.
- C. ***Performance:*** When used in accordance with the manufacturer's recommendations, the product shall satisfy the following requirements:
 - 1. Shall resist degradation in 0.5 pH sulfuric acid immersion when tested in accordance with ASTM C1898.
 - 2. Shall provide positive waterproofing capabilities up to 100 psi when tested in accordance with ASTM D5385.
 - 3. Shall provide negative waterproofing capabilities up to 4 psi when tested in accordance with ASTM D7088.
- D. ***Acceptable Product:*** Concrete Sealants CS-1800. Available in black, gray, or white.

PART 3 – EXECUTION

3.1 MANUFACTURER’S INSTRUCTIONS

- A. Comply with manufacturer’s product technical data sheet regarding condition of the substrate to receive the waterproofing coating, application instructions, weather and temperature conditions before and during installation, and protection of the installed coating system. Product is not intended for use over expansion joints or joints that move.

3.2 PREPARATION

- A. **Verification of Substrates:** All concrete surfaces shall be sound; clean; free of contaminants including dust, dirt, and oil; free of form release agents and materials used to cure the concrete; and free of any other potential contaminants. All surfaces shall be cleaned by brush blasting.
- B. **Substrate Preparation:** Prepare concrete in accordance with SSPC-SP 13/NACE No. 6, Surface Preparation of Concrete. An acceptable prepared concrete surface should be free of contaminants, laitance, loosely adhering concrete, and dust, and should provide a sound, uniform substrate suitable for the application of primer and for the application of the protective coating. All surfaces shall be completely dry prior to primer application and prior to coating application.

3.3 APPLICATION

- A. **Priming:** Prime the concrete surface with CS-85 waterborne concrete primer for elastomeric sealants prior to application of elastomeric waterproofing coating.
- B. **Preparation:** Store product at room temperature (around 70 degrees Fahrenheit) prior to application to ensure ease of use. Do not thin or dilute product. If necessary, remove product skin layer before use.
- C. **Precautions and Recommendations:** Apply product to concrete surfaces that have been appropriately primed, that are between 40 degrees Fahrenheit and 130 degrees Fahrenheit. Do not apply product to frozen or wet concrete. Apply product using a roller, brush, trowel, squeegee, or sprayer. When applying multiple coats of the product, apply subsequent coats as soon as possible. When recoating, ensure the skin layer is clean, dry, and has met curing requirements.
- D. **Application:** Apply each coat of the product at a thickness of about 30 mils dry film thickness per coat, which equates to a coverage rate of about 50 square feet per gallon. Apply two coats, for a total dry film coating thickness of at least 60 mils.

3.4 CLEANING AND PROTECTION

- A. **Cleaning:** Clean product spillage while wet using mineral spirits.

End of Section 09 96 53