GUIDE SPECIFICATION FOR CS-309™-25: NON-YELLOWING ACRYLIC CURING AND SEALING COMPOUND

SECTION 03 39 23

MEMBRANE CONCRETE CURING

Last Update: November 29, 2021

Specifier Notes: This guide specification is written according to the Construction Specifications Institute (CSI) format. The section must be carefully reviewed and edited by the architect or engineer to meet the requirements of the project. Coordinate this section with other specification sections and drawings.

Specifier Notes: W. R. MEADOWS CS-309-25 acrylic curing and sealing compound offers a 30% solids content. It is a clear, transparent, ready-to-apply, non-yellowing liquid compound formulated from special acrylic polymers and quick-evaporating solvents that effectively cures and seals freshly placed concrete. CS-309-25 meets maximum VOC content limits of 700 g/L for concrete curing and sealing compounds as required by the U.S. EPA architectural coatings rule.

Once properly applied, CS-309-25 provides a premium-grade seal for superior moisture retention. This produces a hard, dense, high-compressive strength concrete.

CS-309-25 is ideal for application on commercial and industrial concrete surfaces, sidewalks, patios, multi-level parking decks, driveways and parking areas ... wherever you want to simultaneously cure and seal exterior concrete surfaces. The use of CS-309-25 on any exterior concrete surface provides a durable, long-lasting finish that has improved resistance to chemicals, oil, grease, de-icing salts, and abrasion. CS-309-25 provides an attractive, low sheen finish that enhances the natural appearance of the concrete.

PART 1 GENERAL

- 1.01 SECTION INCLUDES
 - A. Surface preparation.
 - B. Application of clear, acrylic curing and sealing compound for decorative concrete.

1.02 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

- A. Section 03 30 00 Cast-in-Place Concrete.
- 1.03 REFERENCES
 - A. ASTM C309 Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
 - B. ASTM C1315 Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
 - C. AASHTO M 148 Liquid Membrane Forming Compounds for Curing Concrete.

D. U.S. Environmental Protection Agency Architectural Coatings Rule.

1.04 SUBMITTALS

- A. Comply with Section 01 33 00 Submittal Procedures.
- B. Submit manufacturer's product data and application instructions.
- 1.05 DELIVERY, STORAGE, AND HANDLING
 - A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
 - B. Store materials in a clean, dry area in accordance with manufacturer's instructions.
 - C. Keep away from sparks and flames.
 - D. Avoid direct contact with this product as it may cause irritation of the eyes and/or skin.
 - E. Protect materials during handling and application to prevent damage or contamination.
 - F. Do not dilute curing and sealing compound.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Apply curing and sealing compound in exterior applications only.
- B. Do not apply curing and sealing compound if the temperature of the concrete is below 40° F (4° C).
- C. Avoid application in direct sunlight combined with high temperatures.
- D. Do not apply to concrete exposed to excessive moisture.
- E. Do not use on dense or non-porous surfaces.

PART 2 PRODUCTS

- 2.01 MANUFACTURER
 - W. R. MEADOWS, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976.
 (847) 683-4500. Fax (847) 683-4544. Website: www.wrmeadows.com.

2.02 MATERIALS

- A. Performance-Based Specification: Acrylic curing and sealing compound shall be a nonyellowing, clear acrylic curing and sealing compound meeting the following requirements:
 - 1. ASTM C309, Type 1, Class A and B.
 - 2. AASHTO M 148, Type 1, Class B.
 - 3. ASTM C1315 Ultraviolet Resistance Class A Non-yellowing Chalk Resistance – No chalking
 - Check/Peel Resistance No deterioration
 - 4. Dried film accepted by USDA.
 - 5. Meets the maximum VOC content limits of 700 g/L for Concrete Curing and Sealing Compounds as required by the U.S. EPA Architectural Coatings Rule.
- B. Proprietary-Based Specification: CS-309-25 Non-Yellowing Acrylic Curing and Sealing Compound by W. R. MEADOWS.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine surfaces to receive curing and sealing compound. Notify architect if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.

3.02 SURFACE PREPARATION

- A. Protect adjacent surfaces not designated to receive curing and sealing compound.
- B. Clean and prepare surfaces to receive curing and sealing compound in accordance with manufacturer's instructions, ensuring that all stains, oil, grease, form release agents, dust, and dirt removed prior to application.
- C. Apply curing and sealing compound when surface water has completed disappeared on new concrete.
- D. Ensure concrete surface will not be marred by walking workmen.

3.03 APPLICATION

- A. Apply curing and sealing compound in accordance with manufacturer's instructions.
- B. Apply a uniform film using a standard industrial-grade sprayer, equipped with a neoprene hose and gaskets, as well as a 5941 spray tip.
- C. Alternatively, apply using a short nap roller.
- D. Avoid puddling in low areas.

3.04 PROTECTION

A. Restrict foot traffic for at least four hours; 12 hours is preferable.

END OF SECTION