GUIDE SPECIFICATION FOR TOP-STOP™: SPRAY-APPLIED, WATER-SOLUBLE HORZIONTAL SURFACE RETARDER

SECTION 03 35 23

EXPOSED AGGREGATE CONCRETE FINISHING

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 the drawings.

Specifier Notes: TOP-STOP is a spray-applied, water-soluble surface retarder designed to slow the set of surface mortar in concrete to expose the aggregate. It temporarily halts the set of Portland cement at the surface while the concrete below the surface cures normally. TOP-STOP is economical and easy to use, producing beautiful exposed aggregate concrete flatwork with consistent results. TOP-STOP is non-flammable and VOC-compliant.

TOP-STOP may be used to produce an architectural finish on concrete slabs by exposing the natural color and texture of the aggregate. TOP-STOP exposes the aggregate on floor slabs, sidewalks, tilt-up and precast panels, or any normal horizontal concrete application. TOP-STOP produces roughened bonding surfaces for subsequent concrete toppings and roughens horizontal surfaces for construction joints in power plants, dams, and other civil engineering projects.

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Application of spray applied horizontal surface retarder.

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 SUBMITTALS

A. Comply with Section 01 33 00 - Submittal Procedures.

B. Submit manufacturer's product data and application instructions.

1.04 QUALITY ASSURANCE

A. Apply test patch under exact job conditions to demonstrate surface finish, color variations, and to determine a level of workmanship.

B. Conduct a test patch if using concrete admixtures which will affect the setting time of the concrete.

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 product from freezing.

D. Avoid direct contact with this product as it may cause mild-to-moderate irritation of the eyes and/or skin.

E. Protect materials during handling and application to prevent damage or contamination.

F. Do not use concrete curing compounds.

G. Do not use on concrete containing calcium chloride or other set accelerators.

1.06 ENVIRONMENTAL REQUIREMENTS

A. Do not apply product when air, surface, or material temperatures are expected to fall below 40° F (4° C) within four hours of expected application.

B. Do not apply to frozen concrete.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. 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. Horizontal Concrete Surface Retarder: spray-applied, water-soluble material designed to slow the set of the cement at the top surface of the concrete.

1. TOP-STOP by W. R. MEADOWS.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine surfaces to receive surface retarder. Notify architect if surfaces are not acceptable.

B. Do not begin surface preparation or application until unacceptable conditions have been corrected.

3.02 APPLICATION

A. Protect adjacent surfaces not designated to have surface retarder applied.

B. Spray apply surface retarder at a rate of 150 – 300 ft.^{2}/gallon immediately after placing and screeding, or as soon as bleed water has disappeared.

C. Apply only after all finishing operations are complete.

D. Avoid puddles and over spraying.

E. Cover concrete with wet burlap or plastic sheeting to prevent drying out.

F. Secure the edges of the plastic sheeting to prevent ballooning.

G. Periodically check concrete to determine depth of retarded mortar, making sure concrete hardens.

H. Within 12-24 hours of application, remove burlap or plastic sheeting one section at a time.

I. Wash an area of the retarded surface mortar using a low-pressure garden hose and stiff broom.

J. Test this area to determine if depth of retarded mortar is at desired level. If the depth is greater than desired, allow the slab to cure longer before exposing the aggregate.

3.04 PROTECTION

A. Ensure surface moisture has disappeared and apply a concrete sealing compound as recommended by manufacturer.

END OF SECTION