GUIDE SPECIFICATION
DUAL-TECH: LIQUID HARDENER AND WATER REPELLENT

SECTION 03 35 00

Concrete Finishing

Specifier Notes: This guide specification is written according to the Construction Specifications Canada (CSC) Master Format '04. 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: DUAL-TECH Liquid Hardener and Water Repellent was specially formulated as a general purpose hardener and densifier and water repellent. It contains no wax, resin or acids.

DUAL-TECH is ideal for hardening and dust proofing and for providing water repellence to exposed concrete floor slabs. DUAL-TECH is not recommended for concrete floors to be painted or covered by resilient, carpeted, wood, or synthetic flooring.

1 General

1.1 SECTION INCLUDES

.1 Surface preparation.

.2 Application of clear, liquid concrete curing aid and hardener.

1.2 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.

.1 Section 03 00 00 - Cast-in-Place Concrete.

1.3 SUBMITTALS

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

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

1.4 DELIVERY, STORAGE, AND HANDLING

.1 Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

.2 Store materials in a clean, dry area in accordance with manufacturer's instructions.

.3 Keep products from freezing.

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

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

1.5 ENVIRONMENTAL REQUIREMENTS

.1 Do not apply concrete curing aid and hardener when concrete temperature is below 2º C (35º F) or above 57º C (135º F).

.2 Do not apply to frozen concrete.

2 Products

2.1 MANUFACTURER

.1 Cornerstone Coatings International Inc. 125 9th Ave SE Calgary, AB T2G 0P6
Suite 2000 Phone: +1 (587) 355-2219 Fax: +1 (587) 319-0510
Web Site www.cornerstonecoatings.com.

2.2 MATERIALS

.1 Performance Based Specification:
.1 Concrete Curing Aid and Hardener shall be a ready to use, water-base liquid, formulated with chemically reactive raw materials with a VOC content of 0 g/l.

.2 Hardener and stain resistant sealer shall be ready to use, water-base liquid, formulated with chemically reactive raw materials with an additional methysilanetriolate additive with a VOC content of 0 g/l.

.2 Proprietary Based Specification:
.1 Concrete Curing Aid and Hardener shall be Protec III Chem RX as manufactured by Cornerstone Coatings International Inc.

.2 Hardener and stain resistance shall be Dual Tech as manufactured by Cornerstone Coatings International Inc.

2.3 RELATED MATERIALS

.1 Water: Potable water.

3 Execution

3.1 EXAMINATION

.1 Examine surfaces to receive curing aid and hardener. Notify architect if surfaces are not acceptable. Do not begin application until unacceptable conditions have been corrected.

3.2 SURFACE PREPARATION

.1 Protect adjacent surfaces not designated to receive treatment.

.2 Ensure application equipment is clean and free of previously used materials.

3.3 APPLICATION

.1 Apply concrete curing aid and hardener in accordance with manufacturer's instructions.

.2 Do not dilute concrete curing aid and hardener.

.3 Fresh Concrete

.1 Apply concrete curing aid and hardener once the final pass of the power trowel is completed.

.2 Apply one even coat with a pressure hand sprayer at a rate of approximately 400 ft^2/gallon or (9.8 m^2/litre)

.3 On colored concrete do not apply for 3 days.

.4 Do not allow material to puddle on the surface.

.5 After 28 days apply one coat of Dual-Tech at a rate of 300 ft^2/gallon (7.4 m^2/litre)

.6 Do not allow material to puddle on the surface.

.4 Existing Concrete

.1 Clean and prepare surfaces to receive treatment in accordance with manufacturer's instructions, ensuring that all stains, oil, grease, form release agents, dust, and dirt are removed prior to application.

.2 Apply one even coat of Dual-Tech with a pressure hand sprayer or paint roller at a rate of 300 ft^2/gallon.

.3 Do not allow to puddle on the surface.

3.4 PROTECTION

.1 Keep heavy traffic off surface for 24 hours after application.

.2 Clean floor regularly in accordance with manufacturer's recommendation because water will accelerate the sealing and scrubbing will impart a shine.

.3 Clean up spills immediately and spot-treat stains with a good degreaser or oil emulsifier.

.4 Precautions and cleaning are the responsibility of the General Contractor until substantial completion.

END OF SECTION