

Paragraph Specification: Please use the below specification language for projects requiring specifications directly on drawings.

- Finishing Aid: Spray-applied Lythic Day 1 concrete finishing aid for lubricating surface during finishing operations by Solomon Colors. Single component colloidal silica-based aid for improving surface properties, color concrete finishing and minimizing adverse high wind, heat and low humidity damage. Apply material in accordance with manufacturers written requirements using the following spread rates:
 - A. Exterior Concrete: 250 square feet per gallon
 - B. Interior Concrete: 500 square feet per gallon
 - ASTM C672 Scaling Resistance: 70% improvement, 50 cycles
 - ASTM C666 Freezing and Thawing: 85% resistance improvement
 - ASTM C779 Abrasion Resistance: 35% improvement
 - AASHTO T 259/260 Chloride Ion Penetration: 95% resistant

SECTION 03 35 00

CONCRETE FINISHING AID

- **GENERAL**

- 1.1 RELATED DOUCMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

- SECTION INCLUDES

- Spray-applied finishing aid to improve properties of interior and exterior concrete finishing.
- Related Sections:
 - Division 01: Administrative, procedural, and temporary work requirements.

- REFERENCES

- ASTM International:
 - C672 - Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals
 - C666 - Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
 - C779 - Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces

- B. American Association of State Highway and Transportation Officials

- 1. T259 – Standard Method of Test for Resistance of Concrete to Chloride Ion Penetration

- SUBMITTALS

- Submittals for Review:
 - Product Data: Manufacturer's technical data.

- Sustainable Design Submittals:

- **Low-Emitting Product**

- **QUALITY ASSURANCE**

- **Manufacturer Qualifications:**
 - Minimum of five (5) years documented experience producing colloidal silica concrete materials.

- **PROJECT CONDITIONS**

- A. Apply when temperatures are a minimum of 40°F and a maximum 100°F for 24 hours prior to, during and after application.
- B. Do not allow material to freeze prior to application.

- **PRODUCTS**

- **MANUFACTURERS**

- **Acceptable Manufacturers:**
 - Solomon Colors (www.lythic.com)
- **Substitutions:** [Under provisions of Division 01.] [Not permitted.] [No Known Equal]

- **MATERIALS**

- **Colloidal Silica Finishing Aid:** Product used to improve workability of concrete, colored concrete finishing and minimize adverse high wind, heat and low humidity surface irregularities by reducing surface evaporation, curling and shrinkage.
 - **Specified Product:** Day 1 Finishing Aid by Solomon Colors
 - **Material Type:** Water-based, colloidal silica blended surfactant
 - **VOC Content:** 0.5 grams per liter.
 - c. **pH Level:** Maximum of 10.0pH and non-hazardous waste per EPA.
 - d. **Scaling Resistance:** 70% improvement, 50 cycles, ASTM C672
 - e. **Freeze Thaw:** 85% resistance improvement, ASTM C666
 - **Abrasion Resistance:** 35% improvement, ASTM C779
 - **Chloride Ion Penetration:** 95% resistant, AASHTO T 259/260

- **EQUIPMENT**

- A. **Equipment:** Manufacturer recommended air-less sprayer meeting a maximum of 0.5 gallon per minute flow rate and operating pressure of up to 60 psi

PART 3 EXECUTION

3.1 PREPARATION

- A. Pour and place concrete to required levelness and thickness requirements.

- B. Determine square footage of surfaces to be finished and verify proper material quantities have been delivered to site.

3.3 INSTALLATION

- Spray-apply directly to concrete surface during finishing process in accordance with manufacturers recommendations and the following:
 1. Interior: Less than 500 square feet per gallon
 2. Exterior: Less than 250 square feet per gallon

- B. Maintain uniform coverage to provide manufacturer published performance properties.

- FIELD QUALITY CONTROL

- Prevent overspray of material to adjacent equipment and construction materials.

3.5 PROTECTION

- A. Close areas to traffic until concrete has cured to allow walking foot traffic without marring surface.

END OF SECTION