



DATA SHEET & INSTALL GUIDE SURFACE-EXT®

Fiber Reinforcement for Slurry & Micro-Surfacing

Surface-EXT™ is an alkali and acid resistant (AR) glass fiber specifically designed to extend the life of slurry or micro surfacing pavement application. Surface-EXT completely and uniformly distributes into the slurry mix, making construction easy and performance exceptional. The higher tensile strength AR Glass strands creates a superior bond increasing the life of pavement preservation surfacing through increased durability, enhanced flexibility, and reflective crack mitigation.

Features /

- Alkali and Acid Resistant Fiberglass
- Complete and Uniform Dispersion
- Great Workability
- Superior Technical Support and Guidance

Benefits /

- Improved Long-Term Durability
- Reflective Crack Mitigation
- Reduced Aggregate Loss
- Enhanced Flexibility

SURFACE-EXT /

Surface-EXT is used in micro surfacing and slurry seal paving applications. Surface-EXT has been designed to arrange into a matrix in the mixture which helps link the asphalt to the aggregate giving the cured mixture additional durability. It assures excellent workability and reliable long-term performance. Use of Surface-EXT typically does not require a change to the mix design.

Physical Properties /

SURFACE-EXT	
Material	Alkali Resistant Glass*
Tensile Strength	250 ksi (1,700 MPa)
Modulus of Elasticity	10,000 ksi (72 GPa)
Density	4,517 lb/cu yd (2,680 kg/cu m)
Form	¼-in , Pre-Chopped
Dosage Rate	0.15 to 0.40% of dry aggregate weight

* Fibers are manufactured with high Zirconium content in compliance with ASTM C1666 / C1666M-07.

Table 1.

Delivery, Storage, and Handling /

Deliver Surface-EXT in sealed, undamaged containers. Surface-EXT should be stored in a dry environment and covered. Fibers are to remain in packaging until use. Prevent and/or minimize dust formation on the fiberglass strands. Wear protective equipment while handling fiberglass strands.

Surface Preparation /

Prior to micro-surfacing or slurry application, the pavement surface should be cleaned and free of dust and debris. If required by the Engineer, apply a tack coat on any heavily oxidized pavement areas, and high traffic roadways. Pre-treat existing cracks with approved sealant as directed.

Dosage Rate & Dispensing Equipment /

The recommended dosage for Surface-EXT fiberglass reinforcement is 0.15 to 0.40 percent of dry aggregate weight (3 to 8 lbs of Surface-EXT per one ton of dry aggregate). Add Surface-EXT according to approved mix design.

Surface-EXT is metered into the micro-surfacing / slurry application via one of two procedures.

1. Ranger Mobile Fiber Dispenser



- i. The Ranger system is a continuous feed system uniquely designed to avoid clumping and withstand harsh paving environments.



- ii. The Ranger system easily installs and attaches to paving equipment without hindering the paving process. The 24-in or 36-in tube lengths are available to fit any paving equipment. A 12 VDC power source is required.
- iii. The Ranger system utilizes pre-chopped fiberglass strands that come in 40-pound bags. The Ranger drum holds 80-pounds. Adjust the speed control knob to control the feed rate of the mobile dispenser.



2. Rover Mobile Fiber Dispenser

- i. The Rover system chops fiberglass spools on-site and on-demand which are then added directly to the mix.
- ii. A 90-psi air supply is required.

Quality Assurance and Submittals /

Contractor should visually inspect the mix to ensure proper blending of fiber into the micro-surfacing/slurry mixture. Periodically, check fiber dispenser to ensure proper metering and that sufficient material remains within the Ranger drum.

Upon project completion, contractor shall supply a certificate stating that the specified fibers were added throughout the entire project. Certificate should indicate total quantity of micro-surfacing/slurry dry aggregate used and total quantity of fiber-reinforcement added.

Packaging /

SURFACE-EXT	
Bags	40 lb
Pallets	42 bags / 1,680 lb

Table 2.

Limited Warranty /

Pacific GeoSource Products are warranted to be free of defects in material and will meet all published physical properties as set forth herein.

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