# **EUCO-SPEED**

# RAPID-SETTING, HORIZONTAL REPAIR MORTAR



#### DESCRIPTION

EUCO-SPEED is a rapid-setting, rapid-hardening, cementitious material for repairing horizontal concrete surfaces. Requiring only the addition of water, EUCO-SPEED is easy to use and can be installed with standard equipment and procedures. It bonds tenaciously to properly prepared concrete and provides a durable repair.

# PRIMARY APPLICATIONS

- Bridge decks
- Ramps
- · Parking garages

- Pavements
- · Walls (formed) and floors
- Marine structures

## FEATURES/BENEFITS

- · Rapid-setting for quick repairs
- Rapid, high-early strength for quick turnaround time
- Easy to use single-component mortar

- · Suitable for both interior and exterior applications
- Versatility in thickness from 1/2" (12 mm) to 6" (15 cm)

### TECHNICAL INFORMATION

Typical Engineering Data @ 72°F (22°C)

Compressive Strengths	ASTM C109 2"(50mm) cubes
3 hours	1,100 psi (8 MPa)
1 day	5,000 psi (35 MPa)
7 days	6,000 psi (41 MPa)
28 days	7,000 psi (48 MPa)
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Final set time.....approx.18 minutes

Wheeled traffic.....approx. 6 to 8 hours

Flow after 5 min per ASTM C 109105%	
Scaling per ASTM C 672 25 cycles1 rating	
Length change in water per ASTM C 157 (3"x3"x11" specimens were removed from mold @ 2 hrs)	
(0 AO ATT Specimens were removed nontrinoid @ 2 ms)	

28 days.....+0.129% Length change in air per ASTM C 157

(3"x3"x11" specimens were removed from mold @ 2 hrs) 28 days..... - 0.026%

Appearance: EUCO-SPEED is a free-flowing powder as packaged. After mixing and placing, the color may initially appear slightly darker than the surrounding concrete. While this color will lighten up substantially as the concrete cures and dries out, the repair may always appear somewhat darker than the surrounding concrete. This product is designed to be finished with a float or broom appearance. A steel trowel finish may be applied, but timing of the final trowel is critical and the contractor may have difficulty achieving a smooth finish over a large area.

#### PACKAGING/YIELD

One 50 lb (22.7 kg) bag of EUCO-SPEED, mixed with .75 gal (2.85 L) of water, will yield approximately 0.4 ft3 (0.011 m³) of mortar. EUCO-SPEED may be extended with up to 25 lb (11.3 kg) of 3/8" (9.5 mm) pea gravel per bag for deeper areas. Yield with pea gravel will increase to approximately 0.56 ft<sup>3</sup> (.016 m<sup>3</sup>) per bag.

#### SHELF LIFE

2 years in original, unopened package

#### SPECIFICATIONS/COMPLIANCES

ASTM C 928: Standard Specification for Packaged, Dry, Rapid-Hardening, Cementitious Materials for Concrete Repairs Canadian Food Inspection Agency, MTQ, MTO

#### COVERAGE

One unit of EUCO-SPEED will cover approximately 9.8 ft2 (0.91 m2) when placed at an average depth of 1/2" (12 mm). When one unit of material is extended with 25 lb (11 kg) of 3/8" (9.5 mm) pea gravel, the mixed material will cover 13.4 ft<sup>2</sup> (1.24 m<sup>2</sup>) when placed at an average depth of 1/2" (12 mm).

#### **DIRECTIONS FOR USE**

**Surface Preparation**: Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 5-7 in accordance with ICRI Guideline 310.2. Properly clean profiled area. **Priming:** Clean and prime exposed steel with DURALPREP A.C. Concrete should be primed with a spray or brush coat of DURALPREP A.C. Allow the DURALPREP A.C. to thoroughly dry prior to mortar application. Alternately, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of EUCO-SPEED. The repair must be made before the scrub coat dries out.

**Mixing**: Single bags may be mixed with a drill and "jiffy" mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 60°F (16°C) to 90°F (32°C). Add the appropriate amount of water, 0.70 - 0.75 gal (2.65 - 2.85 L) per bag, for the batch size and then add the EUCO-SPEED. Mix material for about 2 minutes. The mixed product should be quickly transported to the repair area and placed immediately. If extending, add pea gravel to mix water before adding dry powder.

**Placement**: EUCO-SPEED sets quickly; the time available for placement and finishing will be very limited. For repairs; spread with a trowel, come-a-long, or square tipped shovel to a thickness that matches the surrounding concrete. Float to even out mortar.

**Finishing**: Finish EUCO-SPEED to the desired float or broom finish. Do not add additional water to the surface during the finishing operation; use EUCOBAR evaporation retarder on sunny, hot & windy days.

**Curing and Sealing**: Proper curing procedures are important to ensure the durability and quality of the repair. To prevent surface cracking, cure EUCO-SPEED with a high-solids curing compound, such as SUPER AQUACURE VOX or SUPER DIAMOND CLEAR VOX. In hot, windy or direct sunlight situations, re-wet the surface after the curing compound has dried and cover with polyethylene for a minimum of 3 days. If a curing compound is not desired, wet cure for a minimum of 3 days.

#### **CLEAN-UP**

Clean tools and equipment with water before the material hardens.

## PRECAUTIONS/LIMITATIONS

- If used in cold weather, the repair must be kept from freezing for at least 8 hours.
- Do not apply over frozen concrete.
- Do not place material at temperatures below 40°F (4°C).
- No heavy traffic until the product has reached a minimum of 2,000 psi (14 MPa).
- In all cases, consult the Safety Data Sheet before use.