

EUCO #456S MORTAR

IRON AGGREGATE EPOXY MORTAR SYSTEM

DESCRIPTION

EUCO #456S MORTAR is an epoxy repair material for use where exceptional strength and toughness are needed. It consists of a two component epoxy resin system and a specially processed graded iron aggregate. EUCO #456S MORTAR has excellent adhesion and provides maximum abrasion and impact resistance on floors with extra heavy duty traffic.

PRIMARY APPLICATIONS

- Floor joint repairs and overlays
- New installations to armor floor surfaces
- Floor areas subject to cutting from steel flanges
- High impact and manipulating areas in steel mills
- Patching metallic floors
- Areas needing superior abrasion resistance

FEATURES/BENEFITS

- The most durable topping available for high impact and abrasion conditions
- Fast and economical repair system
- Excellent bonding to most construction materials
- Extremely high early strengths
- Solvent free and VOC compliant - 100% solids

TECHNICAL INFORMATION

Typical Engineering Data The following results were developed under laboratory conditions.

Working time	Temperature
30 min.....	90°F (32°C)
75 min.....	75°F (24°C)
90 min.....	60°F (16°C)

Maximum Continuous Service Temperature
..... 170°F (77°C)

Appearance: EUCO #456S MORTAR will appear as a charcoal gray metallic gray surface when applied over a concrete floor. It is not intended to be used as a decorative overlay.

Compressive Strength	ASTM C 109 2" (50 mm) cubes
1 day.....	12,000 psi (83 MPa)
3 days.....	12,500 psi (86 MPa)
7 days.....	13,000 psi (90 MPa)
14 days.....	13,500 psi (93 MPa)

Bond Strength ASTM C 882 2,200 psi... (15 MPa)

Abrasion Resistance ASTM C 779 Procedure A

	<u>Euco 456S</u>	<u>Plain Concrete</u>
30 minutes: 0.008" (.20 mm)		.048" (1.22 mm)
60 minutes: 0.013" (.33 mm)		.102" (2.59 mm)

PACKAGING/YIELD

EUCO #456S MORTAR is available in .35 ft³ (.01 m³) kit. **Part A (resin):** 0.97 gal (3.7 L), **Part B (hardener):** 0.25 gal (0.95 L), **Part C (aggregate)*:** 53 lb (24 kg) *Eucopoxy S Trowel Grade Iron Aggregate

SHELF LIFE

2 years in original, unopened package.

SPECIFICATIONS/COMPLIANCES

ASTM C 881, Type II & IV, Grade 1 Class B & C

COVERAGE

Thickness	Kit Size 0.35 ft ³ (0.01 m ³)
1/4" (6 mm)	16.8 ft ² (1.6 m ²)
1/2" (13 mm)	8.4 ft ² (0.8 m ²)

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 a minimum depth of 1/8" (3 mm) to achieve a surface profile equal to CSP 6 - 7 in accordance with ICRI Guideline 03732. Properly clean profiled area. **Priming:** Concrete must be primed with a brush coat of EUCO #456 PRIMER/SEALER.



The Euclid Chemical Company

19218 Redwood Rd. • Cleveland, OH 44110
Phone: [216] 531-9222 • Toll-free: [800] 321-7628 • Fax: [216] 531-9596
www.euclidchemical.com

An **RPM** Company



Joints and Edges: Edges should be sawcut to 1/4" (6 mm) more than the overlay thickness and notched at the edge of the overlay to provide a locked edge. Chip the edge with a hand held chipping hammer to provide the wedge shaped notch. Moving joints as in the case of expansion joints should be brought up through the overlay by sawcutting or with the use of a divider strip. All cracks over 1/16" (2 mm) wide should be routed out to a 1/4" (6 mm) width and 1/4" (6 mm) depth prior to application of the mortar.

Mixing: All materials should be in the proper temperature range of 60°F (16°C) to 90°F (32°C). Mix parts A and B (resin & hardener) for 2 minutes using a drill and mixing prop. For ease of mixing, add the Part B to the Part A (not the reverse). The epoxy must be well mixed to ensure proper chemical reaction. Add Part C (iron aggregate). Mix for an additional 2 minutes or until all aggregate pieces are completely covered by the epoxy. For large placements, mix the epoxy separately in a 5 gallon pail then mix the epoxy and aggregate together in a mortar mixer. Place immediately.

Placement: For large overlays, use of vibratory screed is strongly recommended to maximize product density and ultimate performance. Finish by machine trowel. For patching, spread with a trowel, come-a-long, or square tipped shovel to a thickness of about 1/8" (3 mm) higher than the final desired height of the overlay. Compact and finish by hand or machine trowel.

CLEAN-UP

Clean tools and equipment with solvent such as acetone, toluene or MEK. Do not allow the epoxy to harden on equipment.

PRECAUTIONS/LIMITATIONS

- Interior use only.
- Not recommended where floor temperature will exceed 170°F (77°C) on a continual basis.
- Keep at room temperature 60°F to 70°F (16°C to 21°C) 24 hours prior to use for ease of product placement.
- Not suitable for use where the topping will be exposed to acids.
- In all cases, consult the Material Safety Data Sheet before use.

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.