



**LOW SHRINKAGE, FIBER REINFORCED
VERTICAL/OVERHEAD CONCRETE REPAIR MORTAR**

EUCOREPAIR V100

EUCLID CHEMICAL



TYPICAL APPLICATIONS

- Quick repairs to vertical and overhead concrete
- Building façades, parking structures, industrial plants, bridges, precast concrete elements
- Repair of new construction defects

FEATURES AND BENEFITS

- Very low shrinkage
- Microfiber reinforcement controls plastic shrinkage cracking
- Polymer modified for excellent bond strength
- NSF/ANSI 61 certified
- Can be applied from 1/8 inch to 4 inches deep per lift on vertical surfaces (0.3 cm to 10 cm); up to 2 inches (5 cm) per lift overhead
- Single component – just add water
- Fast set and cure times
- Can be shaped

EucoRepair V100 is a single component, fast setting, very low shrinkage mortar for trowel applied vertical and overhead concrete repair. EucoRepair V100 contains microfiber, unique additives and a specialty cementitious blend that optimize the physical properties that fight cracking. The result is a concrete repair material with exceptional engineering properties and unmatched durability. EucoRepair V100 is NSF/ANSI 61 certified for use in water treatment facilities.

THE CRACKING CONCERN

Cracking is the most frequent cause of concrete repair failure, commonly caused by restrained shrinkage cracking. As they dry, concrete repair mortars shrink due to the loss of moisture. Because repair patches are typically restrained by the surrounding concrete, the combination of shrinkage and restraint causes internal stress within the patch. When the stress exceeds the tensile strength of the repair mortar, the mortar can crack.

Cracks in repair mortars can be an immediate structural concern or cause long term damage due to moisture penetration and corrosion of reinforcement.

THE SOLUTION: EUCOREPAIR V100

EucoRepair V100 was formulated to optimize the properties that help prevent shrinkage and cracking. A blend of shrinkage compensating and reducing additives in EucoRepair V100 provides resistance to drying shrinkage, while microfiber provides three dimensional reinforcement and increased tensile strength. This synergistic blend of materials gives EucoRepair V100 the ability to fight the stresses that can cause cracking.

EucoRepair V100 is also polymer modified for strong adhesion, improved elasticity, and resistance to creep. Its low permeability ensures excellent freeze-thaw resistance, and the addition of an integral corrosion inhibitor protects embedded steel against corrosion.

EASY INSTALLATION AND FINISHING

Complementing EucoRepair V100's exceptional engineering properties is an unmatched ease of use. It's a single component, simply proportioned mortar, mixed with exactly one gallon of water, with no guesswork necessary. EucoRepair V100 is quick setting – wait just 20 to 30 minutes between lifts. Its lightweight texture and smooth consistency makes hand application effortless, and it can be shaved and shaped to match the contour of surrounding concrete.



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EUCOREPAIR V100 TYPICAL ENGINEERING PROPERTIES

Compressive Strength	6,000 psi (41 MPa)
Tensile Strength	> 400 psi (3 MPa)
Flexural Strength	> 600 psi (4 MPa)
Bond Strength	> 1,800 psi (12 MPa)
Modulus of Elasticity	2.65 x 10 ⁶ psi (1.8 x 10 ⁴ MPa)
Length Change	-0.020%
Working Time	Approximately 15 minutes
Unit Weight	120 lb/ft ³ (1,922 kg/m ³)
Minimum/Maximum Application Depth	Minimum: 1/8 inch (0.3 cm) Maximum Vertical: 4 inches per lift (10 cm) Maximum Overhead: 2 inches per lift (5 cm)
Mix Ratio	1 gallon of water per 46 lb bag (3.8 L per 21 kg)
Yield	0.45 ft ³ (0.013 m ³) per bag
Recommended Curing	High solids, water based cure & seal or 3 day wet cure

For additional technical information, refer to the *EucoRepair V100 data sheet*

COMPLIMENTARY PRODUCTS

For an exceptional bond to existing concrete and protection of reinforcing steel, use **DURALPREP A.C.** epoxy/cement bonding slurry.

EucoRepair V100 can be cured with **SUPER DIAMOND CLEAR VOX** or any Euclid Chemical high solids, water based cure & seal.

EUCOBAR is a liquid evaporation retarder used to help prevent plastic shrinkage cracks in hot, dry, or windy conditions.

SERVICE AND SUPPORT

The Euclid Chemical Company is unique in our offering of superior products, unparalleled customer service and industry support. The Euclid Chemical team delivers a range of value-added resources and in-depth industry experience to architects, designers, engineers, building contractors and owners. Our experts are highly-trained professionals who are available in local offices across the Americas, and are active members on industry technical committees including American Concrete Institute (ACI), International Concrete Repair Institute (ICRI) and American Society for Testing and Materials (ASTM). Our experienced field team is available to support you and your projects using Euclid Chemical solutions and products manufactured under the stringent standards of our ISO 9001 certified quality system. The Euclid Chemical Company works hand-in-hand with customers:

- Supplying field evaluations, recommendations and application problem solving on a project-by-project basis.
- Assisting in product selection, specification, installation and related technology.
- Attending pre-design meetings, assisting in clarifying specifications, and recommending product selection.
- Supporting you by providing proper pre-installation instructions and methods for achieving quality results.

For more than 100 years, The Euclid Chemical Company has served as a leading supplier to the concrete and masonry industry, offering a full line of engineered concrete admixture and construction products marketed under the EUCO brand name. These products include concrete admixtures, block and masonry additives, curing and sealing compounds, epoxy adhesives, floor and wall coatings, structural grouts for columns, equipment and machinery, joint fillers and repair products. The Euclid Chemical Company strives to bring innovative technologies and products to the concrete market with industry-leading customer service.