RAPID HARDENING CONCRETE REPAIR MORTARS

VERSASPEED Repair Mortars





TYPICAL APPLICATIONS

- Interior and exterior horizontal concrete repairs
- Vertical and overhead formed repairs
- Concrete roadways, parking structures, and bridges
- Floors and columns
- Sloped repairs (Versaspeed RMC is best)

FEATURES AND BENEFITS

- Very rapid setting
- Micro-fiber reinforcement controls plastic shrinkage cracking
- Meet ASTM 928
- Low permeability
- Can be coated within 4 hours
- Contains shrinkage compensation and reduction additives
- Excellent freeze-thaw durability
- Choice of standard or long working time formulas

VERSASPEED 100, VERSASPEED LS 100 and **VERSASPEED RMC** are rapid hardening concrete repair mortars ideal for projects that require a quick turnaround time. Repairs can typically be opened to light traffic within hours after placement and coatings can be applied in several hours. VERSASPEED 100 is the fastest setting formulation. VERSASPEED LS 100 provides a speedy cure with additional working time, making it perfect for elevated temperature applications or when worksite conditions cannot accommodate a rapid setting mortar. VERSASPEED RMC is pre-extended with pea gravel for full depth repairs and still provides that fast turnaround time. It is also perfect for any sloped repairs.

VERSASPEED 100, VERSASPEED LS100 and VERSASPEED RMC are fortified with microfiber to increase tensile strength and help prevent plastic shrinkage cracking, and contain unique pozzolans that improve durability. To further combat shrinkage, VERSASPEED 100, VERSASPEED LS100 and VERSASPEED RMC contain both shrinkage compensating and reducing additives. VERSASPEED 100, VERSASPEED LS100 and VERSASPEED RMC are high performance mortars well-equipped to produce concrete repairs that are not only strong and durable, but also contribute to the success of a project where speed and return to service are paramount.

VERSATILITY AND SPEED COMBINED

Concrete repairs come in all shapes and sizes. VERSASPEED 100, VERSASPEED LS100 and VERSASPEED RMC can accommodate most needs thanks to their wide range of application thickness. Shallow repairs as little as 1/4 inch (0.64 cm) deep and deeper voids up to four inches (10 cm) in depth can be filled with VERSASPEED 100 and VERSASPEED LS100 without extending. Add clean, dry pea gravel to the mix, and patches up to six inches deep (15 cm) can be repaired. Interior or exterior, thin or thick, the versatility of VERSASPEED 100 and VERSASPEED LS100 make these mortars indispensable to a concrete repair contractor. VERSASPEED RMC is pre-extended and can be placed at depths from 1 inch (2.54 cm) to full depth. (no additional pea gravel should be added to VERSASPEED RMC)

Today's schedule-driven projects require quick solutions, especially when repairing concrete that is already in service. VERSASPEED 100 repairs can take light tire traffic in as little as one hour after placement, and full return to service in just two hours. VERSASPEED RMC repairs can take light tire traffic in as little as two hours after placement, and full return to service in just three hours. VERSASPEED LS100, with its longer working time, is light traffic ready in four hours, and after five hours is fully back in service. Coatings can be applied over VERSASPEED 100 just four hours after installation, and after five hours for VERSASPEED LS100 and VERSASPEED RMC.

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EXCEEDING INDUSTRY STANDARDS

VERSASPEED 100, VERSASPEED LS100 and VERSASPEED RMC meet the requirements of ASTM C928, Standard Specification for Rapid-Hardening Cementitious Materials for Concrete Repairs, and are approved for use by many U.S. state Departments of Transportation.

TYPICAL ENGINEERING DATA

PROPERTY	VERSASPEED 100	VERSASPEED LS100	VERSASPEED RMC
Compressive Strength	10,500 psi (72 MPa)	8,000 psi (55 MPa)	9,000 psi (62 MPa)
Slant Shear Bond Strength	2,700 psi (19 MPa)	2,800 psi (19 MPa)	3,000 psi (21 MPa)
Flexural Strength	1,500 psi (10 MPa)	1,100 psi (8 MPa)	1,100 psi (8 MPa)
Length Change	Air cure: -0.042% Water cure: +0.007%	Air cure: - 0.030% Water cure: +0.013%	28 Day Shrinkage: < 0.05%
Splitting Tensile Strength	780 psi (5 MPa)	480 psi (3 MPa)	1,000 psi (7 MPa)
Initial Set Time	10 to 20 minutes	30 to 60 minutes	Approximately 20 minutes
Final Set Time	20 to 40 minutes	60 minutes to 1 hour 40 minutes	Approximately 30 minutes
Unit Weight	141 lb/ft³ (2,259 kg/m³)	141 lb/ft³ (2,259 kg/m³)	141 lb/ft³ (2,259 kg/m³)
Minimum/Maximum Application Depth	Minimum: 0.25 inch (0.6 cm) Maximum: 4 inches (10 cm) neat; 6 inches (15 cm) extended	Minimum: 0.25 inch (0.6 cm) Maximum: 4 inches (10 cm) neat; 6 inches (15 cm) extended	Minimum: 1 inch (2.5 cm) Maximum: Full Depth
Mix Ratio	0.66 gallon of water per 50 lb bag (2.5 L per 23 kg)	0.66 gallon of water per 50 lb bag (2.5 L per 23 kg)	0.64 pints of water per 50 lb bag (2 L per 23 kg)
Yield	0.39 ft ³ (0.01 m ³) unextended Up to 0.52 ft ³ (0.015 m ³) extended	0.39 ft ³ (0.01 m ³) unextended Up to 0.52 ft ³ (0.015 m ³) extended	0.37 ft ³ (0.01 m ³)
Recommended Curing	Curing compound or one day wet cure	Curing compound or one day wet cure	Curing compound or one day wet cure

For additional technical information, refer to the VERSASPEED 100, VERSASPEED LS100 and VERSASPEED RMC data sheets.