DESCRIPTION
MEADOW-CRETE GPS is a one-component, trowel- or pneumatically-applied (wet process), migrating-corrosion-inhibitor enhanced, polymer-modified, shrinkage-compensated, fiber-reinforced, micro-silica enhanced, cementitious repair mortar for horizontal, vertical, and overhead applications.

USES
The product is ideal for patches from 1/4" to deep horizontal, vertical, and overhead repairs and resurfacing of concrete, either small or large areas; interior or exterior application. MEADOW-CRETE GPS is suitable for industrial and civil engineering applications.

FEATURES/BENEFITS
• Fiber reinforced/Increased tensile and flexural strengths.
• Polymer-modified/Enhanced bond.
• Micro-silica enhanced/Low permeability/Protects embedded reinforcing steel.
• Shrinkage compensated/Add dynamic stability.
• Highly engineered/Low rebound.
• Creamy consistency/Easily finished.
• Excellent freeze-thaw resistance/Long term stability.
• Wet spray process/Low in-place cost.
• Migrating-corrosion-inhibitor enhanced/Protects localized and adjacent reinforcing steel.

SHELF LIFE (TYPICAL)
One (1) year when stored on pallets in a dry, cool area.

PACKAGING AND YIELD
Fifty lb. (22.7 kg) bag yields 0.44 ft.³. Yield based on 3.5 quarts (3.30 L) of water per bag and will vary based on substrate profile, aggregate, variations in mix water amounts, and waste/rebound. Field trials should be performed to determine yields based on jobsite conditions.

LEED INFORMATION
May help contribute to LEED credits:
• MR Credit 4.1: Recycled Content: 10%
• MR Credit 4.2: Recycled Content: 20%
• MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally
• MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally

TECHNICAL DATA*
The following physical properties were determined using the maximum water to powder ratio of 3.75 quarts (3.54 L) per bag at 75° F (23.5° C)

Set Time per ASTM C 191
Initial 4 hours
Final 6 hours
Working Time 2 hours
Flow
Per ASTM C 928
56%
Compressive Strength per ASTM C 109³
@1 day 2500 psi (17 MPa)
@7 days 6000 psi (41 MPa)
@28 days 6750 psi (46.5 MPa)
Bond Strength per ASTM C 882¹
@1 day 700 psi (5 MPa)
@28 days 2550 psi (17.5 MPa)
Modulus of Elasticity per ASTM C 469¹
2.44 x 10⁶ psi (16.8 GPa)
Length Change per ASTM C 157¹
Drying Shrinkage -0.083% (830 µstrain)
Flexural Strength per ASTM 348¹
@1 day 675 psi (4.5 MPa)
@28 days 1450 psi (10 MPa)
Freeze-Thaw Resistance per ASTM C 666 (Procedure A)¹
At 300 Cycles 112% RDM³

*All technical data is typical information, but may vary due to testing methods, conditions, and procedures.
¹Independent reports are available upon request.
²Modified – No bonding agent used. Pre-dampening of properly prepared substrate.
³RDM – Relative Dynamic Modulus

For most current data sheet, further LEED information, and MSDS, visit www.wrmeadows.com.
FOR BEST PERFORMANCE

MEADOW-CRETE GPS is recommended for concrete repairs only. Not intended to be used as a self-leveling underlayment or topping; MEADOW-CRETE GPS is designed as a trowel-down repair mortar. Do not apply when concrete surface and air temperatures are below 40°F (4°C), above 90°F (32°C), or when rain is imminent. Protect from freezing for a minimum of 48 hours. Do not bridge moving cracks. Extend existing control and expansion joints through MEADOW-CRETE GPS. For large areas with no control, expansion, or construction joints, refer to ACI guidelines. Do not exceed a length-to-width ratio of 2:1 for the repair area. Do not add any admixtures. Follow ACI 305-R89: Standard on Hot Weather Concreting or ACI 306 R88: Standard on Cold Weather Concreting when applicable. Exceeding liquid requirements will result in reduced physical properties. Realize that set time will decrease as the product, air, substrate, and mixing liquid temperature increases and will increase as the temperature decreases. Repair areas should be saw cut and slightly undercut to a minimum depth of ¼” (6 mm). Do not featheredge. Protect from conditions that may cause early water loss: high winds, low humidity, high temperature, direct sunlight. Early water loss is exaggerated in thin applications. Use of extender aggregate will alter physical properties. Failure to follow industry standard practices may result in decreased material performance. Proper application is the responsibility of the user. Field visits by W. R. MEADOWS personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the jobsite.

SURFACE PREPARATION

Prepare concrete substrate in accordance with ICRI Technical Guideline #310.2-1997: Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays. Also, prepare concrete repair area in accordance with ICRI Technical Guideline 310.1R-2008: Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion.

Mechanically roughen or high pressure water-jet the existing concrete substrate to a minimum concrete surface profile of CSP-6 or higher, depending on substrate condition. Remove all unsound concrete and provide a profiled, porous surface. The substrate must be structurally sound, dust-free, and free of grease, oil, dirt, curing compounds, release agents, or any other surface or penetrated contaminants that will adversely affect bond. Sanding or wire-brushing are not approved surface preparation methods. Saw cut perimeter of repair zone to a depth of 1/4” (6.35 mm). Completely expose all reinforcing steel, ensuring a minimum clearance of ¾” (19.05 mm) behind the reinforcing steel. Substrate must be saturated surface dry (SSD) and free of standing water.

Hand Application … Prime SSD substrate with a slurry coat (two parts MEADOW-CRETE GPS powder to one part water). For enhanced bonding, use ACRY-LOK™ from W. R. MEADOWS instead of water. Allow slurry coat to become tacky prior to application of MEADOW-CRETE GPS.

LIMITED WARRANTY

“W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order.” Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.