

# GUIDE SPECIFICATION FOR MEADOW-PLUG™: ONE-COMPONENT, SUPER FAST SETTING, HYDRAULIC REPAIR MORTAR

SECTION 03 01 30

MAINTENANCE OF CAST-IN-PLACE CONCRETE

Specifier Notes: This guide specification is written according to the Construction Specifications Institute (CSI) format. The section must be carefully reviewed and edited by the architect or engineer to meet the requirements of the project. Coordinate this section with other specification sections and the drawings.

Specifier Notes: W. R. MEADOWS® MEADOW-PLUG is a specially blended, extremely fast setting, hydraulic cement product designed to instantly stop running water or fluid seepage in concrete or masonry structures. This single-component, high strength repair mortar permanently plugs non-moving cracks, joints, and voids.

Once mixed with water to a putty-like consistency; MEADOW-PLUG may be hand-formed to quickly stop active fluid leaks in basements, tunnels, swimming pools, sewers, non-potable water tanks, voids around pipes, and wall tie holes. It seals construction joints between floors and walls. MEADOW-PLUG is versatile enough for either vertical or horizontal applications; below-, above- or on-grade. Its controlled expansion formulation permanently holds the repair in place on exterior, interior, and even underwater installations.

## PART 1 GENERAL

### 1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Application of one-component, hydraulic repair mortar.

### 1.02 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

- A. Section 03 30 00 - Cast-in-Place Concrete.
- B. Section 03 40 00 - Precast Concrete.

### 1.03 REFERENCES

- A. International Concrete Restoration Institute (ICRI) Technical Guidelines No. 03730.
- B. American Society for Testing and Materials (ASTM)
  - 1. ASTM C109 - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2" or [50 mm] Cube Specimens).
  - 2. ASTM C191-01a - Standard Test Method for Time of Setting of Hydraulic Cement by Vicat Needle.

### 1.04 SUBMITTALS

- A. Comply with Section 01 33 00 - Submittal Procedures.
- B. Submit manufacturer's product data and application instructions.

## 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean, dry area, in accordance with manufacturer's instructions.
- C. Protect materials during handling and application to prevent damage or contamination.

## 1.06 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply below 40° F (4° C) or above 90° F (32° C) or when rain is imminent.
- B. Protect from conditions that may cause early water loss: high wind, low humidity, high temperature, direct sunlight.
- C. Protect from freezing for a minimum of 24 hours.

## PART 2 PRODUCTS

### 2.01 MANUFACTURER

- A. W. R. MEADOWS, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax: (847) 683-4544. Website: [www.wrmeadows.com](http://www.wrmeadows.com).

### 2.02 MATERIALS

- A. Performance-Based Specification:
  - 1. Hydraulic Repair Mortar: shall be a one-component, cementitious, very fast-setting restoration/repair mortar and water plug which shall have the following properties as determined by laboratory testing:
    - a. Compressive Strength, ASTM C109: 5.86 MPa (850 psi) @ 15 minutes  
1,225 psi (8.44 MPa) @ 1 hour  
3,000 psi (20.7 MPa) @ 1 day  
6,500 psi (44.8 MPa) @ 28 days
    - b. Set Time, ASTM C191: Initial: 2 minutes  
Final: 3 minutes
- B. Proprietary-Based Specification:
  - 1. MEADOW-PLUG hydraulic repair mortar by W. R. MEADOWS.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Examine surfaces to receive hydraulic repair mortar. Notify engineer if surfaces are not acceptable. Do not begin surface preparation or application until unacceptable conditions have been corrected.

### 3.02 SURFACE PREPARATION

- A. Perform surface preparation in accordance with ICRI Technical Guidelines No. 03730.
- B. Mechanically abrade existing substrate to remove all unsound concrete, but do not use excessive force, which may cause micro-fracturing.
- C. Confirm the substrate is structurally sound and free of any contaminants that will adversely affect bond of mortar.

- D. Cut or notch out the area to a minimum dimension of  $\frac{3}{4}$ " x  $\frac{3}{4}$ " (19.1 mm x 19.1 mm) with the bottom of the notched opening wider than the top.
- E. Pre-soak repair zone prior to application of mortar to a saturated, surface dry (SSD) condition and free of standing water if the repair area is dry at time of application.

### 3.03 APPLICATION

- A. Mix hydraulic repair mortar with enough potable water to form a thick, putty consistency that can be placed in one minute.
- B. Force hydraulic repair mortar directly into prepared area and hold in place, maintaining pressure until material hardens.
- C. Avoid overworking the material.
- D. Shave hydraulic repair mortar just prior to final set to match the profile of the area surrounding the patch.
- E. Wet cure immediately if repairing a dry area for a minimum of 15 minutes or until set is fully achieved.

END OF SECTION