



PLUG-IT

Rapid Setting Hydraulic Cement Mortar

1. Product Description

a. **Basic Use:** Plug-It is a very rapid setting hydraulic cement mortar designed for filling holes and cracks in concrete or masonry. When mixed with water, it sets in 2 to 4 minutes to allow rapid sealing and blockage of running water. The early expansion which occurs as Plug-It sets assures a firm interlock to holes and cracks.

b. **Features/Benefits:**

- Easy to use requiring only the addition of water.
- Sets very rapidly for quick repairs.
- Early expansion assures a firm, bonded plug.
- Excellent strengths and durability.
- Requires no forming or special tools.
- Hardens under water.

c. **Typical Applications:** Cracked walls, seams, joints, holes, cracked mortar joints, basements, man-holes, sewers, handrails, non-structural anchor bolts.

d. **Limitations:** Plug-It sets very quickly. Do not mix more than can be handled in 2 minutes. Do not use as a structural repair material. Use Vertipave for such applications.

e. **Composition:** Plug-It is a blend of fine aggregate, rapid-setting hydraulic cement, specialty chemicals, and expansive components.

f. **Color/Appearance:** Slightly darker than most concrete.

2. Packaging

Plug-It is available in 60-lb. (27.2 Kg) pails and 10-lb. (4.5 Kg) tubs.

3. Estimating/Yield

<i>Unit Size</i>	<i>Yield</i>	<i>Length of Slot 3/4" x 3/4" (20 mm x 20 mm)</i>
<i>60-lb. (27.2 Kg) pail</i>	<i>0.60 cu. ft. (0.017 cu. m)</i>	<i>150 ft. (46 m)</i>
<i>10-lb. (4.5Kg) tub</i>	<i>0.10 cu. ft. (0.003 cu. m)</i>	<i>25 ft. (7.6 m)</i>

4. Technical Data

a. **Compressive Strength:** ASTM C 109, 2 in. (50 mm) cubes at 72°F (22°C).

<i>Age</i>	<i>Strength</i>
<i>1 hour</i>	<i>500 psi (3.4 MPa)</i>
<i>1 day</i>	<i>2,000 psi (14 MPa)</i>
<i>7 days</i>	<i>3,000 psi (21 MPa)</i>
<i>28 days</i>	<i>3,500 psi (24 MPa)</i>

b. **Bond Strength:** ASTM C 1042; 28 days, 800 psi, (5.5 MPa).

c. **Final Set Time:** ASTM C 191; 2 minutes.

5. Directions for Use

a. **Preparation:** Concrete and masonry surfaces must be clean and sound. Chip or chisel damaged or unsound concrete back to good material. Cracks and joints should be opened to a 3/4" (20 mm) opening at the surface. Holes, joints or cracks under hydrostatic pressure should be chiseled to give an inverted "V" shape wherever possible. Cracks with running water may be drilled out at the bottom to relieve as much pressure as possible and make plugging easier. Holes for handrails or bolts should be clean and textured.

b. **Bonding:** Surfaces should be damp. Pre-wet if not already wet. No separate bonding agent is required.

c. **Mixing:** Mix small quantities at a time to allow adequate handling. Use 40 oz. (1.2 liter) of water for each 10 lbs. (4.5 Kg) of Plug-It. Minor adjustments can be made to get desired consistency. Mix by hand or with a mechanical mixer.

d. **Placement:**

- **Joints and Cracks:** Tool Plug-It into opening and be sure to get good compaction. Finish to a smooth surface or brush texture.
- **Running Water:** Mix Plug-It to a stiff, putty-like consistency. Make a ball or patty in the hand and force into crack or hole. Keep pressure on the area until the Plug-It sets hard, usually less than 5 minutes. On vertical cracks, work from the top down.
- **Grouting:** Mix to a pourable consistency and place into handrail blockout or anchor bolt hole.

e. **Curing:** Normally, curing is not required. When used in extremely dry or low humidity situations, cover with wet rags for 4 to 6 hours.

f. **Maintenance:** Inspect repairs where running water was stopped regularly for leakage. Re-mortar any isolated leaks should they occur.

6. Availability

Plug-It is normally available immediately from your local distributor or it will be shipped within 5 working days upon receipt of order. Please contact your local Metalcrete representative or call Metalcrete directly for more information.

7. Warranty

Plug-It is manufactured in strict accordance with the quality control standards of Metalcrete Industries. It is guaranteed to perform as indicated on this data sheet when applied by competent applicators.

8. Technical Service

Metalcrete technical service representatives are available to provide on-site assistance with a minimum three day notice.



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