

PLUG-IC

Fast Setting Crystalline Cementitious Waterstop & Repair Mortar

CSI Div. 07

03 01 30 Maintenance of Cast-in-Place Concrete

LEED Points

MR Credit 5.1, Regional Materials:.....Up to 2 Points
 IEQ Credit 4.2, Low-Emitting Materials, Paints and Coatings:.....1 Point.
 Using this AQUAFIN product can help contribute to LEED certification of projects in the categories shown above.

Product Description:

AQUAFIN's PLUG-IC is a 1-component, cementitious non-shrink, hydraulic cement, enhanced with Aquafin's crystalline waterproofing technology. It withstands strong hydrostatic pressure, is breathable, has no odor, no fumes & is non flammable.

Typical Applications:

Applied against the water pressure to substrates such as concrete and masonry, interior, exterior, below and above grade, vertical or horizontal.

- Plugging / stopping / repairing water leaks
- Drying of wet areas, sealing leaky joints, cracks or formtie holes
- Repairing of concrete substrates before application of Aquafin coating materials.

Advantages:

- Stops water leaks in two to four minutes at 68°F (20°C)
- Water stopper and structural repair mortar
- Approved/certified for use in contact with potable water
- Excellent bond to concrete and masonry
- Easy application - No odor - No fumes.

Mixing:

Approximate mixing ratio by volume: 1 part water to 4 parts powder (1:4)

- Mix swiftly to a stiff putty like consistency. Mixing time is about 30 - 60 seconds.
- Do not mix more than can be used in 2 minutes. Set time is dependent mainly on the amount of mixing water used and temperature of water.
- In cold weather, use lukewarm or heated water. In higher temperatures, use cold water.
- Fast repairs to concrete: Add water to PLUG-IC to a workable trowel consistency.

Installation:

NOTE: max. thickness 2" (50 mm) when in contact with potable water.

Active Water Leaks – Leaking Construction Joints & Cracks:

1. Locate leakage in the concrete.
2. Start at the highest point and work down.
3. Cut/rout out the active leak to sound substrate or 1" - 2" (25 - 50 mm) depth and 1" (25 mm) width in a U-shaped configuration.
4. Clean the cavity with a sponge, air blower, vacuum, or other suitable means.
5. Mix PLUG-IC as per mixing instructions.

| Physical and Technical Data | |
|--|--|
| Aggregate State: | Powder |
| Color: | Gray |
| Bulk Density: | ~75 lbs/ft ³ (~1.2 kg/dm ³) |
| pH - Value: | 11 - 13.5 |
| VOC Content: | 0 g/L |
| Compressive Strength: ASTM C-109 | 24 Hrs: 2800 psi (19 MPa) 7 Days: 3200 psi (22 Mpa) 28 Days: 3850 psi (26 MPa) |
| Flexural Strength: ASTM C-348 | 24 Hrs: 320 psi (2.2 MPa) 7 Days: 360 psi (2.5 Mpa) 28 Days: 430 psi (3.0 MPa) |
| Initial set: | Approx. 2 minutes |
| Final set: | 4 minutes at 68°F (20°C) |
| All data are averages of several tests under laboratory conditions. In practice, climatic variations such as temperature and humidity may affect these values. | |
| Packaging & Yield: 50 lb (22.7 kg) plastic pails. • 50 lb (22.7 kg) pail yields ~0.5 ft ³ (0.017 m ³). • 1 lb (0.45 kg) fills a cavity of ~1" x 1" x 24" (25 x 25 x 600 mm). | |
| Storage and Shelf Life: 12 months when stored dry in the original, unopened packaging. | |

6. WAIT UNTIL THE PLUG-IC BEGINS TO STIFFEN AND BECOMES WARM (~1 min.).
7. Place PLUG-IC into the cavity using gloved hands or a brick jointer and hold firmly in place until it has set (hard).
8. When PLUG-IC has set apply surface Aquafin waterproofing (i.e. AQUAFIN-IC, AQUAFIN-1K, MORTAR-1N, MORTAR-40 CI, etc.) over concrete, CMU or brick surface.

Active Water Leaks – Plugging with a drain:

1. Follow steps 1. to 3. above.
2. Insert a pressure relieving drain (i.e. 3/8" - 1/2" (10 - 12 mm) clear plastic pipe) into the cavity at the lowest point to force water through it.
3. Mix PLUG-IC as per mixing instructions.
4. WAIT UNTIL THE PLUG-IC BEGINS TO STIFFEN AND BECOMES WARM (~1 min.).
5. Immediately mold PLUG-IC into the cavity around the drain, and maintain pressure on PLUG-IC for at least 1 minute.
6. Allow minimum 24 hrs for hardening.
7. Carefully remove the drain pipe and plug the remaining hole as described above. If necessary, insert steel wool or wooden plug to reduce water flow.
8. In extreme cases it may be necessary to use more than one plug or drain pipe. When the PLUG-IC has set apply surface waterproofing as described above.

Patching – Surface repair

PLUG-IC

1. Apply PLUG-IC in trowel consistency by gloved hand or by trowel to the areas to be repaired.

Clean up:

Before material hardens, thoroughly clean tools with water after use.

Note:

Installer is responsible for proper product application. Site visits by Aquafin personnel or representatives are solely for the purpose of making technical recommendations, not for providing supervision or quality control.

Safety:

Refer to SDS. This product contains portland cement and sand (crystalline silica) and is highly alkaline (irritant) in contact with water. Avoid breathing dust. May cause delayed lung injury (silicosis). Use rubber gloves and goggles during mixing and application. Protect skin and eyes. After contact with skin, wash with plenty of water. In case of eye contact, rinse immediately with plenty of cool water and seek medical advice.

KEEP OUT OF REACH OF CHILDREN.

LIMITED WARRANTY: AQUAFIN, INC. warrants this product for a period of one year from the date of installation to be manufactured free of defects and to be consistent with its technical properties as stated in our current Technical Data Sheet. This product must be used as directed and within its stated shelf life. AQUAFIN INC. will replace or at our discretion refund the purchase price of any product, excluding cost of labor, which is proven to be defective. Our product recommendations are based on industry standards and testing procedures. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. We assume no warranties written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase. **For Professional Use Only.**

