



# Anchoring Cement

## Pourable Anchoring Cement

### DESCRIPTION

**Anchoring Cement** is a blend of specialty cements, admixtures and proprietary aggregates. **Anchoring Cement** is designed with expansive compounds to reach final set in 20 minutes. As it sets, **Anchoring Cement** uses the expansive compounds to lock in bolts, posts, railings and other fixtures. **Anchoring Cement** is non-corrosive and non-rusting.

### USES

**Anchoring Cement** is ideal for a wide variety of applications that include:

- Anchoring of wood or metal sign posts, fence posts, parking meters, dowels and rods
- Setting appliances, machinery, processing equipment and conveyors
- Bridge railings and other fixtures in concrete and masonry

### BENEFITS

- Will not deteriorate with exposure to water
- Longevity: Resists freeze/thaw cycles
- Performance: Expands to lock into place
- Consistent: Strict Quality Control testing and standards

### SURFACE PREPARATION

All surfaces in contact with **Anchoring Cement** shall be free of dirt, oil, grease, laitance and other contaminants that may act as bondbreakers. All unsound concrete should be removed to ensure a good bond. The hole to receive **Anchoring Cement** must be cored in sound concrete. The recommended hole diameter is 3 1/4 times the bolt diameter. Always allow sufficient hole diameter so the material will flow readily between the fixture and the wall of the cavity. Blow or vacuum out all loose particles and dust. ACI recommends that the area to be grouted be saturated for 24 hours before placement. Remove any standing water prior to placement. Surface should be saturated, surface dry (SSD).

### MIXING

Mix using a heavy duty 1/2" (15 mm) (or larger) low-speed, corded drill and mixing paddle #6 per ICRI Technical Guideline 320.5. Pre-wet mixer and empty excess water. Place 3/4 of the required 4.5 quarts of cool, clean potable water in mixer, then add dry material. Mix on low RPM for a total of 3 to 5 minutes, adding the remaining water until a homogeneous mixture is achieved. For vertical applications, mix with just enough water for a puttylike consistency. Mix only enough material that can be placed within working time. Do not blend excess water as this will cause bleeding and segregation. Do not use any other admixtures or additives.

### PLACING

When mixed to a fluid consistency, it is necessary to seal any openings where **Anchoring Cement** may escape. Pour a small amount of **Anchoring Cement** into the hole and work the bolt up and down a few times to eliminate any air pockets. Fill the balance of the hole pouring from one side only to ensure an

### PLACING (continued)

even flow. Fixture should be supported until **Anchoring Cement** reaches final set. Once the work has begun, continue without interruption so the entire area to be grouted is completely filled before **Anchoring Cement** begins to set.

### FINISHING & CURING

Follow standard ACI curing practices. Exposed surfaces should be cured with a membrane forming curing compound such as **US SPEC Maxcure Resin Clear**, **US SPEC Hydrasheen** or **US SPEC Hydrasheen 30%**.

### STORAGE

Normal cement storage and handling practices should be observed. Store in an interior, cool, dry place. Shelf life is one year in original, unopened container.

### LIMITATIONS

In addition to limitations already mentioned, please note the following. Do not apply when the surface or ambient temperature is below 40°F (4°C) or expected to fall below 40°F (4°C) within 48 hours. Do not use as a patching or overlay mortar or in unconfined areas. Setting time will speed up in hot weather and slow in cold weather. For hot and cold weather applications, contact your US SPEC manufacturer's representative.

**Packaging: 50 lb (22.7 kg) pail, 36 pails per pallet**



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### PHYSICAL PROPERTIES

All Physical Property testing performed in laboratory conditions of 73.5 ± 3.5°F (23 ± 2°C) and a relative humidity no less than 50% unless otherwise determined by the test method or specification. All results represent **Anchoring Cement** with 4.5 quarts water unless listed otherwise. Tests are conducted under standardized conditions for comparative purposes, and results may not be representative of performance under field conditions.

| Property and Test Method                 | Results                  |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| <b>Compressive Strength</b><br>ASTM C109 | <b>1 Day</b>             | <b>3 Days</b>            | <b>7 Days</b>            | <b>28 Days</b>           |
|  | 2,300 psi<br>(15.85 MPa) | 3,000 psi<br>(20.68 MPa) | 4,000 psi<br>(27.57 MPa) | 5,000 psi<br>(34.47 MPa) |
| <b>Rate of Set</b><br>ASTM C266          | <b>Working Time</b>      | <b>Initial</b>           | <b>Final</b>             |                          |
|  | :10                      | :15                      | :20                      |                          |
| <b>Pull-Out Strength</b><br>ASTM E488*   | <b>Age</b>               | <b>Tensile Strength</b>  |                          |                          |
|  | 28 Days                  | 21,672 lbs (3,180 psi)   |                          |                          |

\*Average of five tests. 4,000 psi concrete using #4 (1/2") Grade 60 rebar embedded 8" in 2" diameter core-drilled SSD holes. Rebar failed before Anchoring Cement.

### DANGER

This product contains Crystalline Silica (CAS# 14808-60-7) and Portland Cement (CAS# 65997-15-1). Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust.



**WARNING:** Cancer and Reproductive Harm -

[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### FIRST AID

If swallowed: Immediately call a poison center/doctor. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

### MANUFACTURER/TECHNICAL SERVICE

Contact your US SPEC manufacturer's representative for the most current product information. Always read and follow the warnings and instructions on the most current technical data sheets, available online at [www.usspec.com](http://www.usspec.com).

US MIX Co.  
112 South Santa Fe Drive  
Denver, CO 80223  
Tel: 303.778.7227 Fax: 303.722.8426  
Web Site: [www.usspec.com](http://www.usspec.com)

**NOTICE OF LIMITED WARRANTY** US MIX Co. (manufacturer) warrants to buyer that this product at the time and place of shipment is of good quality and conforms to the manufacturer's specifications in force on the date of manufacture when used in accordance with the instructions hereon. Manufacturer cannot warrant or guarantee any particular method of use, application or performance of the product under any particular condition. This limited warranty cannot be extended or amended by manufacturer's sales people, distributors or representatives or by any sales information, specifications of anyone other than the manufacturer. Liability under this warranty is expressly limited to refund of the purchase price. See product packaging for complete limitation of warranties and liability.

**Yield: 50 lb (22.7 kg) will fill approximately 14 in<sup>3</sup> when 4.5 quarts mixing water is used.**