



ChemMasters

P.A.C.

POURABLE ANCHORING CEMENT

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

P.A.C. is a very rapid setting, cementitious mortar. It is compounded to withstand continual exposure to water and the elements. P.A.C. is a non shrink product which bonds well to develop exceptional pull out strengths. P.A.C. may be used at a pourable consistency for easy field use or mixed to a mortar consistency for damp packing precast members or performing minor repairs on non-traffic bearing surfaces.

USES

- Anchoring bolts, dowels, reinforcing rods, handrails, posts, hooks
- Grouting precast floors and walls
- Filling cracks or voids in concrete or masonry
- Interior or exterior, horizontal or vertical placements

ADVANTAGES

- Sets in 15 minutes at 70°F (21°C)
- Not affected by continual exposure to water
- Shrinkage compensating formulation
- Excellent bond and compressive strength
- Premixed, ready to use, addition of admixtures or aggregates unnecessary
- Free of chloride ions or other components known to cause oxidation and deterioration of base concrete or metal
- Pourable for ease of placement in intricate voids or deep placements

PACKAGING AND YIELD

P.A.C. is packaged in 50 pound (22.7 Kg) pails, shipped 36 per pallet or in 10 pound (4.5 Kg) cans, packed 4 per case.

Yield per 10 lb. (4.5 Kg) can is 140 cubic inches (2,300 cm³)

Yield per 50 lb. (22.7 Kg) pail is 0.40 Ft.³ (0.011 M³)

TECHNICAL DATA

Bond Strength in Lbs.(Kg)

Test	Total Load	Failure Mode
1	11,140 (5,046)	Bolt Failed
2	9,860 (4,466)	Bolt Failed
3	10,590 (4,797)	Bolt Failed

PROCEDURE: Three 1/2 inch (1.3 cm) bolts were set into holes with the bolt head down and firmly set against washers. The bolts were centered and fixed in a rigid upright position. The holes were then filled with P.A.C. The specimens were allowed to cure at room temperature for 14 days prior to testing. The bond test was performed by fixing the test block and applying a direct tensile load on the bolt. In all three tests the bolt failed, leaving the P.A.C. intact.

Compressive Strength	psi	MPa
4 hours	3,300	23
1 day	4,250	29
3 days	5,100	35
7 days	6,200	43
14 days	7,000	48
28 days	7,500	52

DIRECTIONS

MIXING: P.A.C. sets rapidly. Do not mix more than can be placed within 5 minutes of adding water. P.A.C. is packaged ready to use. Do not extend by adding sand, cement or aggregate. Do not add any type of admixture or attempt to retemper mixed material.

P.A.C. may be used at either a pourable or mortar consistency. Add 9 pints (4.3 liters) of clean, room temperature water per bag for a pourable consistency and 7.5-8 pints (3.5-3.8 liters) for a trowelable mortar. Do not over mix as P.A.C. will begin to take initial set rapidly.

General Placement Procedures: To insure adequate pull out strengths, roughen inside surface of hole with a star drill or wire brush and/or enlarge top and bottom of hole diameter. Clean hole of all dust and dirt using oil free compressed air. Saturate drilled hole with clean potable water, removing any puddles or free standing water prior to placement of P.A.C.



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Revised Apr 2002

ANCHORING: Drill hole in concrete 1/4 to 1/2 inch (0.64-1.3 cm) larger than bolt or bolt head diameter. For bolts less than 3/8 inch (0.95 cm), a washer should be placed on bolt resting on bolt head in bottom of hole. If concrete is of questionable strength, or less than 3,000 psi, increase the hole depth to 3-5 times the length of the bolt.

FLOORS AND GROUND: Pour a little P.A.C. of batter consistency into the hole. Slowly work the bolt up and down a few times to eliminate air pockets. Fill remainder of hole, pouring from one side only. Hold mixing container high enough to create positive pressure as P.A.C. flows into hole. Fill slightly above the surface. Brace bolt to hold in place until P.A.C. stiffens. Trim and smooth around bolt.

WALLS AND CEILINGS: Use P.A.C. at mortar consistency and pack or tamp into the hole using a rod or bolt. P.A.C. will set hard in 15 minutes and gains strength as it cures. Allow 60 - 90 minutes, at normal temperature before tightening nut. Allow more time in colder weather and for heavy machinery and large installations.

REPAIRS: Surface to be repaired must be clean and free of all oil, grease, asphalt, curing or sealing compounds, dirt dust or other contaminants that might inhibit bond.

Enlarge cracks or holes to a minimum 3/4 inch (0.95 cm) width and depth. Remove unsound concrete or loose particles. Cut edges at right angle to surrounding surface, or under cut if possible. Do not "V" cut. All reinforcing steel must be cleaned to bright metal and coated with epoxy to prevent further oxidation. Saturate prepared surface with clean, potable water, removing any puddles or free standing water prior to placement of mortar.

Carefully tamp and compact mortar under reinforcing steel, into corners and around edges, filling voids and eliminating air pockets. Smooth with trowel and finish to match surrounding surface texture. P.A.C. sets rapidly. If a slower setting mortar is desirable, contact ChemMasters for recommendations.

CURING: P.A.C. generates considerable heat when used in quantity and continues to gain strength if damp. For optimum curing, keep repaired area damp by sprinkling with hose or covering with wet burlap for a minimum of 1 hour following finishing operations. Area may be opened to light duty service following curing period. During cold weather or when using P.A.C. to set anchors on heavy

machinery and equipment, allow a minimum of 4 hours before opening for service or further procedures.

LIMITATIONS

- P.A.C. hardens in 15 minutes. Prepare only enough for immediate use and wash tools and equipment quickly.
- Do not use in place of nonshrink grout under machine baseplates or columns
- Above Normal Temperatures: At temperatures above 80°F (27°C.), cool part to be anchored, surface and/or hole with cool, potable water.
- Below Normal Temperatures: Do not apply below 40°F (4°C.) or to a frozen surface. Frost must be removed by heating. In cold weather, heat hole and part to be anchored before using P.A.C. During 50-60°F (10-16°C) weather keep material warm and use luke-warm water to speed set.
- Due to the amount of heat generated, P.A.C. is not recommended for large repairs or thick buildups.

STORAGE

Store unopened pails on pallets under cover, out of direct sun, heat or moisture. Shelf life of properly stored material is one year from date of manufacture.

CAUTIONS

May cause eye and respiratory tract irritation. Over exposure may cause skin irritation. Do not take internally. Keep out of reach of children.

This Product is Formulated and Labeled for Industrial and Commercial Use Only

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT

We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.