



**Manufacturers of  
Professional Grade Cement &  
Construction Products Since 1967**

7/01-1

# PERMA PATCHING CEMENT

## FAST SETTING, CEMENTITIOUS PATCHING MORTAR

### DESCRIPTION:

**PERMA PATCHING CEMENT** is a fast setting, cementitious patching mortar designed to repair horizontal, vertical and overhead concrete and masonry surfaces. **PERMA PATCHING CEMENT** has a working time of 10 to 20 minutes when mixed with water at 70° F (21° C).

### USES AND APPLICATIONS:

- Restoring disintegrated concrete or masonry surfaces
- All vertical or overhead surfaces
- Spalling repairs at reinforcing bars
- Repairing damaged concrete pile, curbs, steps or other pre-cast concrete materials.

### ADVANTAGES:

- Fast-setting and high early strengths
- Superior bond and adhesion properties
- Excellent freeze/thaw resistance
- Compatible with the coefficient of thermal expansion of concrete
- Contains no gypsum or chloride compounds

### SURFACE PREPARATION:

All surfaces must be clean and sound before placing **PERMA PATCHING CEMENT**. Remove all spalling or unsound concrete from the patch area by use of chisel or air hammer. Any bond inhibitors such as oil or grease should be removed in a like manner. It is recommended to saw cut all edges to accommodate repairs. Dampen the area to be patched with clean water. The substrate should be saturated surface dry (SSD). Place material and finish to match surrounding surfaces. No priming is required.

### MIXING:

**PERMA PATCHING CEMENT** maybe mixed by manual or mechanical means.

**MANUAL MIXING:** Mix in original container or use various size buckets and a margin trowel. Remove the cement from the pail. Add water to the pail and then add the **PERMA PATCHING CEMENT**. Mix until a putty or trowel consistency is achieved using 5 to 6 quarts of potable water.

**MECHANICAL MIXING:** Mix in a 5 gallons pail using a heavy duty slow speed drill (400-600 rpm) with a mixing paddle.

Pour water into the mixing container and then add the **PERMA PATCHING CEMENT**. Mix until a uniform, no slump consistency is obtained. Do not over mix! 2 minutes is all that is required. Only mix that which can be placed in 12 minutes.

**NOTE: PERMA WELD** may be used as the mixing liquid if enhanced properties are required.

### POT LIFE:

**PERMA PATCHING CEMENT** has a pot life of 10 to 20 minutes at 70°F (21° C). Cold water 40° F (4° C) will retard the set time and hot water 90 °F (32° C) will accelerate the set time.

### CURING:

**PERMA PATCHING CEMENT** will reach its final set in 10 to 20 minutes at 70F (21 C). Under normal conditions, no special curing is required. However, under high temperature, low humidity or strong winds, the patch must be protected from rapid drying. Use a liquid curing compound, wet burlap or polyethylene sheeting is recommended.

### YIELD:

**PERMA PATCHING CEMENT** will yield approximately 0.4 cu.ft. (0.01 cu.m) per 50 lb. Pail.

### RECOMMENDATIONS:

Apply only to a clean, sound properly prepared substrate. Minimum ambient and surface temperatures should be 45 F (7 C) at the time of application and not drop below that level for a minimum of 4 hours.

Use clean water when mixing **PERMA PATCHING CEMENT**

Do not apply to a frozen surface

Do not re-temper

Do not mix more material than can be placed in 12 minutes

### APPLICATION:

The surface should be damp (SSD) and the PERMA PATCHING CEMENT should be placed immediately after mixing. The PERMA PATCHING CEMENT should be forced into the area to be patched to insure a good mechanical bond. Next, continue to fill the patch area to above the level of the existing concrete. The mortar should be allowed to stiffen slightly and then shaved to flush with the surrounding substrate. Finish work maybe done with a steel, wood or sponge float.

NOTE: The maximum depth of a lift of PERMA PATCHING CEMENT must not exceed 1" (2.5cm). When repair work exceeds 1" (2.5cm) the mix may be extended with 3/8" (9.5mm) to 1/2" (13mm) coarse aggregate to extend the lift to 2" (5cm). After mixing, add up to 25 lbs. of aggregate to each 50 lb. Unit of PERMA PATCHING CEMENT. Mix for one minute. After placing the first lift, score the surface to provide sufficient mechanical grab for the next lift.

### STORAGE CONDITIONS:

Store PERMA PATCHING CEMENT at or above 45° F (7° C) in a dry area. Avoid excessive heat or humidity.

### COLOR:

Concrete gray when cured.

### SHELF LIFE:

When stored in original, un-opened container, one year. Rotate your stock.

### PRECAUTIONS:

- Dispose of waste materials in accordance with Federal, State and local regulations.
- The use of a dust mask, safety goggles and rubber gloves are recommended.
- **CAUTION:** Contains Portland Cement, which is highly caustic.
- Contains Free Silica. Do not breath the dust as inhalation may cause delayed lung injury (silicosis) and is a carcinogen.
- In case of eye contact, flush with water. Wash skin with soap and water if contact occurs. Consult a Physician
- Use only with adequate ventilation
- Keep out of reach of children

### TECHNICAL DATA:

#### **Compressive Strength (ASTM C 109)**

1 day	2,800 psi
7 days	4,000 psi
28 days	5,500 psi

#### **Tensile Strength (ASTM C 190)**

1 day	300 psi
7 days	500 psi
28 days	600 psi

#### **Flexural Strength (ASTM C 348)**

1 day	600 psi
7 days	800 psi
28 days	900 psi

### GENERAL INFORMATION:

Please contact CGM, Inc. at any of the following numbers for customer service or technical assistance:

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### WARRANTY:

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