

## 4.3.3 RM 800 PC Cement Repair Mortar

# Listings, Approvals & Testing Standards

ASTM C 928

# 4.3.3.2 Material Specifications

#### **Working Time**

15 mins at 75°F (24°C)

### Set Time (ASTM C 266)

Initial (Hrs:Min): 0:20 Final (Hrs:Min): 0:30

### Flexural Strength

(ASTM C 348) 28 Days

900 psi

## Compressive Strength (ASTM C 109)

 3 hrs
 3000 psi

 1 day
 6000 psi

 28 days
 8000 psi

## Percentage Length Change (ASTM C 157)

Air-cured..... -0.082% Moist-cured ..... +0.031%

## Resistance to deicing salts (ASTM C 672)

(10% Calcium Chloride Solution) 25 cycles - 1 Rating

## Water Absorption (ASTM C 642) 9.8%

Freeze-Thaw Resistance, 3000 cycles

(ASTM C 666, Procedure A) 88% Dynamic modulus

### Flow, 5 min (ASTM C 109)

142%

Color

Concrete gray

## Splitting Tensile Strength (ASTM C 496)

## 4.3.3.1 Product Description

RM 800 PC is a fast setting concrete patching material which exhibits high early strength. RM 800 PC is a self-bonding patching compound blended with special cements and additives. No bonding agents are required. RM 800 PC can accept vehicular traffic in three hours and meets the requirements of ASTM C 928 for packaged, dry, rapid-hardening cementitious materials for concrete repairs.

#### **Product Features**

- DOT approved (Tennessee & Mississippi)
- Self-bonding, requires no bonding agents or primers
- · Minimizes downtime
- Pre-blended; just add water
- Suitable for vehicular traffic in 3 hours at 70°F (21°C)
- Initial set time 20 minutes, final set time 30 minutes

### 4.3.3.3 Installation Data

#### **Basic Use**

RM 800 PC is suitable for repair of damaged concrete on parking structures, airport runways, warehouse floors and loading docks. It can also be used for setting posts, railing and parking meters.

#### Coverage

One 50 lb (22.7 kg) bucket yields  $0.42 \, \mathrm{ft^3}$  (0.011 m³) and covers approximately 10 ft² when applied 1/2" (13 mm) thick.

#### Limitations

RM 800 PC is designed for use on horizontal surfaces in thicknesses from 1/2" to 8".

#### 4.3.3.4 Installation Instructions

#### **Surface Preparation**

The damaged area should be prepared by back-cutting, or sawing of a vertical edge. This preparation should be performed in a manner which prevents damage to the surrounding concrete. Provide a minimum depth of 1/2". Loose scale or dust must be removed using compressed air or water blasting, leaving only clean, sound concrete. The area to be repaired should be saturated with water, but there should be no puddles present.

#### **Mixing**

- Do Not add excessive amounts of water
- Do Not mix more than can be used in 10 minutes
- Up to 1 lb of cement colorant may be added to color patch

Working time is approximately 10 minutes at 75°F (24°C), and becomes shorter as the temperature increases. Do Not mix more product than you can place in 10 minutes. Clean mixer or mixing paddle with water between mixes and after last mix, to avoid build-up of product.



## RM 800 PC Cement Repair Mortar 4.3.3

#### **Application**

Air, mix and substrate temperatures should be between 45°F (7°C) and 90°F (32°C) during repair and for 24 hours afterward. Place RM 800 PC in the area to be repaired, filling flush with surrounding concrete, and consolidate during placement by

rodding. Surface is ready for brooming or texturing in 20 to 30 minutes.

 Do Not use in vertical or overhead surfaces

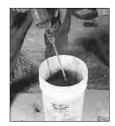
#### Storage Life

One year from date of manufacture, in original, unopened container.

### **Installation Instructions**



- Score concrete around damaged area at a slight backward angle to a minimum depth of 1/2" using Hilti Dry Diamond Blade.
- 2. Expose fresh concrete surface and chip out edges to a depth of 1/2" using a Hitti Combihammer (Hitti TE 56 suggested) and chisel or bushing head. Remove dust and debris with vacuum or compressed air.



3 Saturate prepared area with water. Add 2 quarts of potable water to an empty 5 gallon pail. Slowly add powdered RM 800PC and mix using a drill (or equivalent) and a mixing paddle (sold below) until free of lumps. Add an additional quart of water, alternating with remaining powder, until entire contents have thoroughly blended.



 After removing excess water from prepared area, use a trowel to place mortar and push into all corners and edges.



Finish patch with trowel. Protect patch from traffic until cured.

#### Maintenance

RM 800 PC may be cleaned with most floor cleaning detergents. Aggressive solvents should be avoided.

CAUTION: Contains Silicon
Dioxide, Portland Cement and
Calcium Hydroxide.
Your skin may be sensitive
to cement. Wearing rubber gloves
is recommended. Avoid contact
with eyes or prolonged contact
with skin. In case of contact, flush
thoroughly with water.
For eyes, flush with clean water
for at least 15 minutes and get
prompt medical attention.
Keep out of reach
of children.

#### **Estimating Formula\***

Number of Units Required =  $(L \cdot W \cdot (D_{avg} / 12)) / Y_{prod}$ 

L = length of void in feet
W = width of void in feet
D<sub>avg</sub> = avg. depth of void in inches
Y<sub>prod</sub> = Yield for product

# Estimated Yield for Repair Mortars & Grout (Y<sub>prod</sub>) in ft<sup>3</sup>

Product Y<sub>prod</sub> RM 800 PC 0.420

Numbers are approximate and assume no waste.

## 4.3.3.5 Ordering Information

RM 800 PC is packaged in convenient, reclosable plastic pails, containing 50 lb (22.7 kg) of product.

#### Description

#### RM 800 PC 50 lb pail

Stainless Steel Paddle Mixer smooth shank specially designed for mortar repair. Use with Jacob's style chuck.



