



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

7/01-1

# PRO HIGHWAY PATCH

## RAPID SET, HIGH STRENGTH, EXCELLENT BOND

### DESCRIPTION:

**PRO HIGHWAY PATCH** is a cement based, rapid setting, high strength road patching mortar which will allow traffic to resume within two hours.

### USES AND APPLICATIONS:

- Patching concrete highways and expressways
- Patching concrete bridge decks and ramps
- Patching airport runways and taxi areas
- Patching concrete parking garages and lots

### ADVANTAGES:

1. High early compressive strength
2. Excellent impact resistance
3. Open to traffic in 2 hours
4. Freeze/thaw resistant
5. Compatible with the coefficient of thermal expansion for concrete
6. Excellent bond strength
7. Requires water only

### SURFACE PREPARATION:

Cut a vertical edge of at least 1/2" around the repair area with a masonry chop saw. Remove all spalled and unsound concrete from the repair area. Make sure that all loose, oily or greasy concrete is removed from the patch area. Thoroughly dampen the area with clean water, leaving no puddles. If reinforcing steel is exposed, follow the CIRA Technical Guidelines # 03730-03734. If the reinforcing steel is worn beyond repair, follow the ACI standards for the removal and installation of reinforcing steel.

Featheredge patching is **NEVER** recommended!

### MIXING:

**PRO HIGHWAY PATCH** may be mixed by manual or mechanical means.

**MANUAL MIXING:** Use various size buckets and a margin trowel.

**MECHANICAL MIXING:** Mix in a 5 gallon pail using a heavy duty, slow speed drill (400-600 rpm) with a mixing paddle. Pour 3.5 quarts of water into an appropriate mixing container and then, while mixing, add the entire bag of **PRO HIGHWAY PATCH**. Mix until a uniform, no slump consistency is obtained, 2 minutes. Do not over mix! Do not mix more material than can be placed in 15 minutes.

For applications greater than 2" in depth, 1/4" to 3/8" coarse aggregate may be added to **PRO HIGHWAY PATCH**. Add 37 lbs. of clean and damp (SSD) aggregate to the **PRO HIGHWAY PATCH** and mix for 1 minute.

**NOTE:** **PRO CONCRETE ADHESIVE** may be used as the mixing liquid if enhanced properties are required.

### POT LIFE:

**PRO HIGHWAY PATCH** has a working time of 10 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:

**PRO HIGHWAY PATCH** may be opened to traffic in 2 hours providing that temperatures have remained at or above 70° F (21° C). Lower temperatures will extend that time required before the repair area may be opened to traffic.

### YIELD:

**PRO HIGHWAY PATCH** will yield approximately 0.4 cu.ft. per 50lb bag.

### SPECIAL NOTES:

- Apply only to a clean, sound and properly prepared substrate
- Curing and in service times are dependent on ambient conditions
- Use clean water when mixing **PRO HIGHWAY PATCH**
- **PRO CONCRETE ADHESIVE** may be used for enhanced properties
- Minimum ambient and surface temperatures should be 40° F (4° C) at the time of application and not drop below that level for a minimum of 4 hours.
- Do not apply to a frozen surface
- Do not use admixtures or re-temper
- Do not featheredge material
- Do not mix more material than can be placed in 15 minutes

### APPLICATION:

PRO HIGHWAY PATCH should be placed immediately after mixing. Dampen (SSD) the repair area and have no standing puddles. With a trowel, work the PRO HIGHWAY PATCH into the bottom and sides of the repair area to enhance the bond. Continue to fill the patch area and bring the material to a level just above the grade. Now screed the patch area and level to the existing concrete.

After the initial set, the PRO HIGHWAY PATCH maybe troweled or boom finished.

### COLOR:

Available in gray only

### PACKAGING:

PRO HIGHWAY PATCH is available in a 50lb. bag.

### 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
- 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)**

2 hours	2,000 psi
1 day	5,000 psi
7 days	7,000 psi
28 days	8,000 psi

#### **Tensile Strength (SATM C190)**

2 hours	250 psi
1 day	400 psi
7 days	500 psi
28 days	600 psi

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

2 hours	500 psi
1 day	600 psi
7 days	1,000 psi
28 days	1,200 psi

#### **Bond Strength (ASTM D 4541)**

28 days	400 psi
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#### **Modulus of Elasticity (ASTM C 469)**

28 days	4.0 X 10 <sup>6</sup> psi
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#### **Coefficient of Thermal Expansion (ASTM C 490)**

28 days	5.0 X10 <sup>6</sup> in./in. F
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#### **Freeze/Thaw resistance (ASTM C 672)**

Rating = 0; No scaling

#### **Rapid Freeze/Thaw Resistance (ASTM C 666)**

300 cycles; Method A Durability Factor 90

#### **Specification Compliance (ASTM C 928)**

Very rapid hardening

### GENERAL INFORMATION:

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

Voice: 215-638-4400

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### WARRANTY:

CGM INC. warrants this product to be free of manufacturing defects. The sole responsibility and maximum liability of CGM under this warranty shall be at CGM's option, either (1) to replace the defective product in the form the product was purchased but not in the form the product was installed or used, or (2) to refund the purchase price of the product. In no event shall CGM be liable to the purchaser or to any third party for any loss or damage, of any type, including but not limited to incidental and/or consequential damage, resulting from the purchase or use of this product. In the event of any claim under this warranty, written notice must be given by registered mail. This warranty is in lieu of all other warranties, expressed or implied, including but not limited to warranties of merchantability and fitness for a particular purpose. Information contained herein is for evaluation purposes only. While CGM believes this information to be true and accurate as of this printing of this material, CGM shall have no obligation to notify purchasers of any error which is subsequently discovered in this information. CGM reserves the right to modify or improve any of its products, at any time without prior notice.