

MAGNA 100

Description

ProSpec® Magna 100 is a rapid setting, magnesium phosphate cement based concrete repair material that quickly develops high compressive strength. Suitable for use in extreme cold environments.

Features

- Rapid setting
- Open to heavy traffic in 1-2 hours
- Used 1/2" to 8" (13 mm to 203 mm) in depth without modification
- Suitable for DOT horizontal concrete repairs*
- Interior/exterior
- No special curing
- Meets applicable sections of ASTM C 928
- Can be placed in below freezing temperatures

* Call for DOT state approvals.

Uses

For repair of concrete:

- Highways and bridges
- Airport runways
- Concrete slabs
- Parking decks
- Manhole repairs
- Anchor plates
- Marine structures
- Commercial freezer room repairs
- Loading docks

Technical Data

Set Time ASTM C 191

Initial set	8-10 minutes
Final set	12-15 minutes

Compressive Strength ASTM C 109

2 hours	>3,500 psi (24 MPa)
1 day	>4,500 psi (31 MPa)
7 days	>5,500 psi (37 MPa)
28 days	>6,500 psi (44 MPa)

Flexural Strength ASTM C 78

28 days air cured	>750 psi (5 MPa)
-------------------	------------------

Bond Strength ASTM C 1042 (modified)

7 days	>1,000 psi (7 MPa)
28 days	>2,000 psi (14 MPa)

Freeze-Thaw Resistance ASTM C 666A

95% durability factor

Preparation

1. Clean area and remove all unsound concrete, grease, oil, paint and any other foreign materials that will inhibit performance.
2. Slick or sealed surfaces must be thoroughly roughened.
3. The area should be back cut or have a vertical edge by sawing or other suitable means that will not cause damage to surrounding concrete.
4. Clean all reinforcing steel to bare white metal and coat with ProSpec Rebar Coat if not covering within 8 hours.
5. Surface should be brought to a saturated surface dry (SSD) condition with clean potable water.

NOTE: It is the responsibility of the installer/applicator to ensure that test areas are performed to determine the suitability of the product for its intended use.

Refer to

- ASTM C 928 Standard Specification for Packaged, Dry, Rapid-Hardening Cementitious Materials for Concrete Repair

MAGNA 100

Mixing

1. Mix material in a mortar mixer or with a slow speed drill and mixing blade.
2. Add 2 quarts (1.9 L) of water per 50 lb. (22.7 kg) bag.
3. Place water in the mixer and add dry material.
4. Mix for 2 minutes.

Placement

1. Immediately place the blended material into the properly prepared area.
2. Maintain a minimum thickness of 1/2" (13 mm).
3. Compact to eliminate voids.
4. Forms may be removed after 8 hours.

Curing

No special curing required.

Color

Gray

Yield

50 lb. (22.7 kg) bag = 0.4 cu. ft. (0.02 cu. m) with 30 lbs. of aggregate = 0.6 cu. ft. (0.02 cu. m)

Packaging

50 lbs. (22.7 kg) bag

MAGNA 100

Shelf Life

One year from the date of manufacture.

Best Performance

- Can be used in freezing temperatures as low as 20° F (-7° C), provided that the material and water temperatures are above 40° F (4° C) and the substrate is not frozen. In warm temperatures use ice or cold water to ensure that the mix temperature at time of placement is below 75° F (24° C).
- Avoid over watering.
- Do not mix more than can be placed in 7 minutes.
- Do not retemper.
- Use only clean potable water.
- Do not add portland cement.
- Do not add limestone aggregate.
- Add only well graded 3/8" pea gravel

WARNING: Cracks in the material may reappear due to the structural faults in the structure itself. The effectiveness of any repair depends on sound structures, proper preparation and application of the end user.

Caution

KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Product may burn or irritate upon contact with eyes or skin. Do not take internally. Use of safety goggles, rubber gloves and dust respirator is recommended. Avoid prolonged contact with

clothing. This product contains crystalline silica. Take measures to contain and reduce dust. Prolonged exposure to crystalline silica may cause silicosis or other serious delayed lung injury. Avoid breathing dust. For prolonged exposure wear a respirator

approved for protection against crystalline silica dust. Crystalline silica has been classified by IARC and NTP as a carcinogen.



MAGNA 100

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes and SEEK IMMEDIATE MEDICAL ATTENTION. For skin contact, wash thoroughly with soap and water. If swallowed,

SEEK IMMEDIATE MEDICAL ATTENTION. For additional information, call Bonsal American at 704-525-1621 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA.

Refer to Material Safety Data Sheet (MSDS) for further information.

LIMITED 1 YEAR WARRANTY FROM DATE OF MANUFACTURE: Bonsal American warrants that this product and the materials used therein meet or exceed the applicable standards listed and enforced at the time of manufacture. Bonsal American will replace any product or part which proves defective due to quality of ingredients used or due to the manufacturing process itself. This Warranty shall apply only if the product is used in strict accordance with applicable specifications and instructions provided by Bonsal American for its use, and Bonsal American shall not be liable otherwise. Replacement of any defective product, or, at Bonsal American's option, refund of the purchase of any defective product shall be the buyer's sole remedy under this Warranty, and Bonsal American shall in no event be liable for any damages in excess of the purchase price of the defective product. BONSAL AMERICAN SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES INCLUDING LOSS OF PROFITS OF ANY KIND. Product demonstrations are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. This Warranty constitutes the sole warranty given by Bonsal American in connection with this product. No modification of this Warranty in favor of any buyer shall be valid unless given in writing and signed by an officer of Bonsal American. Bonsal American has authorized no person to make or give any other warranties or representation, oral or written on its behalf. IN PARTICULAR, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT EXCEPTION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ProSpec® is the registered trademark of Bonsal American, Inc.
8201 Arrowridge Blvd. Charlotte, NC 28273 • www.prospec.com • E-Mail: prospec@oldcastleapg.com