

B-7000 EPOXY MORTAR & GROUT

Description

ProSpec® B-7000 is a 100% solid, chemical resistant and water cleanable tile setting and grouting epoxy. B-7000 is a 3-part epoxy that cures by chemical reaction. Part A is the resin, Part B is the hardener, Part C is ProSpec Sanded Tile Grout (sold separately) and Part D is a thickener to use for vertical applications. Ideal for use as a mortar and/or grout (interior only).

Features

- Available in 38 ProSpec colors
- No shrinkage
- Resistant up to 350° F (177° C)
- Turns cement grout into epoxy
- Non-absorptive grout
- Sets most types of ceramic tile or stone
- 100% solids
- Stain, acid and alkali resistant
- Exceeds ANSI A118.3
- Ideal for installing green marble
- Ideal for sanitary areas

Uses

Grout

- Used to grout virtually any ceramic tile or stone*
- Ideal for use in sanitary areas: kitchens, bathrooms, restaurants, hospitals, etc.
- Suitable for use where the grout is exposed to acids or alkalis
- Suitable for use where steam cleaning will take place
- Not suitable for use as a grout outdoors; the color can be affected by ultra violet radiation

* Not recommended for grouting absorptive marble or tile; staining may occur. It is the user's responsibility to determine the suitability.

Mortar

- Used to thin set ceramic tile, porcelain tile, quarry tile, pavers, mosaic tile and natural stone.
- As a setting material, can be used for interior or exterior applications
- Recommended for use where chemical resistance is needed - e.g., breweries, dairies, food preparation areas, etc.

NOTE: B-7000 Epoxy may stain some light colored marble.

For installation over:

- Fully cured dry concrete slabs (minimum 28 days)
- Tile backer board
- Gypsum plaster, gypsum block or gypsum board (dry areas - walls only)
- Properly prepared vinyl or vinyl asbestos flooring
- Tile over tile
- Cured portland cement mortar (cured conventional setting beds)
- Plumb and true masonry
- Exterior grade plywood (interior floors only)
- For other substrates - contact the ProSpec Technical Department

NOTE: When used as a mortar, the substrate must be dry, clean, sound and dimensionally stable. It must be free from loose particles, wax, sealers, curing compounds, grease and efflorescence.

Technical Data

Exceeds ANSI A118.3 for Chemical Resistant Water Cleanable Tile Setting and Grouting Epoxy

Compressive Strength

7 day 8,000 psi (55.2 MPa)

Shear Strength

>1,500 psi (10.3 MPa)

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Chemical Resistance

ProSpec® B-7000 Epoxy is recommended where exposure to the following room temperature chemicals will be encountered:

Acetic Acid (3%)	Calcium Hydroxide	Hydrobromic Acid (10%)	Sodium Carbonate
Aluminum Fluoride	Carbon Disulfide	Hydrochloric Acid (37%)	Sodium Hypochlorite
Ammonium Bromide	Carbon Tetrachloride	Hydrofluoric Acid (48%)	Sodium Hydroxide
Amyl Alcohol	Citric Acid (20%)	Hydriodic Acid (20%)	Soy Sauce
Barium Hydroxide	Chlorine Water (Bleach)	Nitric Acid (10%)	Sulfuric Acid (45%)
Beer	Chromic (10%)	Phosphoric Acid (10%)	Trisodium Phosphate (5%)
Benzyl Acetate	Cooking Grease	Potassium Hydroxide (5%)	Vegetable Oil
Bromine Water	Ethyl Alcohol	Potassium Hypochlorite	Wine
Butanol	Ferric Chloride	Pyridine (20%)	
Calcium Chloride	Household Ammonia	Sat. Sugar Solution	

NOTE: For other chemicals, please contact ProSpec Technical Service.

Mixing

B-7000 is packaged in accurately weighed proportions that allow for proper performance. Mix only full, complete units. For 3.8 lb. (1.7 kg) units of ProSpec® B-7000, use 10 lbs. (4.5 kg) of ProSpec Sanded Tile Grout (Part C). For 9.6 lb. (4.4 kg) units, use 25-30 lbs. (11.3-13.6 kg) of ProSpec Sanded Tile Grout. If grouting vertical applications or using as a setting mortar, add the contents of Part D, thickener.

Stir units well before mixing. Always add the liquid to the mixing container first, and then add the filler portion (ProSpec Sanded Tile Grout and thickener) to the liquid. Mix thoroughly until mixture is uniform. This should only take 1-2 minutes. ProSpec B-7000 cures by a chemical reaction between Part A and Part B. Mix either by hand or with a slow speed mechanical mixer. Do not over mix as air bubbles will occur, as well as generation of heat causing premature setting. Once mixed it is best to get the epoxy out of the container as soon as possible. This will reduce the heat being generated. The more heat

being generated, the faster it will cure.

The recommended working temperature for ProSpec B-7000 is between 60° F (16° C) and 75° F (24° C). At higher temperatures the bucket life, working times and cleanup times are reduced. At lower temperatures the times are extended. A surface temperature of 60° F (16° C) must be maintained before, during and 24 hours after the application. (Surface temperature should be determined using a surface thermometer.) B-7000 will not bond to a surface colder than 60° F (16° C). When epoxies are applied to cold surfaces they become very thick. In winter, store ProSpec B-7000 Epoxy in a heated area several days prior to use. Both portions can be heated by immersing sealed unit in heated water just prior to mixing. Do not allow resin temperature to exceed 100° F (38° C). An electric blanket can be used to bring floor up to temperature.

Preparation

Setting:

- Surfaces must be dry and clean of dust and foreign materials, e.g., oil, grease and dirt. Thoroughly brush or vacuum surface to insure that loose dust and dirt are removed. Concrete floors must be fully cured (28 days) and free from hydrostatic pressure.
- When using over plywood, a 19/32" exterior grade plywood substrate should be installed, with 1/4" gaps between sheets, over 19/32" plywood or 1" (6 mm) nominal board with joist spacing 16" o.c. maximum. The gap between the plywood underlayment will be filled with ProSpec B-7000 Epoxy as it is applied to set tile.

- ProSpec B-7000 Epoxy will not perform on surfaces below 60° F. (16° C) The ideal surface temperature is 60° F (16° C) to 75° F (24° C). The colder ProSpec B-7000 Epoxy is, the thicker it gets and the longer it takes to cure.
- Surfaces to receive tile should be plumb and true. Maximum variation from the required plane should be: horizontal - 1/4" in 10'.
- Expansion joints are necessary for exterior installations exceeding 8 feet to 12 feet in each direction. Interior installations 20 feet to 25 feet.

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Preparation (cont'd)

Expansion joints shall be located (refer to the TCA Handbook for Ceramic Tile Installation)

- Where tile work abuts restraining surfaces, such as perimeter walls, curbs, columns, pipes and the like.
- Directly over joints in structural floor and over construction or cold joints.
- Directly over expansion or control joints
- Where specified in the architectural drawing

Grouting:

- Before grouting, all tile must be firmly set, all paper and glue removed from the face of mounted tile,

- and all spacers, strings, ropes or pegs removed.
- Allow 16-20 hours for the setting material to cure before grouting with ProSpec® B-7000 Epoxy.
- For best results, the temperature of the surface and materials should be maintained between 60° F (16° C) and 75° F (24° C). Higher temperatures may result in "flash setting". When epoxies are applied to cold surfaces they become very thick and difficult to work with. Surface temperatures below 60° F (16° C) will cause epoxy not to adhere.

NOTE: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Application

Grouting:

All installations must conform to the current specifications in ANSI A108.6 and the current TCA Handbook

1. Before applying the epoxy to the face of the tile, dampen the surface of absorptive tile lightly with water. **DO NOT** get water into empty grout joints.
2. Using a hard rubber float force the grout into the joints. Be sure all joints are well compacted and free of voids.
3. Remove the excess grout from the tile surface by holding the float at a 90° angle and screed diagonally (from corner to corner) across the tile.
4. The tile may be cleaned immediately after grouting. Do not let epoxy cure on the face of the tile.
5. To clean the tile use a white nylon pad with a liberal amount of water. Warm water or cold water

can be used. Some liquid dish soap in the cleanup water will greatly aid in the cleanup.

6. When scrubbing with the white nylon pad, a white lather will be created. This lather is now water cleanable and only needs to be removed from the tile. Be sure to change the cleanup water often. **Do Not** get cleanup water in the ungrouted joints. This will cause discoloration of the grout. To keep from getting water into the ungrouted joints, stop cleaning approximately 6" (152 mm) from the edge then continue grouting. At that time, the previous 6" (152 mm) can be cleaned, etc.
7. Always check the installation the following day to be sure the tile is completely clean. If the tile is tacky or has a light film on the surface, use ProSpec® Epoxy Haze Remover to clean.

Coverage

Coverage per 3.8 lb. (1.7 kg) unit

1/4" x 1/4" x 1/4" Square Notch	25 ft ² (2 m ²)
1/4" x 3/8" x 1/4" Square Notch	18 ft ² (2 m ²)

NOTE: Coverage depends on the type and condition of the trowel and substrate. The figures shown in this table are based on the joint being filled to the full depth. Actual coverage may vary.

Tile Size	Joint Width			
	1/16"	1/8"	1/4"	3/8"
1" x 1" x 1/4"	44	22	11	—
2" x 1" x 1/4"	56	28	14	—
2" x 2" x 1/4"	88	44	22	14
3" x 3" x 1/4"	132	66	33	22
4" x 4" x 1/4"	176	88	44	29
4" x 4" x 1/2"	88	44	22	14
4" x 4" x 3/4"	60	30	15	10
4" x 8" x 1/2"	120	60	30	20
4" x 8" x 3/4"	80	40	20	13
4" x 8" x 1 3/8"	44	22	11	7
6" x 6" x 1/4"	264	132	66	44
6" x 6" x 1/2"	132	66	33	22

Tile Size	Joint Width			
	1/16"	1/8"	1/4"	3/8"
6" x 6" x 3/4"	88	44	22	14
8" x 8" x 3/8"	—	118	59	39
8" x 8" x 1/2"	—	88	44	29
8" x 8" x 3/4"	—	60	30	20
10" x 10" x 3/8"	—	148	74	49
10" x 10" x 1/2"	—	112	56	37
12" x 12" x 1/4"	—	268	134	89
12" x 12" x 3/8"	—	178	89	59
12" x 12" x 1/2"	—	132	66	44
13" x 13" x 3/8"	—	190	95	63
15" x 15" x 3/8"	—	222	111	74



B-7000 EPOXY MORTAR & GROUT

Packaging

3.8 lb. (1.7 kg) and 9.6 (4.4 kg) pails

Colors

ProSpec® B-7000 Epoxy is available in all ProSpec grout colors. Actual color may vary slightly from color chart.

NOTE: All epoxies tend to darken or discolor (yellow) as a result of exposure to ultraviolet light, and occasionally incandescent and fluorescent light. This discoloration is most noticeable with white or lighter colors.

Caution

KEEP OUT OF REACH OF CHILDREN AND ANIMALS. May cause skin and eye burns or irritation. Inhalation is known to cause cancer or delayed lung injury.

Avoid contact with eyes and skin. This product is composed of four parts. Part A, an epoxy resin; Part B, a curing agent; Part C, a colored grout (purchased separately) and Part D, a bodying

agent. This container has Parts A, B, and Part D. When Parts A and B are mixed with part C and/or Part D, the result is a solution that is highly alkaline and may burn or irritate the eyes or skin. Wear safety glasses or goggles, protective clothing, shoes and gloves to prevent eye and skin contact. Do not take internally.

Avoid breathing dust. This product, when combined,

contains crystalline silica. Prolonged exposure to crystalline silica dust is known to cause lung cancer or delayed lung injury, including silicosis. Take measures to eliminate dust and wear a respirator approved for protection against crystalline silica dust.

Crystalline silica has been classified by IARC and NTP as a carcinogen.

First Aid

ProSpec® B-7000 (Part A) is a colored paste and (Part B) is a liquid polyamide adduct. When B-7000 (Part A) is mixed with B-7000 (Part B) it results in a mixture that is 100% solids liquid. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions.

Eyes: Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to

remove all particles. Get medical attention if irritation occurs.

Skin: Wash skin with water and soap or an approved cream. Seek medical treatment if irritation or inflammation develops.

Inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of B-7000 (Part A) require immediate medical attention.

Ingestion: Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

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.