



## Product Information

### BDC 8400S

### Pebble Bond

#### Description

BDC 8400S is a two component, 100% solids, low viscosity, moisture tolerant, high strength epoxy formulated specifically for the bonding of decorative pebbles to structural substrates. When applied BDC 8400S is an 8-10 hour cure (depending on temperature).

#### Uses

The Pebble Bond 8400S Epoxy System is used primarily with aggregate pebbles to produce a decorative covering for patios, driveways, pool decks, and walkways. The 8400S can also be used as an epoxy primer to help further increase the product's bond to its substrate.

BDC 8400S Epoxy can be used for filling cracks in existing concrete and bonding many types of materials to each other.

#### Advantages

- Strong Tensile Strength
- High Abrasion Resistance
- Durable Medium Gloss Finish
- Good Chemical Resistance
- Convenient 2:1 Mix; A:B=2:1
- Superior Adhesion

#### Coverage

BDC 8400S covers approximately 50 sq ft per 1 ½ gallon kit when mixed with 200 lb of ¼" x 5/16" aggregate laid at ½" thick. Coverage will vary depending on condition of surface, size aggregate and desired thickness. Can be applied up to 1 ½" thick.

#### Colors

Clear

#### Packaging

1 ½ gallon kits - 1 g part A to ½ g part B  
15 gallon kits - 10 g part A to 5 g part B  
165 gallon kits - 110 g part A to 55 g part B

#### Inspection

Surface must be structurally sound. Concrete must be clean, dry, and free of grease, paint, oil, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be

able to absorb water. A minimum of 28 days cured is required on all concrete. Before starting flooring work, test existing concrete slab for efflorescence, moisture vapor emissions, and alkalinity (see 1200 or 3300 spec for more details).

#### Surface Preparation

Surface should be clean and dry. Remove dust, laitance, grease, rug glue, etc. Painted surfaces should be scored with grinding equipment. All loose paint must be removed. All expansion joints should be honored. Cracks should be chased with a diamond crack chaser (approximately ¼" x ¼"), swept or blown clean. Surface should be porous enough to absorb water.

#### Application

As a primer: (Optional) For best results, use BDC 8400S as a primer first. Mix 2 parts A with 1 part B (by volume) of BDC 8400S together for 3 to 4 minutes. For best penetration into concrete, thin by adding up to 1 quart of acetone to each 1.5-gallon kit. Thinned material should be applied at 3-4 mils (400-500 sq ft per gallon) to cure properly. The BDC 8400S will have approximately 30 minutes of working time. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be cut in using a brush. Pour the remaining material near the cut in area and spread evenly using a trowel or squeegee and back roll using a ¼" nap roller. There is no need to wait for cure before applying coat of stone and epoxy.

With Stone: Stir each component before proportioning. Mix two parts A (resin) with 1 part B (hardener) (by volume) for 3 to 4 minutes with a slow speed (400-600 rpm) electric drill. Mix only the quantity that can be used in 20 minutes.

Combine the mixed BDC 8400S Epoxy with clean kiln dry river pebbles and mix for approximately 3 to 4 minutes. Recommended ratios are 1 ½ gallon epoxy, 200 lbs of ¼" x 5/16" pebbles when laid down at ½" thick. Smaller stones will require more epoxy and larger will require less. An easy mix option for larger mixes can be done in a cement mixer.

After epoxy is mixed with pebbles, pour them onto the substrate and rake them until their depth is approximately ½" deep (approx. 3-4 pebbles thick.) Use a standard concrete trowel (14" x 4") to smooth the pebbles into a comfortable walking surface. Continue troweling smooth and wiping trowel clean with solvent as needed.

**Drying Time**

**Primer:** The stone and epoxy can be applied immediately after primer is laid down. There is no need to wait for a complete cure.

**With Stone:** Allow 24 hours for light foot traffic and 72 hours for heavy or vehicular traffic.

All times are based on average temperature of 77 degrees and 50% humidity. Cooler temperatures will increase drying time.

**Limitations**

- \* Do not apply at any temperature below 50° F or above 95°F.
- \* Concrete must be cured for a minimum of 28 days and

have less than 5 lbs of moisture per thousand square feet.

- \* Epoxy must be cured for a minimum of 24 hours before coming in contact with water.
- \* Concrete should be a minimum of 2500 psi.

**Caution**

All epoxies have the potential of causing skin irritation or allergic reactions, be careful not to get on skin, clothes, or in eyes. Glove and respirators are strongly recommended. Avoid breathing vapors. If splashed in the eyes, flush with warm water and contact a physician if blurring persists.

**Maintenance**

Clean as needed with TSP and water. Power wash as needed or at least annually. Re-glaze with epoxy at 300 sq ft per 1 ½ gallon kit every 2 to 3 years or as needed to avoid pebble loss.

**Technical Data**

Pot Life (3oz.)	1 hour
Viscosity	2,400 cps.
Shore Hardness (ASTM D-2240)	79-81 – D
Gel Time (5 mil)	6-8 hours
Tensile Strength (ASTM 0-638)	6,000 psi
Flexural Strength (ASTM 0-790)	7,000 psi
Compressive Strength (ASTM D-695)	6,500 psi
Bond Strength (ASTM C-321) (24 hrs.)	6,000 psi
Elongation (ASTM D-638)	22%
Water Absorption (24 hrs.)	0.2%
Shelf Life	2 years

**Pebble Bond Resealing Instructions**

- 1) For best results, use BDC 3300 Cycloaliphatic Epoxy for resealing purposes.
- 2) Make sure pebbles are clean and dry. Do not seal in old dirt or stains.
- 3) If the outside temperature is over 80° F:
  - a. Reseal the pebbles in the morning or evening when the pebbles are out of direct sunlight. If the pebbles are hot, the epoxy will cure while you are working.
  - b. Begin work immediately or the entire batch will solidify. If this happens, do not touch it as it will be very hot (up to 170° F).
  - c. The resin and hardener should be mixed with a slow speed drill mixer until well blended, approximately 2-3 minutes.
  - d. Make sure to scrape sides of mixing container while mixing to ensure an even mix.
- 4) Using a 3/8" nap paint roller, roll the epoxy onto the pebbles at a rate of 200ft<sup>2</sup> per gallon (300ft<sup>2</sup> per kit)
- 5) Do not mix more than ¼ gallon at a time
- 6) Depending on the weather, the epoxy will cure in 12-36 hours. Cure time will be longer if pebbles are not in direct sunlight.
- 7) The hardener has a shelf life of approximately 1 year. Using it past that time may cause improper curing.