



## Product Information

**BD CLASSIC 9790PB**

**Polyurea Pebble Bond**

### Description

BDC 9790PB is a two component, 90% solids, low viscosity, high strength polyasapartic Polyurea formulated specifically for the bonding of decorative pebbles to structural substrates. BDC 9790PB is BD Classic's highest quality Pebble Bond system available. When applied BDC 9790PB is a 3-4 hour cure (depending on temperature).

### Uses

The Pebble Bond 9790PB System is used primarily with aggregate pebbles to produce a decorative covering for patios, driveways, pool decks, and walkways.

### Advantages

- Exceptional Tensile Strength
- True Non-Yellowing formula
- High Abrasion Resistance
- Durable High Gloss Finish
- Great Chemical Resistance
- Convenient 1:1 Mix
- Complete U.V. Stability

### Coverage

BDC 9790PB covers approximately 35 sq ft per 1 gallon kit when mixed with 150 lb of 1/4" x 5/16" aggregate laid at 1/2" thick. Coverage will vary depending on condition of surface, size aggregate and desired thickness. Can be applied up to 1 1/2" thick.

### Colors

Clear

### Packaging

- 1 gallon kits – 1/2 g part A to 1/2 g part B
- 10 gallon kits - 5 g part A to 5 g part B
- 110 gallon kits - 55 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.

### 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 1/4" x 1/4"), swept or blown clean. Surface should be porous enough to absorb water.

### Mixing

Primer: (optional coat) Use BDC Vapor Seal or BDC 1200 Epoxy Primers for ultimate adhesion to substrate. See individual data sheets for application instructions.

With Stone: Stir each component before proportioning. Mix one part A (isocyanate) with 1 part B (resin) (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 9790PB with clean kiln dry river pebbles and mix for approximately 3 to 4 minutes. Recommended ratios are 1 gallon of 9790, 150 lbs of 1/4" x 5/16" pebbles when laid down at 1/2" thick. Smaller stones will require more Polyurea and larger will require less. An easy mix option for larger mixes can be done in a cement mixer.

### Application

Primer: (optional coat) Use BDC Vapor Seal or BDC 1200 epoxy primers for ultimate adhesion to substrate. Thinned epoxy must be applied at less than 5 mils (and not puddled) to cure properly. Wait for epoxy to tack before applying coat of stone and Polyurea. See individual data sheets for application instructions.

With Stone: After Polyurea is mixed with pebbles, pour them onto the substrate and rake them until their depth is approximately 1/2" 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**

**With Stone:** Allow 24 hours for light foot traffic and 48 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.
- Do not apply over concrete under hydrostatic pressure.
- Polyurea must be cured for a minimum of 24 hours before coming in contact with water.
- Concrete should be a minimum of 2500 psi.

*Technical Data (Without Stone)*

	Test Method	Results
Shelf Life		6 months
Mixing Ratio by Volume A:B		1:1
Dry Film Thickness per Coat:	ASTM D-3363	4-7 mils
Tear Resistance DleC	ASTM D-1004-66	270 pli
Tensile Strength	ASTM D-412	3980 psi
Ultimate Elongation	ASTM D-412	8-10%
Gloss (60 deg)	ASTM D-823	90
Volume Solids	ASTM D-2697	90% by volume
VOC	ASTM D 2369-81	<50 g/l
Pot Life (75±3oF)		30 minutes
Recoat Time		7 hrs (min) -24 hrs (max)
Taber Abrasion	ASTM D-4060-84	33.9 mg Loss, C17 Wheel, 1000g Load, 1000 Cycles
Impact Resistance	ASTM D-2794-84	Inch-pounds Direct 120 Reverse 90
Pencil Hardness	ASTM D-3363-84	2-H
Pendulum Hardness	After 1 Day After 7 Days	43 Seconds 168 Seconds
Viscosity at 75 F(24 C) 50% RH		A-SIDE 350-400 cps B-SIDE 200-300 cps
Weight		A-SIDE 9.9 lbs/gal B-SIDE 9.2lb
<b>14 Days Cured</b>	<b>4 hrs</b>	<b>24hrs</b>
50% Sulfuric Acid	Slight Soften	Blister
10% Sulfuric Acid	No Effect	No Effect
10% Hydrochloric Acid	No Effect	No Effect
50% Ammonium Hydroxide	No Effect	No Effect
50% Sodium Hydroxide	No Effect	No Effect
IPA - Iso-Propyl Alcohol	No Effect	No Effect
MEK - Methyl Ethyl Ketone	No Effect	No Effect
Deionized (Water)	No Effect	No Effect
10% Betadine	No Effect	No Effect
Break Fluid	No Effect	No Effect
Gasoline	No Effect	No Effect