



BentoTak



Product Description

Basic Use: BentoTak is a delayed-swell bentonite self-adhesive waterstop strip designed to stop water infiltration through cast-in-place concrete construction joints and penetrations. BentoTak can withstand ponding water for up to 7-days, can be applied to a wet substrate, and is suitable for application in salt water and fresh water conditions. BentoTak's unique water-activated adhesive coating allows for fast and easy application, even to irregular substrates, without the need for separate adhesive or mechanical fastening. Unlike expanding rubber hydrophilic waterstops that create a rigid gasket water barrier, BentoTak swells within the concrete joint to fill cracks and voids. This swelling action does not subject the concrete joint to excessive expansion pressures which can lead to cracks in and around the joint. BentoTak can be reactivated nearly indefinitely during wet/dry cycling and only activates around areas of water intrusion.

Composition: BentoTak waterstop strip is comprised of a delayed swell polymer-modified sodium bentonite malleable clay encased in a polyvinyl acetate (PVA) water-activated adhesive film. BentoTak is specially conditioned to swell in salt water, brackish and fresh water conditions.

Benefits

- Active swelling waterstop is fully encased in concrete to seal off water ingress.
- Ponding water resistant for up to 7 days.
- Self-adhesive for fast and easy installation.
- Requires only 1.25-inch (32 mm) concrete coverage.
- Conforms to rough and irregular concrete surfaces.
- Seals around pipe penetrations.
- Effective in both fresh and saltwater.
- High resistance to hydrostatic pressure.
- Resistant to most groundwater contaminants and highly vapor impermeable.

Limitations

- Designed for concrete construction joints and penetrations, not as an expansion joint sealant.
- It is designed for structural concrete with a minimum of 2,600 psi compressive strength.
- BentoTak must be encased completely in concrete.

Technical Data

Properties: See physical properties table.

Coverage: Strip: 39 linear inches (1 meter)

Box: 20 strips, 65'-6" linear feet.

Storage and Handling: Store raised off the floor away from sun and moisture, between 40-90°F (5-32°C), maximum 10 boxes high.

Shelf Life: 2 years.

Specification Writer: Contact EPRO before writing specifications on this product. EPRO System selection should be reviewed in order to meet project specific site conditions.

Installation

Preparation: Please refer to manufacturer's specifications for substrate requirements. Strips should be inspected for water damage prior to application.

Application: Please refer to manufacturer's specifications. Ensure the concrete surface is clean and free of loose material and debris.

Common areas of application:

- Non-moving concrete construction joints
- Precast segment joints – concrete pipes, box culverts, manholes
- Pipe penetrations
- Steel piles/beams

Concrete nails may be required for long and smooth vertical or overhead surfaces, approximately 2-3 nails per strip.

BentoTak can be installed using two methods:

"Dip It & Stick It"

1. Dip the BentoTak strip in a bucket of tap water for less than 5 seconds and place directly onto the concrete joint as close to the center as possible (minimum 1.25" [32mm] concrete cover from outside end of joint).
2. Press BentoTak into the joint in the form a triangle, ensuring that all waterstop butt ends are molded together to form a continuous waterstop strip.

"Wet It & Press It"

1. Wet the concrete with water and place the BentoTak as close to the center of the joint as possible (minimum 1.25" [32mm] concrete cover from outside end of joint).
2. Press BentoTak into the joint in the form a triangle, ensuring that all waterstop ends are molded together to form a continuous waterstop strip.



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Warranty

Limited Warranty: EPRO Services, Inc. believes to the best of its knowledge that performance tables are accurate and reliable. EPRO warrants this product to be free from defects. EPRO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. EPRO's liability shall be limited in all events to supplying sufficient product to retreat the specific areas to which defective product has been applied. EPRO shall have no other liability, including liability for incidental or resultant damages, whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of EPRO or its distributors.

Availability and Packaging

Contact EPRO sales representative for local distributors or authorized applicators (www.eproinc.com).

Strip Size: 0.5" x 1" x 39" (12 mm x 25 mm x 1 m), 0.95 lbs (0.43 kg)
Box Size: 20 strips, 65'-6" linear feet, 19 lbs (8.6 kg)

Equipment

Water.

Technical Services and Information

Complete technical services and information are available by contacting EPRO at 800.882.1896 or www.eproinc.com.

This product was formally known as Bentotak DS by Kingfield Construction Products.

Physical Property

Test Method

Value

Material		Polymer-modified Bentonite clay
Color		Gray
Thickness		0.5-inch x 1-inch
Specific Gravity @ 77°F	ASTM D 71	1.403
Installation Temperatures	ASTM D 4068	32°F – 176°F (0°C – 80°C)
Penetration (0 strokes)	ASTM D 217	99
Penetration (60 strokes)	ASTM D 217	84
Flash Point (Min.)	ASTM D93 Pensky-Martens	>482°F (>250°C)
Pour Point (Max.)	ASTM D 97	Solid @ ambient temp. >77°F (>25°C)
Swelling Rate	One side soaked in water for 24 hours	130%
Adhesion to Concrete Substrate	Vertical Pull Test (after 24 hour cure)	9 psi (632.7 gf/cm ²)
Adhesion to Iron Plate Substrate	Vertical Pull Test (after 24 hour cure)	4.2 psi (296.7 gf/cm ²)
Hydrostatic Pressure Resistance		318 foot head (137.75 psi – 0.95 MPa)

Dimensions: Strip: 0.5" x 1" x 39" (12 mm x 25 mm x 1 m), 0.95 lbs (0.43 kg), Box: 20 Strips, 65'-6" linear feet
Weight: Strip: 0.95 lbs (0.43 kg), Box: 19 lbs (8.6 kg)