TECHNICAL DATA

AKWASTOP

HYDROPHILIC RUBBER CONCRETE JOINT WATERSTOP

DESCRIPTION

Akwastop is a hydrophilic rubber waterstop that stops water infiltration through cast-in-place concrete construction joints subjected to continuous or intermittent hydrostatic pressure. Akwastop effectively stops moisture infiltration by expanding upon contact with water to form a positive seal against the concrete.

The key to Akwastop's effectiveness is its swelling capacity and plasticity to contour the surrounding surface. The hydrophilic agent is distributed throughout the product's acrylate polymer matrix to provide consistent sealing performance throughout the entire installation. Akwastop's exceptional plasticity allows the product to fill voids and cracks in the concrete immediately around it.

Akwastop is designed to replace passive PVC dumbbell waterstops, thereby eliminating the requirement of split-forming and field seam welding. Akwastop has been successfully tested to withstand 231 feet (70 m) of hydrostatic water pressure.

Akwastop is manufactured in lightweight, flexible coils that are easily installed by a single worker. The product is adhered to concrete, steel, and PVC (pipes) with CETSEAL. Coil ends are butted together – not overlapped – to form a continuous waterstop. Akwastop has excellent chemical resistance to hydrocarbons, salts, and many organic acids and bases.

PRODUCT ADVANTAGES

- Engineered Volumetric Swell
- Retains Cohesive Strength at Expanded Volume
- Reproducible Swell after Wet-dry Cycling
- Contains No Sodium Bentonite

APPLICATIONS

Applications include both vertical and horizontal cast-in-place concrete joints where limited or no movement is expected. Akwastop is ideal for new to existing concrete construction, and around through-wall penetrations, such as plumbing and utility pipes. Akwastop works in both continuous hydrostatic and intermittent hydrostatic conditions. Akwastop is designed for reinforced structural concrete 8" (200 mm) thick or greater with a minimum of 3000 psi compressive strength. Akwastop requires a minimum 3" (75 mm) of concrete coverage.

INSTALLATION

Surface preparation: Due to the hydrophilic nature of Akwastop, installation should be performed as close as possible to the second concrete placement. Surfaces should be clean and dry. Remove all dirt, rocks, rust, debris or other surface contaminant. Do not install Akwastop in standing water or over an iced substrate.

Adhesive: Apply a 3/16" (5 mm) diameter bead of CETSEAL along the dry substrate where Awkastop will be installed. Assure proper 3" (75 mm) concrete coverage will be maintained. Keep the nozzle tip pressed against the concrete at a 45° angle during application. Do not loosely apply the adhesive to the substrate. Apply adhesive when temperature is 25°F (-4°C) or higher.

Waterstop Placement: Apply CETSEAL to dry substrate as described above. Firmly press the entire length of Akwastop into the wet adhesive immediately after applying CETSEAL. Do not allow adhesive to skin over or cure. Adhesive not receiving Akwastop prior to it curing should be removed and then a new bead applied. Concrete covering should be a minimum 3" (75 mm) thick. Typically the product is installed in the center of the wall or slab joint.

Allow a minimum of 4 hours between product installation and subsequent concrete placement to allow the adhesive to cure and secure the waterstop.

Tightly butt coil ends together to form a continuous waterstop ***— DO NOT OVERLAP COIL ENDS.*** Place in maximum practicable lengths to minimize coil end joints. Where required, cut coil ends square with sharp utility blade or shears to fit lengths together. Do not allow any gap between coil ends. Make horizontal to vertical transitions by abutting product coil ends together.

On rough surfaces such as stone or irregular concrete, it is recommended to use Akwaswell swelling paste to adhere Akwastop into position. Make sure Akwastop remains in direct contact with substrate along the entire installation. Do not allow an air space between the waterstop and the substrate. Sharp or deep surface depressions should be filled with Akwaswell swelling paste prior to Akwastop installation.

For vertical installations, it is recommended to place a single mechanical fastener at the top edge of Akwastop to assure product position as the adhesive sets and cures. Install Akwastop around large diameter pipe penetrations.

Akwastop can be best used if the pipe diameter exceeds 1" (25 mm). Cut a length of product to fit around the pipe. Press Akwastop onto the adhesive. For smaller diameter pipes, install a continuous 1/2" (12 mm) bead of Akwaswell swelling paste around the pipe.

2870 Forbs Avenue Hoffman Estates, IL 60192
847.851.1800 | 800.527.9948

CETCO®

www.CETCO.com

AKWASTOP

HYDROPHILIC RUBBER CONCRETE JOINT WATERSTOP

PRODUCT SIZE & PACKAGING

Akwastop is supplied in 3/4" x 3/8" x 33' (20 mm x 10 mm x 10 m) rolls. Akwastop is packaged 197 linear feet (60 m) per carton. Each carton contains six, 33 feet (10 m) rolls. Carton weight: 45 lbs. (20.4 kg)

LIMITATIONS

Akwastop is not a self-adhering product. CETSEAL is required to secure Akwastop to concrete, metal, or PVC (pipe) surfaces. Mechanical fasteners should not be used to secure waterstop alone, but may be used in conjunction with CETSEAL.

Akwastop is designed for reinforced structural concrete with a minimum of 3000 psi compressive strength. Akwastop requires a minimum of 3" (75 mm) of concrete coverage over all four sides. Akwastop is not designed, nor intended to function as an expansion joint sealant. Do not use Akwastop with precast concrete where the product is not properly contained on all four sides.

Do not allow Akwastop to hydrate (swell) prior to placement of concrete. Keep Akwastop from being subjected to submersion or remain in contact with standing water prior to concrete placement. Brief exposure to precipitation prior to concrete placement will typically not affect the product.

If Akwastop is installed in an expanded condition, the effectiveness of the seal can be severely reduced. Prior to concrete encapsulation, remove standing water in contact with the product with compressed air or other applicable method.

Akwastop is not designed for use in primary chemical containment vessels. Akwastop can be used for secondary chemical containment structures upon approval by the project engineer or other responsible party.

Limit time period between installation and concrete pour to reduce chance of exposure to moisture prior to placement of concrete.

Apply adhesive when temperature is 25°F (-4°C) or higher. Temperatures above 90°F (32°C) and high relative humidity accelerate the curing process of the adhesive and therefore may shorten the length of time that Akwastop may be pressed into the adhesive. Temperatures less than 55°F (18°C) will slow the rate of cure.

TECHNICAL DATA

PROPERTY	TYPICAL VALUE
Swelling Capacity, min.	190%
Hydrostatic Resistance	231 ft (70 m)
Wet / Dry Cycling, 25 Cycles	Unaffected
Adhesion to Concrete Using CETSEAL Adhesive	Excellent
Tensile Strength, ASTM D412	83 psi
Elongation, ASTM D412	275%
Shore A Hardness, ASTM D2240	32
Density, ASTM D792	1.14 g/cm^3

AUGUST 2012

IMPORTANT: The information contained herein supersedes all previous printed versions, and is believed to be accurate and reliable. For the most up-to-date information, please visit www.CETCO.com. CETCO accepts no responsibility for the results obtained through application of this product. CETCO reserves the right to update information without notice.

www.CETCO.com
2870 Forbs Avenue Hoffman Estates, IL 60192
847.851.1800 | 800.527.9948

© 2012 CETCO | PRINTED IN THE USA ON RECYCLED PAPER | FORM: AKWASTOP TD - 08/12