

IDROSTOP Hydrophilic, Expandable, Pre-Formed, Flexible Rubber Strip for Watertight Construction

SECTION 03 15 13 CONCRETE WATERSTOPS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Concrete waterstops.

1.2 RELATED SECTIONS

A. Section 03 30 00 - Cast-in-Place Concrete.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - Installation methods.
- C. Verification Samples: For each finish product specified, two samples, minimum size 6" (150 mm) square representing actual product, color and patterns.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2 years' experience installing similar products.
- C. Source Limitations: For repair products, obtain each color, grade, finish, type and variety of product from single source and from single manufacturer with resources to provide products of consistent quality in appearance and physical properties.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.5 PRE-INSTALLATION MEETINGS

Convene at least two weeks prior to starting work of this section.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Handling: Handle materials to avoid damage.



1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Product Performance:

Expansion in water After 24 hours: About 45%

After 2 days: About 70% After 3 days: About 82% After 7 days: About 120%

Solubility in water Insoluble

Corrosiveness Noncorrosive

Elongation – ASTM D638 M89 70% to 100%

B. Acceptable Manufacturer:

MAPEI North America

1144 E. Newport Center Dr.; Deerfield Beach, FL 33442 Toll-Free for CRS Technical Services: Tel. 888-365-0614

Email: <u>CRS@mapei.com</u>
Web: <u>www.mapei.com</u>

- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 Product Requirements.
- D. Substitutions: Not permitted.

2.2 CONCRETE WATERSTOP

- A. One-component, hydrophilic, expandable, pre-formed, flexible waterstop designed to produce watertight construction joints.
 - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Idrostop.

2.3 MISCELLANEOUS MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I, II or III unless otherwise indicated.
- B. Water: Potable.

2.4 MIXES

A. General: Mix products in clean containers according to manufacturer's written instructions.



- Do not add water, thinners or additives unless recommended by manufacturer.
- 2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovels or trowels as units of measure.
- 3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.

PART 3 EXECUTION

3.1 PREPARATION

Ensure that the surface of the concrete is clean and solid when Idrostop is installed.

- A. Mechanically remove any cement laitance and drops of mortar left on the surface from concrete pouring. Vacuum concrete using a brush attachment to eliminate debris and dust to provide a clean, dust-free surface.
- B. Idrostop can even be applied on slightly damp surfaces, when affixed mechanically or with an MS-polymer-based adhesive.

3.2 INSTALLATION

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details. Read all installation instructions thoroughly before installation.

Installation with adhesive

- A. Apply Idrostop on concrete, metal, PVC and natural stone with an MS-polymer-based adhesive.
- B. Cut cartridge nozzle on a 45-degree angle and with a 3/16" (5-mm) opening size. Extrude the adhesive evenly onto the surface of a section of Idrostop that has been pre-cut to the appropriate length, or apply adhesive directly onto the concrete.
- C. Press the Idrostop strip onto the surface, moving it slowly in all directions to ensure full contact and thorough adhesion.
- D. Former corners or seams do not require any special procedure. Simply apply the pieces of Idrostop so they are in complete contact with each other. Their subsequent expansion will ensure a perfect seal against water pressure.
- E. To facilitate application on vertical surfaces, cut Idrostop into pieces to measure 3.3 feet (0.91 m) long. This precaution makes installation fast and secure, eliminating any potential sliding caused by the weight of longer strips. Longer strips can be attached by mechanically attaching the top end of the Idrostop with screws or nails, and extruding a line of adhesive directly onto the surface.
- F. Place Idrostop strip onto the fresh adhesive to achieve proper bonding.

Installation with screws/nails

A. Alternatively, solely attach Idrostop with screws or nails placed in a row along the strip, spaced no more than 10" (25 cm) apart, to ensure thorough contact with the substrate.

Pouring concrete



- A. If Idrostop has been attached with screws or nails, concrete may be poured immediately after the installation.
- B. If Idrostop has been attached with an adhesive, wait 24 hours before pouring concrete. Wait time can be shortened, if necessary, but wait no less than 4 hours to allow sufficient adhesion.

END OF SECTION