

Idrostop B25

Bentonite-Based, Hydrophilic, Expandable, Flexible
Rubber Waterstop Strip for Watertight
Construction



DESCRIPTION

Idrostop™ B25 is a waterstop used to produce watertight construction joints in civil, industrial and hydraulic construction. *Idrostop B25* is composed of a mix of natural sodium bentonite and polymers that give the product exceptional properties of compactness, flexibility and stability. The material is produced according to a formula developed in MAPEI's own research and development laboratories. *Idrostop B25's* expanding process takes place in a controlled, gradual and uniform way without the risk of altering the balance of the mix.

FEATURES AND BENEFITS

- Pre-formed flexible strip that features a bentonite base specially designed to form watertight construction joints
- Expands gradually in permanent contact with water, creating an active barrier against positive and negative water pressure
- When expanding upon contact with water, *Idrostop B25* adapts perfectly to the volume defined by the surrounding boundaries.
- Able to perfectly seal the formation of localized honeycomb voids that are present in concrete
- Stable at temperatures between -22°F and 122°F (-30°C and 50°C)

WHERE TO USE

- For waterproofing joints between concrete foundations and walls
- For waterproofing contact joints between different building materials, such as steel and concrete, or stone and concrete

- For waterproofing contact joints between different types of materials, such as PVC or steel tubing penetrations in concrete swimming pools, sewage-treatment tanks, reservoirs, and hydraulic projects in general
- For waterproofing cold joints (temporary shrinkage joints) created during pouring to reduce the risk of cracking in long or monolithic structures
- For waterproofing construction joints where conventional waterstops cannot be installed easily and securely because of highly congested reinforcing bar
- For waterproofing construction joints in tunnels, dams and hydraulic projects including potable water reservoirs

LIMITATIONS

- Do not install if the structure is immersed in water at the time of application. Remove any free water from the surface and wait several hours to ensure there is no ponding of water on the surface before installing the strip.
- Do not use if the surface of the installation is heavily contaminated with acids or solvents. Clean the surface thoroughly and consult MAPEI's Technical Services Department.
- Must have 3" (7,5 cm) of concrete coverage

SUITABLE SUBSTRATES

- Concrete
- A variety of building materials in direct contact with concrete, including steel, PVC and stone

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

- Ensure that the surface of the concrete is clean and solid when *Idrostop B25* is installed.
- Mechanically remove any cement laitance and drops of mortar left on the surface from concrete pouring.
- *Idrostop B25* can even be applied on slightly damp surfaces, when affixed mechanically or with an MS-polymer-based adhesive.

PRODUCT APPLICATION

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

1. Apply *Idrostop B25* on concrete, metal, PVC and natural stone with an MS-polymer-based cartridge adhesive.
2. Cut the cartridge nozzle on a 45-degree angle and with a 3/16" (5 mm) opening size. Insert the cartridge into a standard caulking gun and extrude the adhesive evenly onto the surface of a section of *Idrostop B25* that has been pre-cut to the appropriate length, or apply adhesive directly onto the concrete.
3. Press the *Idrostop B25* strip onto the substrate, moving it slowly in all directions to ensure full contact and thorough adhesion.

4. Forming corners or seams does not require any special procedure. Simply align the pieces of *Idrostop B25* so that they butt together and are in complete contact with each other. Their subsequent expansion will ensure a perfect seal against water pressure.
5. To facilitate application on vertical surfaces, cut *Idrostop B25* into strips measuring 3.3 feet (1 m) long. This precaution makes installation fast and secure, eliminating any potential sliding caused by the weight of longer strips. Longer strips can be installed by mechanically attaching the top end of the *Idrostop B25* with screws or nails, and extruding a line of adhesive directly onto the substrate.
6. Press the *Idrostop B25* strip onto the fresh adhesive to achieve proper adhesion.

Installation with screws/nails

- Alternatively, solely attach *Idrostop B25* mechanically with screws or nails placed in a row along the strip, spaced not more than 10" (25 cm) apart, to ensure thorough contact with the substrate.

Pouring concrete

1. If *Idrostop B25* has been attached mechanically with screws or nails, concrete may be poured immediately after the installation.
2. If *Idrostop B25* 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 of the adhesive.
3. If concrete will be poured after adhesive has dried only 4 hours, nails or screws must be placed every 3.3 feet (1 m) to prevent the *Idrostop B25* from moving during the pour.
4. Ensure that *Idrostop B25* is positioned so that the concrete cover is at least 3" (7,5 cm) wide.

Product Performance Properties

Laboratory Tests	Results
Density – ASTM D71	> 1,6 g per cm ³
Solubility in water	Insoluble
Main properties	Expands upon contact with water
Expansion in water	
After 96 hours	> 425%

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Shelf Life and Product Characteristics

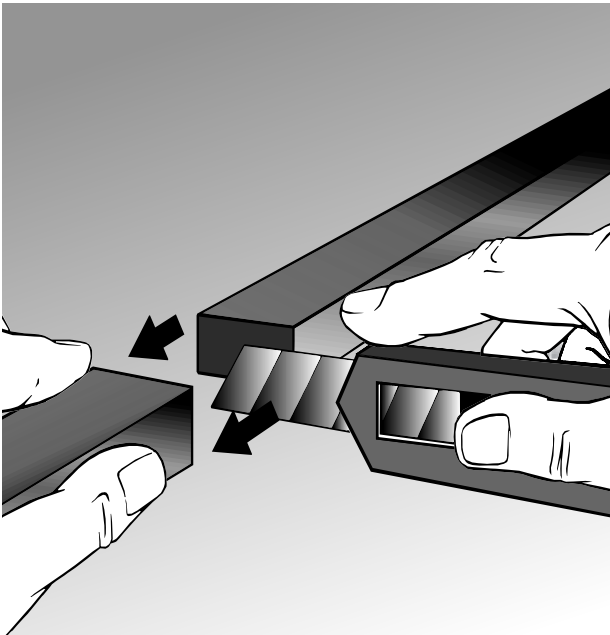
Format	Pre-formed strip
Color	Dark green
Application temperature range with an MS-polymer-based adhesive	50°F to 104°F (10°C to 40°C)
Consumption of adhesive	About 8.5 U.S. oz. per 33 linear feet (250 mL per 10 linear meters) of <i>Idrostop B25</i>
Shelf life	1 year in original, sealed packaging when stored in a dry place at 50°F to 104°F (10°C to 40°C)

CSI Division Classification

Concrete Waterstops	03 15 13

Packaging

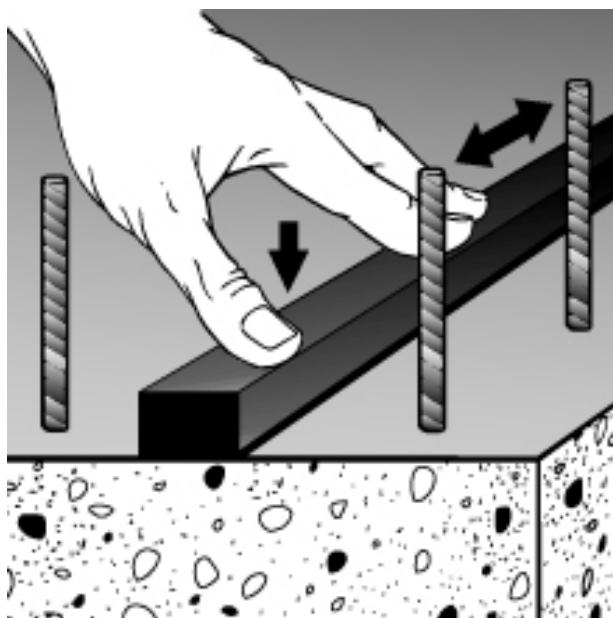
Size
Box of <i>Idrostop B25</i> : six 16.4-ft. (5-m) rolls, each measuring 1" x 3/4" (25 x 20 mm)



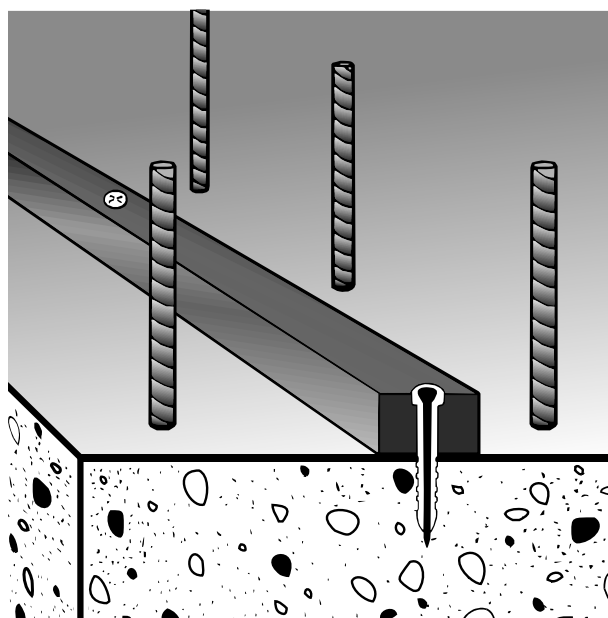
Cut the Idrostop strip to the desired length.



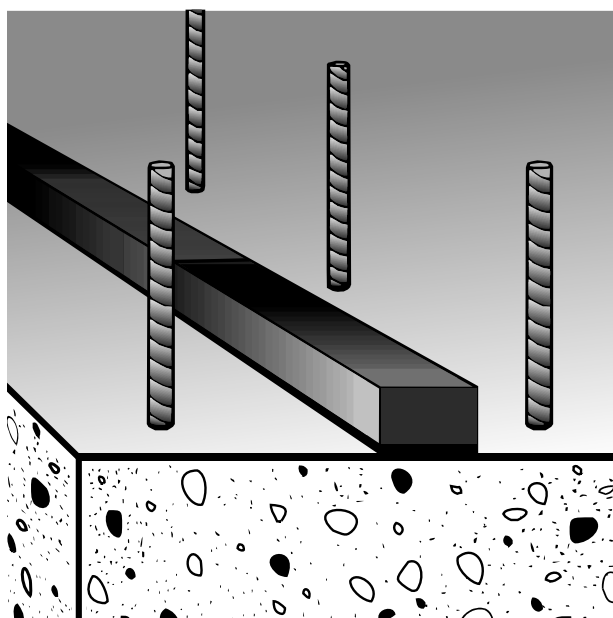
Apply the MS-polymer-based adhesive evenly on the Idrostop or directly to the substrate.



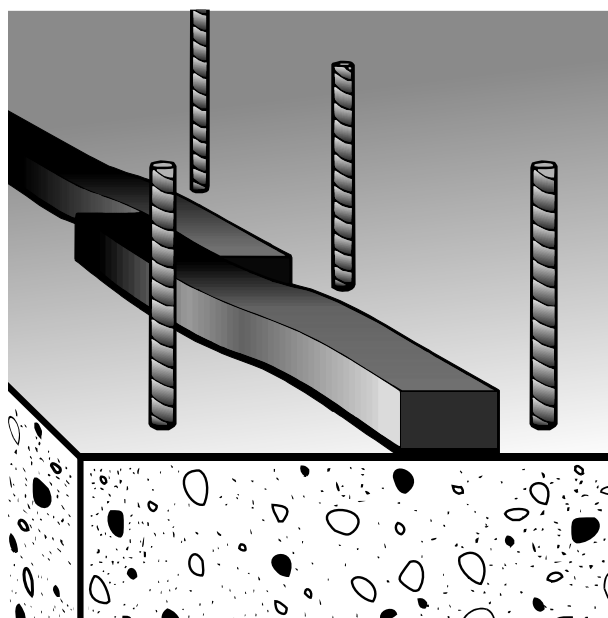
Firmly press Idrostop, moving it in all directions to make it adhere well.



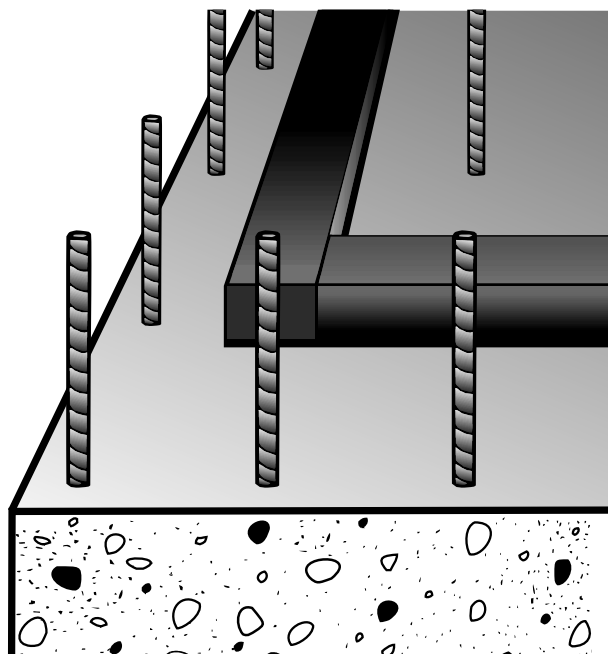
Idrostop can be placed also with screws or nail. Place nails every 10" (25 cm).



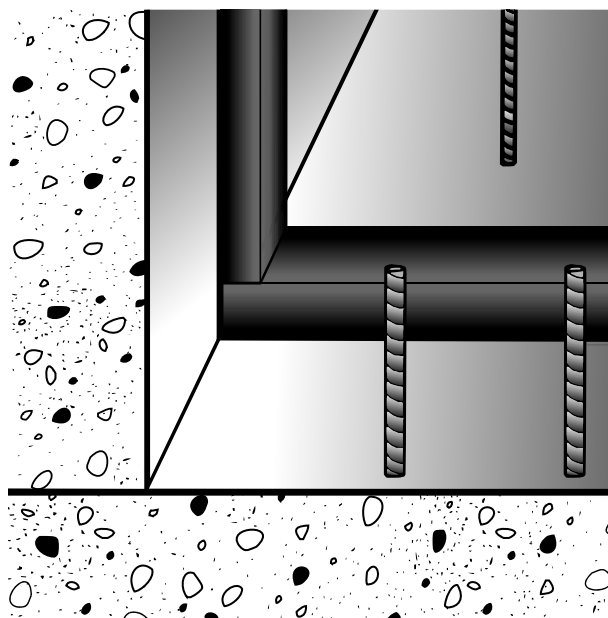
In-line joint: Butt jointing of two pieces of Idrostop



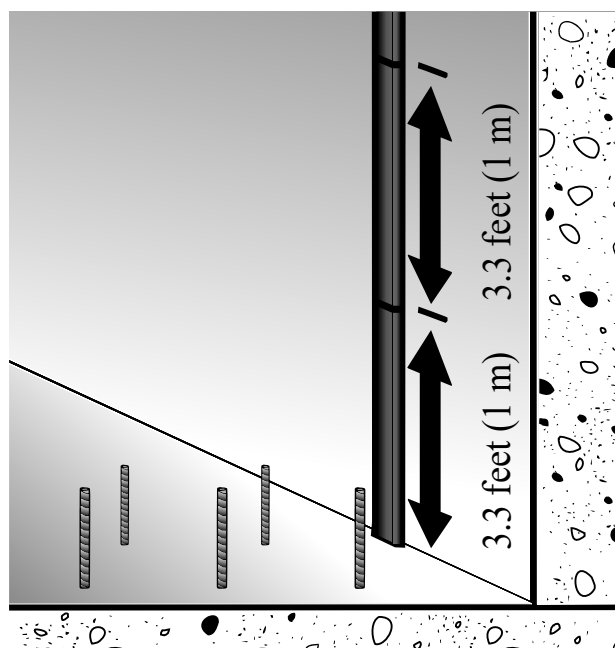
In-line joint: The two ends are staggered with an overlap of 0.8" to 1.2" (2 to 3 cm) for a better seal.



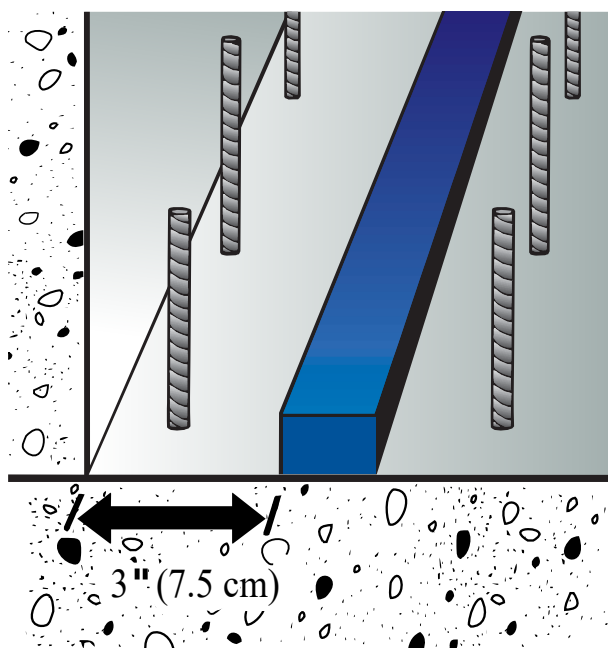
Horizontal corner joint



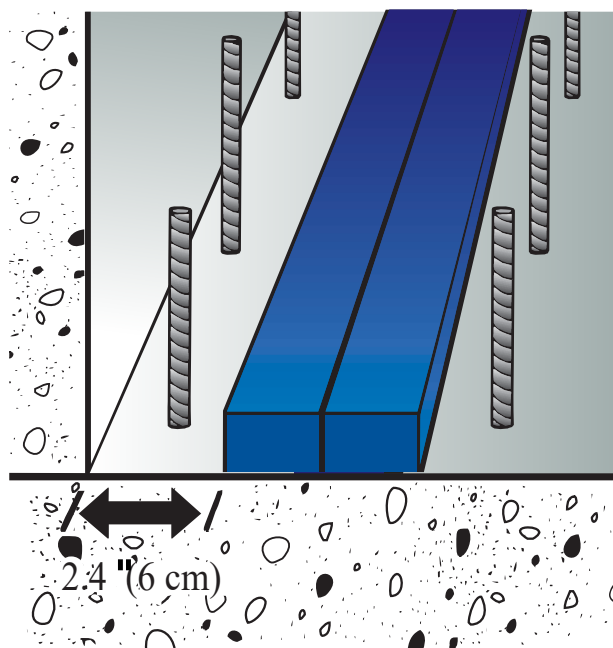
Carnot joint between floor and wall



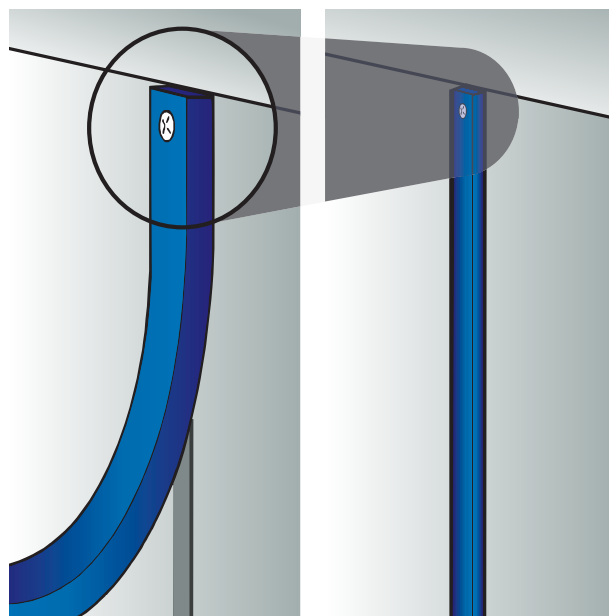
For application on vertical surfaces, install the gasket in lengths of about 3.3 feet (1 m).



Where two strips of Idrostop are used side by side, 2.4" (6 cm) of concrete is sufficient to protect the gasket.



Width of concrete to protect Idrostop



Pieces longer than 3.3 feet (1 m) can be installed on vertical surfaces by fixing the top of the pieces with a nail or pin and then extruding the MS-polymer-based adhesive directly onto the underlying substrate.

ADDITIONAL INFORMATION

Refer to the SDS for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

CONTACT INFORMATION

MAPEI Headquarters of North America

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) / (954) 246-8888

Technical Services

U.S. and Puerto Rico:

Flooring: 1-800-992-6273

Concrete and heavy construction: 1-888-365-0614

Canada:

1-800-361-9309

Customer Service

1-800-42-MAPEI (1-800-426-2734)

Edition Date: August 16, 2024 MK 00420 (24-2542)

For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.
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