

#### **DESCRIPTION**

*Idrostop* is is used to produce watertight construction joints in civil, industrial and hydraulic construction. Construction joints created with *Idrostop* are watertight up to 5 atm of pressure. Unlike materials made of alternate composition that lose efficiency in repeated wet/dry cycling, *Idrostop*'s unique composition allows it to maintain performance even in aggressive environments.

### **FEATURES AND BENEFITS**

- Idrostop's pre-formed flexible strip features an acrylic polymer base specially designed to form watertight construction joints up to a hydraulic pressure of 5 atm
- Bentonite-free
- Expands gradually in permanent contact with water, creating an active barrier against positive and negative water pressure
- Maintains its properties even in the presence of aggressive water such as saltwater (seawater), and water in sewage treatment plants and sewers
- 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.

# **SUITABLE SUBSTRATES**

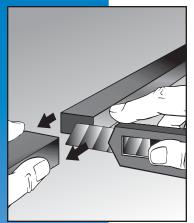
- Concrete
- A variety of building materials in direct contact with concrete, including steel, PVC and stone

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

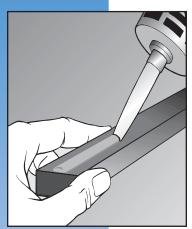
## **SURFACE PREPARATION**

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

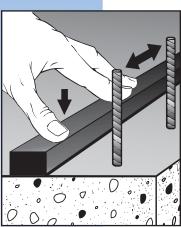
# <u>Idrostop™</u>



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.

- 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.
- Idrostop can even be applied on slightly damp surfaces, when affixed mechanically or with an MS-polymer-based adhesive.

## **PRODUCT APPLICATION**

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details. Read all installation instructions thoroughly before installation.

## Installation with Adhesive

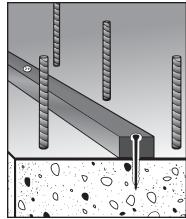
- Apply *Idrostop* on concrete, metal, PVC and natural stone with an MS-polymer-based cartridge adhesive.
- Cut cartridge nozzle on a 45-degree angle and with a 3/16" (5 mm) opening size. Insert the cartridge into a standard caulking gun and extrude the adhesive evenly onto the surface of a section of *Idrostop* that has been pre-cut to the appropriate length, or apply adhesive directly onto the concrete.
- Press the *Idrostop* 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* so that they 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* 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* with screws or nails, and extruding a line of adhesive directly onto the substrate.
- Press *Idrostop* strip onto the fresh adhesive to achieve proper adhesion.

# Installation with Screws/Nails

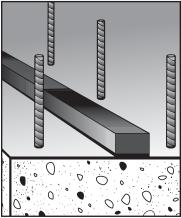
 Alternatively, solely attach *Idrostop* mechanically with screws or nails placed in a row along the strip, spaced not more than 10" (25 cm) apart, to ensure thorough contact with the substrate.

## Pouring Concrete

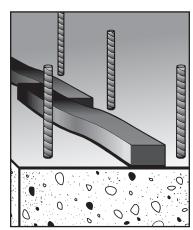
- 1. If *Idrostop* has been attached mechanically with screws or nails, concrete may be poured immediately after the installation.
- 2. If *Idrostop* has been attached with an adhesive, wait 24 hours before pouring concrete. Wait time can be shortened, if necessary, but wait no less than 4 hours to allow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



Idrostop can be placed also with screws or nails. 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.



# **Product Performance Properties**

Customs classification (HTS code)	USA: 4008 11 5000; Canada: 4008 11 9029
Hazard classification	Not controlled under OSHA and WHIMS
Specific gravity	1,30 g per cm³ at 68°F (20°C)
Solubility in water	Insoluble
Corrosiveness	Noncorrosive
Expansion in water	
After 24 hours	About 45%
After 2 days	About 70%
After 3 days	About 82%
After 7 days	About 120%
Impermeability	Up to 5 atm
Elongation per ASTM 638 M89	70% to 100%
Shore hardness per DIN 53505	25 to 35

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	Blue
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</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**

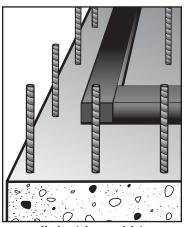
Concrete Waterstops	03 15 13
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## **Packaging**

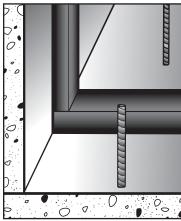
# Size

Box of *Idrostop 5*: six 65-ft. (20-m) rolls, each measuring 3/4" x 3/16" (20 x 5 mm)

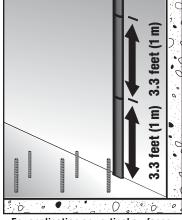
Box of *Idrostop 25*: six 16.4-ft. (5-m) rolls, each measuring 1" x 3/4" (25 x 20 mm)



Horizontal corner joint



Carnet joint between floor and wall



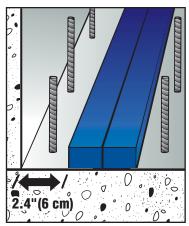
For application on vertical surfaces, install the gasket in lengths of about 3.3 feet (1 m).



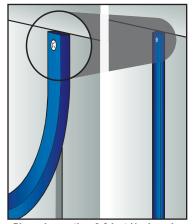




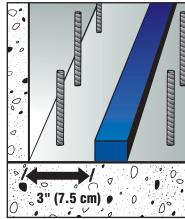




Where two strips of Idrostop are used side by side, 2.4" (6 cm) of concrete is sufficient to protect the gasket.



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.



Width of concrete to protect Idrostop

- 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* from moving during the
- Ensure that *Idrostop* is positioned so that the concrete cover is at least 3" (7,5 cm) wide.

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).

#### **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.

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## **Customer Service**

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

#### Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

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