

# MC-Waterstop Expand

Elastic vulcanized rubber expansion bar for construction joints.

**PRODUCT DESCRIPTION:** **MC-Waterstop Expand** ensures the water-tightness of concrete structures when in contact with water. The volume of uniform swelling in three directions can be over 450% without changing the polymer structure of the material. This swelling process will put pressure on the surrounding concrete surface and prevent water from passing through the joints. This swelling ability can be repeated continuously, resulting in a long product life.

**PRODUCT PROPERTIES:**

- Waterproof bar with the ability to expand up to 450%.
- Made from thermoplastic elastomer TPE.
- The ability to swell in contact with water and recover to its original size when dry can be repeated continuously without damage.
- Coated with an expansion delay coating to protect the product from the effects of water in the concrete or from weathering during application.
- Chemical resistance.
- No movement during construction.
- Withstands hydrostatic pressure up to 14m.
- Convenient, easy to construct, and no need to weld.

**AREAS OF APPLICATION:**

- Used to seal joints in structures such as foundations, tunnel walls, precast concrete structures, water tanks, and basement floors.
- The area is subject to high hydrostatic pressure of up to 14m.
- Areas with variable groundwater levels.

**APPLICATION NOTES:**

- Clean the construction surface, free from oil, grease and dirt,...
- In the area around the joint, it must be dry, without standing water.
- If the application surface is uneven or has voids, it is necessary to smooth the application surface with an adhesive mortar (eg Oxal SPM).
- After the application surface has been prepared, secure one entire side of the rubber bar with a one-component adhesive primer (Mycoflex 488 MS).
- To ensure the best quality, it is recommended to stick the entire surface of the rubber bar to the construction surface.
- Ideally, **MC-Waterstop Expand** should be placed immediately before placing concrete to avoid premature swelling when the product is exposed to rain for a long time.
- **MC-Waterstop Expand** is resistant to moisture because it is covered with a layer that delays swelling during application, however, the product must not be exposed to too long and continuously with water.
- In the area where the joint has a complex structure, the position of the rubber bars is 90° symmetrical, it is necessary to use **MC-Waterstop Paste**.
- For members with thickness less than 30cm, the rubber bar should be fixed at the center point.
- For structures thicker than 30cm, it is necessary to cover at least 8cm of concrete on the waterproof side exposed to water.
- When placing concrete, make sure that the concrete completely covers **MC-Waterstop Expand** without shifting it.

### TECHNICAL DATA:

Characteristic	Unit	Value
Swelling capacity	%	≥ 450
Swelling pressure	N/mm <sup>2</sup>	0.72

*\*Specifications are based on laboratory conditions (23°C ± 2 and 60% RH) and are subject to change under actual application conditions. In order to determine specifications under specific conditions, preliminary conformance tests should be performed under actual construction conditions.*

### PRODUCT CHARACTERISTICS:

<b>Color</b>	Red
<b>Packaging:</b>	<ul style="list-style-type: none"> <li>• MC-Waterstop Expand 5 (20*5mm): 20m/roll (180 rolls/pallet)</li> <li>• MC-Waterstop Expand 10 (20*10mm): 10m/ roll (180 rolls /pallet)</li> <li>• Mycoflex 488 MS: 600ml/tube (12 tubes/box)</li> <li>• MC-Waterstop Paste: 310ml/box</li> </ul>
<b>Storage</b>	Store in dry, cool, covered and ventilated place.
<b>Lifetime</b>	12 months from manufacture date stored in original unopened packs.

**Note:** The information provided here is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual building projects, to the specific application and to non-standard local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be adhered.

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