

# MITCHBAR 1020

## Swellable Water Bar

### DESCRIPTION

**MITCHBAR 1020** is in the form of rubber strips and is made of high-performance modified polymer materials. The swelling action is the result of the contact between water and hydrophilic groups which are part of the **MITCHBAR 1020** molecular structure. Expansion of the water stop creates a positive seal against the face of the concrete joint and prevents the entry of water into the structure through the protected joint.

The swelling properties are unaffected by long term wet/dry cycling and provides an effective water seal throughout the life of the structure.

### ADVANTAGES

- Controlled expansion
- Active leakage protection
- Easy to install
- No need for heat jointing
- Simple butt jointing

### PROPERTIES

**MITCHBAR 1020** is a **delayed-action hydrophilic swell bar** specifically designed to prevent premature swelling during the initial concrete curing and setting period. The product is factory-coated with a controlled water-resistant barrier which ensures that **MITCHBAR 1020 does not begin to swell for the first 7 days after placement** when in contact with moisture within fresh concrete.

This **7-day delayed swelling feature** helps to:

- Prevent early expansion during concrete curing
- Avoid potential displacement or void formation around joints
- Ensure the bar fully activates only after the concrete has stabilized
- Provide a reliable long-term hydrostatic seal under pressure

After the controlled delay period, **MITCHBAR 1020 begins swelling gradually upon exposure to water**, providing a tight, long-lasting seal against water ingress in construction joints, pipe penetrations, and structural interfaces.

### USES

**MITCHBAR 1020** can be applied against existing concrete and is simply installed by nailing or using a bonding adhesive. In contact with water, hydrophilic strips react and swell by up to 300% of their original dimensions to form a compression seal. Hydrophilic strips are suitable for installation in low movement construction joints as well.

**MITCHBAR 1020** is used primarily for foundation wall slabs, slabs-on grade, precast wall panels, manholes, pipe connections, box culverts, sewage and drainage structures, Tunnels, drinking water tanks and all other concrete structures where water tight joints are required.

### METHOD OF USE

For effective and long-term water protection, it is essential that concrete substrates have a minimum compressive strength of 20 N/mm<sup>2</sup> and have at least 75mm of concrete cover in all directions of the hydrophilic waterbar.

Ensure the concrete surfaces where **MITCHBAR 1020** will be placed, are smooth, clean and free from contamination such as dust, oil, grease, and laitance. Brush apply a thin film of adhesive onto the prepared substrate along the proposed line of the waterbar or use mechanical nail fixing for placing **MITCHBAR 1020**.

It is suggested to also apply a thin layer of adhesive to the side of water bar that will bond to the concrete. Wait for 5-20 minutes depending on the ambient temperature, to allow the solvent to fully evaporate before firmly pressing the elements together to bond with the adhesive.

At corners and intersections, simply butt join the water stop together ensuring a tight joint between the profiles. No heat jointing is required for **MITCHBAR 1020**.

### PACKING

10 X 10 Meter Coils

### TECHNICAL DATA

|                           |                        |
|---------------------------|------------------------|
| Appearance                | Polymer rubber Strips  |
| Color                     | Blue                   |
| Solid Contents            | 100%                   |
| Density (20°C)            | 1.20 g/cm <sup>3</sup> |
| Service temperature       | -35 - 55°C             |
| Elongation                | > 450%                 |
| Expansion volume rate     | > 300%                 |
| Water pressure resistant  | 5 Bar                  |
| Resistant to saline water | Resistant              |

### SHELF LIFE

12 months, if stored in original containers away from sunlight and dampness.

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