

# MasterSeal<sup>®</sup> 910 S

## Water swelling waterbar for joint

### DESCRIPTION

**MasterSeal 910 S** Waterbar is suitable for all construction joints subject to hydrostatic pressure, on one or both sides. **MasterSeal 910 S** provide simple but efficient waterproofing of construction joints. Movements in the joint, e.g. by shrinkage or settlement in the substrate, are taken up by the elastic profile of the **MasterSeal 910 S** waterbar. **MasterSeal 910 S** has been successfully employed to waterproof joints where an opening of up to 5mm was deliberately created. Water pressure of up to 6 bar was sealed. **MasterSeal 910 S** is a component of the Master Builders Solutions pile-cap waterproofing and watertight jointing systems. Consult your representative for details.

Due to the specially formulated compounding of **MasterSeal 910 S** it does not pre-expand when exposed to the wet conditions of a project.

Hydrophilic swelling bar based on high quality butyl rubber, retains its shape after 3 wet and dry cycles.

### MATERIAL COMPOSITION

**MasterSeal 910 S** is based on synthetic rubber blend, based on butyl rubber and plasticizer capable of storing water in their molecular structure by increasing their volume. Where previously **MasterSeal 910 S** was available in different grades for various exposure conditions. A single version of **MasterSeal 910 S** now resists deterioration in the following conditions: In fresh/concrete and where in construction with chemical exposure and/or exposure of solvents, including oils and fuels.

### FUNCTIONAL BEHAVIOUR

When in contact with water the **MasterSeal 910 S** waterbars will slowly increase in volume (swell) without changing the homogeneous structure of the polymer matrix. The increase in volume by the swelling action can be up to 140% (depending on type of water). The pressure of the swelling action will cause the **MasterSeal 910 S** waterbar to profile itself exactly into the joint filling all cavities and effectively stopping water seepage, even at high external water pressure.

The **MasterSeal 910 S** waterbars will not transport water through their polymer matrix and thus not act as a capillary duct. The swelling action is limited to the sides exposed to water

### PREPARATION

All joints to be waterproofed with **MasterSeal 910 S** waterbars must first be cleaned. Free standing water and sharp protrusions must be avoided. **MasterSeal 910 S** waterbars can be installed on moist or frozen surfaces.

**MasterSeal 910 S** waterbars are resistant to most ordinary mould release agents, but if in doubt the installed waterbar should always be protected from accidental exposure to form release agents.

### PLACING

For normal joint widths of 200-400mm, **MasterSeal 910 S** placed in the middle of the joint. For added safety thicker walls can be fitted with 2 waterbars.

**MasterSeal 910S** waterbars are glued into the joint with a special adhesive for **MasterSeal 910 S** waterbars. On vertical surfaces the **MasterSeal 910 S** is temporarily fixed to the construction joint with a nail until the adhesive dries.

**MasterSeal 910 S** waterbar MUST always be secured so that the waterbar is in close contact with the surface of the substrate otherwise the full waterproofing effect will not be obtained.

After placing the **MasterSeal 910 S** waterbar the joint area should be kept clean and free of loose dirt and stones before concreting. The minimum concrete cover of **MasterSeal 910 S** waterbar is 50mm.

### BUTT JOINTS

**MasterSeal 910S** waterbars should never be glued at butt joints, but laid with a 20mm overlap.

### TECHNICAL PROPERTIES

Basis:	polymer composite
Water seepage (when placed in expansion joint):	none
Application temperatures:	-30°C to +50°C
Freeze / thaw resistance:	no influence before and after concreting

### PACKAGING

20 x 15mm (± 5%) 60 linear metres per carton

20 x 19mm (± 5%) 60 linear metres per carton

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## STORAGE

Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage and disposal instructions refer to the Material Safety Data Sheet.

## SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. If accidentally ingested, seek immediate medical attention. Reseal containers after use. For further information, refer to material safety data sheet.

## NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local representative. Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

## NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.