

MasterSeal® 910 AP

Water swelling waterbar for joints

DESCRIPTION

MasterSeal 910 AP Waterbar is suitable for all construction joints subject to hydrostatic pressure, on one or both sides. **MasterSeal 910 AP** 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 AP** waterbar. **MasterSeal 910 AP** has been successfully employed to waterproof joints where an opening of up to 5mm was deliberately created. Water pressure of up to 5 bar was sealed.

MasterSeal 910 AP is a component of the Master Builder Solutions watertight jointing systems. Consult your representative for details.

MATERIAL COMPOSITION

MasterSeal 910 AP is based on a newly developed polymer technology providing flexible polymer composites which have good chemical resistance capable of storing water in their molecular structure by increasing their volume.

MasterSeal 910 AP resists deterioration in the following conditions: In fresh water and where the water has a nominal salt content in construction with chemical exposure.

FUNCTIONAL BEHAVIOUR

When in contact with water the **MasterSeal 910 AP** 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 250% in tap water and upto 100% in salt water upto 3% salt content. The pressure of the swelling action will cause the **MasterSeal 910 AP 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 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 AP** must first be cleaned. Free standing water and sharp protrusions must be avoided. **MasterSeal 910 AP** Waterbars can be installed on moist or frozen surfaces.

MasterSeal 910 AP 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 AP** is placed in the middle of the joint. For added safety thicker walls can be fitted with 2 waterbars.

MasterSeal 910 AP are glued into the joint with a special adhesive **MasterSeal 911** for it. On vertical surfaces the **MasterSeal 910 AP** is temporarily fixed to the construction joint with a nail until the adhesive dries.

MasterSeal 910 AP 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 AP** Waterbar the joint area should be kept clean and free of loose dirt and stones before concreting. The minimum concrete cover of **MasterSeal 910 AP** Waterbar is 80mm.

BUTT JOINTS

MasterSeal 910 AP 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
Swelling in Tap water	≥250%
Swelling in NaCl (3%)	≥100%
Shore A Hardness	30 ± 5

MasterSeal[®] 910 AP

PACKAGING

20 x 5mm ($\pm 5\%$) 100 linear meters per carton
20 x 10mm ($\pm 5\%$) 100 linear metres per carton.
20 x 15mm ($\pm 5\%$) 100 linear metres per carton.
20 x 20mm ($\pm 5\%$) 75 linear metres per carton.
Other size please contact local sales representatives.

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 Master Builders Solutions 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.