

# MasterLife WP 910/912 Application Guidelines

Hydroswellable waterbar & mastic dry joint sealing system for construction joints.

## Introduction

This Method Statement describes the application and installation procedure of the MasterLife WP 910 & 912 system. The installation should only be carried out by operatives authorised by Master Builders Solutions using the correct application procedures and who can demonstrate a repeatable high standard to the satisfaction of the site supervisors. Master Builders Solutions has the authority to vary the method statement to suit the contract drawings and actual site conditions encountered.

## System Brief

MasterLife WP 910 & 912 is a two component, moisture curing prepolymer which is reswellable when in contact with water and suitable for the permanent sealing of construction joints in concrete structures.

## Fields of Application

- Construction joints.
- Connecting joints in sheet pilings or diaphragm walls.
- Sealing of bell butt joints.
- Wall penetration for metal, plastic and concrete pipes, cable bushing.
- Bonding of MasterLife WP swelling waterbars.
- Surrounding steel reinforcement bars on pile heads.
- To seal water penetration where the use of gaskets is not possible:
  - Irregular substrates
  - Tube penetrations
  - H shapes piles
  - Joint repair
  - Joints with humidity
- Applicable on humid substrates.

## Features & Benefits

MasterLife WP 910/912 offers the following benefits:

- Simple to use.
- High swelling capacity.
- Reversible swelling process.
- Highly resistant to chemicals and saline liquids.
- Can be applied on wet substrates (without pounded water).
- Good adhesion to dry and moist surfaces.
- Excellent adhesion on concrete, steel, PVC without the need of primer.
- High flexibility and adaptability.
- High resistance to water pressure.



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**The MasterLife WP 910/912 system consists of the following components:**

## MasterLife WP 910

**Material:**

Specially formulated hydrophillic epoxy.

**Coverage:**

Application requirements can vary according to the total consumption of the project.

**Packaging:**

Each box contains 3 x 10m strips. Each strip is 10mm x 20mm.

**Field of application:**

Main component of a Type B waterbar system.



## MasterLife WP 912 Adhesive

**Material:**

Single component, polymer based, hydroswelling mastic.

**Coverage:**

Application requirements can vary according to the total consumption of the project.

**Packaging:**

Supplied in a box of 12 x 310ml cartridges.

**Fields of Application:**

MasterLife WP 912 is a hydroswelling mastic adhesive for use with MasterLife WP 910 waterbar.



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## Substrate Preparation

It is essential for all concrete surfaces to be clean, free of debris, dry and as smooth as reasonably possible. Carefully remove all loose particles and dust by appropriate measures.

- Must be regular and smooth with minimal gaps and voids.
- Free from oil and grease, dust and any loose particles (tie wire).
- Large voids to be filled before application.
- A damp, moist environment is acceptable but ponding water must be avoided.
- Concrete temp above 5 degrees Celsius



## Application Procedure

Once the concrete surface has been prepared according to the guidelines above, the intended route of the MasterLife WP 910 will have to be assessed. This is typically along the centre of the joint in between steel reinforcement with at least 80mm coverage to provide sufficient concrete cover to absorb the swelling stresses. There is no need for scabbling or a precast recess to be used. The MasterLife WP 910 must not be applied in wet conditions as this will cause pre-swell which can lead to leaks at the joint.



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MasterLife WP 912 is applied first using a caulking gun, cut the nozzle to approx. 10mm. Apply a continuous strip in the middle of the joint aiming for a bead slightly wider than the MasterLife WP 910. Mechanical fixings can be used as long as they are removed once the MasterLife WP 910 is adhered with MasterLife WP 912. Apply the MasterLife WP 910 on top of the MasterLife WP 912 and push firmly so that the adhesive is visible along the sides of the waterbar.

Any small gaps or voids in the concrete that cause bridging of the MasterLife WP 910 can be filled with MasterLife WP 912 adhesive.

### Corner and Overlap Detailing

Do not butt the joints of MasterLife WP 910. Always lay the waterbar with a 5cm overlap at the ends. Use MasterLife WP 912 to seal any gaps in a join, no matter how small.



### Concrete Pouring

Leave the waterbar and adhesive for at least 6 hours before pouring concrete. During this time ensure the waterbar is kept dry. Concrete should not be poured from a height that exceeds 1.5 metres as this could dislodge the MasterLife WP 910.

### Contact Details

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