

## WATERSTOP RX101®

### BENTONITE HYDROPHILIC WATERSTOP

#### DESCRIPTION

Waterstop RX101® is a sodium bentonite based waterstop designed to stop water infiltration through cast-in-place concrete construction joints by expanding upon contact with water to form a positive seal against the concrete. The key to Waterstop RX101 effectiveness is its 75% sodium bentonite content, which provides superior expansion to seal and fill voids and cracks in the concrete. Waterstop RX101 is an active bentonite based waterstop that is designed to replace passive PVC/Rubber waterbars, thereby eliminating the requirement of special pieces, split-forming and seam welding. Waterstop RX101 has been successfully tested by independent testing firms to over 70 m of hydrostatic water pressure, under both continuous immersion and wet/dry cycling.

Waterstop RX101 is manufactured in light-weight, flexible coils that are easily installed by a single worker. The product is applied to concrete, steel and PVC (Pipes) with Revofix Mesh (preferred), and/or RX WB Adhesive. Coil ends are butted together – not overlapped – to form a continuous waterstop.

#### APPLICATIONS

Applications include both vertical and horizontal non-moving concrete construction joints, new to existing concrete construction, irregular surfaces, and around through-wall penetrations; such as plumbing and utility pipes. Waterstop RX101 works in both continuous hydrostatic and intermittent hydrostatic conditions.

Waterstop RX101 is designed for use in reinforced structural concrete, utilizing two rows of reinforcing steel, with a minimum thickness of 175 mm, providing the RX with no less than 75 mm concrete cover to all sides.

#### INSTALLATION

##### SURFACE PREPARATION

Construction joint surfaces should be clean and free of standing water. Loose/flaking concrete or laitence should be removed (scabbling, brushing, jet-washing etc.) Forming of rebates/chases is not required.

##### INSTALLING WATERSTOP RX101 WITH REVOFIX MESH

After preparing concrete surface, uncoil Waterstop RX101 and leaving the release paper intact, apply exposed/black face against concrete, pushing firmly against release paper to force RX101 into concrete undulations. As work proceeds, remove release paper, and locate Revofix Mesh sections over RX101, lapping the ends just. Nail through laps with fixings supplied, and provide one additional fixing in between i.e. fixings at 300 mm c/c.



End-to-end or end-to-side junctions are created by simple butt joints. Ensure continuity is achieved through Revofix Mesh, by pressing ends firmly together. Start at junctions; do not stretch Waterstop RX101 to fit. Do not overlap the Waterstop RX101.

## **INSTALLING RX101 WITH RX WB ADHESIVE**

After preparing concrete surface, brush apply a thin, uniform strip, 25 mm wide, of WB Adhesive onto concrete, working well into undulations, and allow to cure to black (5-20 minutes depending on ambient temperatures). Recoat areas not receiving RX within 6 hours. Uncoil RX, and leaving the release paper intact, apply exposed/black face against concrete, pushing firmly against release paper to force RX into concrete undulations. Release paper can remain, as it provides some protection from rainfall, but **MUST** be removed prior to placing concrete.

Waterstop RX101 junctions are as for 'Installing RX101 with Revofix Mesh'.

Waterstop RX101 may be installed as 'puddle flanges' around cast-in, through wall/slab penetrations, using the RX WB Adhesive and/or tie-wire to secure.

On irregular surfaces make sure Waterstop RX101 remains in direct contact with the substrate along the entire installation on irregular surfaces e.g. Old to new slab junctions. Bentoseal can be used to provide a 'bed' for Waterstop RX101, followed by application of Revofix Mesh (which may require additional nailing to allow it to conform to the surface profile).

## **LIMITATIONS**

Waterstop RX101 is not a self-adhesive product. Revofix Mesh or WB Adhesive is required to secure Waterstop RX101 to concrete, metal or PVC (Pipes) surfaces.

Waterstop RX101 is not designed, nor intended to function as an expansion joint sealant. Contact Manufacturer for precast concrete applications, technical information and approval.

Waterstop RX101 is designed for structural concrete. Waterstop RX101 requires a minimum of 75 mm of concrete cover to all sides. Waterstop RX101 should only be used in applications where the product is completely encapsulated within the concrete.

Waterstop RX101 should not be prehydrated by being subjected to submersion or remain in contact with water prior to concrete pour. If the product exhibits considerable swell prior to confinement in the joint, it must be replaced with new material.

In conditions where severe ground water chemical contamination exists or is expected, consult manufacturer for compatibility information and approval.

## **SIZE & PACKAGING**

Waterstop RX101 is supplied in single 5 m coils, 30 m per box. Revofix Mesh is supplied in 50 No 600 mm lengths, 30 m per box. RX WB Adhesive is supplied in 3.8 litre tubs (sufficient for 100 +m of RX application).



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