



# Reliance

## ***Aqua Seal Hydrophilic Swellable Waterstop***

### **Description**

Aqua Seal is made of high performance modified rubber strips. Interaction between water and hydrophilic groups which are part of the Aqua Seal molecular structure results in swelling of rubber strips. When in contact with water, Aqua Seal reacts and can swell upto 300% of its original dimension to form a compression seal.

### **Application**

Hydrophilic waterbar is primarily used to seal concrete construction joints, foundation wall slabs, precast wall panels, slabs-on-grade, manholes, pipe & steel work penetration through wall & slabs, construction joints in tunnel segments, box culverts and potable water structure etc.

Aqua Seal is recommended in low movement construction joints.

### **Advantages**

- ❖ Easy & secure application
- ❖ Simple jointing techniques
- ❖ Excellent elastic properties
- ❖ Does not need hardening time
- ❖ Sustain effective seal in wet conditions
- ❖ Permanent water resistance, no leaching
- ❖ Non-polluting, ecological user friendly system
- ❖ Remains unaffected by long term wet/dry cycling
- ❖ Maintain actual shape after repeated expansion and contraction
- ❖ Slow expansion rate to prevent damage to freshly placed concrete during curing.



**RELIANCE RUBBER & PLASTIC INDUSTRIES LLC**

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### Installation

When the substrate is uneven, Aqua Seal can be fastened in place using masonry nails at approx 300 mm center. Care should be taken to ensure that the substrate has sufficient strength to enable mechanical fixing to be securely driven without damaging the Aqua Seal. Alternatively, a groove can be cast into concrete to facilitate application.

*Alternatively:* Aqua Seal can be fixed on the concrete surface with adhesive. Place Aqua Seal end to end, do not overlap. Make sure Aqua Seal swellable waterstops covers all parts of the surface, especially for surfaces which are not perfect in shape. Protect the Aqua Seal Swellable Waterstops from water until concrete is poured.

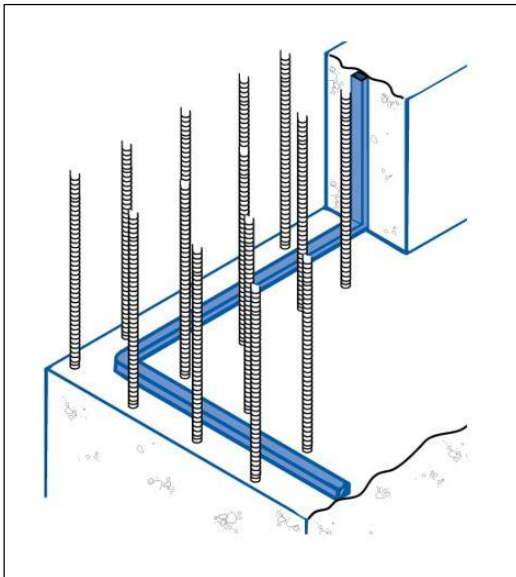
Aqua Seal is suitable for use in most weather conditions but heavy rain and prolong immersion will cause premature swelling. Should this occur, it will be necessary to allow it to dry out or be dried with a hot air gun before concrete pouring takes place.

### Storage

Store in a cool & dry place in original packing to prevent from moisture and premature swelling.

### Safety Precautions

- ❖ Safety gloves should be used to avoid allergic reaction.
- ❖ Do not re-use containers of consumable items for storage



**Information:** recommendations and usage rates etc., given in our literature is based upon extensive experience and given in good faith and without guarantee, since condition of use are beyond our control. The customer must satisfy himself that the product is suitable for the purpose for which it is intended to be used and that the conditions under which it is to be used are suitable.

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## Aqua Seal Hydrophilic Swellable Waterstop

### Technical Data Sheet

**Product** : Aqua Seal - Hydrophilic Swellable Waterstop

**Color** : Blue

**Size** : 10 mm x 20 mm  
25 mm x 25 mm

Properties	Test Standard	Values
Shore 'A' Hardness	ASTM D2240	45-50
Specific Gravity	ASTM D 792	1.40 – 1.50
Tensile Strength	BS 2782	≥1.5
Elongation	BS 2782	≥500 %
Expansion Volume Rate	-	≥300% (Pure Water) ≥150% (Salt Water)
Service Temp. range	-	-30°C to 60°C
Change in volume	-	Pure Water@ 24°C ≥ 600% Pure Water@ 60°C ≥ 500% Salt Water @ 24°C ≥ 200% Salt Water @ 60°C ≥ 400% Methanol @ -30°C ≥ 85%