

# CHEMSWEL 0520



## RUBBERIZED SWELL-ABLE WATERSTOP

### TYPICAL USES:

Waterstop swells when in contact with water, forming an impermeable barrier. This swelling property allows the Waterstop to form a permanent pressure seal within the concrete joint, thus eliminating water migration over or along the waterstop.

Waterstop is designed for structural concrete, however the product requires a minimum of 75mm concrete cover to all sides. Waterstop should only be used in applications where the product is completely encapsulated within the concrete; see Detail. When designing Type A structures (as classified in BS 8102: 2009), the product is used in construction joints in reinforced concrete, as part of the Structure seal system. When designing Type B structures (as classified in BS 8102: 2009), the product is used in construction joints within the reinforced concrete structure.

Applications include both vertical and horizontal non-moving concrete construction joints, new to existing concrete construction, irregular surfaces, and as a puddle flange around through-wall service penetrations. The key to the products effectiveness is its 75% sodium bentonite content, which provides superior expansion, to seal and fill voids and cracks within the concrete. Waterstop is not designed, nor intended to function, as an expansion joint sealant.

### DURABILITY:

Waterstop, when fully protected and when subjected to normal service conditions, will provide an effective barrier to the transmission of liquid water through construction joints, for the life of the building in which it has been incorporated.

Waterstop has been successfully tested by independent testing firms, to over 70m of hydrostatic water pressure, under both continuous immersion and wet/dry cycling.

Waterstop should not be pre-hydrated, by being subjected to submersion or remain in contact with water, prior to concrete placement. The product is engineered for temporary protection from inclement weather, however if it exhibits considerable swell, prior to confinement in the joint, it must be replaced with new material.

### SPECIFICATION:

E40 – Designed Joints in In-situ Concrete in accordance with NBS Clause 320.

Please consult Chemi Tech for further information.

### PREPARATION:

**Surface Preparation:** Construction joint surfaces should be clean and free of standing water. Loose/flaking concrete or laitance should be removed by suitable means, (scabbling, brushing, jet-washing etc).

### APPLICATION:

Waterstop is manufactured in flexible coils that are easily installed in hot or cold weather conditions, by a single worker.

The product is not a self-adhesive material, and therefore the product to concrete surfaces can be fixed using cable tie or by direct nailing. For advice on fixing to metal surfaces, please contact the Technical Department.

End to end, or end to side junctions are created by simple butt joints. Ensure continuity is achieved through Mesh, by pressing ends firmly together. Start at junctions; do not stretch the Waterstop to fit, and do not provide overlaps in the Waterstop. This may be installed as a 'puddle flange' around cast-in, through wall/slab penetrations, using tying wire to secure it in place.

Where upvc type pipes are used, the 'wall' thickness should be a minimum of 3mm to prevent collapse when the waterstop expands. On irregular surfaces, make sure the Waterstop remains in direct contact with the substrate, along the entire installation eg. old to new slab junctions.

### SAFETY:

Full health and safety instructions are contained on the product material safety data sheets and these must be referred to before use.

### SUPPLY:

### PACKAGING

Waterstop is 05 x 20mm, supplied in 40m long coils. Available colors are Pink and Blue

### STORAGE

Waterstop and associated products must be stored in dry conditions, under cover, and away from possible contact with water. Store products above 4°C, prior to use.

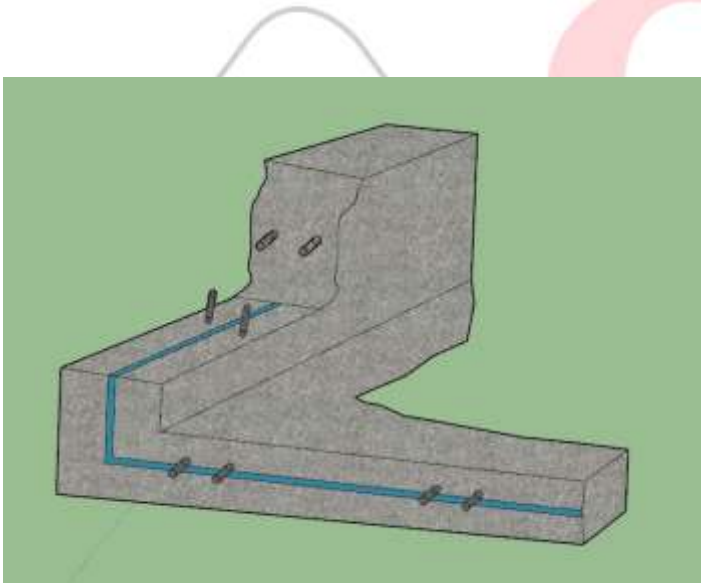
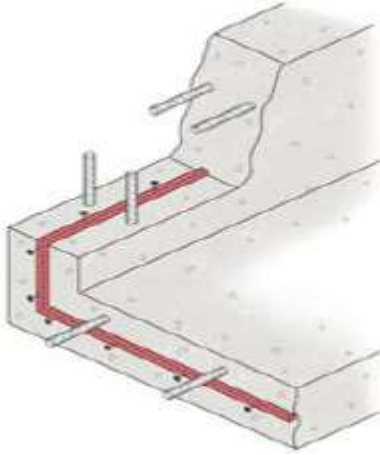
### TECHNICAL SERVICES:

The Chemi Tech's Technical Department is available to advise on individual projects and to prepare or assist in the preparation of specifications and drawings.

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### TYPICAL DETAIL:



Chemi  
Tech<sup>TM</sup>  
Construction Solutions

The information in this literature was correct at the time of going to press. However, we are committed to continually improving our products and reserve the right to change Product's specifications.

For the latest information, please consult Chemi Tech. Conditions of use are beyond our control, therefore we cannot warrant the results to be obtained.