

# SpECTite PVC Waterstop

INTERNAL AND EXTERNAL FIXED PVC WATERSTOP

## DESCRIPTION

**SpECTite PVC Waterstop** is a high grade PVC extrusion formulated to meet the highest performance specifications. **SpECTite PVC Waterstops** are supplied as straight lengths along with factory fabricated junction pieces to simplify layouts and site jointing.

## TYPICAL USES

**SpECTite PVC Waterstop** provides a continuous network solution for sealing construction and movement joints in cast, in-situ concrete structures. Typical uses include:

### Water retaining

- Tanks, reservoirs and sewerage plants
- Swimming pools
- Elevated water towers
- Oil storage tank bond walls
- Culverts, canals and dams

### Water excluding

- Basements
- Underground car parks
- Buried storage tanks
- Retaining walls
- Bridge abutments
- Tunnels and subways

## ADVANTAGES

- Unique design
- Full range of profiles
- Full range of factory fabricated junctions
- Continuous 4 valve network
- Reinforced edge flange with brass eyelets on internal sections for secure fixing
- Easy jointing system
- Approved for use in contact with potable water

## RELEVANT STANDARDS

**Complies with US Corps of Engineers**

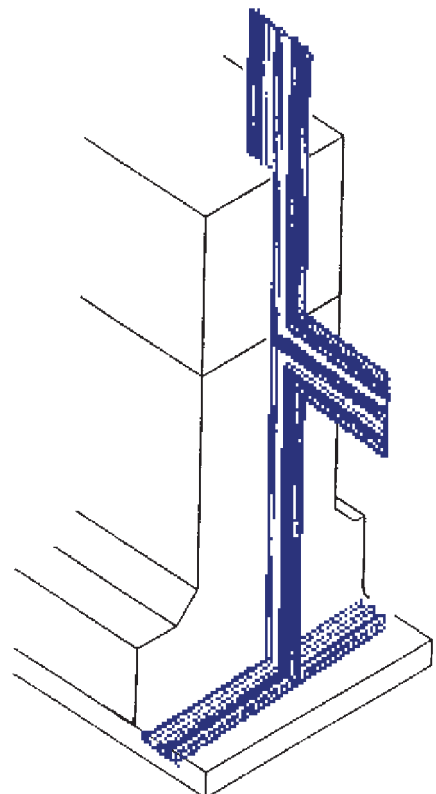
**Specification CRD-C-572 and BS2571**

**Test method BS2782:320A**

## TECHNICAL DATA

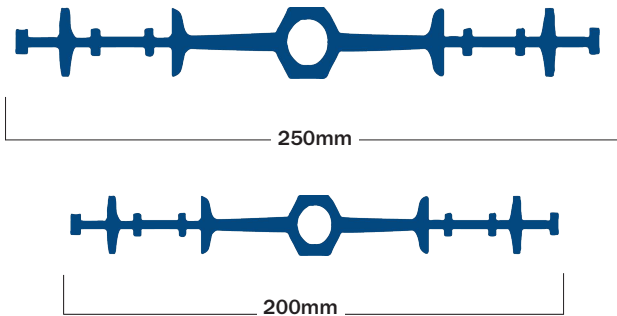
### Profiles

<b>Form</b>	Extruded PVC profiles
<b>Colour</b>	Blue
<b>Hydrostatic head</b>	Up to 100m
<b>Joint movement</b>	Up to 12mm
<b>PVC Compound</b>	
<b>Tensile strength min.</b>	14±2 N/mm <sup>2</sup>
<b>Elongation at break min.</b>	300% up to 350%
<b>Shore A hardness</b>	70±5

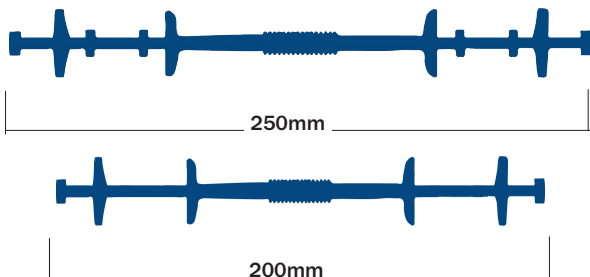


## SPECTITE PVC WATERSTOP INTERNAL PROFILES

**Internal Expansion Joint (IEJ)** sections are used in expansion joints. The centre bulb allows for cyclical movement in the structure and has a flat top section for seating of expansion joint fillers and formwork.



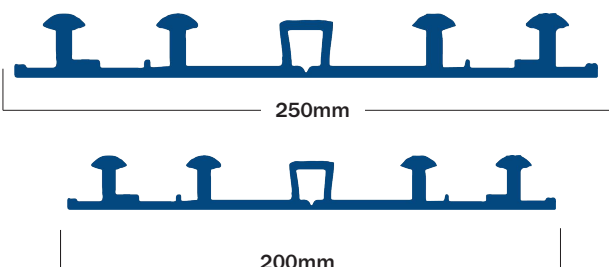
**Internal Construction Joint (ICJ)** plain web sections are used in construction joints. Grout excluding fins are incorporated to give a positive area to locate formwork and control grouts loss.



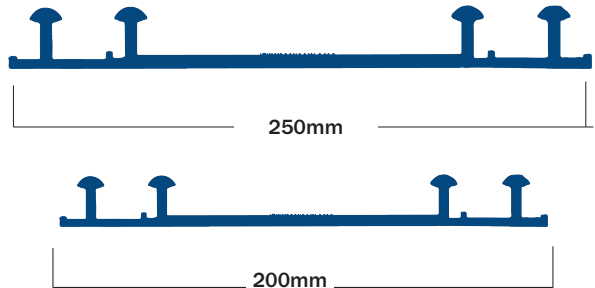
**IEJ** and **ICJ** sections incorporate an eyeletted reinforced edge flange, which enables the profile to be securely wired to adjacent rebar.

## EXTERNAL PROFILES

**External Expansion Joint (EEJ)** sections are used in expansion joints. The centre box allows movement accommodation and has a flat top section for easy seating of expansion joint fillers and formwork.



**External Construction Joint (ECJ)** sections are used in construction joints and incorporate grout excluding fins to give a positive area to locate formwork and control grout loss.

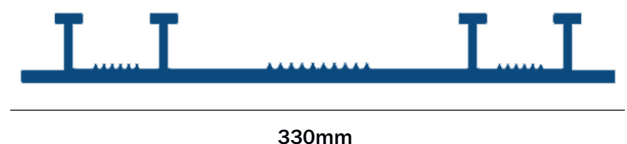


**EEJ** and **ECJ** sections incorporate a nailing flange with a reinforced edge to provide secure fixing that will resist tearing.

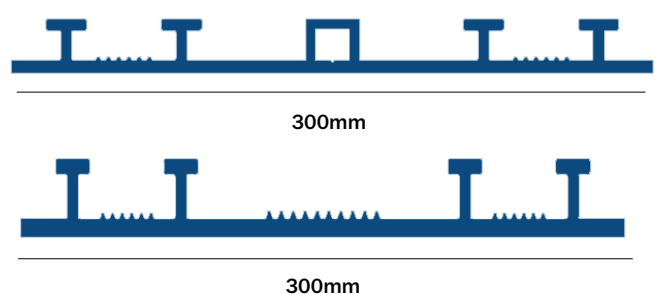
### NOTE:

**150mm** wide sections and **extra heavy duty (XHD)** profiles are available if required. Please contact SpEC Technical Department for more details.

**ECJ Kicker** is an extended width profile to be used when a separate kicker is cast between floor slab and wall construction which spans the 2 joints formed.

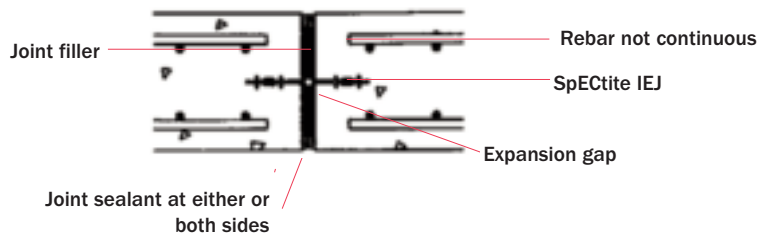


**External Angle Joint (EAJ)** sections are used mainly in pile cap locations when the ground slab meets the pile cap or the joint line is along a change of level of slabs. The section can be linked with the 250mm EEJ and 250 ECJ.

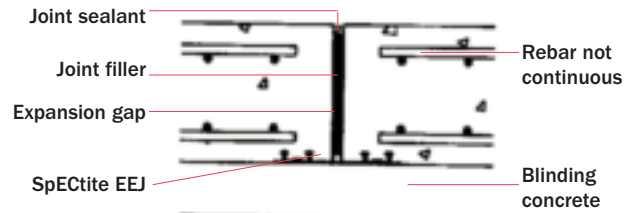


## TYPICAL DETAILS OF MOVEMENT/CONSTRUCTION JOINTS WATER RETAINING STRUCTURES

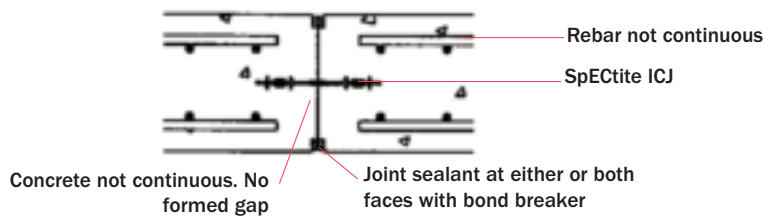
### Expansion joint - wall



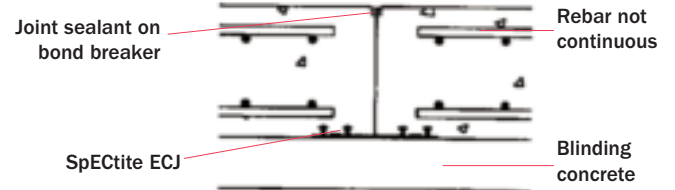
### Expansion joint - floor



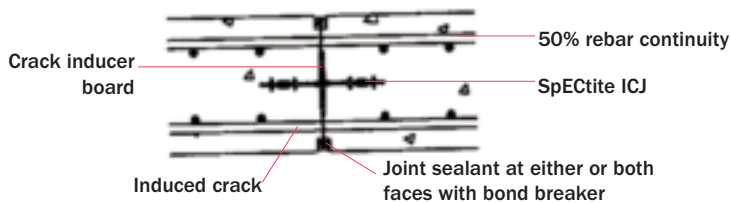
### Formed contraction joint - wall



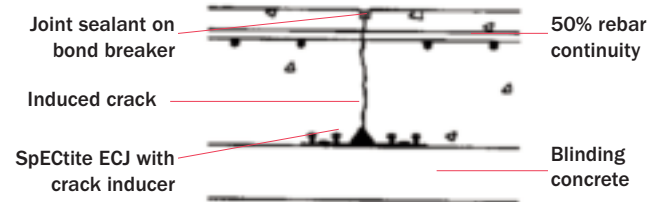
### Formed contraction joint - floor



### Induced partial contraction joint - wall



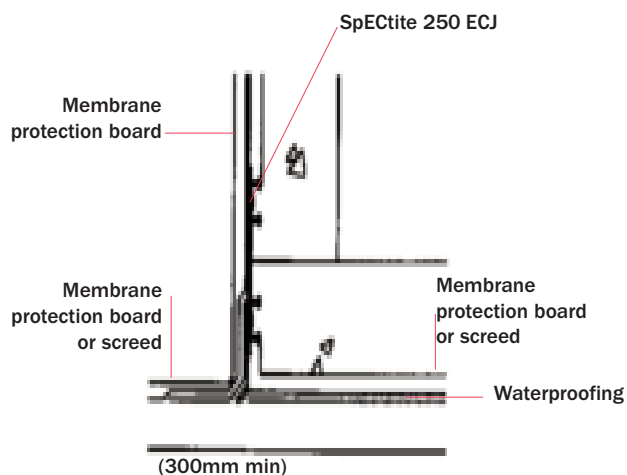
### Induced partial contraction joint - floor



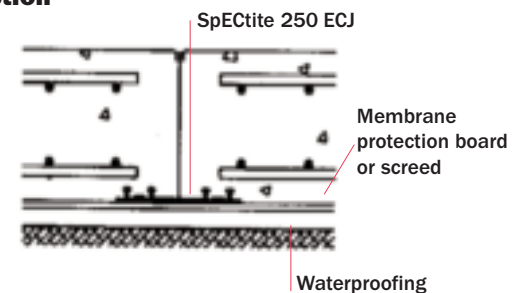
Details comply with BS8007. Design of concrete structures for retaining aqueous liquids.

## WATER EXCLUDING STRUCTURES

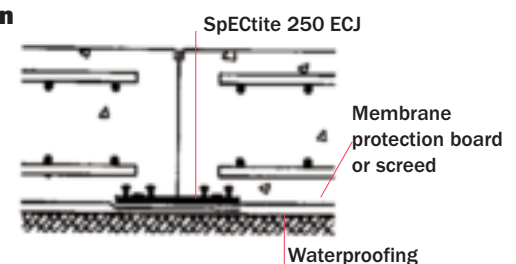
### Junction of wall and ground slab.



### Floor - section



### Wall - plan



Details comply with BS8102: 1990. Protection of structures from water from the ground.

## SPECTITE PVC WATERSTOP STANDARD JUNCTION PIECES

Factory fabricated junctions are available for all **SpECTite PVC Waterstop** profiles. Flat junctions have a leg length of 230mm from centre line. Vertical or on edge junctions have a leg length of 75mm. Leg lengths for EAJ sections are 300mm.

### IEJ/ICJ

Flat mitre



Flat 3-way



Flat 4-way



Vertical T-piece



90° Edge mitre



### EEJ/ECJ

Flat mitre



Flat 3-way



Flat 4-way



90° Edge mitre



### EEJ/IEJ AND ECJ/ICJ

Vertical T-piece



90° Edge mitre



## 250 EAJ JUNCTIONS

Internal Type 1



External Type 2



Internal Type 3



External Type 4



## SITE JOINTING WELDING EQUIPMENT

Site jointing of **SpECTite Waterstop** is carried out utilising **SpECTite** metal jointing jigs and electric heater blades.

## WIDTH OF WATERSTOP

For concrete members of 250mm or above, use the 250mm profile. For concrete members less than 250mm thick, select the waterstop width to be equal to or greater than the width of the concrete wall or slab.

## PACKAGING

### SpECTite PVC Waterstop

300mm wide 10m rolls

250mm wide 15m rolls

200mm wide 15m rolls

150mm wide 20m rolls

ECJ Kicker 12m roll

EAJ 3m roll

### SpECTite Heater Blades

110v and 220v, 350w blades are available.

Warning: Ensure that heater blades are earthed by the green/yellow wire.

## HEALTH & SAFETY

Hot welding of PVC waterstop will liberate hydrogen chloride vapour which may exceed the operational exposure limit of 5 parts per million in confined still air spaces. A suitable respirator or forced ventilation should be provided in these situations.

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