# **PENTENS SW20**

**Swellable Waterstop** 

# Description

PENTENS SW20 is a swellable water bar made of high quality hydrophilic material used to prevent water leakage from construction and expansion joints.

PENTENS SW20 can be installed and linked to conventional PENTENS PVC Waterstop networks. The swelling action is the result of contact between water and hydrophilic groups in PENTENS SW20. The hydrophilic groups are not subject to extraction or loss of swelling ability through prolonged or repeated wetting. This is a unique feature of the basic polymer. Expansion of the waterstop creates a positive pressure against the face of the concrete joint, thus preventing water from passing through the protected joint.

#### Uses

Integral sealing for construction joints cast in-situ where conventional waterstops are impractical because of limited access. A conventional waterstop would require complex shuttering.

- Reservoirs, water towers
- Sewage tanks
- Dams, culverts, canals and spillways
- Swimming pools
- Bunds surrounding liquid retaining tanks
- · Basements and underground car parks
- Tunnels and subways
- Abutments and retaining walls
- Roof decks and podium areas
- Secant pile and diaphragm walls
- Detailing of pipe entries

### **Advantages**

- Swelling properties are unaffected by long term wet and dry cycles.
- Tolerant to salt presence, concrete and groundwater.
- Easy installation by using adhesives or nails.
- Sustainable in wet condition.
- Solves detailing problems when used in conjunction with PVC Waterstop range.

# **Technical & Physical Data**

Solid Content(%)	100
Shore "A" Hardness	26-36
Unrestrained Volumetric	170%
Expansion	
Hydrostatic Pressure	50m
Resistance	
Service Temperature	-30°C to 70°C
Storage &	12 months if store in
Shelf Life	dry, cool place
Application Temperature	-5°C to 50°C
Packaging	19mm x 25mm x 30m (roll)

#### **Instruction for Use**

PENTENS SW20 may be positioned by bonding with an appropriate adhesive. The waterstop may be installed either on the groove cast in the concrete or directly on the concrete surface. Nailing may also be used.

#### Limitations

- PENTENS SW20 should not be used for expansion joints or subjects with repetitive movements.
- PENTENS SW20 should not be installed with less than 70mm of concrete cover to ensure that the pressure arising from the swelling action is accommodated.
- PENTENS SW20 should not be used in any free unrestrained swelling places.

