

## **SUPERSHIELD**

# SWELLBAR R

Hydro-expansive Waterstop based on Polyethylene, Butyl Rubber, Resin and Elastomeric Binders



### **PRODUCT DESCRIPTION**

SUPERSHIELD SWELLBAR R is a hydro-expansive sealing waterstop designed for sealing construction joints in structures, walls, and foundations. It is composed of a mixture of polyethylene, butyl rubber, resin and elastomeric binders. SWELLBAR R is characterized by excellent mechanical strength and elasticity. It exhibits a gradual and controlled expansion when exposed to water. This timing ensures that fresh concrete can set properly without experiencing deformations. Even after multiple hydration and dehydration cycles, SWELLBAR R retains its volume expansion capability. Additionally, SWELLBAR R demonstrates high hydraulic resistance, effectively withstanding hydrostatic pressure equivalent to a 120-metre (12 bar) water column.

#### **AREA OF APPLICATION**

- Suitable for all types of construction joints
- Ideal for cast-in-place concrete subjected to hydrostatic pressure (approximately 12 bar).
- Effective for sealing joints between: Concrete and concrete; Concrete and stone; Concrete and masonry.
- Applicable in foundations, gallery walls, basements, steel and concrete pipes, prefabricated elements, and more.



## **TECHNICAL DATA**

General Characteristics	
PROPERTY	VALUE
Color	Red
Density	$1.2 \pm 0.03 \text{ g/mm}^2$
Temperature of Use	-20°C/+50°C
Performance Characteristics	
CHARACTERISTICS	PERFORMANCE
Shore A	40
Hydro Expansive Product Expansion	≥ 500%
Tensile Stress	≥ 3.50 N/mm²
Longitudinal Elongation at Break	≥ 600%
Hydrostatic Pressure Resistance	12 bar



## **APPLICATION GUIDELINES**

## Application

To ensure the SWELLBAR R waterstop performs optimally, it's crucial to begin with a smooth and even laying surface, devoid of irregularities or crumbling sections. If the surface isn't perfectly smooth, Supershield SELAON can be used to fill and level it, guaranteeing a uniform substrate. Additionally, meticulously remove any non-adhering or powdery parts to achieve a consistent base for application.

Next, spread the SWELLBAR R waterstop in its designated position, ensuring accurate placement. Fixation is achieved by nailing, with one steel nail required approximately every 20-25 cm along the waterstop. It's crucial to note that when sealing joints between waterstop kerbs, overlap should be avoided, and instead, a minimum flanking distance of at least 10 cm is recommended.

### **HEALTH AND SAFETY**

Use Personal Protective Equipment (PPE) like gloves, masks and glasses during installation. For further instructions on a safe use of the product please refer to safety datasheets.

## STORAGE

Store in dry conditions, protected from heat, frost and direct sunlight. Shelf life is 12 months.

## **PACKAGING**

The waterstop has a rectangular cross-section of 10 x 20 mm and is packaged in rolls of 8 metres each (Box of 48 metres - 6 x 8m rolls).

#### WARRANTY

Supershield warrants that its products will be free from material defects and will comply with the specifications provided in their respective technical data sheets. If any product is proven to be defective, Supershield's liability will be limited to the replacement of the product. Supershield will not be liable for any incidental or consequential damages. No other warranties, express or implied, shall apply, including warranties of merchantability or fitness for a particular purpose. It is the user's responsibility to determine the suitability of the product for their intended use and to assume all risks and liabilities associated with its application. Supershield reserves the right to alter the properties of its products without prior notice.