



Lease Life
to Man-Made
Structures

SUPERSHIELD

SWELLBAR B

Hydroexpansive Sodium Bentonite Waterstop with an Expanding Rubber base



PRODUCT DESCRIPTION

SUPERSHIELD SWELLBAR B is a hydro-expansive sealing waterstop joint designed for sealing construction joints in structures, walls, and foundations. It is composed of a mixture of sodium bentonite, expanding rubber, and special aggregating polymers. It stands out for its simple and straightforward application, not requiring any special preparations or pre-shaped seats. The waterstop is easily fixed by nailing and does not need any special protection. When in contact with water, it increases its volume by forming a stable colloidal system that ensures a permanent hermetic seal of the joint. Additionally, it features a retardant coating that delays initial expansion upon first contact with water, preventing deformations during the initial hardening phase of fresh concrete. SUPERSHIELD SWELLBAR B provides an efficient and reliable solution for creating durable, watertight construction joints without the need for extensive preparation or specialized tools.

AREA OF APPLICATION

The SUPERSHIELD SWELLBAR B is used for rigid construction joints (non-expanding) and connections to ensure a secure and enduring hydraulic seal.



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TECHNICAL DATA

General Characteristics	
PROPERTY	VALUE
Color	Black
Density	1.4-1.5 kg/dm ³
Odor	Odorless
Temperature of Use	-15°C / +50°C
Performance Characteristics	
CHARACTERISTICS	PERFORMANCE
Hydro Expansive Product Expansion	+ 350%
Sodium Bentonite Content	> 60%
Expansion after 7 days in demineralized water with pH~7	250%
Expansion after 7 days at pH 12.33	110%
Longitudinal Elongation at Break	60%



APPLICATION GUIDELINES

Application

To ensure the SUPERSHIELD SWELLBAR B sodium bentonite 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 SUPERSHIELD SWELLBAR B 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.

Ensure proper concrete covering of 10-12 cm to contain the expansive action resulting from hydration. Similarly, maintain a minimum distance of 8 cm between the bentonite kerb and formwork spacers. In cases involving groundwater with high saline content or for applications concerning leachate and wastewater stops, conduct preliminary expansion tests or consider utilizing the specific SUPERSHIELD SWELLBAR SW waterstop.

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 25 x 20 mm and is packaged in rolls of 5 metres each (Box of 6 x 5m 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.