

MONNELI ELASTOJOINT SB20

Hydrophilic Swellable Waterstop Joint Profile

Product Description

Highly polymerized, rubber based material with various additives. It has a unique properties that when in contact with water, its volume expands in a controlled fashion up to approximately 400%, guaranteeing a watertight seal between fresh and cured concrete as well as, on cracks caused by hydrometric shrinkage of concrete or structural movements.

The grooved profile of the ELASTOJOINT SB20 section improves the concrete bonding and enhance waterproofing performance.

Uses

ELASTOJOINT SB20 specifically formulated in order to create an impermeable characteristic material used for sealing connections between fresh and cured concrete on both horizontal and vertical joints. areas of application include:

- Bases and concrete header walls
- Foundation walls
- Underground concrete structures
- Concrete tanks and sewerage collectors
- Pipe penetrations
- Subway stations
- Water treatment plants
- Swimming pools
- Basements
- Reservoirs
- Tunnels and pits

Advantages

- Easy to install (no rails, bonding agents & welding required)
- No hardening nor curing time pre-requisite

- Has extra-ordinary expansion capacity
- Powerfully bonds with old & new concrete
- Extremely durable and has superb waterproofing results
- Easy to shape & form to joints
- Delayed swelling ability inhibits premature expansion in cases of adverse weather condition during installation or during pouring of concrete
- Toxic and hazard threat-free
- Exceptionally flexible
- Good resistance to acids, alkalis and most aqueous solutions

Instructions for Use

Surface Preparation

The surface of the concrete shall be flat, dry, smooth, sound, clean and uncontaminated.

This preparation shall be such as to leave a sound exposed concrete surface free from dust, loose particles and any deleterious matter. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Oil, grease, varnishes, rust, dust and mould on metal surfaces shall be removed by wire or stiff brushing and grit blasting then wiped with SOLVENTE 10 prior to priming.

Moss and lichen must be removed physically followed by treatment with fungicidal wash. After treatment, it must be washed down thoroughly with clean water and allow to dry.

Installation

ELASTOJOINT SB20 waterstops shall be positioned to ensure that a minimum of 80 mm cover of concrete is present to accommodate pressure developed during the swelling process.

The waterstops may be positioned by butt-joining the strips making sure their ends overlap by at least 5 cm. The waterstops may also be installed either into a groove cast in the concrete or directly onto the concrete surface.

Recommendations

- ELASTOJOINT SB20 should never be used in expansion/movement joints.
- ELASTOJOINT SB20 contracts back to its original state when exposed to an absolutely dry and or a zero moisture environment. However, it gradually swells again when in contact with water. The strength of the waterstop will not be affected even on a repeated wet and dry cycle.
- Do not attempt to install ELASTOJOINT SB20 on structures that are immersed in water. In this case, it is a must to eliminate free-standing water from the surface.
- Never attempt to make the ELASTOJOINT SB20 appears longer by pulling nor stretching as it hampers product's full potential and effectively.
- Do not install ELASTOJOINT SB20 on areas highly contaminated with acids or solvents.
- When in use of a vibrator, the vibrator needle must never be pushed directly against
- ELASTOJOINT SB20. The product is very flexible and by so doing it could destroy product's sealing capacity. A minimum of 200mm clearance from the water bar is recommended.
- Provide at least 5cm reinforcement spacers between the surfaces where ELASTOJOINT SB20 is to be applied.
- When ELASTOJOINT SB20 is applied around pipes, use tie wires to fix the profile in place.
- Apply PRIMER POXY FF on the surface area by at least 3 cm width when working on a below 10°C temperature environment.

Packaging

- Length of roll: 5m
- Rolls per box: 3

Technical Data

Properties	Results
Shape	Rectangular section 20x5mm
Color	Red
Density	1.3 kg/L
Tensile strength	2.5 N/mm ²
Swelling pressure	1299 N/mm ²
Hydrostatic pressure	0.5 N/mm ²
Shore A hardness	45
Solid content	100%
Elongation	250%
Volumetric expansion in water	350%
Application temperature	+5°C to +35°C

All values are subject to 5-10 % tolerance

Storage

Keep the product in dry and covered shed at temperature between +10°C and +25°C. In these conditions, ELASTOJOINT SB20 maintains its stability for 12 months.

Exposure to extreme temperature and humidity results in the deterioration of the product's efficiency and reduces its shelf life.

Health & Safety

Protective clothing such as gloves should be worn during installation. Wash hands with soap and water after working with this material.

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ELASTOJOINT SB20
Technical Data Sheet
Edition: January 2020
Revision: 02

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