



# Polyfleece SX<sup>®</sup> 1000

External swellable seal fleece

## Properties:

Polyfleece SX<sup>®</sup> 1000 is a high quality seal fleece with a swellable coating containing modified polymers. The chemical composition of the coating makes it start to expand when getting on contact with water (swelling rate appr. 150%).

Polyfleece SX<sup>®</sup> 1000 is applied as external, linear seal of connection joints, as holohedral seal or as pre-applied waterproofing membrane. All concrete surfaces in under & over ground civil engineering and tunneling engineering constructions can be sealed with Polyfleece SX<sup>®</sup> 1000.

## Application:

Polyfleece SX<sup>®</sup> 1000 is applied as linear or holohedral external seal for all kinds of reinforced concrete structures. The swellable polymer coating, mechanically and holohedrally installed on the fleece, seals the concrete reliably and permanently. To ensure the sealing of existing buildings the coated side of the seal fleece faces in the direction of the construction. Polyfleece SX<sup>®</sup> 1000 is installed with a low viscous, swellable adhesive on the concrete surface. Due to the swelling function triggered by the effect of moisture, pressurized swelling builds up between the concrete and the bordering media. This moisture tiggering swelling effect effectively seals even parts of the coating which have been damaged by mechanical impact as a result of the concreting process.

Alternatively Polyfleece SX<sup>®</sup> 1000 can also be used for bonding to fresh concrete as a pre-applied waterproofing membrane: Polyfleece SX<sup>®</sup> 1000 is laid out on a base plate with its coated side facing the blinding layer or it will be fixed with its coated side towards the formwork in wall constructions. The position of the reinforcement is directly on the uncoated side of the seal fleece, concrete is then poured on to this uncoated side of Polyfleece SX<sup>®</sup> 1000, which will suck up a part of the concrete water. By doing so the concrete adheres closely to the fleece.

## Technical features:

Color:	white / grey
Environmental compatibility:	free of solvents and Isocyanate, free of PVC and Silicone
Dimensions:	length: 10,0m; respectively 20,0m width: 1,0m thickness: 1,31mm
Mass per unit area:	1.235 g/m <sup>2</sup>
Tensile properties: (acc. DIN EN 12311-2)	lengthw.: 384 N/50mm across: 278 N/50mm
Elongation at break: (acc. DIN EN 12311-2)	lengthw.: 22,7% across: 75,1%
Joint strength: (acc. DIN EN 12317-2)	glued seam: 113 N/50mm
Resistance to tearing: nail shank (acc. DIN EN 12310-1)	lengthw.: 165 N across: 189 N



Adhesion to concrete: > 3,0 N/mm  
 Resistance to temperature: -40°C / +100°C  
 Reaction to fire: class E

**Storage:**

Polyfleece SX<sup>®</sup> 1000 can be stored in the original unopened containers for at least 12 months at temperatures between +5° C and +25° C.

**Installation:**

Installation of Polyfleece SX<sup>®</sup> 1000 in existing buildings:

Polyfleece SX<sup>®</sup> 1000 is bonded directly on the concrete surface. The surfaces where the seal fleece is installed, must be firm, sustainable, clean and free of dust or loose particles. First the low viscous adhesive is rolled onto the concrete sub-surface, secondly the Polyfleece SX<sup>®</sup> 1000 is gently pushed into the humid adhesive with the coated side (depending on temperatures a skin of the adhesive appears within 5 - 10 minutes). The self-adhesive edge strip at the long side of Polyfleece SX<sup>®</sup> 1000 functions as an overlap joint (remove protective film).

Installation of Polyfleece SX<sup>®</sup> 1000 in fresh concrete:

On a base plate Polyfleece SX<sup>®</sup> 1000 is laid out with its coated side facing the blinding layer or it will be fixed with its coated side towards the formwork in wall constructions. The position of the reinforcement is directly on the uncoated side of the seal fleece, concrete is then poured on to this uncoated side of Polyfleece SX<sup>®</sup> 1000, which will suck up a part of the concrete water. By doing so the concrete adheres closely to the fleece.

Storing and working with Polyfleece SX<sup>®</sup> 1000 is trouble free; it's neither combustible nor toxic.

The working temperature of Polyfleece SX<sup>®</sup> 1000 is from -10°C to +40°C (-5°C/+30°C construction device).

Polyfleece SX<sup>®</sup> 1000 must be stored in a dry place.

**Accessories:**

Order no 30450	Polymer swelling paste SX <sup>®</sup> 100 cartridge	290 ml
Order no 30351	Polymer swelling paste SX <sup>®</sup> 100 tubular bag	600 ml
Order no 30XXX	Polyfleece SX <sup>®</sup> 1000 - adhesive	
Order no 30602	FlexproofX <sup>®</sup> 1 NV	7.5 kg
Order no 30607	FlexproofX <sup>®</sup> 1 roller	10 cm
Order no 30628	FlexproofX <sup>®</sup> 1 roller	grid

Note:

The information on this data sheet is based on our experience and given to the best of our knowledge, but is not legally binding. Recommendations, which are at variance with those stated in this data sheet, are only binding for us, when confirmed in writing. The manufacturer is not responsible for damages resulting from the misuse or incorrect storage of the product. For the accuracy of this information we are liable within the scope of our delivery and service conditions.