



BentoFlex® Quellfugenband

Swellable joint sealants for concrete made of sodium bentonite

BentoFlex® Quellfugenband: Absolutely safe, very cost-effective and durable sealant for construction joints in concrete. 25 years of practical experience and many millions of meters of joints sealed with our swelling tapes worldwide, prove the quality and are the best reference for these products.

BentoFlex® Quellfugenband are elastic and particularly light and, above all, easy to apply. This alone makes them very economical. Specialist knowledge is not required for installation.

When in contact with water, the tapes absorb water; BentoFlex® Quellfugenband expands to seal the joint gap. The profiles increase their volume in proportion to the amount of water absorbed.

Due to the swelling and the resulting swelling pressure, the profiles also adapt quickly to subsequent changes in joint cross-sections.

Experts know that considerable forces are generated by swelling processes. Under unfavourable circumstances (e.g. with "green concrete") swelling pressure can cause damage. To effectively prevent this, the maximum swelling volume of BentoFlex® Quellfugenband is limited. This effectively prevents undesired high swelling pressure and reliably prevents damage.

BentoFlex® Quellfugenband does not contain any volatile or washable ingredients and therefore cannot harden or even become brittle. Its typical properties are not lost even after years. The resistance to temperature changes and the flexibility at low temperatures is therefore also excellent.



For installation on uneven or rough surfaces, use BentoMastic®307, the swelling tape from the cartridge. This avoids lateral infiltrations and leaks. On smooth, even surfaces, installation is carried out with BentoColl®305, an adhesive specially adapted to bentonite tapes. Alternatively, BentoFlex® Quellfugenband can also be nailed on.

BentoFlex®Quellfugenband swells isotropically on contact with water where it is directly wetted with water. However, the product does not transport water (no wicking effect). Due to the swelling pressure, the flexible, expanding material adapts to all unevenness and levels it out.

Compared to other bentonite tapes, BentoFlex®Quellfugenband is much easier to install because it is not only less stiff, but also more elastic. Because of the polymer used, BentoFlex®Quellfugenband does not disintegrate like other bentonite tapes and can therefore permanently seal water-bearing joints without being washed out.

BentoFlex®Quellfugenband is used with commercial and technical advantages in civil engineering for

● **Sealing of connection joints**

● **Sealing of prefabricated parts, tubbings, socket joints**

● **Sealing of cable and pipe penetrations**

● **Also swells in salt water (22% swell ratio, 3,5% Salt water)**

and wherever water or aqueous solutions must be reliably prevented from passing through structures!

When wetted evenly on all sides with water, the volume of the tapes increases by approx. 3 - 10 % in the first hour, the maximum swelling volume is reached after approx. 120 hours (depending on the shape and dimension of the profiles). !

● **For safety reasons, the maximum swelling volume and thus the maximum possible swelling pressure) of BentoFlex®Quellfugenband is limited to approx. 160 % (volume percent). This reliably prevents damage to the concrete caused by excessive swelling forces!**

BentoFlex®Quellfugenband is chemically inert. It does not contain any ingredients that are corrosive to concrete or reinforcing steel or that attack common sealing materials such as PVC, bitumen, SBR or their mixtures. It is environmentally neutral, contains no questionable or toxic ingredients and can therefore be safely processed and, if necessary, disposed of. Of course, BentoFlex®Quellfugenband poses no danger to the groundwater. The water-stops are resistant to aging. Neither the swelling capacity nor the elastomer structure are negatively affected by aging.

Typical product data

Sodium bentonite	:	> 55 %
Swelling rate in 24h	:	3 - 10 %
Max. swelling rate	:	160 %

Storage

The BentoFlex®Quellfugenband must be stored in a dry place. It is recommended that they remain in their original packaging until use.

Typical and recommended cross-sections for concrete construction applications are -
15 x 10 mm / 20 x 10 mm / 20 x 15 mm / 20 x 25 mm

● **Other dimensions and profiles with round, triangular or trapezoidal cross-sections are available on request and in sufficient quantities, as are special products with higher or lower swelling capacity.**

Recommended accessories

BentoColl®305

A paste-like adhesive compound with excellent adhesion, specially developed for the rapid installation of swelling tapes on all typical building substrates - even on damp concrete. Sets quickly and evens out unevenness in the substrate. Supplied in plastic cartridges with 310 ml content, application with putty guns for joint sealants or Jekto®Gun-074 hand gun.

BentoMastic®307

A 1-component bentonite-based swelling mass. Elastic, solvent-free. Very good adhesion to concrete and steel. For levelling coarse substrates, for securing joints and connections and also as a swellable adhesive. Supplied in aluminium cartridges with 310 ml content, application with commercially available putty guns for joint sealants or the Jekto®Gun-074 hand gun .



**Quickly installed
and doubly safe:**

**BentoFlex®Quellfugenband -
glued with BentoMastic®307**

These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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ARCAN Waterproof
ARCAN GmbH Spezialbaustoffe

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passion to invent 