

BENTOSWELL

Description

Hydrophilic, swellable waterstop made of high quality sodium bentonite and butyl rubber for the preventive sealing of construction joints and as a system component for bentonite mats. BENTOSWELL retains its shape after 3 wet and dry cycles (MFPA certified). However, at some point there will be some wash-out. The advantage of this phenomenon is that concrete voids/cracks are filled. BENTOSWELL has a good resistance to a wide range of chemicals.

Application

BENTOSWELL can be applied both vertically and horizontally, but under no circumstances should it be used in expansion joints. Place the BENTOSWELL on a smooth and dust-free surface (concrete). To ensure a continuous section of the sealing bar, an overlap of 5 to 10 cm is applied and the ends of the bars are firmly pressed together. A minimum concrete cover of 6 cm on each side is required. Do not install BENTOSWELL during heavy rainfall as this may cause swelling before the concrete has been poured onto the sealing bar. Avoid any contact with water before pouring concrete. BENTOSWELL is installed between the inside and outside reinforcement. BENTOSWELL can be fixed by using bentonite waterstop fixing glue or by gun nailing with wire mesh. For vertical applications, the use of a wire mesh is recommended. The mesh and bar are then fixed by gun nailing. BENTOSWELL bars that are damaged, already swollen, or whose geometry has changed may not be installed. For saltwater environments, polluted water conditions and contact with manure and slurry, we recommend BENTOSWELL-SALT. The usability of the product in the respective installation situation must be checked by the user!

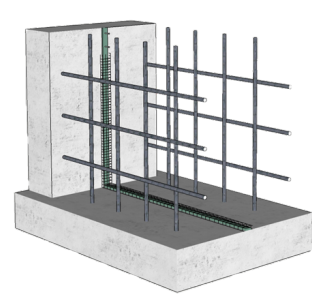
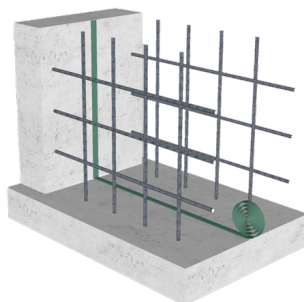
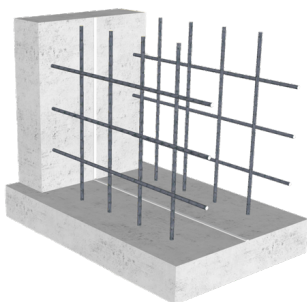
1. Ensure full contact with the joint. If required use fixing glue.
2. Unroll the BENTOSWELL between the first phase starter bars with a minimum concrete cover of 6 cm.
3. Install wire mesh over the BENTOSWELL. In order to ensure good contact with the construction joint surface, shotfire the wire mesh every 25 cm, using nails with washers.

Material

- Sodium bentonite
- Butyl rubber
- Free from PVC, CFC and HFC
- Without substances of very high concern according to ECHA candidate list (REACH Regulation)

Packaging

- Free of halogen-containing compounds, azo dyes, flame retardants



| Item no. | Dimension mm | Length m | Rolls/ Box | m/ Box | m/ Pallet |
|-------------|--------------|----------|------------|--------|-----------|
| BS192405/04 | 19 x 24 | 5,00 | 6 | 30,00 | 1.620,00 |
| BS192405/08 | 19 x 24 | 5,00 | 6 | 30,00 | 1.620,00 |
| BS201010/04 | 20 x 10 | 10,00 | 5 | 50,00 | 3.150,00 |
| BS201010/08 | 20 x 10 | 10,00 | 5 | 50,00 | 3.150,00 |
| BS202505/04 | 20 x 25 | 5,00 | 6 | 30,00 | 1.620,00 |
| BS202505/08 | 20 x 25 | 5,00 | 6 | 30,00 | 1.620,00 |



For further documents
scan or click here!

Technical data:

Volume expansion in rain water: 250 %
 Volume expansion in concrete water: 150 %
 Colour: Black (Item no. BS...04) / Green (Item no. BS...08)
 Density: 1.45 g/m³
 Swelling pressure when encapsulated: Approx. 32 kN/m (MFPA Leipzig)
 Resistance to hydrostatic pressure: Tested up to 5 bar (MFPA Leipzig)
 Bending radius on the corners: 50 mm
 Application Temperature : 0 / +50 °C
 Service Temperature: -50 / +70 °C
 Tolerance range (dimensions) +/-1.0 mm
 These data are not suitable for the issue of specifications. Please contact our Sales Office before issuing specifications.

Weather resistance: Excellent UV and ozone resistance. Avoid long term exposure to direct sunlight.

Chemical resistance: Good general chemical resistance to acids, alkalis and most aqueous solutions but caution is advised with aromatic oils and fuels, vegetable oils and strong aromatic solvents. Contact our Sales Office for detailed specific information.

Chemicals (concentration 1-10%) - Resistance

Inorganic acids - No effect
 Inorganic bases - No effect
 Organic acids/bases - No effect
 Alcohols - No effect
 Aldehydes - No effect
 Amines - No effect
 Ester - No effect
 Ether - No effect
 Detergents and other cleaning agents - Moderate effect
 Chlorine water - No effect
 Aromatic hydrocarbons:
 Benzene - Moderate effect
 Nitrobenzene - Moderate effect
 Toluene - Moderate effect
 Xylene - Moderate effect
 100/150 solvents - Moderate effect



DATA SHEET

BENTOSWELL

Aliphates hydrocarbons (oils and fuels) - Moderate effect

Halogenated hydrocarbons - Moderate effect

Carbon disulphides - Moderate effect

Biological fats, oils and sugars - Moderate effect

No effect: Performance will not be affected under most service conditions.

Moderate effect: Performance may be affected, especially with long-term exposure.

For information on chemical resistance to chemicals in concentrations above 10%, please contact our Sales Office.

Note: Protect from direct sunlight and moisture during storage.

