

DURAHIT® WS816

Highly swellable joint waterstop

Item No 3990

General building authority test certificate, P-1203/709/22, MPA, Braunschweig

FIELDS OF APPLICATION

DURAHIT® WS816 is a water swellable waterstop used for waterproofing of construction joints in concrete constructions. Typical application fields besides others are as follows:

- Waterproofing of construction joints between different concrete pours
- Waterproofing of saw cut joints
- Waterproofing of pipe penetrations
- Waterproofing of the wall-slab joint

DURAHIT® WS816 is characterised by the following benefits:

- 1 000 % (Vol.) swelling capacity, fully reversible for an unlimited number of cycles
- Dimensional stable, no wash-out like with bentonite waterstops
- Retarded swelling, volume increase starts several hours after water contact
- Swelling pressure of > 2 bar, strong resistance against hydrostatic pressure
- Resists 20 m water pressure acc. to EN 12390-8

CONSUMPTION

The required amount is calculated with the planned length of the joint waterproofing.

WORKING PRINCIPLE

DURAHIT® WS816 is a waterstop that swells under contact with water. It is applied on the previous concrete pour into the centre of the construction or expansion joint.

TECHNICAL DATA

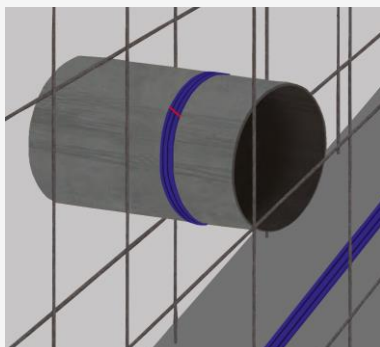
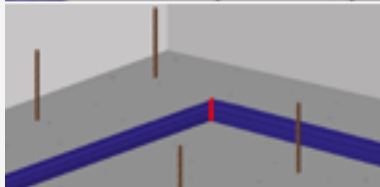
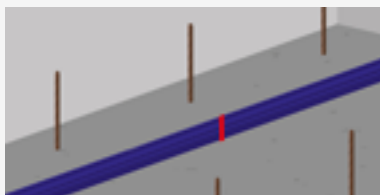
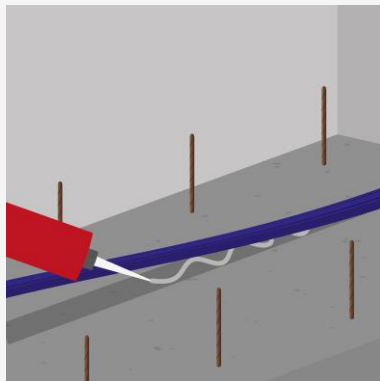
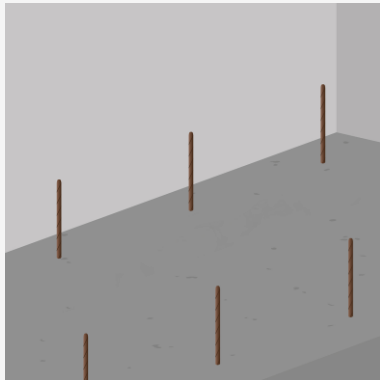
Colour	dark blue
State	solid
Dimensions	20 mm x 5 mm
Density	1.24 g/cm ³
Mass	108 g/m ± 3%
Workability	from +5 to +35 °C
Water impermeability of positive side (acc. to EN 12390-8)	2 bar
Maximum swelling <ul style="list-style-type: none"> ▪ Distilled water ▪ Alkali storage ▪ Acid storage 	796 % 448 % 324%
Fire properties	Class E (acc. to EN 13501-1)
Shelf life	approx. 5 years in unopened original packs
Storage conditions	store in unopened, original sealed packaging between +5 °C and +25 °C. Protect from frost and insolation.

Ha-Be Betonchemie
GmbH
31785 Hameln
Werk Hameln

P-1203/709/22

iBMB MPA
TU BRAUNSCHWEIG
Materialeigenschaften
Institut für Baustoffe
für das Bauen
Massivbau und Brandschutz

PROCESSING INDICATIONS



PREPARING

Before installation, DURAHIT® WS816 should be stored in its original packaging and kept dry.

The substrate must be dry, level, free from loose particles, cement slurries and separating agents. The surface should be open porous and load bearing. Minimal strength requirement is 15 MPa.

Before concreting, DURAHIT® WS816 must be checked for a secure fit and premature swelling. Avoid standing water on the waterstop. Do not install material that has already swollen.

BONDING

To prevent water seeping underneath DURAHIT® WS816 with the adhesive *Soudal Fix All High Tack* (or equivalent) shall be bonded to the entire surface of the substrate.

DURAHIT® WS816 is affixed in the center of the joint on both the internal and external reinforcement with a clearance of approx. 80 mm (at least 50 mm). For thicker components, DURAHIT® WS816 can be placed within the range of $1/3 t - 1/2 t$ of the component thickness t (related to the stress side). Do not use DURAHIT® WS816 on concrete walls with a thickness of less than 120 mm.

JOINT AREAS

Joint areas are butt-joint at a mitre angle of 45 degrees and are connect without a gap.

Hollow areas of more than 4 mm may reduce watertightness significantly.

PIPES

Plastic pipes can only be treated with DURAHIT® WS816 up to DN 50 with cold water and up to DN 25 for more than 30 °C water temperature.

Due to the high swelling pressure plastic pipes may collapse under load. Larger diameters are only permitted with metal pipes.

HEALTH & SAFETY

This product is not classified as hazardous according to the CLP regulations. See safety data sheet for further information.

PACKAGING

- 50 m roll (5 rolls are packaged in a box; 12 boxes per pallet)

REMARKS

This information describes the application- and processing possibilities of a product and its operation principles under regular conditions. Having no influence on the further application and processing, especially in conjunction with other construction materials, the given indication is neither a warranty in respect of the product's properties or its fitness for a particular purpose nor a full instruction of use. This information, any other recommendation or verbal advice are not binding and do not infer to any liability or legal demand.

Due to continuous further development, the most recent Technical Data Sheet is valid and will be supplied on request. All orders are accepted subject to our current general terms and conditions.

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