

# HYPERSTOP DB SERIES

## Hydrophilic Bentonite Technical Data Sheet

DB-2519



### Description

Hyperstop DB is a high performance hydrophilic butyl bentonite waterstop, which swells to form a long-lasting water-tight compression seal. The swelling action is the result between water and hydrophilic groups which are part of the Hyperstop DB molecular structure.

### Uses

Hyperstop DB is suitable for static construction joints, penetrations or non-movement sections where there is any concern regarding water penetration.



### Typical Areas of Application

- Construction joints
- Concrete foundations and walls
- Concrete slabs on grade
- Elevated slabs and ramps
- Elevator pits and equipment pits
- Parking structures
- Swimming pools and water features
- Water towers, reservoirs and water storage tanks
- Tunnels, pipes, underground vaults etc

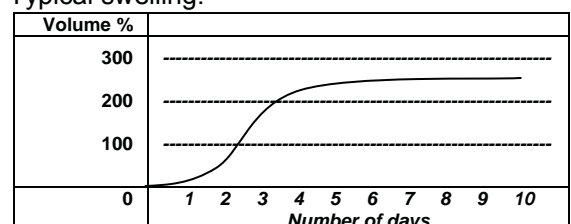
### Advantages

- Easy to install
- Long lasting durability
- Requires no welding or complex detailing
- Economical - low cost waterstop
- Conforms easily to irregular surfaces
- Sustains effective seal in submerged environments
- Compatible with common building materials, plastics, metals etc
- Safe for drinking water
- Non-toxic and zero VOC
- Swelling properties unaffected by long term wet/dry cycles

### Physical Properties

Form:	Flexible mastic strip
Colour:	Black
Expansion volume:	250%
Hydrostatic resistance:	550kPa (55m head)
Specific gravity ASTM D-71:	1.5
Application temperature range:	-24°C to 52°C
Service temperature range:	-34°C to 82°C
Accelerated aging flow resistance:	No abnormality Mechanical oven 4 hrs @ 100°C.
Packaging:	DB2519 - 25mm x 19mm x 5m roll (6 rolls per box)

### Typical swelling:



## Design Criteria

Hyperstop DB can be installed to either a channel formed in the concrete or directly onto the concrete surface.

For quick installation, it is recommended that a relatively smooth surface be provided along the path of the Hyperstop DB; however a moderate amount of irregularity can be accommodated.

Always ensure that there is a minimum of 50mm cover from the edge of the concrete to the face of the Hyperstop DB to prevent concrete blow-outs.

Where possible, situate the Hyperstop DB between two rows of reinforcing steel as this will assist in preventing product displacement.

## Application Instructions

1. Prep work - carefully brush off all loose dirt, dust and debris and apply a suitable contact adhesive. A general solvent-based construction adhesive will suit most situations. In addition, concrete nails can also be used but try to use these in conjunction with an adhesive.
2. Using moderate hand pressure, press a continuous roll of Hyperseal DB into position. Overlap ends approximately 25mm where the strips finish.
3. Peel the protective backing from the exposed side of the Hyperstop DB. Knead the overlapped ends together to form a continuous, uninterrupted seal.
4. Check to be certain the Hyperstop DB has adhered to the area fully.
5. Placement of concrete can proceed as soon as sufficient bond of the Hyperstop DB to the concrete has occurred. Care should be taken not to displace the Hyperstop DB during this process.
6. Hyperstop DB can withstand a slight amount of initial moisture but once fully immersed, swelling commences shortly after and reaches full expansion in approximately 3-7 days, thus placement time of concrete is critical in inclement weather conditions



## Safety

Before using or handling materials, please read all relevant Material Safety Data Sheets (MSDS).

## Storage

Hyperstop DB can be stored unopened for 12 months in a cool, dry place below 25°C. Any leftover material from site usage should be immediately returned to the original box and stored as outlined.

## Limitations

- Do not leave product exposed to inclement weather conditions which could cause the material to expand prematurely.
- Do not leave product immersed in water prior to concrete placement.
- Ground contaminants or salt water will hinder the amount of swelling achieved. Please refer to our alternative Hyperseal products.

## Warranty

The seller warrants that at the time of shipment its products are free from manufacturing defects and, when applied in accordance with the current specification and application instructions, will perform as so stated in its product literature. Project specific warranties are available on request. Please consult your nearest distributor for further information.

## Product Disclaimer

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations are only for the uses they are intended. Hyperseal Waterstops does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product. We also reserve the right to update information without prior notice to reflect ongoing research and development programs. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with any relevant items.

## Technical Support

For any additional information not expressed in this document, please contact us via the details below.