

MATAPROOF

CEMswell Hydrophilic Swelling Rubber

Product Description

CEMswell is an expanding joint sealing profile that swells upon contact with water, while remaining dimensionally stable. It is an extruded TPE-based alloy made from rubber, hydrophilic resin, polyethylene, silicone and special admixtures. CEMswell is capable of swelling up to four times its own volume and will mold itself to surrounding surfaces under conditions of confinement.

Applications

CEMswell is designed for sealing of joints in tunnels and shafts in structures such as subways, water supply and sewer systems, tunnels, and cable channels. It is ideal for sealing precast/prefabricated concrete elements in these applications as well as construction at greater depths or under the seabed where protection against high-pressure water is critical. CEMswell performs at temperatures ranging from -22 °F (-30 °C) to 159 °F (70 °C).

Features and Benefits

- Suitable for the use in both vertical and horizontal joints in prefabricated elements
- Successfully seals joints up to 5 bar water pressure
- Available in various standard sizes but also can be extruded in any user-defined shape and size
- In its round profile, may be used to successfully seal tie-bolt holes
- Swelling volume more than 400%
- Easy to install
- Approved for the use in wastewater, slurry and animal manure
- CEMswell Inject may be used with injection hose systems for a double joint sealing system

Physical Properties*

Property	Test Method	Value
Color		Grey
Working Material		TPE
Shore A		38
Elongation at Break	ASTM D638	490 - 770%
Tensile Strength	ASTM D638	1.1/2.1 MPa
Weight		18x7 mm:160 g/m 23x15 mm:400 g/m
Specific Weight		1.25 g/cm ³
Swelling Pressure		.56 N/mm ²
Volume of Swelling		More than 400%
Concrete Cover		Min. 8 to 10 cm

** The values shown are based on system testing under laboratory conditions. Different field application conditions or lab equipment configurations may result in system value variances.*

Packaging

- CEMswell - 18x7 mm, 6x12 m per box; 3600 m per pallet
- CEMswell Inject - 23x15 mm, 5x6 m per box; 1500 m per pallet
- Other sizes available upon request

Installation

The surface onto which CEMswell is to be placed should be clean and flat.

Limitations/ Shelf Life

Shelf life 3 years when stored in dry conditions, protected from direct sunlight, frost and water.

Warranty

FPT Infrastructure warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, FPT Infrastructure makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to FPT Infrastructure Products. FPT Infrastructure's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of FPT Infrastructure Products proven to be defective, and FPT Infrastructure shall not be liable for any loss or damage.

Please refer to our website at fptinfrastructure.com for the most up-to-date Product Data Sheets.

NOTE: All FPT Infrastructure Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.