

## Aquaswell

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### Technical data

Basis	Polyurethane
Consistency	Stable paste
Curing system	Moisture Curing (air humidity)
Skin formation	120 min
Curing speed *	1,8 mm / 24h
Hardness**	20 +/-5 Shore A
Density	1,37 g/ml
Elasticity modulus 100% (ISO 37)**	0,34 N/mm <sup>2</sup>
Max. tension (ISO 37)**	0,60 N/mm <sup>2</sup>
Elongation at break (ISO 37)**	> 800 %
E-modulus 100% in joint (ISO 8339)	0,12 N/mm <sup>2</sup>
Max tension in joint (ISO 8339)	0,20 N/mm <sup>2</sup>
Elongation at Break in joint (ISO 839)	250 %
Temperature resistance**	-30 °C → 90 °C
Shrinkage	< 5 %

\* These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. \*\* This information relates to fully cured product.

### Product description

Aquaswell is a high quality, elastic, 1-component sealant based on polyurethane. Swells in contact with water. Designed for the water- and gastight sealing around cable or pipe penetrations and the watertight sealing of joints in concrete and prefabricated elements. Able to bond bentonite swelling strips to rough surfaces.

### Properties

- Water- and gastight until 5 bar (DVGW VP-601)
- Excellent adhesion on a wide range of construction materials both in interior and exterior applications
- Permanently elastic after curing
- Easy application on both vertical and horizontal surfaces
- Swells up to 450% of its original volume, under constant water load
- Returns to its original shape when the water contact is cleared
- Solvent free

### Applications

- Water- and gastight sealing of most pipes in gas-, water- and cable ducts.
- Watertight sealing of construction joints in concrete and prefabricated elements.
- Watertight sealing of joints in building and construction.
- Adhesion of bentonite swelling tapes on rough surfaces.

### Packaging

*Colour:* champagne

*Packaging:* 310 ml alu cartridge, 600 ml foil bag

### Shelf life

Cartridges: 9 months Foil bags: 12 months If stored in an unopened packaging and stored in a cool and dry place at temperatures between +5°C and +25°C.

Remark: This technical data sheet replaces all previous versions. The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. Since the design, the quality of the substrate and processing conditions are beyond our control, no liability under this publication is accepted. In every case it is recommended to carry out preliminary experiments. Soudal reserves the right to modify products without prior notice.

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## Substrates

*Substrates:* concrete, metals, PVC, No adhesion on glass, PE, PP, PTFE and bituminous surfaces.

*Nature:* clean, free of dust and grease.

*Surface preparation:* No pretreatment required.

## Application method

### 1) Application method sealing of penetrations:

Fill throughput on both sides at least 1 cm wide and at least 5 cm deep with Aquaswell. With manual or pneumatic sealant gun. Use joint filling if necessary. In case of large/deep penetrations, wrap PU joint filling in the middle around the pipe. If there is a larger gap between borehole and throughput, more product will be needed. E.g. with a 120 mm core bore and 60 mm pipe diameter 4 tubes and 1 joint filling are needed to guarantee watertightness. At 80 mm core drilling and 60 mm tube diameter 1 tube is sufficient. The width of the applied seal may never exceed the depth. Always work sufficiently deep at larger openings. If necessary, finish the seal with smear compound and smear plate.

### 2) Application method sealing of concrete pouring seams:

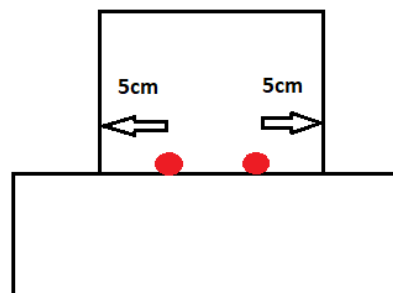
Apply Aquaswell before pouring with a short cut nozzle,  $\pm 1$  cm diameter. Keep 5 cm from the edges, apply 2 beads if possible. These may be less than 5 cm apart. It is more important that the bead is not within 5 cm of the edge. See detail drawing.

### 3) Application method attach swelling strips:

Apply a bead of  $\pm 1$  cm diameter in the corner between floor and wall. Press the strip well into the uncured Aquaswell bead.

*Cleaning:* Aquaswell can be removed from tools and material with Soudal Surface Cleaner, White Spirit or Swipex, before curing.

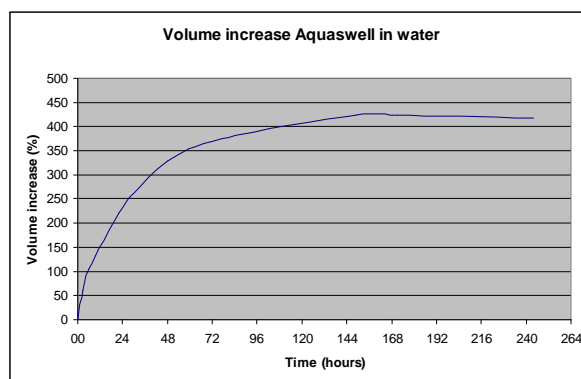
*Repair:* With the same material.



Detail for sealing of concrete pouring seams

## Swelling Characteristics

Sealant bead extruded with triangular nozzle, fully immersed in water at 23°C.



- Volume increase after 24 hours: 150-200%
- Volume increase after 72 hours: 300%
- Volume increase after 144 hours: 400-450%

## Health- and Safety Recommendations

Take the usual labour hygiene into account. Consult label and material safety data sheet for more information.

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**Remarks**

- Given the great diversity of possible surfaces, it is recommended to perform an adhesion test on both substrates prior to application.
- If the tubes are placed in lukewarm water before use, the extrudability and final adhesion will improve.
- For each application, avoid contact with water until skin has formed.

**Standards and certificates**

Aquaswell complies with the LEED requirements v4.1 IEQ Credit 4.1 - Low Emitting Materials regarding the VOC content evaluation. Aquaswell complies with the VOC limits as described in SCAQMD regulation 1168 (2017).  
VOC-content < 50 g/L

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