













# **MULTIPURPOSE SWELLABLE** SEALANT

Installation instructions

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# 1. Introduction

### **General information**

A single-component, polymeric, multipurpose sealant expanding when contacting with water. Designed for construction of foundations and engineering structures.

#### Features

- After hardening, it becomes elastic and, through increasing its volume twice, provides waterproofing.
- It is applied as conventional sealants using an explosiveactuated gun.
- It provides waterproofing of a connection without losing its elasticity.
- Suitable for attachment of the LOGICBASE IC-SP 20×10 swellable bar. Eliminates displacement of the bar during concreting and prevents forming a cold joint between concrete and the bar.

## Benefits



High resistance to salt water and chemicals



High adhesion to dry and wet (without free water) surfaces (concrete, metal and plastic ones)



Reversible swelling process (original dimensions are restored after drying)



High strength and elasticity



Ease of installation



Designed to withstand high water pressure



A significant volume increase when contacting with water



May be used on uneven surfaces



Does not contain solvents



2. Installation of the swellable sealant from TECHNONICOL

# 2.1 Base preparation

The base must be dry. The use on a matt-wet base without standing water is allowed. The base must be firm, clean and free from any unfixed parts, dust, oil and other substances that prevent adhesion. Otherwise, the base must be cleaned either manually or mechanically.

Use suitable tools and accessories for mechanical cleaning of concrete. If there are significant roughnesses (more than 5 mm) on the concrete surface, it is recommended to machine the bar installation places mechanically.

**IMPORTANT!** Surface preparation is an important stage for highquality installation of a material.

#### **ATTENTION!**

- The recommended operating temperatures are from +5 °C to +30 °C.
- In case the sealant is used at temperatures less than +5 °C, its application may be difficult.
- In case the material is used at temperatures less than +5 °C, the polymerization hardening time may be increased.
- Use the material within 24 hours after opening-out.

# 2.2 Sealing cold joints in monolithic constructions, fixing the polymer bar LOGICBASE IC-SP 20×10







Cut off the plastic conical tip on the tube.

Install the tip and cut at an angle to facilitate applying the sealant. For increasing the applicable sealant layer, cut the tip as much as possible:

 a tip hole diameter for sealing cold joints is 15-20 mm;

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a tip hole diameter for fixing the LOGICBASE IC-SP bar is 20×10 — 8-10 mm (the theoretical flow rate of the sealant is 120 ml per meter run). The specified flow rate norms are theoretical. The flow rate accuracy depends on the unevenness of the base and the width of application and is determined at the workplace.

Prepare a sealant gun for working. To do this, insert the tube into the gun and secure its enclosure. Follow the instructions for using the gun.

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Apply the sealant to the prepared concrete surface by a slow uniform motion. To do this, squeeze a sufficient amount of sealant out of the tube. Apply the sealant in a strip with no gaps in the middle of the seam of the concrete element. If the concrete surface has any roughnesses, the sealant amount must be sufficient for aligning them.

ATTENTION! A distance to the edge of the wall from the sealant and the installed cord must be at least 8 cm on each side. Lay concrete no earlier than 2-3 hours after applying the sealant. The TECHNONICOL swellable sealant needs to be prevented from premature contacting with water for the first 24 hours.







For fixation of a LOGICBASE IC-SP 20x10 bar, lay the polymer bar over the sealant applied in the middle of the joint.

Fix it by smooth pressing into the freshly applied sealant. The minimum distance from the edge id the joint to the bar must be not less than 8 cm on all sides. For the best fixation while laying the bar, it is recommended to provide additional mechanical hold-down in places of residual stress.

ATTENTION! Lay concrete no earlier than 2-3 hours after applying the sealant. In order to avoid premature starting the LOGICBASE IC-SP 20×10 bar swelling process, the bar should be protected from moisture ingress.

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2.3 Sealing the places where the waterproofing is adjacent to pipe penetrations (places of entry of engineering communications)\*



Upon welding the membrane, install a clamp with the corresponding diameter, which should securely fix the membrane on the pipe.



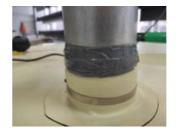
Fill the formed cavity with the sealant along the entire contour of the pipe until a visible swelling occurs.

Upon filling the cavity between the membrane and the pipe with the sealant, install the second clamp at a distance not less than 30-50 mm from the first clamp.









For additional sealing, it is recommended to treat the edge of the membrane with the TECHNONICOL LOGICFLEX polyurethane sealant. For this purpose, if necessary, remove excess swelling sealant and apply the TECHNONICOL LOGICFLEX PU sealant in such a way that it closes the upper clamp and connects to the pipe base, forming a hermetic lock.

#### **ATTENTION!**

Metal parts must be cleaned of rust, as well as traces of oils and paint to the state of «clean» metal.

\* For more information on performing this assembly, see "Instructions on installing the waterproofing foundation system using LOGICBASE PVC membranes".

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