

PC-Injoflex® T

RE-INJECTABLE HOSE SYSTEM FOR RELIABLE
CONSTRUCTION JOINT SEALING

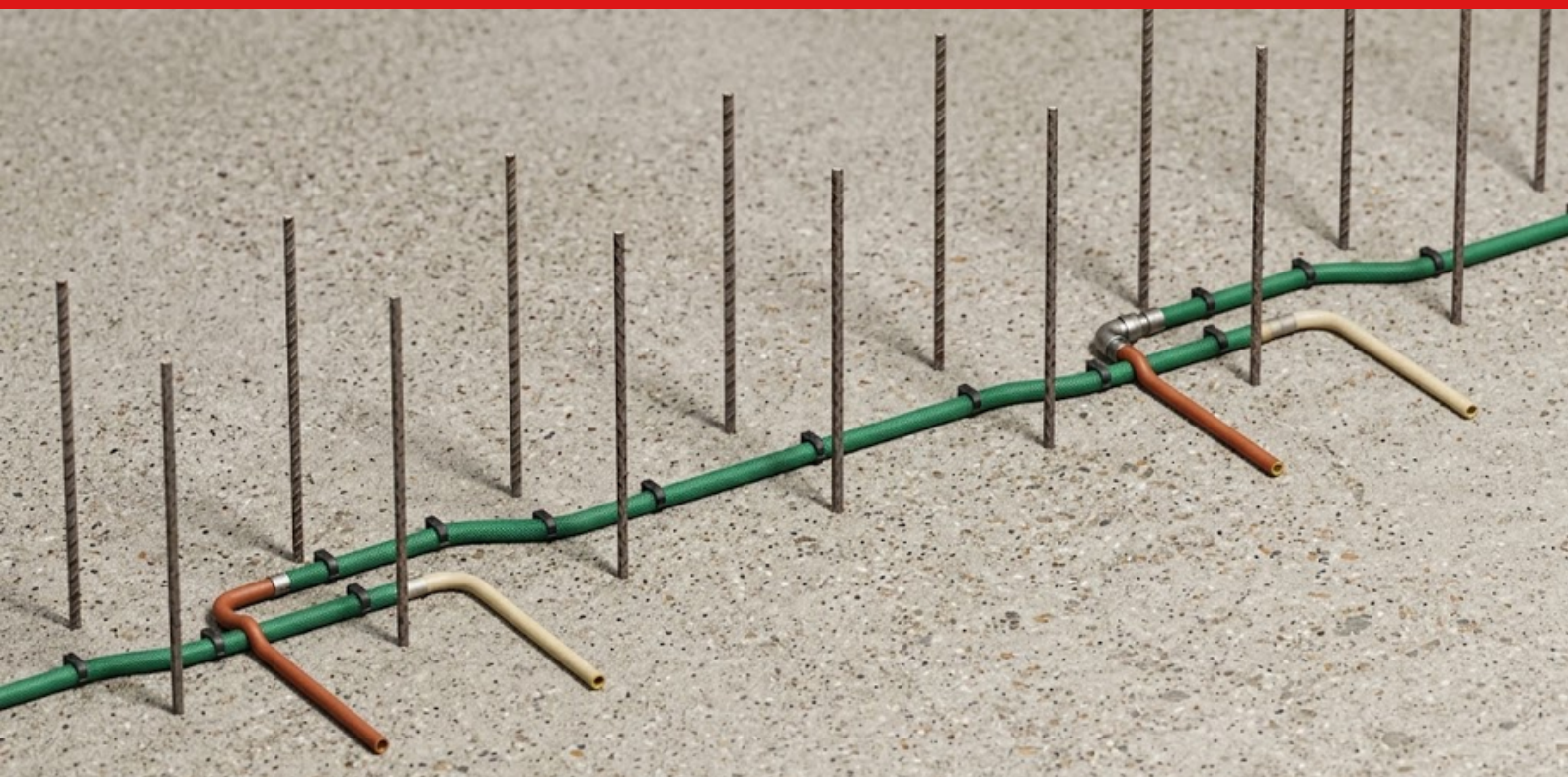


INTRODUCTION

PC-Injoflex® T is a flexible and economical re-injectable hose system designed for sealing construction joints in watertight concrete structures. The system provides a planned injection pathway for suitable injection materials, helping create reliable secondary sealing against water under pressure and water not under pressure. Its specialized hose geometry helps prevent cement paste from entering the injection channel during concrete casting, while the range of hose types and sizes allows the system to be selected according to different joint and injection requirements.

PURPOSE OF USE?

PC-Injoflex® T is suitable for planned injection sealing of construction joints in watertight concrete structures and can be used as a secondary sealing system in both horizontal and vertical construction joints. It is applicable to structural, civil and general construction engineering projects where concrete components may be exposed to water under pressure or water without pressure. The system can also be combined with other joint-sealing systems where an additional secondary seal is required.



Key Features & Benefits

✓ **Reliable Joint Sealing**

Designed for planned injection sealing of construction joints in watertight concrete structures.

✓ **Easy Installation**

Designed for straight forward installation within construction joints.

✓ **Suitable for Water Exposure**

Applicable to structures exposed to water under pressure and water without pressure.

✓ **Controlled Injection Path**

Hose geometry helps prevent cement paste from entering the transport channel during concrete casting.

✓ **Flexible System**

Available in different hose properties and diameters to suit varying project requirements.

✓ **Smooth Hose Surface**

Helps prevent undesirable bonding between the injection hose and surrounding concrete.

✓ **Multiple Injection Capability**

Selected system variants can be injected multiple times for continued sealing and maintenance.

✓ **Versatile Injection Materials**

The system can accommodate conventional injection materials, depending on the selected hose type.



PC-Injoflex® T System Types

PC-Injoflex® T1	Re-injectable grouting tube for liquid cement or polyurethane waterstop material injection
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Technical Characteristics

PC-Injoflex® T1 is a single-walled PVC re-injectable grouting tube designed for the injection of liquid cement-based or polyurethane waterstop materials into construction joints. It provides a controlled injection channel within the joint, allowing suitable grouting materials to be introduced for effective sealing against water penetration. The tube has an internal diameter of 6 mm, an external diameter of 12 mm, and a maximum recommended injection length of 10 m.



General System Parameters

PARAMETER	PC-INJOFLEX® T1
Material	PVC-based
Impact Resistance	Round
Inside Diameter	6 mm
Outside Diameter	13.5 mm
Weight	106 ± 3 g/m
Maximum Water Pressure	1.0 bar
Maximum Concrete Column Height	5 m

Application Instructions

General Information

PC-Injoflex® T should be installed on a level, clean and load-bearing substrate, positioned in the centre of the construction joint. The hose should be installed in sections of maximum 10 m using suitable end pieces. Fasteners should generally be placed at intervals of 150 mm or less where required by the joint condition. The hose should follow the contour of the surface without kinking or constriction, and changes in direction should be made using an appropriate bending radius. Where two hose sections meet, they should overlap by at least 150 mm, while parallel hoses should maintain a minimum spacing of 50 mm. A minimum concrete cover of 50 mm should also be maintained.

Storage

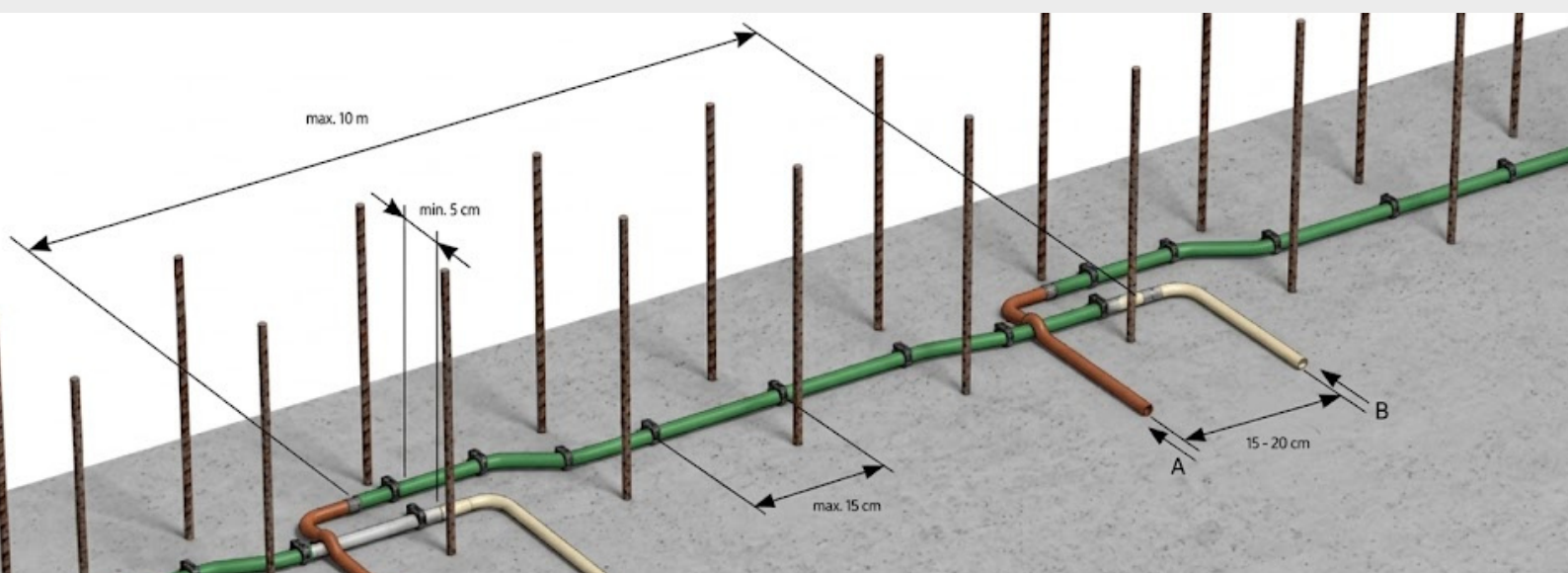
PC-Injoflex® T injection hoses should be handled carefully during loading, unloading and transportation and checked after delivery to ensure they are complete and undamaged. Until installation, the hoses should remain in their original packaging, protected from direct sunlight, and stored in a dry, frost-free location.

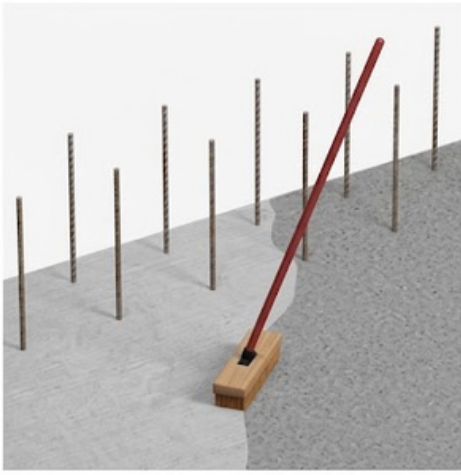
Application

PC-Injoflex® T is designed for planned injection sealing of construction joints in in-situ concrete structures. It can be used as a secondary sealing system for both horizontal and vertical construction joints, including structures exposed to water pressure and non-pressurized water. Depending on the selected system type, suitable injection materials include PU injection resin, PU foam and cement suspension. Injection should be carried out only after the concrete hydration process has been completed and the construction joint is almost fully loaded.

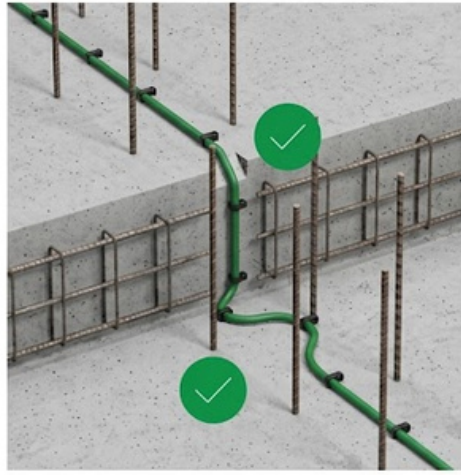
Installation Considerations

- Install the hose at the centre of the construction joint.
- Maximum recommended injection section: 10 m.
- Fix the hose at intervals of approximately 150 mm or less.
- Avoid kinking, crushing or constricting the hose.
- Maintain at least 50 mm between parallel hoses.
- Maintain at least 50 mm concrete cover over the installed hose.
- Keep hose ends at least 50 mm apart to prevent cross-injection.
- Where sections meet, provide a minimum 150 mm overlap.
- Ensure injection is performed only after concrete hydration is complete and the joint is sufficiently loaded.

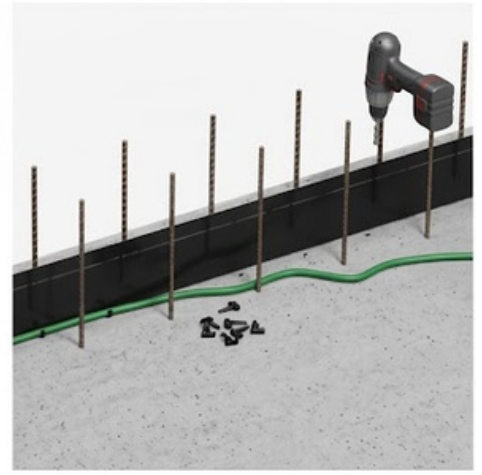




Cleaning the substrate
before installation



Prevent kinking when
changing direction or
elevation



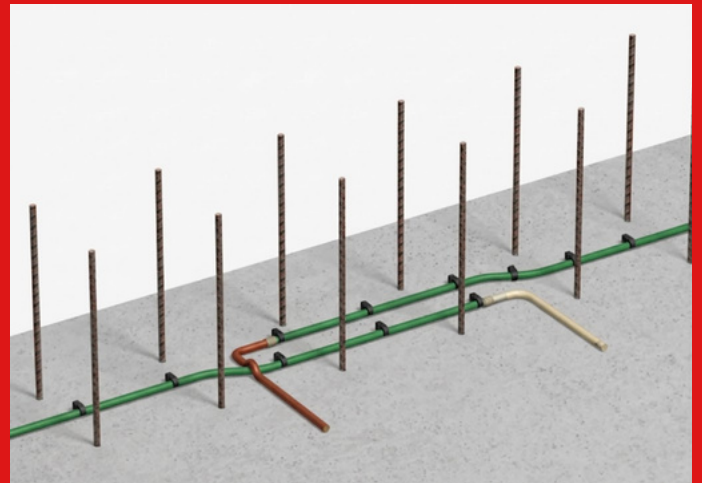
Installation as a secondary
seal in combination with
PC-Injoflex®

Installation Variants



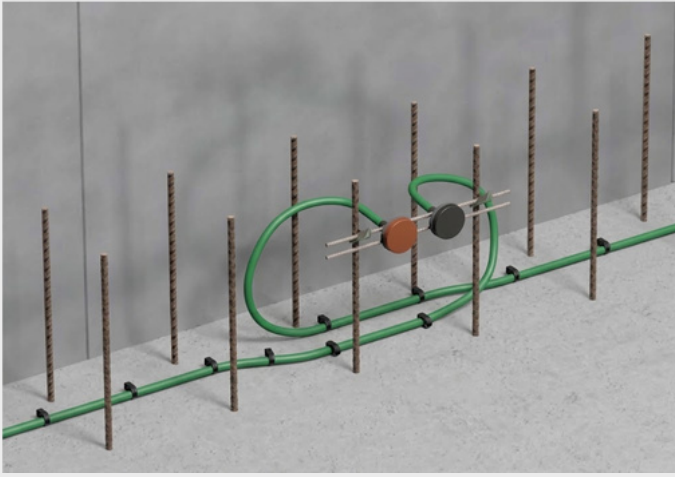
Using Protective Boxes

PC-Injoflex® can be installed using protective boxes to provide accessible connection points for subsequent injection. Approximately 10 cm of filling and venting hoses are inserted into the protective boxes. In horizontal construction joints, the protective boxes are positioned approximately 15 cm above the joint, while in vertical construction joints they are positioned next to the joint. The exact positioning should take the structural conditions of the project into consideration.



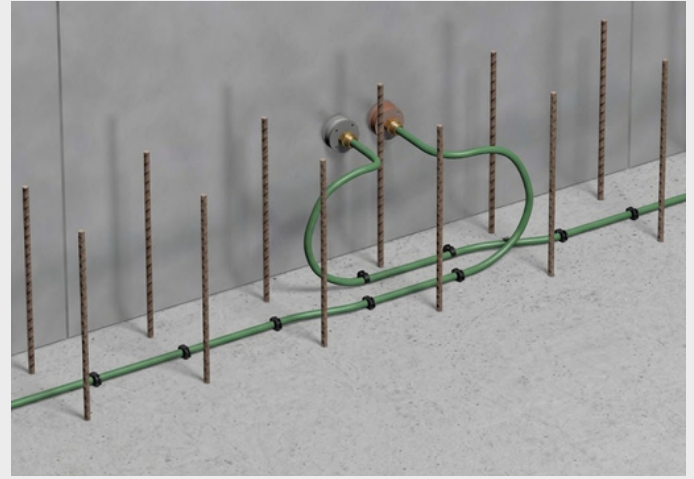
Routing the PVC Hoses Out from Underneath the Formwork

In this installation method, the PC-Injoflex® T PVC injection hoses are routed out from underneath the formwork using suitable end pieces. This arrangement provides direct access to the injection hose after casting and eliminates the need for separate filling and venting hoses. The hose routing should be planned carefully to ensure that the connection points remain accessible for later injection work.



Fixed to the Reinforcement with Shutter Spider and Packers

PC-Injoflex® can be fixed directly to the reinforcement using shutter spiders and two-part nail packers. The injection hose is secured to the reinforcement at the required position, while the packers provide the connection points for subsequent injection. This installation variant does not require filling and venting hoses when the system is injected through the nail packers.



Fixed to the Formwork with Nail Packers

PC-Injoflex® can also be installed by fixing the injection hose to the formwork using two-part nail packers. The packers are positioned on the formwork before concrete casting, allowing the injection hose to remain correctly positioned within the construction joint and providing accessible injection points after casting. This method also eliminates the need for separate filling and venting hoses.

NOTES!

For further technical information regarding the PC-Injoflex® system, including product characteristics, assembly, installation, and injection procedures, please refer to the relevant technical documentation, applicable standards, and project-specific requirements. Installation and injection should be carried out in accordance with recommended procedures to ensure proper system performance and reliable sealing of construction joints.



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TECHNICAL DATA SHEET
UPDATED IN JAN 2025
TDS/PC-INJOFLEX® T/25-2

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our [website www.pc-wc.com](http://www.pc-wc.com)