

# CEM 11 Injection Tube

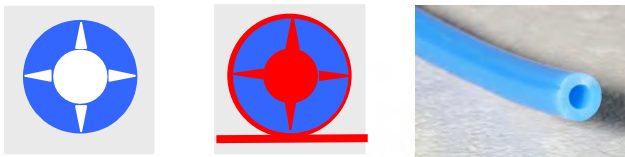
Injection Tube for Economic Sealing of Cold Joints in Concrete Structures

**An efficient, well-priced injection tube system for structural waterproofing**

## Product

PVC based injection hose for economical sealing of any construction joints in subterranean construction.

Single-wall hose of PVC based material, with slightly cone-shaped openings and slots from inside to outside for the compressed injection material to be squeezed out in order to seal the joints in underground constructions. The openings get closed by their geometry thus avoiding efficiently any penetration of cement paste into the injection hose.

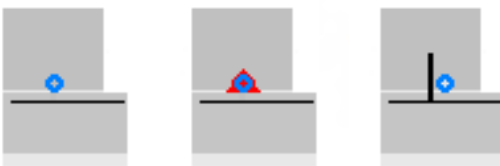


The smooth surface of CEM 11 eliminates any unwanted bond between injection hose and concrete. The CEM 11 injection tube system can be used for any injection resin. Injections are possible even after years, because the smooth surface CEM 11 does not allow any sinter deposits or obstructions in the system.

## Use

The CEM 11 injection hose is used for sealing of construction joints which are permanently or occasionally exposed to groundwater or surface water. CEM 11 is an efficient, effective injection tube system used to prepare waterproof, gastight and frictional construction joints.

## Application



Suitable for all kind of vertical and horizontal construction joint / cold joint sealing!

## Product Characteristics

- Sufficiently dimensioned inside diameter and permeability of the injection hose and the outlet openings after concrete work.
- Prevents cement paste from penetrating during concrete work.
- Sturdy when being incorporated under building-site conditions with fastening system included.
- Easy handling, simple time-saving fitting
- No unwanted twisting when you incorporate from the coil as there is a circular hose.

- Material to be injected leaves the hose system embedded in concrete, even under reasonable pressure, that is to say material is reliably coming out to all sides (opening injection-pressure min. 0.5 bar).
- Can be used for multiple injections by using acrylate-gel or PU-gel.
- Outlet opening shaping conically from inside towards outside. Some trifle opening resistance only has to be overcome therefore.
- Smooth surface, hence no unwanted bond between injection hose and concrete.
- Very favourable balance of price and performance.

## Technical Data

<b>Material:</b>	<b>PVC</b>
<b>Inside diameter:</b>	<b>5 mm</b>
<b>Outside diameter:</b>	<b>11 mm</b>
<b>Injection material:</b>	<b>PU / EP resin, acrylates, gels -no cement-</b>
<b>max. injection length:</b>	<b>10 m</b>
<b>Outlet openings:</b>	<b>5 mm every 25 mm</b>
<b>Arrangement of holes in hose:</b>	<b>Every 12 mm to 14 mm</b>
<b>DIN EN ISO 9001 certificated manufacturing process. Injection hose with ongoing control-numbers.</b>	

The hose has been approved by several public testing laboratories for overground and underground constructions for sealing concrete construction joints.

**Remark:** CEM 11 is a multiple injectable system when using acrylates or special PU-gels. Use only acrylates without corrosive behaviour to the reinforcement of the concrete structure!

## Accessories for CEM 11



Shutter connector



Rubber plate for shutter connector



Pressing nipple for shutter connector



Plastic clip

# Installation of the BPA Injection Hose System

The PREDIMAX/CEM 11 injection hose is easy to install when you consider the following items of this installation manual:

Put the hose in the middle of the cold joint. The connection, ventilating hose / PREDIMAX/CEM 11 has to be placed completely inside the concrete structure.



The hose has to be well set on the cold joint and has to be fastened with hose clamps at **approx. 15 cm** distance (depending on surface of the concrete of the construction joint).



Overlapping: The overlapping should at least be 10 cm.



The injection ends shall be placed towards outside the formwork in order to be easily found again. **Two different possibilities are shown:**

Installation of the injection hose system by using **shutter connector** including rubber plate and a spider (for easy installation on the reinforcement)



Installing the ventilation hoses inside an **end box**: Important: Ventilation hoses have to be fixed in order to avoid a replacement during the concrete work.

