

Description

Concrete often cracks. It is inevitably recognized and experienced. Concrete construction requires construction joints and cold joints. All of these unwanted openings in concrete structures may cause very serious problems of water leakage.

Most of these problems can be economically solved by utilizing the **PENTENS** Pressure Injection Systems. Its have been proven to accomplish two major purposes: one, is to stop water leakage permanently, and the other is to maintain or even restore design strength. Slabs on grade, construction or control joints, parking garages, manholes, tanks, dams, and many other structures can now be fixed permanently.

Uses

Areas of application include:

- Floor slabs
- Suspended floors
- Terraces and balconies
- Patios
- Bathrooms
- RC gutters and planter boxes
- Swimming pools
- Water tanks
- Basements and fountains
- Retaining walls

Advantages

- ☐ Negative side application possible
- ☐ Deep penetration into very small cracks
- ☐ Foam increases in volume to fill cavities and voids
- ☐ Adjustable gel times
- ☐ Excellent bond to wet surfaces
- ☐ Underwater injection approved
- ☐ Good elastic strength, tolerant of movement
Inert after curing, constant volume, no shrinkage
- ☐ Does not create new cracks
- ☐ Non-toxic.

Technical & Physical Data

Foam	Single part Liquid
Colour	Dark Brown
Solubility in Water	Hydrophobic
Max. Expansion, %	3000
Induction Time, 20°C/68°F	30 Sec
Elongation at break (%) (ASTM D 412-98)	>20
Gel. Time, 20°C/68°F	40 Sec
Unconfined Compressive Strength (Sand Filled)	2000 Psi
Corrosiveness	Non-Corrosive
Chemical Resistance	Resistant to more organic Solvent, Mild Acids, Alkali and olther.
Shelf Life	1 year when unopened and undamaged
Storage Condition	Store in a dry cool place
Packaging	20kg pail

Important Notes

1. Minimum ambient and substrate temperature is 5°C.
2. Material Shall be store in a dry cool place.

Instruction for Use

Step 1 : Clean Surface

Sometimes the concrete surface is hidden under a surface of mineral deposits left from long-term water leakage.

Step 2 : Drilling Injection Holes

In order to inject the resin into the crack, it is necessary to install injection ports, also called mechanical packers.

The depth of the drill hole intersecting the crack should be somewhere close to the center of structure, if possible.

Step 3 : Insert Injection Packers

Place packers in the previously drilled hole, so that the top of the rubber sleeve is below the concrete surface. If the packer can't be pushed into the hole, tap it in. Tighten the packer with a wrench as tight as necessary.

Step 4 : Flush Crack If Necessary

In some circumstances, it can be very useful to flush the crack with water to improve the subsequent penetration of the **PENTENS** injection resin into thicker walls.

Step 5 : Crack Injection

Choose the proper resin for the correct application. The nature of the crack / joint and the conditions at the job site determine the choice of material. Active water flow at a high rate is best stopped by using **PENTENS PU-300**. Moving cracks and expansion joints should be injected with **PENTENS PU-101**. Hairline cracks and dry cracks should be sealed using **PENTENS T-800**. Some problems are solved by using a combination of products.

Step 6 : Clean Up

Once the injection work is completed, a good and thorough clean up is essential. The packers can be removed within 1 hour and the holes should be use **PENTENS T-800** to patched.

For more details, please refer to our Technical Department.

Cleaning

Tools and equipment just can be clean with Thinner immediately after use.

Safety

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensure adequate ventilation when using these products.