

## BACK PRESSURE LINING

### TECHNICAL PROBLEMS

Buried structures (cellars, basements, car parks, tunnels, concrete tanks...) are frequently subject to waterproofing problems due to infiltration (water table or other).

### TRADITIONAL SOLUTION

**Treatment of cracks :** by plugging, bridging or injection with a resin

Disadvantage : other cracks form elsewhere with time.

**Waterproofing structures :** with a cement rendering charged with resin.

Disadvantage : this technique can make a structure waterproofed, but does not guarantee waterproofing when the substrate cracks.

Poor resistance with risk of separation under high pressure.

### SOUPLETHANE TECHNIQUE

SOUPLETHANE applied to a concrete substrate guarantees waterproofing even if the substrate develops wide cracks (up to 2 mm) and resists a water back pressure of more than 10 kg/cm<sup>2</sup>.

It is also very strong mechanically and can be applied to an accessible floor (corridor, cellar, car park...) without the need for mechanical protection.

### TEST REFERENCES

- STER 81 qualification for bridges and tunnels (Ponts et Chaussées)
- CEBTP : (Building and Public Works Experimental Research and Design Center) resistance to back pressure of 10 Bars
- Bridging of 2 mm wide concrete cracks



### SPECIFICATION

#### • prepare the substrate :

Dry the substrate (with hot air, injection if necessary) before application.

- if the substrate remains damp nevertheless, use a primer for damp substrates
- sand blast the concrete
- if the substrate is basic (pH > 9)
- leach the concrete with a diluted acid solution
- apply an impregnation concrete primer
- this operation is important since it provides better substrate resistance and plugs porosity that may allow water to percolate.

#### • apply SOUPLETHANE :

A 1.5 mm thick coat, solution that provides good waterproofing resistance even if the concrete develops cracks (up to 2 mm wide).

- application with the machine in one continuous coat, or in 3 coats with the roller.

### WORK REFERENCES

- COGEMA – La Hague
- CEA / Saclay
- SOMANU