



## Waterproofing an Existing Dry Well

### SCOPE

Application Instruction 304 provides information regarding the materials and workmanship necessary to produce a quality concrete treatment in accordance with the manufacturer's written instructions. These instructions outline the procedures for waterproofing existing below-grade concrete, including, elevator pits, basements, equipment pits, underground parking and others.

### LIMITATIONS

Not recommended for moving joints. Must cure for minimum 24 hours before exposure to freezing temperatures.

### SAFETY PRECAUTIONS

Cementitious compounds become caustic when mixed with water or perspiration and can cause serious chemical burns. Avoid contact with skin or eyes. Avoid breathing dust. Wear safety goggles, impervious gloves and long sleeves. See the Material Safety Data Sheet for more information.

### STEP 1: SURFACE PREPARATION

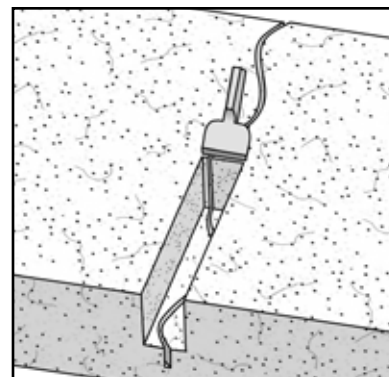
1. Concrete surfaces must be clean and free of contaminants and laitance. Do not use form oils, release agents or hardeners on surfaces to be treated.
2. Concrete must be sound. Remove all rock pockets and honeycombing and repair with Krystol Bari-Cote™. (See Krystol Bari-Cote Technical Data Sheet 702).
3. Concrete must have an open pore surface to allow penetration of the Krystol®. This may require mechanical preparation such as grinding, waterblasting or sandblasting.
4. Surfaces to be treated must be pre-soaked with clean water to a saturated surface dry (SSD) condition. Do not leave any standing water.

### STEP 2: CHIP OUT ALL JOINTS AND CRACKS

1. Chip a 25 mm (1 inch) wide chase along the entire length of all cracks and joints to a minimum depth of 40 mm (1.5 inches) and at a 45 degree angle along the corners where the floor meets the wall.
2. Around protrusions such as pipes, conduits, machinery footings, etc. See Application Instruction 303 for pipe penetration details.
3. Clean the chase to remove all dust and loose concrete.

### TOOLS AND MATERIALS

- Krystol T1® & Krystol T2®
- Krystol Bari-Cote™
- Krystol Plug™
- Clean water source
- Mixing bucket and mixer
- One inch wide margin trowel
- Natural bristle concrete brush



Step 2  
Chisel and prepare the crack



# Application Instructions

## Application Instruction 304

### STEP 3: STOP ANY FLOWING OR SEEPING WATER

1. Surfaces to be treated must be pre-wet to a surface saturated dry (SSD) condition. Do not leave any standing water.

**IMPORTANT:** A saturated surface-dry (SSD) condition is extremely important to your success. The concrete must be completely saturated with water to allow the Krystol® chemicals to penetrate deeply and react. The outer surface, however, must be only slightly damp, so as not to dilute and weaken the bond of the Krystol application.

2. Mix Krystol T1® to a dry putty consistency (5 parts powder to 1 part clean water). Mix only enough material that can be placed in 15 minutes.
3. Pack the chase along the floor and around protrusions to a thickness of 13 mm or 1/2" (one-third) with the putty.

### STEP 4: FINISH SMOOTH

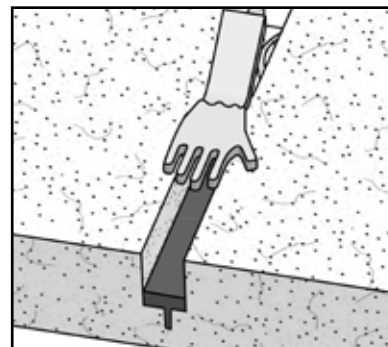
1. Mix Krystol Bari-Cote™ to a putty consistency (approx. 4 parts powder to 1 part clean water). Mix only as much material as can be placed in 15 minutes.
2. Fill the rest of the chase (remaining 25 mm or two-third).

### STEP 5: APPLY SLURRY COATING

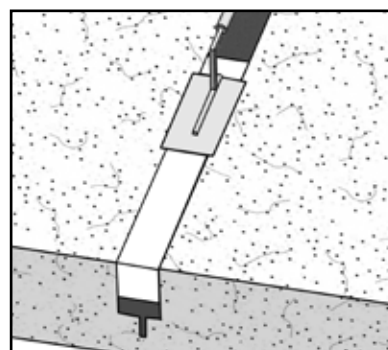
1. Mix Krystol T1® to a brushable slurry consistency (5 parts powder to 2 parts clean water).
2. Surfaces to be treated must be pre-wet to a surface saturated dry (SSD) condition. Do not leave any standing water.
3. Apply slurry mixture to the concrete with a brush in a circular, scrubbing motion so as to achieve maximum adhesion and penetration. Apply the slurry mixture to the entire wall, floor and ceiling.
4. Apply Krystol T1® with a spread rate of 0.8 kg/m<sup>2</sup> (2 lbs./yd<sup>2</sup>).

### STEP 6: APPLY 2ND SLURRY COATING

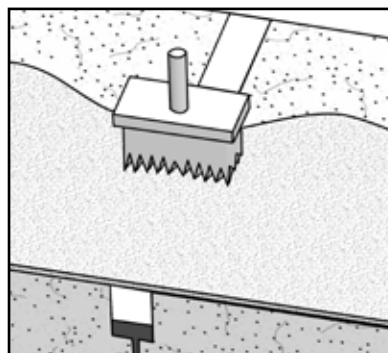
1. Mix Krystol T2® to a brushable slurry consistency (5 parts powder to 2 parts clean water).
2. Apply slurry to the concrete with a brush in exactly the same way that Krystol T1® was applied, in a circular, scrubbing motion so as to achieve maximum adhesion and penetration.
3. Apply Krystol T2® with a spread rate of 0.8 kg/m<sup>2</sup> (2 lbs./yd<sup>2</sup>) over the Krystol T1®.
4. Protect the application from rapidly drying out due to heat, damage from rain, excessive wind and freezing temperatures for 48 hours.
5. Krystol growth and migration only occurs in the presence of water. For this reason Krystol T1/T2 must be "wet (moist) cured" for at least 3 days (continued curing for several days or even weeks will be beneficial in most cases). During the curing period, treatment area must be protected from frost, rain and traffic at least 24 hours. Heavy traffic must be avoided during the curing period.



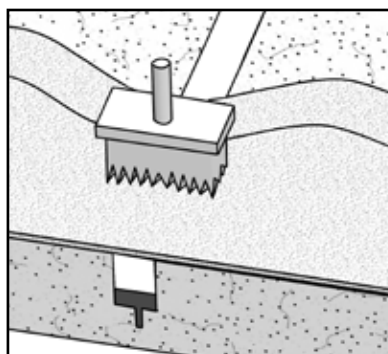
Step 3  
Install Krystol T1®



Step 4  
Install Krystol Bari-Cote™



Step 5  
Apply Krystol T1® slurry coat



Step 6  
Install Krystol T2® slurry coat