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By Your Side.

# WATERPROOFING AN EXISTING DRYWELL

## TECHNICAL BULLETIN #102

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QUESTIONS: 1-800-267-8280 or [www.kryton.com](http://www.kryton.com)



CONCRETE  
WATERPROOFING

### SCOPE

The purpose of this Technical Bulletin is to provide information regarding the material 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.

### SURFACE PREPARATION

1. Concrete surfaces must be clean and free of contaminants and laitance.
2. Do not use form oils, release agents or hardeners on surfaces to be treated.
3. Concrete must be sound. Remove all rock pockets and honeycombing and repair with Krystol Bari-cote. (See Krystol Bari-cote technical data sheet).
4. Concrete must have an open pore surface to allow penetration of the Krystol™. This may require mechanical preparation such as grinding, waterblasting or sandblasting. (See Technical Bulletin #170)
5. 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 1: CRACKS AND JOINTS PREPARATION

1. All cracks and joints must be chipped out and repaired in accordance with the manufacturer's application instructions for the "Krystol Crack Repair System™" (See Technical Bulletin #101).

### STEP 2: PREPARE CORNERS

1. Chip a 1" wide by 1.5" deep chase 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 Technical Bulletin #204 for pipe penetration details.)
3. Clean the chase with water to remove all dust and loose concrete.

### MATERIALS

- **KRYSTOL T1™ & KRYSTOL T2™**
- **KRYSTOL BARI-COTE™ & KRYSTOL PLUG™**
- Clean water source
- Mixing Bucket and mixer
- 1" margin trowel
- Natural bristle concrete brush

### SAFETY PRECAUTIONS

- All safety requirements, as stated in the product literature should be adhered to.
- Use safety goggles at all times.
- Use rubber gloves when handling materials.
- Cementitious materials become caustic (pH=13) when mixed with water. Avoid contact with skin and eyes.

### LIMITATIONS

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

TECHNICAL BULLETIN

Figure 1: Prepare joints and cracks according to TECHNICAL BULLETIN #101

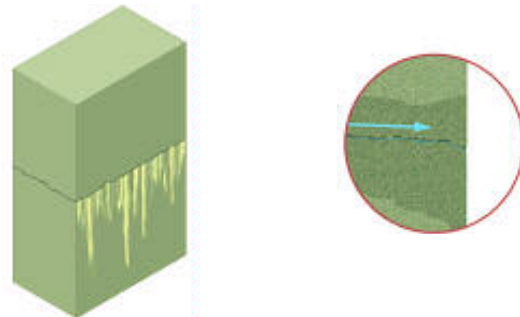
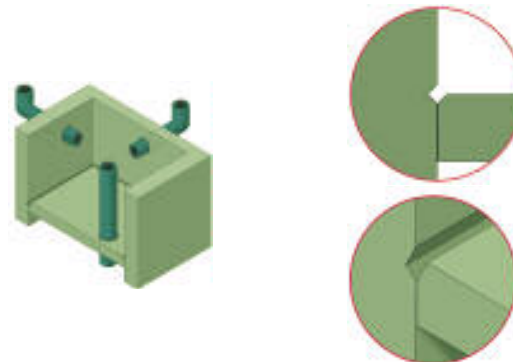


Figure 2: Chip corners at 45 degree angle



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### STEP 3: INSTALL THE KRYSTOL™

1. Surfaces to be treated must be pre-wet to a surface saturated dry (SSD) condition. Do not leave any standing water.
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 1/2" or 14mm (half full) 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 1/2").

### STEP 5: APPLY SLURRY COATING

1. Mix KRYSTOL T1 to a brushable slurry consistency (5 parts powder to 2 parts clean water).
2. 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.
3. Apply KRYSTOL T1 with a spread rate of 0.8 kg/m<sup>2</sup> (2lbs./yd<sup>2</sup>).
4. Protect the application from rapidly drying out due to heat, damage by rain, excessive wind and freezing temperatures for 48 hours.

### 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> (2lbs./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.

Figure 3: Fill the Chase

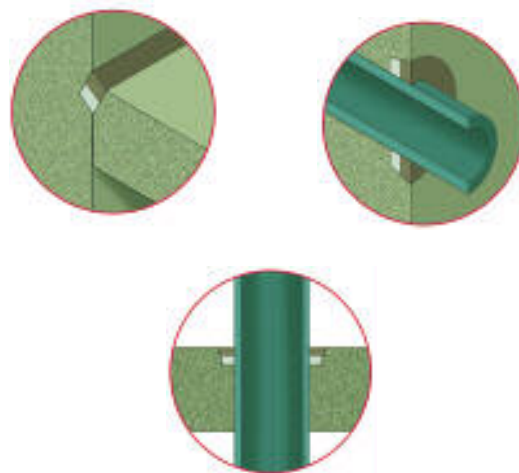


Figure 4: Apply Krystol T1 Slurry Coat



Figure 5: Apply Krystol T2 Slurry Coat over Krystol T1

