



Kryton® Leak Repair System

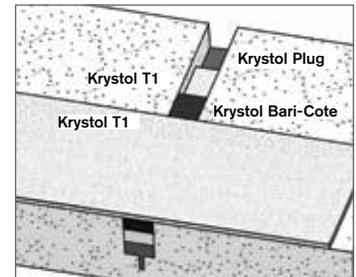
Waterproofing Cracks, Holes & Joints

DESCRIPTION

Kryton Leak Repair System is used to permanently waterproof leaking cracks, joints, and holes in concrete. It is installed in place of other less reliable crack repair systems and allows the concrete to be protected from any direction, even under high hydrostatic pressure. Use these instructions to repair leaks from either side of the concrete.

LIMITATIONS

Kryton Leak Repair System is effective for rigid structures only and may not reliably repair cracks or joints that are subject to movement. Moving cracks can only be repaired using a flexible system such as urethane injection. Concrete with many closely spaced cracks (map cracking) must be repaired carefully. Consult your Kryton representative. Air and surface temperatures must be at least 4°C (40°F).



SAFETY PRECAUTIONS

Read the Material Safety Data Sheets (MSDS) for these products. For professional use only. These products become caustic when mixed with water or perspiration. Avoid contact with skin or eyes. Avoid breathing dust. Wear long sleeves, safety goggles and impervious gloves.

IMPORTANT: You should generally complete steps 2, 3 and 4 on the same day. Steps 3 and 4 **must** be completed on the same day.

STEP 1: PREPARE THE CRACK OR JOINT

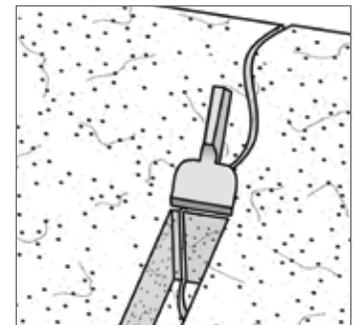
IMPORTANT: Be sure to repair the full length of the crack. If you repair only the area that is currently leaking, the water will likely migrate to the un-repaired section and you will be back to repair a new leak.

1. Using a sharp 25 mm (1 in.) square chisel, chip a 25 mm (1 in.) wide chase along the entire length of the crack to a minimum depth of 40 mm (1.5 in.). The shape of the chase is critical to your success. The chase must be square shaped and deeper than it is wide. If the concrete breaks apart near the surface, you must chisel deeper to obtain the required 25 mm by 40 mm (1 in. by 1.5 in.) size and shape.

TIP: When chiseling, do not place the chisel inside the chase. Instead, place the chisel on the concrete surface over the crack about one inch ahead of the chase and direct chisel pressure back towards the chase so that the piece being removed falls into the chase. Chisel to the full depth of 40 mm (1.5 in.) before moving on. This method is proven to be most productive, requires the least effort and will result in a chase that is the proper shape.

2. Wash chase with water so that it is clean. Use a vacuum if necessary to remove dust, debris or water.

TIP: Grind the concrete 6 inches on either side of the repair to expose clean, sound concrete. This will provide better adhesion for the Kryton T1® coating (step 5).



Step 1: Chisel and prepare the crack

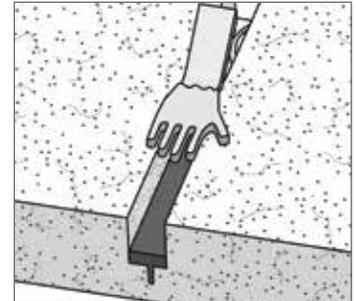


STEP 2: STOP ANY FLOWING OR SEEPING WATER (IF APPLICABLE)

If there is no active leaking at this time, you may skip to step 3.

1. Mix Krystol Plug™ to a putty consistency (4 parts powder to 1 part clean water). Mix only enough material as can be placed in 1 minute.
2. Using a gloved hand, press the putty firmly into the chase to stop the water in that spot. Compact the Krystol Plug so there are no voids behind it and hold without moving until set. Do not move or work the plug after it has started to set or it will break apart.
3. Repeat, working from one end of the crack to the other until all water has been completely stopped.

TIP: Areas of very high water flow should be left until the end. Insert a rubber hose at the worst location and install Krystol Plug around it. Removing the hose will leave a deep narrow hole that is much easier to plug with a single ball of material.



Step 2: Install Krystol Plug

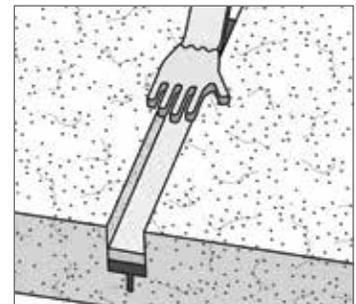
IMPORTANT: When finished, the plug must not fill more than one-third of the chase. If the Krystol Plug fills more than one-third, use a chisel to remove the excess Krystol Plug so that at least 25 mm (1 in.) of space remains in the chase.

IMPORTANT: Do not allow Krystol Plug to build up on the walls of the chase. Remove excess Krystol Plug from the walls so the remaining materials can bond directly to clean concrete.

IMPORTANT: All water seepage must be stopped before proceeding. Touch up work may be needed to stop all the water. An observation period is usually needed before proceeding to step 3 to verify there is no further leakage. For persistent leaks, you might need to leave the Krystol Plug overnight and complete the repair the next day to make sure there is no water seeping around the Krystol Plug.

STEP 3: INSTALL KRYSTOL T1®

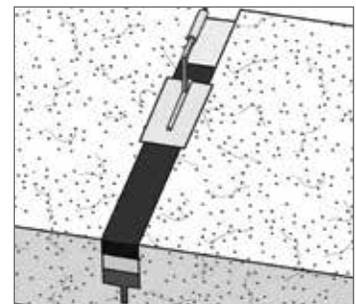
1. Mix Krystol T1 to a very dry consistency (approximately 5 parts powder to 1 part clean water). Use as little water as possible.
2. Surfaces to receive Krystol T1 must be brought to a saturated-surface-dry (SSD) condition. The concrete must be completely saturated with water to allow the Krystol T1 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 T1 application. Thoroughly pre-soak the surface with water; then remove excess water with a sponge just before applying Krystol T1.
3. Pack the Krystol T1 tightly into the chase to a maximum thickness of 13 mm (0.5 in.).
4. The chase should now be maximum two-thirds full (or one-third full if step 2 was skipped). It is essential that enough space remains to install at least 13 mm (0.5 in.) of Krystol Bari-Cote™.



Step 3: Install Krystol T1

STEP 4: FINISH FLUSH WITH KRYSTOL BARI-COTE

1. Mix Krystol Bari-Cote to a stiff putty consistency (approximately 4 parts powder to 1 part clean water). Mix only as much as can be placed in 15 minutes.
2. Ensure that the concrete is in SSD condition.
3. Fill the rest of the chase with Krystol Bari-Cote so that it is flush with the surface and trowel smooth.



Step 4: Install Krystol Bari-Cote

APPLICATION INSTRUCTION

(Formally known as Application Instruction 301)

Concrete Waterproofing Details

5.11

3 of 3



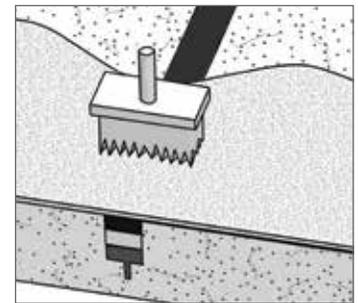
BE SURE. BE KRYTON.

STEP 5: APPLY KRYSTOL T1 COATING

1. Mix Krystol T1 to a thick paste (3 parts powder to 1 part clean water). Mix only as much as can be placed in 30 minutes.
2. Ensure that the concrete is in SSD condition.
3. With a concrete brush, use an aggressive, circular scrubbing motion to apply the Krystol T1 coating over the repair, extending at least 15 cm (6 in.) on either side. Apply at 0.8 kg/m² (1.5 lb. /sq. yd.).

TIP: It is highly recommended that the entire wall, floor and/or ceiling be coated with Krystol T1. For more information, see Application Instruction 2.11 — Waterproofing with Surface Application (Brush Method) or 2.12 — Waterproofing with Surface Application (Spray Method).

4. Protect the repair from drying out. Cover the repair with tarps or plastic to prevent water loss due to evaporation. Once the Krystol T1 coating has hardened, mist the surface with water as needed to keep the repair damp for 3 days. Protect the repair from frost, rain and traffic for at least 24 hours.



Step 5: Install Krystol T1 slurry coat

COVERAGE

Material	Coverage
Dry Packs: Krystol Plug, Krystol Bari-Cote, Krystol T1	Approximately 0.83 kg/m (0.56 lb. /ft.) = 30 m per 25 kg pail (100 ft. per 55 lb. pail)
Coating: Krystol T1	0.8 kg/m ² (1.5 lb. /sq. yd.) =31 m ² per 25 kg pail (330 sq. ft. per 55 lb. pail)

TOOLS & MATERIALS

- Krystol Plug
- Krystol T1
- Krystol Bari-Cote
- Clean water source
- Mixing bucket
- Chipping hammer with 25 mm (1 in.) square chisel blade
- Margin trowel
- Natural bristle concrete brush