



# Waterproofing Form-tie Holes

## SCOPE

Application Instruction 302 describes the essential steps for successfully waterproofing form-tie holes using the Krystol Waterstop Grout™ and Krystol Plug™.

## 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: PREPARATION

1. Remove plastic cones, snap-ties and tapered rods from the concrete to expose tie holes.
2. Clean tie-holes to remove loose debris and other contaminants.
3. Remove any form release or curing compounds by high-pressure water blasting or mechanical cleaning and flushing tie-holes with clean water. DO NOT use an acid cleaner.
4. Air and surface temperatures must be at least 4°C (40°F).

## STEP 2: STOP ANY FLOWING OR SEEPING WATER

**Note:** If the tie hole is NOT actively leaking at this time, you may skip to step 3.

1. Mix plug to a putty consistency (4 parts powder to 1 part water). Mix only enough material as can be placed in 1 minute.
2. Using a gloved hand, press the putty into the leaking hole to stop the water and hold without moving until set. Do not move or work the plug after pressing it into place or it will come apart.

**IMPORTANT:** When finished, the plug must not fill more than one-third of the depth of the tie hole. If the Plug fills more than one-third, use a chisel to remove the excess Plug immediately so that at least two-thirds of depth remains for Waterstop Grout.

## STEP 3: FINISH FLUSH WITH WATERSTOP GROUT

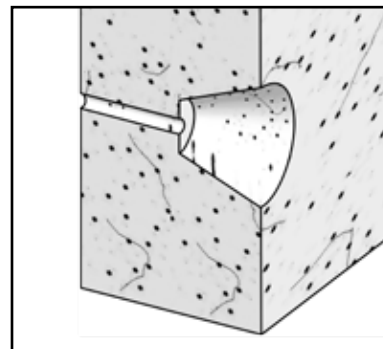
1. Ensure that the tie-holes and surrounding concrete remain saturated with water, but that no water remains on the surface.

**IMPORTANT NOTE:** 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.

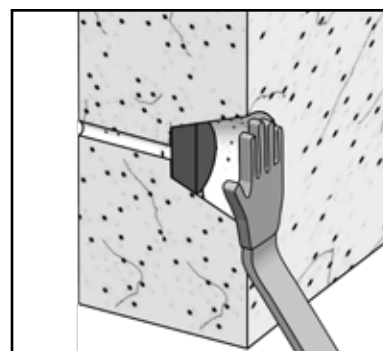
2. Mix Krystol Waterstop Grout™ to a stiff putty consistency (approx. 4 parts powder to 1 part clean water). Mix only as much as can be placed in 15 minutes.
3. Install Waterstop Grout into tie-holes filling entire void with material flush to the surface. Use a rod where necessary to pack material tightly the full depth of the tie hole.

## TOOLS AND MATERIALS

- Krystol Waterstop Grout™
- Krystol Plug™
- Clean water source
- Mixing bucket and mixer



Step 1  
Prepare the form-tie hole



Step 2  
Stop any flowing or seeping water with plug

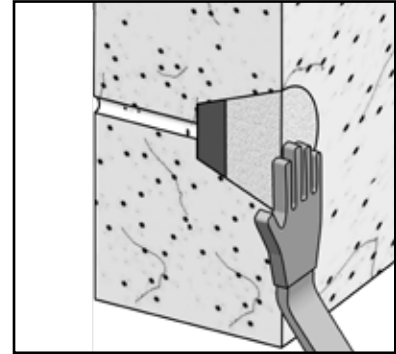


# Application Instructions

## Application Instruction 302

### CURING

Krytol products develop significant heat during the hardening process and are prone to rapid drying. Protect the application from rapid drying for at least 48 hours by repeatedly misting with water or other acceptable curing method. Protect against freezing temperatures for at least 24 hours.



*Step 3  
Finish flush with Waterstop Grout*