



Concrete Aqua Guard Joint Repair Instructions Repairs with Flowing Water

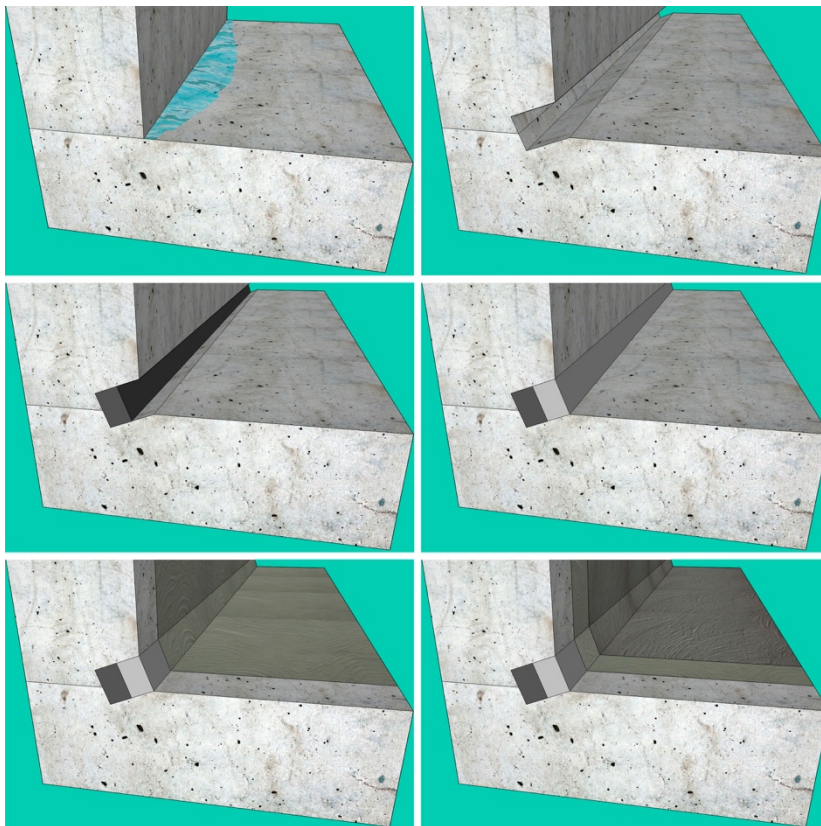
Instruction #1004

Concrete Aqua Guard Joint Repair Instruction - Repairs with flowing water - Instruction #1004 is specifically focused on the repair of leaking non-moving construction joints and is considered an important part of the preparation process for all Crystal Slurry and Crystal Top Coat applications.

Material Needs

- Concrete Aqua Guard Crystal Slurry
- Concrete Aqua Guard Top Coat
- Concrete Aqua Guard Stop
- Concrete Aqua Guard Grout / F
- Clean mixing pails
- Clean mixing tools
- Clean water for mixing
- Chipping, chiseling or routing equipment
- 2.5 cm margin trowel
- Natural bristle concrete brush
- Safety goggles
- Rubber Gloves
- Measuring tools (by volume)
- Water sprayer

Instruction Summary





Detailed Instructions

Step 1: Clean the area

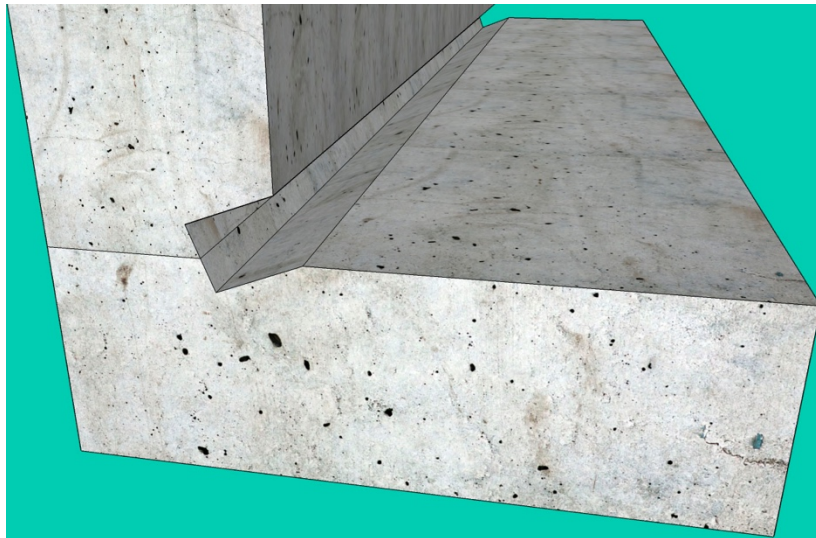
Clean the complete concrete surface area insuring the crack or joint is completely visible. The surface area must be clean of all old surface contaminants such as oil, paints, epoxies, curing agents, form oils, grease, bitumen and laitance. There are several forms of mechanical surface preparation systems that may be used they include high pressure water blasting, sandblasting, scarifying, sanding, and shot blasting. The best systems to use are water blasting and sand blasting (however circumstance do not always allow the use of these systems).



Step 2: Chisel Chip or Route a U Channel

Chisel, Chip or Route out all joints to a depth of 3.5 cm, and a width of 2.5 cm insuring that the cavity is U shaped (rectangular not square). It is important that you do not use a V shaped cavity as it lacks the bonding integrity of the U shaped channel. Saw cutting is not recommended as it plugs the pores and capillaries.

In areas in which structural reinforcing steel does not allow 3.5 cm consistently, chip or chisel or route the concrete on both sides of the steel to the appropriate depth and clear the area over the steel to whatever depth is allow by the placement of the steel.





Step 3: Clean the repair area and saturate well

Clean the chase well, removing any loose concrete, and spray the entire area thoroughly with water using high pressure to insure the pores and capillaries are clean. Insure that the concrete repair area is thoroughly soaked not just dampened.

Remove all pooled water as the products require the concrete at an SSD condition (Saturated Surface Dry), meaning the concrete is to be very wet inside, but the surface has no pooled water.

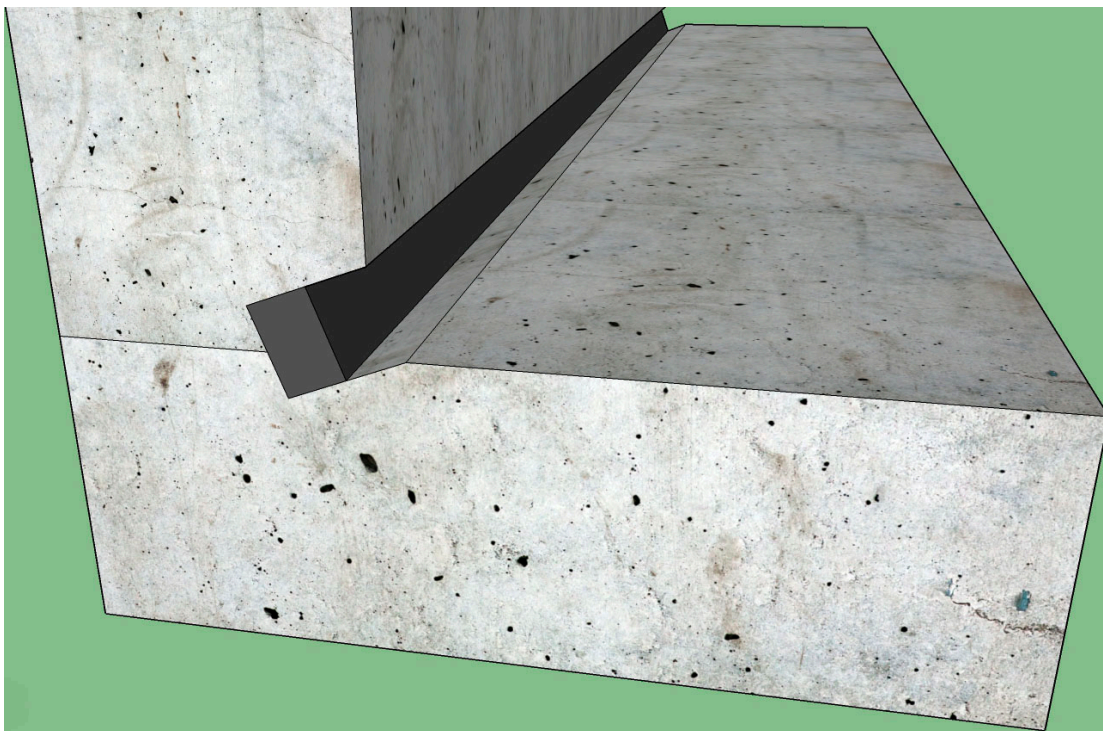
Step 4: Apply Concrete Aqua Guard Stop

Mix Stop to a putty consistency (3.5 parts powder to 1 part water). As this product is very fast drying insure that mixing is done rapidly and that it has not already begun setting during the mixing process.

Using gloves pick up the mixed Stop and knead the putty quickly into a workable shape and apply immediately. When applying keep firm hand pressure on the repair area until Stop has hardened. Insure that Stop does not exceed 1/2 of the channel height.

Precede beginning from the top to the bottom (or from one end until the other on flat surfaces) of the leaking area until all flowing water is stopped.

Clean and wet the application area insuring that all standing surface water is removed.



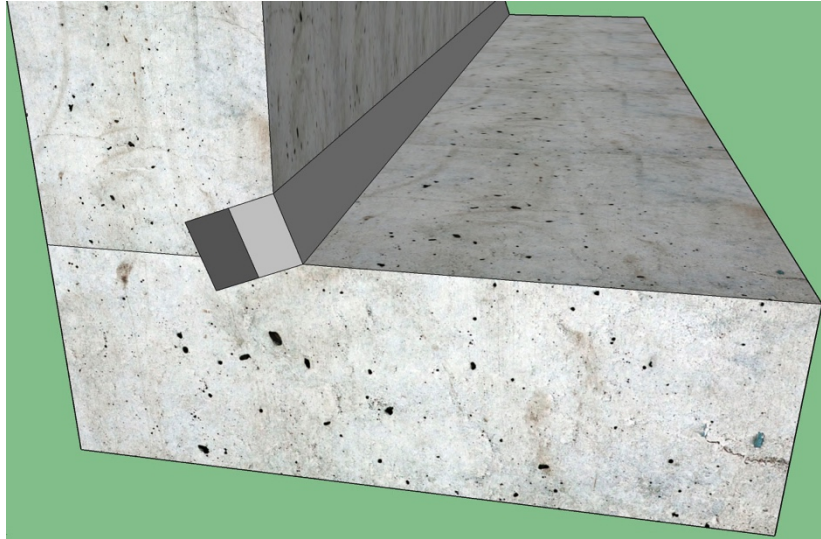


Step 5: Apply Concrete Aqua Guard Grout or Grout F

Mix Grout or Grout F to a putty consistency (3.5 parts powder to 1 part water).

This product is sensitive to water content in relation to setting time, so take care not to use excessive water volumes or initial set time will be extended. Using gloves pick up the mixed Grout or Grout F and knead the putty into a workable shape and fill the existing area of the chase. Precede beginning from the top to the bottom or from one end until the other on flat surfaces.

Using the 2.5 cm margin trowel pack the mixture firmly into the chase. Using a stiff bristled brush wipe the surface area gently insuring a slightly rough surface. Mix only what can be placed in 15 minutes.



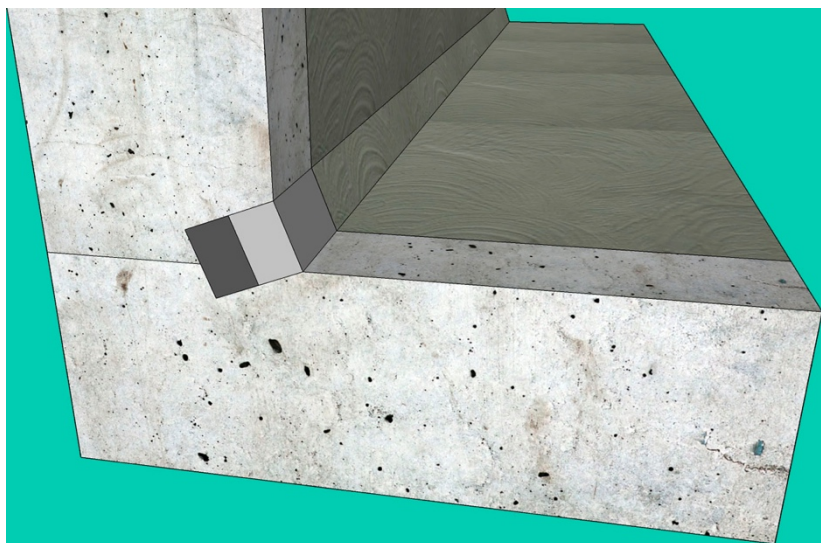
Step 6: Wait for Initial Set of the Concrete Aqua Guard Grout or Grout F

When the Grout or Grout F application has set (roughly 30 minutes from completion of application) clean and wet the entire surface area to an SSD condition.

Step 7: Apply Concrete Aqua Guard Crystal Slurry

Mix Crystal Slurry to a brushable slurry consistency using 5 parts powder to 2 parts clean water.

Using a natural bristle concrete brush coat the entire area using an aggressive circular motion and covering the entire surface area.





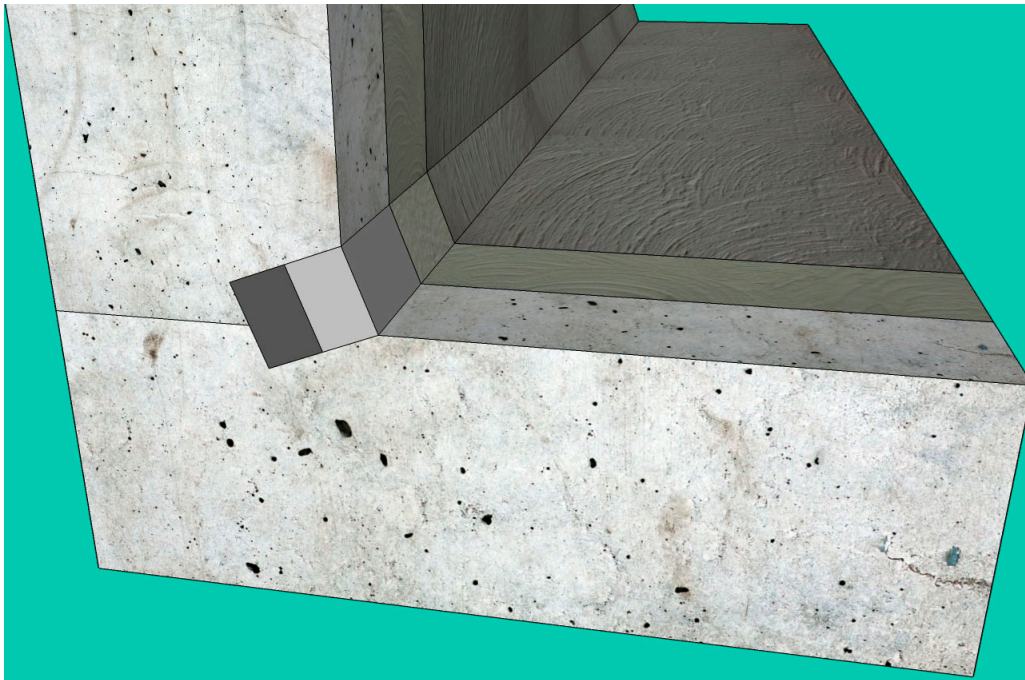
Step 8: Allow the Surface Application to Dry

Allow one to two hours for the Crystal Slurry surface application to dry. Carefully soak the application area (insuring that the water is without pressure and does not wash away the previously applied Crystal Slurry application area).

Step 9: Apply Concrete Aqua Guard Top Coat

Mix Top Coat to a brushable slurry consistency using 5 parts powder to 2 parts clean water. Using a natural bristle concrete brush coat the entire wall using an aggressive circular motion and covering the entire surface area.

Should you wish a smoother finish after the application has been vigorously brushed on a trowel maybe used to provide a smoother finish.



Step 10 Allow Initial Surface Set and Wet Cure

When the Top Coat application has set (roughly one to two hours from completion of application) wet the area. Keep the area damp for a minimum of 48 hours. If conditions allow extend the wetting for 7 days. Protect against sun, wind and rain for a minimum of 48 hours

Notes: Do not acid etch
If surface is too smooth, it must be roughened slightly for better adhesion.