



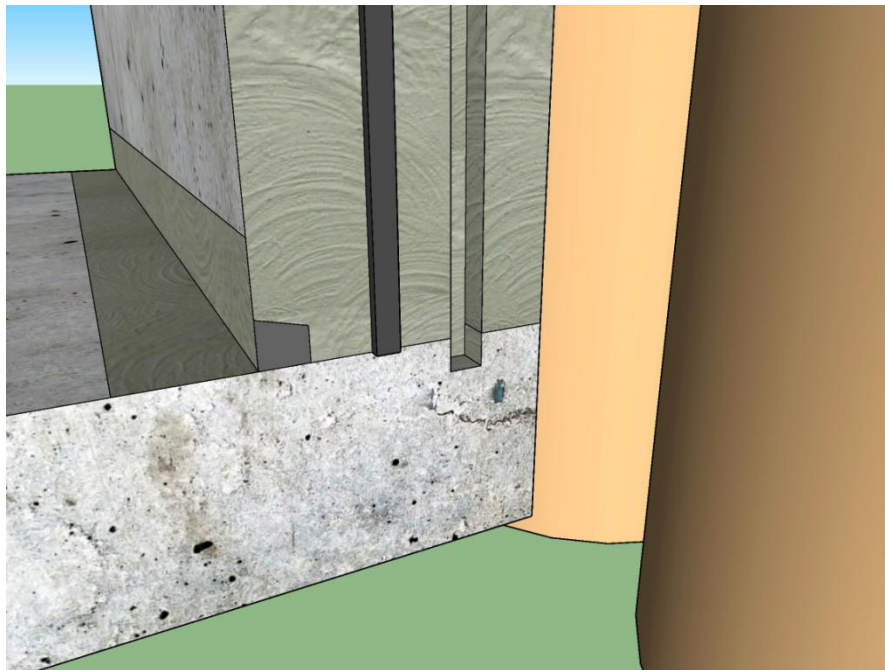
External Day Joint Design Instructions Design 3

Concrete Aqua Guard Joint Design Instructions Design 3 is specifically focused on the design of kicker joints and is considered an important part of the preparation process for all Crystal Admix HD applications.

Material Needs

- Crystal Slurry
- Crystal Grout F
- Waterbar
- Clean mixing pails
- Clean mixing tools
- Clean water for mixing
- 2.5 cm margin trowel
- Natural bristle concrete brush
- Safety goggles
- Rubber Gloves
- Measuring tools (by volume)
- Water sprayer

Overview of Design

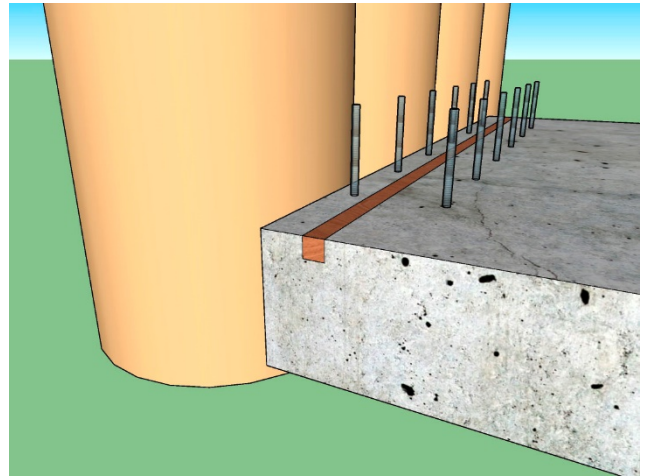




Step 1 – Place wooden rebate

Place a wooden rebate (30mm x 25mm x required length) placed behind the reinforcing steel on the water entry side of the joint.

The channel should be placed at approximately 60mm (depending on reinforcing steel placement) of the concrete edge that will be subject to water penetration.

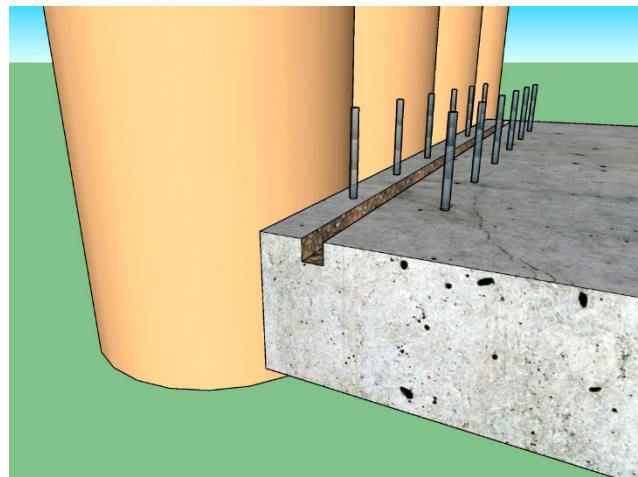


Step 2 – Remove wooden rebate and clean the area and saturate well

Remove the rebate and scabble or power wash the entire area.

Clean well removing any loose concrete and spray thoroughly with water the entire area.

Insure that the concrete area is thoroughly soaked not just dampened.



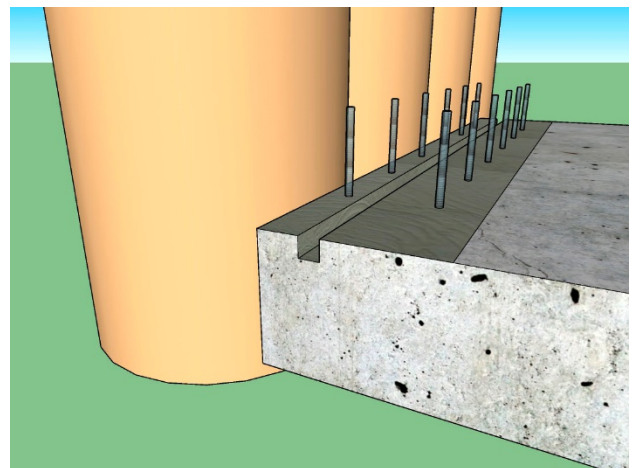
Step 3 – Apply Crystal Slurry

After removing all pooled water, as Crystal Slurry requires the concrete at an SSD condition (Saturated Surface Dry), meaning the concrete is to be very wet inside, but the surface is not to have pooled water.

Use a brush application to apply Crystal Slurry to the full surface including within the cavity.

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 surface area of the cavity. Allow the application to dry for 1 to 2 hours.





Step 4: Place Spacer for forming U Channel in the joint

Use a spacer attached to the form to create a cavity to a depth of 30mm and a width of 25mm on the inner concrete surface area and 30mm at the form side to allow easy removal after the concrete has been placed

Insure that the cavity is almost U shaped and not square.

It is important that a V shaped cavity is not used as it will lack the bonding integrity of the U-shaped channel.

In sure that the full length of the joint is channeled.

Step 5 – Place the Vertical Recess with the Formwork

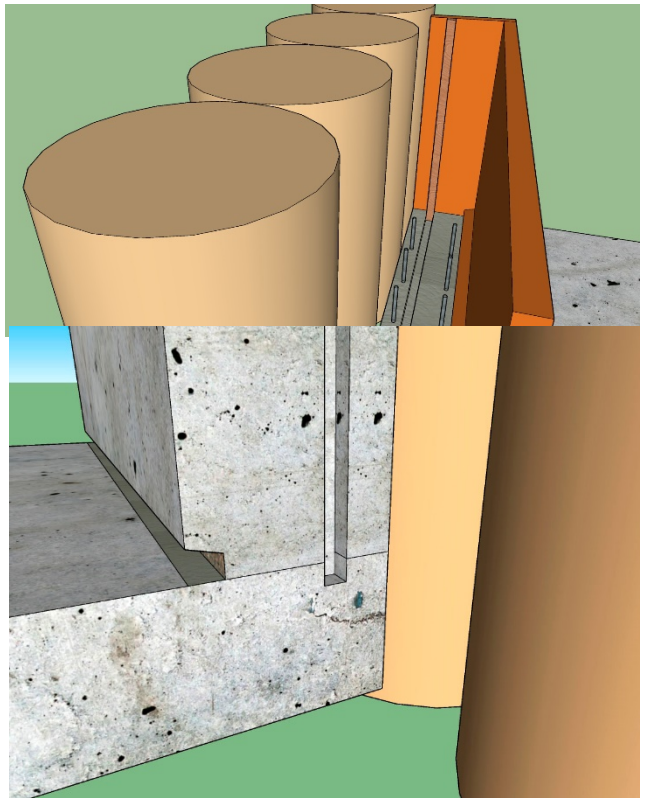
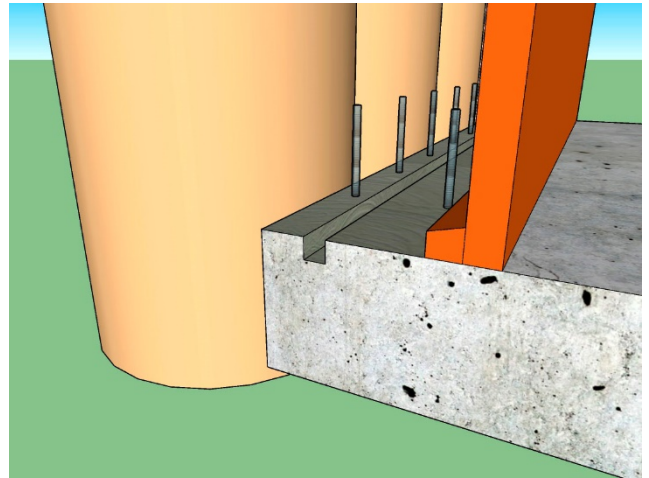
Place the formwork and run a 30mm x 25mm bar from the recess in the kicker to the top of the form.

Step 6 – Remove wooden bar and clean the area and saturate well

Clean the chase well removing any loose concrete and spray thoroughly with water the entire area.

Insure that the concrete repair area is thoroughly soaked not just dampened.

Remove all pooled water as Concrete Aqua Guard products require the concrete at an SSD condition (Saturated Surface Dry), meaning the concrete is to be very wet inside, but the surface is not to have pooled water.





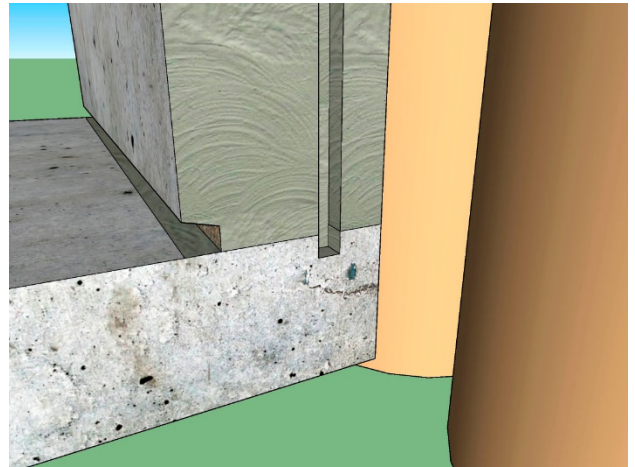
Step 7 – Apply Crystal Slurry to the Vertical Joint Area

Crystal Slurry requires the concrete at an SSD condition (Saturated Surface Dry), meaning the concrete is to be very wet inside, but the surface is not to have pooled water.

Use a brush application to apply Crystal Slurry to the full surface including within the recess.

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 surface area of the cavity. Allow the application to dry for 1 to 2 hours.



Step 8 – Apply Waterbar to the Vertical Area

Apply the waterbar between the rebar and close to the recess area over the Crystal Slurry application.

Insure the waterbar is properly placed in the centre of the wall according to instruction and secured into position.

Step 9 – Apply Crystal Grout F (or Crystal Grout)

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

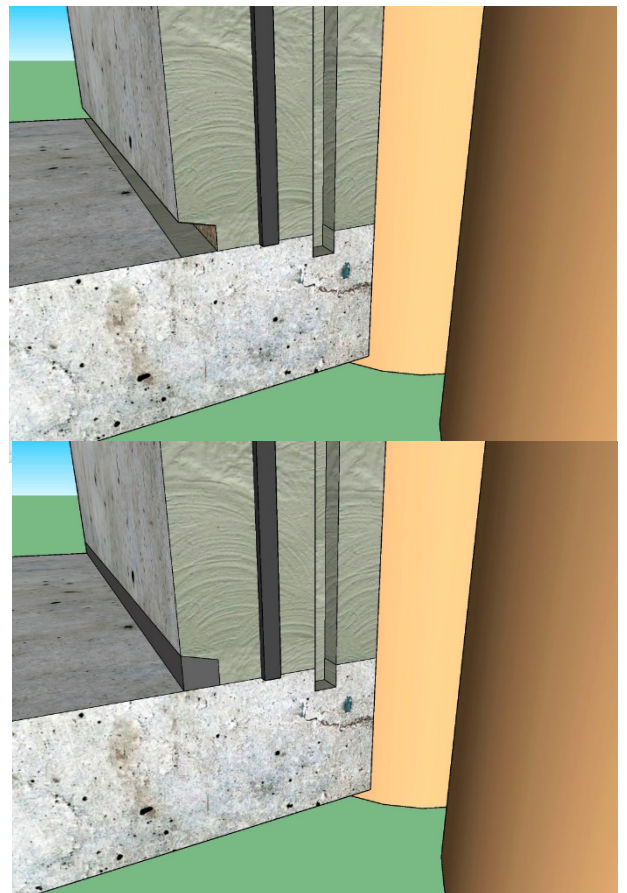
Using a clean pail mix Crystal Grout F (or Crystal Grout) to a dry putty consistency (4 parts powder to 1 part water).

Using gloves or a trowel place Crystal Grout F (or Crystal Grout) in the joint area insuring that it does not exceed the chase area and is flush with the concrete surface.

Pack the mixture firmly into the chase.

After 15 minutes but before it is fully set, use a stiff bristled brush wipe the surface area gently insuring a slightly rough surface.

Mix only what can be placed in 15 minutes.



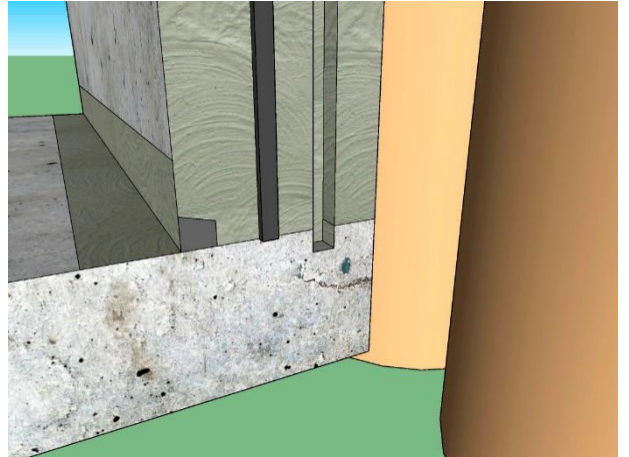


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Step 9: Apply Crystal Slurry

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 grout area on wall and floor slab using an aggressive circular motion.



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 12 hours.

Notes: Do not acid etch

If surface is too smooth, it must be roughened slightly for better adhesion.