

# **PREPARATION GUIDE**

# **Surface Porosity**

- Ensure the concrete has sufficient porosity for the sealer to penetrate.
- Dip a finger into a glass of water and apply 2-3 drops to the surface.
- Time the amount of time it takes for the water to soak into the concrete.
- For sufficient porosity to apply a sealer, this should be no longer than 90 seconds.
- Repeat the test over multiple sections of the concrete substrate.
- If under 90 seconds then the concrete has sufficient porosity for application of the sealer.
- If the water soaks in extremely fast (30 seconds or less), then it is advisable to apply <u>Aqua Prime</u> before an application of the base coat of epoxy.
- If longer than 90 seconds, then it may be necessary to either acid wash or diamond grind the concrete to open it up and create the required porosity.

### Moisture:

- The substrate must be dry and free from any rising moisture.
- Ideally use a concrete moisture meter to determine the moisture content. If this is not available, proceed using the method below.
- To test for moisture, cut a piece of thick black plastic into 1m<sup>2</sup>.
- Ensure that it is free from any tears or pinholes (this would render the test useless).
- Attach the plastic to a section of the substrate (repeat in other areas) & duct tape the edges.
- It is important that the plastic is completely sealed around all edges and free from holes.
- After 24 hours, remove the plastic. If the concrete has darkened or there is condensation under the plastic, then the concrete is not sufficiently dry to apply a sealer or coating.
- If the substrate is not dry enough then either wait a few more days & repeat the test or it may be necessary to use a concrete moisture barrier. Contact Right Choice for advice.

# **Contamination:**

- All substrates must be clean and free of contamination i.e. oil, grease, bird droppings etc.
- Many of these contaminates are easily removed using the Right Choice Concrete Cleaner.
- In some cases it may be necessary to use a concrete grinder or a light acid wash.
- Basically, if water does not penetrate through the contamination then neither will a sealer or a coating.

# Acid Etching:

- If required, the concrete can be lightly acid etched prior to sealing. This will help to create a more porous substrate.
- Use extreme caution and safe handling methods when using hydrochloric acid.
- Before acid etching, make sure the concrete is cleaned properly of all contaminants, oil, grease and dirt by using the <u>Right Choice Concrete Cleaner</u> (mix @ 50:50 dilution with water), paying extra attention to heavily contaminated areas.
- Rinse the Concrete Cleaner off thoroughly with clean water.

- Dilute the hydrochloric acid with water at a rate of 1 part acid to 10 parts water. CAUTION! Always add the acid to the water, not water to acid.
- Lightly dampen the surface so that the concrete is slightly wet but not puddling water.
- Apply the diluted solution evenly to the surface using a watering can or similar.
- Allow the acid to bubble on the concrete for up to 15 mins.
- Once the bubbling has ceased, thoroughly rinse the surface off with clean water (abide by local laws for disposal).
- Neutralise the surface using the Right Choice Concrete Cleaner (mix @ 50:50 dilution with water, highly alkaline). Brush the mixture into the surface and allow it to sit for 5-10mins before rinsing thoroughly with clean water.
- Allow the surface to dry for a minimum of 24 hours (weather dependant).

\*Note - If neutralising is not done correctly, acid etching can leave a white powdery residue, (calcium carbonate) on the dried surface. This is a fine white dust which can cause problems with adhesion and delamination of the coating. Once neutralising is complete, check the entire surface of the concrete. It should have a uniformed texture similar to medium grit sand paper (If not, repeat the above process). Sprinkle a few drops of water over the surface and if all the water is quickly absorbed, the surface is sufficiently oil and grease free. If the water still beads up (even if only in certain areas), then further preparation as above will be required.