

Beadcrete® Installation ,Care & Maintenance

To Maximize the beauty and optimize performance of the Beadcrete® pool coating. It is highly recommended that the pool shell, pool surround edge and terrace finishing be completed prior to commencing the Beadcrete® application. Pumps and filtration systems should be ready to operate, and lighting and fittings should also be installed.

1. Surface preparation

- Ensure the concrete pool shell is fully cured (at least 14 days)
- The surface must be clean and even, holes and defects must be repaired with suitable cement mortar.
- Concrete surface should be coarse finished. Smooth surfaces must be mechanically roughened or 'scratched' to provide adequate key (increase bonding) for the Beadcrete® coating.
- Ensure all permanent fixtures and furnishings are installed correctly, and spaced at 8mm proud of the concrete or cement surface (so they become flush with the Beadcrete® surface).
- Temporarily plug or block all inlets and outlets and mask off surfaces which may be easily marked or stained prior to application of the Beadcrete®.

2. Dampen surface and apply primer coating (recommended).

- We recommend using CPA3000 Pminer with Beadcrete activator as a Scratch-coat, applied to the pre-dampened surface using a wood or plastic trowel, working well into the surface to provide an even thin coat (1- 2mm) of well bonded primer coat and allow to dry.
- Alternatively, A Wet on wet method, whereby a 'scratch coat' of Beadcrete® can be applied onto the dampened surface in a thin layer, worked in with a wood or plastic trowel, then the full coat of Beadcrete® applied immediately onto the 'scratch coat'. In this case DO NOT allow the Primer coating to fully dry or cure before application of the Beadcrete® coating.

3. Mixing Beadcrete®

- Gradually mix in 2-3 litres of clean water for each 20kg bag of Beadcrete®
- Mix thoroughly and evenly with a mechanical mixer. Try to mix in batches of at least 3 bags per time to ensure even colour.
- Check paste consistency and adjust water content as necessary.

4. Apply the Beadcrete®

- Apply to the pool surface, starting with the walls first, using a trowel or spray pump.
- Apply at an even thickness of 8mm & trowel smooth.
- Compact the Beadcrete® by tapping with the trowel & smooth again.
- Remove air bubbles by pricking with the trowel edge, and smoothing over. Extra water may be sprayed on using a squeeze bottle or hand spray to assist trowel workability.
- Repeat this process until the Beadcrete® is tightly and evenly applied to all surfaces.
- Allow to cure until initial set (primary hardening) 2-3 hrs.
- Cover over the pool with plastic sheet or tarpaulin to provide shade from the sun, and leave to cure for 24 - 48 hrs.

5. Acid wash cleaning & detailing

- Mix a solution of Hydrochloric acid and water (Ratio 1:5 up to 1:10) and gently and evenly apply to the Beadcrete® surface with a soft brush, working in a circular motion throughout the surface.
- Start with the walls, and then onto the floor.
- Rinse immediately and thoroughly with clean water and ensure the acid solution does not cut grooves or channels in the surface of the Beadcrete®.
- Repeat this process until all the areas are exposed evenly and consistently.
- Finally wash down all the surfaces with high-pressure water-jet using clean water to remove any residues, and drain away excess cement residue with a suitable slurry or submersible pump.
- Remove masking tape and plastic protection carefully.

6. Fill the pool with clean water and treat as required.

- Fill the pool with **clean, potable** water immediately. If the tap or mains water is not clean, use water supply tankers. Light sediment can be removed by using a flocking agent (available from your local pool supply shop) and vacuum. Water which contains iron deposits is not recommended.
- Take care to remove any soil or dirt that falls into the pool, as this may leave a stain on the Beadcrete® surface during the initial curing/ setting period.

- If the pool cannot be filled straight away, the Beadcrete® surface must be protected from direct sun or wind (using a tarpaulin or shade-cloth) and cured by spraying with water several times per day for 7 days. After this period, the Beadcrete® pool should be protected to keep in clean until it is filled with water.

- Once the pool has been filled, balance the water chemistry to the following recommended outcome:

Chemistry	Recommended Level
pH	7.2 – 7.6
Total Alkalinity mg/L	80 – 120
Calcium Hardness mg/L	150 for first 12 months of pool operation.
Calcium Hardness mg/L	100 – 250 after 12 months of pool operation.
Free Chlorine	1.5 – 3.0
Stabilized Pools (Cyanuric Acid)	2.5 – 4.0

Chemistry levels should be achieved as soon as possible and thereafter checked and adjusted daily/ weekly to maintain good hygiene and swimmer comfort.

7. Care and maintenance.

- As with any swimming pool, it is essential that the water chemistry is maintained at the correct levels at all times. Please consult your pool equipment supplier or pool maintenance team for the correct chemical requirements for your pool. If the chlorine level is allowed to drop too low, algae may start to form on the pool surfaces, and will need to be treated carefully to remove it. Please contact our staff for advice if this should occur.
- Chlorine dosing should be applied carefully. **Chlorine granules must not be thrown or dropped directly into the pool** as they can cause burns/ marks on the Beadcrete® surface. Granules or Chlorine liquid should be fully dissolved and diluted in a bucket first prior to application around the pool. Please contact our staff for advice if this should occur.
- Saltwater chlorination pools and auto feed pools are recommended.

With proper care and Maintenance, your Beadcrete® pool will provide many years of pleasure and beauty. **Thank you for reading this document, and enjoy your unique Beadcrete® Pool!**

Civil Master International Co., Ltd.

Licensed Importer and Approved Applicator of designer Beadcrete® Pool Coatings.