

## **Notes on Exposed Render Finishes**

Exposed render, or coloured render finishes have been used in Australia for many years. Like any pool interior finish, they have advantages and disadvantages. The different versions of this finish had different characteristics, which must be understood when attempting to refinish or refurbish one of these pools.

### **The original mix**

The combination of sand, cement and aggregate that we tend to think of as a cement plaster or render was generally modified in a couple of key ways when an exposed render finish was applied.

### **Colour**

Most of these finishes were a pale colour.

The whiteness of the render could be achieved in a couple of ways:

- A very good quality white cement could be used. This was the most durable and expensive option.
- A significant quantity of titanium dioxide could be added to the mix. This was another good option. The colour might eventually fade a bit but the titanium wouldn't contribute any negative qualities.
- Calcium carbonate. Powdered chalk contributed whiteness, but as the render became more porous over time, would soften and provide a good environment for algae.

### **Resins and other additives**

Often, the render was modified with waterproofing resins, flex agents, or products to make the render harder or smoother. A very good quality hard cement render should require very little in the way of modification. Often a small amount of Nonporite or similar was all that was required. Other additives, however were often used.

- Acrylic resins. These were liquids, or more recently powders which increased the waterproofing characteristics of the mix.
- Vinyl resins. A large variety of vinyl resins were used. Including cross-linkable PVAs, some of these resins made the renders very “tight” and hard to wet. While this helped during the initial lifespan of the render, they make it very hard to repaint these surfaces when the look of the pool starts to degrade.
- Silicone or siloxane resins. Only generally a problem when very new.
- Fibrous additives. Some cement render mixes had fibres added, to strengthen the mix. For a period of time, this included asbestos. It is very important that care be taken with dust if pool render surfaces are being ground or drilled.

### **When the time comes to repair and paint a coloured render surface, care must be taken in the following areas**

- Damage and drumminess. If a render begins to degrade (particularly one rich in chalk), hollow spaces can develop between the render and the concrete shell. Any areas of damage or softness should be cut out and repaired. A standard sand a cement mix is the most effective way to patch these areas.
- The water repellent nature of certain resins. If the render surface is very “tight” (non porous) and if water tends to pour over the surface, rather than soaking into the render, it may be difficult to get penetration with a paint. It may be that additional acid washing or other preparation needs to be done.

If there are any reasons to believe that your pool requires you to obtain specific advice, please call **Macleod Industries** directly before beginning your repainting.