



ABN 48 457 245 764  
13 Duke Street, Paralowie, SA, 5108  
Mob: 0438 100 750

Date: 17/04/2015

## **Advantages and Disadvantages of Polished Concrete**

This PDF has been created in order to help prospective clients fully consider and understand the benefits and drawbacks to having polished concrete as a flooring option.

Polished concrete has developed rapidly in recent times as a prominent flooring option for domestic and commercial applications.

### ***Advantages:***

Polished concrete's biggest draw card is its aesthetically pleasing presentation in many settings. This type of flooring option has the advantage of creating an ultra modern look or a more colonial/rustic look depending on the décor surrounding it. Polished concrete not only looks great but is a very easy floor to clean because of its smooth and seamless composition. It is a great flooring option for summer as concrete as such takes time to absorb heat which keeps your floor cooler for longer in the summer months. Depending on the architectural design of any given setting to suit cooling and heating properties based on weather, polished concrete can also have minimal effect on internal temperatures during winter months. In floor heating within concrete foundations is also a popular option for people choosing a polished

concrete finish in domestic settings. Polished concrete is also a very durable flooring option providing it is looked after and maintained well.

### ***Disadvantages:***

All polished concrete surfaces have some propensity toward permanent staining and scratching/scuffing if not maintained properly and diligently. No polished concrete surface is 100% stain resistant.

### ***Sealants:***

All polished concrete options offered by ConcVert have sealants applied to them to prolong the life of the floor. Other companies promote unsealed polished concrete surfaces, but ConcVert does not endorse this notion as unsealed surfaces will wear out far more rapidly than a sealed surface. This opinion is based on 10 years of observation. As noted in the section above, all sealants can be stained and etched somewhat by acidic products. Having said that, unsealed polished concrete floors will absorb staining far more rapidly than any sealed surface. The biggest destroyers of polished concrete floors are acidic products such as:

- **Food colouring** - Will absorb most rapidly and leave permanent discolouring.
- **Lemon Juice** -Can not only leave a stain but will also eat into sealer and concrete itself if left for an extended period of time.
- **Tomato sauce** -Much the same as lemon juice.
- **Vinegar** - Much the same as lemon juice.
- **Red wine** - Has less propensity to absorb than the other products mentioned depending on the sealer used, but can seep in and permanently stain if left on floor on goingly.
- **Toothpaste** - Less dangerous to the floor but can still stain non-the-less.
- **Cooking or engine oil** - Can leave permanent staining without eating the concrete.
- **Petrol** - Being a petroleum based product, petrol will eat and stain most things.

- **Vomit** - Can't be avoided at times, but emptying and leaving the acidic contents of one's stomach on the polished concrete will stain it.
- **Gum Leaves** – If left on external settings, particularly when wet, the substances in gum leaves will always leach into polished concrete as it will on any other type of flooring.
- **Leaking of water and soil from pot plants** – Will always leech into a polished concrete floor.

The good news is that these products and the like will not stain polished concrete instantly. That is the purpose of providing sealers for the protection of the floor. If these products are cleaned up **IMMEDIATELY** after a spillage has occurred, staining will not occur. If these products are left on the floor for any extended period of time, it is almost certain that staining will occur. Once staining is in a polished concrete floor, it is very difficult to repair without doing a re-grind on the floor.

### ***Scratching and Scuffing – Topical Sealers***

ConcVert offers a number of sealing options that are topical in nature (the sealer sits on the surface of the concrete as opposed to penetrating it). Topical sealers can offer slightly more stain protection than that of penetrant sealers but have more of a propensity to scuff and scratch under foot traffic, the dragging of furniture and the like. The advantage of topical sealers is that they are relatively easy to repair and re-seal in future years without undertaking major work to restore the floor.

The topical sealers ConcVert offers are:

- **Water based** – This sealer produces the most glossy and seamless effect. It is the most stain resistant ConcVert has found to date. Minor scuffing can be an issue but can be rebuffered and re-sealed as required.
- **Polyurethane** – This sealer offers very effective stain resistance (more than the water-based or penetrant options) but is very prone to scuffing. Polyurethanes are generally used for a more budget based option as they do not look anywhere near as good as the water based or penetrant options.

Roller marks and inconsistencies will almost always show up at some spot in a polyurethane floor despite the skill of the installer. Polyurethanes can flake and lift off of polished concrete surfaces as years progress and has some propensity to yellow over time in the sun despite most of them having a Ultra Violet Light Stable element to them.

**Epoxies** – This type of sealer is mainly used in garages but can be used in internal settings as well. Epoxies basically have the same characteristics as polyurethanes although they are harder wearing under general wear and tear over time.

**Acrylic** – This sealer is predominantly used by ConcVert on driveways as it has fantastic durability qualities in all sorts of weather. Its disadvantages are that it can scuff and does not have a seamless finish on highly polished concrete floors like that of the water based or penetrant options. When wet, it can be more slippery than the other products offered as well.

#### ***Penetrant Sealers:***

Penetrant sealers do not offer as much stain resistance as topical sealers but offer far more scuffing resistance. This type of sealer can absorb more dirt than a topical sealer as it does not have a topical layer to lock dirt out. However, if this product is cleaned regularly and maintained well with specified chemical conditioners, it will last effectively and on goingly. Penetrant sealers come in either a high gloss or satin application. Penetrant sealers are also harder than the water based option to repair once staining has occurred.

#### ***Water Resistance:***

All sealers offered by ConcVert resist the absorption of water besides the water based products. However, once water has completely dried from the water based sealer's surface, one would never know the floor has been wet.

### ***Customer Expectations:***

While ConcVert offers a very high standard of workmanship, ConcVert cannot offer a 'perfect' polished concrete floor depending on what that means in any given customer's mind. Concrete is an organic substance and is prone to defects. Cracking can occur which is out of the concrete polisher's control any way. Cracks can be filled but not necessarily hidden. All minor defects in polished concrete can show up in reflections on the floor. While the floor may be finished to the highest standard possible, pits and cracks that have been filled in the polished concrete floor can still appear 'unfinished' in light reflection although they are seamlessly flushed with the floor. The choice of sealer has a role to play to determine how 'seamless' or 'blotchy' the floor will appear upon completion. Polished concrete never comes out as perfect as a marble or granite benchtop..... period. But even polished benchtops have inconsistencies if looked at in the right light.

As eluded to above, the longevity of a polished concrete floor depends on the time and care taken to maintain it. A general rule of thumb is that if one treats their polished concrete floor the same as they would carpet, they will have a long and happy relationship with their polished concrete floor.

### ***Conclusion:***

While polished concrete has its drawbacks, every other flooring option does as well. Nothing is perfect. But what polished concrete does offer is a very alternative look to any given setting. It is easy to clean and offers much in the way of complimenting the heating and cooling logistics of its location. Polished concrete will always draw popular attention because of its ascetically pleasing appearance.