

TIPS FOR RENOVATORS WHEN CONSIDERING CONCRETE FLOORING SYSTEMS

With home renovations and building repurposing becoming more common, smart builders are thinking of long term installations. So it's no wonder that polished concrete and concrete coating systems have started generating a high volume of interest. This fact sheet has been put together with the renovator in mind - Someone with an existing interior concrete slab who would like a concrete flooring system and is researching some of those harder to find pros and cons. These are a few of the most common things we are asked about or that get overlooked in the planning process.

1. PRICE

There is no single price per m2 as there are too many considerations. We will not be able to provide a fixed quote until we see the concrete floor – with all the coverings removed (carpet, tiles, floor boards etc.).

At that time are we able to see the condition of the concrete and know:

- Access restrictions
- Condition of the concrete including potential repairs needed
- If the concrete is flat enough for your preferred look and finish
- Time allocation required

Before existing coverings are pulled up we can give ball park figures or estimates only based on the size and location of the job. Apart from potential repairs and additional prep there are many different systems and products to choose from. It is best to think of 'polished concrete' (or the polished concrete look) like tiles - with many different prices, qualities and maintenance options effecting price. ***See our website for more detailed information on the systems available.***

2. LOOK

We are often asked what the concrete will look like if it was not poured specially for polishing or coating. In very general terms – all concrete has aggregate in it. The size and colours can vary from mix to mix, and area to area. Generally there will be a combination of different coloured stones in a range of sizes throughout the concrete mix. When we grind the surface and remove approx. 5mm from the surface most of the aggregate should be showing. There is a high chance, given that it was not specially poured, that the concreters would not have given much thought to things like walking back through the slab or taking the extra time to get the floor 100% flat. This being the case it is very common in older slabs to find areas that have little to no aggregate showing next to an area with a lot of aggregate. This does not affect the performance of the system being installed but rather the overall look and feel the varied exposure levels create. Best described as rustic and natural the floors tend to have a lot of character and look loved rather than perfect.

For those wanting a 'zero exposure' look the options may be limited. While on the rare occasion it is possible, in most cases the old concrete is not flat enough to achieve a polished concrete finish. Some floors may accept a clear coating system (key grind and seal) however all imperfections, such as stains, cracks, holes etc. will be visible after completion. In most cases due to the non-specific concrete pour and potential damage when removing existing coverings the floor will have height variations which will expose 'patches' of aggregate when even the minimum prep grind is completed.

We always inspect bare floors to assess what options are possible and discuss what the likely outcomes will be. If the zero exposure look is firmly fixed in your design plan, at worst a topping slab may be required to achieve the look you are after. (See also note below on topping slabs).

3. PREP

When renovating we require the floor coverings to be removed first, prior to our arrival. If you are able to pull them up yourself this can save you a fair bit of money however care and thought should be taken in the removal process. Tiles, carpets, and other coverings that have been fixed to the concrete with glue or nails need to be removed with care so as not to damage the concrete. Keeping in mind only 5mm is removed for a full exposure finish – any damage deeper than that will require repairs. Many of the products suitable for flooring repairs are solid colours. If there are holes the filling can

often look like stones and go un-noticed however if there are gouges in the concrete, trenches for old or new pipes etc. they will still be visible after polishing.

We also ask that skirting boards and door frames be removed to allow us to get close to the walls and provide the most consistent finish possible. It is impossible to get the machines right against the walls so there will be up to a 20mm area where even our hand machines cannot grind (*corners can have a slightly larger arc area*). If cabinetry is being left in place there may also be limitations under kitchen cupboards as our hand machines are usually higher than the cupboard bases and access is limited. In such situations customers may consider installing additional (wider) kick boards under cabinetry to hide the unpolished.

4. DUST

We use vacuums on our large machines to minimise dust however even with this method, unfortunately the process of grinding concrete does create some airborne dust, especially where hand grinders are needed. If the floor is your current home with your belongings already in it we recommend sealing off areas not being polished and covering furnishing to minimise the impact. We also recommend moving out while the work takes place. Noise, dust and potential cure periods (depending on your system of choice), limit access and hinder work if there are other people on site while we install concrete floor finishes.

5. ADJOINING AREAS

Consideration should always be given to the rest of the house, especially adjoining areas. Removing 5 mm off the concrete may not seem like a big deal however – if you have a tiled bathroom you are leaving tiled and it is currently the same height as your carpeted hall there may be an issue. By the time the carpet and underlay comes off there may be a step of up to 10mm, add another 5mm to that once we grind the hall and you have a 15mm toe kicking hazard and you may need to think of a creative way to blend the areas. Removing height off the slab also affects things like door heights door frames and skirting boards. None are huge issues that cannot be solved but if you had not considered how you will deal with them it can cause a few drafts or headaches. Additionally, as with walls and corners, our machines may not be able to get 100% flush with the adjoining floor covering without doing damage. Trims or wedge shaped mouldings may not only hide these areas but also provide a smoother height transition between the floor finishes.

6. ACCESS

Our machines and vacuums are very large and heavy, nearly 5000kgs. Running top-of-the-range machines enables us to produce quality floors. We always need to ensure we are able to physically get machines onto the floor. While we do have cranes on our vehicles, when we are working in already constructed homes the crane may not be able to successfully manoeuvre the machine onto the floor level. This being the case, several stairs, steep driveways, steep blocks or multi-story buildings can be challenging and in some cases impossible for us to access. The size of the machines can also limit access to small areas or through narrow doorways under 820mm wide. While hand grinding is still possible in small areas this can add to the time and labour component of the job. The machines require 3 phase power and we supply our own generators to run the machines but we must be able to park the truck close to the access point to run the leads.

7. SHOWERS AND WET AREAS

There is a bit more to consider if you want to convert your bathroom into a polished concrete flooring system. The fall on the concrete beneath the tiles, the drain set downs and the waterproofing of the wall/floor joints are three of the most common challenges. Nothing is impossible however there are a lot more steps (and approvals required) to successfully achieve this type of flooring in an existing area. In most cases shower bases will need to be repoured to remove set downs and add correct fall and drain set out. Alternately there are several moulded shower bases or concrete look tiles on the market that may compliment the adjoining polished concrete floor.

8. TOPPING SLABS

If a renovation is virtually a complete rebuild or the environment is suitable, topping slabs may be possible in an existing building. The slabs need to be thick enough (approx. 100mm) to ensure the concrete won't curl or crack excessively and it needs to be secured properly to the base slab. There are usual cure periods involved (*see our slab guidelines for more information*). Topping slabs can be an effective way of achieving a specific look and floor colour albeit a more expensive option. We recommend engaging the services of a qualified engineer if you are considering going to this degree of renovation. Alternately some thinner self-levelling concrete or epoxy products may provide a similar look or provide a sound base for other coating systems if polishing is not possible.