

Process for Stamped Concrete

Once the required area to be concreted is formed up and the required reinforcing mesh is in place, pour and place the concrete as normal. The mix designed specifically for pattern concrete is usually 25MPA incorporating a 10mm stone.

The smaller stone is used because it is less likely to be overturned or pop up when pressure, caused by pressing the mats onto the soft surface, is applied. 25 MPA concrete is used to keep the concrete up to strength, as a smaller aggregate obviously gives the concrete a slightly lower strength.

Once the concrete has been screeded and bullfloated in the conventional manner, the colour hardener can be applied once the bleed water has been disipated. To apply the colour hardener, broadcast it over the slab by hand, allowing it to flick out between your fingers. Once the colour hardener has darkened in colour from soaking up moisture from the concrete (approximately 5-10 minutes), trowel in this first coat of colour hardener using a steel trowel in the form of a fresno trowel, walking trowel or hand trowel. Apply a second coat of colour hardener to eliminate any possible grey uncoloured areas. This must also be troweled in the same manner as the first. Consumption of the colour hardener should be approximately 10M2 / 20kg bag.

While the concrete is still in the 'plastic' stage, yet firm enough to take a persons weight while standing on one of the pattern mats without sinking into the concrete, the surface is ready to be stamped.

The release agent is then applied using a soft bristled brush (similar to a large painting brush or wallpaper brush). A fine dust coat is put on covering the area to be stamped . Once applied, the urethane pattern stamps can be placed into position.

The release agent has two main qualities;

1. It is hydrophobic - it repels the moisture from the concrete, allowing the pattern mats to release from the surfaces without 'pickup'after stamping.
2. Due to the pressure applied to the concrete during the stamping process, imparts the release agent colour into all the high pressure points of the pattern - ie. the grout lines and lower points of the texture.

When beginning to stamp, it is best to start at a 'square' edge of the job; for example up against a building structure. Place the mats in position on the concrete surface and while walking over the mats lightly tap them into the surface to the required depth using a tamper. Work in a zig-zag fashion back and forth across the shortest dimension of the concrete area.

Once the stamping process has been completed, the job should not be walked on until the release agent has been washed off. The washing off process should not be started for 1 to 2 days (depending on whether the concrete has cured sufficiently). To wash the area off, simply hose off the excess release agent with a hose. Further Then mix up a solution of Hydrochloric Acid & water at a ratio of approximately 20 to 1. (Depending on strengths of acids in each country) Place the solution into a watering can (plastic) and evenly pour over an area of approx. 10m² at one time. (making sure the surface is already wet before applying the solution)

Lightly broom the area that has been treated with the acid solution and hose off excess. Reapply solution and repeat until you get the desired look. Pattern concrete should consist of approximately 60% colour hardener to 40% R/A colour.

Sealing:

Once the area has been washed down completely & has dried completely, you may apply the sealer. The sealer we manufacture is a high quality solvent based acrylic sealer, Because it is solvent based any moisture in the concrete surface may cause the area to turn white or ' milky ' in appearance. There fore it is very important that the area to be sealed is completely dry.

Apply the first coat with either a broom, roller or sprayer. Thinning down the first coat approx. 20-40 to 1 is recommended. To get better adhesion apply the second coat in the same manner.

Non - Slip products are also available. When a sealed surface becomes wet, it is possible it may become slippery. We have two products available. The first consists of crushed up glass fine enough to go through an airless spray unit. Simply pour the required sachet into the drum of sealer and mix. (140gms is suitable for 10 lt. of sealer - 280gms is suitable for 20 lt. of sealer)

The second is also glass but much coarser for critical non-slip areas. To apply this product simply flick out evenly between fingertips over the first coat of sealer while still wet. The second coat is applied locking the glass in between the two coats of sealer.