



Supply of Concrete for Polished Flooring – Information Package

This document is intended to be used as reference material only and in no way, is it to supersede any specific engineering detail applicable for the floor.

Limecrete supplies a range of polished concrete mixes that have a nominal strength rating of 32MPa together with the use of a mid-range water reducing admixture that allows for placement of the concrete at a slump of 120-140mm with a water/cement ratio of 0.48 – any additional water added onsite by others is recorded by Limecrete and can be called upon should there be a dispute with the performance of the concrete.

Higher strength ratings can be supplied upon request and we do not recommend using concrete that is rated less than 32MPa when it is going to be polished.

The maximum aggregate size is 14mm however some products are 7mm only. Limecrete uses only GP or WHE type cement with white sand – no secondary cementitious products are used ie flyash or slag, or general concrete sand which have a tendency to cause surface staining to the concrete.

Dependant upon ambient conditions, Limecrete will use a combination of generic admixtures and chilled water to enhance the set performance of the concrete. Included in the supply rate for polished concrete is a specific shrinkage reducing admixture (MB – SRA200).

The thickness of the slab, use and type of reinforcement & other crack reducing methods, and actual design of the floor with or without internal thickenings is the responsibility of the design engineer. The set out, placement, finishing and curing of the concrete is the responsibility of the builder. Limecrete recommends that for a period of 7 days after pouring in warmer months, the slab surface is ponded with scheme water and sprinklers. Do not place sand or other organic material around the edges of the slab to contain the water as this will stain the surface. It is also prudent to leave the slab completely untouched for 21 days thereafter dependent on the type of aggregate used in the product to allow for critical surface hardening before the initial grind. The builder should then employ a surface protection material over the entire slab during the construction phase to protect the top from damage and stains.

There are 2 types of concrete – one that has cracked, and the other that will crack! Regardless of any design or methodology employed to produce a polished concrete slab, the possibility of cracking cannot be eliminated. The most common type of cracking is plastic shrinkage which is generally superficial in nature if the correct design & methodologies are employed. Often, a professional & reputable concrete polishing contractor can treat these cracks in such a way that virtually makes them unnoticeable in the final product.

No supplier, installer, builder or engineer can & will guarantee that the concrete will not crack however if every effort in the design, batching, placement and finishing is made then the possibility of cracking can be substantially reduced but not eliminated. Dependent upon curing conditions, finishing techniques and overall site conditions, the surface may well exhibit some tonal differences – especially more noticeable in the Architectural Grey product. You or your client must accept these possibilities before deciding on having a polished concrete floor.

As Limecrete is the manufacturer & supplier only of the product, we are not responsible for surface imperfections arising from placement & finishing of the product. Any images, samples or brochures depicting our products are representative only and may not be a true reflection of the final product.

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