



## Supply of Concrete for Polished Flooring

*NB. 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 crème cement – no secondary cementitious products are used i.e. flyash or slag.

Dependant upon ambient conditions, Limecrete will use a combination of generic admixtures and chilled water to enhance the set performance of the concrete. Limecrete can add specific shrinkage reducing admixtures (BASF type SRA 200) and/or synthetic fibres at an additional cost which are designed to dramatically reduce the incidence of shrinkage cracks in the concrete surface.

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, the slab surface is cured with scheme water and sprinklers. Do not place sand or other organic material around the edges of the slab to contain ponded water as this will stain the surface.

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. More often than not, 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, concreter, 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. You or your client must accept this 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. Also any images, samples or brochures depicting our products are representative only and may not be a true reflection of the final product.