



White Concrete

- An Overview

ARMCON
CERTAINTY: IN CONCRETE

Top Tips

- If possible use white aggregate/cement and sand for a completely white concrete
- Use lighter aggregates where possible to achieve as light a concrete as possible when pure white is not possible.
- Use the same mix ratios for a consistent mix
- Produce different tester samples to show your customer

Overview

Yes completely white concrete is possible, there is however a lot of work involved in producing a perfectly white concrete.

The ingredients for completely white concrete are as follows:

- White cement
- White aggregate
- White sand
- Water



Using these ingredients in the same way as you would mix your standard concrete, will produce a white concrete.

These ingredients, especially white sand are, not always easy to get hold of, and can be very expensive.

White marble, white quartz, calcined flint, synthetic white stone, natural pale lake, beach pebbles are just some of the materials used to produce a white concrete.

Please ensure that the aggregates are clean and frost resistant.

The most used materials in white concrete are listed below:

- **White Marble**

White marble is used as an aggregate when the requirement is for especially white concrete, which is also suitable where surfaces are exposed.

- **White Quartz**

White quartz is ideal as an aggregate for white concrete both for untreated and exposed surfaces.

- **Calcined Flint**

Burning flint at a high temperature gives calcined flint. This is a very white aggregate, which is suitable in concrete when light surfaces are required.

- **Light-Coloured Dredged Materials**

Natural light-coloured dredged, lake and beach materials are rounded pebbles especially suitable for exposed concrete surfaces. (watch out for shells in this aggregate, as a high shell content can be harmful to your concrete).

- **Marble**

Coloured marble comes in a large range of colours, shapes, sizes, and can look excellent when used in a white concrete.

Some white pigments exist, however these can be expensive, and in general if you can use the white products these will be enough to produce the white concrete you are after, most people will use a white Portland cement to act as a white pigment.

Like is the case with all concrete, test it, until you find the mix to suit your needs.