



Colour in your Concrete

– An Overview

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Colour in your Concrete:

Top Tips

- Once your perfect mix is achieved, always use the same materials in the same quantities – change just 1 element of your concrete and the colour changes
- More Pigment doesn't always mean more colour – once your concrete is saturated in pigment (usually 8% powder colour to cement ratio) the concrete will not colour significantly any further.
- Water/Cement Ratio is KEY to ensure a consistent colour
- Cement and Aggregate – Keep them the same for consistency
- Remember Colour looks different when the concrete is wet to how it is when it is dry.
- To achieve the wet or matt look use a sealer (different types achieve different looks)



Overview

Producing a single colour paver is easy. Simply take liquid or powder pigment add it into the mix when you add the cement, or water mix as you would normally would and hey presto – coloured concrete.

What is difficult is keeping that colour the same every time.

To ensure a standard product, the same materials in the same quantities must be used.

Lots of factors affect the colour a few are below:

- Aggregates – is it dustier than last time is it wetter/drier does it have the same stone in, same stone size?
- Cement can vary from white all the way to a dark grey – the same cement!
- Water – More makes the concrete lighter, less darker
- Vibration – Change the vibration can change the colour
- Release agent – a little more can sometimes make it look a bit darker and less a bit lighter
- Have you put in the same amount of pigment as you did last time
- Sealants can make the concrete look 'wet' or 'matt'

All of this together means coloured concrete can be a very tricky and difficult process.

The most important thing you can do to ensure that your concrete stays the same colour is to ensure you have a consistent and reliable source of materials, and ensuring you use the same ratios of materials the mix as you have always done.

White cement can help the colour be a bit brighter, but there are plenty of produces using regular cement that I would not say that it is an essential unless you want to produce white concrete, where it really does help.

The proportion of pigment used affects the colour. On average to produce a strong colour use a 6:100 ratio of powder pigment to cement. So if you use 100Kg of cement, use 6 Kg of pigment. Most produces use a 4 – 6% pigment. Anything up to 8% will affect the colour of the concrete. So at 8:100 ratio the concrete is at its strongest colour that it could be. Any more than this and the colour of the concrete will not get any more defined and you will end up simply wasting the pigment, and weakening the concrete.

Finally, curing – when curing pigmented concrete, not only do you have the same issues that are around when you cure standard concrete, but you also want to be sure that the concrete will cure at the same rate, hopefully ensuring a standard colour of concrete.

The key to achieving the best colour in your concrete is by experimentation, do lots of trials using different materials to achieve that 'perfect' mix.

