



EFFLORESCENCE

As manufacturers we are often asked by our customers why coloured concrete paving sometimes looks faded and blotchy. This causes understandable concern when using a new product which is supposed to enhance the beauty of your garden. The most common queries are from those who have laid a brand new patio only to find the colour appears to have faded or gone white almost instantly.

DO NOT PANIC!

These shade variations are caused by a chemical reaction of the cement in the concrete with water, from rain, dew or condensation. It is called efflorescence.

Efflorescence is very often referred to as lime bloom but it is not, as many people think, an indication of too much lime in the concrete or, in deed, of any fault in the manufacture of the concrete at all.

Efflorescence is a phenomenon sometimes formed within concrete through the normal reaction of water and cement. This reaction forms calcium hydroxide (referred to as lime) which sometimes migrates to the surface where it reacts with the air leaving a whitish powdery deposit on the surface. This surface deposit then dissolves in water (from rain or dew or washing the surface down) and washes off, this is why your paving looks a bright new colour when it is wet.

Unfortunately for us, as the manufacturers, there is no hard and fast rule why efflorescence will occur in one area and not another and no way for us to predict with any certainty if or when it will happen. However a significant factor is the weather, both when the product is made and when it is first used. Our experience shows us that it most commonly occurs in Spring and Autumn, when we have wet weather that takes a long period to dry out, but fortunately we have also found that this is also the time when it clears quickly.



The reaction is temporary and is best left to weather out naturally, although it can take some time. Outbreaks can go within a few weeks, but there is the possibility that it will need 12 – 18 months of normal weathering for the reaction to completely clear. It will clear more quickly on heavily used areas through abrasion from foot traffic etc.

Various treatments are suggested but a dilute acid solution is the most effective, however Castacrete does not recommend this. If for any reason the decision is taken to use an acid based solution on our products it is essential that great care is taken when making the application. Acid eats into the surface of the concrete and can alter its surface appearance doing more harm than good, its use should not be considered under any circumstances without thorough safety precautions being taken and the manufacturers instructions followed to the letter. Please refer to the manufacturers of these products for further professional guidance. Castacrete will not accept any liability for any damage being caused to person or product through the use of these treatments.

Whilst efflorescence may be unsightly to start with it will pass. There is no need to replace the product, in fact the site where they are laid could be the cause of the start of the reaction so replacing them would only mean further expense only to find the same thing happening.

Concrete is a natural product made with natural raw materials which vary in their composition and it should be expected to react to its environment. Let nature take its course and allow your patio to naturally weather into an area you can take pleasure in for years to come.