

NCC's Resin Flooring Site –

www.resinflooringsite.co.uk

Solvented Epoxy Resin Based Flooring Materials

Solvented Epoxy Resin Flooring materials are now normally regarded as the old fashioned and rather out-dated epoxy resin flooring technology and only available as 'floor paint types' (Resin Flooring Classification Type 1), which must contain a volatile hydrocarbon based 'solvent' to help the epoxy resin material penetrate and bond into the surface of the concrete. This relatively large quantity of solvent also encourages ease of application and produces the optimum coverage in terms of the highest m²/litre, not necessarily for the finished resin floors performance though. Solvented resin flooring materials are relatively fast curing (drying and hardening) and they can also have good abrasion and chemical resistance, for their comparatively low thickness (approx. 50-80 microns per coat), which was historically why this type of material was once widely used to provide economic and effective floor painting solutions.

However, the highly aggressive solvent content of these solvented epoxy resin flooring products (usually from 50 to >80% solvent) means that today, these products are all now classified as having unacceptably high VOC levels (volatile organic compounds). These VOC's are released into the atmosphere during the products application and curing, so they are increasingly restricted, or even banned on many industrial sites and commercial premises. Additionally this solvent content always requires that considerable ventilation must be provided, otherwise people working in adjacent areas may also be disturbed or inconvenienced by the smell and odour. Some foodstuffs (particularly dairy products) and other materials can also be sensitive and tainted by these solvents.

Finally, these high levels of these solvents are dangerously flammable, so solvented epoxy resin flooring products must never be used near any sources of ignition, naked flames or where welding operations take place etc.

However it should be added that for some commercial applications such as sealing exposed concrete or cement screed floors in large open spaces in factories and warehouses, these materials can sometimes still seem to be ideal. This is usually due to their tolerance of cooler application conditions, or their initially apparent low price, but this should always be viewed together with the cost of the necessary additional restrictions and limitations, plus the risks for the Flooring Contractor, other Trades and the Facilities Owner – Then the real cost is frequently not so attractive.

Fortunately today, in almost all situations, NCC Resin Flooring Experts are able to recommend a much safer, more environmentally friendly and all round better performing water dispersed epoxy, or solvent-free epoxy products as an alternative, **please call any of our offices and one of our resin flooring specialists will be pleased to assist you in the selection of the best resin flooring solution for your project.**