Resin Bound

Resin-based Surfacing: Durable and Versatile

We can also create driveways and other surfaces using resin-based surfacing systems, tailored to suit your precise requirements and budget. The basic premise is that decorative or coloured gravel is “glued” to an existing solid surface by means of a transparent or coloured resin.

Extremely hard-wearing, these surfaces are suitable for indoor and outdoor use, and provide a finish that is relatively low-maintenance in comparison to conventional gravel. The better systems are totally resistant to weeds, oil or petrol spillage, do not fade in UV sunlight, are capable of tolerating a wide range of temperatures and can be laid in a massive range of colours and patterns, as well as all sorts of logos and motifs.

Uses and applications

One great advantage of resin-based surfacing systems is their versatility. They can be used on almost any project, or any scale, to suit any budget. Possible uses include internal flooring, driveways, paths and patios, footways, cycle ways, commercial properties, car parks ... the list really is endless!

Some suppliers can supply almost 700 different colours by using imported aggregates or specially coloured gravels, and by ‘blending’ gravels from various sources to create unique colour schemes. The market in resin surfacing has improved significantly in the last few years, with increasing competition, economies of scale and advances in technology all contributing to cost reductions.

Construction

There are two basic methods of applying a resin-based surface. In the trade, they are referred to as Resin Bound and Resin Bonded, two similar terms that are often confusing to customers. Here they are in laymen’s terms:

Resin bound

Aggregates and resin are mixed together. This mix is applied to the surface using hand trowels and screed bars, it is then left to set and can be trafficked in a relatively short space of time depending upon external temperatures.

Resin bonded

This method works by way of applying a tack coat (to the surface you wish to coat in aggregates) then scattering the aggregates across the surface and allowing them time to bond to the surface. Once set you will have a gravel look surface but without looseness.

How it works Base

Both systems require there to be an existing base to which the resin system can be applied as an overlay. This base, or substrate, can be an existing pavement of tarmac, asphalt, concrete or other monolithic material that has been cleaned and prepared, or it can be a newly laid base.

The preferred bases vary from product to product, but, in general either tarmac or concrete are preferred because they are “monolithic”, that is, they are whole, single ‘slabs’ of pavement, with few, if any joints. Accordingly, “elemental” pavings, that is those made from discrete units with joints between each unit, such as block pavers, setts, flags etc., are NOT suitable for use as the base for a resin-based system.

Existing Bases

If you have an existing monolithic base, then before we start the job we would assess whether this base is in good order as it is critically important that there are no major cracks, potholes, weeds, contamination, etc. Tarmac concrete or asphalt in good condition are usually adequate.

New Bases

These are best constructed from mass or reinforced concrete, or from bitumen or asphalt, depending upon timescales and suitability for each individual job.

Other Bases

Some manufacturers claim a base of wood, flags/slabs or block paving are suitable bases for resin bonded surfacing, but we would never consider any of these surfaces as adequate other than in the most exceptional of circumstances. A standard wooden base may be acceptable on indoor applications, but would swell, rot and/or move on outdoor projects, and so, if a wooden base is to be used, only a proper exterior grade wooden deck surface should ever be considered. Except for specific applications such as tree-pits, resin-based surfacing cannot usually be laid on a granular sub- base, such as a layer of gravel or sand, no matter how well compacted.

Price Guide

Prices are highly variable as there are a lot of factors to take into account: the size of the area to be covered, the thickness of the surface to be laid and the type of aggregate chosen. Other factors include whether you have a suitable base, what preparation it might need or whether the unsuitability of your existing base means laying a new one.

The resin-based surfacing itself costs, on average, between £60 to £90 per square metre depending upon thickness. As a rough guide (including removal of unsuitable base), prices for construction of a new base and the laying of a resin-bound surface start at £140 per square metre.