



CREATIVE
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The Homeowner's Guide to Resin Bound Driveways

Key considerations when thinking
about getting a Resin Bound Driveway





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WHAT IS RESIN BOUND GRAVEL?

Resin bound gravel is small particles of gravel, bound together with a polyurethane resin, the resin bound surface is typically installed on a tarmac base. It's different to resin bonded gravel which is an inferior, non-porous, solution where resin is spread across the surface and loose stone is scattered on top.

Resin bound driveways have been around for approximately 25 years. They are extremely popular and will continue to be so as they offer some unique benefits over other driveway surfaces. In this guide, we will delve into the technical aspects to provide a thorough understanding of the pros and cons associated with resin bound driveways. Getting the right driveway solution for you is paramount as the investment is significant.





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AESTHETICS

Resin bound driveways boast a visually stunning appearance, with a smooth and seamless finish. The variety of colours and textures available allows homeowners to customise their driveways to match the overall aesthetic of their property.

Resin bound surfaces typically suit more modern properties as the look they provide is very "crisp".



However, resin bound driveways can also be described as "plastic or artificial looking" and are not an appropriate solution for many traditional properties where a more natural looking surface is more appealing. In these cases, stabilised gravel may be a preferred solution.





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PERMEABILITY

One of the standout features of resin bound driveways is their permeability. The porous nature of the surface allows water to drain through, reducing the risk of puddles and standing water. This can be particularly advantageous in areas prone to heavy rainfall, minimising the chances of flooding.

When installed on a Type 3 MOT sub base (minimum depth of 220mm) and with an Open Surface Asphalt binder course, your resin driveway will be SUDs compliant. Since the introduction of the SuDS (Sustainable Drainage Systems) legislation in 2010, driveways have either had to be permeable (allow water to percolate through) or if they are non-permeable the water must run to a suitable soak away. The rules make perfect sense as permeable surfaces prevent localised flooding from water run-off. Resin bound driveways, installed on the correct base, therefore offer significant benefits over traditional tarmac and block paving solutions.





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ENVIRONMENT

The drainage credentials of resin bound driveways are excellent and this is an important consideration when looking at the environmental impact of this driveway solution. Allowing rainwater to permeate through the surface and recharge groundwater not only eases the burden on drainage systems but also contributes to sustainable water management practices.

However, the quantity of non recyclable plastic packaging materials for resin bound installations is significant and should be considered in terms of environmental impact. For some, the extensive use of non-recyclable plastic packaging materials during the process raises concerns about the overall sustainability of the product.



SPECIFICATION

Absolutely paramount to the success of your resin driveway installation and the longevity of the driveway is the specification to which the driveway is laid.

Description

Resin Bound
Aggregate troweled
to a smooth finish

Binder Course
Permeable Tarmac

Sub-base
Type 3 MOT or
Type 1 MOT
with reduced fines

Membrane
Geotextile

Sub-grade



Depths and measurements

Minimum 18mm
depth with 5mm/6mm
aggregate formulation

A 70mm depth of AC 14
Open Surface asphalt concrete
max 100/150 pen to
BS EN 13108-1:2006
(Bituminous Macadam)

A minimum of 220mm
depth of well compacted,
non-frost susceptible Type 3
granular sub-base
to SHW clause 805.

We always install a sub-base of at least 220mm for a domestic driveway. This is an element of the installation where many unscrupulous installers cut corners. The vast majority of customers never check the depth of the sub-base being installed. This is completely understandable as it would be very much outside most homeowners' comfort zone. There is an assumption that if the quote says "we install a sub-base of 220mm" that is what will be done. Unfortunately, in a competitive market not all installers do as they say. We will never cut corners.



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This sub-base is always installed upon a geotextile membrane to prevent particle migration from the sub-base material into the sub grade below. After the sub-base is installed to the correct depth and suitably compacted a 70mm layer of Open Surface asphalt is installed which is a permeable tarmac layer.

Finally, the resin layer is installed at a minimum depth of 18mm using UV stable resin bound aggregate. The UV stable product is very important as a non UV stable product is less expensive but does not hold its colour with exposure to sunlight. Some unscrupulous installers will install inferior non UV stable products and claim they are UV stable.





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FAILURES

Lots of resin driveways fail in a variety of ways for a variety of reasons. These are mostly down to sub standard specification and poor installation techniques. The specification of the sub-base, binding layer and the depth and quality of the resin bound layer are vital for a successful installation.

EXCESSIVE WEAR

Heavily trafficked areas where car tyres are turning in a fixed location will, over time, damage the resin surface. The forces involved (particularly with heavy cars such as SUVs and electric vehicles) will damage even a properly installed resin driveway. If this is a concern then resin may not be the answer or the driveway design could incorporate another sort of surfacing such as paving in the area where car wheels will be turning.





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TREE ROOTS

It is critical, when installing any driveway, to consider the trees near to the driveway and the impact any work will have on the roots of the tree. Particular care needs to be taken if trees are covered by a TPO (Tree Preservation Order) or the house is in a conservation area (where all trees are covered by a blanket protection order. Roots can and will damage any driveway. If the driveway is stabilised gravel or block paving then repairs can easily be undertaken. If the driveway is tarmac or resin bound aggregate then repairs are more problematic.





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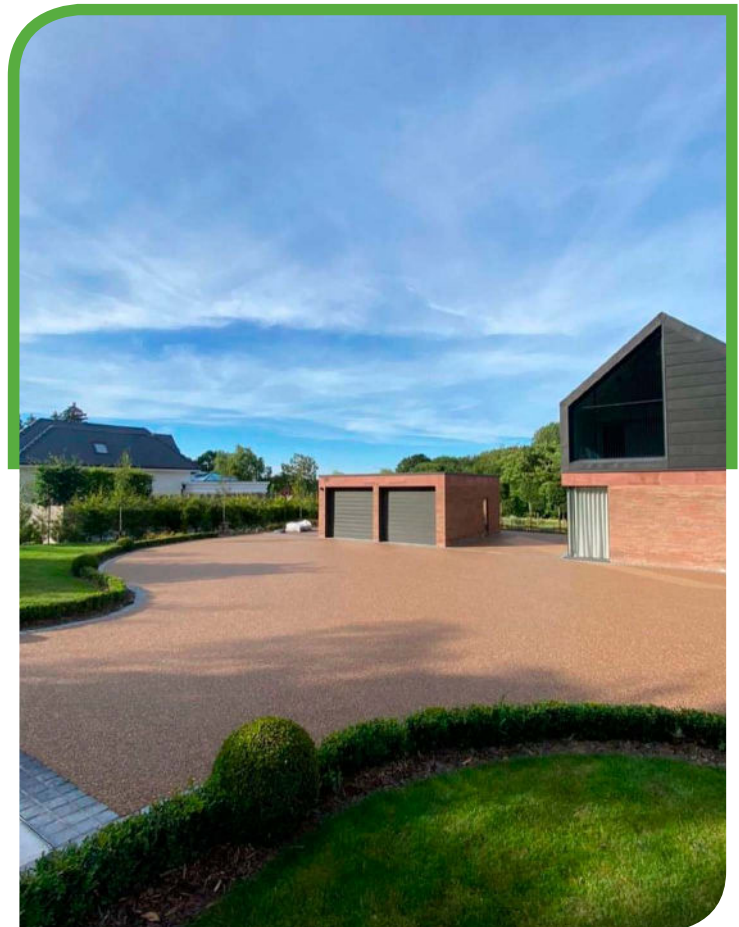
PRACTICALITIES

There are a number of practical considerations with resin bound driveways that are extremely important but often overlooked.

Our resin driveways are guaranteed for vehicle weights of up to 3.5 tonnes, This is far more weight than the heaviest car (a Range Rover, for instance, is 2.3 tonnes). 3.5 tonnes is the weight of a fully loaded Transit van.

Skip wagons and delivery lorries weigh many tons more than this. A fully loaded skip and lorry can weigh up to 40 tons. This means that the homeowner with a resin driveway must take care to protect the driveway properly when heavy lorries are going on the driveway.

For peace of mind, if homeowners are considering building work or garden landscaping after the installation of an amazing and pristine resin bound driveway, they may want to think about changing the sequence of their project and leave the driveway to the end.





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ACCESS ON INSTALLATION DAY.

Once the resin bound material is mixed and laid, the surface can normally receive light foot traffic after approximately 4-6 hours depending on the weather (i.e. 4-6 hours at 20°C). We also insist that vehicular traffic is not allowed on the driveway for 24 hours (again at 20°C). For some homeowners this is not an issue at all. For others it's an important issue that needs careful consideration. If you have no other way of getting into your house other than over the driveway you may be effectively locked in (or locked out) of your property for 4-6 hours after installation. You will certainly need to make alternative parking arrangements for the day of and the day after your installation. We will help you with this dilemma and can usually find a way of gaining temporary access to your property.

Also, next door's cat will probably not understand the need to keep off the driveway and if the cat walks on newly laid resin then the prints will be a permanent feature.

The smooth surface of a resin driveway can become slippery. Keeping the surface clean and free from debris, moss, or algae can help maintain better traction. If a non-slip driveway is important then stabilised gravel may provide a better solution.





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CLEANING

Resin driveways are relatively easy to clean. However, particularly in shady areas they will get mossy. The textured surface of the resin bound aggregate provides a good environment for moss to take hold. Pressure washing is no problem but can be a little time consuming to get all the moss and dirt out properly. A special cleaning lance will help as well as cleaning chemicals. We provide a professional cleaning service.





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CONCLUSION

In certain situations, resin bound driveways are simply the best solution available. In certain situations, they are not. We are happy to discuss your choice of driveway with you in detail to ensure you are getting the best possible advice and the best possible solution for your investment.

THANK YOU

We hope you have found this guide useful.

Creative Gardens & Driveways latest projects can be viewed on its [website](#). The company specialises in landscaping, gardens and driveways with every project individually tailored to the client's requirements. From small spaces to large plots, its experienced team can create a tailored solution to suit a range of budgets, combining knowledge of gardening techniques with an eye for aesthetics.

New enquiries are welcome via the online [form](#) or by calling 0161 524 2455.

Creative Gardens & Driveways provide homeowners in the North West of England with the perfect garden design and build services they need to create their dream outdoor living space.

With award winning garden designers and a team of exceptional project managers and craftsmen, its service is second to none ensuring each individual customer gets the results they desire.



Contact us today to start planning
your dream garden, patio or driveway.

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