

## Welcome to your free DIY guide to installing your own garage floor.

This blueprint will enable you to produce a good-looking floor that will have a longer lifespan by simply following a simple step by step process, with advice on the tools and disposables you'll require, health and safety information, the sequence to take and the pitfalls to avoid. It will also include tips to make your job easier....so let's get cracking.

### **Top TIP**

The success of any venture is all in the planning and preparation and flooring is no different. The failure of most resin floors and coatings is simply a lack of correct substrate grinding and prep works, resulting in flaking, peeling, and delaminating floors, which are a common sight, both in garages and commercial premises.



## FLOORING PREPARATION

On older floors grinding will remove surface contamination built up over many years, including oil, dirt, staining and possibly previous coatings of paint. On new floors it will take off laitance that rise to the surface as well as scratching or 'keying' the concrete for improved adhesion of the first paint coating, giving it something to grip to.

### **Hint**

Don't be overly aggressive with the grinding as this can leave deeper marks in the floor that will be noticeable when the coatings go down, especially if you plan to use an epoxy product, which will be less than 1mm in thickness. Let the grinder skim the surface and only use pressure if you have a stubborn area that needs levelling down.

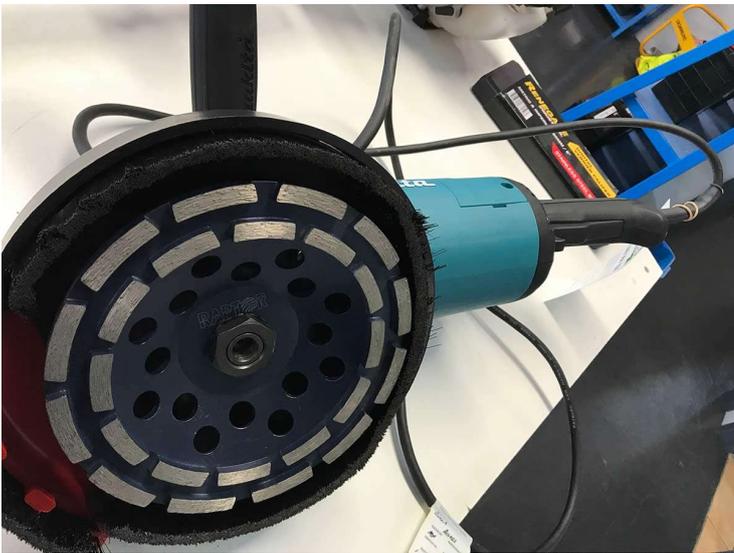


### **Electricity supply considerations for safety**

If you already own a grinder and small industrial vacuum that runs on a 240v supply, that's fine, if not then we'd recommend you hire 110v equipment which is safer. Local hire companies can advise on the right kit to choose for the job.

### **These are our recommendations for the tools you'll require:**

230mm or 7 inch 110v grinder with diamond cup grinding segment disc



Additional 125mm grinder for edges and under units and benches if they are fixed. This can also be used to chase out (cut and widen cracks) if present in the floors.



125mm diamond edge cutting disc



Industrial 100v vacuum with hose to attach to grinders and a wand to vacuum the floors when the grinding is done.



110v 5kva transformer and a couple of 110v 16amp extension cables (some vacs run off a 32amp supply on the transformer (see larger socket on the box) – check with the hire company.



## PPE (personal protective equipment)



The minimum requirements for your safety and protection are:

1. Safety glasses
2. Work gloves
3. Ear defenders
4. Dust mask
5. FFP3 mask (optional) for vapours

To make the job more comfortable, you may want to use some knee pads.

## Cracks, dents and holes in the floor



You'll recall we mentioned the grinder/cutter with the diamond blade.

This is ideal to widen the cracks otherwise you may have a problem getting the flexible filler down the gaps!



There are many flexible sealants available at your local DIY store, any will do but choose one with a relatively quick drying time.

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### Another useful Tip



Dents and holes can be filled with your standard car body filler, usually stocked at Halfords and other automotive retailers.

Don't worry if the result of your hole filling looks a little ragged and rough. Allow it to dry and then go over the area again lightly with the grinder until it is smooth.

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## Right then, let's get onto laying the floor!



### Choosing a suitable coating

There are many flooring products on the market and the old maxim still holds true that 'you get what you pay for'

If you want your floor to last a long time, then generally the more you pay, the better the quality and performance will be.

## **False economy – floor ‘paints’**

We’d strongly suggest you keep away from inexpensive garage floor paints as they don’t have the durability or longevity of resin-based products.

Our choice for an epoxy floor is the Pumatect HB from ResDev. It’s a high-quality epoxy that requires 2 independent coats, allowing 12-16 hours to dry between coatings. There are many other suitable epoxy high build coatings and it’s always prudent to do your own research and to compare costs.

## **A word of advice about porous substrates**

If your fully prepared floor looks very porous or if your garage floor is newly laid, both will benefit from a water-based primer, usually available from the same supplier, otherwise your first coating will appear to disappear into the floor leaving exposed concrete. This will need to dry fully before the first epoxy coat goes down, usually between 12-24 hours depending on the air temperature.

## **The tools and equipment to lay the floor**

- 2 inch wide Bristle paint brushes for edges and corners
- 10L plastic buckets for resin mixing and tool cleaner
- Long roller arms for the main floors – 9 inch or 12 inch heads are ideal
- Short roller arms for edges – 4 inch
- Plastic sheet on the floor to create a mixing area and to cope with spills
- Small paddle mixer (power screwdriver works with a small whisk)

## **Paint Thinners**



We’d recommend Tetroxyl automotive thinners to clean the whisk in between coatings, as well as the paint brushes and roller heads to prevent a build-up of resin.

This is available online and from some automotive stores.

## TOP TIPS

1. To make it easier to get the coatings down, it's best to leave the tins somewhere warm (at room temperature). This makes the epoxy slightly runnier and you won't feel like your forcing it to cover the floor.
2. To also get the best coverage when you mix the epoxy coating with the hardener, you can add 250ml of the thinners to the 5KG epoxy tin to loosen the product up.
3. The pot life is relatively short, sometimes 15-20 minutes when the hardener is added, so you can split the 5kg mix into another couple of buckets as less volume generates less heat, extending the working time.
4. If you are working alone, we'd suggest you divide the epoxy and hardener by half to make your life easier and less stressful. Better to have to make another mix than waste half the contents because you want to take your time and be thorough.
5. Choose a warm day ideally as this helps the coatings to dry.

## Roller sleeves



The best 4-, 9- or 12-inch roller sleeves for coatings are heat sealed that prevent the loss of fibres on the floor. Cheaper ones will leave 'bits' on the floor which will spoil the overall appearance. We buy all our consumables from VI Distribution, who you'll find online. Prices are good and delivery very prompt.

## Optional Gazebo



If the weather looks doubtful but the job has to go ahead, a cheap gazebo will keep the rain off the mix area and if you surround it with inexpensive plastic sheets, this will keep debris and leaves being blown onto the wet floor. Can't promise cats won't leave footprints!

Best to close the garage doors when you are done.

## Product coverage

This varies from product to product. As a rule, a 5kg tin should do approx. 35-40 square metres for a single coat. The water based primer will cover a larger area, always check the manufacturers product information, either on the tin or on their website.

## 1<sup>st</sup> Coating

Start with the paint brushes on the edges and then move onto the main floor with the big roller.

This will require some effort to apply as the better-quality coatings are reasonably thick.

Work from the back of the garage towards to front and use the roller from left to right and front to back to ensure even coverage. Allow 12-24 hours to dry before the 2<sup>nd</sup> coat.



## Garage door threshold

To achieve a neat edge at the front of the garage, it's always best to run a 2 inch tape (gaffa tape) to create a clean edge to the floor. Tapes can be pulled after 10-15 minutes while the epoxy is drying. Don't be tempted to remove them early as they can drip onto the floor and leave blobs.

## 2<sup>nd</sup> coating

The good news is the second coat will go down much easier than the first and the coverage will go much further.



## Curing times for an epoxy floor

- Allow 12-24 hours to dry between all coatings
- Foot traffic is acceptable after 24 hours on the second coating
- Full cure can take up to 7 days. Some fast cure epoxies can reduce this down to 2-3 days, best check with the suppliers first as you'll not want to damage the floor by using it too early, especially after all your hard work!

If you are keen to DIY on your own garage floor, then hopefully this information will be very useful to you.

If you'd prefer the garage floor DFY (done for you), we'd be happy to price up the job and give you options on epoxy coatings or the fast cure, more robust MMA (methyl-methacrylate acrylic resins) with 5 year warranties and 30 year life expectancy. Feel free to give us call.

Good Luck!