

# Surface Preparation

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Proper surface preparation is essential for the success of any protective coating scheme. The importance of removing oil, grease, old coatings and surface contaminants (such as millscale and rust on steel, laitence on concrete and zinc salts on galvanised surfaces) cannot be over emphasised.

The performance of any paint coating is directly dependent upon the correct and thorough preparation of the surface prior to coating. The most expensive and technologically advanced coating system will fail if the surface preparation is incorrect or incomplete.

## CONCRETE AND MASONRY SURFACES

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The surface should be clean, dry and free from oil, grease and other contaminants such as forming lubricants and curing components which would affect adhesion of a paint coating. The moisture content of the concrete or masonry should be less than 6%, measured using a Protimeter Surveymaster or similar. As a rule of thumb, concrete less than 28 days old, in a temperate climate, is unlikely to have dried out sufficiently. Note:- Painting over surfaces, which have not sufficiently dried out, will result in blistering and flaking of the paint coating as the trapped moisture gradually escapes. Laitence and loose surface powder formed on new concrete must be removed. The alkalinity and porosity of the surface must also be considered when painting concrete or masonry. The most preferable surface treatment for concrete is sweep blasting. Wire brushing also provides a suitable surface for painting, but requires more effort. Alternatively, a proprietary acid etch treatment followed by thorough water washing and drying may be used. Any cracks should be cut out and filled with a suitable filler prior to painting. Blow holes may also require filling - consult International Protective Coatings for specific advice.

## Surface Preparation

### SAFETY CONSIDERATIONS Concrete Floors

Preparation of concrete floors is achieved by blasting, scarifying, grinding or by hand. Final choice will be based on the condition of the existing surface, floor area, access for preparation equipment and the coating to be applied.

1. **Blasting** - The concrete should be blasted using a recoverable abrasive blasting unit.
2. **Scarifying** - Scarifiers are machines which include fast-rotating hardened flails, which remove old coatings and roughen the concrete substrate. Scarifiers are generally used for areas less than 250m<sup>2</sup>, for larger areas it is normal practice to blast.
3. **Grinding** - The floor should be thoroughly prepared using a mechanical grinder to remove laitence, fines and any surface contamination.

The final process for all methods of preparation is thorough vacuum cleaning to remove all residual dust.

Always carefully read and completely follow the safety procedures and instructions recommended by manufacturers of surface preparation devices, application

equipment, media or products and the job site safety measures.

Always carefully read and follow the paint manufacturer's safety procedures and instructions concerning paint products.

These are general statements to alert you to the importance of specific warnings and instructions on individual products. These statements are not intended to be specific

## How to Recoat an Epoxy Floor

This is a DIY system, does not reach to professional standard.

Epoxy coatings are ideal for concrete floors.

Epoxy coatings are used to seal concrete floors and make them more durable and easier to clean. In a residential setting like a garage or basement, an epoxy coating can last between 5 and 10 years before it's time to apply a re-coat. But even unfinished epoxy floors should be prepared before they are re-coated: Epoxy creates a hard, slick shell that must be conditioned before another coat of epoxy can stick to it.

### Difficulty:

Easy

### Instructions

things you'll need:

- Mop
- Soap
- Bucket
- Coarse sandpaper
- Broom
- Denatured alcohol or mineral spirits
- Nylon paintbrush
- Paint roller

Clean the floor with soap and water and rinse it well.

Scrub the surface of the epoxy floor with coarse sand paper to give the fresh coat of epoxy something to adhere to. Then sweep away any dust and wipe down the floor with denatured alcohol or mineral spirits.

Apply painter's tape to the base of the walls to protect them from the epoxy. (You'll need to remove the painter's tape before the epoxy dries completely.)

Pour the epoxy into a painting tin (mix first, according to the manufacturer's instructions, if necessary) and apply epoxy to the edges of the floor with a nylon paintbrush. Then use a roller to coat the entire floor with epoxy. Plan your route well so you do not paint yourself into a corner.

Leave the epoxy to dry overnight or for the amount of time prescribed by the manufacturer.

Apply a second coat of epoxy to the floor, following the same method as you did for the first coat.

Allow the epoxy to cure for the amount of time prescribed by its manufacturer. Even if your epoxy floor appears dry, you can damage it if you walk on it has fully cured. Depending on the epoxy, this may take between 3 days and 2 weeks warnings or advice.