

# Total Flooring Solutions

A Guide to PPG Epoxy Resin Flooring Systems



We protect and  
beautify the world™

# Who We Are...



At PPG, we work every day to develop and deliver the paints, coatings and materials that our customers have trusted for more than 130 years. As well as providing decorative paint, woodcare, insulation, render and protective coatings, we offer total coatings solutions, with an extensive portfolio of leading brands designed to meet every need, from light industrial, to heavy duty.



A leading PPG brand in the resin floor market widely available in France.



Offering a variety of floor systems to the protective and marine coatings market worldwide.



A range of epoxy floor products designed for use in a number of industrial situations including the nuclear industry.



Designed to meet a wide range of needs in both residential and commercial properties in the USA.



Formulated especially for light duty areas, from garages, production facilities and warehouse areas.

Building on our heritage for high quality paint and protective coatings, our latest range of epoxy flooring solutions all have CE Marking and meet EN 13813 standards. With these accreditations, you can be confident the products will be capable of meeting a host of performance parameters, including:

- Abrasion, wear and impact resistance
- Bond strength
- Chemical resistance

In the UK, we are a manufacturing member of the Resin Flooring Association (FeRFA). Providing advice, guidance and training support on resin flooring to major product manufacturers, specialist contractors and surface preparation companies, raw material suppliers and specialist service providers. FeRFA works with its members to support them in meeting the exacting standards required within the UK resin flooring industry. This is done through specific industry training schemes designed for all stages of a resin flooring installation.



# Floor Coatings Guide

## Selecting the right flooring product

The key to a successful floor installation starts with the correct choice of flooring product, as well as the selection of the right partners for the project, both in terms of the manufacturer and installer.

PPG can provide guidance and support in building project specifications for our products, as well as advice on choosing installers with experience in preparing and applying flooring systems.

### CHOOSING YOUR FLOORING: the considerations

- What is the age of the floor substrate and its composition?
- Does the floor have a functioning damp-proof-membrane (DPM) under the slab?
- What condition is the floor currently in?
- Does the floor need large scale levelling prior to the resin floor being applied?
- Does the floor have an existing coating or other floor covering on it ?
- What preparation can be done on the floor?
- What type and volume of traffic will the floor be subject to?
- Will chemicals or hot liquids be spilled on the floor?
- Are there any slip resistance requirements for the floor?
- What are the lifespan and budget requirements?



# Primers & Floor Preparation



## Surface preparation

**Prior to installing any PPG Cementitious or Resin Flooring System, a full survey of the subfloor should be carried out. The survey should check its condition and assess whether or not the surface is suitable for a resin floor to be installed.**

We recommend that broken joints, cracks, holes, and any other defects in the floor are correctly repaired before starting work. Any contaminants, such as oil or grease, should also be treated or removed. These steps are key to ensuring the product fully adheres to the substrate - inadequate preparation can lead to delamination and premature wear.

The chosen preparation method will depend on the thickness of the material being applied. When applying certain coating or flow applied systems, there is potential for the finish to mirror any imperfections in the substrate. In such case, grinding or light vacuum contained shot-blasting techniques should be used, rather than heavier methods of mechanical substrate preparation.

For further details on preparation and substrate suitability please speak to PPG Extra or refer to the FerFA guide to preparation which can be found at [www.ferfa.org.uk](http://www.ferfa.org.uk).

## Priming the surface

After the floor has been prepared, concrete substrates sometimes need primers prior to applying cementitious and resin flooring systems. The primer required will depend on the substrate, its condition and how dry it is. At PPG we have two epoxy priming systems that can be used:

**PPG EP001  
Epoxy DPM  
Floor Primer**

Our two-component solvent-free liquid applied surface DPM and residual moisture suppressant. Developed specifically for use as a primer over cementitious surfaces that contain high levels of residual construction moisture, PPG EP001 is ideal for providing good adhesion to damp concrete and other cementitious substrates. PPG EP001 can be used on floors with hygrometer readings up to 98% RH as measured in accordance with BS 8203:2001. PPG EP001 is coloured yellow to give a visual aid for application and to ensure full coverage of the substrate.

PPG EP001 allows you to apply floor coverings, from vinyl and carpet, to PPG Resin Systems, without the traditional "drying out" period. This product is not recommended for use with under-floor heating systems.

This product should not be used on concrete slabs without a functioning DPM within them.

**PPG EP002  
Epoxy Impregnating  
Floor Primer**

Our two-component solvent-free impregnating epoxy primer, this product penetrates into prepared concrete substrates to provide a suitable key for PPG Flooring products.



# Flooring Systems

## Total flooring solutions

At PPG, we have developed a range of flooring systems designed to meet a wide variety of applications, from heavy-duty industrial environments, to light-duty commercial areas. Our team of experts can help identify the most suitable products for the needs of any project.

### Cementitious Flooring Systems

Our range of cementitious flooring systems has been created for use prior to applying our range of resin flooring systems. Our range includes products designed for everything from industrial repair and levelling compounds, to products for fast-drying screed systems, all ideal for a variety of commercial and industrial areas.



### Johnstone's Trade Flortred

Through our Johnstone's Trade brand, we offer a number of products specially formulated for light-duty flooring applications.

Our Johnstone's Trade Flortred is a solvent based semi-gloss coating that is resistant to mild chemicals, water, oil and grease. Suitable for use on concrete, steel and wooden floors, Johnstone's Trade floor coatings can be applied in a variety of environments, offering a smooth, attractive finish.

In lobbies, corridors and other areas prone to slip risk, Johnstone's Trade flooring products can also be mixed with PPG's Anti-Slip Additive to optimise slip resistance, helping to boost safety for room occupants.

### Epoxy Flooring Systems

The durability of epoxy flooring products mean they have been used in industrial environments for a number of years. There are many areas that are suitable for resin flooring systems and many possible systems that can be used in these areas.

#### BENEFITS OF RESIN FLOORING

- Protects the concrete substrate underneath
- Increases durability of the substrate and the floor's abrasion and impact resistance
- Improves slip-resistance
- Improves chemical resistance
- Aids cleaning and maintenance
- Allows for zoning within an area
- Increases the aesthetical appeal of an area



### FeRFA

To assist in the selection of the appropriate flooring solution, FeRFA has produced a classification system for the different floor types. This classification is based on the British Standard BS 8204-6.

For more information visit:  
[www.ferfa.org.uk/products.php](http://www.ferfa.org.uk/products.php)

# Water Based Epoxy

## PPG EP201 Water Based Epoxy Coating

A semi-gloss, two-component water dispersed epoxy floor coating for use on concrete substrates and polymer modified cementitious screeds. PPG EP201 is designed to provide a tough, hard wearing protective floor finish in a range of colours. Due to its vapour permeability, PPG EP201 may also be applied to seven-day old 'green' concrete. Its easy to clean, semi-gloss finish makes the product ideal for garages, light industrial units, warehouse floors and other areas subject to pedestrian and light vehicular traffic.

### FEATURES & BENEFITS:

- Water based technology
- Resistant to general chemical spillages
- Low odour
- Durable and non-dusting
- Economical and easy to apply
- FeRFA Type 2



# High Build Epoxy

## PPG EP301 High Build Epoxy Floor Coating

A glossy, two-component solvent free epoxy floor coating for use on concrete substrates and polymer modified cementitious screeds. Ideal for use in medium-duty areas requiring an easy to clean surface, PPG EP301 is a tough and durable coating with excellent chemical resistance, ideal for use in areas such as warehouses, factories, workshops, showrooms, packing and storage areas. PPG EP301 is suitable for regular foot traffic, medium-duty fork lift truck traffic, as well as occasional hard plastic-wheeled trolleys.



### FEATURES & BENEFITS:

- Protects concrete from oil and chemical spillages
- High build with excellent wear resistance
- Easy application - no need for solvent/thinners
- Gloss, easy-to-clean finish
- Non-dusting
- Slip-resistant options available
- FeRFA Type 3



# Self Smoothing Epoxy

## PPG EP4501 Self-Smoothing Epoxy Floor Topping

A medium-duty flow-applied epoxy floor topping for use on concrete and polymer modified cementitious screeds. PPG EP4501 offers excellent levels of durability, impact, abrasion and chemical resistance. PPG EP4501 gives the floor a smooth, glossy and easy-to-clean finish. PPG EP4501 is a very versatile product that can be used in a variety of different industries in a wide range of flooring situations. If required PPG EP4501 can be used as part as a "sandwich" system to incorporate a slip resistant element to the floor.

### FEATURES & BENEFITS:

- Flow applied
- Resistant to general chemical spillages
- Non-dusting
- Seamless
- High wear & abrasion resistance
- Easy to clean
- FeRFA Type 4 & 5



# Technical Support



Our team of PPG Extra experts are dedicated to helping you get the most from all our products and services. We offer a comprehensive range of added-value support services for professionals who care about their work. Whether you're after close project management, or just a friendly phone call, we're here to help.

Our network of people have the expertise and industry knowledge to help on any project. We can work with you to ensure that you're using the most effective and efficient products, methods of application and ways of working.

## Technical Specification

The PPG Extra team takes into account sustainability, maintenance and legislative factors, to provide you with the necessary guidance to ensure your projects are both legally compliant and environmentally sound. We can also help you budget effectively for projects, by specifying products to simplify complicated projects from the very beginning, saving time and money.

## Training and application

PPG Extra's Training Team helps you achieve the best possible results from our products. With a support network of technical consultants, across the UK and Ireland, we provide a range of training packages to help you develop your skills and expertise, so you can use our coatings to the best effect.

Training can be undertaken onsite, or at our offices in Birstall, Leeds. All sessions provide guidance to give attendees the skills and knowledge to apply our products, as well as advice about maintaining compliance with the latest legislation and building regulations.

## Product Advice

		Frequency of use; trafficking				
		Very Rarely (per week)	Rarely (per day)	Occasionally (per shift)	Frequently (per minute)	Very Frequently (per minute)
Severity of traffic; abrasion/wear	Low to moderate abrasion; foot traffic, rubber tyre traffic	Type 1	Type 1	Type 2	Type 3	Type 4, 5
	Moderate to high abrasion; steel or hard plastic wheeled traffic	Type 1	Type 2	Type 3	Type 4, 5	
	High abrasion; steel or hard plastic wheeled traffic and some impact, moderate loadings	Type 2	Type 3	Type 4, 5		
	Very high abrasion from steel or hard plastic wheeled traffic and/or scoring by dragging metal objects, some impact, heavy loading	Type 3	Type 4, 5			
	Severe abrasion from steel or hard plastic wheeled traffic and/or scoring by dragging metal objects, some impact, heavy loadings, aggressive environment	Type 4, 5				

Table taken from the FeRFA Guide to the Selection of Synthetic Resin Floors

## Product Key

Product	FeRFA reference				
	Type 1	Type 2	Type 3	Type 4	Type 5
Johnstone's Trade Flortred	✓				
Johnstone's Trade Quick Dry Polyurethane Flortred	✓				
Johnstone's Trade 2 Pack Epoxy Water Based Floor Paint	✓				
Johnstone's Trade 2 Pack Epoxy Solvent Based Floor Paint	✓				
PPG EP201 Water Based Epoxy Coating		✓			
PPG EP301 High Build Epoxy Floor Coating			✓		
PPG EP4501 Self-Smoothing Epoxy Floor Topping				✓	✓



# Colour Services

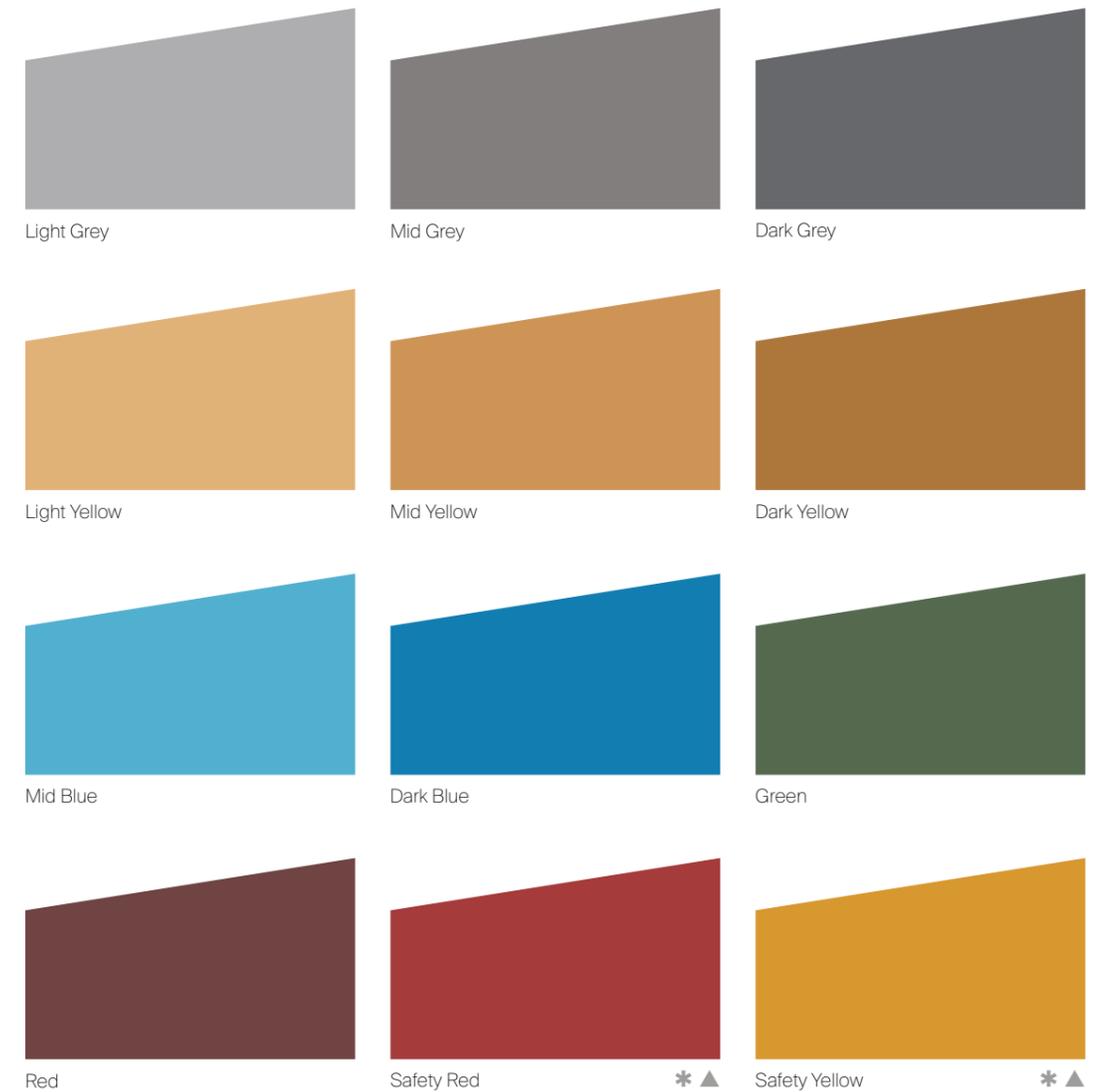
## Support & Advice

The use of colour isn't just about making a beautiful space. It's about making sure people respond to their environment in the right way. Using colour appropriately can make spaces more welcoming, improve workplace productivity, and help create safer environments for occupants.

Whatever project you're working on, we can suggest a colour scheme for a wide range of buildings, from hotels to airport hangers and from warehousing to sports facilities.

In addition to our standard range of 12 colours - including 2 safety - we can also use our extensive colour bank to match RAL and BS shades, and match existing brand colours.

Whatever you require, PPG Extra's colour services are guaranteed to help strike the right tone for your project.



\* Surcharges apply    ▲ May require more than 2 coats

Every effort has been made to accurately reproduce colour but for technical reasons connected with colour reproduction, product composition, texture of the final finish and batch to batch manufacture variations may occur.

Call us on:

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Email us at:

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