

PPG EP201 - Water Based Epoxy Floor Coating

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DESCRIPTION

PPG EP201 is a two-component water dispersed epoxy floor coating for use on concrete and polymer modified cementitious screeds.

PPG EP201 is designed to provide a tough, hard wearing protective floor finish in a range of colours. PPG EP201 is water vapour permeable and may be applied to 7 day old 'green' concrete.

TYPICAL USES

PPG EP201 has an easy to clean, semi-gloss finish which makes the product ideal for garages, light industrial units, warehouse floors and other areas subject to pedestrian and light vehicular traffic.

APPEARANCE

Semi-gloss finish and is available in a range of standard colours (see the PPG Epoxy Colour Chart). For non-standard colours or specific RAL colours please speak to PPG for information.

FEATURES & BENEFITS

- Water based technology
- Resistant to general chemical spillages
- Durable and non-dusting
- Economical and easy to apply

THICKNESS

Approximately 210 microns wet film thickness from two coats (approximately 100 microns dry film thickness).

TYPICAL PROPERTIES, 28 DAYS AT 20 °C

BS 8204-6 Type 2 / FeRFA Type 2

Adhesion to concrete (BS EN 1504-2) > 1.5 MPa (concrete failure)

The typical physical properties given above are derived from testing in a controlled laboratory environment. Results derived from testing field-applied samples may vary dependent upon site conditions.

CURE SCHEDULE AT 20 °C

Working Life / Pot Life of full packs * 1 hour

* Usable working life of material following mixing and immediate spreading as per the application instructions.

PPG EP201 does not have a visible end of pot-life. After the pot life has expired the material will not be hardened or have increased in viscosity but the characteristics of the product will have changed and the final properties of the coating will be affected. Discard excess material after this period.

FINISHED FLOOR *

Over coating period 8 - 24 hours

Cure time to light pedestrian traffic 24 hours

Cure time to medium duty traffic 48 - 72 hours

Full cure 7 days

The material should be protected from contact with water for 7 days.

* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions. At lower temperatures curing times will be extended.

AVAILABLE PACK SIZES

PPG EP201 is available in pack sizes of 5 and 10Kg

COVERAGE*

A minimum of two coats are required. Some substrates may require additional coats depending on profile and porosity.

Light or bright colours such as safety yellow or safety red may require additional coats to achieve full opacity. As a guide, a medium quality substrate may achieve 4 m²/Kg from 2 coats and a more porous substrate may achieve 3 m²/Kg from 2 coats.

* Coverage figures given are theoretical. Practical coverage rates may vary due to wastage factors and the type, condition, profile and porosity of the substrate.

COLOURS

PPG EP201 is not 100% colour fast and may yellow over time. The rate of change will depend on UV light and heat levels and cannot be predicted. This will be more pronounced with lighter colours and blue shades and does not compromise the product's performance or chemical resistance characteristics.

APPLICATION CONDITIONS

Resin products should not be mixed and laid outside of the range 10°C to 25°C. Localised heating or cooling equipment may be required outside this range to achieve ideal temperature conditions. To reduce the risk of "bloom" caused by condensation, the climate above the uncured floor should be maintained at least 3°C above the dew point for at least 48 hours after application. The atmospheric relative humidity should be below 75% and good ventilation should be provided to aid the removal of water and maintain curing times. The substrate should be surface dry with a maximum relative humidity of 80% and free from rising damp and ground water pressure.

SUBSTRATE PREPARATION

The concrete substrate must be sound with a minimum compressive strength of 25 N/mm² and a minimum pull off strength of 1.5 N/mm². The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Inadequate preparation will lead to loss of adhesion and failure. In coatings, there is a tendency for the finish to mirror imperfections in the substrate. Grinding, or light vacuum-contained shot-blasting is therefore preferred over planing for these systems. Percussive scabbling or acid etching is not recommended. Refer to PPG Extra if further information on suitable floor preparation methods is required.

The substrate should be smooth as surface irregularities will show through the coating and excess wear will occur on high spots. If the floor requires levelling or repairing then please choose a suitable product from the PPG Cementitious Flooring Range.

APPLICATION INSTRUCTIONS

Pre-mix the coloured resin component before use. Add the hardener component to the coloured resin component and mix using a low speed electric mixer (200 - 500 rpm) fitted with a mixing paddle designed to minimize air entrainment for 1 - 2 minutes until homogeneous. Care should be taken to ensure that any material adhering to the sides and bottom of the mixing vessel is thoroughly mixed in otherwise uncured patches may result. Apply by brush, roller or airless spray. Depending on the substrate porosity, the first coat may be diluted with up to 10% water to aid penetration. The water should be added after mixing of the resin and hardener components is complete. Avoid ponding or over application of the coating as trapped water will lead to incomplete cure. Do not apply subsequent coats until the previous coat is completely dry.

The curing time will depend on temperature, atmospheric humidity and degree of ventilation. Adequate ventilation and air movement is necessary. Each coat should be applied at right angles to the previous coat in order to minimize imperfections and unevenness overall. Uneven application may lead to differences in gloss levels across the cured floor.

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HEALTH AND SAFETY

Refer to product Safety Data Sheet before use.

EU Directive 2004/42/EC

Complies with category I type WB (< 140 g/l VOC content).

STORAGE

Materials should be stored in their original unopened containers in a dry weatherproof area maintained within a temperature range of 10°C to 30 °C on pallets and away from walls. Protect from frost and direct sunlight.

SHELF LIFE*

12 months if stored in accordance with the above recommendations.

GENERAL MAINTENANCE

PPG EP201 can be easily cleaned using industry standard cleaning chemicals and techniques designed for epoxy resin flooring. Test cleaning agents prior to use in a small area. Do not steam clean or subject to temperatures in excess of 50°C. Spillages must be removed immediately. For further information please download the FeRFA Guide to Cleaning and Maintenance of Resin Floors at www.ferfa.org.uk

LIMITATIONS

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be >75% or if the surface temperature is <3°C above the dew point. Application should not commence when the substrate temperature or the ambient temperature is, or is anticipated to be <10°C during the application or within the curing period. The manufacture of PPG EP201 is a batch process and despite close manufacturing tolerances, minor variations in shade may occur between batches. Products from different batches should not be used on the same surface or surfaces close together. If mixed batches are unavoidable, it is best practice to use the different batches only in areas where the colour cannot be directly compared. Touching up should only be attempted using product from the same batch using the same application methods. Product should be reserved specially for this purpose. It is recommended that touching up is carried out up to a break in the floor or surface. Wear in heavy concentrated foot traffic areas is reduced such as around work stations, vending machines etc. In these areas it is advisable to either specify additional coats or specify a higher build system from the PPG Resin Flooring range.

WARRANTY


PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

TECHNICAL ADVICE

For further information on this or any other PPG product, please contact PPG Extra on 01924 354354 or ppgextra@ppg.com

LIMITATIONS OF LIABILITY

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	17	DOP PPG EP201 17131DUT006/7	
EN 13813 SR-B2,0-AR0,5-IR5 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations.			
Reaction to fire	NPD	Impact resistance	IR5
Release of corrosive substances	SR	Sound insulation	NPD
Water permeability	NPD	Sound absorption	NPD
Wear resistance	AR0,5	Thermal resistance	NPD
Bond strength	B2,0	Chemical resistance	NPD