

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

Flowcoat V is designed to provide a tough, hard wearing protective finish. Being water-based, Flowcoat may also be applied to 7 day old 'green' concrete.

Its easy to clean, silk finish makes the product ideal for industrial wall finishes in laboratories, farm buildings, warehousing, garages and other areas.



Easy to apply



Water-based



## FeRFA Classification

BS 8204-6 Type 1/2

## Colours\*

Clear.

\* Flowcoat 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.

## Appearance

Semi-gloss / silk finish available in a wide range of colours and clear.

## Advantages

- ✓ Water based technology
- ✓ Resistant to general chemical spillages
- ✓ Durable and non-dusting
- ✓ Economical and easy to apply
- ✓ Will not support bacterial growth
- ✓ Solvent-free (low odour)
- ✓ Good light stability

## Suitable Substrates

Concrete, grano, metal and wood.

**Disclaimer:** FeRFA (The Resin Association) do not consider anhydrite, hemi-hydrate, and calcium sulphate screeds to be suitable for overlayment with resin floor finishes.

## Uses

- ✓ Light industrial uses
- ✓ Offices
- ✓ Breweries
- ✓ Factories and warehousing
- ✓ Classrooms
- ✓ Food preparation and storage areas
- ✓ Floors and walls

## Pack Size

2.5 and 5 kg units.

## Components

Flowcoat comprises of: one part Resin and one part Hardener.

## VIRTUS RESINS

The Shippon, Faenol

Pentrecelyn

Ruthin LL15 2SP

**Tel:** 01978 790 744

**Tel:** 0843 289 8422

**Email:** [info@epoxyresinsuppliers.co.uk](mailto:info@epoxyresinsuppliers.co.uk)

**[www.epoxyresinsuppliers.co.uk](http://www.epoxyresinsuppliers.co.uk)**



**virtusresins**  
Epoxy resin suppliers

# Technical Data

## Thickness

Approximately 70-90 microns per coat.

## Chemical Resistance

Good Chemical Resistance, please consult us on specific materials.

## Typical Properties, 28 days at 20 °C

BS 8204-6 Type 1/2

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 of full packs*	45 minutes - 1 hour
Finished wall**	
Full Cure	7 days

The material should be protected from water for 7 days.

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

\*\* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions. Higher temperatures will shorten working time and lower temperatures will extend cure times.

## Pack Size

2.5 and 5 kg units

## 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:

### Porous or uneven substrates e.g. Brickwork, block work:

1<sup>st</sup> Coat diluted 5 - 10 % by volume: 7 - 12 m<sup>2</sup>/kg  
1 or 2 final coats undiluted: 7 - 9 m<sup>2</sup>/kg

### Smooth/dense surfaces e.g. Dense brickwork, steel trowelled renders:

1<sup>st</sup> Coat undiluted: 7 - 10 m<sup>2</sup>/kg  
Final coat undiluted: 7 - 9 m<sup>2</sup>/kg

### Dry/porous surfaces:

1<sup>st</sup> Coat diluted 10 - 20 % by volume: 8 - 10 m<sup>2</sup>/kg  
1 or 2 final coats undiluted: 7 - 10 m<sup>2</sup>/kg

A medium quality substrate may achieve 4m<sup>2</sup>/kg from 2 coats and a more porous substrate may achieve 3 m<sup>2</sup>/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.

## Priming

Flowcoat does not normally require the use of a primer. When treating extremely weak or porous concrete it is advisable to prime with Flowprime SF.

## 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 "blooming" 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 80% 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 75% and free from rising damp and ground water pressure. An effective damp proof membrane should be present in walls and floors.

## Surface Preparation

The concrete substrate must be sound with a minimum compressive strength of 25 N/mm<sup>2</sup> and a minimum pull off strength of 1.5 N/mm<sup>2</sup>. 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 the **Virtus Guide to Surface Preparation** for further information.

The substrate should be smooth as surface irregularities will show through the coating and excess wear will occur on high spots. If any doubt exists, trial applications should be carried out to assess the adhesion characteristics of Flowcoat V in specific situations.

## Mixing

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.

**Important:** Both liquids are pre-weighed and designed to be mixed together in their entirety. It is essential that the full amounts are mixed together and until homogenous to ensure the product cures correctly and to the desired finish.

## Application

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 of the coating as trapped water will lead to incomplete cure.

Do not apply subsequent coats until the previous coat is completely dry. This 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 level across the cured floor.

## Pot Life

Mixed material must be used immediately. Flowcoat 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.

## Health and Safety

Before using this product, please ensure that you have received and read the product Safety Data Sheet. Remove food products from the area during application and curing. As with all high gloss paint finishes, scratching of the surface may occur with use due to surface contamination and abrasion. In common with all smooth floor finishes, Flowcoat may become slippery under certain conditions. In areas of chemical spillage, please consult our Technical Department for specific Advice.

## EU Directive 2004/42/EC

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

## Storage

Materials should be kept dry and stored in a weatherproof building maintained at 15 °C to 20 °C on pallets and away from walls. Consignments should be used in order of batch number. Protect from Frost.

## Shelf Life

12 months if stored in accordance with the above recommendations.

## Technical Advice

For further information please contact our office.

## Limitations

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be >85% 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.

## Availability

3- 5 working days. **Country of Manufacture:** United Kingdom

The manufacture of Flowcoat V 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.

## You Might Also Need:

- Resin Painting Kit
- Mixing Drill Attachment

**Note:** The information contained in this document, and all further technical advice given is based on our present knowledge and experience. However, it implies no liability or

Virtus Resins, The Shippon, Pentre-Celyn, Ruthin LL15 2SP, England			
CE	13	DOP RV0007/9	
EN 13813 SR-B2,0 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations			
Reaction to fire	NPD	Impact resistance	NPD
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