

# High build epoxy floor coating Strongcoat<sup>™</sup> Fast Cure

Strongcoat<sup>™</sup> Fast Cure is a two-component virtually solvent free epoxy floor coating offering excellent abrasion and chemical resistance.

Strongcoat™ Fast Cure provides a tough, hard wearing coating for medium to heavy duty traffic giving high film build and wear resistance.









Strong

Anti-cli

Easy to Clean

Fact Court



#### **FeRFA Classification**

BS 8204 Type 3.

#### Colours\*

Available in a selection of standard colours. A large selection of BS 4800 or RAL colours are available upon request.

#### **Appearance**

Gloss finish in a range of attractive colours. Can have a textured finish with the addition of Anti-slip Aggregate.

## **Advantages**

- ✓ Protects concrete from oil and chemical spillages
- ✓ High build with excellent wear resistance
- ✓ Virtually solvent free
- Non-dusting
- Slip-resistant options available
- Fast curing

#### **Suitable Substrates**

Concrete and polymer modified cementitious screeds.

#### **Uses**

For medium to heavy duty areas requiring an easy to clean, tough and durable coating with excellent chemical resistance such as: warehouses, factories, workshops, showrooms, packing and storage areas. Suitable for foot, forklift, truck traffic and occasional hard plastic-wheeled trolleys.

Time limitations may necessitate a faster initial cure time (working between shifts or close down periods) in which instances the use of a Fast Cure hardener can be employed. This makes it ideal for live sites and areas which require faster turnaround.

#### **Pack Size**

2.5 and 5 kg units.

## **Components**

Strongcoat<sup>™</sup> Fast Cure comprises: one part Resin and one part Hardener.

**VIRTUS RESINS** 

The Shippon, Faenol

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Ruthin II 15 2SP

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# **Technical Data**



#### **Thickness**

Approximately 400 microns (0.4mm) from two coats.

#### **Chemical Resistance**

Good Chemical Resistance, please consult us on specific materials.

## **Slip Resistance**

**Note:** The slip resistance of a floor surface can vary as a result of the installation process, conditions at the time of application and subsequent traffic. Inappropriate cleaning or maintenance can adversely affect the performance. For further advice on potential wet areas please contact us.

## Typical Properties, 7 days at 23 °C\*

BS 8204-6 Type 3
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\* ~15 minutes

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

Finished floor\*

Hard cure (light traffic) 11 hours Full chemical resistance 5 days

The floor should be protected from contact with water for at least 7 days.

\*These 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. I

#### **Pack Size & Colours**

2.5 and 5 kg units.

Range of standard colours (See Colour Chart).

\*Strongcoat™ Fast Cure 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.

## Coverage (nominal 0.5 mm thickness)\*

The coverage rate will vary depending on the texture and porosity of the substrate, film thickness and application technique. Two coats are normally sufficient but on very porous substrates, an initial coat of Flowprime SF may be required. As a guide:

Normal substrate: 1st coat - 375 g/m<sup>2</sup>

2nd coat - 250 g/m<sup>2</sup>

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

## **Application Conditions**

Strongcoat<sup>™</sup> Fast Cure is a relatively viscous coating. Do not apply 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.

## **Surface Preparation**

#### **Concrete**

Concrete substrates must be a minimum of 28 days old, dry, clean and free of surface laitance and contaminants such as dirt, oil, grease, poorly bonded coatings and surface treatments. 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.

Concrete must include a functional damp-proof membrane.

## **Priming**

Strongcoat<sup>™</sup> does not normally require a primer on dry substrates. When treating extremely porous or damp concrete, prime as follows:

Substrate relative humidity <75%: Flowprime SF (Weak or porous) Substrate relative humidity >75%: Flowprime DPM ('green' concrete)

## **Application**

Best results are obtained in warm conditions (minimum 15  $^{\circ}$ C). Apply with a medium pile simulated sheepskin roller working well into the surface taking care not to exceed the coverage rate. Edges and difficult to reach areas may be applied thinly by brush.

An anti-slip finish may be achieved by fully sprinkling the first coat with kiln dried silica sand at 3 - 4 kg/m². Allow the first coat to fully cure (24 hours at 15 °C or longer in colder temperatures) then remove all excess sand with a stiff broom and vacuum and apply a second coat to encapsulate the grains. Coverage rate will depend on surface profile but will be significantly greater than for the first coat. As a guide:

Sand Grading	Maximum Coverage	Achievable PTV (BS 7976-2)	
mm	m²/kg	Dry	Wet
0.3 - 0.6	2.5	≥40	≥40
0.7 - 1.2	1.5	≥55	≥55

**Note:** These coverage figures are approximate as silica sand grading can vary widely as can site conditions. If in doubt, order extra material to account for wastage or install a test area prior to starting works. The pendulum test values given above are derived from testing in a controlled laboratory environment and are given for guidance only. Results derived from testing field-applied samples may vary dependent upon site conditions and application technique. Slip resistance can reduce over time due to poor maintenance, general wear or surface contaminants. Good housekeeping practices should be observed.

# **Technical Data**



## **Mixing**

Materials should be stored at 15  $^{\circ}$ C to 25  $^{\circ}$ C for a minimum of 8 hours prior to use. 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) for at least 3 minutes until homogeneous. Use a spatula to scrape the sides and bottom of the mixing vessel several times as unmixed material will result in uncured patches in the final finish.

#### **Pot Life**

Mixed material must be used immediately. When mixed, a chemical chain reaction takes place which creates heat and further reduces pot life. High ambient temperatures will reduce pot life.

**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.

### Cleaning

Tools and equipment should be cleaned whilst the resin is still wet with a suitable solvent. Strongcoat can be easily cleaned using industry standard cleaning chemicals and techniques designed for epoxy resin flooring. Test cleaning agents prior to use. Do not steam clean or subject to temperatures in excess of 60 °C.

## **Health and Safety**

Refer to product Safety Data Sheet before use.

Before using this product, please ensure that you have received and read the product Safety Data Sheet. Refer to hazard labelling on the product. Wear gloves and avoid contact with skin and eyes.

#### **Precautions**

Remove food products from the area during application and curing. As will 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, Strongcoat™ Fast Cure 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 SB (< 500 g/l).

#### **Shelf Life**

12 months if stored in accordance with the above recommendations.

#### 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 Strongcoat™ Fast Cure 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.

#### **Technical Advice**

Time limitations may necessitate a faster initial cure time (working between shifts or close down periods) in which instances the use of a Fast Cure hardener can be employed. On average, this has the effect of reducing the hard cure time by 1/3 but also reducing the usable life by 1/2:

#### **Strongcoat Standard**

Hard cure time at 20°C - 16 hrs Usable life at 20°C - 30-40 mins

#### **Strongcoat Fast Cure**

Hard cure time at 20°C - 11 hrs Usable life at 20°C - 20 mins

Physical and chemical resistant properties are little affected by this substitution. It should be noted that despite the accelerating effect of this hardener over hard cure time, the resistance time of the product to chemical contact will still only be achieved after normal 5 day cure period. The hardener adopted for the fast cure epoxy system has been designed to reduce hard cure time at "normal" application temperatures (15-20°C). This product should not be specified as a means to providing an epoxy system capable of curing in temperatures below 10°C as this will lead to extended cure times with the possibility of carbonate salt formation if the ambient humidity is high. For further information on this or any other Virtus® product, please contact our office.

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

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# High build epoxy floor coating Colour Chart



Most products are available in a range of standard colours with some non-standard or custom RAL colours available upon request (subject to surcharge and production availability). Unit prices quoted are as per the standard colour ranges in current colour charts and product data with the exception of Safety Red, Safety Yellow and Midnight Blue whereupon a 10% surcharge will apply. The colours shown may differ from the original product due to reprographics and technological media variations. The same colour in different products may also vary due to the composition and texture of the final finish. Samples: If colour and final aesthetics are of concern, please contact us to request an actual hard sample of the colour and system required.

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