



## EPOXY SELF-LEVELLING FLOORING SYSTEM

### DESCRIPTION

**abe.<sup>®</sup>flo** is a four-component solvent-free self-levelling flooring surface system.

The system comprises a clear resin and hardener system, pre-packed blended aggregate and a ready-for-use pigment paste.

### USES

**abe.<sup>®</sup>flo** caters for high hygiene standards with good colour retention and a medium gloss finish.

#### Typical end-use locations are:

Hospitals; schools; kitchens; factories; showrooms; laboratories; canteens; supermarkets; garages.

**abe.<sup>®</sup>flo** is not recommended for use in areas that are subject to heavy mechanical impact and abrasion. For such applications, refer to **a.b.e.<sup>®</sup>**'s Technical Sales division.

### ADVANTAGES

- Good protective qualities.
- Self-levelling
- Chemical resistant
- Colour retention
- Wide variety of locations
- Seamless and hygienic.

### PROPERTIES OF WET MATERIAL

Mixing ratio	See quantities under packaging for 5L Kit and Bulk Pack.
Density of Resin	1.084 Kg/L
Density of compound	1.765 Kg/L
Colours	Pale Grey G62 Med. Sea Grey G24 Drakensberg Green H36 Light Stone C37 Red Oxide Leaf Green (Chrome oxide)
Flash Point	>100°C
Dilution	Do not dilute
Shelf Life	2 years from date of manufacture and in sealed containers @ 25°C

### PROPERTIES DURING APPLICATION

Pot Life	Approx. 40 min. (5L mixed @25°C)
Work Life	Approx. 60 min. (after spreading @25°C)
Volume Solids	100%
Curing time @ 25°C	Touch: 8hrs Light foot traffic: 24hrs Full cure: 7 days
Over-coating time @25°C	Minimum: 12 hrs Maximum: 36 hrs
Application temperature range	>15°C & <35°C
Do not apply coating if humidity is in excess of 85% @ 21°C or 75% @ 10°C.	
Do not apply coating if the substrate temperature is at least 3°C (5°C is better) above dew point.	

## PHYSICAL PROPERTIES OF CURED FILM

Maximum service temperature	60°C
Shrinkage after cure	Negligible
Weather resistance	Chalks on external exposure
Chemical resistance	Good resistance to water, oil, fats, greases, dilute mineral acids and alkalis.

## SURFACE PREPARATION

### Precautionary Notes

(1) The substrate must be dry before application. For concrete, moisture content tests must be conducted prior to application of the priming system.

Maximum moisture content should be between 4-5% (preferably a Protimeter Survey Master or equivalent), or Dynamic Calcium Chloride moisture "weight gain" over 24 hours, or at least a practical overnight "plastic sheet test" is also advisable (approx. 1m<sup>2</sup> masked down on surface).

(2) Concrete substrate must have a minimum tensile strength of 1.5N/mm<sup>2</sup>

Concrete shall be free of all laitance and preferably should be lightly vacuum blast cleaned leaving a uniform texture.

All blemishes in the surface such as pop-outs, omegas, blowholes and honeycomb should be patched with **epidermix 201**. This should be left overnight to cure and shall then be rendered smooth.

For a smooth final finish, the surface profile, peak to valley, should not exceed 25% of the coating thickness. If the surface is very irregular, consideration should be given to the use of **abe.®prime SL**, a solvent free epoxy self levelling primer.

## BONDING/PRIMING

If **abe.®prime SL** is not used, then **abe.®flo** is normally applied over a thoroughly sealed concrete surface using up to two coats of **abe.®cote 337**.

Over coating of the primer with **abe.®flo** should comply with the overcoating time requirements laid down for the specific primer. The overcoating time for **abe.®cote WD 337** is 4-6 hours.

## MIXING

### Precautionary Notes

(1) When decanting base from bulk supply, thorough stirring must be accomplished beforehand.

(2) In order to avoid colour variation in large expanses, one must ensure that the same pigment batch is used and is carefully and accurately dispensed (factory batching available on request).

Proper mixing and proportioning of the epoxy binder (base and activator), filler and pigment is essential for good results with no colour variation from mix to mix.

Transfer pre-measured volume of flooring base resin to mixer. Add pigment and activator and homogenize.

Add filler slowly and mix well.

### Note:

A slow speed mixer must be used.

Ensure that the mixing vanes are below the surface of the mix to minimize air entrapment. The stirrer mixing vane configuration should be such as not to introduce unwanted aeration. Also, for this type of mixing, transferring the base/activator combination to a new container i.e. "re-mixing" will eliminate contamination due to unmixed base which is inclined to cling to the walls of the original container.

## COVERAGE

Recommended dft per application	2 – 3 mm
<b>abe.®flo 2</b> : Theoretical coverage for dft 2mm	2.0L/m <sup>2</sup>
<b>abe.®flo 3</b> : Theoretical coverage for dft 3mm	3.0L/m <sup>2</sup>

## APPLICATION

### Precautionary Note

Prevailing weather conditions must be taken into account otherwise surface defects can occur (see under "properties of wet material").

**abe.®flo** should be applied by first pouring a bead of material in the form of a ribbon on the surface to be coated. Do not leave material in the container too long because it will set faster thus reducing the work life.

Using a 5mm serrated trowel, spread the applied material at the specified rate. Apply as evenly as is possible, working from left to right, and then back.



Approximately 10 minutes after application, roll using a porcupine roller to aid in excess air release.

All over-coating times must be strictly adhered to. **abe.®flo** will not cure if applied at below 10° C.

### CLEANING OF EQUIPMENT

**abe.® super brush cleaner** before setting.

### PROTECTION/MAINTENANCE ON COMPLETION

Enlist the services of experienced cleaning specialists. Furthermore, the following recommendation will go a long way to maintain the original appearance of the epoxy floor viz.

- (1) Protect from trafficked dirt/grit ingress into coated area by using dirt traps etc.
- (2) Use of a "renewable" clear high wear polymer based floor polish will reduce scratching and "black heel".
- (3) Encourage frequent maintenance cleaning.

### MODEL SPECIFICATION

The epoxy floor system will be **abe.®flo**, a four-component, solvent-free epoxy floor system comprising resin and hardener, filler and pigment paste applied in accordance with **a.b.e.® Construction Chemicals'** recommendations.

### PACKAGING

SMALL PACK	
Resin: Base and Activator 5L (Kit) (40001-005)	
<b>abe.®flo 2</b> aggregate (20050-010)	10.0 Kg (yield 8.9L)
<b>abe.®flo 3</b> aggregate (20054-125)	12.5 Kg (yield 9.8L)
Pigment paste (200xy-350) approx. density 1.9 Kg/L	0.350 Kg
BULK PACK	
Resin system comprises	
Base (40005-025)	2 x 25L
Activator (40010-025)	1 x 25L
<b>abe.®flo 2</b> aggregate (20050-010)	15 x 10 Kg (yield 134.1L)
<b>abe.®flo 3</b> aggregate (20054-125)	15 x 12.5 Kg (yield 148.0L)
Pigment paste (200-xy-350) approx. density 1.9 Kg/L	15 x 0.350 Kg

### HANDLING & STORAGE

All **abe.®flo** related products have a shelf life of 2 years if kept in a dry, cool store in the original, unopened packs.

If stored at high temperatures and/or high humidity conditions, the shelf life may be reduced.

### HEALTH & SAFETY

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The safety data sheet is available from your local **a.b.e.® Construction Chemicals** sales representative.

### IMPORTANT NOTE

This data sheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavors to ensure that any advice, recommendation, specification or information is accurate and correct, the company cannot - because **a.b.e.®** has no direct or continuous control over where and how **a.b.e.®** products are applied - accept any liability either directly or indirectly arising from the use of **a.b.e.®** products, whether or not in accordance with any advice, specification, recommendation, or information given by the company.

### FURTHER INFORMATION

Where other products are to be used in conjunction with this material, the relevant technical data sheets should be consulted to determine total requirements. **a.b.e.® Construction Chemicals** has a wealth of technical and practical experience built up over years in the company's pursuit of excellence in flooring and concrete technology.



a.b.e.® is an ISO 9001:2008 registered company  
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