



## a.b.e.<sup>®</sup> Construction Chemicals

# METHODOLOGY

## abe.<sup>®</sup>flo

### OLD CONCRETE

The surface has to be clean, sound, dry, free of oil and deleterious matter prior to applying the system.

See datasheet "Preparation of Surfaces".

All the repair areas are to be effected such that a smooth uniform finish is achieved; a new screed or scraper coat may be required. This finish is important in thin film applications less than 2 mm else the irregularities will reflect through the coating and is even more pronounced when gloss finishes are applied. The surface profile should not exceed 25 percent of the coating thickness if smooth finishes are required.

### NEW CONCRETE

The surface has to be clean, sound, dry, free of oil and deleterious matter prior to applying the system.

See datasheet "Preparation of Surfaces".

The surface must be finished such that all the falls are correct and ready to receive the epoxy coating system. The surface profile should not exceed 25 percent of the coating thickness if smooth finishes are required. The success of any application depends on the strength of the concrete surface. A simple but effective test can be done with the use of an Elcometer adhesion tester. Adhesion failures at levels below 0,8 MPa indicates a relatively weak surface and the performance of the coating on this surface will be subject to doubt.

### PREPARATION

In both cases above when the surfaces have been prepared the laitance has to be removed by one of the following methods:

1. Light grit blast, Vacuum blast or diamond grinding
2. Remove all deleterious matter and fill any holes and irregularities with **epidermix 314** or **epidermix 318**.

3. Due to flooring substrates been subjected to traffic a suitable scraper coat is to be applied if surface irregularities are present. The following is recommended:

Mix **abe.<sup>®</sup>cote** flooring resin with **abe.<sup>®</sup> sand No. 1** to form the scraper coat in the following ratio's:  
2 litre of mixed resin: 4 kgs of fine sand (Sand No. 1 – 7319) – Yield + 3,48 litres

Thoroughly mix the material and apply the material using a steel float and finish to a smooth texture. The surface has to be sound and clean prior to application. See data "Preparation of Surfaces"

### APPLICATION

#### Primer

Should a scraper coat be used then omit **abe.<sup>®</sup>cote WD 337** as a primer and ensure the top coat is applied within 48 hours, otherwise prime with a coat of **abe.<sup>®</sup>cote WD 337** prior to applying the **abe.<sup>®</sup>flo**.

Apply the primer coat **abe.<sup>®</sup>cote WD 337** to the surface as per datasheet – 1 coat is required. One of the functions of the primer coat is to seal the surface and prevent air migrating through; which causes "fish eyes" in the main coating; should the surface be porous an additional coat of **abe.<sup>®</sup>cote WD 337** may be required.

#### Main Coating

Apply **abe.<sup>®</sup>flo** in a single coat application of 2 to 3 mm thick.

Batch to batch colour variation may occur. Ensure that materials for that application are always drawn from the same batch.

See datasheets for additional information.

### **Mixing**

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. Mechanical mixing is essential. Mixing times of about 5 minutes are usual, this being long enough to mix thoroughly and leave adequate working time for laying the floor. Transfer pre-measured volume of flooring base resin to mixer.

Add pigment and filler, homogenise and allow to stand for a while. This will facilitate filler wetting and allow entrapped air to escape. This procedure will reduce the amount of surface working with a porcupine roller to eliminate surface bubbles with which self levelling systems are inherently beset.

Add the pre-measured volume of flooring activator resin and homogenise, care must be taken not to entrap air during mixing.

Immediately after mixing, dump material onto the primed substrate and spread to desired thickness.

### **Application**

The properly mixed material is applied by means of a notched trowel to the required thickness, followed by rolling with a spiked (porcupine) roller to facilitate the release of any entrapped air bubbles.

### **Anti-slip application**

Apply, within 48 hours, a single coat of **abe.®cote** flooring resin to the cured surface of **abe.®flo**. Into the wet coating evenly broadcast the anti-slip aggregate at a rate of 50 grams per square metre, followed by rolling with a short fibre roller to obtain an even distribution and allow to cure. The quantity of non-slip aggregate and size may vary depending on the texture and degree of finish required. The ideal non-slip aggregate to be used is aluminium oxide.

Overcoat time of 48 hours maximum must be adhered to at all stages.

In all cases for each product the intercoat application periods are to be strictly adhered to. All the datasheets are to be read for mixing, application procedures, pot life and coverage rates etc. it must be appreciated that rendering the surface non-slip compromises the low dirt pickup of untreated systems.

### **Properties of wet material**

Mixing Ratio:	See respective datasheets
Density Resin:	1,07
Mix:	1,82
Flash point:	None
Dilution:	DO NOT DILUTE
Shelf Life:	2 years from date of manufacture

### **Properties during application**

Pot Life	45 min. (5L mixed @ 25°C)
Work life:	1 to 1,5 hours (after spreading)
Thickness:	2,0 to 3,0 mm
Curing time @ 25°C	
Touch dry:	8 hours
Light foot traffic:	24 hours
Full cure:	7 days

### **CLEANING EQUIPMENT**

The use of **abe® super brush cleaner** will remove any uncured material from the tools.



## IMPORTANT NOTE

This datasheet is issued as a guide to the use of the product(s) concerned. Whilst **a.b.e.® Construction Chemicals** endeavours 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 datasheets 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 building and construction technology.



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