









solvent free two component epoxy floor coating



FEATURES

- solvent free chemical resistant floor coating
- excellent wear resistance
- hygienic surface
- coloured for decorative appearance and demarcation of zones
- slip resistant with aggregate scatter
- low maintenance
- apply to RonaFloor Epoxy DPM on drying concrete
- BS 8204-6 & FeRFA Class 2 floor coating

Description

RonaFloor HB100 is a FeRFA Class 2 two component, solvent free epoxy floor coatings for use on concrete and polymer modified screeds. RonaFloor HB100 provides excellent abrasion and chemical resistance to floors subject to constant traffic. Cured dry film thickness for a 2 coat application is approximately 0.2mm.

Product Selection

RonaFloor HB100 provides an economical wear resistant surface. RonaFloor HB200 should be used when greater wear is expected or a longer life is required. Apply RonaFloor HB Vertical Grade to vertical surfaces.

Physical Properties (standard grades)

Pot Life 30-45 minutes **Initial Cure Time** 6-8 hours **Intercoat Period** 6-24 hours **Foot traffic** 12-24 hours Fork lift traffic 24-48 hours Full chemical cure 7 days Compressive Strength (HB 100) ASTM D695 55N/mm² Flexural Strength (HB 100) ASTM D790 28N/mm² **Abrasion Resistance** 0.04mm

Physical Properties (rapid grades)

Pot Life 10-15 minutes **Initial Cure Time** 4-6 hours **Intercoat Period** 4-6 hours Foot traffic 4-6 hours Fork lift traffic 12-24 hours Full chemical cure 7 davs Compressive Strength (HB 100) ASTM D695 55N/mm² Flexural Strength ASTM D790 28N/mm²

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Slip Resistance Coating with A/S Aggregate 0.1—0.3mm

SRV (dry) 70
SRV (wet) 64
Surface roughness 63µ

Potential for Slip (dry) Extremely Low

Potential for Slip (wet) Low

Coating with A/S Aggregate 0.4—0.8mm

SRV (dry) 71
SRV (wet) 62
Surface roughness 95µ

Potential for Slip (dry) Extremely Low

Potential for Slip (wet) Low

Chemical Resistance

10% Acetic Acid Resistant 10% Lactic Acid Spillage only 10% Nitric Acid Spillage only 10% Teepol Resistant 16% Bleach Resistant 25% Ammonia Resistant 30% Chromic Acid Resistant 30% Hydrochloric Acid Resistant **50% Phosphoric Acid** Spillage only 50% Sodium Hydroxide Resistant 50% Sugar Solution Resistant 20-50% Sulphuric Acid Spillage only Acetone Not recommended

Acetone Not recom
Animal Fats Resistant
Citric Acid Resistant
Engine Oil Resistant

Industrial Methylated Spirits Spillage only Methanol Spillage only Petrol Resistant Skydrol Resistant **Tap Water** Resistant **Toluene** Spillage only White Spirit Resistant Spillage only **Xylene**

Coverage

Up to 25m²/pack/coat depending on surface profile, coverage of the coating will be significantly reduced when applied to a layer of coating containing slip resistant aggregate.

Rapid Grade

RonaFloor HB100 Rapid can be trafficked by foot after only 4-6 hours and by fork lift truck traffic after 12-24 hours.

The Rapid Grade has a shorter working time and pot life and material must therefore be mixed close to the area of application. The mixed resin must be immediately discharged onto the floor and spread before it begins to cure.

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Typical Applications

RonaFloor HB100 floor coating is used in areas requiring good wear and chemical resistance. It is suitable for use in chemical plant storage areas, warehousing, toilets, laboratories & food preparation areas. It should be applied to concrete and polymer modified screeded floors.

Instructions for Use

Substrate Preparation

To achieve optimal adhesion it is essential that RonaFloor HB coatings are applied to structurally sound, clean and dry substrates. Surfaces must be prepared after making good any defects in the floor, ensuring that friable materials are removed and replaced (for fast cure repairs refer to RonaFloor Repair 1 Hour data sheets). Substrates must be prepared by captive shot blasting or similar approved method to produce lightly textured, laitance free surfaces. Substrates must be cleaned to remove grease, oil and dirt. Substrates must be allowed to dry after washing. Substrates must be vacuum cleaned, to remove loose shot and other loose materials. New concrete or screeds should be allowed to dry out for at least 28 days prior to coating. RH at the surface must be below 75% when measured with a hygrometer, or have a moisture content less than 5%.

Application Conditions

The workability and application characteristics of RonaFloor HB100 are adversely affected by low temperature; viscosity and curing time will increase. Therefore the material should ideally be stored, mixed and applied at 15°C to 20°C. At lower application temperatures the material should be stored at or warmed to 15°C to 20°C prior to use. Application characteristics are severely affected below 10°C, minimum application temperature is 5°C.

Substrate Priming

When applying to porous concrete it is advisable to seal the prepared surface with RonaFloor Epoxy Primer, coverage up to 5m² per kg depending on porosity.

Mixing

Add the full contents of the B component to the full contents of the A component and mix with a slow speed drill and spiral mixing paddle (MR3 type) until a homogeneous colour is achieved. Typical mixing time is 3-4 minutes. Transfer to a shallow paint tray immediately after mixing, or pour onto the floor, to control exothermic reaction and extend working time. This is of even greater importance when using Rapid Grade. Material must **never** be taken directly from the mixing vessel, to avoid the risk of unmixed material being used.

Application

Apply minimum 2 coats by short or medium nap mohair or lambswool (not foam) roller directly from a paint tray. Ensure intimate contact with the surface to ensure the floor is fully wetted. Ensure that the required thickness is achieved, periodically checking thickness with a wet film gauge. Do not attempt to apply the coating at a reduced thickness, which may produce roller marks and pigment separation.

Cleaning

Brushes and tools should be cleaned immediately with xylene based solvent or RonaDeck Low VOC Cleaner.

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Instructions for Use (continued)

Slip Resistance

Scatter RonaFloor A/S Aggregate onto the freshly applied first coat at the rate of approximately 1—3kg/m² and allow to cure. Remove excess aggregate with a vacuum cleaner and apply the second coat to encapsulate the aggregate. Coverage of the second coat will be considerably reduced. The use of A/S Aggregate will reduce the ease with which the floor can be cleaned and the use of cold water power washers or scrubber/ dryers should be considered.

Colours

RonaFloor HB coatings are supplied in a range of colours, refer to colour chart available on request.

Colour Variation

Packs should be used in strict batch rotation. Individual areas or rooms should be treated with material from a single batch to avoid the inevitable minor variations in shade between batches. (see FeRFA Guide To The Specification And Application Of Synthetic Resin Flooring).

Osmotic Blistering

In a few cases severe blistering of thin synthetic resin floorings can occur between 3 months and two years after laying. These blisters commonly vary in size from a few mm in diameter up to 100 mm, with heights up to 15 mm. When drilled into or otherwise broken the blisters are found to contain an aqueous liquid under very high pressure. The mechanism of their formation is not fully understood but it is assumed because of their physical state that they are caused by a process of osmosis. Because the mechanism is not fully understood it is not possible to be specific about the steps which should be taken to avoid osmotic blistering. However it is considered good practice to take steps in order to minimise the risk (an extract from FeRFA Guidance Note No 2: Osmosis in Resin Flooring ISBN 0 9538020 5 1).

Packaging

RonaFloor HB100 is supplied in 5kg packs.

Shelf Life and Storage

Store in unopened containers in dry warehouse conditions between 10°C and 25°C and protected from direct sunlight and frost. Shelf life is approximately 12 months in these conditions. To achieve optimum performance and appearance in shade and sheen, store and apply material at a constant ambient temperature, humidity and with the same air movement throughout the project. Avoid storage and application at air, substrate and material temperatures below 10°C .

Health and Safety

First aid - Skin contact, wash immediately with soap and water. Eye contact - wash immediately with copious quantities of water for 10 minutes.

Seek immediate medical advice. Ingestion - wash mouth thoroughly with water. Drink water. Do not induce vomiting. Seek immediate medical advice. Spillage - extinguish any ignition sources. Wash small spills away with water, soak large spills with earth or sand; avoid contact; inform authorities of major spillage occurs. Notify Fire Brigade if spillage enters drains.

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Site Attendance

When on site Ronacrete representatives are able, if asked, to give a general indication of the correct method of installing a Ronacrete product. It is important to bear in mind that Ronacrete Ltd is a manufacturer and not an application contractor and it is therefore the responsibility of the contractor and his employer to ensure he is aware of and implements the correct practices and procedures to ensure the correct installation of the product and that liability for its correct installation lies with the contractor and not with Ronacrete Ltd.

The information detailed in this leaflet is liable to modification from time to time in the light of experience and of normal product application, and before using, customers are advised to check with Ronacrete Ltd, quoting the reference number, that they possess the latest issue. Any person or company using the product without first making further enquiries as to the suitability of the product for the intended use does so at his own risk, and Ronacrete Ltd can accept no responsibility for the performance of the product, or for any loss or damage arising out of such use.

