

Flowbind is a high performance, SUDS compliant, porous, aggregate-bound system, incorporating a non-hazardous, fast-curing, flexible, solvent-free resin and a range of aggregate blends.

System cures to give attractive, durable finish.



Decorative



UV-resistant



Strong



Flexible



Colours*

Clear.

Flowbind UVR is a UV stable, aliphatic product.

Flowbind Standard will change in colour on exposure to UV, in common with all aromatic based polyurethane technology. The strength of the system is not affected.

Appearance

Highly decorative slightly textured finish. Applied at 15 mm thick.

Advantages

- ✓ High Strength System
- ✓ Porous/ SUDS compliant
- ✓ Range of approved aggregate blends
- ✓ Excellent Track Record
- ✓ UV and non-UV stabilized versions available
- ✓ Highly decorative

Suitable Substrates

Firm, sound sub-base e.g. asphalt, concrete and polymer-modified cementitious screeds or compacted soil.

Uses

- ✓ SUDS areas
- ✓ Driveways
- ✓ Paths
- ✓ Swimming pool surrounds

Pack Size

6.5 kg (UVR) and 6.58 kg (Standard) units.

Components

Flowbind (UVR) System comprises of:

- 1 x 6.5 kg Flowbind resin (2-pack: resin + hardener components)
- 1 x 100 kg Aggregate (4 x 25 kg aggregate mix)

VIRTUS RESINS

The Shippon, Faenol
Pentrecelyn
Ruthin LL15 2SP

Tel: 01978 790 744

Tel: 0843 289 8422

Email: info@epoxyresinsuppliers.co.uk

www.epoxyresinsuppliers.co.uk



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Thickness

Applied at 15 mm thickness.

Chemical Resistance

Chemical Resistance: to various acids, diesel and petrol as well as strong bases.

Typical Properties at 20 °C

Resistant to temperatures of up to 50°C for long periods.

Elongation @ Break (non-UV)	100% to BS2782 Part 3
Tensile Strength	Min 10 N/mm ² to BS2782 Part 3
Speed of Cure	Overnight

(The surface should be allowed to cure for 4 hours at 20°C this will be longer if the temperature is lower).

* 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. During the cure period the surface should be protected from rain.

Pack Size

6.5 kg (Standard) and 6.58 kg (UVR)

Coverage*

The whole system comprising of aggregate and resin will cover 4m² at 15 mm thickness.

* 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

Normally not required.

Application Conditions

Application temperature 10°C-35°C, 15-18°C is optimum for ease of application. The relative humidity should be between RH 30-85%.

The aggregate can be stored in a cool area (or warm area in the case of low ambient temperature) in order to control product temperature and working life.

The substrate and uncured floor must be kept at least 3 °C above the dew point to reduce the risk of condensation or blooming on the surface, from before priming to at least 48 hours after application.

The surface strength of the concrete base or screed assessed using a rebound hammer in accordance with BS 1881-202 should be above 25 and the surface tensile strength should exceed 1.5 N/mm².

An effective structural damp proof membrane should be present and the relative humidity at the surface no more than 75% when measured by the method of BS 8203. New concrete should be a minimum of Grade C35 with a minimum cement content of 300 kg/m³ and should not contain a water repellent admixture.

Accelerator

At low temperatures **Flowbind Accelerator (D4860)** can be added to Flowbind to maintain or speed up cure speed. The table below gives approximate addition level guidance.

NOTE: D4860 coating accelerator additions should be added to the part A and pre-mixed to evenly distribute the catalyst prior to addition of the part B hardener.

Flowbind Standard:

Temperature (°C)	Accelerator Addition Level
20	0% Accelerator
17.5	0.6g per 6.85kg kit
15	1.3g per 6.85kg kit
12.5	2.0g per 6.85kg kit
10	2.7g per 6.85kg kit

Flowbind UVR:

Temperature (°C)	Accelerator Addition Level
20	0% Accelerator
17.5	4.4g per 6.5Kg kit
15	9.8g per 6.5Kg kit
12.5	16.6g per 6.5Kg kit
10	29.3g per 6.5Kg kit

Surface Preparation

Surface preparation and primer application is extremely important in this respect. All surfaces should be free from dust, grit, grease and liquid, ensure that the surface is clean and dry before proceeding with the application. If the system is being applied onto a difficult to bond surface, such as acrylic sealed concrete the use of a **Flowbind Primer** is advised to ensure a full bond between the system and the substrate.

Mixing Instructions

Resin:

Prior to mixing, the temperature of the three components must be between 15 and 25 °C. 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 1 - 2 minutes until homogeneous. Decant the mixture into a suitable mixing vessel and gradually add the aggregate component whilst continuing the mixing action. When all the aggregate has been added, mix for a minimum of 3 minutes until a uniform coloured, lump-free mix is obtained. Care should be taken to ensure that any material adhering to the sides, bottom and corners of the mixer is thoroughly blended in. Unduly extended or vigorous mixing should be avoided in order to minimize air entrainment.

Adding Aggregate:

The mixed PU resin should then be introduced into the mixer containing the aggregate. The aggregate must be dry (<0.5% moisture) and free from dust.

While the mixer is running with the dry aggregate, add the PU resin at a ratio of minimum 6.5% up to 15% depending on end user requirements and the size and particle distribution of the aggregate – smaller particles, or greater particle distribution will require relatively more PU resin as the overall surface area is increased. Resin additions at these levels will ensure a well bonded, durable and sound system.

A rotary mixer or low speed paddle mixer are suitable for mixing.

Mix for 5 minutes until all of the aggregate is uniformly coated.

Application Instructions

The blend of PU and aggregate should then be immediately applied to the surface and compacted with a trowel. The surface temperature should be between +10°C and +35°C for application (note comments above regarding the accelerator use for lower temperatures).

The system should be applied at least 3°C above the dew point measured for the application surface. Care should be taken to ensure that the correct, even coverage rate is applied across the application area. This is especially important at high temperatures where the PU can be thinner. The surface should be installed at a minimum thickness of 3x the maximum stone grading used.

Once levelled and compacted the surface can be smoothed with a trowel coated in a release agent, this allows for the top facing stones to be knitted together, giving an even surface.

Health and Safety

Before using this product, please ensure that you have received and

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.

Limitations

Do not proceed with application if atmospheric relative humidity is, or is anticipated to be, >80% 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 <5 °C during the application or within the curing period.

Availability

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

Technical Advice

For further information please contact our office.

You Might Also Need:

- Trowel
- Self-leveller or Screeding Kit (for the application)
- Mixing Drill Attachment (for the resin)
- Primer
- Accelerator

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 legal responsibility on our part. In particular, no warranty or guarantee of product performance in the legal sense is intended or implied as the conditions of use and the competence of any labour involved in the application are beyond our control. Properties listed are for guidance purposes only. We reserve the right to make any changes according to technological progress or further developments

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Flowbind Aggregate Chart



The colours shown may differ from the original product due to reprographic 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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