

Flowdur WR

Polyurethane mortar for vertical surfaces and radius coves

Description

Flowdur WR is a seamless polyurethane mortar for application to vertical surfaces and for forming radius coves. **Flowdur WR** is designed with the highest order of durability, abrasion and chemical resistance (when sealed). Its easy to clean matt finish makes the product ideal for environments such as the food, beverage, engineering and chemical industries.

Flowdur WR is ideal for coving, plinths and bases, drain linings and bunds

Appearance

Lightly textured matt finish.

Features & Benefits

- Wide chemical resistance
- Non-tainting and non-dusting
- Seamless (minimum joints required)
- High abrasion resistance
- Easy to maintain

Thickness

Typically 2 - 9 mm (vertically 4 mm maximum)

Chemical Resistance

Flowdur WR is resistant to a wide range of commonly used chemicals in the food, dairy and pharmaceutical industries such as concentrated citric acid (fruits), spirit vinegar (50% acetic acid), lactic acid (food & dairy products) and common alcohols (methanol & ethanol).

Flowdur WR is also resistant to a wide range of inorganic acids, fuels, hydraulic oils, mineral oils and solvents. For maximum chemical resistance, **Flowdur WR** should be fully sealed with an appropriate Resdev product such as **Flowdur TF**. Good housekeeping practices should be employed. Please consult our Technical Department for further advice.

Some staining or discolouration may occur with some chemicals, depending on dwell time, temperature, type of chemical and degree of housekeeping employed. This does not affect the product's service integrity or durability.

Temperature Resistance

Flowdur WR is resistant to cleaning temperatures up to 60°C when applied at a minimum of 4 mm thickness.

Typical Properties, 28 days at 20 °C

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. The slip resistance figure given above are affected by application techniques and prevailing site conditions. Slip resistance can reduce over time due to poor maintenance, general wear or surface contaminants. Good housekeeping practices should be observed.

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 *

Overcoat time	12 - 48 hours
Cure time to light pedestrian traffic	12 hours
Cure time to light wheeled traffic	24 hours
Cure time to heavy duty traffic	48 hours
Full chemical resistance	7 days

* The above cure times are approximate and given as a guide only. These times can vary due to prevailing site conditions.

Pack Size

16.80 kg

Coverage*

100 mm x 50 mm (2" radius) - approximately 5 linear metres per pack.

Approximately 2 kg/m² per mm thickness when applied flat.

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

Colours

Flowdur WR is available in a range of standard colours. **Flowdur WR** is not 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.

Virtus Resins

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Application Conditions

Ideal ambient and substrate temperature range is 15 - 25 °C. Localised heating or cooling equipment may be required outside this range to achieve ideal temperature conditions. 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.

Surface Preparation

Inadequate preparation will lead to loss of adhesion and failure. Substrates should be clean, dry, sound and free of surface laitance. See the **Virtus Guide to Surface Preparation** for further information.

Application Instructions

Priming

Flowdur WR should be applied into tacky **Flowprime TC** (typically 45 - 60 minutes after application). If, prior to application of **Flowdur WR**, there are dry patches, a further primer coat is required. If the primer has been left to cure for >48 hours then the primer surface should be mechanically abraded and the area re-primed.

Application of Flowdur WR

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 (300 - 400 rpm) for 1 - 2 minutes until homogeneous. Decant the mixture into a rotary drum mixer and add the aggregate component in stages, mixing for a minimum of 3 minutes until a uniform coloured, lump-free mix is obtained. Apply the mixture immediately onto pre-primed areas using a coving trowel to form skirting if required. Avoid excessive tooling which may lead to 'trowel burn'.

Sealing

Due to the dry nature required of a product designed to be applied vertically, **Flowdur WR** shows a lower colour strength than flooring materials and colour density may vary throughout an installation. Where a closer colour match is required or where **Flowdur WR** requires sealing, for example, in wet areas or where chemical spillages are likely, **Flowdur TF** should be applied within 24 hours of application. See separate technical datasheet.

Cleaning

Regular cleaning is essential to enhance and maintain the life expectancy and appearance of the product. **Flowdur WR** can be easily cleaned using industry standard cleaning chemicals and techniques, especially where sealed using **Flowdur TF**. Consult your cleaning chemical and equipment supplier for more information.

Health and Safety

Refer to product Safety Data Sheet before use.

EU Directive 2004/42/EC

Complies with category j type SB (< 500 g/l). The VOC content of **Flowdur WR** is approx. 6 g/l (theoretical).

Storage

Store off the ground in un-opened packs in a dry store, under cover between 10°C and 30°C out of direct sunlight. Protect from frost.

Shelf Life *

Resin and hardener components	12 months
Aggregate component	6 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, >90% 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. The design strength of concrete surfaces must be a minimum of 25 MPa compressive strength at 28 days. The manufacture of **Flowdur WR** is a batch process and despite close manufacturing tolerances, colour variation 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

For further information on this or any other Virtus product, please contact our office.

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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Virtus Resins, The Shippon, Pentre-Celyn, Ruthin LL15 2SP, England			
CE		13	DOP RV0022
EN 13813 SR-B1,5 Synthetic resin screed material for use internally in buildings not subject to reaction to fire regulations			
Reaction to fire	E _{fl} ⁽¹⁾	Impact resistance	NPD
Release of corrosive substances	SR	Sound insulation	NPD
Water permeability	NPD	Sound absorption	NPD
Wear resistance	NPD	Thermal resistance	NPD
Bond strength	B1,5	Chemical resistance	NPD

⁽¹⁾ According to Commission Decision 2010/85/EU of 9 February 2010, the product satisfies all the requirements of the performance characteristic 'reaction-to-fire' class E_{fl} without need for further testing.

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