vebro polymers

vebrocrete PU MF

vebrocrete PU MF is a 3 or 4-part, heavy duty flow applied polyurethane concrete resin flooring system with a seamless matt smooth finish.

vebrocrete PU MF provides an impact resistant surface that protects against abrasion, chemical attack, and other forms of physical and mechanical based surface activity.

vebrocrete PU MF is resistant to organic acids, dilute mineral acids, vegetable and animal fats, petroleum oils and solvents. It is suitable for use in conditions of a wide temperature range between -15 to 70°C (at 4.0 mm or greater).

vebrocrete PU MF is used in industrial situations subject to exposure to high chemical, thermal and mechanical loading as for example in dairy, food & beverage production facilities, warehouse & distribution centres, chemical and pharmaceutical processing plants.

Substrate Preparation

The substrate should be sound with a minimum compressive strength of 25 N/mm^2 and a minimum pull-off strength of 1.5 N/ mm^2. The surface must be clean, dry, and free of contaminants such as dirt, oil, grease, coatings, and surface treatments.

The concrete substrate must be a minimum of 28 days old and the residual moisture content must be a maximum of 97% RH (Relative Humidity).

Concrete or suitable polymer modified screed substrates should be mechanically prepared using captive vacuum enclosed shot blasting, or by appropriate diamond grinding to remove surface cement based laitance and previous surface treatments leaving an open textured mechanically prepared surface.

Weak concrete / polymer modified screed must be removed and repaired using recommended Vebro Polymer products. In order to ensure the installed system remains fully bonded to the substrate it is recommended that all terminating edges are rebated to produce a cross-section "anchor chase" of 5.0 mm deep by 5.0 mm wide, stepped out at 150.0 mm from and parallel with the walls i.e. day joints, movement joints, floor edges, door thresholds, upstands, plinths, etc.

Application Instructions

Priming

Apply **vebro**crete PU Primer with a squeegee and finish by roller to the prepared surface. The consumption rate is approx. 0.25 – 0.30 kg/m^2 depending on the surface roughness and porosity.

Liquid Mixture

Consumption
7.60 kg/m^2 at 4.0 mm
11.40 kg/m^2 at 6.0 mm

Film Thickness
4.0 – 6.0 mm

Application Temperature
15 – 25°C

Packaging *(Unit Sizes)*
25.85 kg

Colour
Refer to Vebro Polymers' Colour Chart

Shelf Life
12 months in original unopened containers, 6 months for aggregate / filler C component.

Storage
Dry conditions 10 – 25°C, avoid direct sunlight, protect from frost.

Working Time
15 mins @ 20°C

Foot Traffic
18 hours @ 20°C

Overcoating Window
18 – 48 hours @ 20°C (some mechanical preparation maybe required)

The typical physical properties given above are derived from testing in a controlled laboratory environment at 20°C. Results derived from testing field applied samples may vary dependent upon site conditions.

If the overcoat window is exceeded the cured primer must be mechanical prepared and then re-primed using **vebro**crete PU Primer and allow to suitably cure before floor finish over coating commences.

Please note, if the surface is excessively porous it may be necessary to apply subsequent coats of the priming material until the substrate is fully sealed.

Mixing

Pre-mixing of the coloured liquid A component is essential to ensure any light pigment settlement is reincorporated. The contents of the curing agent container should be drained into the pre-mixed base component and the two materials thoroughly mixed. The mixed liquid should then be poured into a clean suitably sized separate mixing container and the aggregate component slowly added under constant mixing using a suitable slow speed electric mixer fitted with either a single or double mixing paddle or by using a forced action (rotary drum) type compulsory mixer until a uniform free flowing consistency has been achieved.

Application

Apply the mixed **vebro**crete PU MF by serrated / notched trowel, or pin rake to the required thickness. Within approximately 10 minutes roll the **vebro**crete PU MF with a spike roller to de-aerate the material. When the material is sufficiently cured existing joints in the substrate must be carried through into the **vebro**crete PU MF polyurethane concrete finish.

Ensure to maintain continuity of wet material between pours (max. 5 – 7 minutes).

The ambient temperature of the installed area should be a minimum of 15°C during the application and curing period, if not adhered to this can affect the colour and appearance of the system.

Materials and substrate temperature must be above 15°C.

Please note:

- Product should be protected from other trades using Kraft paper or similar breathable material e.g. Correx sheet. Polythene should not be used.
- Protect the installed floor finish from damp, condensation, and water for at least 24 hours at 20°C.
- Ensure that the ambient temperature remains above 10°C for at least 24 hours after installation.
- As with all aromatic based polyurethane products light colours exposed to UV light, **vebro**crete PU MF will be prone to cosmetic discolouration (yellowing of the surface), however this does not affect the physical or chemical resistance properties of the installed product.
- The substrate and uncured floor finish must be kept at a temperature at least 3°C above the dew point to reduce the risk of condensation or blooming on the surface.

Cleaning & Maintenance

For the long-term maintenance of the properties of polymer flooring materials, a regular cleaning and care programme is recommended.

Further Information

Information relating to the safe handling of this product can be found in the Material Safety Data Sheet. Local regulations concerning the safe handling of epoxy resin based coating materials must be observed. Suitable protective clothing including suitable eye protection must be worn at all times.

All consumptions listed are for recommendation purposes only. Detailed application instructions and system build-up advice can be provided on request through our Technical Services team.

For the long-term maintenance of the properties of polymer flooring materials, a regular cleaning and care programme is recommended.

Vebro Polymers' systems and products are guaranteed against defective material and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which can be obtained on request. For more information, please refer to individual product data sheets or contact our Technical Services team.

Vebro Polymers accepts no responsibility for liability claims based on the suggested practises and data values listed on product data sheets. Product data sheets are regularly updated and it is the user's responsibility to ensure they obtain the most recent version. The most recent versions can be found at www.**vebro**polymers.com

for chemistry you can count on…

The Court, Kestrel Road, Trafford Park, Stretford, Manchester, M17 1SF

w: vebropolymers.com | e: hello@vebropolymers.com | t: +44 (0) 1618 738 396

Vebro Polymers UK Ltd trading as Vebro Polymers. Registered in England & Wales. Company number: 12261265.
Registered office: The Court, Kestrel Road, Trafford Park, Stretford, Manchester, M17 1SF, UK. VAT registration number: GB 336 7990 57