

# vebrocrete PU HF

**vebrocrete PU HF** is a 3 or 4-part, heavy duty polyurethane concrete-based floor screed designed to provide excellent resistance to abrasion, chemical attack and other mechanical / physical loading or impact related activity.

**vebrocrete PU HF** is thermally stable to steam cleaning and hot water exposure at a minimum thickness of 9.0 mm and can be applied to falls for drainage purposes.

**vebrocrete PU HF** is best suited to use in high-stress food and drink production, processing, and preparation areas subject to high temperature swings, chemical spillage and punishing cleaning processes.

**vebrocrete PU HF** can also be specified into heavy duty manufacturing and production facilities allied to engineering processes, chemical and pharmaceutical processing plants that are subject to high degrees of chemical attack, impact, loading, and abrasion related wheeled activity trafficking.

## Substrate Preparation

The substrate should be sound with a minimum compressive strength of 25 N/mm<sup>2</sup> and a minimum pull-off strength of 1.5 N/ mm<sup>2</sup>. 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, scabbling (Vonarx type or similar and approved), or by heavy duty diamond grinding in order to remove surface cement based laitance and previous surface treatments leaving an open textured mechanically prepared surface.

Weak concrete 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 10.0 mm deep by 10.0 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.

## Liquid Mixture

### Consumption

12.0 kg/m<sup>2</sup> at 6.0 mm  
18.0 kg/m<sup>2</sup> at 9.0 mm

### Film Thickness

6.0 – 9.0 mm

### Application Temperature

10 – 25°C

### Packaging (Unit Sizes)

29.64 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

12 hours @ 20°C

### Overcoating Window

12 – 24 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.

## Application Instruction

### Priming

Apply **vebrocrete** PU Primer with a squeegee and finish by roller to the prepared surface. The consumption rate is approx. 0.25 – 0.30 kg/m<sup>2</sup> depending on the surface roughness. If the re-coating interval is to be exceed scatter **vebro** Natural Quartz 0.3 – 0.8 mm (approx. 0.5 – 0.6 kg/m<sup>2</sup>) while the primer is still wet and allow to cure.

### Mixing

Pre-mixing of the coloured liquid A component is essential to ensure any light pigment settlement is reincorporated. Empty both the brown hardener component B and the coloured resin A component into a rotary drum (forced action) mixer and mix for a minimum of one minute or to provide a homogeneous mix. The aggregate C component is gradually added in stages, until a lump free uniform consistency is obtained.

### Application

Pour the mixed **vebrocrete** PU HF product immediately onto the prepared substrate and spread evenly with a trowel to the required thickness achieving a flat surface additionally using a flat metal strip known as a 'lat' to act as a thickness guide if required to lay the material up against which application of the product is in progress .

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 10°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, **vebrocrete** PU HF 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.

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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.

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