

industrial polymer systems flooring guide

a big **hello** from vebro

Vebro Polymers is a global supplier of polymer flooring solutions, specialist coatings, pump screeds, rapid-drying screed additives and car park deck wearing and waterproofing solutions.

Our products and systems have been expertly designed for use in a wide variety of applications.

We can also provide specialist materials for use on fast turnaround new-build or renovation projects as well as those required for external applications or subfloor preparation prior to the installation of final finishes.

industries we serve



industrial & manufacturing



food & beverage



parking garages



commercial venues



prison buildings



shopping centres



institutional buildings



mixed-use developments



transport & infrastructure



external areas

our **big** promise

Vebro Polymers has been formed by like-minded individuals who have hundreds of years' combined experience in the polymer flooring, coatings and construction chemicals industry.

The company was founded on a simple service promise to customers, which aims to provide the best quality, agility and reliability in the industry.



Quality



Agility



Reliability

global team, local expertise

Founded in the UK, Vebro Polymers has grown, establishing hub HQs and partnerships to serve local markets across the world.



vebro HQ



distribution

polymer flooring explained

what is polymer flooring?

Polymerisation is, in short, a chemical reaction between multiple components to create a polymer.

Although the components of a polymer floor are primarily liquid (other than added decorative flakes, filler aggregates, texturing sand or anti-slip quartz beads), the chemical reaction results in a hard, durable surface.

There are different types of polymer flooring, each with its own unique performance characteristics.

Technology	Best for...
Epoxy	Applications where durability and chemical resistance are required
Polyurethane	Applications where elasticity, impact resistance and UV stability are required
Polyurethane Concrete	Heavy-duty applications and areas of thermal shock
Comfort PU Liquid Vinyl	Commercial applications where design and improved indoor environmental quality are of high importance
Methyl Methacrylate (MMA)	Speedy applications, where a quick turnaround is required

how is polymer flooring installed?

The first, and arguably most important, step in the installation of a resin floor system is preparation. The applicator will ensure that the substrate has the correct degree of texture, and is level and free of contaminants like dust, oils or grease that may affect the integrity of the final finish.

Once the substrate is ready, resin flooring materials are installed by experienced applicators in layers. Depending on the type of floor system being installed, this process often starts with a primer layer, then body coats and sealers where necessary, ensuring each coat has cured to the appropriate degree before moving on to the next.

benefits of seamless resin vs. alternative floor finishes



Seamless impervious finish, prevents the build-up of dirt in grout lines or at trims



Hardwearing and durable finish with a robust sealer that withstands frequent foot and forklift traffic



Easy to clean; can withstand chemical cleaning processes and hot water downs



Fast cure MMA systems available that can be installed overnight – walk on in just 60 minutes



Low maintenance; can be over-coated periodically to refresh the surface



Wide range of finishes available to suit every area throughout the industrial facility

industrial resin flooring in action...

Vebro Polymers' range of high performance industrial resin flooring is ideally suited to a variety of heavy duty applications including...

-  Hangars & aerospace environments
-  Manufacturing facilities
-  Warehousing & distribution centres
-  Packaging & processing
-  Automotive production & workshops
-  Data centres & electronics
-  Transport & infrastructure
-  Laboratories



industrial flooring tip...

Choose a UV stable sealer to enhance the colour stability of a variety of systems.



In line with BS 8204-6, Section 6.2, FeRFA divides polymer flooring into eight groups that define the specific criteria of a polymer floor – ranging from light duty floor sealers, through to extremely hardwearing trowel finished aggregate-filled floor systems.

- 1 Floor seal**
< 0.15 mm
Light duty
- 2 Floor coating**
0.15 – 0.3 mm
Light / medium duty
- 3 High build floor coating**
0.3 – 1.0 mm
Medium duty
- 4 Multi-layer flooring**
> 2.0 mm
Medium / heavy duty
- 5 Flow applied flooring**
2.0 – 3.0 mm
Medium / heavy duty
- 6 Resin screed flooring**
> 4.0 mm
Medium / heavy duty
- 7 Heavy duty flowable flooring**
4.0 – 6.0 mm
Heavy / very heavy duty
- 8 Heavy duty resin flooring**
> 6.0 mm
Very heavy duty

beneath the surface

Prior to the installation of polymer floor coating systems, the substrate may need some attention before being primed to ensure suitable adhesion of the following epoxy, polyurethane or PU concrete materials.



substrate repair & levelling

- vebro EP Mortar**
A high-strength, trowel-applied epoxy resin mortar designed for rapid and permanent repairs to concrete and masonry surfaces.
- vebroscreeed Industrial**
A deep-fill, rapid-setting and hardening, high strength, 5.0 – 50.0 mm cementitious smoothing underlayment screed.
- vebroscreeed Renovate**
A single part, fibre reinforced, 3.0 – 75.0 mm cementitious smoothing underlayment screed.



epoxy primers

- vebro EP Primer**
A solvent free, colourless, moisture mitigating primer for overcoating with suitable epoxy, PU or polyurea resin products.
- vebro EP DPM**
A solvent free, two-component, moisture mitigating and water vapour suppressing liquid damp proof membrane.

floor seal ¹

Polymer floor seals are a protective finish, designed to protect and enhance existing substrates.

They are often used to shield the floor from water and chemical damage, as well as to provide a decorative finish.

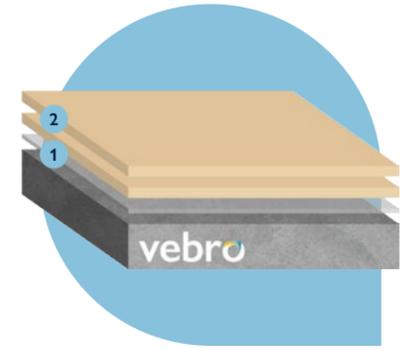


vebrores EP SC
↓ 0.12 mm

Two-coat water-based, easily applied epoxy seal coating with a gloss or satin finish.

system design

- 1 vebro EP Sealer (2 coats)**



vebrores PU HBC
↓ 0.70 mm

Pigmented, solvent-free, flexible, high-build polyurethane floor system for industrial applications.

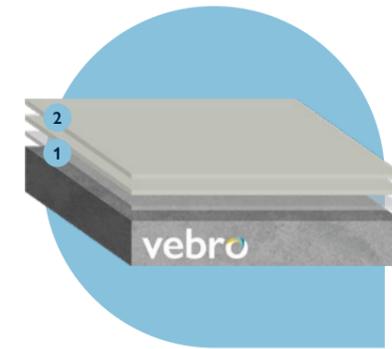
system design

- 1 vebro EP Primer**
- 2 vebro PU HBC (2 coats)**

high build coating ³

Typically two-component epoxy or polyurethane systems that are applied to a prepared substrate.

The floor coating system can provide a hard wearing and decorative finish, as well as resistance to abrasion, chemical attack and impact.



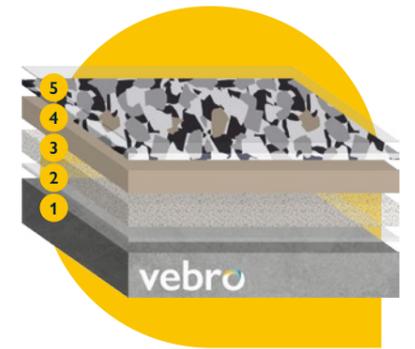
vebrores EP HBC
↓ 0.35 mm

Two-coat water-based, easily applied epoxy seal coating with a gloss or satin finish.

vebrores EP HBC HCR is also available for areas where there is significant risk of damage from chemical attack.

system design

- 1 vebro EP Primer**
- 2 vebro EP Universal (2 coats)**



vebrorespeed Flake
↓ 1.0 – 3.0 mm

Highly decorative, durable UV-stable methyl-methacrylate (MMA) flooring system.

system design

- 1 vebro MMA Primer**
- 2 vebro Natural Quartz**
- 3 vebro MMA Binder with vebro MMA Pigment & vebro MMA Filler**
- 4 vebro Coloured Flake Blends**
- 5 vebro MMA Seal (Clear Silk)**

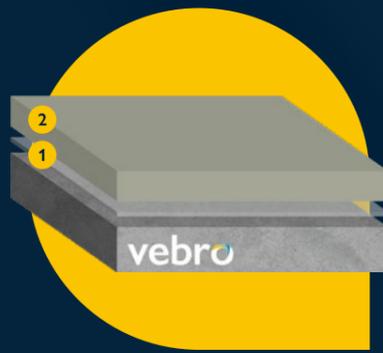
multi layer flooring ⁴

Typically systems that consist of multiple layers, including a base coat to provide adhesion to the substrate, a wear layer that gives the floor resistance to wear and tear, and a sealant layer to protect the floor from dirt, moisture and other contaminants.

flow applied flooring ⁵

Seamless, durable, flexible flooring solutions for medium to heavy-duty commercial and industrial applications.

Typically two-component and applied using a roller or trowel, and available in a variety of colours and textures.

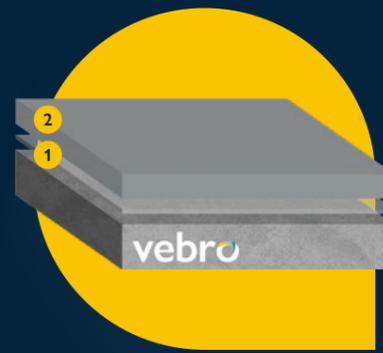


vebrores EP SL
↑ 2.0 – 4.0 mm

Solvent-free, self-smoothing epoxy system for medium to heavy-duty industrial areas.

system design

- 1 vebro EP Primer
- 2 vebro EP SL



vebrores PU SL HD
↑ 2.0 – 4.0 mm

Solvent-free, self-smoothing polyurethane system for heavy-duty industrial areas.

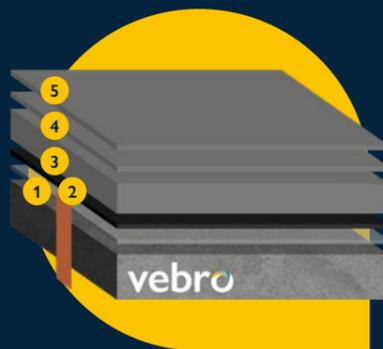
system design

- 1 vebro EP Primer
- 2 vebro PU SL

resin screed flooring ⁶

Medium to heavy duty flooring systems for industrial and commercial applications, consisting of an epoxy or polyurethane resin base coat, a quartz bead aggregate and a durable topcoat.

The highly durable, resistant systems offer excellent protection against moisture, as well as being easy to clean and slip resistant.

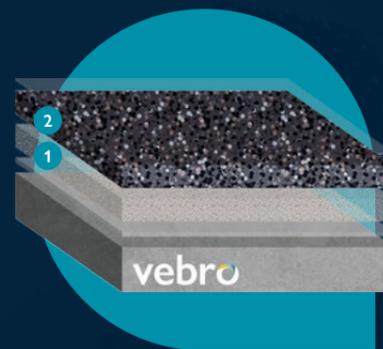


vebrostatic ESD SL (Conductive)
↑ 1.0 – 2.0 mm

Solvent-free, self-smoothing epoxy flooring system designed to immediately dispel electrostatic discharge.

system design

- 1 vebro EP Primer
- 2 Copper Tape
- 3 vebro EP ESD Primer
- 4 vebro EP ESD SL (Conductive)
- 5 vebro PU ESD Seal (Matt) (optional)



vebrospeed Quartz
↑ 4.0 mm

Highly durable, decorative, UV-stable methyl-methacrylate (MMA) quartz flooring system.

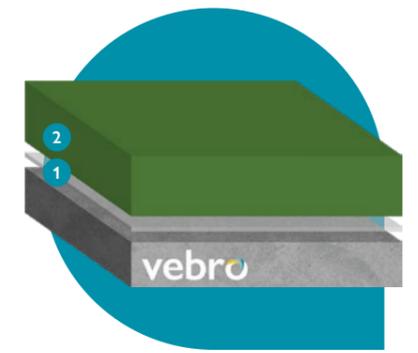
system design

- 1 vebro MMA Primer
- 2 vebro Coloured Quartz Blends
- 3 vebro MMA Binder
- 4 vebro Coloured Quartz Blends
- 5 vebro MMA Seal (Clear Silk)

heavy duty flowable flooring ⁷

Designed to provide a seamless, hard-wearing and durable finish to floors in industrial and commercial applications, generally applied up to 6.0 mm.

They can be used in areas subject to heavy traffic and / or chemical and oil spills. The relatively-quick-to-install flooring solution delivers minimal downtime for businesses considering the durability payoff.



vebrocrete MF
↑ 4.0 – 6.0 mm

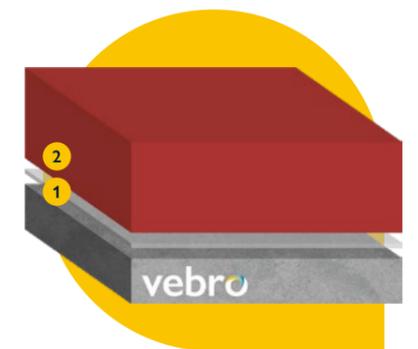
Medium duty, easily-applied, self-smoothing PU concrete for dry & semi-wet areas.

system design

- 1 vebrocrete PU Primer
- 2 vebrocrete PU MF

heavy duty resin flooring ⁷

Highly durable, seamless, and low-maintenance flooring systems that are ideal for areas with high foot traffic and heavy machinery. Extremely resistant to impact, abrasion and chemicals, the systems are also very easy to clean, with no need for waxing or buffing required.



vebrocrete HF
↑ 6.0 – 9.0 mm

Medium duty, easily-applied, self-smoothing PU concrete for dry & semi-wet areas.

system design

- 1 vebrocrete PU Primer
- 2 vebrocrete PU HF

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vebro polymers.com

Please note: the information in this guide is subject to change and the most recent technical data should be sought for accurate, up-to-date product or system information. Errors & omissions excepted. The applied colours may differ from the examples shown within this guide. Actual samples should always be viewed before making a final decision, especially if colour accuracy or matching is key to your decision.

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Industrial Polymer Flooring Systems Guide [Vebro Polymers] 11/12/23