

correctional facilities & prisons 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.



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, texturising 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 is smooth, 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



Easy to clean, simply wipe away spillages with a damp cloth or mop



Low maintenance and easy to repair, reducing costly and disruptive shutdowns



Hardwearing and durable finishes that withstand frequent heavy foot traffic



Slips resistant finishes that reduce the risk of slips and trips across the facility



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



Polymer flooring is fully bonded to the substrate, reducing the risk of damage by clients or harm to cell users



vebroflex systems can incorporate a seal coat that resists damage from chair castors or moving objects



vebroflex systems provide sound absorption from 3 dB up to 20 dB with added Bounce matting



vebroscreed SBR can be laid to falls for effective drainage in individual or communal shower areas

correctional facilities floor systems guide

Ranging from epoxy and polyurethane coating systems through to PU screeds and liquid comfort vinyl, as well as wearing screeds and outdoor rubber crumb systems, Vebro Polymers offers a complete range of resin flooring materials for prisons & correctional facilities.

Vebro Polymers' range of epoxy, polyurethane and MMA flooring and deck coating systems are available in a wide range of standard, non-standard and premium colours. For your copy of the Vebro Polymers Colour Bible, visit vebropolymers.com.



what does it all mean?

Throughout this floor system guide, you will see a number of icons relating to the installation and performance features of each system recommended for industrial facilities and warehouse units. Here's what they all mean...


Application
thickness


FeRFA
type


Working
time


Time before
light foot traffic


Full chemical curing
time at 20°C

technically speaking...

Looking for technical information?
Full technical profiles can be found in
Vebro Polymers' technical datasheets.

For the most recent technical datasheets
and standard system specifications,
please visit vebropolymers.com

epoxy floor coating systems

vebrores EP SC

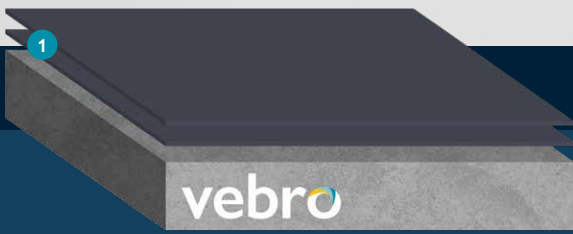
- 1 vebro EP Sealer (Gloss or Matt) (2 coats)

best for walls in showers & medical rooms

0.12 mm

1

 ~40 mins



vebrores EP HBC

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

For shower areas, coving is available and a textured finish can be achieved through the inclusion of graded aggregates between coats. **vebro**screed SBR can be installed and laid to falls prior to the installation of **vebrores** EP HBC to ensure sufficient drainage.

best for cells, showers & industrial workshops

0.35 mm

3

 ~20 mins

 7 days



vebrores EP Quartz Classic

- 1 vebro EP Primer
- 2 vebro Coloured Quartz Blends
- 3 vebro EP Quartz Binder with vebro Coloured Quartz Blends
- 4 vebro EP Quartz Sealer (Clear Gloss)
- 5 vebro PU UV WB Seal (Clear Matt)

Fast cure methyl-methacrylate **vebro**speed Quartz is available for reduced construction schedules.

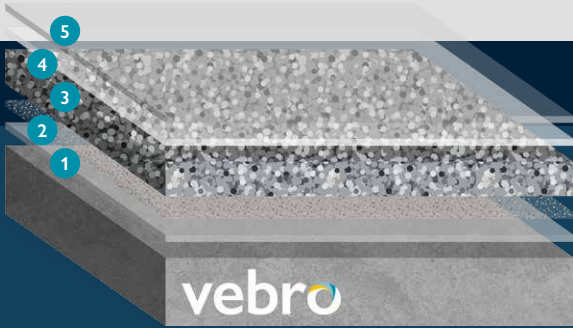
best for cells, showers, medical rooms, corridors & walkways

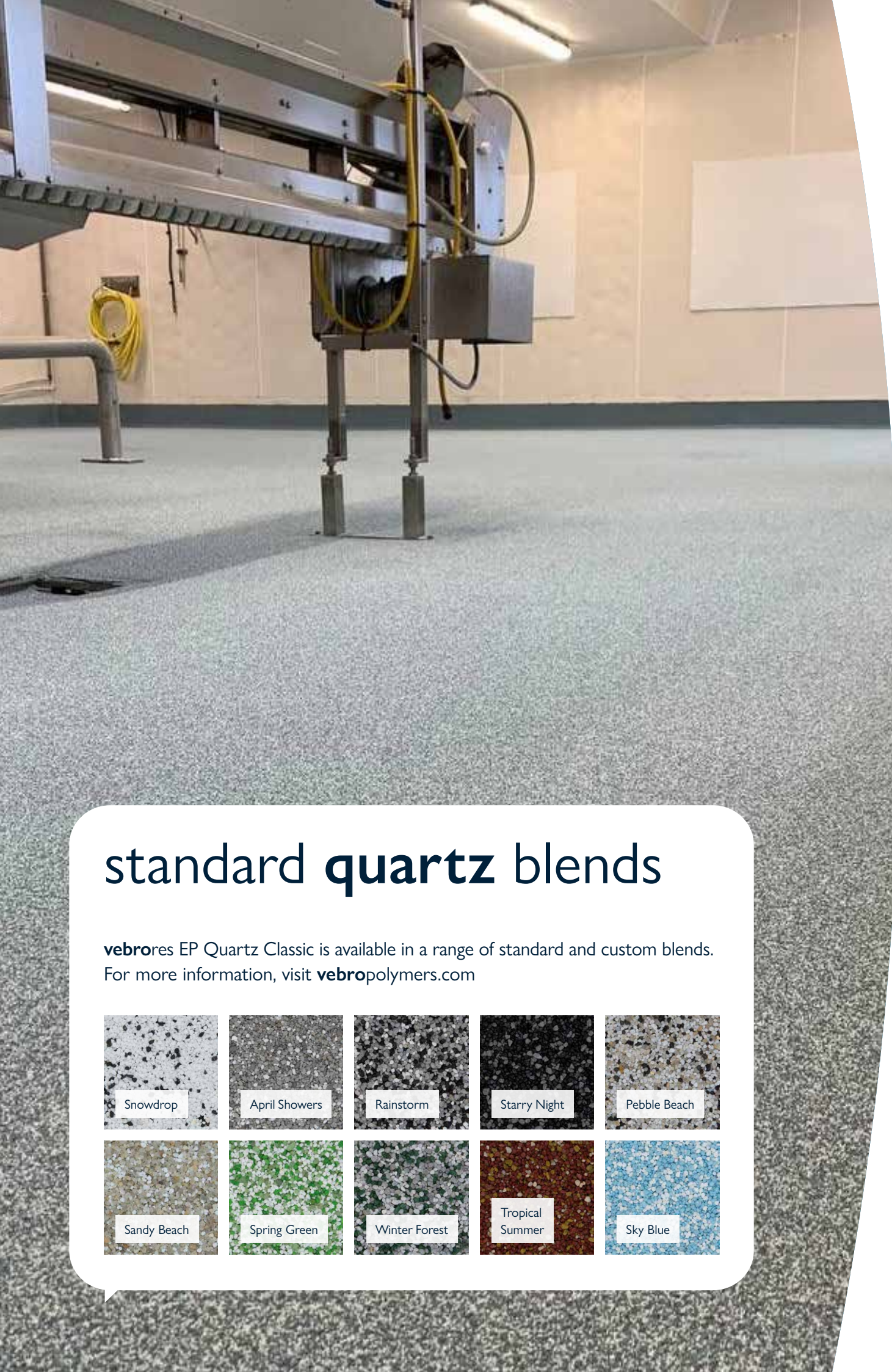
4.0 mm

6

 16 hrs

 7 days





seamless, cementitious polyurethane screeds

vebrocrete MF (S)

- 1 vebrocrete PU Primer
- 2 vebrocrete PU MF



best for dining halls & industrial workshops

4.0 – 6.0 mm

7



~15 mins



12 hrs



7 days

vebrocrete HF (T)

- 1 vebrocrete PU Primer (optional)
- 2 vebrocrete PU HF

vebrocreed SBR can be installed and laid to falls prior to the installation of vebrocrete HF to ensure sufficient drainage.



best for dining halls, laundries & kitchens

6.0 – 9.0 mm

8



~15 mins



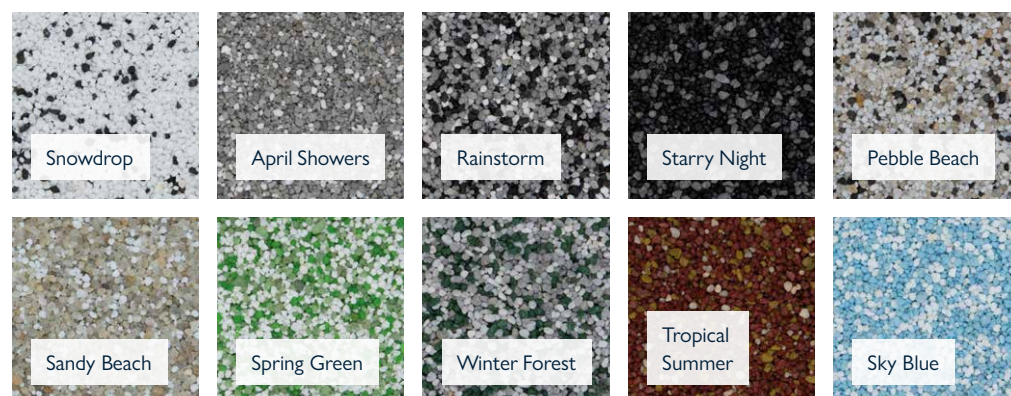
12 hrs



7 days

standard quartz blends

vebrores EP Quartz Classic is available in a range of standard and custom blends. For more information, visit vebro polymers.com

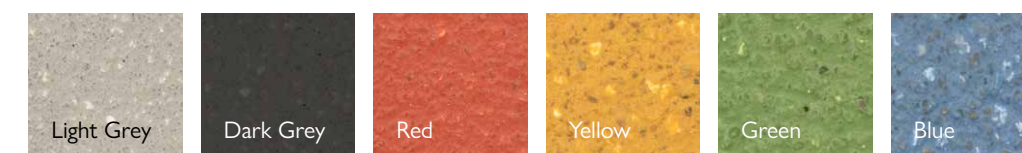


standard polyurethane screeds colours

(S) smooth finish



(T) textured finish

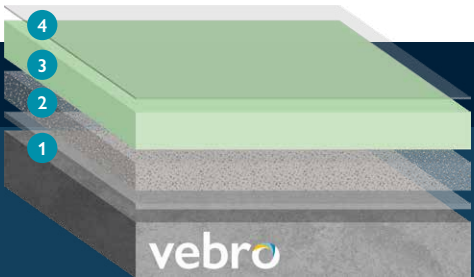


liquid vinyl comfort floor coating systems

vebroflex Comfort UV Plus

vebroflex Comfort UV Plus is a seamless, flexible, polyurethane comfort resin flooring system with a clear UV seal coat for enhanced colour stability.

vebroflex Comfort UV Plus is a liquid-applied alternative to vinyl floor coverings, providing a hygienic finish and an elastic cushioning effect underfoot.



- 1 vebro EP Primer
- 2 vebro 52 Silica Sand
- 3 vebroflex PU SL UV Plus
- 4 vebroflex PU UV WB Seal (Clear Matt)

best for cells, medical rooms, corridors, walkways & staff offices

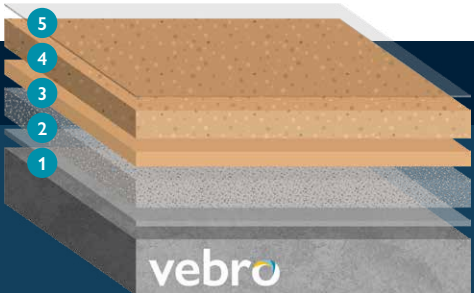
2.0 – 3.0 mm

5

vebroflex Decorative UV Plus

vebroflex Decorative UV Plus is a seamless, decorative, polyurethane comfort resin flooring system with a clear UV seal coat for enhanced colour stability.

vebroflex Decorative UV Plus is a liquid-applied alternative to vinyl floor coverings, providing a hygienic finish and an elastic cushioning effect underfoot.



- 1 vebro EP DPM Plus
- 2 vebro Natural Quartz
- 3 vebroflex PU SL
- 4 vebroflex PU SL Decorative
- 5 vebroflex PU UV WB Seal Decorative (Matt)

best for cells, medical & interview rooms, lobbies, waiting areas, staff canteens & WC

3.0 – 4.0 mm

5

solid colours available

vebroflex solid colour finish systems are available in an unlimited palette of standard, non-standard and premium RAL Classic colours.

Below is just a snapshot of the colours available. For a full breakdown of the colours available in each of the vebroflex systems, contact your local Vebro Polymers team.

Beige RAL 1001	Brown Beige RAL 1011	Oyster White RAL 1013	Black Grey RAL 7021	Concrete Grey RAL 7023
Graphite Grey RAL 7024	Light Grey RAL 7035	Dusty Grey RAL 7037	Agate Grey RAL 7038	Traffic Black RAL 9017

flexible with the finish too...

Not only are vebroflex systems available in an unlimited palette of RAL colours, they're also available in solid, decorative and motion finish options.

solid colour finish Available in an unlimited palette of RAL Classic colours	decorative finish Incorporates decorative quartz micro chippings	motion finish Mixes two or more colours to create a marbling effect
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wearing & outdoor cementitious screeds

vebroscreed Industrial

vebroscreed Industrial is a deep fill, rapidsetting and hardening, high compressive strength, single-part, cementitious screedunderlayment and finished wearing surface,

- ✓ Pump or trowel applied
- ✓ Can be used as a wearing surface (minimum 5.0 mm)
- ✓ Suitable to receive a resin floor coating system
- ✓ Suitable for underfloor heating systems
- ✓ Protein-free and moisture tolerant
- ✓ Extremely smooth finish with superior flow

best for industrial workshops, corridors & walkways

5.0 – 50.0 mm

30 – 40 mins

2 – 3 hrs

2-3 hrs



vebroscreed X

vebroscreed X is a pour or pump-applied cementitious smoothing screed for repairing or levelling external concrete surfaces.

- ✓ Can be used as a finished wearing surface
- ✓ Pump or pour applied
- ✓ More economical than resin-based systems
- ✓ Protein-free and moisture tolerant – suitable for use on wet areas

best for outdoor recreational areas

5.0 – 40.0 mm

30 mins

4 – 5 hrs



outdoor resin bound rubber crumb system


vebrobound Rubber Crumb

vebrobound Rubber Crumb is a seamless, UV-stable resin bound rubber crumb play surface incorporating 100% recycled EDPM rubber granules.

vebrobound Rubber Crumb is designed to absorb shock and impact, cushioning slips, trips and falls.

best for outdoor recreational areas

>35.00 mm



standard rubber crumb colours



looking for a different colour?

vebrolux Rubber Crumb is available in custom colours for an additional supplement! For more information, visit vebropolymers.com



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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