



MIRAFLOOR
by NULK



POLISHED CONCRETE SYSTEM
Six steps to the perfect finish



MIRAFLOOR
by **VULK**

The Mirafloor System uses premium products that have been designed not only to be easy to use, but also time and cost-effective.

Developed over 20 years of research and continuous improvement, Mirafloor offers user-friendly products and systems which enhance and protect the natural look of concrete in any environment.

With a proven track record nationwide, our solutions have been tested in the field and are trusted by contractors, architects and suppliers for their quality results and versatility of finish.

Mirafloor's polished concrete systems and products solve common problems in a simple way, minimise labour and deliver superior results that stand the test of time.





It's easy when you know how.

The Mirafloor polished concrete system is a six-step process, ideal for architectural, commercial, industrial, residential and retail projects.

Step One: Initial Grinding

Step Two: Grouting Process

Step Three: Densification process prior to polishing

Step Four: D-Rub Process of Refinement

Step Five: Final Polishing Process

Step Six: Sealer Application

Mirafloor Polished Concrete System.

Mirafloor by VULK delivers superior flooring results that are both beautiful and high performing.

Mirafloor is a premium polished concrete system for luxury retail and domestic environments.

As concrete is a natural raw material, and no two floors are the same, the Mirafloor system has a range of variations and sealers based on the specific requirements of the project at hand.

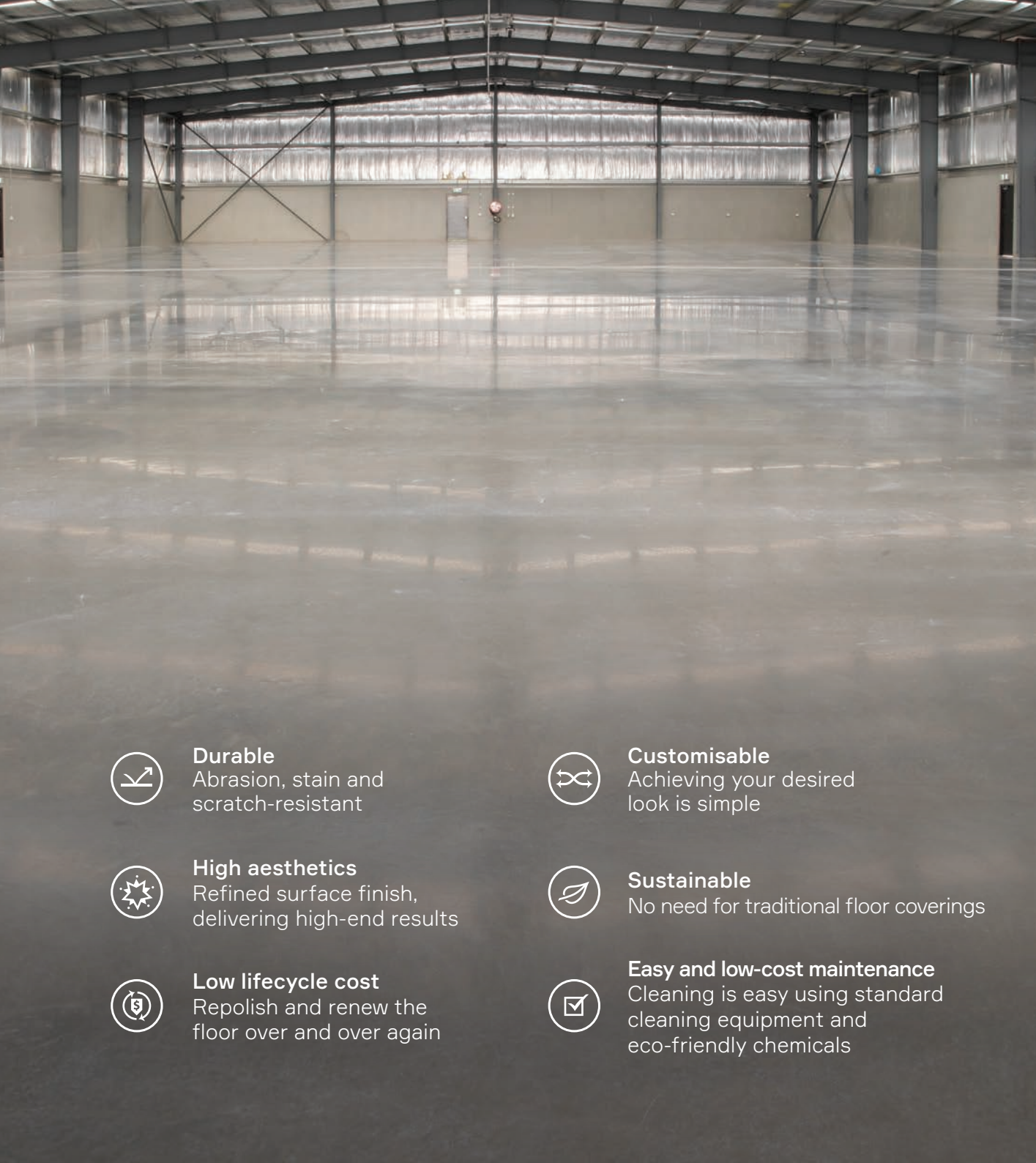
The Mirafloor Polished Concrete system has been designed by subcontractors with extensive industry experience. Mirafloor transforms and enhances structural concrete into an attractive and durable surface and can be used in conjunction with other flooring substrates such as concrete, stone, terrazzo and more.



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Mirafloor Industrial System.

Designed specifically for big-box retail, distribution warehouses and other storage facilities, the Mirafloor Industrial system is a cost effective flooring solution, providing increased abrasion resistance and reflectiveness to the surface of the concrete.

If you're looking for an industrial concrete treatment that protects your most valuable asset and ensures it stands the test of time, look no further than Mirafloor Industrial.

Cost effective solution for large commercial flooring.



Durable
Abrasion, stain and scratch-resistant



Customisable
Achieving your desired look is simple



High aesthetics
Refined surface finish, delivering high-end results



Sustainable
No need for traditional floor coverings



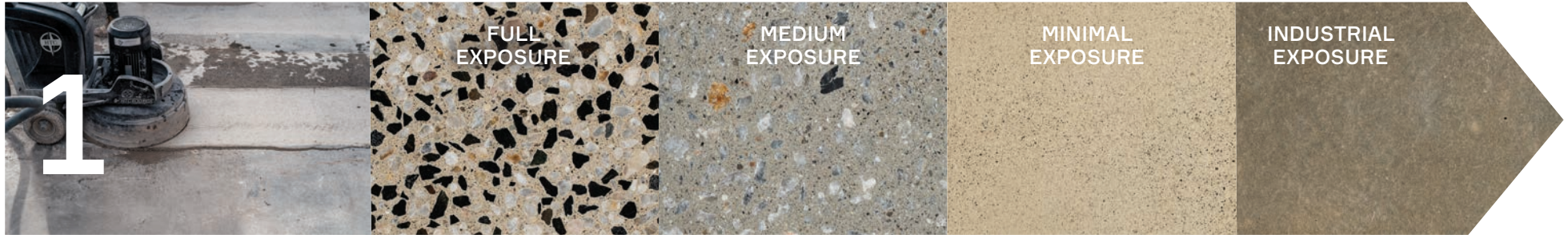
Low lifecycle cost
Repolish and renew the floor over and over again



Easy and low-cost maintenance
Cleaning is easy using standard cleaning equipment and eco-friendly chemicals



Step One: Initial Grinding



As well as providing the foundation for a ultimate finish, the initial grinding stage gives you the opportunity to choose your look: Decorative, Minimalist or Industrial.

DECORATIVE EXPOSURE

Uncover the natural beauty of aggregates within the substrate.

Full Exposure

- ▶ Grind concrete with a 3-phase planetary grinder with #25-#30 metal bond diamonds to achieve full exposure of aggregate.

Medium Exposure

- ▶ Grind concrete with a 3-phase planetary grinder with #25-#30 metal bond diamonds to achieve an approximate 50:50 exposure of coarse aggregate to fine aggregate.
- ▶ Removal of 30grit coarse scratches with #60-#80 metal bond diamonds.

MINIMAL EXPOSURE

For a simply refined architectural look.

Dry Process

- ▶ Grind concrete to 1-2mm with a 3-phase planetary grinder with #30 metal bond diamonds to expose predominantly surface fines only.
- ▶ Removal of 30grit scratch pattern with #60-#80 grit metal bond diamonds and vacuum clean.

Wet Process

- ▶ Grind concrete to 1-2mm with a 3-phase planetary grinder with #50 WET resin bond diamond while using a continuous flow of water underneath the grinder to expose predominantly surface fines.
- ▶ Removal with a wet vacuum while slurry waste is wet to ensure all pits/pores are free of slurry.

INDUSTRIAL

Maximise the performance and aesthetics of hard trowel finished concrete surfaces.

Wet Process

- ▶ Ensure a continuous flow of water to the grinder head.
- ▶ Polish surface with 3-phase planetary grinder with #200 WET resin bonded diamonds aiming to polish the hard, smooth trowel finish and remove fine surface laitance.
- ▶ Remove the slurry with a wet vacuum before it dries to ensure all pits/pores are free of slurry



Step Two: Grouting Process



Remove imperfections and create a seamless surface, prior to moving to the polishing phase.

- ▶ Pre-dampen the concrete to a puddle free appearance.
- ▶ Using an industrial pump sprayer, apply the MIRABIND liberally to the area 3-4 metres in front of the grinding machine, with an effective working area of approximately 6-10m². Use a soft-bristled broom to spread the MIRABIND evenly across the surface.
- ▶ While MIRABIND is still wet, grind the surface with #50 grit Hybrid puck diamonds at a medium speed.
- ▶ Dust from the grinding process will mix with the MIRABIND to create slurry that will fill holes and imperfections in the concrete. Continue grinding at an effective speed until the excess is removed from the surface and repeat as required.
- ▶ Remove excess MIRABIND from edges using a #50 Resin Hand Pad on 5-inch tool.
- ▶ Allow the surface to completely dry before gently sweeping to remove any excess debris ready for application of MIRAHARD Densifier.

Tip - If shallow depressions still remain, change to a one step finer grit diamond and follow the process steps until satisfactory filling is achieved.



MIRABIND

- Internal use
- External use
- Water based

A water-based binding agent and grouting polymer to fill pores, pin holes and minor imperfections.

- Strong adhesion
- Low VOC
- User-friendly
- Economical
- Extends the life of concrete flooring



Step Three: Densification process prior to polishing



Densification not only gives you extra tough, durable floors, it also provides the perfect substrate, ready for polishing to your desired gloss level.

DECORATIVE EXPOSURE & MINIMAL EXPOSURE FLOORS




- ▶ Apply a liberal coat of MIRAHARD using an industrial pump sprayer, ensuring the product doesn't pool.
- ▶ Use a microfibre mop or soft broom to spread MIRAHARD evenly over the surface and to work it into the pores of the concrete, keeping the area wet for 20 minutes.
- ▶ MIRAHARD should be reapplied until the concrete no longer absorbs it. At this point, allow a drying time of at least 8 hours before continuing with the polishing process or exposure to traffic.

INDUSTRIAL BURNISHED FINISH FLOORS

- ▶ Application of MIRAHARDEN PLUS to the substrate after #200 resin bond preparation.
- ▶ Using a low-pressure sprayer, apply MIRAHARDEN PLUS evenly to the surface ensuring to avoid producing puddles. The treated surfaces should stay wet for 5-10 minutes following the initial application. Reapply to areas of greater porosity that dry quickly.



MIRAHARD

-  Internal use
-  External use
-  Water based

Potassium silicate densifier for micro-grouting of polished concrete and hardening of external concrete pavements.

- Increases the surface hardness
- Enhances surface appearance
- Promotes longevity
- Easy to use
- Economical
- Environmentally safe



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Step Four: D-Rub Process of Refinement



The D-rub process further refines the surface by micro grouting and densification, which adds durability and gloss, taking the floor to the next level.

- ▶ Polish floor with resin bond diamond pucks after applying a thin mist coat of MIRAHARD in the path of the machine.




#100 Resin
#200 Resin
#400 Resin

- ▶ A further spiff coat can be undertaken using a thin application of MIRAHARDEN PLUS without excess at #800 Resin.

- ▶ Ensure to polish edges progressively with each grit after completing the machine polishing using 5" resin hand pads on hand polishing tool (i.e #200 hand pad after #100 machine pass).



MIRAHARDEN PLUS

-  Internal use
-  External use
-  Water based

Lithium Silicate hardener for densifying and enhancing concrete surfaces.

- Increases abrasion resistance
- Eliminates dusting
- Reduces water absorption and penetration
- UV stable and low VOC
- Cost-effective
- Quick drying
- Environmentally safe
- Enhances colour and light reflectivity

Step Five: Final Polishing Process



During the final polishing process, choose the combination of tools and products to give you the precise finish you're looking for: low, mid or high gloss.

POLISHING

Polish floor to high-gloss level using resin puck. Commence polishing with one grit higher than the final D-RUB pass.

#400 Resin
#800 Resin
#1500 Resin/Finishing Pad
#3000 Resin/Finishing Pad

- ▶ After completing the final pass using the resin pucks, it is recommended to finish the polishing with the corresponding finishing pad with weights back i.e., #800 finishing pad pass after the #800 resin puck for the ultimate preparation.
- ▶ The finishing pads may be used at #1500 and #3000 without the preceding resin puck pass with excellent results.

CUSTOMISE FLOOR GLOSS LEVELS

Low Gloss

- ▶ Cease polishing at #100 resin puck, followed by #100 finishing pad and proceed to sealer application as per product TDS sheet.

Mid Gloss

- ▶ Cease polishing at #400 followed by #400 finishing pad and proceed to sealer application as per product TDS sheet.

High Gloss

- ▶ Polish floor though to #800 resin puck, #1500 resin puck followed by #3000 finishing pad and proceed to sealer application as per product TDS sheet.



Step Six: Sealer Application



Choose from the Mirafloor range of sealers - including internal and external sealers, with natural or colour enhancing finishes - to protect your finished floor.



MIRASEAL ENHANCE

Colour enhancing penetrating sealer for protection of refined polished concrete, natural stone, and masonry surfaces. Suitable for both internal and external uses.

- ↓ Reduced slip
- ✳ Colour enhancing
- 🏠 Internal use
- 🏠 External use
- 🔪 Solvent based

MIRASEAL X

Solvent-based siloxane-acrylic resin-blend sealer, used to enhance the natural colour of concrete, masonry, and natural stone materials. The best choice for sealing honed concrete, external pavements, exposed architectural concrete, and natural or artificial stone.

- ↓ Reduced slip
- ✳ Enhancing finish
- 🏠 External use
- 🔪 Solvent based

MIRASEAL NATURAL

A clear, penetrating, low-viscosity solvent-based sealer with a natural finish. Ideal for mechanically-polished, honed, and exposed architectural concrete, as well as footpaths, masonry, benchtops, and a wide range of other indoor and outdoor uses.

- ↓ Reduced slip
- 🌿 Natural finish
- 🏠 Internal use
- 🏠 External use
- 🔪 Solvent based

Make sure to follow the product-specific instructions in the Technical Data Sheet. Refer to VULK.com.au for more information or contact us at enquiries@vulk.com.au.





VULK

1300 069 388
www.vulk.com.au

VULK has the experience and supporting product range to provide expert advice and solutions for your decorative and structural concrete projects of any scale. Contact us today for assistance with your specification at enquiries@vulk.com.au

See our other trusted brands for additional product solutions on your project:



Concrete Curing



Architectural sealers
and protective coatings



Repair and
waterproofing

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