



## Description

Miraseal is a patented co-polymer formulation that not only seals concrete with a rich, high glossy finish but also provides the toughness of Miraharden Plus, our advanced sealer, hardener and densifier for horizontal concrete. This easy to apply lithium silicate treatment penetrates and reacts with concrete, increasing hardness, denseness and durability on old and new surfaces. Treated surfaces resist damage from water, chemical attack and abrasion. Miraseal is perfect for application on standard or decorative concrete and terrazzo. It protects and enhances the colour intensity of integrally coloured and colour stained concrete, maximises light reflectance and eliminates the need for floor waxes, liquid polishes and conventional resin based coatings. Safer than conventional sodium or potassium silicate hardeners.

## Benefits

### Long Lasting Glossy Finish

A high glossy finish is obtained with 2-3 thin applications on smooth, steel troweled concrete; creates maximum light reflectance.

Improves stain resistance against acids, fats, grease, and oils.

### Hardens Densifies and Seals.

Small reactive lithium molecules harden, densify and seals, increasing abrasion resistance.

### Eliminates Waxing.

Eliminates need for floor waxes, liquid polishes and conventional resin based floor coatings.

### Eliminates Dusting

In ordinary concrete, tiny particles of dust are pushed to the surface through an upward force called hydrostatic pressure, resulting in efflorescence, which leads to dusting. Miraseal eliminates efflorescence and prevents dusting making concrete easy to maintain.

### Enhances and Protects

Miraseal is compatible with all Mirafloor products. Reduces or Eliminates ASR (Alkali Silicate Reaction) due to high lithium content. High concentrations of sodium or potassium salts, which will contribute to surface crazing and surface ASR are not present in Miraseal.

### Improves Condition of Old Floors

As concrete ages, surface stress, delaminating, curled cold joints, and other problems can arise. Miraseal combined with a customised grinding and polishing technique, can remove the top surface layer of the old concrete and strengthen the floor, increasing its impact and abrasion resistance.

### Little or No Production Down Time

Cures quickly. Floor can be put into service immediately after the application process is complete. Due to the cleanliness of the process and the lack of toxic or hazardous chemicals, floors can often be serviced while the

plant is in full production.

### Cost-Effective

Miraseal improves performance, appearance and light reflectance of new and old floors. It will reduce energy bills. A treated floor will lower maintenance costs significantly through reduction in upkeep (no waxing), and reduced tire wear.

### Environmentally Friendly

Water-based, contains no solvents, non-toxic, no smell, complies with all known national and state VOC regulations, non-mutagenic & carcinogenic (safe in food preparation areas), non flammable, low odour, fast drying, easy to apply.

## Surface preparation

Please read the safety information on the label and surface preparation instructions before use and application.

### Surface

Protect people, vehicles, property, plants and all nearby surfaces not to be treated from contact with the product, wind drift or overspray.

Please note: Mirafloor recommends that a waterproof barrier should be included in the construction of the floor to prevent upward migration of moisture from beneath the concrete flat work.

The concrete surface must be free of any material that would prohibit or slow down the penetration of Miraseal. Acid-stained concrete must be thoroughly neutralised and rinsed prior to application of Miraseal.

### Equipment

Use a low-pressure sprayer and a microfibre pad. Do not atomise.

### Air and Surface Temperature

The air and surface temperature should be between 4°C and 38°C.

## Application instructions

ALWAYS TEST each surface for suitability and desired results before application. For best results follow the Application Instructions. Let the surface dry thoroughly before inspection and final approval.

Miraseal may be applied to steel troweled, mechanically ground, polished or highly polished concrete surfaces, new and existing concrete, concrete with dry shakes, coloured concrete, acid-stained concrete, stamped concrete, cementitious tiles, terrazzo, and concrete treated with sodium or potassium silicate hardeners.

For best results, surfaces should be treated with Miraharden Plus prior to application of Miraseal.

### Application

1. Using a low-pressure sprayer with adjustable nozzle apply a thin, even coat of Miraseal to dense, smooth concrete



surfaces at a rate of 25-40 m<sup>2</sup>/litre.

2. Use microfiber pad to uniformly spreading Miraseal in a thin layer by pulling back the product on the surface. Make sure to pre-moisten the microfiber applicator with Miraseal before using. Stop spreading once product begins to dry.

3. Allow Miraseal to dry tack-free for about 30 minutes to 1 hour and apply additional coats to increase the gloss. Each successive coat will achieve a higher coverage rate.

4. Once dry, burnish to a high gloss finish using high-speed burnishing equipment fitted with heat polishing pads or other approved high-speed burnishing pads. In addition to smoothing and polishing the treated surface, high speed burnishing heats the Miraseal to help fuse and bond with the concrete for increased durability and longevity.

5. Additional coats may be applied and burnished depending upon concrete porosity and desired finish. See application procedure for additional coats below.

6. Surface is ready for traffic within 1 hour of burnishing under typical conditions.

Please Note: Protect from water for 72 hours.

### First Coat

Using a microfibre pad, apply the first coat at 25-40 m<sup>2</sup> per litre. Allow the first coat to dry tack free for 20 – 60 minutes. Always burnish between Miraseal coats.

### Second Coat

Using a microfibre pad, apply the second coat at 40-60 m<sup>2</sup> per litre. Allow the second coat to dry tack free for 20 – 60 minutes. Always burnish between Miraseal coats.

### Second Coat

Using a microfibre pad, apply the second coat at 40-60 m<sup>2</sup> per litre. Allow the second coat to dry tack free for 20 – 60 minutes. Always burnish between Miraseal coats.

### Third Coat

If additional sheen is desired, apply a third coat at a coverage rate of 60-75 m<sup>2</sup> per litre. Always burnish between Miraseal coats. Allow to dry for one hour after final coat before opening to traffic.

### Application Procedure for Additional Coats

To achieve a high gloss and stain resistant protective sheen, application of up to three thin coats of Miraseal is recommended.

ALWAYS burnish between Miraseal coats using heat burnishing pads.

Application to concrete surfaces previously treated with Mirahard, sodium and potassium silicate based liquid hardeners or dry shake hardeners will achieve a higher coverage rate.

### Cleanup

Clean tools and equipment immediately with fresh water. Immediately wash with water over sprayed glass, aluminum, or other surfaces.

### Final Results

The concrete surface is ready to use when dry. Maximum water resistance will develop over 7 days. Smooth and hardened concrete surfaces should exhibit reduced water absorption and the desired sheen upon drying.

### Maintenance

Use Mirafloor Maintenance, a high quality and lithium based solution, to clean and maintain the lithium treated surfaces. This product was developed to further enhance the long-term performance of the finished concrete floor.

Do not use acidic cleaners to maintain treated floors. Although Miraseal will improve the stain resistance of concrete; some acid concentrates and acidic foods may etch and leave a residual stain if left on the surface. Clean up all spills quickly to minimise any possible damage. All sealers, both penetrating and coatings will only slow down the staining process. Spills must be cleaned up in a timely manner.

Daily removal of surface dust and debris with a microfibre pad or dry dust mop will help maintain the desired appearance. Regular maintenance cleaning will improve surface shine. To maintain gloss, dry buff periodically with high-speed burnisher and a heat pad.

To restore maximum shine to high traffic areas, apply mist-like coat of Miraseal and repeat Application Instruction steps 1-5 in affected areas.

### Safety information

Miraseal is a water-carried solution. Use appropriate safety and job site controls during and application and handling.

#### First aid

Ingestion: Drink large quantities of water or milk. DO NOT induce vomiting. Seek medical attention immediately.

Eye Contact: Remove any contact lenses. Immediately flush eyes for 15 minutes in clear running water while holding eyelids open. Seek medical attention immediately.

Skin Contact: Wash contacted area with soap and water. DO NOT attempt to neutralise with chemical agents. If irritation persists, seek medical attention.

Inhalation: Remove affected person to fresh air. Wash mouth and nasal passages with water repeatedly. If breathing difficulties persist, seek medical attention.

### Warranty

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, and anticipate every variation encountered in masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.



## Compliance

Miraseal is recommended for use on concrete, both new and existing.

Safe for use in food and drug processing industries.

## Limitations

All information provided is accurate to the best of our knowledge and is to be used strictly as a guide. Handling conditions, installation and use are not in our control therefore we cannot guarantee the results.

For indoor use only.

## Recommendations

The Miraseal recommendations for surface preparation and product application must be followed.

Do not apply Miraseal products on surfaces which are frozen, dirty or retain standing water.

Protect from pools or puddled water for at least 72 hours.

Thoroughly neutralise and rinse acid-stained concrete before applying Miraseal.

For best results floors should be treated with Miraharden+ prior to application of Miraseal.

For best durability and stain resistance, burnish freshly applied Miraseal with high-speed burnisher using heat polishing pads for high gloss finishes. Best results are achieved when burnishing heats the floor to 33°C or greater immediately after passing.

## Typical properties and application data

Form:	Water White Liquid
SPECIFIC GRAVITY:	1.1
ACTIVE CONTENT:	22%
TOTAL SOLIDS:	22%
pH:	11.0
WT/L:	1.1Kg
FLASH POINT:	Not applicable
FREEZE POINT:	0°C
VOC CONTENT:	<100g/L
SHELF LIFE:	1 year unopened, factory sealed container

Refer to Material Safety Data Sheet for precautions and personal protection.

Disclaimer: Any advice, recommendation, information, assistance or service provided by Mirafloor in relation to goods manufactured or supplied by them or their use and application is in good faith and is believed by Mirafloor to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by Mirafloor is provided without liability.