Acrylic Sealer

PeterFell
SPECIALISTS IN COLOURED CONCRETE

Acrylic Sealer is a water-based concrete sealer for interior and exterior residential concrete floors.

1. DESCRIPTION

Acrylic Sealer is a transparent sealer for use on concrete floors. It can be applied to both internal and external concrete floors, giving a semi-gloss finish. Acrylic Sealer displays excellent adhesion to correctly prepared surfaces, is no-hazardous, solvent free, and is very easy to apply.

Applications:
- Interior and exterior residential concrete floors.

Characteristics:
- Water based - no odour and VOC free (certified).
- Designed and manufactured in New Zealand.
- Easy to apply, and quick drying.

Limitations:
- Not for use on commercial floors.
- Exterior concrete must be appropriately textured to ensure sealer does not make the surface slippery.
- Cannot be used as a waterproofing agent
- Does not act as a filler - any cracks or defects should be repaired prior to application.
- Not as durable as Epoxy Sealer on internal concrete floors.
- Acrylic Sealer is a coating, so whilst durable, it is still susceptible to scratching.

This product guide covers the preparation, application, and maintenance of Acrylic Sealer - if there is any question as to the suitability or application of this product please contact Peter Fell Ltd prior to use. Refer to the SDS for full Health and Safety information.

2. PRECAUTIONS

- Do not seal any concrete under 28 days old.
- Do not apply to highly burnished or very 'tight' floors.
- Do not apply to concrete surfaces that have been treated with concrete densifiers/hardeners.
- Do not apply to concrete surfaces that are not *completely* dry, not just surface dry.
- Do not apply to any surface that has been previously treated with another product i.e. other sealers, curing compounds, etc.
- Do not seal concrete if the concrete temperature (not atmospheric) is below 12°C or above 30°C.
- Do not dilute.
- Do not add Anti-Slip.
- Do not use as a filler – any cracks, pitting or pinholes must be treated prior to application.
- Clean up any spills immediately to avoid staining.

3. TEST AREA

Prior to application of the sealer it is recommended that a test area is conducted first.
This test area is to ensure that the sealer adheres correctly to the surface and gives the desired look and finish.
Slip resistance: it is important to check that application of the sealer to exterior surfaces does not make the concrete slippery.
- Once the sealer is cured, wet the area and check that the surface has required level of slip resistance.
- If slip resistance is not sufficient do not apply.

It is recommended that test area of 0.5 - 1.0 m^2 is executed according to the following protocol.
- If possible do the test area on a part of the floor that will be covered or hidden when the job is complete i.e. in a wardrobe or under a kitchen island inside, or under furniture or fixtures outside.

Test pots and small volumes of all the sealer and preparation and cleaning products are available from Peter Fell Ltd.

4. PREPARATION

Prior to application it is important to establish that Acrylic Sealer can be applied to the floor.

- Acrylic Sealer cannot be applied to new floors treated with curing compounds or other similar products.
- Some highly burnished or ground/honed floors are too dense or 'tight' to allow the adequate adhesion.
- Old floors previously treated with other sealing compound, or contaminated and stained, will also not accept a water based sealer.

A simple 'water test' can quickly show if the floor will 'accept' the coating:

- Drop a small amount of water on the concrete surface.
- If the water penetrates (darkens) the concrete within 15 - 30 seconds the concrete is likely to accept the sealer.
- If the water beads on the surface this would indicate that the concrete has high surface tension (too dense) and is not suitable for sealing with Acrylic Sealer.
- Beading could be due to other factors such as contaminants or other treatments in or on the concrete.
    - These contaminants or treatments must be removed prior to any sealer application.

The floor must be completely dry before applying Acrylic Sealer. If it is uncertain whether the floor is dry, conduct a Plastic Sheet Test (ASTM D4263) to confirm:

- Tape a plastic sheet (45 x 45 cm) onto the concrete surface being tested; ensuring an airtight seal between the concrete and the plastic is formed. After 24 hours remove the plastic sheet. Concrete can be coated if no moisture/condensation is present on the underside face of the sheet, or if concrete has not darkened (compared to adjacent concrete).
    - Use low tack tape to avoid marking the concrete surface.
- If moisture is present, allow to dry and repeat test.

If Acrylic Sealer is able to be applied to the floor, and the floor is dry, then prepare the concrete as follows:

New interior concrete floors:

- All protective covers must be lifted at least one week prior to sealing to allow the floor to dry.
    - If a non-breathable cover was used (i.e. polythene) it will need to be lifted much earlier to allow drying.
    - Ensure good air flow over the floor (open all doors and windows) to allow moisture from the building.
- If dirty, clean the floor with Neutralizer & Cleaner or Concrete Cleaner (see Product Guides for application instructions).
- Prepare the floor for sealing with Surface Preparation followed by Neutralizer & Cleaner (see Product Guide's for application instructions).

New exterior concrete floors:

- If dirty, clean the floor with Neutralizer & Cleaner or Concrete Cleaner (see Product Guides for application instructions).
- Prepare the floor for sealing with Surface Preparation or Surface Prep Lite followed by Neutralizer & Cleaner (see Product Guide's for application instructions).

Ground or burnished concrete floors:

- Acrylic Sealer can be applied to floors ground to 120 metal bond or less only if they have *not* been densified.
- Ground or honed floors typically do not require treatment with Surface Preparation (acid wash).
- Ensure the floor is clean and dust free – clean with Concrete Cleaner if required then rinse the floor with fresh clean water.

Old concrete floors:

- Any existing coating should be removed by grinding and the water test repeated to ensure all remnants have been removed.
- Any contaminated areas should be treated with appropriate cleaning agents and pass the water test prior to application of the sealer.
- Once any coatings have been removed and contaminated areas treated, clean the floor with Concrete Cleaner, then rinse once with fresh clean water.
    - A wet and dry vacuum cleaner should be used to remove all residual water from the concrete surface.

5. EQUIPMENT

- Paint tray
- Acrylic Sealer can be applied with any of the following:
    - Roller (5mm nap mohair roller or similar), recommended for smooth interior surfaces
        - microfibre mop can be used for second and any subsequent coats.
    - Broom or brush (soft bristle), recommended for textured exterior surfaces.
- Safety Equipment – see section 11. Personal Protective Equipment.

6. APPLICATION

Acrylic Sealer should only be applied when new concrete floors are fully cured (at least 28 days after pouring), and as with old concrete surfaces, concrete prepared as above.

New power float finished (interior) concrete floors:
- Apply with roller in thin coats, avoid pooling.
- Apply minimum 2 coats.
    - Second coat can be applied with microfiber mop.
    - 'open' or porous floors may require a third coat to form an even surface coating.
- Drying time between coats is typically 4 - 6 hours after application.
- Recoating must be done within 24 hours.
    - sanding between coats is recommended if more than 24 hours between coats.

Ground or burnished concrete floors:
- Acrylic Sealer can be applied to floors ground to 120 metal bond or less only if they have *not* been densified.
- Apply with roller or microfiber mop in thin coats, avoid poling.
    - Roller is recommended for the first coat.
- Apply minimum 2 coats.
    - most ground floors will require a third or fourth coat to form an even surface coating.
- Drying time between coats is typically 1 - 2 hours after application.
- Recoating must be done within 24 hours
    - sanding between coats is recommended if more than 24 hours between coats.

Old concrete floors:
- Apply the same as the appropriate type of floor above.

<u>Drying Time:</u>

- Allow 24 hours drying before light foot traffic.
- The sealer will be fully cured after 3 days.
    - Joinery and furniture should not be placed onto the newly sealed floor until the coating is fully cured to minimise scratching and marking of the sealer.
- Apply CoverSeal to internal floors ONLY when sealer is fully cured.

<u>Coverage:</u>

- Approximately 8 – 12 m^2/L
    - Coverage will vary greatly depending on the porosity and texture of the concrete.

<u>Clean-up:</u>

- All equipment can be cleaned with water.

7. MAINTENANCE

- Floors sealed with Acrylic Sealer should be cleaned using with Concrete Cleaner.
    - Refer to the Product Guide or contact Peter Fell Ltd for product information.
- Do not use ammonia or amine containing cleaners (e.g. Janola) – they will damage the sealer.
- Do not use steam mops to clean the floor.
    - Excess heat and steam from the mop can breakdown the sealer leading to 'cloudy' patches
- We recommend that felt pads are used on the bottom of all furniture (i.e. chair and table legs) to minimise scratching or damaging the sealer.
- ALL internal concrete floors sealed with Acrylic Sealer should be maintained with CoverSeal.
    - CoverSeal should be applied routinely (every 6 months) to maintain sealer appearance and performance – refer to the Product Guide or contact Peter Fell Ltd for product information.

8. RE-SEALING

Acrylic Sealer can be re-applied over sealed floors that are in good condition. If the sealer or concrete surface is worn, stained, or damaged it is recommended that the floor is ground/honed prior to re-sealing. This process will alter the surface appearance by exposing the aggregate which should be considered prior to re-sealing.

For standard re-sealing:

- Clean floor thoroughly with Concrete Cleaner.
- Using low grit sandpaper (less than 240 grit) lightly sand the floor to provide a key for re-seal.
    - Take great care not to scratch or mark the concrete surface.
    - Ensure any worn or damaged areas of sealer are sanded back appropriately.
- Clean floor thoroughly with Concrete Cleaner and then rinse once with fresh clean water and allow to dry completely.
- Apply sealer with a roller or microfiber mop in thin coats, avoid pooling.
- Apply additional coats as required to form an even surface coating
- Drying time between coats is typically 1-2 hours after application.
- Recoating must be done within 24 hours.
    - sanding between coats is recommended if more than 24 hours between coats.

9. REMOVAL

Removal of Acrylic Sealer is difficult and can result in damage or alteration of the concrete surface and as such is not recommended. If required the sealer should be removed mechanically by grinding/honing the floor. This process will alter the appearance of the floor by exposing the aggregate (stones) which should be considered prior to removal of the sealer.

10. STORAGE AND HANDLING

Pack Sizes:	1, 2, 5, 10, and 20 L units
Handling:	Wear suitable protective clothing - see section 11. Personal Protective Equipment.
Storage:	Store in cool, dry, well ventilated place in original container. Store out of reach of children. Store away from direct sunlight, oxidizing agents (e.g. nitrates), acids, anionic, detergents, and foodstuffs. Keep away from naked flames and other heat sources. Take precautions against static discharge. Ensure container is sealed when not in use and is checked regularly for leaks or spills. Acrylic Sealer can be stored for up to 12 months.

11. PERSONAL PROTECTIVE EQUIPMENT

Eyes:	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear if splashes are likely.
Skin:	Protective gloves and clothing are no normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period.
Respiratory:	Respirator is not required under normal use. Ensure adequate natural ventilation.

12. FIRST AID

Swallowed:	DO NOT induce vomiting. Give water or milk to drink. Obtain medical attention immediately. For emergency information contact the *National Poisons Centre (0800 764 766)*.
Eyes:	Immediately flood with copious quantities of water, holding eye open if necessary, for at least 15 minutes. Seek urgent medical attention.
Skin:	Remove contaminated clothing and shoes and wash skin thoroughly with excess water. If irritation occurs or persists, seek medical attention. Launder clothing and clean shoes before re-use.
Inhalation:	Remove patient from exposure, keep warm and at rest. If there is respiratory distress, give oxygen and seek immediate medical attention.

Refer to the SDS for full Health and Safety information.

13. PHYSICAL PROPERTIES AND IDENTIFICATION

Appearance (in pack):	White milky liquid
Appearance (when dry):	Transparent
Odour:	Faint 'plastic' odour
Solubility:	miscible in water
Wet film thickness:	approximately 35 - 50 micron
Dry film thickness :	approximately 20 - 40 micron
UN Number:	n/a
HSNO Approval:	non-hazardous
Hazchem code:	n/a
DG Class:	n/a
Packing Group:	n/a

PRODUCT WARRANTY

The information contained in this document is true and accurate to the best knowledge of Peter Fell Ltd. We cannot however anticipate all conditions under which this information and our products may be used. Peter Fell Ltd therefore accepts no responsibility and offers no warranty with respect to results obtained by the application of our products, their suitability, or for their safe use. Peter Fell Ltd offers our products for sale subject to, and 'The Customer' and all users are deemed to have accepted, our Terms and Condition of Trade. Peter Fell Ltd warrants our products to be free of manufacturing defects. If the product when purchased was defective and was within recommended storage life when used, Peter Fell Ltd will replace the defective product with new product without charge to the purchaser. Peter Fell Ltd makes NO OTHER WARRANTY, either expressed or implied, concerning our products.