

Ecoflor® MicroConcrete – Flooring. Issued: April 2022

INTRODUCTION

Description:

Ecoflor® MicroConcrete is a cementitious-based polymer modified 2-part cement resurfacing system. Ecoflor® MicroConcrete can produce a durable polished cement surface or textured slip-resistant decorative concrete surfaces. Ecoflor® MicroConcrete is natural white in colour and may be integrally coloured using Ecoflor® Colour In liquid colour pigments. Ecoflor® MicroConcrete achieves excellent compressive, flexural strength and has high abrasion resistance.

Recommended Use:

Ecoflor® MicroConcrete is tested suitable as a decorative wear surface placed on existing plain concrete pavements used for pathways, patios, pool surrounds (with anti-slip additive) or internal flooring, provided that the structural integrity of the underlying substrate is sound.

Features

- Transforms plain concrete surfaces.
- Colours/Stencil patterns replicate commercial logos.
- Design flexibility add style and value.
- Economical saves cost of removal and reinstatement of existing concrete pavements in good condition.
- Negligible impact of existing pavement design loadings and finished levels- Ecoflor thickness is less than 2mm.
- Suitable for large and small projects new concrete may be placed for constructed site safety, access and mobility and afterwards resurfaced before handover at completion of works.
- Service life expectation 20 years subject to exposure conditions and maintenance.

Storage and Shelf Life:

Store materials in original sealed packaging in dry conditions. Shelf life of 6-12 months may be expected depending on humidity.

Precautions & Limitations:

Until hard-set has occurred, freshly finished surfaces must be protected from rain or damage from other sources. In windy conditions and on days of high ambient temperature (>28 degrees) and particularly if accompanied with low humidity, special precautions must be taken during product mixing and placement. The product should not be applied at ambient temperatures >33 degrees. Finished surfaces can be sealed after 16 hours following completion of the work.

Estimating Data

Ecoflor® MicroConcrete Base Coat is to be applied as a base coat for flooring and pavements only.

15kg of Ecoflor® MicroConcrete Base Coat mixed with 1.8 litres of water mixed with 1.8 litres of Ecoflor® Concrete Modifier will cover approximately 10 - 12m2 in a single coat application.

Ecoflor® MicroConcrete Finish Coat is to be applied as a finish coat for flooring and pavements over Ecoflor® MicroConcrete Base Coat, in a 2-coat application.

10kg Ecoflor® MicroConcrete Finish Coat mixed with 1.5 litres of water and 1.5 litres of Ecoflor® Concrete Modifier will cover approximately 20 - 25m2 dependent on applied thickness in a single coat application.

Technical Data Sheet



APPLICATION

Mixing Instructions - Summarized:

Important Notice: Read mixing Instructions fully for proper understanding of the blending operation and how to achieve the desired mix consistency.

Ecoflor® MicroConcrete Base Coat

Primer - 1 part Ecoflor® Concrete Modifier: 1 part water. Apply by broom or roller. Allow to dry.

15kg bucket – 1.8 litres water: 1.8 litres Ecoflor® Concrete Modifier for typical Base Coat. Do not exceed 4 litres including 300ml colour additive per 15kg bag. "Wet Mixes" 2L:2L typically used squeegee base coat application.

Finish Coat

Primer - 1 part modifier: 1 parts water for priming over Base Coat. Apply by broom or roller. Allow to dry.

10kg bucket – 1.5 litres water: 1.5 litres Ecoflor® Concrete Modifier for typical Finish Coat. Do not exceed 3.5 litres including 300ml colour additive per 10kg bucket

Mixing Instructions:

Pour correct portion of water into an empty pail, and then add correct portion of Ecoflor® Concrete Modifier. Briefly mix liquid then add Ecoflor® Liquid Colour Dispersion 300ml component and mix into the liquid. Then slowly add Ecoflor® MicroConcrete cement powder component whilst continually mixing.

Do not mix by hand. Use a mortar mixing paddle with an appropriate high speed electric drill or mixer. Mix at slow speed initially whilst adding the powder component and increase mixing speed. Continue to mix until lump free for 2-3 minutes.

Floor Application

Surface Preparation:

All surfaces must be clean, sound and free of dust, moisture, oils and grease or other surface contaminants such as paints, curing compounds and release agents etc. Concrete surfaces must be acid washed, water blasted, grit blasted (outdoor only) or mechanically ground, depending on surface conditions. The strength of the concrete or mortar substrate should be a minimum of 20MPa. The prepared substrate should be thoroughly dry before applying the Ecoflor® MicroConcrete Overlay system.

Warning: do not apply over soft, chalky or dusty concrete or neither waterproof membrane on concrete flatwork. Seek technical advice from Ecoflor®.

Placement:

Primer: Apply with broom or roller. Base Coat: Trowel or squeegee. Finish Coat: Trowel.

- 1. Apply Primer to concrete surface. Let thoroughly dry. 2nd prime coat is recommended for porous substrates.
- Apply Base Coat to concrete surface. Let thoroughly dry. Sand the whole floor and any rough or high areas (80-100 grit).
- Apply primer to Base Coat as per instructions. 1 part Ecoflor® Concrete Modifier: 1 part water.
- 4. Apply Finish Coat. Trowel over entire area. Apply second Finish Coat for a smoother, consistent and better finish.
- 5. Polishing. Use a floor sander (120 grit). Progressively increasing to (180 grit) to achieve the desired sheen.

Apply at least 3 coats of Ecoflor® EcoCoat Floor Sealer if suitable for the application. Follow EcoCoat TDS instructions.

Address: 26 Progress Drive, Carrum Downs Vic, 3201

Technical Data Sheet



Basic Equipment Requirements for Ecoflor® MicroConcrete Method:

- Concrete Grinding Equipment Floor grinder, edge grinder and corner tool.
- High Torque Power Drill geared for variable speed and of good quality.
- Electric Power Extension Cords good quality and commercial use rated and compatible with power tools.
- Metal Paddle Stirrer purpose made for mixing low viscosity cements.
- Plastic Measuring Jugs and buckets capacity from1 litre to 20 litres.
- Trowels & Squeegee Magic Trowel recommended for Ecoflor®.
- Floor Sander Floor Scrubber with sanding screen attachment and orbital sander.
- Dust Extraction Suitable vacuum machines to attach to sanding equipment.
 Paint Brushes and paint rollers 10mm Microfibre nap roller.
- Squirrel Mixer Attach to Cordless Drill for mixing sealer.
- Safety PPE Gloves, Dust Mask, Goggles and Work Boots.

Basic Consumable Requirements for Ecoflor® Micro Concrete Method:

- 50mm Masking tape Painters grade.
- 50mm Cloth Tape High strength liquid impermeable.
- Rags Disposable

SAFETY DATA

- KEEP OUT OF REACH OF CHILDREN
- Wear protective clothing and safety glasses. Gloves are essential
- Avoid contact with exposed skin
- Apply barrier cream before commencing work
- Wear a dust mask when mixing

Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by Ecoflor® either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not Ecoflor® are responsible for carrying out procedures appropriate to a specific application.

Disclaimer

Ecoflor® products should be used in accordance with the information contained here. Each user should read and consider this information carefully in the context of how the products will be handled and used in the workplace including in conjunction with other products. While the information contained here is to the best of our knowledge at the date of publication, Ecoflor® makes no representation about the accuracy of the information. If you need clarification or more information, you should contact Ecoflor® directly. Ecoflor® products are sold without express or implied warranties other than as provided by statute, and subject to our standard terms and conditions (provided to customers and available on request). Subject to our standard terms and conditions and any statutory provisions, Ecoflor® accepts no responsibility (including in negligence) for loss or damage of any nature resulting from the use of Ecoflor® products or reliance upon the information contained here.