

TECHNICAL DATA SHEET

Fortis Concrete Acid Stains

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INTRODUCTION

FORTIS Concrete Acid Stains

Fortis manufacture a range of reactive concrete acid stains. They work by penetrating the concrete surface and reacting chemically with the hydrated lime (calcium hydroxide) in the concrete to produce a permanent colour change. Fortis utilise a natural acid in the stain to lightly etch the surface, allowing the metallic salts to penetrate more easily. The colours that are produced are unique and vary with multi-coloured intensities.

Fortis Adhesive and Coatings Concrete Acid Stains contain no hydrochloric acid, therefore eliminating the need for neutralising. The floor does however require a mop the following morning with clean water to remove any salts formed.



Image 1.



Image 2.



Image 3.

USE

The Fortis Concrete Acid Stains can be used on designer stained concrete floors for an individual effect, Image 3. It is the concrete acid stain of choice for those wishing to eliminate heavy neutralisation. Fortis Concrete Acid Stains can be used on new and old concrete as well as concrete overlays. They can also be applied to both horizontal and vertical concrete surfaces such as walkways, patios, interior living room floors, walls or fireplace surrounds. Image 1. Shows the diversity of this product whereby artist Natalie Sun creates master pieces on concrete using Fortis Acid stains. The varied colour pallet of the Fortis Acid Stains can be seen in Image 2, whereby this product is available in the following colours:

Antique Red, Antique Blue, Antique Ebony/Black, Antique Brown & Antique Gold/Tan.

Staining imparts a luxurious richness that can't be achieved by any other colouring medium. Rather than produce a solid, opaque effect like paint, stains permeate the concrete to infuse it with luminous, translucent tones that vary depending on the surface they are applied to and the application techniques used. The results can mimic everything from polished marble to tanned leather to natural stone or even stained wood.

Enhancing the acid stain is recommended. This can be done by sealing with a range of different coatings: From water based **FORTIS ECO COAT 526 GLOSS** to single pack moisture curing **FORTIS COAT 519**.

FEATURES

- Contains no Hydrochloric acid, eliminating the need for neutralisation.
- Available in a diverse range of colours
- Excellent UV stability
- Excellent wear resistance
- Can be applied to new or old concrete as well as concrete overlays
- Can be used for interior and exterior applications

APPLICATION

1. Prepare the surface
2. Apply the stain
3. Remove any residue
4. Add a sealer for protection

SURFACE PREPARATION

- Whereby stains must be able to soak into the concrete to achieve full colour saturation, they should not be applied to surfaces covered by anything that can inhibit stain penetration, such as dirt, grease, glues, coatings, curing membranes and sealers
- Prior to application ensure that the substrate is clean, dry and free of wax and oil and any loose, flaking material and substances that may inhibit the stain from soaking into the concrete.
- Particularly the application surface may require cleansing with strong detergents, high pressure cleaning, acid wash or other to prepare it for application.
- When applying stains, always use all-plastic spray bottles.
- Always test your dilution concentrations to ensure you obtain the colour you're after.
- Test the sealer to see how the finished floor will look.
- DO NOT use hydrochloric acid to prepare the concrete.
- Concrete needs to be a minimum of 14 days old before applying Acid Stain
- Mask off any areas not intended for staining. Acid stains can be tough and sometimes impossible to remove.

APPLICATION

Staining concrete successfully requires a skilful hand and a discerning eye. Here are a few tips for getting the best results:

- When applying stains, always use all-plastic spray bottles
- To produce various concentrations of colour, you can dilute the stain by adding water, either by wetting the concrete before the stain is applied or by spritzing the concrete after stain application with water from a spray bottle.
- Don't expect colour consistency or perfection. Variations are inherent in the staining process.
- Protect your newly stained surface with a sealer. Be sure to select a product that's compatible with the stain you're using.
- When spraying, apply liberally with an even and continuous pattern over the slab. Maintain a wet edge.
- Avoid puddling of stain
- When applying to vertical surfaces start from the bottom and work your way up.
- One person should spray the stain just ahead of another person scrubbing the surface. Avoid over application and drips. Alternatively use a light random spray pattern to form cloud like formation.
- Allow stain to remain on the surface and react for at least 4-6 hours. Exterior applications should be completed in the early morning hours when the concrete is cool and allows the stain to dry slowly.

TECHNICAL DATA SHEET

CLEAN UP

- Using water thoroughly wash down the treated area removing any powder residue as you go.
- Once the surface is clean & dry you are now ready to finish with a sealer for added protection.
- Fortis Adhesives & Coatings have a wide range of options for sealing and coating the surface from water based **FORTIS ECO COAT 526 GLOSS** to single pack moisture curing **FORTIS COAT 519**. Please discuss the most suitable option for your application with your local Fortis Adhesives & Coatings consultant & follow all application instructions for the given chosen product. More information on all options can be found on the Fortis Adhesives & Coatings website www.fortisadhesives.com.au

SAFETY

Good industrial hygiene should be observed at all times – Appropriate PPE should be worn including impervious gloves & eye wear.

First Aid

Eyes: If sprayed into eyes, flush with water for 15min. Seek medical advice.

Skin: Wash affected area with soap and water.

Inhalation: If mists are inhaled, remove patient to fresh air. Seek medical advice.

Swallowed: Do NOT induce vomiting. Give milk or water to dilute. Seek medical advice.

For further information, refer to the Fortis Material Safety Data Sheet. www.fortisadhesives.com.au

Disclaimer

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