

Application Guide

Concrete Etch & Preparation

Overview:

It is important to understand that Nutech concrete sealers and coating have been developed to provide optimum adhesion to a variety of properly prepared bare concrete surfaces without the need for primers. Nutech concrete sealers and coatings have been developed to penetrate the concrete in first coat application, so it is important to observe all preparation and product dilution recommendations.

Whilst it is permissible to mechanically abrade the surface, this Application Guide provides recommendations in to the correct use and application of Nutech EcoSafe Etching solutions such as **Nu-EcoSafe Etch** and **Nu-EcoSafe Ultra Etch**.

Prior to Commencement of works:

Observe all Occupational Health and Safety (OH&S) precautions.

Refer to the relevant Technical Data Sheets (TDS) and Safety Data Sheets (SDS) for product specific and safety related information.

For further information and support: Nutech Paint 03 9770 3000

www.nutechpaint.com.au

New Concrete Surfaces: IMPORTANT INFORMATION regarding the chosen concrete finishing system;

- 2 pack concrete coatings MINIUM 28 DAYS cure is required prior to treatment.
- Single pack concrete sealers MINIUM 7 DAYS cure is required prior to treatment.

Powdery or soft concrete:

Concrete surfaces exhibiting these issues SHOULD NOT be etched. Contact Nutech Paint for further recommendations.

Mechanically Abraded Concrete:

Etching of this surface is not recommended or required.

Existing, old, exposed bare concrete:

Moss, mould, lichen and other surface contaminants must be thoroughly removed prior to etching and must be treated individually treated prior to etching.

Moss, Mould and lichen: Refer to the recommendation outlined in the Nu-EcoSafe MossRid TDS.

Oil, grease, silicone and other surface contaminants: Refer to the recommendation outlined in this Fact Sheet and Nu-EcoSafe Degreaser TDS.

Previously Painted Concrete Surfaces:

Etching of previously painted concrete surfaces IS NOT recommended. Ideally, old coatings should be completely removed prior to concrete treatment and application. Refer to the **Nu-EcoSafe Strip** range of paint removal systems. For further information and advice, contact Nutech Paint.

Cleaning:

- Remove all loose contaminants including dust, dirt and debris
- Where required, clean residual grease and oil using Nu-EcoSafe Degreaser
- Mix 1 part Nu-EcoSafe Degreaser to 4 parts water
- Apply by plastic watering can or pump spray pack, liberally to the soiled area
- Allow the solution to activate on the surface for a minimum of 2 hours
- High pressure clean with a recommended minimum water pressure of 2000 psi

Etch Mix Ratio In Accordance with Surface Profile:

- Use a plastic watering can to mix and apply the etch as outlined;
- Rough stipple finished concrete:
 - 1 part Nu-EcoSafe Etch or Nu-EcoSafe UltraEtch to 15 parts clean water



Smooth steel trowelled concrete surfaces:

1 part Nu-EcoSafe Etch or Nu-EcoSafe UltraEtch to 10 parts clean water

Hardened or High MPa Concrete:
1 part Nu-EcoSafe Etch or Nu-EcoSafe UltraEtch to 5 parts clean water

Nutech Tip:

When mixing **Nu-EcoSafe Etch** or **Nu-EcoSafe UltraEtch**, always add the etch in the recommended ratio to water.

Applying the etch:

- Use the watering can to evenly wet the entire concrete surface with diluted Nu-EcoSafe Etch or Nu-EcoSafe UltraEtch solution and allow to activate on the surface for 15 minutes
- After 15 minutes, high pressure clean with a recommended minimum water pressure of 2000 psi
- Allow the concrete surface to dry thoroughly

Prior to coating application: It is important to understand if the surface dry and is porous enough to allow sufficient penetration of the sealer or coating. Porosity and moisture content can be performed following the recommended methods;

Test for porosity and moisture content:

Determine Porosity

- Measure 1 cup of fresh water and pour onto the dry surface
- Observe water absorption noting absorption within 30 seconds
- If water pools or is slow to be absorbed, a second stronger solution of etch will be required. (Refer etch mix ratios in section above and follow directions for Hardened or High MPa Concrete)
- Repeat process for determining porosity

Determine moisture content

- The concrete should have less than 5% moisture content prior to sealing/ coating
- A calibrated moisture test meter should be used to assess the percentage of moisture present prior to application

Nutech Tip:

If there is no access to a moisture test meter, tape a plastic sheet onto the concrete surface and leave for 30 minutes. After 30 minutes, lift the plastic sheet. If no moisture or condensation is present under the sheet, the concrete is dry enough to apply the sealer/ coating.



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Disclaimer: The information given in this Application Guide is based on many years' experience and is correct to the best of our knowledge. However, since the use of our products, surface conditions, weather and a number of other factors are completely beyond our control, we can only be responsible for the quality of our product at the time of dispatch. As this information is of a general nature, we cannot assume any responsibility in individual cases. For more information please contact Nutech Paint. The information contained in this Application Guide is subject to amendments in the light of experience and our policy of continuous improvement and product development.