

Technical Note #6- Applying Acid Stains

Prepare concrete ready for application of clear coating. As per Technical note#4. The concrete needs to contain sufficient Calcium for the stain to react. If the concrete has been densified or wash with acid the acid stain may not take in which case we recommend using FORTIS CONCRETE STAIN.

As the acid stain reacts with the chemicals in the concrete it is not possible to obtain a uniform color. The intensity and final color is determined by the amount of acid stain used and the concrete and as such no two floors will be the same.

The stain is best applied by pump spray bottle. A simple 5 or 8 Lt Hills or Gardenia insecticide sprayer will suffice. Do not brush or roll the stain as the brush strokes will be visible as darker concentration of stain.

To test the concrete, apply some water. If the water sits before wetting the surface it may require a grind. If the water is absorbed straight away the concrete will absorb the stain. Always test the concrete to determine the exact reaction and color formed.

Application is generally best done at the rate of 5m² per Lt. Only apply sufficient to cause wetting of the surface. If blending of colors is to be achieved spray sufficient to allow one liquid to flow into the other to soften edges of the color (known as clouds). Further stain can be added once the concrete has dried.

Cleaning is required after the addition of the stain as concrete salts come to the surface. NO neutralization is required if using FORTIS CONCRETE STAIN. Mop the surface with cold water only to take off the excess salt. Allow to dry fully before application of the clear coat. Note: The color may look quite light and dull and it is not until the coating is applied that it is enhanced

Coating the acid stain is the same as coating a concrete floor the FORTIS COAT 519 or FORTIS COAT 526 clear coats are recommended with the solvent based system providing a more intense color. The color

Technical Note #7- Reduce the darkening effect of FORTIS COAT 519 on concrete

To reduce the darkening effect of FORTIS COAT 519 on concrete it is recommended to first seal the concrete with FORTIS PRIME 520C or FORTIS COAT 526

Product

Type

FORTIS COAT519 Gloss (Interior/Exterior)

Moisture curing (single-pack) solvent-based gloss, non-yellowing coating for heavy-duty flooring. Tyre stain-resistant. Normally applied by brush, roller or applicator bar, but can be sprayed in a booth situation.

FORTIS COAT519 Matt (Interior/Exterior)

Similar to above, but used on a final coat only over FORTIS COAT519 Gloss for a matt finish.

FORTIS COAT525 Gloss & Matt (Interior only)

Two-pack (2:1) aliphatic coating designed to be spray applied, for furniture quality finish. Gloss & Matt resin components can be blended intermediate gloss levels.

FORTIS COAT526 Gloss & Matt (Interior only)

A non-yellowing high performance two-pack water-based polyurethane finish coat, with tough elastomeric properties. Applied on FORTIS PRIME520. Apply by brush, roller or applicator bar. Not tyre-stain resistant.

FORTIS PRIME520 (Interior use)

Non-yellowing high performance two-pack water-based polyurethane primer. Fast curing, allowing a second coat after 4 hours. Does not darken the substrate as much as a solvent-based coating such as FORTIS

COAT519. Apply by brush, roller or applicator bar.

**FORTIS
POLYURETHANE ADHESION PROMOTER**

A silicone based adhesion promoter that reacts with clean mineral substrates and provides an effective link to the polyurethane build coats.

FORTIS CCA ACID ETCH

A citric acid based etches cleaner that is very effective in removing grinding residues from prepared substrates. These residue can prevent effective penetration and bonding.

All products should be used in accordance with the current product data sheets as published on our web site, www.fortisadhesives.com

It has been clearly demonstrated that all of these systems perform markedly better if fully bonded to the substrate.

The best-by-test procedure is to diamond grind the surface to the desired degree, and then to vacuum to remove grinding dust.

This should be followed by cleaning with suitably diluted CCA Cleaner well scrubbed in (and not allowed to dry). Actively rinse acid treated surface to completely remove acid residues, and allow the surface to thoroughly dry. Good ventilation is essential for this process.

Priming the cleaned substrate with the Fortis Polyurethane Adhesion Promoter should then be carried out. The carrier solvent and the reaction by-products of this single-pack primer can interfere with the cure of the polyurethane build coats, so the proper coating sequence should not begin until all these solvents have been removed.

Depending on the ventilation and the scale of the job, this may be between 1- 4 hours or even more.

When the silane primer is fully dry and the solvents gone, then the appropriate polyurethane build coats can be applied.