



TECHNICAL BULLETIN – TB118

TILING OVER PREVIOUSLY PAINTED SURFACES

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INTRODUCTION & SCOPE

A common situation when renovating is the temptation to apply ceramic tiles over previously painted surfaces. While some Ardex adhesives will generally adhere to painted surfaces, the installer needs to consider that this is not an ideal substrate for tiles and that it is best to remove it.

Specific exceptions to paints apply to particular primers, and these are noted.

Remember, the tile bond is only as good as the paint's adhesion to the substrate, not the tile adhesive's adhesion to the paint.

THE ISSUES

Paints are designed as decorative finishes and are intended as the final surface. When applied on walls, they are only intended to carry their weight and are not designed to hold the loads imposed by tiles, adhesives, and grout, which may cause the paint to de-bond and the tiles to go with it.

Some paints are incompatible with the typically alkaline nature of tile adhesives and will chemically or physically degrade when tiled over, resulting in de-bonding. Water-based paint (e.g., Acrylics/PVA) can soften when damp, resulting in peeling, and PVA paint can be water-soluble and breaks down when in contact with the wet tile adhesive.

Paints with glossy and hard finishes, such as polyurethanes or resin-rich epoxies, provide very non-porous and inert surfaces. Tile adhesives do not develop a chemical or physical bond with these paints and can de-bond.

Texture-coated surfaces are generally too rough to get a flat surface and may result in irregular tiled surfaces.

Surfaces that are not sound, for example, peeling, flaky, dusty, oily, or dirty, are poor surfaces for tiling on.

RECOMMENDATIONS

Paint type	Suggested preparation
Solvent-based alkyds ('oil-based paints')	Mechanically roughen the full surface with coarse sandpaper (40 grit) to a sound CSP1 profile. If unsound, remove 100% to expose the substrate. Priming with Ardex P9 or Ardex P82 will improve the bond.



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Water-based acrylics and PVA	Mechanically remove 100% to expose the substrate
Calsomine and similar washes	Mechanically remove 100% to expose the substrate.
Polyurethane	Mechanically remove 100% to expose the substrate.
Epoxy Enamels and Finish Coats*	Mechanically roughen the surface 100% to a CSP1 profile, then prime it with Ardex P9 or Ardex P82.
Paving paints and timber finishes	Mechanically remove 100% to expose the substrate
Texture coats	Mechanically remove 100% to expose the substrate
Bituminous coatings	Mechanically remove 100% to expose the substrate
Generally unsound painted surfaces	Mechanically remove the coating 100% to expose the substrate

* The application of two-part epoxy primers (filler-rich rather than resin-rich, as is the case with epoxy enamels) is a requisite practice for metal surfaces before adhesive fixing tiles. The same applies to the application of tile adhesives over water-based epoxy sealers such as ARDEX WPM300 HYDREPOXY (\pm sand seeding). Both these coatings are acceptable surfaces.

There are also two other points to consider –

- ⇒ Premixed adhesives applied over painted surfaces can display extended drying times.
- ⇒ Where the coating is not entirely removed (alkyd paints), this procedure is only recommended on internal surfaces and is not recommended on external surfaces.

CAUTION—Older oil-based paints applied before the mid-70s may contain lead; for example, the ‘red lead primer’ contains lead oxide. It is not recommended that these paints be sanded, and expert advice on removing these coatings should be sought from a paint manufacturer or a specialist consultant in this area.

CONCLUSIONS

Some types of paints can be tiled over; however, for the reasons mentioned already, ARDEX recommends that the best approach is to remove paints from the substrate and apply the tile adhesive to the cleaned surface.

Clean and properly prepared substrates always provide the optimal surface for the application of tile adhesives.



IMPORTANT

This Technical Bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application/installation of the products described. Since each project potentially differs in exposure/condition, specific recommendations may vary from the information contained herein. For recommendations for specific applications/installations, contact your nearest Ardex Australia Office.

DISCLAIMER

The information presented in this Technical Bulletin is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of a product for a particular application. Users are asked to check that the literature in their possession is the latest issue.

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