

TECHNICAL BULLETIN – TB179

SOLVENT GROUT SEALERS AND RUBBERISED TILE ADHESIVES

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INTRODUCTION & SCOPE

The grout market has seen the increasing use of grout sealers over the last few years, ostensibly to increase water resistance, aid cleaning and to increase colour intensity. The types of sealers used are predominantly water based products, but there are also solvent based versions as well. This technical bulletin discusses an effect that has been observed where solvent based sealers have been applied onto grout which overlies rubber modified tile adhesives (using black rubber crumb).

THE ISSUE

Ardex has observed dark discolouration occurring on grout treated with some solvent based grout sealers, where the underlying adhesive used to bond the tiles was a rubber modified flexible adhesive. These observations were made in the field on job sites, and some laboratory examination of applied of sealer onto samples of rubber modified adhesive, have shown that the discolouration appears to arise from solvent attack of the crumb rubber.

The solvents used are predominantly 'aromatics', with the most common one being Xylene (CAS No. 1330-20-7, UN Number 1307). This particular class of solvents is very effective in extracting oils, light fractions and colourants from rubber and then mobilising them. Recycled rubber from car tyres is more subject to leaching than first use synthetic rubber. A major advantage of solvent based sealers is their superior penetration ability into the grout, but this means that the solvents can also affect the underlying adhesive bed, leaching out the staining materials.

SUGGESTIONS

In the first instance examine the availability of water borne sealers, such as ARDEX ACP10 and ARDEX ACP12.

Where a rubber modified adhesive has been used to bond the tiles, and a solvent based grout sealer is to be applied, it would be prudent to install either test areas to check for discolouration, or apply the sealer to a section of the adhesive to check for solvent attack on the adhesive components.

Once the grout has been stained, it cannot be cleaned or decolourised and it is necessary to either replace the grout, or potentially apply an epoxy based grout colourant onto the grout.

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.

REASON FOR REVISION

Periodic review, addition of ACP10 and ACP12.

REVIEW PERIOD

36 months from issue

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