

# TECHNICAL BULLETIN – TB080

## INSTALLATION OF NEW SHEET VINYL OVER EXISTING RESILIENT SHEET OR TILE COVERINGS

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### INTRODUCTION & SCOPE

The commercial resilient sheet and tile flooring industry place many demands on contractors to save time and money by sometimes forgoing sound installation practices and requesting that new resilient coverings be installed over existing resilient sheet or tile coverings.

Whilst this practise in undertaken on a daily basis in the industry, contractors should be aware of the requirements of the relevant Flooring Standards, the flooring manufacturer, and the issues of adhering a non absorbent covering such as sheet vinyl, to an non-absorbent surface such as an existing resilient sheet or tile covering using water base adhesives.

### THE AUSTRALIAN STANDARD

In referring to the current Australian Standard A.S.1884 2012 section 3.2.3 the following advice is provided:

*“Resilient sheet and tile finishes are not considered a suitable surface for adhering resilient Coverings”.*

This is a significant change from the superceded 1985 version of the standard which said in section 2.2.2,

*“Existing resilient sheet and tile floors, which have a smooth surface and are well adhered may be considered to be a suitable surface for laying a new floor covering. Cushioned or loose laid floor coverings are not acceptable surfaces”.*

### THE BRITISH STANDARD

The current British Standard “B.S. 8203 : 2001 Installation of Resilient Floor Coverings” section 3.5 provides these recommendations as follows:

“The practise of laying the floor coverings covered by the British Standard on top of existing sheet and tile floor coverings is not recommended. Existing floor coverings and sufficient residual of adhesive should be removed to enable the subfloor to receive the floor covering. The level of dryness of the base with regard to both rising moisture from the ground and residual moisture should be in accordance with section 3.1”.

### RESILIENT FLOOR COVERING MANUFACTURER’S RECOMMENDATIONS

In addition to the recommendations provided in Flooring Standards, the vinyl flooring manufacturer’s recommendations must also be followed in such installations. To the best our knowledge, the practice of installing sheet vinyl over existing resilient sheet or tile coverings is not widely recommended in Australia, or at best is not a preferred option.

### THE TECHNICAL ISSUES

Where the installer decides they wish to proceed with an installation which while feasible runs counter to the recommendations, they need to consider the following things.

- a) The old floor surfaces must be cleaned thoroughly to remove any polishes, varnishes, oils, or soaps etc., and then lightly sanded to create a slightly rough surface to assist the adhesive bond. Old sealers on existing vinyl can interfere with the performance of any levelling material or possibly even the adhesive bond of the new glue.
- b) Glass reinforced backed PVC sheet must not be adhered to this type of surface, but because the acrylic adhesives required for these products rely on at least one of the bonding surfaces to be absorbent in order to cure properly, such material should be loose laid or perimeter fixed instead.
- c) *Adequate precautions should be taken when sanding existing resilient floor coverings as they may contain asbestos fibres. Inhalation of asbestos dust is detrimental to health.*
- d) Care must be taken with the selection of adhesives. If water based adhesives are used over existing resilient sheet or tile floors the adhesive may not dry out as moisture can be entrapped. water based adhesives now almost exclusively used in the flooring industry, require one absorbent surface for the moisture to migrate into so they can dry out. Consequently their use in this type of installation may result in the high risk of lifting or bubbling of the new sheet vinyl flooring;



- e) Placing of vinyl over existing vinyl carries the risk of indentation and other surface damage. The old covering does not have the hardness or rigidity of concrete and so imposed loads such as chair feet, table feet, heavy trolleys or even high heeled shoes can produce unacceptable indentations.
- f) VCT type tiles are normally adhered with pressure sensitive adhesive which can make for a less secure base for new vinyl and also where a coating of 'smoothing material' applied as described below, can result in cracking along the tile edges. Application over VCT should be considered carefully before proceeding.

#### ONE SOLUTION

ARDEX Australia does have a system for the preparation of existing embossed vinyl coverings with the procedures detailed in the FEATHER FINISH technical data sheet section titled "EMBOSSING FILLER". ***This system is suitable for residential applications only and Ardex does not recommend it for commercial or high traffic situations due to the high risk of indentation.***

Since this application of a underlayment at a thickness less than 1mm, and the mixing of FEATHER FINISH (1.5-2 parts) with ARDEX P82 ULTRAPRIME (1 part), *the system will not provide an absorbent surface for water based adhesives to dry out into.*

As a result this system requires special selection of a suitable adhesive, double dropping or loose laying/perimeter bonding of the new vinyl flooring. Alternatively the embossing filler can be over coated with neat Feather Finish to improve the porosity.

Installers need to examine the application carefully to satisfy themselves that vinyl once installed will be able to perform to the customers' expectations.

The other consideration is any pre-existing moisture conditions which may not be evident, for example:

1. Existing vinyl tiles, especially tiles manufactured with asbestos, may wick the moisture through the tile or allow moisture evaporation through the tile joint.
2. Existing sheet vinyl coverings with Hydracord backing may also wick moisture away through the porous backing.

Installing a new sheet vinyl over an existing vinyl covering without checking for any pre-existing moisture problems may result in bubbling/de-laminations of the new vinyl and expensive replacement costs.

#### SUMMARY

In summary the recommended procedures in line with flooring standards, and the recommendations of the flooring manufacturer would be to

- remove the existing vinyl flooring
- remove adhesive residue
- proceed with checking the subfloor for any pre-existing moisture condition
- apply the appropriate level of floor preparation (grinding, levelling, patching, skim-coating, etc) to achieve a smooth flat surface to meet the customers expectations.

Ardex recommends that where there any doubts as to the suitability of the existing vinyl installation in a domestic situation, it should be removed. In commercial applications the old vinyl must be removed prior to new underlayment coverings being put down.

#### **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**

Addition of clause f) under the Technical Issues section

#### **REVIEW PERIOD**

36 months from issue

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