

TECHNICAL BULLETIN – TB017

LEVELLING OVER CERAMIC TILES & TERRAZZO

Date, 25th November 2020

INTRODUCTION & SCOPE

Successful topping systems over ceramic tiles or terrazzo rely on the integrity and bond of the original tiles to the substrate. Any loose or drummy tiles must be removed, the surface cleaned, and then filled with a levelling cement plus aggregate mixture, or ARDEX A45 repair mortar.

When there is a moisture problem, typically rising damp due to problems with the under slab membrane, or moisture travelling sideways through the slab, the tile system may become unstable when moisture is trapped under an impervious floor covering such as sheet vinyl. This needs to be considered as it can cause the floor covering to de-bond or blister. For the same reason, ARDEX does not offer a recommendation for a moisture barrier system as part of this application.

Certain types of tiles such as slates are problematic as they are intrinsically weak due to their laminated structure, and some types contain graphite which reduces topping adhesion. Slates also commonly have sealers applied.

The success of this system relies on the tiles being perfectly clean and free of all grease, oil, sealers, wax etc., and cleaned back to a squeaky clean surface. Always seek professional advice to obtain a suitable commercial grade detergent or degreaser applied by means of an automatic scrubbing machine that will hold all dirt, soil, grease etc., in suspension until removal. It is essential to avoid dirt, grease, and oil migration via foot traffic from soiled areas back onto cleaned areas.

It may also be necessary to lightly mechanically prepare the tile face surface to obtain a more porous and clean surface. *Where there are any doubts about either the types of tiles or their integrity, it is best to remove the tiles and mechanically prepare the surface.*

SURFACE PREPARATION

1. Ensure ceramic tiles are firmly bonded.
2. Remove all grease, oil, polish and any other contaminant by the use of film-less commercial grade detergents/degreasers, applied by means of an automatic scrubbing machine. Flush away all residue with copious amounts of clean water.
3. Allow to dry completely.
4. Prepare the surface of the ceramic tile/terrazzo to provide a mechanical key.

OPTION 1 - Residential

Grind the tile surface using diamond shaving/grinding equipment or sand using a 40 grit carborundum paper.

OPTION 2 - Commercial

Profile or remove the glazing by captive shot-blasting.

5. Vacuum to remove all dust.
6. Prime ceramic tile/terrazzo with ARDEX P82 Ultraprime or ARDEX P9. If using ARDEX P9 the primer is diluted with water 1:1. Make sure that excess primer does not accumulate in the tile grout lines.

Note: ARDEX Feather Finish does not require priming but can be applied directly to the prepared tile surface.

7. Allow primer to dry.
8. ARDEX K55, ARDEX K15M, ARDEX K12N, ARDEX K10R ARDEX A30 or ARDEX ARDITEX NA are mixed and applied directly to the primed and prepared surface.

Always install a test area to determine the suitability of the product for the intended use.

ARDEX does not recommend application of smoothing cements over tiled surfaces where the smoothing cement is to be used as a 'feature floor' or wear surface. This results in a patchwork or chequerboard effect due to surface porosity variations.

Ardex has no recommendations for levelling over tiles in external applications.

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 or Ardex New Zealand 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 – ISSUER

SW -INCLUSION OF P9 PRIMER AND OTHER CHANGES

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