TECHNICAL BULLETIN – TB141

APPLICATION OF SMOOTHING CEMENTS OR SCREEDS OVER WET SEAL POLYESTER-FIBREGLASS-EPOXY TOPCOAT WATERPROOFING SYSTEM

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INTRODUCTION & SCOPE

The Wet Seal hybrid polyester-fibreglass base and epoxy topcoat water proofing system is commonly applied to concrete substrates to provide a waterproof membrane for wet areas.

The normal order of installation sees the sub-floor being smoothed or falls created prior to membrane application, however in some circumstances the opposite occurs and a smoothing cement is applied to the membrane.

This technical bulletin describes the procedure for applying Ardex LQ92 and Arditex smoothing cements, or a sand-cement screed over this Wet Seal System.

QUALIFICATIONS

This procedure using LQ92+Abalastic applies only to masonry sub-floors such as concrete, and Compressed Fibre-Cement Sheeting.

For small waterproofed 'wet area' particleboard or plywood timber subfloors, Arditex can be used provided the subfloor is solid and fixed to provide a rigid base, with deflections less than $1/360^{th}$ of the span distance of the floor joints. Where large format tiles are to be installed the deflection should be less than $1/500^{th}$ of the span distance.

In larger floor areas where there are unfilled sheet joints or joints are not installed with bond breakers, should the flooring flex, then cracking can appear in Arditex over these joints and this can 'telegraph' through grout lines.

Arditex must not be placed directly onto un-waterproofed timber substrate for wet areas, and tongue groove type strip timber flooring is not suitable for this application.

This procedure *does not* apply to other Ardex Smoothing Cements such as A55, K80, K15, K10, K11, K301, A45, A46 or Feather Finish.

This procedure does not apply to Wet Seal flexible membranes or polyurethanes. It only applies to the fibreglass base coated with Wet Seal Topcoat 300.

PROCEDURE

1) The surface of the Topcoat 300 is cleaned free of any loose material or dust.
2) A fresh coating of Ardex WPM300 Hydrepoxy (H300) or Ardex Moisture Barrier (AMB) is mixed as per the product instructions and applied to existing surface. The coverage rate required is $5m^2$/litre or a *wet* film thickness of 200µm (0.2mm). The coat is allowed to tack-off for approximately 30 minutes, but no longer than 60 minutes. This coat acts as a bonding bridge for the subsequent cementitious material.
3) To the slightly tacky surface of the newly applied H300/AMB, the following screeds-smoothing cements can be applied –

- A standard sand-cement screed mixed in the ratio of 3 parts washed sand to 1 part Portland cement. The performance of the screed can be improved with the addition of Ardex Abacrete to the gauge water as per the product datasheet.
- Ardex LQ92 smoothing cement + Ardex Abalastic additive, mixed in the ratio of 2.5 litres of Abalastic diluted with 2.5 litres of clean drinkable water per 20kg bag of LQ92.
- Ardex Arditex mixed in accordance with the product datasheet.

4) Where falls are being created to a maximum of 30mm, or the build thickness exceeds approximately 12mm to maximums of 25-30mm the following 'bulk fill' mix designs are recommended.
    - Arditex can be mixed with an equal weight of 2-5mm or 3-8mm washed dry aggregate.
    - LQ92 can be mixed with an equal weight of 2-5mm washed dry aggregate, or for creating falls, approximately 10kg of washed dried sand 0.3mm in diameter per 20kg of LQ92 can be added.
    - If the resulting textured surface requires smoothing, then neat Arditex or LQ92+Abalastic 2-3mm thick can be applied to the cured bulk fill. Where Arditex is used, the surface is primed with Ardex P51 primer diluted to 2:1 with water. Where LQ92 is used the primer is either Ardex Multiprime, or Ardex P51 diluted as for Arditex.
5) Where a smoothing cement has been applied, drying time to tiling is around 4-6 hours.

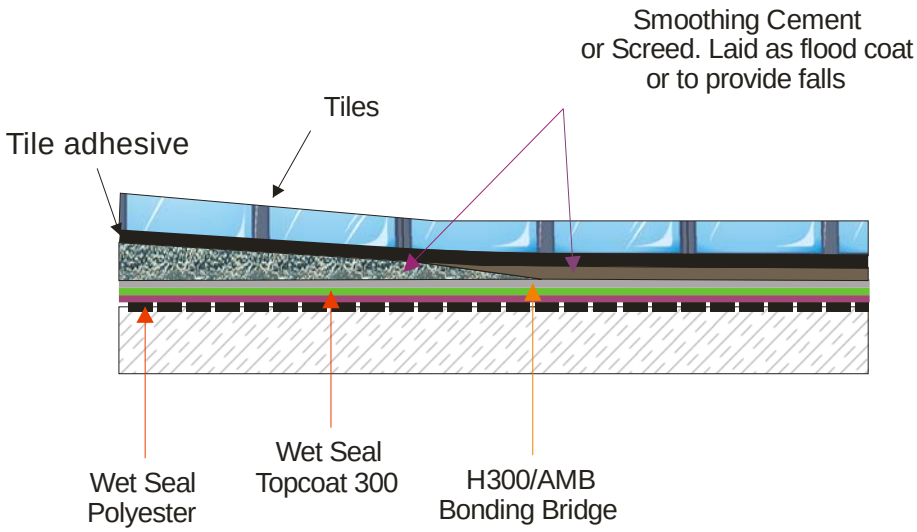
PRECAUTION

The bonding bridge of H300/AMB should not be left for longer than 60 minutes after application, as this reduces the bond effectiveness of the screed/smoothing coat. Therefore areas should not be coated, that cannot be covered with a screed or smoothing cement within the 60 minute period.

NOTES

Where LQ92 or sand:cement are being used it is recommended that WPM300 is used as the bonding bridge.

Where Arditex is being used it is recommended that Ardex Moisture Barrier is used as the bonding bridge.



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 Ofiice.

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 THIS ISSUE

Revisions have made to allow the use of Arditex over timber subfloors that have been waterproofed with Wet Seal System.

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