

TECHNICAL BULLETIN – TB139

SEALING GREASE AND OIL CONTAMINATED SURFACES

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INTRODUCTION & SCOPE

Building restoration is commonplace today and frequently requires the refurbishment of grease—and oil-contaminated surfaces, such as vehicle workshops, for other uses requiring more architectural floor finishes.

This always presents a problem since it is impossible to fully remove all grease and oil contaminants that have been ingrained in the concrete matrix over many years of service.

Combining appropriate surface preparation and the timely use of ARDEX HydrEpoxy can allow these surfaces to be reinstated to accommodate various architectural finishes.

This bulletin outlines the procedure for preparing a grease and oil-contaminated surface in readiness to install most other adhesives, coatings, and surface finishes.

CLEANING THE SURFACE

All heavy surface grease and oil contaminants are first removed using industrial degreasers, mops and rinse water.

The contaminated surfaces are then high-pressure detergent water blasted using as high a nozzle pressure as is possible within the confines of the site—normally 20 MPa or 3,000 psi is ideal. Surfaces are then high-pressure rinsed using the same nozzle pressure to remove all traces of detergent.

This cleaning aims to remove all surface and immediate subsurface grease and oil contaminants and/or force these contaminants into the concrete matrix. This allows a structural bonding impermeable coating membrane to be applied and achieves a sound bond to the base substrate.

As the surface dries, the grease and oil that have been forced back into the concrete matrix slowly migrate back to the surface, recontaminating the surface and subsurface. Therefore, it is critical that the structural bonding membrane be applied as soon as possible following the high-pressure rinsing.

INSTALLATION OF STRUCTURAL BONDING MEMBRANE SYSTEM

As soon as the high-pressure water rinsing is completed, remove all surface water using a rubber squeegee or similar device.

Immediately apply one coat of ARDEX WPM300 thinned with 50% of water at a coverage rate of six (6) square metres per litre by brush or roller application techniques.

As soon as the thinned ARDEX WPM300 HydrEpoxy has been applied and in any event before it dries, apply one coat of undiluted ARDEX WPM300 HydrEpoxy at a coverage rate not exceeding three (3) square metres per litre.

Allow overnight cure before coating with standard building or paving paints or suitable water-based tile adhesives and at least four (4) days before installing most other coatings. Allow the membrane system to cure for seven (7) days before overcoating with coatings containing aggressive solvents, and check with ARDEX Technical Services before proceeding.





If bonding impermeable floor coverings such as vinyl sheets, apply a 2-3mm layer of a suitable ARDEX smoothing cement, such as ARDEX K15, to all surfaces before installing the impermeable layer. Refer to Technical Bulletins TB006 or TB170 for more details.

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-ISSUER

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DOCUMENT REVIEW REQUIRED

36 months or whenever third-party suppliers change their recommendations.

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