

TECHNICAL BULLETIN – TB164

INCONTINENCE BARRIERS AND ADHESIVE FOR CONCRETE FLOORS IN HEALTH CARE INSTITUTIONS

Date, 15 July 2014

INTRODUCTION & SCOPE

A common requirement in aged care facilities is a cleaning and urine resistance sealer for concrete floors under carpet and similar pervious floor coverings. The sealer needs to be low maintenance and be compatible with direct bond and pressure sensitive carpet adhesives.

More recently the same requirement has been requested for resilient flooring which is more complex system, but can also be delivered.

Ardex can offer a number of solutions to this situation based around a penetrative sealer and the other a film forming two part epoxy which can also act as a moisture barrier.

PENETRATIVE SEALER

A simple easy to apply system is based on the Ardex sealer WPM163 which is a polyurethane-acrylic water based product. This product dries clear and provides good resistance to the penetration of liquids.

Application is by lamb's wool applicator or nap roller onto the floor. Typically three to five thin coats applied at 15m²/litre are rolled on thinly to provide good sealing and penetration. Each coat must be allowed to dry before the next is applied to prevent the build up of films of the sealer on the concrete surface.

This product can also be applied to the surface of smoothing cements which may have been applied to smooth and flatten the concrete floor.

FILM FORMING SEALER

The system based on Ardex WPM300 Hydrepoxy is another option for sealing the floor to prevent penetration of spilled liquids. This product is not penetrative but forms a pale grey coating on the subfloor surface.

For textile floor coverings, one coat applied at 3m²/litre (0.15mm dry film thickness) will provide a basic seal for the substrate.

Two coats of WPM300 with a final dry film thickness of 0.3mm is a moisture barrier and provides resistance to rising damp or subfloor moisture as well as sealing the floor surface from above.

When carpet is to be laid direct onto the WPM300 surface care must be taken not to cut or damage the coating during carpet laying operations.

However, it should be noted that when water based resilient flooring adhesives are applied over non-porous surfaces such as WPM300, the adhesives are likely to display slow drying, which can create issues with sheet vinyl flooring such as blistering. Also the surface finish of the WPM300 is not suitable for direct installation of resilient or linoleum type flooring so the application of a smoothing cement is required.

SURFACE SMOOTHING

Where the subfloor requires a combination of moisture suppression and smoothing, the Ardex Moisture Barrier system as described in Ardex Technical Bulletin TB006 or TB192 shall be installed. Where the concrete surface only needs smoothing an Ardex smoothing cement which can be applied 2-3mm thick (e.g. Ardex K15, K11 or K12).



In both cases the smoothing cement shall be sealed with Ardex WPM163 at a rate of 15m²/litre with up to five coats.

ADHESIVES FOR FLOORING

Where the adhesives are to be applied over the WPM300 they must be compatible with a water based amide epoxy coating, and where used with the sealed smoothing cement, be compatible with a water based polyurethane acrylic – WPM163.

The recommended Ardex flooring adhesives are;

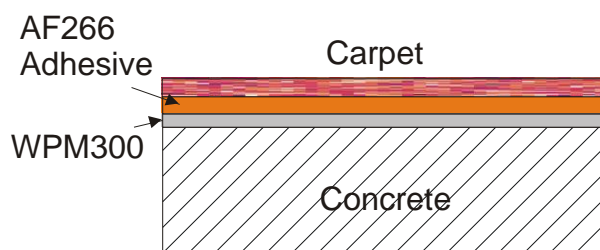
Carpet and textile floor coverings – Ardex AF266 carpet adhesive

Rubber flooring and heavy duty vinyl – Ardex AF545 epoxy adhesive

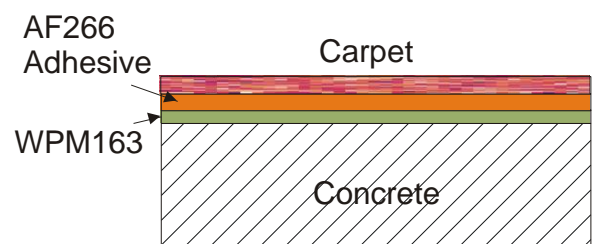
Vinyl planks – Ardex AF142 fast grab adhesive

VCT flooring and vinyl backed carpet tiles – Ardex AF143 pressure sensitive adhesive

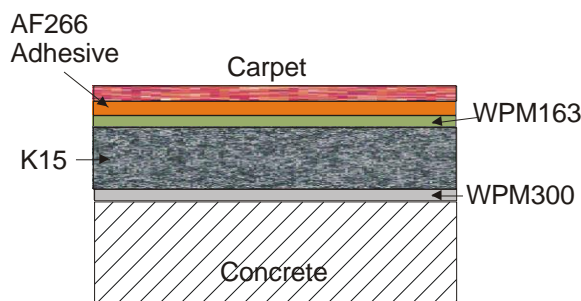
Welded sheet vinyl flooring – Ardex AF164 vinyl adhesive.



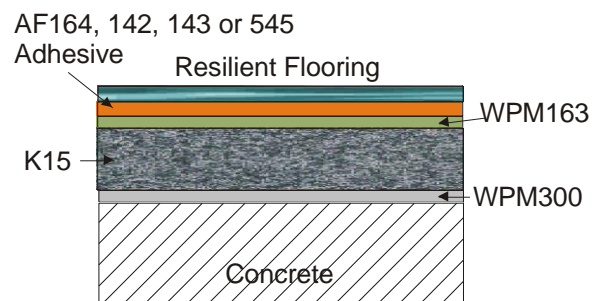
Case 1 – Use of WPM300 as incontinence barrier with carpet floor coverings (no smoothing cements)



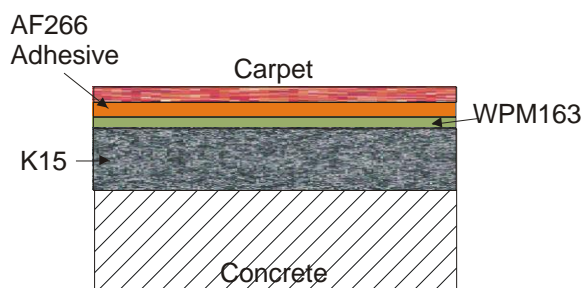
Case 2 – Use of WPM163 as incontinence barrier with carpet floor coverings (no smoothing cements)



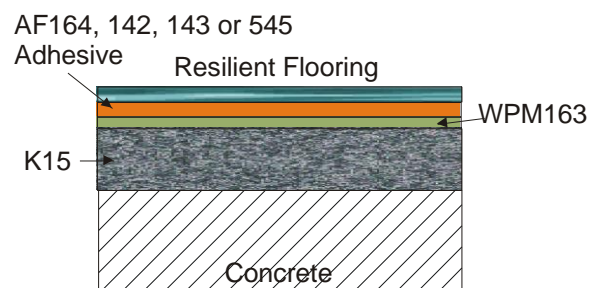
Case 3 – Use of WPM300 as moisture barrier and WPM163 as incontinence sealer with smoothing cement and carpet.



Case 4 - Use of WPM300 as moisture barrier and WPM163 as incontinence sealer with smoothing cement and resilient flooring.



Case 5 – Use of WPM163 as incontinence sealer with smoothing cement and carpet.



Case 6 - Use of WPM163 as incontinence sealer with smoothing cement and resilient flooring.

Depending on the 'show through' properties of the rubber flooring, it may be possible to apply Ardex AF545 epoxy adhesive direct to the WPM300 or WPM163 on the concrete base surface.

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

24 month review

REVIEW PERIOD

24 months from date of issue

NSW 02 9851 9100, **QLD** 07 3817 6000, **VIC** 03 8339 3100, **SA/NT** 08 8406 2500, **WA** 08 9256 8600

New Zealand (Christchurch) 64 3384 3029

Web: <http://www.ardex.com> email: technicalservices@ardexaustralia.com

