



## TECHNICAL BULLETIN – TB170

# EPOXY PRIMING SYSTEMS FOR ARDEX LEVELLING COMPOUNDS

Date: 31<sup>st</sup> January 2025

### INTRODUCTION & SCOPE

A priming system based on epoxy resins can be required for use with levelling compounds in place of ARDEX P51 primer. The reasons are:

- Where a moisture barrier is required on an internal floor
- Where the subfloor requires a degree of consolidation, or the floor will be subjected to heavy-duty applications.
- These levelling compounds are not suitable for use with ARDEX P82 primer

This bulletin describes the recommended epoxy primer systems available in Australia and New Zealand for concrete subfloors.

### QUALIFICATIONS

The following recommendations DO NOT apply to sand-cement screeds as these are considered unacceptable substrates. While it is possible to apply these leveling compounds over tiled floors, it is not a recommended practice, and removal of the tiles is the preferred option.

### MOISTURE BARRIER SYSTEMS K1, K2, K80 & K301 (DAMP INTERNAL FLOORS)

If the subfloor is defined as damp as per AS1884, that is, if the measured moisture content as the subfloor relative humidity exceeds 75% when measured by ASTM F2170 (or 70% when measured to ASTM F2420), a moisture barrier is required.

The following systems are recommended for the applications described. Extra information for system detailing can be obtained from ARDEX Technical Bulletin TB006.

System Type	Preparation	Products	Steps
Damp floor Standard ARDEX Moisture Barrier System. (This is a modification of TB006)	Preferred mechanical preparation is shot blasting	ARDEX WPM300 HydrEpoxy	<ol style="list-style-type: none"> <li>1) Apply one coat WPM300 by roller at 3m<sup>2</sup>/litre. Cure for two hours</li> <li>2) Apply a second coat at 3m<sup>2</sup>/litre. While still wet broadcast 0.5mm clean dry sand over surface at ~700g/m<sup>2</sup>.</li> <li>3) Cure overnight and broom and vacuum excess sand off. Apply smoothing cement.</li> </ol>



## DRY INTERNAL SUBFLOORS FOR ARDEX K80 AND ARDEX K301 OR EXTERNAL SUBFLOORS FOR ARDEX K301 ONLY

The primers are used where the floor requires a degree of hardening or will be subjected to high loads. The concrete's surface must be sound overall, and it is not satisfactory to assume that the application of an epoxy coating will harden a powdery or weak surface.

System Type	Preparation	Products	Steps
Basic system	Preferred mechanical preparation is shot blasting	ARDEX WPM300 HydrEpoxy	<ol style="list-style-type: none"> <li>1) Apply one coat WPM300 by roller at 3m<sup>2</sup>/litre and allow to cure for 2 hrs.</li> <li>2) Apply a second coat of WPM300 and while still wet broadcast 0.5mm clean dry sand over surface at ~700g/m<sup>2</sup>.</li> <li>3) Cure overnight and broom and vacuum excess sand off. Apply smoothing cement.</li> </ol>
Heavy duty applications	Preferred mechanical preparation is shot blasting	ARDEX EG800	<ol style="list-style-type: none"> <li>1) Apply one coat of mixed epoxy by roller at 300gm/m<sup>2</sup>. While the epoxy is still wet, broadcast 0.5mm clean dry sand over the surface at ~700g/m<sup>2</sup>.</li> <li>2) Cure overnight and broom and vacuum excess sand off. Apply levelling compound.</li> </ol> <p style="text-align: center;"><b>WARNING</b></p> <p><b>Failure to use broadcast sand over these epoxies will result in the levelling compound de-bonding.</b></p>

Only the liquid resin components of ARDEX EG800F are used.

The sand used for broadcasting is ideally ARDEX Primer Sand, which is dry, clean, and has a unique shape that promotes adhesion and packing.

### CONCLUSION

The application of liquid epoxies as primers provides a moisture barrier and a more robust priming system required for the wear surface products ARDEX K80, and ARDEX K301.

The described systems will generally work with all ARDEX levelling compounds; however, installers should contact ARDEX Technical Services for confirmation that the application is suitable for their proposed system or site.



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**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**

Change of slogan and address

**DOCUMENT REVIEW REQUIRED**

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

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