



SRO935 Levelling to External Pedestrian Wear Surfaces

SCOPE

This recommendation is regarding the levelling of concrete footpaths, courtyards and garage floors subject to foot traffic and light vehicle traffic with an exposed wear surface.

PREPARATION

The concrete to be levelled must be structurally sound and free of cracks. Any cracking is to be repaired using the ARDEX systems described in **ARDEX Technical Bulletin TB206**. These include the **ARDEX RA** series of injection products as well as repair mortars (e.g. [ARDEX A 46](#) or [ARDEX B R 345](#)) for filling wide cracks and/or holes in the concrete.

Note: Ensure the repair system selected is suitable for external applications where it may be exposed to occasional moisture.

All new concrete shall have completed the minimum 4 week curing & drying period to allow the development of any micro-cracks as any cracking will continue through any applied levelling cement. If the recommended drying time is not available, the concrete must have cured/dried for a minimum of 7 days and have achieved at least 20MPa compressive strength

All concrete (new & aged) shall be mechanically prepared (by grinding, shot-blasting, scabbling or scarifying) to remove all contaminants such as weak surface materials, adhesive residues, waxy/oily residues, debris from other trades, paint over-spray and/or laitance to achieve a clean open pored surface comparable to Concrete Surface Profile 3 (CSP3) which has a fine textured surface. Vacuum to remove all dust prior to proceeding.

PRIMING

The prepared concrete is to be primed with the [ARDEX P51](#) water based primer where the concrete is not subject to rising damp or ponding water such as on a suspended substrate.

Where the prepared concrete may be subject to rising damp (e.g. slab on ground) or ponding of water, the preferred priming system is to apply 2 coats of [ARDEX WPM 300 Hydroepoxy](#) at not more than 3m² per litre per coat and allowing at least 4 hours between coats. As the top coat is applied, broadcast **ARDEX Primer Sand** to achieve an evenly distributed coverage over at least 90% of the wet surface. Allow to dry overnight and brush or vacuum to remove any loose sand prior to application of the [ARDEX K301](#).



APPLICATION

The recommended levelling cement is [ARDEX K 301](#) which can be applied from 2 to 20mm normally, or from 10 to 30mm when mixed with an equivalent weight of 2-5mm aggregate. The added aggregate will allow the [ARDEX K 301](#) to be used for creating fall to prevent water ponding and to create ramping if required.

The [ARDEX K 301](#) is to be mixed using ARDEX Mixing Paddles attached to a heavy duty electric drill. Concrete mixers and hand mixers are not suitable for mixing this product.

The mix ratio is 20kg of [ARDEX K 301](#) with 4 litres of water. The powder is added to the prepared quantity of water in a 20 Litre pail. Mix for 2-3 minutes to a smooth lump free consistency and apply to the prepared and primed surfaces to achieve the thickness required.

The [ARDEX K 301](#) will be walkable after 3-4 hours drying time @ 20°C although lower temperatures will slow drying.

Once the [ARDEX K 301](#) has fully dried, a penetrating sealer, [ARDEX ACP 10](#) may be applied as a dust suppressant, grease and oil resistant sealer. [ARDEX ACP 10](#) is applied using a low pressure hand sprayer and normally 2-4 light coats are sufficient. The sealer must not be applied so that a film appears on the surface as it is designed as a penetrating sealer.

Disclaimer:

The recommendation selected is based upon questions answered on the ARDEX Australia website. This recommendation is designed as a general application for your described situation and should not be considered site specific documentation for general distribution. Always consult the latest relevant ARDEX Technical Bulletins and information on the product packaging and/or product data sheets (available on the ARDEX Website). Australian and other relevant standards should be followed during installation. If you have any further questions or would like further clarification please contact the ARDEX Technical Services Hotline on 1800 224 070 (9am to 5pm Monday to Friday).