



ARDEX R 90 P

Heavy Duty Polyurethane Screed

Easy application with rake & trowel

Extremely durable and resistant to abrasion

Low maintenance costs

Facilitates rapid application

Resistant to many chemicals and liquids

Suitable for use in food & drink production environments

Easy to clean and maintain high standards of hygiene

Seamless and continuous surface

Resistant to thermal shock

Apply from 4mm to 9mm thickness

Available in a range of colours

ARDEX Australia Pty Ltd
20 Powers Road
Seven Hills NSW 2147
Phone: 1300 788 780
technicalservices@ardexaustralia.com
www.ardexaustralia.com

ARDEX New Zealand Ltd
15 Alfred Street
Onehunga, Auckland 1061
Phone: 0800 227 339
info@ardexnz.com
www.ardex.co.nz

ARDEX R 90 P

Heavy Duty Polyurethane Screed

DESCRIPTION

ARDEX R 90 P is a specialist applied polyurethane resin floor finish combining outstanding high chemical and abrasive resistance with an aesthetic finish. Ideally suited to aggressive areas where a seamless, joint-free finish is required and high hygiene standards are essential. Factories and general heavy duty plant and traffic areas are just some of the environments that can benefit from this tough, chemical-resistant and anti-slip system.

ARDEX 90 P has been formulated to give an easily worked system that can be applied quickly using a pin rake, only requiring finishing with a trowel to give the required finish.

SURFACE PREPARATION

Ensure that the substrate is slightly rough, dry, solid and free of laitance, grease, dust or other loose particles such as paint, release agents, limescale, mortar, plaster, adhesive residues, etc., which may impair adhesion. Remove all traces of varnish, waxes, fats, oils and similar contaminants prior to mechanical preparation. Prepare substrate with specialist machinery; grinding, milling or blasting machine depending on the state of the substrate. Vacuum the substrate.

Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (for example expansion joints). New concrete slabs must be allowed to cure for at least 14 days. Substrate tensile strength must be greater than 15 MPa.

To ensure maximum bond, grooves must be cut into the perimeter of the sub-floor, typically 8mm deep by 8mm wide. These should be inset approximately 100mm from and running parallel with the walls and adjacent to doorways etc., including any finishing edges and day joints. The grooves must have clean, square edges and the product laid into the full depth of the groove forming a perimeter anchorage. Grooves should surround areas not exceeding 20m².

Steel decking must be clean, sound and properly supported to prevent flexing. Deck plates of less than 4mm thick are not recommended. Surfaces should be shot blasted to SA2.5 and primed using ARDEX R 5 E Epoxy Resin & Primer.

PRIMING

All appropriate substrates to receive ARDEX R 90 P must first be primed with ARDEX R 5 E. One or more coats of primer may be required depending upon the condition and porosity of the concrete substrate. The final coat of ARDEX R 5 E must be seeded with a fine (1-1.5mm) aggregate to provide a mechanical key.

MIXING

Part A & Part B Resin Components of ARDEX R 90 P must first be mixed together for 1 minute, using forced action, in a suitably sized mixing vessel. The contents of Part C, the powder component and pigment sachet should then be introduced into the mixed resin and mixed together for a further 2 minutes to create one homogeneous mix. One or more packs may be mixed at the same time in order to maintain a quick rate of installation.

APPLICATION

The mixed material should be applied to the prepared and primed substrate without delay using a pin rake to achieve the desired thickness and closed with a steel trowel.

NOTE: If a smoother texture is required, as soon as the product has been laid and as work progresses, the surface should be gently rolled with a short piled roller in order to provide an even surface appearance. Do not over roll the surface, as this will reduce the texture of the surface finish. Do not re-roll later.

The work area should be protected during the installation process and during the initial curing time to ensure that no airborne debris can contaminate the surface of the wet resin as this will lead to unwanted blemishes in the hardened, cured surface.

All movement joints in the sub-floor must be carried through the topping and properly sealed. Construction joints and cracks not subject to movement may be overlaid but should the floor move in anyway, these defects will reflect through the system. Isolation joints will need to be allowed for in areas where high thermal movement is anticipated, e.g. around ovens and freezers.

LIMITATIONS

Do not use ARDEX R 90 P where ambient and/or substrate temperatures are less than 5°C or where ambient humidity exceeds 90%. Floors should have an RH (relative humidity) of 75% or less. If ARDEX R 90 P is applied to substrates with a strength lower than 15 MPa, long term performance may be impaired.

If pot life is exceeded the mixed product loses characteristics and should be disposed of.

CLEAN UP

Clean tools and equipment immediately after use. Hardened product will need to be removed mechanically. See product safety data sheet for further information.

STORAGE

ARDEX R 90 P can be stored for up to 6 months in its original unopened packaging. The product should be stored in a dry place between 5°C and 30°C. Keep away from frost, direct sunlight and sources of heat.

COVERAGE

Approximately 2.1m² per kit when applied at a 5mm thickness.

PACKAGING

ARDEX R 90 P is available in kits of 28.9kg containing three parts.

TECHNICAL DATA

Characteristics	Result
Working time @ 20°C	30 minutes
Light traffic	24 hours
Full traffic	48 hours
Full chemical cure	7 days
Bond strength	>1.5 MPa
Compressive strength	52 MPa
Flexural strength	14 MPa
Tensile strength	6 MPa

PRECAUTIONS

During mixing and application the following precautions should be observed: ensure adequate ventilation and avoid contact of the material with the eyes, nasal passages, mouth and unprotected skin. Avoid contact with the hands by wearing protective gloves and by using, if necessary, a suitable barrier cream.

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice and after contact with the skin wash immediately with plenty of soap and water (do not use solvents).

Prolonged contact with the skin should be avoided, especially where the user has an allergic reaction to resin-based materials. Always wear gloves and eye/face protection as necessary. Observe personal hygiene, particularly washing the hands after work has been completed or at any interruption whilst work is in progress. Care should be taken when removing gloves to avoid contaminating the insides. In case of accidents seek medical advice.

Additional information is in the Safety Data Sheet at www.ardex.co.nz

COLOURS

Indication only.



Green



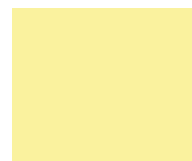
Grey



Orange



Red



Cream



Yellow

Toll Free Technical Services:
1800 224 070 (Australia)
0800 227 339 (New Zealand)

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable New Zealand & Australian Standards, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

© ARDEX New Zealand Ltd 2019.

All aforementioned products are the trademarks of ARDEX New Zealand Ltd, its licensors and affiliates. This data sheet was issued in November 2019 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardex.co.nz for the latest technical data from ARDEX New Zealand Ltd.