



ARDEX WPM 405

High Performance SBR Polymer Additive

High Performance Polymer Additive for Cement and Concrete Mixes

High Strength – Ideal for Patching, can be feathered out with minimal cracks

Can be used as a temporary waterproofing sealer within exposed environments

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ARDEX WPM 405

High Performance SBR Polymer Additive

PRODUCT DESCRIPTION

ARDEX WPM 405 is an SBR, multipurpose, concentrated, liquid polymer additive which can greatly improve the bond strength, flexibility and workability of sand/cement mortars and screeds. Being water resistant, ARDEX WPM 405 mixed with cement can also be used as a temporary waterproofing sealer.

FEATURES

- Reduces the cement water ratio, which can result in a stronger mortar/screed.
- Can be used as a temporary waterproofing sealer when mixed with cement.
- Can be used in surface preparation (patching requirement) as it can be feathered out with minimal cracks.

USES

- As a bonding bridge for new to old concrete.
- As an admix for sand/cement mixes especially in surface repair mortars, covings, renders, and screeds.
- As a temporary waterproofing sealer in areas such as rooftops, prior to new waterproofing membrane system being installed.

SURFACE PREPARATION

By way of mechanical methods and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to installation. Prepare surface to leave sound, clean, dry, free from loose or other materials which may cause potential adhesion issues.

New concrete must be a minimum of 28 days old. Old or new concrete must be clean and profiled or textured. Prepare the surface by rough-grinding, scarifying or by using other equipment that will give a roughened profile. A roughened surface is imperative for good adhesion.

New brickwork walls, sand/cement render or screeds should be left for at least 7 days before application of the ARDEX WPM 405 temporary waterproofing or slurry coat.

MIXING RATIO

TEMPORARY WATERPROOFING -

1 part ARDEX WPM 405 : 2 parts cement (by volume).

SLURRY COAT -

1 part ARDEX WPM 405 : 1 part clean water : 4 parts cement (by volume).

ADMIX FOR RENDER/SCREED/COVING -

Mix 1 Part ARDEX WPM 405 with 4 parts clean water and use as the gauging mix (mixing water) with a 3:1 or 4:1 sand/cement mix.

APPLICATION

TEMPORARY WATERPROOFING

Mix ARDEX WPM 405 with fine cement to a lump free consistency. Pre-moisten the prepared concrete substrate (fine mist spray) then apply a first coat using a brush or roller to achieve minimum 1mm wet bed thickness. Allow first coat to set, then apply second coat at right angles to the first application to ensure no pin-holing occurs. Total thickness between 2mm - 3mm. Once cured, subsequent ARDEX Liquid Applied or Sheet Applied Waterproofing Membranes can be applied directly over this temporary waterproofing.

SLURRY COAT

Mix to a thin slurry and spread the mix over the prepared surface with a brush, roller, or small broom. Pre-moisten the prepared concrete substrate (fine mist spray) then apply to achieve minimum 2mm wet bed thickness. The subsequent screed, render or coving mix must be applied whilst the slurry coat is still wet - ensure a wet-on-wet application occurs.

RENDER/COVING

Apply slurry coat on the prepared surface. While the slurry coat is wet apply the ARDEX WPM 405 mortar mix with a wood float trowel, ensuring firm pressure on the trowel to work the render or coving into good contact with the surface.

SCREED

When directly bonding, a minimum thickness of 15mm is recommended when using diluted ARDEX WPM 405 instead of water. For an unbonded screed a minimum thickness of 40mm with reinforcing mesh is required. Using a roller, brush or a flat trowel, coat the prepared area with a slurry coat of ARDEX WPM 405 to improve adhesion to the substrate. Apply the screed mix whilst the slurry coat is still wet using a straight edge, trowel or timber batten to level the screed.

Bonded and unbonded screeds must be compacted to ensure there are no voids. Screeds should be left with a wood float finish to create a key for tiling and waterproofing. When reinforcing the screed with mesh, apply first layer of screed, lay in the mesh and apply the second layer of the screed. Do not lay the mesh directly onto the substrate or waterproofing membrane. Falls to drain are to be in accordance with AS4654.2 or AS3740.

DRYING TIME

Approximately 16 hours (overnight) at 23°C and 50% R.H when used for temporary waterproofing or render/screed. Drying times will be affected due to environmental conditions such as temperature and total thickness of screed/render application.

COVERAGE

Temporary waterproofing: 12m² - 16m² (2 coats at 1mm/coat)

Slurry coat: 3m²/L at 2mm thick (70m² at 1mm thick)

Note: Coverage rate per 20L container at the advised mixing ratios.

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PACKAGING

20L container

TECHNICAL DATA

CHARACTERISTICS	NOMINAL VALUE
Form	Thin white liquid
Specific Gravity	1.0kg/litre
pH	9 - 10
VOC Content	32g/L

SHELF LIFE

Shelf life is approx. 12 months when stored in the original unopened packaging in a dry place at 23°C and 50% R.H. Protect liquid from frost, do not allow to freeze.

LIMITATIONS

Do not use ARDEX WPM 405 mix to concrete slabs subject to rising damp or hydrostatic pressure without first priming with ARDEX WPM 300 (HydrEpoxy) - please refer to ARDEX WPM 300 (HydrEpoxy) product datasheet for further details. Do not apply ARDEX WPM 405 as a temporary waterproofing sealer if rain is imminent. Do not apply if the surface temperature or ambient temperature is below 10°C or above 35°C.

Before any substrate preparation, installation or finishing methods relating to ARDEX products are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

SAFETY DATA

In case of contact with the eyes rinse with running water until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Wear protective gloves, clothing, eye and face protection. Avoid inhaling dust/fumes/gas/mist/vapours/spray. Ensure adequate ventilation during mixing and application. Store locked up. Check with your local Council regarding the disposal of contents, dispose of packaging thoughtfully and recycle where possible. Keep out of the reach of children. Call the Poisons Information Centre on 131 126 (AUS) and 0800 764 766 (NZ) or call a doctor if you feel unwell. Additional information is in the Safety Data Sheet (SDS) at www.ardexaustralia.com.

GUARANTEE

ARDEX Australia Pty Ltd ("we" or "us") guarantees this product ("our goods") is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a "consumer" under the Australian Consumer Law and to that extent you need to be aware that: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss of damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure".

DISCLAIMER

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 Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. 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 affect 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.

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