



ARDEX BR 340

**MICROTEC® Fibre-Reinforced, Polymer-Modified,
Structural Concrete Patching and Repair Mortar**

Polymer modified & shrinkage compensated

Medium weight with good adhesion to concrete

MICROTEC® fibre-reinforced

Contains active corrosion inhibitor

Low resistivity (<15,000Ω cm)

Used in conjunction with ARDEX BRX 60 LO Low Output
Anodes



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ARDEX BR 340

MICROTEC® Fibre-Reinforced, Polymer-Modified, Structural Concrete Patching and Repair Mortar

DESCRIPTION

ARDEX BR 340 MICROTEC® Fibre-Reinforced, Polymer-Modified, Structural Concrete Patching and Repair Mortar is designed for reinstating concrete surfaces damaged through concrete spalling and other chemical or mechanical causes. ARDEX BR 340 is a high-build patching mortar and is capable of being applied up to a thickness of 80mm on vertical, horizontal and overhead surfaces. It is designed to be used in conjunction with an appropriate ARDEX bonding bridge or primer and ARDEX BRX 60 LO Low Output Anodes for ultimate corrosion control and cathodic prevention.

- Polymer modified
- Shrinkage compensated
- MICROTEC® fibre-reinforced
- Medium weight
- Good adhesion to concrete
- Contains active corrosion inhibitor
- Low resistivity (<15,000Ω cm)
- Used in conjunction with ARDEX BRX 60 LO Low Output Anodes

PREPARATION

The substrate must be clean, sound and free from all grease, oil, dust and other surface contaminants such as curing membranes. Damaged or contaminated concrete must be removed to obtain a good bond to the substrate. Cut the edges of the repair vertically to a minimum depth of 10mm. All surface laitance must be removed. Exposed reinforcing steel should be cleaned to remove all residual rust and concrete residue. In accordance to best practice, as outlined in the ACRA Guide to Concrete Repair and Protection Concrete HB84-2006 Chapter 6, concrete should be removed from around and behind all corroding rebar to avoid future contamination of the repaired area. Exposed reinforcing must be cleaned and protected with ARDEX BR 10 ZP Zinc-rich Primer in a continuous film. If ARDEX BRX 60 LO Low Output Anodes are used, please refer to respective Technical Datasheet for surface preparation, rebar priming and installation methods.

PRIMING

The prepared substrate should be pre-soaked for 24 hours but at least 2 hours before applying ARDEX BR 340. The surface should be mat damp but without standing water. The substrate should then be primed by employing one of the following methods:

1. ARDEX WR Prime should be applied and worked into the substrate. Once the ARDEX WR Prime has reached initial cure, ARDEX BR 340 can be applied.
2. A slurry bond coat of ARDEX WR Prime and ARDEX BR 340 should be made to a stiff, brushable consistency and applied to the dampened surface.

Apply the ARDEX BR 340 as soon as the bonding bridge is tacky enough to hold the weight of the mortar. ARDEX BR 340 should be applied wet-on-wet. Do not let the bonding layer dry out completely. If the surface is too wet or too dry application of ARDEX BR 340 may be difficult.

Priming for reinforcement steel

Use ARDEX BR 10 ZP Zinc-rich Primer as primer for steel reinforcement in concrete. Apply ARDEX BR 10 ZP in a continuous film; apply a second coat if needed. ARDEX BR 10 ZP should be cured prior to applying the repair mortar. If ARDEX BRX 60 LO Low Output Anodes are used, please refer to respective Technical Datasheet for surface preparation, rebar priming and installation methods.

MIXING

Use approximately 3.2 – 3.5L water per 20Kg bag of ARDEX BR 340. Measure the appropriate amount of water into a clean suitable sized pail and then add approximately half to two-thirds of the powder to the water while mixing with a heavy duty electric drill and spiral mixing paddle on slow-medium speed (approx. 400-600 rpm). Mix to fully wet-out the powder; then, add the remaining powder fully mixing to disperse the powder. Once all of the powder has been added, mix for approximately 2 to 3 minutes to fully homogenise. Let the mixed mortar sit for 1 – 2 minutes, then briefly mix the mortar again prior to placement.

APPLICATION

ARDEX BR 340 is to be applied onto the prepared primed substrate. Make sure that the patching mortar is applied whilst the priming layer is still wet (wet-on-wet). Apply using a trowel or by hand (wearing chemically resistant gloves). Make sure that the material is sufficiently forced and compacted into cracks and holes to ensure that all voids are filled.

Note: Minimum application thickness is 10mm. If repair mortar slumps, remove all ARDEX BR 340 and re-apply after re-priming the substrate, then apply the repair mortar at a reduced thickness.

FINISHING

Once the mortar has set, and the surface is hard enough, work can begin on the surface finish. The surface finish can be dense and smooth by using a wooden or plastic float, or coarse and sandy by using a sponge to give the required effect.

CURING

An approved ARDEX curing compound such as ARDEX BA 70 CC should be used immediately after finishing. Curing compounds should be sprayed onto the surface of the finished ARDEX BR 340 according to the Technical Datasheet of the curing compound.

OVERCOATING

To achieve a fine finish, use ARDEX BR 120 as a Fairing Coat; alternatively, the repaired patch can be rendered over with a suitable ARDEX Render or Coating. Refer to relevant Technical Datasheets for application of overcoats.

SET TIMES

Pot Life @ 23°C: 30 – 45 min

Initial Set: 45 - 60 min

Final Set: 60 - 90 min

PACKAGING

ARDEX BR 340 is packed in polylined paper sacks – net weight 20kg.

COVERAGE

20kg of powder makes approximately 12.4 litres of mortar. At 10mm thickness: approximately 1.25m²

SHELF LIFE

ARDEX BR 340 has a shelf life of 12 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

Pay Attention to the following:

The repaired area should always be overcoated with an appropriate coating or sealer. ARDEX BR 340 is not meant to be left exposed. For carbonation resistance a EN1504-2 compliant carbonation resistant coating should be applied.

CLEAN UP

Clean all tools in water immediately after use.

SAFETY DATA

This product may cause irritation and an allergic reaction to the skin. It may cause serious eye injury and irritation to the respiratory system. In case of contact with the eyes rinse with running water (15 mins) including removal of contaminated clothing. Wear protective gloves, clothing, eye and face protection. Avoid inhaling dust/ fume/ gas/ mist/ vapours/ spray. Ensure adequate ventilation during mixing and application. Store locked up. Check with your local Council regarding the disposal of contents. 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

TECHNICAL DATA

Water	3.2 - 3.5l/20kg
Wet Density	~1.90g/cc
Pot Life @23°C	45 - 90m
Initial Set	45 - 90m
Final Set	90m - 3h

EN 1504-3 R3 TESTING DATA

	Test Method	R3 Requirements	Typical Results
Compressive Strength	EN 12190	≥ 25MPa	1d ~10MPa 7d 20-30MPa 28d 30-40MPa
Chloride Ion Content	EN 1015-17:2000	≤ 0.05%	0.005%
Adhesive Bond	EN 1542	≥ 1.5MPa	≥ 1.5MPa
Shrinkage and Expansion	EN 12617-4	≥ 1.5MPa	≥ 1.5MPa
Elastic Modulus	AS 1012.17*	≥ 15GPa	17.5MPa
Coefficient of Thermal Expansion	AASHTO T336-11**	declared value	9.9ms/°C
Capillary Absorption	EN 13057:2002	≤ 0.5kg/(m ² Xh ^{0.5})	0.12kg/(m ² Xh ^{0.5})

ADDITIONAL TECHNICAL DATA

	Test Method	Typical Results
Flexural Strength	EN 12190	28d ~8MPa
Drying Shrinkage 23°C 50% RH	AS 1478.2-2005	7d <400ms 28d <700ms
Bulk Resistivity	internal method	7d <5000 Ω.cm 28d <8000 Ω.cm 56d <10,000 Ω.cm

*AS1012.17 done in place of EN 13412

**AASHTO T336-11 done in place of EN1770

ms = micro strains

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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 Standard, 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.

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