

Polybond AC

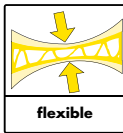
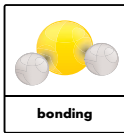
Acrylic based bonding agent

Used as an admixture for cementitious mortars and screeds



CHARACTERISTICS

- ▶ Improves bond, flexural and tensile strength of cementitious mixes
- ▶ Reduces the permeability of mortar
- ▶ Single component, easy to apply
- ▶ Suitable for internal and external application



DESCRIPTION

Polybond AC is a single component, acrylic polymer based emulsion, designed as an admixture for cementitious mortars and screeds and as a bonding and curing agent for concrete and patch repairs.

FIELDS OF APPLICATION

- bonding agent for bonding new concrete to old concrete
- bonding agent in high strength repair and patching mortar
- bonding agent for GRC mixes
- bonding / curing agent for Polycrete* repair systems

APPLICATION INSTRUCTIONS

Surface preparation:

Surface to which Polybond AC mixes are to be applied should be clean, sound and free of loosely adhering material. Remove all laitance, oil, grease, mould oil or curing compound from concrete surface using wire brush, bush hammer or by blasting. Ensure that reinforcing steel is clean and free from scale and rust. When repairing damaged concrete, ensure that the concrete has been cut back to thoroughly sound substrate.

Bonding slurry

Wet down absorbent surfaces, such as concrete, brick, stone, ensuring that they are fully saturated but free of surface water. Prepare a bonding slurry of 1 to 2 parts cement to 1 part of Polybond AC mixed to a lump-free creamy consistency. Using a stiff brush, work the bonding slurry well into the damp surface, ensuring that no pinholes



are visible. Do not apply bonding slurry at a thickness in excess of 2mm. If a second coat is necessary, it must be applied at right angles to the first coat to ensure complete coverage. The mixed bonding slurry should be applied at 1- 2 kg/m². For bonding of patch repairs using Polycrete repair mortars apply undiluted at 5 to 6 m²/L.

Polybond AC modified mixes:

Sand: Sand should be washed and well graded.

cement: Polybond AC is compatible with all types of opc, sulphate resisting and high alumina cements.

Water: The strong plasticizing action of Polybond AC greatly reduces the water cement ratio for any given workability.

Polybond AC: Standard dose is 5-8L per 50 kg of cement used. For more demanding situations, and greater exposure to aggressive environment 15L per 50 kg of cement is recommended. Mixing should be carried out in an efficient concrete mixer. Charge the mixer with required quantity of sand and cement and premix for approximately one minute. Pour the required quantity of Polybond AC and mix for two minutes only to avoid excessive air entrainment. Add the water slowly until the required consistency is achieved. Avoid adding excessive water.

Render to vertical surfaces:

Apply the bonding slurry to the prepared surface and then render immediately with Polybond AC modified mortar. Apply in coats to a maximum thickness of 5mm per coat. Several coats can be applied at intervals of 20-30 minutes. Thicker coating can be applied when suitable form work is used. Finish the surface using wooden float or steel trowel.

Screeds and topping

Screeds, patches based on Polybond AC modified mix should be placed over the tacky bonding slurry, well compacted and struck off to level. It may be trowelled to the required finish using a steel trowel.

CURING

Proper curing of Polybond AC modified mixes is vital. Small patch repairs can be cured with Polybond AC. Large areas should be cured by resin based curing compounds, wet hessian or water mist methods.

DOSAGE RATE

For normal use with cement sand screed, the standard doses of 5-8L of Polybond AC for 50kg of opc is recommended.

STORAGE & SHELF LIFE

Store in a cool, dry place and keep away from all sources of heat and sunlight. In tropical climates, store in air condition rooms. The shelf life is up to 12 months in unopened condition and if stored as per recommendations. Excessive exposure to sunlight, humidity and UV will result in the deterioration of the quality of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skins or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

SUPPLY

Polybond AC 20L pail & 200L drum

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Color	Milky white	-
Specific gravity, [g/cc]	1.0±0.05	ASTM D 1475
Solid content, [%]	30±2	ASTM 2939
Slant Shear bond Strength, [N/mm ²]	3.5	-
Application temperature, [°C]	5 to 45	-

All values given are subject to 5-10% tolerance

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.