



PC-Conbond® Aid

Polymer bonding agent and plastering aid for excellent bonding between old and new concrete or plaster

PC-Conbond® Aid is an acrylic polymer-based emulsion utilized as a singular component admixture in cementitious mortars and screeds. Additionally, it serves as a bonding and curing agent for concrete applications and patch repairs.

ADVANTAGES

- Enhances the bond, flexural, and tensile strength of cementitious mixes.
- Reduces mortar permeability.
- Single-component and easy to apply.
- Suitable for both internal and external applications.

FIELDS OF APPLICATION

- Serves as an adhesive for connecting new concrete to existing concrete structures.
- Functions as a bonding agent in high-strength repair and patching mortar applications.
- Plays a vital role as a bonding agent in Glass Reinforced Concrete (GRC) mixes.
- Acts as a bonding or curing agent in **PC-Conrend®** repair systems.

APPLICATION INSTRUCTIONS

SURFACE PREPARATION:

The surface intended for the application of **PC-Conbond® Aid** must be pristine, structurally sound, and devoid of any loosely adhering substances. Prior to application, it is imperative to remove any laitance, oil, grease, mold release agents, or curing compounds from the concrete surface through methods such as wire brushing, bush hammering, or blasting. Additionally, it is essential to verify that the reinforcing steel is clean and free from both scale and rust. When repairing damaged concrete, it is crucial to ensure that the concrete has been adequately removed to expose a solid substrate.

BONDING SLURRY

Dampen absorbent surfaces such as concrete, brick, and stone, ensuring they are fully saturated without any pooling water. Prepare a bonding slurry by blending 1 to 2 parts cement with 1 part **PC-Conbond® Aid** until a uniform, smooth texture is achieved. Apply the bonding slurry onto the dampened surface using a sturdy brush, ensuring complete coverage without any apparent pinholes.

Avoid applying bonding slurry exceeding 2mm in thickness. When a second coat is necessary, ensure it is applied perpendicular to the initial coat to achieve complete coverage. Apply the blended bonding slurry at a rate ranging from 1 to 2 kg/ m². When conducting patch repairs using Polycrete repair mortars, apply undiluted at a rate of 5 to 6 m²/L.



Sand:

To ensure optimal quality, sand should undergo a thorough washing process and be appropriately graded.

Cement:

PC-Conbond® Aid is compatible with various types of cement, including ordinary Portland cement (OPC), sulphate-resisting cement, and high alumina cement.

Water:

The use of **PC-Conbond® Aid** helps reduce the water-cement ratio, thereby improving workability.

PC-Conbond® Aid:

- The recommended standard dosage is 5-8 liters per 50 kg of cement. For more demanding conditions and increased exposure to harsh environments, a dosage of 15 liters per 50 kg of cement is advised.
- Utilize an efficient concrete mixer by initially combining the required sand and cement and premixing for approximately a minute.
- Add the prescribed amount of **PC-Conbond® Aid** and mix for two minutes to prevent excessive air entrapment.
- Gradually introduce water until reaching the desired consistency, avoiding overhydration.

RENDER TO VERTICAL SURFACES:

Apply the bonding slurry to the prepared surface and then render immediately with **PC-Conbond® Aid** 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.

RENDER TO VERTICAL SURFACES:

Screeds and patches composed of a **PC-Conbond® Aid** modified mixture should be carefully applied over the adhesive bonding slurry, ensuring thorough compaction and even leveling. A steel trowel is recommended for achieving the desired surface finish.

CURING

Proper curing of **PC-Conbond® Aid** modified mixes is of utmost importance. In the case of minor patch repairs, **PC-Conbond® Aid** can effectively serve as a curing agent. However, for larger areas, it is advisable to utilize resin-based curing compounds, wet hessian, or water mist techniques for optimal curing results.

PRODUCTS PROPERTIES

Physical Properties	Typical Value	Test Standards
Form	Acrylic Polymer	-
Colour	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	3.5	-
Application temperature, [°C]	5 to 45	-

The provided values have a tolerance range of 5% to 10%.

PACKAGING

20 kg bucket

STORAGE & SHELF LIFE

Store the product in a cool, dry location, away from heat and direct sunlight. For tropical regions, storage in air-conditioned environments is recommended. When adhering to these storage conditions, the product can maintain its quality for up to 12 months if unopened. Exposure to sunlight, humidity, and UV radiation can compromise product quality and reduce its shelf life.

DOSAGE RATE

When utilizing cement sand screed, it is recommended to incorporate 5-8 liters of **PC-Conbond® Aid** for every 50 kilograms of OPC for standard applications.



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TECHNICAL DATA SHEET UPDATED IN
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All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our website www.pc-wc.com