

UniBond LX

Acrylic bonding agent, mortar admixture and curing aid

Description

UniBond LX is an acrylic-based liquid polymer. It is specially formulated to be used as a bonding agent, admixture for cement-based mixes and curing aid.

Features and benefits

- Non-toxic. Ideal for use in contact with potable water.
- Improves waterproofing, durability, flexibility, and reduces shrinkage.
- Excellent bonding properties to steel reinforcement, concrete and most construction materials.
- Suitable for internal, external and submerged applications.
- Improves all physical characteristics of cement-based mixes.

Recommended for

Bonding agent

Bond new concrete to old & thin modified screeds or toppings to concrete substrate.

Mortar admixture

Floor screeds, tile adhesive, thrown coat render, base coat render, concrete repair and floor patching.

Curing aid

Reduces the forming of early age cracking in patch repairs.

Composition

UniBond LX is composed of modified acrylic, plasticizer free polymer.

Packaging

UniBond LX is available in 5, 20 & 125 kg packs.

Coverage

Bonding agent: 5 – 8 m²/kg.

Mortar admixture: proposed mix design and coverage rates are mentioned below.

Curing aid: 4 – 5 m²/kg.

Note:

Coverage rate takes no account of wastage and may vary according to surface condition and application method.

Technical data

Appearance	White liquid
pH value	8.5±0.5
*Compressive strength	>30 N/mm ²
*Adhesion strength	>1.0 N/mm ²
Density	1.04 kg/liter
Particle size	0.3 µm

*Dependent on cement content and workability.

Materials to produce modified mortars

Cement

UniBond LX is compatible with all types of OPC, SRC Type II and V.

Sand

Use sharp, washed, well graded sand free from excessive fines.

Water

Clean potable water.

Surface preparation

Surface preparation is very important on the final result of the bonding properties.

All surfaces must be sound, clean, dry and free of any material which may impair adhesion. Surface laitance should be removed using suitable mechanical method including high pressure water jetting, grit blasting or grinding. Surface should be roughened and open-pored.

For concrete repair applications, saw cut the perimeter of the area to be treated to a minimum depth of 10 mm.

Loose and damaged concrete should be chased out.

Exposed steel reinforcements should be protected by applying **UniGuard 606**.

High suction substrates should be evenly dampened with clean water.

Remove any excess water at the time of application.

Application

Bonding coat

UniBond LX can be used concentrated or diluted between 1:1 and 1:2 with water. Apply a bonding coat using stiff brush.

Work it well onto the prepared substrate to fill all pores and voids.

Then, apply the top modified mortar while the bonding coat is still tacky using normal application techniques.

Thrown coat render (key coat)

UniBond LX can be diluted between 1:1 and 1:3 with water. The proposed mix design is 400 – 450 kg cement + 1 m³ of sand.

The dry components should be mixed together.

Add the diluted **UniBond LX** until a thick slurry consistency is obtained. Do not overmix.

Apply the slurry manually onto the prepared surface ensuring that the final surface is rough enough to bond the following cement-based render.

Base coat render

UniBond LX can be diluted between 1:1 and 1:3 with water. The proposed mix design is 250 – 300 kg cement + 1 m³ of sand.

The dry components should be mixed together.

Add enough diluted **UniBond LX** till a mortar consistency is obtained. Apply it manually at a maximum application thickness of 6 mm/layer onto the thrown coat render.

Compact it well to ensure maximum contact with the substrate. Finish it with trowel till you get a smooth finish. Do not over trowel.

If greater thickness is required, apply it in several layers within 30 minutes of the application of the previous layer.

In case of delaying of the application of the following layer, leave the first layer to dry

overnight and apply another bonding coat before applying the following layer of render.

Floor screed & floor patches

The proposed mix design is 50 kg cement + 100 kg sand + 50 kg crushed basalt + 5 liters of **UniBond LX**. The dry components should be mixed together.

Add enough water till you get a semi-dry mortar consistency. Then add **UniBond LX**.

Continue mixing till a homogeneous mix is obtained.

Lay the modified mortar to the wet bonding coat at a thickness between 10 and 50 mm. Compact it well to ensure maximum contact with the substrate.

Finish it with trowel till you get a smooth finish. Do not over trowel.

Curing aid

UniBond LX can be spray applied as a curing aid to cementitious repair mortars.

Curing

Air-dry circumstance is recommended for. In hot weather, provide suitable protection against weather conditions while setting. In cold, humid or unventilated areas, it may be necessary to leave the application for a longer curing period or to provide adequate ventilation.

Cleaning

Clean tools with water immediately after use. Hardened materials should be cleaned mechanically.

Storage and shelf life

To maintain its quality and suitability for use, the product should be stored in its unopened packaging, off the ground on pallets or similar structures, in a cool and dry environment. When stored under these recommended conditions, the product remains suitable for use for 12 months from the manufacturing date stated on the packaging.

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Health and Safety

This product should not be ingested as it is based on acrylic polymers. Wear protective gloves, eye goggles and clothing. In case of skin contact, wash with plenty of water. In case of eye contact, rinse continuously with water for several minutes and seek medical attention. Dispose excess material to special waste collection point in accordance with local & national regulation. Keep out of reach of children.

For further information, please ask for Safety Data Sheet for this product.

The most up-to-date TDS can be obtained from ACC Customer Service Department, or downloaded from our website: www.acc.com.eg.

More from ACC

A wide range of construction chemicals, specialty mortars and specialized building materials are manufactured by ACC which include:

- Waterproofing.
- Flooring.
- Tile Adhesives & Grouts.
- Concrete Repair.
- Non-Shrink Grouts.
- Bonding Agents.
- Exterior Façade Coatings.
- Premixed Fairing Coats, Renders & Mortars.
- Putties (stucco).
- Sealers & Emulsion Paints.