

# CHEMFIT BOND LA

**Water Resistant Bonding Agent and Mortar Improver – For Thin Layer Patching Mortars, Renders, Screeds, Repair Mortars & Tile Fixing**

## PRODUCT DESCRIPTION

**ChemFit Bond LA** is a high-performance, water resistant bonding agent and mortar improver based on a synthetic latex emulsion. It is added to cementitious mixes to significantly enhance adhesion, water resistance, flexural strength, and durability. The improved formulation provides excellent bonding for thin layer applications and ensures long-lasting performance in damp or wet environments. This versatile additive is ideal for site-mixed mortars, renders, screeds, and tile fixing adhesives.

## PRIMARY APPLICATIONS

**ChemFit Bond LA** is recommended for use in conditions such as:

- Thin layer patching mortars
- Renders and waterproof renders
- Floor screeds and cementitious toppings
- Concrete repair mortars
- Tile fixing mortars (ceramic, porcelain, stone)
- Masonry mortars
- Bonding slurry for concrete to concrete
- Wall and floor levelling compounds

## KEY FEATURES AND BENEFITS

- **Water resistant** – Suitable for damp and wet environments; protects against moisture ingress
- **Excellent adhesion** – Bonds strongly to concrete, masonry, brick, blockwork, and tiles
- **Reduces shrinkage** – Minimizes cracking and improves long-term dimensional stability
- **Increases flexural strength** – Produces tougher, more durable mortars
- **Enhances workability** – Improves cohesion and spreadability of cement mixes
- **Chloride free** – Safe for use with reinforced concrete and steel
- **Ready to use** – Simple liquid additive; mix with water and cement
- **Economical** – Low dosage provides high performance

## PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Liquid
Color	Milky white / Off-white
Form	Ready-to-use liquid
Basis	Synthetic latex emulsion (styrene acrylic or similar)
Specific Gravity	1.01 – 1.05 at 25°C
pH Value	7.0 – 9.0
Chloride Content	Nil
VOC Content	Low
Freezing Point	0°C (protect from freezing)
Application Temperature	+5°C to +50°C

## PACKAGING AND STORAGE

### Packaging:

- 25 L pails
- 200 L drums

### Storage:

- Store in original sealed containers at +5°C to +35°C
- Protect from direct sunlight, frost, and extreme heat
- Keep container tightly closed when not in use
- If frozen, thaw completely and agitate before use

**Shelf life:** 12 months from date of manufacture when stored properly

## DOSAGE AND COVERAGE RATES

### As a Bonding Slurry:

- **Mix Ratio (by volume) – Bond LA : Water = 1 : 1 to 1 : 2** (depending on required consistency). Mix with cement and fine sand to a brushable paste.
- **Coverage** – Approximately 4 – 6 m<sup>2</sup> per liter of mixed slurry, depending on substrate porosity.

### As a Mortar Admixture:

- **For Renders & Screeds** – Add Bond LA to mix water. Typical dosage: 5 – 10 liters per 50 kg bag of cement.
- **For Waterproofing & High Strength** – Use Bond LA neat (without water dilution) as the gauging liquid.
- **For Thin Layer Patching** – Use 10 liters Bond LA per 50 kg cement for maximum adhesion.

### Typical Mix Proportions (by volume):

Application	Bond LA	Water	Cement	Sand
Bonding Slurry	1	1	2	2
Render / Screed	0.5	0.5	1	2-3
Repair Mortar	0.7	0.3	1	2
Tile Fixing Mortar	0.5	0.5	1	2.5

**NOTE: Dosage and coverage are approximate. Always conduct trial mixes to determine optimal proportions for specific site conditions.**

## APPLICATION GUIDELINES

### Surface Preparation:

- Substrate must be clean, sound, and free from dust, oil, grease, laitance, curing compounds, loose particles, and any contaminants
- Concrete/masonry: mechanically abrade (grinding, wire brushing, scabbling) to achieve open texture
- Pre-soak absorbent substrates with clean water to achieve saturated surface dry (SSD) condition
- Remove any standing water before application

### Mixing:

- For bonding slurry: mix Bond LA, water, cement, and sand to a brushable consistency
- For mortar admixture: dilute Bond LA with water (typically 1:1) or use neat as required
- Mix with low-speed drill and mixing paddle (400-600 rpm) for 2-3 minutes until uniform, lump-free consistency
- Do not add excess water beyond recommended ratio

### Application:

- Apply bonding slurry by brush or stiff broom onto prepared surface
- For bonding new concrete to old, apply slurry and place new concrete while slurry is still tacky (within 30-60 minutes)
- For repair mortars, renders, and screeds, apply by steel trowel and finish as required
- For thin layer patching, apply in layers not exceeding 10-15 mm thickness
- For deeper repairs, apply in multiple layers with bonding slurry between coats
- For vertical and overhead applications, use stiffer consistency to prevent sagging

### Curing:

- Protect from rapid moisture loss, direct sunlight, wind, and extreme temperatures
- Apply curing compound or cover with plastic sheeting immediately after final finish
- Maintain moist curing for minimum 3 days (7 days for critical applications or water-exposed areas)
- Do not apply below +5°C or when temperatures expected to drop below +5°C within 24 hours

## HEALTH AND SAFETY

**ChemFit Bond LA** may cause mild eye and skin irritation. If eye contact occurs, rinse with water for 15 minutes and seek medical attention if irritation persists. For skin contact, wash with soap and water. If swallowed, do not induce vomiting; rinse mouth and drink water, then seek medical advice. Use gloves, safety glasses, and protective clothing during handling. Ensure adequate ventilation when using in enclosed spaces. Refer to the Safety Data Sheet for detailed information.

## CLEAING OF TOOLS

Clean all mixing equipment, brushes, trowels, and spillages with water immediately after use. Dried material may require mechanical removal. Dispose of cleaning materials in accordance with local regulations.

## APPROVALS AND STANDARDS

**ChemFit Bond LA** conforms to the following standards:

- **ASTM C1059 / C1059M** – Type I & II (Latex-Based Bonding Agents for Concrete)
- **ASTM C631** – Standard Specification for Bonding Plastic Concrete to Hardened Concrete
- **ASTM C932** – Standard Specification for Latex-Based Floor Topping and Patching Compounds
- Water resistant bonding agent and mortar improver for cementitious systems
- Suitable for thin layer patching mortars, renders, screeds, repair mortars, and tile fixing

## LEGAL NOTES

*All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.*

### **CHEMFIT CONSTRUCTION CHEMICAL AND SERVICES LIMITED**

Office No. 8, 1KM Near Gaey Soap, Sargodha Road, Faisalabad

Tel: +923364544837

Web: [www.chemfitchemicals.com](http://www.chemfitchemicals.com)

Email: [chemfit.pro@gmail.com](mailto:chemfit.pro@gmail.com)