

# Kenal Bond PVA

## PVA Bonding Agent.

### Description:

**Kenal Bond PVA** is a milky white, latex polymer, based on polyvinyl acetate that is designed to improve the physical properties and integrity of cementitious mortars, screeds or renders, and act as a bonding agent sealer to concrete, plaster or other porous substrates.

**Kenal Bond PVA** improves durability, compressive, tensile and flexural properties of modified mixes whilst reducing permeability, making it suitable for horizontal or vertical applications internally.

### Advantages

- Bonding agent for cement based mortars & renders.
- Bonding agent for gypsum based plasters.
- Can be used as Sealer and primer for plaster and gypsum boards

### Uses

- Industrial floors and screeds
- Refurbishment of concrete floors
- Concrete repairs

### Packing

**Kenal Bond PVA** is available in 20 and 200ltr drums.

### Physical Properties\*

PROPERTY	TYPICAL RESULTS
Solid content by weight	48% ± 2%
Specie gravity	1 ± 0.03
Tensile strength	> 2 MPa
Bond to concrete	> 1 MPa

\*The above properties are average laboratory values

### Dosage

For admixture or integral bonding agent the dosage is typically 10 to 15 lt. of **Kenal Bond PVA** per 50 kg cement.

### Shelf Life

24 months when stored in cool dry environment in factory packed unopened containers between 5°C – 25°C.

### Installation Guidelines

**KENAL** provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting the work. The information below is a summary intended for guidance only.

### Surface Preparation

Substrate must be structurally sound. Loose or unsound materials should be removed. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The substrate must be prepared to create a 'key' for bonding.

## Priming

Apply a bonding coat comprising 3 parts OPC, 1- part water and 1 part **Kenal Bond PVA** to the pre-soaked concrete surface. Apply the subsequent modified screed or mortar ‘wet on wet’ to the bonding coat.

**DO NOT LET THE BONDING COAT DRY.**

Work the primer well into the concrete surface using a brush to give an even, continuous, unbroken coating.

If the primer coat has dried, simply Re-prime

## Mixing

As per the mix design below, dry blend the sand, cement and aggregates in the mixer.

Application	OPC (kg)	Sand (Kg)	4-6 Aggregate (Kg)	Kenal Bond PVA	Mix with Clean water	Approx. Yield (ltr.)
Bonding Slurry	50	0	0	10	14	40
Patch repair 5-40mm	50	125	0	10	6	79
Render 5-12mm	50	150	0	10	5	87
Heavy duty Floor screed 10-25mm	50	75	75	10	6	88

The above guide is as per theoretical calculations and may vary dependent upon cement, moisture content and grading of sand & aggregates used at site. We recommend trial mixes should be done on site to establish the required yield, consistency, workability and mechanical properties.

Ensure accurate measurement of **Kenal Bond PVA** & Clean water, and add & mix continuously for 4 to 5 minutes until the required consistency is achieved.

## Application

Apply the mixed material onto the prepared surface using a steel trowel, plastic or wooden oat. Spread out and tamp or compact onto the primed surface to a mini-mum thickness of 5mm.

Finish with a plastic or wooden oat or steel trowel depending on the surface texture required.

Subsequent layers can be applied to the first layer approximately after 12 hours. The first layer should be prepared to create a ‘key’ to assist bonding. No further pre-soaking or priming is required between layers. It is recommended to do on site trials to assess the actual coverage rates that can be achieved prior to commencement of the works.

Expansion joints must be reflected through the repair or screed and preferably sealed with a sealant.

We recommend construction joints be introduced at thresholds or perimeters, and joints induced to give a maximum bay size of 40 m<sup>2</sup> in accordance with BS 8204

– Screed bases & in-situ flooring.

## Cleaning

Curing is essential for all cementitious surfaces to prevent possible shrinkage cracks and ensure the performance characteristics of the product are achieved. The duration for curing will depend on the applied thickness and ambient conditions. Typically for thickness of 10 – 25 mm, allow at least 4 to 7 days curing applied immediately after initial hardening of the product or removal of any formwork.

Thicker sections may need up to 28 days curing depending on the ambient conditions, however subsequent floor finishes should only be applied when the residual relative humidity (RH) has reached 75% or less.

**A Perfect Chemistry...A Durable Concrete**

## Precautions

- Do not add any thinner or solvent.
- Do not apply in wet conditions or at temperature below 3°C of the dew point.
- Do not dispose into water drains.

## Technical Support

**Kenal Chemical** offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

## Health & Safety

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn. See packaging/MSDS for specific instructions.

Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

Ensure the container is available for the medical attendant to examine for any relevant instructions and content details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labelling.