



# Nitobond PVA

## Multi-purpose resin adhesive, sealer and cement admixture

### Uses

#### As multi-purpose adhesive

Bond asbestos, bricks, carpet, China, concrete, cork, earthenware, glass, laminated plastic, leather, linoleum, plasterboard, polystyrene, renders, roofing-felt, stone, textile, tiles, wood.

#### As a plaster bonding agent

Reduces hacking and keying, and will provide an adhesive or mechanical key to receive plaster or render coats of gypsum, lightweight gypsum, or anhydrous plasters.

#### As a bonding agent for tiles

Woodblock, cork, linoleum, ceramic, terrazzo, concrete, quarry, day, polystyrene and acoustic tiles: plasterboard and acoustic board.

For repairs to concrete and natural or reconstructed stone

Resurfacing, renovation, surface restoration.

For bonding of granolithic toppings to sub-concrete

For repairs to concrete and granolithic floors

Repairing cracks and holes in cementitious floors. Resurfacing of worn concrete and granolithic floors. Levelling of worn stairs treads.

#### As a primer for overcoating bitumen with oil based paints

For dust proofing floor screeds and friable concrete flooring

### Advantages

- Versatile - Applications relevant to most building trades
- Universal Bonding Agent • Bonds most common construction material except polythene, PVC, rubber and similar materials
- Easy to apply - Can be applied by brush, roller or spray

### Standards compliance

Complies with BS 5270:1976

### Description

Nitobond PVA is a multi-purpose PVA adhesive based on polymerised resins and is a white, non-toxic, water based emulsion of medium viscosity which dries to a transparent film.

### Technical support

Fosroc offers a comprehensive range of high performance, high quality construction products. In addition, Fosroc offers a technical support package to specifiers, end users and contractors as well as technical on-site assistance in location all over the world.

### Application instructions

#### Surface preparation

Surfaces must be sound and thoroughly cleaned before Nitobond PVA is applied. All loose particles, old mortar, laitence, dirt, paint etc, must be removed by brushing with a stiff/wire brush or other suitable means. Fungi or Algae should be scoured away using Fosroc Fungicidal Wash and then washed with water. Timber and composition boarding must be dry and free from wax, polish and paint etc, all traces of oil and grease must be removed with Fosroc Chemical Degreaser (see separate leaflet) or another suitable degreasing agent.

On vertical surfaces, where all the paint cannot be removed, it is advisable to peck-hammer, except where gypsum plasters are to be applied. This ensures a bond between Nitobond PVA and the structure, and prevents failure due to lack of adhesion between the paint film and the substrate.

#### Sealing porous surfaces

Porous surfaces should be sealed with a solution of 1 part Nitobond PVA to 15 parts clean water, Where surface porosity is very high it may be necessary to increase the concentration to 1 part Nitobond PVA to 10 parts water. Breeze, foam, slag and other lightweight building blocks are exceptionally absorbant and may require wetting down before sealing.

### Specific applications

#### 1. As a general adhesive

After surface preparation, apply a thin film of neat Nitobond PVA over both faces and allow to become tacky (20 to 30 minutes). Bring surfaces firmly together, position as required, wipe off any excess and allow to set 24 hours. Do not clamp tightly as Nitobond PVA may be squeezed out.

NB: Nitobond PVA will not bond polythene, PVC rubber or similar materials, if in doubt consult Fosroc Technical Dept.

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## 2. As a plaster bonding agent for gypsum, lightweight gypsum and anhydrous plasters.

Seal as required and prime with solution of 1 part Nitobond PVA to 1 part water and allow to become tacky. Then plaster straight onto the tacky Nitobond PVA in the normal way.

For heavier renderings and cementitious toppings.

Seal and prime as above and then prepare a key coat by mixing 1 part ordinary Portland cement, 1 part clean washed sharp sand, gauged to a stiff consistency with 1 part Nitobond PVA to 3 parts clean water. Apply this to the tacky priming coat to a average thickness of 6 mm (1/4 inch) and stipple with stiff brush, or otherwise roughen surface to provide a good mechanical key.

Allow to harden and dry thoroughly. Test for adhesion before applying rendering.

For plastering onto glazed tiles

To ensure a satisfactory bond, a mechanical key should be provided by light peck hammering before sealing, priming and plastering as above.

## 3. For repairs to concrete

Prepare and seal surface as required, apply priming coat of 1 part Nitobond PVA to 1 part water and allow to become tacky. Using the same sand or fine aggregate as in the concrete to be repaired, prepare a stiff cement/sand mix in the proportions 1:2 (or leaner) gauged with 1 part Nitobond PVA to 3 parts clean water.

Compact firmly and level out with minimum trowelling.

## 4. For repairs to natural or reconstructed stone

Prepare and seal surface as required, apply priming coat as above. Prepare a stiff mix comprising ordinary Portland cement with original aggregate in as lean a mix as possible, e.g. 1:6 (or leaner) consistent with strength requirements, gauged with 1 part Nitobond PVA to 3 parts clean water.

Compact firmly and level out with minimum trowelling.

\*NB: Resurfacing does not normally call for high strengths. Colours can be matched by adding pigments to the mix. Where high strengths are required, Fosroc should be consulted for advice on alternative materials.

## 5. For repairs to concrete and granolithic floors

Prepare and seal surface as required. Apply priming coat of 1 part Nitobond PVA to 1 part water. Brush well into all crevices and allow to become tacky. The priming coat must never be allowed to dry. If it does, re-prime and proceed only when tacky.

Prepare a mix of 1 part ordinary Portland cement, 2.5 parts clean washed sharp sand, gauged to a stiff consistency with 1 part Nitobond PVA to 3 parts clean water. Then proceed as for the particular application as below.

### Repairing cracks and holes in cementitious floors

Place mix on tacky priming coat, compact firmly and level out to a smooth finish with minimum trowelling.

Deep holes and cracks should be filled with ordinary concrete onto the tacky priming coat to within 6 mm (1/4 inch) of the surface and topped off to above specification whilst ordinary concrete fill is still green.

### Resurfacing of worn concrete and granolithic floors

Place mix onto tacky sealing coat and trowel into surface of flooring using existing exposed aggregate as level, so replacing mortar lost by wear. Treat deep indentations as for cracks and holes, (see above.)

### Levelling of worn stair treads

Place mix on tacky priming coat, compact firmly and level out to a smooth finish with minimum trowelling.

To give a non-slip surface to the stair tread, a piece of hessian should be placed on the newly filled area soon after trowelling, and lightly tamped to leave an impression of the hessian.

## 6. As bonding agent for tiles, wood block, cork, lino and acoustic tiles

Use Nitobond PVA as a general adhesive. If the surface is uneven, the adhesive should be filled as described below under 'Polystyrene Tiles'.

Ceramic, concrete, quarry, clay and terrazzo tiles Seal with a solution of 1 part Nitobond PVA to 5 parts water, brush well into the surface and allow to dry.

Before bedding tiles in sand and cement, give the floor and base of tiles a further coat of 3 parts Nitobond PVA to 1 part water. Whilst this is still wet or tacky, apply sand and cement bedding to base and bed the tiles.

### Polystyrene tiles, plaster board and acoustic board

Prepare and seal the surface as required. Then using a suitable filler, such as plaster, cement, fine sand or sawdust, make a paste with a solution of 1 part Nitobond PVA to 1 part water. Apply this mixture as an adhesive coat to the tiles and surface to be bonded.

## 7. For bonding granolithic toppings to sub-concrete

Prepare surface and apply a priming coat of 1 part Nitobond PVA to 1 part water. Brush well into all crevices and allow to become tacky. The priming coat must never be allowed to dry. If it does, then the surface must be re-primed.



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Prepare key coat consisting of 1 part ordinary Portland cement in 1 part clean sharp sand gauged to a stiff consistency with a solution of 1 part Nitobond PVA to 23 part water. Spread over area whilst priming coat is still tacky to an average depth of 6 mm (1/4 inch) then stipple with a stiff bristle brush to form a mechanical key, i.e. as rough a surface as possible.

Allow to harden thoroughly and check for adhesion before laying granolithic topping.

## 8. For dust-proofing floor screeds and friable concrete flooring

Apply 2 coats of a solution of 1 part Nitobond PVA with 5 parts water, allowing first coat to dry before applying second coat.

## 9. As a primer for overcoating bitumen with oil based paints

Coat the bitumen with a solution of 1 Nitobond PVA to 1 part water as an anti-bleed priming coat suitable for most oil-based paints.

## Limitations

Nitobond PVA should not be used when it will be in continuous contact with water.

Nitobond PVA should be protected from frost and should not be used in temperatures below 7°C (45°F).

Nitobond PVA sets by evaporation and should therefore be protected from moisture during the setting period. Do not use out of doors in the rain.

Once placed Nitobond PVA mortars should not be disturbed.

## Curing

In uncured Nitobond PVA mortar surfaces are exposed to exceptionally severe drying conditions e.g. strong winds, excessive sunshine, close proximity to heat sources etc. the surface may be lightly dampened or protected by covering with damp sacking, polythene sheeting etc. for 24 hours.

## Cleaning

Brushes and tools should be cleaned with water immediately after use.

## Estimation

Nitobond PVA		20 Litre Drums	
Coverage			
	Nitobond PVA	Water	m <sup>2</sup> (approx)
Sealer Coat	1	15	75
	1	10	50
	1	5	25
Primer Coat	1	1	5
Antidust Coat	1	5	15 (2 coats)
Primer Coat when used with mortar	1	1	3
	1	3	3

These figures are based by typical substrates. Actual coverages may vary according to porosity.

## Storage

### Shelf life

Nitobond PVA	12 months
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### Storage conditions

Nitobond PVA should be maintained in dry storage conditions in unopened containers. Nitobond PVA must be protected from frost.

## Precautions

### Health & safety

Avoid contact with skin or eyes. Any skin or eye contamination should be washed immediately with plenty of water. Gloves and protective clothing are recommended

### Fire

Nitobond PVA is non-flammable.

## Additional information

Nitobond PVA is part of a wide range of adhesives, repair materials, sealing and waterproofing compounds, grouts and flooring products manufactured by Fosroc for the construction industry.

Separate data is available on these products.

