



# NanoSeal

Two part, acrylic polymer modified, elastomeric, cementitious waterproofing and protective coating

## Description

NanoSeal is a two part acrylic polymer modified elastomeric cementitious water proofing & protective coating, composed of best quality Portland cement, properly selected & graded aggregates, additives & acrylic emulsion polymer as a binder. Once applied, its integral bonding takes place within the pores of the substrate, a waterproof shield is formed which seals the inner structure of the treated surface. NanoSeal prevents intrusion of water, yet allows entrapped moisture to be released.

## Uses

- Cast-in-place and pre-cast concrete.
- Brick, block, stucco, unglazed terra cotta.
- Porous stone, masonry substrates.
- Exterior or interior,
- Above or below grade applications.
- All types of structures in industrial, commercial and residential areas, coastal environments.
- To reface and even out variations in concrete surfaces.
- Waste water treatment plants
- To protect exposed steel rebars from corrosion.
- As a waterproof coating for roofs.
- To provide protection to concrete surfaces from carbonation and chloride attack.
- As a lining for water retaining structures.
- Potable water tanks.
- Basements, terraces, balconies and roof gardens.
- Retaining and sea walls
- Swimming pools.
- Sealing hairline cracks, not subjected to movement.
- As a baking to marble, tile and granite to prevent water ingress and thus alleviate surface staining.

## Advantages

- NanoSeal is highly resistant to standing water or wind driven rain and is intended for use on vertical and horizontal surfaces
- Waterproof, Allows water vapor to escape from the structure
- Highly resistant to the effects of long term weathering
- Durable in all climatic conditions
- Non-toxic
- Excellent bond to concrete and masonry
- Does not require over coating
- Flexible
- A 1 mm coating provides anti carbonation cover equivalent to over 80 mm of concrete
- NanoSeal can be applied on 24 hour old concrete thereby giving immediate protection

## Properties

Typical properties of mixed material:

Pot life at 20°C:	60 minutes
Pot life at 35°C:	30 minutes
Color:	Grey
Density:	1.6 Kg/ltr
Compressive strength	30-35N/mm <sup>2</sup> at 28 Days

## Packaging

16 kg pack

## Storage

Store in dry and cool place below 35°C. Protect from direct sunlight.

## Shelf life

12 months if stored properly in original unopened packaging.

## Instruction for use

### Surface preparation:

All surfaces to be coated must be clean and structurally sound. Chip, sand or shot blast, wet blast or high pressure water wash to remove all foreign matter; dust, dirt, paints, oils, grease, coatings, laitance or any other surface contaminants. All static cracks or breaks, voids or honeycombing larger than 1/32" should be cut out and repaired with polymer modified repairing mortar.



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**Mixing:**

Shake well the liquid component to a homogenous milky color, before mixing transfer entire quantity of liquid component into a suitable clean mixing vessel, gradually start addition of powder component under constant mixing with a stirrer using a pneumatic or electric power tool (1kw) at slow speed at 250 - 300 rpm for 3- 5 minutes to achieve a homogeneous & uniform free flowing slurry.

**Application:**

Pre-dampen the substrate surface with water using a brush or spray bottle. High porosity substrates will require more dampening than dense substrates. Whilst the surface is damp, apply the material using a soft bristled brush (120mm-200mm wide). Application may also be made by roller, or spray machine. The first coat should be allowed to cure for a minimum of 5 hours at 20°C or 3 hours at 35°C prior to a second application. Pre-dampening of the substrate is not necessary prior to applying the second coat.

**Spray application:**

For spray application the substrate should be prepared in the same manner as for brush application. The required film thickness can be achieved in one application.

**Coverage:**

Coverage at 1mm thickness:	1.6 kg/m <sup>2</sup>
Coverage at 0.5mm thickness:	0.8 kg/m <sup>2</sup>

**Cleaning & disposal**

All tools and equipment should be washed with water immediately after use. Do not dispose off into water or soil but according to local regulations.

**Precautions /limitations**

Do not apply NanoSeal to surfaces that have not been properly cleaned or are unsound. Do not apply in rain or when rain is expected before initial set has taken place. Do not apply to frozen or frost filled surfaces or when the temperature is below (4°C). For additional Information contact with Nano vision (Pvt) Ltd.

**Health & safety**

NanoSeal powder is irritating to the eyes, respiratory system and skin. Avoid inhalation of dust and wear suitable respiratory protective equipment. NanoSeal liquid is not classified as dangerous. NanoSeal when mixed, becomes highly alkaline, wear suitable protective clothing, gloves and eye protection.