



TECHNICAL DATASHEET **509 NeoKrete**

DESCRIPTION:

NeoSeal® 509 NeoKrete is a white acrylic polymer based cementitious flexible composite coating system. It is commonly used as a waterproof coating and bonding agent for wide variety of applications in new and old building. It improves tensile & flexural strength of concrete and increases the durability of the structure.

TYPICAL APPLICATIONS:

- Waterproofing of basements, terraces, balconies, side walls, toilets, water tanks, swimming pool etc.
- Bridge decks, traffic aprons, runway, parking garages, industrial floors etc.
- Foundations, channels, dams, water tower, tunnels, reservoirs, sewers etc.
- Protection of concrete against corrosion and effloresce.
- As an additive with cement paints which improves waterproofing property and increase coverage by 20-25% along with life of cement paint.
- As a bonding agent for old concrete and new concrete.

FEATURES / ADVANTAGES:

- NeoKrete is easily mixed with cement, cures to hard, tough, weather resistant surface & bonds strongly to most of the building materials.
- NeoKrete can be over coated by exterior emulsion base coating or cement-based paints.
- It can be applied to uniform thickness coating on both the horizontal and vertical surfaces.
- NeoKrete allows trapped water vapor to inhibit and prevents blistering and adhesion failure.
- It makes cement mortars or coating compact thus preventing salt penetration into concrete.
- It has good UV resistance hence prevents discoloration of concrete and corrosion in steel due to its alkali nature.
- It is resistant to water, dilute acids and alkali solutions.
- Coating is highly durable even in continuous contact with water.
- It is non-flammable, non-hazardous, does not evolve toxic gases when exposed to fire.
- Non-toxic to human being.
- Resistant to fungus and microorganism growth.

DIRECTIONS FOR USE:

1. Surface preparation:

Remove dust, loose particles etc. and contaminants like oil/grease using wire brush and water jet. Vacuum clean the surface and dampen it. Break the weak portion of concrete surface near the area of repair. All concrete surfaces should properly pre-wetted prior to the application; remove excess water. Ideal application temperature is between 10° C to 40° C.





2. Application:

I. Brush Coating Application:

- For waterproofing of terrace, toilet blocks, swimming pools, water tanks and basements.
- After completion of surface preparation, pre-wet the surface with sufficient water and allow it to dry for an hour.
- Mix 2 Kg. of OPC cement with 1 Ltr. of NeoKrete homogenously till no lump or air bubble remains in the mix.
- Apply coating by brush and allow it to dry for 3 hrs. before application of second coat. Minimum 2 coats are required.

II. Cement Paint Admixtures:

- Mix 3-4 Ltr. of NeoKrete with 50kg. of cement paint homogeneously to form a uniform mix.
- Apply the mixed and diluted cement paint by brush.
- Allow to dry 3 hrs. before application of second coat.
- It increases the coverage capacity of cement paint by 20-25%.

III. Bond Coat:

Apply plaster/concrete when the coat becomes tacky.

3. Curing:

- After application of the final coat of NeoKrete, let the surface to air dry for 2-6 hours.
- During this period don't use any water for curing.
- In case of high temperature and high wind condition, cover the application area with polythene sheet to avoid rapid drying of the coating.
- After 6 hours of air drying, moist the application surface for the next 24 hours by spraying clean water.
- Don't let is air-dry or submerged in water during this time period.
- Following moist curing of 24 hours, allow to air dry for next 2 days before submersion in water.

MIX DESIGN:

SR NO.	APPLICATION	RATIO	THICKNESS
1.	Waterproofing coats	1 : 2 (NeoKrete : OPC cement) for water retaining structures like water tanks etc.	2 coats
2	Concrete surface priming coat	1:3:6 (NeoKrete: Water: OPC Cement)	1 coat
3.	Waterproof plaster/ repair plaster	OPC - 50 KG, Clean sand - 150 KG, Water - 20 Ltr, Neokrete - 1 Ltr.	6-40 mm
4.	Rebar coating	1 : 1 (NeoKrete : OPC)	1 coat
5.	Bond Coat	1 : 1.5 (NeoKrete: OPC)	1 coat
6.	Renders, Patching/ Crack repair Mortar	OPC - 50 KG, Clean Sand - 150 KG, Water - 15 Ltr., NeoKrete - 5 Ltr.	-





TECHNICAL INFORMATION

PROPERTIES	RESULTS
Appearance	Milky white free flowing liquid
Product type	Acrylic Co-polymer Emulsion
Solid Content	$30 \pm 3\%$ (w/w)
pH value	8-10
Sp. gravity at 27° C	1.02 ± 0.02 gm/ml
7 days compressive strength	> 2.0 N/mm2
28 days compressive strength	> 30.0 N/mm ²
Full Cure	14 days

COVERAGE: About 40 - 45 sq. ft. per Ltr. for a single coat and 20 - 25 sq. ft. for two coats for waterproofing coat application with the mix ratio 1 : 2 (NeoKrete : OPC). Coverage varies depending on the mix design and application. DFT about 400 – 500 microns.

PACKING: 1Ltr., 5Ltr., 20Ltr. & 50Ltr.

SHELF LIFE AND STORAGE: Best before 18 months from the date of manufacturing when in sealed pack and stored under proper condition. Store in a cool and dry place between 5° C to 30° C in closed condition and away from direct sunlight.

PRECAUTIONS AND LIMITATIONS: Follow recommended dosage strictly. Do not use in second coat of plaster as it may create difficulty in paint application, instead use NeoSeal[®] IWP 500. Add water if needed in repair mortar in hot temperature conditions to compensate for evaporation loss.

HEALTH AND SAFETY PRECAUTIONS: Wear suitable protective clothing, gloves and eye protection during mixing and application. In case of contact with skin, rinse with plenty of clean water and then cleanse with soap water. In case of contact with eyes, immediately rinse with plenty of clean water and take medical advice.