



NEWLOOK

NewLook International, Inc. NanoSet Densifer™ LI

Technical Information Sheet

NewLook NanoSet Densifer™ LI is a blend of nano-lithium-silicate chemistry that penetrates concrete to dustproof and increase surface density and hardness of new and existing concrete. NewLook's NanoSet Densifer LI incorporates penetrating aids to help the nano-particles penetrate deeply into concrete surfaces and makes the concrete more water, stain and abrasion resistant. The densifier helps with easier maintenance and increased longevity of the substrate. It is recommended to use NanoSet Densifer LI as part of NewLook's NanoSet Polishing System. NanoSet Densifer LI may also be used as a topical treatment for warehouses, roads, bridges, and other surfaces that require additional fortification.

NanoSet Densifer reduces the potential for freeze/thaw damage, shrinkage cracking, carbonation, efflorescence and rebar corrosion caused by salts and moisture penetration. Surface applications on new concrete surfaces REDUCE the potential for these problems before they happen.

NanoSet Densifer makes an extremely hard, dense floor surface that improves wear resistance to foot and fork lift traffic. It is water-based, environmentally friendly and VOC compliant in all US states and territories.

HOW NANOSSET DENSIFER™ LI IMPROVES THE PHYSICAL PROPERTIES OF CEMENT:

The formulation penetrates and scavenges excess calcium hydroxide (Portlandite), a byproduct of the original hydroxide process, and reacts with the Portlandite and water to form a hydro-calcium-silicate gel (HCS). Treatment with NanoSet Densifer reduces the void and capillary spaces normally caused by bleed water. This aids in the formation of significantly denser cement paste which improves vapor and moisture barrier actions.

The ultimate result of treating concrete and mortar with NanoSet Densifer LI is a lower porosity which means water-borne salts and chemicals can not easily penetrate the concrete. Treated concrete and mortar surfaces improve maintenance capabilities and can improve the bond between coatings and the substrate. Treated surfaces have enhanced bonding quality and prevent peeling, cracking and loss of bond caused by capillary moisture or internal chemical reactions.

USES AND BENEFITS

- Increases density and hardness of cementitious-based materials
- Reduces the potential for chloride ion (salt) intrusion
- Reduces shrinkage cracking in new "green" concrete slabs
- Improves the substrates ability to resist water intrusion which lowers the potential for freeze/thaw damage
- Reduces efflorescence and surface sweating
- Fast-action, reacts completely within the hour
- Ideal for concrete polishing
- Excellent for use to protect the concrete surface against spalling and chalking
- Fills porosity/capillaries of concrete creating a permanent bond that makes floors and walls harder, less prone to dusting and absorption of most liquids
- Helps reduce penetration of many liquids including oils and chemicals
- Helps minimize rubber tire marks in warehouse applications
- Application equipment may be cleaned with water
- Will not discolor or blush over time
- Not affected by bond breaker systems when used as directed
- Will not leave a white cast on floor if over used or not removed
- Reduces operating costs by increasing ease of maintenance and cleaning
- Meets all VOC regulations including California and meets LEED Qualifying standards

PRIMARY APPLICATIONS

- Interior or exterior concrete (vertical or horizontal)
- Warehouses/Distribution center floors
- Concrete roads and highways
- Manufacturing plants
- Medical and Research
- Residential garages and floors
- Commercial floors

INDUSTRIAL

- Food Processing Facilities, Cold Storage/freezers, Factories

COMMERCIAL

- Grocery Stores, Office Building, Retail, Banks, Malls, Warehouses, Distribution Centers

INSTITUTIONAL

- Churches, Hospitals, Universities, Schools, Museums

THEME & LEISURE

- Resorts, Hotels, Casinos, Restaurants, Theaters

GOVERNMENTAL

- Federal & State Buildings, Prisons, Concrete Roads, Bridges, etc.

RESIDENTIAL

- Concrete floors and garages

PERFORMANCE ADVANTAGES

- pH improves reactivity and stability of materials
- Low viscosity and nano -molecule size provides deeper and more complete penetration
- Will not peel
- Reduces dusting
- Can be applied to newly troweled green slabs

NEW CONCRETE (GREEN)

NewLook NanoSet Densifer may be applied to newly installed concrete after the final trowel while the slab is still fresh and green. Concrete must be clean and free of all contaminating materials such as curing compounds, bond breakers, form release oils or construction dust and debris, etc. Use a low-pressure sprayer or pump sprayer to achieve a consistent, even application and to ensure consistent coverage of the surface. Re-apply as necessary to keep surface wet for 10-20 minutes. Let surface dry. No cleaning, flooding, neutralizing or rinsing is necessary prior to polishing. If curing agent is to be used, it can be applied over reacted NanoSet Densifer LI. Use NanoSet Densifer LI as a surface preparation product for NewLook Concrete Color Stains and other concrete coatings; prior to coating or staining, thoroughly rinse or pressure wash the surface until there is no debris or dust and ensure

the concrete surface is pH neutral.

SURFACE PREPARATION

Remove all loose or broken mortar and all previous coatings, toppings or other foreign materials. Assure the concrete is clean and free of bond-breakers and other contaminants that could prevent penetration. If possible, pressure-wash the concrete or masonry substrate with a minimum of 3,000 psi to remove any contamination, loose or broken cement paste and aggregates. Ensure that no previous coatings, hardeners, form oils, paints, sealers or any other material that could prevent NanoSet Densifer LI from entering the concrete or masonry surface. After pressure washing the substrate should readily absorb water and not show any signs of water beading on the surface.

EXISTING, CURED CONCRETE

NewLook NanoSet Densifer LI may be applied to concrete of any age. Surface must be clean and structurally sound. Surface also must be clear of membrane forming curing compounds, sealers, oils, dust and other surface contaminants. For best results use NewLook line preparation products, such as Concrete Cleaner™, Concrete Degreaser™, EcoAcid™, EasyStrip™ or QuickEtch™ depending on the situation. Apply enough NanoSet Densifer LI to keep the surface wet for 10 to 20 minutes or to the point of rejection. Let surface dry 1 hour before heavy traffic.

Applying NanoSet Densifer LI For Polishing:

- Once the surface is clean, and if more aggressive surface preparation is needed to remove surface contaminants, 60-100 grit sanding screens can be used. If such additional sanding or scrubbing was necessary, then you must clean off and remove all debris prior to applying NanoSet Densifer LI.
- Use a low-pressure sprayer or pump sprayer to apply NanoSet Densifer LI. Create an even sheen across surface to ensure complete saturation of surface. Apply enough material to keep the surface wet for 10 to 20 minutes. Grind or polish once the surface is dry.
- Diamond grinding or polishing to an 800-grit finish after applying NewLook NanoSet Densifer LI will render a very durable and stain resistant floor surface. Generally, you will add color after a 200-400 grit finish.
- It is permissible to densify twice, before and after application of color.

Applying NanoSet Densifer LI For Concrete Protection and Surface Preparation:

- Once the surface is clear of contaminants and membrane forming compounds, use a low-pressure sprayer to apply NanoSet Densifer LI to form an even sheen across surface to ensure complete saturation of surface. Apply enough to keep the surface wet for 10 to 20 minutes. Then, allow the surface to dry.
- If staining concrete with NewLook Concrete Stains, pressure wash the surface with at least a 3,000 psi washer and follow

- NewLook's surface cleaning instructions.
- If staining or coating concrete surfaces with products other than NewLook Concrete Color Stains, follow the manufacturer's concrete cleaning and preparation instructions.
- For vertical applications, start from the bottom up.

AFTER CURE

Make repairs to the substrate or apply coatings and/or toppings after NanoSet Densifer LI has been applied and cured for at least 24 hours. Wait one (1) week before making concrete surface repairs in order to allow for the substrate to gain strength. Prepare the surface by pressure washing to ensure that no contamination is present and to condition the substrate for repair materials. Consult the repair product's instructions for preparation and application procedures.

DILUTION

NanoSet Densifer LI comes in concentrated form. Just add clean water, stir and spray on the surface.

- **New Concrete:** add 4-6 parts water, coverage is 400 – 600 square feet per gallon
- **Existing Concrete:** add 2-4 parts water, covers 150 – 400 square feet per gallon depending upon porosity and absorption.

CLEAN-UP

Clean tools and equipment with water immediately after use. Residue from application and clean-up is non-toxic. Protect metals, glass, wood, paint or brick from contact with NewLook NanoSet Densifer LI. Wash over-sprayed areas immediately with potable water.

MAINTENANCE

Routine sweeping, mopping and periodic mechanical scrubbing with a neutral pH, non-rinsing cleaner or water is allowable directly on NanoSet Densifer LI, but not required. NewLook **NanoSet Cleaner™** is recommended when cleaning. Avoid using acidic cleaners, which may etch the surface over time and cause the finish to dull. No aggressive scrubbing brushes such as stratogrit, nylogrit or other aggressive scrubbing brushes should be used. Avoid detergents containing hydroxides or sulfates.

PACKAGING

Product	Bucket Size	Approximate Coverage (Sq Ft.)
NanoSet Densifer	4 oz., 1 or 5 Gallon, 55 Gallon Drum	150-600 SF Per Diluted Gallon Coverage varies based on surface porosity

AND COVERAGE

WARRANTY

The following warranty is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use. The only obligation of either seller or manufacturer shall be to replace any quantity of this product, which is proved to be defective. Any claim of defective product must be received in writing within one year from date of shipment. Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

NEWLOOK INTERNATIONAL, INC. PRODUCTS available through: