

NanoSet[™] Densifier NS

NanoSet[™] Densifier is nano silicate premium densifier that helps protect polished concrete

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NewLook NanoSet Densifer [™] LI is a blend of lithium chemistry that penetrates concrete to stabilize the silicate. The densifier will also dustproof and increase surface density and hardness of new and existing concrete. NewLook's Lithium NanoSet Densifer penetrates 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 Densifier LI as part of NewLook's NanoSet Polishing System.

NanoSet Densifier 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.

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-born 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.

Common Applications

- Interior or exterior concrete (vertical or horizontal)
- Warehouses/Distribution center floors
- Manufacturing plants

Benefits

- 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
- Resists 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
- Lower pH improves reactivity and stability of materials
- Low viscosity and smaller molecule size provides deeper and more complete penetration

- Medical and Research
- Residential garages and floors
- Commercial floors
- 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
- 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 the need for a silica fume and fly ash additives
- Will not peel
- Reduces dusting
- Can be applied to newly troweled green slabs

Preparation

Remove all loose or broken mortar and all previous coatings, toppings or other foreign materials. 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. Surface must be clean and structurally sound. Surface also must be clear of membrane forming curing compounds, sealers, oils, dust and other surface contaminates. 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 to keep the surface wet for 10 to 20 minutes. 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

Application for Existing, Cured Concrete

NewLook NanoSet Densifer LI may be applied to concrete of any age.

- 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.

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 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.

Packaging and Coverage

- 1 gallon (300 -600 sq. ft. per diluted gallon)
- 5 gallons
- 55 gallons

Warnings

KEEP AWAY FROM CHILDREN AND ANIMALS. Before using or handling, read the SDS and Product Instructions. **DO NOT CONSUME**. Avoid contact with eyes and skin. Wear rubber gloves, aprons and safety eye goggles.

Antidotes:

Ingestion: Call a physician immediately. Eyes: Flush with large amounts of water for 15 minutes. Call a physician immediately. Inhalation: Remove person to fresh air, if the victim is unconscious or having trouble breathing, call a physician. Skin: Wash with soap and water.

Other Information

Warranty: NewLook International, Inc. NanoSet[™] Densifier LI is not intended for public use and are intended for use by licensed contractors and installers, experienced and trained in the use of these products. Product is warranted to be of uniform quality within manufacturing tolerances. The manufacturer has no control over the use of Product, therefore no other oral or written representation or statement of any kind, express or implied, now or hereafter made is authorized or warranted by NewLook International, Inc. or its affiliates, and NewLook International, Inc. and its affiliates hereby disclaims all such warranties, including those of merchantability or fitness for a particular purpose. In any case, the manufacturer's obligations shall be limited to refunding the purchase price or replacing material proven to be defective. NewLook International, Inc. shall not be liable for special, incidental, or consequential damages, including delays or lost profits. Communication of this warranty and its limitations to end users is not the responsibility of NewLook International, Inc. Any claim regarding product defect must be received in writing within thirty days from the date of purchase. No claim will be

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Application to New (GREEN) Concrete

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 dried NanoSet Densifer.

Dilution Ratio

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

- New Concrete: add 6 parts water
- Existing Concrete: add 4 parts water

Clean up and Maintenance

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.

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