

DURO-NOX

Maximum performance, chemically reactive, water based, sodium silicate type liquid floor hardener, sealer and densifier.
Component of the **DURO-FLOOR CLASSIC SYSTEM**.



**VOLATILE ORGANIC COMPOUND (VOC)
REGULATORY COMPLIANCE**

**DURO-FLOOR
CLASSIC**
SYSTEM FOR CONCRETE FLOORS

Duro-Nox

USEPA
CARB-SCM
SCAQMD
LADCO, OTC
UT-R307, CO
MCAQD
CT, MD, DE, D.C., NY, MI
CANADA

HOW IT WORKS

DURO-NOX deeply penetrates the pores of concrete surfaces where it can chemically react with the available lime to densify and harden the surface from within.

APPLICATIONS

- ◆ Use to seal, harden and dustproof new concrete or existing concrete floors.
- ◆ Ideal for use in warehouses, distribution centers, large retail centers, office complexes, food processing plants, dairies, breweries, slaughtering plants, food lockers, animal pens, bottling plants, chemical plants, etc.
- ◆ Use to dustproof vertical concrete surfaces in situations where dust formation would pose an appearance problem or a contamination problem with building contents, equipment and/or occupants. Examples include concrete tanks for potable water and other liquid or bulk contents, basements and garages.

ADVANTAGES

- ◆ Increases abrasion resistance up to 39% and increases surface hardness up to 12%.
- ◆ Hardens and increases the abrasion, impact and wear resistance of concrete floors where high volumes of pedestrian and/or vehicular traffic are expected.
- ◆ Provides permanent protection to the depth of penetration.
- ◆ Reduces the porosity of concrete surfaces, providing chemical resistance to most organic acids, alkalies, salts, foods, fats, oils, greases and solvents and sufficient resistance to inorganic acids to permit successful cleanup of spillage.
- ◆ Densifies, strengthens, seals and dustproofs soft or dusty concrete floors.
- ◆ Improves the adhesion of subsequently applied line stripes, paints and coatings to soft or weak concrete surfaces.
- ◆ Overall performance and life far surpasses that of conventional membrane forming acrylic cure and seal type products.
- ◆ Complies with USDA requirements for incidental food contact.
- ◆ Green Engineered™ – better for health and the environment.
- ◆ Allows the floor to breath, preventing hydrostatic pressure related adhesion failure.
- ◆ May be used in conjunction with all Nox-Crete SILCOSEAL Cure and Bondbreakers for tilt-up construction.
- ◆ Meets all federal and state VOC requirements.

▲ PRECAUTIONS ▲

- ◆ Do not use on latex or epoxy polymer modified concrete.
- ◆ Do not use on concrete previously treated with wax or resin cures, sealers and bondbreaker compounds. These products must be removed by chemical or mechanical means, prior to the application of DURO-NOX, as their presence interferes with the penetrating properties of the product.
- ◆ Protect from freezing. Allowing product to freeze can cause the container to rupture as well as separation of the active components, resulting in poor product performance. Product which is suspected of freezing should not be used.
- ◆ Verify that product is within the "USE BY" date stated on product packaging. Do not use expired product. The use of expired product may result in poor product performance or failure.
- ◆ Apply at substrate temperatures above 40° F (4° C) and below 100° F (38° C).
- ◆ Avoid contact with glass, aluminum and steel. If exposure occurs, immediately flush with water. Failure to do so may result in permanent surface discoloration.
- ◆ Before using on colored concrete, contact NOX-CRETE for specific procedures required. Incorrect application procedures could result in unacceptable discoloration of the concrete surface.
- ◆ If considering the use of DURO-NOX to cure freshly placed concrete, contact Nox-Crete prior to use for specific limitations and use instructions.
- ◆ Not recommended for application on concrete floor surfaces that are over three years old unless the floor surface has been previously diamond ground to remove carbonation and expose unreacted lime.
- ◆ Some form of surface preparation is generally required prior to top coating DURO-NOX treated floor surfaces with a subsequently applied paint or coating. For specific surface preparation procedure recommendations see ICRI guideline No. 03732.

USE INSTRUCTIONS

- ◆ Request current product literature, labels and safety data sheets from manufacturer and read thoroughly before product use.
- ◆ Environmental and substrate conditions and concrete mix design have a major impact on product selection, application methods, appearance and performance. Product literature provides general information for some conditions. However, an adequate test application by the installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify that product and quantities purchased can be adequately applied and will achieve desired appearance and performance.

DURO-NOX

Liquid Floor Hardener



chemical solutions to concrete problems

- ◆ Surface must be clean and free from dirt, dust, paint, residual wax or resin curing compounds, bondbreaker, sealers and standing water. For existing concrete floors, it is recommended to clean with Nox-Crete's biodegradable floor stripper, Bio-Clean Plus and an auto-scrubbing machine equipped with stiff nylon bristles. A dilution rate of 1 part Bio-Clean Plus to 5 parts water is generally sufficient.
- ◆ Temperatures during application should be above 40°F (4°C) and no more than 100°F (38°C). To minimize rapid drying in warm weather conditions, best results are obtained if applications occur without contact from direct sunlight or at low sun angles.
- ◆ Apply using a low pressure sprayer, roller, mop, brush, stiff bristle broom or by flood and squeegee.
- ◆ Do not allow DURO-NOX to dry on the floor surface as this can cause white, blotchy discoloration.
- ◆ Typical application rate for new concrete is 150-250 sf / gal (3.7-6.2 sm / L). For existing concrete, typical rate is 100-200 sf / gal (2.5-5.0 sm / L).

Concrete Surfaces Less Than 1 Year Old

- ◆ Apply to the point of saturation and surface accumulation.
- ◆ Keep the entire treated area wet for a minimum of 30 minutes by respraying any dry spots with DURO-NOX.
- ◆ After 30 minutes, begin spreading out puddles with a squeegee or broom. During this time, DURO-NOX will begin to dry by forming a slippery gel on the concrete surface.
- ◆ Lightly mist the treated area with water to assist good penetration and maximum performance.
- ◆ As the surface begins to dry, thoroughly rinse the entire treated area with water and vacuum or squeegee off the excess to prevent any residual staining.

Concrete Surfaces More Than 1 Year Old

- ◆ Apply DURO-NOX to the point of saturation and surface accumulation.
- ◆ Keep the entire treated area wet with DURO-NOX for 45-60 minutes by working DURO-NOX into the surface with a stiff bristled push broom or a power scrubber with stiff nylon bristles. Continuously move excess material from low spots to high spots. If drying occurs, apply more DURO-NOX to the floor.
- ◆ After 45-60 minutes, DURO-NOX should have turned into a slick gel. Squeegee the excess material to the next area to be treated. Flush the floor thoroughly with water and scrub with a broom or floor scrubbing machine and squeegee dry.

TECHNICAL DATA

Color	Colorless
Clarity	Clear
Odor	None
Flash Point	None
Freeze Point	32° F (0° C)
Flammability	Nonflammable
VOC	0 g / L
Active Sodium Silicate Solids	17%

Complies with USDA requirements for incidental food contact.

TEST DATA

DURO-NOX	
ASTM D4060 Standard Test Method for Abrasion Resistance	
Percent improvement after 100 revolutions compared to untreated control.*	>400%
<i>*Concrete samples were treated at 21 days and tested at 28 days.</i>	
ASTM C805 Standard Test Method for Rebound Number of Hardened Concrete	
Improvement in impact resistance	12%
ASTM C779 Standard Test Method for Abrasion Resistance of Horizontal Concrete Surfaces	
Improvement after 15 minutes	500%

PACKAGING

Packaged in 5 gal (19 L) pails and 55 gal (208 L) drums.

SHELF LIFE

Shelf life is two years. Use before the "USE BY" date stated on product packaging.

HANDLING/STORAGE

Store in a dry location within a temperature range between 40° F (4° C) and 100° F (38° C).

AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE INC. maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

LIMITED WARRANTY

NOTICE-READ CAREFULLY

CONDITIONS OF SALE

NOX-CRETE offers this product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and limited warranty which may only be varied by written agreement of a duly authorized corporate officer of NOX-CRETE. No other representative of or for NOX-CRETE is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

NOX-CRETE warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, NOX-CRETE will replace the defective product with new product without charge to the purchaser.

NOX-CRETE makes NO OTHER WARRANTY, either express or implied, concerning this product. There is NO WARRANTY OF MERCHANTABILITY. In no case shall NOX-CRETE be liable for special, indirect or consequential damages resulting from the use or handling of the product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which damages are claimed.

INHERENT RISKS

NOX-CRETE MAKES NO WARRANTY WITH RESPECT TO THE PERFORMANCE OF THE PRODUCT AFTER IT IS APPLIED BY THE PURCHASER, AND PURCHASER ASSUMES ALL RISKS ASSOCIATED WITH THE USE OR APPLICATION OF THE PRODUCT.