



AMERON
INTERNATIONAL

Performance Coatings & Finishes

Nu-Klad® 105A

Epoxy primer and sealer

Application Instructions

Refer to the Product Data Sheet for properties and uses.

Adhere to all instructions, precautions, conditions and limitations during storage, handling, application and drying periods to obtain maximum performance. For conditions outside the requirements or limitations described, contact your Ameron representative.

Concrete

1. All surfaces to be coated must be strong and sound, contain no additives or hardeners, and should not be treated with sealers or conventional curing compounds containing waxes, silicones, or silicates.
2. New slabs (horizontal surfaces) should have a float finish or broom finish as described in ACI Specification 301. Finishing shall be within Class A tolerance, when using Nu-Klad 105A as a concrete cure compound and applying epoxy surfacing.
3. For existing slabs with a trowelled finish, see "Surface Preparation."
4. Formed surfaces should be adequately vibrated to minimize air pockets and holes. Suitable form facing material should be used to produce a smooth form finish as described in ACI Specification 301.
5. Do not use form release agents based on oils, which will deposit a residue on the concrete. When Nu-Klad 105A is used as a curing compound the forms should be removed within three days and the Nu-Klad 105A applied immediately.

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. All surfaces must be clean, dry and free of all contaminants.

Primer – water-cured concrete or existing structures must be cured a minimum of 14 days and have attained 80 percent of its final strength. When cured, surface must either be prepared per ASTM D4259 or ASTM D4260 with muriatic acid using equal parts of acid to water by volume.

A suitably finished surface must have a uniform surface texture exposing fine aggregate resembling coarse sandpaper. If required, repeat acid etching or abrasive blasting until the surface texture is uniform.

Concrete surfaces cured with conventional curing compounds or contaminated with form oils must be completely cleaned by ASTM D4259. Acid etching is not acceptable, as it will not normally remove these contaminants.

Curing compound – New concrete which will be cured with Nu-Klad 105A does not require blasting or etching. Remove fins and projections from formed concrete, and ensure that all surfaces are free from oil or contaminants. Cure concrete a minimum of 14 days prior to applying epoxy surfacing. When applying epoxy surfacing the 105A must be roughened when maximum topcoat time is exceeded.

Apply Nu-Klad 105A as soon as possible after pouring and finishing the concrete.

Environmental Conditions

Temperature	°F	°C
air	50 to 100	10 to 38
surface	50 to 120	10 to 49
material (minimum)	50	10

Application Procedure

Nu-Klad 105A is two components packaged in the proper proportions of resin and cure which must be mixed together before use.

On slabs, puddled areas of water must not remain. On formed surfaces no running water may be evident.

Primer - When used over acid-etched concrete apply immediately after water rinsing. Abrasive blasted concrete must be thoroughly cleaned to remove all loose material, then may be moistened with water. A damp surface aids in primer/sealer penetration into the surface.

Brush out any primer/sealer which puddles in low areas on slabs (horizontal) or runs or sags on formed surfaces (verticals) during application.

After overnight curing, coated surface may vary in appearance. Areas which appear to have no evidence of primer/sealer indicate a high porosity. In these areas, a second application is recommended. Surfaces not properly primed or sealed may result in bubbling of surfacer. Avoid thick glossy areas of Nu-Klad 105A. Roughen these areas prior to topcoating.

Curing compound – When used as a curing compound, Nu-Klad 105A must be applied to slabs (horizontal) immediately after the final finishing operation or upon disappearance of the "sheen" of surface moisture. On formed surfaces (verticals), apply immediately after form removal. (Forms should be removed within three days after concrete is poured.) If there is any drying or appreciable loss of moisture, spray the surface with water and allow to reach a uniform damp condition with no excess water on the surface.

Immediately after use, clean all application equipment with Amercoat 12 or 928.

	90/32 3/4	°F/°C 70/21	50/10 1 1/2
Working time (hours)		1	
Drying time (ASTM D1640) (hours)		°F/°C 70/21	50/10
touch	13	17	24
through	20	24	36

Epoxy surfacing topcoat time over 105A

	90/32	70/21	50/10
minimum (hours)	3	4	6
maximum** (days)			
inside	15	21	30
outside	3	5	7

Amerlock/Amershield topcoat times

	90/32	70/21	50/10
minimum (hours)	13	17	24
maximum*** (months)	3	3	3

*Nu-Klad 105A is subject to color change upon aging.

**Roughen surface if maximum topcoat time is exceeded. Nu-Klad 105A which is thick and glossy must be roughened.

***Roughen surface if maximum topcoat time is exceeded

Application Equipment

The following equipment is recommended; other equipment which provides a proper application may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

Conventional – Industrial equipment such as DeVilbiss MBC or JGA or Binks 18 or 62 spray gun. Separate air and fluid pressure regulators, mechanical pot agitator and moisture/oil trap in the main air supply line are recommended.

Airless – standard equipment such as Graco Bulldog Hydra-Spray or larger with a 0.015 to 0.021 inch fluid tip.

Brush – industrial pure bristle or nylon bristle brush.

Roller – industrial short-nap roller with a nondegradable core.

Squeegee – rubber floor-squeegee.

Power mixer – such as $\frac{1}{4}$ -inch Jiffy Mud and Resin Mixer chucked into a $\frac{1}{4}$ -inch or $\frac{3}{8}$ -inch variable speed drill.

Safety Precautions

Read each component's material safety data sheets before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep spray mists and vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. Ameron makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which Ameron is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

This product is for professional use only. Not for residential use.

Warranty

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to Ameron in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Ameron of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

Ameron makes no other warranties concerning the product. No other warranties, whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

Limitation of Liability

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. **In no event shall Ameron be liable for consequential or incidental damages.**



Ameron U.S.A. • 13010 Morris Rd, Suite 400, Alpharetta, GA 30004 • (678) 393-0653
Ameron B.V. • J. F. Kennedylaan 7, 4191 MZ Geldermalsen, The Netherlands • (31) 345-587-587