

NEXGEN POLYMERS

NexGen Armor 100

100% SOLIDS GENERAL PURPOSE EPOXY

PHYSICAL PROPERTIES

% SOLIDS	100%
VOL. RATIO	2 A : 1 B
VISCOSITY	300-450 cps
VOC CONTENT	<5 g/L
DRY TO TOUCH	5-7 Hours at 70° F
RECOAT TIME	8-24 Hours at 70° F
POT LIFE	25-35 minutes
FULL CURE	7 Days
APPLICATION TEMP	50° - 90° F
COVERAGE RATE	
Primer:	200 ft ² /gal
Topcoat:	160 ft ² /gal
PACKAGING	3 Gal Kit 15 Gal Kit 825 Gal Kit

MECHANICAL PROPERTIES

SHORE D HARDNESS	78-80
ASTM D2240	
TENSILE STRENGTH	4,500-5,250 p.s.i
ASTM D412	
ELONGATION	20%-30%
ADHESION TO CONCRETE	>600 p.s.i
ASTM D4541	
WATER ABSORPTION	0.1%
ASTM D570	
COMPRESSIVE STRENGTH	9,800 p.s.i
ASTM C695 @ 7 Days	
IMPACT RESISTANCE	PASS
ASTM D2794	

CHEMICAL RESISTANCE

Refer to NexGen Chemical Resistance Chart

Nexgen Armor #100 is a 100% solids clear 2K epoxy, low VOC, engineered for indoor applications. This two-part, low viscosity, and low odor formulation is ideally suited for use as a primer or basecoat. It offers exceptional adhesion to concrete, providing a superior bond between the substrate and subsequent overlay topcoats.

SURFACE PREPARATION

NEW CONCRETE: Surface laitance must be removed by diamond grinding on concrete that is cured for a minimum of 28 days. The concrete must be structurally sound, dry, and free of contaminants and other coatings. Rising moisture vapor emission rate must not exceed 3 lb. per 1000 sq. ft. over a 24-hour period as measured method ASTM F-1869. The preferred method of surface preparation is to mechanically abrade the floor by diamond grinding to achieve a final #80-#120 grit finish, reference profile CSP-2 according to ICRI.

PREVIOUSLY COATED: Previously coated surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding or shot blasting to create a surface profile. Armor 100 Epoxy is compatible with most coatings, but a test patch is suggested. NOTE: Concrete must be visibly dry at time of application.

MIXING

Must pre-mix prior to use. Hand mixing will produce inconsistent results and is not an approved method. Before starting, ensure that the material, concrete surface, and the ambient air are all at 50-90°F. Mixing ratio is 2 parts by volume of Part A to 1 part by volume of part B. Pre-mix both A and B sides prior to combining. Add part "A" to the mixing container. Add part "B" to the mixing container and mix for 3 minutes with Jiffy Mixer.

PIGMENTING

Pre-mix NexGen Universal Tint Packs into the Part A at 8 oz. per gallon of mixed floor coating material and combine thoroughly via power mix to achieve uniform dispersal.

Note: Some colors, especially lighter colors, may require an additional coat for full hide.

APPLICATION EQUIPMENT

24" notched squeegee
18" short nap lint free roller

APPLICATION

Mix only what you can squeegee and back roll within 30-45 minutes (approximately 1 gallon of mixed material per crew of two applicators wearing spiked shoes). Do not aerate the mix. Before starting, ensure that the material, concrete surface, and the ambient air are all at 50-90°F. Do not apply in direct sunlight or when temperature is rising. Wearing spiked shoes, immediately pour mixed Armor 100 Epoxy on the floor in ribbons. Spread using a squeegee and then back roll using a short nap lint-free roller. If required, Armor 100 Epoxy can be thinned up to 10% by volume with xylene and squeegeed tight to help fill small voids. Refer to recoat window below for best practice when abrading and/or applying subsequent coats.

CLEANUP

Clean Tools and application equipment immediately after use with solvent like acetone. Clean spills or drips while still wet with solvent. Dried product will require mechanical abrasion for removal.

LIMITATIONS

Do not apply if water or moisture is present. Lower temperatures will slow cure time. Do not store at temperatures below 50°F or above 95°F. Do not apply to slabs on grade unless a heavy uninterrupted vapor barrier has been installed under the slab. Do not apply Epoxy if the floor is subject to moisture vapor drive or hydrostatic pressure. Nexgen Armor 100 will yellow with extended exposure to sunlight or high intensity artificial lights.

PRODUCT HANDLING

Avoid contact of uncured material to skin and eyes, proper PPE should be used during the handling of this product. Clean skin with soap and water. Refer to the Safety Data Sheet for additional information.

SHELF LIFE

1 Year from the Date of Manufacture provided containers are unopened.

STORAGE & DISPOSAL

Store in a dry environment at room temperature out of direct sunlight. Dispose of waste in accordance with federal, state and local regulations.