

PRE-FORM 100

High-build, solvent-free, self-leveling, epoxy coating for sealing architectural plywood forms.



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

PRE-FORM 100, 100 FC



HOW IT WORKS

PRE-FORM 100 seals and protects plywood form surfaces, creating an impact-resistant, glossy, seamless, smooth and long-lasting casting surface for producing architectural concrete.

APPLICATIONS

- ◆ Transforms rough, non-overlaid plywood and dimensional wood forms into smooth architectural quality forms.
- ◆ Seals plywood forms, eliminating wood grain transfer and sugar-related concrete surface discoloration and staining in architectural concrete applications.
- ◆ Produces a uniform surface for application of form-applied surface-set retarders in exposed aggregate applications.
- ◆ PRE-FORM 100 should be used in temperatures between 60° F (15° C) and 90° F (32° C)
- ◆ PRE-FORM 100 FC is for use in temperatures between 50° F (10° C) and 70° F (21° C)

ADVANTAGES

- ◆ Eliminates all concrete surface voids and other surface irregularities resulting from plywood form imperfections.
- ◆ Excellent resistance to concrete vibrator burns compared to low-build sealers.
- ◆ 100% solids - contains no solvent
- ◆ Safe to apply in interior applications and has almost no odor.
- ◆ Self-leveling and easy-to-apply with either a notched squeegee, grooved roller or short nap roller.
- ◆ 20-minute gel time at 70° F (21° C) when left in the mixing bucket but has a 40-minute working time once applied to a form surface.
- ◆ Convenient 2:1 volume mix ratio allows user to easily make small batches.
- ◆ Available in both pre-measured 4.0 gal (15.1 L) kits, bulk 15 gal (57 L) pails and 165 gal (624 L) drums.
- ◆ Available in both a slow-cure, warm weather formulation and a fast-cure, cold weather formulation.
- ◆ The application of successive overlay coat is easily accomplished with light sanding in between coats.

▲ PRECAUTIONS ▲

- ◆ Not for application to wet plywood forms.
- ◆ Not for application on steel forms. Use Nox-Crete's PRE-FORM HB on steel forms.
- ◆ Not for application to plywood forms subject to exposure to dew prior to PRE-FORM 100 becoming tack-free.
- ◆ Not for applications in windy environments where dirt, leaves and other debris can blow into the wet coating.
- ◆ PRE-FORM 100 may become slippery when wet with water or form release agent.
- ◆ Not for applications when ambient temperatures fall below 50° F (10° C).
- ◆ Applications to raw plywood forms will require a minimum of two or three coats with sanding in between coats to achieve a smooth form surface.
- ◆ PRE-FORM 100 may crack if exposed to extreme and rapid temperature changes, hot to cold or cold to hot.
- ◆ **Using an incorrect mixing ratio may result in poor product performance.**

USE INSTRUCTIONS

- ◆ Request current product literature, labels and safety data sheets from manufacturer and read thoroughly before product use.
- ◆ Site environmental conditions, substrate conditions and construction have a major impact on product selection, application methods, procedures and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site test application by the purchaser or 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 satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- ◆ Do not apply in direct sunlight. Apply in shade or when sun is at low angle. (Early morning or late afternoon.)
- ◆ When the ambient air temperature drops below 60° F (15° C), use PRE-FORM 100 FC (Fast Cure) to reduce cure time.
- ◆ Do not apply if ambient air temperature falls below 50° F (10° C).

PRE-FORM 100

High-Build Epoxy Coating



chemical solutions to concrete problems

SURFACE PREPARATION & MIXING

- ◆ New wood forms should be clean, dry and free from dust, dirt and all foreign matter to include form release agent residue and wax.
- ◆ Forms previously sealed with PRE-FORM 100 should be sanded with an orbital floor sanding machine using 100-grit sandpaper and then scrubbed with Nox-Crete's BIO-CLEAN citrus based degreaser to remove all form release agent, oil and grease residue prior to top coating.
- ◆ PRE-FORM 100 is a two-component epoxy and must be mixed prior to application. The mix ratio by volume is 2:1, two parts A (epoxy resin) to one part B (resin hardener). **Using an incorrect mixing ratio may result in poor product performance.**
 - ◆ To mix a **pre-measured 4 gallon (15.1 L) kit**, simply pour Component B into the Component A bucket and mix for 3-4 minutes.
 1. To mix **bulk product**, use exact measurements to measure two (2) parts Component A and one (1) part Component B by volume in separate containers.
 2. Then pour the premeasured components A and B into a third container, suitable for mixing.
 3. Mix thoroughly for 3-4 minutes.
- ◆ Use a heavy duty drill fitted with a flat-blade mixing paddle and mix at 400 rpm. Keep mixing paddle submerged in product at all times to minimize incorporating air into product. Work mixer up and down and throughout the liquid to ensure proper mixing.

APPLICATION (SEE APPLICATION GUIDE FOR DETAILS)

- ◆ Immediately after mixing, pour product out and spread to desired film thickness. Leaving mixed product in mixing buckets generates heat, causing product to quickly thicken.
- ◆ PRE-FORM 100 is easily applied with a notched squeegee and roller applicator equipped with a 3/8 inch (1.0 cm) nap cover. For larger areas, use Nox-Crete's 18-inch (45 cm) wide roller applicator with a 12 ft (3.6 m) extension pole handle.
- ◆ Once product is poured out onto the form surface, there is a 40-minute working time to achieve the desired surface film thickness.
- ◆ Avoid overworking applied product which can introduce excessive air into the product and lead to film bubbling. Quickly spread applied product to achieve a uniform film thickness. Use a spiked roller if necessary to eliminate air bubbles.
- ◆ Unused material in roller pans should not be returned to original container.
- ◆ Application equipment should be cleaned immediately following use with Nox-Crete SOLVENT B or xylene. (Check local VOC regulations before using)

COVERAGE RATES

- ◆ The typical application rate on standard horizontal plywood forms is 50-100 sf / gal (1.25 -2.5 sm / L) or 16-30 mil (400-800 μ). *See chart for details.*
- ◆ PRE-FORM 100 can be applied heavier in a single application up to 13 sf / gal or 125 mil (3.3 mm).

TECHNICAL DATA

| | Pre-Form 100 | Pre-Form Fast Cure |
|-----------------------------------|--|--------------------|
| Mix Ratio By Volume | 2:1 | 2:1 |
| Mix Ratio By Weight | 2.1:1 | 2:1 |
| Temperature based on | 72° F (22° C) | 60° F (16° C) |
| Container Gel Time | 30 minutes | 33 minutes |
| Thin Film - Open Time | 25 minutes | 50 minutes |
| Tack Free Time | 2-3 hours | 2 hours |
| Sandable | 5-6 hours | 5-6 hours |
| Mixed Viscosity (ASTM D-2196) | 1500 cps at 72°F | |
| Color | Light Amber (Also available in color tints) | |
| Bond Strength | 2200 | |
| Tensile Strength (ASTM D-638) | 7500 | |
| Tensile Elongation % (ASTM D-638) | 5 | |
| Flexural Strength (ASTM D-790) | 12,000 | |
| Compressive Strength (ASTM D-695) | 13,960 | |
| Heat Deflection Temp (ASTM D-648) | 115 | |
| Shore D Hardness (ASTM D-2240) | 81 | |

PACKAGING

Available in a premeasured 4.0 gallon (15.1 L) kit, a 15 gallon (57 L) bulk kit packaged in three 5-gallon pails and a 165 gallon (624 L) bulk kit packaged in three 55-gallon drums.

SHELF LIFE

Shelf life is one year. Use before the "USE BY" date stated on product packaging.

HANDLING/STORAGE

Store in a dry location within a temperature range between 50° F (10° C) and 80° F (27° 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.

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