

FISTER, INC.

1150 LYON ROAD
BATAVIA, IL 60510
630/761-0100
630-761-0108 FAX
800/542-7393

ARMORGARD 505 FORM COATING

**EXTREMELY TOUGH SURFACE
SINGLE COAT APPLICATION
ADHESION TO WOOD, CONCRETE AND STEEL**

**B.G.E FREE
V.O.C FREE
BONDS TO DAMP FORMS**

PRODUCT GENERAL INFORMATION

Armorgard 505 is a 100% solids, self-leveling, primer less, odorless epoxy form coating for precast, tilt-up slip form or cast-in-place applications. Armorgard 505 is formulated to provide a hard, tough coating for wood and metal concrete forms. Use of Armorgard 505 transforms a "rough" form into a hard, smooth surface, creating an "architectural" quality cast.

Armorgard 505 provides a convenient work life, rapid tack free time, and adhesion to damp surfaces. Armorgard 505 was designed from conception to be the ideal form coating.

Armorgard 505 is easily applied with a squeegee or roller. Normal application thickness is 15-30 mils (0.38- 0.76 mm). Application varies depending on the porosity and roughness of the surface. A single build may be applied to horizontal surfaces up to 1/8" thick (125 mils or 0.3 cm). Armorgard 505 is conveniently packaged in pre-measured 4 gallon kits or bulk 15 gallon and 165 gallon kits

Armorgard is also available dyed Red or White, which serves as a wear indicator for the coating. **Dyes are only available for select kit sizes.

HANDLING PROPERTIES @ 77 °F (25 °C)

COMPONENTS	Resin, Hardener
WEIGHT PER GALLON (MIXED)	9.08
DENISTY (MIXED) kg/l	1.04
MIX RATIO, pbv (pbw)	2/1 (100/44.6)
COLOR	Clear
MIXED VISCOSITY, cP or mPa.s	600
WORKING TIME, min	25
GEL TIME, min	30
TACK-FREE TIME, h	5-6
INITIAL CURE, h	9-12
APPLICATION TEMPERATURE, °F (°C)	
Ideal	70 – 80 (21-27)
Acceptable	55 – 90 (13-32)
COVERAGE* @ 20 mil(0.50mm), ft ² /gal	120

*Varies with porosity of surface

TYPICAL CHARACTERISTICS

HARDNESS, Shore D	82	ASTM D 2240
ADHESION, psi (MPa)		
to steel	2,300 (15.9)	
to wood	>300 (2.1) (100% failure in wood)	
to concrete	>800 (5.5) (100% failure in concrete)	
COMPRESSIVE STRENGTH, psi (MPa)	12,000 (82.7)	ASTM D 695
TENSILE STRENGTH, psi (MPa)	6,100 (42.1)	ASTM D 638
ELONGATION @BREAK, %	6	ASTM D 638
FLEXURAL STRENGTH, psi (MPa)	10,000 (68.9)	ASTM D 790
LINEAR SHRINKAGE	0.0006	ASTM D 2566

SURFACE PREPARATION

To achieve excellent adhesion, the substrate should be free of all loose and foreign material and should be clean. Oils, grease, waxes or other contaminants must be removed prior to coating. These can be removed with a solvent wipe using isopropyl alcohol or acetone or an application of warm (120-140 °F or 50-60° C) caustic detergent followed by a hot water rinse. Repeat this procedure until the water does not "bead up" on the form. Armorgard 505 will not bond to a contaminated surface.

AMBIENT CONDITIONS

Relative humidity and dew point must be determined before application to avoid adhesion failures. The dew point is used to predict the substrate temperature at which air begins to condense, in the form of water, on the substrate. Never apply a coating unless the form surface temperature is 5 °F (2.5 °C) above the dew point. This temperature difference must be observed until the epoxy coating is cured to a tack-free state. A dew point calculation chart is available from a Copps Technical Representative.

Armorgard 505 will soften when exposed to extreme precast temperatures. A service temperature of no greater than 110 °F (42 °C) is recommended when removing forms coated with Armorgard 505.

MIXING

Mix 2 parts A (resin) to 1 part B (hardener) for three minutes using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 850 rpm) to avoid air entrainment. DO NOT mix more material than can be used within the stated working time. REMEMBER – you will have less working time at higher temperatures.

APPLICATION

Armorgard 505 can be applied with a squeegee, brush, non-shedding roller or a grooved fiberglass roller. Re-coating a used form requires light sanding to remove concrete residue and improve surface profile and adhesion.

CLEAN UP

Armorgard 505, before it is fully cured (hard), may be removed from tools with Copps Eviro Kleen solvent, warm soapy water, isopropyl alcohol or acetone.

SAFETY PRECAUTIONS

Avoid breathing of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions (such as heated polymer, sanding) may cause high vapor concentrations. Do not weld on, burn or torch Armorgard 505 or any epoxy material. Hazardous vapor is released when an epoxy is burned.

Avoid skin or eye contact. Wash skin with soap and water if contact occurs. If eye contact occurs, flush with water for 15 minutes and obtain medical attention.

Read and understand all cautions on can labels and material safety data sheet before using this material.

WARRANTY AND DISCLAIMER

Copps Industries, Inc. gives no warranty, express or implied, and all products are sold upon condition that purchasers will make their own tests to determine the quality and suitability of the product. Copps Industries, Inc. shall be in no way responsible for the proper use and service of the product. The information given in this publication is considered accurate and reliable and is provided as a service only. Physical properties shown are typical. Actual properties are dependent on curing conditions and degree of cure. Any information or suggestions given are without warranty of any kind and purchasers are solely responsible for any loss arising from the use of such information or suggestions. No information or suggestions given by us shall be deemed a recommendation to use any product in conflict with any existing patent rights.