

TECHNICAL BULLETIN

Armorgard 507 – K-507

Description:	Copps Armorgard 507 is a 100 % solids, self leveling, primerless, odorless, clear epoxy flooring system designed to resurface concrete. Armorgard 507 has excellent resistance to most harsh chemicals and ca be applied as thin as 10 mil. Armorgard 507 is USDA approved for application to structural surfaces or surfaces that will receive incidental food contact. Adhesion to wood, concrete and most metals is excellent. Armorgard 507 can be used as a clear coating or filled with a colored aggregate to produce a colored/clear topping.						
	Armorgard 507 was desig chemical processing, pulp attractive appearance is c	o and paper mills, the fo	rom t ood a	he light to medium traffi and beverage industry, ar	c found nd anyw	in power plants, here a clean,	
Product	• PRIMERLESS						
Advantages:	CHEMICALLY RESIS	STANT					
	 100 % SOLIDS BONDS TO DAMP	CONCRETE					
		CONTRACTO					
Application Guidelines:	Application thickness can be varied from a 10 mil rolled coat (unfilled) to a 1/8" colored broadcast resurfacer.						
Handling Properties:	COMPONENTS COLOR			in/Hardener/Colored Agg ar/colored aggregates	gregate (optional)	
Flopenties.	MIXED VISCOSITY, cP WORKING TIME, min		600 25			ASTM D 2196	
	GEL TIME, min		30				
	TACK-FREE TIME, h INITIAL CURE or FOOT TR	RAFFIC TIME. h	7-8 12-1	16			
	COVERAGE* @10 mil (un	nfilled), ft ² /gal	160				
	APPLICATION TEMPERAT	Ideal	70-8	30			
		Acceptable	55-9	90			
	*Varies with porosity of c	concrete					
	HARDNESS Shara D		82			ASTM D 2240	
Physical Properties:	HARDNESS, Shore D ADHESION TO CONCRETE		> 80	00 (100 % failure in concr	ete	ASTM D 4541	
	COMPRESSIVE STRENGTH TENSILE STRENGTH, psi	H, psi	12,0 6,10			ASTM D 695 ASTM D 638	
	ELONGATION @ BREAK,		6			ASTM D 638	
	FLEXURAL STRENGTH, ps TABER ABRASION @1000		10,0 60	000		ASTM D 790 ASTM D 4060	
Chemical Resistance:	Excellent Resistance		`	Very Good	Not Re	commended	
	Ethylene Glycol50Kerosene10Water3610 % Lactic AcidSky10 % Nitric AcidBle	% Sulfuric Acid % Sodium Hydroxide % Hydrochloric Acid % Hydrochloric Acid ydrol each clohexanol		10 % Citric Acid 1,1,1- Trichloroethane Foluene Acetone Xylene 50 % Phosphoric Acid 30% Nitric Acid	Methyl		
	The above recommendations are based on a 28 day immersion @ 72°F (22°C).						
					,		

Surface Preparation:	Armorgard 507 is used to strengthen and seal a porous concrete substrate, therefore, adhesion is paramount. To achieve excellent adhesion, the substrate should be free of all loose and foreign material and should be roughened slightly to provide a coarse profile by shot blasting.
	Before blasting, any contaminates on/in the concrete must be identified. Oils, grease, fats, waxes or other contaminates must be removed prior to roughening the concrete. These can be removed with an application of warm (120-140°F) caustic detergent, steam cleaning or pressure washing. De-grease the floor, follow with a hot water rinse.
	Repeat this procedure until the water does not "bead up" on the concrete.
	Shot blasting using self-propelled, self-contained equipment is the recommended preparation method.
	NEW CONCRETE MUST CURE A MINIMUM 28 DAYS PRIOR TO THE APPLICATION OF ANY EPOXY. CONCRETE MUST BE TESTED FOR MOISTURE AND VAPOR TRANSMISSION BEFORE APPLICATION.
Mixing:	To mix Armorgard 507 pour the contents of the pail marked Hardener into the larger Resin pail. Immediately mix for 3 minutes (or until uniform) using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 500 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.
	Armorgard 507, before it has hardened, can be removed from tools with Copps Enviro Kleen solvent.
Application:	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 moisture begins to condense, in the form of water, on the substrate. Never apply a coating unless the concrete surface temperature is 5°F 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.
	 PRIMER: 1) The application of a primer is recommended to reduce concrete outgassing, in turn producing a smoother coating. 2) Armorgard 507 can be applied to prepared concrete without a primer. Apply with a squeegee and a medium (3/8" nap) roller. PRIMER MIXING: To mix Copps K-049 concrete primer pour the contents of the can marked Hardener into the large pail (resin). Immediately mix for 3 minutes (or until uniform) using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 500 rpm) to avoid air entrainment. PRIMER APPLICATION: Apply 5 mil of Copps K-049 Concrete Primer to the prepared concrete with a short nap (1/4") roller. This insures adhesion to the concrete substrate.
	DO NOT apply K-049 over standing water. Damp or dry concrete is acceptable.
	LIGHT "ROLLED" ARMORGARD 507 COAT FOR LIGHT DUTY - 10-30 mil liquids only. Apply with a squeegee and a medium (3/8") nap roller.
	MEDIUM DUTY "BROADCAST" COATING - 30-60 mil: Apply liquid 15-30 mil thick then evenly broadcast colored aggregate into the wet coating until it is saturated. Let cure (dry), then brush off the excess aggregate and apply a 5-10 mil liquids only topcoat to lock down the exposed aggregate. Repeat as needed to achieve your desired texture.
Packaging:	Armorgard 507 is conveniently packaged in pre-measured 1.5 or 4 gallon kits containing a resin (Part A) and a hardener (Part B). Larger bulk quantities are also available.

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 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 safety data sheets before using this material.

FOR INDUSTRIAL USE ONLY

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 to be 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 to be a recommendation to use any product in conflict with any existing patent rights.



10500 N. Commerce Street •. Mequon, WI 53092-4473 262-238-1700 www.coppsindustries.com