

ARMORGARD 602T

CHEMWEAR

1/4" FLOORING, EPOXY NOVOLAC, OVERLAY SYSTEM HEAVY-DUTY, CHEMICALLY RESISTANT RESURFACER

**100 % SOLIDS
ENVIRONMENTALLY FRIENDLY
USDA APPROVED**

**EXCELLENT WEAR RESISTANCE
FAST WALK-ON TIME
OUTSTANDING CHEMICAL RESISTANCE**

PRODUCT GENERAL INFORMATION

Copps Armorgard 602T, epoxy novolac is a 100 % solids, chemically resistant, no odor, troweled epoxy flooring system. 602T was designed to provide outstanding protection, for new or old damaged concrete, against a wide range of severe mechanical abuses found in today's industrial environments. Armorgard 602T 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 602T was designed to protect floors in extreme chemical environments and heavy industrial traffic (specifically, steel-wheeled carts and forklift trucks.) It is ideally suited for chemical processing, power plants, pulp and paper mills, food and beverage plants, utilities and anywhere a chemically tough floor is needed.

Application thickness can be varied from 1/4" to 1/2" troweled topping.

PACKAGING CONVENIENCE

Armorgard 602T is conveniently packaged in pre-measured (17 ft² @ 1/4") 3 component kits, containing a resin (Part A), hardener (Part B), and a troweling aggregate (Part C). Larger bulk quantities are also available. The troweling aggregate is supplied in pre-measured bags. Non-sag versions are available for vertical or trench applications.

HANDLING PROPERTIES @ 72 °F

COMPONENTS	Resin/Hardener/Troweling Aggregate (Copps K-040 Primer is required for maximum service)
COLOR	Grey, Red, Natural-Buff
CONSISTENCY	Trowelable Mortar
WORKING TIME, min	45
GEL TIME, min	90
TACK-FREE TIME (1/4" thick), h	4
APPLICATION TEMPERATURE:	Ideal 70 – 80 °F, 55 – 90 °F is acceptable. Work-life and tack-free time will be extended at lower temperatures, and reduced at elevated temperatures.
INITIAL CURE OR FOOT TRAFFIC TIME, h	5-6
FULL CURE (FOR CHEMICAL IMMERSION), h	48 minimum, 4 days ideal
COVERAGE	17 ft ² @ 1/4" per 43 pound kit

TYPICAL CHARACTERISTICS

SHORE HARDNESS, Scale D	94	ASTM D 2240
ADHESION TO CONCRETE, psi (Tested with K-040 primer)	> 500 (100 % failure in concrete leaving topping-concrete bond intact)	

TYPICAL CHARACTERISTICS (con't.)

COMPRESSIVE STRENGTH, psi	11,000	ASTM D 695
TENSILE STRENGTH, psi	1,700	ASTM D 638
FLEXURAL STRENGTH, psi	4,200	ASTM D 790

SURFACE TEXTURE

602T will leave a moderately textured surface. The surface can be modified to increase or decrease the slip resistance as needed, please consult your Copsps representative.

CHEMICAL RESISTANCE (28 day immersion @ 72 °F)

Excellent Resistance		Not Recommended
Motor Oil	70 % Sulfuric Acid	50 % Acetic Acid
Gasoline	98 % Sulfuric Acid	50 % Nitric Acid
Gasohol	10 % Phosphoric Acid	Methylene Chloride
Kerosene	50 % Phosphoric Acid	
Diesel Fuel	85 % Phosphoric Acid	
Ethylene Glycol	50 % Sodium Hydroxide	
Tap Water	30 % Fluorsilicic Acid	
10 % Lactic Acid	10 % Citric Acid	
50 % Gluconic Acid	30 % Citric Acid	
10 % Acetic Acid	Bleach	
25 % Acetic Acid	Xylene	
10 % Hydrochloric Acid	Acetone	
36 % Hydrochloric Acid	Ethyl Alcohol	
10 % Nitric Acid	Cyclohexanol	
30 % Nitric Acid	Methanol	
10 % Sulfuric Acid	Toulene	
50 % Sulfuric Acid	Methyl Ethyl Ketone	

HUMIDITY/DEW POINT

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 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 your Copsps representative.

SURFACE PREPARATION

Armorgard 602T 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 shot 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 process 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 28 days prior to the application of any epoxy.

APPLICATION

PRIMER MIXING: To mix Copps K-040 concrete primer pour the contents of the can marked Hardener (B-025) into the large pail (resin). Immediately mix for 3 minutes using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 850 rpm) to avoid air entrapment.

PRIMER APPLICATION: Apply 5 mil of Copps K-040 Concrete Primer to the prepared concrete with a short nap (1/4") roller. This insures adhesion to the concrete substrate.

DO NOT apply K-040 over standing water. Damp or dry concrete is acceptable.

MIXING 602T: To mix Armorgard 602T pour the contents of the can marked Hardener (B-602) into the larger resin can (A-602). Immediately mix for 2-3 minutes using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 850 rpm) to avoid air entrapment. DO NOT mix more material than can be used within the stated working time. Add this liquid to a rotating pail mixer and add half of the troweling aggregate, let mix for 1-2 minutes, then add the remaining troweling aggregate, mix for 2-3 minutes.

602T APPLICATION: Immediately pour out the mixed kit onto the floor in 7-10" wide strips. Spread evenly with a clean trowel (steel finishing trowel, 3" x 14"). Finish each kit before mixing another to insure proper working times and surface textures. As the material begins to set up the trowel will pull on the surface creating a porous surface, this can be corrected by cleaning the trowel with isopropyl alcohol or acetone.

The 602T can be applied to the K-040 immediately or up to 24 hours later @ 72 °F. If more than 24 hours have passed it is necessary to scuff the primer surface if it is not tacky.

Do not rapidly raise the air or substrate temperature, this can cause outgassing of the concrete and joint shrinkage. This can lead to product cracking or failure.

CLEAN-UP

Armorgard 602T, before it has hardened, can be removed from tools with Copps Enviro Kleen solvent or warm soapy water.

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 on or near 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 sheets 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 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.

TB#4602T (11/27/07)