

## Armorgard 602T - K-602T

### Description:

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.

### Product

### Advantages:

- 100 % SOLIDS
- OUTSTANDING CHEMICAL RESISTANCE
- EXCELLENT WEAR RESISTANCE
- FAST WALK-ON TIME

### Application

### Guidelines:

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

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.

### Handling

### Properties:

COMPONENTS	Resin/Hardener/Troweling Aggregate (Copps K-049 Primer is required for maximum service)
COLOR	Gray, Red, Natural
CONSISTENCY	Trowelable Mortar
WORKING TIME, min	
GEL TIME, min	
TACK-FREE TIME (1/4" thick), h	
INITIAL CURE OR FOOT TRAFFIC TIME, h	5-6
FULL CURE (FOR CHEMICAL IMMERSION), h	48 minimum, 4 days ideal
COVERAGE	17 ft <sup>2</sup> @ 1/4" per 43 pound kit

### Physical

### Properties:

SHORE HARDNESS, Scale D	94	ASTM D 2240
ADHESION TO CONCRETE, psi (Tested with K-049 primer)	> 500 (100 % failure in concrete leaving topping-concrete bond intact)	
COMPRESSIVE STRENGTH, psi	11,000	ASTM D 695
TENSILE STRENGTH, psi	1,700	ASTM D 638
FLEXURAL STRENGTH, psi	4,200	ASTM D 790

### Chemical

### Resistance:

#### Excellent Resistance

Motor Oil	36 % Hydrochloric Acid
Gasoline	10 % Nitric Acid
Gasohol	30 % Nitric Acid
Kerosene	10 % Sulfuric Acid
Diesel Fuel	50 % Sulfuric Acid
Ethylene Glycol	70 % Sulfuric Acid
Tap Water	98 % Sulfuric Acid
10 % Lactic Acid	10 % Phosphoric Acid
50 % Gluconic Acid	50 % Phosphoric Acid
10 % Acetic Acid	85 % Phosphoric Acid
25 % Acetic Acid	50 % Sodium Hydroxide
10 % Hydrochloric Acid	30 % Fluorsilicic Acid

#### Not Recommended

50 % Acetic Acid
50 % Nitric Acid
Methylene Chloride

10 % Citric Acid
30 % Citric Acid
Bleach
Xylene
Acetone
Ethyl Alcohol
Cyclohexanol
Methanol
Toulene
Methyl Ethyl Ketone

The above recommendations are based on a 28 day immersion @ 72°F (22°C).

**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 contaminants on/in the concrete must be identified. Oils, grease, fats, waxes, or other contaminants 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 A MINIMUM 28 DAYS PRIOR TO THE APPLICATION OF ANY EPOXY. CONCRETE MUST BE TESTED FOR MOISTURE AND VAPOR TRANSMISSION BEFORE APPLICATION.**

**Mixing/  
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 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 Copps representative.

**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 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.

**MIXING 602T:** To mix Armorgard 602T pour the contents of the can marked Hardener into the larger resin can. Immediately mix for 2-3 minutes 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. 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-049 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.

602T will leave a moderately textured surface.

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

**Packaging:**

Armorgard 602T is conveniently packaged in pre-measured (17 ft<sup>2</sup> @ 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.

### 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 safety data sheets before using this material.

### WARRANTY AND DISCLAIMER

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