

Armorgard 600T - K-600T

Description:

Copps Armorgard 600T is a 100 % solids, chemically resistant, odorless, troweled epoxy flooring system. 600T 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 600T is USDA approved for application to structural surfaces or surfaces that will receive incidental food contact. Adhesion to concrete, wood and most metals is excellent.

Armorgard 600T was designed to protect floors from heavy industrial traffic (specifically, steel-wheeled carts and forklift trucks) making it ideally suited for chemical processing, power plants, pulp and paper mills, food and beverage plants, utilities and anywhere a clean, tough floor is needed.

Product

Advantages:

- 100 % SOLIDS
- EXCELLENT IMPACT 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 to 80 °F; 55 to 90 °F is acceptable. Working 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, h	1
GEL TIME, h	2
TACK-FREE TIME (1/4" thick), h	3.5
INITIAL CURE OR FOOT TRAFFIC TIME, h	4-5
FULL CURE (FOR CHEMICAL IMMERSION), h	48-72
COVERAGE, ft ² . per 42 pound kit @ 1/4"	15

Physical

Properties:

HARDNESS, Shore D	86	ASTM D 2240
ADHESION TO CONCRETE, psi (Tested with primer K-049)	> 500	(100 % failure in concrete)
COMPRESSIVE STRENGTH, psi	10,500	ASTM D 695
TENSILE STRENGTH, psi	1,400	ASTM D 638
FLEXURAL STRENGTH, psi	3,700	ASTM D 790

Chemical

Resistance:

Excellent Resistance		Very Good	Not Recommended
Motor Oil	10 % Lactic Acid	1,1,1-Trichloroethane	Methyl Ethyl Ketone
Unleaded Gasoline	10 % Nitric Acid	Toluene	50 % Acetic Acid
Gasohol	30 % Citric Acid	70 % Sulfuric Acid	50 % Nitric Acid
Kerosene	50 % Gluconic Acid	36 % Hydrochloric Acid	Methylene Chloride
Diesel Fuel	10 % Acetic Acid	30 % Nitric Acid	
Xylene	50 % Sulfuric Acid		
Ethyl Alcohol	10 % Hydrochloric Acid		
Methanol	75 % Phosphoric Acid		
Ethylene Glycol	50 % Sodium Hydroxide		
Cyclohexanol	Bleach		
Water			

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

**Surface
Preparation:**

Armorgard 600T 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. Contaminants can be removed with an application of warm (120-140 °F) caustic detergent, steam cleaning or pressure washing. Degrease 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 airborne 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 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 ensures adhesion to the concrete substrate.

DO NOT apply K-049 over standing water. Damp or dry concrete is acceptable.

MIXING 600T: To mix Armorgard 600T 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.

600T 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 600T 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.

600T will leave a moderate non-slip surface.

Armorgard 600T, before it has hardened, can be removed from tools with Copps Enviro Kleen solvent or warm soapy water.

Packaging:

Armorgard 600T is conveniently packaged in pre-measured (15 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.

SAFETY

Armorgard 600T is an epoxy resin system. Please refer to the safety data sheets prior to using this product. Do not weld on or near the hardened epoxy, hazardous fumes will be released.

WARRANTY AND DISCLAIMER

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