

EPX-METALLIC

DECORATIVE METALLIC EPOXY SYSTEM

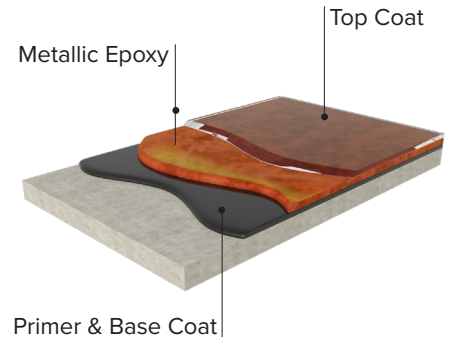
Resinwerks EPX-Metallic is a decorative metallic epoxy flooring system that offers striking color depth and range. Metallic systems can be constructed in a variety of ways depending on the requirements of the application. In general, these systems include a penetrating primer, followed by a pigmented epoxy base-coat, metallic epoxy and clear high-traffic urethane finish. They are widely used in design centric commercial/retail applications where a vibrant, contemporary finish is desired. All products are compliant with the California Department of Public Health standard method V1.2 and the system is eligible for LEED credits as per USGBC LEED Version 4/4.1.

Applications

- Retail
- Amusement Parks
- Showrooms
- Offices
- Residential

Features:

- Suitable for multiple colors
- Excellent color depth
- Low Odor & VOC
- ADA compliant slip coefficient
- Infinitely customizable



SYSTEM COMPONENTS:

PRIMER OPTIONS:

Vapor Barrier Epoxy	100% solids vapor barrier epoxy
Rapid H2O EP	41% solids water-based primer
WBE 500	40% solids penetrating primer

BASE COAT

BioCure 1100 EP	100% solids epoxy primer/intermediate coat
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METALLIC COAT

LevelGuard Clear EP	100% solids epoxy water-clear cyclo-aliphatic epoxy
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TOP COAT:

HDC 100 Urethane	95% solids 3-component moisture cure urethane
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GENERAL SYSTEM PERFORMANCE - SC-100

TEST TYPE		RESULT
Compressive Strength	ASTMC 695	9,350 PSI
Permeability (VBE ONLY)	ASTME 96	0.059 PERMS (grains h-1 ft-2 in Hg-1)
Water Absorption	ASTMD 570	< .1%
Impact Resistance	ASTMD 2794	> 160
Adhesion Pull-Off	ASTMD-4541	+500 PSI concrete fracture
Elongation / Tensile	ASTMD 638	2500 psi
Flexibility 1/4" cylindrical mandrel	ASTMD 5221	Pass
Hardness / Shore D	ASTMD 2240	92
Taber Abrasion	ASTMD 4060	16 mg loss (HDC 100)
Coefficient of Friction	ASTMD-2047	>0.6 / pass

For Professional Use Only

Please note that metallic epoxy systems are extremely difficult to install and subject to several outside variables outside of the control of the installer. Please reference all product Technical Data and Material Safety Data Sheets prior to use. Mock-ups are strongly recommended to validate appearance and performance prior to use.

SURFACE PREPARATION

Ensure substrate to be coated is clean, dry, and in sound condition. All laitance, curing compounds, concrete hardeners, and other surface contaminants must be removed. Prepare concrete in accordance with ASTM D 4259-83. Mechanical shot blasting or planetary grinding is recommended to achieve a surface profile of ICRI CSP 2-3. Surface to be coated must be completely porous, thoroughly vacuumed, and free of excessive dust & contaminants.

MOISTURE IN CONCRETE

Concrete slabs should be tested prior to application for elevated moisture vapor emission levels. Resinwerks recommends ASTM F2170-19 standard for determining relative humidity in concrete slabs using RH probes. Moisture level results will determine recommended mil thickness for application.

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DE-GREASING OF CONTAMINATED SUBSTRATES

For concrete substrates containing oil, animal fats, or other carbon based contaminants, slabs should be de-greased appropriately using an enzymatic based concrete de-greasing agent. Multiple applications may be required depending on the level of contamination.

TREATMENT OF JOINTS & CRACKS

Prior to installation of any Resinwerks primer, all joints, cracks and other substrate irregularities must be addressed. For more information on specific joint treatment procedures, please reference Resinwerks joint-treatment guidelines.

COVE BASE

Metallic Epoxy vertical cove base applications are not recommended. Please consult Resinwerks directly for suitable cove base options.

COATING APPLICATION

****Note: Disperse Metallic Pigments into LevelGuard™ Clear Part A a minimum of 24-48 hours prior to application to allow for proper wetting.****

1. Primer Options (select one)

Vapor Barrier Epoxy

- **Mixing:** Thoroughly agitate part A prior to mixing. Mix 2-parts A to 1-Part B by volume for 2-3 minutes using a slow speed jiffy mixer. Make certain that material is properly mixed. Only mix in metal buckets as left-over material can become hot and will melt a plastic bucket. After mixing, get the material out of the bucket and apply material as soon as possible to avoid issues.
- **Application:** Immediately following mixing, pour Vapor Barrier Epoxy onto substrate in a uniform ribbon and spread evenly with a notched squeegee. Apply at a recommended coverage rate of 12-mils or 130 SF/gallon. Immediately back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.
- Once cured, lightly abrade surface with a black pad or fine sanding screen to remove gloss sheen and any surface contaminants. Vacuum up excess dust and wipe with solvent (xylene or acetone) to prepare for topcoat.

--OR--

Rapid H2O EP™

- **Mixing:** Review Rapid H2O EP Data Sheet Prior to mixing. Thoroughly agitate part A and B prior to mixing. Mix 2-parts A to 1-Part B by volume for one minute using a slow speed drill mixer. After 1-minute add 1-gallon of water and mix for a minimum of 2 additional minutes. Adding water is required.
- **Application:** : Immediately following mixing, pour onto substrate in a uniform ribbon and spread evenly with a

Important:

Inhalation of vapor or mist can cause headache, nausea irritation of nose, throat, and lungs. Avoid breathing vapors, it is strongly recommended that respirators are worn. Prolonged or repeated skin contact can cause slight skin irritation. All epoxies have the potential of causing skin irritations or allergic reactions. Be careful not to get on skin, clothes or in eyes. Gloves are strongly recommended. If splashed in the eye, flush with warm water and contact a physician if blurring persists.

Solvent based products are extremely flammable, extinguish all pilot lights and sources of ignition such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

Resinwerks recommends the use of slip-resistant additives in all coating systems that are subject to heavy foot traffic and especially those within wet or oily environments It is the end-user's responsibility to provide flooring that meets current safety standards and local coefficient of friction requirements. Resinwerks nor any of its distributors are responsible for injury resulting from any slip and fall incident.

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notched squeegee. Standard recommended coverage is 140 sq. ft. per gallon. Immediately back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.

--OR--

WBE 500™

- **Mixing:** Thoroughly agitate part B prior to mixing. Mix 2-parts B to 1-Part A by volume for two minute using a slow speed drill mixer.
- **Application:** : Immediately following mixing, pour onto substrate in a uniform ribbon and roll material evenly over the floor. Standard recommended coverage is 300 sq. ft. per gallon. Back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.

2. Base Coat: BioCure 1100 EP™

- **Mixing:** Thoroughly agitate part A prior to mixing. Mix 1-part A to 1-Part B by volume for 2-3 minutes using a slow speed jiffy mixer. Make certain that material is properly mixed. After mixing, get the material out of the bucket as soon as possible to avoid issues.
- **Application:** Immediately following mixing, pour onto substrate in a uniform ribbon and spread evenly with a notched squeegee. Standard recommended coverage is 160 SF per gallon. Immediately back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.

3. Metallic Coat: LevelGuard EP™ Clear

- **Pigment Dispersion:** Disperse powder metallic pigments into Part A LevelGuard™ Clear at a rate of 4-12 oz per final mixed gallon. Load rates will depend on the color(s) employed as well as installer's preference. Pigments should be dispersed well in advance (24-hour minimum) of coating application and thoroughly mixed into resin.
- **Screen Metallic Epoxy:** To help limit the potential for "metallic comets" in the finish, the pigmented part A material should be gently poured through a fine mesh screen prior to mixing. Any remaining metallic particulates may be discarded.
- **Mixing:** Thoroughly agitate part A prior to mixing. Mix 2-parts A to 1-Part B by volume for 2-3 minutes using a slow speed jiffy mixer. Make certain that material is properly mixed.
- **Application:** Immediately following mixing, pour onto substrate in a ribbon and spread evenly with a roller, squeegee or tool of your choice. Standard recommended coverage is 60-100 Sq. Ft. per gallon. Material may be manipulated with designs, solvents or additional colors as desired. Working time will vary depending on temperatures. Do not overwork material as it may lead to bubbles or other imperfections in the final film. Once cured, lightly abrade surface with a black pad or fine



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sanding screen to remove gloss sheen and any surface contaminants. Vacuum up excess dust and wipe with solvent (xylene or acetone) to prepare for topcoat.

- **Application:** : Immediately following mixing, pour onto substrate in a uniform ribbon and spread evenly with a notched squeegee. Standard recommended coverage is 100ft² per gallon. Immediately back-roll with a non-shedding roller. Use a brush or small roller to cut-in along perimeter walls or any other obstructions.
- **Broadcast:** Once material has been applied, immediately broadcast decorative quartz aggregate media to rejection. Once cured, excess quartz should be thoroughly removed and retained for future use.

5. Top Coat:

- **4. Topcoat Options:**
- **Note:** While Resinwerks offers several topcoat options for metallic flooring, some installers may elect to use a sacrificial wax finish or elect to not topcoat the finish at all. Resinwerks strongly recommends that a mock-up or large sample is completed prior for owner sign off.
- **HDC100™: High Wear Urethane:**
- **Mixing:** Mix complete kit for two minutes using a slow speed jiffy mixer. While mixing pour complete contents of HDC 100 aggregate into mix, taking care to properly suspend all aggregates.
- **Application:** HDC 100 should be applied at about 3 mils DFT with a coverage rate of approximately 550 square feet per kit by pan rolling with a 3/8 nap roller. For proper appearance, dip the roller in the coating and lightly roll out excess in the application tray. Take care to spread the material evenly and immediately back-roll in a perpendicular fashion. Frequently agitate material in both the pan and mixing vessel during application process to keep aggregates properly suspended.
- **Other Topcoat Options:** Please consult your local Resinwerks representative.

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