MT-110

DECORATIVE METALLIC EPOXY SYSTEM

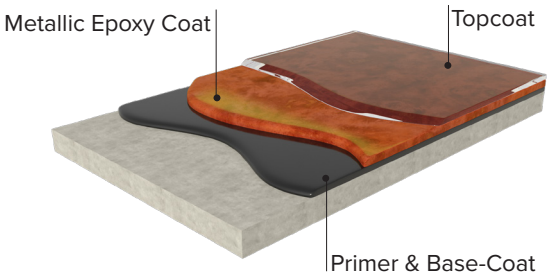
MT-110 is a decorative metallic epoxy flooring system that incorporates a penetrating, water-based epoxy primer followed by a 100% solids pigmented intermediate coat, 100% solids water-clear cycloaliphatic metallic coat and high-traffic urethane finish. This system is widely used in design centric commercial/retail applications where a vibrant, contemporary finish is desired. MT-110 is compliant with the California Department of Public Health standard method V1.2 and is eligible for LEED credits as per USGBC LEED Version 4/4.1. Available in a variety of finishes or textures, please consult with your Resinwerks representative for further details on recommended system configuration. For professional use only.

Applications

- Retail
- Showrooms
- Residential
- Education
- Decorative Concrete

Features:

- Striking color depth and range
- Moisture Vapor Resistant
- Low odor & low VOC
- Highly reflective
- Infinitely customizable



Colors & Finishes

Available in standard Resinwerks metallic epoxy colors with custom colors available upon request. Please contact Resinwerks directly for a color selection chart. Available with a multiple sheen finishes and textures, please your Resinwerks representative for more information.

System Components

1. **Primer:** WBE 500 water-based penetrating epoxy primer. Kit components include one 2-gallon unit of part B and 1-gallon of part B
2. **Base Coat:** Bio-Cure™ 1100 EP is a 100% solids intermediate coat. This material will be pigmented to a color that is dependent on the final desired finish. Packaged in 10-gallon kits as a 1:1 mix ratio.
3. **Metallic Coat:** LevelGuard™ Clear EP. A 100% solids water-clear cycloaliphatic epoxy. High-grade resin formulation that offers minimal long-term ambering with excellent viscosity for metallic applications. Metallic pigments are dispersed into part A at a rate of 4-12 oz per MIXED gallon (minimum of 24-hrs. prior).
4. **Top Coat Options:** Metallic systems are available with a range of top-coat options. **HDC100**™ is a clear, low-odor and low-voc high-traffic urethane that provides for excellent long-term durability. It is available in a semi-gloss or satin finish with a fine aggregate for a lightly textured, slip resistant surface.

EpiSeal 600 is a water-based epoxy top-coat that leaves a smooth satin finish. Ideal for medium-traffic applications, Episeal 600 offers minimal odor and 0-VOCs.

GENERAL SYSTEM PERFORMANCE - MT-110

TEST TYPE		RESULT
Compressive Strength	ASTMC 695	9,350 PSI
Water Absorption	ASTMD 570	< .1%
Adhesion Pull-Off	ASTMD-4541	+500 PSI concrete fracture
Elongation / Tensile	ASTMD 307	1200 psi
Flexural Strength	ASTMC 580	2500 psi
Flexibility 1/4” cylindrical mandrel	ASTMD 522I	Pass
Impact Resistance	ASTMD 4060	> 160 Inch/Lb
Abrasion	ASTD 4060	16 mg loss (HDC100)

For Professional Use Only

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 is recommended to achieve a surface profile of ICRI CSP 2. Surface to be coated must be completely porous, thoroughly vacuumed, and free of excessive dust & contaminants.

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

For projects requiring a perimeter vertical cove base, please reference Resinwerks cove base installation guidelines or contact your local Resinwerks representative for more information.

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: Vapor Barrier Epoxy**
   - **Mixing:** Thoroughly agitate part B prior to mixing. Mix 2-parts B to 1-Part A by volume for 2-3 minutes using a slow speed jiffy mixer. Make certain that material is properly mixed. Once mixed, get the material out of the bucket and apply material as soon as possible to avoid issues.
   - **Application:** Immediately following mixing, pour WBE 500 onto substrate in a uniform ribbon and spread evenly with a squeegee. Apply at a recommended coverage rate of 4-mils or 300 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.
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. 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 metallic coat.
3. **Metallic Coat: LevelGuard™ Clear EP**
   - **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 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.
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.