



PRODUCT DATA SHEET

EPIC Flooring Systems, Inc.

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LuminArt photoluminescent flooring systems

Description

LuminArt flooring systems combine a unique fusion of specially formulated, high quality 100% solids epoxy, with transparent dyes, distinctive iridescent and photoluminescent pigments to create extremely decorative yet highly durable polymer composites resistant to moderate to heavy use, and withstanding many chemical exposures. These monolithic flooring systems are often crafted with hand blown glass objects, photoluminescent glass aggregates, as well as custom metal inlays. **LuminArt** flooring systems are available in a gloss or satin finish, with smooth or controlled non-slip textures.

Benefits

- Seamless Flooring System
- Low Odor
- Excellent Abrasion Resistance
- Superior Adhesion
- Excellent Luster & Luminous Afterglow
- Durable
- Superior Chemical Resistance
- Easy Maintenance

Colors

LuminArt flooring systems are color customized to meet varying project specifications. The interaction between transparency, refraction, clear epoxy resin and multiple reflection creates unusual color effects rarely found in today's flooring marketplace. Custom color blends are available for aggregates, pigments, and dyes to produce truly unique seamless epoxy composites with endless design possibilities.

Typical Uses

LuminArt flooring systems are hand crafted for discerning applications in varying types of settings. These systems are intended to offer high decorative appeal along with superior functional value. They can be applied on most sound substrates including concrete, quarry tile, brick pavers, steel decks, plywood floors, etc.

Surface Preparation

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Substrate must be primed. Please refer to the master "Surface Preparation Guide" for more information.

Application Method & Finished Thickness

LuminArt flooring systems can be applied with varying finished mil thicknesses from 30-mils to 1/4". They are typically engineered in multiple layers to provide excellent long-term durability, superior color, and luminous "glow" retention. An ultra clear resin must be used for topcoats over **LuminArt** flooring systems to retain color clarity and luster of the floor. A clear, aliphatic urethane is a required finish coat to prevent ultraviolet ambering in the flooring system.

Limitations

These systems are best suited for application in temperatures between 55°F and 95°F. Substrate must be clean, sound and dry.

AfterGlow

LuminArt flooring systems contain some of the finest glow-in-the dark phosphors available in the global marketplace. All the photoluminescent pigments used in the **LuminArt** flooring system applications are derived from non-radioactive natural rare earth mineral crystals that possess the unique capacity to absorb and store energy from ambient light. Duration and intensity of afterglow depends upon concentration of phosphorescent pigments or crystals in the epoxy formulation and length of exposure to ambient light. Typically, average afterglow ranges from 6-12 hours.

Chemical Resistance

LuminArt flooring systems are resistant to many common chemicals. Please refer to the master "Chemical Resistant Chart" for actual resistance to specific chemical/reagents. Urethane finish coat will determine ultimate chemical resistance.

Moisture Concerns

Moisture vapor transmission in the slab should be measured prior to application of these polymeric systems to ensure a long lasting, durable installation. Please refer to the master "Moisture Guidelines" for more information.

Cleaning

This system is designed to be a low maintenance flooring solution, however, certain textures and service environments require specific procedures. Please refer to the master "Cleaning Guide".

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Color	Custom colors & blends
Cure Time, Foot Traffic at 70°F	12-16 hours
Toxicity	Non-toxic, meets USDA & FDA standards

Physical Property	Test Method	Result
Hardness (Shore D)	ASTM D-2240	75-80
Compressive Strength	ASTM D-695 ASTM C-579	16,000 psi 10,500 psi
Tensile Strength	ASTM D-638 ASTM C-307	3,000 psi 1,950 psi
Tensile Elongation	ASTM D-638	7.50%
Flexural Strength	ASTM D-790 ASTM C-580	4,000 psi 2,900 psi
Flexural Modulus of Elasticity	ASTM D-790	5.5×10^5
Linear Shrinkage	ASTM D-2566	0.02%
Linear Expansion	ASTM D-696	2×10^{-5}
Bond Strength to Concre	ASTM D-4541	400 psi. substrate fails
Indentation	ML D-3134	.025 max
Impact Resistance	ML D-3134	Pass
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F-200°F
Flammability	ASTM D-D-570	Self extinguishing
Flame Spread/NFPA 101	ASTM E-84	Class B
Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM C-501	5mg-20mg loss depending upon performance topcoat
Coefficient of Friction Orange Peel Smooth	ASTM D-2047	0.8 0.7