Durex® Dur-A-Metallic

Decorative Pearlescent Metallic Seamless Epoxy Flooring System

Description

Durex® Dur-A-Metallic is a durable, pearlescent metallic, seamless resinous flooring system. This architectural flooring system creates a three-dimensional, striking and vivid appearance with a seamless epoxy-based chemistry for a floor with exceptional durability and long-lasting performance. Applied at a thickness of 2-3mm for enhanced visual effect.

Uses

Durex® Dur-A-Metallic is formulated to be applied over concrete substrates to achieve a uniquely architectural, pearlescent metallic floor. To be used as a resinous flooring system for a variety of commercial, institutional, retail and residential applications. Can be integrated with a cove for a seamless, contained flooring system.

Idea For

- Retail Stores and Commercial Areas
- Institutional Facilities
- Showrooms and feature floor areas
- Healthcare and educational facilities.

Features

- High build (2-3mm) for enhanced multi-dimensional aesthetics
- Highly reflective and vivid finish
- 100% solids, VOC free resins
- Wide variety of colour and design combinations
- Customizable designs available
- Seamless. Will not support growth of fungus or bacteria
- Easy to clean and to maintain
- CFIA approved, USDA accepted

TECHNICAL DATA

PHYSICAL PROPERTIES			
Colour	Please see *Durex® Colour Selection Guide* for available colour options.		
Resin Type	**Primer**	Epotel Multi-Prime	5 m^2/L (200 ft^2/gal) @ 8 mils
	Base Layer	Epotel GSC	4 m^2/L (160 ft^2/gal) @ 10 mils
	Decorative Metallic Coat	Epotel 1000 + Pearlescent Pigments	0.3 – 0.5 m^2/L (13-20 ft^2/gal) @ 80-120 (2-3mm)
	UV Top Coat	Polyuretel or Durathane 90	7.9 m^2/L (320 ft^2/gal) @ 5 mils
Ratio	As Supplied. Refer to TDS Sheet		
Pot Life @ 23°C	Refer to TDS Sheet		
Service Temperature Range	Min. 0°C/Max. 50°C/Quick Term 95°C		

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Compressive Strength @ 7 days	ASTM C 579	12,500 psi
Tensile Strength	ASTM C 307	3,200 psi
Flexural Strength	ASTM C 580	6,000 psi
Bond Strength	ACI 503R	350 psi concrete fails
Thermal Coefficient of Expansion	ASTM D 696	0.00635 mm/inch per 0°C (0.000025 in.)
Abrasion Resistance CS-17-wheel, 1 kg. load, 1000 rev.	ASTM D 4060	25 mg maximum weight loss
Thermal Shock Resistance	ASTM C 884	Passes
Water Absorption	ASTM C 413	Less than 0.1%
Impact Resistance	MIL D-3134F	16 ft/lb concrete fractures (Pass)
Indentation	MIL D-3134F	0.02 (No discernable indentation)
Flammability	ASTM D-635	Self-Extinguishing
Shore Hardness (D)	ASTM D-2240	90
Coefficient of Friction	ANSI A137.1 / ANSI A326.3	0.58 wet to 0.90 dry (with Durex® Shark Grip)

Packaging

Durex® Epotel Multi-Prime, Durex® Epotel GSC, Durex® Epotel 1000 and Durex® Polyuretel are packaged as a kit (Part A and Part B) in 18.9 L (5 gal) and 3.78 L (1 gal) units. This product is available in multiple standards, highly reflective decorative colours. Custom colour matching can also be attained at an additional cost. Please refer to the *Durex® Colour Selection Guide* for all available colour options.

Storage Conditions

For improved performance, Durex® Dur-A-Metallic should be sealed and kept in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials in ambient temperatures above 10 degrees C and below 35 degrees C. **KEEP FROM FREEZING**.

Surface Preparation

Concrete must be shot blasted or mechanically abraded to achieve a surface profile consistent with ICRI CSP 3. Do not apply this or any impermeable finish over an on-grade slab with high moisture or RH levels without an appropriate moisture mitigation primer. Consult Durabond for complete details.

Application

Durex® Dur-A-Metallic is installed at a nominal 2-3 mm (80-120 mils) thickness; consisting of a 100% solids epoxy primer, Durex® Epotel Multi-Prime, a coloured epoxy base coat, Durex® Epotel GSC; a decorative pearlescent layer, Epotel 1000, and a UV resistant topcoat, Durex® Polyuretel. (Durex® Epotel TL and Durex® TL Aggregate). Optional seal coats and anti-slip aggregates are available for specified texture and finish. Once the decorative layer has been installed, a variety of top coat components can provide a solid in gloss, matte and light dissipative sheens. These finishes will improve resistance to chemical attack and wear. Contact a Durabond Technical Representative for further information.

Step 1 **PRIMER**: Durex® Epotel 100 Multi-Prime. Premix components A and B at a 2:1 ratio with a low-speed drill for two minutes. Pour onto substrate and apply with squeegee. Do not allow material to pond. Durex® Epotel 100 Multi-Prime shall be applied to a thickness of 8mils, but will vary depending upon the condition of the substrate.

Step 2 **BASE COAT**: Premix Durex® Epotel GSC components, blending parts A and B with a low-speed drill for two minutes. Apply at a thickness of 10 mils DFT. Allow to cure.

Step 3 **DECORATIVE COAT**: Premix Epotel 1000 components, then blend coating components A and B for two minutes, slowly adding the Durex® Dur-A-Metallic Pigment as supplied. Pour onto floor, distribute with a notched squeegee, applying the materials at 2-3mm thick, always maintain a wet edge. Immediately spike-roll with a fine spiked roller to smooth out the coating. Use decorative techniques to achieve the finish pre-determined by the consultant. Consult Durabond Representative for decorative finish techniques, colour combinations and effects.

Step 4 **TOPCOAT**: Apply Durex® Polyuretel or Durex® Durathane 90 by lint free roller and back roll. Optional topcoats are available subject to environment and usage. Add Durex® Shark Grip for anti-slip properties. Contact a Durabond Representative for more details.

Care & Maintenance

Newly installed floors should be cured a minimum of 48 hours at 20°C (70°F) before wash-downs. Only warm water should be used to clean within the first week. If the use of a detergent is absolutely necessary during the first week, use only a non-chlorine cleaner dissolved in water. Sanitizing detergents containing chlorine or hypochlorite must not be used for at least 7 days. Good housekeeping practices and regulated spill removal will prolong the service life of the floor. While polymer flooring often requires less maintenance than other finishes, cleaning and stain removal must be performed. Stains should be removed as soon as possible. The following maintenance should be performed on a weekly basis or as needed:

- Remove spills at the earliest opportunity
- Sweep or vacuum loose dirt and debris
- Clean floor with an industrial detergent, dissolved in water as directed by cleaner manufacturer. A mild, moderately alkaline, non-sensing detergent is generally best.
- Power scrub surface, then rinse with a pressure washer. **CAUTION**: Certain stiff-bristled brushes can affect gloss of finish when used with power scrubbing tools. Consult with janitorial supplier for brush recommendation.
- Change soap solution and rinse water frequently. Remove rinse water with a wet vacuum or squeegee. Keep mop heads and maintenance equipment free of accumulated dirt.
- Floors can be sealed, waxed and buffed, if desired. A local janitorial supply house is a good source for supplies. **All materials for cleaning and sealing should be tested in a small area prior to use.**

Limitations

Durex® Dur-A-Metallic is impermeable. Test all concrete slabs on grade for moisture content. Product should only be installed if moisture content falls within an acceptable range. Minimum application temperature is 8°C (45°F). Low temperature activators are available for application from 0°C - 10°C (32°F to 50°F). Below 15°C (62°F), handling characteristics are affected and cure times are lengthened. Chemical exposure, service temperatures, mechanical abuse, and housekeeping influence service life. The project depending on chemical exposure may require Durex® Chemical Resistant Coatings. Consult your Durabond Technical Representative for further details.

Health and Safety

Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Keep product out of reach of children. Read published Material Safety Data Sheet prior to handling, storage and use.

Warranty

Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.

Technical Services

Technical support is available upon request at info@durabond.com. For the latest version of this data sheet, please visit our website at www.durabond.com, call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Technical Coatings Ltd sales representative.