

ARMOR-STAT ESD FLOOR SYSTEM

DESCRIPTION

ARMOR-STAT ESD is an epoxy/urethane, pigmented, static dissipative floor coating system. This system provides a static dissipative (10^6 - 10^9 Ω /Square) floor from primer through the satin finish topcoat. ARMOR-STAT ESD provides an average of 5v Body Voltage Generation when utilizing dissipative footwear. Resistance readings are consistent for the life of the floor and are independent of ambient humidity. ARMOR-STAT ESD protects new and existing concrete floors from many chemicals and was designed to provide the ultimate in wear resistance, chemical resistance and cleanability. The system is designed for areas where dirt or dust cannot be tolerated while providing static dissipation to protect against electrostatic discharge.

BENEFITS

- Static Dissipative
- UV Stable
- Dissipates 5000 Volt charge to Zero in 0.01 seconds
- VOC Compliant
- Superior Wear Resistance
- Excellent Stain Resistance
- Easy to Clean
- 5v Avg. BVG with dissipative footwear

LIMITATIONS

This product is best suited for application in temperatures between 60°F and 85°F. Top-coating with non-conductive waxes or finishes will render the static dissipative properties ineffective. This product is not intended for use in munitions or explosive manufacturing facilities.

TYPICAL USES

- Pharmaceutical Facilities
- Packaging Lines
- Plastic Manufacturing
- Electronics Assembly
- Processing Areas
- Clean Rooms
- Laboratories
- AGV Warehouses

COLORS

ARMOR-STAT ESD is available in Arctic Grey, Medium Grey, Slate Grey, Smoke Blue and Beige.

PACKAGING

ARMOR-STAT ESD is packaged in kits consisting of resin, hardener, powder and grit (where applicable). Shelf life is 6 months in unopened containers.

SURFACE PREPARATION

This product requires preparation in order to perform as expected. Substrate must be profiled, clean, sound, and dry. Substrate must be primed with DUR-A-GLAZE #4 ESD PRIMER. Please refer to the Dur-A-Flex, Inc. Surface Preparation Guidelines for more information.

APPLICATION METHOD / SPREAD RATES

Please refer to the ARMOR-STAT ESD Application Instructions for more information.

GUIDE SPECIFICATIONS

This product is part of the DUR-A-FLEX family of polymer systems. Please refer to the master “**Specifier’s Guide**” for complete three part guide specs.

DRAWINGS AND DETAILS

Standard CAD drawings and details are available for coves, drains, breaches, transitions, etc. Please refer to the master Detail Drawings in the Architect Center at www.dur-a-flex.com for actual drawings.

JOINT GUIDELINES

Refer to the Joint Guidelines in the Contractor Center at www.dur-a-flex.com for complete details.

MOISTURE CONCERNS

Normal limits for moisture vapor transmission for epoxy floor systems are 3 lbs./1,000 sq. ft./24 hour using the calcium chloride test per ASTM F-1869 or 75% relative humidity using in-situ Relative Humidity Testing per ASTM F-2170. Please refer to the [Floor Evaluation Guidelines](#) at www.dur-a-flex.com for complete details.

TECHNICAL INFORMATION

Color	Arctic Grey, Beige, Medium Grey, Slate Grey and Smoke Blue	
Cure Time, Touch Dry at 70° F (per component)	8 – 10 Hours	
Cured Film Thickness (nominal)	28 mils	
Toxicity	Non – Toxic, USDA Approved	
Physical Property	Test Method	Result
Surface Resistivity	ASTM D-257	10 ⁶ -10 ⁹ Ω/Square
Static Decay	Mil-Std-3010, Method 4046	0.01 Seconds
Body Voltage Generation (with dissipative footwear)	ESD STM 97.2	5v
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
Hardness (Shore D)	ASTM D-2240	75-80
Linear Shrinkage	ASTM D-2566	0.02%
Linear Expansion	ASTM D-696	2 × 10 ⁻⁵
Bond Strength to Concrete	ASTM D-4541	400 psi substrate fails
Indentation	MIL D-3134	.025 MAX
Impact Resistance	MIL D-3134	Pass
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F – 200°F
Flammability	ASTM D-570	Self Extinguishing
Flame Spread/NFPA 101	ASTM E-84	Class A
Taber Abrasion Resistance CS17 Wheel 1000 GM Load 1000 Cycles	ASTM D-4060	29 mg loss (without grit) 5 mg loss (with grit)
Coefficient of Friction	ASTM D-2047	0.6
UV Resistance		Excellent
VOC Content		10 g/l

CLEANING

This product is considered a low maintenance flooring solution however, certain textures and service environments do require certain procedures. Please refer to our Cleaning Guide in the Contractor Center at www.dur-a-flex.com for complete details.

CAUTION

Slight batch-to-batch color variations may occur. When ordering to match a previous color, inquire if the same batch number or quality control number is still available. Follow the Hazardous Materials Identification System labeling guide for proper personal protective equipment to use when handling this product. Use only as directed. **KEEP OUT OF REACH OF CHILDREN.**

Before using any DUR-A-FLEX, Inc. product, be sure the Material Safety Data Sheet is read and understood