APPLICATION INSTRUCTIONS

Staticide® 4400 ESD Polycoat Paint & 6210 ESD Polycoat

Specifications:	
Base	Waterborne polyurethane
Surface	Egg shell to satin
Resistance	$10^5 – 10^8$ Ω
VOC	Zero
Compliancy	No REACH SvHC or RoHS chemicals
Durability	Enhanced with reinforcing fibers
Mixing	Easy to mix with no drips
Reducer for spraying	Deionized water

Before beginning:

- Read this entire document before application.
- Always wear protective eyewear and gloves. Read SDS for safety information: https://www.aclstaticide.com/sds/4400
- Apply a test patch for adhesion, abrasion, resistance, and aesthetics testing prior to coating large areas.
- Average Coverage: 200-250 sq. ft. per gallon.
- Actual coverage may vary depending on substrate and application method.
- Apply at temperatures between 60-80°F.
- Mix thoroughly before use.
- Two coats are not required but may be preferred as substrate absorbency varies.

APPLICATION CONSIDERATIONS

1. **Temperature:** Between 50-85°F (10–30°C).
2. **Humidity:** Between 40-70% RH (dew point dependent). Too high humidity (>70%) slows drying and curing and can trap moisture in the painted surface, leading to poor adhesion, bubbling, or peeling. Too low humidity (<40%) may cause paint to dry too quickly, causing improper curing or weak bonding.
3. Do not paint in conditions where condensation may form on the freshly painted surface. Do not paint in the rain, or if rain or heavy dew is expected within 48 hours of application.
4. Apply paint in an even coat. Do not over or under apply.

NEW SURFACE PREPARATION

1. **All Surfaces:** Clean surface with a diluted **Staticide® 4040 Universal Cleaner Concentrate** solution (5 parts water to 1 part concentrate). Scrub with auto scrubber using stripping pad or a stiff bristle broom brush. Do not use solvents or solvent based cleaners. All surfaces must be clean, totally dry, and free of any acid, stripper detergent, oil, grease, dirt, mildew, form release agents, curing compounds, flaking paint, or other foreign substances.

2. **Concrete:** Concrete must be cured for a minimum of thirty days before coating. Do not use on floors subject to hydrostatic pressure. Roughen slick poured or precast concrete and remove sealers by chemical cleaning or abrasive method such as sand sweeping. Rinse thoroughly with water and allow to dry. Concrete must be internally dry. Remove loose aggregate. Prime with this product. See **important tests for concrete** below.

3. **Wood:** Sand smooth. Remove sanding dust. Prime with this product.

4. **Steel:** Prepare surface to SSPC-SP 11 cleanliness standards and prime with a metal primer.

5. **Galvanized metal and aluminum:** Clean off oils and other contaminants. Prime with a galvanized metal primer.

PREVIOUSLY PAINTED SURFACE PREPARATION

1. Grit blast or sand glossy surfaces to dull areas and to remove loose paint, wax, silicone, sealers, oils and other coatings or chemicals that will adversely affect the product performance. Simple cleaning may be insufficient to obtain maximum adhesion.

2. Prepare surface as specified in **NEW SURFACE PREPARATION.**

3. Apply a test patch. If the test patch is acceptable, continue application. If the test patch shows unacceptable adhesion after five days, further surface preparation is required or surface is unsuitable for paint application.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead

Important tests for concrete:

It is critical that concrete is fully cured (30+ days) and dry. Excess moisture inside the painted concrete or a pH > 10 will ruin the coating, leading to poor adhesion, bubbling, or peeling. Test with litmus paper to ensure the floor has a neutral pH.

Porosity Test: Pour one ounce of water onto the concrete. If the water soaks in, the surface is porous enough for coating. If water beads up on the concrete, the surface is not porous and further treatment is required. The presence of laitance (fine white particles) requires abrasive blasting, sanding or abrading to assure removal. Ensure test area is dry before painting.

Dryness Test: Place a weighted rubber mat, piece of plastic sheet, or other non-porous material on the surface for 24 hours. If the underside of the material is dry after that time, then the floor is suitable to paint. If moisture persists, concrete surface cannot be coated.

Moisture Vapor Emission Rate (MVER): Test with a digital MVER pin meter. Moisture content must be 12% or less.

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1. Mix thoroughly before use, as solids may settle in storage. Fibers are noticeable in wet mixture but will be absorbed into the coating as it dries. Stirring with a paint stick may not be adequate for mixing solids into solution. Mixing with a drill attachment is recommended.

2. May be applied by brush, roller, or spray. A foam roller or ¼" nap polyester roller is recommended. Roller will depend on surface. Saturate roller completely and apply paint in continuous strokes to avoid fiber clumping.

3. For airless spray application, dilute with deionized water as needed.

4. Ensure adequate ventilation during application and drying.

5. **DRYING TIME:** At 77°F (25°C) and 50% RH, dries to touch in 2 to 4 hours. Apply second coat after 8 hours. Allow floor to dry overnight at not less than 60°F before allowing light foot traffic to resume on the surface. Allow floor to dry 3 days (72 hours minimum) at not less than 60°F before allowing general industrial traffic to resume or before applying an optional coat of **Staticide® ESD Floor Finish** to increase gloss and durability. Low temperatures, high humidity, thick coats, or poor ventilation will increase these times.

6. Allow floor to dry 3 days (72 hours minimum) at not less than 60°F if applying optional coat of ESD floor finish. ACL dissipative floor finishes will provide an increase in gloss and durability.

7. **CLEAN-UP:** Clean hands and tools immediately with warm, soapy water. Clean spills right away with a damp cloth.

8. After drying, test the floor with a surface resistance meter according to ANSI/ESD STM7.1 testing standards. If the reading is greater than 10^8 Ω and/or the readings on five separate test spots on the floor differ by more than a decade, apply a second coat of paint.

REGULAR MAINTENANCE

1. Allow 2 weeks of drying time after initial paint application before using a damp mop to clean coated floor.

2. Sweep or dust mop daily. Use sweeper, vacuum, or an untreated mop to clean the floor. Do not use a sweeping compound.

3. Damp mop weekly.

4. Remove all spills immediately.

5. Do not machine buff, use abrasive cleaners, or scrubbing machines with aggressive pads to clean the painted floor.

6. Dirty floors will negatively impact surface resistance performance.

7. Touch up worn areas with additional paint as needed.

FINAL NOTE

It is crucial to begin a program of taking regular readings of surface resistance to evaluate the floor and to establish a proper maintenance program tailored to your requirements. All surface resistivity readings should be taken when the floor is at room temperature and dry. Refer to ANSI/ESD S20.20 specifications and standards.
Staticide® Resistance Meters are calibrated and provide quick and accurate measurements.