



SLIDE ARMOR™

Polyurethane Hybrid Gelcoat

SPECIFICATION GUIDELINE FOR PAINTING WATERSLIDE RESTORATION COATINGS SLIDE ARMOR 2500/2505

1.0 **SCOPE**

- 1.1 This Guideline for SLIDE ARMOR covers the requirements for surface preparation and application of this Hybrid Polyurethane Gelcoat over Fiberglass Water Slides, Fiberglass parts and other Water Park surfaces.

2.0 **INTENT**

- 2.1 The intent of this specification is to provide direction and guidance to help ensure the proper and complete installation of the Slide Armor Hybrid Polyurethane Gelcoat Coating System. Depending on the condition of your waterslide project, a thorough and complete preparation process is required to assure maximum bond and long-term performance.
- 2.2 The application contractor's proposal should be based upon this Specification Guidelines and the technical information provided in the manufacturer's Technical Data Sheets for the specified materials.
- 2.3 SLIDE ARMOR is self-priming and does not need the use of a primer on fiberglass surfaces when these guidelines are properly followed.

3.0. **FIBERGLASS REPAIR MATERIALS**

- 3.1 Surfacers/Filler

3.1.1 Filler 3M Bondo # 262

3.2 Topcoat

3.2.1 SLIDE ARMOR, a Hybrid, two component Polyurethane Gel coat. Mix Ratio 1A to 2B. It is self-priming in most applications. Call Manufacturer for details.

3.2.2 SLIDE ARMOR 2500 comes in colors. Slide Armor 2505 is a clear coat. See literature and website for color chart or contact Creative Polymers.

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4.0

SURFACE PREPARATION

- 4.1 Power Wash Interior Riding Surface using high pressure water blast of at least 3,500 psi to remove all oil, grease, dirt, or other contaminants using a heavy duty detergent and wax remover in a ratio as required by the manufacturer. If scale is build up, a scale remover must be used separately. Keep blast head in close proximity to the surface for proper cleaning. Refer to Product Data Sheets for each of the utilized solutions.
- 4.2 Sanding Surface: Power sand entire surfaces with 80 grit sand paper to scuff and remove loose or flaking surface defects and crosshatch with 40 grit. This ensures maximum bond and long-term performance.
- 4.3 Final Power Wash: Using high pressure water blast with 3500 psi or greater, wash all remaining detergents, wax and sanding residues from the surface with Water only. Keep power washer spray close to the surface.
- 4.4 Repairs: Using Bondo filler or equal, repair only deep scratches, gouges or defects.
- 4.5 Prepare to Paint: Assure that the surface of the Interior Riding Surface is completely dry and free of any surface contaminants that have appeared, such as dust, leaves, droppings or other contaminants using compressed air free of all oil, water or other contaminants. Wipe down entire slide surface with a white lint-free cloth using Acetone as a final prep before applying Slide Armor.

5.0 APPLICATION

A test area of the complete coating system should be applied to the substrate prior to starting the full application to determine if any additional special cleaning or application procedures may be required. The SLIDE ARMOR "Surface Tension Test System" is highly recommended.

- 5.1.1 All surfaces shall be dry and free of dust and debris prior to commencing with material application. Surface Temperature must be at minimum of 5°F (3°C) above the dew point to avoid moisture condensation and negative effects on the coatings system during and for 6 hours after application at 75F. Warm and dry Temperatures must be maintained according to chart provided.

SLIDE ARMOR may be applied as a one coat color system, but certain colors such as "yellow" will need 2-3 coats for proper hiding and color uniformity. See Creative Polymers

Color Guide Chart for details. In addition, for longer life and color retention and in severe UV & high volume water environments, SLIDE ARMOR 2505 Clear is recommended over the SLIDE ARMOR 2500 Color coat to extend longevity. It is highly suggested for large volume Water Parks.

Slide Armor Colors or Clear may be rolled, brushed or spray applied. See details in Section 5.2.10

5.2 Base Coat/Top Coat/Clear Coat: SLIDE ARMOR 2500 Color and SLIDE ARMOR 2500 Clear.

5.2.1 Store the unopened containers off the ground and in a dry protected area at 60-90°F (15-32°C).

5.2.2 Precondition components "A" and "B" to 70-90°F (21-32°C) prior to mixing.

5.2.3 Mixing: Power mix each component to a smooth, uniform consistency and then combine 1 "A" to 2 "B" by volume and mix thoroughly for 3 minutes.

5.2.4 Thinning: Not Recommended.

5.2.5 Clean up: Use MEK solvent.

5.2.6 Pot Life:

Material Temperature:

60°F (15°C)	90-110 minutes
78°F (25°C)	60-75 minutes
90°F (32°C)	less than 45 minutes

5.2.7 Preferred Application Conditions:

	Normal	Minimum	Maximum
Material	75-90°F (24-32°C)	65°F (18°C)	100°F (38°C)
Surface	75-90°F (24-32°C)	45°F (7°C)	110°F (43°C)
Ambient	75-90°F (24-32°C)	45°F (7°C)	100°F (38°C)
Humidity	30-50%	0%	85%

5.2.8 Surface Temperature must be at minimum of 5°F (3°C) above the dew point.

5.2.9 Application Equipment:

5.2.9.1 Roller:

5.2.9.2 Use of rollers require that a fiber free, 3/8" nap roller. Roller type is extremely important! Use a solvent and shed resistant commercial grade roller, such as the Worster Pro Grade 3/8" which is recommended.

5.2.9.3 Conventional/HVLP:

5.2.9.3.1 Pressure Pot with fluid tip .039-0.59

- 5.2.9.3.2 Siphon with fluid tip .055-0.63
- 5.2.9.3.3 Gravity Feed with fluid tip .047-0.63

5.2.9.4 Airless Spray

- 5.2.9.4.1 Airless spray tip size 0.019 with 8" fan as a general guide.

5.2.10 Dry Film Thickness: Slide Armor at 5 dry mils (125 microns) per coat. Applicator should use a Wet Film Thickness Gauge and obtain 8 Wet Mils. Many applications, especially the external slide can be a one coat of Slide Armor. However, multiple coats may be necessary depending on color selected and desired longevity required, especially for the interior slide. Minimum dry film thickness is 5 mils. Contact Creative Polymers for other options and the use of SLIDE ARMOR 2505 as a clear coat over the color coat.

5.2.11 Dry / Recoat / Cure Times: The times shown below are based on a 30-50% RH and proper ventilation through the application area.

	50-60°F (10-15°C)	70-80°F (21-27°C)	90-100°F (32-40°C)
Surface Dry	3-4 hours	2-3 hours	1 hour
Hard Film	20 hours	14 hours	4 hours
Recoat (minimum)	8 hours	3 hours	1-2 hours
Recoat (maximum)	24 hours	18 hours	12 hours
Full Cure	9 days	6 days	4 days

5.3 Filler / Patch Compound: Polyester type Bondo # 262

- 5.3.1 Store the unopened containers off the ground and in a dry protected area at 60-90°F (15-32°C).
- 5.3.2 Precondition components "A" and "B" to 70-90°F (21-32°C) prior to mixing.
- 5.3.3 Mixing: Use Manufacturers recommendations
- 5.3.4 Thinning: Not Recommended.
- 5.3.5 Pot Life: See Manufacturers Recommendations
- 5.3.6 Preferred Application Conditions:

	Normal	Minimum	Maximum
Material	75-90°F (24-32°C)	65°F (18°C)	100°F (38°C)
Surface	75-90°F (24-32°C)	50°F (10°C)	110°F (43°C)
Ambient	75-90°F (24-32°C)	50°F (7°C)	100°F (38°C)
Humidity	30-50%	0%	85%

- 5.1.8. Surface Temperature must be a minimum of 5°F (3°C) above the dew point.
- 5.1.9. Using a squeegee, trowel or putty knife, fill all gouges, or exposed fiberglass as needed, and other surface defects. Do not fill greater than ¼" per application. See manufacturers instructions.
- 5.1.10. Transfer material to the surface using a strike flush using a squeegee or putty knife.
- 5.1.11. Dry / Recoat / Cure Times: See Manufacturer's instructions for cure details.

6.0 INSPECTION AND QUALITY ASSURANCE

- 6.1 It will be the Application Contractor's responsibility to perform first line inspection of all aspects of the surface preparation and lining application work and to assure conformance with all pertinent specifications.
- 6.2 The Application Contractor shall provide a daily record of all application process information, including temperatures, relative humidity, dew point, procedures and inspection data.
- 6.3 All of the Application Contractor's work to be performed and material to be supplied under the contract shall at all time be subject to inspection by the Owner's engineer or inspector who shall be allowed complete access for examining said work. This person may reject work not complying with the specifications.
- 6.4 The Application Contractor shall be aware that after preparing the surface of a completed section of work, it will be made available for inspection and approved by the Owner's engineer or by the representatives of the Owner.
- 6.5 Dry Film Thickness Measurement: Prior to the application of successive coats, dry film thickness measurements will be taken in accordance with SSPC-PA 2.
 - 6.5.1 The Slide Armor System shall have a dry film thickness of no less than 5 mils (250 microns) over any surface.

7.0 SAFETY

- 7.1 Read the Material Technical Data Sheet, the Safety Data Sheet (MSDS) and container labels of the materials being used for detailed health and safety information.
- 7.2 Slide Armor and its related components should only be used by trained, professional painters. All materials associated with Slide Armor are to be considered hazardous. Any coating containing isocyanates can cause irritation to respiratory system and hypersensitive reactions. Asthma sufferers, those with allergies or any history of respiratory complaints should not use the Slide Armor or related products. Do not sand, flame cut, braze or weld in the vicinity while applying these liquid systems, as these material are flammable. Use of proper respiratory protection is mandatory.
- 7.3 The Application Contractor will establish the number of air exchanges per hour required to maintain a safe working atmosphere during all phases of work. The

Application Contractor will include details of his safety program for working in tanks with his bid, complete with a list of equipment used to test organic vapor and/or oxygen levels in the vessels.

- 7.4** All applicators and their helpers will wear appropriate respiratory protection equipment. The type of respiratory protection will depend upon the nature of the application and material hazard, and shall eliminate dust, fumes, mists, organic vapors, acids and alkaline contaminants.
- 7.5** The Application Contractor must comply with all Federal, State and Local regulations pertaining to safety, environmental protection and other pertinent regulations.

