SMOOTHSHIELD

(29S Series – Bulk)

User Guide

FIRMFOOT®



FORREST
Technical Coatings

FIRMfoot® SmoothShield (29S Series) is a solvent-borne epoxy ester coating designed to provide a durable, protective finish for surfaces exposed to foot traffic. Unlike Grit Tough, SmoothShield provides a uniform, satin finish without added texture, making it ideal where protection is needed without added texture or traction.

Suitable for properly prepared substrates including steel, concrete, wood, fiberglass, and aluminum.

3 Basic Steps for Best Results

1 **Prepare the Surface**

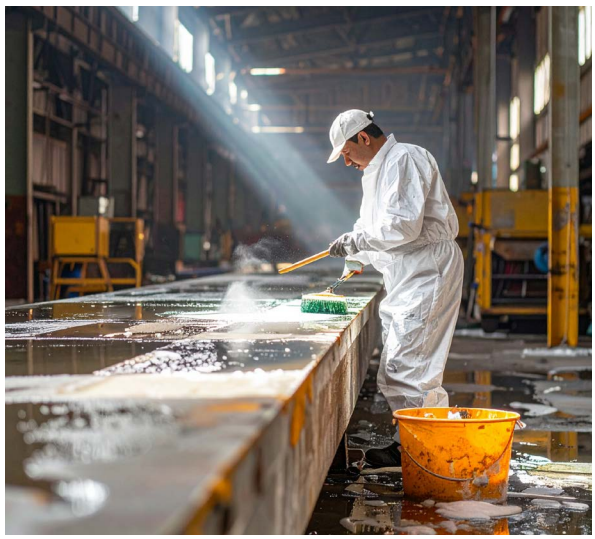
2 **Mix & Apply the Coating**

3 **Allow Proper Dry & Cure Time**

Following these steps in sequence will help ensure proper adhesion, a consistent finish, and long-term durability.

1 Surface Preparation (CRITICAL STEP)

Surface preparation directly impacts adhesion and durability.



General Requirements

- Surface must be **clean, dry, and free of contaminants**
- Remove all:
  - » Dirt, dust, grease, oil
  - » Rust or failing coatings

Recommended Prep by Substrate

- **Steel (Ferrous Metals):** Clean thoroughly; use primer for corrosion resistance
- **Aluminum / Non-Ferrous:** Acid etch for adhesion
- **Fiberglass:** Light sanding or acetone wipe
- **Concrete:** Clean with TSP and allow to fully dry
- **Wood:** Clean and dry (no primer required)

Best Practices

To achieve the best finish and adhesion, follow these additional guidelines.

- Use clean white rags only to avoid contamination (industrial standard)
- Avoid
  - » Paint thinner / mineral spirits
  - » Tack cloths (leave residue and reduce adhesion)

If prep is done incorrectly:

- Coating may peel, blister, or fail prematurely

2 Mixing & Thinning

Once the surface is properly prepared, the next step is to mix the coating thoroughly to ensure a uniform appearance and consistent performance.

Mixing

- Stir thoroughly before use and occasionally during application

Key Difference vs. Grit Tough:

- No grit = less aggressive settling, but still requires proper mixing for consistent finish and performance

Thinning (If Needed)

After thoroughly mixing the product, determine if thinning is necessary based on your application method and conditions.

- Product is **ready-to-use**
- May be thinned up to **10% maximum** with**:**
  - » Xylene
  - » Toluene

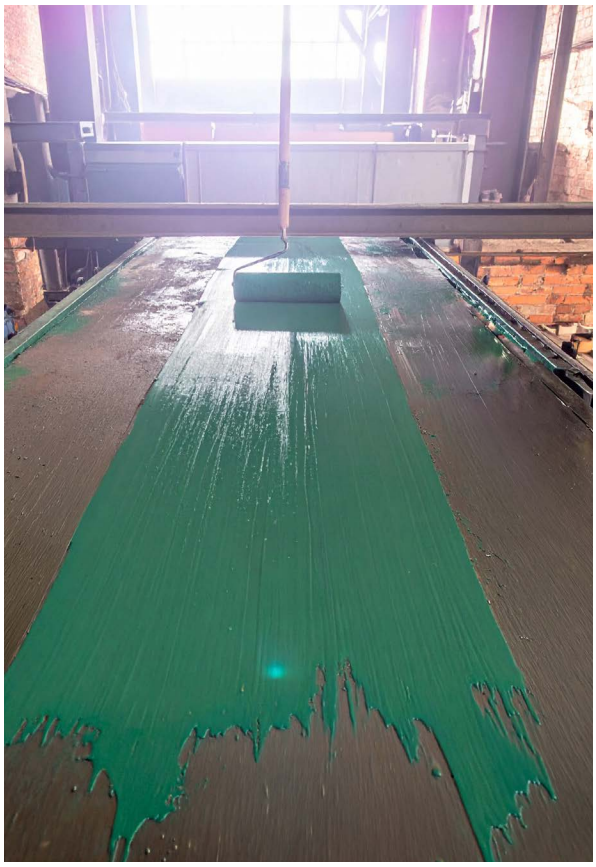
CAUTION: Do NOT over-thin

- Can reduce film build and durability
- May impact final appearance



3 Application Instructions

Once the coating is properly mixed (and adjusted if needed), proceed with application.



Application Methods

Brush	Roll	Spray

Environmental Conditions

Before beginning application, confirm that environmental conditions are within the recommended range.

- Temperature: 40°F – 85°F
- Humidity: < 80%
- Surface temperature must be ≥5°F above dew point

How to Apply

After selecting your application method and confirming conditions, apply the coating as follows.

- Apply in 2 coats for best performance
  - » First coat: thin / tack coat
  - » Second coat: full coverage coat

Film Thickness Targets

Apply the coating within the following thickness ranges to achieve proper protection and finish quality.

Wet Film Thickness: **6–8 mils**	Dry Film Thickness: **2–3 mils**

Why this matters

Proper film thickness directly affects performance and appearance.

- Too thick -> longer dry time, potential surface defects
- Too thin -> reduced protection and durability

Recoat Window

To ensure proper adhesion between coats, follow the recommended recoating times.

- Within 2 hours, **OR** after 24 hours

4 Dry & Cure Time

After application is complete, allow the coating to properly dry and cure before placing into service. Drying conditions will directly impact the final appearance.

- Dry to handle: ~20 minutes
- Allow 24 hours for full cure; do not allow foot traffic during this time.
- Full cure depends on:
  - » Temperature
  - » Airflow
  - » Film thickness



Use the following information for planning and proper storage

Coverage

- Approx. **529–593 sq ft per gallon @ 1 mil**

Storage

- Store in a cool, dry, well-ventilated area
- Keep containers tightly sealed
- Shelf life: ~12 months (unopened)

Safety Information

Always follow appropriate safety precautions when handling and applying this product.

- **Flammable product** – keep away from heat, sparks, and flame
- Use in **well-ventilated areas**
- Follow PPE guidelines
- Review SDS before use

Troubleshooting

If issues occur during or after application, refer to the guide below to identify common causes and corrective actions.

Peeling / Adhesion Failure

- Cause: Poor surface preparation, Too much paint applied, paint applied outside of ideal re-coat window
- Fix: Remove coating, properly clean and reapply

Uneven or Thin Coverage

- Cause: Under-application or over-thinning
- Fix: Apply additional coat within recoat window

Runs or Sags

- Cause: Over-application (too heavy)
- Fix: Apply thinner, controlled coats

Inconsistent Finish

- Cause: Insufficient mixing or uneven application
- Fix: Stir thoroughly and apply evenly

Pro Tips

For best results and a consistent finish, keep the following tips in mind.

- SmoothShield is a **protective coating, not a non-slip solution**
- Ideal where you want:
  - » Easier cleaning
  - » A uniform satin finish
  - » Protection without added texture
- Always test application method before full-scale use
- Maintain consistency in film thickness for best results



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