Product Description

FRC 'Flexible Rubber Coating' is a water-based, waterproof, encapsulating rubber coating designed for wood, concrete, metal and water-immersible applications. The coating encapsulates degraded surfaces and forms a flexible, waterproof, and slip-resistant membrane suitable for interior and exterior use. It can be top-coated or sealed for added durability and color customization.

Key Benefits

- Suitable for indoor and outdoor applications
- Low VOC, meeting all state standards
- Repairs splintered wood and concrete floors
- Single-part 'no-activation' formula
- Good UV, impact, abrasion, and chemical resistance
- Slip-resistant and waterproof surface
- High-wear, traffic resistant coating
- Easy clean-up with soap and water
- Can be used to waterproof and protect many types of surfaces

Product Characteristics

Color	60+ standard options, unlimited custom options
Finish	Matte / Textured
Base Type	Water-based rubber polymer
Solids by Volume	52%
Solids by Weight	68%
VOC (Material)	0.41 lb/gal (as supplied)
VOC (Coating)	0.86 lb/gal (as applied)
Viscosity	85–95 KU
Coverage Rate	100 sq. ft./gal
Pot Life	N/A (single component)
Flash Point	>200°F (non-flammable)
Weight per Gallon	10.2–10.6 lb/gal
Coating VOC	0.86 lb/gal
Material VOC	0.41 lb/gal
Packaging:	3.5-gal bucket
Storage:	Store in dry, moisture-free environment, protect from freezing
Shelf Life:	6 months in unopened container
Coverage Rate, Wet/Dry Mil Thickness	See Surface Preparation: for Wood or Concrete

Product System & Variants

Multiple products are referenced in this document; this section helps to clarify naming, references and general uses of each product.

• **FRC 'Flexible Rubber Coating':** Refers to the "FRC" base rubberized coating, **without rubber aggregate**. It can be used on its own when the substrate is in relatively good condition—i.e. no gouges, scrapes, or cracks to fill - or as a topcoat **over** FRC 'High-Build Membrane' to smooth the surface which will be somewhat granular due to the Rubber Aggregate.

• **FRC 'High-Build Membrane':** Refers to the FRC 'Flexible Rubber Coating' combined with Rubber Aggregate. It is available pre-packaged or can be field-mixed by the user to increase the film thickness and to help fill cracks, gouges or other surface damage. Field mix with 1.4 lbs. of Rubber Aggregate per gallon of FRC 'Flexible Rubber Coating'. (5 lbs. per 3.5 gallon container). Thoroughly mix with a paint mixer or impellor mixer. Multiple layers can be applied to fill deeper damage and achieve a more even surface. FRC 'High-Build Membrane' is then top-coated with FRC 'Flexible Rubber Coating' to smooth the rougher high-build membrane.

• **Rubber Aggregate:** Is a granulated, vulcanized rubber which is added to FRC 'Flexible Rubber Coating' as described previously. It is black in color and has the **consistency of a very fine sand**.

Recommended Uses

Product is suitable for application on dry and properly prepared wood, concrete, and primed metal substrates. Due to variations in substrate and job site conditions, it is always recommended to prepare a test sample before full application.

Pre-Application Testing ▸

Moisture Testing (Concrete):

• Plastic Sheet Test (ASTM-D-4263): Tape a clear plastic sheet (18" x 18") to the slab for 16 hours. If condensation or darkening occurs, the surface is too wet.

• Calcium Chloride Test (ASTM-F-1869): Measures moisture vapor transmission. If readings exceed 3 lbs per 1,000 ft² per 24 hours, the surface is too wet for application.

• pH Level: Do not apply if pH levels exceed 10.5.

Application Testing:

• Application methods, techniques, equipment, and environmental conditions—including moisture and humidity—can affect performance and appearance. Because these factors vary by job site and application, it is **strongly recommended to perform a test application** to confirm that the desired results can be achieved before proceeding with full production.

Application Guide

These are high-level guidelines. Refer to the FRC Application Guide documents for specific substrates like wood floors, concrete floors, etc.

Surface Preparation

• Remove all oil, dust, grease, dirt, chalk, rust, loose or peeling paint and all foreign matter. **For wood**, use an orbital disk sander to remove loose fibers and failed coatings while rounding broken edges**. For concrete**, shot blast or diamond grinding is recommended. Concrete must be moisture free and tested for hydrostatic pressure. **On metal**, remove all rust and scale and prime the surface with an appropriate corrosion and bonding primer. **For previously painted surfaces**, remove any loose or peeling material and apply a bonding primer.

• Mechanical abrasion is recommended. If pressure washed, confirm surface is 100% dry before proceeding. Clean all dust and debris thoroughly using vacuum or other mechanical means.

• **Crack Repair (Concrete only):**

- Route cracks ≥ 1/8" to a minimum of 1/4" width, then clean using compressed air.

- Fill with a 2-part epoxy or polyurethane crack filler (e.g., NP818 or Sikaflex 1C SL). Typical set time ~4 hours; cures to ~6500 psi.

Application Process

Priming ▸

• **NOTE:** In all cases, new and unpainted drywall should be coated with a PVA sealer or an appropriate multi-purpose primer. Priming may be advisable on other highly porous surfaces such as unpainted wood. Always allow the primer to **dry completely**, typically within 2–3 hours depending on temperature and humidity.

• **FRC 'Flexible Rubber Coating' Only:**
When FRC Flexible Rubber Coating is applied as a standalone system, **no primer is required** but may be advisable on very porous surfaces.

• **FRC 'High-Build Membrane':**
When applying the FRC High-Build Membrane, a **reduced-strength prime coat is recommended**. Prepare this prime coat by mixing the **FRC High-Build Membrane 1:1 with FRC Flexible Rubber Coating**. This produces a mixture containing approximately **half the rubber aggregate** of the standard High-Build formulation.

Applying this reduced-aggregate mixture as the initial coat promotes **more uniform dispersion of the rubber aggregate** and creates a slightly gritty surface profile. This improves mechanical bond and helps subsequent full-strength High-Build coats adhere and cling to the surface.

• **NOTE:** This step is especially important for applications on **vertical surfaces**, where sag resistance is critical. For vertical applications, it is recommended to apply **two or more coats of the reduced-aggregate prime coat mixture** in place of the full-strength FRC 'High-Build Membrane'. Applying the full-strength High-Build Membrane on vertical surfaces may result in increased texture and a less uniform finish.

• **Application:** Apply using a **3/8" smooth roller cover.** Apply at a rate of **1-gallon per every 100 S/F per coat.** A notched squeegee may be used to initially help distribute the material before rolling. Allow to dry for a minimum of 2 hours between coats. In all cases, the coating must be completely dry before applying additional coats. Apply additional coats as needed per the above specification. To achieve desired film thickness, see the **Product Coverage and Thickness Table** for details.

FRC 'High-Build Membrane' Application ▸

• **Material:** Endura-Clad Coatings FRC 'Flexible Rubber Coating' with Rubber Aggregate. Field mix with 1.4 lbs. of Rubber Aggregate per gallon of FRC 'Flexible Rubber Coating'. (5 lbs. per 3.5 gallon container). Thoroughly mix paint mixer or impellor mixer.

• **Application:** Apply using a **3/8" smooth roller cover.** Apply at a rate of **1-gallon per every 100 S/F per coat.** A notched squeegee may be used to initially help distribute the material before rolling. Allow to dry for a minimum of 2 hours between coats. In all cases, the coating must be completely dry before applying additional coats. Apply additional coats as needed per the above specification. To achieve desired film thickness, see the **Product Coverage and Thickness Table** for details.

FRC 'Flexible Rubber Coating' Application ▸

• **Material:** FRC 'Flexible Rubber Coating' tinted to desired color.

• **Application:** Apply using a **3/8" smooth roller cover.** Apply at a rate of **1-gallon per every 100 S/F per coat.** A notched squeegee may be used to initially help distribute the material before rolling. Allow to dry for a minimum of 2 hours between coats. In all cases, the coating must be completely dry before applying additional coats. Apply additional coats as needed per the above specification. To achieve desired film thickness, see the **Product Coverage and Thickness Table** for details.

Final Sealing (If Desired)

For a glossy and easy to clean surface, seal with Endura-Clad Coatings **Endura-Plate**.

• **Material**: Endura-Clad Coatings **Endura-Plate** Gloss Finish tinted to desired color.

• **Application**: Apply using a **3/8" smooth roller cover.**

• **Coverage Rate**: Apply **Endura-Plate** at **200 square feet per gallon**. May be applied in one heavy or two light coats. NOTE: Two light coats applied at 400 sq ft per gallon per coat will provide a more uniform finish.

• Ensure the final coat is **fully dry** before reopening to foot & cart traffic (if applicable). **Endura-Plate** dries in 2–3 hours depending on application thickness, temperature, and humidity but 8 hours is recommended before full foot traffic.

Curing & Reopening ▸

• Allow proper dry times between all coats and after sealing.

• Wait minimum 8 hours before reopening to foot & cart traffic.

• Additional dry time may be required for waterproofing applications.

• **Full cure** typically reached in **2–7 days**, depending on weather conditions.

General Notes ▸

• FRC can be applied in multiple coats to achieve a high film thickness depending on usage and requirements.

Product Coverage and Thickness Table

Product	Coverage (sq ft / gallon)	Wet mil thickness	Dry mil thickness
FRC Flexible Rubber Coating	100	16	8
FRC High Build Membrane	100	16	10

• If a smooth surface is desired, cover FRC 'High Build Membrane' with at least one coat of FRC 'Flexible Rubber Coating'. Additional coats may be needed to achieve the desired surface profile.

• Only apply when surface temperatures are between **60°F and 100°F**. Can be applied in lower temperatures but will require longer curing times.

• **Do not apply in hi-humidity** or if rain is expected within 24 hours.

• **Avoid thinning with water**. Use **propylene glycol** if thinning is needed.

• Store and handle materials per manufacturer guidelines.

Mixing & Reduction

• **For FRC 'Flexible Rubber Coating'**, mix thoroughly before use.

• **For FRC 'High Build Membrane'**, field mix with 1.4 lbs. of Rubber Aggregate per gallon of "FRC" Flexible Rubber Coating. (5 lbs. per 3.5 gallon container). Thoroughly mix with a paint mixer or impellor mixer.

• **Reduction:** Do not thin with water. If thinning is necessary, use propylene glycol only.

Clean Up

• **Before drying:** Clean spills and tools with soap and water.

• **After drying:** Removal may require mechanical methods.

• **Disposal:** Dispose of unused product per local waste regulations.

Final Notes

• All products are tinted to specified color for easy touch-ups.

• Apply only when surface temperatures are between 60°F and 100°F. Application in lower temperatures is possible but will extend cure time.

• Do not apply if rain is expected within 24 hours.

• Do not thin with water. Use propylene glycol if thinning is necessary.

Health & Safety

For use by trained professional personnel only. Before use, read and follow all label directions, this Technical Data Sheet (TDS) and relevant Safety Data Sheets (SDS).

Respiratory Protection: Although low in VOCs and considered non-toxic, avoid prolonged inhalation of vapors. When handling, mixing, or spraying, wear a properly fitted NIOSH-approved respirator with organic vapor cartridges as needed.

Skin Contact: May cause irritation. Wear chemical-resistant gloves and protective clothing. Wash exposed skin thoroughly with soap and water. Launder contaminated clothing before reuse. If irritation persists, seek medical attention.

Eye Contact: Can cause irritation. In case of contact, flush eyes with water for at least 15 minutes. Seek medical attention if symptoms persist.

Mixtures: If the product is mixed with other components, all associated hazards apply to the mixture.

General Precautions: Keep out of reach of children. Apply only in well-ventilated areas.

Cured Product: Once fully cured, this product is considered non-hazardous.

Warranty

All products are warranted to be free of manufacturing defects. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product.

Disclaimers

All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for professional use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Published technical data and instructions are subject to change without notice.