

MCI® CorShield®

DESCRIPTION

MCI® CorShield® provides excellent corrosion resistance on reinforcing metals in storage or embedded in concrete. This product is water-based and easy to use. As a soft non-tacky film, MCI® CorShield® is an excellent choice for long-term indoor protection and short-to medium-term unsheltered outdoor protection. MCI® CorShield® has been tested for reinforcing steel bond strength in accordance with ASTM A944-99. The results of this test were exceptionally good, confirming that MCI® CorShield® does not have to be removed prior to embedding in concrete (see ASTM A944 Bond Strength graph).

PACKAGING & STORAGE

Available in 5 gallon (19 L) pails, 55 gallon (208 L) drums, liquid totes, and bulk.

To ensure best product performance, store in original packaging, indoors, and out of direct sunlight at 40-100 °F (4-38 °C).

Shelf life: 1 year



HOW IT WORKS

MCI® CorShield® cures to a soft non-tacky film and eventually hardens.

WHERE TO USE

- Temporary storage of reinforcement and other metal components used in concrete construction
- Processing protection
- Overseas shipping
- Maintenance repairs

ADVANTAGES

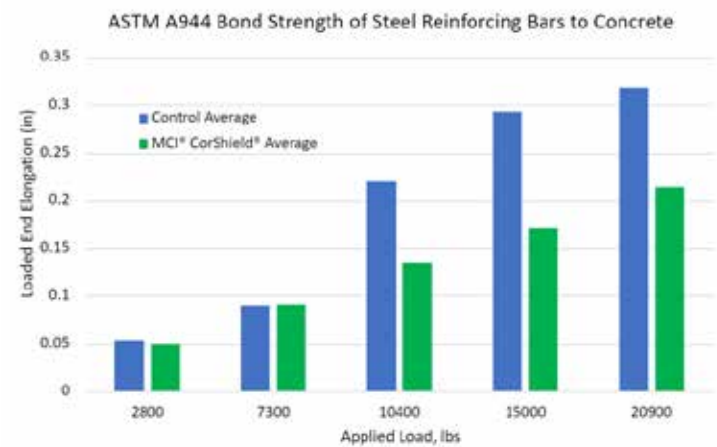
- Excellent outdoor protection
- Multi-metal protection
- Easy to use
- Does not affect concrete adhesion to rebar

PHYSICAL PROPERTIES

Appearance	Light beige to tan liquid
Volume Solids	41%
Dry to Touch	30-60 min @ 75 °F (24 °C), 50% R.H.
Viscosity	1,000-7,000 cPs
Density	8.1-8.5 lb/gal (1.00-1.01 kg/L)
Spreading Rate	658 ft²/gal @ 1.0 mils (16.1 m²/L @ 25 µm) DFT
VOC	0.4 lb/gal (48 g/L)
Dry Film Thickness	1.0-3.0 mils (25-75 µm)
Wet Film Thickness	2.4-7.3 mils (61-185 µm)

STANDARD TEST RESULTS

Typical Corrosion Protection Properties (2-3 mils [50-75 µm] DFT)		
Test Method	Property	Protection Time
ASTM B117	Salt Spray	250 hours
ASTM D1748	Humidity	1400 hours



Average of three trials, according to AET test report #05-01412.

APPLICATION

Surface Preparation

Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, rust inhibitors (except Cortec® approved), or any other surface contamination that could affect adhesion. Cortec® recommends a minimum of SSPC-SP1 over painted surfaces. For bare metal applications, Cortec® recommends NACE #3/SSPC-SP6. Consult Cortec® and/or test system adhesion prior to full scale application.

Note: Make sure dew point is more than 5°F (2°C) less than air temperature for application. Power agitate to a uniform consistency using a “squirrel cage” type mixer, handheld drill mixer, or other equivalent method. MCI® CorShield® can be applied by spray, roll, brush, or dip.

Typical Equipment Setups

HVLP / Conventional Spray

- Tip: 0.011”-0.19” (0.28-0.48 mm) dependent upon pressures and viscosity
- Air Pressure: 45-55 psi
- Fluid Pressure: 10 psi
- Fluid hose should be ¾” (0.95 cm) I.D. with a maximum length of 50 feet (15.2 m). ¼” (0.64 cm) I.D. fluid hose can be used but pressures may need to be adjusted. Pot should always have dual regulation and be kept at same elevation as spray gun.

Air Assisted Airless / Airless

- Tip: 0.015”-0.035” (0.38-0.89 mm) dependent upon pressures and viscosity
- Pressure: 1800-2500 psi
- Hose should be ¾” (0.95 cm) I.D. minimum, but a ¼” (0.64 cm) I.D. whip end section may be used for ease of application. A maximum length of 100 feet (30.5 m) is suggested.

Cleanup

Clean tools/equipment immediately after use with water when coating is still wet. When dry, use Butyl Cellusolve or MEK. Follow mfg’s safety recommendations when using any solvent.

CONSIDERATIONS

The ambient air, coating, and metal substrate temperature should be between 45 and 110 °F (7 and 43 °C) when applied.

MCI® CorShield® should be completely dry before placing the part into storage.

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