NEWS ALERT



Avoiding the Pitfalls of Rusty Rebar with Proper CorrVerter® MCI® Application





Since rusty rebar is often the culprit of concrete deterioration, it must be removed or passivated before concrete repair. Otherwise, serious adhesion or re-rusting problems could cause the repair to fail. The tips below will help contractors avoid some of the pitfalls of rusty rebar and get the most out of CorrVerter® MCI[®] Rust Primer as a labor-saving alternative to sandblasting.

Keys to Successful Rust Passivation

Before doing any rebar rust treatment, rebar condition must be assessed and dealt with based on rust severity level. If reinforcing bars are too corroded, they may need to be replaced, but if they have enough thickness/integrity remaining, they can be sandblasted or passivated. The latter is much easier but requires attention to the following important details for best results.

- 1. Check the weather. If applied outdoors, CorrVerter® MCI® should only be applied when it is not raining. The temperature must be 49-90 °F (9.4-32.2 °C), and dew point should be more than 5 °F (2 °C) lower than the ambient temperature.
- 2. Clean the rebar surface. Use a wire brush to remove any loose rust. Then rinse the surface before coating.
- 3. Make sure CorrVerter® MCI® is properly mixed. The product should be stirred to a uniform consistency, usually for two to three minutes before applying.
- 4. Apply CorrVerter[®] MCI[®] at the recommended wet film thickness (WFT). The goal is to have 3-5 mils (75-125 μm) when dry, which means WFT should be 8.7-14.5 mils (217.3-362.3 µm). Using a WFT gauge to check the coating at the time of application is a good idea whenever possible.
- 5. Allow CorrVerter® MCI® to air dry 24 hours before applying the concrete patch to make sure the coating is fully cured.

Cortec* Corporation is the global leader in innovative, environmentally responsible VpCI° and MCI° corrosion control technologies for the Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Headquartered in St. Paul, Minnesota, Cortec^{*} manufactures over 400 products distributed worldwide. ISO 9001 and ISO 14001 Certified, and ISO 17025 Accredited.





Post-Application Best Practices

After allowing enough dry time, workers should inspect the CorrVerter® MCI® for the following points:

- The first thing to check for is total coverage of the rebar by the rust converting primer. Any exposed rebar should be recoated to ensure full protection.
- If possible, the dry film thickness (DFT) should be measured (3-5 mils [75-125 µm] is ideal) and any potentially thin areas where DFT could not be verified should be noted on the inspection report.
- No rust should be bleeding through the CorrVerter®; otherwise, another coat of CorrVerter® may be needed to make up for insufficient DFT.
- Workers should also look for soft or white milky areas where the coating has not cured and allow further dry time if needed (CorrVerter® MCI® should be dark brown to black when fully cured).
- Any potential problem areas should be photographed and noted in the inspection report.

Capture the Benefits of CorrVerter® MCI®!

Ultimately, CorrVerter® MCI® is an extremely simple method of surface prep for rusty rebar. It eliminates the extra hassle required for sandblasting and leaves behind a passivated surface that supports good adhesion to the concrete patch material. Follow these guidelines and contact Cortec® for further help avoiding the pitfalls of rusty rebar by proper CorrVerter® MCI® application: https://www.cortecmci.com/contact-us/.

Keywords: rusty rebar, CorrVerter, MCI, alternative to sandblasting, concrete repair, Cortec, rust converting primer, surface prep for rusty rebar, good adhesion to concrete, concrete deterioration



