

US Army Corps of Engineers Test Report Summary

Moisture-Cure Urethane Coatings for Compliance with Industry specifications – SSPC Paint 41

December 2011

Products tested:

Superior Products International II, Inc. with Rust Grip marked MC4
Sherwin Williams with Corothane I Ironox B marked MC2
Wasser Coatings with MC FerroxB 100 marked MC 6
Wasser Coatings with MC-Miomastic 100 Red Oxide marked MC8
Indmar Coatings Corp with Chem-Thane 2821 marked MC10

Summary of Test Results

Stability: All products except for Chem-Thane 2821 met all requirements of the specification for stray stability, mixing properties, and spraying properties.

Adhesion: All met with minimum requirements. Rust Grip and Wasser Miomastic 100 Red Oxide exceeded the minimum requirements for adhesion to the substrate.

Corothane I Ironox B, MC FerroxB 100, and Chem-Thane 2821 were tested under a different system as intermediate coats over their perspective primers (two-coat system).

Rust Grip and MC-Miomastic 100 Red Oxide were tested as one coat primers direct to metal.

Weathering: Scribed panels cycled between a fluorescent UV/Condensation apparatus and a salt fog apparatus. All the coatings exceeded the minimum requirements for blistering and rust undercutting the scribe.

Only two of the products, Corothane I Ironox B and Rust Grip passed the rust evaluation requirement of the specification.

The other three products, MC FerroxB 100, MC-Miomastic 100 Red Oxide, and Chem-thane 2821 showed a range of rusting with the Chem-thane 2821 being the worst.

Impact: All the products exceeded the minimum impact requirement for intrusion testing but fell far short of the specification value when evaluated on the extrusion side of the panel with Chem-thane 2821 performing the worst.

Conclusions:

- **Rust Grip** was the most consistent performer of all the coatings.
- **Rust Grip** was one of two coatings (with MC-Miomastic 100 Red Oxide) to exceed the minimum requirements for adhesion and only one of two coatings to be applied directly to metal.
- **Rust Grip** was one of two coatings (with Corothane I Ironox B) to pass the rust evaluation requirement of the specification.
- **No other coating** performed at the same level as **Rust Grip** in exceeding and passing the test requirements.