

Method Statement for Application of Building chemistry Industry Epoxy Zinc Rich Primer -BC Poxy primer 859

1. Scope of Work:

This method statement outlines the procedures for the surface preparation, application, and inspection of Building chemistry Industry epoxy zinc-rich primer , BC poxy primer 859 to protect steel structures from corrosion. The primer serves as a base coat for further layers in a protective coating system.



2. Materials & Equipment Required:

Materials:

Epoxy zinc-rich primer
Thinner (if required, as per manufacturer's recommendations)
Solvent for cleaning (e.g., acetone or xylene)

Equipment:

Abrasive blasting equipment
Air compressor
Spray gun or brush/roller for application
Personal protective equipment (PPE): Gloves, safety goggles, dust mask, overalls
Humidity gauge, surface temperature thermometer, and wet film thickness gauge

3. Health & Safety Considerations:

Ensure all personnel wear appropriate PPE, including respirators when in contact with paint fumes.

Ensure adequate ventilation in confined areas.

Implement measures to prevent fire hazards due to the solvent in the primer.

Follow all safety guidelines as per MSDS for the materials.

4. Surface Preparation:

Cleaning: Remove oil, grease, or other contaminants from the steel surface using a suitable solvent.

Abrasive Blasting: Perform abrasive blasting to achieve a minimum surface preparation standard of Sa 2.5 (ISO 8501-1) or SSPC-SP 10 (Near White Metal Blast Cleaning).

Anchor Profile: Ensure the surface roughness profile is suitable for the epoxy zinc-rich primer, typically 40-75 microns.

Dust Removal: After blasting, thoroughly clean the surface to remove all dust, abrasives, and contaminants.

Inspection: Inspect the surface for any defects such as rust, mill scale, or contaminants, ensuring they are addressed prior to application.

5. Environmental Conditions:

Surface Temperature: Ensure the surface temperature is at least 3°C above the dew point to prevent condensation.

Ambient Temperature: Apply the primer within the temperature range recommended by the manufacturer (typically 10°C to 35°C).

Humidity: Ensure relative humidity is below 85% during application to avoid moisture affecting the coating.

6. Primer Application:

Mixing: Follow the manufacturer's instructions for mixing the epoxy zinc-rich primer.

Use a mechanical mixer to achieve a uniform consistency.

Mix the base and hardener components thoroughly in the specified ratio.

If necessary, add a thinner (as per manufacturer's guidance) to adjust the viscosity for spraying or rolling.

Application Method:

Spray Application:

Apply using an airless spray gun for large areas, ensuring uniform coverage. Set the equipment pressure and nozzle size per the manufacturer's instructions.

Brush/Roller Application:

For touch-ups or small areas, use a brush or roller. Ensure an even coat without excess buildup or runs.

Coating Thickness:

Ensure that the wet film thickness (WFT) meets the required specification, typically around 50-75 microns per coat.

Drying Time:

Allow the primer to dry as per the manufacturer's recommended time before applying subsequent coats or handling.

7. Inspection & Quality Control:

Visual Inspection: Check for any defects such as pinholes, holidays, or uneven coverage.

Dry Film Thickness (DFT): Measure the DFT using a calibrated coating thickness gauge to ensure it meets the specification (typically around 60-80 microns).

Adhesion Test: Perform an adhesion test (if required) as per ISO 2409 or ASTM D3359.

8. Cleaning of Tools:

Clean all equipment immediately after use with the recommended solvent to prevent curing inside the equipment.

9. Completion:

After the primer has fully cured, proceed with the application of the subsequent layers (e.g., intermediate or topcoats) as specified in the coating system.

10. Documentation:

Record the surface preparation standard achieved.

Record the batch numbers of materials used.

Document the environmental conditions during application (temperature, humidity, and dew point).

Provide a report on dry film thickness measurements and any repairs or touch-ups performed.

11. Safety Disposal:

Dispose of all leftover materials, including solvent and cleaning materials, as per local environmental regulations and waste management guidelines.

This method ensures the proper application of epoxy zinc-rich primer, providing long-term corrosion protection for steel structures.