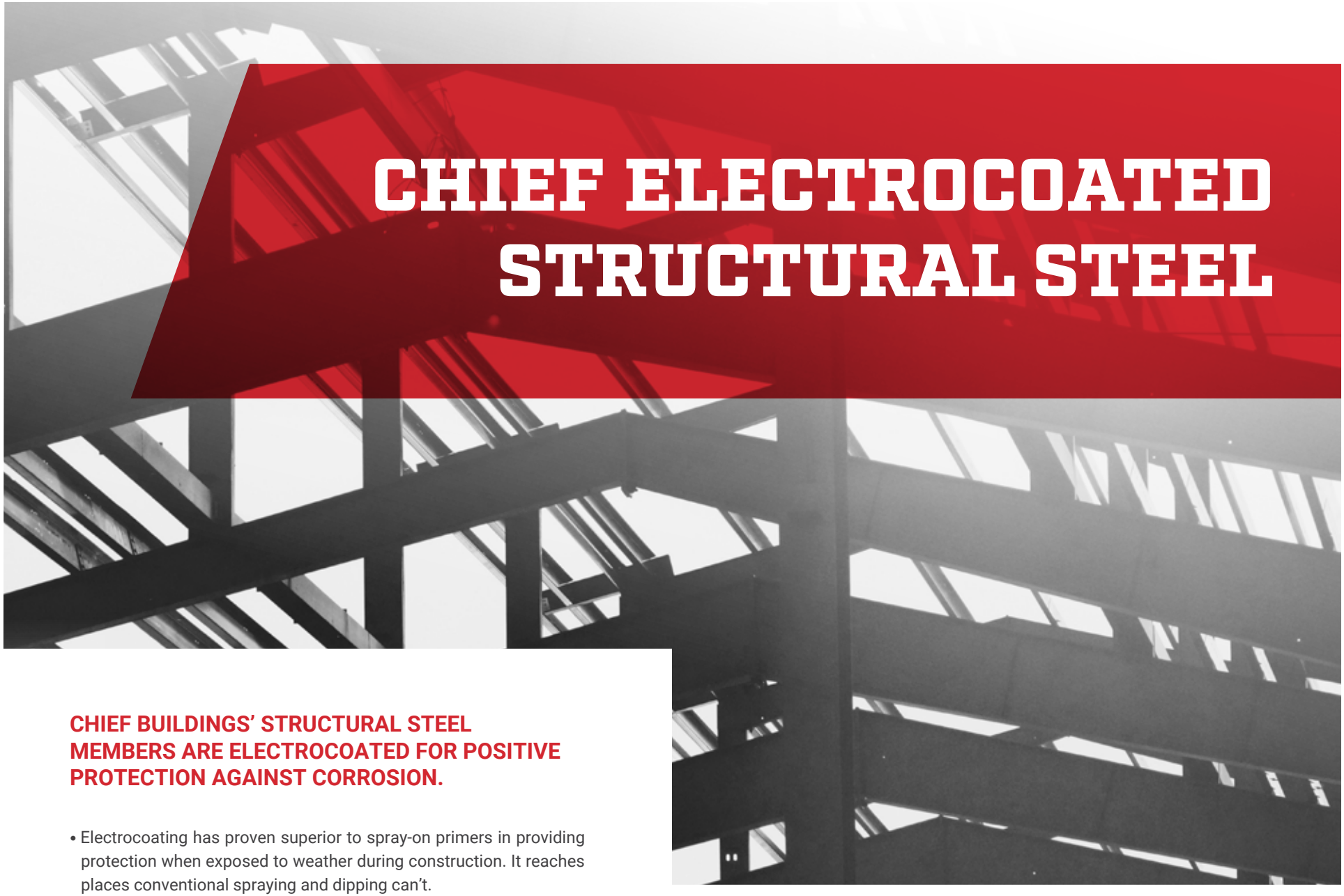

CHIEF ELECTROCOATED STRUCTURAL STEEL

CHIEF BUILDINGS' STRUCTURAL STEEL MEMBERS ARE ELECTROCOATED FOR POSITIVE PROTECTION AGAINST CORROSION.

- Electrocoating has proven superior to spray-on primers in providing protection when exposed to weather during construction. It reaches places conventional spraying and dipping can't.
- This gray oxide primer maintains a superior appearance, but may be field painted should you choose to finish with a coat of paint.
- There is no other process that gives the same consistent, abrasion and corrosion resistant results as Chief Electrocoating.

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CHIEF BUILDINGS

THE PROCESS

To fully understand the benefits of electrocoating, it is necessary to understand the mechanics of the process. We use gray oxide primer carefully balanced with resins, pigments, and corrosion inhibiting agents. As processed, resins are water insoluble and must be converted chemically into salts that are easily dispersed in water.

In electrocoating, our tanks are filled with this water dispersion of paint. The paint particles have a negative surface charge due to the salt formation. The structural members to be painted are connected to the positive side of the power source. When the power supply is activated, the current flows from the negatively charged tank to the positively charged structural steel, causing the negatively charged paint particles to migrate to the steel and be plated to the surface.

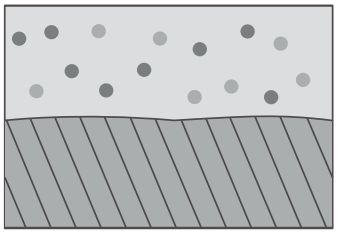
THE RESULTS

During the plating process, taking one to two minutes, electro-chemical reactions take place on the surface of the structural parts, changing the salts in the paint back to their original acid state. The voltages involved (200-300 VDC) act as an electronic pressure to add density to the resin. The result is a paint film that is not only water insoluble, but virtually 100% solid.

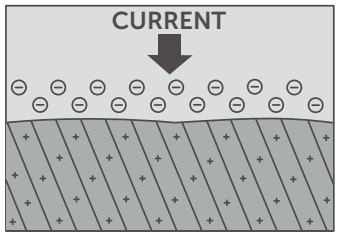
After coating, the parts are baked in an oven, converting the paint films to an enamel composition that is hard and abrasive resistant. With this process, superior corrosion resistance is achieved.

CURED FILM PROPERTIES

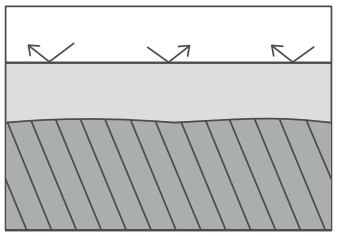
- **COLOR:** Gray
- **GLOSS:** 45-55 @ 60°
- **FILM** Thickness: 0.8-1.2 Mils
- **MEK** Rubs: 100+
- **PENCIL HARDNESS:** 2H
- **MAR RESISTANCE:** Excellent
- **CROSS HATCH ADHESION:** 100%
- **REVERSE/DIRECT IMPACT:** 80 In/lbs
- **1/8 CONICAL MANDREL:** Pass
- **18 HR DI WATER SOAK:** Pass
- **4 HR HYDROCARBON SOAK:** Pass
- **100 HR SALT SPRAY:** 1/4 inch Creep
- **HUMIDITY RESISTANCE:** 1,000+ hrs



Chief Electrocoating, being a liquid submersion process, penetrates virtually everywhere, most notably the places that spray primer can't reach.



Introducing electricity into the process creates a current, forcing the negatively charged primer to plate the positively charged steel member.



Oven baking the plated steel results in a smooth, hard, abrasion and corrosion resistant enamel film.

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