

# How NOT properly bonding a fire bowl will Causes Powder Coating Delamination.

## Why Proper Bonding Prevents This

Bonding the firebowl (via a listed bonding lug, clamp that achieves metal-to-metal contact, or dedicated tab — typically #8 AWG solid copper or equivalent) to the rebar grid:

- Forces the aluminum and steel to the **same electrical potential**.
- Eliminates the driving voltage for galvanic current between them.
- Distributes any stray currents over the large steel grid instead of concentrating them on the small firebowl.
- Dramatically slows or stops the electrochemical attack at coating defects.

It also satisfies electrical code for shock safety (equipotential plane) and is standard practice for any metallic pool fixture (handrails, lights, equipment, etc.).

Lack of electrical (equipotential) bonding between the pool's steel rebar grid and a powder-coated aluminum firebowl creates a potential difference that drives electrochemical corrosion, which undermines and delaminates the powder coating at defects.