

Monarch Materials Group Inc. Technical

BULLETIN

Window Well Anodic Corrosion

Due to the construction techniques and building requirements in some areas of the country, accelerated and sometimes severe corrosion of window wells can occur. The typical situation where this happens is caused by a combination of soil type, grounding of the concrete rebar and contact between the window well mounting bolts and/or window buck with the concrete rebar. When an electric circuit is established between the house and the soil with the window well acting as the grounding element, the window well effectively becomes a sacrificial anode and will experience accelerated corrosion. This can be tested after installation by performing a simple continuity test and comparing it to the house ground.

To perform the test, a multi-meter with continuity reading capability and at least a $10 \text{ M}\Omega$ resistance is required; half cell electrode; and 10 foot leads. The electrode is inserted into the ground a few feet away from the house and the continuity is checked between the house and the electrode. The continuity is then checked between the window well and the electrode. If these two readings are within 10 mV of each other, then the window well is part of the house grounding circuit and can experience accelerated corrosion.

An acceptable method to correct this situation is to remove the window well from the circuit by breaking the connection to the concrete rebar. To do this, after the wall is installed, follow these procedures:

- 1) From inside the window well, cut through the mounting bolts with a reciprocating saw or other appropriate means.
- 2) Pry the window well flange away from the window buck.
- 3) Take another continuity reading to verify that all fasteners have been cut.
- 4) Insert non-conducting (plastic) shims between window well flange and window buck, or use the Monarch isolator washer, part number 10954, to separate the well from the mounting bolt.
- 5) Fill the void between flange and window buck with exterior rated construction adhesive.
- 6) Take another continuity reading to verify that circuit has been broken.

Once the circuit has been broken, the window well will not be susceptible to accelerated anodic corrosion and should perform as originally intended and provide years of trouble free service.

Respectfully,

Steve Privitera Monarch Materials Group Inc.