

## Manufacturer's Galvanic Corrosion Statement

This statement is intended to provide our clients with general information about the galvanic corrosion potential of installing Parasoleil's laser-cut aluminum panels on steel framework and/or using steel fasteners. Parasoleil reserves the right to modify this attestation at any time.

In general, Galvanic Corrosion occurs when two dissimilar metals come into electrical contact with a conductive electrolyte, usually rainwater. Parasoleil aluminum laser-cut decorative panels are commonly attached to steel framework using steel fasteners in exterior conditions exposed to moisture. However **the Galvanic Corrosion potential of these conditions is minimal** for the following reasons:

- 1. The most desired combination of materials to minimize the risk of galvanic corrosion of fasteners, is a combination of large anode (more active and more likely to corrode) material with small cathode (more passive and less likely to corrode) material. In the above scenario, steel fasteners like bolts and screws are smaller and are of a more cathodic material when used to fasten aluminum panels (5052 aluminum alloy) which are more anodic and larger. So for this reason, the chance of fastener corrosion is considered minimal.
- 2. Metals that are close together on the Galvanic Series list generally do not have a strong effect on one another compared to those that are farther apart. Of the 44 + metals listed, aluminum and mild steel are listed directly next to each other so the potential for corrosion is minimal from the start. When the two materials separated by a finish such as a powder coating, paint or galvanized coating, this potential is reduced even further.

See the link to Preservation Science (<a href="http://www.preservationscience.com/materials/metals/PGC.html">http://www.preservationscience.com/materials/metals/PGC.html</a>) for more information regarding galvanic corrosion.

Please contact us directly with any additional questions.

Signed Mike Schock Design Director

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