



GEORGIA FOUNTAIN COMPANY, INC.
2513 Royal Place
Tucker, GA 30084 USA

Telephone +1 770.934.3297
Fax +1 770.934.8770
Email: info@georgiafountain.com

TECH LETTER 08/2014: The Subject of Bonding

While the construction of fountains is in and of itself a rather simple tasks ALL details and requirements have to be taken seriously and complied with in DETAIL.

In the picture below you see a new piece of SCH40 red brass water pipe side by side with a like type piece removed from one of the projects not done by Georgia Fountain Company, Inc.

One can see the

TOTAL DESTRUCTION

of a similar piece of SCH40 red brass piping in the small time span of 4 years.

How does this happen?

Dissimilar metals in the same body of water will have electrolytic convection between the different metal parts just like in a car battery. This activity is prevented when the required bonding system is installed per code The absence of the

bonding system is evident by the copper oxide (green colored deposit on the destroyed brass pipe) most likely traveling to another metal pipe part in the system indicating the copper departing the brass by galvanic actions.



The project was inspected by Georgia Fountain Company and a bonding test was done. It was discovered that of the multiple fountains on the project one fountain system had no bonding system at all and one fountain system had parts of the bonding system omitted. Now the project faces repair costs that not should have to be encountered because of the poor workman ship on the project and most of all because of the non-existing or incomplete inspection by the city or county electrical inspector which, if done diligently and correctly, would have caught this problem before the concrete trucks rolled to the project.

It is vitally important to make sure the supplied drawing details and the national electric code are followed **IN DETAIL** to avoid system failures of a magnitude like this. For additional information or for a HQ picture do contact us directly.