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TECHNICAL BULLETIN

DATE: February 27, 2008

RE: **Using Galvanized Power Bar™ with Brass 90 fittings**

Sioux Chief Manufacturing produces a wide variety of hangers, fasteners and bracketing products for the professional plumbing contractor. Our metal brackets are made with a copper plated or galvanized plated finish. Most of our bracketing products are designed for use inside a structure where they are not subjected to continuous environmental exposure.

We are often asked about whether or not electrolysis occurs when a brass drop ear elbow is attached to a galvanized bracket like the Power Bar.

Electrolysis or galvanic corrosion is not due to the contact of dissimilar metals in itself, but requires the presence of certain other chemicals, which may act as electrolytes when in high concentration, such as salts and some acid compounds. Water is an electrolyte, however, usually a fairly weak one. Normally, because of the differences in the metals compositions, electrolysis affects the *least noble* materials.

In order for electrolysis or galvanic corrosion to occur, an electrolyte must be in frequent or continuous contact in the area between the dissimilar metals. Electrolysis or galvanic corrosion is not common when the electrolytic solution is not present.

Sioux Chief's galvanized Power Bar universal bracket attaches to the outside of the brass fitting and never comes in contact with the water passing through the fitting. Hence, it would be most uncommon to have any electrolysis or galvanic corrosion occur where the fitting is screwed onto the bracket. Normal condensation is considered a poor electrolyte and should not give cause for concern.

If this bulletin does not satisfy your concerns regarding installations of our galvanized Power Bar bracket, please know that we have sold tens of thousands of Power Bar brackets for use with brass elbows, especially at the shower riser. This product has been widely accepted as an engineered product and a solution to labor-intensive metal stud cross bracing or wood blocks, which are susceptible to mold.

Sincerely,

Carol Flanagan
Product Group Director – Support Products Division

