



INSTALLATION OF EARED FITTINGS ON GALVANIZED STUDS

Elkhart Products supplies several varieties of cast brass “winged” or “eared” plumbing fittings. Installation of these copper or brass fittings directly in contact with galvanized steel metal framing in the presence of an electrolytic fluid can result in galvanic corrosion. Galvanic corrosion is likely to occur where there are high levels of humidity or persistent moisture in contact with dissimilar metals.

Galvanic corrosion occurs when electrons move from the steel (an anode) to the copper or brass (a cathode) resulting in deterioration of the steel member. Generally the copper or brass fitting is not impacted by this electrolytic action.

Installation of copper or brass fittings directly onto a galvanized steel surface is an acceptable practice when done in a dry environment, such as within a plumbing chase closed in behind drywall. Care should be taken to ensure there is no leakage or opportunities for moisture to enter the closed environment where the dissimilar metal contact is located.

In the event that a copper or brass fitting is installed directly onto a galvanized steel framing member in a moist environment steps should be taken to isolate the two dissimilar metals. This can be accomplished by placing a non-conductive material between the fitting and the framing member. Further isolation by using plastic or rubber washers between the fitting and the mounting screws will significantly reduce the likelihood that galvanic corrosion will occur.

