Water Piping Dissimilar Metals
2019 CALIFORNIA PLUMBING CODE (CPC)

2019 California Plumbing Code

Section 604.1 specifically states that all materials used in water supply system, except valves and similar devices, shall be of like material, except where otherwise approved by the Authority Having Jurisdiction (AHJ).

Section 310.6 Dissimilar Metals. Except for necessary valves, where inter-membering or mixing of dissimilar metals occurs, the point of connection shall be confined to exposed or accessible locations.

The code does not provide any information or guidance as to how to connect pipes of dissimilar metals. Interpretation by the international Association of Plumbing and Mechanical Officials, (IAPMO), suggests that inter-membering when it does occur, shall be confined to exposed accessible locations. Please note that the code says exposed or accessible location. This interpretation suggests that but does not specifically say a dielectric union is required.

Since this interpretation was based upon a question regarding change in materials assumed to be enclosed in a wall where intermixing of materials would occur above and below the brass shower valve, then such mixing would not be allowed.

The question seems to be how, and where dissimilar metals may be allowed.

Since Section 604.1 opens the door for allowing this practice the authority Having Jurisdiction (AHJ) may then set forth any rule or regulation to satisfy this situation.

For the City of Perris, the following interpretation and standards are hereby set forth:

The connection of dissimilar metals in water piping systems and at water heaters shall be restricted to exposed or accessible locations as defined in the California Plumbing Code (CPC).

Note: Accessible shall include attic or under floor areas that are provided with an access panel.

1. Exposed locations can be installed by the use of a brass nipple of 6 inches or greater in length. Exposed shall be defined as open to visual inspection at all times, and not capable of being hidden by doors, storage, or appliances.

2. Accessible locations shall be installed with a dielectric union installed in accordance with the manufacturer’s instructions.

Code Interpretation CI-15 (updated 01/1/20)