

Architectural Copper Oxidation

Why does copper turn green?



When used outdoors and exposed to the elements, copper transforms from a bright, shiny new penny shade, to a burnished brown, and finally to a distinct green colour. It is this particular effect that attracts architects and designer to use copper. This green finish can most famously be seen on the Statue of liberty and is seen across many cities on old and new buildings.



This unique characteristic of copper is completely natural and is often referred to as the "patina" – which refers to the way copper changes colour and turns green as it ages. This natural process actually preserves the copper and protects it from the outside elements making it an excellent choice for exterior lighting.

Over time copper will naturally change colours – transforming from a shiny brown colour to darker browns, then blues and finally greens after a period of time dependant on fittings location and exposure the natural elements such as wind and rain. Copper develops this "patina" which protects and preserves the metal underneath.

Natural Oxidation

In the same way rust develops on iron, patina develops on copper when the copper sulphate on the surface interacts with oxygen in the environment. Importantly, unlike rust which corrodes iron, patina actually protects and preserves the copper underneath.

Copper Care

The patina process of copper is completely natural and one of the big draws for people who like its look. However, some people prefer the newer look of copper and this can be restored with the help of readily available cleaning products and a little "elbow grease."

Buffing is a big part of the cleaning process. There are also many commercial products as well as homemade remedies, including those made with vinegar and lemon juice. You should always start by washing the copper with warm water and gentle soap. Avoid using abrasive cleansers or cloths, as they may scratch the copper.