

POWDER COATING

SECONDARY FINISH

Powder coating is a cost effective way to add an unlimited range of colors to wire mesh. Powder coating uses an electrostatic charge to attract a fluidized powder evenly across all surfaces of the wire mesh. The electrostatic charge holds the pigmented powder until it passes through an oven where it melts and adheres permanently to the wire mesh. After curing, the wire mesh has a colorful and durable coating that adds to the desired aesthetic of the project.

Appropriate wire mesh base alloys:



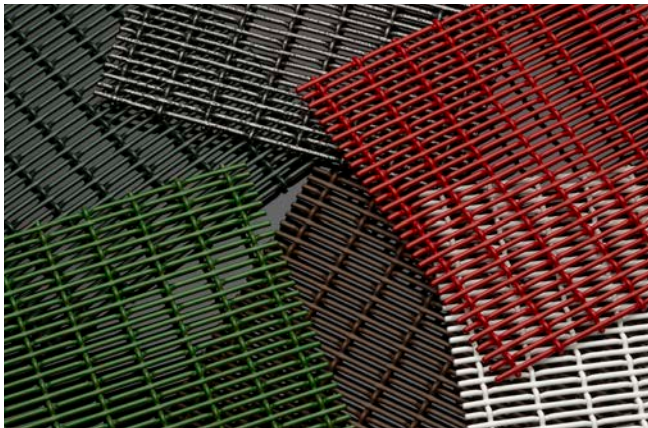
Corrosion resistance: Powder coating alone provides adequate corrosion protection provided it does coat the product 100%. However, wire mesh is unique in that the round sections of wire are assembled in an over, under fashion. The intersection points (wire on wire) of the wire mesh will therefore not be coated by powder and the material will not be completely protected against corrosion. For interior applications powder coating over bare steel is just fine because the mesh is unlikely to encounter environmental situations that would promote corrosion. If conditions exist where corrosion is a concern (Interior or Exterior) then the wire mesh base material specified becomes very important. The most cost-effective

solution would be to use pre-galvanized steel wire as the base alloy; the zinc provides good corrosion protection at the metal on metal intersections where powder does not reach.

Wire mesh and frame assemblies: For exterior, fully fabricated wire mesh assemblies, an E-coat primer application is highly recommended prior to the final powder coat finish. E-coating is an electrically charged wet paint process where the entire assembly is submerged. The positive and negative currents drive the wet E-coat into all of the small nooks of the mesh and frame assembly to ensure complete coverage. Powder cannot push itself into tight corners leaving areas exposed. E-coating is highly recommended as a primer level under powder coating when the application is exterior. Powder coating requires that the assemblies provide adequate means of drainage during the rinsing process.

Special Considerations: When it comes to powder coating, not all powders are created equal. There are a variety of powder coat chemistries to choose from for specific environmental criteria, like epoxy, polyester, hybrid, and so on. It is important to understand the differences in powder coat chemistries and how the final product will be utilized, such as indoor or outdoors. When powder coating is determined as the secondary finish on Banker Wire mesh, the specifier will typically define the powder coat that is to be used.

POWDER COATED SAMPLES



UNIVERSITY OF PITTSBURGH AT GREENSBURG, POWDER COATED FPZ-16 RAILING INFILL

